





















DEFECT NO.	LOCATION	AREA	BREACH	PHOTOGRAPH	DEFECT DESCRIPTION
C 193	Level U4 lobby	Balcony – door threshold	Note.		<p>Paving pedestals installed over tiled surface.</p>  <p>HARPER OBSERVATION AND COMMENTS – NOT A DEFECT AS TILED SURFACE SUITABLE FOR PEDESTAL SYSTEM.</p>
C 194	Level U4 lobby	Balcony - handrail	See sections 8.5 and 8.26 of this report.		<p>Crack at line of possible DPC</p> <p>No visible DPC</p>  <p>HARPER OBSERVATION AND COMMENTS – NO EVIDENCE OF CRACK</p>





DEFECT NO.	LOCATION	AREA	BREACH	PHOTOGRAPH	DEFECT DESCRIPTION
C195	Level U4 lobby	Balcony – door threshold Balcony door threshold	See section 8.3 of this report.		No waterstop. Aluminium in contact with cement which will cause deterioration.  HARPER OBSERVATION AND COMMENTS – CONCUR NO EVIDENCE OF WATER STOP, HOWEVER HARPER IS OF THE VIEW THE DOOR IS WEATHERPROOF DUE TO ADEQUATE ROOF COVER. REFER ITEM C-1 SECTION 10 HARPER DEFECT SCHEDULE
C196	Level U4 lobby	–	See section 8.3 of this report.		No waterstop Aluminium in contact with cement which will cause deterioration.  HARPER OBSERVATION AND COMMENTS – RESOLVED – SEALANT APPLIED



DEFECT NO.	LOCATION	AREA	BREACH	PHOTOGRAPH	DEFECT DESCRIPTION
C 197	Level U4 lobby	Balcony - handrail	See sections 8.5 and 8.26 of this report.		 HARPER OBSERVATION AND COMMENTS – LOW LEVEL OF MOISTURE INDICATED
C 198	Level U4 lobby	Balcony overflow	See section 8.8 of this report.		No visible waterproof membrane to overflow.  HARPER OBSERVATION AND COMMENTS – NO ISSUE AS ADEQUATE ROOF COVER PROVIDED



DEFECT NO.	LOCATION	AREA	BREACH	PHOTOGRAPH	DEFECT DESCRIPTION
					
C 199	Level U4 lobby	Balcony – floor tiles	See section 8.4 of this report.		<p>Fall of 3mm insufficient</p> <p>HARPER OBSERVATION AND COMMENTS – DISAGREE FALL IS SUFFICIENT.</p>



DEFECT NO.	LOCATION	AREA	BREACH	PHOTOGRAPH	DEFECT DESCRIPTION
C 200	Level U4 lobby	Balcony – door threshold	Note.		Visible upturned waterproof membrane. HARPER OBSERVATION AND COMMENTS – NOTED
C 201	Level U4 lobby	Balcony – Floor tiles	Not fit for purpose.		Adhesion failure of waterproof membrane  HARPER OBSERVATION AND COMMENTS – DISAGREE MEMBRANE BONDED.





DEFECT NO.	LOCATION	AREA	BREACH	PHOTOGRAPH	DEFECT DESCRIPTION
C 202	Level U4 lobby	Balcony – door threshold	Note.		Membrane thickness of 1164 microns to upturn. HARPER OBSERVATION AND COMMENTS – NOTED – SATISFACTORY THICKNESS
C 203	Level U4 lobby	Service risers	Fire engineer to inspect		Fire pillow installation.  HARPER OBSERVATION AND COMMENTS – NO INSPECTED DUE TO RESTRICTIONS





DEFECT NO.	LOCATION	AREA	BREACH	PHOTOGRAPH	DEFECT DESCRIPTION
C 204	Level U4 lobby	Service risers	Fire engineer to inspect.		Fire pillow and wrapping. 
C 205	Level U4 lobby	Service risers	Fire engineer to inspect		Black sealant used as fire rating  HARPER OBSERVATION AND COMMENTS – RESOLVED FIRE SAFETY COMPLIANCE CERTIFICATE PROVIDED.





DEFECT NO.	LOCATION	AREA	BREACH	PHOTOGRAPH	DEFECT DESCRIPTION
C 206	Level U4 lobby	Service risers	Fire engineer to inspect.		<p>Poly pipes to be inspected by fire engineer.</p> <p>HARPER OBSERVATION AND COMMENTS – RESOLVED</p> <p>FIRE SAFETY COMPLIANCE CERTIFICATE PROVIDED.</p>
C 207	Level U4 lobby	Service risers	Fire engineer to inspect		<p>Moisture resistant plaster used to services riser</p> <p>Fire consultant to inspect and advise.</p> <p>HARPER OBSERVATION AND COMMENTS – RESOLVED</p> <p>FIRE SAFETY COMPLIANCE CERTIFICATE PROVIDED.</p>



DEFECT NO.	LOCATION	AREA	BREACH	PHOTOGRAPH	DEFECT DESCRIPTION
C 208	Fire stair level U4	Handrail	See sections 8.15 and 8.18 of this report.		<p>A. Handrail not continuous. B. No nosing or compliant non-slip finish. Details of paint to be provided to identify if non-compliant and tested to AS4586.</p> <p>HARPER OBSERVATION AND COMMENTS – HANDRAIL RESOLVED.</p> <p>NO DETAILS OF PAINT USED ON TREADS PROVIDED.</p>
C 209	Fire stair level U4	Stair nosing	See section 8.15 of this report.		<p>A. No nosing or compliant non-slip finish. B. Details of paint to be provided to identify if non-compliant and tested to AS4586.</p> <p>HARPER OBSERVATION AND COMMENTS – NO DETAILS OF PAINT USED ON TREADS PROVIDED.</p>



DEFECT NO.	LOCATION	AREA	BREACH	PHOTOGRAPH	DEFECT DESCRIPTION
C 210	Level 4 Lobby	Service risers	Fire engineer to inspect. HARPER OBSERVATION AND COMMENTS –RESOLVED FIRE SAFETY COMPLIANCE CERTIFICATE PROVIDED.		Services over wall.
C 211	Level 4 Lobby	Service risers	Fire engineer to inspect .		Black sealant in Hebel wall . HARPER OBSERVATION AND COMMENTS – RESOLVED FIRE SAFETY COMPLIANCE CERTIFICATE PROVIDED.





DEFECT NO.	LOCATION	AREA	BREACH	PHOTOGRAPH	DEFECT DESCRIPTION
C 212	Level 4 Lobby - balcony	Door threshold	See section 8.3 of this report.		<p>A. No waterstop. B. Sliding door installed in contact with cement.</p>  <p>HARPER OBSERVATION AND COMMENTS – CONCUR, HOWEVER DOOR WEATHERPROOF DUE TO ROOF COVER</p> <p>REFER ITEM C-1 SECTION 10 HARPER DEFECT SCHEDULE</p>
C 213	Level 4 Lobby - balcony	Cladding	See sections 8.5 and 8.26 of this report.		<p>Elevated moisture to wall below tile pedestals</p>  <p>HARPER OBSERVATION AND COMMENTS – LOW LEVEL OF MOISTURE INDICED</p>



DEFECT NO.	LOCATION	AREA	BREACH	PHOTOGRAPH	DEFECT DESCRIPTION
C 214	Hydrant	South east of site	Incomplete work.		Hydraulic engineer to inspect hydrant assembly.  HARPER OBSERVATION AND COMMENTS – FIRE SAFETY COMPLIANCE CERTIFICATE PROVIDED.
C 215	Hydrant	South east of site	Incomplete work		wiring not connected.  HARPER OBSERVATION AND COMMENTS – FIRE SAFETY COMPLIANCE CERTIFICATE PROVIDED.

DEFECT NO.	LOCATION	AREA	BREACH	PHOTOGRAPH	DEFECT DESCRIPTION
C216	Hydrant	South east of site	Incomplete work.		<p>Cardboard box covering elements.</p>  <p>HARPER OBSERVATION AND COMMENTS – RESOLVED</p>
C217	Hydrant	South east of site	Not fit for purpose		<p>Temporary signage</p>  <p>HARPER OBSERVATION AND COMMENTS – RESOLVED</p>





DEFECT NO.	LOCATION	AREA	BREACH	PHOTOGRAPH	DEFECT DESCRIPTION
C218	Drive way	Storm water pit	See section 8.4 of this report.		<p>Water ponding in base of driveway pit.</p>  <p>HARPER OBSERVATION AND COMMENTS – WATER RETAINED IN OSD SUMP.</p> <p>NOTE – DAMAGE TO GRATE REQUIRES REPAIR.</p> <p>REFER ITEM OSD-1 SECTION 10 HARPER DEFECT SCHEDULE</p>

DEFECT NO.	LOCATION	AREA	BREACH	PHOTOGRAPH		DEFECT DESCRIPTION
C 219	Drive way	Storm water pit	See section 8.4 of this report.			<p>Cold joint or crack to concrete driveway.</p>  <p>HARPER OBSERVATION AND COMMENTS – RESOLVED</p>

DEFECT NO.	LOCATION	AREA	BREACH	PHOTOGRAPH	DEFECT DESCRIPTION
					 <p>HARPER OBSERVATION AND COMMENTS – RESOLVED.</p>
C 220	Drive way	Pipe	Not fit for purpose		<p>Diesel pump vent pipe when running will blow smoke into habitable spaces (see balconies in back ground).</p>  <p>HARPER OBSERVATION AND COMMENTS – NOT A DEFECT AS FREQUENCY OF USE IS MINIMAL AND EXHAUST PIPE IS LOCATED AT A SAFE DISTANCE FROM THE GROUND FLOOR BALCONIES.</p>

DEFECT NO.	LOCATION	AREA	BREACH	PHOTOGRAPH	DEFECT DESCRIPTION
C 221	Drive way	Strip drain	Hydraulic engineer to confirm capacity.		Hydraulic engineer to confirm capacity of strip drain.
C 222	Drive way	Planter box	Works have not been completed with due care and skill.		Incomplete pipe in block wall.




DEFECT NO.	LOCATION	AREA	BREACH	PHOTOGRAPH	DEFECT DESCRIPTION
C 223	Drive way	Concrete soffit	Works have not been completed with due care and skill.		Timber saw dust to concrete soffit. HARPER OBSERVATION AND COMMENTS – RESOLVED

DEFECT NO.	LOCATION	AREA	BREACH	PHOTOGRAPH	DEFECT DESCRIPTION
Unit G05					
U G05.1	Lounge room	Ceiling space (access panel)	See section 8.2 of this report	 	<p>Fire rating between SOC not installed to slab soffit.</p> <p>Fire engineer to inspect and advise</p>   <p>HARPER OBSERVATION AND COMMENTS – OUTSTANDING</p> <p>CONCUR FIRE SEPARATION IS NOT IN ACCORDANCE WITH C2.7 NCC VOLUME 1 2019.</p> <p>REFER ITEM 3-GO5 SECTION 10 HARPER DEFECT SCHEDULE</p>




U G05.2	Lounge room	Sliding door threshold	See section 8.3 of this report			<p>A. No waterstop. B. Sliding door installed in contact with cement.</p>  <p>HARPER OBSERVATION AND COMMENTS – OUTSTANDING REFER ITEM C-1 SECTION 10 HARPER DEFECT SCHEDULE</p>
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<p>U G05.3</p>	<p>Lounge room</p>	<p>Window glazing</p>	<p>Works not completed with due care and skill.</p>		<p>Visible sealant smear to glass</p>  <p>HARPER OBSERVATION AND COMMENTS – RESOLVED</p>
<p>U G05.4</p>	<p>Lounge room</p>	<p>Gyprock ceiling</p>	<p>Incomplete work.</p>		<p>Smoke detector cover retained</p>  <p>HARPER OBSERVATION AND COMMENTS – RESOLVED</p>

<p>U G05.5</p>	<p>Kitchen</p>	<p>Benchtap</p>	<p>Electrical engineer to advise.</p>		<p>GPO installed in close proximity to water supply.</p>  <p>HARPER OBSERVATIONS AND COMMENTS - NOT A DEFECT, COMPLIES WITH AS3000</p>
<p>U G05.6</p>	<p>Kitchen</p>	<p>Intercom</p>	<p>Incomplete work</p>		<p>Intercom has not been commissioned as incorrect date and time.</p>  <p>HARPER OBSERVATION AND COMMENTS - RESOLVED</p>

<p>U G05.7</p>	<p>Laundry</p>	<p>Mechanical exhaust</p>	<p>See section 8.25 of this report.</p> <p>HARPER OBSERVATION AND COMMENTS – RESOLVED</p>		<p>Exhaust not operational.</p> <p>HARPER OBSERVATION AND COMMENTS - RESOLVED</p>
<p>U G05.8</p>	<p>Bathroom</p>	<p>Floor waste</p>	<p>See section 8.12 of this report</p> <p>Works not completed with due care and skill.</p> <p>Inadequate substrate preparation</p>		<p>Adhesion failure of waterproofing in drain.</p>  <p>HARPER OBSERVATION AND COMMENTS – DISAGREE, WATERPROOFING ADHESION IS SATISFACTORY.</p>

					
U G05.9	Bathroom	Shower screen	Incomplete work.		Cement on shower screen. HARPER OBSERVATION AND COMMENTS – RESOLVED
U G05.10	Bathroom	Vinity (Sink)	Water entering concealed space is a breach of FP1.7 of the BCA.		Void to under mount sink HARPER OBSERVATION AND COMMENTS – RESOLVED

<p>U G05.11</p> <p>HARPER OBSERVATION AND COMMENTS – RESOLVED</p>	<p>Bathroom</p>	<p>Mechanical exhaust</p>	<p>See section 8.25 of this report.</p>		<p>Mechanical exhaust not operational.</p> <p>HARPER OBSERVATION AND COMMENTS – RESOLVED</p>
<p>U G05.12</p>	<p>Bathroom</p>	<p>Vanity</p>	<p>Incomplete work. Edging missing</p>		<p>Exposed mellamine edges.</p>  <p>HARPER OBSERVATION AND COMMENTS – OUTSTANDING, HOWEVER ITEM HAS NO IMPACT ON USE OR MATERIALS.</p>

<p>U G05.13</p> <p>HARPER OBSERVATION AND COMMENTS – RESOLVED</p>	<p>Ensuite</p>	<p>Vanity (Sink)</p>	<p>Water entering concealed space is a breach of FP1.7 of the BCA.</p>			<p>Void to under mount sink.</p>  <p>HARPER OBSERVATION AND COMMENTS - RESOLVED</p>
<p>U G05.14</p>	<p>Ensuite</p>	<p>Mechanical exhaust</p>	<p>See section 8.25 of this report</p>			<p>Mechanical exhaust not operational.</p> <p>HARPER OBSERVATION AND COMMENTS – RESOLVED, EXHAUST FAN OPERATING.</p>

<p>U G05.15</p>	<p>Main bedroom</p>	<p>Sliding door threshold</p>	<p>See section 8.3 of this report.</p>		<p>A. No waterstop. B. Sliding door installed in contact with cement.</p> 
<p>HARPER OBSERVATION AND COMMENTS – – OUTSTANDING REFER ITEM C-1 SECTION 10 HARPER DEFECT SCHEDULE</p>					
<p>U G05.16</p>	<p>Main bedroom</p>	<p>Carpet smooth edge rear to balcony</p>	<p>See section 8.7 of this report</p>		<p>Elevated moisture to base of wall</p>  <p>HARPER OBSERVATION AND COMMENTS – EVIDENCE OF MOISTURE PENETRATION AND CAUSING MOULD GROWTH.</p> <p>OUTSTANDING REFER ITEM 4-G05 SECTION 10 HARPER DEFECT SCHEDULE</p>






<p>U G05.17</p>	<p>Main bedroom</p>	<p>Top of door</p>	<p>See section 8.16 of this report</p>		<p>Top of door has not been sealed</p>  <p>HARPER OBSERVATION AND COMMENTS – RESOLVED</p>
<p>U G05.18</p>	<p>Bedroom 2</p>	<p>Top of door</p>	<p>See section 8.16 of this report</p>		<p>Top of door has not been sealed</p>  <p>HARPER OBSERVATION AND COMMENTS – RESOLVED</p>

<p>U G05.19</p>	<p>Bedroom 2</p>	<p>Wall (South east corner)</p>	<p>See section 8.7 of this report.</p>	<p>HARPER OBSERVATION AND COMMENTS – NO ISSUE FOUND IN LOCATION DESCRIBED.</p>		<p>Moisture entering habitable spaces.</p> 
<p>U G05.20</p>	<p>Bedroom 2</p>	<p>Wall (South east corner)</p>	<p>See section 8.7 of this report</p>	<p>HARPER OBSERVATION AND COMMENTS – NO ISSUE FOUND IN LOCATION DESCRIBED.</p> <p>HARPER IS OF THE VIEW THE ISSUE DESCRIBED IS LOCATED IN MAIN BEDROOM IN ITEM U G05.16</p>	 	<p>Moisture entering habitable spaces.</p> 

					
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<p>U G05.21</p>	<p>Bedroom 2 wall outside</p>	<p>Ground floor south entry</p>	<p>See section 8.7 of this report</p>		<p>External face of unit G05 wall. 500mm higher and elevated moisture to base of wall.</p>  <p>HARPER OBSERVATION AND COMMENTS – ELEVATED MOISTURE LEVELS NOT DETECTED.</p>
<p>U G05.22</p>	<p>Balcony - South (Mitchell Avenue)</p>	<p>Hebel cladding</p>	<p>See section 8.6 of this report.</p>		<p>Hebel wall missing pressure equalisation slots.</p>  <p>HARPER OBSERVATION AND COMMENTS – WALL DESCRIBED IS METAL FRAME WITH FIBRE CEMENT SHEET AND RENDERED FINISH.</p>

<p>U G05.23</p>	<p>Balcony - South (Mitchell Avenue)</p>	<p>Stairs</p>	<p>See section 8.15 of this report</p>		<p>No nosing or non-slip finish to stairs.</p>  <p>HARPER COMMENTS AND OBSERVATIONS – RESOLVED</p>
<p>U G05.24</p>	<p>Balcony - South (Mitchell Avenue)</p>	<p>Hebel cladding (North wall)</p>	<p>See section 8.6 of this report</p>		<p>Elevated moisture to base of Hebel wall</p>  <p>HARPER OBSERVATION AND COMMENTS –</p> <p>ELEVATED MOISTURE LEVELS NOT DETECTED.</p> <p>WALL DESCRIBED IS METAL FRAME WITH FIBRE CEMENT SHEET AND RENDERED FINISH.</p>




U G05.25	Balcony - South (Mitchell Avenue)	Hebel cladding (West wall)	Note.		<p>Base reading to Hebel of 14.2%</p> <p>HARPER COMMENTS AND OBSERVATIONS – CONCUR, NOTED.</p>
U G05.26	Balcony - South (Mitchell Avenue)	Floor waste	No waterproofing as required by AS4654.2.		<p>No visible waterproofing has been turned down the floor waste.</p> 
U G05.27	Balcony - South (Mitchell Avenue)	Hebel cladding	See section 8.6 of this report		<p>No drainage provision to facade.</p>  <p>HARPER OBSERVATION AND COMMENTS – OUTSTANDING REFER ITEM 5-GO5 SECTION 10 HARPER DEFECT SCHEDULE</p>




<p>U G05.28</p>	<p>Balcony - South (Mitchell Avenue)</p>	<p>Air conditioning condenser</p>	<p>See section 8.10 of this report</p>		<p>AC condenser is not fixed in position</p>  <p>HARPER COMMENTS AND OBSERVATIONS – FIXING OF BASE NOT RECOMMENDED DUE TO RISK OF DAMAGE TO WATERPROOFING MEMBRANE.</p>
<p>Unit 304</p>					
<p>U 304.1</p>	<p>Lounge</p>	<p>Sliding door threshold</p>	<p>See section 8.3 of this report</p>		<p>A. No waterstop. B. Sliding door installed in contact</p>  <p>HARPER COMMENTS AND OBSERVATIONS – OUTSTANDING REFER ITEM C-1 SECTION 10 HARPER DEFECT SCHEDULE</p>

				 	   <p>HARPER COMMENTS AND OBSERVATIONS – OUTSTANDING REFER ITEM C-1 SECTION 10 HARPER DEFECT SCHEDULE</p>
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<p>U 304.2</p>	<p>Lounge</p>	<p>Sliding door threshold</p>	<p>See section 8.3 of this report</p>		<p>A. No waterstop. B. Sliding door installed in contact with cement.</p>  <p>HARPER COMMENTS AND OBSERVATIONS – OUTSTANDING REFER ITEM C-1 SECTION 10 HARPER DEFECT SCHEDULE</p>
<p>U 304.3</p>	<p>Kitchen</p>	<p>Ceiling space</p>	<p>See section 8.2 of this report</p>		<p>Fire rated wall. Sheet joint not set. Fire consultant to inspect and advise.</p>  <p>HARPER COMMENTS AND OBSERVATIONS –NO GAP IN JOINT. FIRE SAFETY CERTIFICATE PROVIDED.</p>



					
U 304.4	Laundry	Mechanical exhaust	Note.		Exhaust operational. HARPER COMMENTS AND OBSERVATIONS – NOTED

	Bathroom	Mechanical exhaust	Note.			
U 304.5			HARPER COMMENTS AND OBSERVATIONS – NOTED			Exhaust operational.
U 304.6		Top of door	See section 8.16 of this report			Top of door has not been sealed HARPER COMMENTS AND OBSERVATIONS – OUTSTANDING REFER ITEM 1-304SECTION 10 HARPER DEFECT SCHEDULE

U 304.7	Ensuite	Floor tile	See section 8.4 of this report.			<p>Water is ponding</p>  <p>HARPER OBSERVATION AND COMMENTS - OUTSTANDING, SUFFICIENT FALL IN TILE SURFACE, WATER IS PONDING DUE TO DRAINAGE INLET EDGE IS HIGHER THAN TILE SURFACE</p>
U 304.8	Ensuite	Mechanical exhaust	See section 8.25 of this report.			<p>Mechanical exhaust not operational.</p>

U 304.9	Ensuite	Shower screen	Safety issue. Install door stop.			Door can hit tiles. Possible damage to glass door
U 304.10	Ensuite	Top of door	See section 8.16 of this report			Top of door has not been sealed  HARPER COMMENTS AND OBSERVATIONS – OUTSTANDING REFER ITEM 1-304 SECTION 10 HARPER DEFECT SCHEDULE

U 304.11	Bedroom 2	Door threshold	See section 8.3 of this report		<p>A. No waterstop. B. Sliding door installed in contact with cement.</p>  <p>HARPER COMMENTS AND OBSERVATIONS – OUTSTANDING REFER ITEM C-1 SECTION 10 HARPER DEFECT SCHEDULE</p>
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U 304.12	Bedroom 2	FC Cladding	See sections 8.5 of this report.		Cladding does not have a drainage provision.  HARPER COMMENTS AND OBSERVATIONS – UNABLE TO TEST DUE TO RAIN AND RESTRICTED ACCESS.
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U 304.13	Balcony	Floor tiles	See section 8.3 of this report .			<p>A. No waterstop. B. Sliding door installed in contact with cement.</p>  <p>HARPER COMMENTS AND OBSERVATIONS – CONCUR, OUTSTANDING REFER ITEM C-1 SECTION 10 HARPER DEFECT SCHEDULE</p>
U 304.14	Balcony	Sliding door threshold	See section 8.3 of this report .			<p>A. No waterstop. B. Sliding door installed in contact with cement.</p>  <p>HARPER COMMENTS AND OBSERVATIONS – CONCUR, OUTSTANDING REFER ITEM C-1 SECTION 10 HARPER DEFECT SCHEDULE</p>


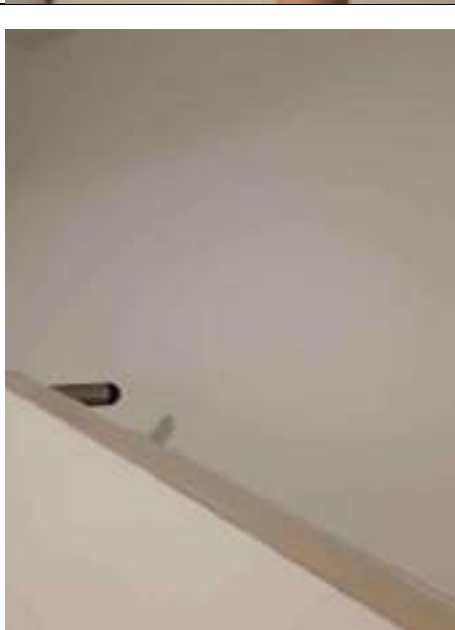

U 304.15	Balcony	Hebel cladding	See section 8.3 of this report.		<p>Tile installed vertically proud of subsill.</p> <p>Subsill will restrict water from weepholes.</p>  <p>No overflow provision.</p>
<p>HARPER OBSERVATION AND COMMENTS – DISAGREE, DRAINAGE HOLES LOCATED ON TRACK ABOVE THRESHOLD TILE.</p>		Balcony	See section 8.8 of this report		
U 304.16		Floor tiles			<p>HARPER COMMENTS AND OBSERVATIONS – OVERFLOW PROVIDED TO SOUTHWEST END OF BALCONY.</p>
U 304.17	Balcony	Air conditioning condenser	See section 8.10 of this report		<p>AC condenser has not been mechanically fixed into position</p> <p>HARPER COMMENTS AND OBSERVATIONS – FIXING OF BASE NOT RECOMMENDED DUE TO RISK OF DAMAGE TO WATERPROOFING MEMBRANE.</p>



U 304.18	Balcony	Floor waste	See section 8.6 of this report		No cavity drain has been provided for Hebel cavity drain.
U 304.19	Balcony	Control joints	See section 8.13 of this report		<p>Expansion joint does not continue through the tile screed.</p>  <p>HARPER COMMENTS AND OBSERVATIONS – CONCUR, ISSUE IS OUTSTANDING, MOVEMENT JOINTS ARE NOT IN ACCORDANCE WITH AS4654.2 REFER ITEM 6-304 SECTION 10 HARPER DEFECT SCHEDULE</p>

U 304.20	Balcony	Base of Hebel facade	See section 8.5 and 8.6 of this report.		II. 
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U 304.21	Balcony	Ceiling	See section 8.24 of this report.		Timber look eaves to be tested for combustability. 
U 304.22	Balcony	Floor tiles	See section 8.4 of this report		Insufficient falls of 3mm per metre. AS4654.2 requires 10mm per metre  HARPER COMMENTS AND OBSERVATIONS – FALLS ARE SUFFICIENT AND REASONABLE IN ACCORDANCE WITH AS4654.2
U 304.23	Balcony	Floor tiles	See section 8.13 of this report		Drummy tiles  HARPER COMMENTS AND OBSERVATIONS – CONCUR, ISSUE IS OUTSTANDING. REFER ITEM 6-304 SECTION 10 HARPER DEFECT SCHEDULE

Unit 306						
U 306.1	Lounge	Sliding door threshold	See section 8.3 of this report			<p>A. No waterstop. B. Sliding door installed in contact with cement.</p>  <p>HARPER COMMENTS AND OBSERVATIONS – CONCUR, OUTSTANDING</p> <p>REFER ITEM C-1 SECTION 10 HARPER DEFECT SCHEDULE</p>
U 306.2	Laundry	Clothes dryer	Works have not been completed with due care and skill.			<p>Instead of shortening the length of the cable, a twist tie has been used to retain the extra length of cable.</p>  <p>HARPER OBSERVATIONS AND COMMENTS – CLOTHES DRY REMOVED.</p>





U 306.3	Laundry	Mechanical exhaust	See section 8.25 of this report			Mechanical exhaust not operational. HARPER OBSERVATIONS AND COMMENTS – RESOLVED - MECHANICAL EXHAUST IS OPERATING.
U 306.4	Laundry	Top of door	See section 8.16 of this report			Top of door has not been sealed  HARPER OBSERVATIONS AND COMMENTS – RESOLVED

U 306.5	Bathroom	Shower screen	Breach of AS/NZS 2208. Works are not fit for purpose		Glass not identifiable as safety glass. HARPER OBSERVATIONS AND COMMENTS – CERTIFICATION PROVIDED BY SUPPLIER.
U 306.6	Bathroom	Top of door	See section 8.16 of this report		Top of door has not been sealed  HARPER OBSERVATIONS AND COMMENTS – RESOLVED



U 306.7	Bathroom	Mechanical exhaust	See section 8.25 of this report			Mechanical exhaust is not operational. HARPER OBSERVATIONS AND COMMENTS – RESOLVED - MECHANICAL EXHAUST IS OPERATING.
U 306.8	Ensuite	Door striker	Works have not been completed with due care and skill.			 Poor painting works below door striker HARPER OBSERVATIONS AND COMMENTS – OUTSTANDING

<p>U 306.9</p>	<p>Ensuite</p>	<p>Top of door</p>	<p>See section 8.16 of this report</p>		<p>Top of door has not been sealed</p>  <p>HARPER OBSERVATIONS AND COMMENTS – RESOLVED</p>
<p>U 306.10</p>	<p>Ensuite</p>	<p>Mechanical exhaust</p>	<p>See section 8.25 of this report</p>		<p>Mechanical exhaust is not operational.</p> <p>HARPER OBSERVATIONS AND COMMENTS – RESOLVED - MECHANICAL EXHAUST IS OPERATING.</p>

U 306.11	Main bedroom balcony	Door threshold	See section 8.3 of this report	 	<p>A. No waterstop. B. Sliding door installed in contact with cement.</p>  <p>HARPER OBSERVATIONS AND COMMENTS – RESTRICTION DUE TO LOUVRE SHUTTER FRAME.</p> <p>REFER ITEM C-1 SECTION 10 HARPER DEFECT SCHEDULE</p>
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<p>U 306.12</p>	<p>Main bedroom balcony</p>	<p>Floor tiles</p>	<p>See section 8.3 and 8.9 of this report</p>		<p>A. No waterstop. B. Sliding door installed in contact with cement. C. Efflorescence.</p>  <p>HARPER OBSERVATIONS AND COMMENTS – NO EFFLORESCENCE PRESENT REFER ITEM C-1 SECTION 10 HARPER DEFECT SCHEDULE</p>
<p>U 306.13</p>	<p>Main bedroom balcony</p>	<p>Sliding door threshold</p>	<p>See section 8.3 of this report</p>		<p>Tile installed proud of subsill not behind as detailed by AS4654.2.</p>  <p>HARPER OBSERVATIONS AND COMMENTS – OUTSTANDING, HOWEVER DOOR DRAINAGE IS NOT OBSTRUCTED AND METAL TILE TRIM FINISH IS SATISFACTORY.</p>



					<p>Crack sealant will allow moisture from weepholes to enter behind tiles.</p>  <p>HARPER OBSERVATIONS AND COMMENTS – OUTSTANDING</p> <p>REFER ITEM 2-306 SECTION 10 HARPER DEFECT SCHEDULE</p>
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U 306.14	Main bedroom balcony	Base of Hebel	See section 8.5 and 8.6 of this report		Elevated moisture to base of wall due to a failure to install a drainage provision. HARPER OBSERVATIONS AND COMMENTS - LOW LEVEL OF MOISTURE
U 306.15	Main bedroom balcony	Floor waste	See section 8.6 of this report.		No cavity drain provided for Hebel. HARPER OBSERVATIONS AND COMMENTS - HEBEL IS LOCATED WITHIN BALCONY ENVELOPE AND NOT FULLY EXPOSED TO WEATHER, SO NO REQUIREMENT FOR DRAINAGE PIPE TO STORMWATER INLET.





<p>U 306.16</p>	<p>Main bedroom balcony</p>	<p>Floor tiles</p>	<p>See section 8.4 of this report.</p>		<p>No falls provided to external tiled balcony.</p>  <p>HARPER OBSERVATIONS AND COMMENTS – TILED SURFACE HAS SUFFICIENT FALLS.</p>
<p>U 306.17</p>	<p>Main bedroom balcony</p>	<p>Base of Hebel cladding</p>	<p>See section 8.5 and 8.6 of this report</p>		<p>Elevated moisture to base of wall.</p>  <p>HARPER OBSERVATIONS AND COMMENTS – LOW LEVEL OF MOISTURE DETECTED.</p>

					
U 306.18	Main bedroom balcony	Base of Hebel wall	Works have not been completed with due care and skill.		<p>Paint adhesion failure</p>  <p>HARPER OBSERVATIONS AND COMMENTS – RESTRICTED ACCESS TO INSPECTION.</p>

U 306.19	Main bedroom balcony	Top of FC cladding	Works have not been completed with due care and skill or to manufacturer's specifications.		<p>No parapet cap to exposed FC blade wall.</p>  <p>HARPER OBSERVATIONS AND COMMENTS – OUTSTANDING</p> <p>REFER ITEM 2-C SECTION 10 HARPER DEFECT SCHEDULE</p>
U 306.20	Main bedroom balcony	Overflow	See section 8.8 of this report		<p>The subsill is 45mm high and overflow is 58mm.</p> <p>Top of the tile is reliant upon sealant for the vertical termination against the subsill.</p>  <p>HARPER OBSERVATIONS AND COMMENTS – RESTRICTED ACCESS TO INSPECTION</p>

					
U 306.21	Bedroom 2	Top of door	See section 8.16 of this report .		<p>Top of door has not been sealed.</p> <p>HARPER OBSERVATIONS AND COMMENTS – RESOLVED</p>

U 306.22	Bedroom 3	Top of door	See section 8.16 of this report		<p>Top of door has not been sealed</p>  <p>HARPER OBSERVATIONS AND COMMENTS – RESOLVED</p>
U 306.23	balcony	Sliding door threshold	See section 8.8 of this report		<p>Weepholes in glazing are same height as overflows.</p>  <p>HARPER OBSERVATIONS AND COMMENTS – RESTRICTED ACCESS TO INSPECTION</p>

						
U 306.24	Balcony	Sliding door threshold	Incomplete work.			<p>Gap in tiles will allow moisture to enter rear of tiles.</p>  <p>HARPER OBSERVATIONS AND COMMENTS –RESOLVED</p>
U 306.25	Balcony	Floor waste	See section 8.6 of this report	<p>HARPER OBSERVATIONS AND COMMENTS - HEBEL IS LOCATED WITHIN BALCONY ENVELOPE AND NOT FULLY EXPOSED TO WEATHER, SO NO REQUIREMENT FOR DRAINAGE PIPE TO STORMWATER INLET.</p>		<p>No visible cavity drain for Hebel I.</p>  <p>HARPER OBSERVATIONS AND COMMENTS –IMAGE DOES NOT MATCH DESCRIPTION.</p> <p>RESTRICTED ACCESS TO INSPECTION</p>

APPENDIX A

SCOTT SCHEDULE

FILE NO. 2021/00161286

APPLICANT

Mitchell Avenue Development Pty Ltd (Developer)

RESPONDENT

Forte Sydney Construction Pty Ltd

SCOTT SCHEDULE

ITEM No.	Alleged Defects and Incomplete Works	APPLICANT Claimed Scope of Remedial Works	APPLICANT Claim for Costs	Notes
R-1	Roof – Waterproofing	Scope of Remedial Works	Claim for Costs	Notes
	<p>Builder has failed to carry out the works in accordance with manufacturers guidelines, AS4654.2 and National Constructions Code 2016 Volume 1 F1.4.</p> <p>Breach(es)</p> <p><i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a) & (c);</i> ▪ <i>Manufacturers guidelines.</i> ▪ <i>AS4654.2:2012 Waterproofing membranes for external above-ground use Part 2: Design and installation.</i> ▪ <i>National Construction Code 2016 Volume 1 F1.4</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. <p>Supervisor to coordinate access and facilitate the works throughout the whole process.</p> <ol style="list-style-type: none"> 2. Gain access to required areas in accordance with Safework requirements. 3. Supply and install temporary guard rail to perimeter of roof 4. Cover and protect adjacent surfaces during the rectification work. 5. Supply and install temporary 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 2menx2hr@\$60/h/\$240</p> <p>Protection materials \$50</p> <p>Supply and install temporary guard rail to perimeter of roof 104lm@\$25plm/\$2600</p>	

		<p>props to mechanical ventilation service</p> <p>6. Labour to cut existing metal supports to ventilation service</p> <p>7. Supply and erect formwork to provide plinths to mechanical ventilation services</p> <p>8. Supply premixed concrete for plinths</p> <p>9. Labour to mix premixed concrete, place and finish</p> <p>10. Labour to extend metal supports and fix to concrete plinths, remove temporary support</p> <p>11. Labour grind horizontal channel to perimeter of concrete hob and walls to install over flashing in accordance with AS4654.2</p> <p>12. Labour to grind and prepare rough surface areas</p> <p>13. Labour to fill low spots, prepare and prime existing waterproofing basecoat as to manufacturers guidelines</p>	<p>Labour to cut existing metal supports to ventilation service and install temporary props to mechanical ventilation service 2menx4hrs\$90/h/\$720</p> <p>Supply and erect formwork, mix concrete and finish to provide plinths to mechanical ventilation services 2menx8hrs@\$85/h/\$1360</p> <p>Supply premixed concrete for plinths 40 bagsx\$10/bag/\$400</p> <p>Labour to extend metal supports and fix to concrete plinths, remove temporary support 2menx4hrs@\$90/h/\$720</p> <p>Supply materials and ancillaries to extend mechanical services supports \$200</p> <p>Labour grind horizontal channel to perimeter of concrete hob and walls to install over flashing in accordance with AS4654.2, and grind and prepare rough surfaces for waterproofing</p>	
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		<p>14. Labour to install fillet bond breaker to roof junctions</p> <p>15. Supply fillet bond breaker as to manufacturers guidelines and AS4654.2</p> <p>16. Labour to apply waterproofing system in accordance with manufacturers guidelines and AS4654.2</p> <p>17. Supply waterproofing materials and ancillaries</p> <p>18. Labour to install and seal aluminium termination over-flashing the roof perimeter and walls</p> <p>19. Supply custom aluminium over-flashing and sealant</p> <p>20. Labour to install flashing to pipes and penetrations in accordance with AS4654.2</p> <p>21. Supply pipe and penetration flashing and ancillaries</p> <p>22. Labour to paint concrete plinths to similar colour to existing finishes in accordance with contract</p>	<p>2manx16hrs@\$85/h/\$2720</p> <p>Labour to fill low spots, prepare and prime existing waterproofing basecoat as to manufacturers guidelines and install fillet bond breaker to roof junctions 2manx16hrs@\$85/h/\$2720</p> <p>Supply Sikalastic 100EP primer 5x19.8Lt@\$190ea/\$950</p> <p>Supply fillet bond breaker as to manufacturers guidelines and AS4654.2 \$5plmx104/lm/\$520</p> <p>Labour to apply waterproofing system in accordance with manufacturers guidelines and AS4654.2 3manx36hrs@\$85/h/\$9180</p> <p>Supply waterproofing materials and ancillaries Sika 488 40x15lt@\$142/\$5112 Sika Excel 622 12x18.9lt@\$440/\$5280 Source: tradiecart.com.au Ancillaries \$200</p>	
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		<p>specifications</p> <p>23. Supply paint and ancillaries</p> <p>24. Labour to place waste material in waste bin, clean site and leave in a tidy condition upon completion of work</p> <p>25. Dismantle and remove temporary guard rail</p> <p>26. Waste disposal</p>	<p>Labour to install and seal aluminium termination over-flashing the roof perimeter and walls 3menx24hrs@\$90/h/\$6480</p> <p>Supply custom aluminium over-flashing and sealant Aluminium flashings 104lm@\$6.50plm/\$672 Waterproof sealant 50x600ml@\$18each/\$900</p> <p>Labour to install flashing to pipes and penetrations in accordance with AS4654.2 1manx8hrs@\$85/h/\$680</p> <p>Supply pipe and penetration flashing and ancillaries \$200</p> <p>Labour to paint concrete plinths to similar colour to existing finishes in accordance with contract specifications 1manx8hrs@\$70/h/\$560</p> <p>Supply paint and ancillaries \$200</p> <p>Labour to carry, load materials and assist trades, place waste</p>	
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			<p>material in waste bin, clean site and leave in a tidy condition upon completion of work 2manx\$60@36hrs/h/\$4320</p> <p>Labour to makegood affected finishes 2manx\$70@8hrs/h/\$1120</p> <p>Materials and ancillaries to make good, affected finishes \$200</p> <p>Dismantle and remove temporary guard rail 104lm@18plm/\$1872</p> <p>Waste disposal \$1500</p> <p>Total \$51676</p>	
R-2	Lower roof Insulation – Building L and U	Scope of Remedial Works	Claim for Costs	Notes
	<p>Roof insulation has not been installed in accordance with the manufacturers guidelines and contract plans and specifications.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>Manufacturers installation guidelines</i> ▪ <i>Contract plans and specifications</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 2menx4hr@\$60/h/\$480</p> <p>Protection materials \$200</p>	

		<p>requirements.</p> <p>3. Supply and install temporary guard rail to perimeter of roof</p> <p>4. Cover and protect adjacent surfaces during the rectification work.</p> <p>5. Labour to remove pebbles and store in a secure location</p> <p>6. Remove and dispose of insulation panels and geofabric</p> <p>7. Labour to clean roof surface and prepare roof as to manufacturers guidelines</p> <p>8. Labour to install new insulation and provide falls to drainage inlets as manufacturers guidelines</p> <p>9. Supply new insulation panels, vapour control layer materials and fixings as to manufacturers guidelines</p> <p>10. Labour grind horizontal channel to perimeter of concrete hob and walls to install over flashing in accordance with AS4654.2</p> <p>11. Labour to clean surfaces and prepare surfaces for waterproofing</p>	<p>Supply and install temporary guard rail to perimeter of roof 91lm@\$25plm/\$2275</p> <p>Labour to remove pebbles and store in a secure location, remove and dispose of insulation panels and geofabric, clean roof surface and prepare roof as to manufacturers guidelines 4manx\$70@16hrs/h/\$4480</p> <p>Labour to lay Hebel to increase height of hob to provide for R4.0 90mm insulation 2menx16hr@\$85/h/\$2720</p> <p>Supply Hebel and ancillaries Hebel 50mm/25m2@\$55m2/\$1375 Ancillaries \$200</p> <p>Labour to install new insulation and provide falls to drainage inlets as per manufacturers guidelines 4manx\$85@16hrs/h/\$5440</p> <p>Supply new insulation panels, vapour control layer materials and</p>	
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		<p>12. Labour to install fillet bond breaker to roof junctions</p> <p>13. Supply fillet bond breaker as to manufacturers guidelines</p> <p>14. Labour to apply single ply sheet waterproofing system in accordance with manufacturers guidelines</p> <p>15. Supply waterproofing materials and ancillaries</p> <p>16. Labour to install and seal aluminium termination over-flashing the roof perimeter and walls</p> <p>17. Supply custom aluminium over-flashing and sealant</p> <p>18. Labour to install flashing to pipes and penetrations in accordance with AS4654.2</p> <p>19. Supply pipe and penetration flashing and ancillaries</p> <p>20. Labour to reinstate and place pebbles</p> <p>21. Labour to makegood affected finishes</p> <p>22. Materials and ancillaries to</p>	<p>fixings as to manufacturers guidelines</p> <p>Recticel 90mm Flat 247m2x\$45/\$11,115</p> <p>IKO Shield ALU/SA Vapour barrier 5x\$491/\$2455</p> <p>Ancillaries \$450 Source:wpdgroup.com.au</p> <p>Labour grind horizontal channel to perimeter of concrete hob and walls to install over flashing in accordance with AS4654.2 2manx\$85@16hrs/h/\$2720</p> <p>Labour to clean surfaces and prepare surfaces for waterproofing 2manx\$70@8hrs/h/\$1120</p> <p>Labour to apply single ply sheet waterproofing system in accordance with manufacturers guidelines 4manx\$85@24hrs/h/\$8160</p> <p>Supply waterproofing materials and ancillaries ARDEX HD Cover Board 2.7m2@\$95x98/\$9310</p>	
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		<p>make good, affected finishes</p> <p>23. Labour to place waste material in waste bin, clean site and leave in a tidy condition upon completion of work</p> <p>24. Dismantle and remove temporary guard rail</p> <p>25. Waste disposal</p> <p>26. Waste chute hire, install and dismantle</p> <p>27. Cranage permit and cranage to remove, place roof pebbles in a secure location and return to roof reinstate following waterproofing</p> <p>28. Labour to lay Hebel to increase height of hob to provide for thickness of manufacturers R4.0 insulation</p> <p>29. Supply Hebel and ancillaries</p>	<p>ARDEX WPM 715 28m2@\$1780x10/\$17800 Ancillaries \$650 Source:wpdgroup.com.au</p> <p>Supply custom aluminium over-flashing and sealant Aluminium flashings 95lm@\$6.50plm/\$617 Waterproof sealant 40x600ml@\$18each/\$720</p> <p>Labour to install flashing to pipes and penetrations in accordance with AS4654.2 2manx16hrs@\$85/h/\$2720</p> <p>Supply pipe and penetration flashing and ancillaries \$120</p> <p>Labour to reinstate and place pebbles 4manx\$70@8hrs/h/\$2240</p> <p>Labour to makegood affected finishes 2manx\$70@8hrs/h/\$1120</p> <p>Materials and ancillaries to make good, affected finishes \$200</p>	
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			<p>Labour to place waste material in waste bin, clean site and leave in a tidy condition upon completion of work 3manx\$70@8hrs/h/\$1680</p> <p>Provide waste chute to balcony terrace level to remove demolition and building, delivery and pick up \$600</p> <p>Labour to install waste chute 2menx4hrs@\$70/hr/\$560</p> <p>Provisional allowance: Cranage permit and cranage to remove, place roof pebbles in a secure location and return to roof reinstate following waterproofing, and road traffic control \$20000</p> <p>Dismantle and remove temporary guard rail 91lm@18plm/\$1638</p> <p>Waste disposal \$2500</p> <p>Total \$130665</p>	
R-3	Lower roof drainage - Building L and U	Scope of Remedial Works	Claim for Costs	Notes

<p>The Author has observed that</p> <p>A) Metal mesh has been loosely placed over the stormwater drainage inlet and no netting to pebbled roof areas.</p> <p>B) No bird netting has been provided as to contract specifications.</p> <p>The Author is of view,</p> <p>A) The use of the metal mesh and installation is not a suitable solution to prevent materials and stone ballast from falling into drainage inlet and the defect originated due to poor workmanship employed by the builder at the time of construction.</p> <p>B) The building contract Page 50 Clause 6.4.4 Roof and Roof finishes of the Principal's Project Requirements specifies <i>'All non-trafficable areas to be covered with pebbles and netting (ensuring the pebbles cannot be removed by birds).'</i></p> <p>The Author is of the view that the Builder has failed to carry out the works in accordance with the contract plans and specifications.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a) ▪ Contract plans and specifications ▪ NCC Volume 3 Part A5.0 – Suitability <p>(1) A building and <i>plumbing</i> or <i>drainage</i> installation must be</p>	<p>Allow to:</p> <p>IN CONJUNCTION WITH REMEDIATION WORKS IN RELATION TO ITEM R-2</p> <ol style="list-style-type: none"> 1. Labour to install galvanized inlet grates to stormwater inlets to Buildings L and U 2. Supply galvanized inlet grates 3. Labour to install bird netting to pebbled roof areas to Building L and U 4. Supply bird netting and ancillaries 5. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to install galvanized inlet grates to stormwater inlets to Buildings L and U 1manx8hrx\$95/h/\$760</p> <p>Supply galvanized inlet \$20ea.x10/\$200</p> <p>Labour to install bird netting to pebbled roof areas to Building L and U, grates and clean site on completion 3menx\$8hrs@\$70/h/\$1680</p> <p>Supply (Heavy duty) bird netting and ancillaries \$8m2x\$250m2/\$2000</p> <p>Total \$4640</p>
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	constructed using materials, products, <i>plumbing products</i> , forms of construction and designs fit for their intended purpose to achieve the relevant requirements of the NCC.			
R-4	Building L – Ladder	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author is of the view that the ladder is comply with AS1657:2018 7.3.1 and 7.44 Fixed platforms, walkways, stairways and ladders – Design, construction and installation, as the width of the upper steps is less than 450mm and ladder is not securely fastened.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>NCC Volume 1 2016 - D2.18 Fixed platforms, walkways, stairways and ladders -A fixed platform, walkway, stairway, ladder and any going, and riser, landing, handrail or barrier attached thereto may comply with AS1657</i> ▪ <i>Contract plans and specifications</i> ▪ <i>AS1657:2018 7.3.1 and 7.44 Fixed platforms, walkways, stairways and ladders – Design, construction and installation</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Supply and install ladder in accordance with AS1657:2018 7.3.1 and 7.44 4. Labour to place waste material in waste bin, clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Supply ladder in accordance with AS1657:2018 7.3.1 and 7.44 \$1200 Source: www.industroquip.com.au</p> <p>Labour to install 2menx4hrs@\$90/hr/\$720</p> <p>Ancillaries and fixings \$25</p> <p>Labour to dispose of waste and clean site 1hr@\$60/\$60</p> <p>Total \$2005 Note: Provisional allowance included in item R-1.</p>	
R-5	Building L – Exposed Roof Services	Scope of Remedial Works	Claim for Costs	Notes
	The Author has observed that mechanical and plumbing service to the northern side of Building L	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. 	<p>Co-ordination and Supervision - Refer to allowance in summary of</p>	

	<p>have not been screened.</p> <p>The Author noted that the building contract Page 50 Clause 6.4.4 Roof and Roof finishes of the Principal's Project Requirements specifies 'All services and plant equipment located on the roof must be adequately screened.'</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>Contract plans and specifications</i> 	<p>Supervisor to coordinate access and facilitate the works throughout the whole process.</p> <ol style="list-style-type: none"> 2. Gain access to required areas in accordance with Safework requirements. 3. Supply powder coated metal louvre panels, posts, railing, gate, gate furniture and ancillaries 4. Labour to install screening materials and ancillaries 5. Labour to place waste material in waste bin, clean site and leave in a tidy condition upon completion of work 6. Dispose of building waste 	<p>costs at end of this Scott schedule.</p> <p>Supply powder coated metal louvre panels, posts, railing, gate, gate furniture and ancillaries \$334 plmx\$10lm/\$3340 Source: www.supergates.com.au</p> <p>Labour to install screening materials and ancillaries, place waste materials in waste bin and clean site on completion 2menx8hrs@\$70/h/\$1120</p> <p>Total \$4460</p> <p>Note: Provisional allowance included in item R-1.</p>	
C-1	Door installation – Waterstop and weatherproof flashing	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that no water stop has been provided to the doors to all units.</p> <p>The Author noted that the defect was identified in Section 8.3 of the Construction Adviser (Giaouris) Report.</p> <p>The Author concurs with Giaouris view that the installation has not been carried out in accordance</p>	<p>Allow to:</p> <p>Apply following rectification methodology to each unit and door identified in Table C-1-1</p> <ol style="list-style-type: none"> 1. Provide site supervision. <p>Supervisor to coordinate access and facilitate the works throughout the</p>	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx1hr@\$60perhr/\$60</p>	

with AS4654.2.

The Author is of the view that the defect is systematic failure of the Builder to carry out the works with due care and diligence in accordance with AS4654.2 and the NCC Volume 1 2016.

Breach(es)

Failure to comply with the following:

- *Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)*
- *NCC Volume 1 2016 FP1.4 – Weatherproofing*
- *AS4654.2*

The doors identified by the Author in **Table C-1-1** of this item in relation to the defective works should be rectified to comply with requirements of the NCC and AS4654.2.

TABLE C-1-1	
Unit Number	Location of Doors
GO2	Bedroom 2
GO3	Bedroom 2
G04	Bedroom 1 and 2
G05	Bedroom 2
104	Bedroom 2
204	Bedroom 2
304	Bedroom 2
401	Bedroom 1 and 2
402	Bedroom 2
403	Bedroom 1 and 2

whole process.

2. Gain access to required areas in accordance with Safework requirements.
3. Cover and protect adjacent surfaces during the rectification work
4. Labour to pull back carpet to provide access to carry out repairs
5. Labour to remove sliding door and store in a secure location
6. Labour to clean down existing waterproofing, reactivate waterproofing, install new waterproofing waterstop angle behind sliding door, aluminium angle colour matched to aluminium frame, Install new waterproofing, angle and fillet to hob and waterstop
7. Labour to reinstall sliding door suite, finishes, sealant to vertical and horizontal tile junction, install storm moulds to sliding door
8. Labour to complete paint repair affected finishes

Protection materials \$30

Labour to move furnishings and place in a secure location, pull back carpet to provide access to carry out repairs, remove sliding door and tile threshold
2menx4hrs@\$90perhr/\$720

Labour to clean down existing waterproofing, reactivate waterproofing, install new waterproofing waterstop angle behind sliding door, aluminium angle colour matched to aluminium frame, Install new waterproofing, angle and fillet to hob and waterstop
1manx8hrs@\$85perhr/\$680

Supply aluminium powder coated angle and waterproofing materials
\$120

Labour to reinstall sliding door suite, finishes, sealant to vertical and horizontal tile junction, install storm moulds to sliding door
2menx4hrs@\$90perhr/\$720

		<p>9. Supply paint ancillaries</p> <p>10. Labour to reinstate carpet</p> <p>11. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>12. Clean site and leave in a tidy condition upon completion of work</p>	<p>Labour to rectify paint work 1manx4hrs@\$70/hr/\$280</p> <p>Supply paint & ancillaries \$25</p> <p>Labour to reinstate threshold tile, grout and seal joints 2manx4hrs@\$85/h/\$680</p> <p>Tiles \$45 Grout \$5 Sealant \$18</p> <p>Labour to reinstate carpet and make good any surfaces affected as part of the works, to their prior condition. 1manx2hrs@\$90perhr/\$180</p> <p>Labour to clean site 1hr@\$60/\$60</p> <p>Total \$3623x13doors/\$47099</p>	
C-2	Efflorescence	Scope of Remedial Works	Claim for Costs	Notes
	The Author is of the view that the efflorescence and damage to the rendered finish has originated due to the lack of flashing and waterproofing to the buildings parapets, hobs and roof perimeter, that has allowed water to penetrate and migrate the wall and	<p>Allow to:</p> <p>1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process.</p>	Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.	

substrate, causing the efflorescence staining, cracking and delamination of the rendered finish.

Breach(es)

Failure to comply with the following:

- *Home Building Act 1989 (NSW) under Section 18B Clauses 1(a) & (c);*
- *National Construction Code 2016 Vol1 FP1.4 Weatherproofing*

2. Gain access to required areas in accordance with Safework requirements.
3. Supply and install scaffold in hard-to-reach areas
4. Supply and install custom made powder coated metal flashing to parapets and roof perimeter
5. Supply fixings, sealants, and ancillaries
6. Labour to remove efflorescence staining and repair paint finish to nearest junction and make good, affected finishes
7. Supply paint, cleaning materials and ancillaries
8. Dismantle and remove scaffold
9. Labour to place waste material in waste bin, clean site and leave in a tidy condition upon completion of work
10. Dispose of building waste

Labour to cover and protect adjacent surfaces
 2menx2hr@\$60perhr/\$240

Protection materials \$100

Provisional allowance to Supply and install scaffold to provide working platform to repair all defects Buildings L & U façade and roof parapets \$65000

Supply and install custom made powder coated metal flashing to parapets and roof perimeter -

Supply custom made powder coated metal flashing
 210lmX\$25plm/\$5250

Supply fixings, sealants, and ancillaries 210plmx\$5plm/\$1050

Labour to install flashing
 \$35plmx210plm/\$7350
 Labour to remove efflorescence staining and repair paint finish to nearest junction and make good, affected finishes
 2menx40hrs@\$70/h/\$5600

			<p>Supply paint, cleaning materials and ancillaries Paint \$1200 Ancillaries \$240</p> <p>Labour to place waste material in waste bin, clean site and leave in a tidy condition upon completion of work 1manx16hrs@\$60/h/\$960</p> <p>Waste disposal \$350</p> <p>Total \$87340</p>	
C-3	Northern exterior – Courtyard Unit G07 and Balcony Unit 107 – Lightweight rendered column	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author is of the view that –</p> <ul style="list-style-type: none"> The Builder has failed to carry out the waterproofing to the balcony in accordance with AS4654.2 The Builder has failed to weatherproof the building <p>Weatherproofing</p> <p>The Author observed evidence of water leaks directly below the parapet to the northside of the column that balconies and northwest corner of Building U.</p>	<p>Provisional allowance: Structural engineers inspection and report</p> <p>Prior to the commencement of rectification works, provide for a structural engineer to carry out inspection and provide report in relation to the defective works and structural impact due to the deflection of cantilevered concrete balconies.</p>	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Supply and install scaffold to provide a safe working platform Included in item C-2</p> <p>Labour to cover and protect adjacent surfaces 2menx2hrs@\$60perhr/\$240</p>	

The Author is of the view that the water leak originated due to the failure of the building to provide a weatherproof capping to the parapets above.

Building distortion, settlement deterioration of building elements

The Author observed that the gasket seal to the horizontal joint to the east side and northside of the column below the slab had ruptured and the alignment between the underside of concrete slab and the top of the rendered lining was distorted primary to the eastern side of the column, and that sections of the render finish had cracked and were delaminating from the slab edge above the render lightweight cladding.

The Author is of the view that the damage caused to the horizontal gasket seal and rendered finish described is due to sag of the cantilevered slab and settlement of the building.

The Author recommends that the issue be investigated by suitable qualified structural engineer.

