

OFFICIAL TEST REPORT

STONEFACE LTD & CERTIFIED STONE PLUS LIMITED AS/NZS 4284

Shelby Wright Test Report

Report Writer:
Bernard Farrington

Report Date:
13 December 2025

SWTL Reference:
J-25029

Client Information	
Client Name and Address	STONEFACE NZ Ltd 198 Hazeldean Rd, Sydenham, Christchurch, NZ. 8023, for and on behalf of: Stone Façade Company Ltd Unit 14, 8 Vernon Drive, Lincoln, 7608, NZ & CERTIFIED STONE PLUS LIMITED Care of Marbello, 9-C Francella Street, Bromley, Christchurch, 8061
Report Administered to	STONEFACE Ltd & CERTIFIED STONE PLUS LIMITED
Test Report Number	SWTL - R0102
Testing	
Test Location	Shelby Wright Test Labs – 515 Rosebank Road, Avondale Auckland 1026
Test Date	12 th August 2025
Report Date	13 th December 2025
Project Name	STONEFACE Ltd & CERTIFIED STONE PLUS LIMITED – AS/NZS 4284
Test Procedure	SWTM-1.0 AS_NZS 4284 2008 Test Procedure v3
Testing Officer	Bernard Farrington
Observers	Brent Robertson (STONEFACE Ltd), Josh Prangell (CBA Tiling)
Sample	
Sample	Grespania COVERLAM, & STONEFACE fixing systems.
Manufacturer	STONEFACE Ltd & Grespania
Specifier	Oculus Building Science and Facades
Sample Designer	Oculus Building Science and Facades
Sample Installer	STONEFACE Ltd & CBA Tiling
IANZ	
IANZ Accredited KTP	Bernard Farrington
IANZ Accreditation No	1438

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Report Writer Bernard Farrington
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Report Number: SWTL R0102
Report Date: 13 December 2025



All tests reported herein
have been performed in
accordance with the
laboratory's scope of
accreditation



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Avondale, Auckland
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REVISION CONTROL

Revision number	Date published	Reviewed by
1	22 August 2025	BF
2	Client Address updated – Reissued 11 September 2025 as Final	BF
3	13 December 2025 – Updated drawings appended	BF

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1 EXECUTIVE SUMMARY

Testing of Grespania's Ultra Compact Surface (UCS) "COVERLAM" mounted on a variety of STONEFACE Ltd's chem-elastic & Stonemec cladding fixing systems was carried out at Shelby Wright Test Labs (SWTL) Avondale laboratory. The sample was prepared by CBA Tiling and installed in the test booth June/July 2025.

Testing pressures align with New Zealand's "Extra-High" wind zone, with the sample passing all requirements of the applicable testing sequences as defined in AS/NZS 4284:2008, with the ULS Strength Test reaching above "Extreme Wind Zone" of 3150 Pa without failure.

The Stonemec systems passed Seismic ULS at +/- 30 mm, and the Struktec/chem-elastic systems passed Seismic ULS at +/- 50 mm.

Table 1 Target Building Pressures

Serviceability Pressure
+ 1515 Pa.
- 1515 Pa

The test sample was found to have the following results for AS/NZS 4284:2008 compliance with any modifications as noted in this report:

Table 2 Summary of Results

Test Date	AS/NZS 4284:2008 Test	Result
12th August 2025	Clause 8.2 – Preliminary tests	Pass
12th August 2025	Clause 8.3 – Structural test at serviceability limit state	Pass
12th August 2025	Clause 8.4 – Air infiltration test	Pass
12th August 2025	Clause 8.5 – Water penetration by static pressure	Pass
12th August 2025	Clause 8.6 – Water penetration by cyclic pressure	Pass
12th August 2025	Clause 8.9 – Seismic test at serviceability limit state	Pass
12th August 2025	Clause 8.4 – Air infiltration test	Pass
12th August 2025	Clause 8.5 – Water penetration by static pressure (post seismic)	Pass
12th August 2025	Clause 8.6 – Water penetration by cyclic pressure (post seismic)	Pass
12th August 2025	Clause 8.8 – Structural test at ultimate limit state	Pass
12th August 2025	Clause 8.9 – Seismic test at ultimate limit state	Pass

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2 REQUEST FOR TESTING

STONEFACE Ltd & CERTIFIED STONE PLUS LIMITED requested testing of the sample to AS/NZS 4284:2008 with the test sequences as detailed in section 5 of this report.

3 METHOD

The tests were carried out in accordance with SWTL procedures:

SWTM-1.0 AS_NZS 4284 2008 Test Procedure v2

4 TEST SAMPLE

The test sample is as per the drawings in Appendix B of this report.

4.1 Description

The sample was comprised of an arrangement of Grespania's COVERLAM UCS in both 12 mm and 5.6 mm thicknesses, mounted on a suite of STONEFACE's cladding fixing systems.

STONEFACE's fixing systems included in the sample were:

- SLIMLINE20 – *Tweha Panelmate (chem-elastic)*
- STRUKTEC – *Tweha Panelmate (chem-elastic)*
- STONEMEC + LOAD BRACE – *Tweha Panelmate (chem-elastic)*
- STONEMEC – *mechanical (back of panel anchor)*
- STONEMEC + LOAD BRACE – *mechanical (back of panel anchor)*

The COVERLAM and STONEFACE systems were installed over a 140mm x 45mm H1.2 structural frame, overlaid with 12 mm ply, and wrapped with Pro-Clima Extasana Adhero peel and stick membrane.

Penetrations of the membrane by fixing system screws, had a patch of Pro-Clima Naidek applied prior to penetration.



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The window was a Starke Ambience 70, (ideal 4000 profile) with safety glass IGU, mounted in the rough opening with Pro-Clima Extasil and Pro-Clima Tescon tapes.

The window flashings were Starke proprietary extruded aluminium profiles.

The sample featured:

- One window
- Internal corners
- External corners
- A parapet
- A soffit
- A 140mm pipe penetration,
- Two vertical joints in the cladding system.
- An interstory joint in the cladding system.
- Flashing members as detailed in the specification tables and drawings contained within this report.
- An array of see-through portholes for inspection during the Series 1 and Series 2 water penetration tests, and for removal to inspect the Adhero membrane and provide low air-resistance for the Series 3 water penetration test.

For the purpose of description in this report:

- Reference to the “Exterior” side of the sample refers to the side of the sample facing inwards to the test booth and would normally represent the external faces of the building.
- Reference to the “Interior” side of the sample refers to the side of the sample facing outwards from the test booth and would normally represent the internal faces of the building.

Client supplied “As Built” drawings are in Appendix B of this report.

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Table 3 Test Sample Setup

Photo/Figure Reference	Description
	Figure 1 – Sample, Pre-test

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	<i>Figure 2 – Sample Pre-test</i>
	<i>Figure 3 – Sample preparation. Noting the UCS Soffit</i>

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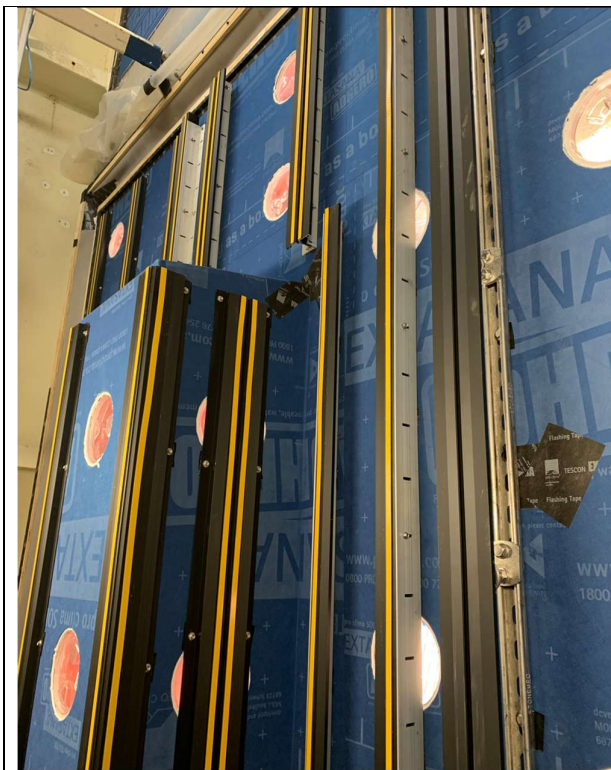


Figure 4 – Stoneface
cladding fixing system
installation.

4.2 Client Documentation

Test request and parameters form. Refer to Appendix A

Drawings. Refer to Appendix B

Certificate of Identification. Refer to Appendix E

4.3 Components

The components of the sample are as listed in drawings. Refer to Appendix B

4.4 Modifications of Sample

None.

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5 TEST PROCEDURE

The test procedure was carried out following SWTM-1.0 AS_NZS 4284 2008 Test Procedure v2

5.1 Test Sequence

5.2 AS/NZS 4284:2008

- (a) Preliminary tests
- (b) Structural test at serviceability state
- (c) Air infiltration test
- (d) Water penetration test by static pressure followed by cyclic pressure test
- (e) Seismic test at serviceability limit state displacement: Not carried out
- (f) BMU restraint test – Not carried out
- (g) Strength test at ultimate limit state
- (h) Seismic test at ultimate limit state displacement
- (i) Seal degradation test: Not carried out

5.3 Deviation, variation, or exclusion to the test procedure

None.

6 TESTING EQUIPMENT

Table 4 Testing Equipment

Item	Description	ID	Calibration
Manometer	DG 1000	SWTL - 068 (Serial No: 11040)	Date of next calibration: 30 January 2026
Manometer	Sensirion SDP2000-L	SWTL – 053 (Serial No: 2128001006)	Date of next calibration: 30 June 2026
Anemometer	FLSchmidt	SWTL - 050 (Serial No: 000011234)	Date of next calibration: 08 April 2026
Anemometer	FLSchmidt	SWTL - 018 (Serial No: 000010820)	Date of next calibration: 17 January 2026

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LDS	Bojke BLG-250N-485	SWTL - 113 (Serial No: SWTL-113)	Date of next calibration: 26 February 2025
LDS	Bojke BLG-250N-485	SWTL - 112 (Serial No: SWTL-112)	Date of next calibration: 26 February 2025
LDS	Bojke BLG-250N-485	SWTL - 111 (Serial No: SWTL-111)	Date of next calibration: 26 February 2025

7 ENVIRONMENTAL CONDITIONS

Table 5 Environmental Conditions

12th August 2025			
Temperature °C	Barometric Pressure hPa	Humidity	Calm / Windy
15.8	1024	95%	Calm/Moderate

8 TEST RESULTS

8.1 Results

8.2 AS/NZS 4284:2008

(a) Preliminary tests:

Clause	Test Date	Applied Pressure	Result
8.2	12th August 2025	+/- 1515 Pa	Pass
Comments	No damage noted.		
Test		Applied Pressure	Result
Static Pressure		455 Pa	PASS
Cyclic Pressure		227-455 Pa	PASS
Cyclic Pressure		303-606 Pa	PASS
Cyclic Pressure		455-909 Pa	PASS

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(b) Structural test at serviceability state:

Clause	Test Date	Applied Pressure	Deflection/Span Result	Successive Member Displacement Result
8.3	12th August 2025	+/- 1515 Pa	Pass	Pass
Criteria	Clause 8.3.5, no framing members shall deflect by an amount greater than span/250 mm.			
Comments	No damage noted.			

(c) Air infiltration test:

Clause	Test Date	Applied Pressure	Allowable Leakage l/s	Leakage l/s	Leakage l/s/m ²	Result
8.4	12th August 2025	+/- 150 Pa	9.85	4.06	0.25	Pass
Criteria	Clause 9.3 Air infiltration for airconditioned buildings shall not exceed 1.6 L/m ² s.					
Comments	Air leakage area and result values are the combination of both samples.					

(d) Water penetration test by static pressure followed by cyclic pressure test:

Clause	Test Date	Applied Pressure	Result
8.5 / 8.6	12th August 2025	See table below	See table below
Criteria	Clause 9.4, Under static and cyclic pressures there shall be no leaks. For both the static and cyclic water tests, a leak is considered to occur when one or more of the following occur: (a) Water appears on any inside surface of the facade and is visible from an occupied space. (b) Uncontrolled water appears on any inside surface of the facade. (c) Water appears that is likely to wet insulation, fixtures and finishes. (d) Water appears in other locations specified as unacceptable by the Specifier.		
Comments	No leaks evident.		

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Test	Applied Pressure	Result
Static Pressure	455 Pa	PASS
Cyclic Pressure	227-455 Pa	PASS
Cyclic Pressure	303-606 Pa	PASS
Cyclic Pressure	455-909 Pa	PASS

(e) Seismic test at serviceability limit state displacement:

Clause	Test Date	Interstorey Displacement	Reverse Cycles	Cycle Frequency	Result
8.9	12th August 2025	+/- 12mm	15	0.05 Hz	Pass
Criteria	Clause 9.5, The sample shall pass the criteria set for the cyclic water penetration test (see Clause 8.6) after the seismic test at the SLS displacements.				
Comments	No damage noted during seismic cycles. Static and Cyclic post SLS seismic tests carried out with no leaks evident.				

(f) BMU restraint test: Not carried out.

(g) Strength test at ultimate limit state:

Clause	Test Date	Applied Pressure	Duration	Result
8.8	12th August 2025	+/- 3150 Pa	10 sec.	Pass
Criteria	Clause 9.7 Under structural test at ultimate limit state there shall be no collapse of the test sample. Collapse shall mean any one or any combination of the following: (a) Disengagement or partial disengagement of any framing member, facade panel or any part thereof. (b) Failure of any fixings that connect the façade to the building structure.			

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	(c) Failure of any stop, locking device, fastener or support which could allow an opening light to come open. (d) Repeated breakage of glass resulting in loss of chamber pressure. Glass may only be replaced once before the sample is deemed to have collapsed. (e) Repeated cracking of glass which does not result in loss of chamber pressure. Glass may only be replaced twice before the sample is deemed to have collapsed.
Comments	No damage observed.

(h) Seismic test at ultimate limit state displacement:

Clause	Test Date	Interstorey Displacement	Reverse Cycles	Cycle Frequency	Result
All Stoneface Fixing Systems					
8.9	12th August 2025	+/- 30 mm	15	0.05 Hz	Pass
Stoneface "chem-elastic" Fixing Systems					
8.9	12th August 2025	+/- 50 mm	15	0.05 Hz	Pass
Criteria	Clause 9.8, The sample shall not collapse during or after the seismic test at ultimate limit state displacements. Any damage to the seals, members or panels shall be recorded and noted in the report. Collapse shall mean any one or any combination of the occurrences described in Clause 9.7 (a) to (d). 9.7 (a) Disengagement or partial disengagement of any framing member, facade panel or any part thereof. (b) Failure of any fixings that connect the facade to the building structure. (c) Failure of any stop, locking device, fastener or support which could allow an opening light to come in. (d) Repeated breakage of glass resulting in loss of chamber pressure glass may only be replaced once before the sample is deemed to have collapsed. (e) Repeated cracking of glass which does not result in loss of chamber pressure. Glass may only be replaced twice before the sample is deemed to have collapsed.				
Comments	No damage observed at +/- 30mm. A small chip at the bottom of the mechanical panel "Stonemec" to "Stonemec Plus Load Brace" at +/- 40mm.				

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	No damage observed for the panels mounted with the “chem-elastic” systems at +/- 50mm.
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(i) Seal degradation test: Not carried out.

8.3 Observations

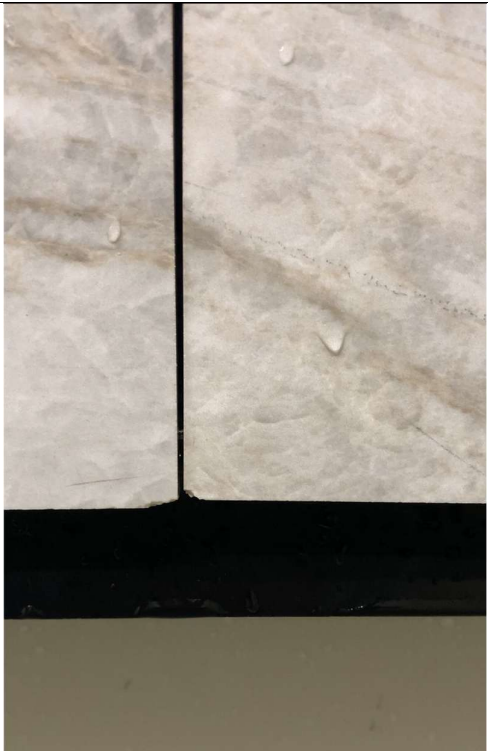
Table 6 Observations

Obs. No:	Test	Observation	Photo
1	All water penetration tests	Due to the ventilated façade design with open horizontal joints between UCS modules, water was observed running down the inside face of the UCS. As there are no horizontal elements in the STONEFACE mounting systems, no water was directed to, or was observed to migrate to the Adhero membrane. The water on the inside face of the UCS was managed and exited the façade cavity at the lower interstorey junction.	 

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2	Seismic SLS	The mechanically fixed components/UCS modules demonstrated significant closure and opening of gaps between stone module, whereas the UCS modules mounted via the chem-elastic systems showed very little movement relative to adjacent modules, with the gaps maintaining a relatively even distance throughout the seismic cycles.	
3	Seismic ULS	Image showing the extent of seismic racking	

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43	Seismic ULS	Racking of the panels mounted with the Stonemec mechanical system (below window) moving relative to panels mounted via the Struktec chem-elastic system (left hand side of image). This gap between panels opened and closed with respective seismic racking, and returned to a centralised position with cessation of the seismic cycles. No damage observed.at 30mm Stonemec system chipped at 40mm. Struktec/chem-elastic systems, no damage at 50mm.	
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9 DISCLOSURE/QUALIFICATIONS

On instruction of STONEFACE Ltd & Certified Stone Plus Limited:

- STONEFACE Ltd & Certified Stone Plus Limited Drawings attached to this report have been provided by the client and SWTL accepts no liability with regards to the accuracy of the drawings.
- SWTL has not be provided with any other test reports from the manufacturer or manufacturing instructions.
- This report has been prepared solely for the party of who it was addressed within the terms of the brief provided to this company. This report may not be used for any other context or for any other purpose without prior agreement.
- This report may not be read or reproduced other than a complete document.



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10 IANZ ACCREDITATION

This testing has been produced under IANZ accreditation number: **1438**

11 TESTING OFFICER

Name: Bernard Farrington

Date: 13 December 2025

Signature: 

12 REPORT WRITER

Name: Bernard Farrington

Date: 13 December 2025

Signature: 

13 PEER REVIEWED BY

Name: Shawn McIsaac

Date: 13 December 2025

Signature: 



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14 Appendix A – Test Request Form

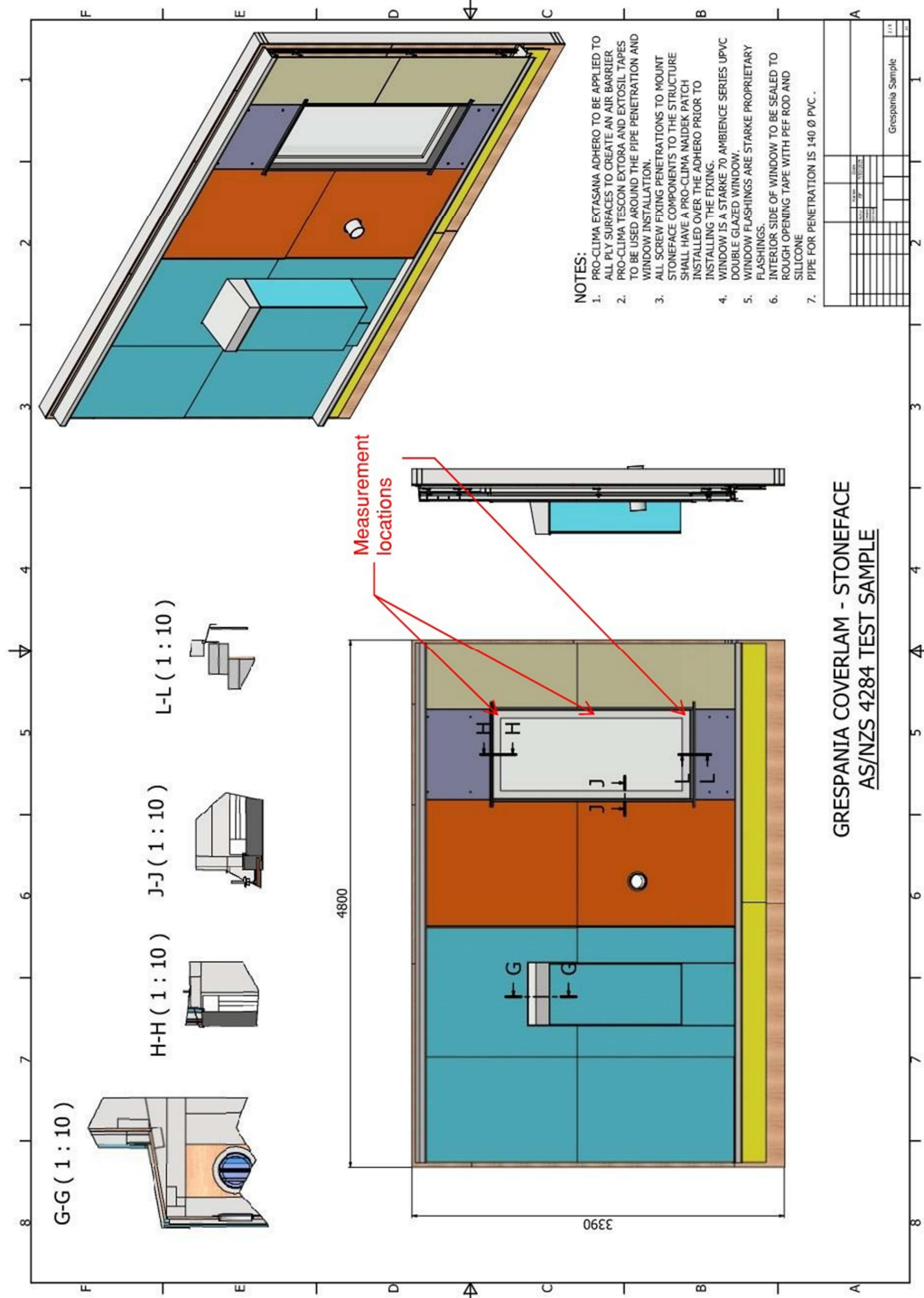
NZS 4284 TEST REQUEST FORM				
Mandatory	Section	Test Name	Clause	Required Parameters
Y	a	Preliminary test	8.2.1	
		SLS pressure	8.2.2/8.3	SLS (+) = 1515 Pa SLS (-) = 1515 Pa
		Water static	8.2.3/8.5	Static water test pressure = 455 Pa
		Water - Cyclic	8.2.3/8.6	Cyclic test pressure Stage 1 = 227 - 455 Pa Cyclic test pressure Stage 2 = 303 - 606 Pa Cyclic test pressure Stage 3 = 455 - 909 Pa
Y	b	Structural test at SLS	8.2.3/8.6	Location of transducers noted on drawings? Y/N
			8.3.2	Pressure steps? 5
			8.3.3	Max. Displacement? = 7.16 mm
		Members or panels	Deflection/span limit ratio	
		Window Stile	1/250	7.16 mm
N	c	Air infiltration test	Test pressure	(+) = 150 Pa (-) = 150 Pa
Y	d	Water test (static and cyclic)	Air infiltration limit = 1.5	
		Static	Pressure (Pa)	455
		Cyclic 1	227 - 455	Duration (mins) 15 Duration and spray intensity 15 min, 0.05 l/m ² s
		Cyclic 2	303 - 606	5 min, 0.05 l/m ² s
		Cyclic 3	455 - 909	5 min, 0.05 l/m ² s
		Additional water penetration requirements?		5 min, 0.05 l/m ² s
N	e	Seismic at SLS		(Water test repeated after)
		Support beam movement allowed = 12 mm		
		Number of cycles = 15		
N	f	Frequency of movement = 0.05 Hz		
		BMU restraint		Test load across face of sample = kN Test load perpendicular to sample = kN
Y	g	Strength at ULS	Test pressure	ULS (+) = Pa ULS (-) = Pa
N	h	Seismic at ULS		
		Support beam movement allowed = 30 mm		
		Number of cycles = 15		
N	i	Frequency of movement = 0.05 Hz		
		Seal degradation		10% air seal removal Y/N
		Describe seals to be altered		NA

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15 Appendix B – Drawings

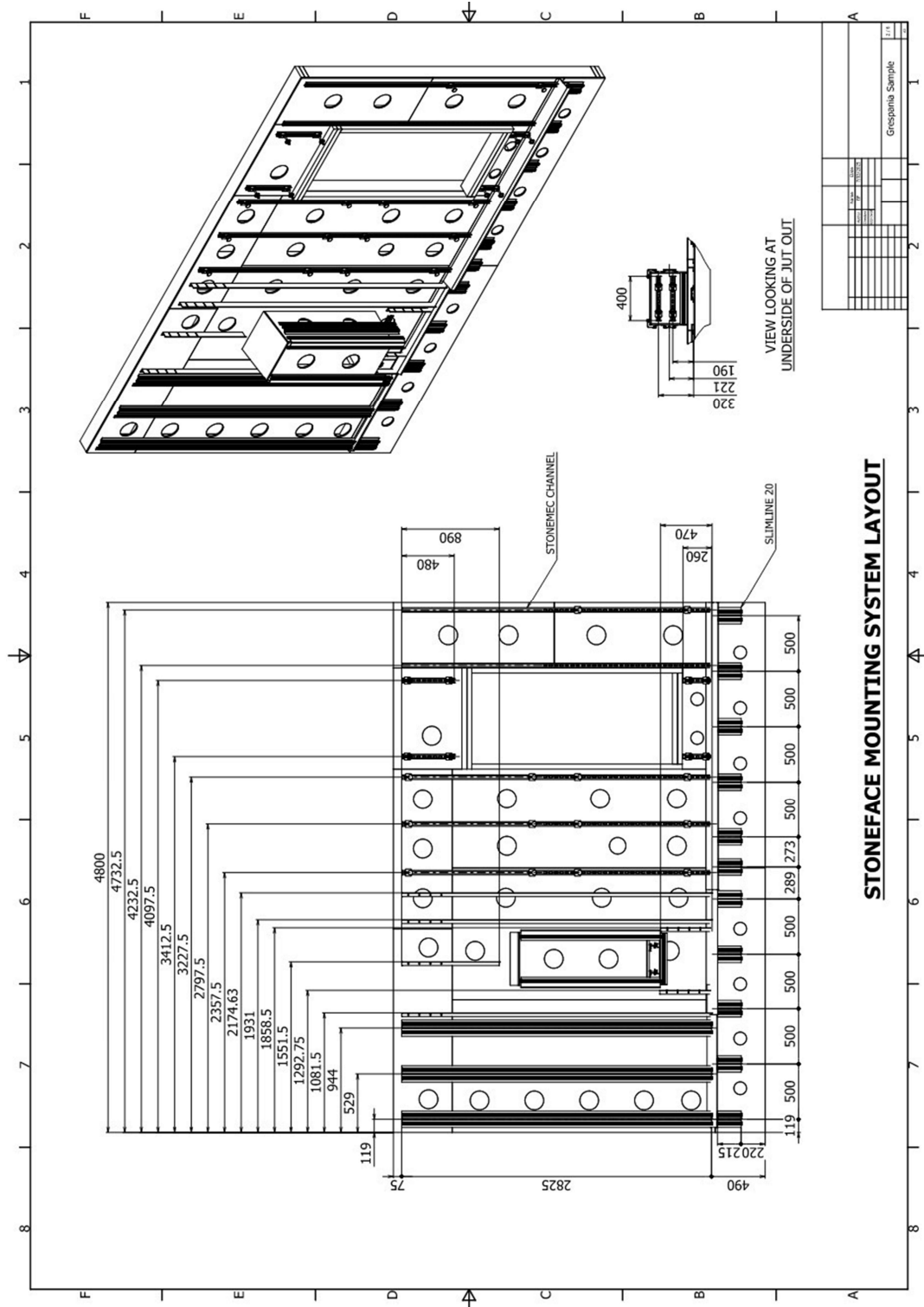


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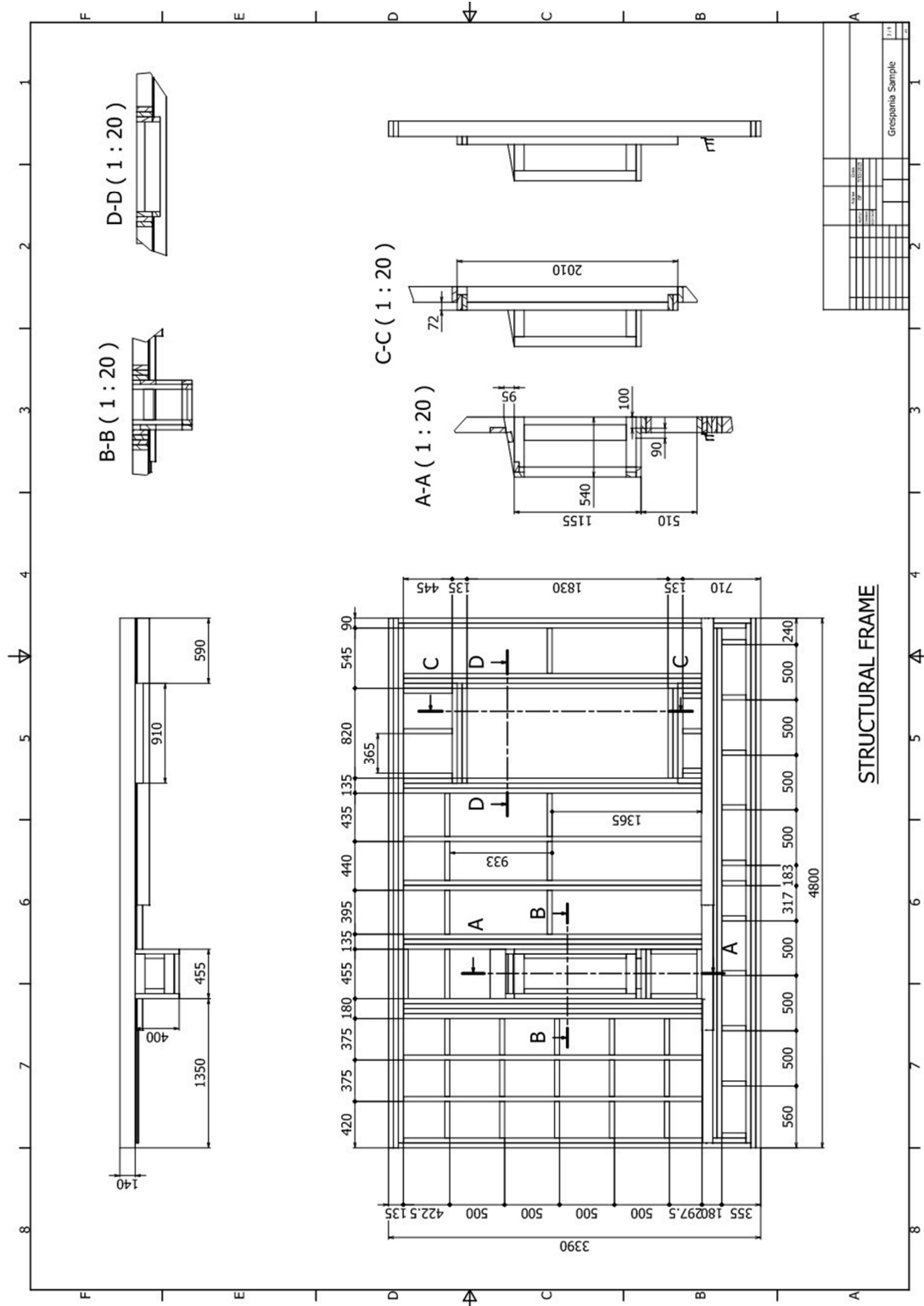
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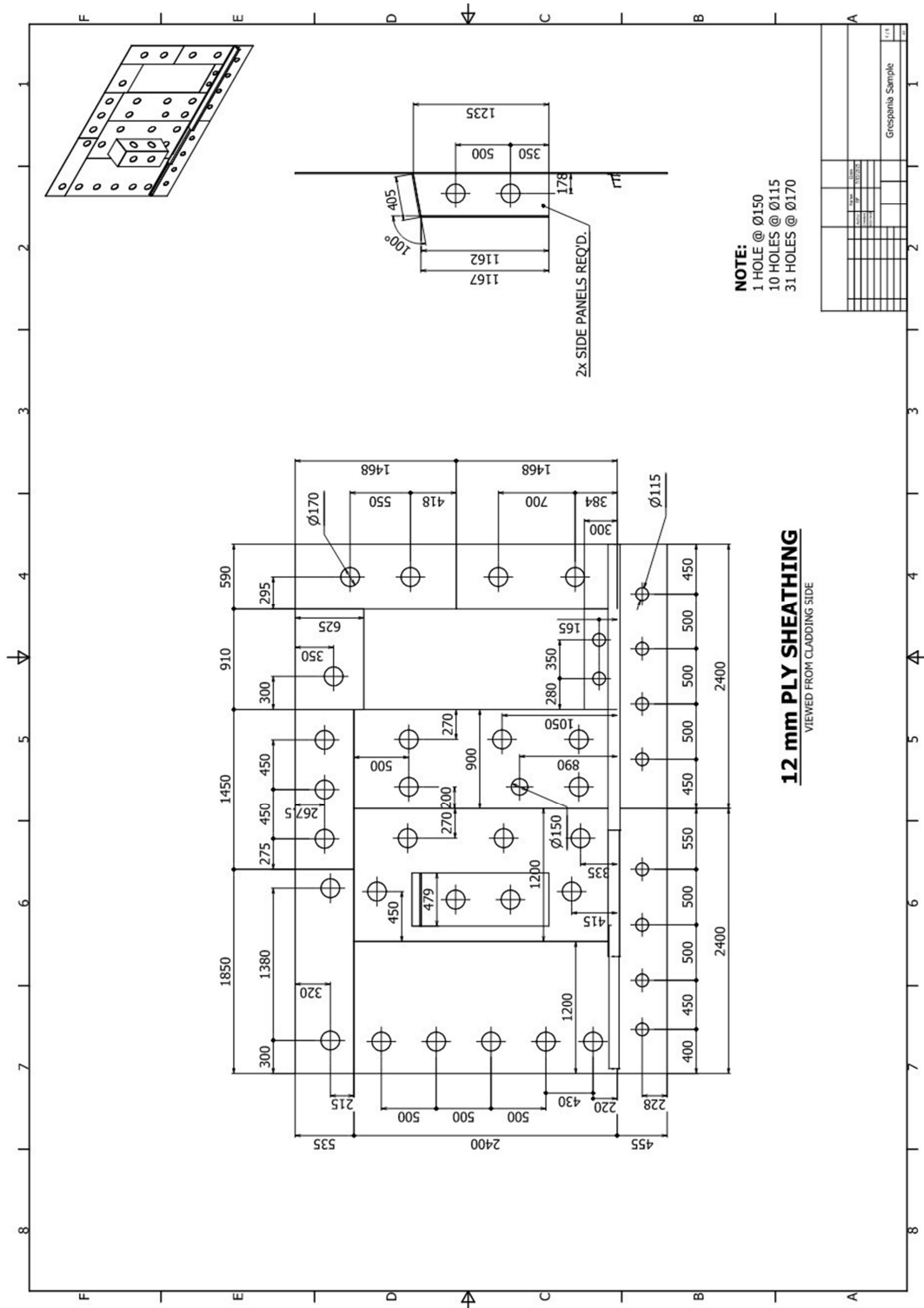


