Ian Bennie & Associates

Test Report No. 2022-031-S1

VALMOND & GIBSON INTERLOQ RAINSCREEN CLADDING PANELS - Cavity wall system

Specimen tests by the methods of AS/NZS4284

To the requirements of NCC 2019 verification methods FV1 & V2.2.1

For

VALMOND & GIBSON

May 2022

NATA

Accredited Laboratory No. 2371
Accredited for compliance with ISO/IEC 17025 - Testing

IAN BENNIE & ASSOCIATES PTY. LTD.
Building performance Testing
ACN: 007 133 253

Accredited
Laboratory
No.2371

TEST REPORT NUMBER 2022-031-S1

Test Client: **Valmond & Gibson**
Building C, 23-25 Princes Rd East, Auburn, NSW, 2144

Specimen identification:

An Interloq Rainscreen Cladding Panels cavity wall system test specimen measuring 3950 mm in height x 3600 mm in width was installed on a steel stud frame by the client. The sample consisted of various panel sizes. The sample included a 600 mm recess, window, wall junctions, control joints, parapet and balcony drainage conditions. The window itself was not deemed a formal part of the sample and as such isn't detailed in the report. However, the air seal connection to the window sub frame was deemed a formal test part of the sample Full details of the cladding system provided by the Client are included in Appendix C.

Construction:

For the purposes of the NCC the specimen was deemed to be a Cavity Wall utilising appropriate breather wrap to prevent water ingress to the stud framing. For the purposes of observations during the test, acrylic sheets were used as the internal lining on the stud frame. Holes were introduced through the internal lining to create an air infiltration of 1.6 L/s.m2 at 150 Pa of pressure on the sample, being the highest allowable infiltration rate specified in AS/NZS 4284.

Test Method:

NCC-2019 Weatherproofing Verification Methods V2.2.1 and FV1 with test procedures in accordance with Australian Standard AS/NZS 4284:2008, Testing of building facades.

Nominated Serviceability limit state pressures: +1500 Pa and -1500 Pa

Test Location: Ian Bennie & Associates, Dandenong South, Victoria

Test Date: 5th April 2022 **Sample received:** 1st April 2022

Drawings Received: 28th April 2022

Requirement:

The compliance requirements of the NCC-2019 Weatherproofing Verification Methods FV1 & V2.2.1 are given in Appendix B

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Conclusions:

The Interloq Rainscreen cladding panels cavity wall system test specimen passed all the compliance requirements of the NCC-2019 Weatherproofing Verification Methods FV1 & V2.2.1 at the nominated test parameters. Complete detail of all tests conducted are given in the body of this report

Disclaimer:

Sample information including material properties and detailing was supplied by the client and no verification of actual construction details or sampling of production stock could be performed. The test results contained herein apply to the sample as tested. Ian Bennie & associates accept no liability for claims of losses, expenses, damages and costs arising as a result of the use of product(s) referred to in this report.

Report distribution:

Ian Bennie & Associates	PDF	Ian Bennie 6th May 2022
Valmond & Gibson	PDF	Authorised Signatory

Water Penetration Test Results

Nominated Serviceability limit state pressures:

Static pressure water test: 450 Pa
No leakage through the cladding system was observed during the test.

Cyclic pressure water test: 450 Pa - 900 Pa
No leakage through the cladding system was observed during the test.

Static pressure water test with 6mm penetrations in cladding: 450 Pa
No leakage through the cladding system was observed during the test.

Cyclic pressure water test with 6mm penetrations in cladding: 450 Pa - 900 Pa
No leakage through the cladding system was observed during the test.

Static pressure water test with internal lining removed: 50 Pa
No leakage through the cladding system was observed during the test. After the test the building wrap was cut away and there was evidence of water having penetrated cladding boards however there was no pooling of water on horizontal surfaces.

APPENDIX A TEST PROCEDURES & METHODS FOR AS/NZS:4284-2008 & NCC-2019 FV2.2.1

Test Sequence

NCC- 2019 Weatherproofing test procedures were conducted in accordance with Australian Standard AS/NZS 4284:2008, Testing of building facades, as detailed in Appendix A in the following sequence:

Static pressure Pre loading.
Positive and negative serviceability limit state pressures were applied to the external face of the specimen for periods of 1 minute each.

Static pressure water test.
A water penetration test was then carried out in accordance with Clause 8.5 of AS/NZS 4284:2008 at a static pressure of 30% of W_s for a period of 15 minutes.

Cyclic pressure water test.
A water penetration test was then carried out in accordance with Clause 8.6 of AS/NZS 4284:2008 at the cyclic pressures of: 30% -60% of W_s for 5 minutes.

Cyclic pressure water test with 6mm penetrations in cladding.
6mm diameter holes were inserted in the external face of the specimen at the following locations:

Wall/window joint at 3/4 height of the window
Immediately above the window
Through the external sealing of the vertical and horizontal control joints
Above the meter box and the downpipe penetrations.

Water penetration tests were then carried out in accordance with Clause 8.6 of AS/NZS 4284:2008 at the Static and Cyclic pressures as detailed above.

Static pressure water test with internal lining removed.
The internal acrylic lining of the sample was removed and a static water penetration test was then carried out in accordance with Clause 8.5 of AS/NZS 4284:2008 at a static pressure of 50 Pa for a period of 15 minutes.

Test Equipment
Water was applied via sprays located 300 mm away from the outdoor face of the test specimen. Water flow rate to the sprays was measured with a calibrated pressure gauge to an accuracy of 2% and was maintained at a level of 0.05 l/s.m2 over the test area throughout the test. Water application was maintained continuously and water was

observed to evenly cover the exterior face of the test specimen. All pressure transducers are calibrated against NATA certified manometers and may be taken to have a measurement accuracy of 1%.

Water Penetration Test Parameters as stated in AS/NZS:2484-2008

Test pressures:

Static 30% of Ws (at least 300 Pa) duration = 15 minutes

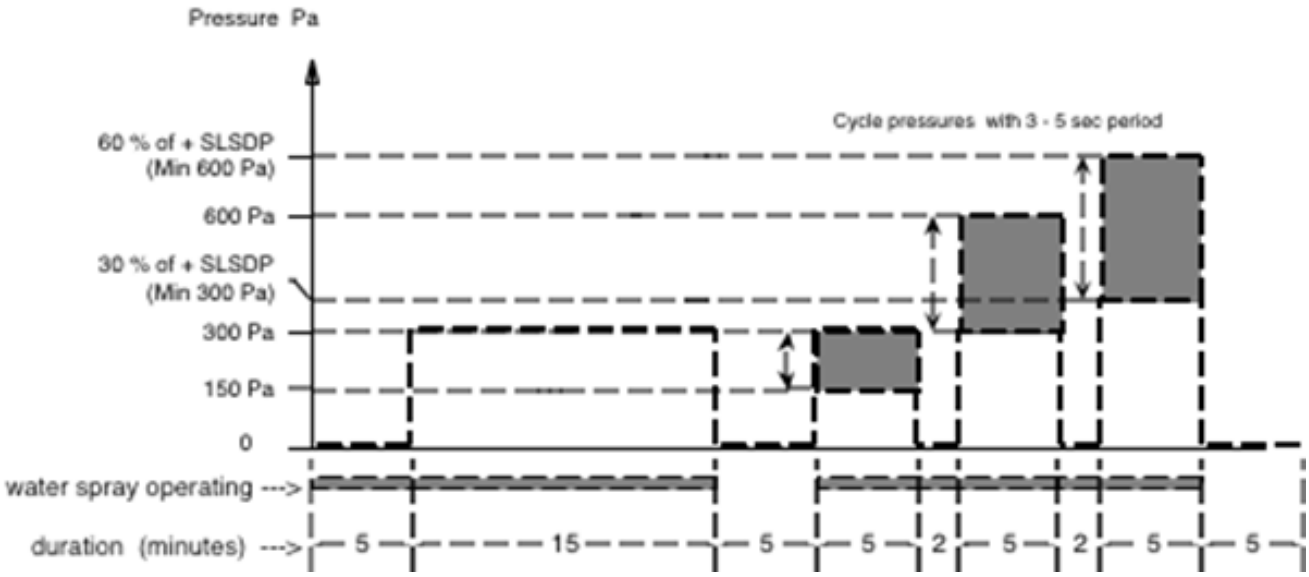
Cyclic 15% - 30% of Ws duration = 5 minutes

20% - 40% of Ws duration = 5 minutes

30% - 60% of Ws duration = 5 minutes

Water application rate: 0.05 L/m2.s

Water penetration test sequence



Test Requirement:

As per the Compliance requirements of NCC-2019 Weatherproofing Verification Methods V2.2.1 and FV1 that are given in Appendix B.

APPENDIX B – COMPLIANCE REQUIREMENTS
Applicability to be verified with specifier

These results are applicable for the weather proofing of an *external wall* that;

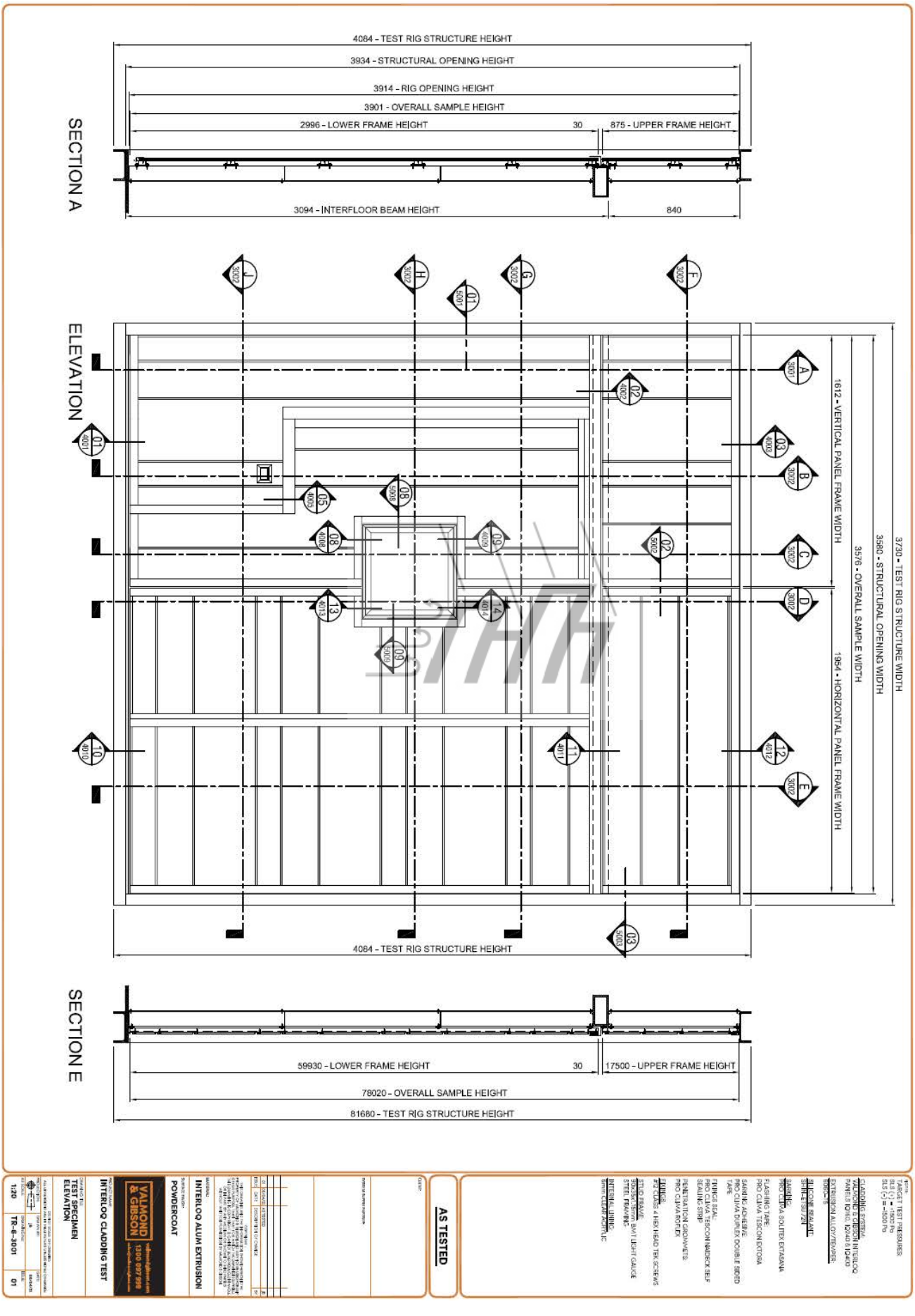
i.) Has a risk score of 20 or less (tables FV1 & V2.2.1 a)
ii.) Is not subjected to a ULS of more than 2.5kPa
iii.) Includes only windows that comply with 2047

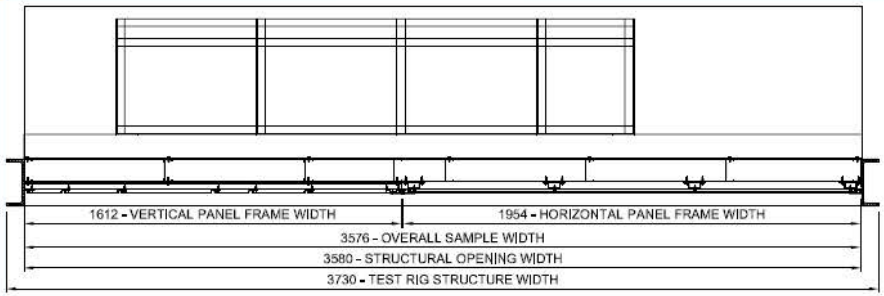
Compliance requirements:

(i) A direct fix cladding wall and unique wall are verified for compliance with FP1.4 if there is no presence of water on the inside surface of the facade.

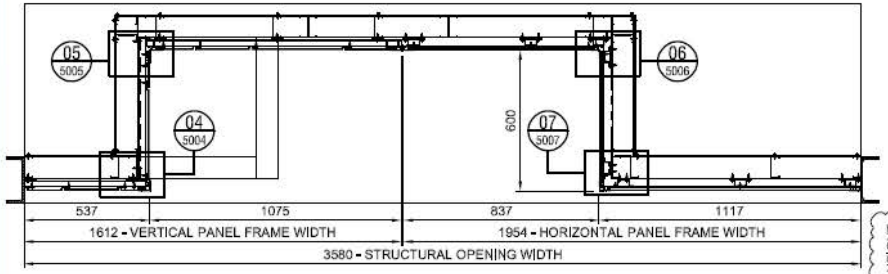
(ii) A cavity wall is verified for compliance with FP1.4 if there is no presence of water on the removed surface of the cavity, except that during the simulation of the failure of the primary weather-defense or sealing, water may—
(A) transfer to the removed surface of the cavity due to the introduced defects (6 mm holes); and
(B) contact, but not pool on, battens and other cavity surfaces.

