element 13

Technical Manual

non-combustible • pre-finished • external wall cladding system

Contents

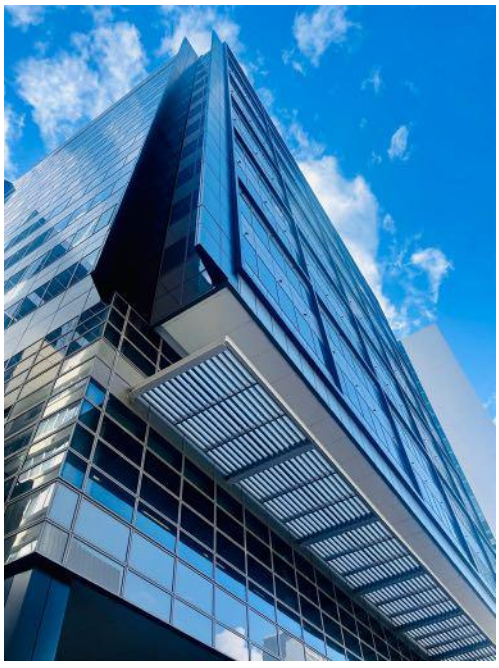
1.0 About this manual

This manual has been developed as a guide for Architects, Specifiers, Builders, Engineers, workshop fabricators and site installers of Valmond & Gibson's non-combustible, pre-finished solid aluminum cladding; element13®.

It has been developed as an introduction to element13® in order to display its function, material data, fabrication and installation methods on a general level. It is our understanding that the user of this manual and element13® has experience in metalwork fabrication and is familiar with façade cladding and it's relevant building codes and practices.

The content has been compiled with due care and accuracy to our knowledge at the time of publishing. Due to uncontrollable conditions, methods of fabrication and construction as well as varying skills and experience of users and quality of tooling the following recommendations and suggestions are provided without warranty.

Valmond and Gibson reserve the right to revise the content of this manual without notice.



2.1 element13 Wall Cladding System

Leading Valmond & Gibson's product portfolio is element13, a 3mm non-combustible solid aluminium cladding panel that offers complete peace of mind to building owners and specifiers.

With an extensive range of colours and sizes, element13 is suited to a range of applications regardless of the scale, complexity or environment.

With exceptional performance and unparalleled safety accreditation element13 is the façade of choice for both new constructions and recladding of existing buildings.

2.2 Quality & Benefits

element13® is highly durable and impact resistant. These qualities make it an ideal choice for use in harsh environments and high traffic areas.

Our superior selection of PPG's PVDF paint finishes provide superior long-lasting UV resistance, corrosion resistance and gloss retention.

Our commitment to achieving the highest quality for our clients and customers is reflected in our sourcing of materials.

The implementation of a complete quality control system ensures delivery of consistently high quality products to the client.

20 year warranty

element13® has up to a 20 year warranty when installed by a qualified installer.

The following document will provide a guide for installation.

Sustainability

element13® is 100% recyclable offering an eco-friendly solution that makes meeting sustainable construction demands much easier.

element13® is resistant to heavy metal erosion which ensures that both personal and global environments are improved.

Manufactured under ISO-9001:2015 quality management systems

Our commitment to achieving the highest quality for our clients and customers is reflected in our sourcing of materials.

The implementation of a complete quality control system ensures delivery of consistently high quality products to the client.

Certified non-combustible material

CSIRO tested to AS1530.1

element13® is constructed using solid aluminium making it an ideal product for all applications where the use of non-combustible panels are required; such as high-rise buildings, schools or hospitals.

It is certifiably non-combustible in accordance with the NCC Section C.

3.0 Testing and assessments

3.1 Fire Safety

SECTION	TEST STANDARD	TESTING AUTHORITY	TEST REPORT NO.	RESULT
3.1.1	AS1530.1: 1994 NCC Vol 1. Specification C1.8 Clause 5(a) Combustibility test for materials	CSIRO	FNC12545	Non-combustible
3.1.2	AS1530.3: 1999 NCC Vol 1. Specification C1.8 Clause 5(a) Test for ignitability, flame propagation, heat and smoke release	CSIRO	FNE12552	Ignitability index (0-20) 0 Heat evolved index (0-10) 0 Spread of flame index (0-10) 0 Smoke developed index (0-10) 1
3.1.3	Resistance to impact NCC Vol 1. Specification C1.8 Clause 5(c) ASTM E695-03	Ian Bennie & Associates	2021-083_2	Pass to C1.8 Clause 3.1(b)(iii)
3.1.4	Resistance to surface indentation NCC Vol 1. Specification C1.8 Clause 5(d)	Ian Bennie & Associates	2021-083	Pass - Immesureable

3.2 Weather Proofing

SECTION	TEST STANDARD	TESTING AUTHORITY	TEST REPORT NO.	RESULT
3.2.1	AS/NZS 4284:2008 NCC Vol 1. FV1.1 & NCC Vol 2. V2.2.1 Weather performance test	Ian Bennie & Associates	2022-031-S2	±1500Pa SLS

3.3 Structural Performance

SECTION	TEST STANDARD	TESTING AUTHORITY	TEST REPORT NO.	RESULT	
3.3.1	Appraised against AS 1664.1, AS/NZS 1170.0, AS/NZS 1170.2	JFS Engineers	23-00156-QLD-RPT-0001(00)	Refer to wind load tables Section 5.2	
3.3.2	AS 4040.3 Method 3: resistance to wind pressures for cyclonic regions	Azuma Design	AZT 0190.23	SLS	1875 Pa Maximum Pressure applied - 2501 Pa
				ULS	5559 Pa Maximum Pressure applied - 7226.7 Pa

3.3 Material Performance

SECTION	TEST STANDARD	TESTING AUTHORITY	TEST REPORT NO.	RESULT
3.4.1	AAMA 2605:2020 Performance requirements for superior organic coatings	Intertek - Shanghai	210203002SHF-001	Sample meets specification
3.4.2	ANSI FM 4473 Hail impact resistance test	Ian Bennie & Associates	2020-090_S1-2	Sample meets specification
3.4.3	AS 1734:1997 Material identification test	MECHTEST - Archerfield QLD	RB21-5523-01	Sample meets specification
3.4.4	AS 1391:2020 Material tensile test	MECHTEST - Archerfield QLD	RB21-5523-01	Sample meets specification
3.4.5	AS 1734:1997 Material identification test	LMATS	LS20-2252-01_MA	Sample meets specification
3.4.6	AS 1391:2020 Material tensile test	LMATS	LW21-0151_MI	Sample meets specification

4.1 Product quality and tolerances

Each Valmond & Gibson product is made from the highest quality raw materials and are put through a rigorous auditing process that ensures we consistently deliver an unprecedented level of quality, durability and reliability.