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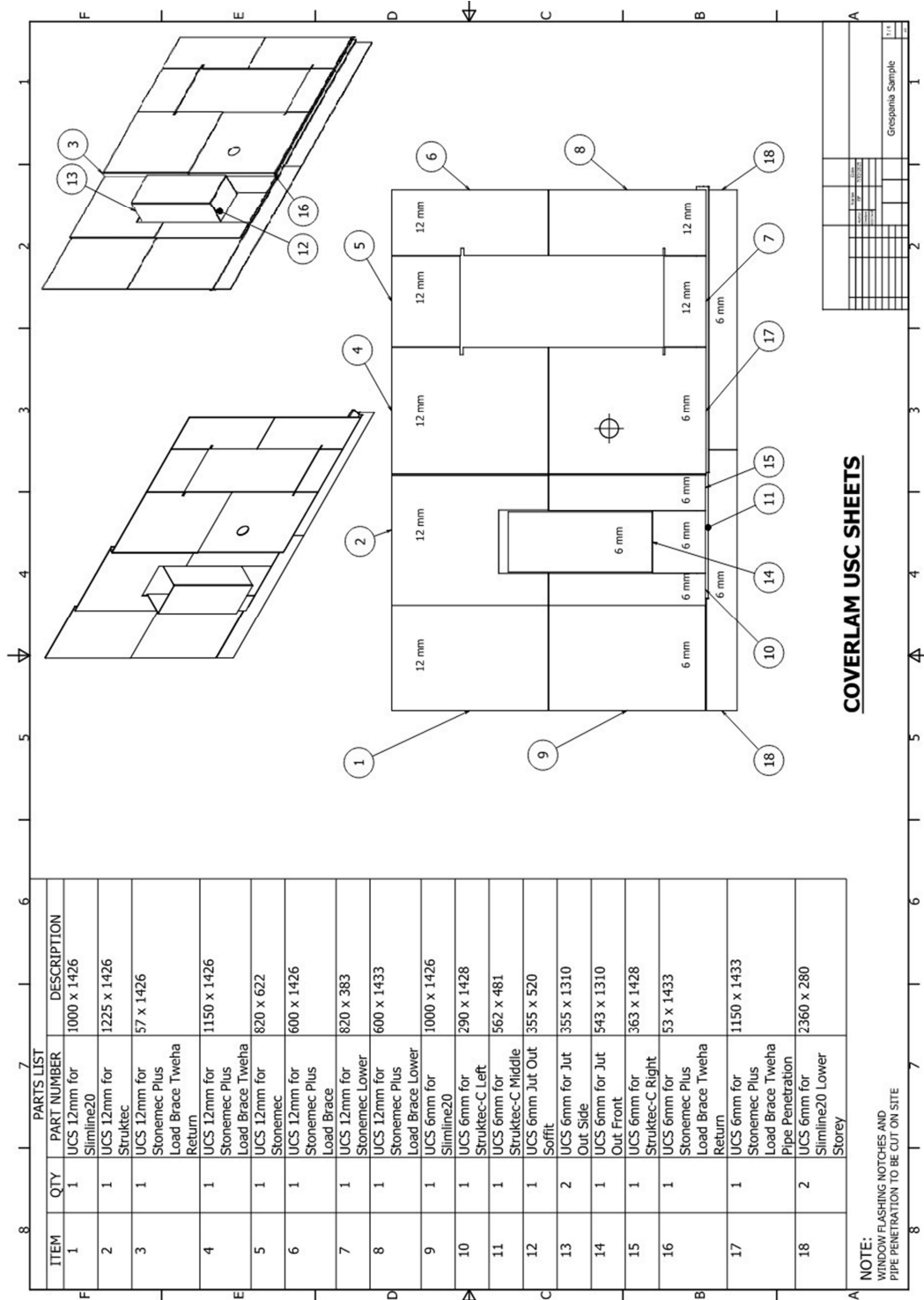
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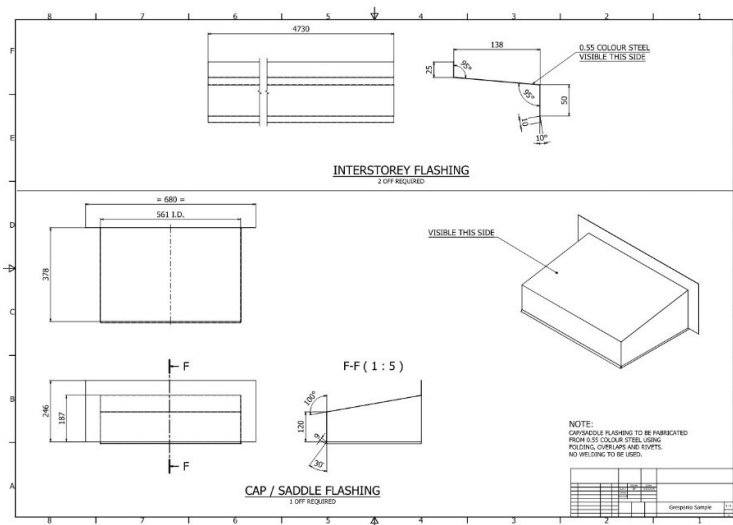
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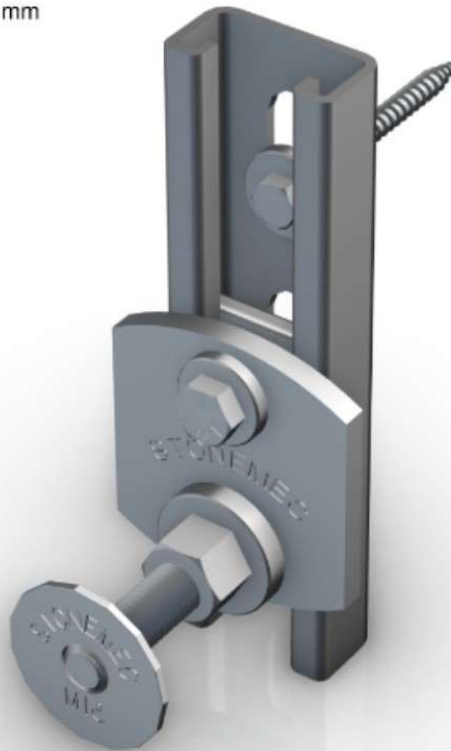
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STONEFACE system drawings for reference



STONEMEC

Cavity Depth 50-125 mm



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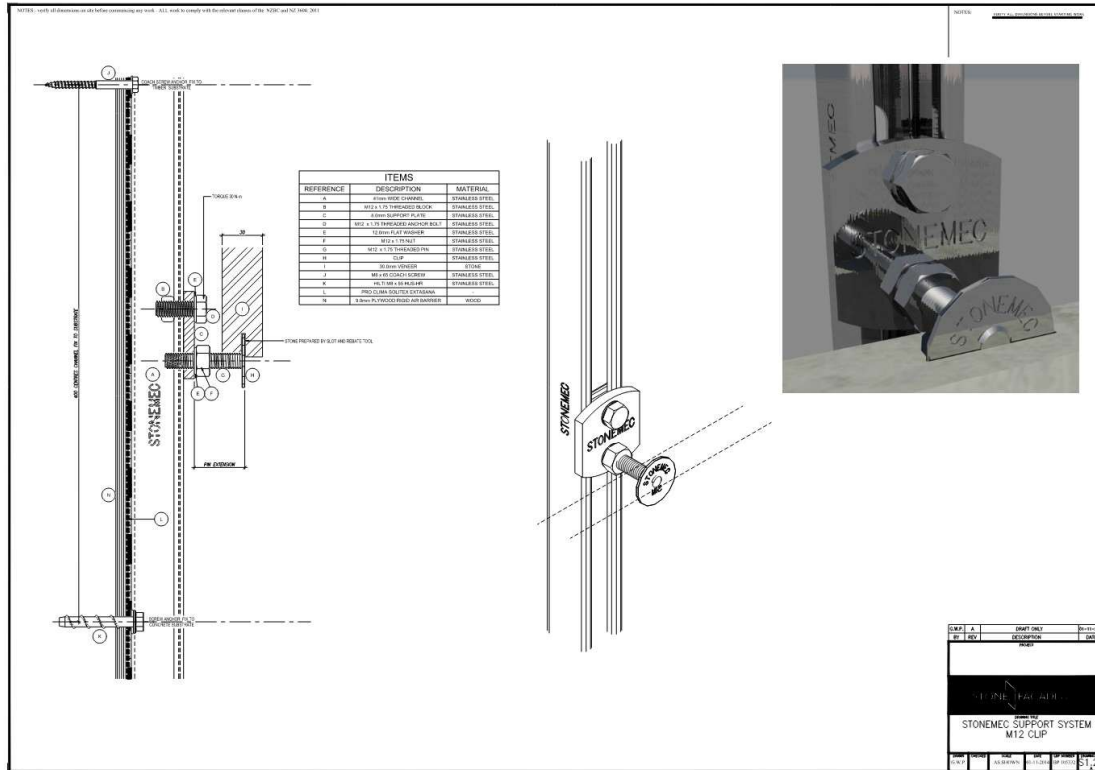


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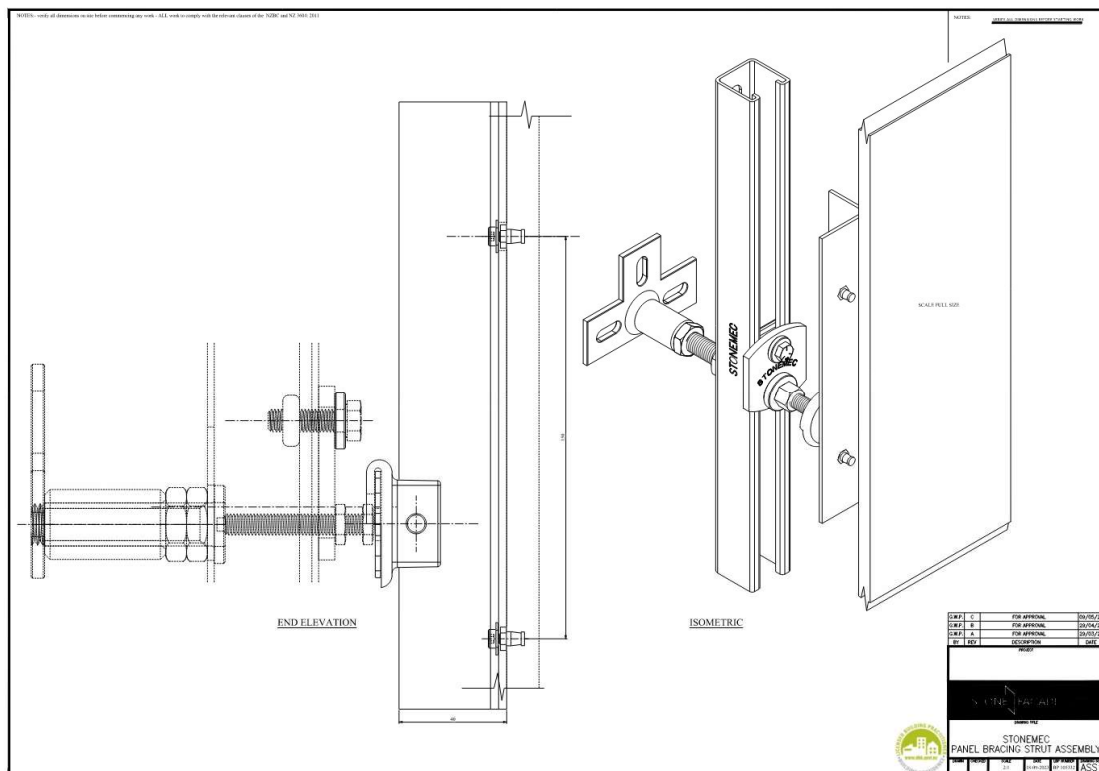
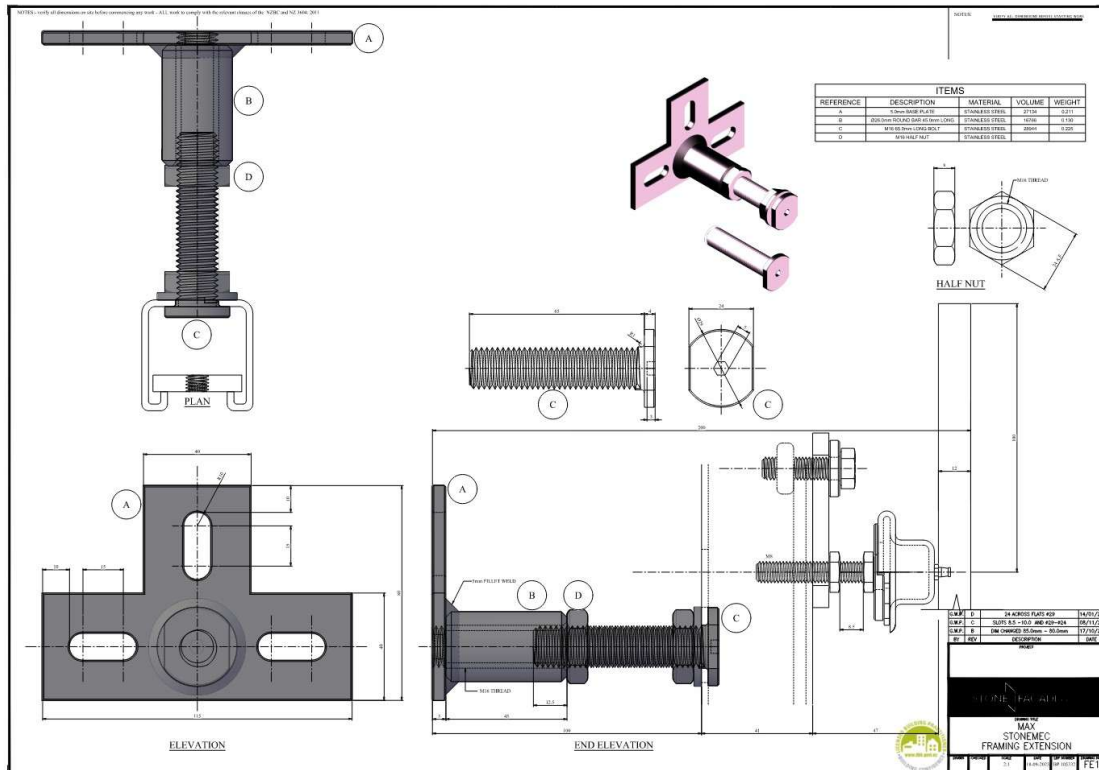


STONEMEC CAVITY EXTENSION BRACKET

Cavity Depth 120-245 mm



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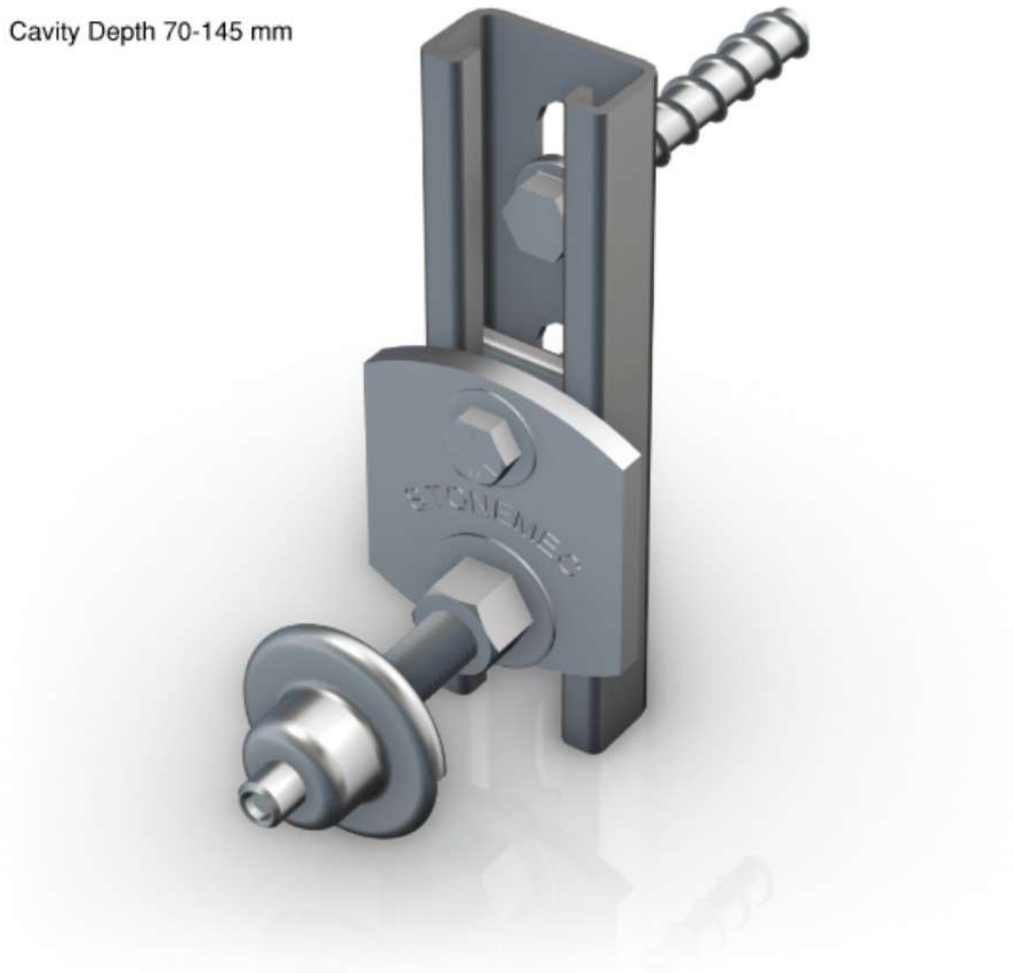
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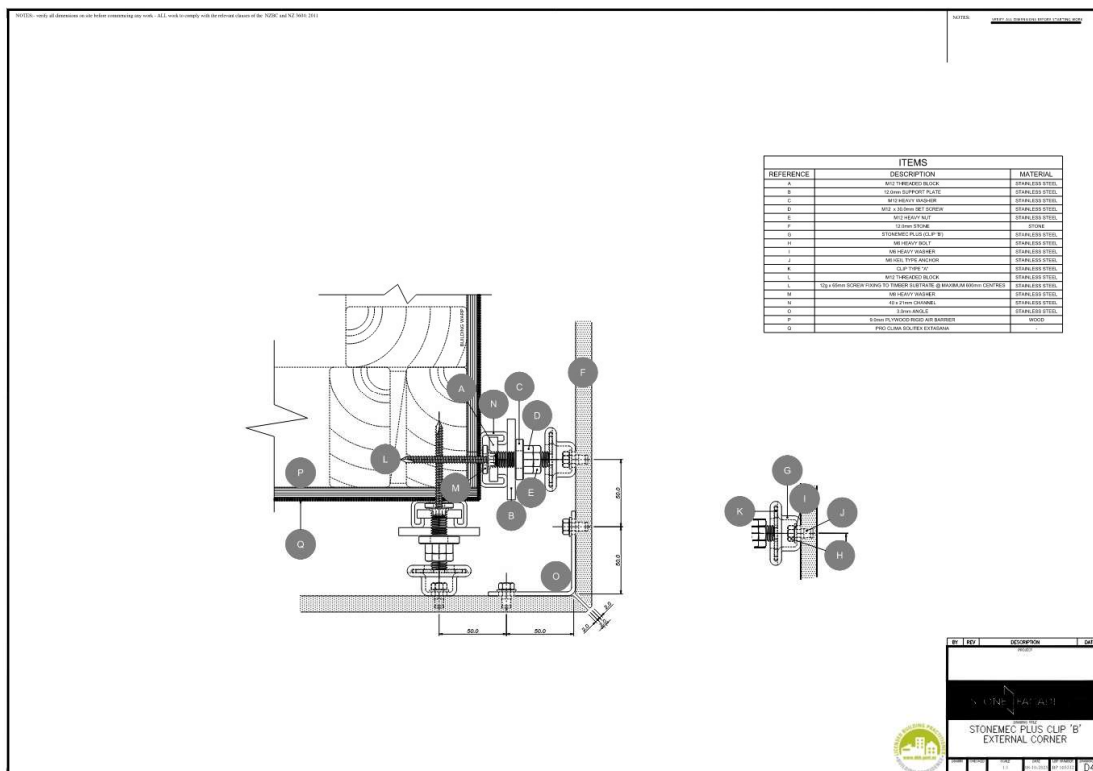
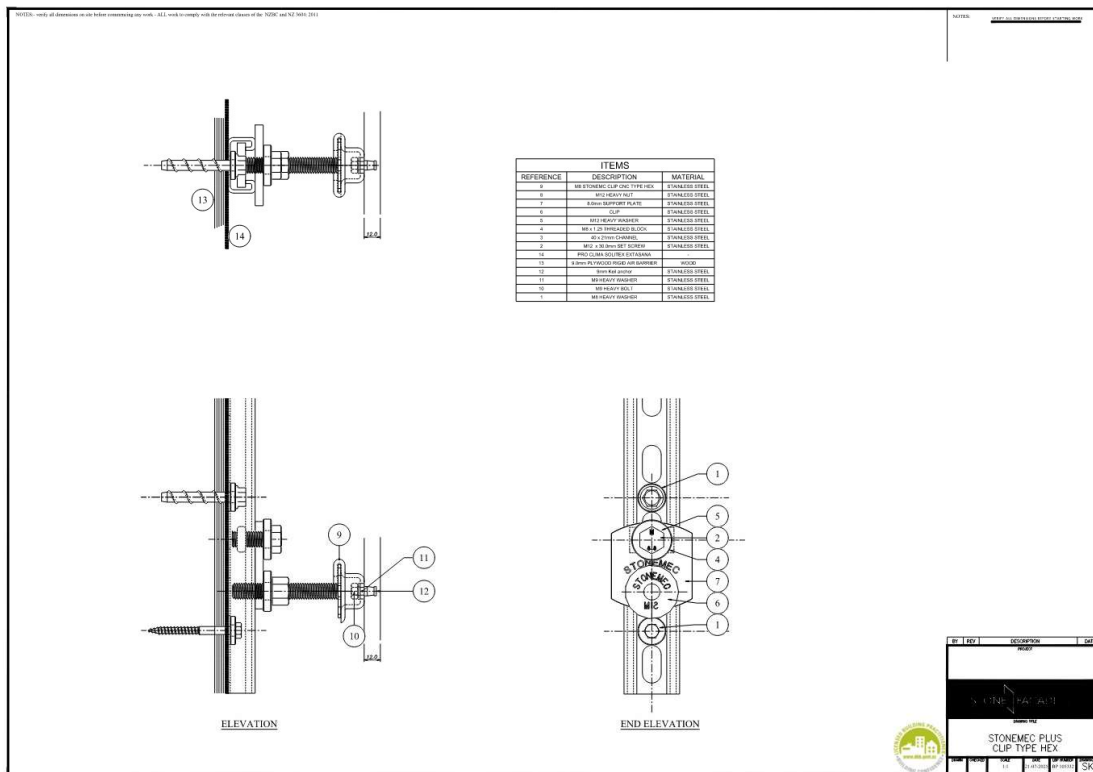
STONEMEC Plus

12mm Mechanical Back of panel _ Keil Type Anchor

Cavity Depth 70-145 mm



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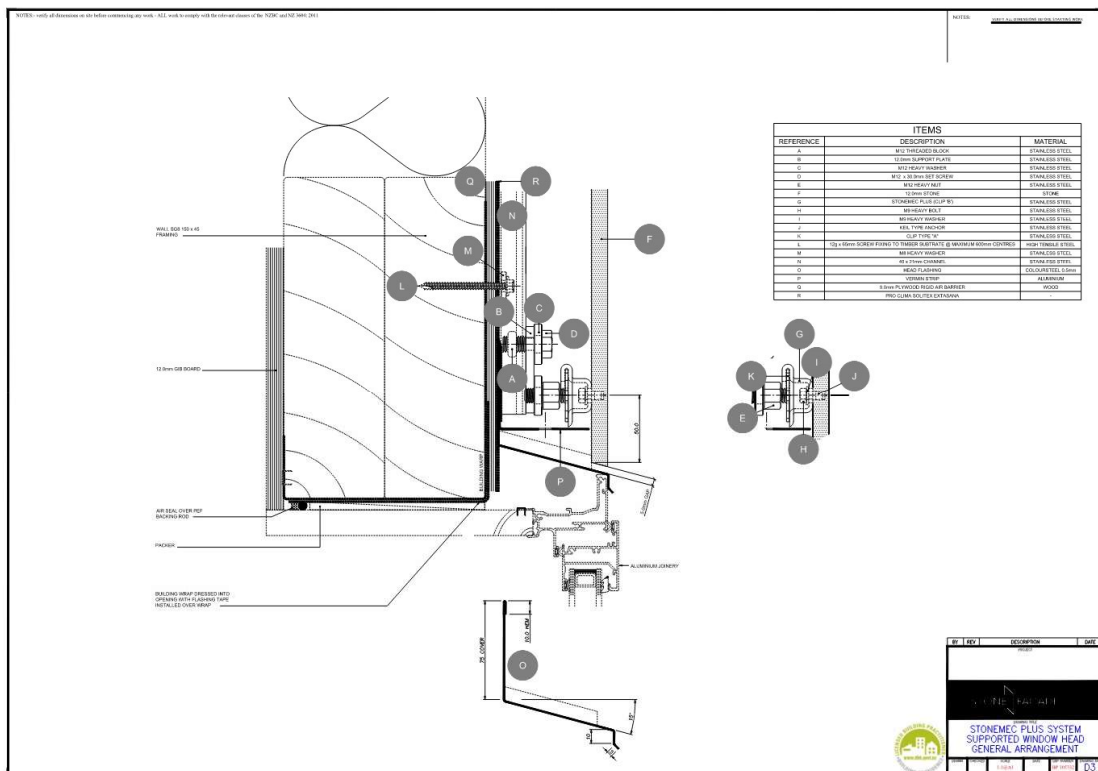
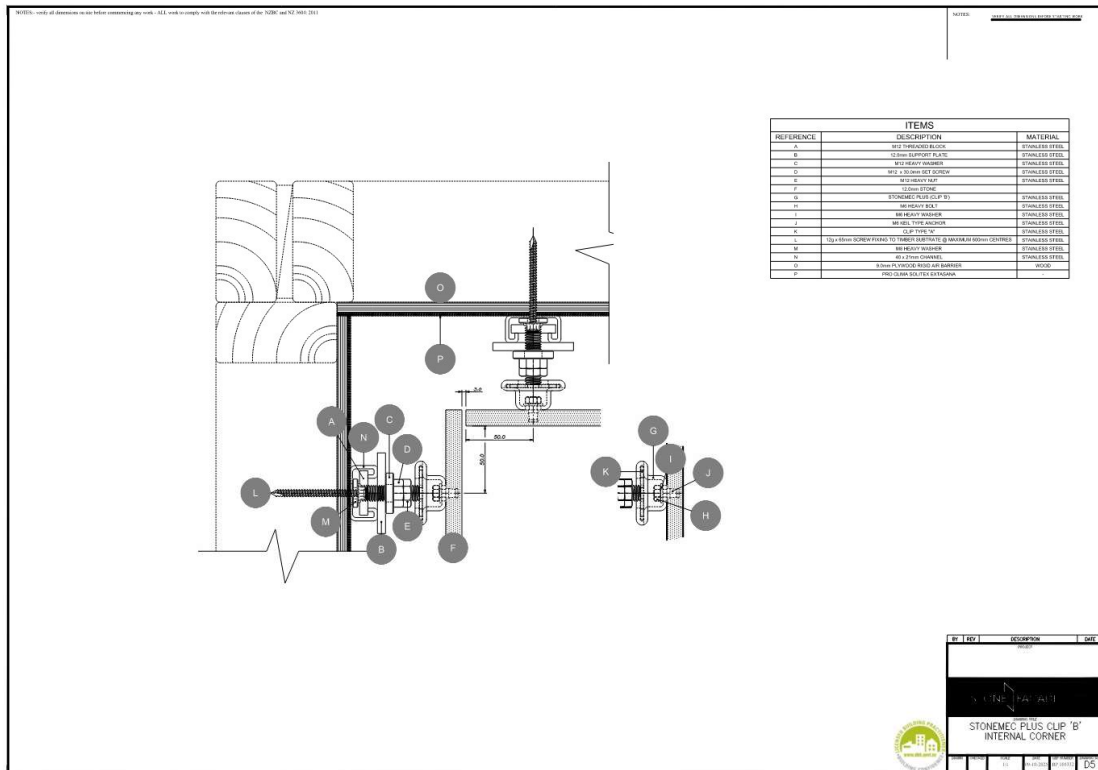