APPENDIX C – DETAILS OF THE TEST SPECIMEN





PLAN SECTION F



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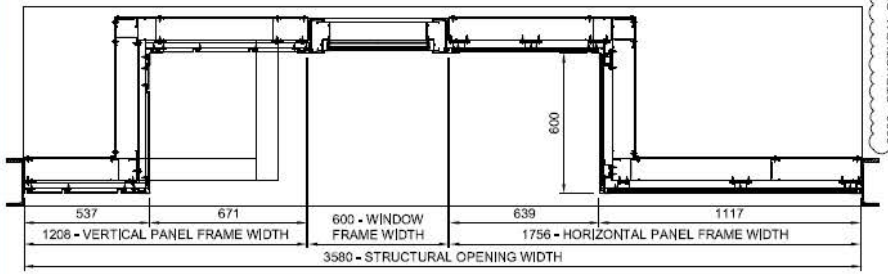

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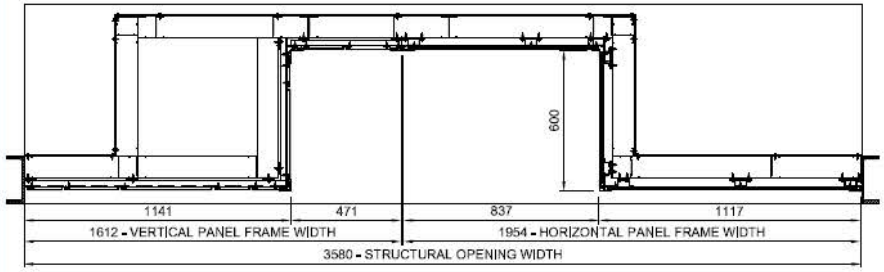

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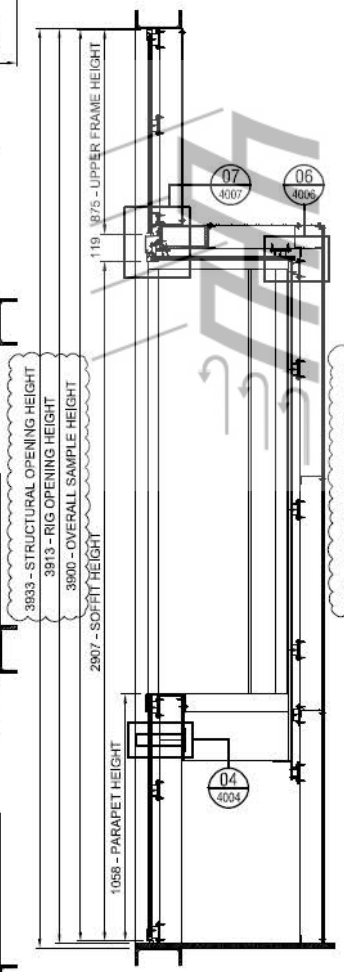
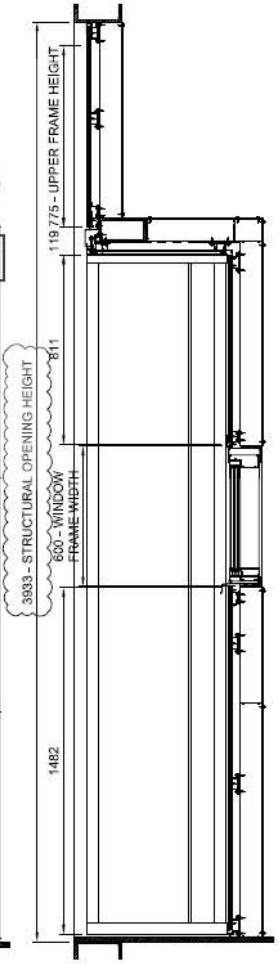
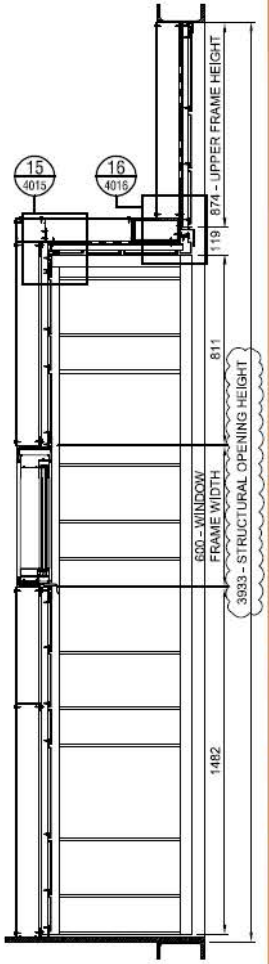


SECTION B



SECTION C



SECTION D

AS TESTED

CLIENT:

INTERLOQ ALUM EXTRUSION

POWDERCOAT

VALMOND & GIBSON

PROJECT NAME:
INTERLOQ CLADDING TEST

DRAWING TITLE:
TEST SPECIMEN
PLAN & SECTION VIEWS

DO NOT SCALE OFF DRAWING
ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE

PROJECTION	DRAWN BY	DATE
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AS SCALE	DRAWING No.	ISSUE
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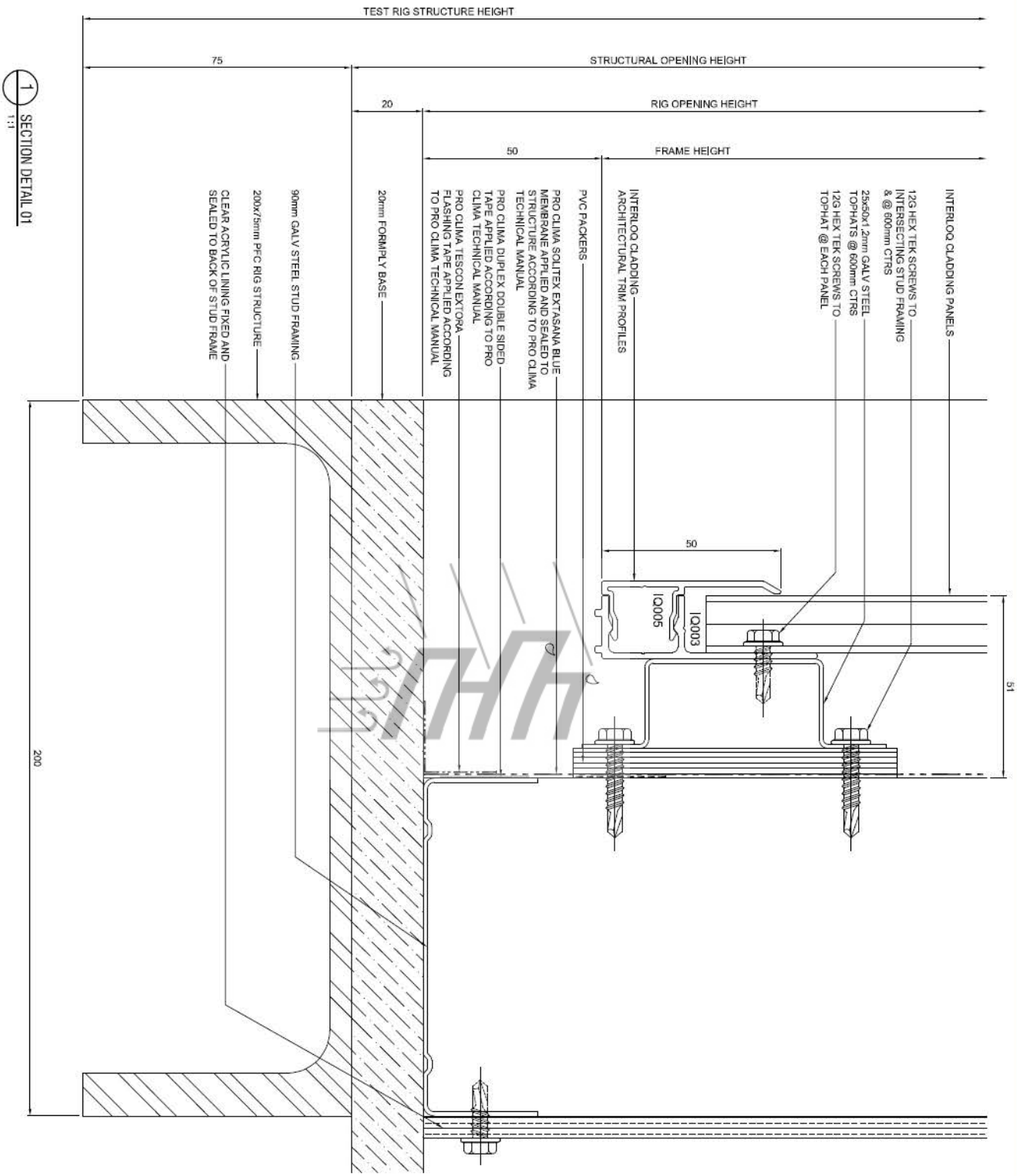


1 SECTION DETAIL 01
1:1

AS TESTED

VALMOND & GIBSON
1300 007 998

INTERLOQ CLADDING TEST

TEST SPECIMEN DETAILS

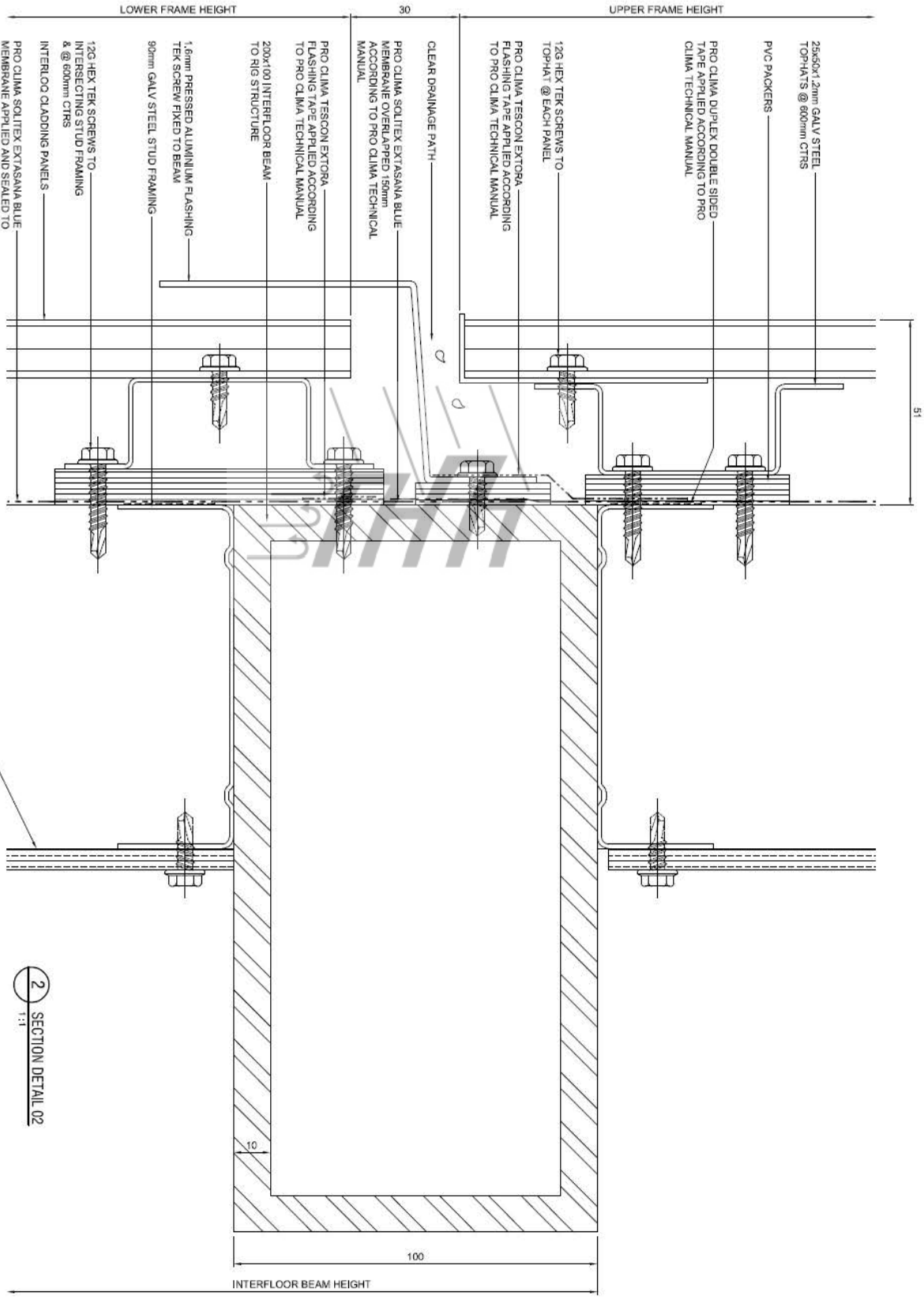
INTERLOQ ALUM EXTRUSION

POWDERCOAT

1:1

TR-6-4001

01



2 SECTION DETAIL 02
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AS TESTED

INTERLOQ CLADDING TEST

TEST SPECIMEN DETAILS

VALMOND & GIBSON

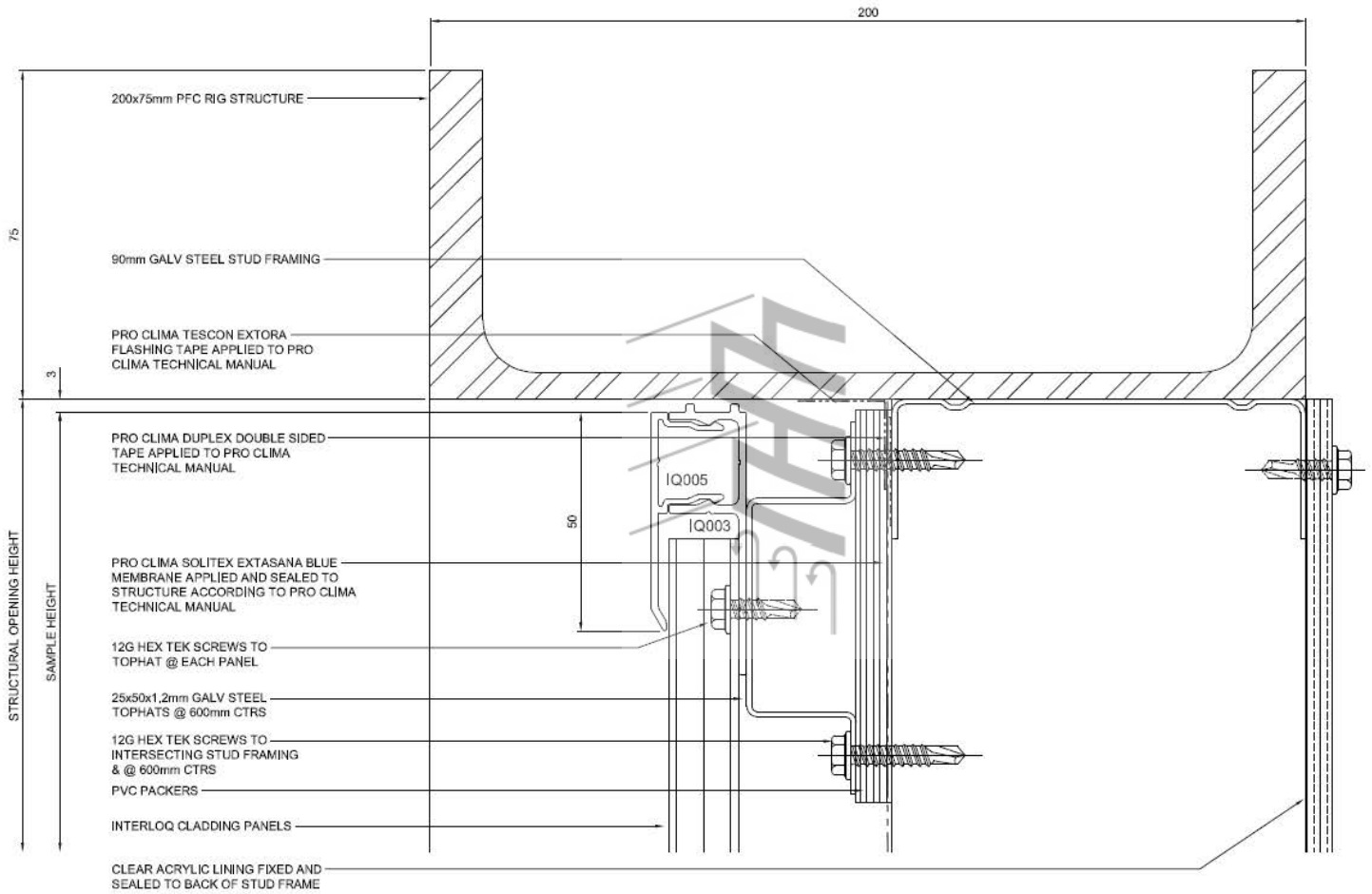
INTERLOQ ALUM EXTRUSION

POWDERCOAT

1:1

TR-6-4002

01



3 SECTION DETAIL 03
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AS TESTED

ISSUE	DATE	DESCRIPTION OF CHANGE	BY
01	08/04/22	AS TESTED	JB

MATERIAL: INTERLOQ ALUM EXTRUSION

SURFACE FINISH: POWDERCOAT

VALMOND & GIBSON 1300 057 999

PROJECT NAME: INTERLOQ CLADDING TEST

DRAWING TITLE: TEST SPECIMEN DETAILS

DO NOT SCALE DRAWING
ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

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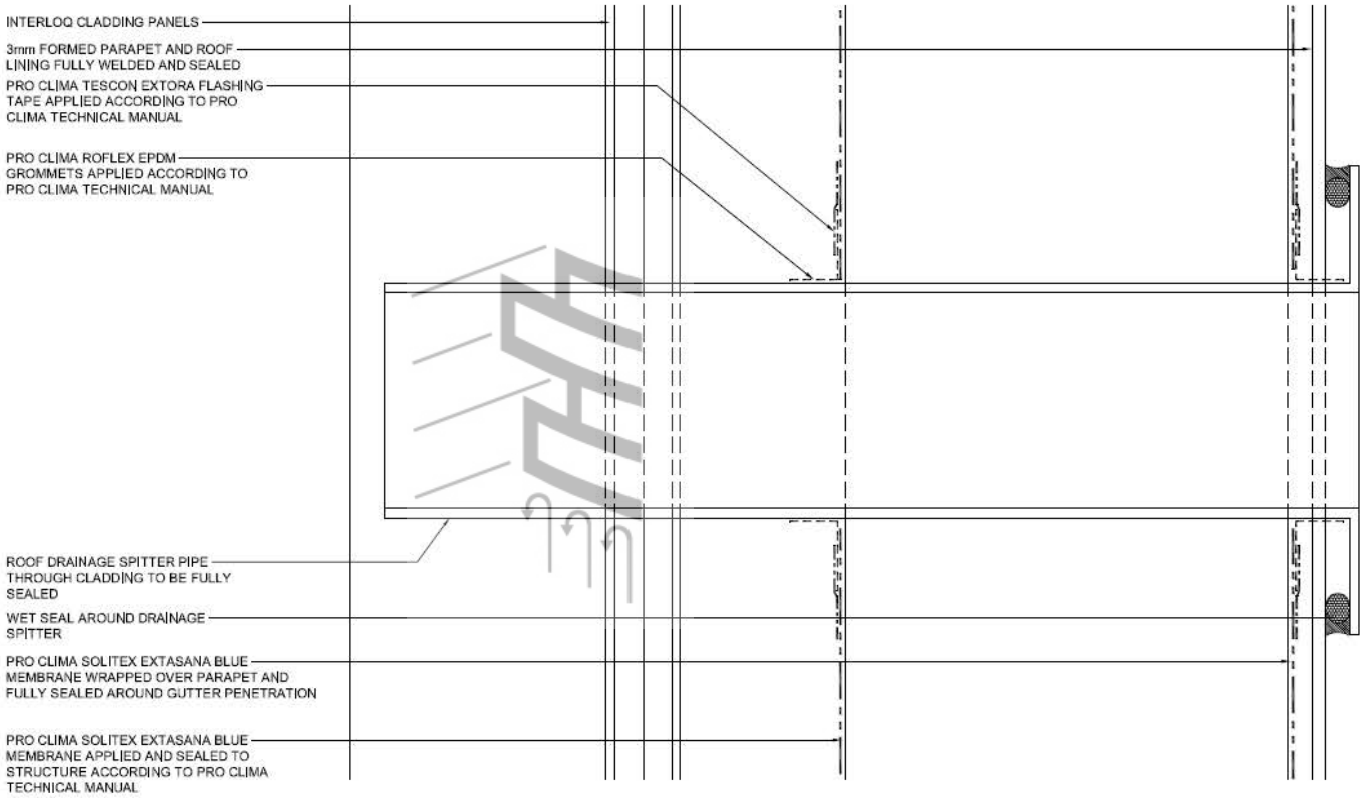
AT SCALE: 1:1	DRAWING NO: TR-S-4003	ISSUE: 01