The Author is of the view that the defects described originated due -

- Poor workmanship employed by the Builder at the time of construction
- Failure of the Builder to carry out the works in accordance with plans and specification.
- Failure of the Builder to carry out the works in accordance with AS4654.2
- Failure of the Builder to carry out the works in accordance with NCC FP1.4 –

CONCURRENT AND IN CONJUNCTION WITH REPAIRS IN RELATION TO ITEM C-2

Allow to:

1. Provide site supervision.
Supervisor to coordinate access and facilitate the works throughout the whole process.
2. Gain access to required areas in accordance with Safework requirements.
3. Supply and install scaffold to provide a safe working platform
4. Cover and protect adjacent surfaces during the rectification work.
5. Labour to remove furniture, affected fixtures and place in secure location
6. Provide waste chute to balcony level to remove demolition and building material waste from balcony
7. Labour to demolish and remove tiling, tile bed (screed), and waterproofing membrane, expose

Protection materials \$60

Labour to remove furniture, affected fixtures and place in secure location
 2menx1hr@\$60perhr/\$120

Provide waste chute to balcony level to remove demolition and building material waste from balcony –
 Provide waste chute to balcony level to remove demolition and building, delivery and pick up \$600

Labour to install waste chute
 2menx1hr@\$70/h/\$140

Labour to demolish and remove tiling, tile bed (screed), and waterproofing membrane, expose concrete slab substrate, remove demolition waste and place in waste bin for disposal
 Labour to grind concrete surface and prepare surface for new waterproofing system
 2menx8hrs@\$70perhr/\$1120

Weatherproofing

Breach(es)

Failure to comply with the following:

- *Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)&(c);*
- *National Construction Code 2016 Vol1 FP1.4 Weatherproofing*
- *AS4654.2:2012 Waterproofing membranes for external above-ground use Part 2: Design and installation.*
- *Contract Plans and specifications*

concrete slab substrate, remove demolition waste and place in waste bin for disposal

8. Labour to grind concrete surface and prepare surface for new waterproofing system

9. Labour to provide proprietary waterproofing system in accordance with AS4654.1&2 to balcony terrace

10. Labour to carry and load materials throughout remediation works

11. Labour to place sand and cement tile screed and provide positive falls to drainage inlets in accordance with AS3958.1 and in accordance with building contract specifications

12. Labour to mix sand and cement for tile screed and assist trades

13. Supply sand and cement for tile screed

14. Supply 'Efflock' to prevent efflorescence

Labour to provide proprietary waterproofing system in accordance with AS4654.1&2 to balcony terrace
 2menx8hrs@\$70perhr/\$1120

Labour to carry and load materials throughout remediation works
 2menx8hrs@\$60perhr/\$960

Labour to place sand and cement tile screed and provide positive falls to drainage inlets in accordance with AS3958.1 and in accordance with building contract specifications
 2menx8hrs@\$70perhr/\$1120

Labour to mix sand and cement for tile screed and assist trades
 1manx8hrs@\$60perhr/\$480

Supply sand and cement for tile screed
 Washed Sand 1ton \$95
 Cement 10bagsx\$10p/bag/\$100

		<p>15. Supply and apply waterproofing system on top of tile bed to prevent efflorescence</p> <p>16. Supply and install preformed tile movement joint in accordance with AS3958.1 and building contract specifications</p> <p>17. Supply and fix new selected tiles and grout in accordance with AS3958.1:2007 and building contract specifications</p> <p>18. Supply 'Efflock' for tile adhesive and grouts to prevent efflorescence</p> <p>19. Labour to seal all joints and junctions</p> <p>20. Supply sealants</p> <p>21. Remove and dispose of all building waste</p> <p>22. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>23. Dismantle and remove scaffold</p> <p>2.4 Clean site and leave in a tidy condition upon completion of work</p>	<p>Supply and apply waterproofing system on top of tile bed to prevent efflorescence Primer \$200 PU waterproofing \$400 Ancillaries \$60</p> <p>Supply preformed tile movement joint in accordance with AS3958.1 and building contract specifications 2lm@\$12plm/\$24</p> <p>Supply and fix new selected tiles and grout in accordance with AS3958.1:2007 and building contract specifications Tiling labour 2menx8hrs@\$70/h/\$1120 Adhesive \$35 Grout \$25</p> <p>Supply 'Efflock' for tile adhesive and grouts to prevent efflorescence \$45</p> <p>Labour to seal all joints and junctions 1manx8hrs@\$70/h/\$560</p> <p>Supply sealants \$36</p>	
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		25. Dispose of building waste	<p>Labour to remove and dispose of all building waste 2menx8hrs@\$60perhr/\$960</p> <p>Labour to make good any surfaces affected as part of the works, to their prior condition. 1manx4hrs@\$70/h/\$280</p> <p>Supply paint & ancillaries \$25</p> <p>Dismantle and remove scaffold Included in item C-2</p> <p>Labour to clean site 2hrs@\$60/\$120</p> <p>Total \$10045</p>	
C-4	Light weight balcony columns and walls to units G07-107, G06-206	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author observed at the time of inspection –</p> <ul style="list-style-type: none"> Water damage to the northeast and northwest light weight rendered wall and columns to units G07-107, 106, G06-206. <p>The Author is of the view that the defects described originated due -</p> <ul style="list-style-type: none"> Poor workmanship employed by the Builder at the time of construction 	<p>CONCURRENT AND IN CONJUNCTION WITH REPAIRS IN RELATION TO ITEM C-2.</p> <p>NOTE: WEATHERPROOFING, SCAFFOLD, COVER AND PROTECTION OF ADJACENT FINISHES INCLUDED IN</p>	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to repair damaged finishes and rectify paint work 2manx8hr@\$70/hr/\$1120</p>	

- Failure of the Builder to carry out the works in accordance with plans and specification.
- Failure of the Builder to carry out the works in accordance with AS4654.2
- Failure of the Builder to carry out the works in accordance with NCC FP1.4 – Weatherproofing

Breach(es)

Failure to comply with the following:

- *Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)&(c);*
- *National Construction Code 2016 Vol1 FP1.4 Weatherproofing*
- *AS4654.2:2012 Waterproofing membranes for external above-ground use Part 2: Design and installation.*
- *Contract Plans and specifications*

ITEM C-2

Allow to:

1. Provide site supervision.
Supervisor to coordinate access and facilitate the works throughout the whole process.
2. Gain access to required areas in accordance with Safework requirements.
3. Labour to repair damaged finishes
4. Materials and ancillaries to repair damaged finishes
5. Clean site and leave in a tidy condition upon completion of work
6. Dispose of building waste

Materials and ancillaries to repair damaged finishes
Dulux render materials \$200
\$200 paint
Ancillaries \$100

Labour to clean site and dispose of waste 2hrs@\$60/\$120

Total \$1740

C-5	Balcony Unit 205 – Efflorescence	Scope of Remedial Works	Claim for Costs	Notes
	The Author observed efflorescence staining to the top of concrete slab at the southeast balcony of Unit 205 that evidence of a moisture penetration.	CONCURRENT AND IN CONJUNCTION WITH REPAIRS IN RELATION TO ITEM C-2	Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.	

	<p>During inspection following periods of rain, the Author observed moisture penetrating at the top of the concrete slab in the location of efflorescence staining to unit 205, and moisture penetrating the eastern side of the lightweight rendered wall in location above unit 205 and below at the balcony slab to unit 105.</p> <p>The Author noted that the defect was identified in Attachment F Section 10.6 of TCA report.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)&(c);</i> ▪ <i>National Construction Code 2016 Vol1 FP1.4 Weatherproofing</i> ▪ <i>Contract Plans and specifications</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Supply and install scaffold to provide safe working platform 5. Labour to repair damaged finishes 6. Materials and ancillaries to repair damaged finishes 7. Dismantle and remove scaffold 8. Clean site and leave in a tidy condition upon completion of work 9. Dispose of building waste 	<p>Labour to cover and protect adjacent surfaces 1menx0.5hr@\$60perhr/\$30</p> <p>Protection materials \$10</p> <p>Supply and install scaffold to provide safe working platform Included in item C-2</p> <p>Labour to repair damaged finishes 1menx2hrs@\$70perhr/\$140</p> <p>Materials and ancillaries to repair damaged finishes Included in item C-4</p> <p>Dismantle and remove scaffold Included in item C-2</p> <p>Labour to clean site and dispose of waste 0.5hrs@\$60/\$30</p> <p>Total \$210</p>	
C-6	Building L and U Façade - Decorative battens	Scope of Remedial Works	Claim for Costs	Notes

The Author has observed evidence of –

1. Corrosion of the metal fixings to southern side Building L and U façade.
2. Cracks to the aerated concrete decorative battens installed to the building façade to north and west of building L and south of building U.
3. Gaps to decorative battens installed to the building façade to north and west of building L and south of building U.

During inspection the found metal fixings with the demolition waste from waterproofing repair to southern building side of entry with evidence of corrosion.

The Author noted that the Item had been identified in Attachment F Section 10.6 item C20 of TCA report. The Author is of the view that Builder originated due to the has failure to use suitable fixings for installation of aerated decorative battens and poor workmanship employed by the Builder at the time of construction.

Breach(es)

Failure to comply with the following:

- *Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)&(c);*
- *NCC 2016 Volume 1 Part A5.0 (2)(b) – Suitability of materials and products*

Allow to:

1. Provide site supervision.
Supervisor to coordinate access and facilitate the works throughout the whole process.
2. Gain access to required areas in accordance with Safework requirements.
3. Cover and protect adjacent surfaces during the rectification work.
4. Supply and install scaffold to provide safe working platform
5. Labour to remove damaged, poorly installed battens and prepare surface for install of new battens
6. Supply new batten material, ancillaries, and fixings
7. Labour to full seal new and existing battens, apply textures finish and paint new and existing battens, repair and make good, affected finishes
8. Supply paint and ancillaries

Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.

Labour to cover and protect adjacent surfaces
 2menx2hrs@\$60perhr/\$240

Protection materials \$100

Supply and install scaffold to provide safe working platform
Included in item C-2

Labour to remove damaged, poorly installed battens and prepare surface for install of new battens.
 2menx24hrs@\$90perhr/\$4320

Supply new batten material, ancillaries, and fixings
 ACC
 50x25/200lm@\$15plm/\$2000
 Fixings 1000 S/S 8-gauge screws and dowel anchors \$250
 Labour to full seal new and existing battens, apply textures finish and paint new and existing battens, repair and make good, affected finishes

		<p>9. Labour to remove and dispose of building waste</p> <p>10. Dismantle and remove scaffold</p> <p>11. Clean site and leave in a tidy condition upon completion of work</p> <p>12. Waste disposal</p>	<p>2menx40hrs@\$70perhr/\$5600</p> <p>Supply paint and ancillaries Paint \$400 Ancillaries \$120</p> <p>Labour to remove and dispose of building waste 1manx4hrs@\$60/\$280</p> <p>Dismantle and remove scaffold Included in item C-2</p> <p>Labour to clean site 2hrs@\$60/\$120</p> <p>Waste disposal \$250</p> <p>Total \$13280</p>	
C-7	HEBEL cladding installation	Scope of Remedial Works	Claim for Costs	Notes
	<p>Hebel panel drainage and pressure equalisation – Item C7 identified in Attachment F Section 10.6 and 8.26 of TCA report.</p> <p>The Author has observed that there is no provision for drainage or pressure equalization to the Hebel panels to the façades of building L and U.</p> <p>The Author noted that the defective works had been identified in Section 10.6 and 8.26 of Mr Giaouris</p>	<p>Allow to:</p> <p>1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process.</p> <p>2. Gain access to required areas in</p>	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1menx1hr@\$60perhr/\$60</p> <p>Protection materials \$20</p>	

report dated 7 December 2020. However, the Author noted that Hebel installation guidelines referenced by Mr Giaouris states PE/drainage slots to be located no greater than **3 metre spacing**. Therefore, the Author is of the view that work is defective in the locations where the spacing exceed or do not conform to the manufacturers guidelines.

The Author is of the view that where the works have not been carried out in accordance with manufacturers guidelines that the works are defective and the defect originated due to poor workmanship employed by the Builder at the time of construction.

Breach(es)

Failure to comply with the following:

- *Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)*
- *Manufacturers installation guidelines*

accordance with Safework requirements.

3. Cover and protect adjacent surfaces during the rectification work.
4. Supply and install scaffold to provide working deck to all levels in location described to western façade to Building L and northern façade of Building U.
5. Labour to cut slot in Hebel panel to install Weepa protector, install Weepa protectors and patch and repair affected finishes in accordance with manufacturers guidelines.
6. Labour to repair render and paint façade to provide even finish
7. Supplier Weepa protectors
8. Supply Dulux render system materials, paint and ancillaries
9. Make good any surfaces affected as part of the works, to their prior condition.
10. Dismantle and remove scaffold

Supply and install scaffold to provide working deck to all levels in location described to western façade to Building L and northern façade of Building U.

Included in item C-2

Labour to cut slot in Hebel panel to install Weepa protector, install Weepa protectors and patch and repair affected finishes in accordance with manufacturers guidelines.

2menx40hrs@\$90perhr/\$7200

Labour to repair render and paint façade to provide even finish and make good, affected finishes Supplier Weepa protectors

2menx32hrs@\$70perhr/\$4480

Supply Dulux render system materials, paint and ancillaries
 Dulux materials \$400
 Ancillaries \$90

Labour to clean site and dispose of waste 2hrs@\$60/\$120

		<ul style="list-style-type: none"> 11. Clean site and leave in a tidy condition upon completion of work 12. Waste disposal 	Total \$12370	
C-8	Main Foyer Entry – Waterproofing repair	Scope of Remedial Works	Claim for Costs	Notes
	<p>Moisture affecting habitable areas</p> <p>The Author has observed the progress of the waterproofing repair affecting unit G04 to the southside of the entry.</p> <p>Works not carried out in accordance with architectural plans</p> <p>The Author observed sections of blue board have been used to close voids in the base of the wall and that the Builder has applied to waterproofing membrane of the before mentioned sections.</p> <p>On review of the construction certificate architectural plans the Author observed the design required a concrete hob to south of entry above G04.</p> <p>Please refer to extract – PBA Aarchitects construction certificate plans drawing A4001 Section details 01 for further details in the following table.</p> <p>Drummy render</p> <p>The Author carried out testing of the rendered finish and found the render to be drummy.</p>	<p>BEFORE COMMENCING REPAIR CHECK MOISTURE LEVEL TO INTERIOR WALL TO UNIT G04</p> <p>If there is no evidence of ongoing moisture originating for the defective works carried out at the time of construction, then allow to:</p> <ul style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove drummy render and prepare wall surface for 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1menx1hr@\$60perhr/\$60</p> <p>Protection materials \$30</p> <p>Labour to remove drummy render and prepare wall surface for waterproofing 2menx8hrs@\$70perhr/\$1120</p> <p>Labour to apply primer wall, binding material, and waterproofing membrane in accordance with waterproofing manufacturers guidelines 1manx8hrs@\$70perhr/\$560</p> <p>Labour to mix and apply polymer cement render</p>	

Weepa installation

The Author has observed that Weepa's have been installed to the base of wall within the rendered finish and is of the view that the Weepa's have no useful functions.

Findings

The Author is of the view that Builder has failed to carry out the works in accordance with plans and specifications and that the remediation works are defective.

Breach(es)

Failure to comply with the following:

- *Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)*
- *Contract plans and specifications*

waterproofing

5. Labour to apply primer wall, binding material, and waterproofing membrane in accordance with waterproofing manufacturers guidelines

6. Labour to mix and apply polymer cement render

7. Labour to install decorative ACC battens to match existing architectural finishes

8. Labour to seal batten materials, apply paint and texture to match existing architectural finish and provide even finish.

9. Supply waterproofing materials polymer cement render, paint, and ancillaries

10. Supply ACC battens and ancillaries

11. Make good any surfaces affected as part of the works, to their prior condition.

12. Clean site and leave in a tidy

2manx8hrs@\$70perhr/\$1120

Labour to install decorative ACC battens to match existing architectural finishes
 2manx8hrs@\$90perhr/\$1440

Labour to seal batten materials, apply paint and texture to match existing architectural finish and provide even finish.
 2manx8hrs@\$70perhr/\$1120

Supply waterproofing materials polymer cement render, paint, and ancillaries
 Primer\$45
 PU waterproofing \$200
 Polymer cement
 40bags@\$15p/bag/\$600

Supply ACC battens and ancillaries
 120lm@\$15plm/\$1800

Labour to dispose of waste and clean site
 2hr@\$60/\$120

Waste disposal \$250

		condition upon completion of work 13. Waste disposal	Total \$8465	
C-9	Eastern façade - Northern side of entry	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author observed at the time of inspection that the paint finish to Eastern façade - Northern side of entry has uneven cover.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>NSW Guide to Standards and tolerances 2017 13.2 Surface finish of paintwork</i> <i>Paintwork is defective if the application has blemishes such as paint runs, paint sags, wrinkling, dust, bare or starved painted areas, colour variations, surface cracks, irregular and coarse brush marks, sanding marks, blistering, non-uniformity of gloss level and other irregularities in the surface that are visible from a normal viewing position.</i> <i>(Highlighting added)</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to apply paint system to provide even cover 5. Supply paint to match existing architectural finishes 6. Supply paint ancillaries 7. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1menx0.5hr@\$60perhr/\$30</p> <p>Protection materials \$10</p> <p>Labour to rectify paint work 1manx4hrs@\$70/hr/\$280</p> <p>Supply paint & ancillaries \$35</p> <p>Labour to clean site 0.5hrs@\$60/\$30</p> <p>Total \$385</p>	
C-10	Northern side of entry – Stone paving	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author observed that the rainwater is ponding at the western end of the stormwater drain to the south side of the entry.</p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. 	<p>Co-ordination and Supervision - Refer to allowance in summary of</p>	

Breach(es)

Failure to comply with the following:

- *Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)*
- *NCC 2016 Volume 3 FP2.1. (2) (b)*

Supervisor to coordinate access and facilitate the works throughout the whole process.

2. Gain access to required areas in accordance with Safework requirements.

3. Cover and protect adjacent surfaces during the rectification work.

4. Labour to remove stone paving with insufficient fall to the south and north side of stormwater drain and storage in secure location

5. Labour to place and form tile screed to provide sufficient fall to stormwater drain, reinstate stone paving and grout joints and provide flexible sealant to wall and tile joints

6. Supply tile screed materials, grouts, and sealants

7. Clean site and leave in a tidy condition upon completion of work.

costs at end of this Scott schedule.

Labour to cover and protect adjacent surfaces
 1menx0.5hr@\$60perhr/\$30

Protection materials \$10

Labour to remove stone paving with insufficient fall to the south and north side of stormwater drain and storage in secure location
 2menx4hrs@\$70/hr/\$280

Labour to place and form tile screed to provide sufficient fall to stormwater drain, reinstate stone paving and grout joints and provide flexible sealant to wall and tile joints
 2menx4hrs@\$70/hr/\$280

Supply tile screed materials, grouts, and sealants
 Sand and cement \$100
 Grout \$10
 Sealant \$18

			Labour to clean site 0.5hrs@\$60/\$30 Total \$758	
C-11	Planter Box – Northwestern side of Building L	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that damage and incomplete repair to render finish to the top of planter box wall at the water tap located to the south end of the planter box.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>NSW Guide to Standards & Tolerances 2017 G – Responsibility to rectify – Builders are liable to repair damage caused to property in the course of completing their building work.</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to repair damaged render and apply paint to match existing architectural finishes 5. Supply polymer cement render, paint and ancillaries 6. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1menx0.5hr@\$60perhr/\$30</p> <p>Protection materials \$10</p> <p>Labour to repair damaged render and apply paint to match existing architectural finishes 1manx2hrs@\$70/hr/\$140</p> <p>Supply polymer cement render, paint and ancillaries \$25</p> <p>Supply paint & ancillaries \$25</p> <p>Labour to clean site 0.5hrs@\$60/\$30</p>	

B1-1	Basement level 2 Stairs - Eastern wall	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that there following rain, water is penetrating location of the Dincel wall at –</p> <ol style="list-style-type: none"> 1. To the northern wall above stair landing Basement 2 level of the Fire stair 2 2. At the base of the wall to the southern wall at Basement 2 level of Fire stair 2 <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>Manufacturers guidelines</i> ▪ <i>Plans and specifications</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to break out Dincel lining to reveal void in location of water leak, fill void with epoxy based two-part waterproofing compound and make flush with Dincel surface. 5. Supply two-part epoxy waterproofing product 6. Labour saw cut, demolish and remove concrete approximately 200mm out from base of wall in location of water leak to south, and 	<p>Total \$260</p> <p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1menx0.5hr@\$60perhr/\$30</p> <p>Protection materials \$10</p> <p>Labour to break out Dincel lining to reveal void in location of water leak, fill void with epoxy based two-part waterproofing compound and make flush with Dincel surface. 1manx4hrs@\$90/hr/\$360</p> <p>Supply two-part epoxy waterproofing product \$100</p> <p>Labour saw cut, demolish and remove concrete approximately 200mm out from base of wall in location of water leak to south,</p>	

		<p>extend cutting and demolition of concrete to provide drain to other side of wall to southwest corner to drain in location of stormwater inlet at base of excavation adjacent to southwest corner of Firer stairs.</p> <p>7. Labour to install galvanized angle to base of Dincel wall at newly formed drain and fix galvanized metal grated drainage material over drainage channel.</p> <p>8. Supply galvanized grated drainage materials and ancillaries</p> <p>9. Clean site and leave in a tidy condition upon completion of work</p> <p>10. Dispose of building waste</p>	<p>and extend cutting and demolition of concrete to provide drain to other side of wall to southwest corner to drain in location of stormwater inlet at base of excavation adjacent to southwest corner of Firer stairs. 2menx8hrs@\$95/hr/\$1520</p> <p>Labour to install galvanized angle to base of Dincel wall at newly formed drain and fix galvanized metal grated drainage material over drainage channel. 2menx4hrs@\$95/hr/\$760</p> <p>Supply galvanized grated drainage materials and ancillaries 3/lm@\$75/lm/\$225</p> <p>Clean site and leave in a tidy condition upon completion of work 0.5hrs@\$60/\$30</p> <p>Waste disposal \$100</p> <p>Total \$3135</p>	
B1-2	Basement level 1 North retaining wall Entry – Evidence of moisture penetration	Scope of Remedial Works	Claim for Costs	Notes

The Author has observed water penetrating the northern retaining wall at the entry basement 1, and evidence of isolated waterproofing repairs carried in the location of the water leaks.

The Author noted that the building contract requires completed basements must be dry at all times.

Breach(es)

Failure to comply with the following:

- *Home Building Act 1989 (NSW) under Section 18B Clauses 1(a);(c)*
- *Plans and specifications*
- *Building contract*

Allow to:

1. Provide site supervision.
Supervisor to coordinate access and facilitate the works throughout the whole process.
2. Gain access to required areas in accordance with Safework requirements.
3. Cover and protect adjacent surfaces during the rectification work.
4. Labour to break out masonry in location of water leaks, fill opening with epoxy based two-part waterproofing compound and make flush with wall surface.
5. Supply two-part epoxy waterproofing product
6. Labour to apply Drizoro Max seal over wall to provide even texture over wall surface
7. Labour to paint masonry wall to provide even finish
8. Supply epoxy waterproofing compound, Drizoro Max seal, paint

Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.

Labour to cover and protect adjacent surfaces
 1menx0.5hr@\$60perhr/\$30

Protection materials \$10

Labour to break out masonry in location of water leaks, fill opening with epoxy based two-part waterproofing compound and make flush with wall surface.
 2menx8hr@\$70/hr/\$1120

Supply two-part epoxy waterproofing product \$200

Labour to apply Drizoro Max seal over wall to provide even texture over wall surface
 1manx8hr@\$70/hr/\$560

Labour to paint masonry wall to provide even finish
 1manx8hr@\$70/hr/\$560

		<p>and ancillaries</p> <p>9. Clean site and leave in a tidy condition upon completion of work</p> <p>10. Dispose of building waste</p>	<p>Supply epoxy waterproofing compound, Drizoro Max seal, paint and ancillaries</p> <p>Max seal \$350</p> <p>Paint \$200</p> <p>Ancillaries \$100</p> <p>Labour to clean site</p> <p>0.5hrs@\$60/\$30</p> <p>Total \$3160</p>	
B1-3	Basement 1 - Car wash bay	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that the car wash bay has no fall to the drainage inlet.</p> <p>The Author noted that the condition 21 of the development consent DA 18/0393 requires that the wash-bay must be graded to an internal drainage point. Please refer to extract from the Development consent DA 18/0393 condition 2.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ Home Building Act 1989 (NSW) under Section 18B Clauses 1(a);(c) ▪ Condition 21 of the development consent DA 18/0393 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove perimeter barrier to south and west of carwash bay. 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces</p> <p>1menx0.5hr@\$60perhr/\$30</p> <p>Protection materials \$10</p> <p>Labour to remove perimeter barrier to south and west of carwash bay.</p> <p>1manx2hr@\$70/hr/\$140</p>	

		<p>5. Labour to acid etch concrete surface to prepare for Roxset Epoxy Mortar Screed.</p> <p>6. Supply, place and finish Roxset Epoxy Screed with grades to drainage inlet</p> <p>7. Labour to reinstate barriers to west and south of carwash bay</p> <p>8. Clean site and leave in a tidy condition upon completion of work</p> <p>9. Dispose of building waste</p>	<p>Labour to acid etch concrete surface to prepare for Roxset Epoxy Mortar Screed. 1manx2hr@\$70/hr/\$140</p> <p>Supply, place and finish Roxset Epoxy Screed with grades to drainage inlet 24m2x\$280m2/\$6720 Source: roxset.com.au</p> <p>Labour to reinstate barriers to west and south of carwash bay 1manx1hr@\$70/hr/\$70</p> <p>Supply acid & ancillaries \$25</p> <p>Labour to clean site 0.5hrs@\$60/\$30</p> <p>Total \$7165</p>	
B1-4	Basement 1 Switch room – Evidence of waterproofing failure	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed evidence of defective waterproofing to the base of the southwestern wall in the basement 1 switch room.</p> <p>On further investigation of the defective works the Author is of the view that the waterproofing system applied to the interior and external side of the wall has been carried out to repair or mitigate waterproofing issues that originated at the time of construction.</p>	<p>Allow to:</p> <p>1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process.</p> <p>2. Gain access to required areas in</p>	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1menx0.5hr@\$60perhr/\$30</p>	

The Author noted that the building contract requires completed basements must be dry at all times.

Breach(es)

Failure to comply with the following:

- *Home Building Act 1989 (NSW) under Section 18B Clauses 1(a);(c)*
- *National Construction Code Volume 1 2016 FP1.2 Preventing rainwater from entering buildings*
Surface water must not enter the building.
- *Building contract*

accordance with Safework requirements.

3. Cover and protect adjacent surfaces during the rectification work.
4. Labour saw cut, demolish and remove concrete the rear of masonry wall
5. Labour to prepare rear base of masonry wall
6. Labour to apply cementitious waterproofing to extend from the top of the wall to the base of slab below masonry wall
7. Labour to extend drainage connect into stormwater system and provide drainage inlets to rear of masonry wall
8. Labour to place blue metal to rear of masonry wall
9. Provide plant hire and temporary lighting and mechanical ventilation
10. Supply waterproofing, drainage, blue metal material and

Protection materials \$10

Labour saw cut, demolish and remove concrete the rear of masonry wall
2menx8hrs@\$70/hr/\$1120

Labour to prepare rear base of masonry wall
2menx4hrs@\$70/hr/\$560

Labour to apply cementitious waterproofing system to extend from the top of the wall to the base of slab below masonry wall
2menx8hrs@\$70/hr/\$1120

Labour to extend drainage connect into stormwater system and provide drainage inlets to rear of masonry wall
1manx4hrs@\$95/hr/\$380

Labour to place blue metal to rear of masonry wall
2menx2hrs@\$70/hr/\$560

Plant hire and temporary lighting and mechanical ventilation \$200

		<p>ancillaries</p> <p>11. Clean site and leave in a tidy condition upon completion of work</p> <p>12. Dispose of building waste</p>	<p>Supply waterproofing, drainage, blue metal material and ancillaries Waterproofing materials \$480 Source: tradiecart.com.au Blue metal \$200</p> <p>Labour to clean site 0.5hrs@\$60/\$30</p> <p>Total \$4490</p>	
B1-5	Basement 1 – Switch room	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that there is a significant amount of cement slurry and cement staining on the floor the eastern side of the switch room and at the base of the main switch board.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>Incomplete contract works</i> 	<p>Allow to:</p> <p>1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process.</p> <p>2. Gain access to required areas in accordance with Safework requirements.</p> <p>3. Labour to remove cement mortar and staining from floor and wall</p> <p>4. Clean site and leave in a tidy condition upon completion of work</p>	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to remove cement mortar and staining from floor and wall, clean site and dispose of waste 1manx1hr@\$60/hr/\$60</p> <p>Total \$60</p>	

B1-6	Basement 1 -Garbage Room	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed while carry out testing using a spirit level, that the surface finish fall was directed away from the sewer drainage inlet.</p> <p>The Author noted that the PBD Architects construction certificate drawings A1002 – Note: Finish falls to sewer waste as per Sydney Water requirements. Please refer to following extract in this items table.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a);(b)</i> ▪ <i>To carry out the works in accordance with the plans and specifications</i> 	<p>5. Dispose of building waste</p> <p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove bins and materials and place in a secure location 5. Labour to acid etch concrete surface to prepare for Roxset Epoxy Mortar Screed. 6. Supply, place and finish Roxset Epoxy Screed with grades to drainage inlet 7. Labour to reinstate bins and equipment on completion of floor 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1menx0.5hr@\$60perhr/\$30</p> <p>Protection materials \$10</p> <p>Labour to remove bins and materials and place in a secure, acid etch concrete surface to prepare for Roxset Epoxy Mortar Screed. 2menx4hrs@\$70/hr/\$560</p> <p>Supply, place and finish Roxset Epoxy Screed with grades to drainage inlet 30m2x\$280m2/\$8400 Source: roxset.com.au</p> <p>Labour to reinstate bins and equipment on completion of floor finish</p>	

		<p>finish</p> <p>8. Clean site and leave in a tidy condition upon completion of work</p> <p>9. Dispose of building waste</p>	<p>2menx1hrs@\$70/hr/\$140</p> <p>Supply acid and ancillaries \$35</p> <p>Labour to clean site 0.5hrs@\$60/\$30</p> <p>Total \$9205</p>	
B1-7	Basement 1 – Floor insulation Units G01 to G07	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that there is no insulation installed to the concrete floor slab to units G01 to G07 as specified on the construction certificate architectural plans.</p> <p>The Author noted that no evidence of insulation certification provided on the occupation certificated 5325 issued by Kudos Building Certification dated 11.11.2020.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>Incomplete contract works</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Supply mobile scaffold to provide working platform 5. Labour to install Kingspan insulation panels 6. Supply R2.0 and R3.0 insulation 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Protection materials \$30</p> <p>Mobile scaffold hire to provide working platform \$1500</p> <p>Labour to install Kingspan insulation panels 2menx48hrs@\$90/hr/\$8640 1manx48hrs@\$70/hr/\$3360</p> <p>Supply R2.0 and R3.0 Foilboard insulation as per plans and specifications R2.0 478m2x\$10m2/\$4780 R3.0 80m2x\$12m2/\$960</p>	

		<p>as per plans and specifications</p> <ol style="list-style-type: none"> 7. Supply fixings and ancillaries 8. Clean site and leave in a tidy condition upon completion of work 9. Dispose of building waste 	<p>Source: pricewiseinsulation.com.au</p> <p>Supply fixings and ancillaries \$450</p> <p>Total \$19720</p>	
B1-8	Basement 1 – Switch room	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that there is exposed electrical wiring to the northern side of the switch room at the entry that is crudely covered above a small concrete plinth at the floor.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>AS3000:2018 Electrical installations</i> ▪ <i>Incomplete contract works</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Labour to remove cement mortar and staining from floor 4. Labour to install custom metal trunking to exposed wiring 5. Supply custom metal trunking and fixings 6. Clean site and leave in a tidy condition upon completion of work 7. Dispose of building waste 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to remove cement mortar and staining from floor 0.5hr@\$60/\$30</p> <p>Labour to install custom metal trunking to exposed wiring 1manx1hrs@\$95/h/\$95</p> <p>Supply custom metal trunking and fixings \$75</p> <p>Total \$200</p>	

B2-1	Basement 2 – Parking bay 2	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed a rainwater leak from above the northeast corner of parking bay 2.</p> <p>The Author noted that the building contract requires completed basements <u>must be dry at all times</u>.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a);(b)</i> ▪ <i>Contract plans and specifications</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. <p>Supervisor to coordinate access and facilitate the works throughout the whole process.</p> <ol style="list-style-type: none"> 2. Gain access to required areas in accordance with Safework requirements. 3. Labour to install flashing to prevent water from leaking onto basement floor 4. Supply flashings materials and ancillaries 5. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to install flashing to prevent water from leaking onto basement floor and clean site on completion 1manx1hrs@\$95/h/\$95</p> <p>Supply flashings materials and ancillaries \$15</p> <p>Total \$110</p>	
B2-2	Basement 2 – Storage area near stairway 1	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed evidence of mould grow forming on materials in storage area. During several inspections the Author noted, there was a damp smell in the air and in the early mornings a strong smell of motor vehicle fumes.</p> <p>The Author is of the view that due to the sections of the perimeter of the basement carpark and storage and exposure to moisture from seepage from</p>	<p>Allow:</p> <p>PROVISIONAL ALLOWANCE FOR A SUITABLE QUALIFIED VENTILATION ENGINEER TO CARRY OUT TESTING PROVIDE REMEDIATION SOLUTION TO MITIGATE DAMAGE RESULTING FROM</p>	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>PROVISIONAL ALLOWANCE FOR A SUITABLE QUALIFIED VENTILATION ENGINEER TO CARRY OUT TESTING AND PROVIDE REMEDIATION SOLUTION TO</p>	

rainwater and pump out tank located under the slab of the basement and that the presents of moisture from the sources has caused the development of mould.

During inspection an owner occupant of the property stated to the Author that the mechanical ventilations is set to activate 2 hours in the morning and 2 hours in the early evening.

The Author is of the view that the mechanical ventilation as a measure mitigate the presents of moisture is inadequate.

The Author noted that Premium Consulting Engineers provided mechanical design certificate in relation to the mechanical ventilation, however the Author has not been provided with evidence of testing that the mechanical ventilation system is adequate to mitigate the presents of moisture in the basement area. Please refer to copy of Premium Consulting Engineers design certificate in Appendix C of this report.

The Author noted that Premium Consulting Engineers mechanical design certificate does not state that the '*certification shall confirm that the system will protect the health of occupants of the carpark at anytime it is used and satisfies the atmospheric contaminate exposure rates specified in the Worksafe Australia document: Workplace Exposure Standards for Airborne Contaminants.*' For clarity, please refer to extract of condition 27 of the development consent DA18/0393 in the following sections of this table.

MOULD GROWTH AND HEALTH OF BUILDING OCCUPANTS.

MITIGATE DAMAGE RESULTING FROM MOULD GROWTH AND HEALTH OF BUILDING OCCUPANTS.

Total \$5,000

	<p>The Author is of the view testing should be carried out by a suitably qualified consultant to confirm if the mechanical ventilation system satisfies the conditions of the development approval.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a);(b)</i> ▪ <i>Condition 27 DA 18/0393</i> ▪ <i>National Construction Code Volume 1 2016 FP4.4 –FP4.4Mechanical ventilation to control odours and contaminants</i> ▪ <i>A mechanical air-handling system installed in a building must control— (a) the circulation of objectionable odours; and (b) the accumulation of harmful contamination by micro-organisms, pathogens and toxins.</i> 			
B2-3	Basement 2 – Stairway 1	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that the height clearance of 1954mm at the landing to the stairway on basement 2, does not meet the minimum required height of 2000mm noted on PBD Architects construction certificate plan drawing no. A4101 Fire Stair 2 details.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a);(b);(d) &(f)</i> ▪ <i>Contract plans and specifications</i> ▪ <i>National Construction Code Volume 1 2016 F3.1(iii) –</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx0.5hr@\$60perhr/\$30</p> <p>Protection materials \$10</p>	

**F3.1 (iii) above a stairway, ramp, landing or the like
 — 2 m measured vertically above the nosing line
 of stairway treads or the floor surface of the ramp,
 landing or the like**

surfaces during the rectification work.

4. Labour to lay bricks to underside of bottom riser above stair landing to underpin and support stairs above.

5. Labour to demolish and remove landing and bottom stair flight to provide access to rectify landing height clearance

6. Labour to provide formwork to form up new stairs and landing, fix reinforcement to engineers detail, place and finish concrete

7. Supply steel reinforcement, ancillaries, concrete and pump

8. Labour to install new stair railing in accordance with NCC Volume 1 2016 D2.17(v)

9. Supply steel railing materials and ancillaries

10. Labour to apply non-slip finish to tread nose in accordance with AS4586

11. Supply non-slip materials for

Labour to lay bricks to underside of bottom riser above stair landing to underpin and support stairs above.

1menx4hrs@\$85perhr/\$340

Labour to demolish and remove landing and bottom stair flight to provide access to rectify landing height clearance

2menx8hrs@\$70perhr/\$1120

Labour to provide formwork to form up new stairs and landing, fix reinforcement to engineers detail, place and finish concrete

2menx16hrs@\$85perhr/\$2740

Supply steel reinforcement, ancillaries, concrete and pump
 Steel reinforcement & ancillaries
 0.4ton@\$1400p/ton/\$560

Concrete 2.4m3@\$305m3/\$732

Line pump \$950

Labour to install new stair railing in accordance with NCC Volume 1 2016 D2.17(v)

2menx8hrs@\$95perhr/\$1520

		stair tread 12. Provisional allowance for Registered Structural engineers design, inspection and certification 13. Clean site and leave in a tidy condition upon completion of work 14. Dispose of building waste	Supply steel railing materials and ancillaries \$350 Labour to apply non-slip finish to tread nose in accordance with AS4586 1manx4hrs@\$70perhr/\$280 Supply non-slip materials for stair tread \$200 Provisional allowance for Registered Structural engineers design, inspection and certification \$1500 Labour to dispose of building waste and clean site 1man x8hrs@\$60/\$480 Total \$10812	
B2-4	Basement 2 – Parking bay 25	Scope of Remedial Works	Claim for Costs	Notes
	The Author has observed a rainwater leak from above the northeast corner of parking bay 25. The Author noted that the building contract requires completed basements <u>must be dry at all times.</u> Breach(es)	Allow to: 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process.	Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule. Labour to install flashing to prevent water from leaking onto	

	<p><i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a);(b)</i> ▪ <i>Contract plans and specifications</i> 	<ol style="list-style-type: none"> 2. Gain access to required areas in accordance with Safework requirements. 3. Labour to install flashing to prevent water from leaking onto basement floor 4. Supply flashings materials and ancillaries 5. Clean site and leave in a tidy condition upon completion of work 	<p>basement floor and clean site on completion 1manx1hrs@\$95/h/\$95</p> <p>Supply flashings materials and ancillaries \$15</p> <p>Total \$110</p>	
FS-1	Fire stairs – Non-Slip finish	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author noted that the issue had been identified in TCA (Giaouris) Report Item C-52 Attachment F Section 10.6</p> <p>The Author observed that the Fire Stairs to the property had a yellow paint strip to the nose of threads that did not have a non-slip finish.</p> <p>The Author found has assumed that the yellow line marking paint found in the storage at Basement 1 was used to paint the stairs. The Author is of the view that the Builder has failure to carry out the works with due care and diligence and in accordance with AS4586.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to apply non-slip resistant painted finish to nose of stair treads to all areas 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1menx0.5hr@\$60perhr/\$30</p> <p>Protection materials \$10</p> <p>Labour to apply non-slip resistant painted finish to nose of stair treads to all areas 2menx16hrs@\$70perhr/\$2240</p> <p>Supply non-slip resistant paint and ancillaries \$300</p>	

	<ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)&(d)</i> ▪ <i>AS4586 Slip resistance</i> 	<ol style="list-style-type: none"> 5. Supply non-slip resistant paint and ancillaries 6. Clean site and leave in a tidy condition upon completion of work 7. Dispose of building waste 	<p>Labour to clean site 0.5hrs@\$60/\$30</p> <p>Total \$2610</p>	
F2-2	Fire Stairs 2 (Ground floor) East– Railing	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that the cut end to the metal railing has sharp edges and that a section Dincel at the junction to the masonry wall has not been trimmed.</p> <p>The Author noted that the issue had been identified in TCA (Giaouris) Report Item C-54 Attachment F Section 10.6</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>Incomplete contract works</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Labour to machine off sharp edges to make safe and trim Dincel wall material 4. Clean site and leave in a tidy condition upon completion of work 5. Dispose of building waste 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to machine off sharp edges to make safe, trim Dincel wall material and clean site on completion 1manx1hr@\$70/hr/\$70</p> <p>Total \$70</p>	
OSD-1	Driveway OSD metal access grate	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author observed that metal OSD access grate</p>	<p>Allow to:</p>	<p>Co-ordination and Supervision - Refer to allowance in summary of</p>	

	<p>located to the northeast corner of the driveway has damage to the western side of the grate at the hinge.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>NSW Guide to Standards & Tolerances 2017 G – Responsibility to rectify – Builders are liable to repair damage caused to property in the course of completing their building work.</i> 	<ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Labour to remove damaged grate and install new grate 4. Supply new steel grate 5. Clean site and leave in a tidy condition upon completion of work 6. Dispose of building waste 	<p>costs at end of this Scott schedule.</p> <p>Labour to remove damaged grate, install new grate, clean site and dispose of building waste 1manx1hr@\$95/hr/\$95</p> <p>Supply new steel grate \$250</p> <p>Total \$345</p>	
GRD-1	Entry Lobby – Interior finishes	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has been instructed that the Builder did not complete the interior fit out to the Entry Lobby in accordance with the contract plans and specifications.</p> <p>The Author noted that the following clauses in Annexure Part P-PPR of the building contract in relation to the Entry Lobby works -</p> <p>6.4.5 f) Lobby finishes are to be documented by the Architect and/or as approved by the Principal</p> <p>6.4.5 h) Lobby has special interior design from</p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1menx1hr@\$60perhr/\$60</p> <p>Protection materials \$30</p>	

contractor, which need approval from principal. And additional finish package of lobby will implementation of the interior design by contractor.

The Author has observed on inspection that the interior finishes to the Entry Lobby that the works have not been completed as to Studio 91 jbw design and plans.

Breach(es)

Failure to comply with the following:

- *Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)*
- *Contract plans and specifications*

surfaces during the rectification work.

4. Labour to prepare walls and ceilings for installation of custom joinery and fixtures
5. Supply interior custom joinery, finishes and signage as to Studio 91 jbw design and plans
6. Electrical labour to isolate to make safe, pre-wire and fit electrical services, lighting following install of interior joinery and commission on completion.
7. Supply feature light fittings and ancillaries
8. Supply framing materials, ancillaries, custom joinery, signage and finishes
9. Labour to fix and install custom joinery and finishes
10. Labour to paint affected finishes
11. Supply paint and ancillaries
12. Labour to make good, affected finishes

Labour to prepare walls and ceilings for installation of custom joinery and fixtures
 2menx8hrs@\$90perhr/\$1440

Supply framing materials \$350
 Fixings \$50

Supply interior custom joinery, finishes and signage as to Studio 91 jbw design and plans
 Provisional sum \$6000

Electrical labour to isolate to make safe, pre-wire and fit electrical services, lighting following install of interior joinery and commission on completion.
 1menx4hrs@\$95/h/\$380

Supply feature light fittings and ancillaries \$500

Labour to fix and install custom joinery and finishes and make good, affected finishes
 2menx16hrs@\$90perhr/\$2880

Labour to repair paintwork
 1menx4hrs@\$70/h/\$280

		<p>13. Clean site and leave in a tidy condition upon completion of work</p> <p>14. Dispose of building waste</p> <p>15. Waste disposal</p>	<p>Supply paint & ancillaries \$25</p> <p>Labour to dispose of building waste and clean site 1manx 2hrs@\$60/\$120</p> <p>Waste disposal \$50</p> <p>Total \$12,165</p>	
GRD-2	Ground level foyer – Building L	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed screws are missing to the hinges to service doors.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>Incomplete contract works</i> 	<p>Allow to:</p> <p>1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process.</p> <p>2. Gain access to required areas in accordance with Safework requirements.</p> <p>3. Labour to fix screws to hinges</p> <p>4. Clean site and leave in a tidy condition upon completion of work</p>	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to fix screws to hinges 1manx05hrs@\$90/hr/\$45</p> <p>Total \$45</p>	
1-AC	Balcony (Air conditioner barrier) Unit 202, 204,207,302,304,307	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author is of the view, that the barrier rail does not</p>	<p>Allow to: Provisional allowance -</p>	<p>Co-ordination and Supervision - Refer to allowance in summary of</p>	

comply with the National Construction Code 2016 Vol1 D2.16 in preventing the facilitation of climbing.

The Author noted that the builders in Annexure Part P_PP item 6.6.7 of the building contract, specified 'louvered aluminium cage' for the air conditioning condensers. Please refer to extract of contract item 6.6.7 in this table of the report.

The Author is of the view, a suitable qualified consultant be engaged to provide a design solution that prevents the facilitation of climbing in accordance with National Construction Code.

In determining a proposed scope of works for this item the Author has allowed a provisional sum for the cost of a suitability qualified consultant to provide a design solution and cost to replace the existing metal barrier rail.

Breach(es)

Failure to comply with the following:

- *Home Building Act 1989 (NSW) under Section 18B Clauses 1(a) & (c);*
- *National Construction Code 2016 Vol1 D2.16 in preventing the facilitation of climbing.*
- *Contract works - Annexure Part P_PP item 6.6.7 of the building contract*

- A suitably qualified consultant to provide a design solution to prevent the facilitation of climbing.
- Replacement of existing balcony air conditioning barrier with metal louvre barrier as to building contract.

costs at end of this Scott schedule.

Labour to cover and protect adjacent surfaces
 3menx8hrs@\$60perhr/\$1440

Protection materials \$200

Supply 6 x custom made powder coated aluminium louvres
 6x\$450/\$2700

Ancillaries & fixings \$180

Labour to install metal louvres
 2menx8hrs/\$90p/h/\$1440

Remove and dispose of all building waste
 Labour 8hrs@\$70p/h/\$560

Labour to make good, affected finishes 1manx4hrsx\$85p/h/\$340

Labour to remove protection materials and clean site
 8hrs@\$60/\$480

Waste disposal \$350

			Total \$7,690	
1 -G02	Main bedroom door	Scope of Remedial Works	Claim for Costs	Notes
	<p>Staining to the paintwork at the bottom of the bedroom door.</p> <p>Breach(es) Failure to comply with the following:</p> <ul style="list-style-type: none"> ▪ Home Building Act 1989 (NSW) under Section 18B Clauses 1(a) ▪ NSW Guide to Standards and tolerances 2017 13.2 Surface finish of paintwork <p>Paintwork is defective if the application has blemishes such as paint runs, paint sags, wrinkling, dust, bare or starved painted areas, colour variations, surface cracks, irregular and coarse brush marks, sanding marks, blistering, non-uniformity of gloss level and other irregularities in the surface that are visible from a normal viewing position. (Highlighting added]</p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove staining to paint finish and make good 5. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1menx0.5hr@\$60perhr/\$30</p> <p>Protection materials \$10</p> <p>Labour to rectify paint work 1manx1hr@\$70/hr/\$70</p> <p>Supply paint & ancillaries \$25</p> <p>Labour to clean site 0.5hrs@\$60/\$30</p> <p>Total \$165</p>	
2-G02	Main bedroom door jamb	Scope of Remedial Works	Claim for Costs	Notes
	<p>Paint stain on the floor at the door jamb to main bedroom.</p> <p>Breach(es) Failure to comply with the following: Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p>	

		<p>throughout the whole process.</p> <ol style="list-style-type: none"> 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove staining and make good, affected finishes 5. Clean site and leave in a tidy condition upon completion of work 	<p>Labour to cover and protect adjacent surfaces included in item 1-G02.</p> <p>Protection materials included in item 1-G02.</p> <p>Labour to rectify paint work included in item 1-G02.</p> <p>Supply paint & ancillaries included in item 1-G02.</p> <p>Labour to clean site included in item 1-G02.</p> <p>Total Cost - included in item 1-G02.</p>	
3-G02	Bedroom 2 to sliding door	Scope of Remedial Works	Claim for Costs	Notes
	<p>Deterioration of manufacturers glass indicator motif.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(f)</i> ▪ <i>Building contract - Defect liability period – Product warranty</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Window manufacturer 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>If manufacturer does not provide warranty service, then following cost allowed for an alternative service provider –</p>	

		<p>to remove existing and fix new proprietary indicator motifs.</p> <p>4. Cover and protect adjacent surfaces during the rectification work.</p> <p>5. Clean site and leave in a tidy condition upon completion of work</p>	<p>Labour to rectify defective glass door indicators and clean work area on completion 1manx1hr@\$85/hr/\$85</p> <p>Total \$85</p>	
4-G02	Main bedroom - Sliding door	Scope of Remedial Works	Claim for Costs	Notes
	<p>Deterioration of manufacturers glass indicator motif.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(f)</i> ▪ <i>Building contract - Defect liability period – Product warranty</i> 	<p>Allow to:</p> <p>1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process.</p> <p>2. Gain access to required areas in accordance with Safework requirements.</p> <p>3. Window manufacturer to remove existing and fix new proprietary indicator motifs.</p> <p>4. Cover and protect adjacent surfaces during the rectification work.</p> <p>5. Clean site and leave in a tidy condition upon completion of work</p>	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>If manufacturer does not provide warranty service, then following cost allowed for an alternative service provider –</p> <p>Labour to rectify defective glass door indicators and clean work area on completion 1manx1hr@\$85/hr/\$85</p> <p>Total \$85</p>	
5-G02	Ensuite shower screen	Scope of Remedial Works	Claim for Costs	Notes

	<p>Sealant fixing to fixed shower screen is loose and is not fully sealed.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>Building contract - Defect liability period – Product warranty</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to apply construction adhesive waterproofing sealant 5. Supply construction adhesive waterproofing sealant 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx0.5hrs@\$60perhr/\$30</p> <p>Protection materials \$10</p> <p>Labour to repair defective sealant 1menx1hrs@\$70/\$70</p> <p>Supply adhesive waterproofing sealant \$18</p> <p>Labour to remove protection materials and clean work area 1manx0.5hrs@\$60/\$30</p> <p>Total \$158</p>	
6-G02	Main Bathroom – Shower screen	Scope of Remedial Works	Claim for Costs	Notes
	<p>Space between fixed panel and door requires more clearance.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> 	<p>Proposed Rectification Scope of Works</p> <p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works 	<p>Labour to cover and protect adjacent surfaces 1manx0.5hrs@\$60perhr/\$30</p> <p>Protection materials \$10</p>	

	<ul style="list-style-type: none"> ▪ <i>Building contract - Defect liability period – Product warranty</i> 	<p>throughout the whole process.</p> <ol style="list-style-type: none"> 2. Gain access to required areas in accordance with Safework requirements. 3. Labour to adjust shower screen door to provide sufficient clearance 4. Cover and protect adjacent surfaces during the rectification work. 5. Make good any surfaces affected as part of the works, to their prior condition. 6. Clean site and leave in a tidy condition upon completion of work. 	<p>Labour to adjust shower screen door to provide sufficient clearances 1menx0.5hrs@\$70/\$35</p> <p>Labour to remove protection materials and clean work area 1manx0.5hrs@\$60/\$30</p> <p>Total \$105</p>	
7-G02	Eastern exterior sandstone capping	Scope of Remedial Works	Claim for Costs	Notes
	<p>Joints are not filled to the eastern external sandstone at balustrade.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>Building contract – Incomplete works</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Labour to fill joints to sandstone capping 4. Materials to fill joints 5. Cover and protect 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces, mix materials fill gaps, make good, affected finishes and clean work area on completion 1manx4hrs@\$85perhr/\$340</p> <p>Sand, cement and coloured oxide</p>	

		adjacent surfaces during the rectification work. 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work	Sand \$20 Cement \$10 Oxide \$5 Total \$375	
8-G02	Eastern Exterior – pressure equalization slots and Weepa protector installation	Scope of Remedial Works	Claim for Costs	Notes
	Pressure equalization slots and Weepa have not been installed in accordance with the manufacturers guidelines. Breach(es) <i>Failure to comply with the following:</i> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a);</i> ▪ <i>Manufacturers installation guidelines – Refer Heble and Weepa protector installation guide</i> ▪ <i>Building contract specifications</i> 	Allow to: <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove construction covers from Weepa protectors 5. Labour to cut slot in Hebel panel to install Weepa protector, install Weepa protectors and patch and repair affected finishes in accordance with manufacturers guidelines. 	Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule. Labour to cover and protect adjacent surfaces 1menx1hr@\$60perhr/\$60 Protection materials \$20 Labour to remove construction covers from Weepa protectors, remove and dispose of all building waste, cut slot in Hebel panel to install Weepa protector, install Weepa protectors patch, repair and make good, affected finishes in accordance with manufacturers guidelines. Labour 8hrs@\$85p/h/\$680 Supplier Weepa protectors \$15	

		<p>6. Supplier Weepa protectors</p> <p>7. Supply Dulux render system materials</p> <p>8. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>9. Clean site and leave in a tidy condition upon completion of work</p>	<p>Supply Dulux render system materials \$200</p> <p>Labour to clean site 1hr@\$60/\$60</p> <p>Waste disposal \$50</p> <p>Total \$1085</p>	
9-G02	Bedroom 2 – Passage door	Scope of Remedial Works	Claim for Costs	Notes
	<p>The door is not fully sealed and there are paint stains on door stop and air conditioning metal vent.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c);</i> ▪ <i>AS2311:2017 Guide to the painting of buildings</i> ▪ <i>NSW Guide to standards & tolerances 2017-9.6 Sealing of doors</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove door and seal door leaf in accordance with AS2311:2017 Guide to the painting of buildings 5. Labour to reinstall door 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx.05hrs@\$60perhr/\$30 Protection materials \$10</p> <p>Labour to remove door and seal door leaf in accordance with AS2311:2017 Guide to the painting of buildings, reinstall door, remove paint from door stop and air conditioning vent and clean work area on completion 1manx2hrs@\$70/hr/\$140</p>	

		and remove paint from door stop and air conditioning vent 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work	Supply paint & ancillaries \$100 Total \$280	
10-G02	Bathroom and ensuite door privacy sets	Scope of Remedial Works	Claim for Costs	Notes
	There is no lock pin to lock privacy sets. Breach(es) <i>Failure to comply with the following:</i> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>Contract – Incomplete works</i> 	Allow to: <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Labour to install privacy set lock pins 4. Supply privacy set lock pins 5. Cover and protect adjacent surfaces during the rectification work. 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion 	Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule. Labour to protect adjacent finishes, install privacy set lock pins and clean work area on completion 1manx0.5hrs@\$90/hr/\$45 Supply privacy set lock pin \$5 Total \$50	

11-G02	Laundry tiling	Scope of Remedial Works	Claim for Costs	Notes
	<p>Skirting tile at washing machine space has not been fully sealed.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a) & (c);</i> ▪ <i>AS3958.1:2007 Part 1: Guide to the installation of ceramic tiles</i> ▪ <i>Contract – Incomplete works</i> 	<p>of work</p> <p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Labour to apply sealant to skiting tile joint 4. Supply sealant to match existing finishes 5. Cover and protect adjacent surfaces during the rectification work. 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces during the rectification, apply sealant to skiting tile joint, clean work area on completion 1manx1hr@\$70/hr/\$70</p> <p>Supply colour sealant \$18</p> <p>Total \$88</p>	
12-G02	Kitchen rangehood	Scope of Remedial Works	Claim for Costs	Notes
	<p>One light globe is missing to the kitchen range hood.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p>	

	<ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>Incomplete contract works</i> 	<p>and facilitate the works throughout the whole process.</p> <ol style="list-style-type: none"> 2. Gain access to required areas in accordance with Safework requirements. 3. Labour to install rangehood light 4. Supply 1 x rangehood light 5. Cover and protect adjacent surfaces during the rectification work. 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>Labour to cover and protect adjacent surfaces, install rangehood light and clean work area on completion 1manx1hr@\$90/hr/\$90</p> <p>Supply rangehood light globe \$15</p> <p>Total \$105</p>	
1-G03	Living room – Sliding door	Scope of Remedial Works	Claim for Costs	Notes
	<p>That the lock to the living sliding door was not locking. The Author has observed the sliding door lock was out of alignment and not catching the lock latch.</p> <p>Breach(es) <i>Failure to comply with the following: Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i></p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Labour to adjust alignment of door and restore 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to adjust alignment of door and restore lock function and clean work area on completion 1manx1hr@\$85/hr/\$85</p>	

		<p>lock function.</p> <p>4. Cover and protect adjacent surfaces during the rectification work.</p> <p>5. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>6. Clean site and leave in a tidy condition upon completion of work</p>	Total \$85	
2-G03	Laundry cabinet	Scope of Remedial Works	Claim for Costs	Notes
	<p>The northern door bottom hinge is missing, and the door is binding.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>Incomplete contract works</i> 	<p>Allow to:</p> <p>1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process.</p> <p>2. Gain access to required areas in accordance with Safework requirements.</p> <p>3. Labour to install missing hinge</p> <p>4. Supply 1 x hinge</p> <p>5. Cover and protect adjacent surfaces during the rectification work.</p> <p>6. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>7. Clean site and leave in a</p>	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces during the rectification work, install missing hinge and clean work area on completion of works 1manx0.5hr@\$90/hr/\$45</p> <p>Supply 1 x hinge/\$7</p> <p>Total \$52</p>	

3-G03	Bedroom 2 to sliding door	Scope of Remedial Works	Claim for Costs	Notes
	<p>Deterioration of manufacturers glass indicator motif.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(f)</i> ▪ <i>Building contract - Defect liability period – Product warranty</i> 	<p>tidy condition upon completion of work</p> <p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Window manufacturer to remove existing indicators and fix new proprietary indicator motifs. 4. Cover and protect adjacent surfaces during the rectification work. 5. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>If manufacturer does not provide warranty service, then following cost allowed for an alternative service provider –</p> <p>Labour to rectify defective glass door indicators and clean work area on completion 1manx1hr@\$85/hr/\$85</p> <p>Total \$85</p>	
4-G03	Eastern exterior – Painting masonry fence	Scope of Remedial Works	Claim for Costs	Notes
	<p>The occupant reported to the Author at the time of inspection that the Builder changed landscaping levels to rectify drainage issues to the eastern lawn area. The resulting change of landscape levels has exposed unpainted sections of the eastern rendered wall.</p> <p>Breach(es)</p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces, prepare wall</p>	

	<p><i>Failure to comply with the following: Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i></p>	<p>areas in accordance with Safework requirements.</p> <p>3. Labour to clean and prepare wall for painting Labour to apply paint system in accordance with AS2311:2017 Guide to the painting of buildings</p> <p>4. Supply paint and ancillaries</p> <p>5. Cover and protect adjacent surfaces during the rectification work.</p> <p>6. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>7. Clean site and leave in a tidy condition upon completion of work</p>	<p>for painting and apply paint system in accordance with AS2311:2017 Guide to the painting of buildings, Make good any surfaces affected as part of the works, clean work area on completion of works 1manx2hrs@\$70/hr/\$140</p> <p>Supply paint & ancillaries \$100</p> <p>Total \$240</p>	
5-G03	Living room – Pelmet	Scope of Remedial Works	Claim for Costs	Notes
	<p>Paint repair to the living pelmet has not been completed.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>Building contract – Defect liability period</i> 	<p>Allow to:</p> <p>1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process.</p> <p>2. Gain access to required areas in accordance with Safework requirements.</p> <p>3. Labour to complete</p>	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces, complete repair to timber pelmet, apply paint system in accordance with AS2311:2017 Guide to the</p>	

		<p>paint repair to affected area</p> <ol style="list-style-type: none"> 4. Supply paint ancillaries 5. Cover and protect adjacent surfaces during the rectification work. 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>painting of buildings, Make good any surfaces affected as part of the works, clean work area on completion of works 1manx4hrs@\$70/hr/\$280</p> <p>Supply paint & ancillaries \$50</p> <p>Total \$330</p>	
6-G03	Living and bedroom 2 – Sliding doors	Scope of Remedial Works	Claim for Costs	Notes
	<p>Latch screws to sliding doors in living and bed 2 are protruding and have scratched the sliding jamb section at the lock.</p> <p>Cause(s) Faulty manufacturing</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c);</i> ▪ <i>Building contract – Defect liability period Product warranty</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Labour to change over for suitable fixings 4. Cover and protect adjacent surfaces during the rectification work. 5. Make good any surfaces affected as part of the works, to their prior condition. 6. Clean site and leave in a 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to provide paint touch up repair and change screws and clean work area on completion 1manx1hr@\$85/hr/\$85</p> <p>Paint \$5</p> <p>Total \$90</p>	

7-G03	Main bathroom – Shower screen	Scope of Remedial Works	Claim for Costs	Notes
	<p>Sealant fixing to fixed shower screen is loose and is not fully sealed.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>Building contract - Defect liability period – Product warranty</i> 	<p>tidy condition upon completion of work</p> <p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to apply construction adhesive waterproofing sealant 5. Supply construction adhesive waterproofing sealant 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx0.5hrs@\$60perhr/\$30</p> <p>Protection materials \$10</p> <p>Labour to repair defective sealant 1manx1hrs@\$70/\$70</p> <p>Supply adhesive waterproofing sealant \$18</p> <p>Labour to remove protection materials and clean work area 1manx0.5hrs@\$60/\$30</p> <p>Total \$158</p>	
1-G04	Main bedroom – Skirting painting	Scope of Remedial Works	Claim for Costs	Notes
	<p>Poor paint finish to skirting board on western side of sliding door.</p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. 	<p>Co-ordination and Supervision - Refer to allowance in summary of</p>	

	<p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>NSW Guide to Standards and tolerances 2017 13.2 Surface finish of paintwork</i> <i>Paintwork is defective if the application has blemishes such as paint runs, paint sags, wrinkling, dust, bare or starved painted areas, colour variations, surface cracks, irregular and coarse brush marks, sanding marks, blistering, non-uniformity of gloss level and other irregularities in the surface that are visible from a normal viewing position.</i> <i>(Highlighting added)</i> 	<p>Supervisor to coordinate access and facilitate the works throughout the whole process.</p> <ol style="list-style-type: none"> 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to repair paint work 5. Paint and ancillaries 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces, rectify paint work and clean work area on completion of works 1manx1hr@\$70/hr/\$70</p> <p>Supply paint & ancillaries \$10</p> <p>Total \$80</p>	
2-G04	Southern exterior - Drainage	Scope of Remedial Works	Claim for Costs	Notes
	<p>The occupants reported to the Author at the time of inspection, that stormwater is flooding the courtyard to the southern exterior. The Author observed that there is a storm water outlet above the tiled floor surface in the southwest corner of the yard area.</p> <p>The occupants reported there is a stormwater line underneath the grassed area on the southern side of the exterior located in the lawn area, and that the storm water line has two rises, and that the stormwater line runs to the stormwater pit in the southeast corner of the yard which is situated underneath the</p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Cover and protect adjacent surfaces during the rectification work. 1manx1hr@\$60perhr/\$60</p> <p>Protection materials \$30</p>	