Tolerances

The below tolerances are based on 3mm coil sheet

ASPECT	SPECIFIED WIDTH (mm)	SPECIFIED LENGTH (mm)	TOLERANCE
WIDTH	>1200 & ≤1500	-	± 2.0mm
LENGTH	-	>3000 & ≤3600	± 4.0mm
	-	>3600 & ≤4500	± 4.0mm
THICKNESS	>1200 & ≤1500	-	± 0.18mm
*** BOW**	>300	* 1800	5.0mm
**** SQUARENESS**	>1200 & ≤1500	≤3600	11.0mm
	>1200 & ≤1500	>3600	14.0mm
SURFACE DEFECTS	The surface shall be free from defects such as dents, scratches and contaminents effecting it's processing and end use		

* Measured 1800mm from a straight side edge
** Allowable difference between diagonals

4.2 element13 Technical Data

	PROPERTIES	UNITS	VALUES
Physical	Alloy		5052
	Temper		H32
	Material base thickness	mm	3 ± 0.18
	Raw density	kg/m^3	2680
	Coating thickness	micron (µm)	30.5~38.0
	Painted weight	kg/m^2	8.13
Mechanical	Hardness, Brinell	HB	60
	Tensile strength (Ultimate)	MPa	215~265
	Tensile strength (Yield)	MPa	160min.
	Modulus of elasticity	GPa	70.3
	Elongation	%	16
Thermal	Linear thermal expansion	µm/m-K	2.4
	Melting range	˚C	607-649
	Thermal conductivity	W/m-K	138
Electrical	Electrical resistivity	ohm(Ω).m	$0.0499x10^{-6}$
Acoustic	Acoustic insulation	Rw	27