4 SECTION DETAIL 04
1:1

AS TESTED

ISSUE	DATE	DESCRIPTION OF CHANGE	BY
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MATERIAL: INTERLOQ ALUM EXTRUSION

SURFACE FINISH: POWDERCOAT

VALMOND & GIBSON 1300 057 999

PROJECT NAME: INTERLOQ CLADDING TEST

DRAWING TITLE: TEST SPECIMEN DETAILS

DO NOT SCALE DRAWINGS. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

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AS SCALE	DRAWING NO.	ISSUE
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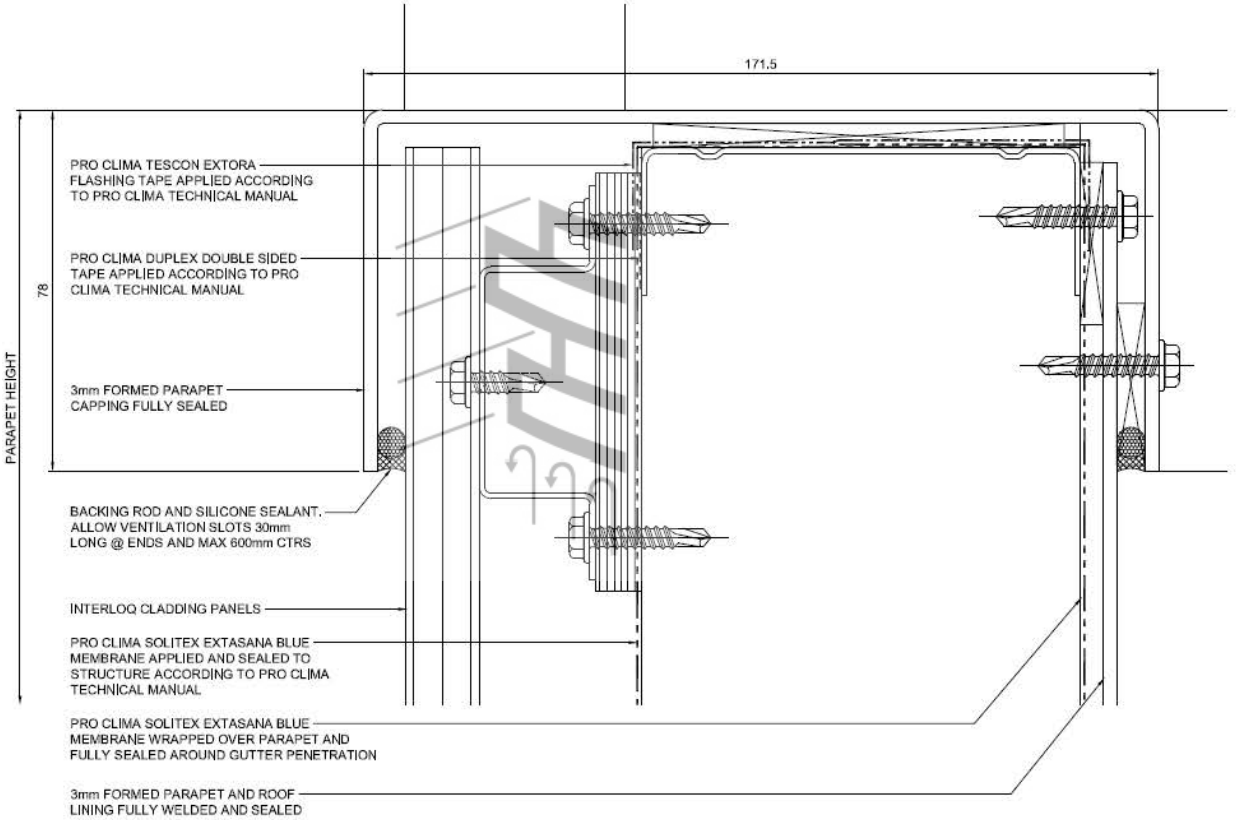

5 SECTION DETAIL 05
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AS TESTED

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MATERIAL: INTERLOQ ALUM EXTRUSION

SURFACE FINISH: POWDERCOAT

VALMOND & GIBSON valmondgibson.com 1300 097 999

PROJECT NAME: INTERLOQ CLADDING TEST

DRAWING TITLE: TEST SPECIMEN DETAILS

DO NOT SCALE OFF DRAWING. ALL DIMENSIONS MUST BE VERIFIED ON SITE BEFORE ANY WORK COMMENCES.

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AS SCALE	DRAWING	ISSUE
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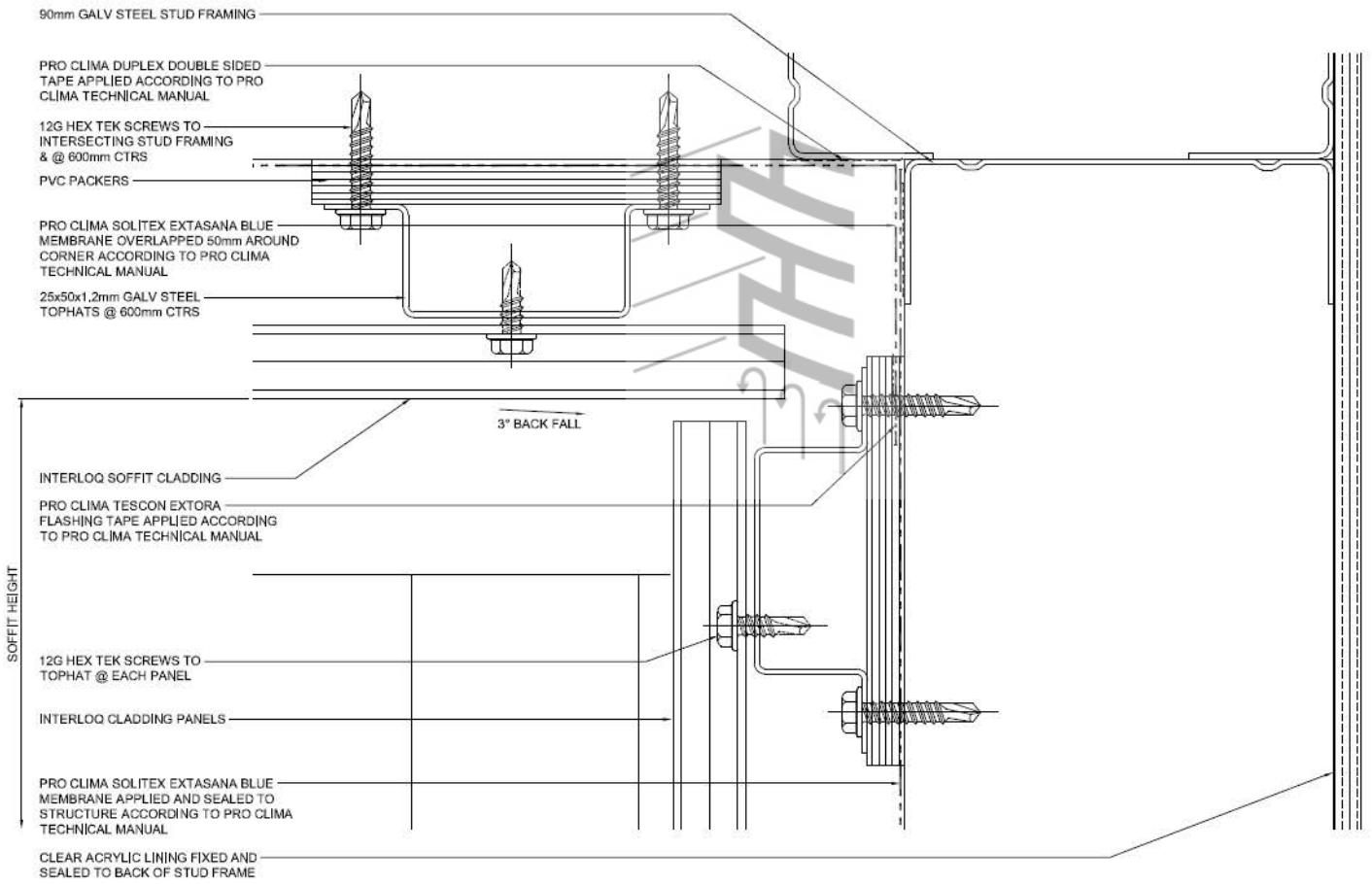

6 SECTION DETAIL 06
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AS TESTED

ISSUE	DATE	DESCRIPTION OF CHANGE	BY
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MATERIAL: INTERLOQ ALUM EXTRUSION

SURFACE FINISH: POWDERCOAT

VALMOND & GIBSON 1300 097 228

PROJECT NAME: INTERLOQ CLADDING TEST

DRAWING TITLE: TEST SPECIMEN DETAILS

DO NOT SCALE OFF DRAWING. ALL DIMENSIONS AND/OR FIELD FEATURES TO BE VERIFIED ON SITE BEFORE ANY WORK COMMENCES.

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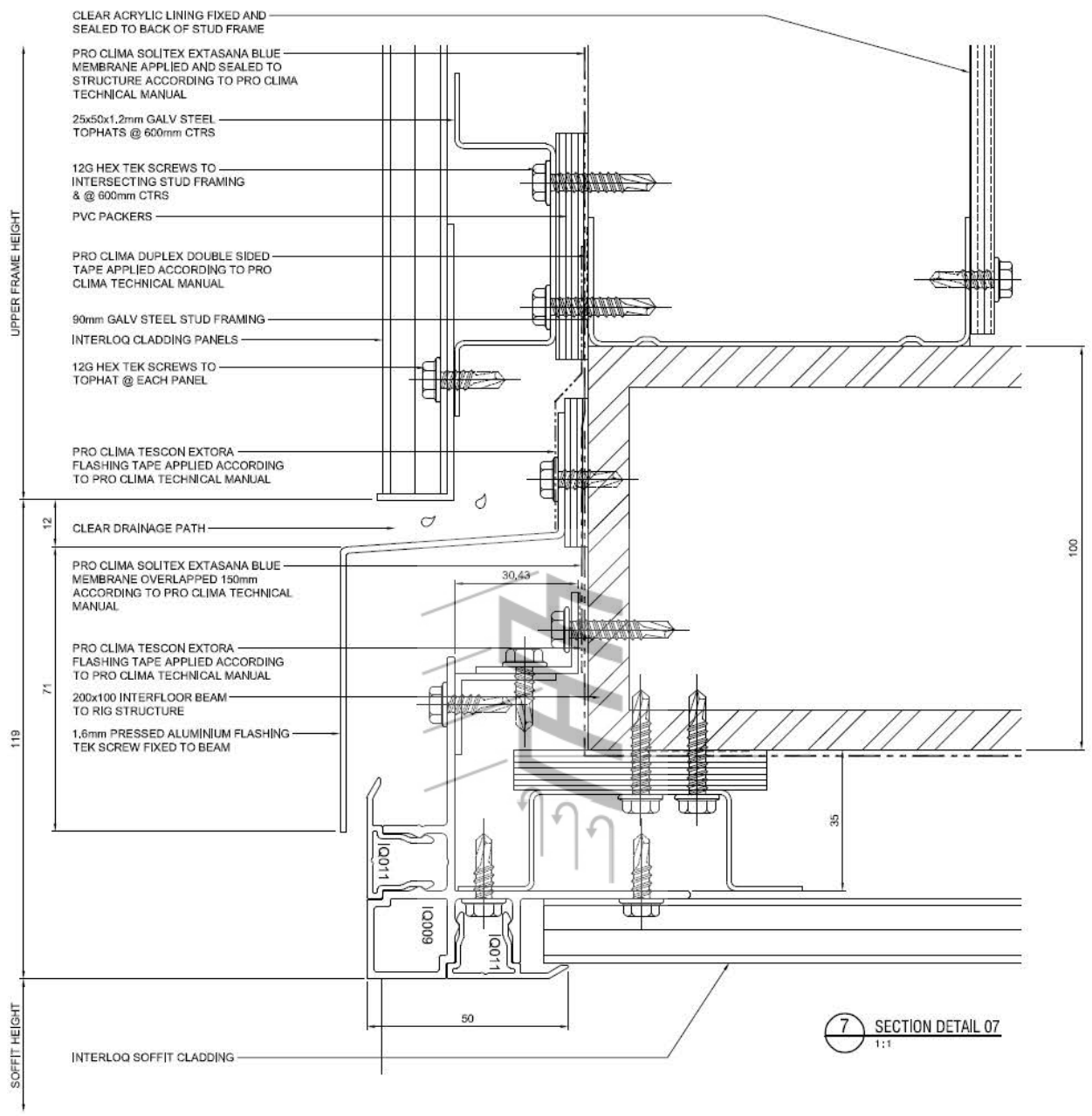
AS SCALE: 1:1	DRAWING No: TR-6-4006	ISSUE: 01



AS TESTED

01	08/04/25	AS TESTED	JB
ISSUE	DATE	DESCRIPTION OF CHANGE	BY

MATERIAL: INTERLOQ ALUM EXTRUSION

SURFACE FINISH: POWDERCOAT

VALMOND & GIBSON 1300 057 999

PROJECT NAME: INTERLOQ CLADDING TEST

DRAWING TITLE: TEST SPECIMEN DETAILS

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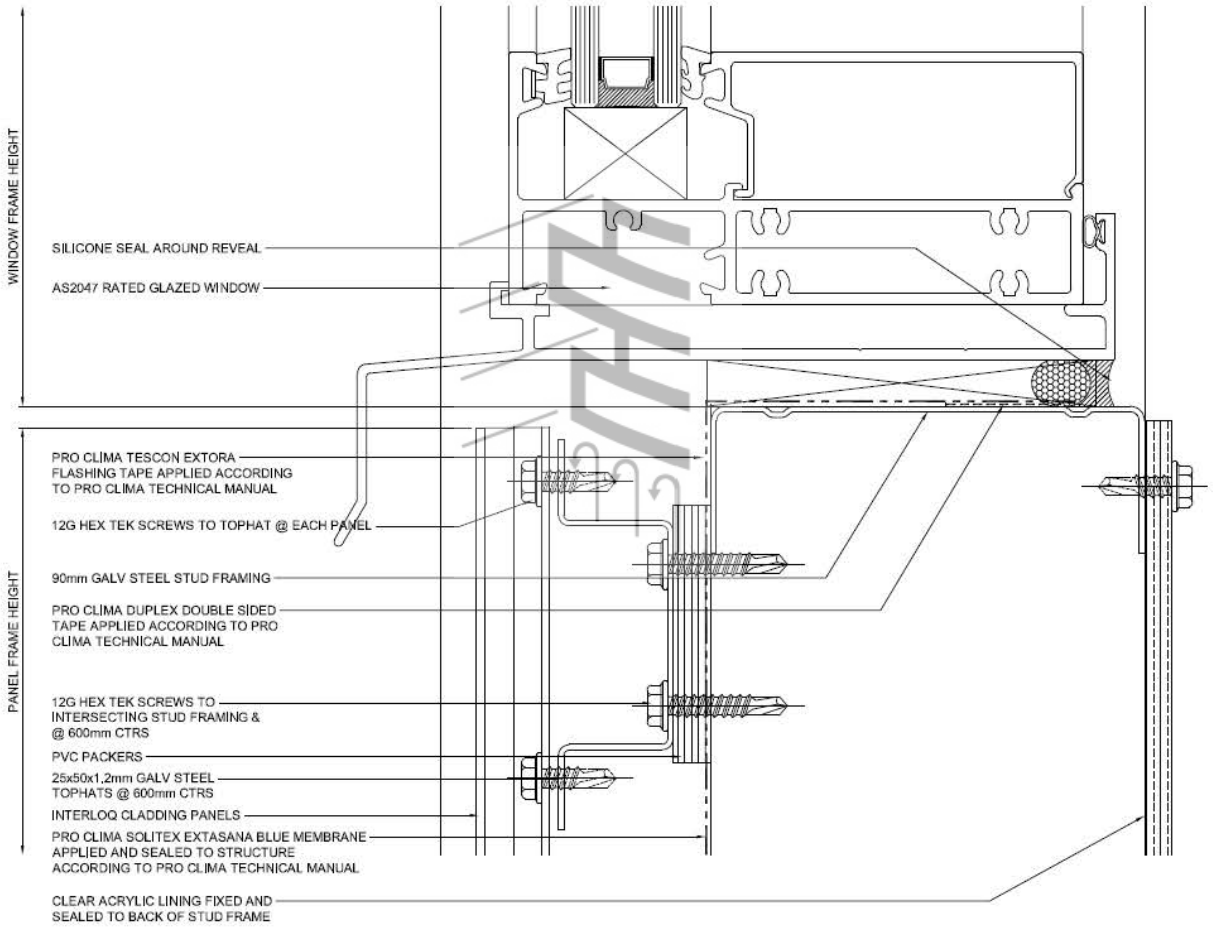
AT SCALE: 1:1	DRAWING NO: TR-6-4007	ISSUE: 01