	<p>doghouse.</p> <p>The Author reviewed the works as executed stormwater design and found that occupants statements were consistent with the approved design. However, the permissible drain inlet (PD) shown of the design to the southwestern end of the lawn area was not visible on inspection.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a) & (c);</i> ▪ <i>AS3500.3 2018 Plumbing and drainage Part 5 Section 5: Surface water drainage system – Design 5.3.1.2</i> ▪ <i>Building contract specifications – Works to be carried out to Australian standards and in accordance with engineers design.</i> 	<p>rectification work.</p> <p>4. Labour to excavate and expose stormwater line, connect and extend additional inlets and terminate at surface level with grated drain to the southwest end and mid-section of southern lawn area.</p> <p>5. Supply stormwater connections and ancillaries</p> <p>6. Make good any surfaces and landscaping affected as part of the works, to their prior condition.</p> <p>7. Clean site and leave in a tidy condition upon completion of work</p>	<p>Labour to excavate and expose stormwater line, connect and extend additional inlets and terminate at surface level with grated drain to the southwestern end and mid-section of southern lawn area.</p> <p>1manx8hrs@\$70/\$560 1manx8hrs@\$95/\$760</p> <p>Supply stormwater connections and ancillaries \$100</p> <p>Labour to clean site and leave in a tidy condition upon completion of work 1manx1hr@\$60perhr/\$60</p> <p>Total \$1570</p>	
3-G04	Living area – Pelmet	Scope of Remedial Works	Claim for Costs	Notes
	<p>Patching repair to pelmets above sliding doors is not complete.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>Incomplete contract works</i> 	<p>Allow to:</p> <p>1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process.</p> <p>2. Gain access to required areas in accordance with</p>	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces, complete repair to timber pelmet, apply</p>	

		<p>Safework requirements.</p> <ol style="list-style-type: none"> 3. Labour to complete paint repair to affected area 4. Supply paint ancillaries 5. Cover and protect adjacent surfaces during the rectification work. 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>paint system in accordance with AS2311:2017 Guide to the painting of buildings, Make good any surfaces affected as part of the works, clean work area on completion of works 1manx4hrs@\$70/hr/\$280</p> <p>Supply paint & ancillaries \$50</p> <p>Total \$330</p>	
4-G04	Main bathroom – Shower screen	Scope of Remedial Works	Claim for Costs	Notes
	<p>Sealant fixing to fixed shower screen is loose and is not fully sealed.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>Building contract - Defect liability period – Product warranty</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to apply construction adhesive waterproofing sealant 5. Supply construction 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx0.5hrs@\$60perhr/\$30</p> <p>Protection materials \$10</p> <p>Labour to repair defective sealant 1manx1hrs@\$70/\$70</p> <p>Supply adhesive waterproofing sealant \$18</p>	

		<p>adhesive waterproofing sealant</p> <p>6. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>7. Clean site and leave in a tidy condition upon completion of work</p>	<p>Labour to remove protection materials and clean work area 1manx0.5hrs@\$60/\$30</p> <p>Total \$158</p>	
1-G05	Western exterior - Drainage	Scope of Remedial Works	Claim for Costs	Notes
	<p>It was reported to the Author at the time of inspection, that the grassed area to the western and southern exterior is extremely soggy following rain events. The Author observed that there was a 450x450 drainage pit located in the southwest corner of the exterior and 90mm drainage surface drains located to the far end of the grassed area to the southeast.</p> <p>On review of the of the stormwater design, it is the Authors view that there is insufficient provision for surface drainage the western and southern lawn area.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (c);</i> ▪ <i>AS3500.3 2018 Plumbing and drainage Part 5 Section 5: Surface water drainage system – Design 5.3.1.2</i> ▪ <i>Building contract specifications – Works to be carried out to Australian standards and the engineers design</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to excavate and expose stormwater line to western side of lawn area, connect and extend additional inlets and terminate at surface level with grated drain. 5. Labour to excavate and provide drainage inlets to southern lawn area and connect to stormwater pit in 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Cover and protect adjacent surfaces during the rectification work. 1manx1hr@\$60perhr/\$60</p> <p>Protection materials \$30</p> <p>Labour to excavate and expose stormwater line, connect and extend additional inlets and terminate at surface level with grated drain to the western and southern lawn area. 1manx12hrs@\$70/\$840 1manx12hrs@\$95/\$1140</p>	

		<p>southwest corner.</p> <p>6. Supply stormwater connections, grated drain inlets and ancillaries</p> <p>7. Make good any surfaces and landscaping affected as part of the works, to their prior condition.</p> <p>8. Clean site and leave in a tidy condition upon completion of work</p>	<p>Supply stormwater connections and ancillaries \$250</p> <p>Labour to clean site and leave in a tidy condition upon completion of work</p> <p>1manx1hr@\$60perhr/\$60</p> <p>Total \$2380</p>	
2-G05	Living area - Pelmet	Scope of Remedial Works	Claim for Costs	Notes
	<p>The patch repair to the pelmets in the living area is incomplete and significant damage to the pelmet on the eastern side of living area.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a);</i> ▪ <i>Incomplete contract works</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Labour to complete paint repair to affected area 4. Supply paint ancillaries 5. Cover and protect adjacent surfaces during the rectification work. 6. Make good any surfaces affected as part of the works, 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces, complete repair to timber pelmet, apply paint system in accordance with AS2311:2017 Guide to the painting of buildings, Make good any surfaces affected as part of the works, clean work area on completion of works</p> <p>1manx4hrs@\$70/hr/\$280</p> <p>Supply paint & ancillaries \$50</p>	

		to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work	Total \$330	
3-GO5	Party wall – Fire Separation	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that the sections of the common wall adjoining unit G06 fire protection is missing. The Author is of the view that the works do not conform to the requirements under C2.7(b)(i) Separation by fire walls of the NCC Vol 1 2016.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a);</i> ▪ <i>NCC Volume 1 2016 C2.7(b)(i) Separation by fire walls</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to isolate electrical services to make safe 5. Labour to demolish and remove ceiling linings to provide access to rectify defective works 6. Labour to install fire rated materials in accordance with NCC 7. Labour repair and reinstate plasterboard linings and finishes 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx2hrs@\$60perhr/\$120</p> <p>Protection materials \$60</p> <p>Labour to isolate electrical services to make safe 1manx2hrs@\$95/h/\$190</p> <p>Labour to demolish and remove ceiling linings to provide access to rectify defective works 2menx4hrs@\$70/h/\$560</p> <p>Labour to install fire rated materials in accordance with NCC, repair and reinstate plasterboard linings and finishes 2menx12hrs@\$70/h/\$1680</p>	

		<p>8. Labour to paint ceiling and affected finishes</p> <p>9. Labour to restore electrical service and commission</p> <p>10. Supply fire rated material, plasterboard, paint and ancillaries</p> <p>11. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>12. Clean site and leave in a tidy condition upon completion of work</p> <p>13. Waste disposal</p>	<p>Labour to paint ceiling and affected finishes 1manx8hrs@\$70/h/\$560</p> <p>Supply fire rated material, plasterboard, paint and ancillaries Fire rated insulation \$100 Plaster board firestop \$200 Plaster board 13mm \$350 Plaster ancillaries \$100 Paint \$250 Paint ancillaries \$50</p> <p>Labour to restore electrical service and commission 1manx2hrs@\$95/h/\$190</p> <p>Labour to make good any surfaces affected as part of the works, to their prior condition. 1manx4hrs@\$70/h/\$280</p> <p>Labour to remove protection materials and clean work area 1manx2hrs@\$60/\$120</p> <p>Waste disposal \$150</p> <p>Total \$4960</p>	
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4-GO5	Bedroom 2 – Rainwater penetration	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed moisture penetration, damage, and high levels of moisture indicated to the southeast corner and western side sliding door to bedroom 2.</p> <p>The Author noted issue was identified in TCA (Giaouris) report Attachment F Defect schedule U G05.20</p> <p>The Author observed that –</p> <ul style="list-style-type: none"> • the cavity drainage (weep hole) at concrete slab level above the eastern side of sliding door has been painted over. • No water stop has been provided to the sliding door <p>The Author conducted moisture test to the exterior wall at the main entry ramp adjoining bedroom 2 and observed high level of moisture indicated.</p> <p>The Author is of the view that –</p> <ol style="list-style-type: none"> 1. Rainwater is penetrating the western end of the sliding door due the Builders failure to provide a water stop in accordance with AS4654.2. 2. Moisture penetrating the southeast corner of bedroom 2 has originated due the Builders failure to provide weep drainage to the HEBEL wall system in accordance with the manufacturers guidelines. 	<p>Allow to: IN CONJUNCTION WITH RECTIFICATION WORKS IN RELATION TO ITEM C-2</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work 4. Labour to remove sliding door and store in a secure location 5. Labour to clean down existing waterproofing, reactivate waterproofing, install new waterproofing waterstop angle behind sliding door, aluminium angle colour matched to aluminium frame, Install 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx1hr@\$60perhr/\$60</p> <p>Protection materials \$30</p> <p>Labour to pull back carpet to provide access to carry out repairs, remove sliding door 2menx2hrs@\$90perhr/\$360</p> <p>Labour to clean down existing waterproofing, reactivate waterproofing, install new waterproofing waterstop angle behind sliding door, aluminium angle colour matched to aluminium frame, Install new waterproofing, angle and fillet to hob and waterstop 1manx8hrs@\$85perhr/\$680</p>	

	<p>3. The has failure to adequately weatherproof the parapet wall above as identified in Item C-2 of this report.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a);</i> ▪ <i>National Construction Code 2016 Vol1 FP1.4 Weatherproofing</i> ▪ <i>AS4654.2:2012</i> ▪ <i>Manufacturers guidelines</i> ▪ <i>Contract plans and specifications</i> 	<p>new waterproofing, angle and fillet to hob and waterstop</p> <p>6. Labour to reinstall sliding door suite, finishes, sealant to vertical and horizontal tile junction, install storm moulds to sliding door frame</p> <p>7. Labour to complete paint repair affected finishes</p> <p>8. Supply paint ancillaries</p> <p>9. Remove damage carpet, supply and install new carpet</p> <p>10. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>11. Clean site and leave in a tidy condition upon completion of work</p> <p>12. Waste disposal</p>	<p>Supply aluminium powder coated angle and waterproofing materials \$40</p> <p>Labour to reinstall sliding door suite, finishes, sealant to vertical and horizontal tile junction, install storm moulds to sliding door 2menx2hrs@\$90perhr/\$360</p> <p>Labour to rectify paint work 1manx4hrs@\$70/hr/\$280</p> <p>Supply paint & ancillaries \$25 Labour to reinstated carpet and make good any surfaces affected as part of the works, to their prior condition. 1manx2hrs@\$90perhr/\$180</p> <p>Labour to clean site 1hr@\$60/\$60</p> <p>Total \$2075</p>	
5-GO5	Southern facade – Hebel cladding installation	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed no Pressure Equalisation PE/weep hole drainage outlets have been provided to the southern façade of unit G05.</p> <p>The Author noted that the defective works had been</p>	<p>Allow to:</p> <p>1. Provide site supervision. Supervisor to coordinate access and</p>	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p>	

identified in Section 10.6 and 8.26 of Mr Giaouris report dated 7 December 2020. However, the Author noted that Hebel installation guidelines referenced by Mr Giaouris states PE/drainage slots to be located no greater than **3 metre spacing**. Therefore, the Author is of the view that work is defective in the locations where the spacing exceed or do not conform to the manufacturers guidelines.

Breach(es)

Failure to comply with the following:

- *Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a);*
- *Manufactures guidelines*

facilitate the works throughout the whole process.

2. Gain access to required areas in accordance with Safework requirements.
3. Cover and protect adjacent surfaces during the rectification work.
4. Labour to cut slot in Hebel panel to install Weepa protector, install Weepa protectors and patch and repair affected finishes in accordance with manufacturers guidelines.
5. Labour to repair render and paint façade to provide even finish
6. Supplier Weepa protectors
7. Supply Dulux render system materials, paint and ancillaries
8. Make good any surfaces affected as part of the works, to their prior condition.
9. Clean site and leave in a tidy condition upon completion of work
10. Waste disposal

Labour to cover and protect adjacent surfaces

1menx1hr@\$60perhr/\$60
 Protection materials \$20

Labour to remove construction covers from Weepa protectors, remove and dispose of all building waste, cut slot in Hebel panel to install Weepa protector, install Weepa protectors patch, repair and make good, affected finishes in accordance with manufacturers guidelines.

Labour 8hrs@\$85p/h/\$680

Supplier Weepa protectors \$15

Supply Dulux render system materials
 \$200

Labour to clean site 1hr@\$60/\$60

Waste disposal \$50

Total \$1085

1-G06	Living area – Sliding door	Scope of Remedial Works	Claim for Costs	Notes
	<p>The northwestern fixed glass panel to the sliding door in the living area is broken. It was reported to the Author by the occupants at the time of inspection that the damage originated at the time of construction.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>Building contract – Defect liability period</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Remove existing glass, supply and install new equivalent glass panel with indicator motif 5. Dispose of building waste 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx1hr@\$60perhr/\$60</p> <p>Protection materials \$10</p> <p>Labour to remove damaged glass and install new glass panel 1manx2hrs@\$70/\$140 1manx2hrs@\$60/\$120</p> <p>Supply and delivery of new glass panel with indicators \$500</p> <p>Labour to remove protection materials and clean work area 1manx1hr@\$60/\$60</p> <p>Waste disposal \$50</p> <p>Total \$880</p>	

2-G06	Northwestern exterior -Landscaping	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed there is a gap between the retaining wall and top of stairs to the northwestern exterior and that timber used to close gap and retain soft landscaping reported by the occupants at the time of inspection, had been placed by the occupants to retain soil and landscaping.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>Building contract specification – Landscaping</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Labour to install treated pine sleeper retaining 4. Supply H4 treated pine sleeper 5. Make good any surfaces affected as part of the works, to their prior condition. 6. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to install treated pine sleeper retaining 1manx1hr@\$70/hr/\$70 Supply treated pine sleeper \$25</p> <p>Total \$95</p>	
3-G06	Northeastern exterior -Tiling	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed there was water ponding at the southern side of the floor waste to the northeastern exterior. The Author conducted test using a digital level and found there was insufficient fall to the tiled surface.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>Failure of Builder to carry out the works in accordance</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour cover and protect adjacent finishes, demolish and remove defective tiling, repair</p>	

	<p>with AS3958.1:2007 Part 1: Guide to the installation of ceramic tiles</p> <ul style="list-style-type: none"> ▪ Building contract specifications 	<ol style="list-style-type: none"> 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to demolish and remove defective tiling 5. Labour to repair tile screed and provide tile screed to direct fall to inlet in accordance with AS3958.2:2007 Part 1: Guide to the installation of ceramic tiles 6. Labour to fix new tiling, apply grout to joins and provide flexible joint at wall junction or movement joint to affected area. 7. Supply sand, cement, tile adhesive, tiles, grout and flexible sealant. 8. Make good any surfaces affected as part of the works, to their prior condition. 9. Clean site and leave in a tidy condition upon completion of work 	<p>substrate, fix tiles and apply grout 1manx4hrs@\$85/hr/\$340</p> <p>Supply tiles1m2x\$80/hr/\$80 Adhesive \$15 Grout \$5</p> <p>Labour to clean site and dispose of waste 1manx2hrs@\$60/hr/\$120 Waste disposal \$30</p> <p>Total \$590</p>	
4-G06	Northern exterior – Efflorescence	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed efflorescent staining on the floor tiles to the northern exterior of the alfresco area. The occupants report to the Author at the time of inspection, that the efflorescence was identified on handover.</p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access 	<p>Co-ordination and Supervision - Refer to allowance in summary of</p>	

	<p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> NSW standards & tolerances 2017 – 14.8 Calcification and efflorescence associated with decks and balconies Calcification or efflorescence caused by water coming from a deck or balcony that occurs on walls below or beside the deck or balcony, or that appears in the mortar joints of the deck or balcony tiling, may be considered a defect if it is due to defective or missing flashings, membrane, a damp proof course DPC or faulty design and needs to be investigated to identify the cause. 	<p>and facilitate the works throughout the whole process.</p> <ol style="list-style-type: none"> Gain access to required areas in accordance with Safework requirements. Cover and protect adjacent surfaces during the rectification work. Labour to remove efflorescence staining Cleaning chemical product Make good any surfaces affected as part of the works, to their prior condition. Clean site and leave in a tidy condition upon completion of work 	<p>costs at end of this Scott schedule.</p> <p>Labour cover and protect adjacent finishes, remove efflorescence staining on tiles and clean work area on completion of works 1manx1hr@\$70perhr/\$70</p> <p>Cleaning materials \$20</p> <p>Total \$90</p>	
5-G06	Southwestern exterior – Gate lock	Scope of Remedial Works	Claim for Costs	Notes
	<p>It was reported by the occupants to the Author at the time of inspection, that no key for the southwestern gate was supplied by the Builder.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> Home Building Act 1989 (NSW) under Section 18B Clauses 1(a); Incomplete contract works 	<p>Allow to:</p> <ol style="list-style-type: none"> Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. Lock smith site service to provide keys to lot owner 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Locksmith service \$153 Source - https://www.homeadvisor.com/</p> <p>Total \$153</p>	

6-G06	Southeastern exterior – Efflorescence	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed efflorescent staining on the floor tiles to the southeastern end of the exterior. The occupants reported to the Author at the time of inspection, that the efflorescence was identified on handover.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ NSW standards & tolerances 2017 – 14.8 Calcification and efflorescence associated with decks and balconies Calcification or efflorescence caused by water coming from a deck or balcony that occurs on walls below or beside the deck or balcony, or that appears in the mortar joints of the deck or balcony tiling, may be considered a defect if it is due to defective or missing flashings, membrane, a damp proof course DPC or faulty design and needs to be investigated to identify the cause. 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove efflorescence staining 5. Cleaning chemical product 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour cover and protect adjacent finishes, remove efflorescence staining on tiles and clean work area on completion of works 1manx1hr@\$70perhr/\$70</p> <p>Cleaning materials included in item 4-G06</p> <p>Total \$70</p>	
7-G06	Main bathroom and ensuite – Shower screens	Scope of Remedial Works	Claim for Costs	Notes
	<p>The main bathroom and ensuite fixed shower screen panel is out of alignment and silicone sealant fixing is loose at base of shower screen.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p>	

	<ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c);</i> ▪ <i>Building contract - Defect liability period – Product warranty</i> 	<ol style="list-style-type: none"> 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to apply construction adhesive waterproofing sealant 5. Supply construction adhesive waterproofing sealant 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>Labour to cover and protect adjacent surfaces 1manx1hr@\$60perhr/\$60</p> <p>Protection materials \$10</p> <p>Labour to repair defective sealant 1menx1hr@\$70/\$70</p> <p>Supply adhesive waterproofing sealant \$18</p> <p>Labour to remove protection materials and clean work area 1manx0.5hrs@\$60/\$30</p> <p>Total \$188</p>	
1-101	Living area – Tiling – Cleaning	Scope of Remedial Works	Claim for Costs	Notes
	<p>The occupant reported to the Author at the time of inspection, there was a residue stain on the floor tiles on the western side of living area that was reported to the Builder.</p> <p>The Author observed that there was evidence of a cloudy film of the area described by the occupant.</p> <p>The Authur has assumed the occupants statement is true and correct.</p> <p>The Author is of the view, that the defect originated at the</p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to move and reinstate furnishings, cover and protect adjacent finishes, remove efflorescence staining on tiles and</p>	

	<p>time of construction due to poor workmanship employed by the Builder at the time of construction.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a);</i> ▪ <i>Building contract – Cleaning</i> 	<p>rectification work.</p> <ol style="list-style-type: none"> 4. Labour to move furnishing, store in a secure location to access affected area. 5. Labour to clean and remove staining from tile surface. 6. Labour to reinstate furnishing in original location. 7. Make good any surfaces affected as part of the works, to their prior condition. 8. Clean site and leave in a tidy condition upon completion of work 	<p>clean work area on completion of works 1manx2hrs@\$70/hr/\$140 1manx2hrs@\$60/hr/\$120</p> <p>Cleaning materials \$20</p> <p>Total \$280</p>	
1-102	Main bathroom and ensuite – Painting to doors	Scope of Remedial Works	Claim for Costs	Notes
	<p>The main bathroom and ensuite doors have not been fully sealed.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a) &(b)</i> ▪ <i>AS/NZS2311:2009 ‘Guide to Painting of Buildings’</i> ▪ <i>NSW Guide to standards & tolerances 2017-9.6 Sealing of doors</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove and 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx1hr@\$60perhr/\$60</p> <p>Protection materials \$10</p> <p>Labour to remove door and seal door leaf in accordance with</p>	

		<p>reinstall doors following repair</p> <p>5. Labour to apply paint system in accordance with AS2311:2009 'Guide to Painting of Buildings'</p> <p>6. Supply paint and ancillaries</p> <p>7. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>8. Clean site and leave in a tidy condition upon completion of work</p>	<p>AS2311:2017 Guide to the painting of buildings, reinstall door, remove paint from door stop and air conditioning vent and clean work area on completion 1manx4hrs@\$70/hr/\$140</p> <p>Supply paint & ancillaries \$100</p> <p>Total \$310</p>	
1-103	Main bathroom and ensuite – Towel rail	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that the bathroom shower screen door is striking the wall mounted metal towel rail.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ Home Building Act 1989 (NSW) under Section 18B Clauses 1(a) ▪ National Construction Code 2016 Vol.2 F2.4.1 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove towel rail store in a secure location, demolish and remove tiles to provide for relocation of towel 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour cover and protect adjacent finishes, remove and relocate towel rail, demolish and remove tiling, repair substrate, fix new tiles to match existing and apply grout 1manx4hrs@\$85/hr/\$340 1manx1hr@\$60/hr/\$60</p> <p>Protection materials \$20</p>	

		<p>rail.</p> <p>5. Labour to prepare substrate and fix new tiles and apply grout to match existing finishes in accordance with AS3958.1:2007 Part 1: Guide to the installation of ceramic tiles.</p> <p>6. Following tile repair provide labour to reinstall existing towel rail clear of possible contact with shower screen door</p> <p>7. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>8. Clean site and leave in a tidy condition upon completion of work</p>	<p>Supply tiles 1m2x\$80/hr/\$80 Adhesive \$15 Grout \$5</p> <p>Labour to clean site and dispose of waste 1manx2hrs@\$60/hr/\$120</p> <p>Waste disposal \$30</p> <p>Total \$670</p>	
2-103	Living room - Pelmet	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed the paint repair to the living pelmet has not been completed.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>Building contract – Defect liability period</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Labour to complete 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces, complete repair to timber pelmet, apply paint system in accordance with</p>	

		<p>paint repair to affected area</p> <ol style="list-style-type: none"> 4. Supply paint ancillaries 5. Cover and protect adjacent surfaces during the rectification work. 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>AS2311:2017 Guide to the painting of buildings, Make good any surfaces affected as part of the works, clean work area on completion of works 1manx4hrs@\$70/hr/\$280</p> <p>Supply paint & ancillaries \$50</p> <p>Total \$330</p>	
3-103	Interior door throughout – Painting	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that the interior doors throughout have not been fully sealed.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a) &(b)</i> ▪ <i>AS/NZS2311:2009 ‘Guide to Painting of Buildings’</i> ▪ <i>NSW Guide to standards & tolerances 2017-9.6 Sealing of doors</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove and reinstall doors following repair 5. Labour to apply paint system in accordance with AS2311:2009 ‘Guide to Painting of Buildings’ 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx1hr1@\$60perhr/\$60</p> <p>Protection materials \$20</p> <p>Labour to remove door and seal door leaf in accordance with AS2311:2017 Guide to the painting of buildings, reinstall door, remove paint from door stop and air conditioning vent and clean work area on</p>	

		<p>6. Supply paint and ancillaries</p> <p>7. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>8. Clean site and leave in a tidy condition upon completion of work</p>	<p>completion 1manx4hr@\$70/hr/\$280</p> <p>Supply paint & ancillaries \$120</p> <p>Total \$480</p>	
1-104	Living room – Pelmet	Scope of Remedial Works	Claim for Costs	Notes
	The Author has observed the paint repair to the living pelmet has not been completed	<p>Allow to:</p> <p>1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process.</p> <p>2. Gain access to required areas in accordance with Safework requirements.</p> <p>3. Labour to complete paint repair to affected area</p> <p>4. Supply paint ancillaries</p> <p>5. Cover and protect adjacent surfaces during the rectification work.</p> <p>6. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>7. Clean site and leave in a tidy condition upon completion of work</p>	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces, complete repair to timber pelmet, apply paint system in accordance with AS2311:2017 Guide to the painting of buildings, Make good any surfaces affected as part of the works, clean work area on completion of works 1manx4hrs@\$70/hr/\$280</p> <p>Supply paint & ancillaries \$50</p> <p>Total \$330</p>	

2-104	Main bathroom – Towel rail	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that the bathroom shower screen door is striking the wall mounted metal towel rail.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>National Construction Code 2016 Vol.2 F2.4.1</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove towel rail store in a secure location, demolish and remove tiles to provide for relocation of towel rail. 5. Labour to prepare substrate and fix new tiles and apply grout to match existing finishes in accordance with AS3958.1:2007 Part 1: Guide to the installation of ceramic tiles. 6. Following tile repair provide labour to reinstall existing towel rail clear of possible contact with shower screen door 7. Make good any surfaces 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour cover and protect adjacent finishes, remove and relocate towel rail, demolish and remove tiling, repair substrate, fix new tiles to match existing and apply grout 1manx4hrs@\$85/hr/\$340 1manx1hr@\$60/hr/\$60</p> <p>Protection materials \$20</p> <p>Supply tiles1m2x\$80/hr/\$80 Adhesive \$15 Grout \$5</p> <p>Labour to clean site and dispose of waste 1manx2hrs@\$60/hr/\$120</p> <p>Waste disposal \$30</p> <p>Total \$670</p>	

		affected as part of the works, to their prior condition. 8. Clean site and leave in a tidy condition upon completion of work		
3-104	Entry door – Binding	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed the entry door is binding on the door jamb.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>Building contract – Defect liability period</i> ▪ <i>NSW standards & tolerances 2017 9.4 – Clearances</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove door, door furniture and fixtures, plane door to provide sufficient clearances and reinstall following paint repair 5. Labour to repair paint and finish door in accordance with AS3958.1:2007 Part 1: Guide to the installation of ceramic tiles 6. Paint and ancillaries 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1menx1hr@\$60/hr/\$60</p> <p>Protection materials \$10</p> <p>Labour to remove defective entry door, plane door to provide sufficient clearances and reinstall door 1manx2hrs@\$90/hr/\$180</p> <p>Labour to paint door in accordance with AS2311 and building contract specifications 1manx2hrs@\$70/hr/\$140</p>	

		<p>7. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>8. Clean site and leave in a tidy condition upon completion of work</p>	<p>Paint and ancillaries \$50</p> <p>Labour to clean site 1hr@\$60/\$60</p> <p>Total \$500</p>	
1-105	Living room - Pelmet	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed paint repair to the living pelmet has not been completed.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>Building contract – Defect liability period</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Labour to complete paint repair to affected area 4. Supply paint ancillaries 5. Cover and protect adjacent surfaces during the rectification work. 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces, complete repair to timber pelmet, apply paint system in accordance with AS2311:2017 Guide to the painting of buildings, Make good any surfaces affected as part of the works, clean work area on completion of works 1manx4hrs@\$70/hr/\$280</p> <p>Supply paint & ancillaries \$50</p> <p>Total \$330</p>	
1-106	Ensuite mixer tap handle	Scope of Remedial Works	Claim for Costs	Notes

	<p>The Author has observed that the ensuite mixer tap handle is loose.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>Building contract – Defect liability period</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to fix loose mixer tap handle 5. Make good any surfaces affected as part of the works, to their prior condition. 6. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent finishes, refix loose mixer tap and clean work area on completion Plumber minimum service call \$120</p> <p>Source - https://emergency-plumbers.net.au/blog/2021-how-much-does-a-plumber-cost-in-sydney/</p> <p>Total \$120</p>	
2-106	Ensuite – Soap holder	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed the soap holder in the shower is loose.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>Building contract – Defect liability period</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent finishes, refix loose soap holder and clean work area on completion</p>	

		<p>adjacent surfaces during the rectification work.</p> <p>4. Labour to fix loose soap holder</p> <p>5. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>6. Clean site and leave in a tidy condition upon completion of work</p>	<p>1manx1hr@\$85/hr/\$85</p> <p>Total \$85</p>	
3-106	Laundry door – Painting and moisture damage	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed the laundry door is not fully sealed and the door leaf is swollen and distorted at top and bottom of door.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c);</i> ▪ <i>Building contract – Defect liability period</i> ▪ <i>AS2311:2017 Guide to the painting of buildings</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Supply new door to replace defective door 5. Labour to remove defective door, install new door and existing door furniture 6. Labour to paint new door in accordance with 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx1hr@\$60/hr/\$60 Protection materials \$30</p> <p>Supply new door similar to existing damaged door \$95</p> <p>Labour to remove existing door and hand new door and fit door furniture 1manx2hrs@\$85/hr/\$170</p> <p>Labour to apply paint system in accordance with AS2311:2009</p>	

		<p>AS2311:2017 Guide to the painting of buildings</p> <p>7. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>8. Clean site and leave in a tidy condition upon completion of work</p> <p>9. Dispose of building waste</p>	<p>'Guide to Painting of Buildings' 1manx2hrs@\$70/hr/\$140</p> <p>Supply paint and ancillaries \$100</p> <p>Labour to clean site and place waste in waste bin 1manx1hr@\$60/hr/\$60</p> <p>Waste disposal \$30</p> <p>Total \$685</p>	
4-106	Laundry – Dryer installation	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed the clothes dryer has been installed out of level.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>Building contract – Annexure Part P_PPR_DOC-11134 pg.56 6.6.4 Laundry</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove clothes dryer, adjust wall fixture as required to make level and reinstall clothes dryer 	<p>Co-ordination and Supervision – Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent finishes, fix clothes dryer to make level and clean work area on completion 1manx1hr@\$85/hr/\$85</p> <p>Total \$85</p>	

		<p>5. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>6. Clean site and leave in a tidy condition upon completion of work</p>		
5-106	Bathroom mixer tap handle	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed the kitchen and ensuite mixer tap handles are loose.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>Building contract – Defect liability period</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to fix loose mixer tap handle 5. Make good any surfaces affected as part of the works, to their prior condition. 6. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision – Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent finishes, refix loose mixer tap and clean work area on completion Plumber minimum service call \$120</p> <p>Source – https://emergency-plumbers.net.au/blog/2021-how-much-does-a-plumber-cost-in-sydney/</p> <p>Total \$120</p>	
6-106	Bathroom – Soap holder	Scope of Remedial Works	Claim for Costs	Notes

	<p>The Author has observed the soap holder in the shower is loose.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>Building contract – Defect liability period</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to fix loose soap holder 5. Make good any surfaces affected as part of the works, to their prior condition. 6. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision – Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent finishes, refix loose soap holder and clean work area on completion 1manx1hr@\$85/hr/\$85</p> <p>Total \$85</p>	
1-107	Kitchen splash back – Damage	Scope of Remedial Works	Claim for Costs	Notes
	<p>The occupant reported to the Author at the time of inspection, that there was blemish mark to the glass splash back at the southwest corner that originated from repairs carried out by the Builder to rectify damage identified prior to handover.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect 	<p>Co-ordination and Supervision – Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces, clean work area on completion of works 1manx1hr@\$60/hr/\$60 Protection materials \$10</p>	

	<ul style="list-style-type: none"> NSW standards & tolerances 2017 – Damage by Builder 	<p>adjacent surfaces during the rectification work.</p> <ol style="list-style-type: none"> Supply and install new splash back Make good any surfaces affected as part of the works, to their prior condition. Clean site and leave in a tidy condition upon completion of work 	<p>Supply and install of new glass kitchen splashback \$700</p> <p>Total \$770</p>	
2-107	Living room – Ceiling painting	Scope of Remedial Works	Claim for Costs	Notes
	<p>It was reported to the Author at the time of inspection, that paint blemish identified to the ceiling plasterboard was present prior to handover.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c); AS2311:2017 Guide to the painting of buildings NSW Guide to Standards and tolerances 2017 13.2 Surface finish of paintwork <p><i>Paintwork is defective if the application has blemishes such as paint runs, paint sags, wrinkling, dust, bare or starved painted areas, colour variations, surface cracks, irregular and coarse brush marks, sanding marks, blistering, non-uniformity of gloss level and other irregularities in the surface that are visible from a normal viewing position.</i> (Highlighting added)</p>	<p>Allow to:</p> <ol style="list-style-type: none"> Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. Gain access to required areas in accordance with Safework Cover and protect adjacent surfaces during the rectification work Labour to apply paint system in accordance with the building contract specifications and as to AS2311:2009 'Guide to Painting of Buildings' Supply paint and ancillaries' materials 	<p>Co-ordination and Supervision – Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to move furniture to a secure location, cover and protect adjacent surfaces during the rectification work 2menx2hrs@\$60/hr/\$240</p> <p>Protection materials \$30</p> <p>Labour to apply paint system in accordance with the building contract specifications and as to AS2311:2009 'Guide to Painting of Buildings' 1manx4hrs@\$70/hr/\$280</p>	

		6. Clean site and leave in a tidy condition upon completion of work	Supply paint and ancillaries' materials \$100 Labour to clean site, reinstate furnishings and leave in a tidy condition upon completion of work 2menx2hrs@\$60/hr/\$240 Total \$890	
3-107	Kitchen sink – Damage	Scope of Remedial Works	Claim for Costs	Notes
	<p>The lot owner reported to the Author at the time of inspection, that the dint to the side of drain in the kitchen sink was reported to the Builder prior to hand over.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>NSW Guide to Standards & Tolerances 2017 G – Responsibility to rectify – Builders are liable to repair damage caused to property in the course of completing their building work.</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove and install new kitchen sink 5. Supply new kitchen sink 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion 	<p>Co-ordination and Supervision – Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces, remove damaged kitchen sink and install new kitchen sink and clean work area on completion 1manx2hrs@\$95/hr/\$190</p> <p>New kitchen sink \$160</p> <p>Total \$350</p>	

4-107	Kitchen - Stainless steel cook top	Scope of Remedial Works	Claim for Costs	Notes
	<p>It was reported to the Author by the lot owners at the time of inspection, that the cooktop had scratchers identified prior to handover.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>NSW Guide to Standards & Tolerances 2017 G – Responsibility to rectify – Builders are liable to repair damage caused to property in the course of completing their building work.</i> 	<p>of work</p> <p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove and install new cooktop 5. Supply new cook top 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision – Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces, remove damaged cooktop and install new cooktop and clean work area on completion 1manx2hrs@\$95/hr/\$190</p> <p>New cooktop \$445</p> <p>Total \$635</p>	
5-107	Bedroom sliding door	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author observed at the time of inspection, scratches, and blemishes to the upper the glass panel to the western sliding sash in the bedroom.</p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p>	

	<p>The lot owner reported to the Author at the inspection, the damage originated during repairs carried out by the Builder on other items identified prior to handover.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>NSW Guide to Standards & Tolerances 2017 G – Responsibility to rectify – Builders are liable to repair damage caused to property in the course of completing their building work.</i> 	<p>throughout the whole process.</p> <ol style="list-style-type: none"> 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Remove existing glass, supply and install new equivalent glass panel with indicator motif 5. Dispose of building waste 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>Labour to cover and protect adjacent surfaces 1manx1hr@\$60perhr/\$60</p> <p>Protection materials \$10</p> <p>Labour to remove damaged glass and install new glass panel 1manx2hrs@\$70/\$140 1manx2hrs@\$60/\$120</p> <p>Supply and delivery of new glass panel with indicators \$500</p> <p>Labour to remove protection materials and clean work area 1manx1hr@\$60/\$60</p> <p>Waste disposal \$50</p> <p>Total \$880</p>	
6-107	Balcony – Waterproofing	Scope of Remedial Works	Claim for Costs	Notes
	<p>The lot owner reported to the Author at the time of inspection, flexible sealant removed at the base at the floor tile junction to the western side of the rendered column at the centre of the balcony, was removed by the Builder to carry out invasive testing to investigate the cause of moisture damage to the light weight rendered column that extends to the ground floor below and to the</p>	<p>INCLUDED IN ITEM C-3</p>	<p>INCLUDED IN ITEM C-3</p>	

	<p>levels above.</p> <p>On inspection the Author found no evidence that the waterproofing membrane to the balcony floor return and terminated at a level above the tiled surface.</p> <p>In the Authors view, further investigation should be undertaken to determine if the waterproofing membrane has been terminated above the tiles surface and if possible whether moisture migration has been caused by a failure to install the waterproofing to the balcony in accordance with AS4654.2</p> <p>The Author has determined the proposed scope of works in relation to this item on an 'if found basis' and has included to conduct an invasive testing to investigate the cause of the defect.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c);</i> ▪ <i>AS4654.2:2012 Waterproofing membranes for external above-ground use Part 2: Design and installation</i> 			
1-201	Living area – Tile repair	Scope of Remedial Works	Claim for Costs	Notes
	<p>It was reported to the Author at the time of inspection that the Builder replaced a damaged floor tile in the living area. The Author observed that the tile replacement tile does not match existing tile finishes.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>NSW standards & tolerances 2017 – F Remedial work - It is envisaged that work to rectify defects</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour cover and protect adjacent finishes, demolish and</p>	

	<p><i>will be carried out to match as closely as practical the surrounding materials, finishes, levels and other characteristics of the existing area.</i></p>	<p>Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove and replace defective floor tile 5. Supply new tile, adhesives, and grout 6. Dispose of waste materials 7. Make good any surfaces affected as part of the works, to their prior condition. 8. Clean site and leave in a tidy condition upon completion of work</p>	<p>remove defective tiling, repair substrate, fix tiles and apply grout 1manx1hr@\$85/hr/\$85</p> <p>Supply tile \$20 Adhesive \$5 Grout \$5</p> <p>Labour to clean site and dispose of waste 1manx1hr@\$60/hr/\$60</p> <p>Total \$175</p>	
2-201	Laundry – Mechanical ventilation	Scope of Remedial Works	Claim for Costs	Notes
	<p>The occupant reported to the Author at the time of inspection, that the exhaust fan in the laundry area was discharge from the from the bathroom when the shower bathroom fan is in use and condensation forms within the laundry cabinet.</p> <p>The Author is of the view, the Builder has failure to carry out the works in accordance with AS1668.2 Mechanical ventilation for acceptable air quality, and that the issue in relation to the ducting of the exhaust requires investigation by a suitably qualified contract to determine the cause.</p> <p>Breach(es)</p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to investigate 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Minimum service call to diagnose issue \$120</p> <p>Source - https://www.service.com.au/</p> <p>Total \$120</p>	

	<p><i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c);</i> ▪ <i>AS1668.2 Mechanical ventilation for acceptable air quality</i> ▪ <i>National Construction Code 2016 Vol1 F4.5 Ventilation of rooms</i> 	<p>cause of defect</p> <p>5. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>6. Clean site and leave in a tidy condition upon completion of work</p>		
1-202	Doors throughout interior – Painting	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed doors throughout have not been fully sealed.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c);</i> ▪ <i>NSW standards & tolerances 2017 – Painting</i> ▪ <i>AS2311:2017 Guide to the painting of buildings</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove and reinstall doors following repair 5. Labour to apply paint system in accordance with AS2311:2009 ‘Guide to Painting of Buildings’ 6. Supply paint and ancillaries 7. Make good any surfaces affected as part of the works, 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx1hr1@\$60perhr/\$60</p> <p>Protection materials \$20</p> <p>Labour to remove door and seal door leaf in accordance with AS2311:2017 Guide to the painting of buildings, reinstall door, remove paint from door stop and air conditioning vent and clean work area on completion 1manx4hr@\$70/hr/\$280</p> <p>Supply paint & ancillaries \$120</p>	

		to their prior condition. 8. Clean site and leave in a tidy condition upon completion of work	Total \$480	
2-202	Kitchen and ensuite mixer tap handles	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed the kitchen and ensuite mixer tap handles are loose.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>Building contract – Defect liability period</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to fix loose mixer tap handle 5. Make good any surfaces affected as part of the works, to their prior condition. 6. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision – Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent finishes, refix loose mixer tap and clean work area on completion Plumber minimum service call \$120</p> <p>Source – https://emergency-plumbers.net.au/blog/2021-how-much-does-a-plumber-cost-in-sydney/</p> <p>Total \$120</p>	
3-202	Kitchen ceiling – Painting	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author observed at the time of inspection, blisters to the paint finish on the ceiling in the kitchen.</p> <p>Breach(es)</p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access 	<p>Co-ordination and Supervision – Refer to allowance in summary of</p>	

	<p><i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c);</i> ▪ <i>AS2311:2017 Guide to the painting of buildings</i> ▪ <i>NSW standards & tolerances 2017 – 13.2 Surface finish of paintwork</i> <p><i>Paintwork is defective if the application has blemishes such as paint runs, paint sags, wrinkling, dust, bare or starved painted areas, colour variations, surface cracks, irregular and coarse brush marks, sanding marks, blistering, non-uniformity of gloss level and other irregularities in the surface that are visible from a normal viewing position. (Highlighting added)</i></p>	<p>and facilitate the works throughout the whole process.</p> <ol style="list-style-type: none"> 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to patch and repair paint finish in accordance with AS2311:2017 Guide to the painting of buildings 5. Supply paint and ancillaries 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1menx1hr@\$60/hr/\$60</p> <p>Protection materials \$30</p> <p>Labour to rectify paint work 1manx1hr@\$70/hr/\$70</p> <p>Supply paint & ancillaries \$45</p> <p>Labour to clean site 1manx2hr@\$60/hr/\$60</p> <p>Total \$265</p>	
1-204	Main hallway northern wall – Painting	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed the main entry hallway northern wall has uneven paint cover.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c);</i> ▪ <i>AS2311:2017 Guide to the painting of buildings</i> 	<p>Proposed Rectification Scope of Works</p> <p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 	<p>Co-ordination and Supervision – Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to move furniture to a secure location, cover and protect adjacent</p>	

	<ul style="list-style-type: none"> NSW standards & tolerances 2017 – 13.2 Surface finish of paintwork Paintwork is defective if the application has blemishes such as paint runs, paint sags, wrinkling, dust, bare or starved painted areas, colour variations, surface cracks, irregular and coarse brush marks, sanding marks, blistering, non-uniformity of gloss level and other irregularities in the surface that are visible from a normal viewing position. (Highlighting added) 	<ol style="list-style-type: none"> Gain access to required areas in accordance with Safework requirements. Cover and protect adjacent surfaces during the rectification work. Labour to patch, repair and apply paint in accordance with AS2311:2017 Guide to the painting of buildings Supply paint and ancillaries Make good any surfaces affected as part of the works, to their prior condition. Clean site and leave in a tidy condition upon completion of work 	<p>surfaces during the rectification work 2menx2hrs@\$60/hr/\$240</p> <p>Protection materials \$30</p> <p>Labour to apply paint system in accordance with the building contract specifications and as to AS2311:2009 'Guide to Painting of Buildings' 1manx4hrs@\$70/hr/\$280</p> <p>Supply paint and ancillaries' materials \$100</p> <p>Labour to clean site, reinstate furnishings and leave in a tidy condition upon completion of work 2menx2hrs@\$60/hr/\$240</p> <p>Total \$890</p>	
2-204	Ensuite shower screen	Scope of Remedial Works	Claim for Costs	Notes
	<p>The bottom of the fixed shower screen in the ensuite, the silicone to the bottom of the shower screen towards the door has gaps.</p> <p>Breach(es) Failure to comply with the following:</p> <ul style="list-style-type: none"> Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a) Building contract - Defect liability period – Product 	<p>Allow to:</p> <ol style="list-style-type: none"> Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. Gain access to required areas in accordance with Safework requirements. 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx0.5hrs@\$60perhr/\$30</p>	

	warranty	<ol style="list-style-type: none"> 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to apply construction adhesive waterproofing sealant 5. Supply construction adhesive waterproofing sealant 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>Protection materials \$10</p> <p>Labour to repair defective sealant 1menx1hrs@\$70/\$70</p> <p>Supply adhesive waterproofing sealant \$18</p> <p>Labour to remove protection materials and clean work area 1manx0.5hrs@\$60/\$30</p> <p>Total \$158</p>	
3-204	Main bathroom shower floor tiling	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed water is ponding on the eastern side of the drain the main bathroom shower. The Author conducted testing with a spirit level and found there was insufficient fall on the tile surface to the eastern side of the drain.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c);</i> ▪ <i>AS3958.1 Fall in floor finishes D1 General – Falls in floor finishes is to ensure water does not remain on the finish floor in a manner that can adversely affect the health or amenity of the occupants or deteriorate building elements.</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework 3. Cover and protect adjacent surfaces during the rectification work 4. Labour to remove shower screen and store in a 	<p>Co-ordination and Supervision – Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces during the rectification work 1manx1hr@\$60/hr/\$60</p> <p>Protection materials \$30 Labour to remove shower screen and store in a secure location 1manx1hr@85 per hr/\$85</p>	

- *The Builder has failed to carry out the works in accordance with the building contract specifications*

secure location

5. Labour to demolish floor and wall tiling to provide access for rectification of defective tiling

6. Labour to demolish and remove tile screed and waterproofing membrane and prepare substrate for new waterproofing system and tile screed

7. Supply water resistant fibre cement wall linings same size as existing wall linings and ancillaries

8. Provide proprietary waterproofing system to affected area in accordance with AS3740, manufacturers guidelines and building contract architectural specifications

9. Labour to mix materials and place new tile screed to fall in accordance with AS3958.1 and in accordance with building contract architectural specifications.

10. Supply sand and cement for tile bed screed

11. Provide waterproofing

Labour to demolish floor and wall tiling, demolish and remove tile screed and waterproofing membrane and prepare substrate for new waterproofing system and tile screed

1manx8hrs@\$85 per hr/\$680

Labour to prepare substrate to shower wall frame and fix fibre cement water resistant fibre wall linings in accordance with manufacturers guidelines

1 manx4hrs@\$85 per hr/\$340

Supply water resistant fibre cement wall linings same size as existing wall linings and ancillaries

Provide to proprietary waterproofing system to affected area
\$450

Labour to mix materials and place new tile screed to fall
1 manx2hrs@\$70per hr/\$140
Supply sand and cement for tile bed screed \$90

Provide waterproofing system to top of screed to prevent efflorescence
\$250

		<p>system to top of screed to prevent efflorescence.</p> <p>12. Supply and fix selected floor tiles and grout.</p> <p>13. Seal floor junctions with flexible sanitary sealant, colour similar to other finishes.</p> <p>14. Labour to install shower drainage channel, fix selected tiles, apply grouts and seal all joints in accordance with A3958.1 and building contract architectural specifications</p> <p>15. Labour to reinstall shower screen and seal to make watertight</p> <p>16. Labour to remove building waste and place in waste skip</p> <p>17. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>18. Clean site and leave in a tidy condition upon completion of work.</p> <p>19. Dispose of all building waste</p>	<p>Supply and fix selected floor tiles and grouts. Supply tiles – Wall 2.2m²@\$102m²/\$\$244.40 Floor 1.5m²@103m²/\$154.50 Grout \$15 Sealant \$20 Labour to fix and assist trade 1manx8rs@\$85per hr/\$680 1manx8hrs@\$70 per hr/\$560 Total \$1673.90</p> <p>Seal floor junctions with flexible sanitary sealant, colour similar to other finishes 1manx1hr@\$85 per hr/\$85</p> <p>Labour to reinstall shower screen and seal to make watertight 1manx2hrs@\$85 per hr/\$170</p> <p>Labour to remove building waste and place in waste skip 1max8hrs@\$70 per hr/\$560</p> <p>Make good any surfaces affected as part of the works, to their prior condition 1manx2hrs@\$85 per hr/\$170</p> <p>Clean site and leave in a tidy condition upon completion of work. 1manx2hrs@\$70perhr/\$140</p>	
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			Waste disposal \$100	
			Total \$5063.50	
1-205	Kitchen mixer tap	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed the Kitchen tap mixer handle is loose.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>Building contract – Defect liability period</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to fix loose mixer tap handle 5. Make good any surfaces affected as part of the works, to their prior condition. 6. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision – Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent finishes, refix loose mixer tap and clean work area on completion Plumber minimum service call \$120</p> <p>Source – https://emergency-plumbers.net.au/blog/2021-how-much-does-a-plumber-cost-in-sydney/</p> <p>Total \$120</p>	
2-205	Western side of balcony – Damage	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed the gas barbecue points repair work that the occupant reported at the time of inspection was carried out by the Builder has damaged the balcony party wall.</p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p>	

	<p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a);</i> ▪ <i>NSW Guide to Standards & Tolerances 2017 G – Responsibility to rectify – Builders are liable to repair damage caused to property in the course of completing their building work.</i> 	<p>and facilitate the works throughout the whole process.</p> <ol style="list-style-type: none"> 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to patch and repair wall lining and render finish in accordance with Dulux render system 5. Supply Dulux render materials and ancillaries 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>Labour to cover and protect adjacent surfaces 1manx1hr@\$60perhr/\$60</p> <p>Protection materials \$10</p> <p>Labour to patch and repair damage to wall lining and render finish 1max2hrs@\$85 per hr/\$170</p> <p>Repair materials \$50</p> <p>Clean site and leave in a tidy condition upon completion of work. 1manx1hr@\$60perhr/\$60</p> <p>Total \$350</p>	
3-205	Ensuite shower screen	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed fixed panel to shower screen there is evidence of scratches to the glass to the upper section of the panel at adjacent to the door. The occupant reported to the Author at the time of construction that the defect was identified at handover.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx1hr@\$60perhr/\$60</p>	

	<p><i>Clauses 1(a);</i></p> <ul style="list-style-type: none"> ▪ <i>NSW standards & tolerances 2017 19.4 - Scratches, fractures, chips or surface blemishes on glazing and mirrors are defective if they exist at handover and can be seen from a normal viewing position.</i> 	<ol style="list-style-type: none"> 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove defective shower screen, install new shower screen and seal all junctions to make watertight. 5. Supply new shower screen 6. Dispose of building waste 7. Make good any surfaces affected as part of the works, to their prior condition. 8. Clean site and leave in a tidy condition upon completion of work 	<p>Protection materials \$10</p> <p>Labour to remove damaged shower screen and install new shower screen and seal all joints to make watertight 1manx2hrs@\$70/\$140</p> <p>Waterproofing adhesive sealant \$18</p> <p>Supply and delivery of new shower screen panel \$350</p> <p>Labour to remove protection materials and clean work area 1manx1hr@\$60/\$60 Waste disposal \$30</p> <p>Total \$668</p>	
1-207	Main bathroom – Shower screen	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed fixed shower screen panel on the Eastern side sealant fixing is loose and there are gaps in the sealant.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p>	

	<p><i>Clauses 1 (a)</i></p> <ul style="list-style-type: none"> ▪ <i>Building contract - Defect liability period – Product warranty</i> 	<p>areas in accordance with Safework requirements.</p> <p>3. Cover and protect adjacent surfaces during the rectification work.</p> <p>4. Labour to apply construction adhesive waterproofing sealant</p> <p>5. Supply construction adhesive waterproofing sealant</p> <p>6. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>7. Clean site and leave in a tidy condition upon completion of work</p>	<p>Labour to cover and protect adjacent surfaces 1manx0.5hrs@\$60perhr/\$30</p> <p>Protection materials \$10</p> <p>Labour to repair defective sealant 1menx1hrs@\$70/\$70</p> <p>Supply adhesive waterproofing sealant \$18</p> <p>Labour to remove protection materials and clean work area 1manx0.5hrs@\$60/\$30</p> <p>Total \$158</p>	
2-207	Bathroom ceiling – Paint repair	Scope of Remedial Works	Claim for Costs	Notes
	<p>The occupant reported to the Author at the time of inspection that the Builder carried out rectification work to the ceiling due to water leak from bathroom above.</p> <p>The Author observed that the ceiling had uneven paint cover.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B</i> ▪ <i>Clauses 1(a)</i> ▪ <i>AS2311:2017 Guide to the painting of buildings</i> 	<p>Allow to:</p> <p>1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process.</p> <p>2. Gain access to required areas in accordance with Safework requirements.</p> <p>3. Cover and protect adjacent surfaces during the</p>	<p>Co-ordination and Supervision – Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1menx1hr@\$60/hr/\$60</p> <p>Protection materials \$30</p>	

	<ul style="list-style-type: none"> NSW standards & tolerances 2017 – 13.2 Surface finish of paintwork Paintwork is defective if the application has blemishes such as paint runs, paint sags, wrinkling, dust, bare or starved painted areas, colour variations, surface cracks, irregular and coarse brush marks, sanding marks, blistering, non-uniformity of gloss level and other irregularities in the surface that are visible from a normal viewing position. (Highlighting added) 	<p>rectification work.</p> <ol style="list-style-type: none"> Labour to patch, repair and apply paint in accordance with AS2311:2017 Guide to the painting of buildings Supply paint and ancillaries Make good any surfaces affected as part of the works, to their prior condition. Clean site and leave in a tidy condition upon completion of work 	<p>Labour to rectify paint work 1manx2hrs@\$70/hr/\$140</p> <p>Supply paint & ancillaries \$45</p> <p>Labour to clean site 1manx2hr@\$60/hr/\$60</p> <p>Total \$335</p>	
3-207	Bedroom door – Binding	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed the bedroom passage door is binding on the jamb.</p> <p>Breach(es) Failure to comply with the following:</p> <ul style="list-style-type: none"> Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a) Building contract – Defect liability period NSW standards & tolerances 2017 9.4 – Clearances 	<p>Allow to:</p> <ol style="list-style-type: none"> Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. Gain access to required areas in accordance with Safework requirements. Cover and protect adjacent surfaces during the rectification work. Labour to remove door, door furniture and fixtures, plane door to provide sufficient clearances and reinstall 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1menx1hr@\$60/hr/\$60</p> <p>Protection materials \$10</p> <p>Labour to remove defective door, plane door to provide sufficient clearances and reinstall door 1manx2hrs@\$90/hr/\$180</p>	

		<p>following paint repair</p> <p>5. Labour to repair paint and finish door in accordance with AS3958.1:2007 Part 1: Guide to the installation of ceramic tiles</p> <p>6. Paint and ancillaries</p> <p>7. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>8. Clean site and leave in a tidy condition upon completion of work</p>	<p>Labour to paint door in accordance with AS2311 and building contract specifications 1manx2hrs@\$70/hr/\$140</p> <p>Paint and ancillaries \$50</p> <p>Labour to clean site 1hr@\$60/\$60</p> <p>Total \$500</p>	
4-207	Balcony column – Waterproofing	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed there is a crack in the render at the top of the column on the southwest corner.</p> <p>The Author is of the view, that the crack is a consequence of defective waterproofing to the balcony above.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a) & (c);</i> ▪ <i>AS4654.2:2012 Waterproofing membranes for external above-ground use Part 2: Design and installation</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to patch and repair render in accordance with Dulux render paint system 5. Supply Dulux render, 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx1hr@\$60perhr/\$60</p> <p>Protection materials \$10</p> <p>Labour to patch and repair crack to render finish 1max1hr@\$85 per hr/\$170</p> <p>Repair materials \$50</p>	

		<p>paint and ancillaries</p> <p>6. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>7. Clean site and leave in a tidy condition upon completion of work</p>	<p>Clean site and leave in a tidy condition upon completion of work. 1manx1hr@\$60perhr/\$60</p> <p>Total \$350</p>	
1-301	Bedroom 2 – Window	Scope of Remedial Works	Claim for Costs	Notes
	<p>The occupant reported to the Author at the time of inspection, that the metal window frame had been scratched from repair work carried out by Builder. The Author observed evidence of damage to the to the northern lower and southern lower sections of the metal window frame.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a);</i> ▪ <i>NSW Guide to Standards & Tolerances 2017 G – Responsibility to rectify – Builders are liable to repair damage caused to property in the course of completing their building work.</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Specialist labour to repair to damaged window frame 5. Make good any surfaces affected as part of the works, to their prior condition. 6. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to provide paint touch up repair and clean work area on completion 1manx1hr@\$85/hr/\$85</p> <p>Paint \$5</p> <p>Total \$90</p>	

2-301	Bathroom – Mechanical ventilation	Scope of Remedial Works	Claim for Costs	Notes
	<p>The occupant reported to the Author at the time of inspection, that when the shower is used in the main bathroom that the mechanical ventilation causes the glass splash back in the kitchen behind the cooktop to fog up.</p> <p>The Author conducted testing, by running shower and exhaust fan for a several minutes and observed fog forming on the kitchen glass splash back.</p> <p>The Author is of the view, that the presents of fog on the glass indicates that the ventilation duct is not fully sealed allowing moist air to leak and dispel into the ceiling space and wall where the glass splash back is located.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a) & (c);</i> ▪ Failure of the Builder to carry out the works in accordance with the National Construction Code 2016 Vol1 F4.5 Ventilation of rooms 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to repair ducting to exhaust fan 5. Make good any surfaces affected as part of the works, to their prior condition. 6. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Minimum service call to diagnose issue \$120</p> <p>Source - https://www.service.com.au/</p> <p>Total \$120</p>	
3-301	Main bathroom ceiling – Damage	Scope of Remedial Works	Claim for Costs	Notes
	<p>The occupant reported to the Author at the time of inspection, that the Builder conducted to maintenance to the mechanical ventilation to the main bathroom damaged the ceiling lining to the northwestern side of the exhaust fan vent.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with 	<p>Co-ordination and Supervision – Refer to allowance in summary of costs at end of this Scott schedule.</p>	

	<ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a);</i> ▪ <i>NSW Guide to Standards & Tolerances 2017 G – Responsibility to rectify – Builders are liable to repair damage caused to property in the course of completing their building work.</i> 	<p>Safework requirements.</p> <ol style="list-style-type: none"> 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to repair damaged plasterboard 5. Labour to apply paint system to affected plasterboard and to extend to provide even finish 6. Supply paint and ancillaries 7. Make good any surfaces affected as part of the works, to their prior condition. 8. Clean site and leave in a tidy condition upon completion of work 	<p>Labour to cover and protect adjacent surfaces 1menx1hr@\$60/hr/\$60</p> <p>Protection materials \$30</p> <p>Labour to rectify paint work 1manx1hr@\$70/hr/\$70</p> <p>Supply paint & ancillaries \$45</p> <p>Labour to clean site 1manx2hr@\$60/hr/\$60</p> <p>Total \$265</p>	
4-301	Linen bed hallway - Damage	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed damage to the linen door to right hand side and upper right, the occupant reported to the Author at the time of inspection, that the damage was identified prior to handover.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c);</i> ▪ <i>NSW Guide to Standards & Tolerances 2017 G – Responsibility to rectify – Builders are liable to repair damage caused to property in the course of</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the 	<p>Co-ordination and Supervision – Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces, remove damaged door for paint repair and reinstall following repair , and</p>	

	<p>completing their building work.</p>	<p>rectification work.</p> <ol style="list-style-type: none"> 4. Labour to remove damaged door and transport to door supplier for repair 5. Labour to return with door and install following repair 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>clean work area on completion of works 1manx2hrs@\$70/ph/\$140</p> <p>Factory paint repair \$150</p> <p>Total \$290</p>	
5-301	Main bathroom and ensuite doors – Painting	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed main bathroom and ensuite doors are not fully sealed.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c);</i> ▪ <i>NSW standards & tolerances 2017 – Painting</i> ▪ <i>AS2311:2017 Guide to the painting of buildings</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove and reinstall doors following repair 5. Labour to apply paint system in accordance with AS2311:2009 'Guide to Painting 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx1hr1@\$60perhr/\$60</p> <p>Protection materials \$10</p> <p>Labour to remove door and seal door leaf in accordance with AS2311:2017 Guide to the painting of buildings, reinstall door, remove paint from door stop and air conditioning vent</p>	

		<p>of Buildings’</p> <p>6. Supply paint and ancillaries</p> <p>7. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>8. Clean site and leave in a tidy condition upon completion of work</p>	<p>and clean work area on completion</p> <p>1manx2hrs@\$70/hr/\$140</p> <p>Supply paint & ancillaries \$100</p> <p>Total \$310</p>	
1-302	Main bathroom – Shower screen	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed fixed shower screen panel is loose and there are gaps in the sealant fixing.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>Building contract - Defect liability period – Product warranty</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to apply construction adhesive waterproofing sealant 5. Supply construction adhesive waterproofing sealant 6. Make good any surfaces affected as part of the works, to their prior condition. 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx0.5hrs@\$60perhr/\$30</p> <p>Protection materials \$10</p> <p>Labour to repair defective sealant 1menx1hrs@\$70/\$70</p> <p>Supply adhesive waterproofing sealant \$18</p> <p>Labour to remove protection materials and clean work area</p>	