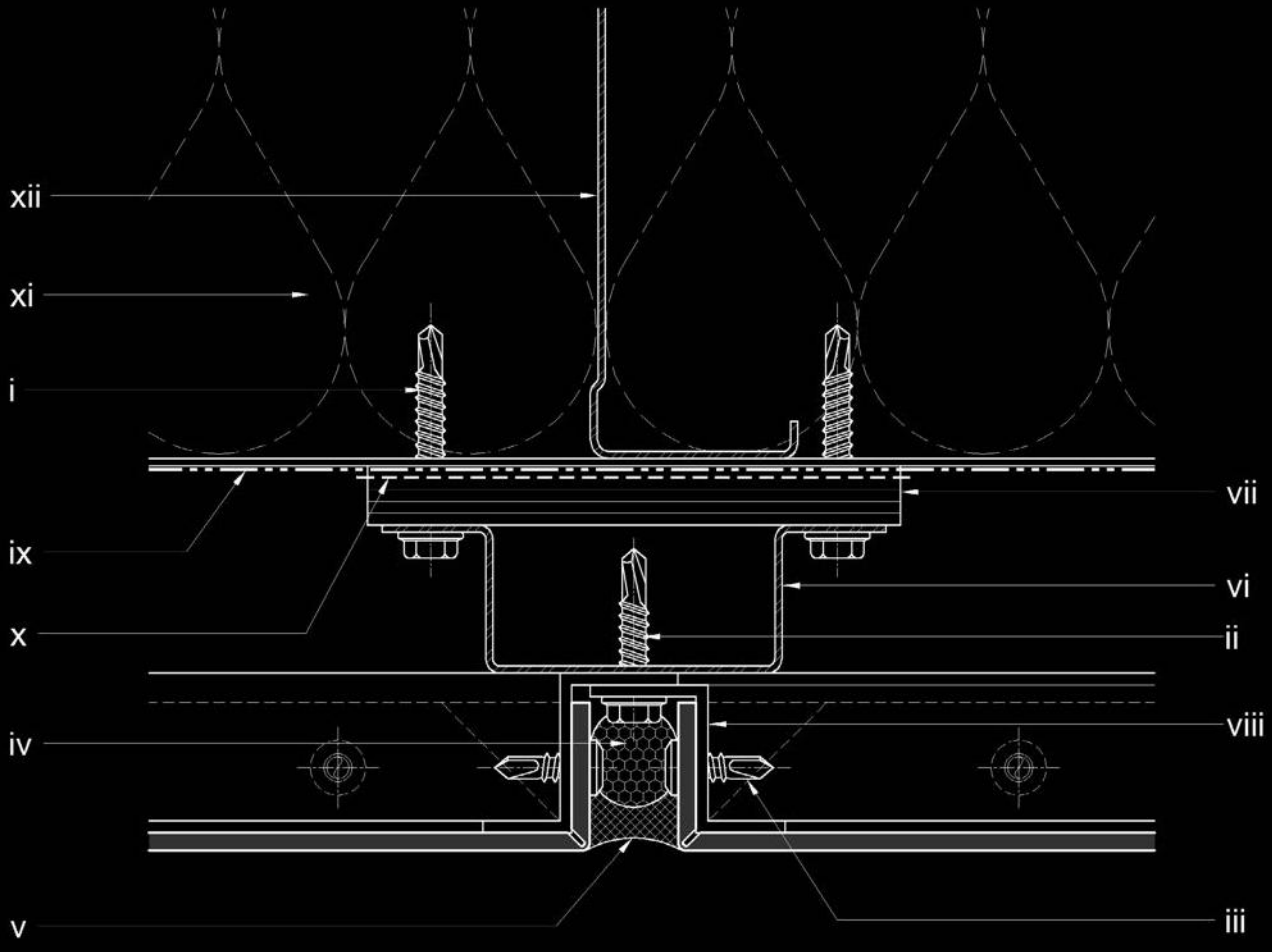
4.3 Coating Specifications

DURANAR PVDF - in compliance with AAMA 2605:2020

COATING PROPERTIES	TEST STANDARD	COMPLIANCE
Dry Film Thickness (nominal)	ASTM D1400	0.20-0.30 mil primer 0.70-0.80 mil color/metallic 0.30-0.40 mil clear topcoat
Gloss	ASTM D523	Standard @ 60°: 25 - 35 DURANAR LG @ 85°: <10
Pencil Hardness	ASTM D3363	F-2H
Flexibility	T-bend, ASTM D4145	0-2 T-bend; No pick-off
Adhesion	ASTM D3359 Reverse impact 1/16" crosshatch	No adhesion loss
Reverse Impact	ASTM D2794	1.5 x metal thickness (aluminum): No cracking or adhesion loss
Acid Resistance	ASTM D1308	10% muriatic acid - 24 hrs.: No effect 20% sulfuric acid - 18 hrs.: No effect
Acid Rain Test	Kesternich SO2, DIN 50018	15 cycles min.: No objectionable color change
Alkali Resistance	ASTM D1308	10%, 25% NaOH, 1 hr.: No effect
Salt Spray Resistance	ASTM B117	5% salt fog @ 95°F: Passes 4000 hrs. Less than 1/16" avg. creepage from scribe; None or few #8 blisters
Humidity Resistance	ASTM D714 ASTM D2247	100% relative humidity @ 95°F: Passes 4000 hrs. No #8 blisters
Exterior Exposure	ASTM D2244 ASTM D4214	10 yrs. @ 45°, South Florida: Max. 5 fade, Max. 8 chalk

4.4 System Hardware

The following hardware items are the minimum expected materials and performance levels in order to comply with the Valmond & Gibson element13 Cladding System as tested in section 3.0 of this manual. It is our expectation that any substitution to the following is of equal or greater performance.



i. 12G x 35mm class 4 hex head tek screws to intersecting stud framing & @ 600mm ctrs

ii. 12G x 25mm class 4 hex head tek screws @ 600mm ctrs

iii. 10G x 16mm class 4 wafer head tek screws @ 200mm ctrs to perimeter of panel

iv. Open cell backing rod

v. Neutral cure silicone weatherseal

vi. Galvanised top hat battens nominal 25 x 50 x 1.15mm BMT @ maximum 600mm ctrs

vii. Solid packing

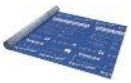
viii. Continuous aluminium Z-section cassette frame fully bonded and mechanically fixed to perimeter of panel

ix. Compliant high performance vapour permeable membrane

x. Compliant self sealing tape strip

xi. Non combustible insulation to meet project thermal specification

xii. Galvanised steel stud framing to meet project wind loading

SECTION	DESCRIPTION	IMAGE
4.4.1	12G x 35mm class 4 hex head tek screws	
	12G x 25mm class 4 hex head tek screws	
	10G x 16mm class 4 wafer head tek screws	
4.4.2	Open cell backing rod	
4.4.3	Neutral cure silicone weatherseal	
4.4.4	Galvanised top hat battens nominal 25 x 50 x 1.15mm BMT	
4.4.5	Solid packers	
4.4.6	Continuous aluminium Z-section cassette frame	
4.4.7	Pro Clima SOLITEX EXTASANA BLUE vapour permeable membrane	
	Pro Clima TESCON EXTORA flashing tape	
	Pro Clima TESCON NAIDECK self sealing strip	
4.4.8	Non combustible insulation	
4.4.9	Galvanised steel stud framing	
4.4.10	20x40x3mm aluminium RHS panel stiffener	
4.4.11	Double sided structural bond tape 3M 4991 VHB 12x2.2mm	
4.4.12	Structural grade silicone adhesive	

5.1 Product specifications

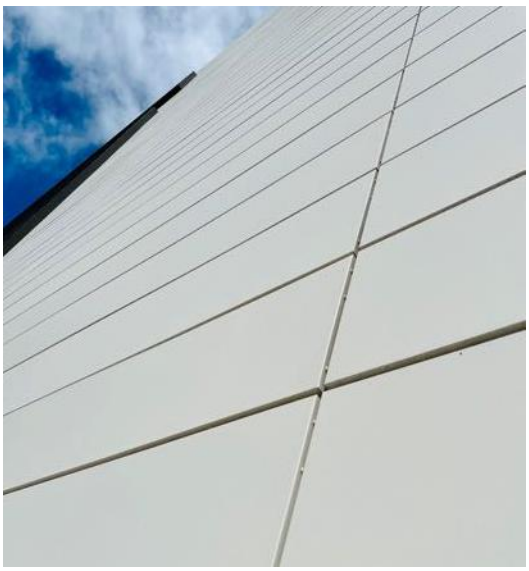
Dimensions

Standard dimensions (Custom sizes are available on large order requests)

WIDTH (mm)	LENGTH (mm)	THICKNESS (mm)
1250 / 1500	3200	3
1250 / 1500	4000	3

Material Weight

THICKNESS	WEIGHT (kg/m^2)
3mm	8.13



5.2
Loading span table

Maximum Design Pressure

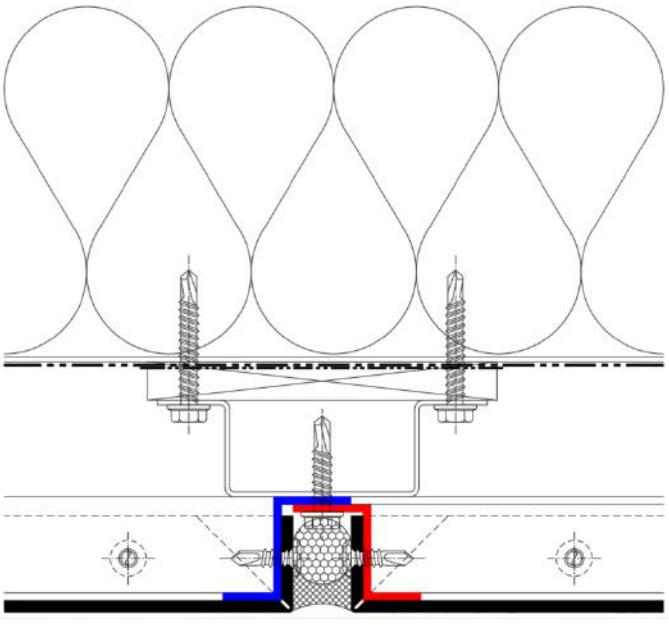
PANEL WIDTH	STIFFENER SPACING											
	300 mm		450 mm		600 mm		750 mm		1000 mm		1200 mm	
	SLS	ULS	SLS	ULS	SLS	ULS	SLS	ULS	SLS	ULS	SLS	ULS
500 mm	16000 Pa	16750 Pa	8800 Pa	11750 Pa	3800 Pa	8250 Pa	2000 Pa	6000 Pa	1000 Pa	2250 Pa	850 Pa	1250 Pa
750 mm	8200 Pa	12000 Pa	4800 Pa	8000 Pa	3200 Pa	5500 Pa	2000 Pa	4250 Pa	850 Pa	1750 Pa	700 Pa	1000 Pa
900 mm	5000 Pa	10000 Pa	3000 Pa	6500 Pa	2000 Pa	4750 Pa	1500 Pa	3750 Pa	850 Pa	1750 Pa	700 Pa	1000 Pa
1000 mm	3600 Pa	9000 Pa	2250 Pa	6000 Pa	1500 Pa	4500 Pa	1250 Pa	3500 Pa	850 Pa	1750 Pa	700 Pa	1000 Pa
1100 mm	2800 Pa	8250 Pa	1750 Pa	5500 Pa	1250 Pa	4250 Pa	1000 Pa	3250 Pa	700 Pa	1500 Pa	550 Pa	1000 Pa
1200 mm	2000 Pa	6750 Pa	1250 Pa	5250 Pa	1000 Pa	4000 Pa	700 Pa	3000 Pa	550 Pa	1250 Pa	400 Pa	1000 Pa
1300 mm	1500 Pa	5000 Pa	1000 Pa	4000 Pa	850 Pa	3250 Pa	550 Pa	2750 Pa	400 Pa	1000 Pa	400 Pa	900 Pa
1400 mm	1250 Pa	4000 Pa	850 Pa	3000 Pa	550 Pa	2500 Pa	550 Pa	2250 Pa	400 Pa	1000 Pa	350 Pa	800 Pa
1500 mm	1000 Pa	3000 Pa	700 Pa	2500 Pa	550 Pa	2000 Pa	400 Pa	1750 Pa	350 Pa	900 Pa	350 Pa	700 Pa