8 SECTION DETAIL 08
1:1

AS TESTED

ISSU	DATE	DESCRIPTION OF CHANGE	BY
01	09/04/22	AS TESTED	JR

MATERIAL: **INTERLOQ ALUM EXTRUSION**

SURFACE FINISH: **POWDERCOAT**

VALMOND & GIBSON 1300 087 999

PROJECT NAME: **INTERLOQ CLADDING TEST**

DRAWING TITLE: **TEST SPECIMEN DETAILS**

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A3 SCALE:	DRAWING No:	ISSUE:
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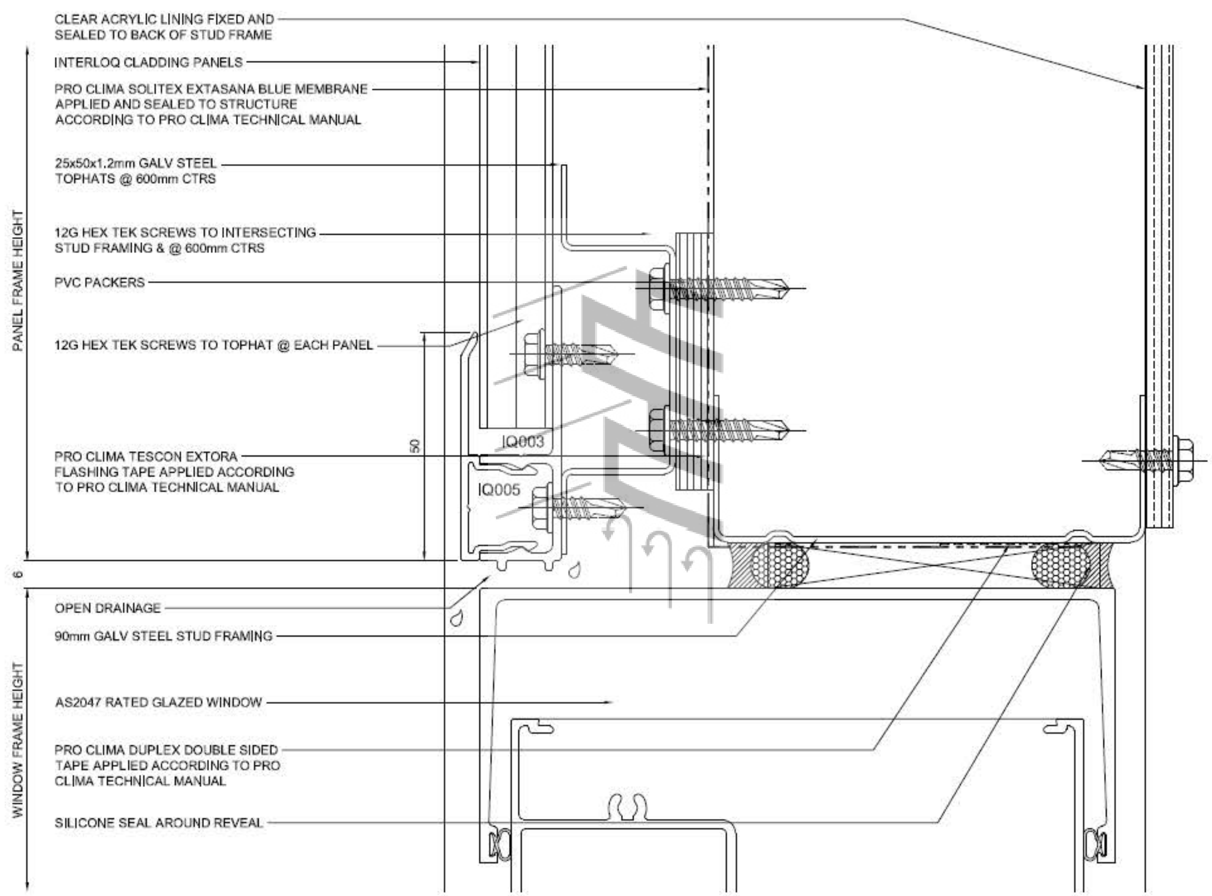

CLEAR ACRYLIC LINING FIXED AND SEALED TO BACK OF STUD FRAME
INTERLOQ CLADDING PANELS
PRO CLIMA SOLITEX EXTASANA BLUE MEMBRANE APPLIED AND SEALED TO STRUCTURE ACCORDING TO PRO CLIMA TECHNICAL MANUAL
25x50x1.2mm GALV STEEL TOPHATS @ 600mm CTRS
12G HEX TEK SCREWS TO INTERSECTING STUD FRAMING & @ 600mm CTRS
PVC PACKERS
12G HEX TEK SCREWS TO TOPHAT @ EACH PANEL
PRO CLIMA TESCON EXTORA FLASHING TAPE APPLIED ACCORDING TO PRO CLIMA TECHNICAL MANUAL
OPEN DRAINAGE
90mm GALV STEEL STUD FRAMING
AS2047 RATED GLAZED WINDOW
PRO CLIMA DUPLEX DOUBLE SIDED TAPE APPLIED ACCORDING TO PRO CLIMA TECHNICAL MANUAL
SILICONE SEAL AROUND REVEAL
PANEL FRAME HEIGHT
WINDOW FRAME HEIGHT
50
6
IQ003
IQ005

9 SECTION DETAIL 09
1:1

AS TESTED

MATERIAL: INTERLOQ ALUM EXTRUSION

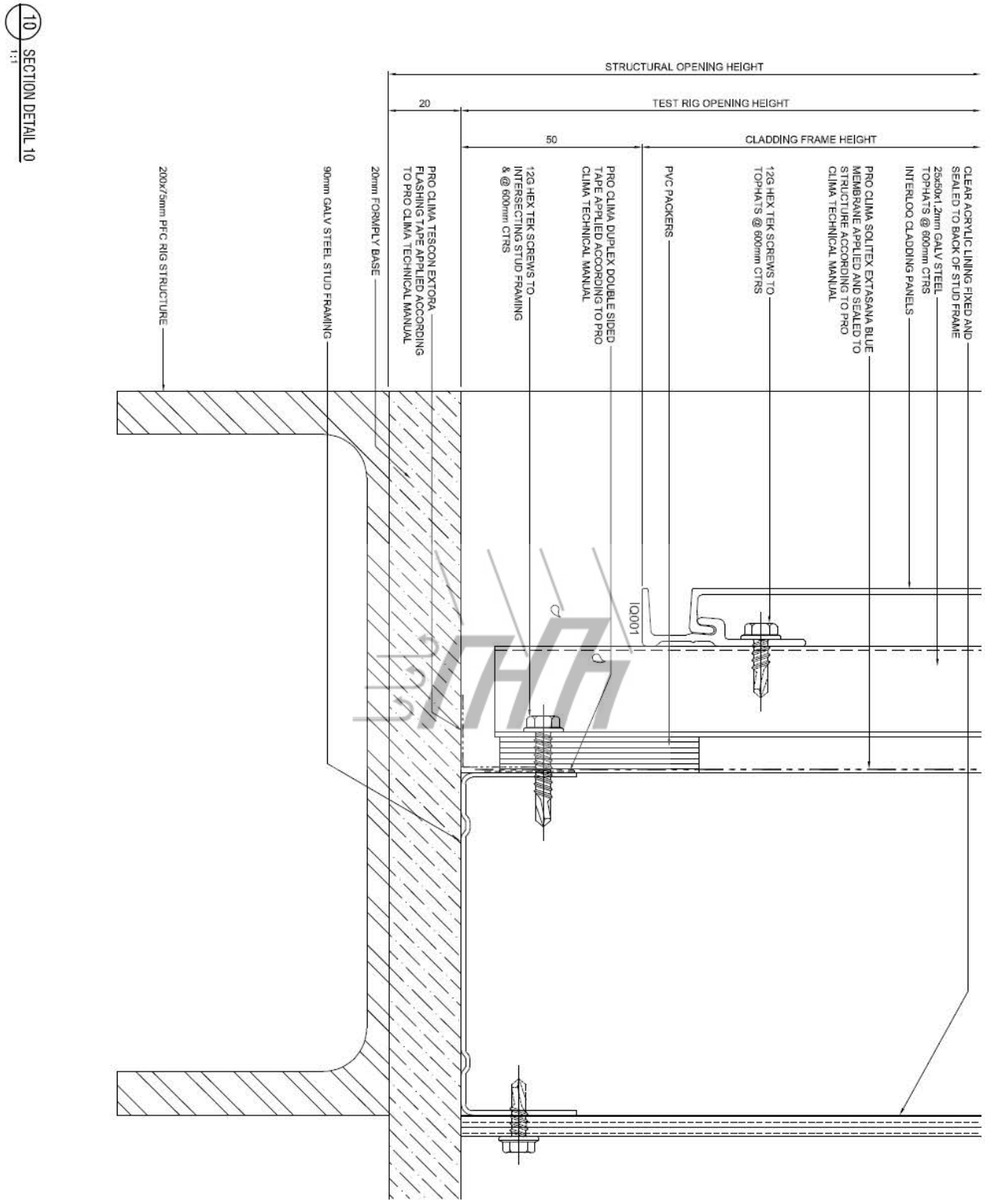
SURFACE FINISH: POWDERCOAT

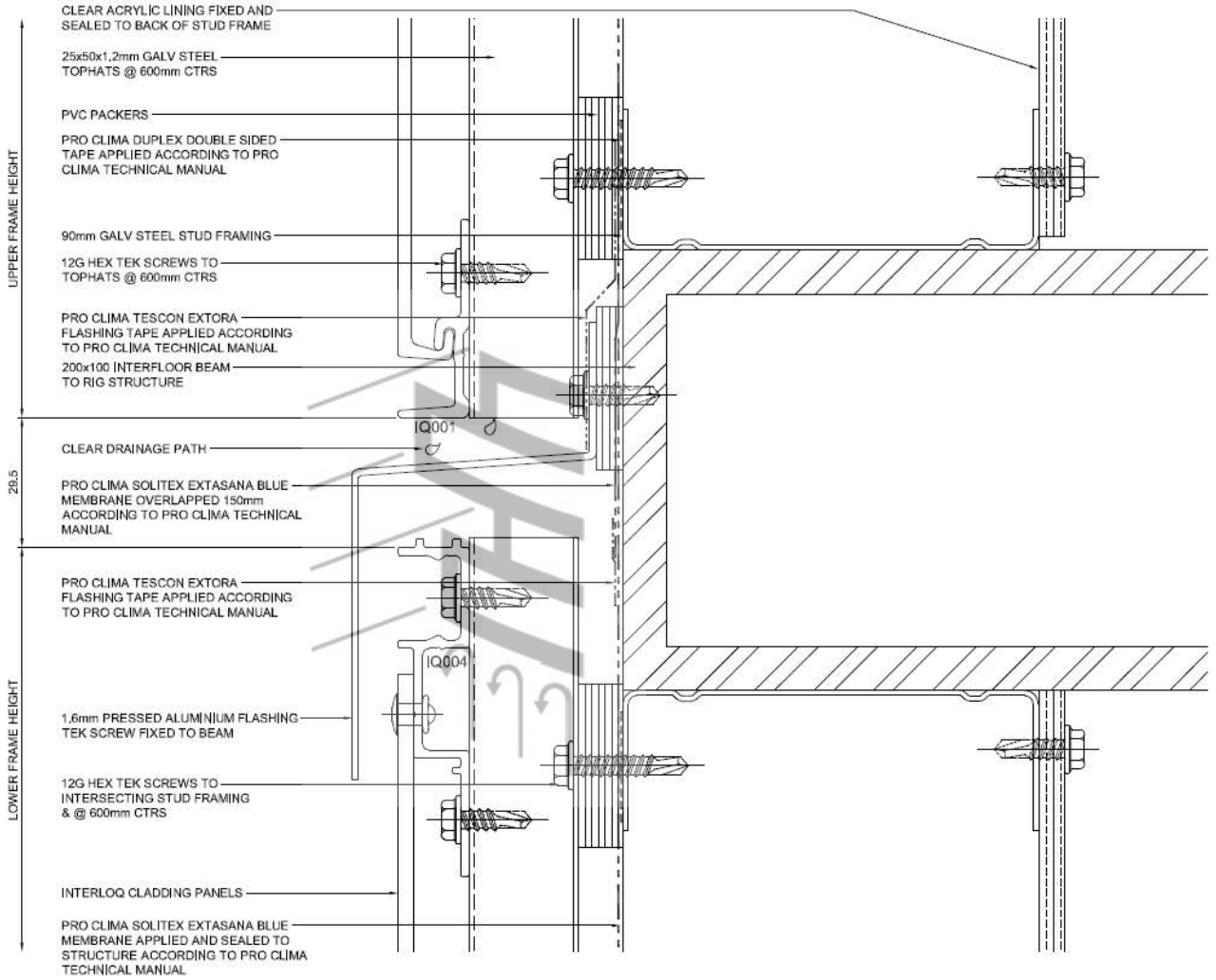
VALMOND & GIBSON
1300 097 998

PROJECT NAME: INTERLOQ CLADDING TEST

DRAWING TITLE: TEST SPECIMEN DETAILS

SCALE: 1:1 | DRAWING No: TR-6-4009 | ISSUE: 02


10
1:1
SECTION DETAIL 10
STRUCTURAL OPENING HEIGHT
20
TEST RIG OPENING HEIGHT
50
CLADDING FRAME HEIGHT
CLEAR ACRYLIC LINING FIXED AND SEALED TO BACK OF STUD FRAME
25x50x1.2mm GALV STEEL TOPHATS @ 600mm CTRS
INTERLOQ CLADDING PANELS
PRO CLIMA SOLITEX EXTASANA BLUE MEMBRANE APPLIED AND SEALED TO STRUCTURE ACCORDING TO PRO CLIMA TECHNICAL MANUAL
12G HEX TEK SCREWS TO TOPHATS @ 600mm CTRS
PVC PACKERS
IQ001
PRO CLIMA DUPLEX DOUBLE SIDED TAPE APPLIED ACCORDING TO PRO CLIMA TECHNICAL MANUAL
12G HEX TEK SCREWS TO INTERSECTING STUD FRAMING & @ 600mm CTRS
PRO CLIMA TESCON EXTORA FLASHING TAPE APPLIED ACCORDING TO PRO CLIMA TECHNICAL MANUAL
20mm FORMPLY BASE
90mm GALV STEEL STUD FRAMING
200x75mm PFC RIG STRUCTURE
AS TESTED
INTERLOQ ALUM EXTRUSION
POWDERCOAT
INTERLOQ CLADDING TEST
TEST SPECIMEN DETAILS
TR-S-4010
01
1:1