		7. Clean site and leave in a tidy condition upon completion of work	1manx0.5hrs@\$60/\$30 Total \$158	
2-302	Bathroom and ensuite doors – Painting	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that the main bathroom door and bedroom ensuite door have not been sealed.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c);</i> ▪ <i>NSW standards & tolerances 2017 – Painting</i> ▪ <i>AS2311:2017 Guide to the painting of buildings</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove and reinstall doors following repair 5. Labour to apply paint system in accordance with AS2311:2009 ‘Guide to Painting of Buildings’ 6. Supply paint and ancillaries 7. Make good any surfaces affected as part of the works, to their prior condition. 8. Clean site and leave in a tidy condition upon completion 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx1hr1@\$60perhr/\$60</p> <p>Protection materials \$10</p> <p>Labour to remove door and seal door leaf in accordance with AS2311:2017 Guide to the painting of buildings, reinstall door, remove paint from door stop and air conditioning vent and clean work area on completion 1manx2hrs@\$70/hr/\$140</p> <p>Supply paint & ancillaries \$100</p> <p>Total \$310</p>	

1-303	Entry door – Distortion	Scope of Remedial Works	Claim for Costs	Notes
	<p>The occupant reported to the Author at the time of inspection, that on occasions the entry door is difficult to close. The Author has observed that the entry door had a bend with an approximate gap of 6mm to the top and bottom when closed to the jamb.</p> <p>The Author is of the view, that the distortion in the door exceeds the tolerance prescribed in the NSW Guide to Standards and Tolerances 2017 and that the defect is the responsibility of the Builder under the building contract maintenance period and under Section 18E(1)(b) of the Home Building Act 1989.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(f) & 18E(1)(b)</i> ▪ <i>NSW standards & tolerances 2017 – 9.5 Distortion of doors.</i> 	<p>of work</p> <p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Supply new door to replace defective door 5. Labour to remove defective door, install new door and existing door furniture 6. Labour to paint new door in accordance with AS2311:2017 Guide to the painting of buildings 7. Make good any surfaces affected as part of the works, to their prior condition. 8. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx1hr@\$60/hr/\$60 Protection materials \$30</p> <p>Supply new door similar to existing damaged door \$195</p> <p>Labour to remove existing door and hand new door and fit door furniture 1manx2hrs@\$85/hr/\$170</p> <p>Labour to apply paint system in accordance with AS2311:2009 'Guide to Painting of Buildings' 1manx2hrs@\$70/hr/\$140</p> <p>Supply paint and ancillaries \$100</p> <p>Labour to clean site and place waste in waste bin 1manx1hr@\$60/hr/\$60</p>	

		9. Dispose of building waste	Waste disposal \$30 Total \$785	
2-303	Laundry door – Painting and moisture damage	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed evidence of distortion to the back of the laundry door and the laundry door has not been fully sealed and the door leaf has moisture damage.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c);</i> ▪ <i>Building contract – Defect liability period</i> ▪ <i>AS2311:2017 Guide to the painting of buildings</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Supply new door to replace defective door 5. Labour to remove defective door, install new door and existing door furniture 6. Labour to paint new door in accordance with AS2311:2017 Guide to the painting of buildings 7. Make good any surfaces affected as part of the works, to their prior condition. 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx1hr@\$60/hr/\$60 Protection materials \$30</p> <p>Supply new door similar to existing damaged door \$95</p> <p>Labour to remove existing door and hand new door and fit door furniture 1manx2hrs@\$85/hr/\$170</p> <p>Labour to apply paint system in accordance with AS2311:2009 'Guide to Painting of Buildings' 1manx2hrs@\$70/hr/\$140</p> <p>Supply paint and ancillaries \$100</p>	

		<p>8. Clean site and leave in a tidy condition upon completion of work</p> <p>9. Dispose of building waste</p>	<p>Labour to clean site and place waste in waste bin 1manx1hr@\$60/hr/\$60</p> <p>Waste disposal \$30</p> <p>Total \$685</p>	
3-303	Living area – Power point	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed the power point to the northeast wall in the living area has been out of level.</p> <p>Breach(es) <i>Failure to comply with the following: Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i></p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to adjust power point to make level 5. Make good any surfaces affected as part of the works, to their prior condition. 6. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Minimum service call to diagnose issue \$120</p> <p>Source - https://www.service.com.au/</p> <p>Total \$120</p>	

4-303	Bathroom and ensuite door – Painting	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that the main bathroom door and bedroom ensuite door have not been sealed.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c);</i> ▪ <i>NSW standards & tolerances 2017 – Painting</i> ▪ <i>AS2311:2017 Guide to the painting of buildings</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove and reinstall doors following repair 5. Labour to apply paint system in accordance with AS2311:2009 ‘Guide to Painting of Buildings’ 6. Supply paint and ancillaries 7. Make good any surfaces affected as part of the works, to their prior condition. 8. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx1hr1@\$60perhr/\$60</p> <p>Protection materials \$10</p> <p>Labour to remove door and seal door leaf in accordance with AS2311:2017 Guide to the painting of buildings, reinstall door, remove paint from door stop and air conditioning vent and clean work area on completion 1manx2hrs@\$70/hr/\$140</p> <p>Supply paint & ancillaries \$100</p> <p>Total \$310</p>	
5-303	Ensuite – Shower screen	Scope of Remedial Works	Claim for Costs	Notes

	<p>The Author has observed the ensuite fixed shower screen silicon fixing is loose.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>Building contract - Defect liability period – Product warranty</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to apply construction adhesive waterproofing sealant 5. Supply construction adhesive waterproofing sealant 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx0.5hrs@\$60perhr/\$30</p> <p>Protection materials \$10</p> <p>Labour to repair defective sealant 1menx1hrs@\$70/\$70</p> <p>Supply adhesive waterproofing sealant \$18</p> <p>Labour to remove protection materials and clean work area 1manx0.5hrs@\$60/\$30</p> <p>Total \$158</p>	
1-304	Doors throughout interior – Painting	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed doors throughout have not been fully sealed.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p>	

	<p><i>Clauses (a) & (c);</i></p> <ul style="list-style-type: none"> ▪ <i>NSW standards & tolerances 2017 – Painting</i> ▪ <i>AS2311:2017 Guide to the painting of buildings</i> 	<ol style="list-style-type: none"> 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove and reinstall doors following repair 5. Labour to apply paint system in accordance with AS2311:2009 'Guide to Painting of Buildings' 6. Supply paint and ancillaries 7. Make good any surfaces affected as part of the works, to their prior condition. 8. Clean site and leave in a tidy condition upon completion of work 	<p>Labour to cover and protect adjacent surfaces 1manx1hr1@\$60perhr/\$60</p> <p>Protection materials \$20</p> <p>Labour to remove door and seal door leaf in accordance with AS2311:2017 Guide to the painting of buildings, reinstall door, remove paint from door stop and air conditioning vent and clean work area on completion 1manx4hr@\$70/hr/\$280</p> <p>Supply paint & ancillaries \$120</p> <p>Total \$480</p>	
2-304	Ensuite – Water ponding in shower	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed the ensuite fixed shower screen silicon fixing is loose, and water is ponding on the tile surface to the northeastern side of the floor waste.</p> <p>The Author conducted fall test using a digital level and found the fall was sufficient, however the ponding is caused due to the floor waste is sitting higher than the tile surface.</p> <p>The Author noted ponding issue was identified in TCA (Giaouris) report item U 304.7 Attachment F</p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx0.5hrs@\$60perhr/\$30</p>	

	<p>Defect schedule.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)&(c)</i> ▪ <i>AS3958.1-2007 Ceramic tiles Part 1: Guide to the installation of ceramic tiles</i> ▪ <i>Building contract - Defect liability period – Product warranty</i> 	<p>accordance with Safework requirements.</p> <ol style="list-style-type: none"> 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove tiles siting lower than level of floor waste 5. Repair tile screed and grade to provide sufficient falls to drainage inlet 6. Reinstate tiling in accordance with AS3958.1 7. Supply tiles, adhesive and grout 8. Make good any surfaces affected as part of the works, to their prior condition. 9. Clean site and leave in a tidy condition upon completion of work 	<p>Protection materials \$10</p> <p>Labour to remove tiles siting lower than level of floor waste, repair tile screed and grade to provide sufficient falls to drainage inlet and reinstate tiling in accordance with AS3958.1 1manx8hrs@\$85/p/\$680</p> <p>Supply tiles, adhesive and grout Tiles \$45 Adhesive \$5 Grout \$5</p> <p>Labour to clean work area 1manx0.5hrs@\$60/\$30</p> <p>Total \$805</p>	
3-304	Ensuite shower – Soap holder	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed the soap holder in the shower is loose.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>Building contract – Defect liability period</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with 	<p>Co-ordination and Supervision – Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent finishes, refix loose soap</p>	

		<p>Safework requirements.</p> <p>3. Cover and protect adjacent surfaces during the rectification work.</p> <p>4. Labour to fix loose soap holder</p> <p>5. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>6. Clean site and leave in a tidy condition upon completion of work</p>	<p>holder and clean work area on completion 1manx1hr@\$85/hr/\$85</p> <p>Total \$85</p>	
4-304	Ensuite vanity mixer tap	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed the basin mixer tap to ensuite vanity and shower are loose.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>Building contract – Defect liability period</i> 	<p>Allow to:</p> <p>1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process.</p> <p>2. Gain access to required areas in accordance with Safework requirements.</p> <p>3. Cover and protect adjacent surfaces during the rectification work.</p> <p>4. Labour to fix loose mixer tap handle</p> <p>5. Make good any surfaces affected as part of the works, to their prior condition.</p>	<p>Co-ordination and Supervision – Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent finishes, refix loose mixer tap and clean work area on completion Plumber minimum service call \$120</p> <p>Source – https://emergency-plumbers.net.au/blog/2021-how-much-does-a-plumber-cost-in-sydney/</p>	

		6. Clean site and leave in a tidy condition upon completion of work	Total \$120	
5-304	Balcony – Metal screen installation	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed the screen to the eastern side of the balcony is binding with the balcony rendered balustrade.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)&(f)</i> ▪ <i>Does not operate as intended by the manufacturer</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Supply and erect scaffold to provide a safe working platform 5. Dismantle metal screen frame and adjust to provide clearances 6. Reinstall metal screening 7. Replace rust fixings 8. Seal fixings in bottom screen track to prevent water penetration into concrete substrate 9. Dismantle scaffolding 10. Make good any surfaces 	<p>Co-ordination and Supervision – Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Scaffold hire - Supply, erection and dismantle \$2500</p> <p>Labour to cover and protect adjacent surfaces, dismantle and adjust metal screening to provide sufficient clearances, and repair holes in bottom track to prevent water penetration and reinstall metal screens 2menx8hrs@\$90/\$1440</p> <p>Labour to remove protection materials and clean work area 1manx1hrs@\$60/\$60</p> <p>Total \$4000</p>	

		<p>affected as part of the works, to their prior condition.</p> <p>11. Clean site and leave in a tidy condition upon completion of work</p>		
6-304	Balcony – Drummy tiles and movement joints	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that tile movement joints has not been provide in accordance with AS3958.1:2007, and that tiles adjacent to the movement joint to the eastern side of balcony are drummy.</p> <p>The Author noted issue was identified in TCA (Giaouris) report item U 304.19 and U 304.23 Attachment F Defect schedule.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)&(c)</i> ▪ <i>AS3958.1-2007 Ceramic tiles Part 1: Guide to the installation of ceramic tiles</i> ▪ <i>Building contract</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove all drummy tiles to each side of movement joint, 5. Cut tile screed – depth of cut controlled to not affect waterproof membrane under screed, 6. Install preformed tile movement joint, lay new tiles with minimum 90% glue coverage to rear of tiles, as stipulated by AS3958.1 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx0.5hrs@\$60perhr/\$30</p> <p>Protection materials \$10</p> <p>Labour to remove all drummy tiles to each side of movement joint, cut tile screed – depth of cut controlled to not affect waterproof membrane under screed, and install preformed tile movement joint, lay new tiles with minimum 90% glue coverage to rear of tiles, as stipulated by AS3958.1 2menx16hrs@\$85/\$2720</p> <p>Tiles 3m3@45m2/\$135</p>	

		<p>7. Lay new tiles with sufficient falls and grout joints as to AS3958.1</p> <p>8. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>9. Clean site and leave in a tidy condition upon completion of work</p>	<p>Preformed movement joint 5/plm@\$13/plm/\$65 Sand \$35 Cement \$20 Tile adhesive \$25 Grout \$15 Sealant \$18</p> <p>Labour to clean work area and dispose of building waste 1manx1hrs@\$60/\$60</p> <p>Waste disposal \$50</p> <p>Total \$3183</p>	
1-305	Balcony – Metal screen installation	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed fixing in bottom sliding screen track on external are rusty, and southwestern screen to balcony is binding with the balcony masonry wall.</p> <p>The Author is of the view, that the fixings are not suitable for exterior use and the binding of the before mentioned screen originated due to poor workmanship employed by the Builder at the time of construction.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)&(f)</i> ▪ <i>Does not operate as intended by the manufacturer</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Supply and erect 	<p>Co-ordination and Supervision – Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Scaffold hire - Supply, erection and dismantle \$2500</p> <p>Labour to cover and protect adjacent surfaces, dismantle and adjust metal screening to provide sufficient clearances, and repair</p>	

	<ul style="list-style-type: none"> NCC Volume 3 Part A2 – Suitability of materials and products 	<p>scaffold to provide a safe working platform</p> <ol style="list-style-type: none"> Dismantle metal screen frame and adjust to provide clearances Reinstall metal screening Replace rust fixings Seal fixings in bottom screen track to prevent water penetration into concrete substrate Dismantle scaffolding Make good any surfaces affected as part of the works, to their prior condition. Clean site and leave in a tidy condition upon completion of work 	<p>holes in bottom track to prevent water penetration and reinstall metal screens 2menx8hrs@\$90/\$1440 Labour to remove protection materials and clean work area 1manx1hrs@\$60/\$60</p> <p>Total \$4000</p>	
2-305	Balcony – Tiling	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed water ponding on tile floor surface to southwest corner of balcony. The Author conducted testing using a digital level and found zero fall to area tested.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)); AS4654.2 Waterproofing membranes for external above-ground use Part 2: Design and installation Building contract specification 	<p>Proposed Rectification Scope of Works</p> <ol style="list-style-type: none"> Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. Gain access to required areas in accordance with Safework requirements. Labour to demolish and 	<p>Co-ordination and Supervision – Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx1hrs@\$60perhr/\$60</p> <p>Protection materials \$30</p>	

		<p>remove tiling, tile bed (screed) to nearest junction</p> <p>4. Labour to expose concrete slab substrate, remove demolition waste and place in waste bin for disposal</p> <p>5. Labour to grind concrete surface and prepare surface for new waterproofing system</p> <p>6. Labour to apply waterproofing system in accordance with AS4654.1&2 to affected area and as to building contract specifications</p> <p>7. Labour to repair render</p> <p>8. Supply Dulux render materials</p> <p>9. Labour to place sand and cement tile screed and provide positive falls to drainage inlets in accordance with AS3958.1 and in accordance with building contract specifications</p> <p>10. Labour to mix sand and cement for tile screed and assist trades</p> <p>11. Supply sand and cement for tile screed</p> <p>12. Supply 'Efflock' to prevent efflorescence</p>	<p>Labour cover and protect adjacent finishes, demolish and remove defective tiling, repair substrate, repair waterproofing system, install preformed movement joint, fix tiles and apply grout 2menx12hrs@\$85/hr/\$2040</p> <p>Waterproofing materials \$100 Efflock \$45</p> <p>Supply preformed movement joint \$25 Supply tiles 5m2x\$80/\$400 Adhesive \$5m2x5m2/\$25 Grout \$15</p> <p>Labour to clean site and dispose of waste 1manx4hrs@\$60/hr/\$240</p> <p>Waste disposal \$100</p> <p>Total \$3080</p>	
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13. Supply and apply waterproofing system on top of tile bed to prevent efflorescence as to building contract specifications
14. Supply and install preformed tile movement joint in accordance with AS3958.1 and building contract specifications if required
15. Supply and fix new selected tiles and grout in accordance with AS3958.1:2007 and building contract specifications
16. Supply 'Efflock' for tile adhesive and grouts to prevent efflorescence
17. Labour to repair paint work to affected finishes
18. Supply paint and ancillaries
19. Remove and dispose of all building waste
20. Make good any surfaces affected as part of the works, to their prior condition.
21. Clean site and leave in a tidy condition upon completion of work

3-305	Main hallway – Air conditioning control	Scope of Remedial Works	Claim for Costs	Notes
	<p>The occupant reported to the Author at the time of inspection, that the dehumidifier function on the air conditioning is not working. The Author conducted testing and observed that the air condition control display did not indicate this function was active.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a);</i> ▪ <i>Building contract – Defect liability period</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Arrange product warranty service with manufacturer or authorised contractor 3. Gain access to required areas in accordance with Safework requirements. 4. Cover and protect adjacent surfaces during the rectification work. 5. Make good any surfaces affected as part of the works, to their prior condition. 6. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Minimum service call to diagnose issue \$100</p> <p>Source - https://www.homeadvisor.com/</p> <p>Total \$100</p>	
4-305	Bathroom vanity basin	Scope of Remedial Works	Claim for Costs	Notes
	<p>The occupant reported to the Author at the time of inspection that the bathroom basin had a crack identified at handover. The Author has observed there is a crack to the basin to the southeast corner of the basin.</p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access 	<p>Co-ordination and Supervision – Refer to allowance in summary of</p>	

	<p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a);</i> ▪ <i>NSW Guide to Standards & Tolerances 2017 G – Responsibility to rectify – Builders are liable to repair damage caused to property in the course of completing their building work.</i> 	<p>and facilitate the works throughout the whole process.</p> <ol style="list-style-type: none"> 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove defective vanity basin and replace with new basin 5. Supply new basin 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces, remove damaged vanity basin and install new kitchen sink and clean work area on completion 1manx2hrs@\$95/hr/\$190</p> <p>New vanity basin \$60</p> <p>Total \$250</p>	
5-305	Main bathroom – Shower screen	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed silicon fixing to the fixed shower screen is loose.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a)</i> ▪ <i>Building contract - Defect liability period – Product warranty</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx0.5hrs@\$60perhr/\$30</p> <p>Protection materials \$10</p>	

		<p>rectification work.</p> <p>4. Labour to apply construction adhesive waterproofing sealant</p> <p>5. Supply construction adhesive waterproofing sealant</p> <p>6. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>7. Clean site and leave in a tidy condition upon completion of work</p>	<p>Labour to repair defective sealant 1menx1hrs@\$70/\$70</p> <p>Supply adhesive waterproofing sealant \$18</p> <p>Labour to remove protection materials and clean work area 1manx0.5hrs@\$60/\$30</p> <p>Total \$158</p>	
6-305	Main bedroom western wall – Painting	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed main bedroom on Western Wall under the location of the television there is a fixing which is a protruding behind the plasterboard lining situated around about 1m and another fixing which is positioned above the power points.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c);</i> ▪ <i>AS2311:2017 Guide to the painting of buildings</i> ▪ <i>NSW standards & tolerances 2017 – 13.2 Surface finish of paintwork</i> <p><i>Paintwork is defective if the application has blemishes such as paint runs, paint sags, wrinkling, dust, bare or starved painted areas, colour variations, surface</i></p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to patch, repair and apply paint in accordance with AS2311:2017 Guide to the painting of buildings 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces, complete repair to wall, apply paint system in accordance with AS2311:2017 Guide to the painting of buildings, Make good any surfaces affected as part of the works, clean work area on completion of works 1manx4hrs@\$70/hr/\$280</p>	

	<p>cracks, irregular and coarse brush marks, sanding marks, blistering, non-uniformity of gloss level and other irregularities in the surface that are visible from a normal viewing position. (Highlighting added)</p>	<p>5. Supply paint and ancillaries 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work</p>	<p>Supply paint & ancillaries \$50 Total \$330</p>	
1-306	Living Balcony sliding door	Scope of Remedial Works	Claim for Costs	Notes
	<p>The occupant reported to the Author at the time of inspection, that the sliding door panel to the western side of the side balcony sliding door was sticking and difficult to open. The Author tested the door sliding function and found the occupants statement was true and correct.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c); ▪ NSW Guide to Standards and tolerances 2017 9.7 –The installation of doors and windows is defective if they <ul style="list-style-type: none"> A) Bind or jam as result of the Builder’s workmanship B) Do not operate as intended by the manufacturer 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Coordinate with manufacturer to provide warranty service 2. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 3. Gain access to required areas in accordance with Safework requirements 4. Cover and protect adjacent surfaces during the rectification work 5. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>If manufacturer does not provide warranty service, then following cost allowed for an alternative service provider –</p> <p>Labour to rectify sliding door function and clean work area on completion 1manx1hr@\$85/hr/\$85</p> <p>Total \$85</p>	
2-306	Main bedroom – Balcony sliding door	Scope of Remedial Works	Claim for Costs	Notes

	<p>The Author has observed that there is a gap in the sealant to the top of threshold tile at the northern end of the sliding door.</p> <p>The Author noted that the issue was identified in TCA (Giaouris) report item U 306.13 Attachment F Defect schedule.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c);</i> ▪ <i>AS3958.1:2007</i> ▪ <i>Incomplete contract works</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements 3. Labour to apply sealant to repair gap to tiled threshold 4. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour seal door threshold and clean work area on completion 1manx0.5hrs@\$70/\$35</p> <p>Total \$35</p>	
1-307	Main bathroom – Shower screen	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed there is insufficient clearance between the shower screen door in the main bathroom and the fixed panel at the top of the door and needs adjustment to provide a more clearance.</p> <p>Breach(es) <i>Failure to comply with the following:</i> <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i></p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to adjust door to provided sufficient clearances 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx0.5hrs@\$60perhr/\$30</p> <p>Protection materials \$10</p>	

		<p>5. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>6. Clean site and leave in a tidy condition upon completion of work</p>	<p>Labour to adjust shower screen door to provide sufficient clearances 1menx0.5hrs@\$70/\$35</p> <p>Labour to remove protection materials and clean work area 1manx0.5hrs@\$60/\$30</p> <p>Total \$105</p>	
1-403	Balcony terrace wall	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author is of the view,</p> <ul style="list-style-type: none"> that the Builder has not considered the intended use of the balcony terrace by dividing the balcony terrace with a wall, that has affected the occupants use and function of the property. that the Builder has failed to consider the finish floor levels to the balcony terrace that form the entire lot of the apartment balcony terrace. <p>Breach(es) <i>Failure to comply with the following: Home Building Act 1989 (NSW) under Section 18B Clauses 1(a) & (f)</i></p>	<p>Proposed Rectification Scope of Works Allow to:</p> <ol style="list-style-type: none"> Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. Gain access to required areas in accordance with Safework requirements. Provide material hoist to balcony terrace level Cover and protect adjacent surfaces during the rectification work. Labour to remove furniture, spa and affected 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 2menx8hrs@\$60/hr/\$960</p> <p>Protection materials \$300</p> <p>Provide material hoist to balcony terrace level Delivery, install, dismantle, pick up and hire \$6500</p> <p>Provide waste chute to balcony terrace level to remove</p>	

		<p>fixtures and place in secure location</p> <p>6. Provide waste chute to balcony terrace level to remove demolition and building material waste from balcony</p> <p>7. Labour to demolish and remove tiling, tile bed (screed), and waterproofing membrane, expose concrete slab substrate, remove demolition waste and place in waste bin for disposal</p> <p>8. Labour to grind concrete surface and prepare surface for new waterproofing system</p> <p>9. Labour to provide proprietary waterproofing system in accordance with AS4654.1&2 to balcony terrace</p> <p>10. Labour to carry and load materials throughout remediation works</p> <p>11. Labour to place sand and cement tile screed and provide positive falls to drainage inlets in accordance with AS3958.1 and in accordance with building contract specifications</p> <p>12. Labour to mix sand and cement for tile screed and</p>	<p>demolition and building, delivery and pick up \$600</p> <p>Labour to install waste chute 2menx4hrs@\$70/hr/\$560</p> <p>Labour to remove furniture, spa and affected fixtures and place in secure location material waste from balcony 2menx2hrs@\$70/hr/\$280</p> <p>Labour to demolish and remove tiling, tile bed (screed), and waterproofing membrane, expose concrete slab substrate, remove demolition waste and place in waste bin for disposal 2menx32hrs@\$70/hr/\$4480 2menx32hrs@\$60/hr/\$3840</p> <p>Labour to grind concrete surface and prepare surface for new waterproofing system 2menx16hrs@\$70/hr/\$2240</p> <p>Provide proprietary waterproofing system in accordance with AS4654.1&2 to balcony terrace 102m2x\$60m2/\$6000</p>	
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		<p>assist trades</p> <p>13. Supply sand and cement for tile screed</p> <p>14. Supply 'Efflock' to prevent efflorescence</p> <p>15. Supply and apply waterproofing system on top of tile bed to prevent efflorescence</p> <p>16. Supply and install preformed tile movement joint in accordance with AS3958.1 and building contract specifications</p> <p>17. Supply and fix new selected tiles and grout in accordance with AS3958.1:2007 and building contract specifications</p> <p>18. Supply 'Efflock' for tile adhesive and grouts to prevent efflorescence</p> <p>19. Labour to seal all joints and junctions</p> <p>20. Supply sealants</p> <p>21. Remove and dispose of all building waste</p> <p>22. Make good any surfaces affected as part of the works, to their prior condition.</p>	<p>Labour to place sand and cement tile screed and provide positive falls to drainage inlets in accordance with AS3958.1 and in accordance with building contract specifications 2menx16hrs@\$85/hr/\$2240</p> <p>Supply sand and cement for tile screed Sand (bagged) 5tonx\$85/\$425 Cement 80x\$10/\$800 Delivery charges with Hyab \$150</p> <p>Labour to carry, load materials, mix sand and cement for tile screed and assist trades throughout remediation works 2menx40hrs@\$70/hr/\$5600</p> <p>Supply 'Efflock' to prevent efflorescence \$150</p> <p>Supply and apply waterproofing system on top of tile bed to prevent efflorescence 102m2x\$40m4/\$4080</p> <p>Supply and install preformed tile</p>	
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		<p>23. Labour to restate spa, furnishing and fixtures</p> <p>24. Clean site and leave in a tidy condition upon completion of work</p>	<p>movement joint in accordance with AS3958.1 and building contract specifications Labour 1menx4hrs@\$85/hr/\$340 Preformed movement joint material \$100</p> <p>Supply and fix new selected tiles and grout in accordance with AS3958.1:2007 and building contract specifications Tiles 120m2x\$80/\$9600 Tile labour to fix perM2 rate 102m2x\$60m2/\$6120</p> <p>Labour to seal all joints and junctions 1menx4hrs@\$85/hr/\$340</p> <p>Supply sealants 12x\$18/\$216</p> <p>Labour to make good any surfaces affected as part of the works, to their prior condition. 1menx4hrs@\$85/hr/\$340</p> <p>Labour to clean site and leave in a tidy condition upon completion of work 2menx8hrs@\$70/\$1120</p>	
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			<p>Labour to restate spa, furnishing and fixtures 2menx4hrs@\$70/\$560 Waste disposal \$650</p> <p>Total \$58491</p>	
2-403	Balcony terrace – Tiling	Scope of Remedial Works	Claim for Costs	Notes
	<p>The occupant reported to the Author at the time of inspection that the tiles to the northern side of the terrace area and reported, that on hot days with direct sunlight on the tiles there is evidence of a white substance that discharges from the tile joints on the northern side of the terrace.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a);</i> ▪ <i>NSW standards & tolerances 2017 - Efflorescence</i> 	<p>Please Note – Measures to prevent efflorescence included in item 1-403.</p>	<p>Included in item 1-403.</p>	
3-403	Balcony terrace north – Tiling movement joint	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that there is no flexible joint which has been provided to the northern side of the terrace at junction of floor tiling and the balustrade hob.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a) & (c);</i> ▪ <i>AS3958.1:2007 Part 1: Guide to the installation of ceramic tiles</i> 	<p>Please Note – Joint sealing included in item 1-403.</p>	<p>Included in item 1-403</p>	

4-403	Balcony terrace – Builders remediation works	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that sections of the glass balustrade have been removed from the western and southern side of the balcony terrace.</p> <p>The owner occupant reported to the Author at the time of inspection, that the Builder had carried out remedial work to repair defective rendering to the balustrade walls. The Author observed patching to render of the balustrade walls in the locations where the glass balustrade had been removed. The Author observed that the removed glass balustrade had been stacked against the spa on the western side of the balcony terrace and adjacent to the staked glass balustrade was a bucket with the balustrade fixtures.</p> <p>The Author has found on conducting a percussion test that area where the render has been repaired to the external wall of balcony terrace was drummy and observed the render finish had significant craze cracks.</p> <p>The Author is of the view, that the Builder has failed to satisfactory apply the render system to the walls in accordance with the manufacturers guidelines and complete the repair works.</p> <p>The Author is also of the view, that the glass balustrade having not been reinstated by the Builder has created a significant safety risk to the occupants.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove defective render and dispose of demolition waste 5. Labour to prepare substrate for rendering in accordance with the manufacturers guidelines 6. Labour to apply proprietary render system to affected areas in accordance with manufacturers guidelines and building specifications 7. Supply proprietary render system materials and ancillaries 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Cover and protect adjacent surfaces during the rectification work and waste disposal costs included in item 1-403.</p> <p>Labour to remove defective render and prepare substrate for rendering in accordance with the manufacturers guidelines 1manx8hrs@\$85/hr/\$680</p> <p>Labour to apply proprietary render system to affected areas in accordance with manufacturers guidelines 1manx8hrs@\$85/hr/\$680</p> <p>Supply proprietary render system materials and ancillaries \$200</p> <p>Labour to prepare rendered</p>	

	<ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a) & (f);</i> ▪ <i>Building contract – Defect liability period</i> ▪ <i>Incomplete contract works</i> 	<p>8. Labour to prepare rendered surfaces and apply paint system to match existing finishes</p> <p>9. Supply paint and ancillaries</p> <p>10. Labour to reinstate glass balustrade and metal handrails</p> <p>11. Labour to remove and dispose of building waste materials</p> <p>12. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>13. Clean all affect surfaces</p> <p>14. Clean site and leave in a tidy condition upon completion of work</p>	<p>surfaces and apply paint system to match existing finishes 1manx8hrs@\$70/hr/\$560</p> <p>Supply paint and ancillaries \$200</p> <p>Labour to reinstate glass balustrade, metal handrails and make good, affected finishes 2manx8hrs@\$85/hr/\$1360</p> <p>Labour to clean site and leave in a tidy condition upon completion of work 1manx8hrs@\$60/hr/\$480</p> <p>Total \$4160</p>	
5-403	Northwestern and Southeast balustrade connection	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that the balustrade rail to the northwest and southeast corners of the balcony terrace are not securely connected.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a) & (c);</i> ▪ <i>NCC 2017 Vol2 3.9.2.2</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Cover and protect adjacent surfaces during the rectification work and waste disposal costs included in item 1-403.</p>	

		<p>rectification work.</p> <p>4. Labour to lay extend height of rendered column to provide balustrade connection</p> <p>5. Supply bricks, sand and cement</p> <p>6. Labour to apply proprietary render system to affected areas in accordance with manufacturers guidelines and building specifications</p> <p>7. Supply proprietary render system materials and ancillaries</p> <p>8. Labour to prepare rendered surfaces and apply paint system to match existing finishes</p> <p>9. Supply paint and ancillaries</p> <p>10. Labour to extend metal balustrade rail and fix to make secure</p> <p>11. Supply balustrade connections and ancillaries</p> <p>12. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>13. Clean site and leave in a tidy condition upon completion</p>	<p>Labour to lay extend height of rendered column to provide balustrade connection 1manx4hrs@\$85/hr/\$340 Supply bricks, sand and cement Bricks \$25 Sand \$10 Cement \$8</p> <p>Labour to apply proprietary render system to affected areas in accordance with manufacturers guidelines and building specifications, supply proprietary render system materials and ancillaries, prepare rendered surfaces and apply paint system to match existing finishes, supply paint and ancillaries included in item 4-403.</p> <p>Labour to extend metal balustrade rail and fix to make secure, and make good, affected finishes 1manx4hrs@\$85/hr/\$170</p> <p>Supply balustrade connections and ancillaries \$100</p>	
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		of work	<p>Labour to clean site included in item 4-403.</p> <p>Total \$780</p>	
6-403	Exterior rendered and cladding PE/Drainage	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed.</p> <ul style="list-style-type: none"> ▪ weep holes to the perimeter of the exterior have been sealed by paint and render materials, ▪ there is a white discharge coming from various weep holes ▪ there is drummy and delamination of render to the building façade to the southeast side of the terrace outside the bedroom door. ▪ Rainwater was penetrating and seeping from cavity at the bottom corner to the eastern side of the sliding door to bedroom 3 <p>The Author is of the view, the Builder has failed to carry out the works in accordance with HEBEL manufacturers guidelines, AS2904 Damp-proof courses and flashings.</p> <p>Furthermore, the Author as identified in Item C-2 of the schedule the Building has failed to adequately weatherproof the Building by not completing the waterproofing and providing flashing to the roof above in accordance with NCC Vol1 2016 FP1.4 Weatherproofing, AS5654.2 and building contract specifications.</p>	<p>Allow to:</p> <p>IN CONJUNCTION WITH REMEDIATION WORKS IN RELATION TO ITEMS R-1 AND C-2 OF THIS SCHEDULE</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to recover weepholes 5. Labour to remove defective render and dispose of demolition waste 6. Labour to prepare 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1menx1hr@\$60perhr/\$60</p> <p>Protection materials \$20</p> <p>Labour to recover Weepa protectors, remove and dispose of all building waste, cut slot in Hebel panel to install Weepa protector, install Weepa protectors patch, repair drummy render finishes in accordance with manufacturers guidelines and make good, affected. Labour 2menx8hrs@\$85h/\$1360</p> <p>Supplier Weepa protectors \$15</p>	

	<p>The Author is of the view, that the Builder has systematically failed to carry out the works with due care, skill, diligence and in accordance with the relevant Australian standards and legislative requirements.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a) & (c);</i> ▪ <i>NCC Vol1 2016 FP1.4 Weatherproofing</i> ▪ <i>Manufacturers installation requirements – Weepa covers</i> ▪ <i>AS2904 Damp-proof courses and flashings</i> ▪ <i>AS4654.2 -2012 Waterproofing membranes for external above-ground use Part 2: Design and installation</i> 	<p>substrate for rendering in accordance with the manufacturers guidelines</p> <p>7. Labour to apply proprietary render system to affected areas in accordance with manufacturers guidelines and building specifications</p> <p>8. Supply proprietary render system materials and ancillaries</p> <p>9. Labour to prepare rendered surfaces and apply paint system to match existing finishes</p> <p>10. Supply paint and ancillaries</p> <p>11. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>12. Clean site and leave in a tidy condition upon completion of work</p>	<p>Labour to remove defective render, prepare substrate for rendering in accordance with the manufacturers guidelines, apply proprietary render system and paint to affected areas in accordance with manufacturers guidelines and building specifications Labour 2menx16hrs@\$85h/\$2750</p> <p>Supply Dulux render system materials \$300 Paint \$200 Ancillaries \$100</p> <p>Labour to clean site 2hrs@\$60/\$120</p> <p>Waste disposal \$70</p> <p>Total \$4995</p>	
7-403	Balcony terrace west – Power point	Scope of Remedial Works	Claim for Costs	Notes
	The lot owner reported to the Author at the time of inspection, that there is no power to the external power point located on the western side of the balcony	Allow to: 1. Provide site supervision.	Co-ordination and Supervision - Refer to allowance in summary of	

	<p>terrace.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>Incomplete contract works</i> 	<p>Supervisor to coordinate access and facilitate the works throughout the whole process.</p> <ol style="list-style-type: none"> 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to provide power to external power point 5. Make good any surfaces affected as part of the works, to their prior condition. 6. Clean site and leave in a tidy condition upon completion of work 	<p>costs at end of this Scott schedule.</p> <p>Minimum service call to diagnose issue \$120</p> <p>Source - https://www.service.com.au/</p> <p>Total \$120</p>	
8-403	Southern side of main bedroom door – Painting	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed poor setting to plasterboard at southern side of doorway on living area side of main bedroom door when viewed from a normal viewing position.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a);</i> ▪ <i>Fair Trading Guide to Standards & Tolerances 2017 10.18 Peaking or jointing in plasterboard</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces, complete repair to wall, apply paint system in accordance with AS2311:2017 Guide to the painting of buildings, Make good any surfaces affected as part of the</p>	

		<p>4. Labour to patch, repair and apply paint in accordance with AS2311:2017 Guide to the painting of buildings</p> <p>5. Supply paint and ancillaries</p> <p>6. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>7. Clean site and leave in a tidy condition upon completion of work</p>	<p>works, clean work area on completion of works 1manx4hrs@\$70/hr/\$280</p> <p>Supply paint & ancillaries \$50</p> <p>Total \$330</p>	
9-403	Bedroom 3 built in robe	Scope of Remedial Works	Claim for Costs	Notes
	<p>The lot reported to the Author at the time of inspection, that there is insufficient depth on the northern side of built in robe to hang clothing. The Author has observed that the northern side of the built-in-robe measures 400 mm to the northern side provided for hanging clothing and measures 490 mm to the southern end that has draws and shelving. On review of the architectural plans there is a service void to the northern side of robe that caused the reduction in depth.</p> <p>The Author is of the view, that the Builder should have provided the shelving to the northern side and for the hanging space to be provided to the southern side.</p> <p>Breach(es) <i>Failure to comply with the following: Home Building Act 1989 (NSW) under Section 18B Clauses 1(f)</i></p>	<p>Allow to:</p> <p>1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process.</p> <p>2. Gain access to required areas in accordance with Safework requirements.</p> <p>3. Cover and protect adjacent surfaces during the rectification work.</p> <p>4. Labour to remove existing joinery and install new joinery</p> <p>5. Supply new joinery</p> <p>6. Make good any surfaces</p>	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx1hr@\$60perhr/\$60</p> <p>Protection materials \$10</p> <p>Labour to remove existing joinery, install new joinery and make good, affected finishes Labour 4hrs@\$85p/h/\$340</p> <p>Supply new joinery \$350</p>	

		<p>affected as part of the works, to their prior condition.</p> <p>7. Clean site and leave in a tidy condition upon completion of work</p>	<p>Labour to remove protection materials and clean work area 1manx1hr@\$60/\$60</p> <p>Waste disposal \$30</p> <p>Total \$850</p>	
10-403	Main bathroom shower screen – Damage	Scope of Remedial Works	Claim for Costs	Notes
	<p>The lot owner reported to the Author at the time of inspection, that the shower screen had been removed to by the Builder to conduct some remedial work, the Author observed that there is evidence that the fixed panel to the northern side of the shower has been damaged to the northeast corner with evidence the glass has been chipped.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1 (a) & (c);</i> ▪ <i>NSW Guide to Standards & Tolerances 2017 G – Responsibility to rectify – Builders are liable to repair damage caused to property in the course of completing their building work.</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove damaged shower screen, install new shower screen and seal all junctions to make watertight 5. Supply new shower screen and sealant 6. Make good any surfaces affected as part of the works, to their prior condition. 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx1hr@\$60perhr/\$60</p> <p>Protection materials \$10</p> <p>Labour to remove damaged shower screen and install new shower screen and seal all joints to make watertight 1manx2hrs@\$70/\$140</p> <p>Waterproofing adhesive sealant \$18</p>	

		7. Clean site and leave in a tidy condition upon completion of work	Supply and delivery of new shower screen panel \$350 Labour to remove protection materials and clean work area 1manx1hr@\$60/\$60 Waste disposal \$30 Total \$668	
11-403	Bathroom door – Painting	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that the bathroom door has not been sealed to the top of the door and the bottom.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c);</i> ▪ <i>NSW standards & tolerances 2017 – Painting</i> ▪ <i>AS2311:2017 Guide to the painting of buildings</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to remove and reinstall doors following repair 5. Labour to apply paint system in accordance with AS2311:2009 'Guide to Painting of Buildings' 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx0.5hr1@\$60perhr/\$30</p> <p>Protection materials \$10</p> <p>Labour to remove door and seal door leaf in accordance with AS2311:2017 Guide to the painting of buildings, reinstall door, remove paint from door stop and air conditioning vent and clean work area on</p>	

		<p>6. Supply paint and ancillaries</p> <p>7. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>8. Clean site and leave in a tidy condition upon completion of work</p>	<p>completion 1manx1hr@\$70/hr/\$70</p> <p>Supply paint & ancillaries \$100</p> <p>Total \$210</p>	
12-403	Bedroom 2 ceiling – Painting	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed paint repair in bedroom two to the northwest side of the room towards the upper ceiling and step up from the ceiling bulkhead patching has not been completed.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a)</i> ▪ <i>Building contract – Defect liability period</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Labour to complete paint repair to affected area 4. Supply paint ancillaries 5. Cover and protect adjacent surfaces during the rectification work. 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces, complete repair to wall, apply paint system in accordance with AS2311:2017 Guide to the painting of buildings, Make good any surfaces affected as part of the works, clean work area on completion of works 1manx4hrs@\$70/hr/\$280</p> <p>Supply paint & ancillaries \$50</p> <p>Total \$330</p>	

13-403	Bedroom 2 southeastern corner – Painting	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed poor paint finish to the southeast corner of bedroom 2 adjacent to the sliding door.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses (a) & (c);</i> ▪ <i>AS2311:2017 Guide to the painting of buildings</i> ▪ <i>NSW standards & tolerances 2017 – 13.2 Surface finish of paintwork</i> <p><i>Paintwork is defective if the application has blemishes such as paint runs, paint sags, wrinkling, dust, bare or starved painted areas, colour variations, surface cracks, irregular and coarse brush marks, sanding marks, blistering, non-uniformity of gloss level and other irregularities in the surface that are visible from a normal viewing position.</i> <i>(Highlighting added)</i></p>	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to patch, repair and apply paint in accordance with AS2311:2017 Guide to the painting of buildings 5. Supply paint and ancillaries 6. Make good any surfaces affected as part of the works, to their prior condition. 7. Clean site and leave in a tidy condition upon completion of work 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces, complete repair to wall, apply paint system in accordance with AS2311:2017 Guide to the painting of buildings, Make good any surfaces affected as part of the works, clean work area on completion of works 1manx4hrs@\$70/hr/\$280</p> <p>Supply paint & ancillaries \$50</p> <p>Total \$330</p>	
14-403	Main bedroom door –Painting and Door furniture installation	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that the cavity sliding door to main bedroom –</p> <ul style="list-style-type: none"> • the guide installed at the bottom of the door is causing damage due to operation and contact 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p>	

	<ul style="list-style-type: none"> with the door paint finish The door furniture set is not catching keeper, needs adjustment. <p>Breach(es) Failure to comply with the following:</p> <ul style="list-style-type: none"> Home Building Act 1989 (NSW) under Section 18B Clauses 1(a) Building contract – Defect liability period AS2311:2017 Guide to the painting of buildings NSW standards & tolerances 2017 – 13.2 Surface finish of paintwork <p>Paintwork is defective if the application has blemishes such as paint runs, paint sags, wrinkling, dust, bare or starved painted areas, colour variations, surface cracks, irregular and coarse brush marks, sanding marks, blistering, non-uniformity of gloss level and other irregularities in the surface that are visible from a normal viewing position. (Highlighting added)</p>	<p>and facilitate the works throughout the whole process.</p> <ol style="list-style-type: none"> Gain access to required areas in accordance with Safework requirements. Cover and protect adjacent surfaces during the rectification work. Labour to repair affected paintwork in accordance with AS2311:2017 Guide to the painting of buildings Labour to adjust door furniture and guides to operate as intended Supply paint and ancillaries Make good any surfaces affected as part of the works, to their prior condition. Clean site and leave in a tidy condition upon completion of work 	<p>Labour to cover and protect adjacent surfaces, complete repair to wall, apply paint system in accordance with AS2311:2017 Guide to the painting of buildings, Make good any surfaces affected as part of the works, clean work area on completion of works 1manx4hrs@\$70/hr/\$280</p> <p>Supply paint & ancillaries \$50</p> <p>Total \$330</p>	
15-403	Main living area ceiling above air conditioning vent - Distortion	Scope of Remedial Works	Claim for Costs	Notes
	<p>The Author has observed that there is evidence that the ceiling is just ordered and sagging above the air conditioning vent the kitchen bulkhead.</p> <p>Breach(es) Failure to comply with the following:</p> <ul style="list-style-type: none"> Home Building Act 1989 (NSW) under Section 18B 	<p>Allow to:</p> <ol style="list-style-type: none"> Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p>	

	<p><i>Clauses (a) & (c);</i></p> <ul style="list-style-type: none"> ▪ <i>NSW standards & tolerances 2017 – Distortion in horizontal surfaces</i> 	<ol style="list-style-type: none"> 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to rectify distortion to ceiling lining 5. Labour to repair affected paintwork in accordance with AS2311:2017 Guide to the painting of buildings 6. Labour to adjust door furniture and guides to operate as intended 7. Supply paint and ancillaries 8. Make good any surfaces affected as part of the works, to their prior condition. 9. Clean site and leave in a tidy condition upon completion of work 	<p>Labour to cover and protect adjacent surfaces 1menx1hr@\$60perhr/\$60 Protection materials \$20</p> <p>Labour to remove ceiling linings to provide access to rectify distortion in ceiling level 1manx4hrs@\$85/\$340 Labour to reinstate plasterboard ceiling linings in accordance with AS2589-2017 Gypsum linings - Application and finishing 2manx4hrs@\$70perhr/\$560</p> <p>Supply plasterboard ceiling linings and ancillaries Plasterboard 3.24m2/\$40 Ancillaries \$30</p> <p>Labour to cover and protect adjacent surfaces, apply paint system in accordance with AS2311:2017 Guide to the painting of buildings. 1manx8hrs@\$70/hr/\$560</p> <p>Supply paint & ancillaries \$100</p>	
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			<p>Labour to clean work area on completion of works and place building waste in skip bin 1manx4hrs@\$60/hr/\$240</p> <p>Waste disposal \$50</p> <p>Total \$1690</p>	
16-403	Entry door signage	Scope of Remedial Works	Claim for Costs	Notes
	<p>The occupant reported to the Author at the time of inspection, that the Builder had removed the unit number sign from the entry to repair defective paint works to the door and that the defective item remains outstanding.</p> <p>Breach(es) <i>Failure to comply with the following:</i></p> <ul style="list-style-type: none"> ▪ <i>Home Building Act 1989 (NSW) under Section 18B Clauses 1(a);</i> ▪ <i>Building contract – Defect liability period</i> ▪ <i>Incomplete contract works</i> 	<p>Allow to:</p> <ol style="list-style-type: none"> 1. Provide site supervision. Supervisor to coordinate access and facilitate the works throughout the whole process. 2. Gain access to required areas in accordance with Safework requirements. 3. Cover and protect adjacent surfaces during the rectification work. 4. Labour to repair defective paintworks in accordance with AS2311:2017 Guide to the painting of buildings 5. Labour to fix unit number signage to entry door 	<p>Co-ordination and Supervision - Refer to allowance in summary of costs at end of this Scott schedule.</p> <p>Labour to cover and protect adjacent surfaces 1manx1hr@\$60/hr/\$60 Protection materials \$30</p> <p>Labour to apply paint system in accordance with AS2311:2009 'Guide to Painting of Buildings' 1manx2hrs@\$70/hr/\$140</p> <p>Supply paint and ancillaries \$100</p>	

	<p>6. Supply paint and ancillaries</p> <p>7. Supply signage</p> <p>8. Make good any surfaces affected as part of the works, to their prior condition.</p> <p>9. Clean site and leave in a tidy condition upon completion of work</p>	<p>Labour to fix unit number signage to entry door 1manx1hr@\$85/hr/\$85</p> <p>Supply preformed number signage \$25</p> <p>Labour to clean site and place waste in waste bin 1manx1hr@\$60/hr/\$60</p> <p>Waste disposal \$30</p> <p>Total \$530</p>	
		Sub Total Claim for Costs	\$ 592483
	<p>Site supervision and Safety management Allow for suitably qualified Site Foreman/Building Supervisor to supervise works, co-ordinate access and facilitate the works, and conduct Site Induction for all workers engaged on the site to implement a site safety plan, retain, and maintain permanent safety register to Safework and WHS regulations.</p> <p>1man@\$90 /hrx40hrs per/wkx26wks/\$64800</p>	Site Foreman/Building Supervisor	\$ 93600
	<p>Site Assistant – To assistant Site Foreman</p> <p>1man@\$45 /hrx40hrs per/wkx26wks/\$64800</p>	Site Assistant	\$ 46800
		Contingency allowance 5% on Sub Total Claim for Costs	\$ 29624

		Sub Total including	\$ 762508	
		Profit margin 25%	\$ 190627	
		Sub Total including Profit Margin	\$ 953135	
		GST	\$ 95313	
		Total Cost Claimed	\$ 1048448	

APPENDIX B

REFERENCE DOCUMENTS

- (a) 'The Construction Adviser' expert building defects report prepared by Stan Giaouris issued 28 January 2021
- (b) BME defect schedule
- (c) Building Contract - Principal's Project Requirements
- (d) PBD Architects construction plans Issue 1 January 2019
- (e) Council DA Consent DA18/0393
- (f) Construction Certificate issued by AED GROUP issued 10/05/2019
- (g) Final Occupation Certificate issued by Kudos Building Certification 11/11/2020
- (h) Recticel Flat Roofs Specification Guide (Eurothane Eurodeck)
- (i) JQC Constructions Pty Ltd – Waterproofing certificate dated 13/08/2020
- (j) Premium Consulting Engineers design certificate

(a) 'The Construction Adviser' expert building defects report prepared by Stan Giaouris issued 28 January 2021

EXPERT BUILDING DEFECTS REPORT

11 Mitchell Avenue,
JANNALI

28 January 2021

The Construction Adviser

Authored by: Stan Giaouris
Commissioned by: Albert Zhang
Commissioned for: Truland Developments
Email: albert@truland.com.au
Inspection date: 7 December 2020
Reference: 2020.059.001 v2



The Construction Adviser

TABLE OF CONTENTS

1. SCOPE & DOCUMENTS.....	4
1.1 Scope of Engagement	4
1.2 Boundaries of Report	4
1.3 Supplied Documents.....	5
1.4 Assumptions.....	5
2. INSPECTION PROCESS & METHODOLOGY	6
2.1 Property Access & Inspection Conditions.....	6
2.2 Tools & Equipment.....	7
2.3 Standard Viewing Positions	8
2.4 Assessment Caveats	9
3. CREDENTIALS & COMMITMENT	10
3.1 Qualifications.....	10
3.2 Declaration	11
4. LEGISLATION, STANDARDS & CODES.....	12
4.1 Documents & Legislation	12
4.2 National Construction Code	12
4.3 Australian Standards.....	14
4.4 NSW Guide to Standards & Tolerances 2017	16
4.5 Building Code of Australia.....	16
4.6 Home Building Act 1989	17
4.7 Home Building Regulation 2014	19
5. DEFINITIONS & ABBREVIATIONS	19
5.1 Report-Specific Terms	19
5.2 Construction Abbreviations	19
5.3 Legislative Definitions of Work.....	20
6. PROPERTY OVERVIEW.....	22
6.1 Property Description	22
6.2 Building Evaluation	23
6.3 Building Classification	24
7. STRUCTURE OF DEFECTS REPORT.....	26
7.1 Defects Summary & Schedule.....	26
7.2 Defects Categorisation.....	26
7.3 Further Investigations	27
8. ASSESSMENT OF DEFECTS	27
8.1 Executive Summary	27
8.2 Fire-Rated Walls	28
8.3 Aluminium Sliding Door Installation	35
8.4 Insufficient Falls/Ponding	45
8.5 FC Cladding Installed Lower than Water Level	53
8.6 Hebel Installation.....	63
8.7 External Water Entering Habitable Areas.....	71
8.8 Balcony Overflow	75

8.9	Efflorescence	82
8.10	Air Conditioning Condenser Installation	85
8.11	External Area Waterproofing	88
8.12	Waterproofing to Internal Wet Area	99
8.13	Drummy Tiles	102
8.14	Minimum Ceiling Height	109
8.15	Non-Slip Stair Tread	111
8.16	Tops of Doors Not Sealed.....	115
8.17	Inconsistent Stair Risers Heights.....	118
8.18	Handrail Noncontinuous.....	120
8.19	Corrosion.....	123
8.20	Honeycombing	129
8.21	Cracking	133
8.22	Missing Coil Ties	135
8.23	External Grated Drain Installation.....	140
8.24	Timber-Look Cladding.....	141
8.25	Mechanical Exhausts to Wet Areas.....	143
8.26	Hebel Facade Ventilation.....	146
8.27	General.....	155
9.	RECOMMENDED REMEDIATION WORKS....	161
9.1	Conclusions.....	161
10.	ATTACHMENTS	162
10.1	Attachment A - Home Building Act 1989	162
10.2	Attachment B - Code of Conduct	163
10.3	Attachment C - Curriculum Vitae	165
10.4	Attachment D - Instructions	171
10.5	Attachment E – Testing Equipment	172
10.6	Attachment F - Defects Schedule	174
10.7	Attachment G - Supporting Documents.....	342
10.8	Attachment H - Supplied Documents	425



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I. SCOPE & DOCUMENTS

I.1 Scope of Engagement

- 1.1.1 I, Stan Giaouris (the author), was engaged by Albert Zhang of Truland Developments to inspect 11 Mitchell Avenue, Jannali (the “**Property**”), on 7 December 2020 to prepare an expert report outlining general building and waterproofing defects.
- 1.1.2 This report is confidential and has been prepared for Truland Developments, and therefore cannot be copied or distributed without the author’s permission.
- 1.1.3 The purpose of the inspection and the following report was limited to investigate and advise on the following items addressing the Owner’s concerns:
 - 1.1.3.1 Advise if the work has been completed in accordance with the statutory warranties under Section 18B of the *Home Building Act 1989*;
 - 1.1.3.2 Advise if the work carried out is in compliance with the Building Code of Australia (“BCA”); and
 - 1.1.3.3 Advise if the work has been carried out in compliance with the relevant Australian Standards.
- 1.1.4 This report lists the observations made during the inspections followed by my comments on the issues raised.
- 1.1.5 This report is inclusive of remediation scope of works for the identified defective items.

I.2 Boundaries of Report

- 1.2.1 This report is not intended to assess:
 - 1.2.1.1 Building Code of Australia Compliance with sections B, E, G, H, I, J;
 - 1.2.1.2 Fire Safety; or
 - 1.2.1.3 Other Specialist Services.
- 1.2.2 All inspections are visual only, and no destructive testing was undertaken. As such, there may be further concealed defects. Please see section 2.4 – Assessment Caveats.

I.3 Supplied Documents

- 1.3.1 I have been provided with the following documentation (contained in Attachment H), which I have relied upon in preparing this report:
- 1.3.1.1 Inspection records from the private certifier Kudos Building Certification on:
 - 1.3.1.1.1. 19 August 2019 – pad footings, no status;
 - 1.3.1.1.2. 16 September 2019 – basement slab, no status;
 - 1.3.1.1.3. 24 February 2020 – internal wet areas GF, satisfactory;
 - 1.3.1.1.4. 31 March 2020 – internal wet areas L6, satisfactory;
 - 1.3.1.2 Construction Certificate from AED, dated 10 May 2019 (“**CC**”);
 - 1.3.1.3 Construction Certificate stamped structural plans provided by Xavier Knight (“**Structural Plans**”);
 - 1.3.1.4 Construction Certificate plans by PBD Architects, dated January 2019 (“**Architectural Plans**”);
 - 1.3.1.5 BCA Specification provided by AED Consulting and stamped as part of the CC issued 25 June 2019 (the “**Specification**”).
 - 1.3.1.6 Construction Certificate number 8899-02-2019-cc from AED (“**CC2**”) dated 25 June 2019.

I.4 Assumptions

- 1.4.1 Where I have made any assumptions in formulating my opinion, I have included those assumptions in the body of the report at the relevant issue being discussed, or I have referred to the evidence without repeating these facts. I have adopted this practice so that any assumptions I have made are encapsulated in the matter being discussed, and therefore immediately obvious to the reader of this report.

I have assumed the following factual matters took place:

- 1.4.1.1 Truland Developments are the “**Developer**”.
- 1.4.1.2 Construction commenced on site in mid-2019;
- 1.4.1.3 AED as the PCA was replaced post issuing of the CC with Kudos Building Certification;
- 1.4.1.4 The Contract was a design and construct (“**D&C**”) as identified on the Architectural Plans:

THIS DRAWING IS ISSUED FOR D&C USED DURING CONSTRUCTION SUBJECT TO FINAL COORDINATION AND INTEGRATION OF ENGINEERS' DETAILS AND OTHER SERVICES DESIGN ISSUED FOR CONSTRUCTION	SCALE:	DRAWING NO:
	1:100 @ A1 / 1:200 @ A3	A3003
	PROJECT NO: 1747	

1.4.1.5 Construction was completed late 2020.

1.4.2 I have not been provided with the details of the builder.

2. INSPECTION PROCESS & METHODOLOGY

2.1 Property Access & Inspection Conditions

2.1.1 The Property was inspected on 7 December 2020 by me, Stan Giaouris, Principal Building Consultant at The Construction Adviser (“TCA”).

2.1.2 Also present during the inspection was Pramod Thebe, graduate engineer at TCA.

2.1.3 The weather conditions were fine on the day of the inspection.

2.1.4 Access was gained to the internal and external areas of the residential lots. Common areas (internal and external) and the basement carpark were also inspected.

2.1.5 Access was permitted to the below areas:

2.1.5.1 Basement car park;

2.1.5.2 Rooftop;

2.1.5.3 Rear courtyard;

2.1.5.4 Common areas;

2.1.5.5 Fire stairs;

2.1.5.6 Unit G05;

2.1.5.7 Unit 304; and

2.1.5.8 Unit 306

2.2 Tools & Equipment

2.2.1 The following equipment was used during the site inspection:

- 2.2.1.1 Tramex CME5, (#200701214);
- 2.2.1.2 Stanley Digital Spirit Level;
- 2.2.1.3 Positech PosiTector 200C coating thickness tester (#828379);
- 2.2.1.4 Protimeter Surveymaster Moisture Tester (#536536180104);
- 2.2.1.5 Flir C3 Thermal Imaging Camera (#720139974);
- 2.2.1.6 Makita Laser LD030P distance measurer (#883816099914);
- 2.2.1.7 Crack gauge;
- 2.2.1.8 Folding rule;
- 2.2.1.9 Tape measure; and
- 2.2.1.10 Combination square.

2.2.2 See Attachment E for further information.

2.2.3 Due to the inconsistency of moisture content and readings, all readings expressed as a defect are in comparison to a baseline reading that has been taken to establish the normal moisture content of the material in this location.

2.2.4 Protimeter moisture meters are calibrated for wood, however, are also suitable for measuring moisture levels in other materials. These meters are highly versatile tools for assessing the moisture condition of a variety of non-conductive materials. When used to test materials that are not wood, the meter measures the wood meter equivalent (“**WME**”) value of the material. WME is the moisture level that would be attained by a piece of wood in equilibrium with the material being tested. Critical moisture levels of wood are known, so therefore, WME Measurements enable the user to decide whether the materials are in a safe air dry, borderline, or damp condition. Pursuant to the manufacturer’s instructions of the Protimeter MMS Moisture Meter, moisture meter readings of:

- 2.2.4.1 18%WME or less are regarded as “DRY”
- 2.2.4.2 Between 18%WME and 20%WME are regarded as “AT RISK”
- 2.2.4.3 Between 20%WME and 28% WME are regarded as “WET”

These readings are consistent with my observations in the field.

2.2.5 Prior to each inspection, the Protimeter Surveymaster is calibrated using the calibration check device (CalCheck) supplied by the manufacturer. The CalCheck is held across the two pins, with a required reading of 18.2% \pm 1.0. This calibration was successfully completed prior to the start of the inspection.



- 2.2.6 The Positech PosiTector 200, a membrane coating thickness gauge, is manufacturer-calibrated and was purchased new in November 2018.
- 2.2.7 The Digital Spirit Level is an auto-calibration inspector grade model that automatically calibrates itself each time at start up. It was purchased new in December 2018.