Notes:

- The information provided in the span table is generic in nature and should be used as a guide only, the information can not be relied upon as structural certification
- Design values are based on principles of AS 1664.1, AS/NZS 1170.0, AS/NZS 1170.2, appraised by a professional engineer
- Span table provides guidance on panel dimensions and stiffener spacing based on wind load conditions only, other loading conditions such as imposed loads and impact loading have not been considered
- SLS = Serviceability Limit States
- ULS = Ultimate Limit States

The table has considered the following assumptions:

- 4 Side supported panels of rectangular shape
- Z-extrusion = 6060 T5 Alloy
- Stiffener = 20X40X3mm RHS using 6061 T6 Alloy
- Stiffener Angles = 32X32X3m using 6061 T6 Alloy
- 2 No. #12 A2/70 screws per restraint
- No thermal slots have been considered.
- Sub framing assumed to be 1.15 BMT G500
- Deflection limit = L/90



6.1 Fabrication Processes

These contents are guidelines. It is strongly recommended that you consult with machinery manufacturers and tool suppliers to ensure the best fabrication results.

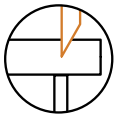
For best results it is recommended that you do not remove the surface protection film from element13® during the fabrication process.

Cutting

element13® can be cut with most of the commonly available metalworking cutting tools; circular saws, jigsaws and bandsaws. For panel fabrication and precise edge results use the following:

Best cutting results are achieved with a track guided circular saw. Blade selection must be discussed with the saw manufacturer.

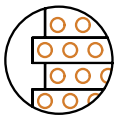
A vertical panel saw can be used to cut and route element13®. When routing a V-groove ensure there is a minimum of 0.7mm of aluminium left under the base of the groove. Existing vertical panel saws can be upgraded with a variable speed driver and lubricant misting attachments. Please discuss appropriate blade selection with the saw manufacturer.



element13® can be shear cut with the use of a guillotine. Ensure the cut material is captured to avoid damage.

Machining

element13® can be routered on the back of the panel along desired fold lines using a CNC router. It is recommended to create a V-groove with a flat base of 3mm to a maximum depth of 2.2mm. Ensure a minimum of 0.7mm of aluminium is left under the base of the groove. For optimum fabrication results use a lubricant mister. Spindle speed, feed rate and tool selection must be discussed with the CNC manufacturer.



element13® is easily punched using sharp high-quality tools and dies. Ensure material is correctly supported to avoid deforming.

element13® can be drilled using a high-quality High-Speed Steel (HSS) centre point drill bit typically used for aluminium.

Assembly

element13® can be roll bent to create curved panels. Ensure rollers are clean and free of imperfections. The minimum bending radius must be no more than 15 times the material thickness.

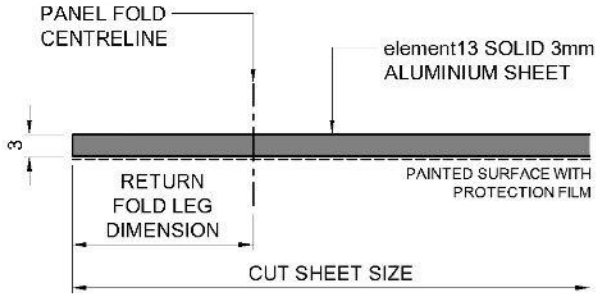
element13® can be hand folded along the V-groove routered fold lines using a portable foldingt ool. Large format panels may require the aid of a sheet metal folding machine. Best results are achieved by folding element13® in one movement with the fold angle slightly greater than the angle required.

element13® can be fixed with rivets or screws depending on the required specifications. Select the fixings' material to suit the application and consider thermal expansion and building movement.

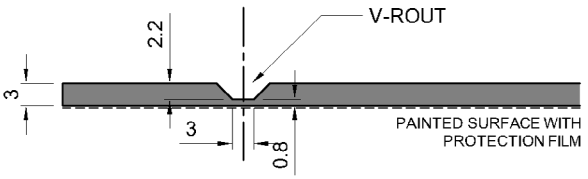
TYPICAL PREPARATION OF element13 CLADDING PANEL EDGE FOLD.

NOTE: PROTECTED PAINT SURFACE FACE DOWN!

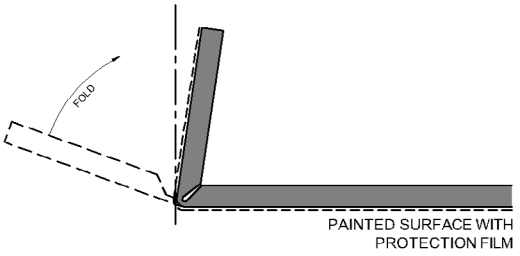
1 DETERMINE RETURN FOLD LEG DIMENSION.