11 SECTION DETAIL 11
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AS TESTED

ISSUE	DATE	DESCRIPTION OF CHANGE	BY
01	08/04/22	AS TESTED	JB

MATERIAL: **INTERLOQ ALUM EXTRUSION**

SURFACE FINISH: **POWDERCOAT**

VALMOND & GIBSON 1300 097 998

PROJECT NAME: **INTERLOQ CLADDING TEST**

DRAWING TITLE: **TEST SPECIMEN DETAILS**

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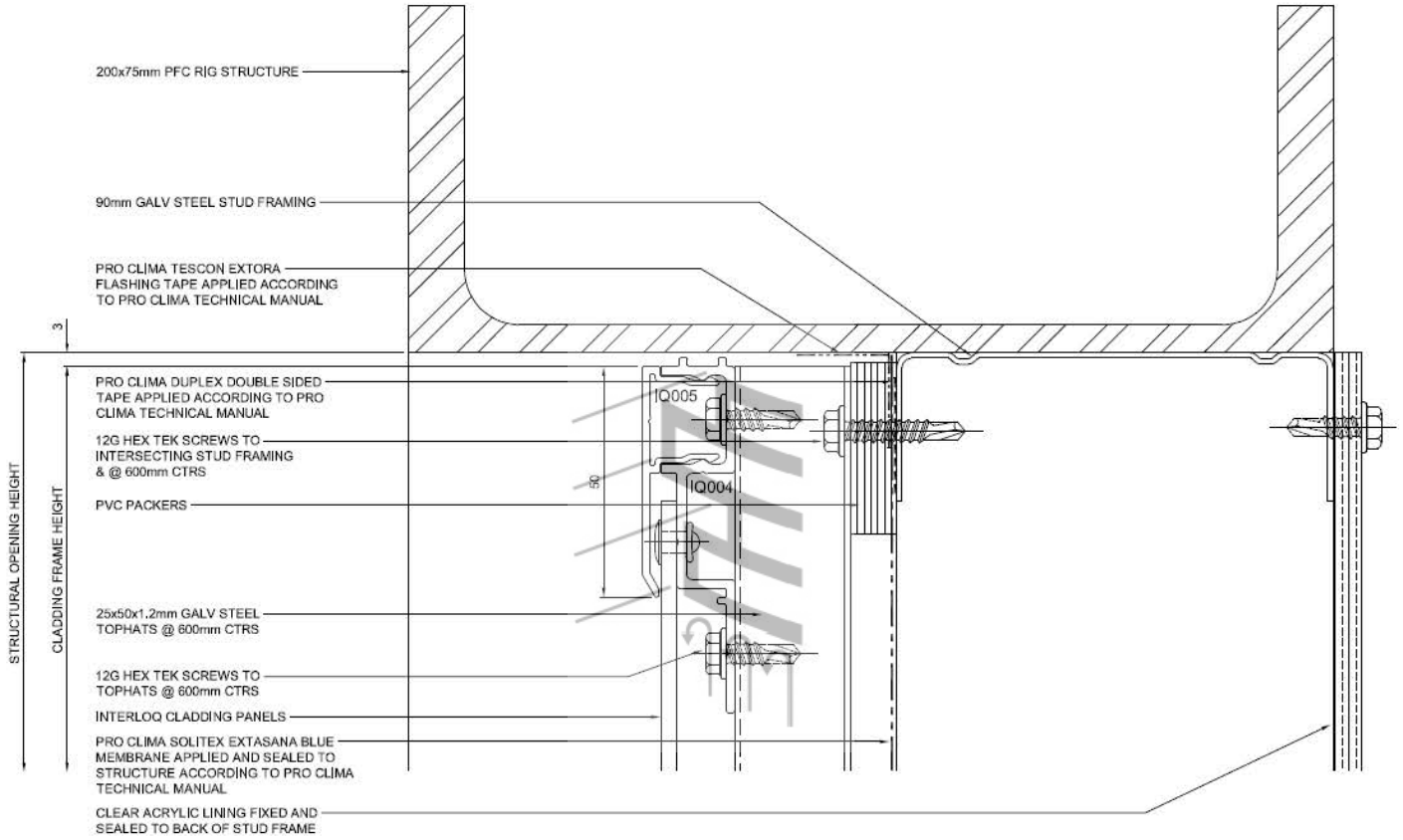
AS SCALE: 1:1	DRAWING NUMBER: TR-6-4011	ISSUE: 01



12 SECTION DETAIL 12
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AS TESTED

ISSUE	DATE	DESCRIPTION OF CHANGE	BY
01	06/04/22	AS TESTED	JB

MATERIAL: **INTERLOQ ALUM EXTRUSION**

SURFACE FINISH: **POWDERCOAT**

VALMOND & GIBSON 1300 097 999

PROJECT NAME: **INTERLOQ CLADDING TEST**

DRAWING TITLE: **TEST SPECIMEN DETAILS**

DO NOT SCALE OFF DRAWING
ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE

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AS SCALED	DRAWING NO.	ISSUE
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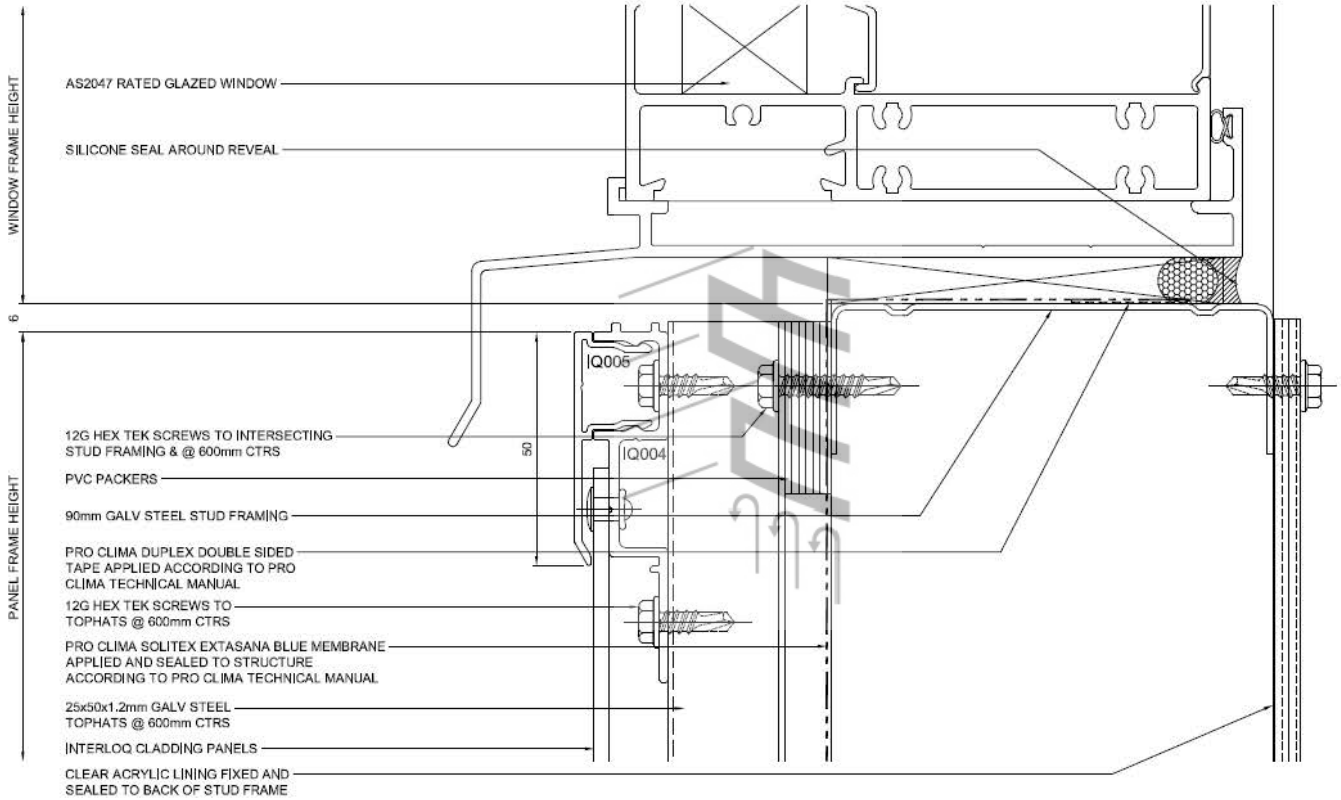