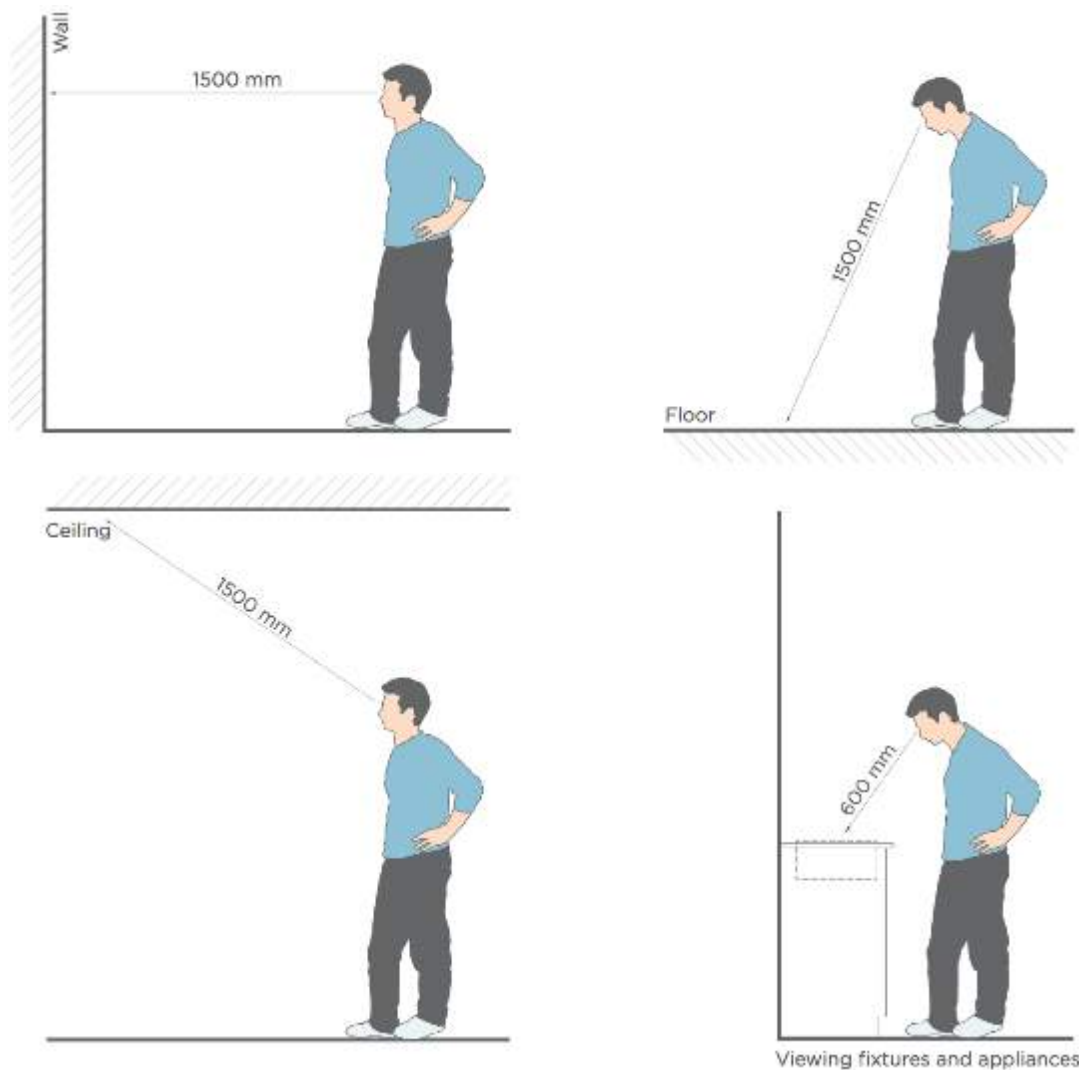
2.3 Standard Viewing Positions

- 2.3.1 When possible and suitable, the works at the Property have been viewed as per the standard viewing positions as identified in the *NSW Guide to Standards and Tolerances 2017* (referred to as the “**Defect Guide**”). Diagram E from the section “Inspecting Surfaces from a Normal Viewing Position” is shown below.

INSPECTING SURFACES FROM A NORMAL VIEWING POSITION

Generally, variations in the surface colour, texture and finish of walls, ceilings, floors and roofs, and variations in glass and similar transparent materials are to be viewed where possible from a normal viewing position, defined as looking at a distance of 1.5 m or greater (600 mm for appliances and fixtures) with the surface or material being illuminated by ‘non-critical light’¹, which is the light that strikes the surface, is diffused and is not glancing or parallel to that surface.

DIAGRAM E NORMAL VIEWING POSITIONS



Slight variations in the colour and finish of materials do not always constitute a defect.

1. Non-critical light is defined in appendix B3 and D7 Australian Standard AS/NZS 2589. Refer also to CSIRO TR 90/1, Report No. L8 – 1992

2.4 Assessment Caveats

- 2.4.1 This report is based on a visual inspection of the Property
- 2.4.2 The inspection did not include destructive testing, dismantling or removal of finishes. Personal items, where in the way, have not been moved to allow access. Further defects may be uncovered with further access and destructive testing.

- 2.4.3 Any remediation works identified are put forward as the most reasonable means identified to ensure resolution of the defective element.
- 2.4.4 In assessing defective items, I have relied upon the Defect Guide mentioned in sections 2.3 and 4.4. It is recognised that this document is not referenced contractually and is not a legislative document. However, the Defect Guide does provide the standards of a reasonable and competent tradesperson and, as such, this document has been referenced as a guide.

3. CREDENTIALS & COMMITMENT

3.1 Qualifications

- 3.1.1 I, Mr Stan Giaouris am the Author of this report and the Principal Building Consultant at The Construction Adviser (“**TCA**”).
- 3.1.2 I possess over 20 years of experience in the construction industry, having completed my Bachelor of Building in Construction Management (part time) at the University of Technology Sydney (“**UTS**”).
- 3.1.3 A brief summary of my experience is:
- 3.1.3.1 1998 - Abigroup contractors – site cadet;
 - 3.1.3.2 1999-2004 – Fugen Constructions – leading hand;
 - 3.1.3.3 2004 -2006 – Brisland – site supervisor;
 - 3.1.3.4 2006 -2009 – Farindon Constructions – project manager;
 - 3.1.3.5 2009 -20018 – CBS Projects - construction director;
 - 3.1.3.6 2018 – BDW Solutions – building consultant; and
 - 3.1.3.7 2018-2020 – TCA – principal building consultant.
- 3.1.4 I hold the following industry positions:
- 3.1.4.1 Lecturer at UTS in the Faculty of Design, Architecture and Building;
 - 3.1.4.2 President of St George division of the Master Builders Association;
 - 3.1.4.3 Councillor for the Master Builders Association of NSW;
- 3.1.5 I have extensive experience across the following facets of construction:
- 3.1.5.1 Department of Defence – Holsworthy, Victoria and Randwick bases;
 - 3.1.5.2 Educational – UTS, UWS and Sydney Universities
 - 3.1.5.3 Educational - public, private and independent secondary schools, public primary schools;
 - 3.1.5.4 Residential – multi dwelling 22 terrace houses and units;

- 3.1.5.5 Residential – luxury fit out for Frasers and local celebrities;
 - 3.1.5.6 Residential – individual homes up to \$18M construction;
 - 3.1.5.7 Rail – central, townhall and Wynyard railways stations;
 - 3.1.5.8 Commercial & retail – clubs, shops, and office fit outs;
 - 3.1.5.9 Medical – medical centres, and research facilities;
 - 3.1.5.10 Industrial – new factory construction;
 - 3.1.5.11 Aged Care – Australian Nursing Home Foundation and Anglican Retirement Villages;
 - 3.1.5.12 Remediation – Unit and facade refurbishment, aged care refurbishment and heritage.
- 3.1.6 The above experience was in the following project roles:
- 3.1.6.1 Site management &/or supervisor;
 - 3.1.6.2 Project management;
 - 3.1.6.3 Construction director; and
 - 3.1.6.4 Design management.
- 3.1.7 TCA holds current membership with the following industry associations:
- 3.1.7.1 Master Builders Association (MBA);
 - 3.1.7.2 Australian Concrete Remediation Association (ACRA);
 - 3.1.7.3 Society of Construction Law (SOLCA); and
 - 3.1.7.4 Australian Corrosion Association.
- 3.1.8 TCA has previously been a member of:
- 3.1.8.1 Australian Institute of Project Managers, registration #17530 (AIPM);
 - 3.1.8.2 Australian Stone Advisory Association Australia (ASSA); and
 - 3.1.8.3 Australian Waterproofing Association (AWA).
- 3.1.9 My Curriculum Vitae is included in Attachment C.
- 3.1.10 In preparing this report, I, Mr Stan Giaouris, have read and complied with the Expert Witness' Code of Conduct, (NCAT Procedural Direction 3 including "Experts' Code of Conduct" and Uniform Civil Procedural Rules 2005, (NSW) Schedule 7 "Expert Code of Conduct"). I agree to be bound by these codes. Attachment B contains copies of the codes.

3.2 Declaration

- 3.2.1 I declare that I have made all enquiries I believe are desirable and appropriate (except for any matters identified explicitly in the report) but reserve my right to amend my opinions if other

information becomes available that affects my advice. No matters of significance which I regard as relevant have, to my knowledge, been withheld from the Tribunal or Court.

4. LEGISLATION, STANDARDS & CODES

4.1 Documents & Legislation

4.1.1 The referenced documents for this report include those below along with those listed in section 1.3 above:

4.1.1.1 Home Building Act 1989 (“**HBA**”);

4.1.1.2 Building Code of Australia (“**BCA**”);

4.1.1.3 Australian Standards; and

4.1.1.4 NSW Guide to Standards and Tolerances 2017 (the “**Defect Guide**”).

4.2 National Construction Code

4.2.1 Typically, the Building Code and National Construction Code names are interchangeable as Volumes One and Two of the National Construction Code are Volume One and Volume Two of the Building Code of Australia (“**BCA**”), with the Plumbing Code forming Volume Three of the National Construction Code (“**NCC**”).

4.2.2 The directive for the applicable NCC edition is provided in the *Environmental Planning and Assessment Regulation 2000* at section 145(1) (b), which is set out in this section.


145 COMPLIANCE WITH DEVELOPMENT CONSENT AND BUILDING CODE OF AUSTRALIA

(cf clause 79G of EP&A Regulation 1994)

(1) A certifying authority must not issue a construction certificate for building work unless:

- (a1) the plans and specifications for the building include such matters as each relevant BASIX certificate requires, and
- (a) the design and construction of the building (as depicted in the plans and specifications and as described in any other information furnished to the certifying authority under clause 140) are not inconsistent with the development consent, and
- (b) the proposed building (not being a temporary building) will comply with the relevant requirements of the *Building Code of Australia* (as in force at the time the application for the construction certificate was made).

4.2.3 I have been provided with the date of application for the Construction Certificate (“CC”), which was issued on 26 April 2019 to AED.



BCA / Certifiers

APPLICATION FOR A CONSTRUCTION CERTIFICATE
(Made under Clause 139 and Part 3 of Schedule 1 of the Environmental Planning and Assessment Regulation 2000)

What date was the application for a Construction Certificate received by AE&D?

26/04/19 BM

AE&D Office Use

4.2.4 I have therefore formed the opinion that the relevant NCC at the time is Amendment 2016, which was adopted in NSW on the 1 May 2016.

4.2.5 In this report all references:

4.2.5.1 To the NCC are references to the NCC Volume Two Class 1 and Class 10 Buildings Amendment 2016.

4.2.5.2 To AS and AS/NZS are references to Standards adopted by NCC Amendment 2016 or (if containing guideline information) current Standards at the time of the Works.

4.3 Australian Standards

- 4.3.1 Australian Standards are voluntary documents developed by Standards Australia by consensus. These are not legally binding documents unless adopted by legislation.
- 4.3.2 Schedule 4 of the 2019 BCA identifies which Australian Standards have been adopted by the NCC as primary referenced documents.
- 4.3.3 Any further document referenced by a primary document, is a secondary document. See extract below from A4.0 of the NCC:

- (4) Any document referenced in a primary referenced document is known as a secondary referenced document.
- (5) A reference in a primary referenced document to a secondary or other referenced document is a reference to the document as it existed at the time of publication of the primary referenced document.

- 4.3.4 Section 4.1 of the NCC stipulates that if there is any difference between the NCC and a primary referenced document, the NCC prevails.

A4.1 Differences between referenced documents and the NCC

The NCC overrules any difference between the NCC and a primary referenced document, including any secondary referenced document.

- 4.3.5 When referencing Australian Standards in this report I have identified where they are mandatory, secondary, or informative.
- 4.3.6 Any Australian Standard reference by the BCA is a Mandatory Australian Standard and therefore must be complied with to fulfil the compliance requirements of the NCC's 'Deemed to Satisfy' provisions.
- 4.3.7 Any works not compliant with the referenced Australian Standard require an approved Alternative Solution, as described in section 5.4.
- 4.3.8 When assessing the wording used in Australian Standards, I have relied upon *Standardisation Guide 009: Preparation of Standards for Legislative Adoption (SG009)* by Standards Australia, which stipulates the following definitions:

5 Use of Must, Shall and Should

In accordance with the International Organization for Standardization (ISO) Directives, the word 'shall' is used to state that a requirement needs to be followed in order to conform to the Standard. Consequently, there can be no deviation from that requirement, other than a specified tolerance.

Standards Australia notes that in legislation and specifications it is common to use the word 'must' to express a requirement. Where Standards are adopted in legislation, the word 'shall' in the Standard should be considered as equivalent to 'must' in the legislation. The word 'must' is not used in Standards in place of 'shall'.

The term 'mandatory' shall not be used to express or refer to a requirement in an Australian Standard, as this may cause the requirement to be confused with a mandatory legal requirement.

The word 'should' introduces a suggestion or recommendation that is not a requirement. It is not necessary that such recommendations or suggestions be followed in order to conform to the Standard.

In a Standard intended for legislative adoption, 'should' shall not be used in Normative Clauses or in Normative Appendices, but may be used in Advisory Notes or Informative Appendices. This may be used to outline generally accepted practice in the industry concerned.

- 4.3.9 A copy of SG009 can be found in Attachment G – Supporting Documents. In summary of the above:
- 4.3.9.1 “Shall” is a mandatory requirement; and
 - 4.3.9.2 “Should” is a recommendation or suggestive term.
- 4.3.10 The details in the Australian Standards are taken to be a minimum; any works inferior to the Australian Standards will be deemed defective. Superior details or products will be classed as exceeding the requirements of those Standards.
- 4.3.11 Compliance with a suggested Australian Standard will result in compliance with the both the BCA and Statutory Warranties under the HBA. Suggested Australian Standards also identify standard building practices, which are generally followed and ensure works have been completed with due care and skill, thereby meeting the performance requirements of the BCA.
- 4.3.12 Industry guides are also referenced at times, and these guides reference accepted and typical industry practices.
- 4.3.13 The Specifications provided and stamped as a part of the CC specify the following Australian Standards as being applicable to the construction works at this Property:
- 4.3.13.1 AS1288-2006;
 - 4.3.13.2 AS2047-1999;
 - 4.3.13.3 AS3600.1-2000;
 - 4.3.13.4 AS1735.11-1986;
 - 4.3.13.5 AS1657;
 - 4.3.13.6 AS4586-2013;
 - 4.3.13.7 AS1428.1-2009;
 - 4.3.13.8 AS2441-2005;
 - 4.3.13.9 AS2444-2001;
 - 4.3.13.10 AS/NZS 1668.1;
 - 4.3.13.11 AS1668.2;
 - 4.3.13.12 AS22931-2005;
 - 4.3.13.13 AS4654 Parts 1 & 2 – 2012;

- 4.3.13.14AS/NZA4200;
- 4.3.13.15AS3740-2010;
- 4.3.13.16AS2870-2011;
- 4.3.13.17AS 3660.1-2000;
- 4.3.13.18AS2870-2011; and
- 4.3.13.19AS1668.4-2012.

4.3.14 As such, I have relied upon the above standards forming part of the approval to require mandatory compliance as no alternate solution has been provided in the CC documents (as compliance with the plans and specifications is a statutory warranty under section 18B of the HBA).

4.4 NSW Guide to Standards & Tolerances 2017

4.4.1 The guide helps provide clarity on whether building elements have been installed or constructed to an acceptable standard. It should be regarded as an advisory resource rather than a series of prescriptive definitions and is not intended to replace the relevant provisions of the Building Code of Australia or Australian Standards. It is referred to in this report as the “**Defect Guide**”.

4.5 Building Code of Australia

- 4.5.1 The BCA requires a ‘Deemed-to-Satisfy Provision’ (DTS) or an ‘Alternative Solution’ where applicable, to demonstrate compliance. Essentially, the BCA has not been complied with until a DTS compliance has been met, or an Alternative Solution has been developed and approved.
- 4.5.2 See extract from the *NCC Building Code of Australia - Volume 1, Part A2* below:

A2.0 Compliance

Compliance with the NCC is achieved by complying with –

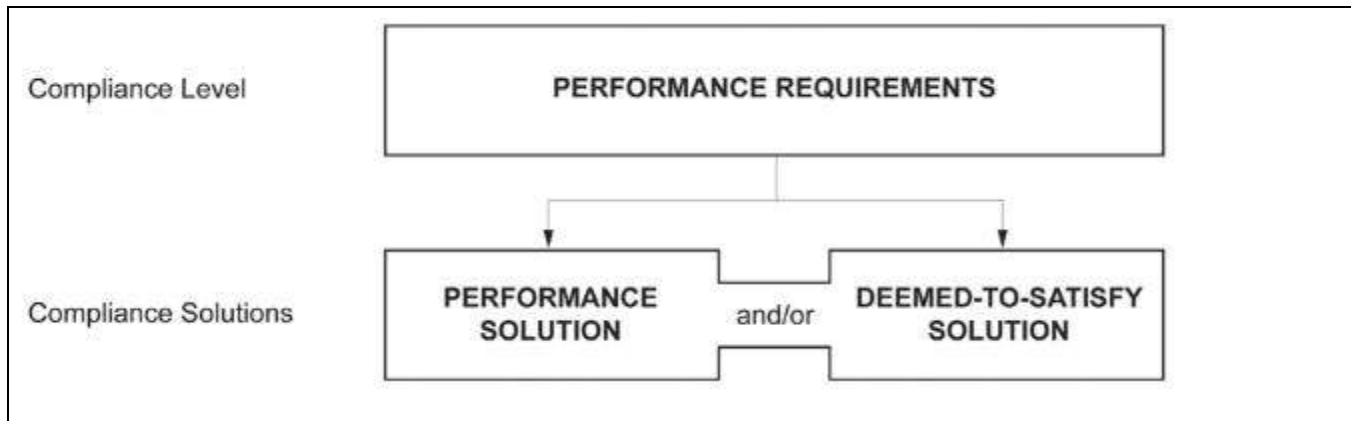
- (1) the Governing Requirements of the NCC; and
- (2) the [Performance Requirements](#).

A2.1 Compliance with the Performance Requirements

Performance Requirements are satisfied by one of the following, as shown in [Figure 1](#):

- (1) A [Performance Solution](#).
- (2) A [Deemed-to-Satisfy Solution](#).
- (3) A combination of (1) and (2).

Figure 1: NCC compliance option structure*



A2.2 Performance Solution

- (1) A *Performance Solution* is achieved by demonstrating –
 - (a) compliance with all relevant *Performance Requirements*; or
 - (b) the solution is at least *equivalent* to the *Deemed-to-Satisfy Provisions*.
- (2) A *Performance Solution* must be shown to comply with the relevant *Performance Requirements* through one or a combination of *Assessment Methods*.

A2.3 Deemed-to-Satisfy Solution

- (1) A solution that complies with the *Deemed-to-Satisfy Provisions* is deemed to have met the *Performance Requirements*.
- (2) A *Deemed-to-Satisfy Solution* can show compliance with the *Deemed-to-Satisfy Provisions* through one or more of the following *Assessment Methods*:
 - (a) Evidence of suitability in accordance with Part A5 that shows the use of a material, product, plumbing and drainage product, form of construction or design meets a Deemed-to-Satisfy Provision.
 - (b) Expert Judgement.

* **Note:** The term "*Performance Solution*" was formerly known as "*Alternative Solution*". The terms, "*Performance Solution*" and "*Deemed-to-Satisfy*" were formerly used under the term, "*Building Solution*".

4.5.3 Alternative Solutions for compliance with the Performance Requirements identified in the BCA have not been provided. In the absence of any Alternative Solution, it is assumed that the Referenced Standards need to be complied with as required by the BCA.

4.6 Home Building Act 1989

4.6.1 Part 2C section 18 of the *Home Building Act 1989* ("**HBA**") categorises building defects as minor or major.

4.6.2 The HBA classifies some defects as "major" under part 2C section 18E(4), as per the excerpt below:

4.6.2.1 Major Defect: a defect in a major element of a building that is attributable to defective design, defective or faulty workmanship, defective materials, or a failure to comply with the

structural performance requirements of the National Construction Code (or any combination of these), and that causes or is likely to cause –

5.6.2.1.1. *the inability to inhabit or use the building (or part of the building) for its intended purpose, or*

5.6.2.1.2. *the destruction of the building or any part of the building, or*

5.6.2.1.3. *the threat of collapse of the building or any part of the building*

4.6.2.2 a defect of a kind that is prescribed by the regulations as a major defect, or

4.6.2.3 the use of a building product (within the meaning of the Building Products (Safety_ Act 2017) in contravention of that Act.

4.6.2.4 Section 18E(b) further states that major defects have a warranty period of 6 years with other defects having a warranty period of 2 years, as per the below excerpt:

“...the warranty period is 6 years for a breach that results in a major defect in residential building work or 2 years in any other case...”

4.6.3 A major element of a building is defined by section 18E (4) as follows:

4.6.3.1 (a) an internal or external load bearing component of a building that is essential to the stability of the building, or any part of it (including but not limited to foundations, footings, floors, walls, roofs, columns, and beams), or

(b) fire safety systems; or

(c) waterproofing; or

(c) any other element that is prescribed by the regulations as a major element of a building.

4.6.4 All other defects, which are not major, are covered by a 2-year warranty period.

4.6.5 Section 6.20 of the *Environmental Planning and Assessment Act 1979* outlines the limitation on time when action for defective building or subdivision work may be brought:

“A civil action for loss or damage arising out of or in connection with defective building work or defective subdivision work cannot be brought more than 10 years after the date of completion of the work.”

4.7 Home Building Regulation 2014

4.7.1 Regulation 69A of the Home Building Regulation took effect on 15 August 2018.

4.7.2 The clause identifies external cladding likely to threaten life safety in the case of a fire as a "major defect".

Major defect in building - external cladding

69A *Major defect in building - external cladding*

(1) This clause applies to a building with a rise in storeys of more than 2 in respect of which a breach of statutory warranty occurred in either of the following circumstances--

(a) the warranty period for the breach started on or after 20 April 2018.

(b) the warranty period for the breach started before 20 April 2018 and the period in which proceedings could be commenced for the breach of statutory warranty had not already expired before 20 April 2018.(2) The failure of external cladding of a building to comply with the performance requirements of the National Construction Code for fire resistance and fire safety for that building is prescribed as a major defect for the purposes of paragraph (b) of the definition of "**major defect**" in section 18E (4) of the Act.

5. DEFINITIONS & ABBREVIATIONS

5.1 Report-Specific Terms

5.1.1 For the purpose of this report and for the sake of brevity, the following commonly used terms refer to these listed documents:

The Code of Conduct = *NCAT Procedural Direction 3 and Uniform Civil Procedural Rules 2005, Schedule 7*

The Cost Guide = 37th Edition of the *Rawlinsons Australian Construction Handbook 2019*

The Defect Guide = *NSW Guide to Standards and Tolerances 2017.*

5.2 Construction Abbreviations

5.2.1 The following abbreviations have been used throughout this Report:

AC = Air Conditioner

AS = Australian Standard

AAC = Autoclaved Aerated Concrete (Hebel)

BCA = Building Code of Australia

CC	=	Construction Certificate	HBA	=	Home Building Act 1989
DA	=	Development Approval	HC	=	Hollow Core
DP	=	Downpipe	IOC	=	(Interim) Occupancy Certificate
DFT	=	Dry Fill Thickness	HWU	=	Hot Water Unit
DPC	=	Damp Proof Course	LGF	=	Lower Ground Floor
DTS	=	Deemed-to-Satisfy Provision	MC	=	Moisture Content (% or REL)
EO	=	Extra Over	MDF	=	Medium Density Fibre Board
FC	=	Fibre Cement	NCC	=	National Construction Code
FIP	=	Fire Indicator Panel	PVC	=	Polyvinyl Chloride
FR	=	Fire Rating/ed	SW	=	Storm Water
FRL	=	Fire Resistance Level	TCA	=	The Construction Adviser
FW	=	Floor Waste	WME	=	Wood Moisture Equivalent
GF	=	Ground Floor	Works	=	Works Under the Contract
GPO	=	General Purpose Outlet (power point)	WP	=	Waterproofing

5.3 Legislative Definitions of Work

5.3.1 Definitions of work are identified in Schedule 4 of the Home Building Regulation 214 (NSW) and include:

Bricklaying	Work involved in the erection of structures by assembly of a number of individual masonry units referred to as either a brick or block.
Dry plastering * Also referred to as plasterboard and/or gyprock.	Work involved in the internal installation of rigid building sheeting or boards made of a core of gypsum plaster set between and bonded to outer covers of cardboard. Dry plastering includes installation of fibrous plaster sheeting or boards or fibrous cement sheeting or boards, cornice, false and suspended ceilings (not including completed work that provides structural support). It does not include any external cladding works, which is work within the categories of carpentry and joinery.
General building work	Any work that is residential building work under the Act.

<p>Glazing</p>	<p>Work involved in installing glass, acrylic or other like materials in prepared openings, such as windows, door panels, screens, fences, balustrades, or partitions. This includes the preparation, fabrication and installation of framing support work associated with glazing and the installation of prefabricated or pre-assembled windows.</p>
<p>Metal fabrication. * Also referred to as metal work or structure steel</p>	<p>Work involved in the preparation, fabrication, and erection of metal components in building work, including structural steel, handrails, security grilles, fences, gates, and balustrades. Metal fabrication does not include roof plumbing or wall cladding.</p>
<p>Minor maintenance and cleaning</p>	<p>Work involved in non-structural maintenance (including minor repairs) or cleaning of existing works, structures, or buildings.</p>
<p>Painting</p>	<p>Work involved in the application of a clear, resin-based, or pigmented product in liquid form which, when applied to a surface by brush, roller, or spray gun, forms a dry, adherent film. Paint may be applied for decorative or protective purposes and may be applied to any appropriate surface on any structure, fixture, fittings, or apparatus.</p>
<p>Stonemasonry</p>	<p>Work involved in construction using natural or artificial stone laid unit-by-unit and set in mortar, including the following:</p>
<p>Wall and floor tiling</p>	<p>Work involved in the affixing of tiles for functional or decorative use on internal or external surfaces of buildings. For the purposes of the describing the category of wall and floor tiling, tile means a thin plate of regular or irregular shape made from fired clay, moulded concrete, ceramics or natural material or other similar manufactured material.</p> <p>Examples of works and materials within the category of wall and floor tiling include the following:</p> <ul style="list-style-type: none"> (a) Tiles made from cork, linoleum or thermoplastics. (b) Waterproofing of wet areas in preparations for the laying of tiles; (c) Mosaics; and (d) Preparation and minor repair (but not renewal or replacement) and insertion of expansion joints to surfaces prior to tiling.

<p>Wet plastering. * Also referred to as render and/or rendering.</p>	<p>Work involved in the application of a mixture of lime, cement, or gypsum plaster and/or and water (or other material to achieve a similar result) for the covering of internal or external walls and ceilings. Wet plaster is applied while wet/plastic, generally by trowel, and dries and hardens after application.</p>
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6. PROPERTY OVERVIEW

6.1 Property Description

- 6.1.1 For the purpose of this report, the elevation of the Property facing Mitchell Avenue is deemed to be facing south. During my inspection, I made the following observations about the Property:
- 6.1.2 The combined land size is 2,132m² and is zoned R4.
- 6.1.3 The Property is a 5-level, split-level unit development of 5 x 1-bedroom units, 21 x 2-bedrooms units, and 5 x 3-bedroom units with a common courtyard and a single lift and fire stair servicing the levels.
- 6.1.4 The basement is a two-storey concrete structure with exposed sandstone walls accessed from Oxley Ave on the eastern side of the Property.



- 6.1.5 The building itself is chiefly constructed with concrete columns and reinforced concrete slabs. The external walls are a mixture of FC sheeting and Hebel, which has been cement rendered and painted. The external windows and sliding doors are manufactured with aluminium frames.
- 6.1.6 Hebel is the proprietary name for Autoclaved Aerated Concrete (“**AAC**”). It is concrete that has been manufactured to contain closed air pockets. This results in a lightweight and fairly energy efficient (thermal properties) cladding material. AAC is produced by adding a foaming agent to concrete in a mould, then wire-cutting blocks or panels from the resulting ‘cake’ and ‘cooking’ them with steam (autoclaving). The most common AAC product in the Australian market is Hebel and is supplied by CSR.

6.2 Building Evaluation

- 6.2.1 I understand that the Property is less than 1 year old based on the advice of the Developer. Some brand new units were still for sale at the time of the inspection.

6.3 Building Classification

6.3.1 This Property has been identified to fall under the below classifications of the BCA:

6.3.1.1 Class 2 – A building containing 2 or more sole-occupancy units; and

6.3.1.2 Class 7a – Carpark

6.3.2 See below extract from CC2:

PROPOSAL			
ADDRESS	<i>11-15 Mitchell Avenue, Jannali NSW 2226</i>		
LOT NO.	<i>100</i>	DP NO	<i>1250463</i>
BUILDING CLASSIFICATION	<i>2, 7a, 7b</i>		

6.3.3 The following explanation of building classes has been provided by the ABCB, who are the publishers of the BCA and NCC.

Classes of Building		
Class 1	Class 1a	A single dwelling being a detached house, or one of a group of two or more attached dwellings, each being a building, separated by a fire-resisting wall, including a row house, terrace house, town house or villa unit.
	Class 1b	A boarding house, guest house, hostel or the like with a total area of all floors not exceeding 300m ² , and where not more than 12 people reside, and is not located above or below another dwelling or another Class of building other than a private garage.
Class 2	A building containing 2 or more sole-occupancy units each being a separate dwelling.	
Class 3	A residential building, other than a Class 1 or 2 building, which is a common place of long term or transient living for a number of unrelated persons. Example: boarding-house, hostel, backpackers accommodation or residential part of a hotel, motel, school or detention centre.	
Class 4	A dwelling in a building that is Class 5, 6, 7, 8 or 9 if it is the only dwelling in the building.	
Class 5	An office building used for professional or commercial purposes, excluding buildings of Class 6, 7, 8 or 9.	
Class 6	A shop or other building for the sale of goods by retail or the supply of services direct to the public. Example: café, restaurant, kiosk, hairdressers, showroom or service station.	
Class 7	Class 7a	A building which is a car park.
	Class 7b	A building which is for storage or display of goods or produce for sale by wholesale.
Class 8	A laboratory, or a building in which a handicraft or process for the production, assembling, altering, repairing, packing, finishing, or cleaning of goods or produce is carried on for trade, sale or gain.	
Class 9	A building of a public nature.	
	Class 9a	A health care building, including those parts of the building set aside as a laboratory.
	Class 9b	An assembly building, including a trade workshop, laboratory or the like, in a primary or secondary school, but excluding any other parts of the building that are of another class.
	Class 9c	An aged care building.
Class 10	A non-habitable building or structure.	
	Class 10a	A private garage, carport, shed or the like.
	Class 10b	A structure being a fence, mast, antenna, retaining or free standing wall, swimming pool or the like.
	Class 10c	A private bushfire shelter.

7. STRUCTURE OF DEFECTS REPORT

7.1 Defects Summary & Schedule

- 7.1.1 The defects identified at the property have generally been discussed in the body of the report and then the appropriate sections of the report have been identified by the numbering in both the Defects Summary and the Defects Schedule.
- 7.1.2 The Defects Summary in Attachment F contains a summary of all defects.
- 7.1.3 The Defects Schedule is the photographic section of the individual report where defects are identified.

7.2 Defects Categorisation

- 7.2.1 The defects have been categorised sequentially across various locations throughout the strata scheme. The first character refers to the unit number and the numbers after the decimal place refer to the defect number at that general location.
 - 7.2.1.1 Defects commencing with “U” refer to the unit number, with the first number thereafter referring to the specific unit number, e.g. Defect “U5.1” refers to Unit 5, defect number 1.
 - 7.2.1.2 Defects commencing with “C” refers to **C**ommon areas.
 - 7.2.1.3 Defects commencing with “F” refers to the building **F**acade.
 - 7.2.1.4 Defects commencing with “B” refers to the **B**asement.
 - 7.2.1.5 Defects commencing with “R” refers to the **R**ooftop.
- 7.2.2 The defect location refers to the specific location within building.
- 7.2.3 The defect area refers to the specific room within the location.
- 7.2.4 The defect type describes the type of defect in the location.
- 7.2.5 Defects will be classified into three categories:
 - 7.2.5.1 **Systemic** - is an identified defect that pertains to the entire property.
 - 7.2.5.2 **Recurring** – is an identified defect that repeats in most inspected areas or recurs throughout the property, but not in all instances.
 - 7.2.5.3 **Specific** – is an identified defect that occurs in a particular identified location.

7.3 Further Investigations

- 7.3.1 I suggest the following further investigations be undertaken:
- 7.3.1.1 Mechanical exhausts, as they were not extracting air from wet areas;
 - 7.3.1.2 Fire and life safety, some fire rating to the walls of the SOU's was incomplete;
 - 7.3.1.3 Fire stairs, as only one has been provided to the Property;
 - 7.3.1.4 Facade cladding to be tested for combustibility (timber-look eaves); and
 - 7.3.1.5 Facade to have destructive testing for moisture ingress where installed below finished external tiled level.

8. ASSESSMENT OF DEFECTS

8.1 Executive Summary

- 8.1.1 Numerous defects were identified throughout the property even though only a sample of the property was inspected.
- 8.1.2 The most concerning defect I have identified at this sample inspection is the fact that the Hebel and FC sheeting to the balconies had been installed below the finished tile level.
- 8.1.3 Hebel installed below the surface level requires a cavity drain.
- 8.1.4 FC cannot be installed below the finished tile level.
- 8.1.5 Furthermore, the FC cladding throughout the property did not have any drainage provision.
- 8.1.6 The other defects identified include:
- 8.1.6.1 Sliding door threshold detail;
 - 8.1.6.2 Insufficient falls;
 - 8.1.6.3 Moisture entering habitable spaces;
 - 8.1.6.4 Inadequate balcony overflows provisions;
 - 8.1.6.5 Efflorescence;
 - 8.1.6.6 AC installation;
 - 8.1.6.7 Waterproofing;
 - 8.1.6.8 Drummy and delaminating tiles;
 - 8.1.6.9 Insufficient ceiling heights;
 - 8.1.6.10 Corrosion;

- 8.1.6.11 Inconsistent stair riser heights;
- 8.1.6.12 Honeycombing; and
- 8.1.6.13 Cracking.

8.2 Fire-Rated Walls

Defect (Recurring)

- 8.2.1 This defect relates to fire-rated walls and building element items being defective due to:
 - 8.2.1.1 Sheet joints in fire-rated plasterboard are not sealed; and
 - 8.2.1.2 Open joints present in fire-rated walls to hydrant room.
- 8.2.2 I suggest the following defects be assessed by a suitably qualified fire and life safety consultant.

Findings

- 8.2.3 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:

	
<p><u>U G05.1 – Unit G05 lounge room, ceiling space</u></p> <p>Fire rating between SOC not installed to slab soffit.</p>	<p><u>U 304.3 – Unit 304 lounge room, ceiling space</u></p> <p>Fire-rated wall. Sheet joint not set.</p>



C 190 – Upper ground level, service riser

Incomplete plasterboard.



C 192 – Upper ground level, service riser

Services penetrations in service riser.

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 176	Level G lobby	Service riser	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Possible non-compliant fire rating.
C 177	Level G lobby	Service riser	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Possible non-compliant fire rating.
C 178	Level G lobby	Service riser	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Possible non-compliant fire rating.

C 181	Level G lobby	Service riser	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Possible non-compliant fire rating.
C 182	Level G lobby	Service riser	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Possible non-compliant fire rating.
C 188	Upper ground level	Service riser	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Missing fire rating to hydraulic pipework.
C 190	Upper ground level	Service riser	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Incomplete plasterboard.
C 191	Upper ground level	Service riser	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Services penetrations in service riser.
C 192	Upper ground level	Service riser	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Services penetrations in service riser.
C 203	Level U4 lobby	Service risers	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Fire pillow installation.
C 204	Level U4 lobby	Service risers	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Fire pillow and wrapping.
C 205	Level U4 lobby	Service risers	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	The black sealant used as fire rating.

C 206	Level U4 lobby	Service risers	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Poly pipes through fire rating.
C 207	Level U4 lobby	Service risers	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Moisture resistant plaster used to services riser.
C 210	Level 4 Lobby	Service risers	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Services over the wall.
C 211	Level 4 Lobby	Service risers	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Black sealant in Hebel wall.
C 176	Level G lobby	Service riser	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Possible non-compliant fire rating.
C 177	Level G lobby	Service riser	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Possible non-compliant fire rating.
C 178	Level G lobby	Service riser	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Possible non-compliant fire rating.
C 181	Level G lobby	Service riser	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Possible non-compliant fire rating.
C 182	Level G lobby	Service riser	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Possible non-compliant fire rating.

C 188	Upper ground level	Service riser	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Missing fire rating to hydraulic pipework.
C 190	Upper ground level	Service riser	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Incomplete plasterboard.
C 191	Upper ground level	Service riser	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Services penetrations in service riser.
C 192	Upper ground level	Service riser	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Services penetrations in service riser.
C 203	Level U4 lobby	Service risers	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Fire pillow installation.
C 204	Level U4 lobby	Service risers	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Fire pillow and wrapping.
C 205	Level U4 lobby	Service risers	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Black sealant used as fire rating.
C 206	Level U4 lobby	Service risers	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Poly pipes through fire rating.
C 207	Level U4 lobby	Service risers	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Moisture resistant plaster used to services riser.

C 210	Level 4 Lobby	Service risers	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Services over wall.
C 211	Level 4 Lobby	Service risers	Breach of C 3.16 and D 2.7 of the BCA. Works not being completed as per plans and specifications (BCA). Works are not fit for purpose.	Black sealant in Hebel wall.

Reasoning

8.2.4 The service risers are located on the path of travel and have not been sealed to prevent smoke spreading, which is a breach of section D2.7 of BCA 2016.

D2.7 Installations in exits and paths of travel

(a) Access to service shafts and services other than to fire-fighting or detection equipment as permitted in the *Deemed-to-Satisfy Provisions* of Section E, must not be provided from a *fire-isolated stairway, fire-isolated passageway or fire-isolated ramp*.

(b) An opening to any chute or duct intended to convey hot products of combustion from a boiler, incinerator, fireplace or the like, must not be located in any part of a *required exit* or any corridor, hallway, lobby or the like leading to a *required exit*.

(c) Gas or other fuel services must not be installed in a *required exit*.

(d) Services or equipment comprising—

- (i) electricity meters, distribution boards or ducts; or
- (ii) central telecommunications distribution boards or equipment; or
- (iii) electrical motors or other motors serving equipment in the building,

may be installed in—

- (iv) a *required exit*, except for fire-isolated exits specified in (a); or
- (v) in any corridor, hallway, lobby or the like leading to a *required exit*,

if the services or equipment are enclosed by *non-combustible* construction or a *fire-protective covering* with doorways or openings suitably sealed against smoke spreading from the enclosure.

(e) Electrical wiring may be installed in a fire-isolated *exit* if the wiring is associated with—

- (i) a lighting, detection, or pressurisation system serving the *exit*; or
- (ii) a security, surveillance or management system serving the *exit*; or
- (iii) an intercommunication system or an audible or visual alarm system in accordance with D2.22; or
- (iv) the monitoring of hydrant or sprinkler isolating valves.

- 8.2.5 The bounding walls for each unit are required to be fire resistant, gaps on the bounding wall can reduce the FRL of the wall making it unsuitable for resisting fire, which is a breach of section C3.16 of BCA 2016.

C3.16 Construction joints

- (a) Construction joints, spaces and the like in and between building elements *required to be fire-resisting with respect to integrity and insulation must be protected in a manner identical with a prototype tested in accordance with AS 1530.4 to achieve the required FRL.*
- (b) The requirements of (a) do not apply where joints, spaces and the like between *fire-protected timber* elements are provided with cavity barriers in accordance with *Specification C1.13.*

Adequate fire protection is required between fire compartments under Part C2 of the BCA.

C2.7 Separation by fire walls

- (a) **Construction** — A *fire wall* must be constructed in accordance with the following:
 - (i) The *fire wall* has the relevant FRL prescribed by **Specification C1.1** for each of the adjoining parts, and if these are different, the greater FRL, except where **Tables 3.9, 4.2 and 5.2 of Specification C1.1** permit a lower FRL on the *carpark* side.
 - (ii) Any openings in a *fire wall* must not reduce the FRL *required by Specification C1.1* for the *fire wall*, except where permitted by the *Deemed-to-Satisfy Provisions of Part C3.*

- 8.2.6 Any wall or opening to a wall dividing the 'sole occupancy unit' ("**SOU**") cannot compromise the FRL as it is a barrier to a separate fire compartment.
- 8.2.7 The building work is therefore considered defective as identified in section 18B of the HBA, due to:
- 8.2.7.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;
 - 8.2.7.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;
 - 8.2.7.3 Works have not been completed as per plans and specifications (BCA) – section 18B(1)(a) of the HBA; and
 - 8.2.7.4 Works are not fit for purpose – section 18B(1)(b) of the HBA.
- 8.2.8 As, in failing to complete the works as stipulated by the BCA, the effectiveness of the fire protection provisions have been reduced, as such an unsatisfactory standard of workmanship has been executed by the Builder.

REMEDIATION

8.2.9 A suitable qualified fire and life safety consultant is to be engaged to undertake an inspection of the fire rating works completed at the property.

8.3 Aluminium Sliding Door Installation

Defect (Recurring)

8.3.1 This defect relates to the balcony sliding door installation being defective as:

- 8.3.1.1 No waterstop to rear of sliding doors;
- 8.3.1.2 Tiles installed proud of subsill;
- 8.3.1.3 Insufficient internal to external setdown height; and
- 8.3.1.4 Aluminium frames are in contact with the cement.

Findings

8.3.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:



U 304.11 – Unit 304, bedroom 2 door threshold

No waterstop.



C 187 – Upper ground level, entry door threshold

No compliant threshold detail.

Sliding door installed in contact with cement.	
 <p><u>U 306.11 – Unit 306, main bedroom balcony door threshold</u></p> <p>No waterstop.</p> <p>Sliding door installed in contact with cement.</p>	 <p><u>U G05.2 – Unit G05, lounge room sliding door threshold</u></p> <p>No waterstop.</p> <p>Sliding door installed in contact with cement.</p>

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 31.B	West facade	Units balcony	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	Set down height once tiled will not be compliant with AS4654.2.
C 186	Upper ground level	Entry door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	No compliant threshold detail.
C 187	Upper ground level	Entry door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	No compliant threshold detail.
C 195	Level U4 lobby	Balcony – door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	No waterstop.

C 196	Level U4 lobby	Balcony – door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	No waterstop.
C 212.A	Level 4 Lobby - balcony	Door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	No waterstop.
C 212.B	Level 4 Lobby - balcony	Door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	Sliding door installed in contact with cement.
U G05.2.A	Lounge room	Sliding door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	No waterstop.
U G05.2.B	Lounge room	Sliding door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	Sliding door installed in contact with cement.
U G05.15.A	Main bedroom	Sliding door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	No waterstop.
U G05.15.B	Main bedroom	Sliding door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	Sliding door installed in contact with cement.
U 304.1.A	Lounge	Sliding door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	No waterstop.
U 304.1.B	Lounge	Sliding door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	Sliding door installed in contact with cement.
U 304.2.A	Lounge	Sliding door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	No waterstop.
U 304.2.B	Lounge	Sliding door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	Sliding door installed in contact with cement.

U 304.11.A	Bedroom 2	Door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	No waterstop.
U 304.11.B	Bedroom 2	Door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	Sliding door installed in contact with cement.
U 304.13.A	Balcony	Floor tiles	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	No waterstop.
U 304.13.B	Balcony	Floor tiles	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	Sliding door installed in contact with cement.
U 304.14.A	Balcony	Sliding door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	No waterstop.
U 304.14.B	Balcony	Sliding door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	Sliding door installed in contact with cement.
U 304.15	Balcony	Hebel cladding	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	Tile installed vertically proud of sub sill.
U 306.1.A	Lounge	Sliding door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	No waterstop.
U 306.1.B	Lounge	Sliding door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	Sliding door installed in contact with cement.
U 306.11.A	Main bedroom balcony	Door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	No waterstop.
U 306.11.B	Main bedroom balcony	Door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	Sliding door installed in contact with cement.

U 306.12.A	Main bedroom balcony	Floor tiles	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	No waterstop.
U 306.12.B	Main bedroom balcony	Floor tiles	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	Sliding door installed in contact with cement.
U 306.13	Main bedroom balcony	Sliding door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Breach of AS 4654.2 and AS 2047. Works are not fit for purpose.	Tile installed proud of subsill not behind as detailed by AS4654.2.

Reasoning

8.3.3 While AS4654 suggests certain height requirements for door thresholds exposed to external areas, no compliant set down has been installed.

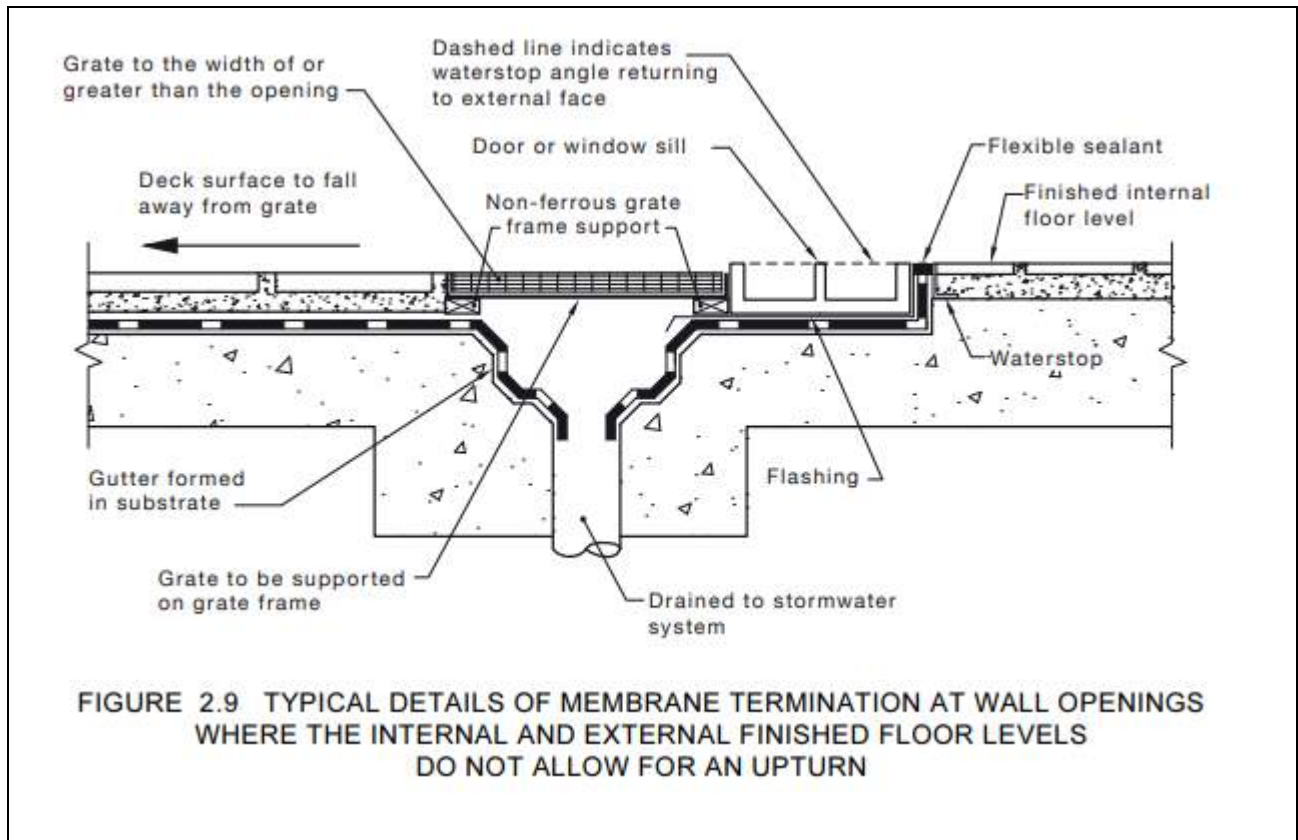
8.3.4 AS4654.2 is a document adopted by the BCA:

		Amdt 1	
AS 4654		Waterproofing membranes for external above-ground use	F1.4
Part 1	2012	Materials	
Part 2	2012	Design and installation	
AS/NZS 4859		Materials for the thermal insulation of buildings	
Part 1	2002	General criteria and technical provisions	J1.2, Spec J5.2b, Spec J5.2c
		Amdt 1	
AS 5146.1	2015	Reinforced autoclaved aerated concrete	B1.4

NCC 2016 Building Code of Australia - Volume One Page 52

8.3.5 Considering some of the doorways are to be accessible, Figure 2.9 of AS4654.2 (below) recommends providing a strip drain to the front of external opening areas.

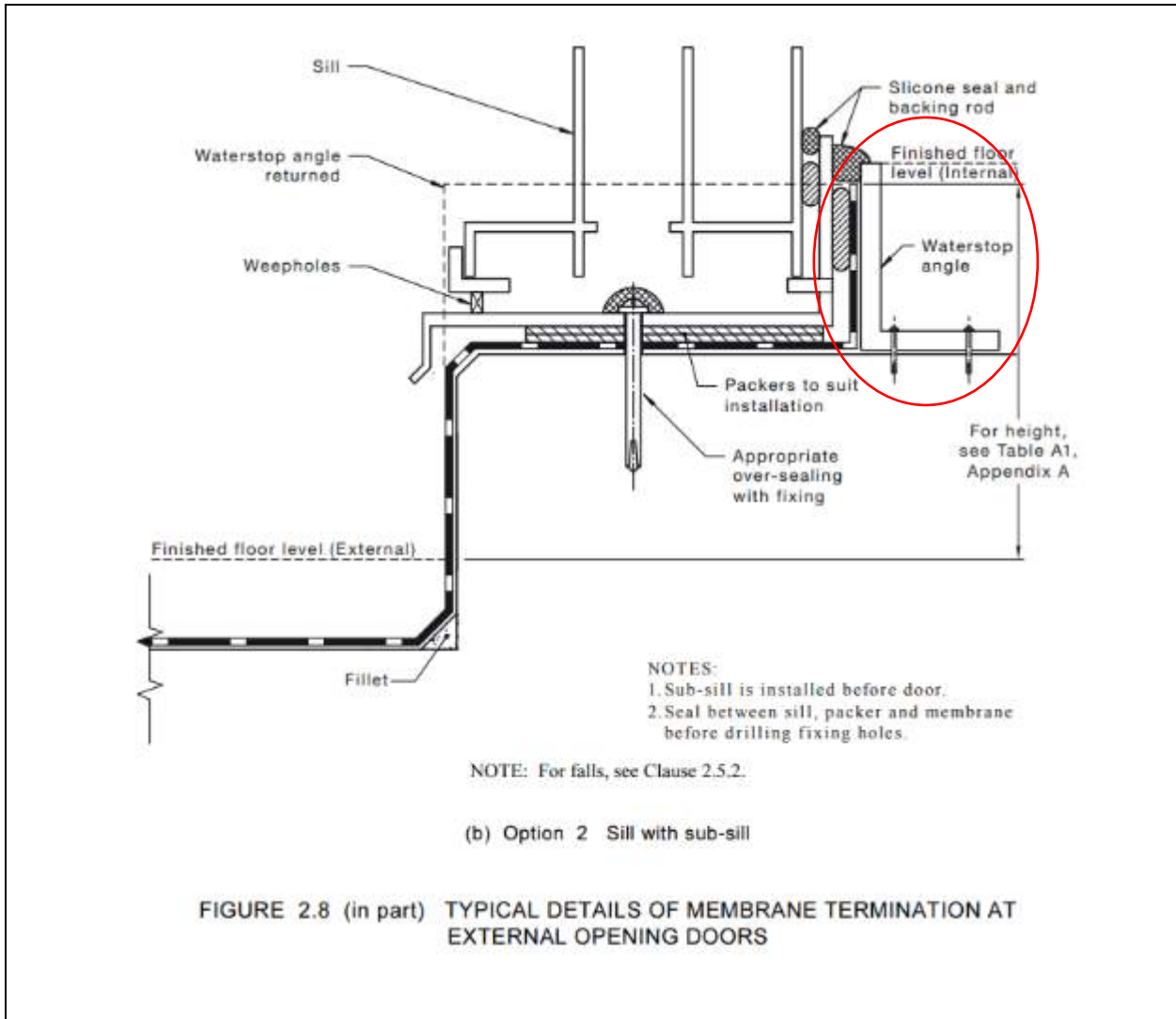
8.3.6 AS4654.2 relevantly provides:



8.3.7 The lack of a compliant set down has also resulted, in some instances, in the aluminium door and window frame being covered in part by the tile bed. In time, this will cause corrosion of the aluminium due to the alkaline in the cement reacting with the aluminium, which is a breach of the “AS2047-2014 Windows and external glazed doors in buildings” and “AS3715 – 2002 Metal finishing – Thermoset powder coating for architectural applications of aluminium and aluminium alloys”.

Reasoning – Waterstop Angle

8.3.8 No waterstop angle has been installed to prevent moisture ingress as identified by AS4654.2:



8.3.9 Lack of waterstop angle to the rear side of sliding door threshold is allowing the moisture ingress and causing damage to the carpet's smooth edges.

Reasoning – No Sill Flashing

8.3.10 The BCA adopts AS2047 as the standard for windows and external glazed doors in buildings, as extracted below:

		Amdt 1	
AS 2047	2014	Windows and external glazed doors in buildings	B1.4, FV1, F1.13, J3.4
AS 2049	2002	Roof tiles Amdt 1	B1.4, F1.5
AS 2050	2002	Installation of roof tiles Amdt 1 Amdt 2	B1.4, F1.5

NCC 2015 Building Code of Australia - Volume One Page 43

8.3.11 AS2047 requires flashings to external windows and doors and the relevant clause has been extracted below:

7.2.2 Flashing
Flashing shall be incorporated into the building envelope where it is necessary—
(a) to restrict water from entering into the interior of a building from the exterior;
(b) to restrict water passing across a cavity to the inner leaf; or
(c) to shed water through cladding to the outer face.
Where used, flashing shall comply with AS/NZS 2904. For masonry construction, flashing shall comply with AS 4773.2.

Reasoning - Summary

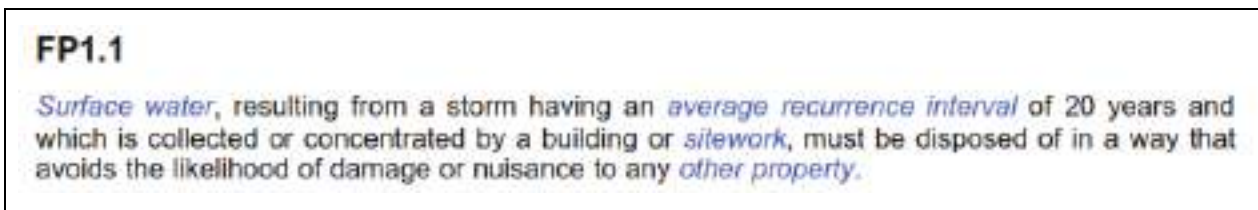
8.3.12 Deterioration of building elements is a breach of the performance requirements FP1.3 and FP1.4 of the BCA, in addition to being in breach of AS2047 and AS4564.

8.3.13 FP1.2 of the BCA requires that stormwater does not enter a building:

FP1.2
Surface water, resulting from a storm having an average recurrence interval of 100 years must not enter the building.

8.3.14 As can be seen from the identified moisture damage at the threshold, this performance requirement of the BCA has been breached.

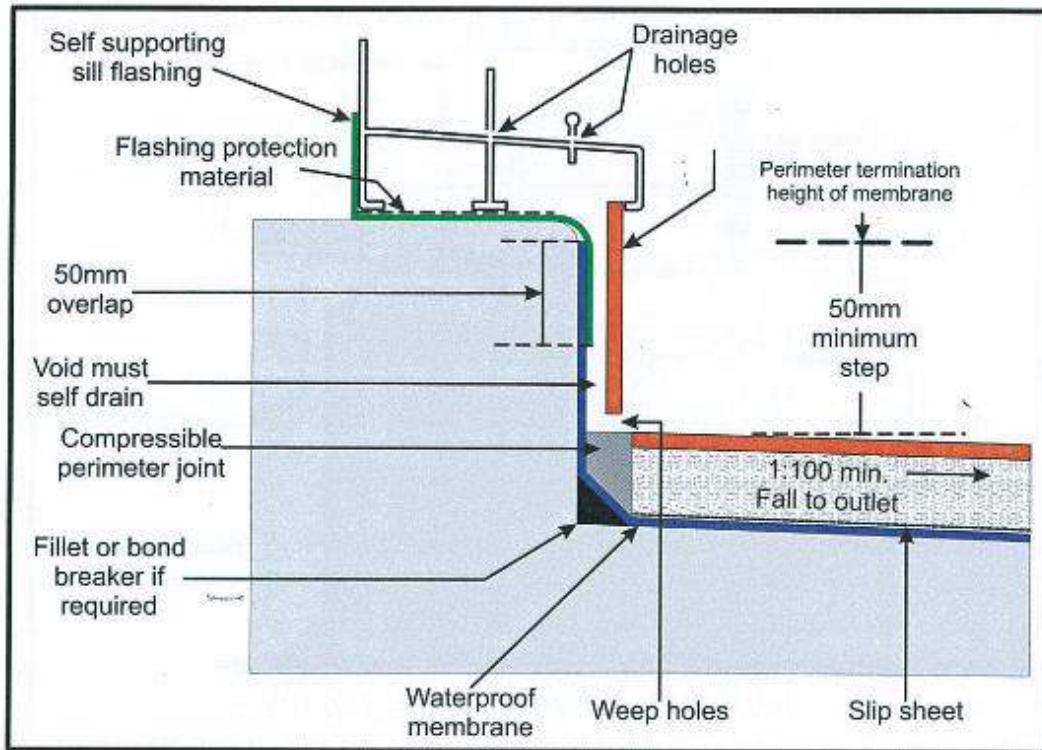
- 8.3.15 FP1.1 requires avoidance of the likelihood of damage to the building. Again, this has been breached as the carpet's smooth edge is deteriorating:



- 8.3.16 The windows and doors are not fit for purpose and have not been installed with due care and skill as required under section 18B of the HBA.
- 8.3.17 The building work is therefore considered defective as identified in section 18B of the HBA, due to:
- 8.3.17.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;
 - 8.3.17.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;
 - 8.3.17.3 Works have not been completed as per plans and specifications (BCA and AS) – section 18B(1)(a) of the HBA; and
 - 8.3.17.4 Works are not fit for purpose – section 18B(1)(b) of the HBA.
- 8.3.18 In failing to complete the works in accordance with the requirements of the BCA, AS2047, and AS4564, the effectiveness of waterproofing and stormwater drainage provisions have been reduced. As such, an unsatisfactory standard of workmanship has been executed by the builder.

Remediation

- 1.1.1. Protect work area;
- 1.1.2. Remove sliding door suite;
- 1.1.3. Remove one row of tiles in front of sliding door;
- 1.1.4. Clean down existing waterproofing;
- 1.1.5. Reactivate waterproofing;
- 1.1.6. Install new waterproofing waterstop angle behind sliding door. Aluminium angle colour-matched to aluminium frame.
- 1.1.7. Install new waterproofing, angle and fillet to hob and waterstop as per the below diagram from the Master Builders' external waterproofing guide:



- 1.1.8. Reinstall sliding door suite;
- 1.1.9. Install tilings to site behind sliding door frame;
- 1.1.10. Install sealant to vertical and horizontal tile junction;
- 1.1.11. Install storm moulds to sliding door frame; and
- 1.1.12. Clean down the work area and demobilise.

8.4 Insufficient Falls/Ponding

Defect (Recurring)

- 8.4.1 This defect concerns:
- 8.4.1.1 Water ponding due to insufficient falls in tiling;
 - 8.4.1.2 Insufficient falls in external tiling;
 - 8.4.1.3 Reverse (back) fall; and
 - 8.4.1.4 Resultant efflorescence.

Findings

- 8.4.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:



C 3 – G.floor north entry, floor tiles

Insufficient falls of 2mm per metre.



U 306.16 – Main bedroom balcony, floor tiles

No falls provided to the external tiled balcony.



C 38 – North facade, planter box

Water is ponding in base of planter.



U 306.12 – Unit 306 Main bed balcony, floor tiles

Efflorescence a result of water ponding.