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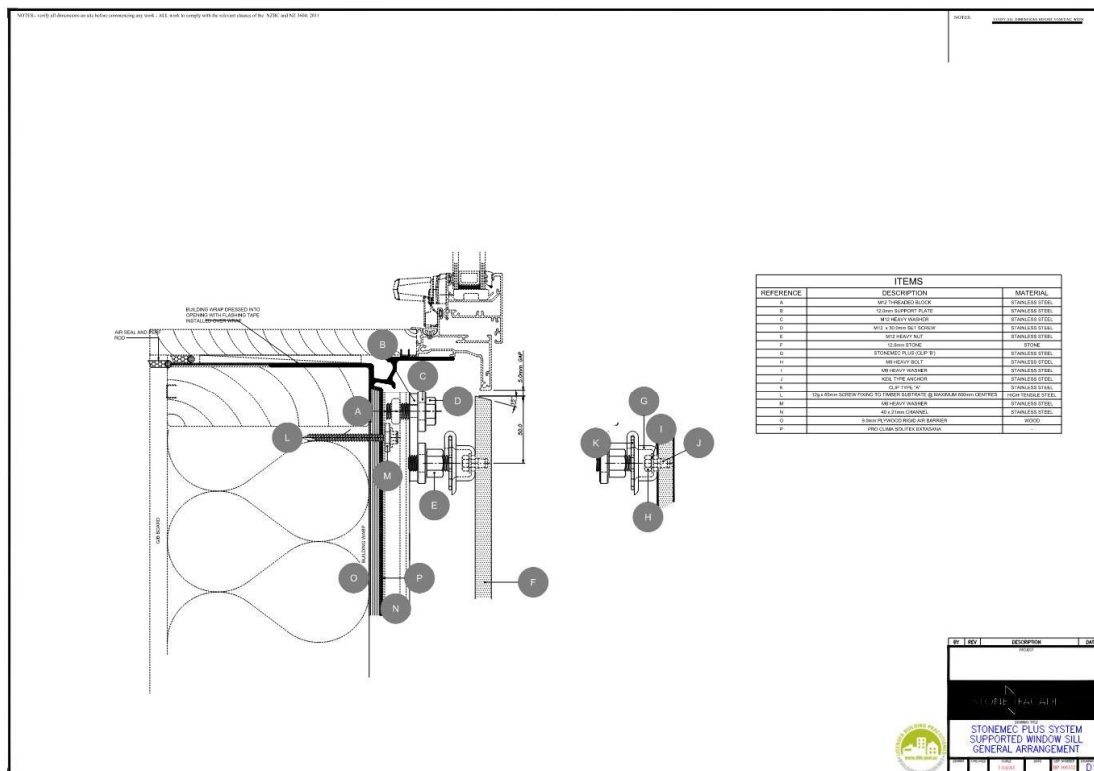
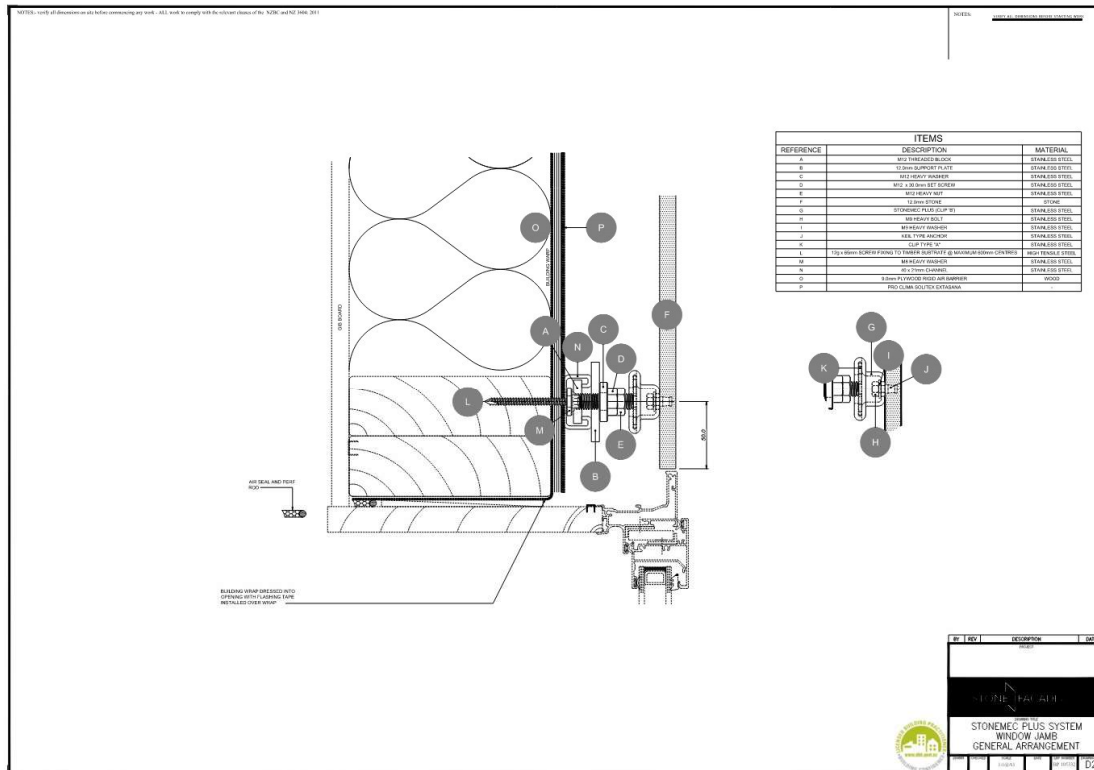


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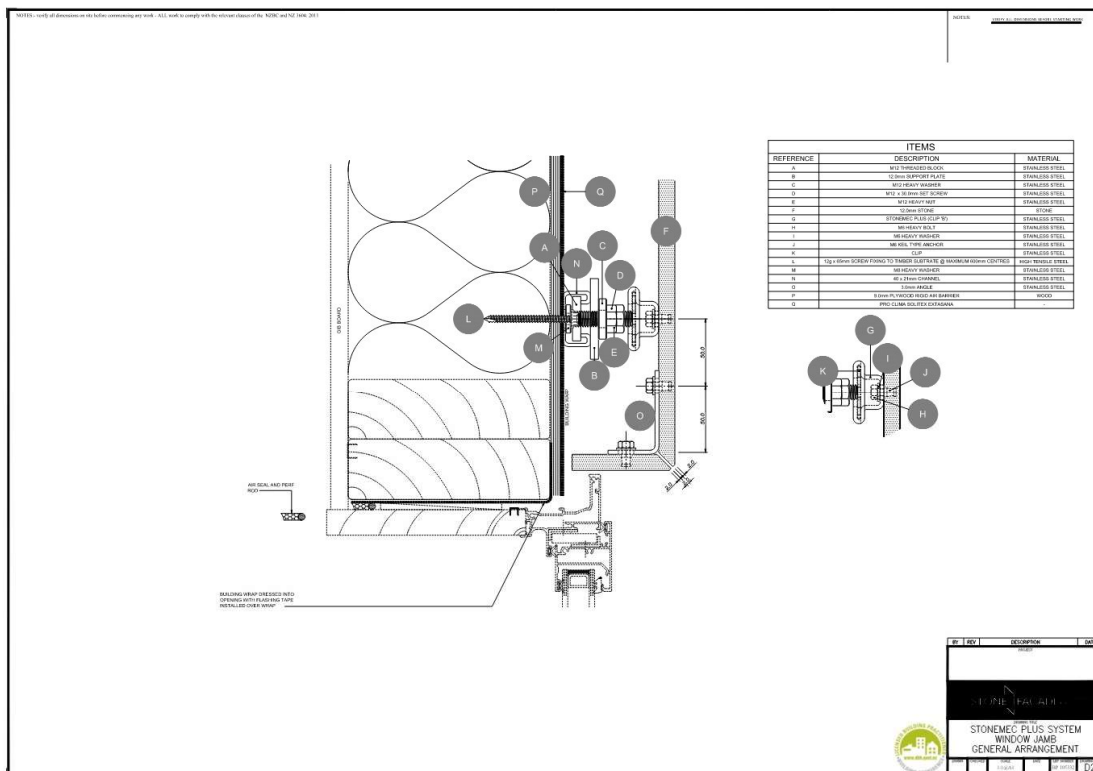
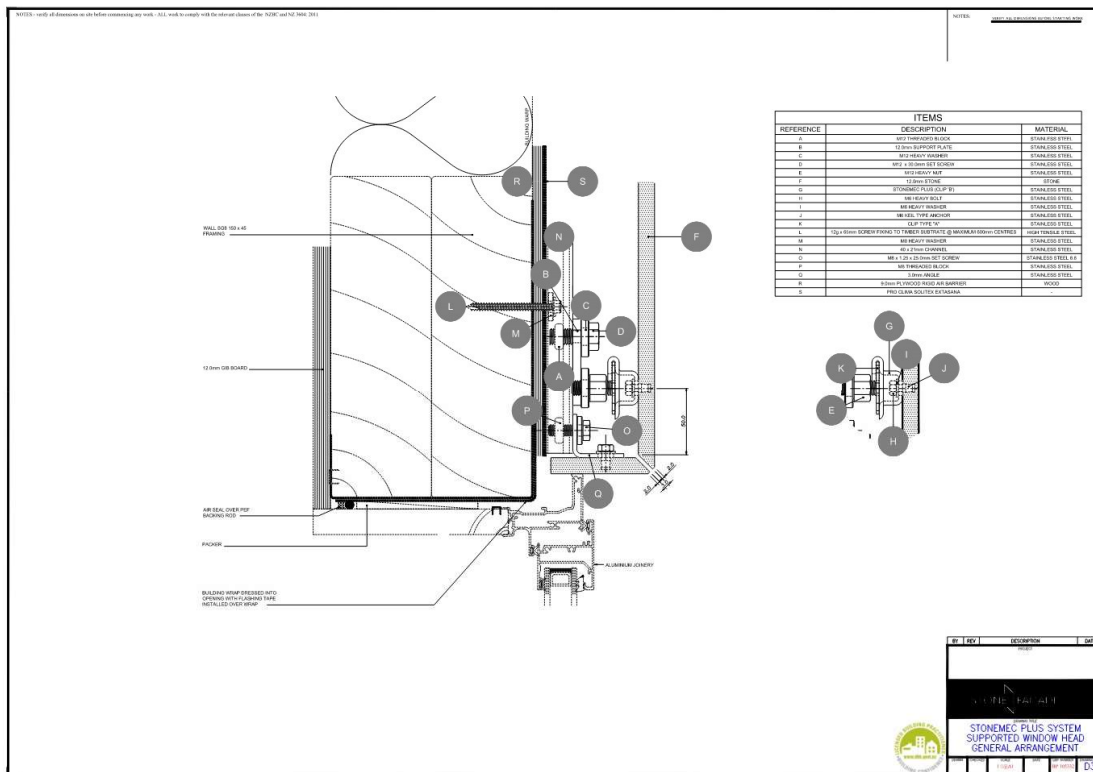


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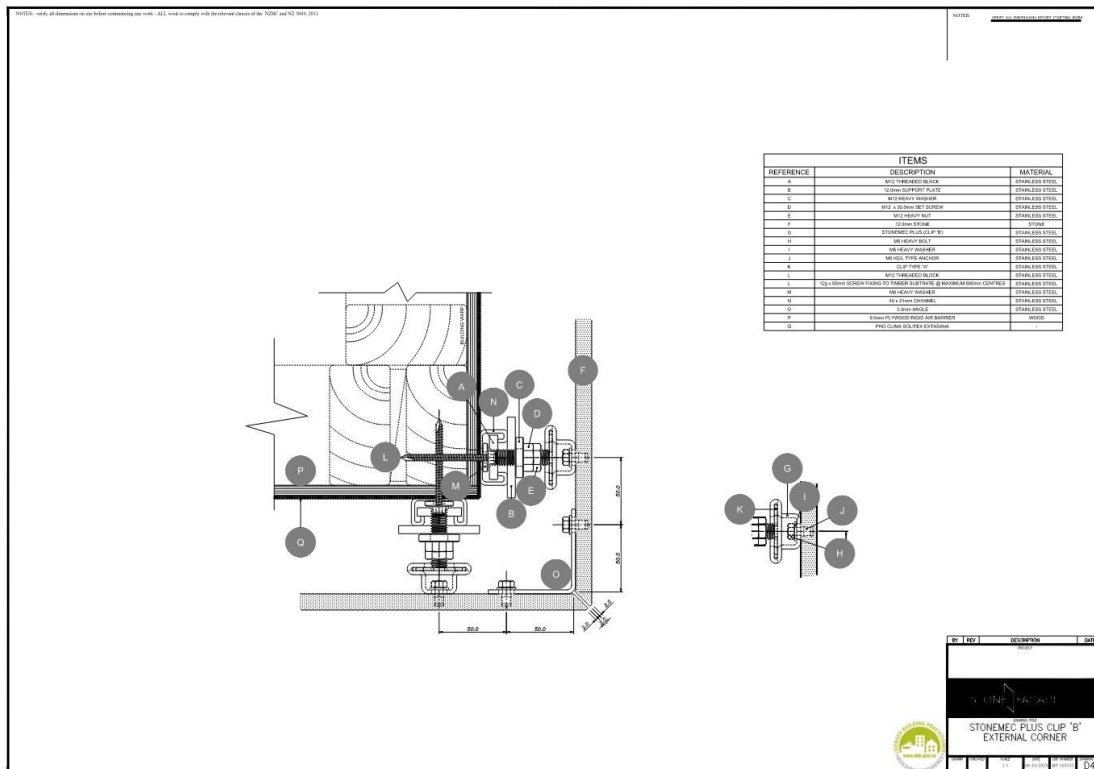
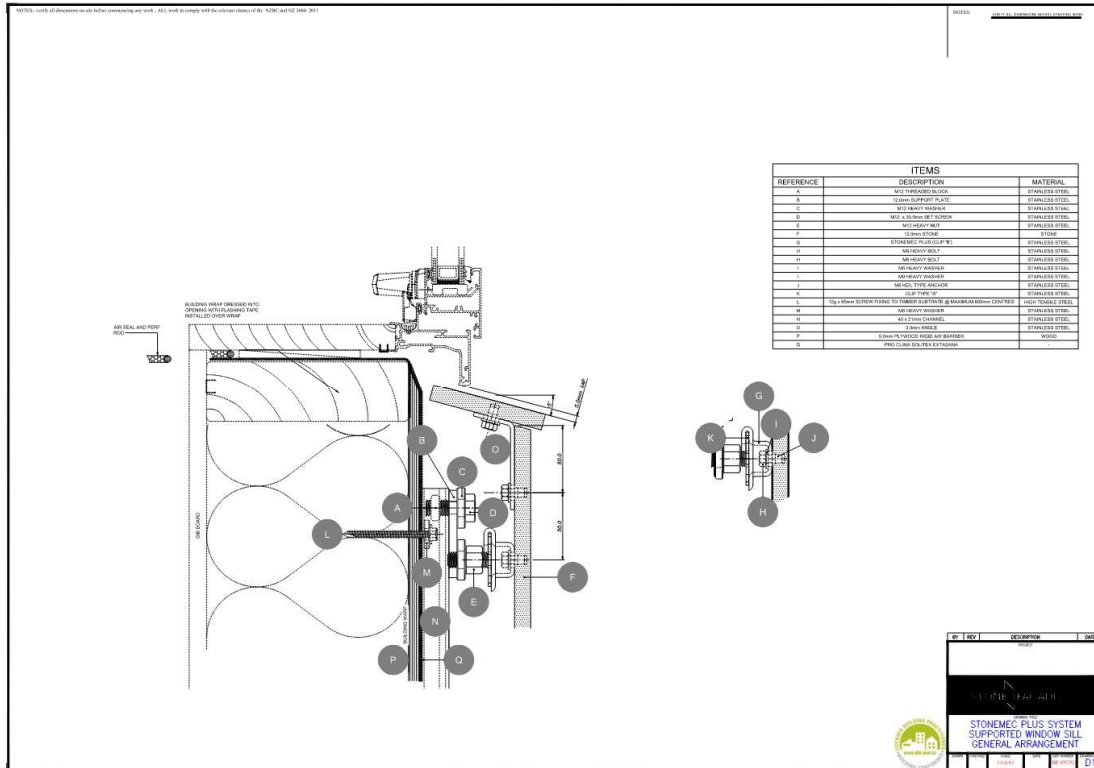


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Report Writer Bernard Farrington

Authorised by Shawn McIsaac

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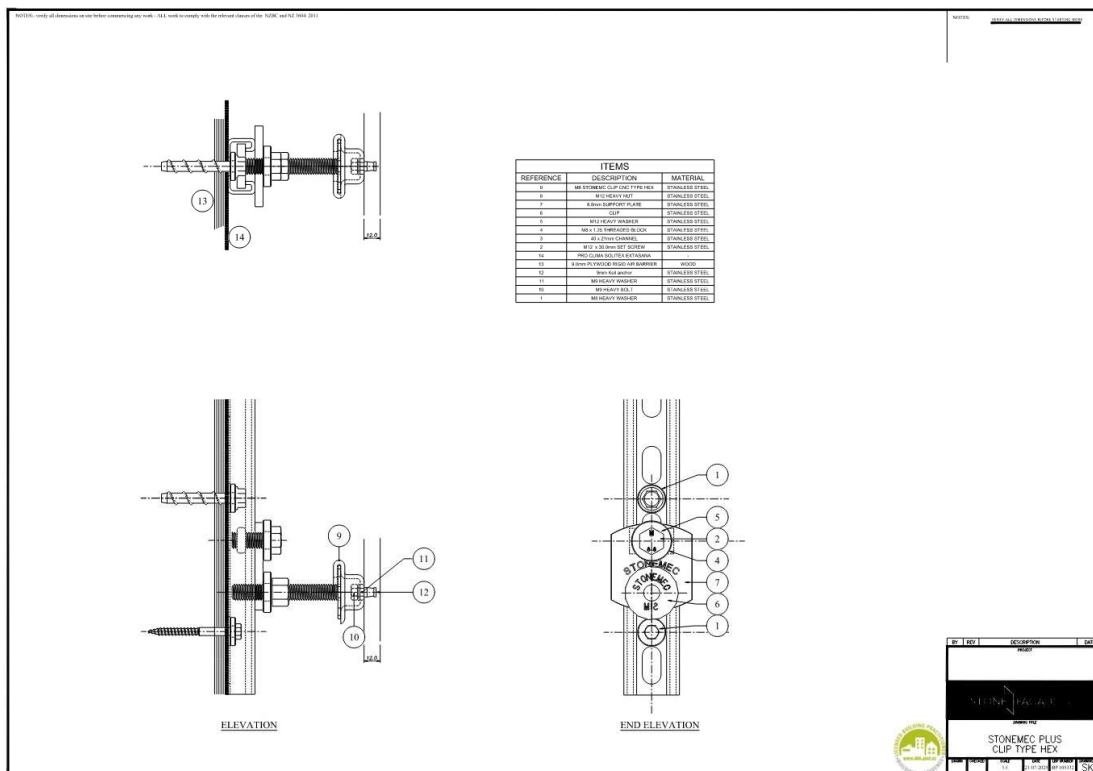
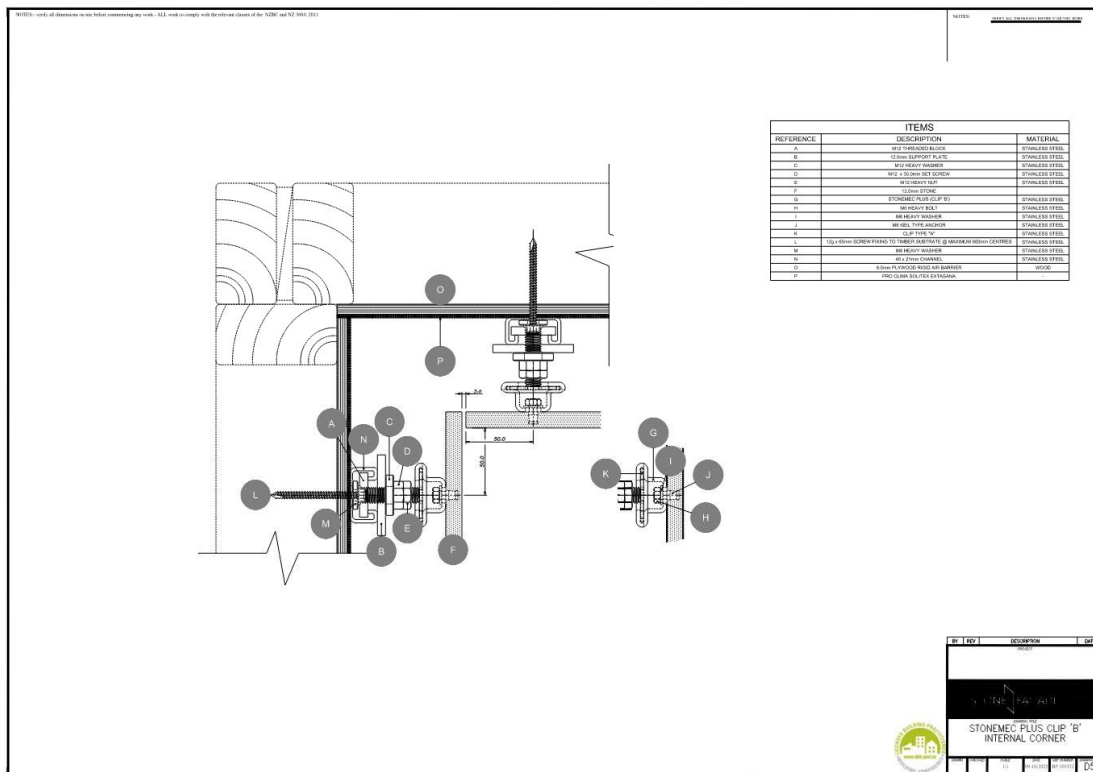


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Report Writer Bernard Farrington

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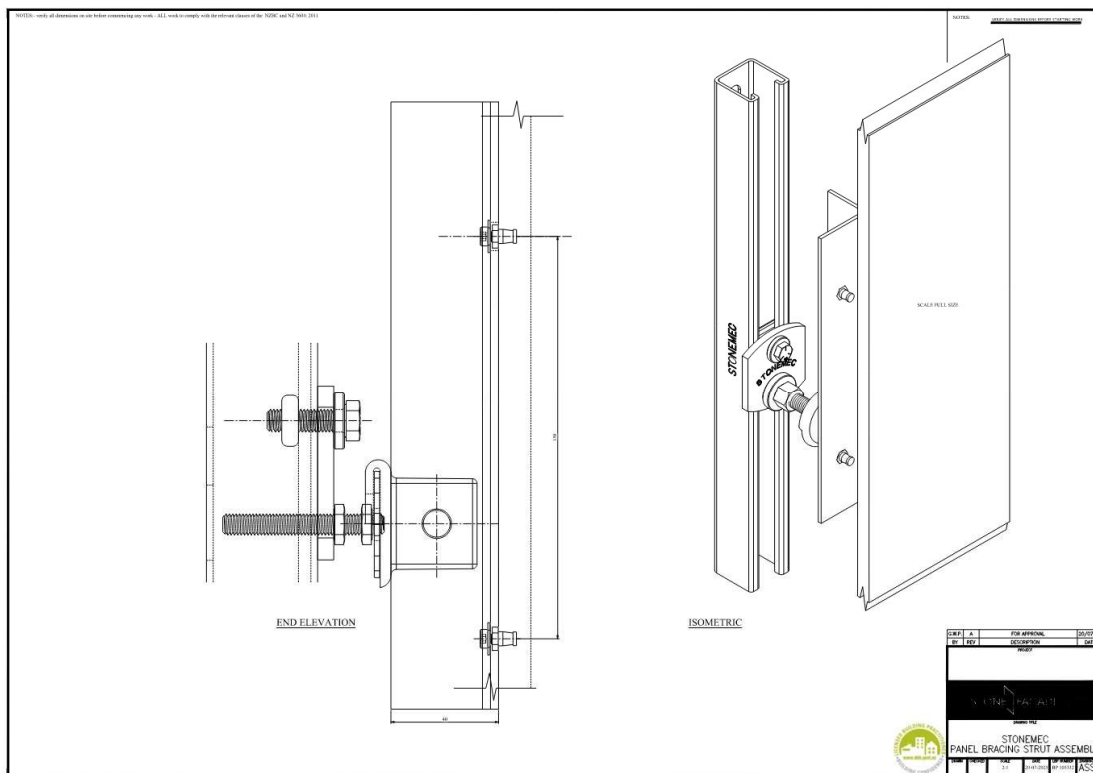
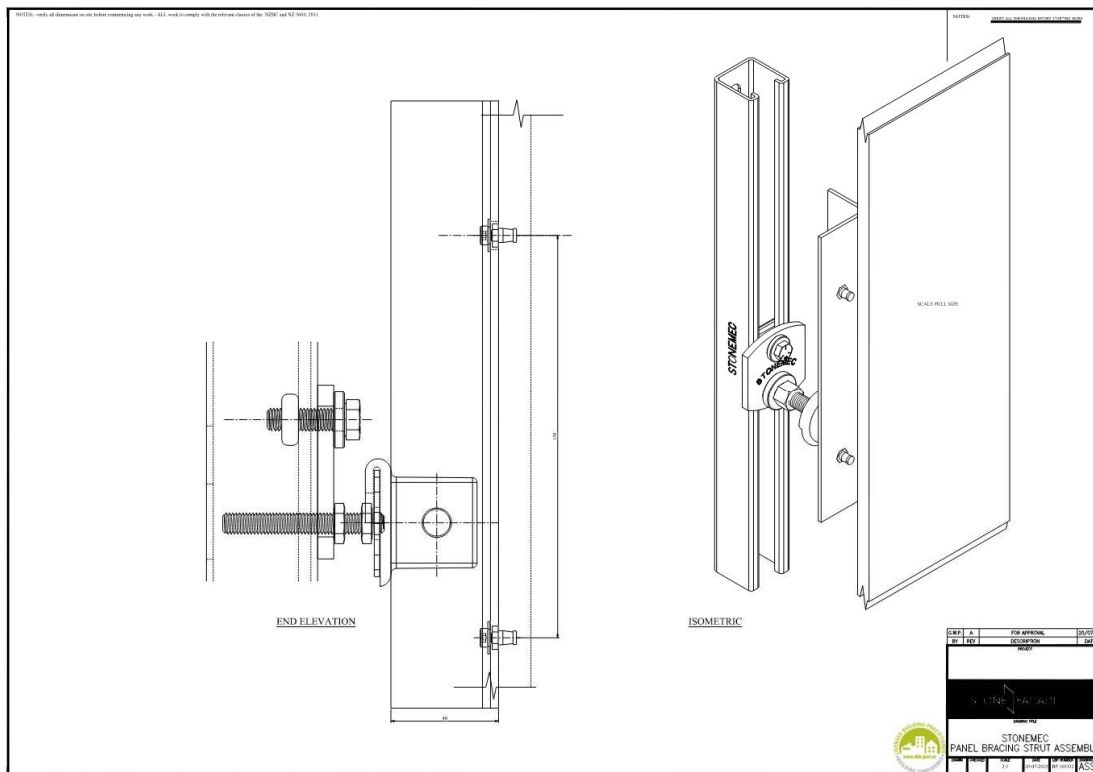


STONEMEC Plus
12mm+ Mechanical Load Brace & Keil Type Anchor

Cavity Depth 50-125 mm



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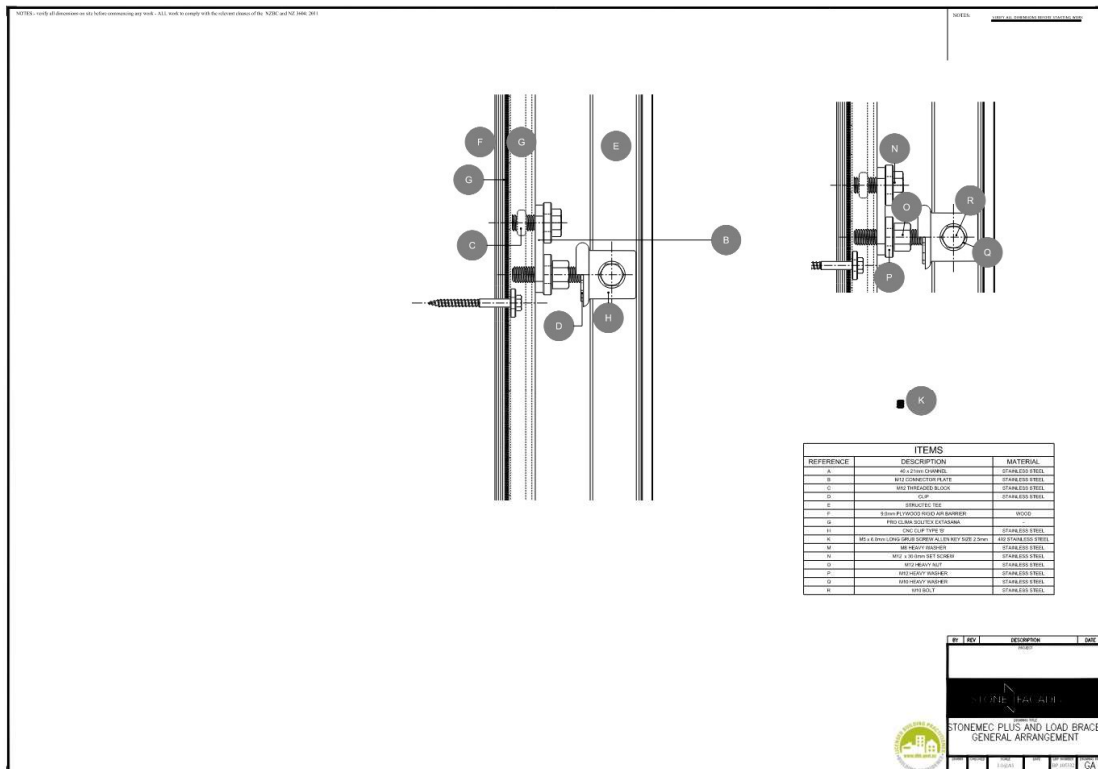
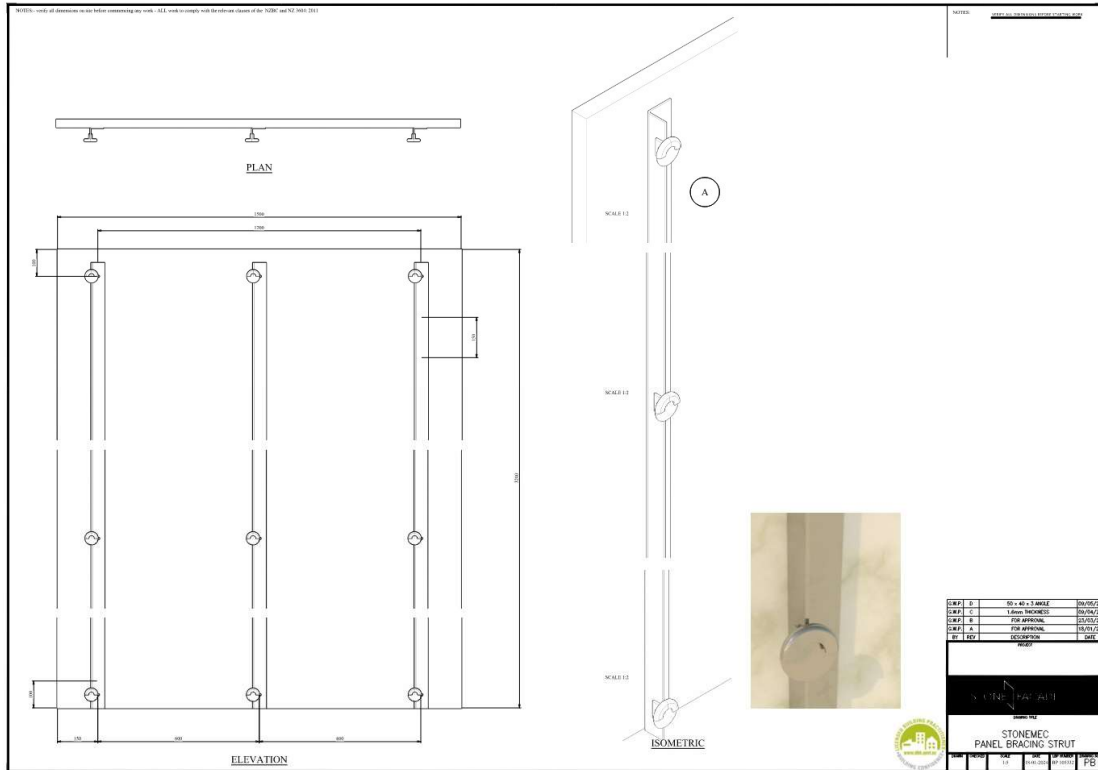