13 SECTION DETAIL 13
1:1

AS TESTED

REV	DATE	DESCRIPTION OF CHANGE	BY
02	08/04/22	UPDATED TO TEST RECORDS	JB
01	06/04/22	AS TESTED	JB

MATERIAL
INTERLOQ ALUM EXTRUSION

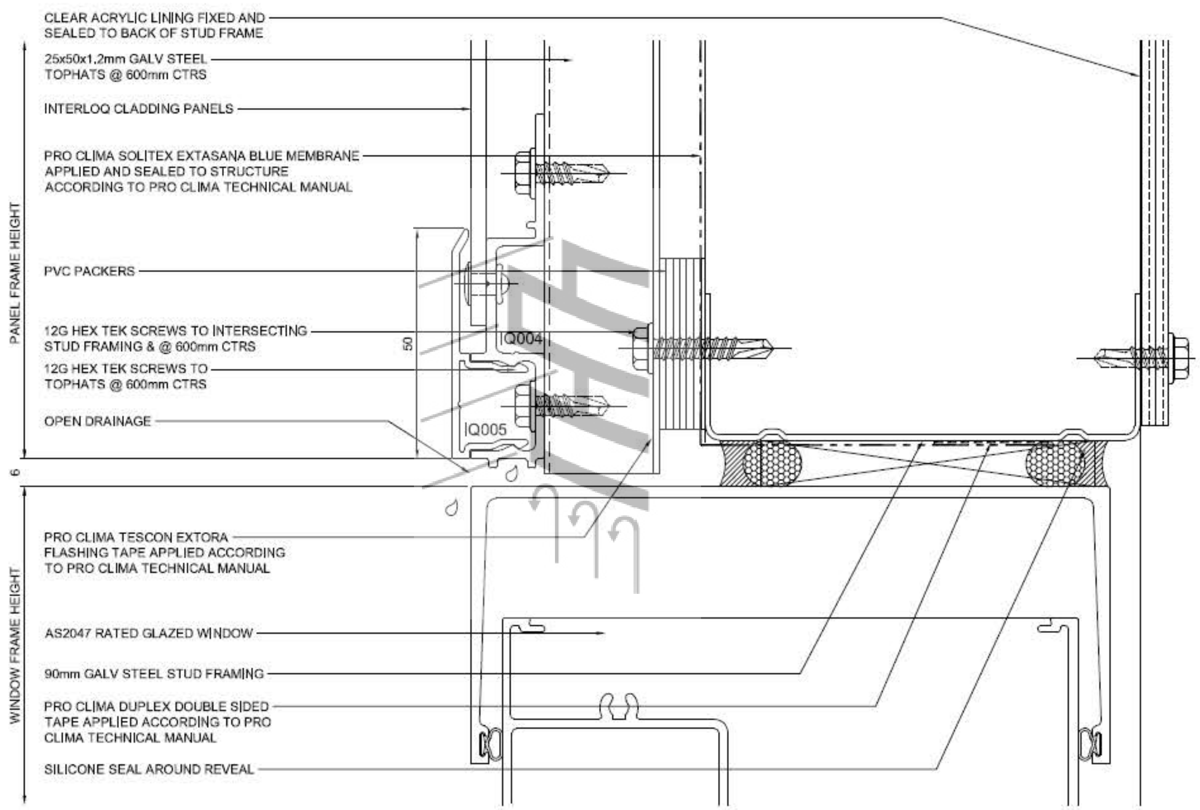
SURFACE FINISH
POWDERCOAT

VALMOND & GIBSON
1300 097 998

PROJECT NAME
INTERLOQ CLADDING TEST

DRAWING TITLE
TEST SPECIMEN DETAILS

PRO SECTION	DRAWN BY: JB	DATE: 08/04/22
AS SCALE: 1:1	DRAWING NO: TR-6-4013	ISSUE: 02



14 SECTION DETAIL 14
1:1

AS TESTED

02	08/04/22	UPDATED TO TEST RECORD	JB
01	08/04/22	AS TESTED	JB
ISSUE	DATE	DESCRIPTION OF CHANGE	BY

MATERIAL: INTERLOQ ALUM EXTRUSION

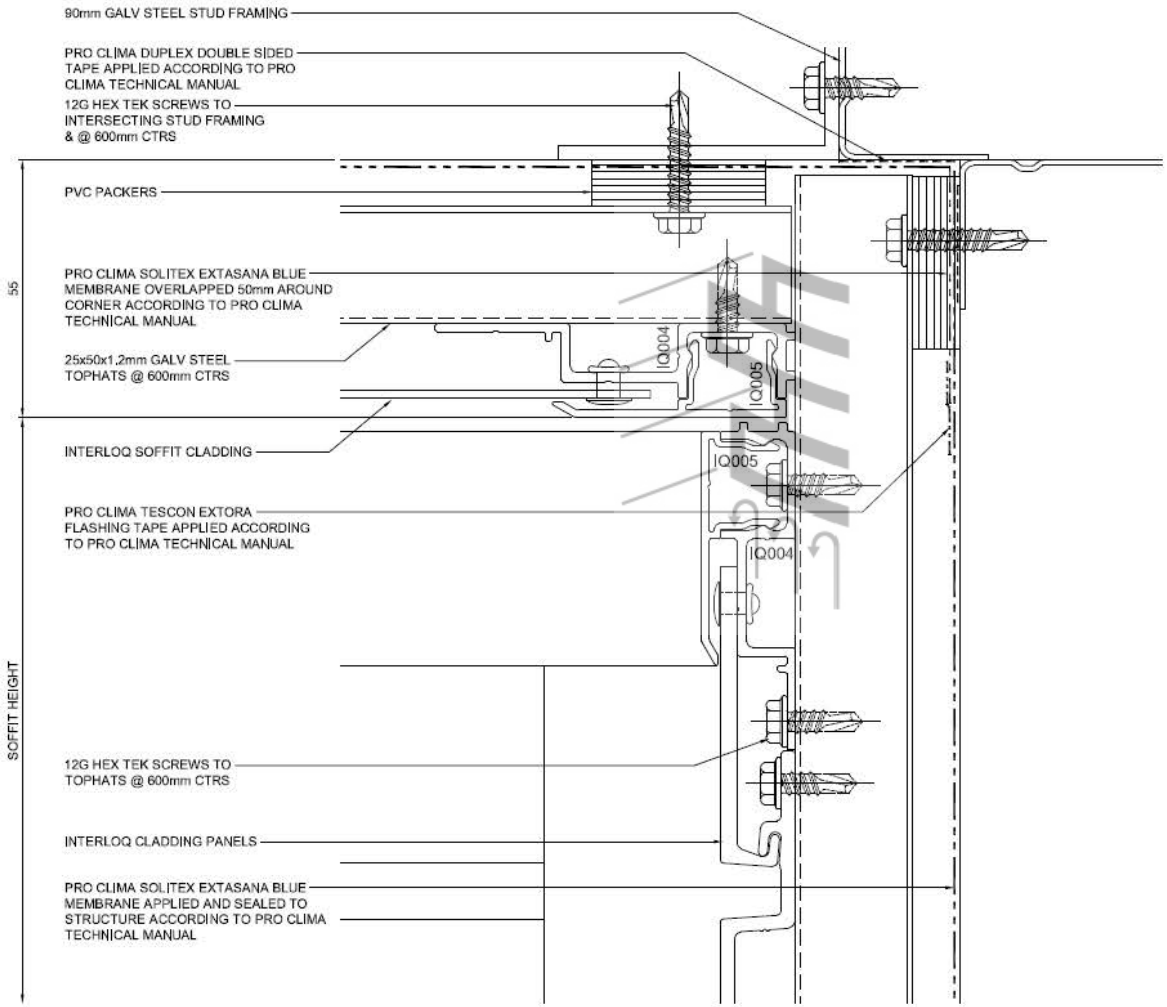
SURFACE FINISH: POWDERCOAT

VALMOND & GIBSON 1300 097 999

PROJECT NAME: INTERLOQ CLADDING TEST

DRAWING TITLE: TEST SPECIMEN DETAILS

SCALE: 1:1 | DRAWING NO: TR-6-4014 | ISSUE: 02



15 SECTION DETAIL 15
1:1

AS TESTED

0	09/04/22	AS TESTED	JR
ISSUE	DATE	DESCRIPTION OF CHANGE	BY

MATERIAL
INTERLOQ ALUM EXTRUSION

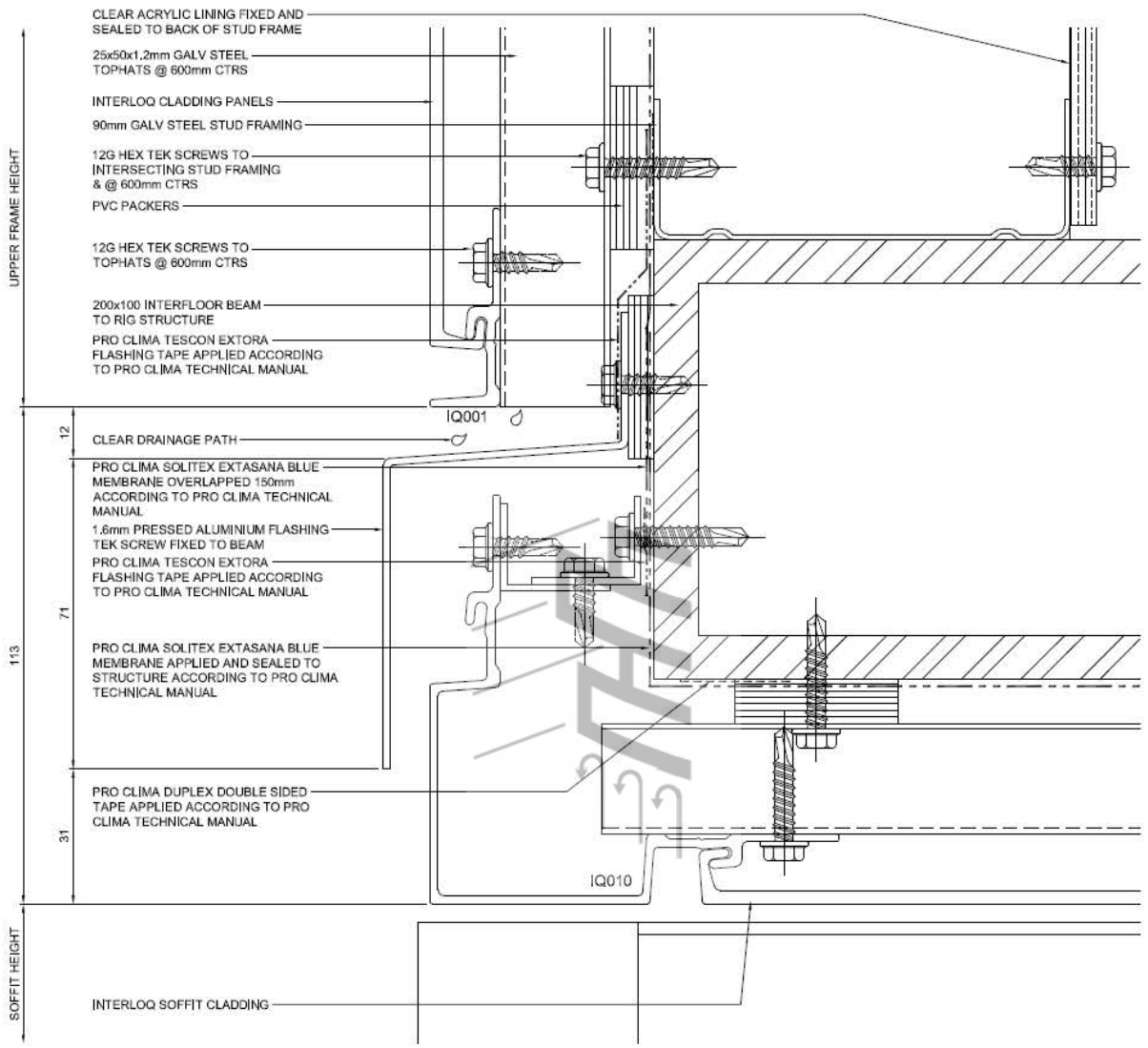
SURFACE FINISH
POWDERCOAT

VALMOND & GIBSON
valmondgibson.com
1300 097 999

PROJECT NAME
INTERLOQ CLADDING TEST

DRAWING TITLE
TEST SPECIMEN DETAILS

PROJECTION	DRAWN BY: JR	DATE: 09/04/22
AS SCALE: 1:1	DRAWING NO: TR-6-4015	ISSUE: 01



16 SECTION DETAIL 16
1:1

AS TESTED

ISSUE	DATE	DESCRIPTION OF CHANGE	BY
01		DRAWING AS TESTED	JB

MATERIAL
INTERLOQ ALUM EXTRUSION

SURFACE FINISH
POWDERCOAT

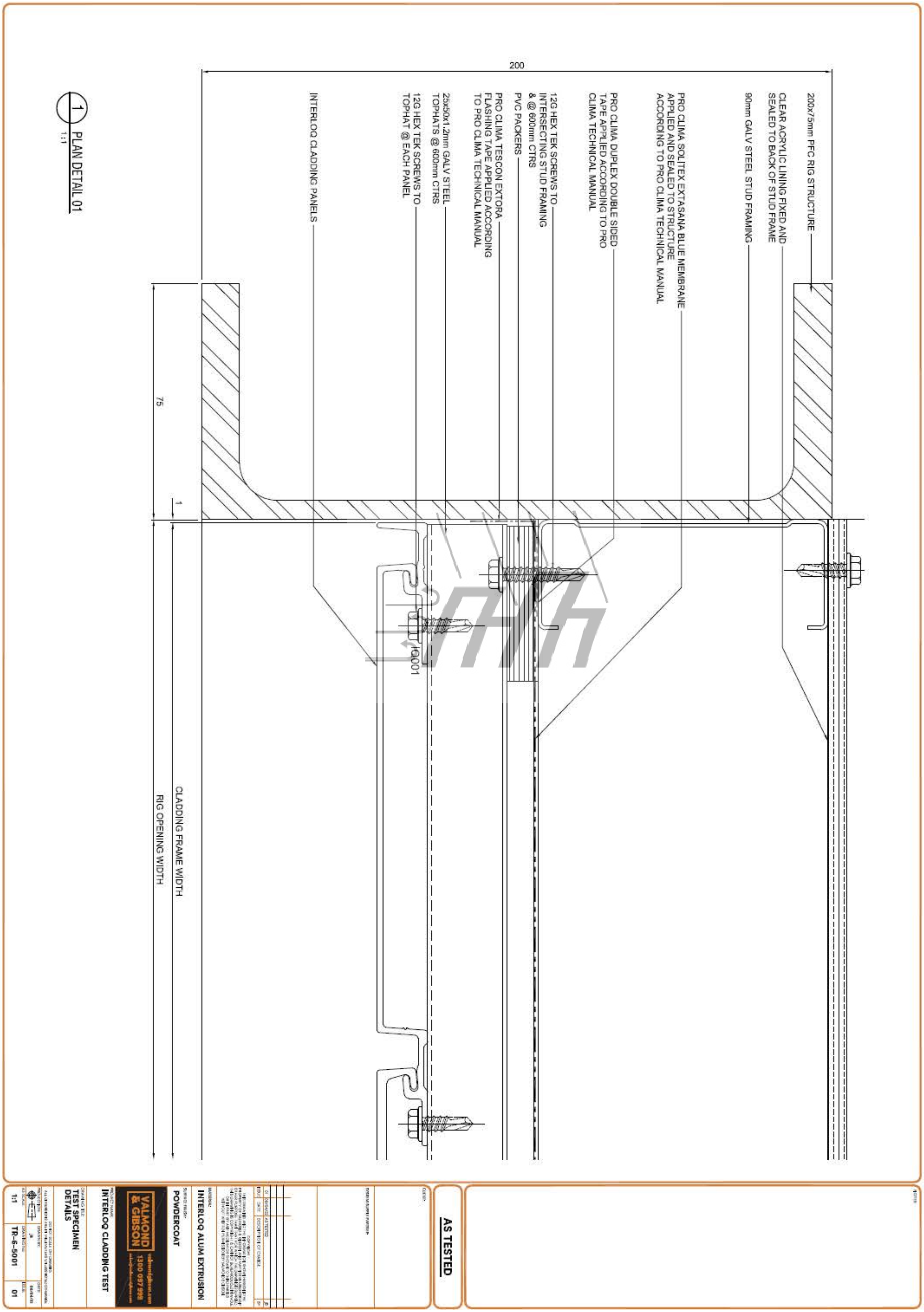
VALMOND & GIBSON
1300 097 999

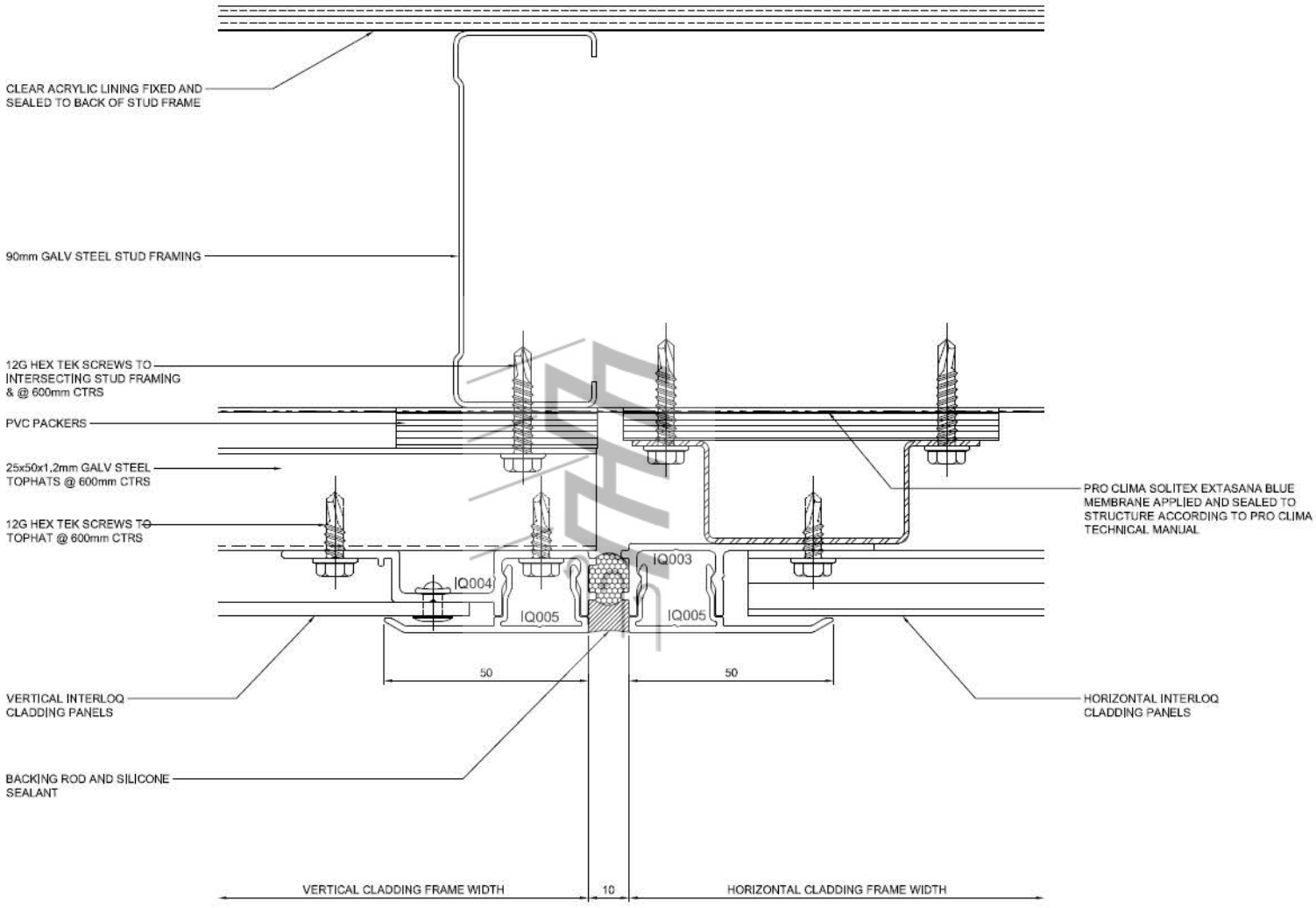
PROJECT NAME
INTERLOQ CLADDING TEST

DRAWING TITLE
TEST SPECIMEN DETAILS

DO NOT SCALE OFF DRAWING
ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE

PROJECTION	DRAWN BY	DATE
	JB	06/04/22
AS SCALE	DRAWING NO.	ISSUE
1:1	TR-6-4016	01


200
200x75mm PFC RIG STRUCTURE
CLEAR ACRYLIC LINING FIXED AND SEALED TO BACK OF STUD FRAME
90mm GALV STEEL STUD FRAMING
PRO CLIMA SOLITEX EXTASANA BLUE MEMBRANE APPLIED AND SEALED TO STRUCTURE ACCORDING TO PRO CLIMA TECHNICAL MANUAL
PRO CLIMA DUPLEX DOUBLE SIDED TAPE APPLIED ACCORDING TO PRO CLIMA TECHNICAL MANUAL
12G HEX TEK SCREWS TO INTERSECTING STUD FRAMING & @ 600mm CTRS
PVC PACKERS
PRO CLIMA TESCON EXTORA FLASHING TAPE APPLIED ACCORDING TO PRO CLIMA TECHNICAL MANUAL
25x50x1.2mm GALV STEEL TOPHATS @ 600mm CTRS
12G HEX TEK SCREWS TO TOPHAT @ EACH PANEL
INTERLOQ CLADDING PANELS
1 PLAN DETAIL 01
1:1
75
1
IQ001
CLADDING FRAME WIDTH
RIG OPENING WIDTH
AS TESTED
VALMOND & GIBSON
INTERLOQ ALUM EXTRUSION
POWDERCOAT
INTERLOQ CLADDING TEST
TEST SPECIMEN DETAILS
1:1
TR-6-5001
01