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 3	Ground floor North entry	Floor tiles	Breach of FP 1.1 and FP 1.3 of the BCA. Breach of AS 3500, AS 3740 and AS 4654. Works are not fit for purpose.	Insufficient falls of 2mm per metre.
C 38	North Facade	Planter box	Breach of FP 1.1 and FP 1.3 of the BCA. Breach of AS 3500, AS 3740 and AS 4654. Works are not fit for purpose.	Water ponding in the base of the planter.
C 49	South Facade (Mitchell Avenue)	Stair	Breach of FP 1.1 and FP 1.3 of the BCA. Breach of AS 3500, AS 3740 and AS 4654. Works are not fit for purpose.	Water ponding on steps is a tripping hazard.

C 81	Basement 2	North-east – Hydrant room	Breach of FP 1.1 and FP 1.3 of the BCA. Breach of AS 3500, AS 3740 and AS 4654. Works are not fit for purpose.	Water ponding.
C 87	Basement 2	North-east – Hydrant room	Breach of FP 1.1 and FP 1.3 of the BCA. Breach of AS 3500, AS 3740 and AS 4654. Works are not fit for purpose.	280mm water ponding in the pit.
C 103	Basement 1	South – On the front of parking bay 18 (Floor waste)	Breach of FP 1.1 and FP 1.3 of the BCA. Breach of AS 3500, AS 3740 and AS 4654. Works are not fit for purpose.	Water ponding.
C 117	Basement 2	North wall	Breach of FP 1.1 and FP 1.3 of the BCA. Breach of AS 3500, AS 3740 and AS 4654. Works are not fit for purpose.	Stagnant water behind parking bay 30
C 118.B	Basement 2	North wall	Breach of FP 1.1 and FP 1.3 of the BCA. Breach of AS 3500, AS 3740 and AS 4654. Works are not fit for purpose.	Water ponding in the dish drain.
C 199	Level U4 lobby	Balcony – floor tiles	Breach of FP 1.1 and FP 1.3 of the BCA. Breach of AS 3500, AS 3740 and AS 4654. Works are not fit for purpose.	Fall of 3mm per m in the tiled substrate.
C 218	Driveway	Stormwater pit	Breach of FP 1.1 and FP 1.3 of the BCA. Breach of AS 3500, AS 3740 and AS 4654. Works are not fit for purpose.	Water ponding in the base of the driveway pit.
U 304.7	Ensuite	Floor tile	Breach of FP 1.1 and FP 1.3 of the BCA. Breach of AS 3500, AS 3740 and AS 4654. Works are not fit for purpose.	Water is ponding
U 304.22	Balcony	Floor tiles	Breach of FP 1.1 and FP 1.3 of the BCA. Breach of AS 3500, AS 3740 and AS 4654. Works are not fit for purpose.	Insufficient falls of 3mm per metre. AS4654.2 requires 10mm per metre.

U 306.16	Main bedroom balcony	Floor tiles	Breach of FP 1.1 and FP 1.3 of the BCA. Breach of AS 3500, AS 3740 and AS 4654. Works are not fit for purpose.	No falls provided to the external tiled balcony.
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Reasoning

8.4.3 External water ponding is a breach of performance requirements FP1.1 and FP1.3 of the BCA:

<p>FP1.1</p> <p><i>Surface water</i>, resulting from a storm having an <i>average recurrence interval</i> of 20 years and which is collected or concentrated by a building or <i>sitework</i>, must be disposed of in a way that avoids the likelihood of damage or nuisance to any <i>other property</i>.</p>
<p>FP1.3</p> <p>A drainage system for the disposal of <i>surface water</i> must—</p> <p>(a) convey <i>surface water</i> to an appropriate <i>outfall</i>; and</p> <p>(b) avoid the entry of water into a building; and</p> <p>(c) avoid water damaging the building.</p>

8.4.4 Internal water ponding is a defect under AS3740 for internal wet areas:

<p>3.3 FALLS IN FLOOR FINISHES</p> <p>Where required, falls in floor finishes shall allow all surface water to drain without ponding except for residual water remaining due to surface tension.</p> <p>For general bathroom floor area, the minimum fall to the waste shall be 1:100.</p> <p>NOTES:</p> <p>1 For information on falls in the floor finishes, see Appendix B.</p> <p>2 For information on the laying of tiles to enable them to drain without retaining water, see AS 3958.1.</p>
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8.4.5 Pursuant to AS3500, AS3958, and AS4654, tile surfaces are required to have falls towards drainage in order to prevent ponding. AS3500 is a document referenced by the BCA:

AS/NZS 3013	2005	Electrical installations — Classification of the fire and mechanical performance of wiring system elements	C2.13
AS/NZS 3500 Part 3	2003	National plumbing and drainage Stormwater drainage Amdt 1 Amdt 2	F1.1
Part 4	2003	Heated water services Amdt 1	J7.2

8.4.6 Water ponding creates an unacceptable risk of slip and fall injuries to occupants. External areas are required to have a compliant slip rating to avoid this, however, water ponding on the surface would make these slip ratings irrelevant.

8.4.7 Water ponding creates unhealthy conditions as they become a breeding ground for mosquitos which can transmit diseases to building occupants and users. See extract below from Department of Health confirming ponding and stagnant water can attract mosquitos:

8.4.7.1 *“...Water ponding in gutters also needs to be prevented as it can provide breeding sites for mosquitoes and could lead to eggs being washed into tanks...rainwater should not be allowed to pool in containers or on surfaces below tank outlets or taps, as this can also provide a breeding site...”– The Department of Health, Preventing Mosquito Breeding*

8.4.8 Following are the photos that show a common breeding ground for mosquitos:



C 218 – driveway, stormwater pit

Water ponding in the base of driveway pit.



C 87– basement, hydrant room

280mm water ponding in the pit.

8.4.9 Regarding internal wet areas, AS3740 prescribes the following fall ratios to drainage:

8.4.9.1 Within shower areas (with shower screen, hob or the like) – 1:100;

8.4.9.2 Within shower area (without shower screens, hob, or the like) – 1:80; and

8.4.9.3 Floor finishes (outside shower areas) – 1:100.

3.3 FALLS IN FLOOR FINISHES

Where required, falls in floor finishes shall allow all surface water to drain without ponding except for residual water remaining due to surface tension.

For general bathroom floor area, the minimum fall to the waste shall be 1:100.

3.4 SHOWER FLOORS

Falls in shower floors shall be sufficient to prevent—

- (a) surface water from being retained on the shower floor (except for residual water remaining due to surface tension); and
- (b) water from discharging outside the shower area.

For shower areas with a vertical separation between the shower area and the wet area, such as a shower screen, hob, step-down or water stop, the fall to the waste shall be 1:100.

As a minimum for other shower areas, the fall shall be a minimum of 1:80.

8.4.10 AS4654 requires surface water to be directed to drainage outlets and be a minimum of 1:100 fall:

2.5.2 Falls

Falls in finishes shall ensure water drains to the drainage outlet. Water shall not be retained on the finished surface with the exception of residual water remaining due to surface tension.

The fall shall be in the structural substrate, or formed by a screed over the structural substrate.

NOTE: Falls for surface drainage should be no flatter than 1 in 100.

8.4.11 The tiling works to the identified areas in the defect schedule are completed without the required falls, as stipulated by AS4654.2 or AS3740, resulting in water ponding and water flow away from drainage outlets. This ponding saturates the tile bed leading to degradation of the underlying waterproofing membrane, as well as resulting in a hazardous (slippery) floor surface. A moisture-charged tile bed will also wick (travel) up to other unprotected adjacent building elements, causing further deterioration of building elements and efflorescence.

8.4.12 AS3500.3 (which is referenced by the BCA) prohibits ponding of water unless temporarily at a sag pit. As ponding has been identified in wet areas, I consider this to be due to defective workmanship:

AS/NZS 3013	2005	Electrical installations — Classification of the fire and mechanical performance of wiring system elements	C2.13
AS/NZS 3500 Part 3	2003	National plumbing and drainage Stormwater drainage Amdt 1 Amdt 2	F1.1
Part 4	2003	Heated water services Amdt 1	J7.2

5.3.3.3 Ponding

Except for on-site stormwater detention (OSD) systems (see Clause 5.4.13), ponding of stormwater shall only occur temporarily at sag pits complying with Clause 5.4.10.1.

NOTES:

- Where the ground floor of a building is lower than the adjacent land, except at access ramps, the latter should be graded so that there is a reverse slope away from the building to permit the discharge of stormwater to a site stormwater drain or channel.
- The ground beneath timber floors and landscaping around and under buildings should be graded to prevent ponding and permit drainage to the outside of buildings.

8.4.13 The building work is therefore considered defective as identified in section 18B of the HBA, due to:

8.4.13.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;

8.4.13.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;

8.4.13.3 Works not being completed as per plans and specifications (BCA and AS) – section 18B(1)(a) of the HBA; and

8.4.13.4 Works not being fit for purpose – section 18B(1)(b) of the HBA.

8.4.14 In failing to complete the works as stipulated by the BCA and AS3740, AS3500, AS4654.2, the effectiveness of weatherproofing and water diversion provisions of the Property have been reduced, as such an unsatisfactory standard of workmanship has been executed by the Builder.

Remediation – Water Ponding on Tiles

8.4.15 The remediation for this scope of works for each tiled area of ponding that has been identified will require typically 8-10m² of the below scope to attain sufficient falls:

8.4.15.1 Protect local work area;

8.4.15.2 Remove tiles;

8.4.15.3 Carefully remove tile bed to ensure minimal damage to waterproofing;

- 8.4.15.4 Waterproof manufacturer to confirm waterproofing can be reactivated;
- 8.4.15.5 Clean down existing waterproof membrane;
- 8.4.15.6 Reactivate existing waterproofing;
- 8.4.15.7 Install 2 x layers of waterproofing with sufficient lap;
- 8.4.15.8 Install tile bed with sufficient falls;
- 8.4.15.9 Seal tile bed to ensure no efflorescence;
- 8.4.15.10 Reinstall tiles with grout; and
- 8.4.15.11 Clean down work area.

Remediation – Waterponding in Stormwater Pits

- 8.4.16 Hydraulic engineer to be engaged to advise if pit bases can be concrete filled or if heights need to be changed for pits and associated pipework.

8.5 FC Cladding Installed Lower than Water Level

Defect (Recurring)

- 8.5.1 This defect concerns the lightweight FC cladding installed, which has no drainage provision.

Findings

- 8.5.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:



C 13 – East facade, unit balcony

Waterproofing turned up base of FC sheets.



C 10 – East facade, unit balcony

Waterproofing turned up base of FC sheets.

	
<p><u>U 304.12 – Unit 306 bedroom 2, balcony FC cladding</u></p> <p>Cladding does not have a drainage provision.</p>	<p><u>U 306.19 – Unit 306 main bedroom, top of FC cladding</u></p> <p>No parapet cap to exposed FC blade wall.</p>

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 9. A	East facade	Unit balcony	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	Waterproofing has been turned up the base of FC sheets and Hebel.
C 10.A	East facade	Cladding	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	Hebel with no cavity drains.
C 11.A	East facade	Hebel cladding	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	No drainage to Hebel.
C 12.A	East facade	Unit balcony	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	Waterproofing turned up base of FC sheets.

C 30.A	West facade	Units balcony	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	FC installed below water level.
C 31.A	West facade	Units balcony	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	FC installed below water level.
C 40	North Facade	Units balcony	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	FC sheet has been installed below water level.
C 42.A	North Facade	Privacy screen	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	Missing drainage provisions to walls under windows.
C 44.B	South facade (Mitchell Avenue)	Hebel cladding	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	FC installed below ground level. The base of FC has been waterproofed up.
C 45.A	South facade (Mitchell Avenue)	Cladding	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	The base of FC waterproofed up.
C 47	South facade (Mitchell Avenue)	Hebel cladding	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	FC installed below water level.
C 194.A	Level U4 lobby	Balcony - handrail	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	Crack at the line of possible DPC.
C 197.A	Level U4 lobby	Balcony - handrail	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	Elevated moisture to the base of the rendered wall.
C 213.A	Level 4 Lobby - balcony	Cladding	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	Elevated moisture to the wall below tile pedestals.
U 304.12	Bedroom 2	FC Cladding	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	Cladding does not have a drainage provision.
U 304.20.A	Balcony	The base of Hebel facade	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	Elevated moisture to the base of the wall.
U 306.14.A	Main bedroom balcony	Base of Hebel	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	Elevated moisture to the base of the wall due to a failure to install a drainage provision.
U 306.17	Main bedroom balcony	The base of Hebel cladding	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	Elevated moisture to the base of the wall.

Reasoning

- 8.5.3 None of the FC cladding inspected at the Property has provision for drainage. Moisture can enter these walls due to:
- 8.5.3.1 Condensation;
 - 8.5.3.2 Leaks around windows, eaves or roofs;
 - 8.5.3.3 Moisture ingress from the base of walls and failed waterproofing; and
 - 8.5.3.4 Cracks to rendered or wall finishes.
- 8.5.4 I have not identified the product, but I have assumed it to be James Hardie HardieTex as this is one of the most common types of FC cladding products in my experience.



- 8.5.5 Noting that most manufacturers provide similar details, the James Hardie Installation Guide for the HardieTex external installation stipulates the following:

4.4 CONSTRUCTION JOINTS

4.4.1 Vertical

Vertical construction joints are required where HardieTex™ base sheets construction intersects with an existing structure (See Figure 21 and Figure 22).

If cement render is applied to masonry wall, do not render hard up against HardieTex™ base sheet edge. Leave a 6mm joint between the render and HardieTex™ base sheet and fill with James Hardie joint sealant over bond breaker tape. Coating system must not cover sealant.

4.4.2 Horizontal

Horizontal construction joints are required where upper level HardieTex™ system construction joins an existing ground floor structure.

See Figure 23.

9.2 SLAB ON GROUND AND PLATFORM FLOORS

9.2.1 General

The slab and footings on which the building is situated must comply with AS 2870 'Residential slabs and footings - Construction' and the requirements of the National Construction Code (NCC).

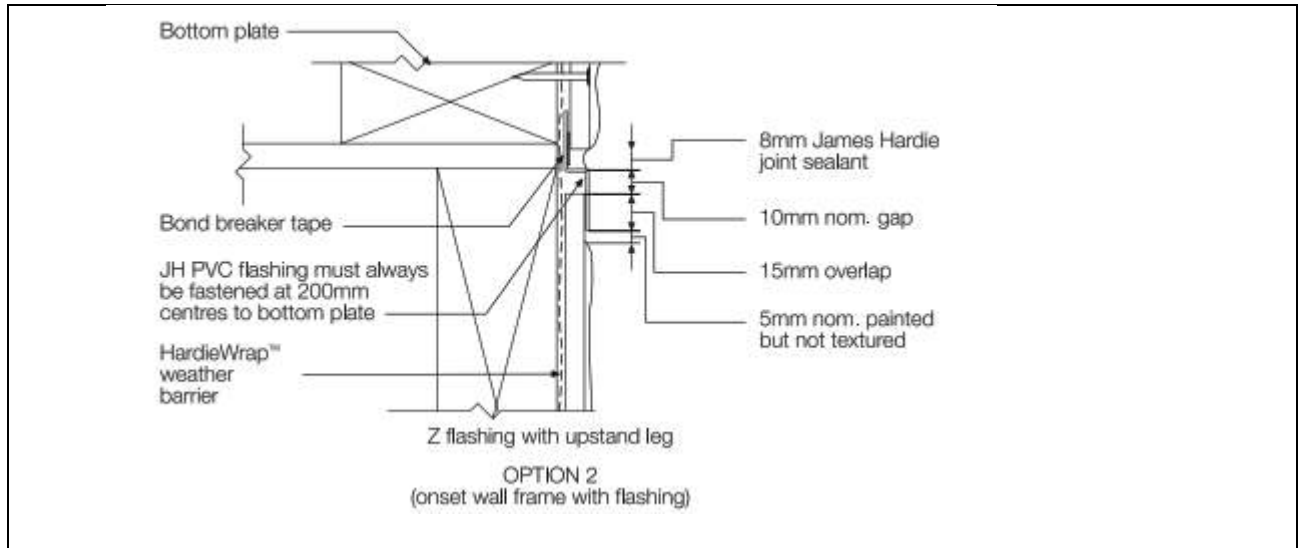
Install James Hardie external cladding with a minimum 150mm clearance to the earth on the exterior of the building or in accordance with local building codes if greater than 150mm is required.

Maintain a minimum 50mm clearance between James Hardie external cladding and roofs, decks, paths, steps and driveways.

Adjacent finished grade must slope away from the building in accordance with local building codes, typically a minimum slope of 50mm minimum over the first metre.

Do not install external cladding such that it may remain in contact with standing water.

While there is no specific detail for FC abutting Hebel, all of the details provided by the manufacturer require a trim and 10mm gap:



8.5.6 When reviewing the manufacturer's detail against the installation observed at the Property, I have identified the following:

8.5.6.1 There is no gap between the base of the FC sheet and the abutting element; and

8.5.6.2 No flashing has been installed to the base of sheets to allow drainage.

8.5.7 Failure to provide FC cladding as per manufacturer's detail has further resulted in:

8.5.7.1 Efflorescence; and

8.5.7.2 Elevated moisture to base of wall.



C 50– South facade (Mitchell Avenue), cladding
Efflorescence.



U 304.12– Unit 304 bedroom 2, FC cladding
Cladding does not have a drainage provision.

8.5.8 The building work is therefore considered defective as identified in section 18B of the HBA, due to:

8.5.8.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;

8.5.8.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;

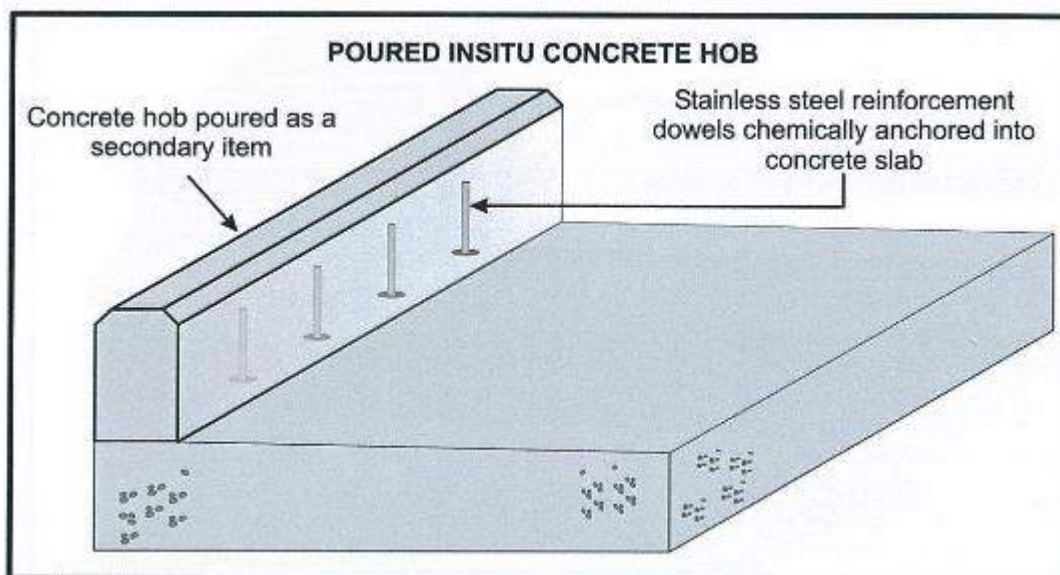
8.5.8.3 Works not being completed as per plans and specifications (Manufacturer spec) – section 18B(1)(a) of the HBA; and

8.5.8.4 Works not being fit for purpose – section 18B(1)(b) of the HBA.

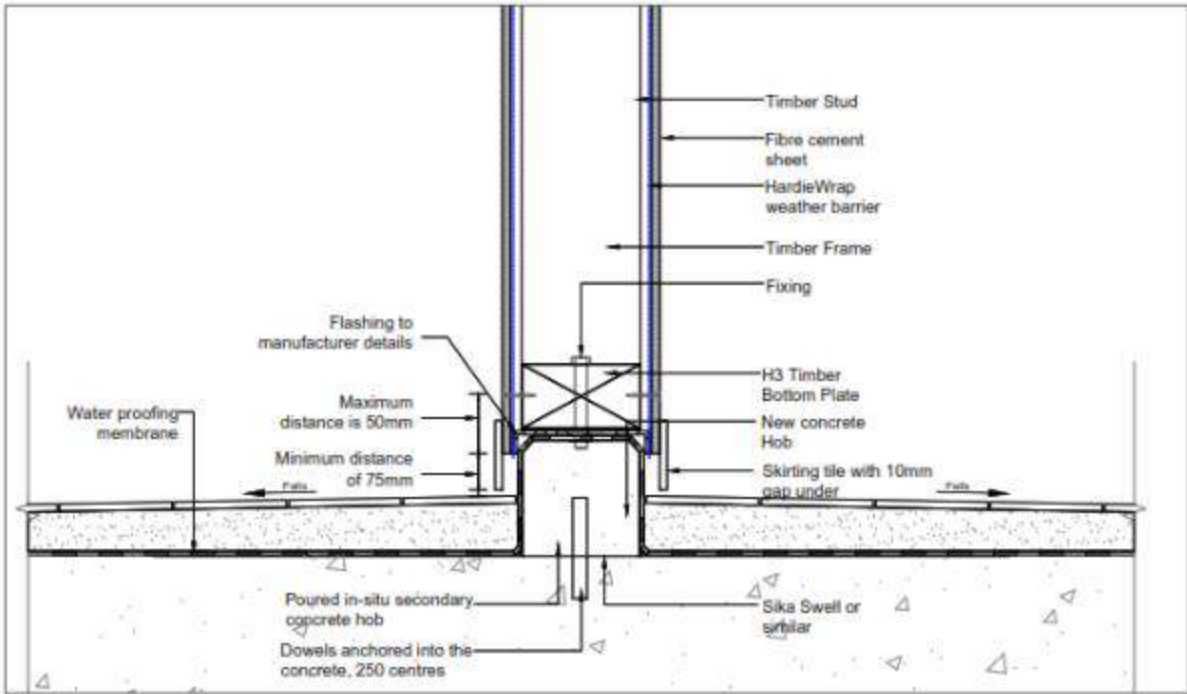
8.5.9 In failing to install the lightweight wall claddings in a manner compliant with the manufacturer's specifications, the effectiveness of the moisture protection provisions of the external walls has been reduced, as such an unsatisfactory standard of workmanship has been executed by the builder.

Remediation

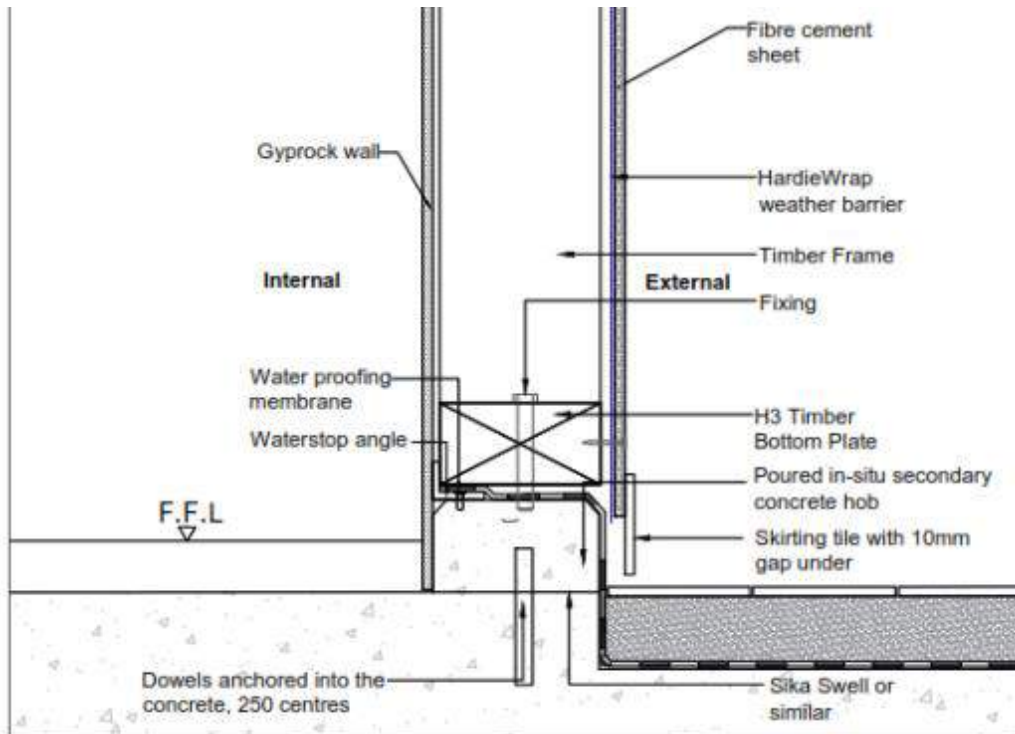
- 8.5.10 Cut back the FC sheet to a height of approximately 400mm;
- 8.5.11 Remove one row of tiles attain access and adequate adhesion of waterproofing;
- 8.5.12 Install temporary blocking and supports to timber framework;
- 8.5.13 Install concrete hob with dowels (as illustrated below, source: Figure 7B of Master Builders external waterproofing guide);



- 8.5.14 Waterproof hob with fillet;
- 8.5.15 Install flashing and new bottom plate;
- 8.5.16 Install new studs laminated to existing;
- 8.5.17 Remove temporary supports;
- 8.5.18 Repair waterproofing and apply membrane, ensure activation prior;
- 8.5.19 Install FC sheeting;
- 8.5.20 Repair cracking to existing render;
- 8.5.21 Install tiles and screed;
- 8.5.22 Install sealant to the perimeter of tiles;
- 8.5.23 Install skirting tiles with packers to allow for drainage to manufacturers specifications.
- 8.5.24 Following detail is for FC balcony dividing wall:



8.5.25 The following detail is for all other external walls where the FC is installed below the water level:



8.6 Hebel Installation

Defect (Recurring)

- 8.6.1 This defect is regarding Hebel facade being defective due to:
- 8.6.1.1 Insufficient provision for a cavity drain to Hebel walls at the balconies;
 - 8.6.1.2 High moisture to the base of Hebel walls;
 - 8.6.1.3 Insufficient pressure equalisation slots (weepholes) have been installed to the external cavity walls; and
 - 8.6.1.4 Installation does not comply with manufacturer requirements or plans and specifications.

Findings

- 8.6.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:



C 36 – West facade, Hebel cladding

Drip from the facade, as moisture has built up inside Hebel and escaping from control joint to Hebel and concrete junction.



C 41 – North facade, Hebel cladding

Missing pressure equalisation slots to Hebel.



C 10 – East facade, balcony cladding
 Hebel with no cavity drains (blue).



U 306.17 – Unit 306 main bedroom balcony, base of Hebel cladding
 Elevated moisture to the base of the wall.

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 4.A	Ground floor North entry	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Elevated moisture to the base of Hebel wall.
C 9. B	East facade	Unit balcony	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Waterproofing has been turned up the base of FC sheets and Hebel.
C 10.B	East facade	Cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Waterproofing turned up base of FC sheets.

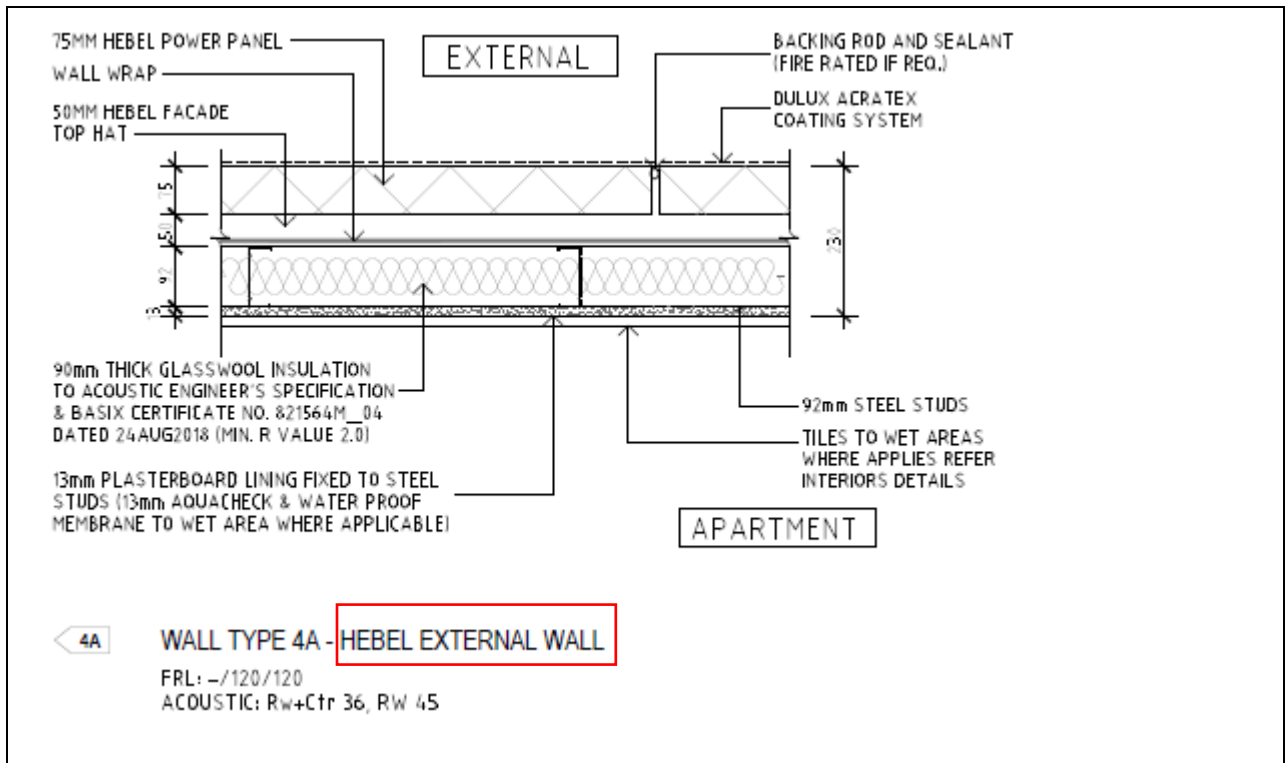
C 11.B	East facade	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Waterproofing has been turned up the base of Hebel.
C 16.A	East facade	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Weephole has been waterproofed over, no drainage for Hebel.
U G05.22	Balcony - south (Mitchell Avenue)	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Hebel wall missing pressure equalisation slots.
U G05.24	Balcony - south (Mitchell Avenue)	Hebel cladding (North wall)	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Elevated moisture to the base of Hebel wall.
U G05.27	Balcony - South (Mitchell Avenue)	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	No drainage provision to the facade.
U 304.18	Balcony	Floor waste	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	No cavity drain has been provided for Hebel cavity drain.
U 304.20.B	Balcony	Base of Hebel facade	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Elevated moisture to base of wall.
U 306.14.B	Main bedroom balcony	Base of Hebel	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Elevated moisture to the base of wall due to a failure to install a drainage provision.
U 306.15	Main bedroom balcony	Floor waste	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	No cavity drain provided for Hebel.

U 306.18	Main bedroom balcony	Base of Hebel wall	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Paint adhesion failure.
U 306.25	Balcony	Floor waste	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	No visible cavity drain for Hebel.

Reasoning

8.6.3 Aerated Autoclaved Concrete (AAC) cladding material was identified during inspection. As explained previously in this report, a large portion of the external walls have been constructed of Hebel or AAC.

8.6.4 Based on the **Architectural Plans** I have considered the cladding material is as specified, Hebel.



8.6.5 I was unable to find the manufacturer installation manual dated 2016 so I have assumed all the principles of installation have not changed and relied upon the 2015 Hebel *High Rise Facades, Design and Installation Guide*, from herewith referred to as “**Hebel Installation Guide**”.

8.6.6 Moisture to the base of the wall identifies that the:

8.6.6.1 Weepholes are not sufficient; and

8.6.6.2 Not working properly.



C 4 – Ground floor north entry, Hebel cladding
Elevated moisture to base of Hebel wall.



C 25 – East facade, Hebel cladding
Drainage provisions are partly covered throughout the facade.

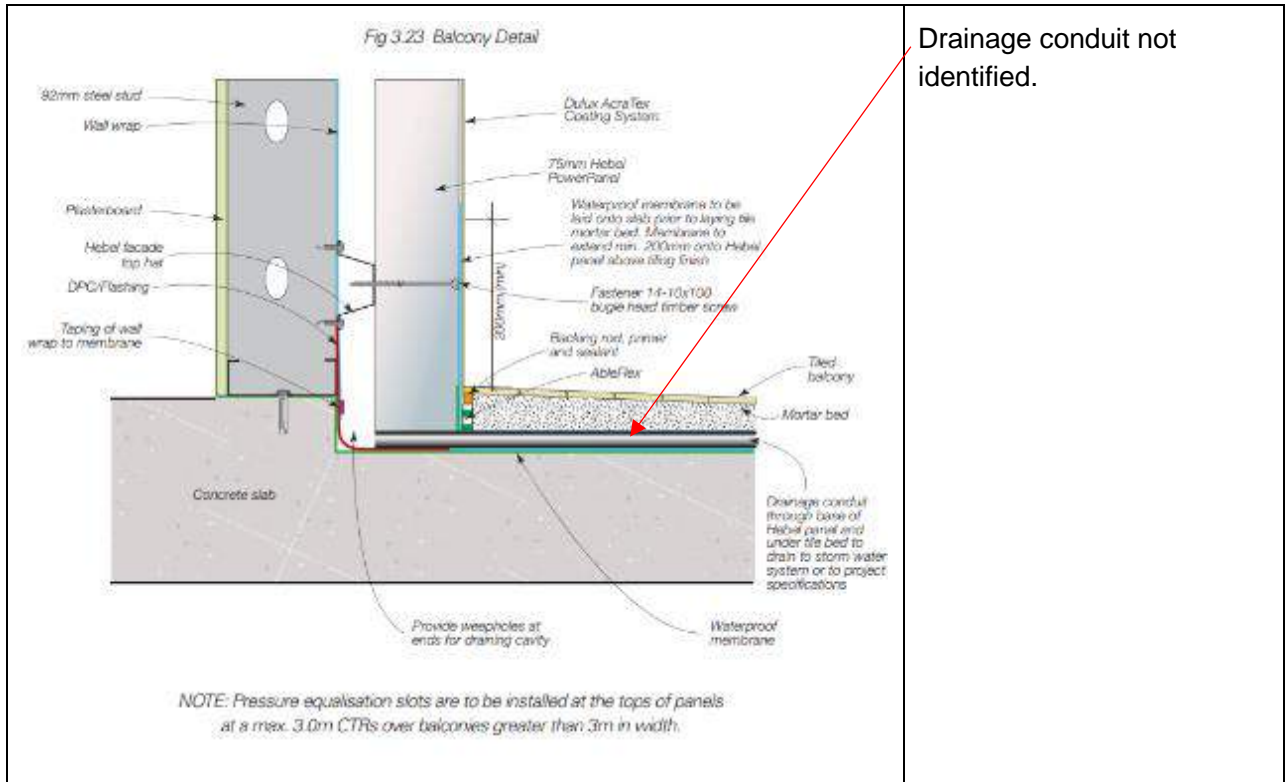
8.6.7 Moisture enters cavities from the following sources:

- 8.6.7.1 Cracks to the facade;
- 8.6.7.2 Window leaks;
- 8.6.7.3 Condensation; and
- 8.6.7.4 Possibly internal leaks.

External Facades to Balconies

- 8.6.8 Hebel systems for balcony facades requires a specific cavity drain where the Hebel is installed lower than the water level.
- 8.6.9 Following is the detail from the Hebel Installation Guide for such an installation, and I have identified the non-compliant areas of installation at the Property.

8.6.10 This installation detail, besides the non-compliances identified previously, is consistent with my findings on site.



8.6.11 The water retained inside the cavity is further causing corrosion of Hebel reinforcement and undue dampness in the identified locations, which is in breach of BCA FP 1.4.

FP1.4

A roof and *external wall* (including openings around *windows* and *doors*) must prevent the penetration of water that could cause—

(a) unhealthy or dangerous conditions, or loss of amenity for occupants; and

(b) undue dampness or deterioration of building elements.

8.6.12 All of the floor drains to the balconies were inspected and no cavity drain could be identified.

8.6.13 The moisture retained by the Hebel is causing the following resultant defects:

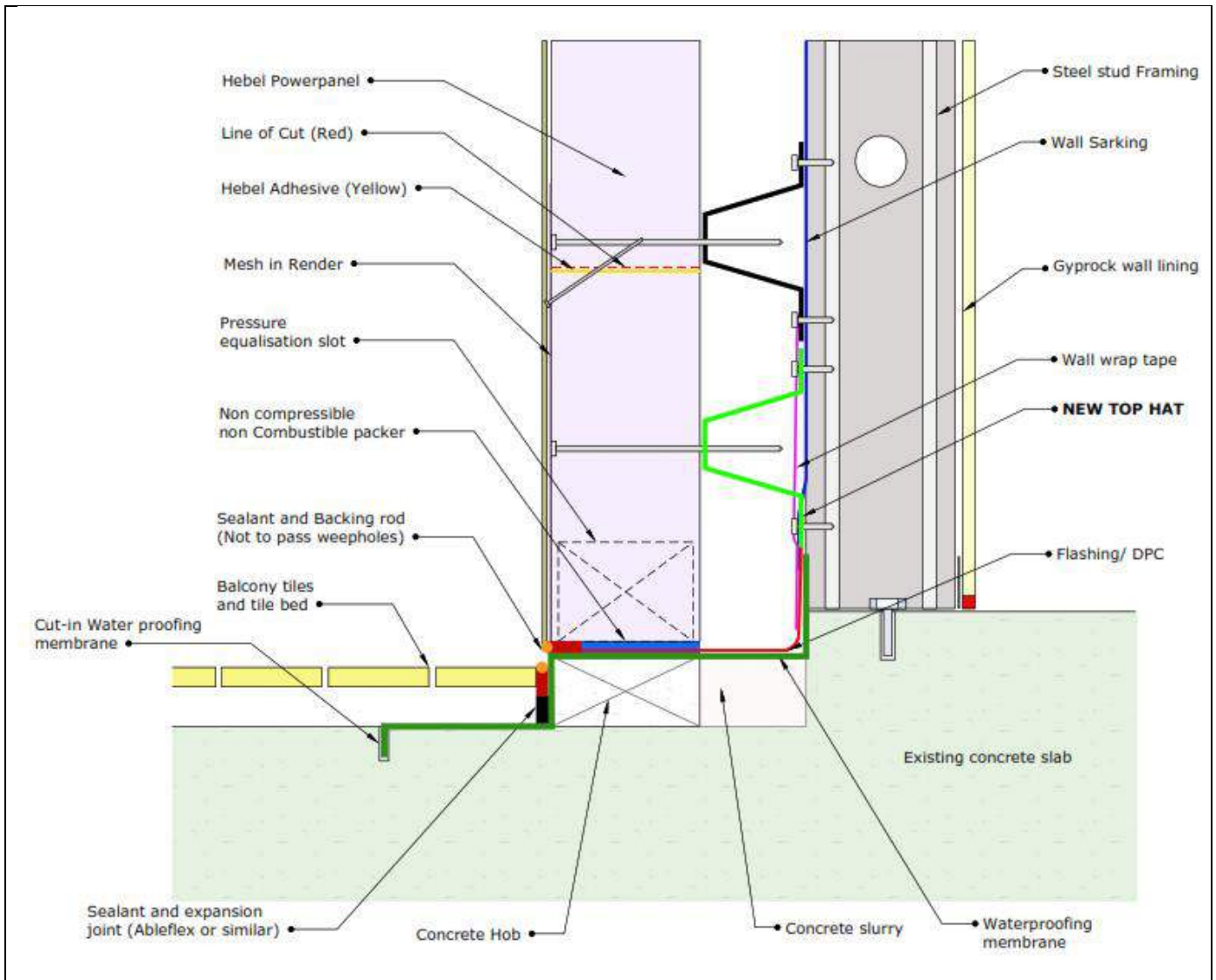
- 8.6.13.1 Paint and render adhesion;
- 8.6.13.2 Moisture to internal faces of wall;
- 8.6.13.3 Increased condensation as no air circulation; and
- 8.6.13.4 Increased moisture to tile screeds.

8.6.14 The building work is therefore considered defective as identified in section 18B of the HBA, due to:

- 8.6.14.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;
- 8.6.14.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;
- 8.6.14.3 Works have not been completed as per plans and specifications (BCA) – section 18B(1)(a) of the HBA; and
- 8.6.14.4 Works are not fit for purpose – section 18B(1)(b) of the HBA
- 8.6.14.5 In failing to install the Hebel facade as per manufacturer requirements, has resulted in moisture retention and the deterioration of building materials, as such an unsatisfactory standard of workmanship has been executed by the Builder.

Remediation – Hebel Cavity Drain

- 8.6.15 Protect work areas;
- 8.6.16 Remove the furniture to the balcony;
- 8.6.17 Carefully remove one row of tiles in front of the Hebel wall, including, the tile bed to a minimum width of 300mm from the face of wall.
- 8.6.18 If waterproofing membrane is identified, retain a minimum of 80mm (or as suggested by the manufacturer) of existing waterproofing membrane that is in good condition to reactivate and lap onto;
- 8.6.19 Cut Hebel below existing top hat;
- 8.6.20 Install temporary hoarding to control water ingress from weather;
- 8.6.21 Remove the existing sealants and other waterproofing materials from the Hebel wall;
- 8.6.22 Pour new concrete hob;
- 8.6.23 Install new strip of sheet waterproofing such as Ardex WPM 1000 as show in attached drawing;
- 8.6.24 Install new horizontal top hat for fixings of Hebel insert;
- 8.6.25 Apply Hebel Adhesive to the underside of wall and reinstall the piece of Hebel;
- 8.6.26 Apply fixings to the pieces of Hebel, both directions, alternating at 200mm centres;
- 8.6.27 Provide Pressure equalization slot to base of wall not exceeding max spacing of 3m use 'weepa' or similar proprietary inserts;
- 8.6.28 Weep holes inserts to sit hard onto slab and sealant to be applied either side of them, not in front;
- 8.6.29 Render wall with mesh to lap over Hebel joint;
- 8.6.30 Install sealant and backing rod;
- 8.6.31 Repaint wall to nearest architectural feature; and
- 8.6.32 Clean down and demobilise.



8.7 External Water Entering Habitable Areas

Defect (Recurring)

- 8.7.1 This defect relates to:
- 8.7.1.1 Moisture ingress to habitable areas through the facades.
- 8.7.2 This defect is due to:
- 8.7.2.1 FC cladding installed below water level;
 - 8.7.2.2 Hebel cladding installed below water level;
 - 8.7.2.3 No concrete hob provision as per Architectural Plans; and
 - 8.7.2.4 Poor waterproofing to the external wet area.

Findings

- 8.7.3 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:



U G05.20 bedroom 2, wall (south-east corner)

Moisture entering habitable spaces.



U G05.20 bedroom 2, wall (south-east corner)

Moisture entering habitable spaces.

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 2	Ground floor North entry	Entry door threshold	Breach of FP 1.1 and FP 1.2 of the BCA. Works not being completed as per plans and specifications (Architectural plans). Works are not fit for purpose.	Hebel external wall installed higher than internal habitable spaces.
C 6	Ground floor South entry	Hebel cladding	Breach of FP 1.1 and FP 1.2 of the BCA. Works not being completed as per plans and specifications (Architectural plans). Works are not fit for purpose.	Elevated moisture to the wall outside of G05. No drainage to façade. Concrete hob not installed as per plans.
U G05.16	Main bedroom	Carpet smooth edge rear to the balcony	Breach of FP 1.1 and FP 1.2 of the BCA. Works not being completed as per plans and specifications (Architectural plans). Works are not fit for purpose.	Elevated moisture to base of wall.
U G05.19	Bedroom 2	Wall (Southeast corner)	Breach of FP 1.1 and FP 1.2 of the BCA. Works not being completed as per plans and specifications (Architectural plans). Works are not fit for purpose.	Moisture entering habitable spaces.
U G05.20	Bedroom 2	Wall (Southeast corner)	Breach of FP 1.1 and FP 1.2 of the BCA. Works not being completed as per plans and specifications (Architectural plans). Works are not fit for purpose.	Moisture entering habitable spaces.
U G05.21	Bedroom 2 wall outside	Ground floor south entry	Breach of FP 1.1 and FP 1.2 of the BCA. Works not being completed as per plans and specifications (Architectural plans). Works are not fit for purpose.	External face of unit G05 wall. 500mm higher and elevated moisture to base of wall.

Reasoning

8.7.4 The external facades were first inspected on 3 of July 2020 when render works were under progress. It was identified that the FC cladding and Hebel cladding on the ground floor were installed below water level.



C 47 – South facade (Mitchell Avenue), Hebel cladding

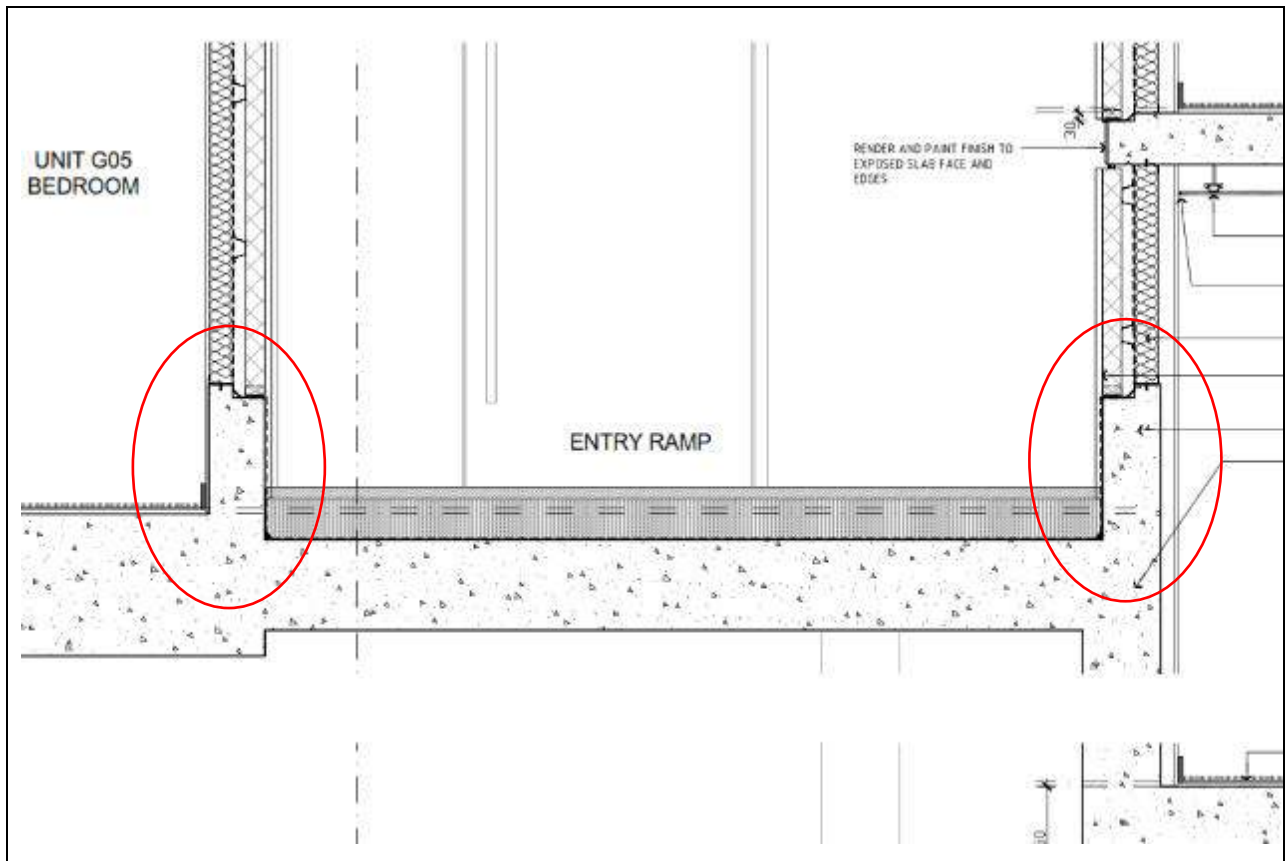
FC installed below water level.



C 44 – South facade (Mitchell Avenue), Hebel cladding

FC installed below ground level.

8.7.5 No concrete hobs were identified to base of wall as per **Architectural Plan**, and the entire waterproofing on ground floor is relying on waterproofing membrane:



- 8.7.6 Failure of waterproofing membrane or storm water entering inside wall cavity is due to poor drainage to the cladding (as mentioned in section 8.6 and 8.5 of this report), which can result in moisture ingress to units adjacent to these walls. This can be observed in Unit G05.
- 8.7.7 Inspections were limited to a few units. Unit G05 was the only unit inspected on the ground floor. The south-east corner of bedroom 2 in Unit G05 has moisture damage to the carpet smooth edge and elevated moisture readings to the base of the wall.
- 8.7.8 FP1.2 of the BCA requires that stormwater does not enter a building:

FP1.2

Surface water, resulting from a storm having an average recurrence interval of 100 years must not enter the building.

- 8.7.9 As can be seen from the identified moisture damage to Unit G05, this performance requirement of the BCA has been breached.
- 8.7.10 FP1.1 requires avoidance of the likelihood of damage to the building. Again, this has been breached as the carpet smooth edge is deteriorating:

FP1.1

Surface water, resulting from a storm having an average recurrence interval of 20 years and which is collected or concentrated by a building or sitework, must be disposed of in a way that avoids the likelihood of damage or nuisance to any other property.

- 8.7.11 The building work is therefore considered defective as identified in section 18B of the HBA, due to:
- 8.7.11.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;
 - 8.7.11.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;
 - 8.7.11.3 Works have not been completed as per plans and specifications (Architectural Plans) – section 18B(1)(a) of the HBA; and
 - 8.7.11.4 Works are not fit for purpose – section 18B(1)(b) of the HBA.
- 8.7.12 In failing to complete the works as stipulated by the Architectural Plan, the effectiveness of waterproofing provisions has been reduced, and has resulted in the loss of amenity to Unit G05. An unsatisfactory standard of workmanship has been executed by the Builder.

Remediation

- 8.7.13 The remediation work for this item will require the following works:
- 8.7.14 Install hoardings,
 - 8.7.15 Vacate units;
 - 8.7.16 Remove floor finishes inside affected rooms;

- 8.7.17 Remove adjacent concrete path approximately 1m wide;
- 8.7.18 Excavate down to expose base of slab of habitable space;
- 8.7.19 Remove internal plasterboard wall;
- 8.7.20 Remove or prop external wall;
- 8.7.21 Clean down slab;
- 8.7.22 Drill and chemset in dowels;
- 8.7.23 Form up concrete wall with setdown for external skin as per plans;
- 8.7.24 Pour concrete wall;
- 8.7.25 Clean down existing waterproofing;
- 8.7.26 Reactivate waterproofing;
- 8.7.27 Install bondbreaker to new wall and existing slab junction;
- 8.7.28 Install compliant waterproofing;
- 8.7.29 Reinstate walls with flashing to base and pressure equalisation slots;
- 8.7.30 Install plasterboards, set sand, and paint;
- 8.7.31 Render and paint external walls;
- 8.7.32 Reinstall internal floor finishes;
- 8.7.33 Retail external path with sealant to perimeter as per AS3958.1; and
- 8.7.34 Clean down work area and demobilise.

8.8 Balcony Overflow

Defect (Recurring)

- 8.8.1 This defect is regarding the overflow provision being defective as:
 - 8.8.1.1 Waterproofing has not been detailed into the overflow;
 - 8.8.1.2 Overflow is higher than the aluminium sliding door sill;
 - 8.8.1.3 Efflorescence is emitting from the overflow and spreading over the facade due to lack of waterproofing; and
 - 8.8.1.4 The overflow does not project behind the face of the facade.

Findings

- 8.8.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:



U 306.20 – Unit 306 main bed balcony, overflow

Overflow is higher than the balcony setdown.



U 304.16 – Unit 30 main balcony, overflow

No overflow provision.



C 156 – Building L, roof overflow

Waterproofing has not been turned into overflow.



C 161 – Building U, roof overflow

Waterproofing has not been turned into overflow.

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 147	Building L - Roof	Cladding	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	Waterproofing does not extend into overflow.
C 156	Building L - Roof	Overflow	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	Waterproofing does not turn into overflow.
C 161	Building U - Roof	Overflow	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	Waterproofing has not been turned into overflow.
C 198	Level U4 lobby	Balcony – overflow	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	No visible waterproof membrane to overflow.
U 304.16	Balcony	Floor tiles	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	No overflow provision.
U 306.20	Main bedroom balcony	Overflow	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	Overflow is higher than the balcony setdown.
U 306.23	balcony	Sliding door threshold	Breach of FP 1.3 of the BCA. Breach of AS 4654.2 and AS 3500.3. Works are not fit for purpose.	Weepholes in glazing are the same height as overflows.

Reasoning – Requirement of Overflows

8.8.3 Overflows are required for the disposal of stormwater in high water events.

8.8.4 The absence of a proper stormwater disposal system is in breach of BCA 2016 as per FP 1.3:

<p>FP1.3</p> <p>A drainage system for the disposal of surface water resulting from a storm having an average recurrence interval of—</p> <p>(a) 20 years must—</p> <p>(i) convey surface water to an appropriate outfall; and</p> <p>(ii) avoid surface water damaging the building; and</p> <p>(b) 100 years must avoid the entry of surface water into a building.</p>

8.8.5 AS3500 is a document adopted by the BCA:

Wiring system elements			
AS/NZS 3500 Part 3	2015	Plumbing and drainage Stormwater drainage	F1.1
AS 3600	2009	Concrete structures Amdt 1 Amdt 2	Spec A2.3, B1.4

8.8.6 AS3500.3 requires a stormwater disposal system to control overflow (see below excerpt):

<p>5.4 GENERAL METHOD</p> <p>5.4.1 Basis</p> <p>The general method may be used for all buildings.</p> <p>Surface drainage systems shall be designed to provide protection against potential losses <u>caused by any overflows</u>, including damage to buildings and their contents, and injury and nuisance to persons.</p>
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Reasoning – Requirement of Waterproofing to Overflows

- 8.8.7 Waterproofing into the overflow is not only a requirement of AS4654.2 but is also a means of controlling efflorescence to the facade. As the waterproofing is not installed into the overflow provision, the efflorescence can access around the overflow and leak down the façade, causing unsightly staining on site.
- 8.8.8 An overflow, which typically extends beyond the facade controls the location of the efflorescence drip.
- 8.8.9 Efflorescence to the facade is not only unsightly, but it is an indication of failed waterproofing membrane installation.
- 8.8.10 AS4654 is a document adopted by the BCA:

Wiring system elements			
AS 4654 Part 1 Part 2	2012 2012	Waterproofing membranes for external above-ground use Materials Design and installation	F1.4

8.8.11 Clause 2.11 of AS4654.2 relevantly provides that waterproofing is to be turned into an overflow and an overflow pipe is to project from the face of the facade.

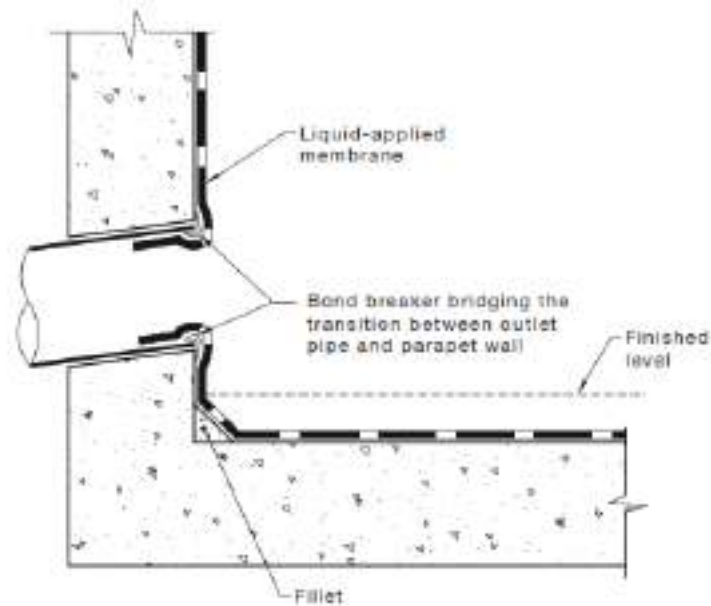
2.11 OVERFLOWS

The membrane shall be turned into the overflow, to prevent moisture from tracking behind the membrane.

The finished floor level shall not reduce the design flow of an outlet.

NOTES:

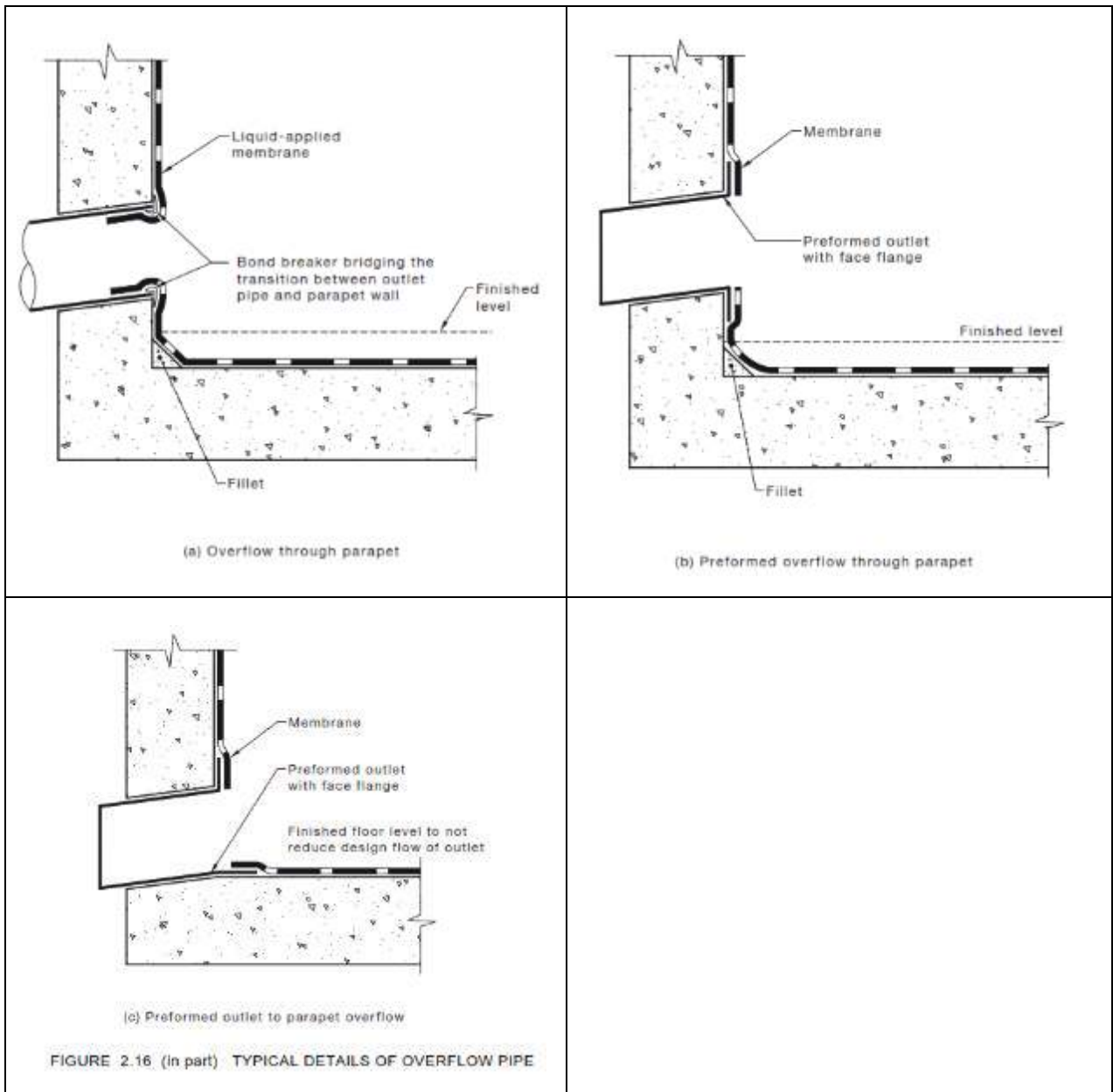
- 1 Typical examples of membranes turned into the overflow are shown in Figure 2.16.
- 2 Overflow facilities should direct water away from the building.



(a) Overflow through parapet

8.8.12 None of the inspected overflows had waterproofing detailed inside the overflow pipe or extended beyond the facade.