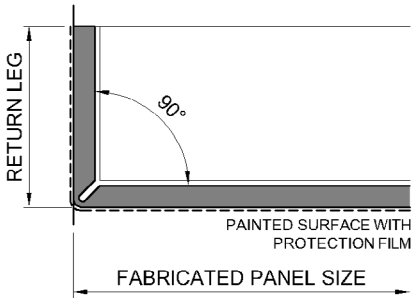
2 V-ROUT TO A DEPTH OF 2.2mm, WITH A BASE WIDTH OF 3mm. ENSURE MATERIAL BENEATH THE V-GROOVE IS BETWEEN 0.7~1.0mm.



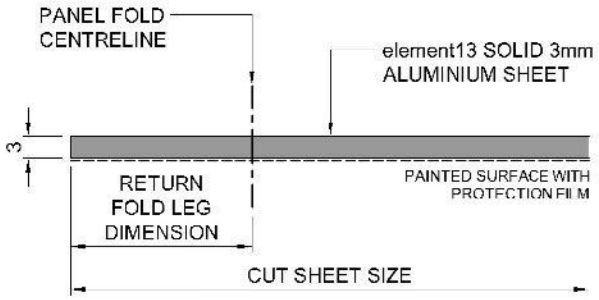
3 FOLD RETURN LEG IN ONE MOVEMENT ALONG ENTIRE EDGE TO AN ANGLE SLIGHTLY OVER THE FINAL DESIRED ANGLE.