2 PLAN DETAIL 02
1 : 1

AS TESTED

ISSUE	DATE	DESCRIPTION OF CHANGE	BY
01	08/04/22	AS TESTED	JB

MATERIAL: INTERLOQ ALUM EXTRUSION

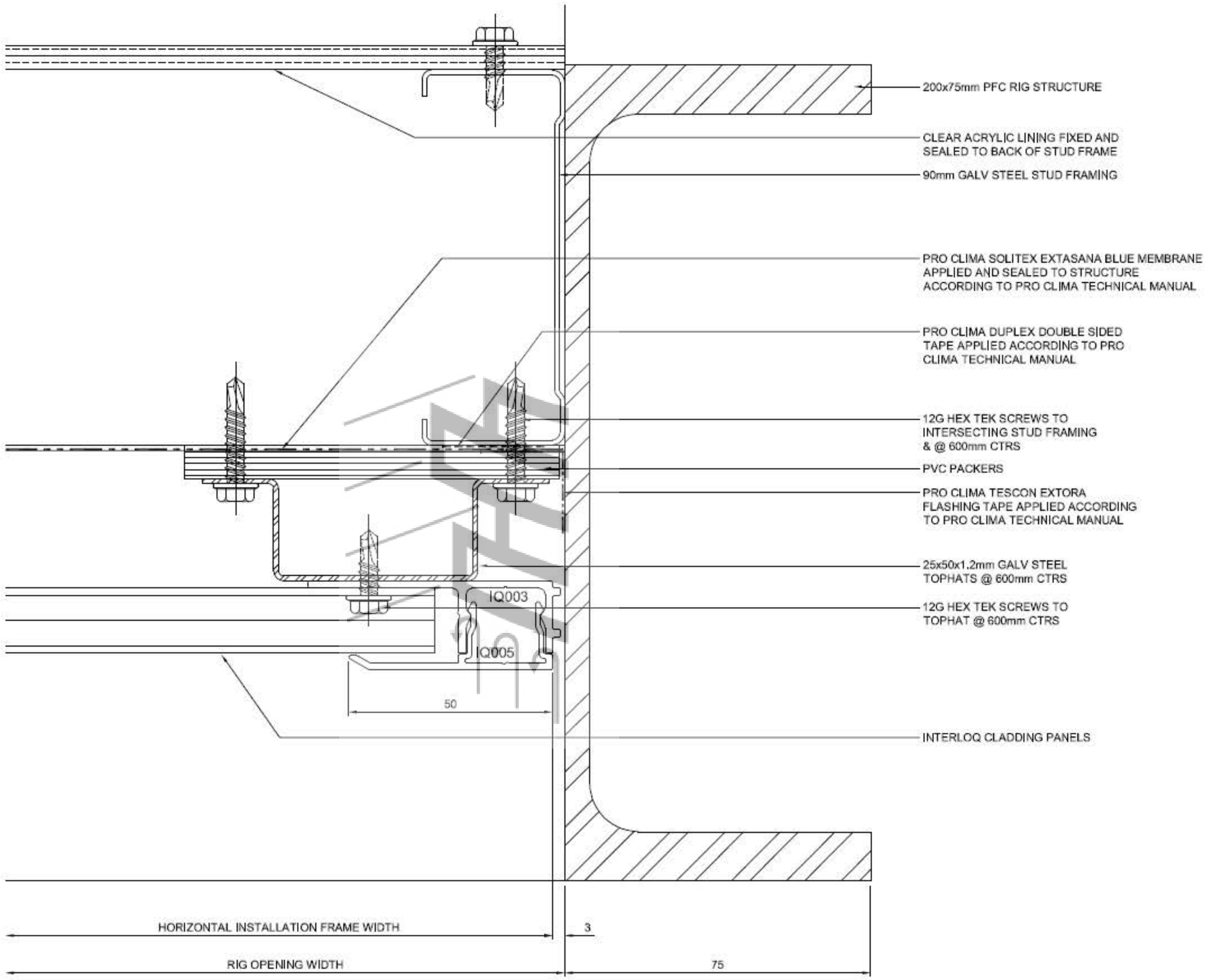
SURFACE FINISH: POWDERCOAT

VALMOND & GIBSON 1300 097 999

PROJECT NAME: INTERLOQ CLADDING TEST

DRAWING TITLE: TEST SPECIMEN DETAILS

PROJECTION	DRAWN BY:	DATE:
	JB	08/04/22
AT SCALE: 1:1	DRAWING NO: TR-6-5002	ISSUE: 01



3 PLAN DETAIL 03
1:1

AS TESTED

MATERIAL: INTERLOQ ALUM EXTRUSION

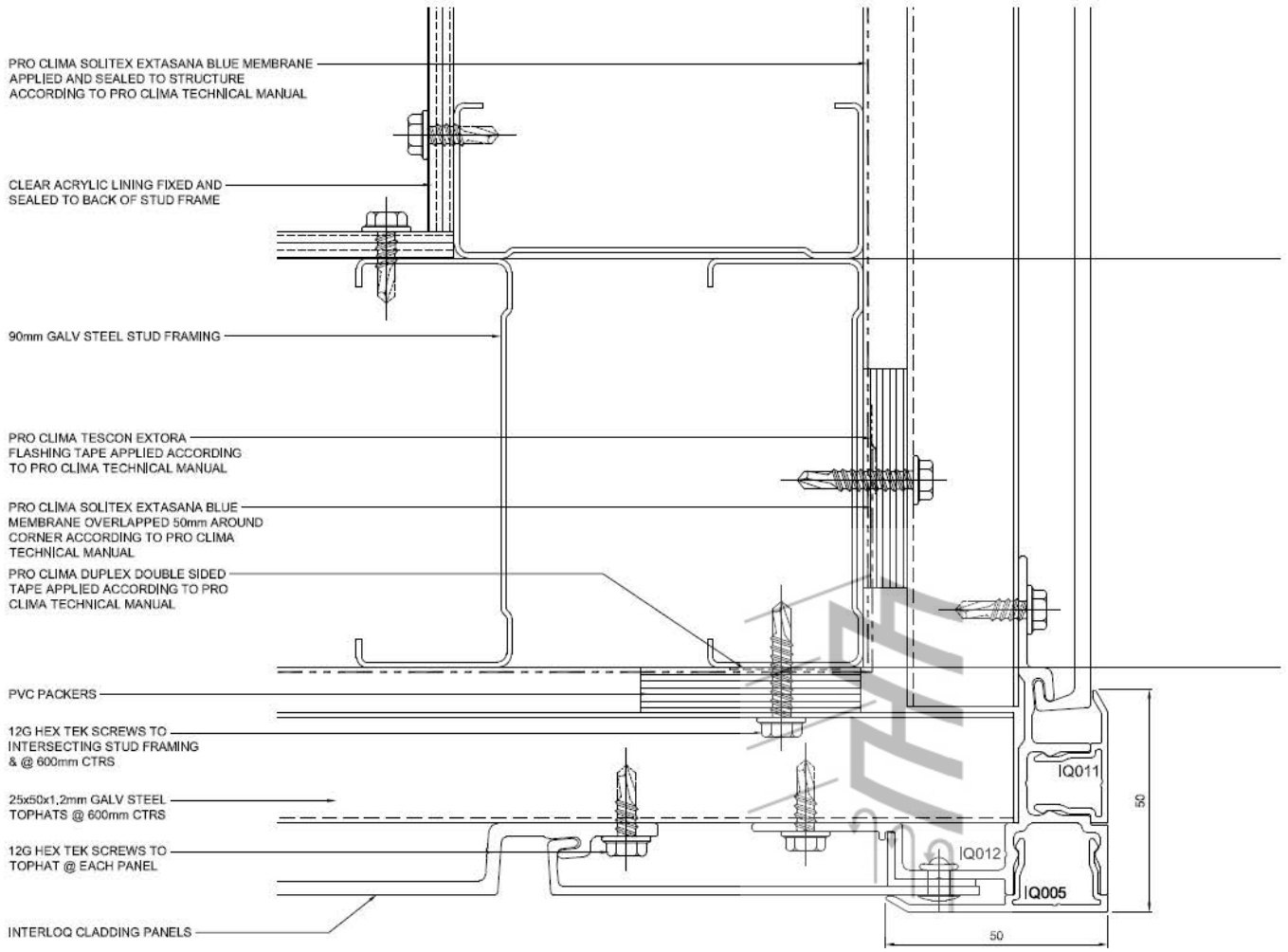
SURFACE FINISH: POWDERCOAT

VALMOND & GIBSON 1300 097 999

PROJECT NAME: INTERLOQ CLADDING TEST

DRAWING TITLE: TEST SPECIMEN DETAILS

SCALE: 1:1 | DRAWING NO: TR-6-5003 | ISSUE: 01



4 PLAN DETAIL 04
1:1

AS TESTED

ISSUE	DATE	DESCRIPTION OF CHANGE	BY
0	08/04/22	AS TESTED	JB

MATERIAL
INTERLOQ ALUM EXTRUSION

SURFACE FINISH
POWDERCOAT

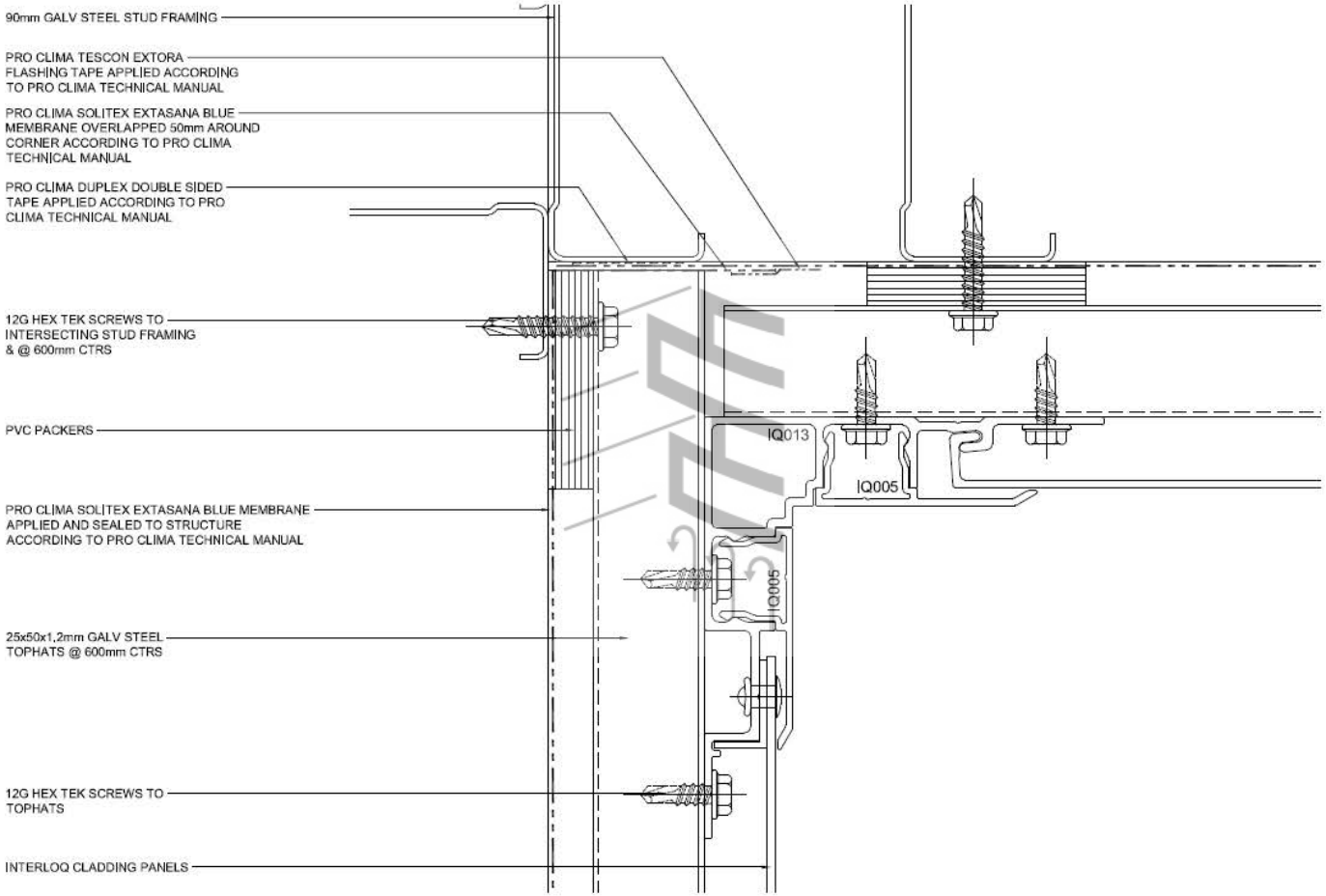
VALMOND & GIBSON
1300 097 999

PROJECT NAME
INTERLOQ CLADDING TEST

DRAWING TITLE
TEST SPECIMEN DETAILS

DO NOT SCALE OFF DRAWING
ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE

PROJECTION	DRAWN BY	DATE
	JB	08/04/22
AS SCALE	DRAWING NO.	ISSUE
1:1	TR-6-5004	01



5 PLAN DETAIL 05
1:1

AS TESTED

ISSUE	DATE	DESCRIPTION OF CHANGE	BY
01	09/04/22	AS TESTED	JR

MATERIAL
INTERLOQ ALUM EXTRUSION

SURFACE FINISH
POWDERCOAT

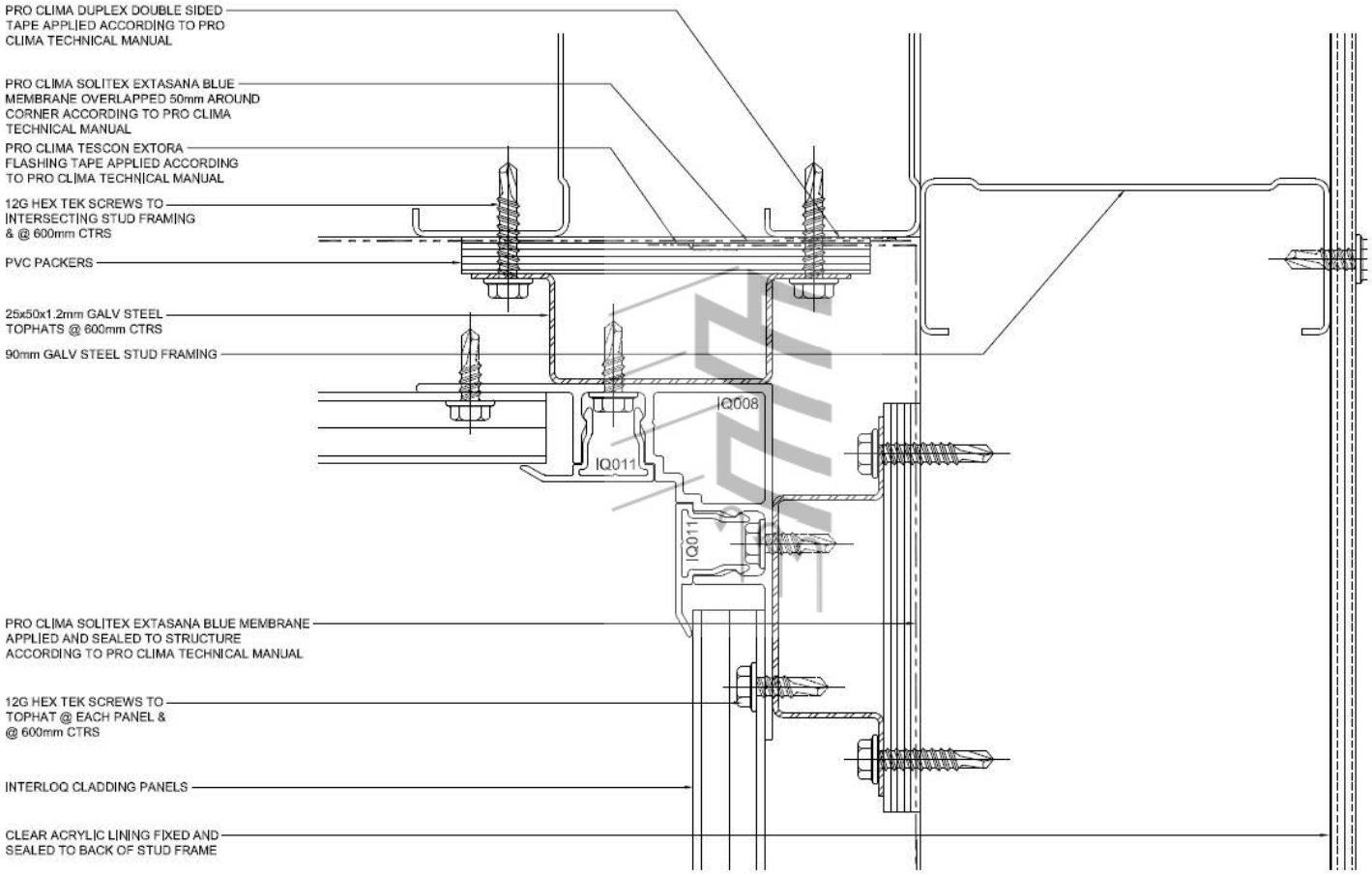
VALMOND & GIBSON
valmondgibson.com
1300 057 998