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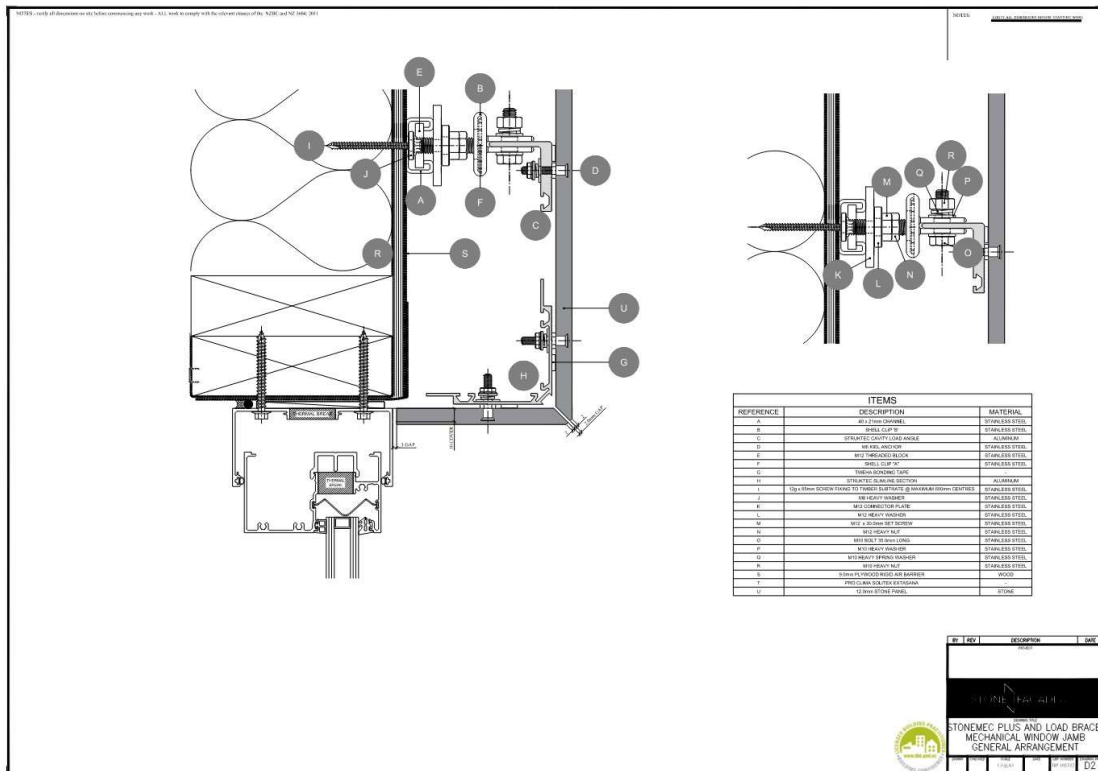
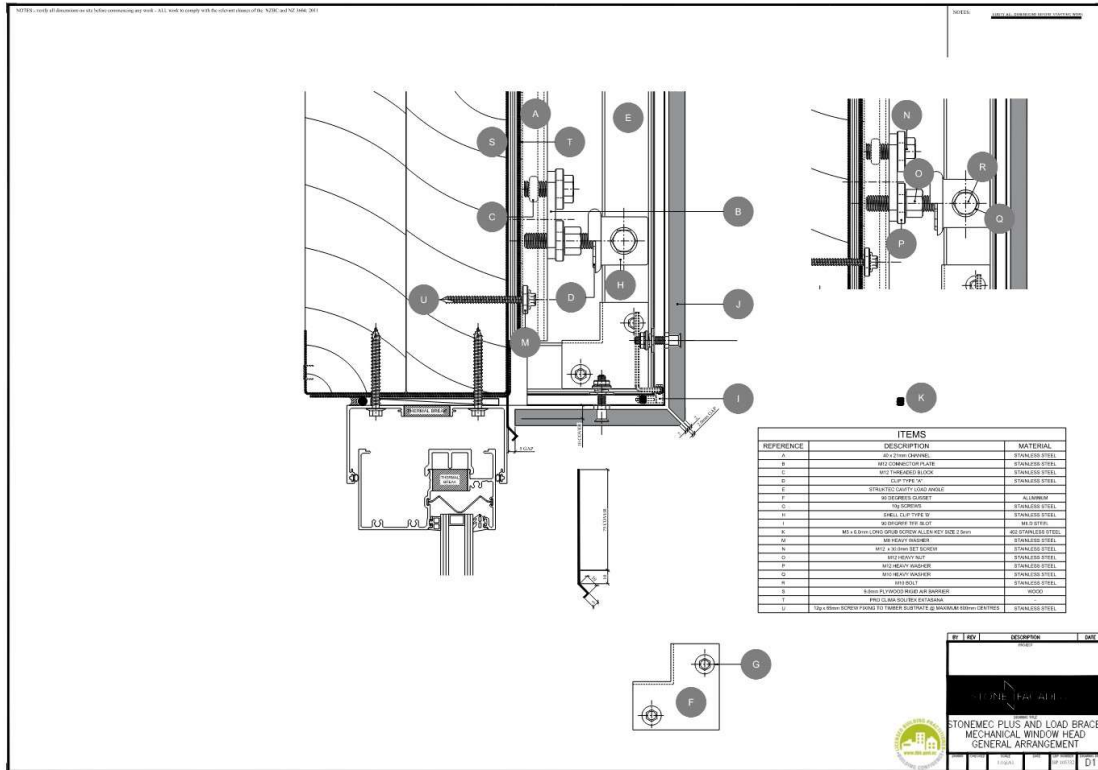
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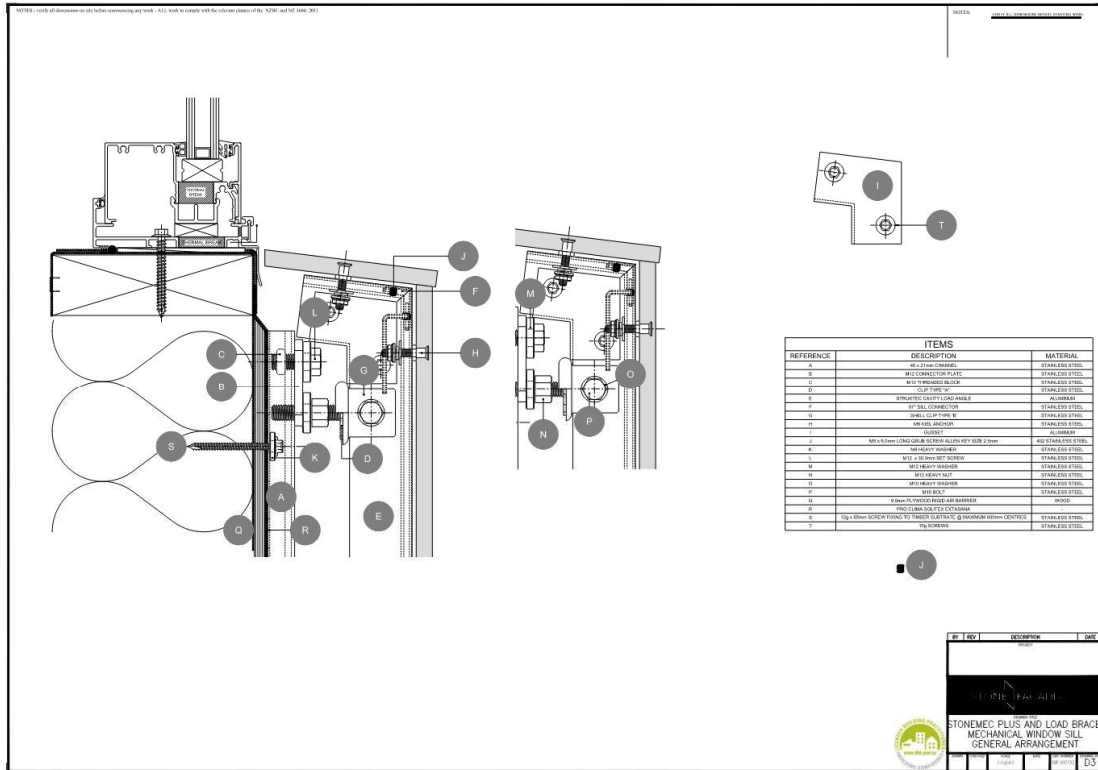


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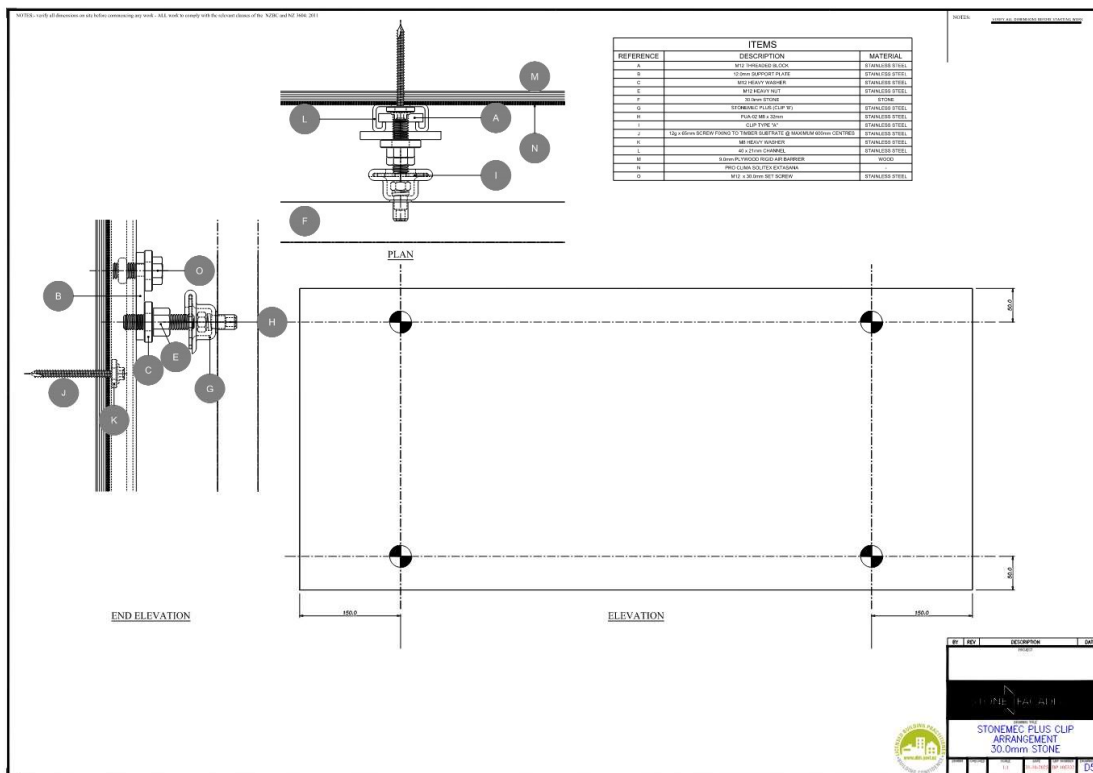
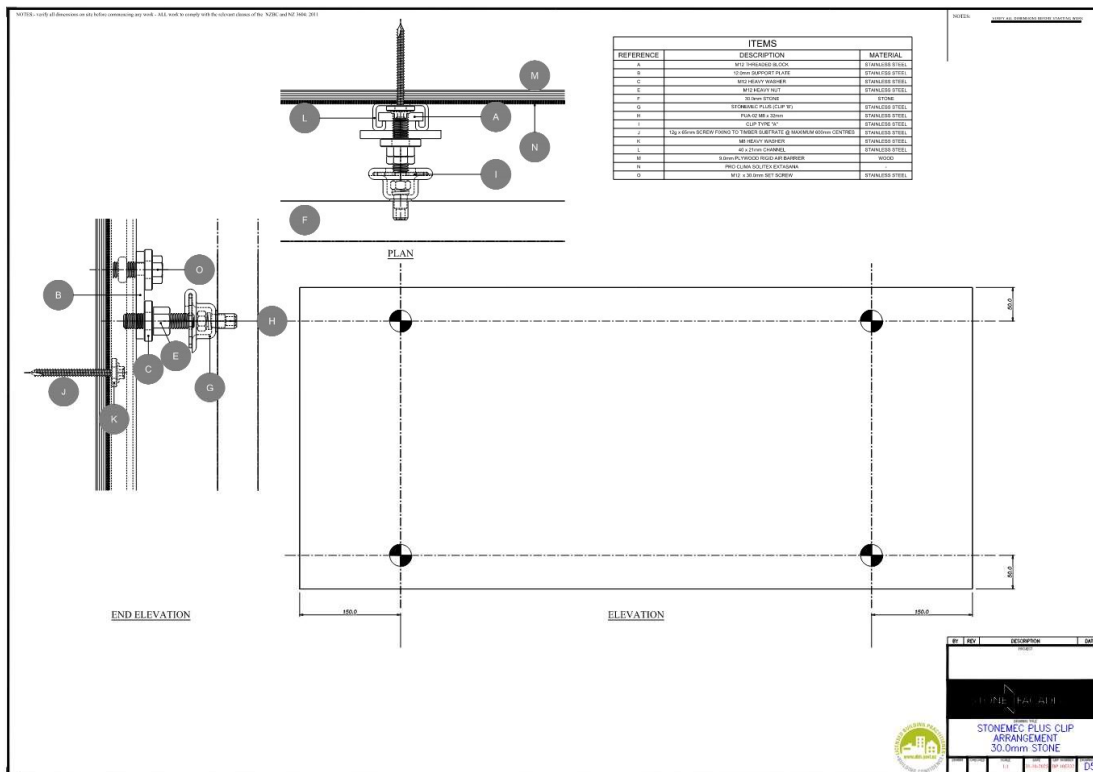


STONEMEC Plus Fischer Type Anchor - Natural Stone

Cavity Depth 70-145 mm



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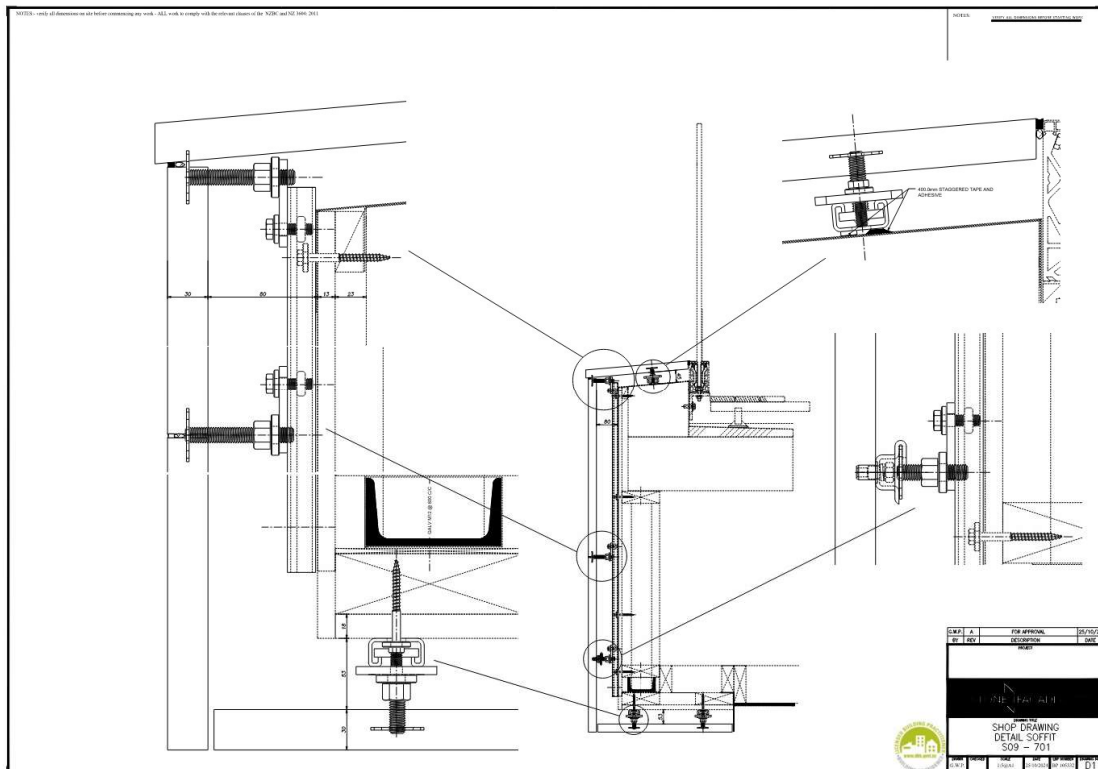
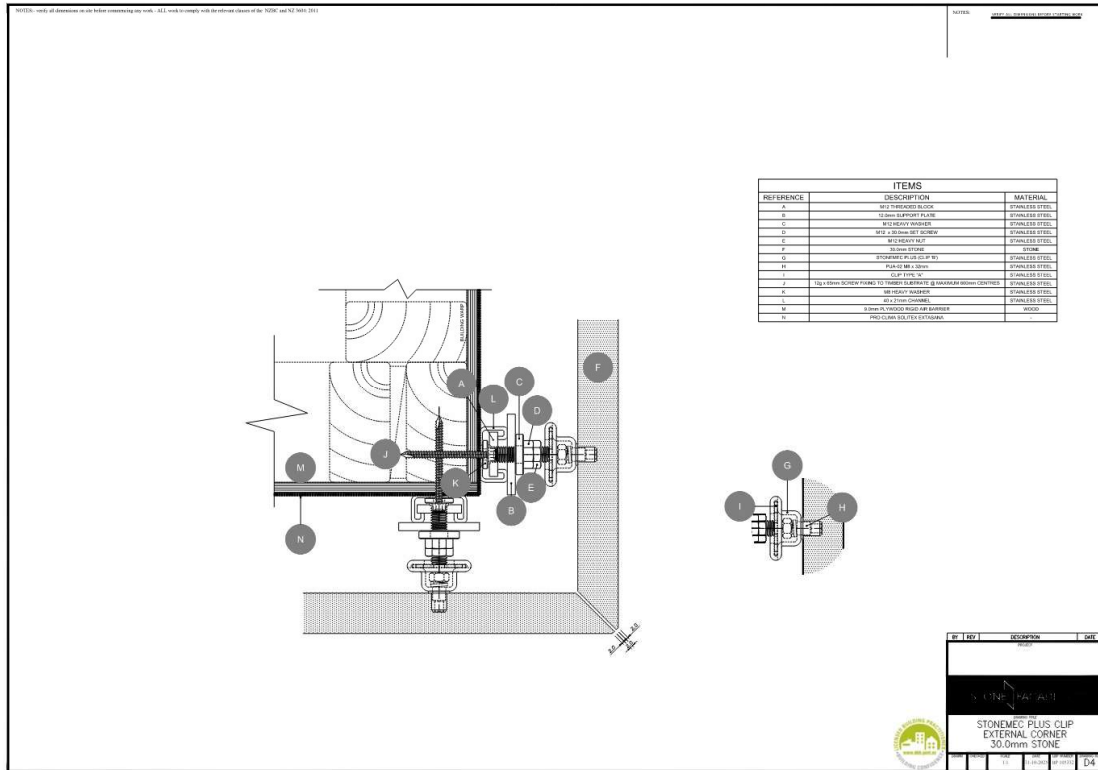


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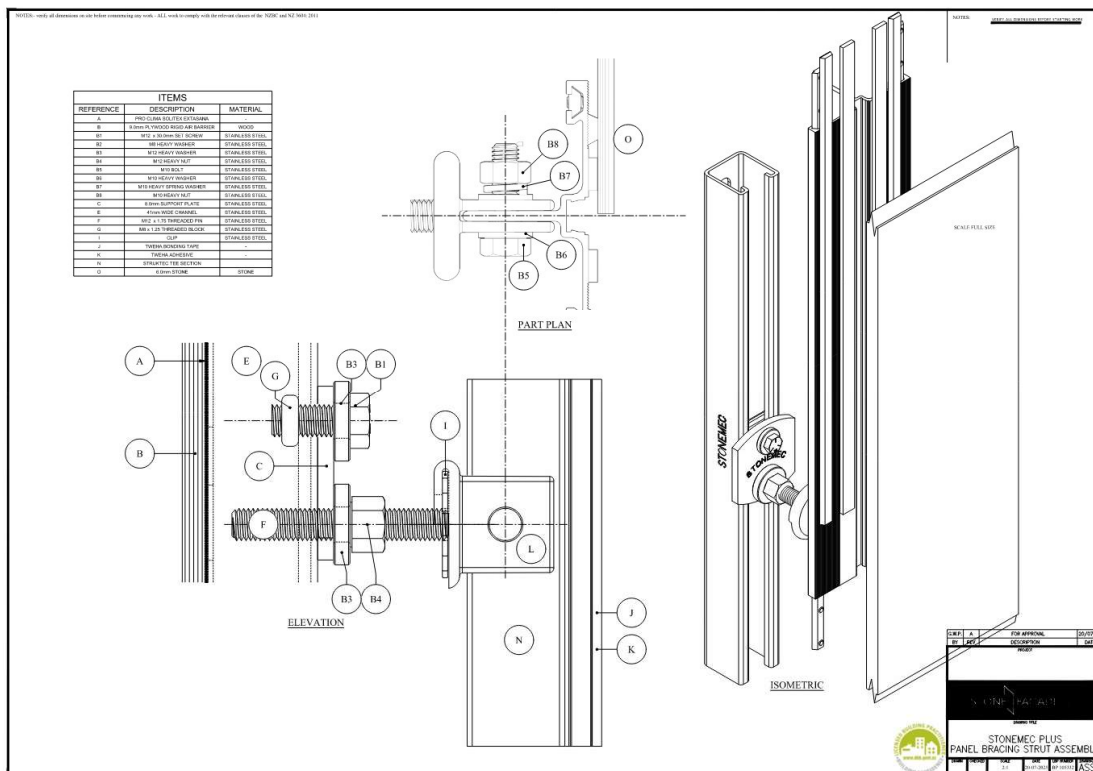
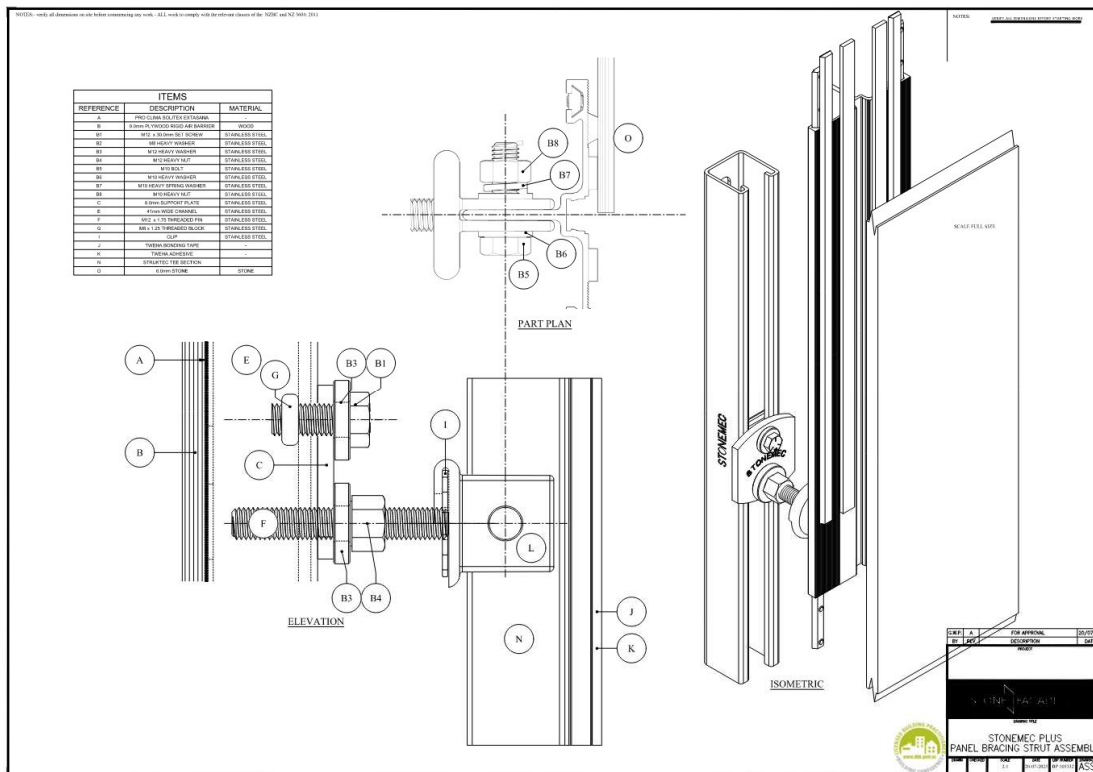


STONEMEC Plus Load Brace T - TWEHA

Cavity Depth 108-190 mm



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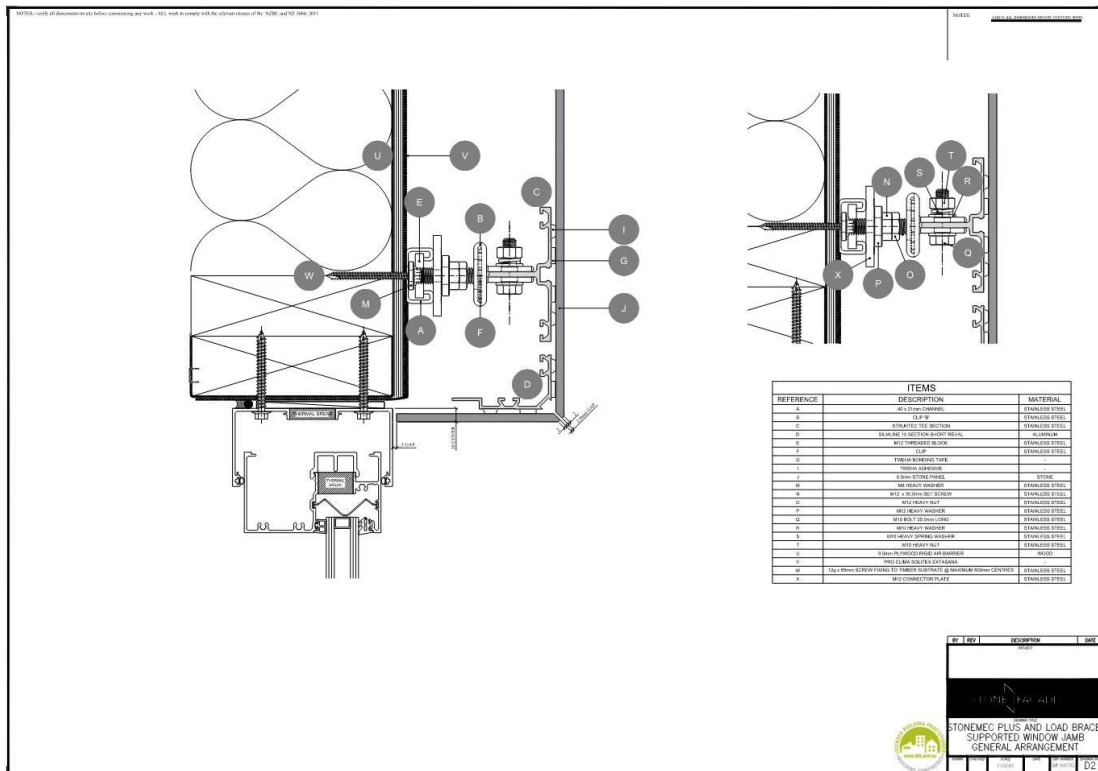
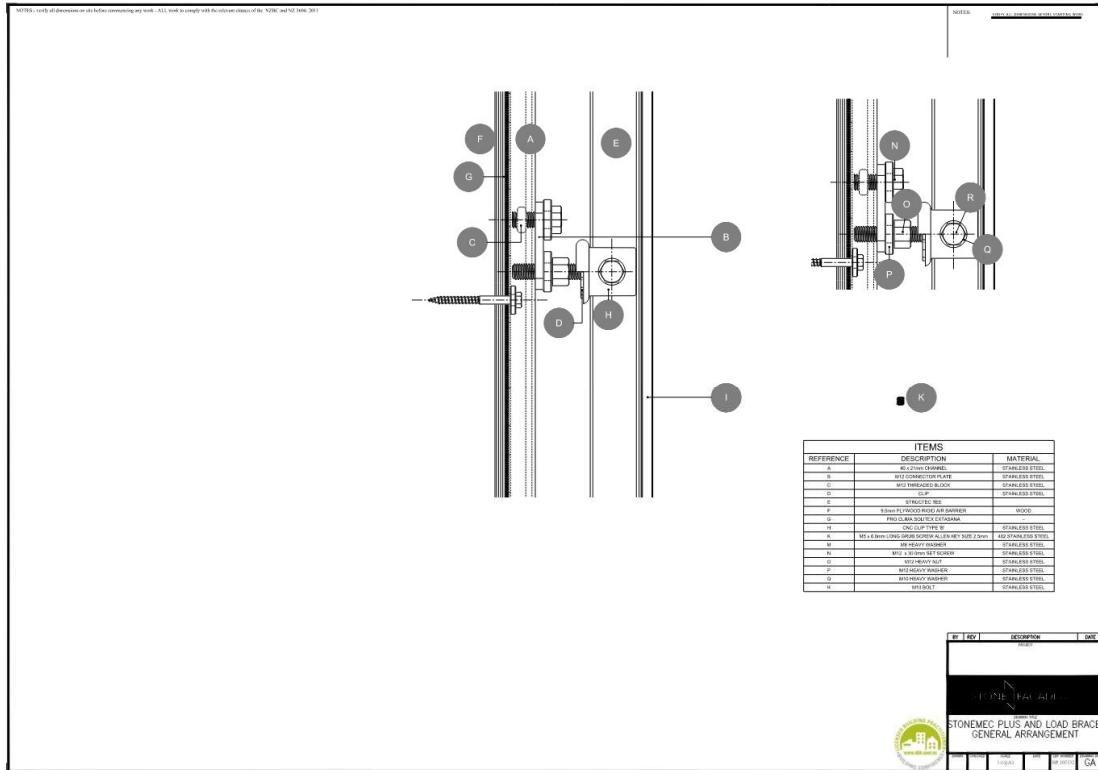


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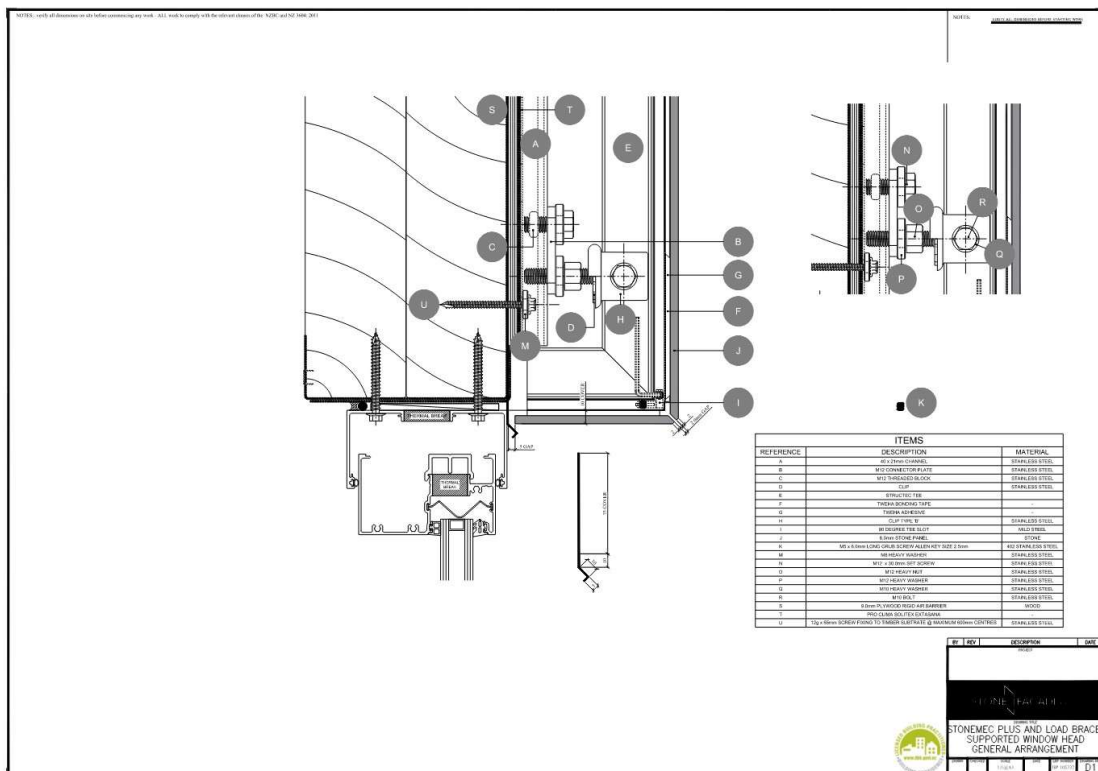
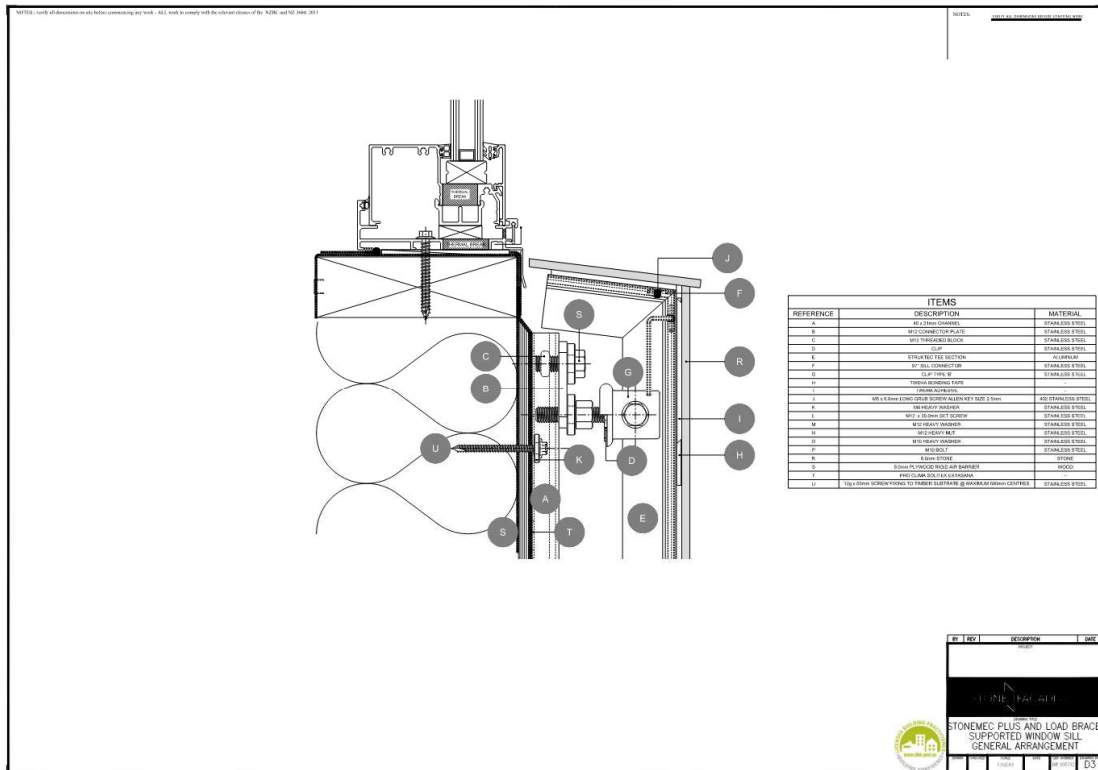