8.8.13 All of the overflow details provided in AS4654.2-2009 show the overflow pipe extending beyond the face of the facade (see extracts below):



8.8.14 Efflorescence is visually unpleasing and affects the aesthetics of the Property.

8.8.15 The hobs and walls installed without compliant overflows are a breach of AS3500 and are, therefore, defective.

8.8.16 The building work is therefore considered defective as identified in section 18B of the HBA, due to:

8.8.16.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;

8.8.16.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;

8.8.16.3 Works not being completed as per plans and specifications (BCA and AS) – section 18B(1)(a) of the HBA; and

8.8.16.4 Works not being fit for purpose – section 18B(1)(b) of the HBA.

8.8.17 In failing to complete the works as stipulated by AS4654 and the BCA, the effectiveness of waterproofing provisions has been reduced. An unsatisfactory standard of workmanship has been executed by the Builder.

Remediation

8.8.18 Install temporary safety measures;

8.8.19 Notch concrete hob to accommodate overflow from surface level and install overflow device so water does not stain as it drops down facade;

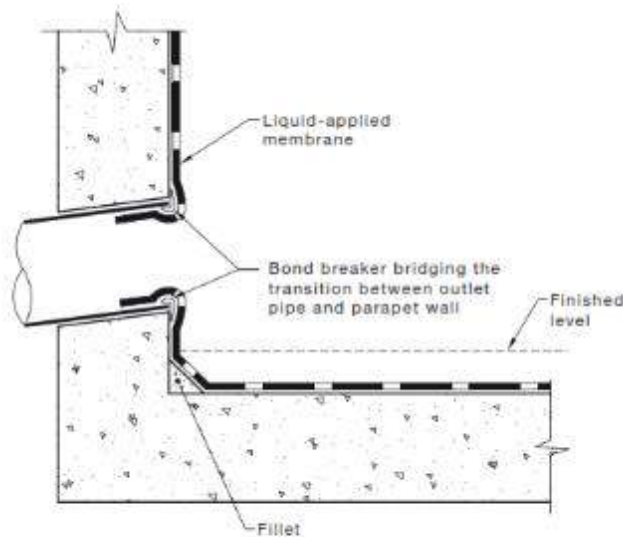
8.8.20 Remove two tiles locally;

8.8.21 Render overflow to hob to be a smooth substrates as required by AS4654.2;

8.8.22 Clean waterproof membrane;

8.8.23 Reactivate waterproofing;

8.8.24 Apply liquid membrane to manufacturers' specification and into overflow as required by AS4654.2;



(a) Overflow through parapet

8.8.25 Reinstall tiles;

8.8.26 Install sealant at time perimeter;

8.8.27 Attain safe access externally; and

8.8.28 Repaint around overflows.

8.9 Efflorescence

Defect (Recurring)

8.9.1 This item includes the defects regarding efflorescence to building elements, including:

8.9.1.1 Efflorescence to the balcony slab edges; and

8.9.1.2 Efflorescence to tile grout joints.

Findings

8.9.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:



C 50 – South facade (Mitchell Avenue),
balcony edge slab

Efflorescence.



C 50 – South facade (Mitchell Avenue),
cladding

Efflorescence.



C 27 – East facade, balcony slab edge

Efflorescence.



C 306.12 – Unit 306 main bedroom balcony, floor tiles

Efflorescence.

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 27	East facade	Balcony slab edge	Breach of defect guides.	Efflorescence.
C 28	East facade	Balcony slab edge	Breach of defect guides.	Efflorescence
C 51	South facade (Mitchell Avenue)	Balcony slab edge	Breach of defect guides.	Efflorescence in this location is the result of failed waterproof membrane upturn.
U 306.12.C	Main bedroom balcony	Floor tiles	Breach of defect guides.	Efflorescence.

Reasoning

- 8.9.3 Efflorescence is a white powdery deposit that generally occurs along the grout lines between the tiles and other locations where water is migrating through building elements.
- 8.9.4 Efflorescence occurs when moisture moves through elements of a building, thereby drawing out the salts and other minerals contained in it. As a result of this, water will be absorbed into the tile bed (underneath the tiles).

- 8.9.5 Efflorescence is caused in tiling systems when soluble salts (which are derived from the sand within the tile bed) and other dispersible materials come to the surface of the tiling system. The efflorescence occurs along the path of the grout because this is the point at which the water from within the tile bed evaporates, leaving behind the salts in its wake.
- 8.9.6 Efflorescence, when identified in the external walls of balconies, is confirmation of a failed or inadequate waterproof membrane upturn.
- 8.9.7 The *NSW Guide to Standards and Tolerance 2007* states:

13.08 Calcification and efflorescence associated with decks and balconies

Calcification or efflorescence caused by water coming from a deck or balcony that occurs on walls below or beside the deck or balcony; or that appears in the mortar joints of the deck or balcony tiling, is a defect. Activities of others, such as owners watering plants, may also contribute to the efflorescence, which may not be attributed to the work of the builder.

- 8.9.8 If the works had complied with AS4654.2, then water would not have been able to escape from the tile screed through to the building facade, thus causing this defect.
- 8.9.9 Sulphate attack has damaged the external cementitious render. Sulphate is present in Portland cements (tile screed) and can react with other chemicals present; the formation is an expansive reaction and causes cracking, bulging, or debonding in the render.
- 8.9.10 The chemical composition of efflorescence is sulphate salts. The chemical reaction is expedited when the render is permanent or intermittently saturated. Therefore, failure to resolve the cause of water ingress can lead to sulphate attack which will, in turn, cause failure of the render and paint systems.
- 8.9.11 The building work is therefore considered defective as identified in section 18B of the HBA, due to:
- 8.9.11.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;
 - 8.9.11.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA; and
 - 8.9.11.3 Works not being fit for purpose – section 18B(1)(b) of the HBA.
- 8.9.12 In failing to complete the works as stipulated by AS4654.2 with consideration for moisture control, this has resulted in efflorescence, as such an unsatisfactory standard of workmanship has been executed by the Builder.

Remediation – Façade

- 8.9.13 Gain safe access to all facades;
- 8.9.14 Clean off efflorescence with a specialised mixture of diluted vinegar or acidic cleaner;
- 8.9.15 Do not high-pressure wash;
- 8.9.16 Scrub and scrape efflorescence off with nylon or similar brush;
- 8.9.17 Wipe clean;

- 8.9.18 Lightly rise area;
- 8.9.19 Allow to dry;
- 8.9.20 Remove scaffold;
- 8.9.21 Clean down and demobilise.

Remediation – Tiles

- 8.9.22 Clean off efflorescence with a specialised mixture of diluted vinegar or acidic cleaner;
- 8.9.23 If unsure, test cleaner on the tile to ensure cleaning product does not affect tile finish;
- 8.9.24 Do not high-pressure wash;
- 8.9.25 Scrub and scrape efflorescence off with nylon or similar brush;
- 8.9.26 Wipe clean;
- 8.9.27 Lightly rise area;
- 8.9.28 Allow to dry;
- 8.9.29 Remove grout;
- 8.9.30 Clean grout joints;
- 8.9.31 Allow tile bed to adequately dry;
- 8.9.32 Reinstall moisture-resistant, flexible grout; and
- 8.9.33 Clean down the work area.



8.10 Air Conditioning Condenser Installation

Defect (Recurring)

- 8.10.1 This defect relates to the balcony air conditioning condensers not mechanically fixed into position.

Findings

- 8.10.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:

	
<p><u>U G05.28 – Unit 28 balcony, AC condenser</u></p> <p>AC condenser is not fixed in position.</p>	<p><u>U 304.17 – Unit 304 balcony, AC condenser</u></p> <p>AC condenser has not been mechanically fixed into position.</p>

Defect Summary

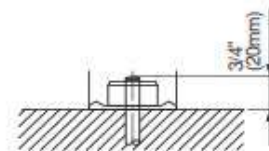
DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
U G05.28	Balcony - south (Mitchell Avenue)	Air conditioning condenser	Works not being completed to the manufacturer's specifications. Works are not fit for purpose.	AC condenser is not fixed in position.
U 304.17	Balcony	Air conditioning condenser	Works not being completed to the manufacturer's specifications. Works are not fit for purpose.	AC condenser has not been mechanically fixed into position.

Reasoning

- 8.10.3 I have not identified the product, but I have assumed it to be "Daikin" air conditioning condensers.
- 8.10.4 Air conditioning condensers are required to be fixed in place securely to the foundation surface.
- 8.10.5 Noting that most manufacturers provide similar details, the Daikin Installation Guide requires the following fixings be installed to outdoor condensers:

Precautions on Installation

- Check the strength and level of the installation surface so that the unit does not cause any operating vibrations or noise after installation.
- Fix the unit in place securely using foundation bolts, as in the figure. (Prepare 4 sets of 5/16 inch (M8) or 3/8 inch (M10) foundation bolts, nuts and washers; all separately available.)
- It is best to screw in the foundation bolts until their ends are 3/4 inch (20mm) from the foundation surface.



- 8.10.6 Typically, all manufacturers require the condenser to be fixed into position as they are installed with rigid copper pipework. If the unit is moved it could crack the copper causing the gasses to escape.
- 8.10.7 The building work is therefore considered defective as identified in section 18B of the HBA, due to:
- 8.10.7.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;
 - 8.10.7.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;
 - 8.10.7.3 Works not being completed to the manufacturer's specifications – section 18B(1)(a) of the HBA; and
 - 8.10.7.4 Works not being fit for purpose – section 18B(1)(b) of the HBA.
- 8.10.8 In failing to complete the works as stipulated in the manufacturer's specifications (Installation Guide), the condensers are prone to pipework damage. An unsatisfactory standard of workmanship has been executed by the Builder.

Remediation

- 8.10.9 Mark fixing locations;
- 8.10.10 Degas AC;
- 8.10.11 Remove AC condenser;
- 8.10.12 Remove one tile locally to each fixing;
- 8.10.13 Install stainless steel threaded rod;
- 8.10.14 Clean waterproofing around threaded rod;
- 8.10.15 Detail base of rod with fillet or bondbreaker to manufacturer's specifications;
- 8.10.16 Reactivate waterproofing;
- 8.10.17 Install waterproofing around rod to manufacturer's specifications and AS4654.2;
- 8.10.18 Reinstall condenser and bolt down;
- 8.10.19 Re-gas AC;
- 8.10.20 Test and commission AC; and

8.10.21 Clean down and demobilise.

8.11 External Area Waterproofing

Defect (Recurring)

8.11.1 The waterproofing installation on external wet areas was identified as defective in numerous areas of the Property and for several reasons including:

- 8.11.1.1 Pinholes to the membrane;
- 8.11.1.2 No compliant fillet or bond breaker has been installed;
- 8.11.1.3 Adhesion failure to membrane;
- 8.11.1.4 Membrane installed on over plug;
- 8.11.1.5 Waterproofing not turned down into floor waste;
- 8.11.1.6 Waterproofing not turned up services pipes; and
- 8.11.1.7 Waterproofing has been installed over a rough substrate.

Findings

8.11.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:



C 149- Building L roof, floor waste



C 164 - Building U roof, concrete hob

Waterproofing not turned down into floor waste	Rough substrate not suitable for waterproofing.
 <p><u>C 166 - Building U roof, pipe penetration</u></p> <p>Waterproofing has not been turned up services pipe as required by AS4654.2.</p>	 <p><u>C 152 – Building L roof, concrete hob</u></p> <p>Rough substrate not suitable for waterproofing.</p>

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 30.B	West facade	Units balcony	Breach of AS 4654.2. Works are not fit for purpose.	The exposed edge of tile screed will result in efflorescence. The membrane has not been turned down the edge as required by AS4654.2
C 145	Building L - roof	Anchor bolt	Breach of AS 4654.2. Works are not fit for purpose.	Waterproofing is failing. Adhesion failure between layer.
C 146	Building L - roof	Anchor bolt	Breach of AS 4654.2. Works are not fit for purpose.	Waterproofing is failing. Adhesion failure between layer.
C 148.A	Building L - roof	Floor waste	Breach of AS 4654.2. Works are not fit for purpose.	Waterproofing not turned down into floor waste.
C 148.B	Building L - roof	Floor waste	Breach of AS 4654.2. Works are not fit for purpose.	Puddle flange has not been provided.
C 148.C	Building L - roof	Floor waste	Breach of AS 4654.2.	Drain cover not installed as required by AS4654.2.

			Works are not fit for purpose.	
C 149.A	Building L - roof	Floor waste	Breach of AS 4654.2. Works are not fit for purpose.	Waterproofing not turned down into floor waste.
C 149.B	Building L - roof	Floor waste	Breach of AS 4654.2. Works are not fit for purpose.	Puddle flange has not been provided.
C 149.C	Building L - roof	Floor waste	Breach of AS 4654.2. Works are not fit for purpose.	Drain cover not installed as required by AS4654.2.
C 150.A	Building L - roof	Floor waste	Breach of AS 4654.2. Works are not fit for purpose.	Waterproofing not turned down into floor waste.
C 150.B	Building L - roof	Floor waste	Breach of AS 4654.2. Works are not fit for purpose.	Puddle flange has not been provided.
C 150.C	Building L - roof	Floor waste	Breach of AS 4654.2. Works are not fit for purpose.	Drain cover not installed as required by AS4654.2.
C 152.A	Building L - roof	Concrete hob	Breach of AS 4654.2. Works are not fit for purpose.	Waterproofing not turned down into floor waste.
C 152.B	Building L - roof	Concrete hob	Breach of AS 4654.2. Works are not fit for purpose.	Puddle flange has not been provided.
C 152.C	Building L - roof	Concrete hob	Breach of AS 4654.2. Works are not fit for purpose.	Drain cover not installed as required by AS4654.2.
C 153.A	Building L - roof	Floor waste	Breach of AS 4654.2. Works are not fit for purpose.	Waterproofing not turned down into floor waste.
C 153.B	Building L - roof	Floor waste	Breach of AS 4654.2. Works are not fit for purpose.	Puddle flange has not been provided.

C 153.C	Building L - roof	Floor waste	Breach of AS 4654.2. Works are not fit for purpose.	Drain cover not installed as required by AS4654.2.
C 154.A	Building L - roof	Floor waste	Breach of AS 4654.2. Works are not fit for purpose.	Waterproofing not turned down into floor waste.
C 154.B	Building L - roof	Floor waste	Breach of AS 4654.2. Works are not fit for purpose.	Puddle flange has not been provided.
C 154.C	Building L - roof	Floor waste	Breach of AS 4654.2. Works are not fit for purpose.	Drain cover not installed as required by AS4654.2.
C 155.A	Building L - roof	Floor waste	Breach of AS 4654.2. Works are not fit for purpose.	Puddle flange has not been provided.
C 155.B	Building L - roof	Floor waste	Breach of AS 4654.2. Works are not fit for purpose.	Drain cover not installed as required by AS4654.2.
C 157.A	Building L - roof	Overflow	Breach of AS 4654.2. Works are not fit for purpose.	Puddle flange has not been provided.
C 157.B	Building L - roof	Overflow	Breach of AS 4654.2. Works are not fit for purpose.	Drain cover not installed as required by AS4654.2.
C 157.C	Building L - roof	Overflow	Breach of AS 4654.2. Works are not fit for purpose.	Waterproofing does not turn into overflow.
C 158	Building L - roof	Floor waste	Breach of AS 4654.2. Works are not fit for purpose.	Removal of the plug will result in tearing of the waterproof membrane.
C 166	Building U - roof	Pipe penetration	Breach of AS 4654.2. Works are not fit for purpose.	Waterproofing has not been turned up services pipe as required by AS4654.2.

C 168	Building U - roof	Open drain	Breach of AS 4654.2. Works are not fit for purpose.	Open drains throughout the rooftop. Waterproofing not turned down into floor waste.
C 173.A	Building U - roof	Floor waste (spot 1)	Breach of AS 4654.2. Works are not fit for purpose.	Waterproofing not turned down into floor waste.
C 173.B	Building U - roof	Floor waste (spot 1)	Breach of AS 4654.2. Works are not fit for purpose.	Puddle flange has not been provided.
C 173.C	Building U - roof	Floor waste (spot 1)	Breach of AS 4654.2. Works are not fit for purpose.	Drain cover not installed as required by AS4654.2.
C 174.A	Building U - roof	Floor waste (spot 2)	Breach of AS 4654.2. Works are not fit for purpose.	Waterproofing not turned down into floor waste.
C 174.B	Building U - roof	Floor waste (spot 2)	Breach of AS 4654.2. Works are not fit for purpose.	Puddle flange has not been provided.
C 174.C	Building U - roof	Floor waste (spot 2)	Breach of AS 4654.2. Works are not fit for purpose.	Drain cover not installed as required by AS4654.2.
U G05.26	Balcony - south (Mitchell Avenue)	Floor waste	Breach of AS 4654.2. Works are not fit for purpose.	No visible waterproofing has been turned down the floor waste.

Reasoning

8.11.3 External waterproofing is governed by Australian Standard AS4654 . Clause 2.8 of AS4654 provides that the waterproofing must be terminated so that water is:

8.11.3.1 unable to bypass the top edge of the waterproofing (on the external wall); and

8.11.3.2 either enter the Property, track underneath the waterproofing, or a combination of both.

8.11.4 As identified previously, AS4654 is a document adopted by the BCA.

8.11.5 The vertical termination height of the waterproofing is determined under AS4564 by taking into account factors such as the wind rating and the height of the building. The minimum finished height of the

upward membrane termination above the finish floor level must ensure sufficient protection from water ingress (refer to Section 2.8.1.1 and Appendix A of AS4654).

- 8.11.6 The waterproofing on the roof area and balconies at the Property does not extend above the concrete hob, and therefore, does not comply with AS4654.
- 8.11.7 Failure to provide waterproofing upturn has further resulted in:
 - 8.11.7.1 Efflorescence (see section 8.9)
- 8.11.8 Waterproofing upturn failure allows moisture to enter the negative side of the render and tiles, which in time causes:
 - 8.11.8.1 Render adhesion failure; and
 - 8.11.8.2 Tile adhesion failure.
- 8.11.9 AS4654 requires:

2.8 TERMINATION OF MEMBRANES

2.8.1 Upward terminations

2.8.1.1 Height

Where the membrane termination is to prevent water entry, the finished height of the membrane above the finished surface level shall be sufficient to prevent water, including wind driven, flowing over the top of the membrane.

NOTE: For information on termination heights, see Appendix A.

APPENDIX A
 VERTICAL UPWARD TERMINATION HEIGHTS
 (Informative)

This Appendix applies to the determination of vertical upward termination of height as given in Table A1.

The vertical heights may be determined by either of the following methods:

- (a) Vertical upward termination to be at a height above finished level not less than specified in Table A1.
- (b) Where stormwater retention is designed into the waterproofed area, the height of the upturn to be above the overflow level.

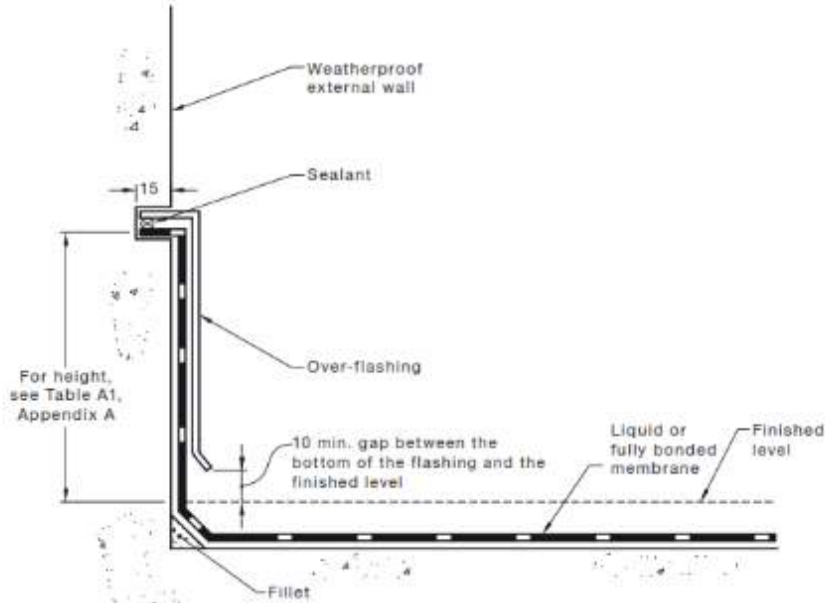
TABLE A1
VERTICAL UPWARD TERMINATION HEIGHTS

Wind class Regions A and B (non-cyclonic) AS 4055	Wind class Regions C and D (cyclonic) AS 4055	Ultimate limit state wind speed ($V_{h,w}$) AS/NZS 1170.2	Termination height mm
N1	—	34	40
N2	—	40	50
N3	C1	50	70
N4	C2	61	100
N5	C3	74	150
N6	C4	86	180

8.11.10 Regarding compliant waterproof membrane upturn and termination, AS4654.2 requires:

AS 4654.2—2012

12

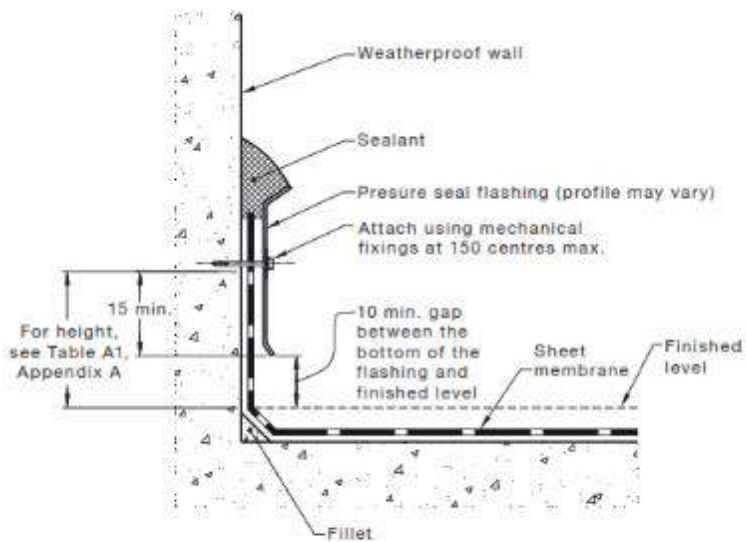


NOTE: For falls, see Clause 2.5.2.

DIMENSIONS IN MILLIMETRES

13

AS 4654.2—2012

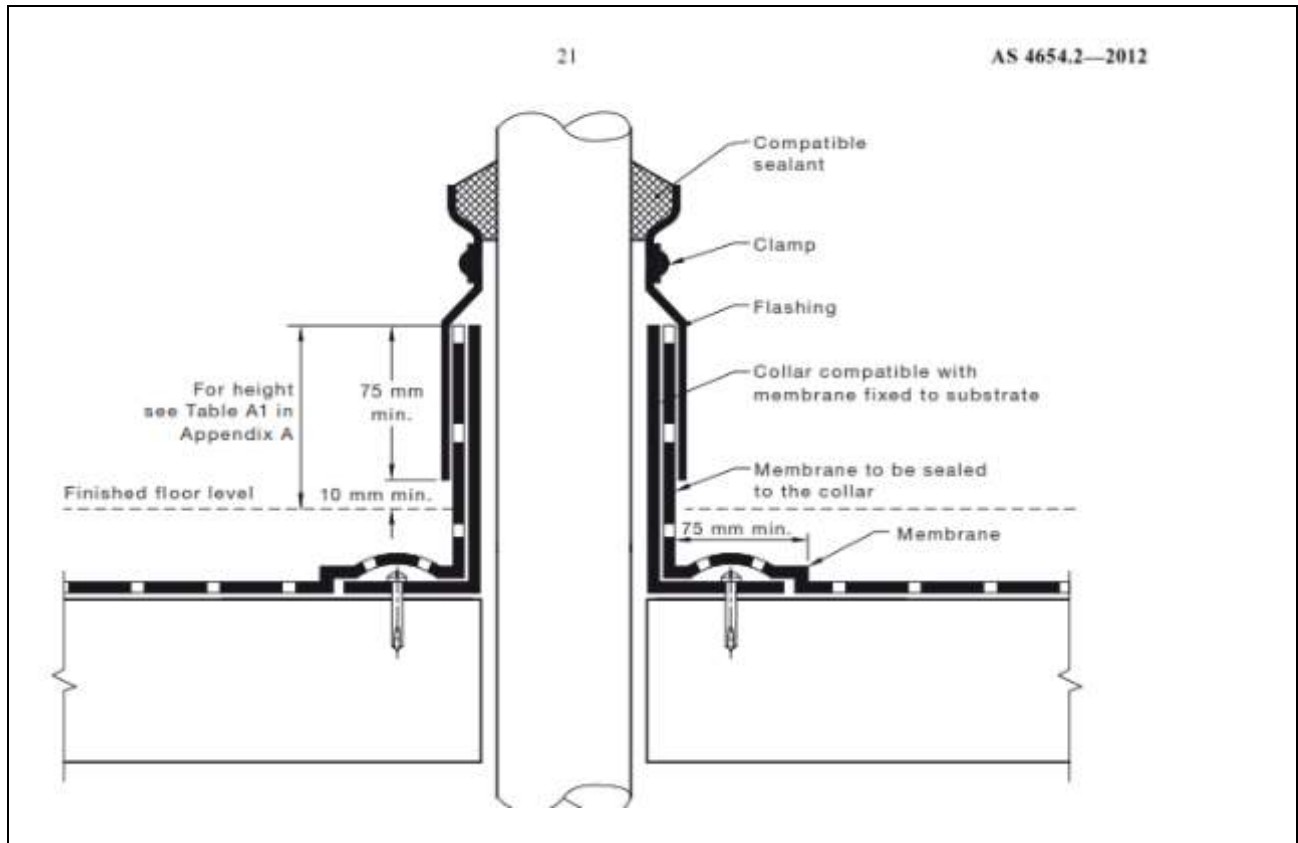


NOTE: For falls, see Clause 2.5.2.

DIMENSIONS IN MILLIMETRES

FIGURE 2.3 TYPICAL VERTICAL UPWARD TERMINATION—DETAIL OF PRESSURE SEAL FOR SHEET MEMBRANE

8.11.11 For services through waterproofing, the following detail is to be adhered to:



8.11.12 AS4654.2 does not allow waterproofing to the rough substrate:

2.5.3 Types of substrates

2.5.3.1 Fully bonded or liquid-applied

The preparation of the substrate for fully bonded or liquid-applied membranes shall result in the surface of the substrate being smooth, without protrusions, voids or formwork distortions, and clean, dry, and free from dust and contamination.

8.11.13 Membrane applied over the rough surface can tear and fail under pressure. It is susceptible to damage and installation of membrane over the rough substrate is in breach of AS 4654.2.

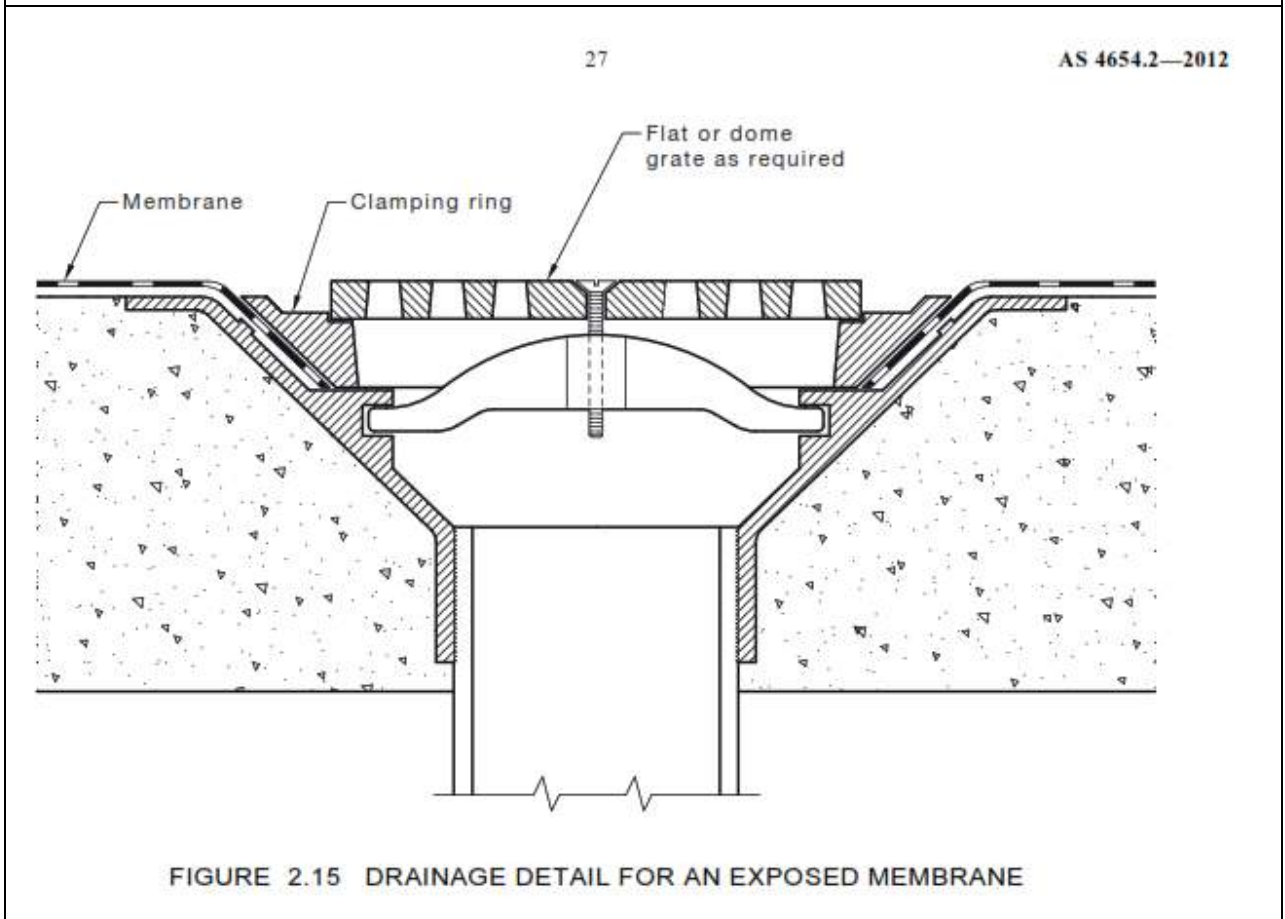
8.11.14 The waterproofing to the rooftops has not been turned down into the drains, as required by AS4654.2, or does it have a grate or drain (see details below):

2.10 DRAINS

The membrane shall be connected to the stormwater drainage system through a turn down of the membrane into the inlet of the system as shown in Figure 2.15.

An alternative connection may have a flange to which the membrane is clamped or attached (see Note 1).

To minimize blockage from debris, the drain shall have a sump, inlet pit, grate or cage.



8.11.15 The building work is therefore considered defective as identified in section 18B of the HBA, due to:

8.11.15.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;

8.11.15.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;

8.11.15.3 Works are not fit for purpose – section 18B(1)(b) of the HBA.

8.11.16 In failing to complete the works as stipulated by the BCA and AS4654.2, the effectiveness of waterproofing provisions has been reduced, as such an unsatisfactory standard of workmanship has been executed by the Builder.

Remediation - Rooftops

8.11.17 As the rooftops have defects identified throughout, this area will require complete re-waterproofing.

8.11.18 As such, the remediation scope of works for the rooftops is as follows:

8.11.18.1 Remove existing waterproofing;

8.11.18.2 Grind and prepare slab;

8.11.18.3 Fill low spots;

8.11.18.4 If reinforcement has corroded:

8.11.18.4.1. Expose the reinforcement;

8.11.18.4.2. Grind back the corrosion;

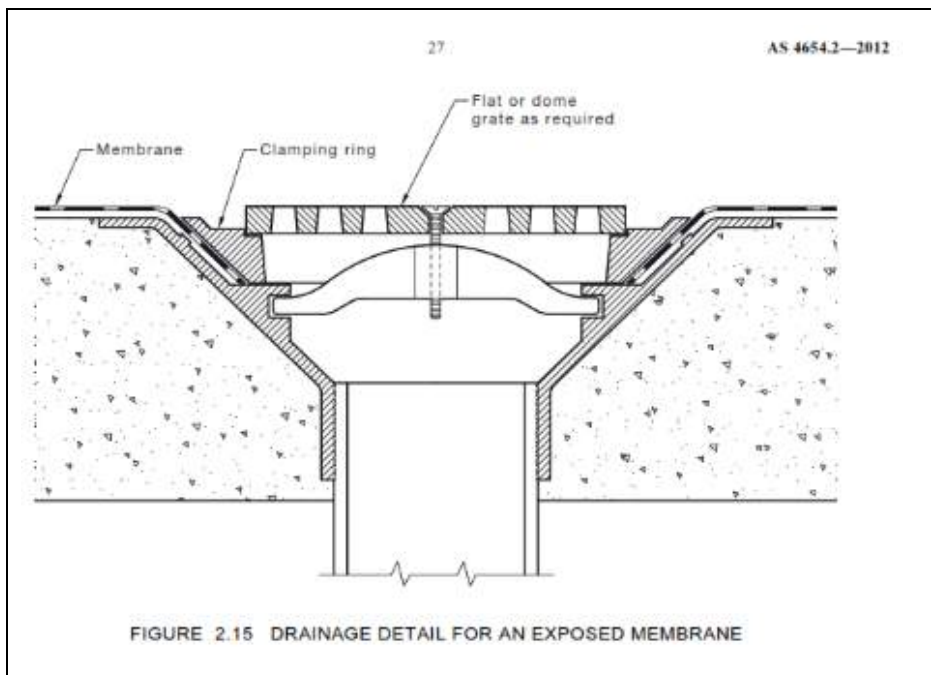
8.11.18.4.3. Treat corroded elements and prepare for priming;

8.11.18.4.4. Prime the steel; and

8.11.18.4.5. Paint with rust-inhibiting paint;

8.11.18.5 Top all low spots and fill all voids and cracks to manufacturer's waterproofing specifications;

8.11.18.6 Install drains to AS4654.2 detail below:



8.11.18.7 Install waterproofing to manufacturer's specification; and

8.11.18.8 Clean down and demobilise.

8.12 Waterproofing to Internal Wet Area

Defect (Recurring)

8.12.1 This defect relates to the lack of adherence to the waterproof membrane in the floor waste drains.

Findings

8.12.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:



Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
U G05.8	Bathroom	Floor waste	Breach of F 1.7 of the BCA. Breach of AS 3740. Works are not fit for purpose.	Adhesion failure of waterproofing in the drain.

Reasoning

8.12.3 Waterproofing membrane to internal wet area floor wastes was identified as:

8.12.3.1 Adhesion failure; and

8.12.3.2 Insufficient termination to drainage flange.

8.12.4 The BCA adopts AS3740 as the standard for waterproofing to internal wet area in buildings, as per excerpt below:

AS 3740	2010	AMGT 1 Waterproofing of domestic wet areas Amdt 1	F1.7
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8.12.5 BCA section F 1.7 requires waterproofing to wet area must comply with AS3740.

<p>F1.7 Waterproofing of wet areas in buildings</p> <p><i>SA F1.7(a)</i></p> <p>(a) In a Class 2 and 3 building and a Class 4 part of a building, building elements in <i>wet areas</i> must—</p> <ul style="list-style-type: none">(i) be <i>water resistant</i> or <i>waterproof</i> in accordance with Table F1.7; and(ii) comply with AS 3740.

8.12.6 AS3740 waterproofing termination to floor waste and the relevant clause has been extracted below:

3.14.1 Termination to a drainage flange

For membrane drainage connections in other floors, any one of the following shall apply:

- (a) A drainage flange shall be installed with the waterproofing membrane terminated at/in the drainage flange to provide a waterproof connection.

NOTES:

- 1 For typical membrane termination at drainage outlet, see Figure 3.8.
 - 2 Drainage flanges may be set into the floor or fixed to the top surface of the floor substrate or tile bed.
- (b) Where a prefabricated shower tray is used, provision shall be made to drain the tile bed and provide a waterproof connection to the drain.

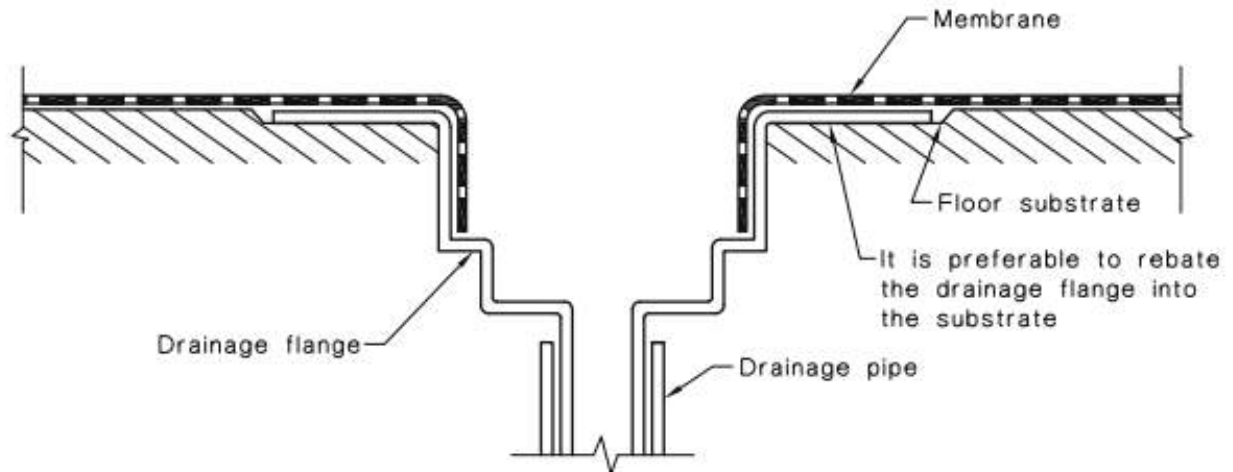


FIGURE 3.8 TYPICAL MEMBRANE TERMINATION AT DRAINAGE FLANGE

3.14.2 Floor waste

The floor waste shall be of sufficient height to suit the thickness of the tile and tile bed at the outlet position. The drainage flange/floor waste shall drain at the membrane level.

8.12.7 Adhesion failure and insufficient membrane termination is in breach of AS3740, which is a further breach of F 1.7 of BCA.

8.12.8 The building work is therefore considered defective as identified in section 18B of the HBA, due to:

8.12.8.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;

8.12.8.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;

8.12.8.3 Works have not been completed as per plans and specifications (BCA and AS) – section 18B(1)(a) of the HBA; and

8.12.8.4 Works are not fit for purpose – section 18B(1)(b) of the HBA.

8.12.9 In failing to complete the works as stipulated by the BCA and AS3740, the effectiveness of the waterproofing provisions has been reduced, as such an unsatisfactory standard of workmanship has been executed by the Builder.

Remediation

8.12.10 Remove failed downturned membrane;

8.12.11 Clean drain;

8.12.12 Reactivate membrane; and

8.12.13 Reapply membrane.

8.13 Drummy Tiles

Defect (Recurring)

8.13.1 This defect relates to external tiling to the balconies being defective as:

8.13.1.1 Tiles are drummy; and

8.13.1.2 Control and expansion joints do not extend into the tile screed.

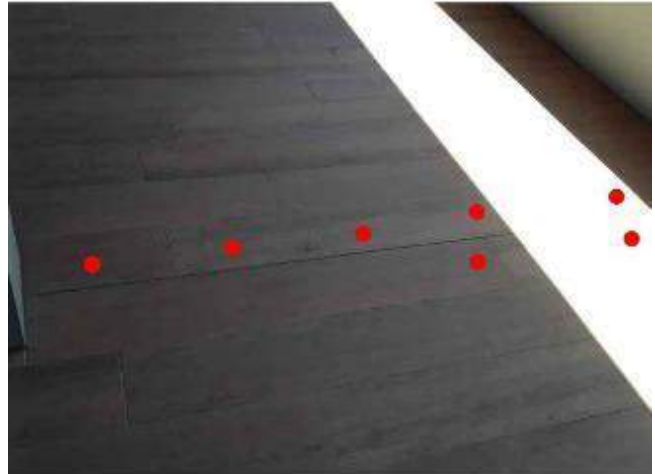
Findings

8.13.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:



U 304.19 – Unit 304 balcony, control joints

Expansion joint does not continue through the tile screed.



U 304.23 – Unit 304 balcony, floor tiles

Drummy tiles.

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
U 304.19	Balcony	Control joints	Breach of AS 3958.1 Works are not fit for purpose.	Expansion joint does not continue through the tile screed.
U 304.23	Balcony	Floor tiles	Breach of AS 3958.1 Works are not fit for purpose.	Drummy tiles.

Reasoning

8.13.3 The tile delamination is typically caused by:

8.13.3.1 Insufficient falls, resulting in moisture ingress into cement tile screed;

8.13.3.2 Insufficient glue coverage, as suggested by AS3958.1;

8.13.3.3 No stormwater drainage, which is charging the tile bed with moisture; and

8.13.3.4 No intermittent or perimeter expansion joints in the tiling.

- 8.13.4 AS3958 is referenced as a guide only, as it is not a document referenced by the BCA/NCC. As such, it is relied upon for suggestive requirements only.
- 8.13.5 Ceramic tiles are susceptible to thermal expansion and contraction. Movement joints should be filled with permanently deformable materials and sealed with materials that are equally deformable and resistant to chemical and physical attack, as well as water-tightness where required (see section 5.4.5 of AS3958.1 as per the excerpt in section 8.13.11 below).
- 8.13.6 Peaking tiles are a defect that is caused by a lack of perimeter and intermediate expansion joints within the tiling system to allow for any tile growth. The reason expansion joints are required in tiling systems is to accommodate the anticipated movement of the building materials (concrete shrinks whereas tiles generally expand).
- 8.13.7 Tiles are defective if they are cracked, pitted, chipped, scratched, loose, or drummy on completion. If more than 5% of the tiled area becomes cracked, pitted, chipped, loose or drummy within 2 years of completion, they are defective (paragraph 11.05 of OFT 2007 Defect Guide).

11.05 Cracked, pitted, chipped, scratched, loose or drummy tiles

Tiles are defective if they are cracked, pitted, chipped, scratched, loose or drummy on completion.

After handover, tiles are defective when caused by the builder's workmanship, they become cracked, pitted, chipped, loose or drummy and such in more than five per cent of the tiled area within 24 months from completion.

- 8.13.8 There is no expansion allowance, as suggested by AS3958.1. Therefore, tiles are subjected to increased forces and will result in either peaking or delaminating tiles.

5.4.5 Movement joints

5.4.5.1 General

Movement joints are discontinuities in the tiled surface, filled with permanently deformable material, which are intended to perform the following functions:

- (a) Separation of the tiled surface from fixed elements such as columns and walls.
- (b) Subdivision of large areas of tiled surface into smaller sections to compensate for induced strain from various causes.
- (c) To interrupt the tiled surface to match discontinuities in the substrate such as construction joints and movement joints.

It is essential that movement joints be carried through the tile and the bedding.

Movement joints should be filled with permanently deformable materials, such as polystyrene, and sealed with materials that are equally deformable as well as resistant to chemical and physical attack.

All joints should be rectangular in section with firm, straight, smooth edges, free from cavities and irregularities. When forming the joints it is useful to insert a fillet to ensure smooth clean faces to the joints, and remove it only when the cladding is sufficiently firm. Care should be taken to avoid grout or other materials becoming trapped in the joint cavity, as these will prevent the proper application of the back-up and sealant.

Unless otherwise specified, movement joints should be constructed as shown in Figures 5.1 and 5.2 and as detailed in Clauses 5.4.5.2 and 5.4.5.3. Where it is essential that the watertightness of the movement joint and tiling system be maintained, specific guidance should be sought with regards to width to depth ratio, priming and special nature of sealant materials.

8.13.9 AS3958.1 relevantly provides that perimeter movement joints are required to be installed where the tiling abuts restraining surfaces, such as perimeter walls, columns, curbs, steps, and paths. In areas less than 10m², perimeter joints may be deleted if it is considered that hygiene, waterproofing, or aesthetics will be adversely affected. However, tiles should finish a minimum of 3mm from the restraining surfaces.

8.13.10 AS4654.2, which is a document adopted by the BCA, requires that external tiling has compliant falls, and this is further supported by AS3958.1.

2.5.2 Falls

Falls in finishes shall ensure water drains to the drainage outlet. Water shall not be retained on the finished surface with the exception of residual water remaining due to surface tension.

The fall shall be in the structural substrate, or formed by a screed over the structural substrate.

NOTE: Falls for surface drainage should be no flatter than 1 in 100.

8.13.11 Section 5.4.5.1 of AS3958.1 for tiling requires the intermediate expansion joints to continue through the tile bed:

5.4.5 Movement joints

5.4.5.1 General

Movement joints are discontinuities in the tiled surface, filled with permanently deformable material, which are intended to perform the following functions:

- (a) Separation of the tiled surface from fixed elements such as columns and walls.
- (b) Subdivision of large areas of tiled surface into smaller sections to compensate for induced strain from various causes.
- (c) To interrupt the tiled surface to match discontinuities in the substrate such as construction joints and movement joints.

It is essential that movement joints be carried through the tile and the bedding.

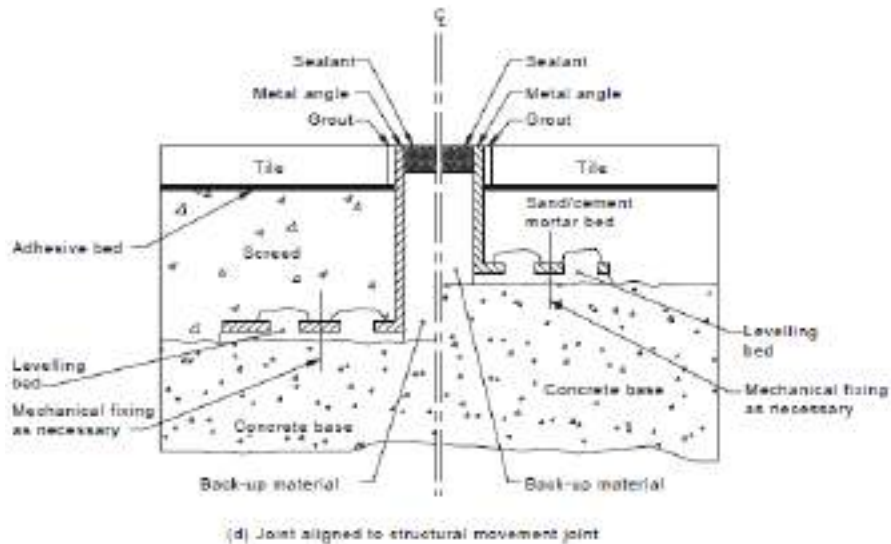


FIGURE 5.1 (in part) TYPICAL MOVEMENT JOINT SYSTEMS FOR FLOORS

8.13.12 AS3958.1 states an excess of 20% of tiles sounding drummy over a 'long term' would be considered suspect. As these tiles have become drummy over a short period, this indicates that the workmanship is defective. See individual photographs of areas identified to have drummy tiles.

8.13.13 AS3958.1 states external tiles and tiles to wet areas should have 90% adhesive coverage in order to prevent differential movement and adhesion failure. An excerpt of AS3958's relevant section is below:

5.6.4.2 Coverage

Adhesive should be applied to the substrate and then spread using a notched trowel of an appropriate size and shape. Optimum coverage requires pressing of tiles into the adhesive bed and moving them perpendicular to the direction of the adhesive notches.

The contact coverage of the adhesive should be maximized. Minimum contact coverage should be:

Internal residential walls	65%
Residential floors	80%
Commercial and industrial walls	80%
Commercial and industrial floors	90%
Wet areas	90%
Swimming pools	90%
External walls	90%
Exterior floors, decks and roofs	90%

NOTE: While increased contact coverage will assist in resisting differential movement, and coverages lower than those recommended might facilitate tiling system failures, a failure to achieve the recommended coverage should not automatically be seen as the primary cause of differential movement failures.

8.13.14 Tiles that are spot fixed in a wet area are defective as they allow water to enter a concealed space, which is a breach of FP1.7 of the BCA:

FP1.7

To protect the structure of the building and to maintain the amenity of the occupants, water must be prevented from penetrating—

(a) behind fittings and linings; and

(b) into concealed spaces,

of *sanitary compartments*, bathrooms, laundries and the like.

8.13.15 Tiles consistently drummy adjacent to a fixed building element or at a control joint is distinguished as a separate defect as there has been an insufficient allowance for expansion (works have not been completed with due care and skill).

8.13.16 Drummy tiles demonstrate a poor adhesion to the substrate and permit water to sit beneath the tiles in a concealed space. This is a breach of FP1.7 of the BCA (as identified above) and in time causes the adhesion of adjacent tiles to fail and become drummy, which is the deterioration of a building element and therefore a breach of FP1.4 of the BCA.

8.13.17 See the following extract of AS3958.1, which suggests that an excess of 20% of tiles sounding drummy is a defect.

5.4.7 Bonding

In some installations small hollow-sounding areas may be found. Although they do indicate incomplete bond they are not necessarily indicative of imminent failure; however, cases where more than 20% of the tile sounds hollow when tapped ('drummy') would have to be considered suspect over the long term. Needless to say this ratio would need to be varied depending on—

- (a) whether the tile is fixed to the floor or wall; and
- (b) the anticipated form and amount of traffic.

8.13.18 Efflorescence is a resultant issue, which is recognised as a defect by the Defect Guide. The cause of the efflorescence is either, or a combination, of the below:

- 8.13.18.1 Failed waterproof membrane;
- 8.13.18.2 Failed expansion joints; and/or
- 8.13.18.3 Insufficient falls to tiling.

8.13.19 The building work is therefore considered defective as identified in section 18B of the HBA due to:

- 8.13.19.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;
- 8.13.19.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;
- 8.13.19.3 Works are not fit for purpose – Section 18B(1)(b) of the HBA.

8.13.20 In failing to complete the works as stipulated by the BCA and AS3958 this tile installation is failing, resulting in the deterioration of building elements. As such, an unsatisfactory standard of workmanship has been executed by the Builder.

Remediation

- 8.13.21 Protect adjacent areas;
- 8.13.22 Remove all drummy tiles;
- 8.13.23 Remove tiles each side of required control, as identified in AS3958.1;
- 8.13.24 Cut tile screed – depth of cut controlled to not affect waterproof membrane under screed;
- 8.13.25 Install sealant to screed;
- 8.13.26 Lay new tiles with minimum 90% glue coverage to rear of tiles, as stipulated by AS3958.1;
- 8.13.27 New tiles to be installed with sufficient falls;
- 8.13.28 Install sealant to tile control joint surface;
- 8.13.29 Grout tiles with flexible additive;
- 8.13.30 Clean down work area and demobilise.



8.14 Minimum Ceiling Height

Defect (Recurring)

8.14.1 This defect relates to areas with a ceiling height less than the 2100mm minimum.

Findings

8.14.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:

	
<p><u>C.80 – Basement 2, north-east fire stair landing</u> Ceiling height 1.95 metres.</p>	<p><u>C.8 – Common area, toilet ceiling</u> Ceiling height is 2.08 metres.</p>

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 8	Common area	Toilet ceiling	Breach of F 3.1 of the BCA. Works are not fit for purpose.	Ceiling height is 2.08m.
C 80	Basement 2	North-east fire stair to ground level	Breach of F 3.1 of the BCA. Works are not fit for purpose.	Ceiling height 1.95 m.

Reasoning

8.14.3 Minimum ceiling height requirement for class 2 building is limited to 2.1m, which is for non-habitable rooms as per section F3.1 of BCA:

F3.1 Height of rooms and other spaces

The height of rooms and other spaces must be not less than—

(a) in a Class 2 or 3 building or Class 4 part of a building—

- (i) a kitchen, laundry, or the like — 2.1 m; and
- (ii) a corridor, passageway or the like — 2.1 m; and
- (iii) a *habitable room* excluding a kitchen — 2.4 m; and
- (iv) in a room or space with a sloping ceiling or projections below the ceiling line within—
 - (A) a *habitable room*—
 - (aa) in an attic — a height of not less than 2.2 m for not less than two-thirds of the *floor area* of the room or space; and
 - (bb) in other rooms — a height of not less than 2.4 m for not less than two-thirds of the *floor area* of the room or space; and
 - (B) a *non-habitable room* — a height of not less than 2.1 m for not less than two-thirds of the *floor area* of the room or space; and

when calculating the *floor area* of a room or space, any part that has a ceiling height of less than 1.5 m is not included; and

8.14.4 The building work is therefore considered defective as identified in section 18B of the HBA, due to:

8.14.4.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;

8.14.4.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;

8.14.4.3 Works have not been completed as per plans and specifications (BCA) – section 18B(1)(a) of the HBA; and

8.14.4.4 Works are not fit for purpose – section 18B(1)(b) of the HBA.

8.14.5 In failing to complete the works as stipulated by the BCA, insufficient head clearance height has been created. As such, an unsatisfactory standard of workmanship has been executed by the Builder.

Remediation

8.14.6 Architect to be engaged to provide design solution to obtain compliant head height.

8.15 Non-Slip Stair Tread

Defect (Recurring)

8.15.1 This defect relates to the staircases being defective as:

8.15.1.1 No non-slip finish has been provided; and

8.15.1.2 No nosing has been provided.

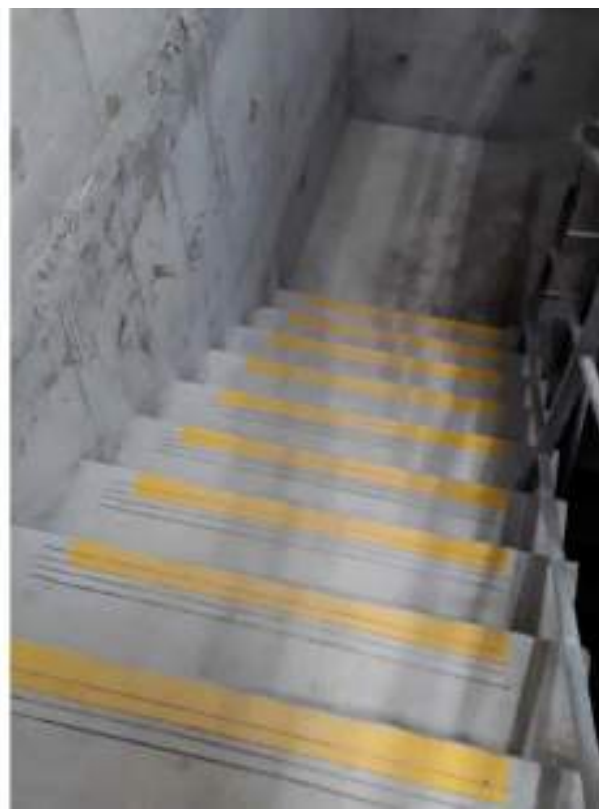
Findings

8.15.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:



C 52 – Basement 1, south-east fire stair

Missing nosing or compliant non-slip finish to steps.



C 74 – Basement 1, north-east fire stair

No nosing or compliant non-slip finish.

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 52	Basement 1	South-east fire stair to ground level	Breach of D 2.13 and D P 2 of the BCA. Breach of AS 1428.1. Works are not fit for purpose.	Missing nosing or compliant non-slip finish to steps.
C 57	Basement 1	South-east fire stair to ground level	Breach of D 2.13 and D P 2 of the BCA. Breach of AS 1428.1. Works are not fit for purpose.	No nosing or non-slip finish.
C 60	Basement 1	South-east fire stair to ground level	Breach of D 2.13 and D P 2 of the BCA. Breach of AS 1428.1. Works are not fit for purpose.	No nosing or non-slip finish.
C 69	Basement 1	North-east fire stair to ground level	Breach of D 2.13 and D P 2 of the BCA. Breach of AS 1428.1. Works are not fit for purpose.	No nosing or non-slip finish.
C 70	Basement 1	North-east fire stair to ground level	Breach of D 2.13 and D P 2 of the BCA. Breach of AS 1428.1. Works are not fit for purpose.	No nosing or compliant non-slip finish.
C 74	Basement 1	North-east fire stair to ground level	Breach of D 2.13 and D P 2 of the BCA. Breach of AS 1428.1. Works are not fit for purpose.	No nosing or compliant non-slip finish.
C 185	Fire stair south of the lift	Staircase nosing	Breach of D 2.13 and D P 2 of the BCA. Breach of AS 1428.1. Works are not fit for purpose.	No nosing or compliant non-slip finish.
C 208.B	Fire stair level U4	Handrail	Breach of D 2.13 and D P 2 of the BCA. Breach of AS 1428.1. Works are not fit for purpose.	No nosing or compliant non-slip finish.
C 208.C	Fire stair level U4	Handrail	Breach of D 2.13 and D P 2 of the BCA. Breach of AS 1428.1. Works are not fit for purpose.	Details of paint to be provided to identify if non-compliant and tested to AS4586.
C 209.A	Fire stair level U4	Stair nosing	Breach of D 2.13 and D P 2 of the BCA. Breach of AS 1428.1. Works are not fit for purpose.	No nosing or compliant non-slip finish.
C 209.B	Fire stair level U4	Stair nosing	Breach of D 2.13 and D P 2 of the BCA.	Details of paint to be provided to identify if non-

			Breach of AS 1428.1. Works are not fit for purpose.	compliant and tested to AS4586.
U G05.23	Balcony - south (Mitchell Avenue)	Stairs	Breach of D 2.13 and D P 2 of the BCA. Breach of AS 1428.1. Works are not fit for purpose.	No nosing or non-slip finish to stairs.

Reasoning

8.15.3 Section DP2(c) of the BCA requires all stairways to have a slip-resistant finish:

DP2

So that people can move safely to and within a building, it must have—

- (a) walking surfaces with safe gradients; and
- (b) any doors installed to avoid the risk of occupants—
 - (i) having their egress impeded; or
 - (ii) being trapped in the building; and
- (c) any stairways and ramps with—
 - (i) slip-resistant walking surfaces on—
 - (A) ramps; and
 - (B) stairway treads or near the edge of the nosing; and
 - (ii) suitable handrails where necessary to assist and provide stability to people using the stairway or ramp; and
 - (iii) suitable landings to avoid undue fatigue; and
 - (iv) landings where a door opens from or onto the stairway or ramp so that the door does not create an obstruction; and
 - (v) in the case of a stairway, suitable safe passage in relation to the nature, volume and frequency of likely usage.

8.15.4 Section D2.13(a)(v)(B) of the BCA requires all staircases to be installed with non-slip nosings that exceed the requirements of Table D2.14 when tested in accordance with AS4586:

D2.13 Goings and risers

- (a) A stairway must have—
 - (i) not more than 18 and not less than 2 risers in each flight; and

- (ii) going (G), riser (R) and quantity (2R + G) in accordance with Table D2.13, except as permitted by (b) and (c); and
- (iii) constant goings and risers throughout each flight, except as permitted by (b) and (c), and the dimensions of goings (G) and risers (R) in accordance with (a)(ii) are considered constant if the variation between—
 - (A) adjacent risers, or between adjacent goings, is no greater than 5 mm; and
 - (B) the largest and smallest riser within a flight, or the largest and smallest going within a flight, does not exceed 10 mm; and
- (iv) risers which do not have any openings that would allow a 125 mm sphere to pass through between the treads; and
- (v) treads which have—
 - (A) a surface with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586; or
 - (B) a nosing strip with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586; and
- (vi) treads of solid construction (not mesh or other perforated material) if the stairway is more than 10 m high or connects more than 3 storeys; and
- (vii) in a Class 9b building, not more than 36 risers in consecutive flights without a change in direction of at least 30°; and
- (viii) in the case of a required stairway, no winders in lieu of a landing.

Table D2.14 SLIP-RESISTANCE CLASSIFICATION

Application	Surface conditions	
	Dry	Wet
Ramp steeper than 1:14	P4 or R11	P5 or R12
Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10	P4 or R11
Tread or landing surface	P3 or R10	P4 or R11
Nosing or landing edge strip	P3	P4

- 8.15.5 As such, any stairway to this Property without compliant non-slip nosing installed has not met the requirements of the BCA.
- 8.15.6 The building work is therefore considered defective as identified in section 18B of the HBA, due to:
- 8.15.6.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;
 - 8.15.6.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;
 - 8.15.6.3 Works have not been completed as per plans and specifications (BCA and AS) – section 18B(1)(a) of the HBA; and
 - 8.15.6.4 Works are not fit for purpose – section 18B(1)(b) of the HBA.
- 8.15.7 In failing to complete the works as stipulated by the BCA, the effectiveness of the safety and access provisions for the occupants has been reduced. As such, an unsatisfactory standard of workmanship has been executed by the Builder.

Remediation

- 8.15.8 Supply and install proprietary nosing to all internal staircases; and
- 8.15.9 Grit tape, while commercially available, is not fit for purpose as they do not last for the statutory warranty periods identified in the HBA.

8.16 Tops of Doors Not Sealed

Defect (Recurring)

- 8.16.1 This defect is regarding:
 - 8.16.1.1 The tops of doors are neither sealed nor painted; and
 - 8.16.1.2 The bottoms of doors are neither sealed nor painted.