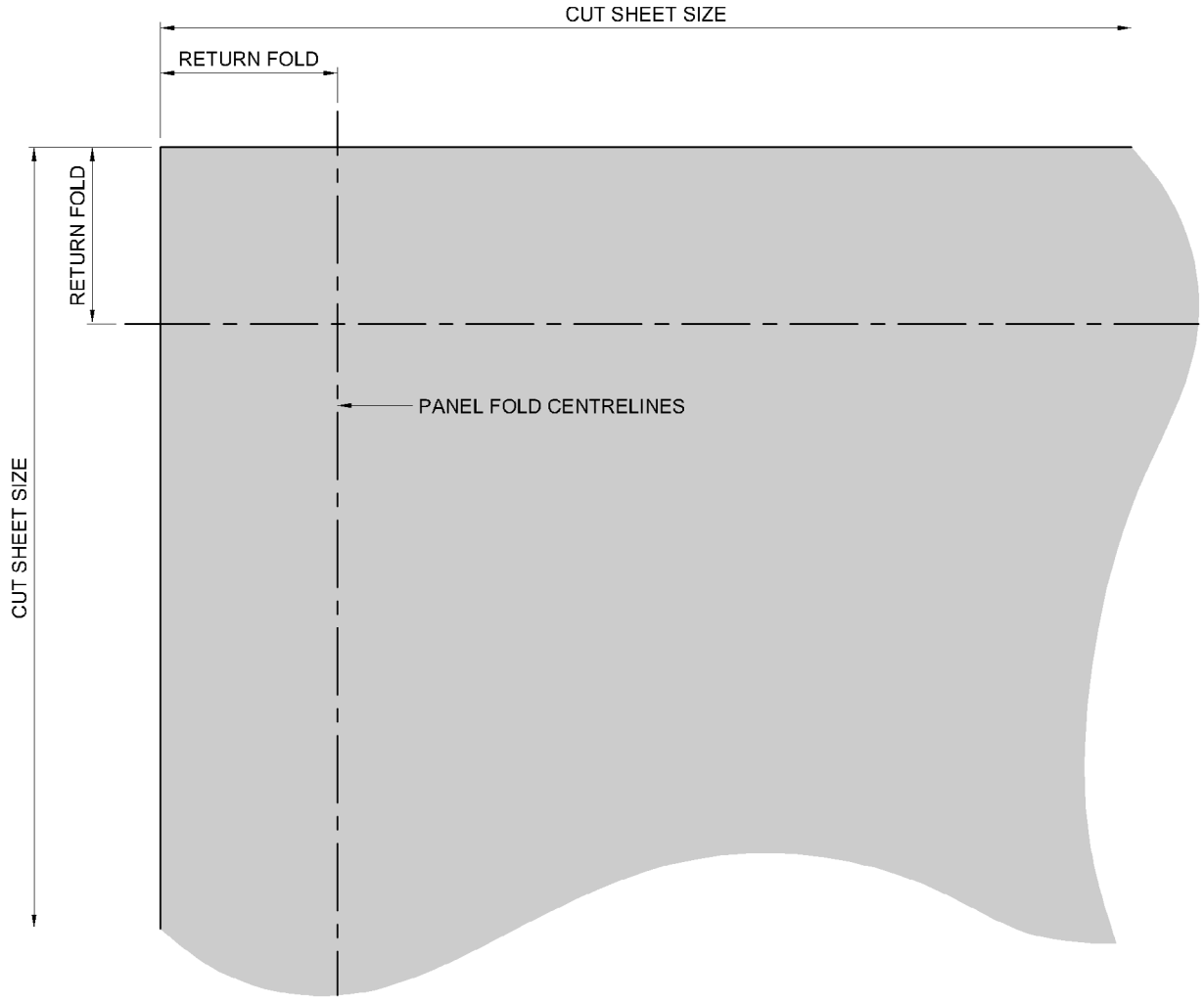


4 ALLOW LEG TO RETURN TO THE DESIRED ANGLE. DO NOT FLATTEN OR RE-FOLD.



1 DETERMINE RETURN FOLD LEG DIMENSION.





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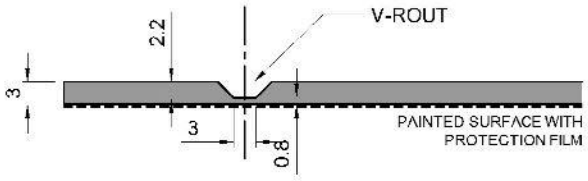
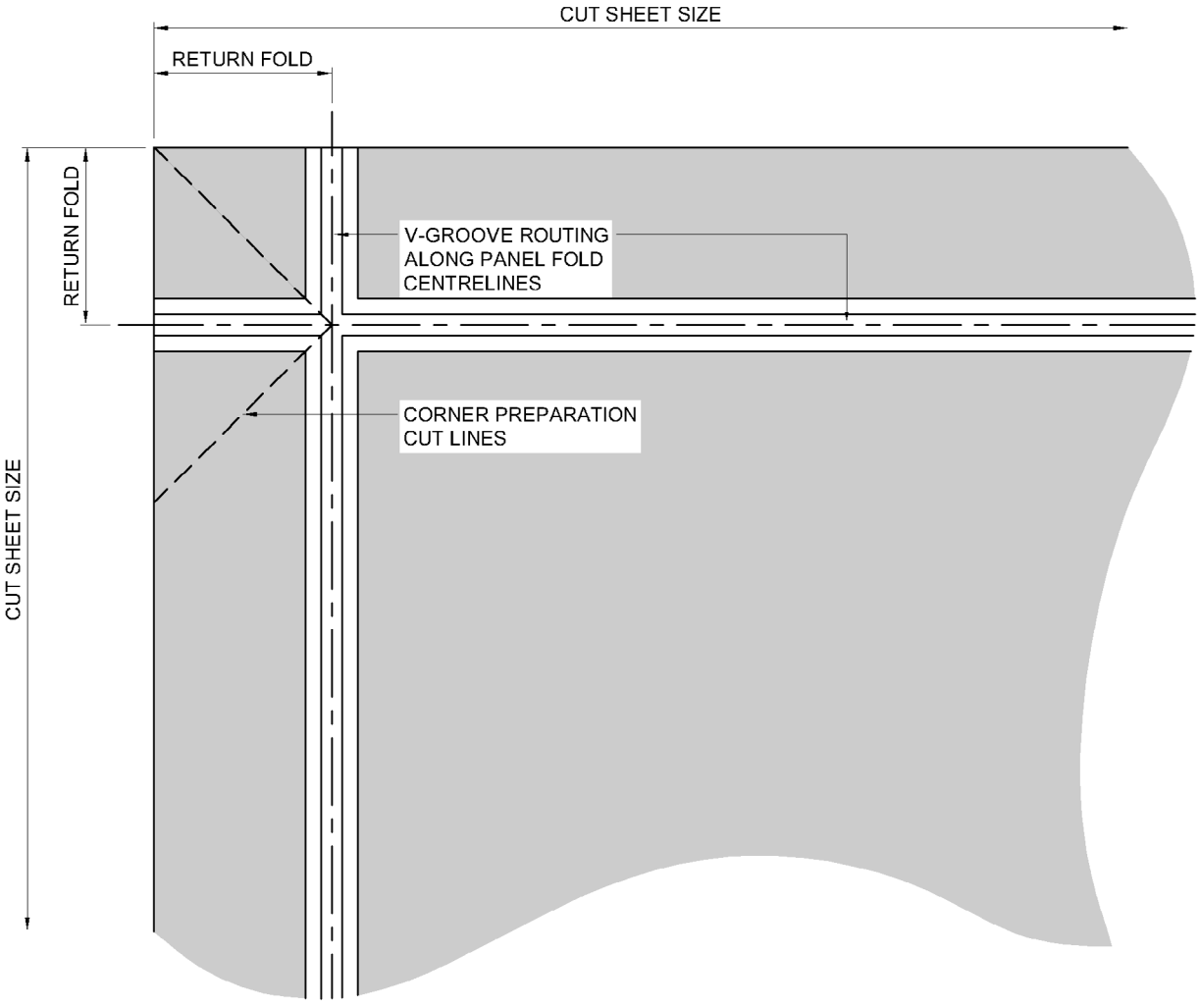
TYPICAL PANEL EDGE PREPARATION

(2.1) V-ROUT TO A DEPTH OF 2.2mm, WITH A BASE WIDTH OF 3mm. ENSURE MATERIAL BENEATH THE V-GROOVE IS BETWEEN 0.7~1.0mm.





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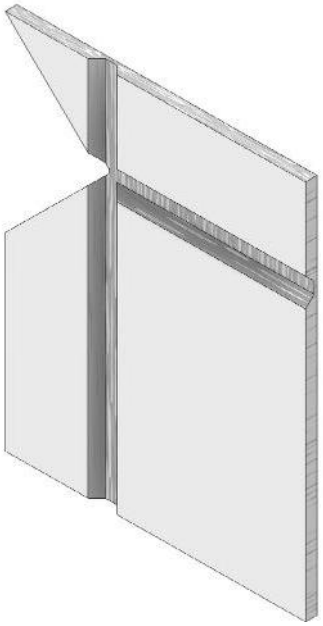
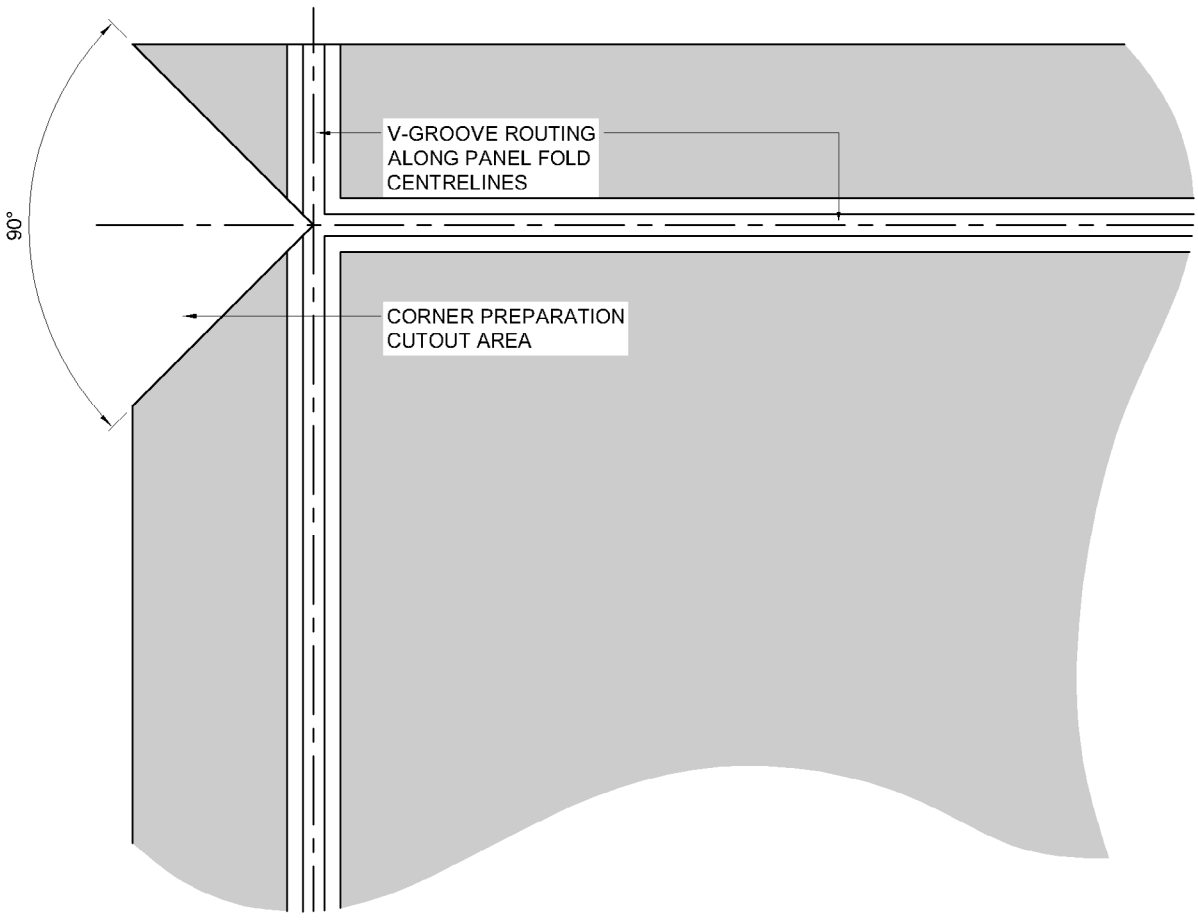
TYPICAL PANEL EDGE PREPARATION