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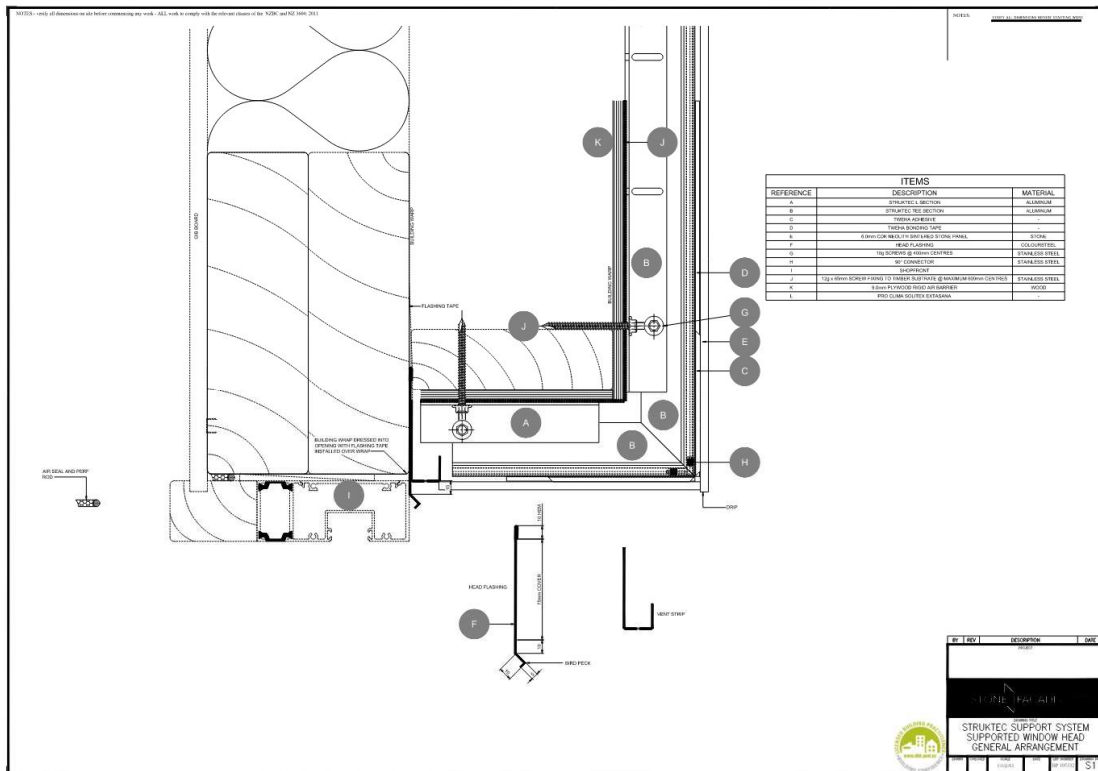
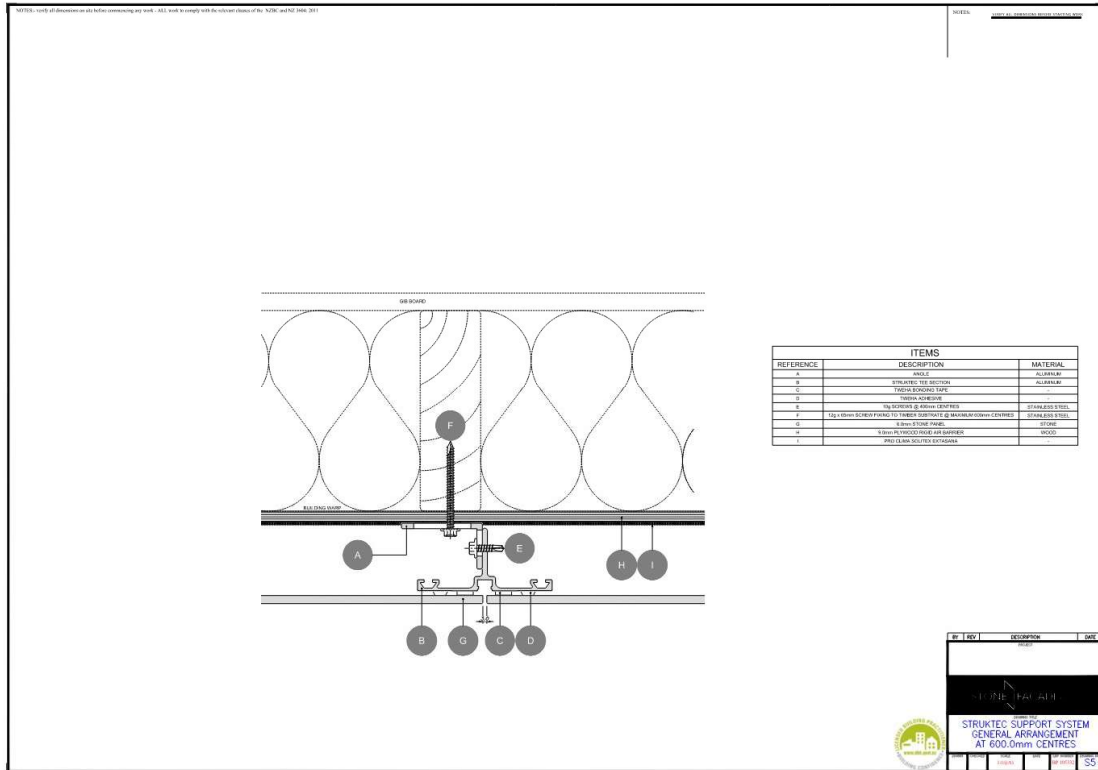


STRUKTEC Cavity - TWEHA

Cavity Depth 45-60 mm



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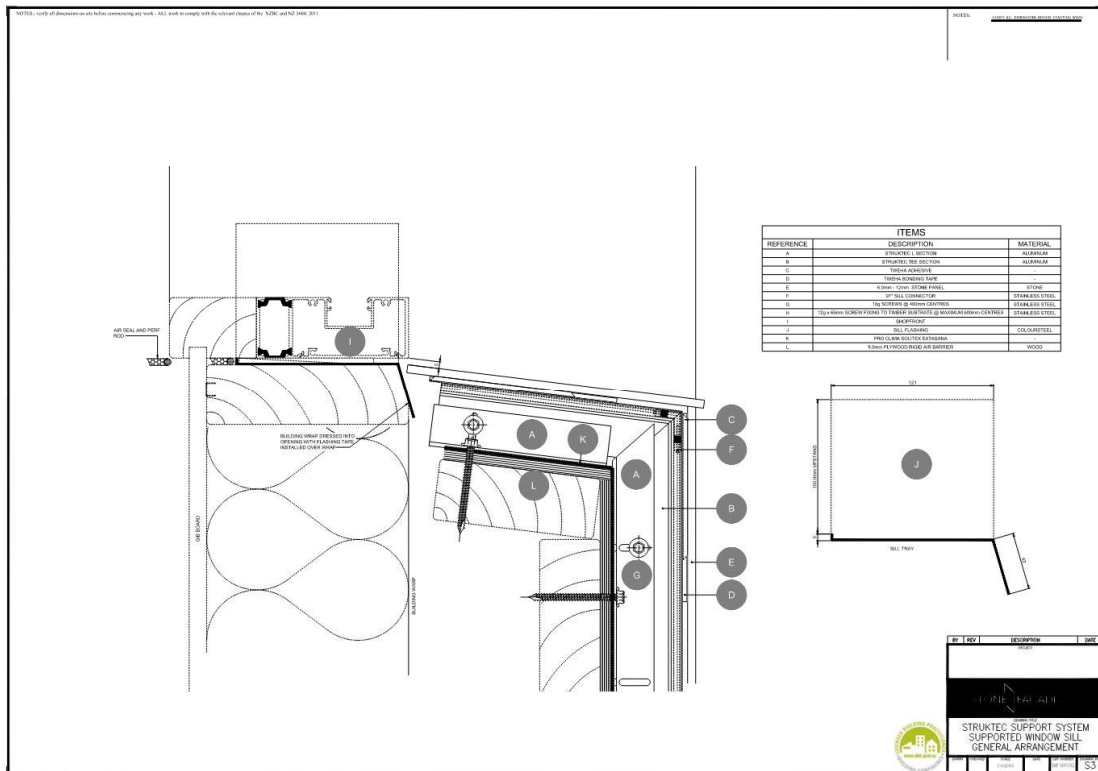
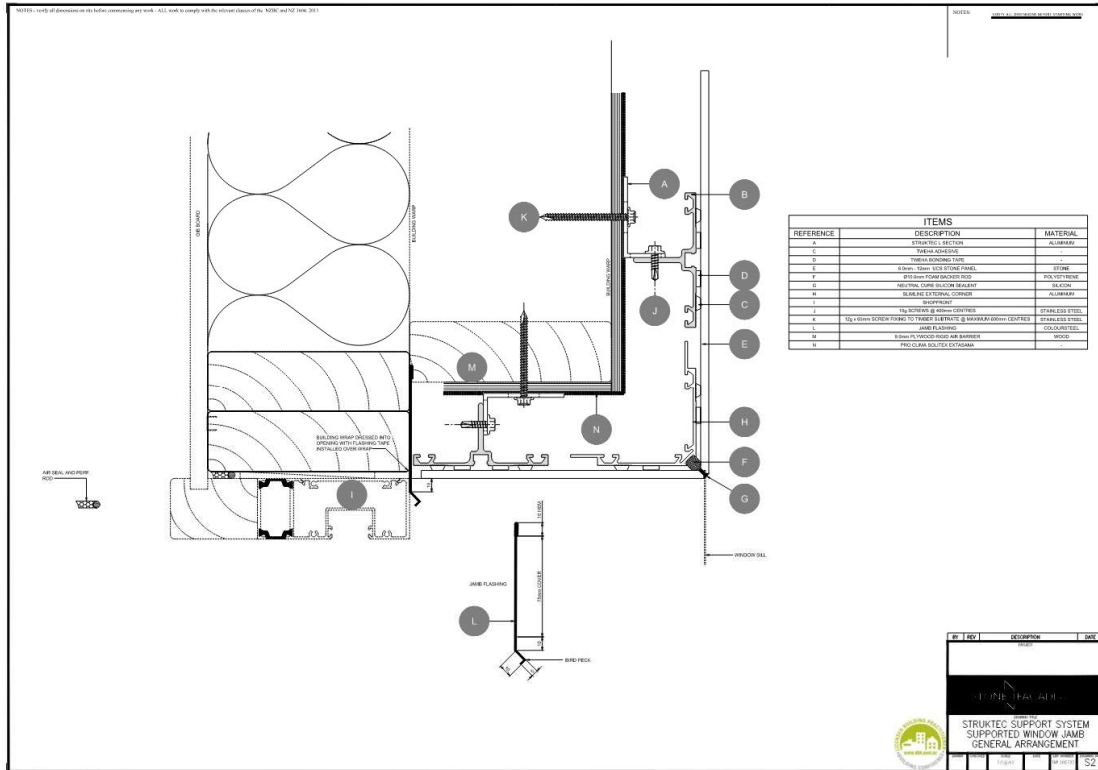


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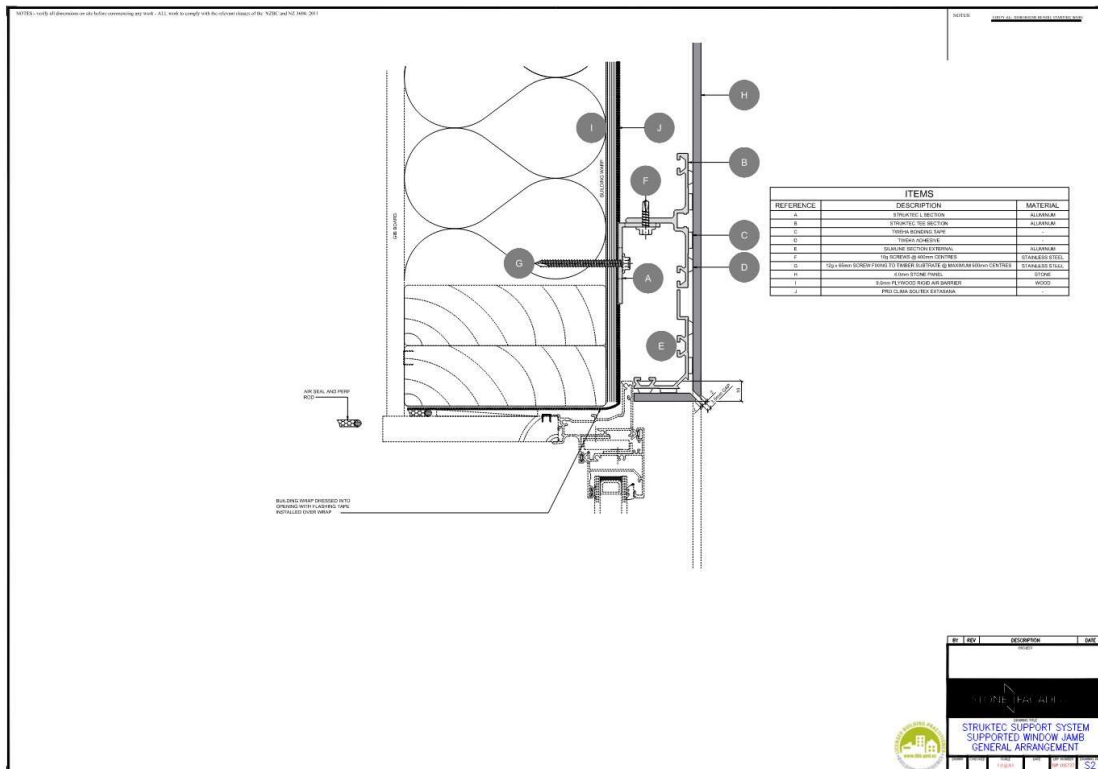
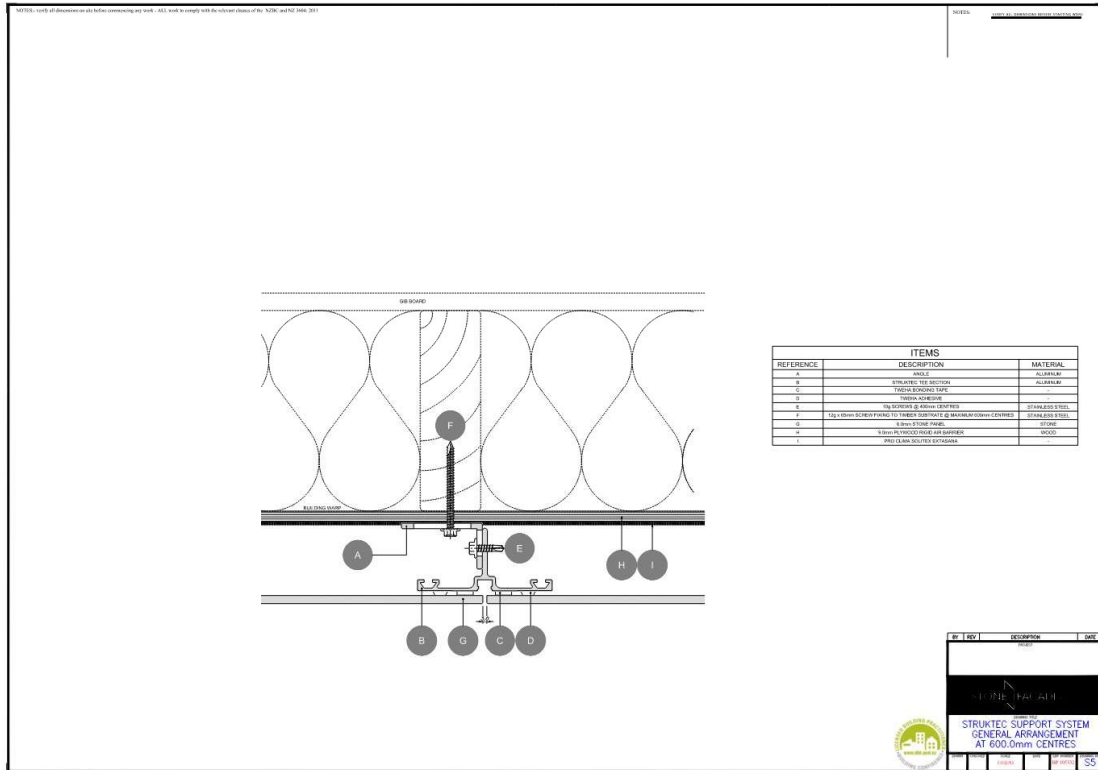


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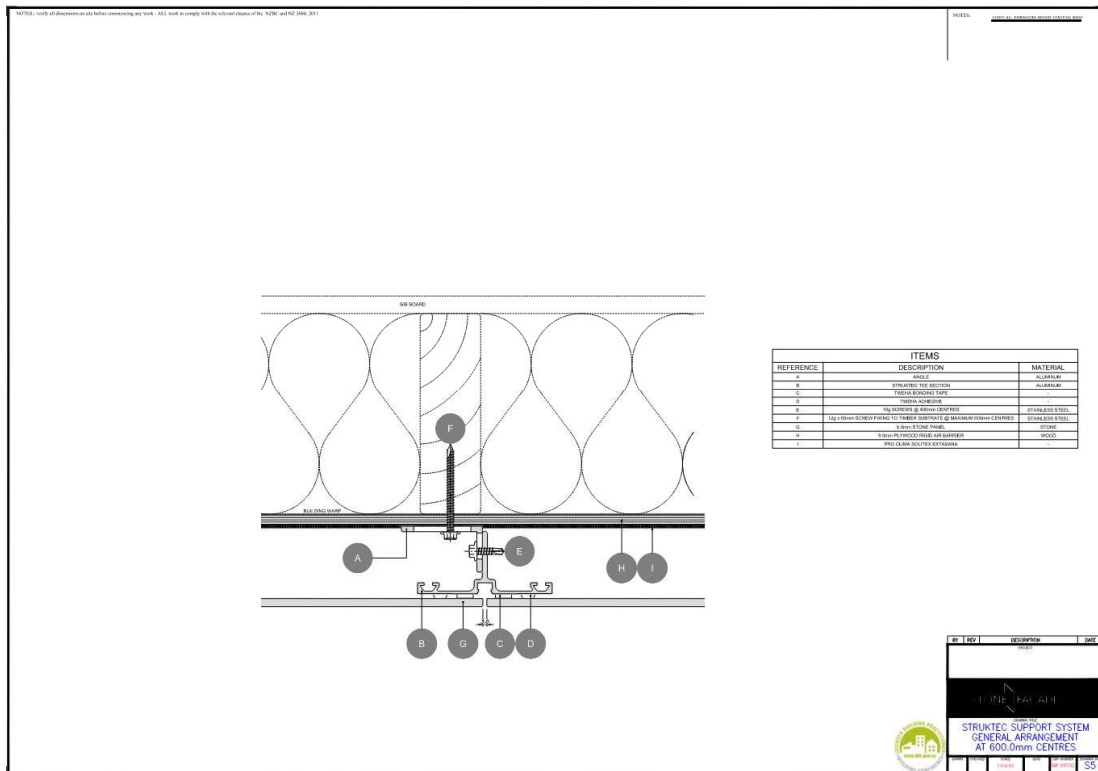
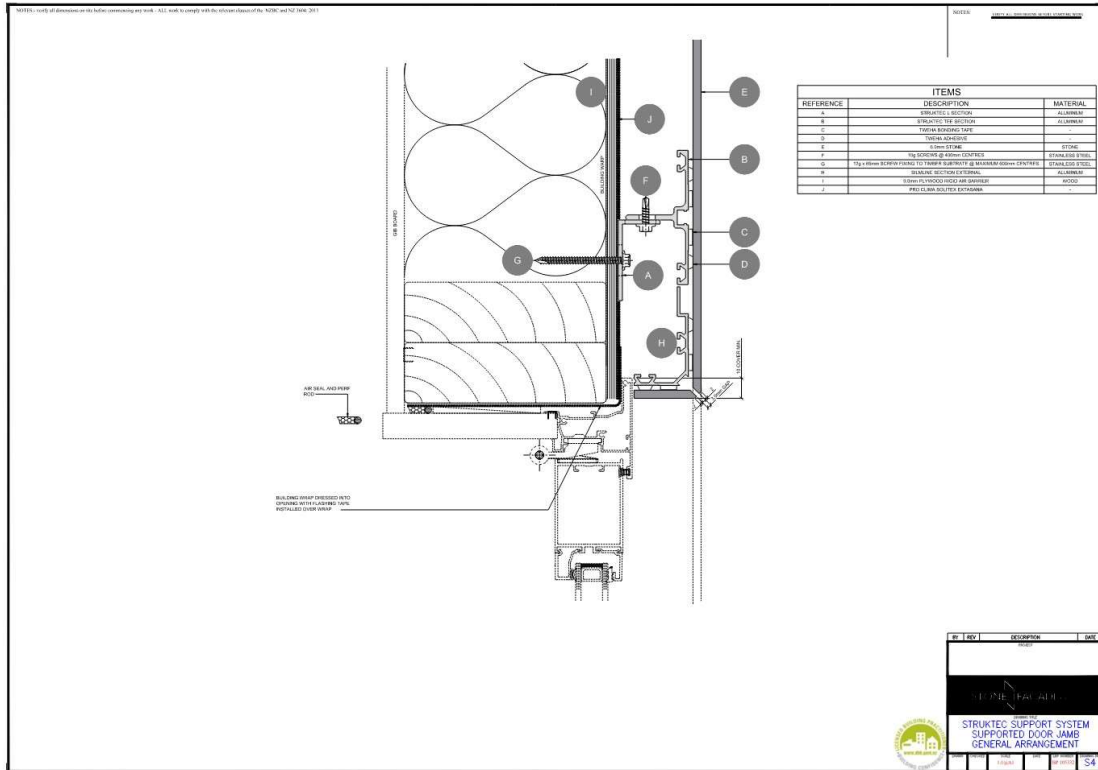


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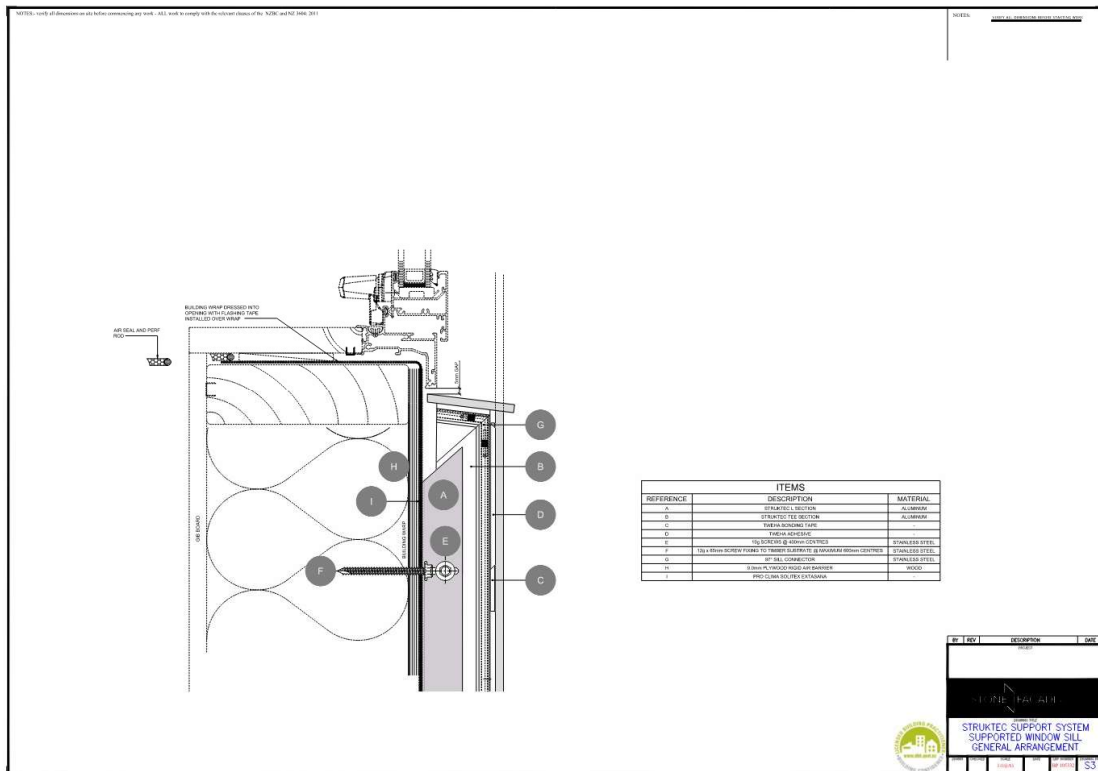
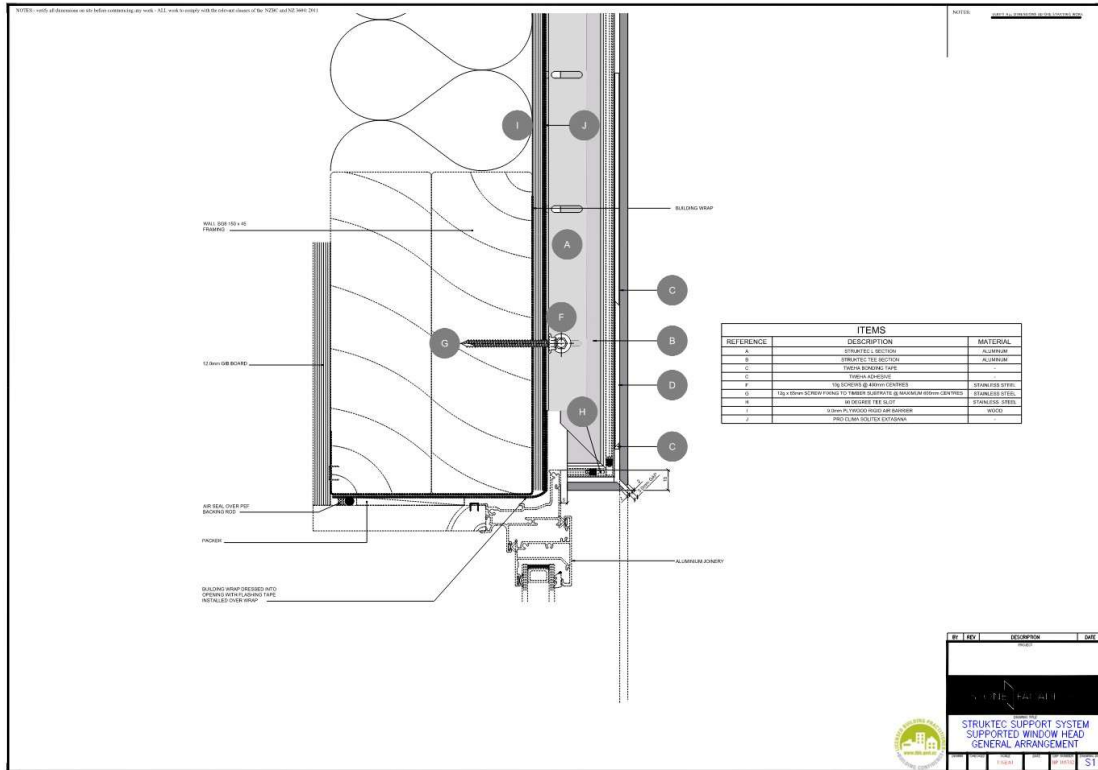


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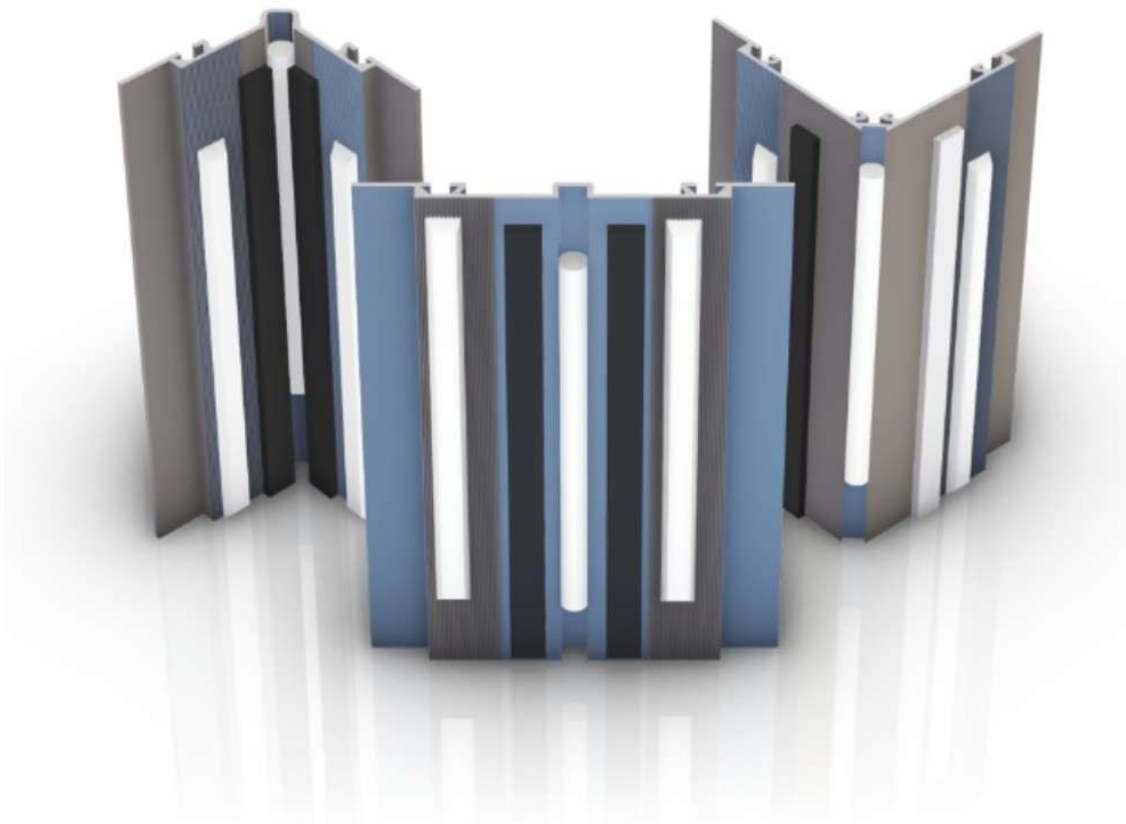
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STRUKTEC Slimline10 - TWEHA