Findings

- 8.16.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:



U G05.18 – Unit G05, bedroom 2 top of the door



U 304.6 – Unit 304, bathroom top of the door

Top of the door has not been sealed.	Top of the door has not been sealed.
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Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
U G05.17	Main bedroom	Top of door	Breach of AS 1909. Works are not fit for purpose.	Top of the door has not been sealed.
U G05.18	Bedroom 2	Top of door	Breach of AS 1909. Works are not fit for purpose.	Top of the door has not been sealed.
U 304.6	Bathroom	Top of door	Breach of AS 1909. Works are not fit for purpose.	Top of the door has not been sealed.
U 304.10	Ensuite	Top of door	Breach of AS 1909. Works are not fit for purpose.	Top of the door has not been sealed.
U 306.4	Laundry	Top of door	Breach of AS 1909. Works are not fit for purpose.	Top of the door has not been sealed.
U 306.6	Bathroom	Top of door	Breach of AS 1909. Works are not fit for purpose.	Top of the door has not been sealed.
U 306.9	Ensuite	Top of door	Breach of AS 1909. Works are not fit for purpose.	Top of the door has not been sealed.
U 306.21	Bedroom 2	Top of door	Breach of AS 1909. Works are not fit for purpose.	Top of the door has not been sealed.
U 306.22	Bedroom 3	Top of door	Breach of AS 1909. Works are not fit for purpose.	Top of the door has not been sealed.

Reasoning

- 8.16.3 It is common for door manufacturers to stipulate that all sides of a door (including top and bottom) are required to be “sealed” prior to installation. However, we were unable to determine the door manufacturer during our inspections.
- 8.16.4 Notwithstanding the above, clause 9.2 of AS1909:1984 — *Installation of Timber Door* expressly provides that “...prior to hanging, the entire surface of the door, including top and bottom edges, shall be sealed with at least two coats of sealer compatible with the final finish of the door”.
- 8.16.5 AS1909 is not a document referenced by the BCA but is relied upon as a general industry guide:

9 FINISHING.

9.1 Condition of surfaces. All surfaces shall be clean and dry. Any marks shall be removed prior to the application of any coating.

9.2 Application of finish. As finishes vary greatly in sensitivity to the conditions under which they are applied, the manufacturer's instructions shall be fully observed.

After fitting is completed and prior to hanging, the entire surface of the door, including top and bottom edges, shall be sealed with at least two coats of sealer compatible with the final finish of the door.

Both faces of the door shall receive a type and thickness of coating which will ensure balanced protection against moisture changes.

- 8.16.6 In the absence of a "sealer", the doors are vulnerable to bowing and other types of deformities associated with moisture ingress (including vapour emanating from fluctuating humidity levels).
- 8.16.7 This is more prevalent in wet areas where steam and humidity from showers are present.
- 8.16.8 The building work is therefore considered defective as identified in section 18B of the HBA, due to:
- 8.16.8.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;
 - 8.16.8.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;
 - 8.16.8.3 Works not being fit for purpose – section 18B(1)(b) of the HBA.
- 8.16.9 In failing to complete the works as stipulated by AS1909, the effectiveness of protection provisions has been reduced, which is likely to result in the long-term deterioration of building elements. As such, an unsatisfactory standard of workmanship has been executed by the builder.

Remediation

- 8.16.10 Remove doors;
- 8.16.11 Sand exposed edges;
- 8.16.12 Seal top and underside; and
- 8.16.13 Rehang doors.

8.17 Inconsistent Stair Risers Heights

Defect (Recurring)

8.17.1 This defect is regarding the inconsistent riser heights to staircases.

Findings

8.17.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:

	
<p><u>C.61 – Basement 1, south-east fire stairs</u></p> <p>First riser is 179mm.</p>	<p><u>C.61 – Basement 1, south-east fire stairs</u></p> <p>Second riser is 185mm.</p>

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 61	Basement 1	South-east fire stairs to ground level	Breach of D 2.13 of the BCA. Works are not fit for purpose.	First riser is 179mm, adjacent riser is 185mm. Greater than 5mm difference in adjacent riser.

Reasoning

8.17.3 Staircases require uniform and consistent riser heights, without irregularities to ensure their safe use.

8.17.4 The stair risers in this instance are not compliant with the BCA as there is greater than 5mm disparity in adjacent risers.

8.17.5 Inconsistent riser height can be a safety issue, difference in riser height can create disbalance while walking, and section D2.13 of the BCA has considered this and as such requires:

- (b) In the case of a non-*required* stairway—
- (i) the stairway must have—
 - (A) not more than 3 winders in lieu of a quarter landing; and
 - (B) not more than 6 winders in lieu of a half landing; and
 - (ii) the going of all straight treads must be constant throughout the same *flight*; and
 - (iii) the going of all winders in lieu of a quarter or half landing may vary from the going of the straight treads within the same *flight* provided that the going of all such winders is constant.
- (c) Where a stairway discharges to a sloping public walkway or public road—
- (i) the riser (R) may be reduced to account for the slope of the walkway or road; and
 - (ii) the quantity (2R+G) may vary at that location.

8.17.6 The definition of 'constant' is defined in the 2016 BCA as:

- (ii) the going of all straight treads must be constant throughout the same *flight* and the dimensions of goings (G) is considered constant if the variation between—
- (A) adjacent goings, is no greater than 5 mm; and
 - (B) the largest and smallest going within a *flight*, does not exceed 10 mm; and

8.17.7 The building work is therefore considered defective as identified in section 18B of the HBA, due to:

8.17.7.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;

8.17.7.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;

8.17.7.3 Works have not been completed to plans and specifications (BCA) – section 18B(1)(a) of the HBA; and

8.17.7.4 Works are not fit for purpose – section 18B(1)(b) of the HBA.

8.17.8 In failing to complete the works as stipulated by BCA, the safety provision has not been met and the safety of building occupants has been compromised. As such, an unsatisfactory standard of workmanship has been executed by the Builder.

Remediation

8.17.9 Remove handrails;

8.17.10 Clean down concrete stairs, removing all oils and contaminants;

8.17.11 Prime stairs;

8.17.12 Install granolithic topping to flight to attain compliant risers and goings;

8.17.13 Modify handrail;

- 8.17.14 Core new holes for handrail;
- 8.17.15 Install handrail; and
- 8.17.16 Clean down work area and demobilise.

8.18 Handrail Noncontinuous

Defect (Recurring)

8.18.1 This defect is regarding the inconsistent riser heights to staircases.

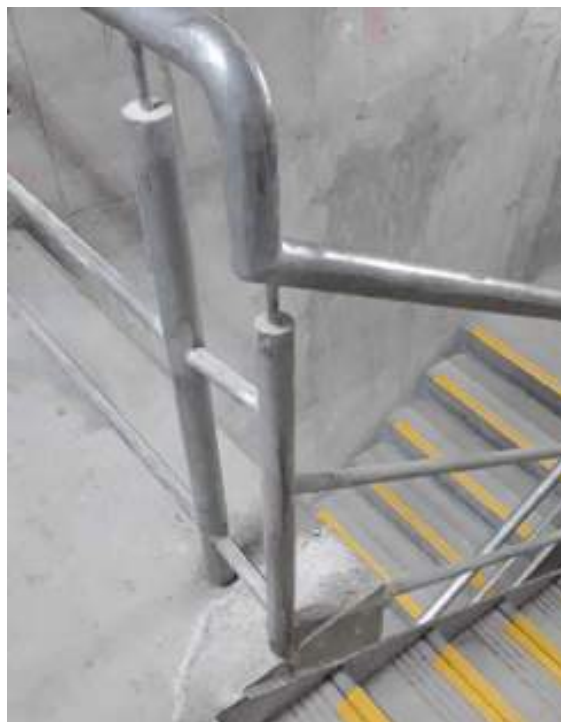
Findings

8.18.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:



C 79 – Basement 1, north-east fire stair

Handrail not continuous.



C 208.A – Fire stair level U4, handrail

Handrail not continuous.

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 79	Basement 1	North-east fire stair to ground level	Breach of D 2.17 of the BCA. Works are not fit for purpose.	Noncontinuous handrail.
C 208.A	Fire stair level U4	Handrail	Breach of D 2.17 of the BCA. Works are not fit for purpose.	Handrail not continuous.

Reasoning

8.18.3 The BCA requires handrails to be continuous:

<p>D2.17 Handrails</p> <p>(a) Except for handrails referred to in D2.18, handrails must be—</p> <ul style="list-style-type: none"> (i) located along at least one side of the ramp or <i>flight</i>; and (ii) located along each side if the total width of the stairway or ramp is 2 m or more; and (iii) in a Class 9b building used as a primary <i>school</i>— <ul style="list-style-type: none"> (A) have one handrail fixed at a height of not less than 865 mm; and (B) have a second handrail fixed at a height between 665 mm and 750 mm, measured above the nosings of stair treads and the floor surface of the ramp, landing or the like; and (iv) in any other case, fixed at a height of not less than 865 mm measured above the nosings of stair treads and the floor surface of the ramp, landing, or the like; and (v) continuous between stair <i>flight</i> landings and have no obstruction on or above them that will tend to break a hand-hold; and (vi) in a <i>required exit</i> serving an area <i>required</i> to be <i>accessible</i>, designed and constructed to comply with clause 12 of AS 1428.1, except that clause 12(d) does not apply to a handrail <i>required</i> by (a)(iii)(B).

8.18.4 The building work is therefore considered defective as identified in section 18B of the HBA, due to:

8.18.4.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;

8.18.4.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;

8.18.4.3 Works have not been completed to plans and specifications (BCA) – section 18B(1)(a) of the HBA; and

8.18.4.4 Works are not fit for purpose – section 18B(1)(b) of the HBA.

8.18.5 In failing to complete the works in a manner compliant with the BCA, the effectiveness of the safety provision has not been met and the safety of building occupants has been compromised. As such, an unsatisfactory standard of workmanship has been executed by the Builder.

Remediation

- 8.18.6 Protect existing stair trades and landings;
- 8.18.7 Cut off handrails;
- 8.18.8 Extend and connect handrails to comply with BCA;
- 8.18.9 Polish all welds to attain consistent finish;
- 8.18.10 Repaint handrail in galvanised finish; and
- 8.18.11 Clean down and demobilise.

8.19 Corrosion

Defect (Recurring)

8.19.1 Corrosion is generally the resultant defect of other defective works, such as poor preparation or covering of building materials, which are consequently exposed to weather and moisture.

8.19.2 The corroded elements identified include:

8.19.2.1 Fire stairs handrail;

8.19.2.2 Exposed reinforcement to the concrete slab; and

8.19.2.3 Fixings.

Findings

8.19.3 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:



C 128 – Basement 2, north of building adjacent to the ramp

Corroding reinforcement.



C 136 – Basement 2, north of building adjacent to ramp

	Exposed reinforcement to soffit of concrete ramp.
 <p><u>C 76 – Basement 1, north-east fire stair</u> Corrosion.</p>	 <p><u>C 89 – Basement 2, north-east hydrant room</u> Corrosion.</p>

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 76	Basement 1	North-east fire stair to ground level	Breach of FP 1.4 of the BCA. Breach of AS 3600 and AS 3610. Breach of Defect guides. Works are not fit for purpose.	Corrosion.
C 89.B	Basement 2	North-east – hydrant room	Breach of FP 1.4 of the BCA. Breach of AS 3600 and AS 3610. Breach of Defect guides. Works are not fit for purpose.	Hanging rod bending and corroded and installed instead of unistrut. Threaded rods are used for hanging not supporting.
C 95	Basement 1	Main entry	Breach of FP 1.4 of the BCA. Breach of AS 3600 and AS 3610.	Localised waterproofing repairs. Corrosion.

			Breach of Defect guides. Works are not fit for purpose.	
C 126	Basement 2	Parking bay 24	Breach of FP 1.4 of the BCA. Breach of AS 3600 and AS 3610. Breach of Defect guides. Works are not fit for purpose.	Exposed reinforcement bar corroding.
C 127	Basement 2	Parking bay 24	Breach of FP 1.4 of the BCA. Breach of AS 3600 and AS 3610. Breach of Defect guides. Works are not fit for purpose.	Exposed and corroding reinforcement.
C 128	Basement 2	North of building - adjacent to the ramp	Breach of FP 1.4 of the BCA. Breach of AS 3600 and AS 3610. Breach of Defect guides. Works are not fit for purpose.	Corroding reinforcement.
C 130	Basement 2	North of building - adjacent to the ramp	Breach of FP 1.4 of the BCA. Breach of AS 3600 and AS 3610. Breach of Defect guides. Works are not fit for purpose.	Corroded reinforcements to the base of the ramp
C 131	Basement 2	North of building - adjacent to the ramp	Breach of FP 1.4 of the BCA. Breach of AS 3600 and AS 3610. Breach of Defect guides. Works are not fit for purpose.	Exposed reinforcement to the base of the ramp.
C 135	Basement 2	North of building - adjacent to the ramp	Breach of FP 1.4 of the BCA. Breach of AS 3600 and AS 3610. Breach of Defect guides. Works are not fit for purpose.	Corrosion to concrete soffit adjacent to the ramp.
C 136	Basement 2	North of building - adjacent to the ramp	Breach of FP 1.4 of the BCA. Breach of AS 3600 and AS 3610. Breach of Defect guides. Works are not fit for purpose.	Exposed reinforcement to the soffit of the concrete ramp.
C 165	Building U - roof	Concrete slab waterproofing	Breach of FP 1.4 of the BCA. Breach of AS 3600 and AS 3610. Breach of Defect guides. Works are not fit for purpose.	Corrosion.

Reasoning

8.19.4 Rust spots and corrosion of building elements are defective under the Defect Guide, AS3600, and the BCA as per the below excerpts:

2007 Guide to Standards and Tolerances ("Defects Guide") 9.02:

Obvious spot rust marks, due to the composition of the material and other blemishes, are defects if they are visible from a normal viewing position.

AS3600 Concrete structures section 14.2.2 (b) requires:

14.2.2 Limitation on materials

The materials to be embedded shall comply with the following requirements, as appropriate:

- (a) Conduits and pipes used for electrical purposes shall comply with the relevant requirements of AS/NZS 3000.
- (b) Other embedded items shall be protected from corrosion or deterioration.
- (c) Metals such as aluminium shall not be embedded in structural concrete unless effectively coated, covered, or treated to prevent chemical action between the metal and the concrete and electrolytic action between the metal and steel.

2016 BCA Volume, performance requirements FP1.4 (b) requires no deterioration of building elements. Corrosion is the deterioration of a building element.

FP1.4

A roof and *external wall* (including openings around *windows* and doors) must prevent the penetration of water that could cause—

- (a) unhealthy or dangerous conditions, or loss of amenity for occupants; and
- (b) undue dampness or deterioration of building elements.

- 8.19.5 Individual rust spots are the result of bar chairs supporting reinforcement having their plastic tips removed or failing. This corrosion is due to insufficient concrete cover.
- 8.19.6 As the bar chairs are connected to the reinforcement inside of the suspended concrete slab, they cannot be allowed to further corrode.
- 8.19.7 Overall corrosion stain and discolouration to the concrete soffit would render the off-form concrete as not compliant with class finishes as identified in AS3610:

TABLE 3.2.1
APPLICABILITY OF SURFACE CLASSES

	Class 1 (see Note 1)	Class 2	Class 3	Class 4	Class 5
	Visual quality important			Visual quality not significant	
Visual characteristics	Highest quality attainable Subject to close scrutiny Best possible uniformity of texture Excellent quality of edge and joint details	Uniform quality and texture over large areas Built to close tolerances Consistently good quality to edge and joint details	Good visual quality when viewed as a whole	Texture not important Good general alignment	Alignment and texture not important
Suitable uses	Selected small elements contained in a single pour Areas of special importance in limited quantities	General external and internal facades intended to be viewed in detail	General external and internal facades intended to be viewed as a whole	Surfaces concealed from general view Surfaces to have thick applied finishes after preparation	Totally concealed areas

8.19.8 As these surfaces are not concealed, they cannot be Class 4, and must be Class 2 to 3. As the brown staining is inconsistent throughout the exposed concrete soffit, it does not offer “good visual quality when viewed as a whole” as concrete is expected to be grey and not brown. As such, all of the stained soffits require rectification.

8.19.9 All corroded building elements are an example of defective workmanship by the Builder.

8.19.10 AS3600 is a document adopted by the BCA:

AS 3600	2001	Concrete structures Amdt 1 Amdt 2	Spec A2.3, B1.4
<hr/> <p>NCC 2011 Volume One Australian Building Codes Board Page 44</p> <p style="text-align: center;">SUPERSEDED</p>			

8.19.11 AS3610 is referenced by AS3600 on seven occasions, as such is a secondary referenced document under the BCA:

4.10.3.2 Standard formwork and compaction

Where concrete is cast in formwork complying with AS 3610 and compacted in accordance with Clause 19.1.3 of this Standard, the cover shall be not less than the value given in Table 4.10.3.2 appropriate to the exposure classification and f'_c .

8.19.12 The building work is therefore considered defective as identified in section 18B of the HBA, due to:

8.19.12.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;

8.19.12.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;

8.19.12.3 Works not being completed as per plans and specifications (BCA and AS) – section 18B(1)(a) of the HBA; and

8.19.12.4 Works not being fit for purpose – section 18B(1)(b) of the HBA.

8.19.13 In failing to complete the works as stipulated by the BCA, AS3600, and AS3610, the effectiveness of the corrosion protection provisions has been reduced, resulting in the deterioration of building elements. As such, an unsatisfactory standard of workmanship has been executed by the Builder.

Remediation - Concrete

8.19.14 Protect work area;

8.19.15 Attain safe access (aluminium mobile scaffold);

8.19.16 Scabble back concrete locally to corrosion – minimum 100mm past corrosion each direction;

8.19.17 Thoroughly grind back corroding elements, no corrosion to be retained;

8.19.18 Install protective coating of rust inhibiting primer;

8.19.19 Prepare surface, clean of all debris and fine particles to ensure adhesion;

8.19.20 Use Renderoc HB40 or similar to patch;

8.19.21 Skim patch with venetian plaster for consistent class 2 finish as required by AS3600; and

8.19.22 Clean down work area and demobilise.

Remediation – Metalwork

8.19.23 Grind back corrosion from steel;

8.19.24 Thoroughly clean down steel;

8.19.25 Apply zinc primer;

8.19.26 Apply two coats of appropriate protection paint; and

8.19.27 Clean and demobilise.

8.20 Honeycombing

Defect (Recurring)

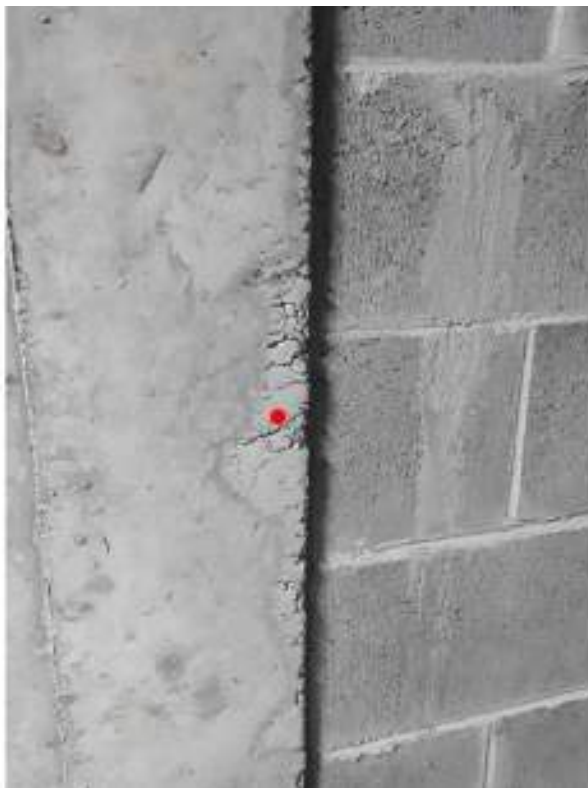
8.20.1 This defect is regarding:

8.20.1.1 Honeycombing in concrete; and

8.20.1.2 Poor vibrated and compacted concrete.

Findings

8.20.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:



C 78 – Basement 1 – north-east fire stair to ground level

Insufficiently vibrated concrete.



C 101 – Basement 1 –visitor parking bay

Insufficiently vibrated concrete.

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 78	Basement 1	North-east fire stair to ground level	Breach of AS 3600 and AS 3610. Failure to perform work with due care and skill.	Insufficiently vibrated concrete.
C 101	Basement 1 Visitor parking bay.	South (column)	Breach of AS 3600 and AS 3610. Failure to perform work with due care and skill.	Insufficiently vibrated concrete.
C 119	Basement 2	Parking bay 29	Breach of AS 3600 and AS 3610. Failure to perform work with due care and skill.	Insufficiently vibrated concrete.
C 120	Basement 2	Parking bay 13	Breach of AS 3600 and AS 3610. Failure to perform work with due care and skill.	Insufficiently vibrated concrete.
C 121	Basement 2	Parking bay 24	Breach of AS 3600 and AS 3610. Failure to perform work with due care and skill.	Insufficiently vibrated concrete.
C 125	Basement 2	Parking bay 24	Breach of AS 3600 and AS 3610. Failure to perform work with due care and skill.	Insufficiently vibrated concrete.

Reasoning

8.20.3 Honeycombing (blowholes) occurs due to inadequate compaction (concrete vibration) causing the mortar to fill the voids between the coarse aggregate, or by holes and gaps in the formwork allowing some of the mortar to drain out of the concrete. In some cases, the member shape and detailing/placement of the reinforcement compounds the effect of inadequate compaction.

8.20.4 BCA clause B1.4 refers to AS3600 for structural resistance. Honeycombing and poor compaction results in underperforming concrete and is a design breach of AS3600.

8.20.5 AS3600 is a document referenced by the BCA, see extract below.

AS 3600	2009	Concrete structures	Spec A2.3, B1.4
		Amdt 1	
		Amdt 2	

8.20.6 AS3610 is a document referenced by AS3600 on seven occasions and stipulates concrete finish, and is a secondary document under the BCA.

8.20.7 AS3610 stipulates the following:

1.5.2.4 Blowhole

Shallow pocket or void in the formed surface of the concrete caused by a bubble of fluid or air trapped against the form face.

8.20.8 I have classed this concrete to have been required to be Class 3 finish as the walls are visible up close, as defined by AS3610:

17 AS 3610.1—2011

**TABLE 3.2.1
APPLICABILITY OF SURFACE CLASSES**

	Class 1 (see Note 1)	Class 2	Class 3	Class 4	Class 5
	Visual quality important			Visual quality not significant	
Visual characteristics	Highest quality attainable Subject to close scrutiny Best possible uniformity of texture Excellent quality of edge and joint details	Uniform quality and texture over large areas Built to close tolerances Consistently good quality to edge and joint details	Good visual quality when viewed as a whole	Texture not important Good general alignment	Alignment and texture not important
Suitable uses	Selected small elements contained in a single pour Areas of special importance in limited quantities	General external and internal facades intended to be viewed in detail	General external and internal facades intended to be viewed as a whole	Surfaces concealed from general view Surfaces to have thick applied finishes after preparation	Totally concealed areas
Surface treatment	Not applicable	Reference shall be made to acceptable surface appearance and measurable deviations prior to surface treatment			Not suitable

8.20.9 Honeycombing is a further breach of AS3600 due to the reduced concrete coverage of structural reinforcement.

8.20.10 Honeycombed concrete fails to comply with the requirement for the standard concrete test in AS3600:

19.1.7 Rejection of concrete

19.1.7.2 Hardened concrete

Hardened concrete shall be liable to rejection if—

- (a) it does not satisfy the requirements of Clause 19.1.6;
- (b) it is porous, segregated, or honeycombed, or contains surface defects; or
- (c) it fails to comply with the other requirements of this Standard.

- 8.20.11 Some locations have been identified to have cold joints and cracking through the structural concrete elements.
- 8.20.12 Cold joints are a plane of weakness in the concrete, caused by the delay between concrete pours. Due to the delay, the batches of concrete do not intermix to act as a monolithic structure as required.
- 8.20.13 A cold joint, where not anticipated in the structural design, is a plane of structural weakness, especially where identified as the concrete is in tension, not compression, such as a beam.
- 8.20.14 Furthermore, cold joints have small voids, which can result in moisture ingress and offer insufficient corrosion protection for reinforcement.
- 8.20.15 The building work is therefore considered defective as identified in section 18B of the HBA, due to:
- 8.20.15.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;
 - 8.20.15.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA; and
 - 8.20.15.3 Works are not fit for purpose – section 18B(1)(b) of the HBA.
- 8.20.16 In failing to complete the works as stipulated by AS3600, the corrosion protection of the concrete reinforcement has been reduced. As such, an unsatisfactory standard of workmanship has been executed by the Builder.

Remediation

- 8.20.17 Scraping of the identified area to remove any loose aggregate;
- 8.20.18 If reinforcement is visible, removal of 25mm of concrete around the reinforcement;
- 8.20.19 Cleaning and treating of the reinforcement;
- 8.20.20 Installation of structural non-shrink grout to the area, working into all voids;
- 8.20.21 Sponging to achieve a smooth and uniform finish; and
- 8.20.22 Cleaning down of the work area and demobilise.

8.21 Cracking

Defect (Recurring)

8.21.1 This defect concerns:

8.21.1.1 Cracked plasterboard;

8.21.1.2 Cracked cornices;

8.21.1.3 Internal cracking;

8.21.1.4 Render crack between tile bed and structural slab under;

8.21.1.5 Cracked render; and

8.21.1.6 Cracked concrete.

8.21.2 Cracking to plasterboard which is defective and requiring repair is either:

8.21.2.1 Cracks exceeding 1mm;

8.21.2.2 Cracking at plaster sheet joints;

8.21.2.3 Peaking to plasterboard; and

8.21.2.4 Cracking and separation at the interface of the skirting board and wall.

Findings

8.21.3 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:



C 21 – East facade, Hebel cladding textured wall

Crack.



C 238 - Driveway, concrete slab

Cold joint or crack to the concrete driveway.

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 21	East facade	Textured wall	Breach of defect guides. Works are not fit for purpose.	Crack
C 238.B	Driveway	Concrete slab	Breach of defect guides. Works are not fit for purpose.	Cold joint or crack to the concrete driveway.

Reasoning

- 8.21.4 Cracks to render and other building elements are defective when they measure over 1mm.
- 8.21.5 The Defect Guide suggests cracks can be limited up to a certain width depending on the location and purpose of the building element. Crack width that exceeds the tolerance is considered defective.
- 8.21.6 See the following extracts from the Defect Guide:

<p>Cracking in render:</p> <p>9.02 Cracking and other blemishes in external rendered surfaces on masonry substrate</p> <p>Assess crack categories and defects in external rendered surfaces on masonry substrate in accordance with clause 3.02.</p> <p>Obvious spot rust marks, due to the composition of the material and other blemishes, are defects if they are visible from a normal viewing position.</p>
<p>Cracks in plasterboard:</p> <p>9.15 Cracking in plasterboard, hard plaster and other plaster elements</p> <p>Cracking in walls, ceilings and bulkheads that is greater than 1 mm is a defect if it is visible from a normal viewing position³. Cracking in recessed and butt joints is a defect if it is visible from a normal viewing position.</p>
<p>Cracks to internal items:</p> <p>10.01 Gaps associated with internal fixing</p> <p>Unless documented otherwise, gaps between mouldings or between mouldings and other fixtures, at mitre or butt joints, or at junctions with a wall or other surfaces are defects if they exceed 1 mm in width, occur within the first 12 months and are visible from a normal viewing position. After the first 12 months gaps exceeding 2 mm are considered defective.</p>
<p>Peaking items:</p>

9.19 Peaking or jointing in plasterboard

Plaster peaking or jointing is a defect if it is visible from a normal viewing position³.

8.21.7 The building work is therefore considered defective as identified in section 18B of the HBA, due to:

8.21.7.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;

8.21.7.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA; and

8.21.7.3 Works not being fit for purpose – section 18B(1)(b) of the HBA.

8.21.8 In failing to provide sufficient allowance for movement, adhesion failures and cracks have occurred at the Property. As such, an unsatisfactory standard of workmanship has been executed by the Builder.

Remediation

8.21.9 Cracks shall be repaired by pressure injection of low viscosity resin or epoxy;

8.21.10 Clean crack surface and depth as reasonable as possible of all dust, debris, efflorescence and oil to 50mm of each side of crack;

8.21.11 Widen cracks to suitable width 'V' joint to accept sufficient epoxy or resin;

8.21.12 High pressure clean with 2500psi;

8.21.13 Allow the crack to thoroughly dry;

8.21.14 Drill holes along the length of crack to the manufacturer's specification for pot injection at spacings not exceeding 200mm;

8.21.15 Seal top of crack with epoxy paste as directed by the manufacturer;

8.21.16 Inject crack at the lowest point and continue until the adhesive emerges;

8.21.17 Seal injection port and proceed to the next injection port; and

8.21.18 Clean surface from injected material.

8.22 Missing Coil Ties

Defect (Recurring)

8.22.1 This defect is regarding the absence of formwork coil tie plugs installed to the off-form concrete.

Findings

8.22.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:



C111 – Basement 1, north-east fire stairs

Missing coil tie plugs.

Defect Summary

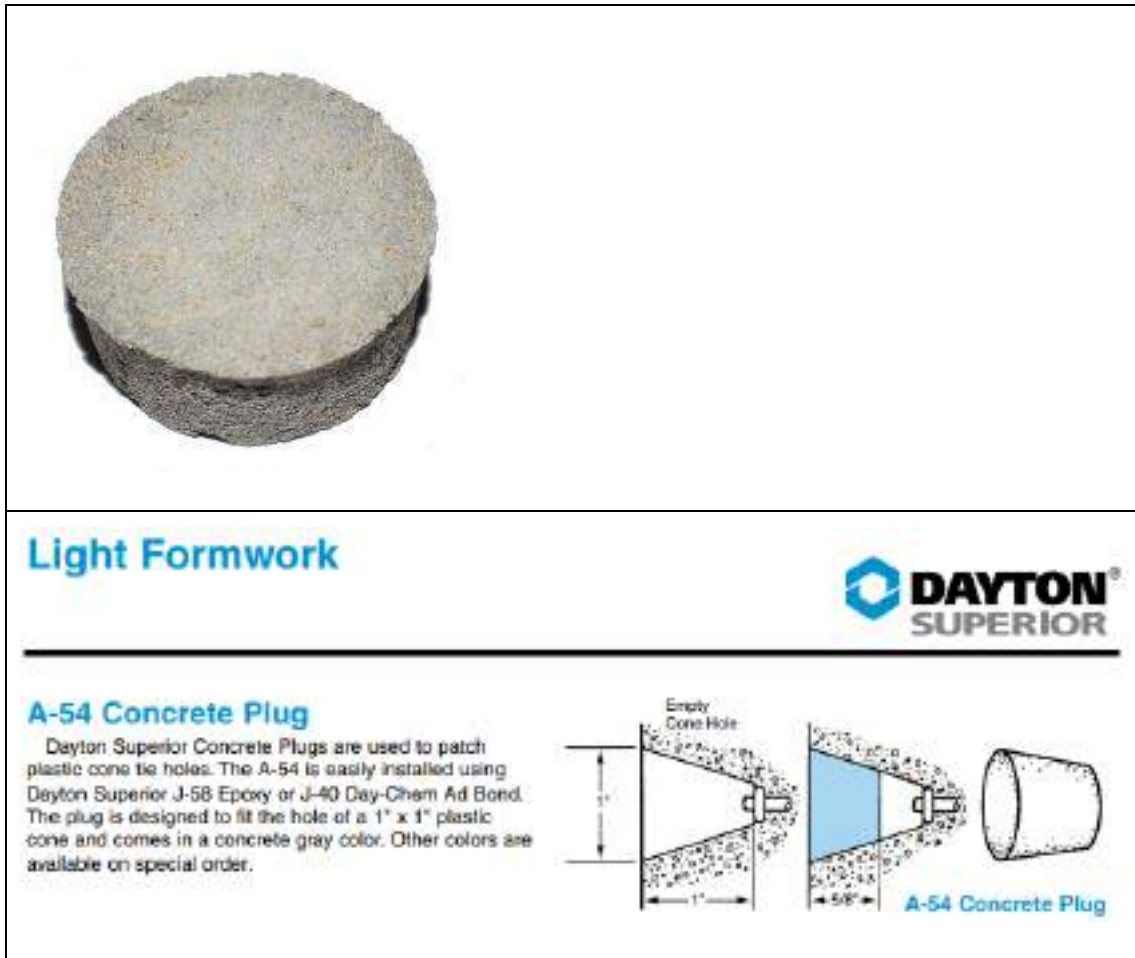
DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 111	Basement 1	North-east fire stairs	Breach of AS 3600. Incomplete work.	Missing coil tie plugs.

Reasoning

8.22.3 Formwork coil tie plugs are used as an architectural finish on concrete feature walls. They are also a method to protect the coil tie from corrosion, which can corrode and cause concrete spalling. Coil ties are used to support wall reinforcement. Therefore coverage, compliance with AS3600 and/or structural drawings is required to ensure corrosion protection.

8.22.4 Works have not been completed with due care and skill.

8.22.5 Concrete plugs are proprietary items used for this specific purpose. See example below.



8.22.6 AS3600 is a document referenced by the BCA. As such, compliance is required. See following extracts where the exposure of coil ties without concrete plugs are exposing the coil ties and wall reinforcement to possible corrosion:

14.2 EMBEDDED ITEMS AND HOLES IN CONCRETE

14.2.1 General

Embedded items and holes shall be permitted in concrete members provided that the required strength and serviceability of the member is satisfied.

For the purpose of this Clause embedded items include pipes and conduits with their associated fittings, sleeves, permanent inserts for fixings and other purposes, holding-down bolts, bar chairs and other supports.

For the purpose of this Clause, holes include holes through a member, holes along the length of a member, rebates, and penetrations.

14.2.2 Limitation on materials

The materials to be embedded shall comply with the following requirements, as appropriate:

- (a) Conduits and pipes used for electrical purposes shall comply with the relevant requirements of AS/NZS 3000.
- (b) Other embedded items shall be protected from corrosion or deterioration.
- (c) Metals such as aluminium shall not be embedded in structural concrete unless effectively coated, covered, or treated to prevent chemical action between the metal and the concrete and electrolytic action between the metal and steel.

14.2.3 Pipes containing liquid, gas or vapour

Pipes that are intended to contain liquid, gas or vapour under pressure or extremes of temperature may be embedded in structural concrete, provided that—

- (a) the maximum pressure to which any piping or fitting is intended to be subjected shall not exceed 2000 kPa; and
- (b) the effect that inclusion of the pipe has on the strength and serviceability behaviour of the member, is taken into account.

14.2.4 Spacing and cover

The minimum clear distance between embedded items and between embedded items and bars (including bundled bars), tendons, or ducts, shall be sufficient to ensure that the concrete can be placed and compacted to comply with Clause 19.1.3.

The cover to embedded items that are not corrosion resistant shall comply with Section 4.

TABLE 4.10.3.2
REQUIRED COVER WHERE STANDARD FORMWORK AND
COMPACTION ARE USED

Exposure classification	Required cover, mm				
	Characteristic strength (f'_c)				
	20 MPa	25 MPa	32 MPa	40 MPa	≥ 50 MPa
A1	20	20	20	20	20
A2	(50)	30	25	20	20
B1	—	(60)	40	30	25
B2	—	—	(65)	45	35
C	—	—	—	(70)	50

- 8.22.7 The collar ties are metal and are exposed because they do not have the cover required by AS3600. Since AS3600 is a document adopted by the BCA, this item is defective.
- 8.22.8 The building work is therefore considered defective as identified in section 18B of the HBA, due to:
- 8.22.8.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;
 - 8.22.8.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;
 - 8.22.8.3 Works have not been completed to plans and specifications (BCA) – section 18B(1)(a) of the HBA; and
 - 8.22.8.4 Works are not fit for purpose – section 18B(1)(b) of the HBA.
- 8.22.9 In failing to complete the works as stipulated by BCA and AS3600, the building elements are exposed and can corrode. As such, an unsatisfactory standard of workmanship has been executed by the Builder.

Remediation

- 8.22.10 Clean down exposed coil ties;
- 8.22.11 Seal with primer;
- 8.22.12 Install coil tie plugs with cement slurry; and
- 8.22.13 Clean surface.

8.23 External Grated Drain Installation

Defect (Recurring)

8.23.1 This defect relates to the external drains being installed with a gap to their edges.

Findings

8.23.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:



C 71 – Basement 1, north-east fire stairs to ground level

Gap to the side of the grated drain.



C 53 – Basement 1, south-east fire stairs to ground level

Gap to the side of the grated drain.

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 53	Basement 1	South-east fire stairs to ground level	Incomplete work.	Gap to the side of the grated drain.
C 71	Basement 1	North-east fire stairs to ground level	Incomplete work.	Gap to the side of the grated drain.

Reasoning

- 8.23.3 The external grated strip drain in front of fire exits have gaps on sides and water can enter under the grated drains.
- 8.23.4 The building work is therefore considered defective as identified in section 18B of the HBA, due to:
- 8.23.4.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;
 - 8.23.4.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;
 - 8.23.4.3 Works have not been completed as per plans and specifications (IOC) – section 18B(1)(a) of the HBA; and
 - 8.23.4.4 Works are not fit for purpose – section 18B(1)(b) of the HBA.
- 8.23.5 In failing to complete the works as stipulated by AS 4654.2, the effectiveness of waterproofing provisions has been reduced, as such an unsatisfactory standard of workmanship has been executed by the Builder.

Remediation

- 8.23.6 Clean down drain;
- 8.23.7 Remove grate;
- 8.23.8 Clean joint;
- 8.23.9 Prime joint;
- 8.23.10 Install backing rod and sealant; and
- 8.23.11 Reinstall grate.



8.24 Timber-Look Cladding

Defect (Recurring)

- 8.24.1 This defect relates to the timber-look cladding and eaves lining to be tested to confirm combustibility.

Findings

- 8.24.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:

 <p><u>C 50 – South facade, cladding</u></p> <p>Eaves to be tested for combustibility.</p>	 <p><u>C 304.21 – Unit 304, balcony ceiling</u></p> <p>Timber-look eaves to be tested for combustibility.</p>
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Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 50	South facade (Mitchell Avenue)	Cladding	Cladding to be sampled and tested for combustibility	Eaves to be tested for combustibility.
U 304.21	Balcony	Ceiling	Cladding to be sampled and tested for combustibility	Timber look eaves to be tested for combustibility.

Reasoning

8.24.3 Cladding to be sampled and tested for combustibility. The areas to be tested include:

8.24.3.1 Timber-look facade cladding; and

8.24.3.2 Timber-look eaves lining.

Remediation

8.24.4 Samples of cladding to be tested for combustibility and PE content.



8.25 Mechanical Exhausts to Wet Areas

Defect (Recurring)

8.25.1 This defect relates to the wet area exhausts not operating as intended.

Findings

8.25.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:

	
<p><u>U G05.7 - Unit G05 laundry, mechanical exhaust</u></p> <p>Mechanical exhaust not operational.</p>	<p><u>U 304.8 - Unit 304 ensuite, mechanical exhaust</u></p> <p>Mechanical exhaust not operational.</p>

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
U G05.7	Laundry	Mechanical exhaust	Breach of FP 4.5 of the BCA. Breach of AS 1668.2. Works are not fit for purpose.	Mechanical exhaust is not operational.
U G05.11	Bathroom	Mechanical exhaust	Breach of FP 4.5 of the BCA. Breach of AS 1668.2. Works are not fit for purpose.	Mechanical exhaust not operational.
U G05.14	Ensuite	Mechanical exhaust	Breach of FP 4.5 of the BCA. Breach of AS 1668.2. Works are not fit for purpose.	Mechanical exhaust not operational.
U 304.8	Ensuite	Mechanical exhaust	Breach of FP 4.5 of the BCA. Breach of AS 1668.2. Works are not fit for purpose.	Mechanical exhaust not operational.

U 306.3	Laundry	Mechanical exhaust	Breach of FP 4.5 of the BCA. Breach of AS 1668.2. Works are not fit for purpose.	Mechanical exhaust not operational.
U 306.7	Bathroom	Mechanical exhaust	Breach of FP 4.5 of the BCA. Breach of AS 1668.2. Works are not fit for purpose.	Mechanical exhaust is not operational.
U 306.10	Ensuite	Mechanical exhaust	Breach of FP 4.5 of the BCA. Breach of AS 1668.2. Works are not fit for purpose.	Mechanical exhaust is not operational.

Reasoning

8.25.3 Mechanical air extraction is required to remove condensed/humid air from bathrooms and wet areas to avoid humid air causing building elements to deteriorate.

8.25.4 Section F4.5 of the BCA 2010 stipulates the following:

<p>F4.5 Ventilation of rooms</p> <p>A <i>habitable room</i>, office, shop, factory, workroom, <i>sanitary compartment</i>, bathroom, shower room, laundry and any other room occupied by a person for any purpose must have—</p> <p>(a) natural ventilation complying with F4.6; or</p> <p><i>NSW F4.5(b)</i></p> <p>(b) a mechanical ventilation or air-conditioning system complying with AS 1668.2 and AS/NZS 3666.1.</p>

8.25.5 Where there is no window, compliance with the BCA is achieved by mechanical exhausting. These mechanical exhausts were audibly operational but would not extract any air. This indicates that this defect is due to the workmanship of the Builder, rather than to a manufacturing flaw in the fan.

8.25.6 The installed exhaust fans are unfit for purpose and are not operating as intended by the manufacturer.

8.25.7 Insufficient ventilation to the internal wet area is causing the water and humidity levels to rise and is thus contributing to excessive condensation.

8.25.8 AS1668.2 recommends the below minimum exhaust ventilation flow rates for enclosures:

MINIMUM EXHAUST VENTILATION FLOW RATES			
Enclosure type	Quantity	Unit	Comments

<p>Sanitary compartment</p> <p>Bath</p> <p>Shower</p> <p>Urinal</p> <p>Water closet</p>	<p>10 or 25</p>	<p>L/s.m² floor L/s per listed fixture</p>	<p>The greater of the two values shall be taken. Each 0.6 m length of urinal shall be considered to be equivalent to one fitting. Where the number of fixtures is not known, it may be determined at a rate of 0.4 fixtures per m² of floor area.</p> <p>Sanitary compartments subject to high level of use (e.g. airports, entertainment venues, and similar venues may require an increased ventilation rate)</p> <p>Where privacy locks or airlocks are included, provision should be made for their ventilation at 5 L/s.m² of floor area (e.g. via make-up air)</p> <p>(Handbasins are not considered as a 'listed fixture')</p>
<p>Bathroom/Toilet</p> <p>Private dwellings and attached to bedroom of hotels, motels, resorts, private hospital rooms and the like</p>	<p>25</p>	<p>L/s/room</p>	<p>May include bath, shower and water closet in one compartment. Rate is independent of room size (see Note 2)</p> <p>Higher air quantities may be required for vapour control or removal</p> <p>(Handbasins are not considered as a 'listed fixture')</p> <p>Operation of the system may be intermittent</p>

8.25.9 As a tissue cannot be held by the identified exhaust fans (i.e. there is not enough suction in the fan to 'grip' or 'absorb' the paper tissue), the exhausts as installed are unfit for the purpose for which they were designed. Given that they do not extract air, the exhaust flow rate would not comply with the minimum requirements of AS1668.2.

8.25.10 The building work is therefore considered defective as identified in section 18B of the HBA, due to:

8.25.10.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;

8.25.10.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;

8.25.10.3 Works not being completed as per plans and specifications (BCA and AS) – section 18B(1)(a) of the HBA; and

8.25.10.4 Works not being fit for purpose – section 18B(1)(b) of the HBA.

8.25.11 In failing to install exhaust fans that are operational and compliant with the requirements of the BCA and AS1668.2, the effectiveness of ventilation to the identified areas has been compromised, resulting

in possibly uninhabitable spaces and deterioration to building elements. As such, an unsatisfactory standard of workmanship has been executed.

Remediation

8.25.12 The scope of remediation for this item is a suitably qualified contractor to attend the site and inspect the cause of no air movement, even though the fan was audibly operating.

8.26 Hebel Facade Ventilation

Defect (Recurring)

8.26.1 This defect relates to insufficient ventilation provisions in the Hebel facade.

Findings

8.26.2 The following supporting photographs with corresponding comments are provided to assist with identifying the pertinent issues:



C 36 - West facade, Hebel cladding

Dripping from the facade, as moisture has built up inside the Hebel and is escaping from control joint to Hebel and concrete junction.



C 33 - West facade, Hebel cladding

Missing drainage provisions to Hebel.

Defect Summary

DEFECT NO.	LOCATION	AREA	BREACH	DEFECT DESCRIPTION
C 4.B	Ground floor north entry	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Some weepholes have been installed to the Hebel facade.
C 7	Ground floor south entry	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	No pressure equalisation slots have been installed.
C 13	East facade	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	No pressure equalisation slots to the wall. One weep hole only visible.
C 14	East facade	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	No visible pressure equalisation slots as required by Hebel manufacturer.
C 15	East facade	FC cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Base of FC sheets has been waterproofed up.
C 16.B	East facade	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Weephole has been waterproofed over, no drainage for Hebel.
C 17	East facade	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Insufficient Hebel drainage.
C 18	East facade	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	The single drainage provision has been waterproofed over.
C 22	East facade	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers	Drainage provisions are partly covered throughout the facade.

			specifications). Works are not fit for purpose.	
C 23	East facade	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Drainage provisions are partly covered throughout the facade.
C 24	East facade	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Drainage provisions are partly covered throughout the facade.
C 25	East facade	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Drainage provisions are partly covered throughout the facade.
C 29	East facade	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Drainage provisions are partly covered or missing throughout the façade.
C 32	West facade	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Missing drainage provisions to Hebel.
C 33	West facade	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Missing drainage provisions to Hebel.
C 34	West facade	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Missing drainage provisions to Hebel.
C 36	West facade	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Drip from façade, as moisture has built up inside Hebel and escaping from control joint to Hebel and concrete junction.
C 37	West facade	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers	Missing drainage provisions to Hebel.

			specifications). Works are not fit for purpose.	
C 41	North facade	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Missing pressure equalisation slots to Hebel.
C 42.B	North facade	Privacy screen	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Missing drainage provisions to walls under windows.
C 44.A	South facade (Mitchell Avenue)	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	No Hebel drainage.
C 45.B	South facade (Mitchell Avenue)	Cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Hebel with no drainage
C 46	South facade (Mitchell Avenue)	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	No facade drainage.
C 48	South facade (Mitchell Avenue)	Hebel cladding	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Parapet wall caps required if Hebel, FC or Dintel.
C 194.B	Level U4 lobby	Balcony - handrail	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Crack at line of possible DPC.
C 197.B	Level U4 lobby	Balcony - handrail	Works have not been completed as per plans and specifications (drawings and manufacturers specifications). Works are not fit for purpose.	Elevated moisture to base of rendered wall.
C 213.B	Level 4 lobby - balcony	Cladding	Works have not been completed as per plans and specifications (drawings and manufacturers	Elevated moisture to wall below tile pedestals.

			specifications). Works are not fit for purpose.	
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Reasoning

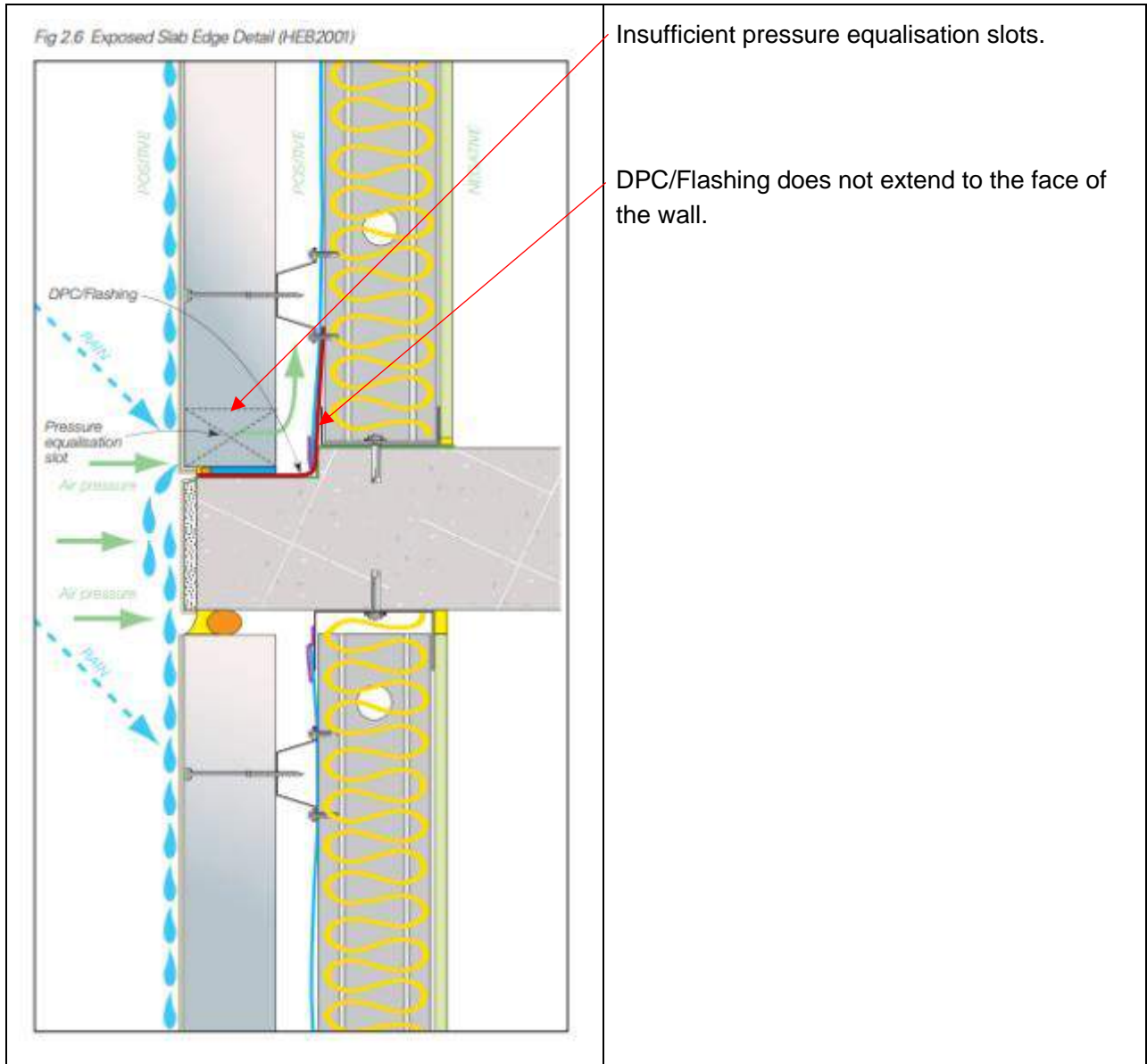
8.26.3 The Hebel Installation Guide requires the provision of pressure equalisation slots to the wall for allowing pressure equalisation and to permit the drainage of water inside the cavity.

<p>Hebel Facades</p> <p>Hebel PowerPanel Systems for Facades are non-loadbearing external wall solutions. These wall configurations consist of a Hebel PowerPanel secured to a lightweight structural (cold formed) steel support framing. The Systems suits applications ranging from low-rise industrial/commercial developments to high-rise office or medium density residential buildings.</p> <p>The Hebel PowerPanel Systems for Facade have been developed for framed construction following the principles of pressure equalisation. Pressure equalisation refers to the wall cavity being allowed to experience the same pressure as that acting on the outside wall.</p>	<p>a penetration in the external coating and sealing system; and water, can result in water being drawn through the penetration and into the cavity.</p> <p>The principal of pressure equalisation is, where wind pressure acting on the external surface of the facade can gain access to the cavity side, thus allowing the pressures on both sides of the cladding to become similar.</p> <p>The elimination of a pressure differential significantly reduces the process of water being drawn through a penetration in the external coating/sealing system and cladding.</p> <p>Additionally, the slots provided for pressure equalisation allow for drainage of water from the cavity if ingress occurs.</p> <p>A compulsory part of the Hebel PowerPanel System for Facades is the wall wrap, which is installed on the external side of the stud frame to seal the cavity space.</p>
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Pressure Equalisation Slots

PE Slots (Weepa) allow pressure equalisation to the wall cavity and permit drainage of any water from the cavity. Ideally located at control joints (CJ) and at no greater than 3 metre spacing.

- 8.26.4 These pressure equalisation slots act to control pressure differences and allow for any moisture entering the cavity to drain.
- 8.26.5 Hebel has two facade systems: a visible slab edge type or a hidden slab edge type. Both systems require the pressure equalisation slots to be installed, the slab edge was visible at the installation to the Property.
- 8.26.6 Following is the manufacturer's detail, which identifies the elements that have not been installed:



Insufficient pressure equalisation slots.

DPC/Flashing does not extend to the face of the wall.

- 8.26.7 The flashing inspected stopped at the rear of the Hebel panel and had no provision to direct the water to the external face of the facade.
- 8.26.8 As such, the water hits the rear of the Hebel panel and is trapped in by the sealant and wicks (sucked) up the panel, resulting in elevated moisture readings.
- 8.26.9 Elevated moisture levels to the base of the walls were identified at the Property.
- 8.26.10 The building work is therefore considered defective as identified in section 18B of the HBA, due to:
 - 8.26.10.1 Failure to perform work with due care and skill – section 18B(1)(f) of the HBA;
 - 8.26.10.2 Failure to perform work with due diligence – section 18B(1)(d) of the HBA;

8.26.10.3 Works have not been completed as per plans and specifications (manufacturers specifications) – section 18B(1)(a) of the HBA; and

8.26.10.4 Works are not fit for purpose – section 18B(1)(b) of the HBA.

8.26.11 Failing to install the Hebel facade as per manufacturer requirements has resulted in moisture retention inside the external wall cavities and the deterioration of building materials. As such, an unsatisfactory standard of workmanship has been executed.

Remediation – Missing Pressure Equalisation Slots

8.26.12 Attain safe access to the work areas;

8.26.13 Cut holes internally as required to attain location of top hats;

8.26.14 Cut out the section of Hebel beneath existing top hat;

8.26.15 Remove the existing sealants from the Hebel wall;

8.26.16 Remove Hebel strip;

8.26.17 Install new top hat for fixing of Hebel strip;

8.26.18 Install new horizontal top hat for fixings of Hebel insert;

8.26.19 Pin up flashing/DPC for access;

8.26.20 Clean down slab edge and waterproof to manufacturer's detail;

8.26.21 Install new DPC under flashing (existing DPC to extend to face of wall);

8.26.22 Apply Hebel adhesive to the underside of wall and reinstall the piece of Hebel;

8.26.23 Apply fixings to the pieces of Hebel, both directions, alternating at 200mm centres;

8.26.24 Provide pressure equalisation slot to base of wall not exceeding max spacing of 3m use 'weepa' or similar proprietary inserts;

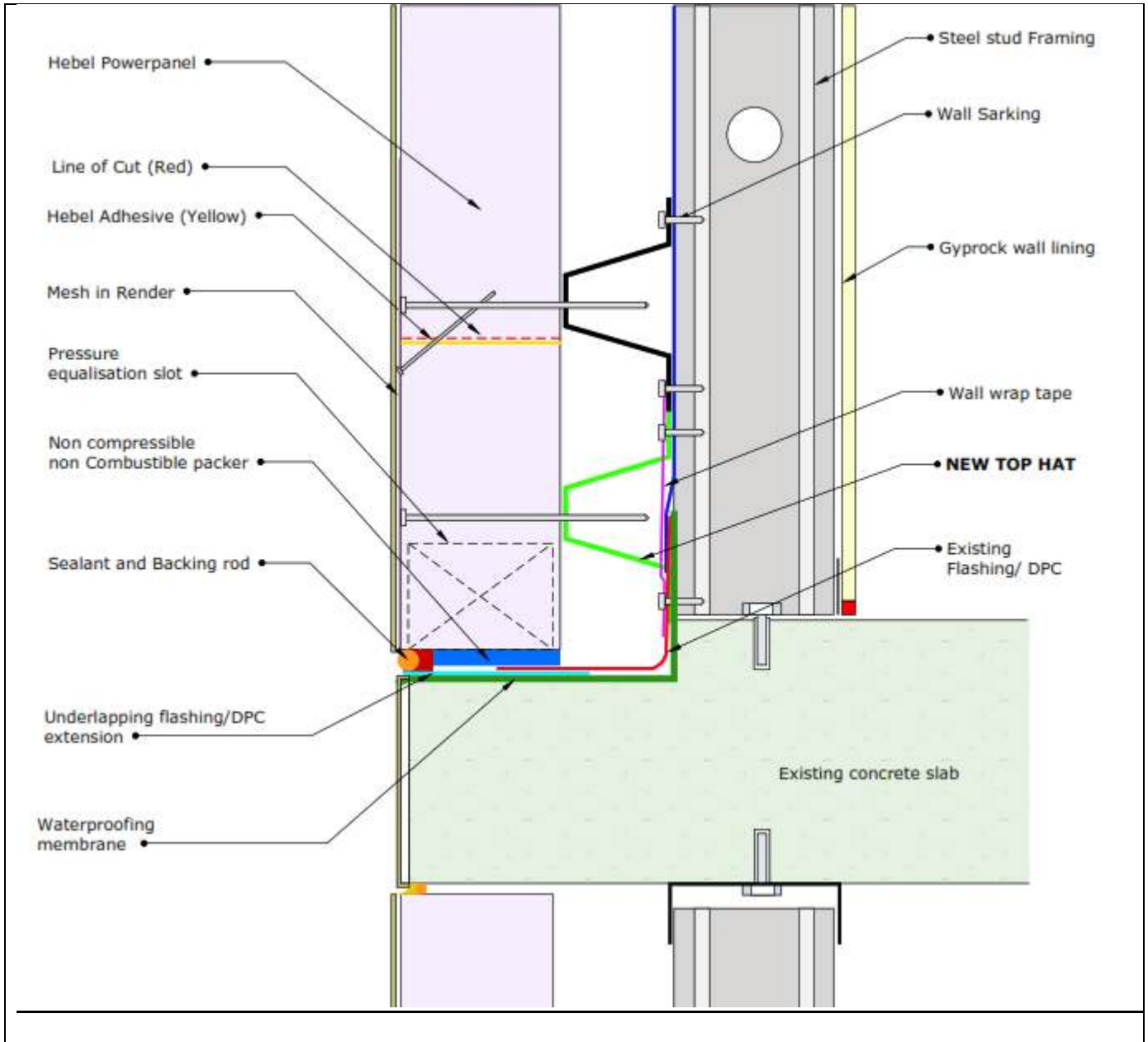
8.26.25 Weep hole inserts to sit hard onto slab and sealant to be applied either side of them, not in front;

8.26.26 Render wall with mesh to lap over Hebel joint;

8.26.27 Install sealant and backing rod;

8.26.28 Repaint wall to nearest architectural feature; and

8.26.29 Clean down and demobilise.



8.27 General

Defect (Specific)

8.27.1 This defect is regarding specific defects.

Defect Summary

DEFECT NO.	LOCATION	AREA	DEFECT DESCRIPTION	REMEDATION
C 1	Landscape (north of the site)	Stormwater pit	The bark is washing down the stormwater pit.	Install drainable shroud to pit.
C 12.B	East facade	Unit balcony	No drip groove to the soffit.	Install drip groove.
C 21	East facade	Hebel cladding	Weep holes have been partly covered.	Clean paint and render off weep holes.
C 26	East facade	Privacy screen	Render to aluminium track.	Clean render off track.
C 39	North facade	Planter box	Blockwork has not been bagged prior to waterproofing. Smooth substrate required for the waterproof application.	Remove plants Clean wall Bag wall. Waterproof wall Reinstall plants.
C 43	North facade	Hebel cladding	Poor rendering work.	Clean and re-render wall. Repaint.
C 54.A	Basement 1	South-east fire stairs to ground level	Handrail cut off.	Metalwork to repair handrail.
C 54.B	Basement 1	South-east fire stairs to ground level	Dintel offcut.	Remove damaged Dintel. Install flat bar over.
C 55	Basement 1	South-east fire stairs to ground level	Incomplete cleaning of concrete slurry.	High pressure wash wall. Scrape down wall. Clean by hand.
C 56	Basement 1	South-east fire stairs to ground level	Sawdust and debris in concrete.	Scabble away sawdust Fill with nonshrink grout.
C 58	Basement 1	South-east fire stairs to ground level	Visible patching and slurry over pour from construction.	High pressure wash wall. Scrape down wall. Clean by hand.
C 59	Basement 1	South-east fire stairs to ground level	Sensor temporarily installed.	Electrician to permanently connect.
C 62	Basement 1	South-east fire stairs to ground level	Rough concrete edge.	Render edge.