2.2 NOTCH AND REMOVE A 90° CUTOUT FROM EACH CORNER





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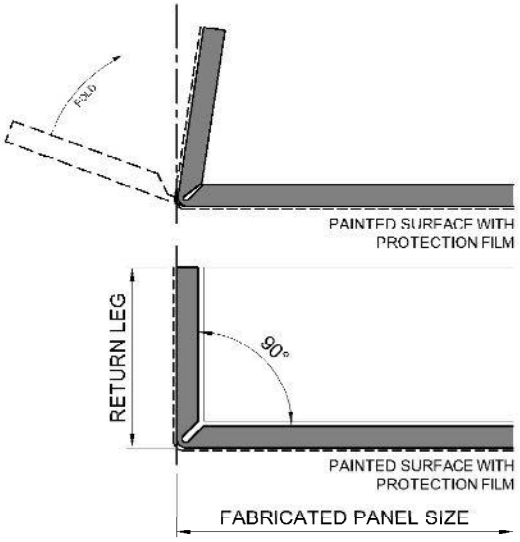
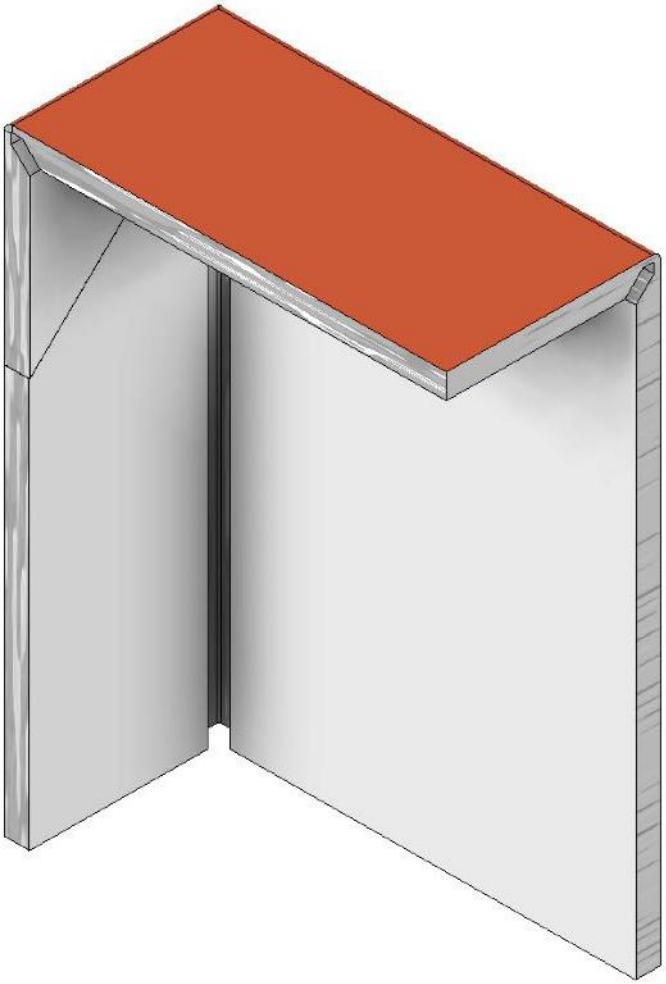
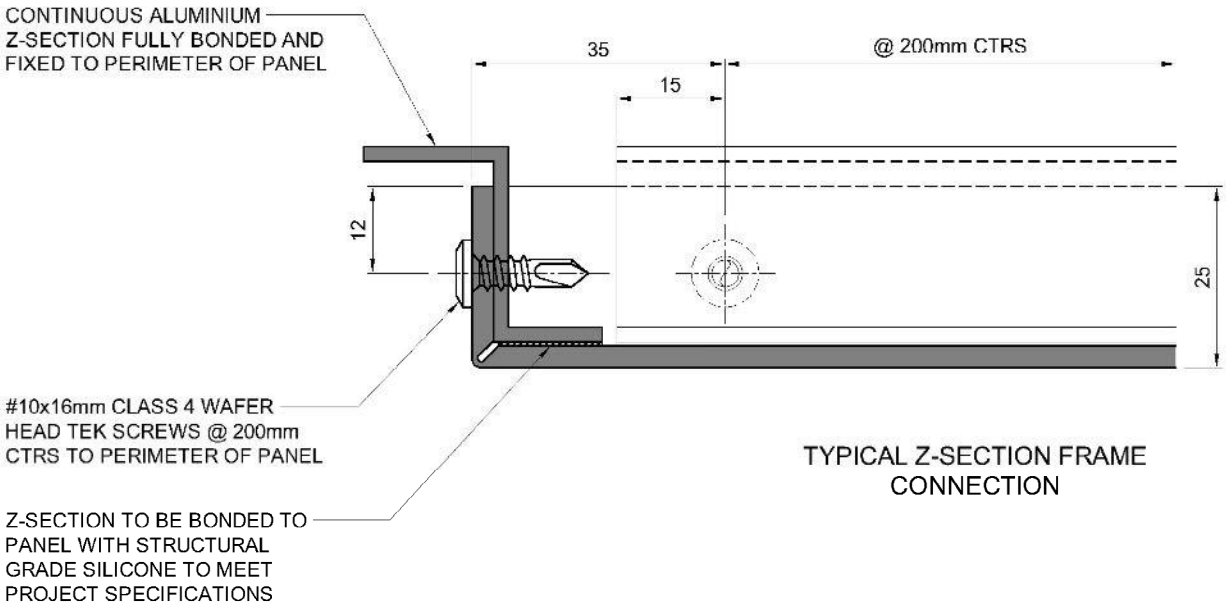
TYPICAL PANEL EDGE PREPARATION