PROJECT NAME
INTERLOQ CLADDING TEST

DRAWING TITLE
TEST SPECIMEN DETAILS

DO NOT SCALE OFF DRAWING
ALL DIMENSIONS AND/OR VALUES TO BE CHECKED ON SITE

PROJECTION	DRAWN BY	DATE
	JR	09/04/22
AS SCALE	DRAWING No.	ISSUE
1:1	TR-6-5005	01



6 PLAN DETAIL 06
1 : 1

AS TESTED

0	ENGAGE AS TESTED	JS
ISSUE	DATE	DESCRIPTION OF CHANGE

MATERIAL: INTERLOQ ALUM EXTRUSION

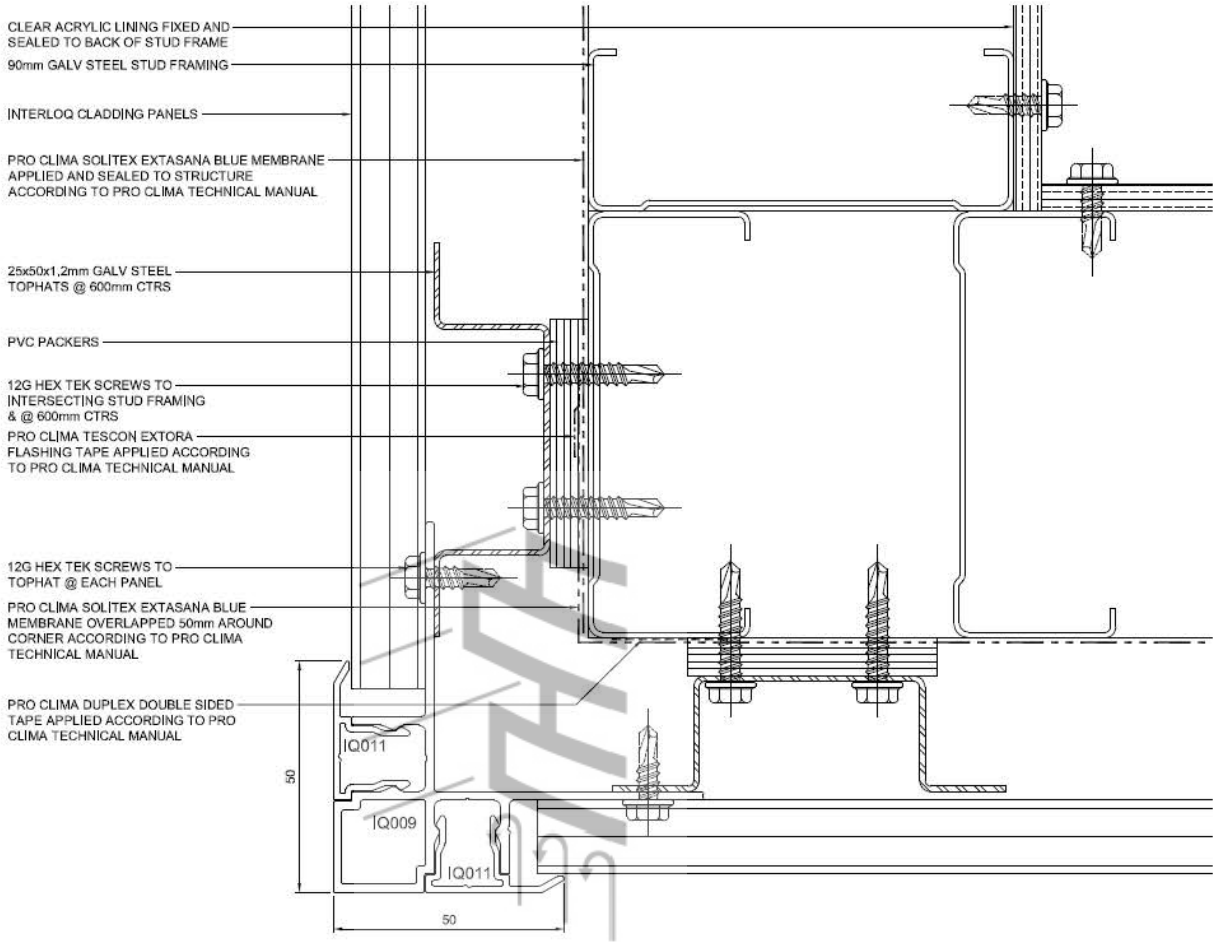
SURFACE FINISH: POWDERCOAT

VALMOND & GIBSON
1300 097 998

PROJECT NAME: INTERLOQ CLADDING TEST

DRAWING TITLE: TEST SPECIMEN DETAILS

PROJECTION	DRAWN BY: JS	DATE: 06/04/22
AS SCALE: 1:1	DRAWING No: TR-6-5006	ISSUE: 01



7 PLAN DETAIL 07
1:1

AS TESTED

ISSUE	DATE	DESCRIPTION OF CHANGE	BY
01	08/04/22	AS TESTED	JB

MATERIAL: **INTERLOQ ALUM EXTRUSION**

SURFACE FINISH: **POWDERCOAT**

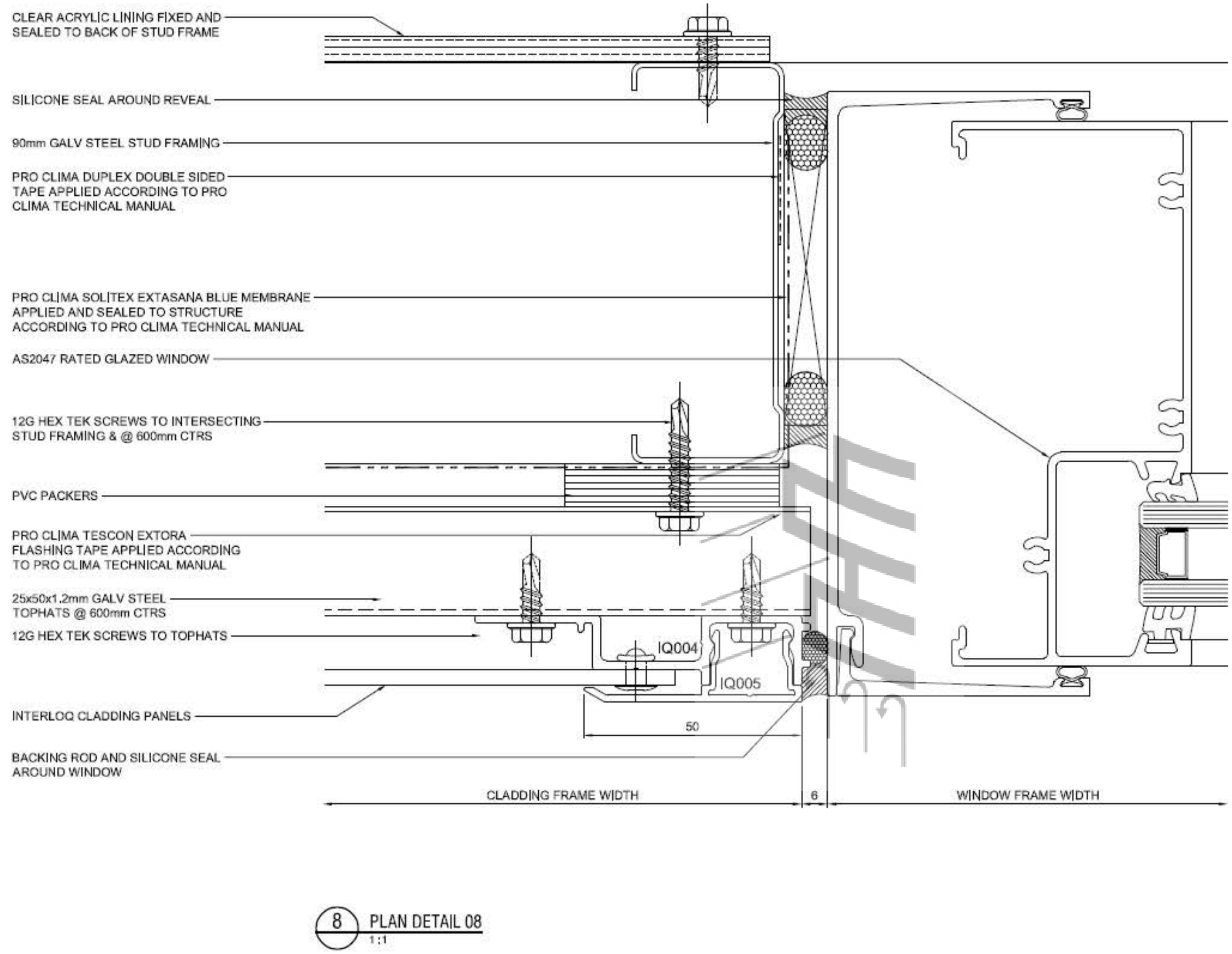
VALMOND & GIBSON
valmondgibson.com
1300 097 929

PROJECT NAME: **INTERLOQ CLADDING TEST**

DRAWING TITLE: **TEST SPECIMEN DETAILS**

DO NOT SCALE THIS DRAWING
ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE

PROJECTION	DRAWN BY	DATE
	JB	08/04/22
AS SIZED	DRAWING No.	ISSUE
1:1	TR-6-5007	01



8 PLAN DETAIL 08
1:1

AS TESTED

MATERIAL: INTERLOQ ALUM EXTRUSION

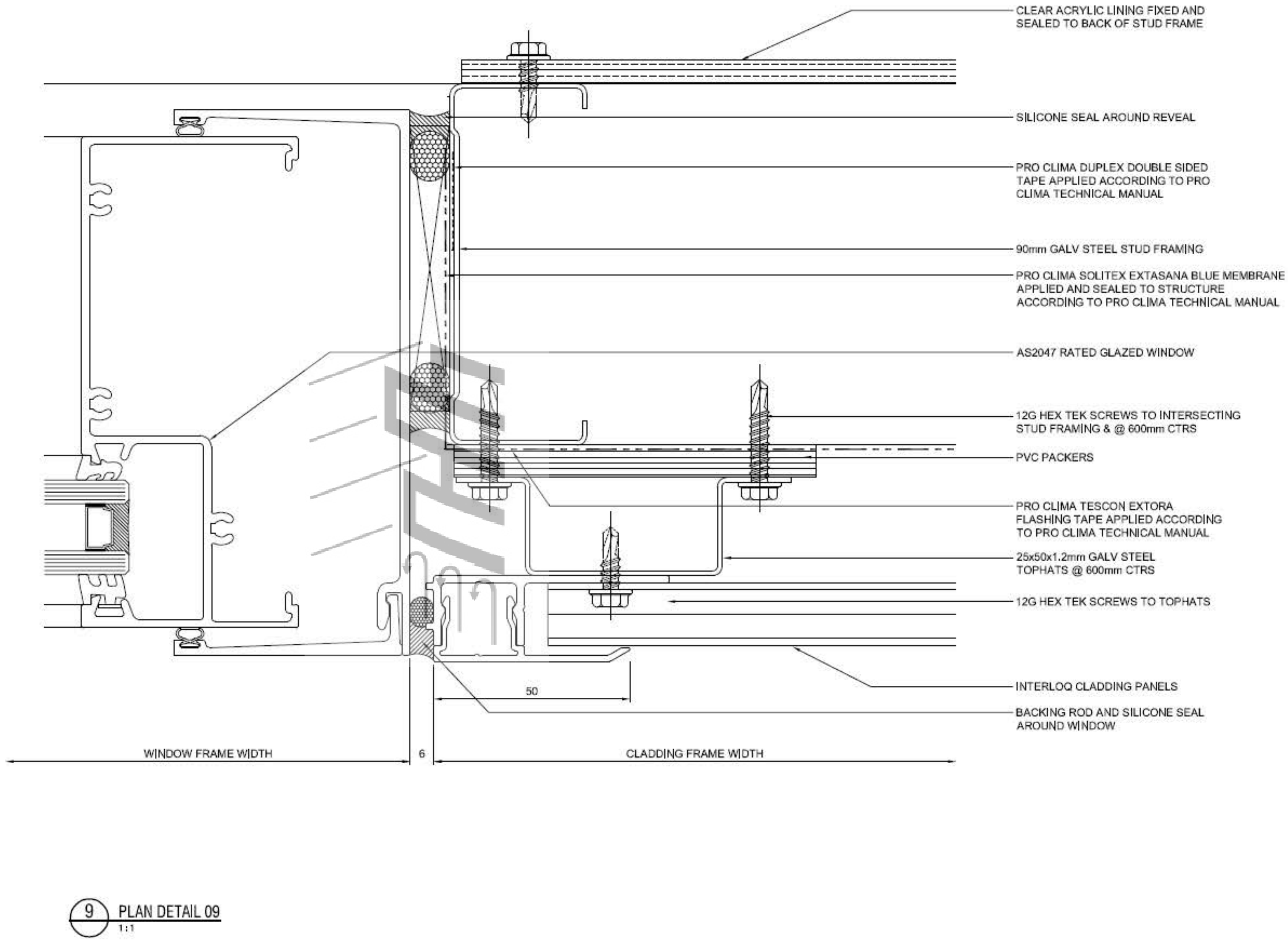
SURFACE FINISH: POWDERCOAT

VALMOND & GIBSON 1300 097 999

PROJECT NAME: INTERLOQ CLADDING TEST

DRAWING TITLE: TEST SPECIMEN DETAILS

SCALE	DRAWING NO.	ISSUE
1:1	TR-6-5008	02



CLEAR ACRYLIC LINING FIXED AND SEALED TO BACK OF STUD FRAME
SILICONE SEAL AROUND REVEAL
PRO CLIMA DUPLEX DOUBLE SIDED TAPE APPLIED ACCORDING TO PRO CLIMA TECHNICAL MANUAL
90mm GALV STEEL STUD FRAMING
PRO CLIMA SOLITEX EXTASANA BLUE MEMBRANE APPLIED AND SEALED TO STRUCTURE ACCORDING TO PRO CLIMA TECHNICAL MANUAL
AS2047 RATED GLAZED WINDOW
12G HEX TEK SCREWS TO INTERSECTING STUD FRAMING & @ 600mm CTRS
PVC PACKERS
PRO CLIMA TESCON EXTORA FLASHING TAPE APPLIED ACCORDING TO PRO CLIMA TECHNICAL MANUAL
25x50x1.2mm GALV STEEL TOPHATS @ 600mm CTRS
12G HEX TEK SCREWS TO TOPHATS
INTERLOQ CLADDING PANELS
BACKING ROD AND SILICONE SEAL AROUND WINDOW
50
WINDOW FRAME WIDTH
6
CLADDING FRAME WIDTH

9 PLAN DETAIL 09
1:1

AS TESTED

INTERLOQ ALUM EXTRUSION

POWDERCOAT

VALMOND & GIBSON 1300 097 998

INTERLOQ CLADDING TEST

TEST SPECIMEN DETAILS

1:1 | TR-6-5009 | 02

AWTA PRODUCT TESTING

Australian Wool Testing Authority Ltd - trading as AWTA Product Testing
A.B.N 43 006 014 106
1st Floor, 191 Racecourse Road, Flemington, Victoria 3031
P.O Box 240, North Melbourne, Victoria 3051
Phone (03) 9371 2400 Fax (03) 9371 2499

TEST REPORT

Client : Akzo Nobel Pty Ltd
51 McIntyre Road
Sunshine VIC 3020

Test Number : 16-005953
Issue Date : 5/12/2016
Print Date : 8/04/2019

Replacement of Initial Report dated :27/01/2017

Sample Description

Clients Ref : "D2525"
Powder coating applied to aluminium street
Colour : White
End Use : Architectural Aluminium Coating
Nominal Composition : Polyester resin powder coating
Nominal Mass per Unit Area/Density : 1.2-1.7 g/m2
Nominal Thickness : 60-80um

AS/NZS 1530.3-1999

Methods for Fire Tests on Building Materials, Components and Structures
Part 3: Simultaneous Determination of Ignitability,
Flame Propagation, Heat Release and Smoke Release

Face tested: Face
Date tested: 02/12/2016

	Standard Error	Mean	
Ignition time	0.10	7.98	min
Flame propagation time	Nil	Nil	sec
Heat release integral	2.0	16.9	kJ/m²
Smoke release, log d	0.0170	-1.4856	
Optical density, d		0.0328	/ metre

Number of specimens ignited:	6	
Number of specimens tested:	6	
Regulatory Indices:		
Ignitability Index	12	Range 0-20
Spread of Flame Index	0	Range 0-10
Heat Evolved Index	0	Range 0-10

162024 16016

Accredited for compliance with ISO/IEC 17025 - Testing
- Chemical Testing : Accreditation No. 983
- Mechanical Testing : Accreditation No. 985
- Performance & Approvals Testing : Accreditation No. 1356

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APPROVED SIGNATORY

MICHAEL A. JACKSON B.Sc.(Hons)
MANAGING DIRECTOR

0204/11/06

AWTA PRODUCT TESTING

Australian Wool Testing Authority Ltd - trading as AWTA Product Testing
A.B.N 43 006 014 106
1st Floor, 191 Racecourse Road, Flemington, Victoria 3031
P.O Box 240, North Melbourne, Victoria 3051
Phone (03) 9371 2400 Fax (03) 9371 2499

TEST REPORT

Client : Akzo Nobel Pty Ltd
51 McIntyre Road
Sunshine VIC 3020

Test Number : 16-005953
Issue Date : 5/12/2016
Print Date : 8/04/2019

Replacement of Initial Report dated :27/01/2017

Smoke Developed Index	3	Range 0-10

These results only apply to the specimen mounted, as described in this report. The result of this fire test may be used to directly assess fire hazard, but it should be recognised that a single test method will not provide a full assessment of fire hazard under all fire conditions.

Specimens tended to flash before ignition. Ignition was based on the occurance of a single flash of flame which lasted longer than 10 seconds.

Each test specimen was clamped in four places.

Accredited for compliance with ISO/IEC 17025 - Testing

- Chemical Testing	: Accreditation No.	983
- Mechanical Testing	: Accreditation No.	985
- Performance & Approvals Testing	: Accreditation No.	1356

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APPROVED SIGNATORY

MICHAEL A. JACKSON B.Sc.(Hons)
MANAGING DIRECTOR

Certificate of Test

QUOTE No.: NC8376 **REPORT No.: FNC12595**

COMBUSTIBILITY TEST FOR MATERIALS IN ACCORDANCE WITH AS 1530.1-1994

SPONSOR:
Valmond & Gibson Pty Ltd
88 Phillip Street
Level 25 Aurora Place
SYDNEY NSW 2000
AUSTRALIA

DESCRIPTION OF TEST SAMPLE:
The sponsor described the tested specimen as an aluminium material presentative of the aluminium used in the InterloQ cladding panel.

Nominal thickness:	3 mm (50 mm for the test)
Nominal density:	2700 kg/m^3
Colour:	silver

TEST PROCEDURE:
Five (5) samples were tested in accordance with Australian Standard 1530 Methods for fire tests on building materials, components and structures, Part 1- 1994: Combustibility Test for Materials.

An alternative suitable insulating material was used to fill the annular space between the furnace tubes, as specified in Clause 4.2 of ISO 1182:2010.

RESULTS:
The following calculated results were obtained, refer also to Summary of measurements:

Arithmetic mean	$= \frac{\Sigma\, results}{5}$
Mean furnace thermocouple temperature rise **(°C)**	8.63
Mean specimen centre thermocouple temperature rise **(°C)**	12.56
Mean specimen surface thermocouple temperature rise **(°C)**	8.22
Mean duration of sustained flaming (s)	0
Mean mass loss (%)	0.06

DESIGNATION:
The material is NOT deemed combustible according to the test criteria specified in Clause 3.4 of AS 1530.1-1994.

These test results relate only to the behaviour of the test specimens of the material under the particular conditions of the test and they are not intended to be the sole criterion for assessing the potential fire hazard of the material in use.

DATE OF TEST: 23 June 2020

Issued on the 21st day of July 2020 without alterations or additions.

Faustin Molina
Testing Officer

Stephen Smith
Team Leader, Reaction to Fire & Façade Fire Laboratory

End of Report

NATA Accredited Laboratory
Number: 165
Corporate Site No 3625
Accredited for compliance with ISO/IEC 17025 - Testing.

CSIRO INFRASTRUCTURE TECHNOLOGIES

14 Julius Avenue, Riverside Corporate Park, North Ryde NSW 2113 AUSTRALIA
Telephone: 61 2 9490 5444 Facsimile: 61 2 9490 5555 www.csiro.au

SUMMARY OF MEASUREMENTS AND OBSERVATIONS OF SAMPLES UNDER TEST C12595

Parameters	Symbol or expression	Unit symbol	Sample Number				
			1	2	3	4	5
Initial specimen mass	m_{si}	g	178.26	178.29	178.35	178.05	178.22
Final specimen mass	m_{sf}	g	178.22	178.23	178.34	177.70	178.18
Mass loss	$\Delta m = \frac{Msi - Msf}{Msi} \times 100$	%	0.02	0.03	0.01	0.20	0.02
Total duration of sustained flaming	Cumulative total of duration of flaming*	s	0	0	0	0	0
Initial furnace thermocouple temperature	T_{fi}	°C	750	751	747	753	747
Maximum furnace thermocouple temperature	T_{fm}	°C	795	786	794	782	797
Final furnace thermocouple temperature	T_{ff}	°C	790	780	784	770	786
Furnace thermocouple temperature rise	$\Delta Tf = Tfm - Tff$	°C	5	6	10	12	11
Maximum specimen centre thermocouple temperature	T_{cm}	°C	743	722	729	730	706
Final specimen centre thermocouple temperature	T_{cf}	°C	735	709	711	718	695
Specimen centre thermocouple temperature rise	$\Delta Tc = Tcm - Tcf$	°C	8	13	18	12	11
Maximum specimen surface thermocouple temperature	T_{cm}	°C	790	780	783	787	792
Final specimen surface thermocouple temperature	T_{sf}	°C	783	776	775	775	783
Specimen surface thermocouple temperature rise	$\Delta Ts = Tcm - Tsf$	°C	7	4	8	12	9
Test duration	-	min	125	110	115	80	110

- Any individual duration flaming less than 5 seconds was discarded

End of Test Certificate

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Telephone: 61 2 9490 5444 Facsimile: 61 2 9490 5555 www.csiro.au