Cavity Depth 11 mm



Report Number: SWTL R0102
Report Date: 13 December 2025

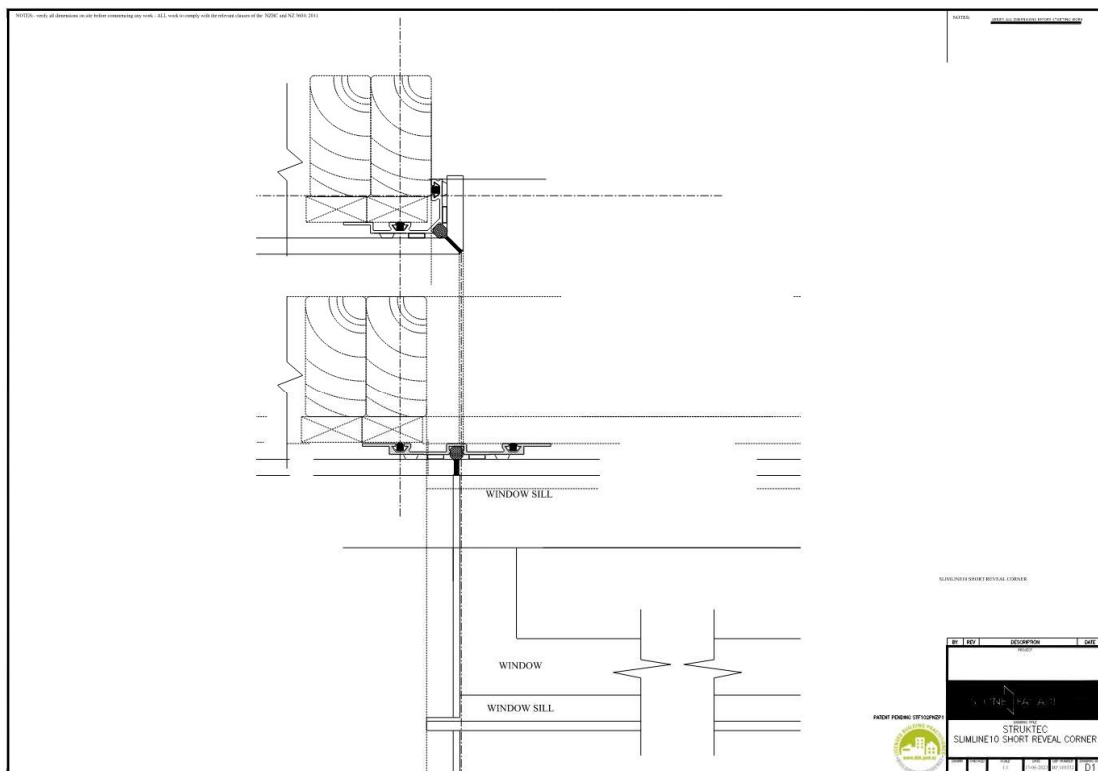
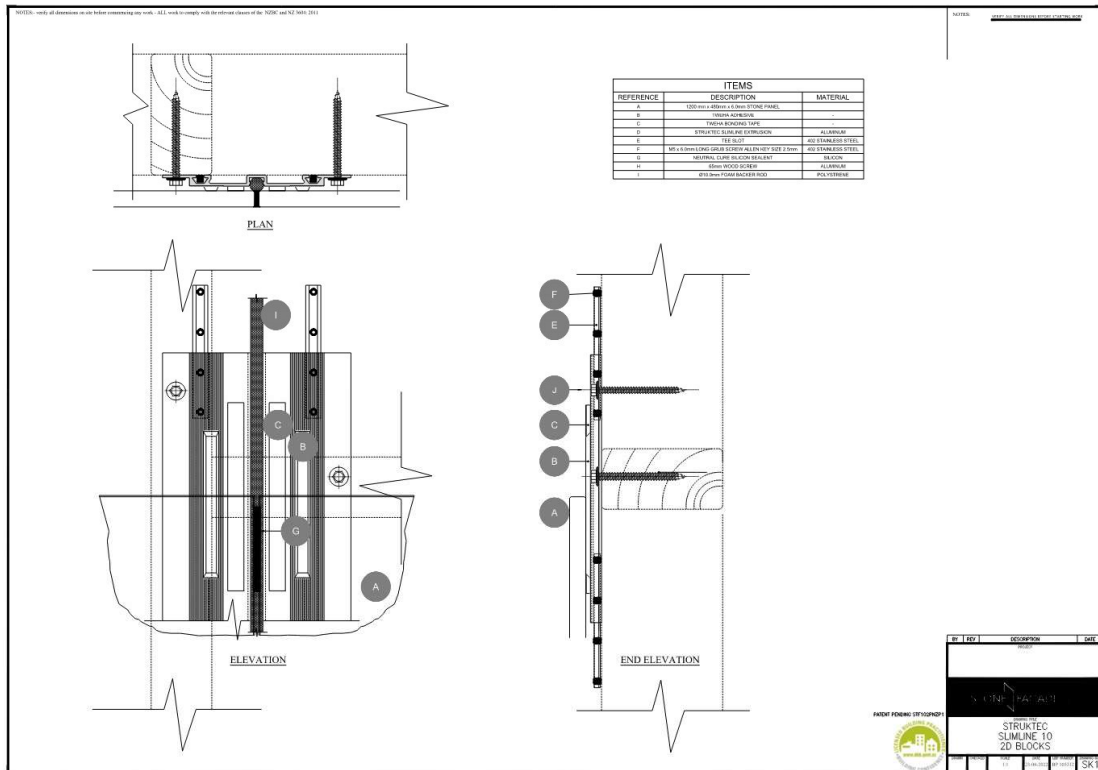


All tests reported herein have been performed in accordance with the laboratory's scope of accreditation



Shelby Wright Test Labs
515 Rosebank Road
Avondale, Auckland
New Zealand, 1026

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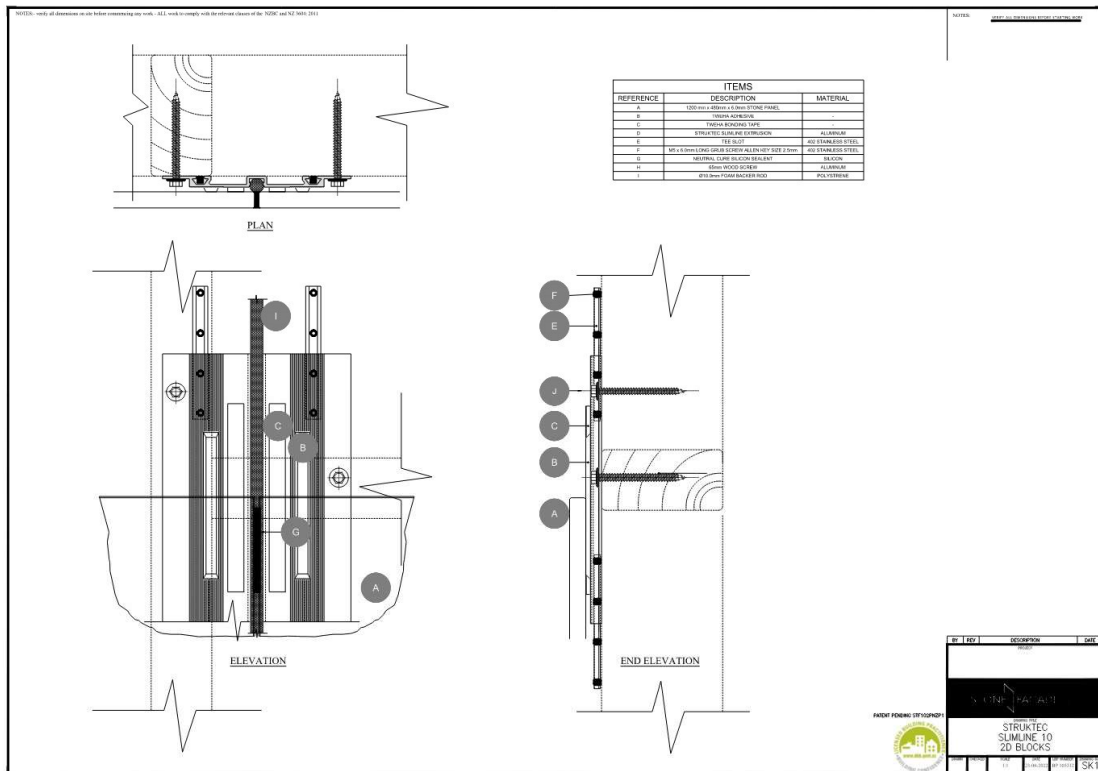
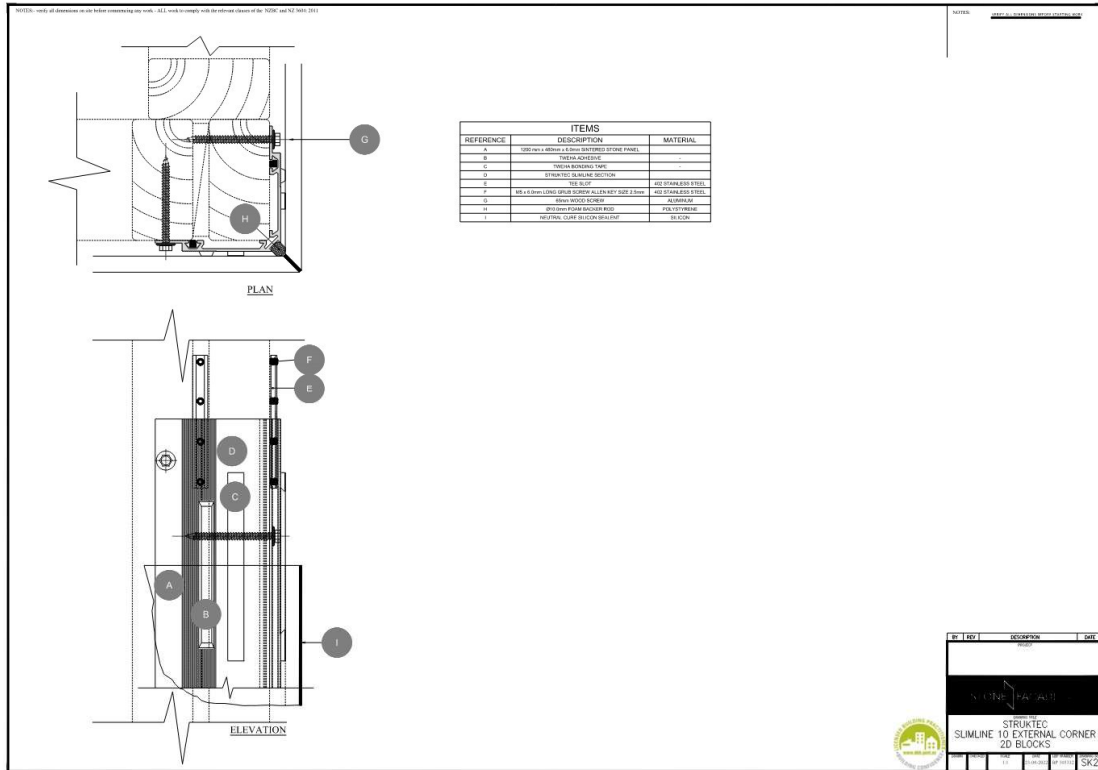


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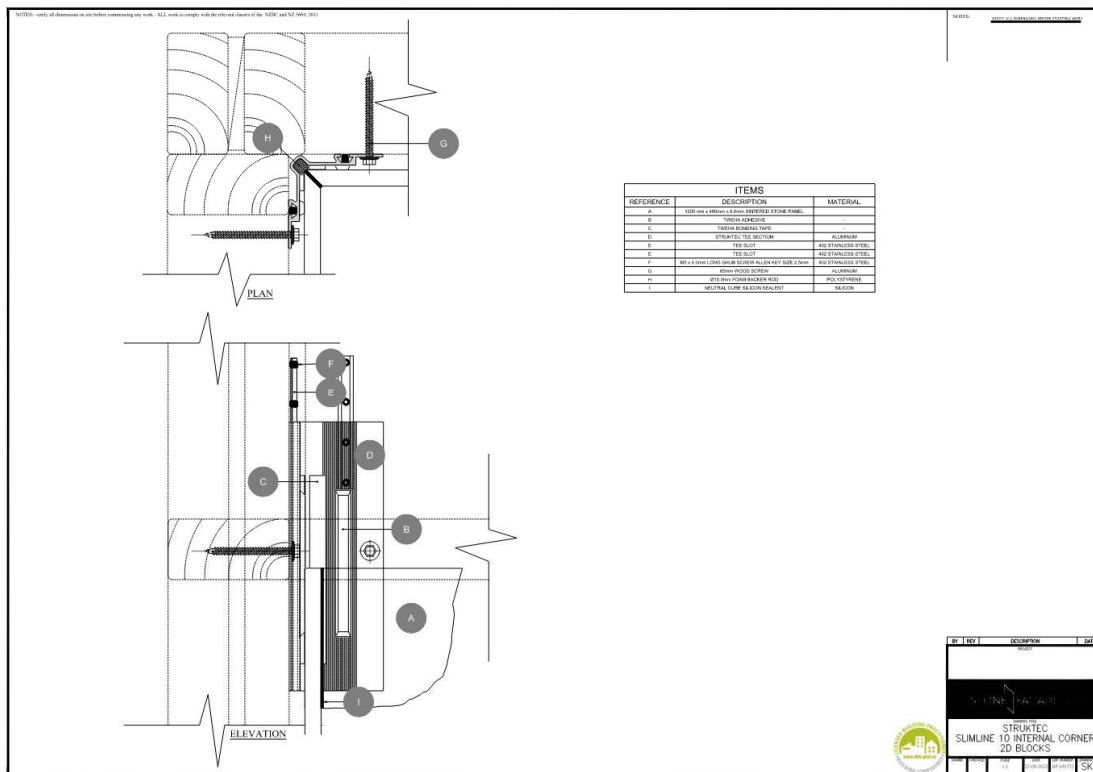


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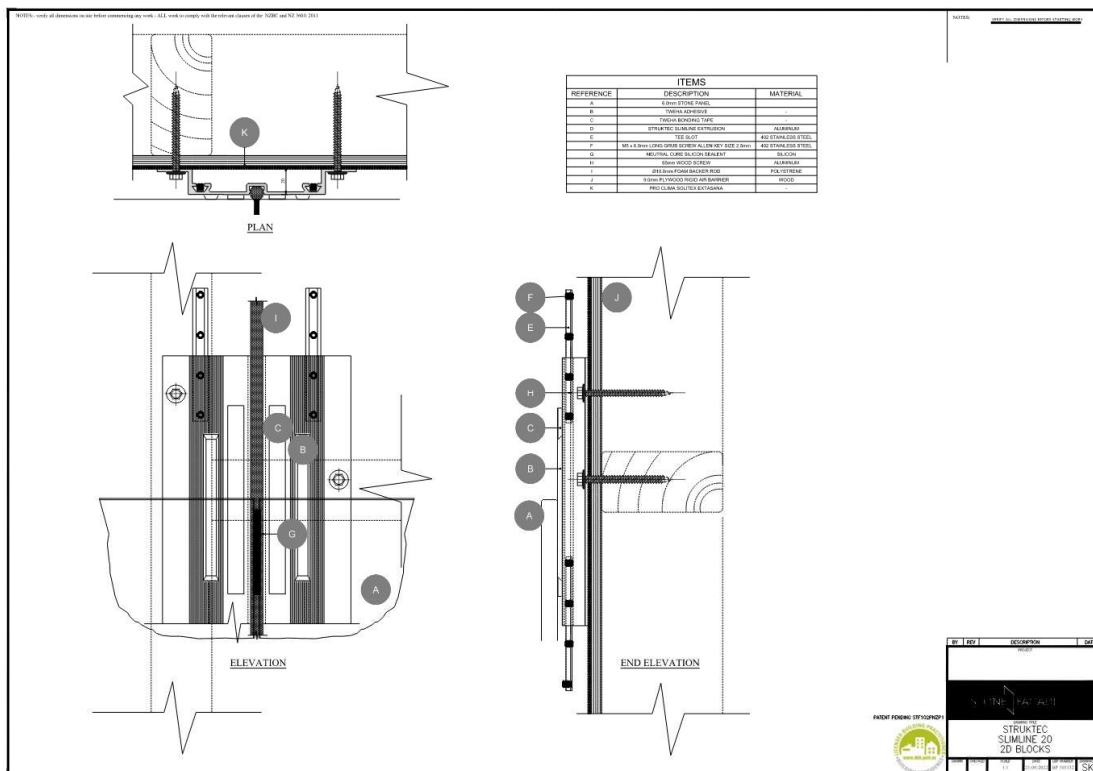
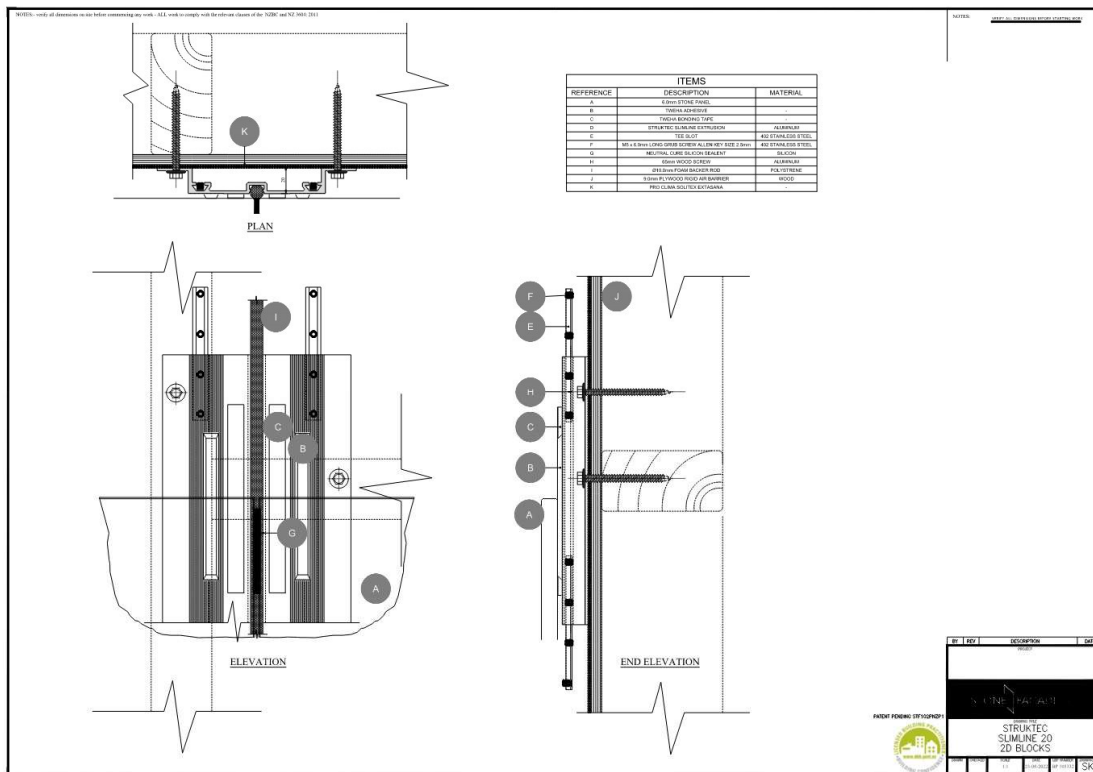


STRUKTEC Slimline20 - TWEHA

Cavity Depth 23 mm



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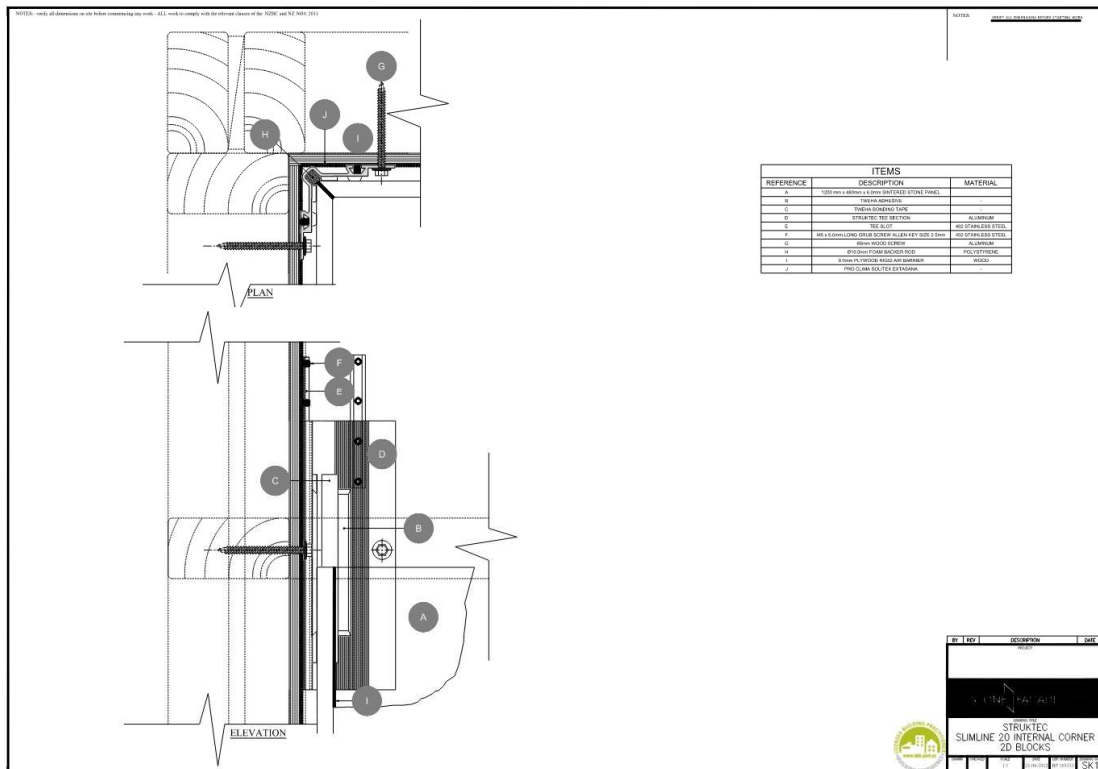
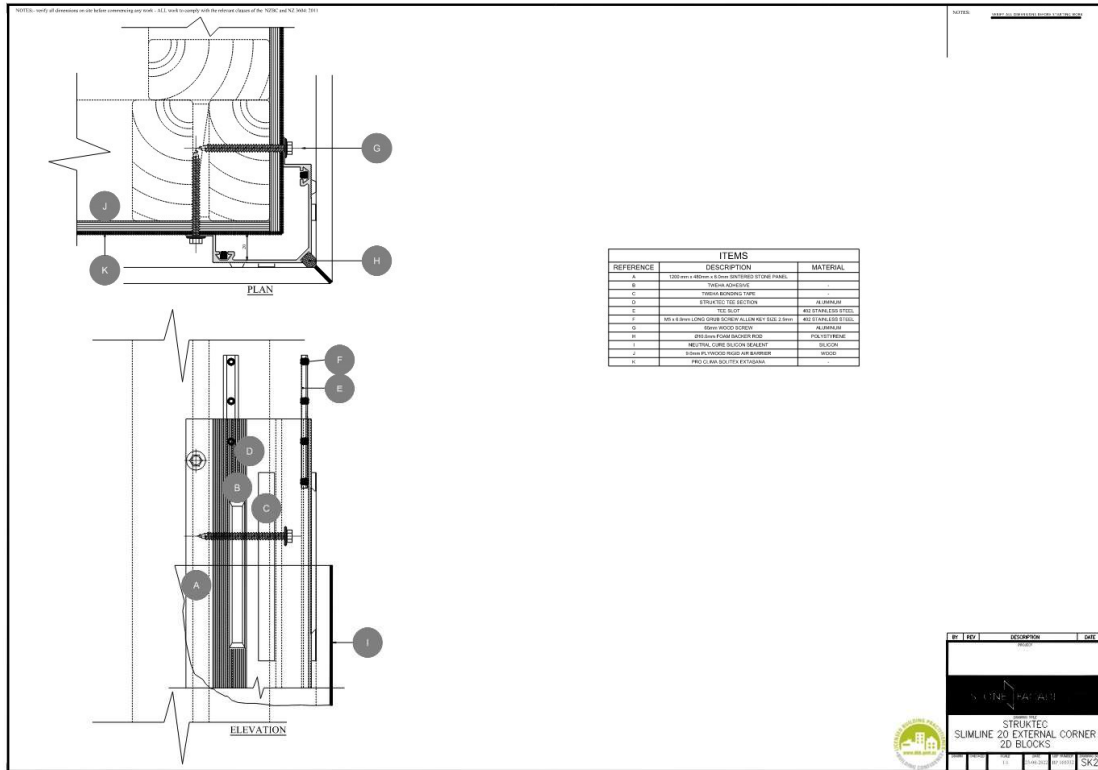


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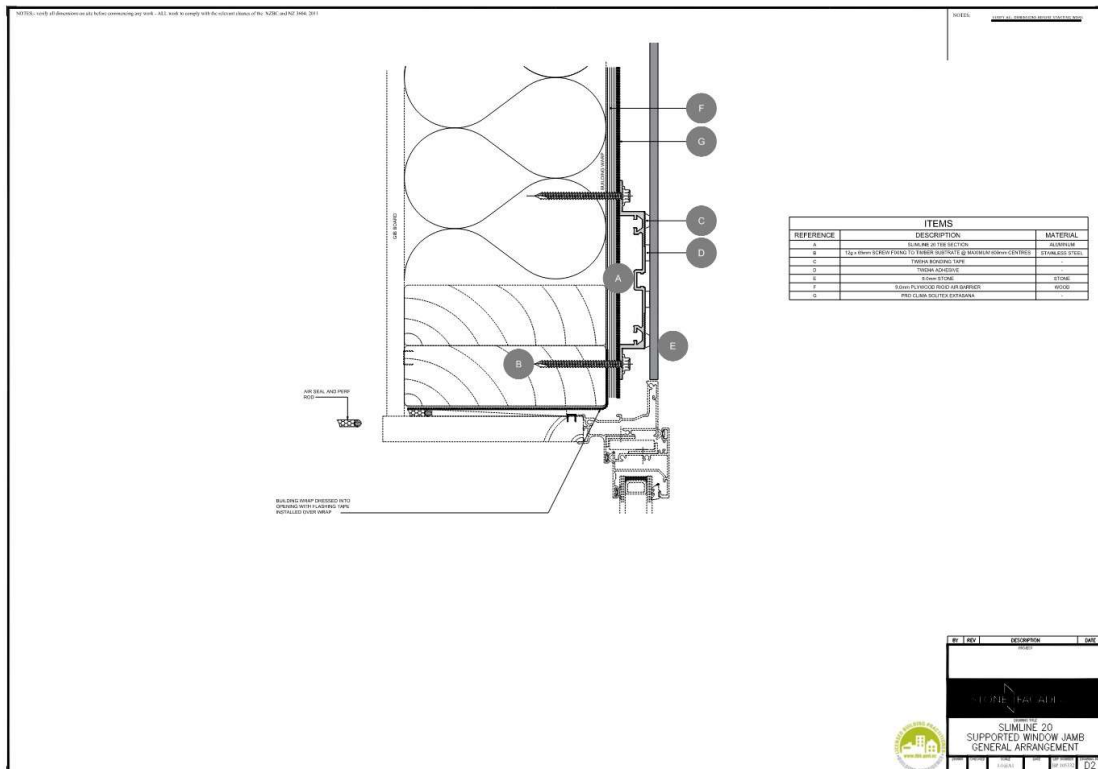
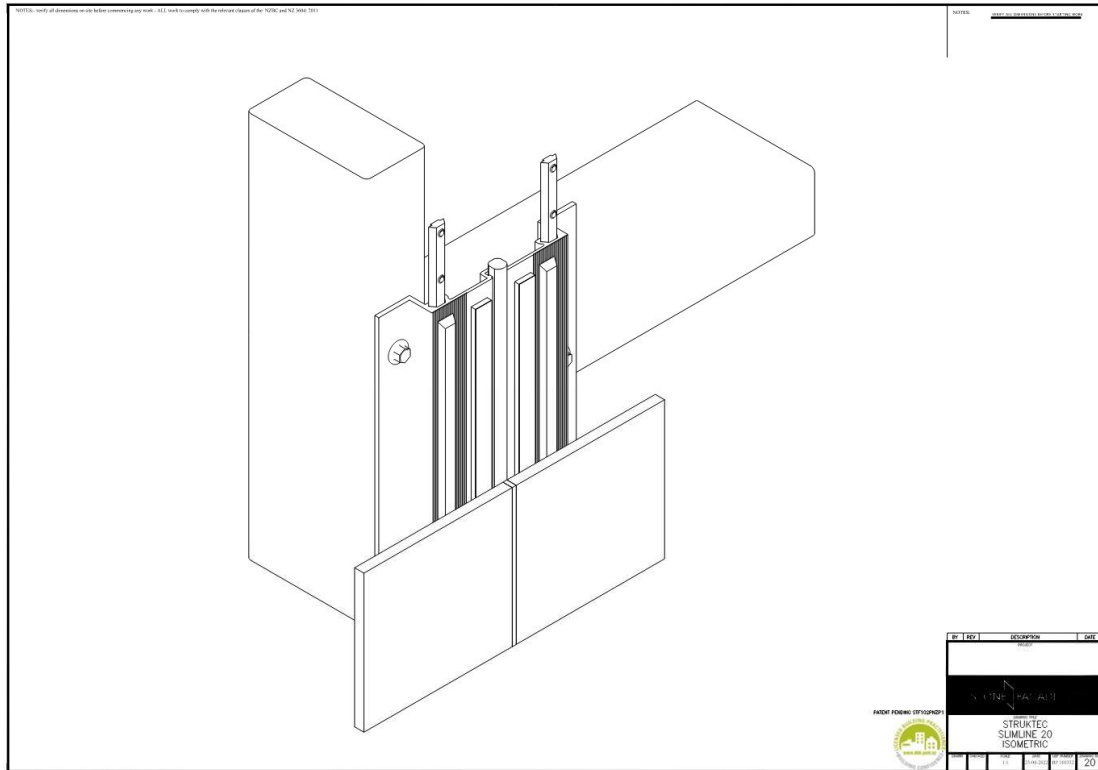


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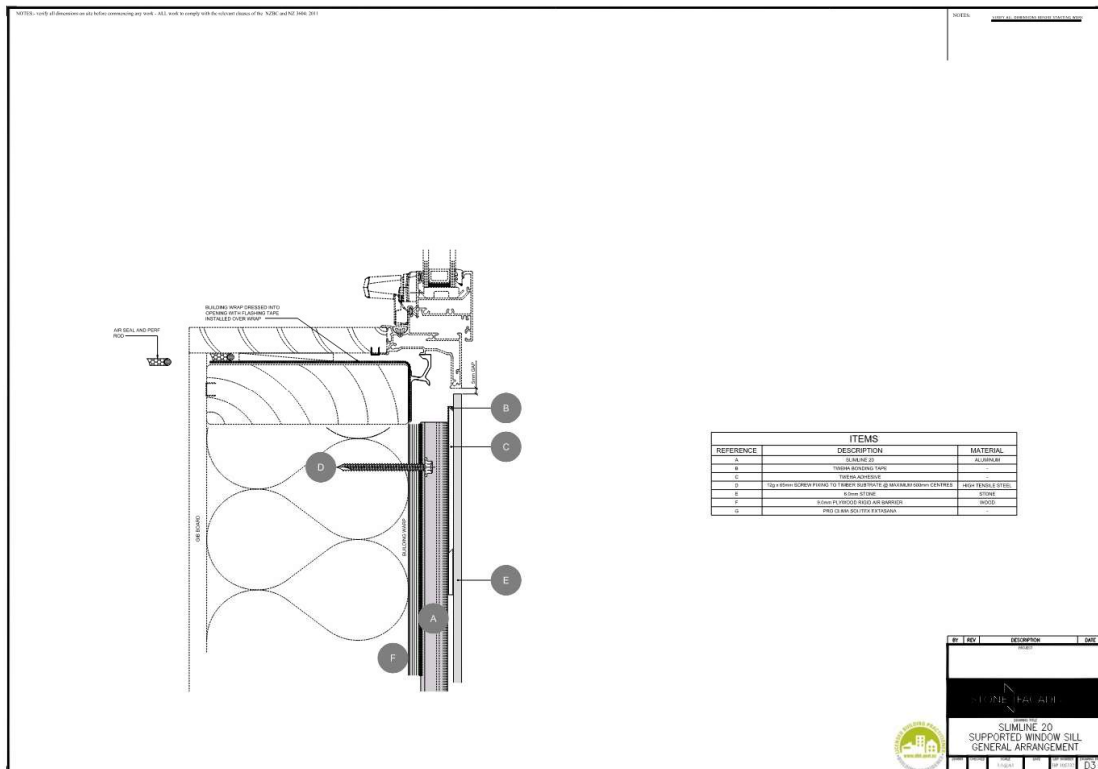
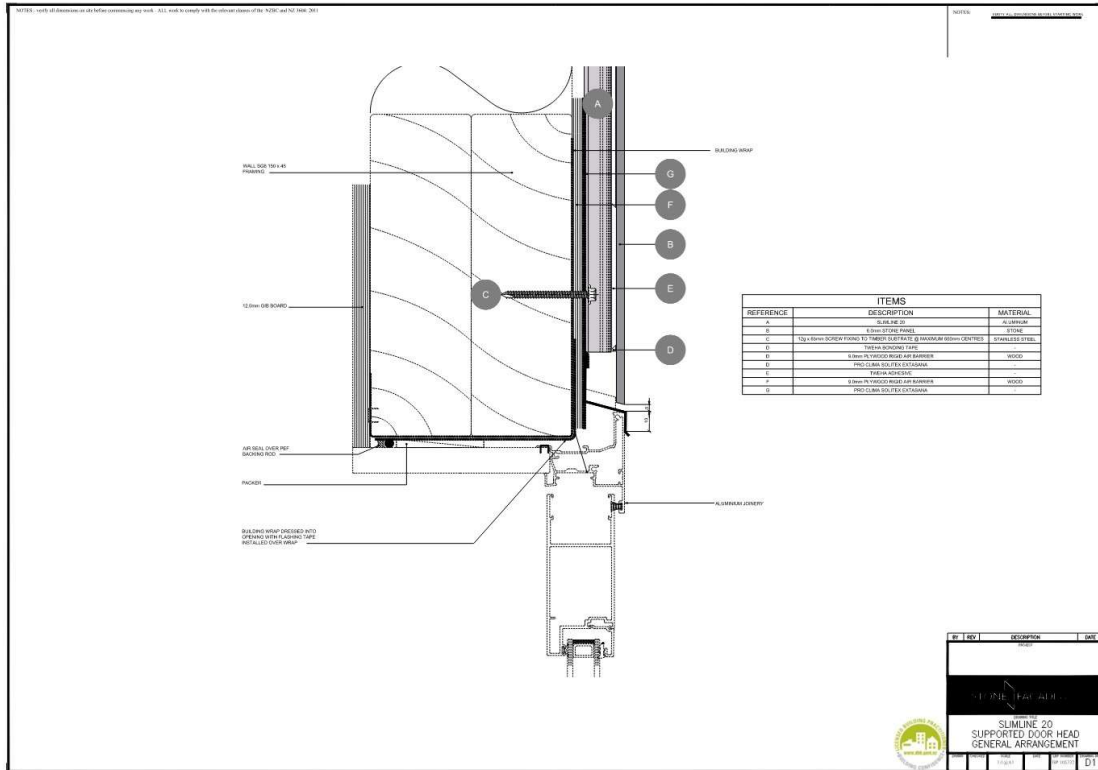


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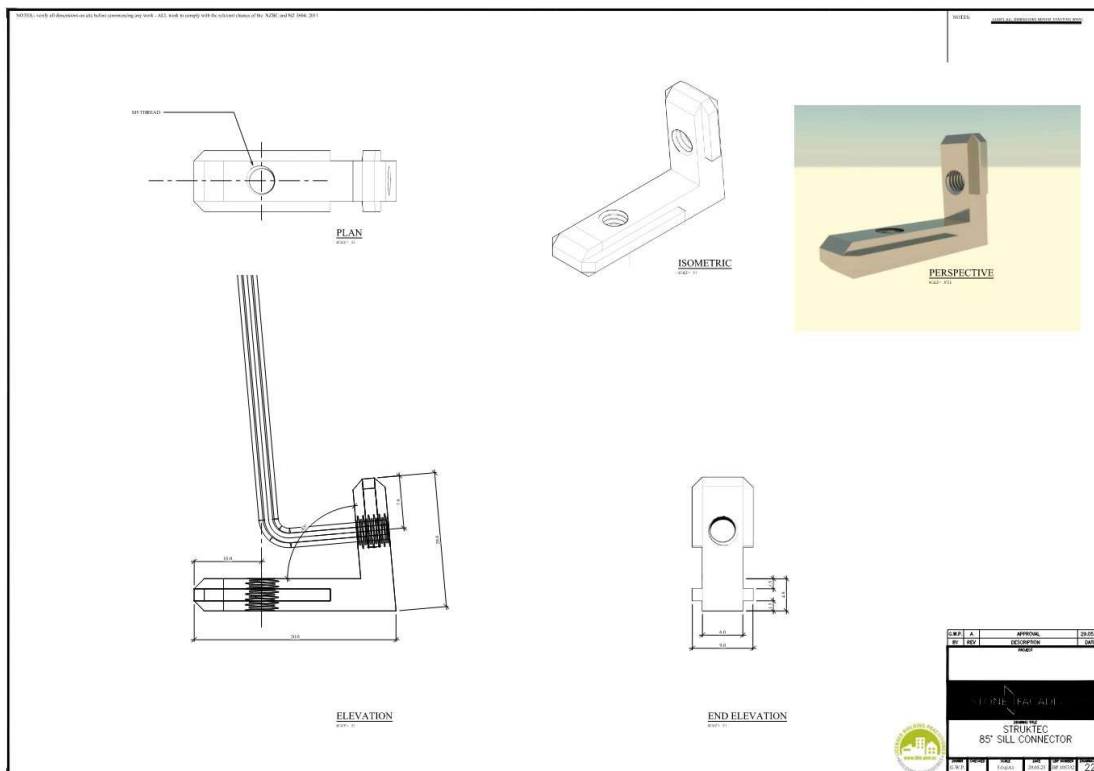
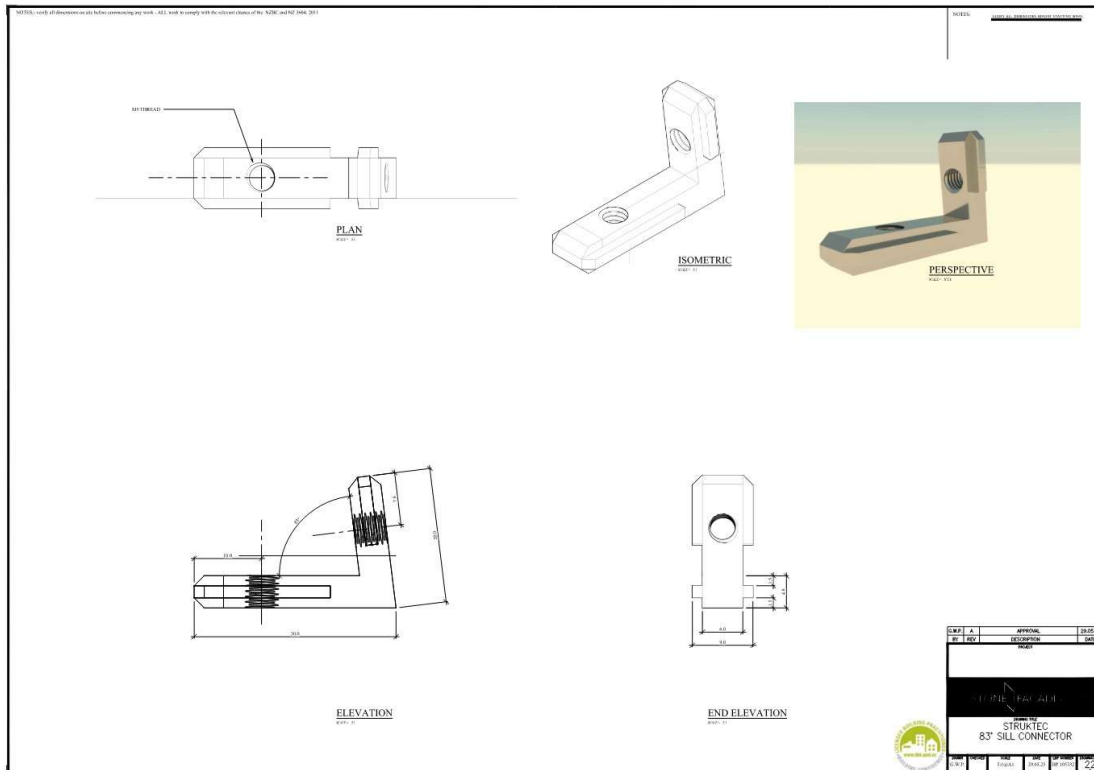
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STRUKTEC - SYSTEM CONNECTORS

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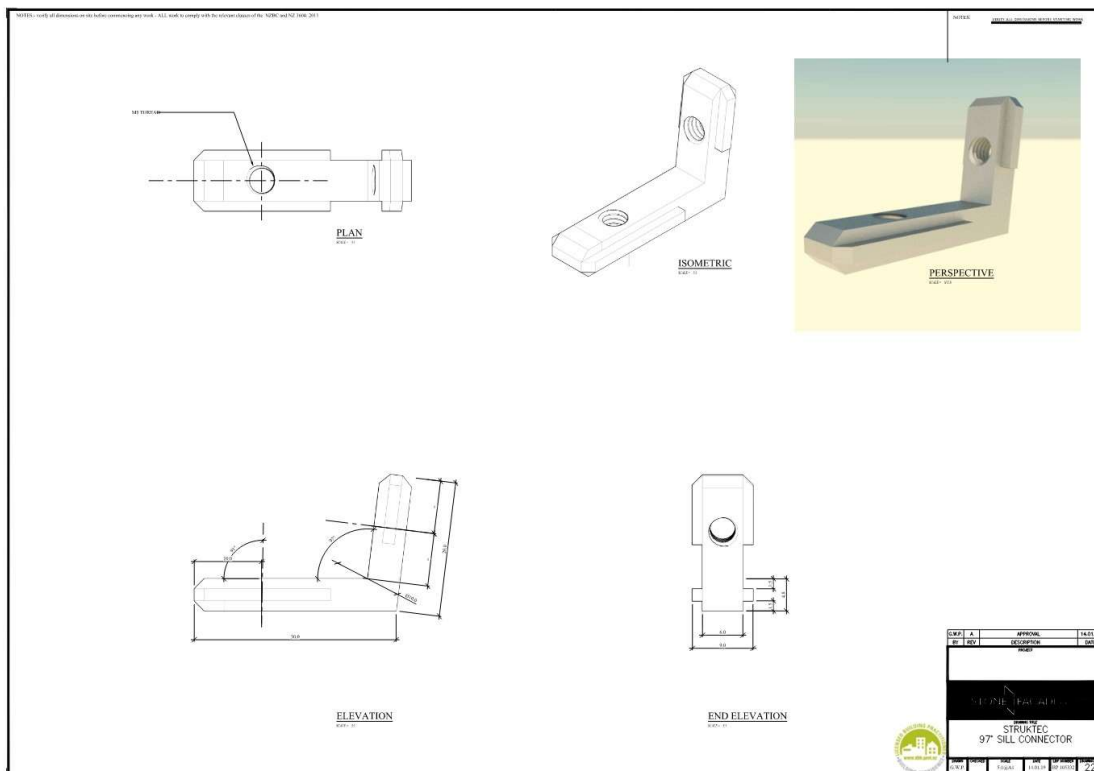
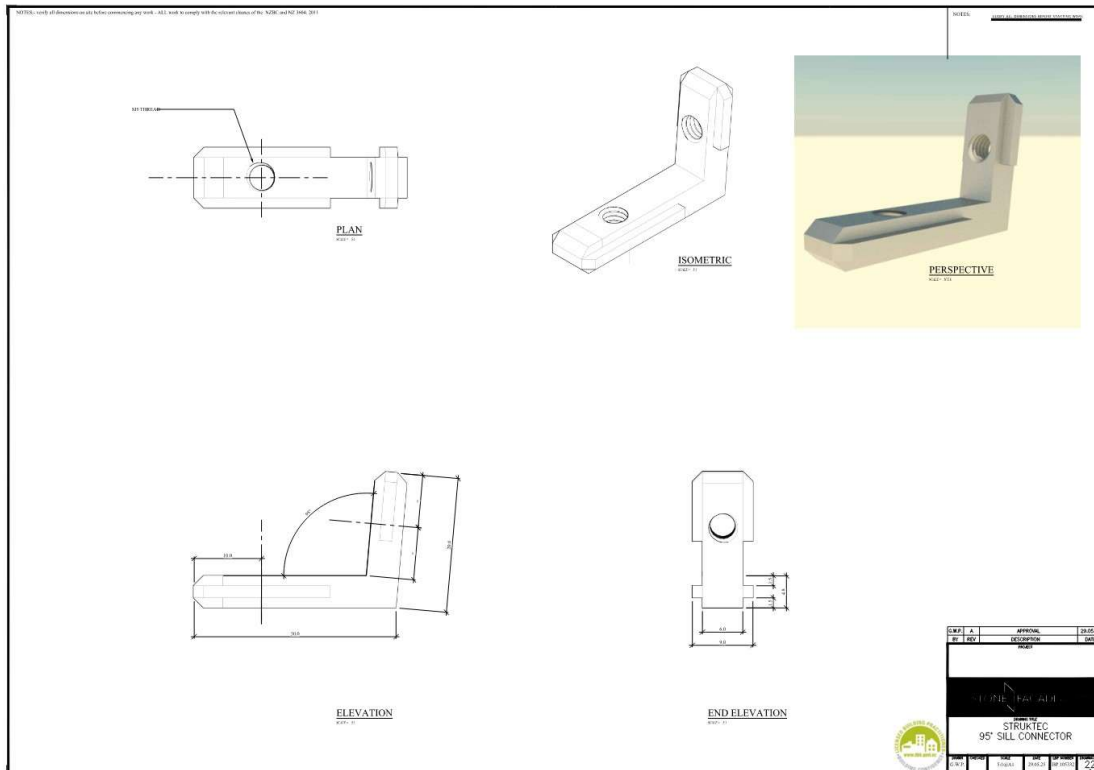


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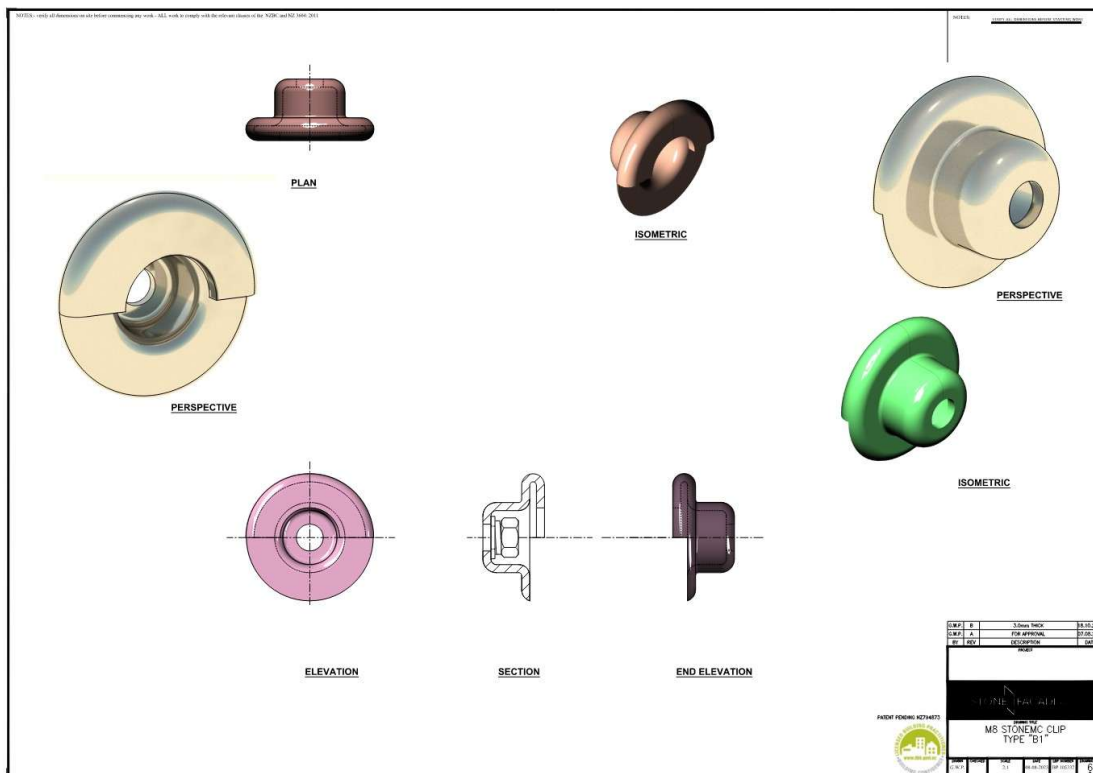
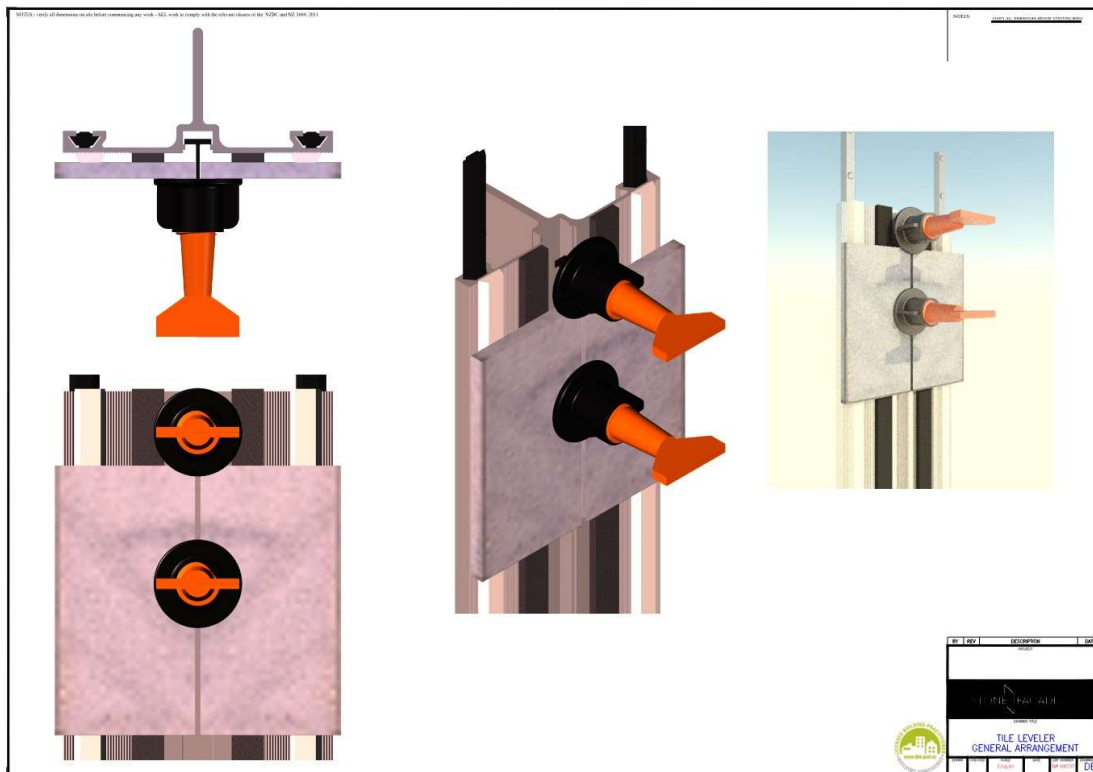


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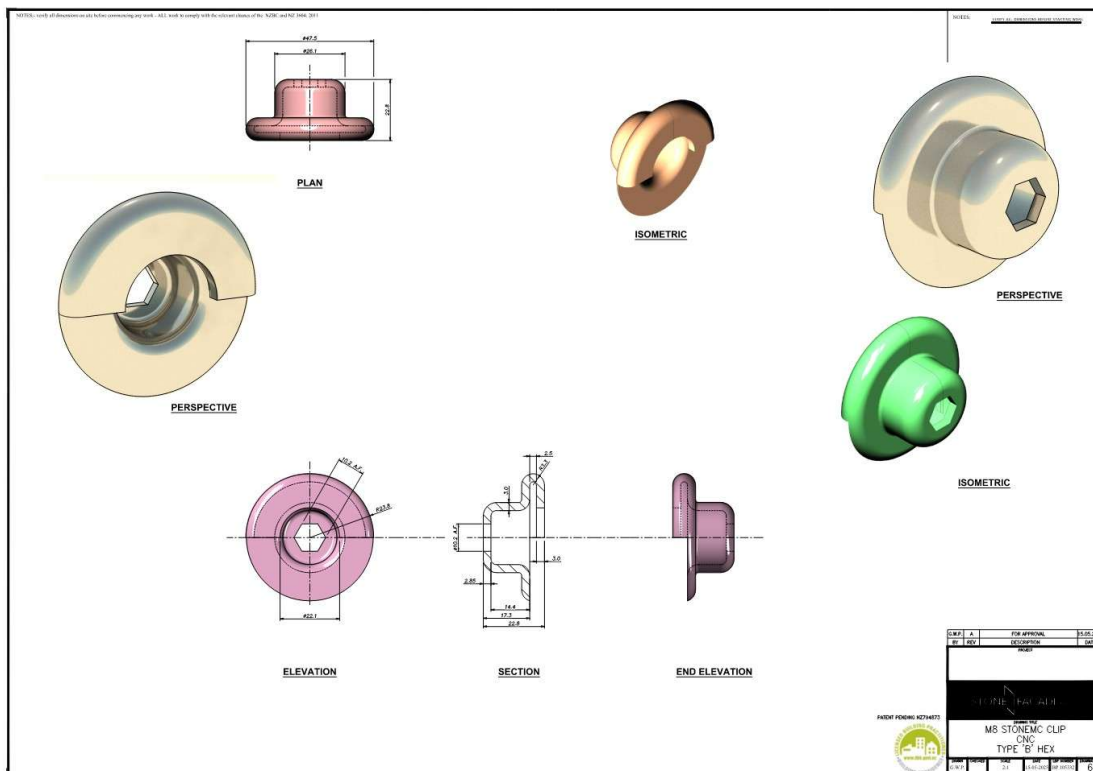
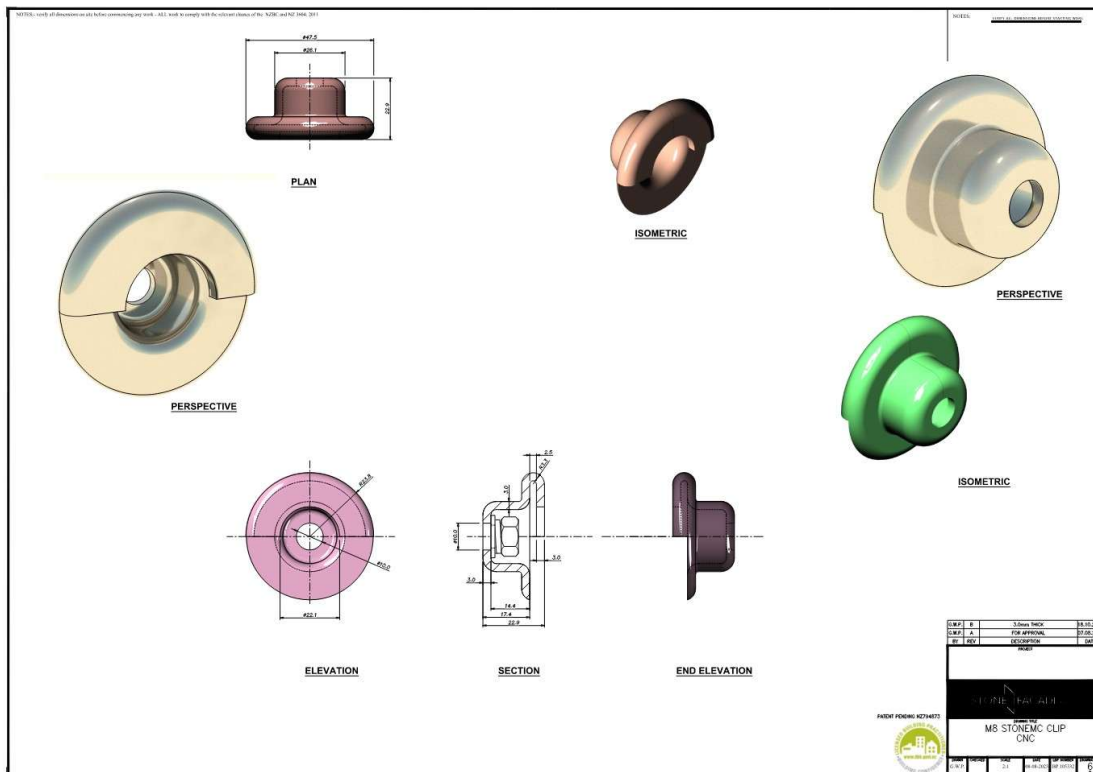


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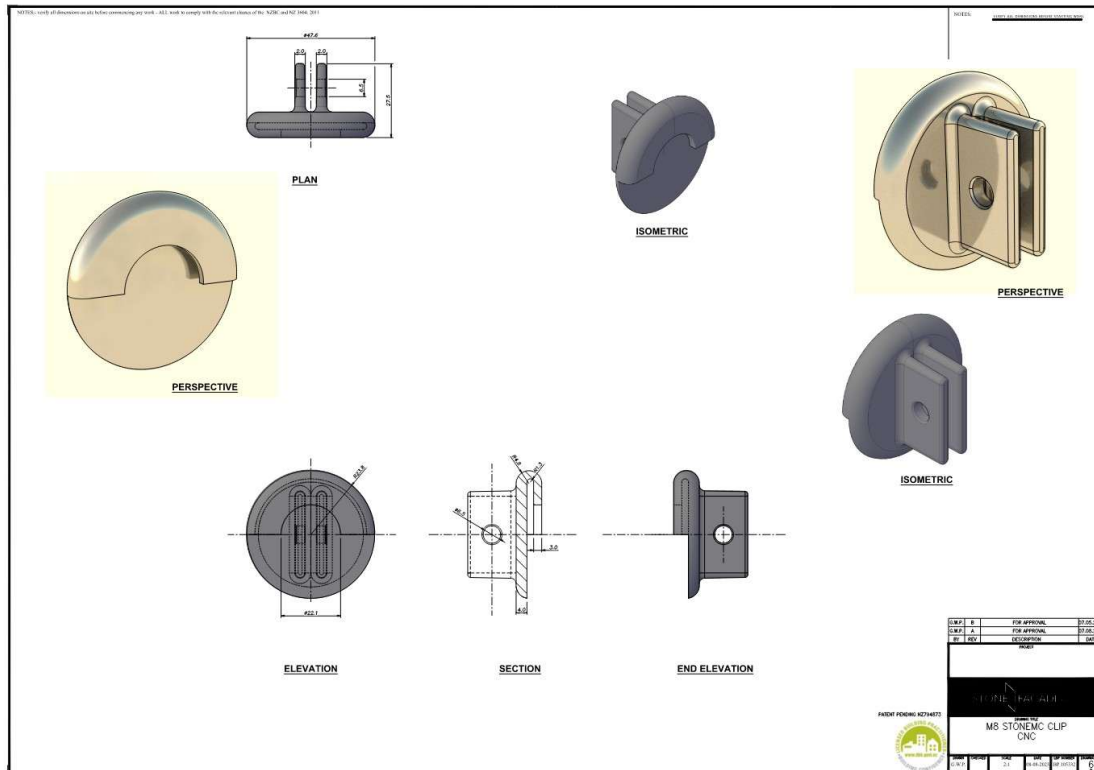


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JARING™ FACADES		TECHNICAL DATA SHEET	
JARING FACADES CO.,LTD No.107 Dainan Industrial Park, Taizhou City,Jiangsu Province,China Tel:86 0523 83988997 Fax:86 0523 83988997		TDS No: 1/2018	
		Date: Jan 2018	
		Version No : 001	

UNDERCUT ANCHOR PUA-02

1.Product Descriptions

Name: Undercut Anchor

Type: PUA-02

Material: AISI316/A4

Size: M8*32

Contains: Bolt + Nut + Spring Washer + Flat Washer + Sleeve + Clip



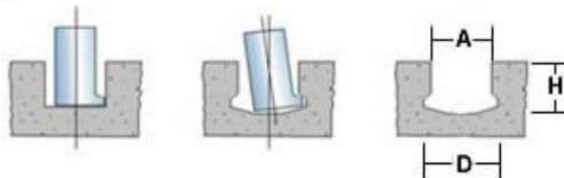
2.Features:

- * This Undercut Anchor is also called Knock-On Undercut Anchor for it's application. The clip will expand in the Ceramic or Porcelain Tiles when knocking.
- * Anchor and bolt length have to be matched to the hole depth required and to the panel bracket chosen.
- * The anchor is expanded to its original dimension by knocking the sleeve to a controlled depth, so that the sleeve sits snugly against the undercut section of the hole in the facade panel.

3.For use in:

Natural Stone | Artificial Panel |Fibre Cement | Ceramic |LimeStone |Porcelain Tiles

4.Technical information



Item	Hole Diameter (mm)	Bottom Hole (mm)	Drill Depth (mm)	Bolt Length (mm)	Design Value (KN)	
	A	D	H	L	Anti-Shearing	Anti-Stretching
M6*9*18	11	13	9	18	4	8
M6*12*25	11	13	12	25	4	8
M6*15*30	11	13	15	30	4	8
M8*12*25	13	16	12	25	8	15
M8*15*32	13	16	15	32	8	15
M8*15*35	13	16	15	35	8	15

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	TECHNICAL DATA SHEET
JARING FACADES CO.,LTD No.107 Dainan Industrial Park, Taizhou City,Jiangsu Province,China Tel:86 0523 83988997 Fax:86 0523 83988997	TDS No: 1/2022 Date: Jan 2022 Version No : 001

UNDERCUT ANCHOR KUA-02

1.Product Descriptions

Name: Undercut Anchor
Type: KUA-02
Material: AISI316/A4
Size: M6*10(Hs=7)
Contains: Flange Bolt +Anchor



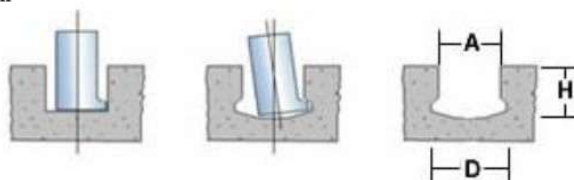
2.Features:

- * The UnderCut Anchor consists of an Anchor Sleeve and a Flange Bolt.
- * Anchor sleeve and bolt length have to be matched to the hole depth required and to the panel bracket chosen.
- * The anchor sleeve is expanded to its original dimension by inserting the screw to a controlled depth,so that the sleeve sits snugly against the undercut section of the hole in the facade panel.

3.For use in:

Natural Stone | Artificial Panel |Fibre Cement | Ceramic | Porcelain Tiles

4.Technical information



Item	Hole Diamater (mm)	Bottom Hole (mm)	Drill Depth (mm)	Screw Diamater (mm)	Design Value (KN)	
					Anti-Shearing	Anti-Stretching
M6 (hs=5)	7.2	9.5	5.5	6	4	8
M6 (hs=7)	7.2	9.5	7.5	6	4	8
M6 (hs=9)	7.2	9.5	9.5	6	4	8
M6 (hs=12)	7.2	9.5	12.5	6	4	8
M6 (hs=15)	7.2	9.5	15.5	6	4	8

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COVERLAM|TOP
A NEW SKIN FOR YOUR KITCHEN

IMAGEN / Image:



FICHA DE CARACTERÍSTICAS TÉCNICAS (TECHNICAL PROPERTIES SHEET)

REFERENCIA / Code	BASIC NATURAL 12 (NIEVE, BLANCO, NEGRO, MARFIL, TAUPE, CEMENTO)		FECHA: 13 de julio de 2023
GRUPO (E%) / Group	Annex G, Bla, UGL		Date: 13 July 2023
MEDIDAS NOMINALES (MM) / Nominal measurements (mm)	1620x3240		
ESPESOR (MM) / Thickness (mm)	12		
RECTIFICADO / Rectified	No		
ABSORCIÓN AGUA / Water absorption	< 0,1 %		UNE-EN ISO 10545-3

CARACTERÍSTICAS DIMENSIONALES / Dimensional stability and surface aspect Normas de referencia UNE-EN ISO 10545-2 (ISO-13006:2018 UNE-EN 14411:2016)

		RESULTADO / Result
DESVIACIÓN LONGITUD Y ANCHURA / Deviations length and width	UNE-EN ISO 10545-2	SI/YES
DESVIACIÓN RECTITUD LADOS (luneta) / Straightness	UNE-EN ISO 10545-2	SI/YES
DESVIACIÓN ORTOGONALIDAD (descuadre) / Rectangularity	UNE-EN ISO 10545-2	SI/YES
DESVIACIÓN PLANIMETRÍA / Surface flatness	UNE-EN ISO 10545-2	SI/YES
DESVIACIÓN ESPESOR / Deviation thickness	UNE-EN ISO 10545-2	SI/YES

CARACTERÍSTICAS MECÁNICAS / Mechanical characteristics Normas de referencia UNE-EN ISO 10545-4-7-11-12 (ISO-13006:2018 UNE-EN 14411:2016), UNE-EN 12722-2009+A1:2014

		RESULTADO / Result	VALORES / Values
RESISTENCIA AL CUARTEO / Resistance to cracking	UNE-EN ISO 10545-11	-	
RESISTENCIA A CHOQUE TÉRMICO / Resistance to thermal shock	UNE-EN ISO 10545-9	SI/YES	
RESISTENCIA A LA FLEXIÓN / Modulus of rupture	UNE-EN ISO 10545-4	SI/YES	> 50 N/mm ²
FUERZA DE ROTURA / Breaking strength *	UNE-EN ISO 10545-4	SI/YES	> 1000 N
RESISTENCIA AL IMPACTO / Impact resistance (Coef. restitution)	UNE-EN ISO 10545-5	SI/YES	e = 0,7
RESISTENCIA A LA HELADA / Frost resistance	UNE-EN ISO 10545-12	SI/YES	
RESISTENCIA DE LA SUPERFICIE AL CALOR SECO / Surface resistance to dry heat	UNE-EN 12722:2009+A1:2014	5	
RESISTENCIA A LA ABRASIÓN PROFUNDA / Deep Abrasion resistance	UNE-EN ISO 10545-6	CLASE / Type	< 175 mm ³
RESISTENCIA A LA ABRASIÓN (P.E.I.) / Abrasion resistance (PEI method)	UNE-EN ISO 10545-7	SI/YES	
COEFICIENTE DE EXPANSIÓN LINEAL / Coef. of lineal thermal expansion	UNE-EN ISO 10545-8	SI/YES	< 7 x 10 ⁻⁶ K ⁻¹

RESISTENCIA A LOS AGENTES QUÍMICOS / Chemical agents resistance (ácidos/acids, bases y productos domésticos de limpieza/bases and home cleaning products) Normas de referencia UNE-EN ISO 10545-13-14:1995 (ISO-13006:2018 UNE-EN 14411:2016)

		CLASE / Type
ACIDO CLORHÍDRICO / Hydrochloric acid	UNE-EN ISO 10545-13	ULA
ACIDO CÍTRICO / Citric acid	UNE-EN ISO 10545-13	ULA
HIDRÓXIDO POTÁSICO / Potassium hydroxide	UNE-EN ISO 10545-13	ULA
CLORURO AMÓNICO / Ammonium chloride	UNE-EN ISO 10545-13	UA
HIPOCLORITO SÓDICO / Sodium hypochlorite	UNE-EN ISO 10545-13	UA
AGENTE VERDE/ROJO EN ACEITE LIGERO / Green/red agent in light oil	UNE-EN ISO 10545-14	5
SOLUCIÓN DE YODO / Iodine solution	UNE-EN ISO 10545-14	5
ACEITE DE OLIVA / Olive oil	UNE-EN ISO 10545-14	5

COEFICIENTES DE ANTIDESLIZAMIENTO / Slipness coefficient

Normas de referencia UNE-EN ISO 12633:2003, DIN-51097, DIN-51130, ASTM C-1028/96

	RESULTADO / Result
DIN-51097:1992 (pie descalzo en zonas húmedas / bare foot wet ground)	-
DIN-51130 (rampa / ramp)	-
ASTM C1028 96 (coeficiente dinámico de fricción / dynamic coefficient of friction)	-
UNE-41901:2017 EX (péndulo humedo / wet pendulum)	-
PTV BS 7976-2 and BS 13036-4 (pendulum test value British Standard)	-
DCOF ANSI A137.1-2012, (Dynamic Coefficient of Friction)	-

RESISTENCIA AL FUEGO / Resistant to fire

Normas de referencia UNE-EN 13501-1

	RESULTADO / Result
CON FIBRA DE VIDRIO / With fiberglass	A2-s1, d0

*LOS VALORES DEL ENSAYO CORRESPONDEN A PIEZAS
CORTADAS A FORMATO 100x600 MM CON FIBRA DE VIDRIO
*Size assay according to 100x600 mm with fiberglass

FIRMADO POR / Signed by Cesar Solaz

LABORATORIO GRES PANIA COVERLAM MONCOFAR

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Tested By Bernard Farrington

Report Writer Bernard Farrington

Authorised by Shawn McIsaac

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COVERLAM
by GRESPANIA

IMAGEN / Image:



FICHA DE CARACTERÍSTICAS TÉCNICAS (TECHNICAL PROPERTIES SHEET)

REFERENCIA / Code	BASIC NATURAL 5,6 (BLANCO, NEGRO, GRIS)	FECHA: 11 de septiembre de 2024
GRUPO (E%) / Group	Annex G, B1a, UGL	Date: 11 September 2024
MEDIDAS NOMINALES (MM) / Nominal measurements (mm)	+/- 0,5 mm	
ESPESOR (MM) / Thickness (mm)	5,6	
RECTIFICADO / Rectified	SI/Yes	
ABSORCIÓN AGUA / Water absorption	< 0,1 %	UNE-EN ISO 10545-3

CARACTERÍSTICAS DIMENSIONALES / Dimensional stability and surface aspect Normas de referencia UNE-EN ISO 10545-2 (ISO-13006:2018 UNE-EN 14411:2016)

		RESULTADO / Result
DESVIACIÓN LONGITUD Y ANCHURA / Deviations length and width	UNE-EN ISO 10545-2	SI/YES
DESVIACIÓN RECTITUD LADOS (luneta) / Straightness	UNE-EN ISO 10545-2	SI/YES
DESVIACIÓN ORTOGONALIDAD (descuadre) / Rectangularity	UNE-EN ISO 10545-2	SI/YES
DESVIACIÓN PLANIMETRÍA / Surface flatness	UNE-EN ISO 10545-2	SI/YES
DESVIACIÓN ESPESOR / Deviation thickness	UNE-EN ISO 10545-2	SI/YES

CARACTERÍSTICAS MECÁNICAS / Mechanical characteristics Normas de referencia UNE-EN ISO 10545-4-7-11-12 (ISO-13006:2018 UNE-EN 14411:2016)

		RESULTADO / Result	VALORES / Values
RESISTENCIA AL CUARTEO / Resistance to cracking	UNE-EN ISO 10545-11	-	
RESISTENCIA A CHOQUE TÉRMICO / Resistance to thermal shock	UNE-EN ISO 10545-9	SI/YES	
RESISTENCIA A LA FLEXIÓN / Modulus of rupture	UNE-EN ISO 10545-4	SI/YES	> 50 N/mm ²
FUERZA DE ROTURA / Breaking strength *	UNE-EN ISO 10545-4	SI/YES	> 1000 N
RESISTENCIA AL IMPACTO / Impact resistance (Coef. restitution)	UNE-EN ISO 10545-5	SI/YES	e = 0,7
RESISTENCIA A LA HELADA / Frost resistance	UNE-EN ISO 10545-12	SI/YES	
RESISTENCIA A LA ABRASIÓN PROFUNDA / Deep Abrasion resistance	UNE-EN ISO 10545-6	CLASE / Type	< 175 mm ³
RESISTENCIA A LA ABRASIÓN (P.E.I.) / Abrasion resistance (PEI method)	UNE-EN ISO 10545-7	-	
COEFICIENTE DE EXPANSIÓN LINEAL / Coef. of lineal thermal expansion	UNE-EN ISO 10545-8	SI/YES	< 7 x 10 ⁻⁶ K ⁻¹

RESISTENCIA A LOS AGENTES QUÍMICOS / Chemical agents resistance (ácidos/acids, bases y productos domésticos de limpieza/bases and home cleaning products) Normas de referencia UNE-EN ISO 10545-13-14:1995 (ISO-13006:2018 UNE-EN 14411:2016)

		CLASE / Type
ACIDO CLORHÍDRICO / Hydrochloric acid	UNE-EN ISO 10545-13	ULA
ACIDO CÍTRICO / Citric acid	UNE-EN ISO 10545-13	ULA
HIDRÓXIDO POTÁSICO / Potassium hydroxide	UNE-EN ISO 10545-13	ULA
CLORURO AMÓNICO / Ammonium chloride	UNE-EN ISO 10545-13	UA
HIPOCLORITO SÓDICO / Sodium hypochlorite	UNE-EN ISO 10545-13	UA
AGENTE VERDE/ROJO EN ACEITE LIGERO / Green/red agent in light oil	UNE-EN ISO 10545-14	5
SOLUCIÓN DE YODO / Iodine solution	UNE-EN ISO 10545-14	5
ACEITE DE OLIVA / Olive oil	UNE-EN ISO 10545-14	5

COEFICIENTES DE ANTIDESLIZAMIENTO / Slipness coefficient Normas de referencia UNE-EN ISO 12633:2003, DIN-51097, DIN-51130, ASTM C-1028/96

	RESULTADO / Result
DIN-51097:1992 (pie descalzo en zonas húmedas / bare foot wet ground)	A
DIN-51130 (rampa / ramp)	R-9
ASTM C1028 96 (coeficiente dinámico de fricción / dynamic coefficient of friction)	Fd>0,6 / Fw>0,6
UNE-41901:2017 EX (péndulo humedo / wet pendulum)	CL 1
PTV BS 7976-2 and BS 13036-4 (pendulum test value British Standard)	36+
DCOF ANSI A137.1-2012, (Dynamic Coefficient of Friction)	-

RESISTENCIA AL FUEGO / Resistant to fire Normas de referencia UNE-EN 13501-1

	RESULTADO / Result
SIN FIBRA DE VIDRIO / Without fiberglass	A1
CON FIBRA DE VIDRIO / With fiberglass	A2-s1, d0

*LOS VALORES DEL ENSAYO CORRESPONDEN A PIEZAS
CORTADAS A FORMATO 200X300 MM SIN FIBRA DE VIDRIO
*Size assay according to 200x300 mm without fiberglass

FIRMADO POR / Signed by Cesar Solaz

LABORATORIO GRESPANIA COVERLAM MONCOFAR

Se aconseja siempre seguir las instrucciones de colocación y mantenimiento editadas por GRESPANIA, cumpliendo en cualquier caso los requisitos legales o normativos que pudieran existir para cada ámbito de uso. No utilizar agentes de limpieza que contengan fluorhídrico. En lugares de pública concurrencia las baldosas deben cumplir con los requisitos de resistencia al Código Técnico de Edificación.

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Tested By Bernard Farrington

Report Writer Bernard Farrington
Authorised by Shawn McIsaac

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DECLARATION OF PERFORMANCE

1. Unique identification code of the product-type:
TWEHA PanelMate
2. Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11 (4):
The batch number is indicated on the product's label and/or packaging.
3. Intended use of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:
Bonding material used in a system to install internal and external wall cladding with HPL, Fibre Cement Board, etc..
4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11 (5):
TcB
Lepelstraat 1, bus 02.01 - B-3920 Lommel – Belgium
Chamber of Commerce 56565860 - RSIN 852189187
T: +31 88 600 3 600 - E: info@tweha.com - W: www.tweha.com
5. Where applicable, name and contact address of the authorized representative whose mandate covers the task specified in Article 12 (2):
Inapplicable
6. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V:
Inapplicable, there is no European harmonized standard (hEN) or ETAG
7. In case of the declaration of performance concerning a construction product covered by a ageing test procedure and/or harmonized standard:
The LNE (notified body no. 1234; Efectis) has undertaken the test of reaction to fire and issued the test reports in relation with EN 13823, EN 13501-1.
Based on the research carried out, it can be concluded that on the materials mentioned in the summary of tested and approved substrates a sufficiently durable adhesive connection with TWEHA PanelMate can be realized.
8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:
Inapplicable

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9. Declared performance:

Essential Characteristics	Performance	Harmonized Technical Specification
• Mechanical strength, tensile	> 2.7 MPa	EN 53504
• Mechanical strength, shear	> 2.5 MPa	EN 53504-2
• Density 23°C/50%RH	1.48 g/m ³	
• Fire resistance	B-s1,d0	EN 13823, EN 13501-1
• Temperature resistance	-40°C to + 200°C	
• Elongation at break 23°C/50%RH ca. 300%		EN 53504 S2
• Consistency	non-sagging	EN 27390
• Shore-A hardness 23°C/50%RH	60±2	DIN 53505/ISO 7619
• Change of volume	< 10%	EN 52451
• Modulus elongation at 100%	1.6 MPa	EN 53504 S2
• Curing time 23°C/50%RH	2.5-3 mm / 24 h	
• Skin forming time 23°C/50%RH	10 minutes	
• Hygiene, health and environment	no influence	
• Safety in use	minor safety measures needed	
• Durability	assumed to be 50 years	
• with application according	processing directive	
• Sound absorption	inapplicable	
• Thermal resistance	inapplicable	

10. The performance of the product identified in point 1 and 2 is in conformity with the declared performance in point 9.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Lommel, August 1, 2023



M.J.P. van Leeuwen, General Director

Annex to the declaration of performance in accordance with Article 6(5) of Building Regulation and the REACH Regulation No. 1907/2006, Article 31 or 33

- (31) Material safety data Sheet (MSDS): available on www.tweha.com
- (33) information on substances of very high concern (SCHC): inapplicable

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16 Appendix C – Worksheets

SWTM-1.1 AS_NZS4284 Worksheet Preliminary Testing v3

G:\Shared drives\Shelby Wright Test Labs\Technical Records\2.0 Testing Procedures, Worksheets and Logs\Test Methods Worksheets

Version	3	TEST No: SWTL T-	0342
Date Created	4-Apr-24 BF	Sheet #	1
Date Checked	23-Apr-24 BF	of sheets	10

SERVICEABILITY LIMIT	+	1515 Pa	10 sec	Comments	No damage observed
STATE TEST PRESSURE	-	1515 Pa	10 sec	Comments	No damage observed

STATIC PRESSURE TEST AS/NZS 4284:2008

Specified Test Pressure 300 Pa or

Test Pressure: 0.3 x SLS Pressure 454.5 Pa

Note: Adjust water pump to meet noted spray nozzle calibration pressure

Pressure	Time	Comments
0 Pa	5 min.	No Leaks Evident
454.5 Pa	15 min.	No Leaks Evident
0 Pa	5 min.	No Leaks Evident

CYCLIC PRESSURE TEST AS/NZS 4284:2008

5 MINS @ 0.15 - 0.30 +ve SLS Test Pressure Pa	Based on minimum +ve SLS of 1000 Pa. 2 minutes zero pressure between each stage.
5 MINS @ 0.20 - 0.40 +ve SLS Test Pressure Pa	
5 MINS @ 0.30 - 0.60 +ve SLS Test Pressure Pa	

Note: If Cyclic test is more than 30 minutes after Static test, then water must be turned on for 5 minutes prior to cyclic pressure.

Pressure	Water On/Off	Time	Comments
227.25 454.5 Pa	On	5 min.	No Leaks Evident
0 Pa	On	2 min.	No Leaks Evident
303 606 Pa	On	5 min.	No Leaks Evident
0 Pa	On	2 min.	No Leaks Evident
454.5 909 Pa	On	5 min.	No Leaks Evident
0 Pa	Off	5 min.	No Leaks Evident

Result Pass

Checked BF

Tested By Bernard Farrington

Report Writer Bernard Farrington
Authorised by Shawn McIsaac



Report Number: SWTL R0102
Report Date: 13 December 2025

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SWTM-1.2 AS_NZS4284 Worksheet Deflection Measurements v3

G:\Shared drives\Shelby Wright Test Labs\Technical Records\2.0 Testing Procedures, Worksheets and Logs\Test Methods Worksheets

Version	3	TEST No: SWTL T-	0343
Date Created	4-Apr-24 BF	Sheet #	2
Date Checked	23-Apr-24 BF	of sheets	10

Note: This worksheet is for use with laser distance measurement

CLIENT	Stone Face Ltd	12 August 2025
TEST OPERATOR	Bernard Farrington	
DESCRIPTION OF SAMPLE	Coverlam UCS & STONEFACE Fixing Systems	
CLIENT DRAWING REF(S)	COVERLAM - STONEFACE AS/NZS 4284 TEST SAMPLE	
MEMBER TESTED		

SERVICEABILITY LIMIT	+	1515 Pa	Overall length	1800 mm
STATE TEST PRESSURE	-	1515 Pa	Gauge length	1790 mm
*Specified maximum deflection ratio			Max defl. (1/	250)
			Max defl. Specified	7.16 mm
SNZ TS 4284 default = span/250			Max defl. Default	7.16 mm
Atmospheric Conditions			Temperature	13.19 °C
			Barometric Pressure	1025 hPa
			Relative Humidity	87 %
			Bottom Middle Top	
			Gauge #	108 115 116

POSITIVE PRESSURE									
SLS test pressure				Net centre deflection mm	Default Ratio Check	Specified Ratio Check	Successive Member Displacement		
Input Values									
Stage	Time	%	Pa	(Direct Displacement)	Mode	Value	Limit	Check	
Z1	0 min	0%	0	167.1 165.6 167.0					
	2 min	100%	1515	153.2 151.6 158.0	-2.535				
	2 min	0%	0	162.7 162.4 166.4	1.885	<= Zero Ref	1.89	3	
Z2	1 min	20%	303	165.0 161.1 161.7	-0.135	-2%			
	1 min	40%	606	163.7 159.2 160.0	-0.535	-7%			
	1 min	60%	909	161.9 156.6 158.0	-1.22	-17%			
	1 min	80%	1212	160.0 154.1 155.6	-1.56	-22%			
	1 min	100%	1515	157.7 151.3 152.7	-1.82	-25%			
	2 min	0%	0	166.1 161.9 162.2	-0.1	-1%	-0.1	-0.1	
	1 min	100%	1515	157.6 151.4 152.7	-1.675	-23%			
	1 min	80%	1212	158.6 152.6 153.8	-1.485	-21%			
	1 min	60%	909	159.9 154.2 155.1	-1.245	-17%			
	1 min	40%	606	161.5 156.3 157.7	-1.22	-17%			
Z3	1 min	20%	303	163.6 158.8 159.2	-0.49	-7%			
	2 min	0%	0	166 162 162	-0.13	-2%	-0.1	-0.1	
NEGATIVE PRESSURE									
Z4	2 min	-100%	-1515	179.7 181.0 182.8	1.91	27%			
	2 min	0%	0	171.11 170.67 173.03	0.855	<= Zero Ref	0.85	3	
	1 min	-20%	-303	172.85 172.24 174.55	-0.06	-1%			
	1 min	-40%	-606	174.53 174.19 176.51	0.07	1%			
	1 min	-60%	-909	176.43 176.56 178.25	0.62	9%			
	1 min	-80%	-1212	178.14 179.02 181.12	0.79	11%			
Z5	1 min	-100%	-1515	180.40 181.23 183.00	0.93	13%			
	2 min	0%	0	171.38 170.86 173.43	-0.145	-2%	-0.1	-0.1	
	1 min	-100%	-1515	180.34 181.46 183.20	1.09	15%			
	1 min	-80%	-1212	179.25 180.19 182.16	0.885	12%			
	1 min	-60%	-909	178.00 178.37 180.76	0.39	5%			
	1 min	-40%	-606	176.42 176.47 178.60	0.36	5%			
Z6	1 min	-20%	-303	174.61 174.18 176.33	0.11	2%			
	2 min	0%	0	171.80 171.19 173.66	-0.14	-2%	-0.1	-0.1	
POSITIVE PRESSURE									
Z7	2 min	100%	1515	158.00 151.73 153.40	-1.845	-26%			
	2 min	0%	0	166.16 162.47 162.62	0.205	3%	0.2	0.2	
Result				Pass	Checked				
					BF				

Tested By Bernard Farrington

Report Writer Bernard Farrington

Authorised by Shawn McIsaac

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SWTM-1.3 AS_NZS4284 Worksheet Air Infiltration Measurements v4

G:\Shared drives\Shelby Wright Test Labs\Technical Records\2.0 Testing Procedures, Worksheets and Logs\Test Methods Worksheets

Version	4	TEST No: SWTL T-	0344
Date Created	4-Apr-24 BF	Sheet #	3
Date Checked	23-Apr-24 BF	of sheets	10
CLIENT	Stone Face Ltd 12 August 2025		
TEST OPERATOR	Bernard Farrington		
DESCRIPTION OF SAMPLE	Coverlam UCS & STONEFACE Fixing Systems		
CLIENT DRAWING REF(S)	COVERLAM - STONEFACE AS/NZS 4284 TEST SAMPLE		
Sample Width	4.805 m	Sample Perimeter Length	16.41 m
Sample Height	3.4 m		
Sample Area	16.337 m ²		
AS/NZS 4284:2008 Maximum permitted air flow, l/s at		150 Pa booth pressure	
Overall Sample Area x 1.6		=	26.1392 l/s
Sample Perimeter Length x 0.6		=	9.846 l/s
Atmospheric Conditions		Temperature	17.27 °C
		Barometric Pressure	1024 hPa
		Relative Humidity	63 %
POSITIVE PRESSURE			
Sample Unsealed		Sample Sealed	
	Flow,		Flow,
	Δ P, Pa m ³ /hr Flow l/s		Δ P, Pa m ³ /hr Flow l/s
Reading 1	150 14.14 3.93	150	0.00
Reading 2	14.99 4.16		0.00
Reading 3	14.98 4.16		0.00
Average Air Flow	4.08		0.00
Net Air Leakage	4.08 l/s		
NEGATIVE PRESSURE			
Sample Unsealed		Sample Sealed	
	Flow,		Flow,
	Δ P, Pa m ³ /hr Flow l/s		Δ P, Pa m ³ /hr Flow l/s
Reading 1	150 14.47 4.02	150	0.00
Reading 2	15.03 4.18		0.00
Reading 3	14.73 4.09		0.00
Average Air Flow	4.10		0.00
Net Air Leakage	4.10 l/s		
Result	Pass	Checked	BF

Tested By Bernard Farrington

Report Writer Bernard Farrington
Authorised by Shawn McIsaac



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SWTM-1.4.1 AS_NZS4284 Static Water Penetration v1

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Methods Worksheets

Version	1	TEST No: SWTL T-	0345
Date Created	4-Apr-24 BF	Sheet #	4
Date Checked	23-Apr-24 BF	of sheets	10

CLIENT	Stone Face Ltd 12 August 2025
TEST OPERATOR	Bernard Farrington
DESCRIPTION OF SAMPLE	Coverlam UCS & STONEFACE Fixing Systems
CLIENT DRAWING REF(S)	COVERLAM - STONEFACE AS/NZS 4284 TEST SAMPLE

STATIC PRESSURE TEST AS/NZS 4284:2008

Specified Test Pressure 300 Pa or

Test Pressure: 0.3 x SLS Pressi 454.5 Pa

Note: Adjust water pump to meet noted spray nozzle calibration pressure

Pressure	Time	Comments
0 Pa	5 min.	No leaks evident
454.5 Pa	15 min.	No leaks evident
0 Pa	5 min.	No leaks evident

Result Pass Checked BF

Tested By Bernard Farrington

Report Writer Bernard Farrington
Authorised by Shawn McIsaac



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SWTM-1.4.2 AS_NZS4284 Cyclic Water Penetration v1

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Version	1	TEST No: SWTL T-	0346
Date Created	4-Apr-24 BF	Sheet #	5
Date Checked	23-Apr-24 BF	of sheets	10
CLIENT	Stone Face Ltd 12 August 2025		
TEST OPERATOR	Bernard Farrington		
DESCRIPTION OF SAMPLE	Coverlam UCS & STONEFACE Fixing Systems		
CLIENT DRAWING REF(S)	COVERLAM - STONEFACE AS/NZS 4284 TEST SAMPLE		

CYCLIC PRESSURE TEST AS/NZS 4284:2008

5 MINS @ 0.15 - 0.30 +ve SLS Test Pressure Pa	Based on minimum +ve SLS of 1000 Pa. 2 minutes zero pressure between each stage.
5 MINS @ 0.20 - 0.40 +ve SLS Test Pressure Pa	
5 MINS @ 0.30 - 0.60 +ve SLS Test Pressure Pa	

Note: If Cyclic test is more than 30 minutes after Static test, then water must be turned on for 5 minutes prior to cyclic pressure.

Note: Adjust water pump to meet noted spray nozzle calibration pressure

Pressure	Water On/Off	Time	Comments
227.25 454.5 Pa	On	5 min.	No Leaks Evident
0 Pa	On	2 min.	No Leaks Evident
303 606 Pa	On	5 min.	No Leaks Evident
0 Pa	On	2 min.	No Leaks Evident
454.5 909 Pa	On	5 min.	No Leaks Evident
0 Pa	Off	5 min.	No Leaks Evident
227.25 454.5	Result	Pass	Checked BF
303 606	Result	Pass	Checked BF
454.5 909	Result	Pass	Checked BF

Tested By Bernard Farrington

Report Writer Bernard Farrington
Authorised by Shawn McIsaac



Report Number: SWTL R0102
Report Date: 13 December 2025

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SWTM-1.5 AS_NZS4284 Seismic Displacements v3

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Version	3	TEST No: SWTL T-	0347
Date Created	4-Apr-24 BF	Sheet #	6
Date Checked	23-Apr-24 BF	of sheets	10
CLIENT	Stone Face Ltd 12 August 2025		
TEST OPERATOR	Bernard Farrington		
DESCRIPTION OF SAMPLE	Coverlam UCS & STONEFACE Fixing Systems		
CLIENT DRAWING REF(S)	COVERLAM - STONEFACE AS/NZS 4284 TEST SAMPLE		

SERVICEABILITY SEISMIC DISPLACEMENT TEST

AS/NZS 4284:2008

Reverse cycles at SLS inter-storey displacement

15

Specified SLS displacement:

12 mm

Cycle Frequency

0.05 Hz

Displacement Speed

2.4 mm/s

Load Direction	Achieved	Cycle check																			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Push		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
Pull		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
Comments: The mechanically fixed components/UCS modules demonstrated significant closure and opening of gaps between stone module, whereas the UCS modules mounted via the chem-elastic systems showed very little movement relative to adjacent modules, with the gaps maintaining a relatively even distance throughout the seismic cycles.																					

Result Checked

Tested By Bernard Farrington

Report Writer Bernard Farrington
Authorised by Shawn McIsaac



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SWTM-1.6.1 AS_NZS4284 Static Water Penetration v1

G:\Shared drives\Shelby Wright Test Labs\Technical Records\2.0 Testing Procedures, Worksheets and Logs\Test
Methods Worksheets

Version	1	TEST No: SWTL T-	0348
Date Created	4-Apr-24 BF	Sheet #	7
Date Checked	23-Apr-24 BF	of sheets	10

CLIENT	Stone Face Ltd 12 August 2025
TEST OPERATOR	Bernard Farrington
DESCRIPTION OF SAMPLE	Coverlam UCS & STONEFACE Fixing Systems
CLIENT DRAWING REF(S)	COVERLAM - STONEFACE AS/NZS 4284 TEST SAMPLE

STATIC PRESSURE TEST AS/NZS 4284:2008

Specified Test Pressure 300 Pa or

Test Pressure: 0.3 x SLS Press: 454.5 Pa

Note: Adjust water pump to meet noted spray nozzle calibration pressure

Pressure	Time	Comments
0 Pa	5 min.	No Leaks Evident
454.5 Pa	15 min.	No Leaks Evident
0 Pa	5 min.	No Leaks Evident

Result Pass Checked BF



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SWTM-1.6.2 AS_NZS4284 Cyclic Water Penetration v1

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Version	1	TEST No: SWTL T-	0349
Date Created	4-Apr-24 BF	Sheet #	8
Date Checked	23-Apr-24 BF	of sheets	10

CLIENT	Stone Face Ltd 12 August 2025
TEST OPERATOR	Bernard Farrington
DESCRIPTION OF SAMPLE	Coverlam UCS & STONEFACE Fixing Systems
CLIENT DRAWING REF(S)	COVERLAM - STONEFACE AS/NZS 4284 TEST SAMPLE

CYCLIC PRESSURE TEST AS/NZS 4284:2008

5 MINS @ 0.15 - 0.30 +ve SLS Test Pressure Pa	Based on minimum +ve SLS of 1000 Pa. 2 minutes zero pressure between each stage.
5 MINS @ 0.20 - 0.40 +ve SLS Test Pressure Pa	
5 MINS @ 0.30 - 0.60 +ve SLS Test Pressure Pa	

Note: If Cyclic test is more than 30 minutes after Static test, then water must be turned on for 5 minutes prior to cyclic pressure.

Note: Adjust water pump to meet noted spray nozzle calibration pressure

Pressure	Water On/Off	Time	Comments
227.25 454.5	Pa On	5 min.	No Leaks Evident
0	Pa On	2 min.	No Leaks Evident
303 606	Pa On	5 min.	No Leaks Evident
0	Pa On	2 min.	No Leaks Evident
454.5 909	Pa On	5 min.	No Leaks Evident
0	Pa Off	5 min.	No Leaks Evident
227.25 454.5	Result	Pass	Checked BF
303 606	Result	Pass	Checked BF
454.5 909	Result	Pass	Checked BF

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SWTM-1.7 AS_NZS4284 Worksheet Structural ULS Pressure v3

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Version	3	TEST No: SWTL T-	0350
Date Created	4-Apr-24 BF	Sheet #	9
Date Checked	23-Apr-24 BF	of sheets	10
Note: This worksheet is for use with laser distance measurement			
CLIENT	Stone Face Ltd 12 August 2025		
TEST OPERATOR	Bernard Farrington		
DESCRIPTION OF SAMPLE	Coverlam UCS & STONEFACE Fixing Systems		
CLIENT DRAWING REF(S)	LEVANTINA - STONEFACE AS/NZS 4284 TEST SAMPLE		
ULTIMATE LIMIT STATE TEST	+	3150 Pa	10 sec Comments No collapse observed
PRESSURE	-	3150 Pa	10 sec Comments No collapse observed
Atmospheric Conditions		Temperature	17.27 °C
		Barometric Pressure	1024 hPa
		Relative Humidity	63 %
Result	Pass	Checked	BF

SWTM-1.5 AS_NZS4284 Seismic Displacements v3

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Version	3	TEST No: SWTL T-	0351
Date Created	4-Apr-24 BF	Sheet #	10
Date Checked	23-Apr-24 BF	of sheets	10
CLIENT	Stone Face Ltd 12 August 2025		
TEST OPERATOR	Bernard Farrington		
DESCRIPTION OF SAMPLE	Coverlam UCS & STONEFACE Fixing Systems		
CLIENT DRAWING REF(S)	COVERLAM - STONEFACE AS/NZS 4284 TEST SAMPLE		

ULTIMATE SEISMIC DISPLACEMENT TEST

AS/NZS 4284:2008

Reverse cycles at SLS inter-storey displacement	15
Specified ULS displacement:	50 mm
Cycle Frequency	0.05 Hz
Displacement Speed	10 mm/s

Load Direction	Achieved	Cycle check																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Push		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Pull		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			

Comments: The mechanically fixed components/UCS modules demonstrated significant closure and opening of gaps between stone module, whereas the UCS modules mounted via the chem-elastic systems showed very little movement relative to adjacent modules, with the gaps maintaining a relatively even distance throughout the seismic cycles.

Result	Stonemec Pass @ 30. Chem-elastic Pass @ 50.	Checked	BF
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Tested By Bernard Farrington

Report Writer Bernard Farrington
Authorised by Shawn McIsaac

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17 Appendix D – Uncertainty of Measurement

SWTM-16.0 V3 Uncertainty of Measurement - Air Infiltration
Date Created: 4-Dec-23 BF
Date Checked: 12-Dec-23 BF
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Client	Stoneface NZ Ltd & Cosentino Global S.L.U.
Test Sample	Crespania Coverlam, & STONEFACE fixing systems.
Date	3rd July 2025
Operator	Bernard Farrington

FLOW COMPENSATION FOR ATMOSPHERIC PRESSURE AND TEMPERATURE

PARAMETER	UNITS	INPUTS	RESULTS
Flow Reading	m³/h	14.74	Flow Compensated
Temperature Actual	Degrees Celcius	17.27	290.27
Pressure Actual (Metservice)	Hectapascals	1024	102400 m³/h 14.899
Air Infiltration Pressure	Pascals	150	
Specimen Dimensions	Width (m)	4.805	Actual Flow per m²
	Height (m)	3.4	l/m²/s 0.253
	Area (m²)	16.337	

UNCERTAINTY OF SAMPLE SIZE

		Dimension measured in (m)	Tape Calibration UoM (%)	Reading Accuracy +/- 0.001 m	UoM of Sample Size %
Dimension (mm)	X-X (U _a)	4.805	0.5%	0.001 U _a	2.382%
Dimension (mm)	Y-Y (U _b)	3.4	0.5%	0.001 U _b	1.671%
$U_{m^2} = \sqrt{\left[\frac{U(A)}{A}\right]^2 + \left[\frac{U(B)}{B}\right]^2}$		0.00697934 %			

UNCERTAINTY OF AIR INFILTRATION FLOW RATE

Daaks Certificate UoM for Schmidt SS.20.260	3.0% SWTL-050
$U^2 [Flow] = \left[\frac{L}{S}\right]^2 U^2 m^2 + [m^2]^2 U^2 \left[\frac{L}{S}\right]$	0.305636724
UoM Air Infiltration	0.552844%

M: +64 277173143
E: Bernard@swtl.co.nz
W: www.swtl.co.nz

Report Number: SWTL R0102
Report Date: 13 December 2025



All tests reported herein
have been performed in
accordance with the
laboratory's scope of
accreditation



Shelby Wright Test Labs
515 Rosebank Road
Avondale, Auckland
New Zealand, 1026

OFFICIAL TEST REPORT

18 Appendix E – Certificate of Identification

STONEFACE Ltd for Architectural Stone

Workshop – 198 Hazeldean Rd, Sydenham
Christchurch 8023

Postal Address – PO. Box 28115
Christchurch 8242
Ph. +64.0.27 919 2840
E – brent@stoneface.co.nz

Re SWTL R0102 Certification of identification AS/NZS-4284

To Whom this may concern

Further to your request STONEFACE Pty Ltd confirm that the products supplied & installed as mentioned in report SWTL-R0102 are in accordance with STONEFACE Ltd drawings, Refer to Appendix (B) and STONEFACE's material specification provided (Refer to section 4.3 components)

Brent Robertson (Director)

A handwritten signature in black ink, appearing to be "BR", written over a horizontal line.

STONEFACE Ltd. –
STONE FAÇADE Company - Fixing Systems for Stone

Tested By Bernard Farrington

Report Writer Bernard Farrington
Authorised by Shawn McIsaac