3 FOLD RETURN LEG IN ONE MOVEMENT ALONG ENTIRE EDGE TO AN ANGLE SLIGHTLY OVER THE FINAL DESIRED ANGLE.

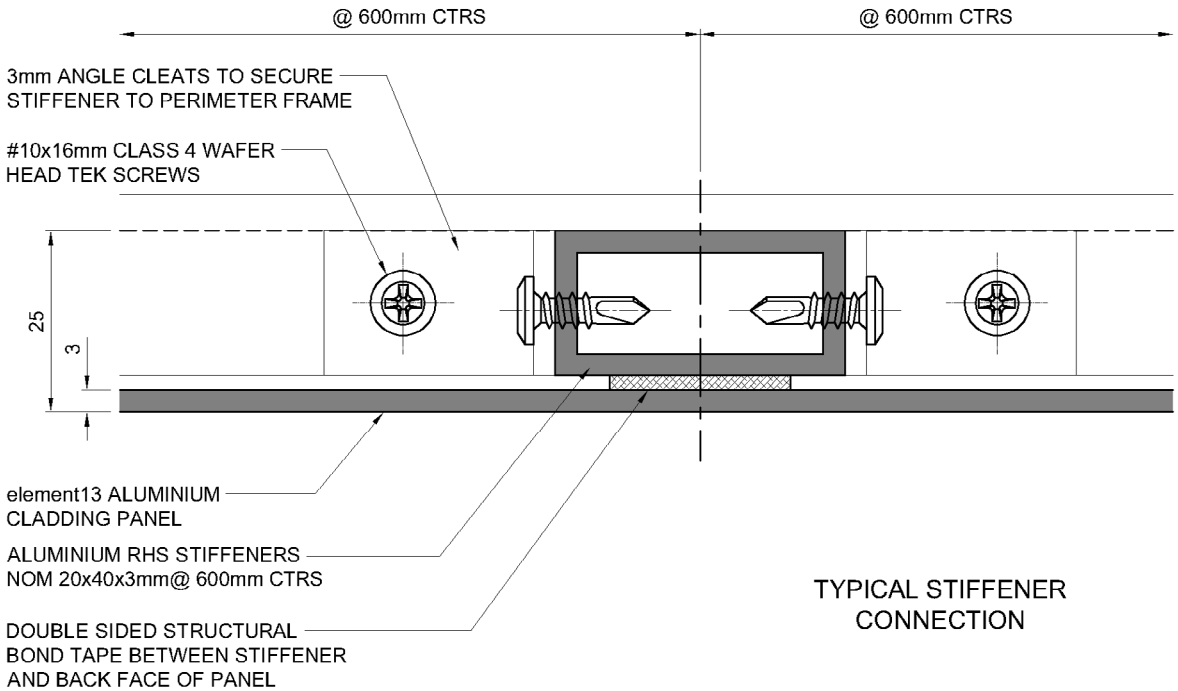
4 ALLOW LEG TO RETURN TO THE DESIRED ANGLE. DO NOT FLATTEN OR RE-FOLD.







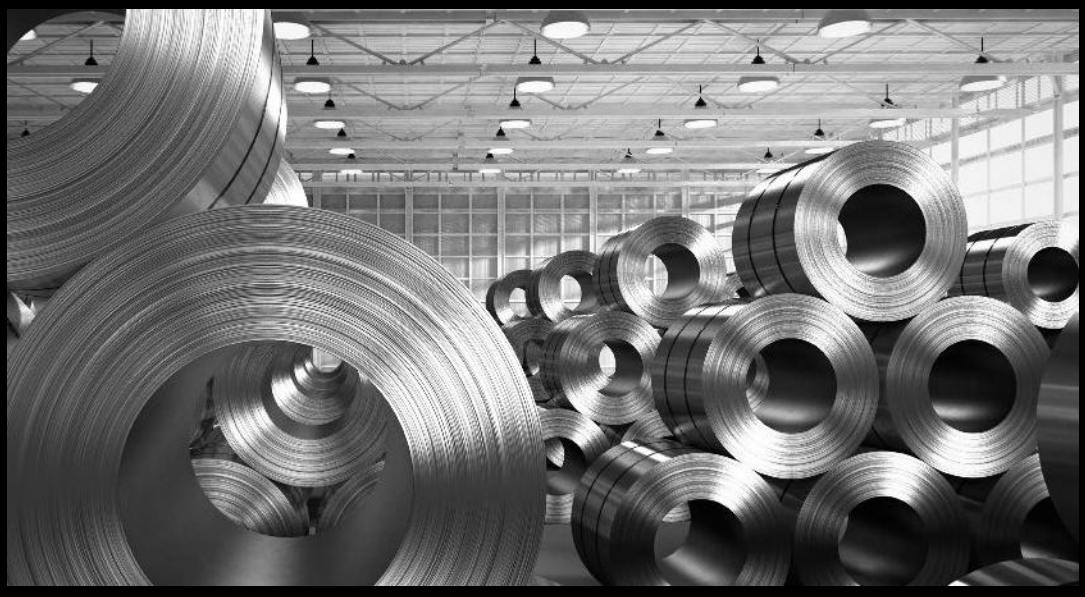
TYPICAL Z-SECTION FRAME CONNECTION



TYPICAL STIFFENER CONNECTION

NOTE:
PANEL STIFFENERS SHALL BE PARALLEL TO THE SHORT EDGE OF THE PANEL.
WHERE HORIZONTAL, STIFFENERS MUST BE AT A MIN SLOPE OF 1:12 TO ALLOW WATER RUNOFF.


ALDI
Car Park
KITCHEN
DINE IN



7.1 Installation guidelines

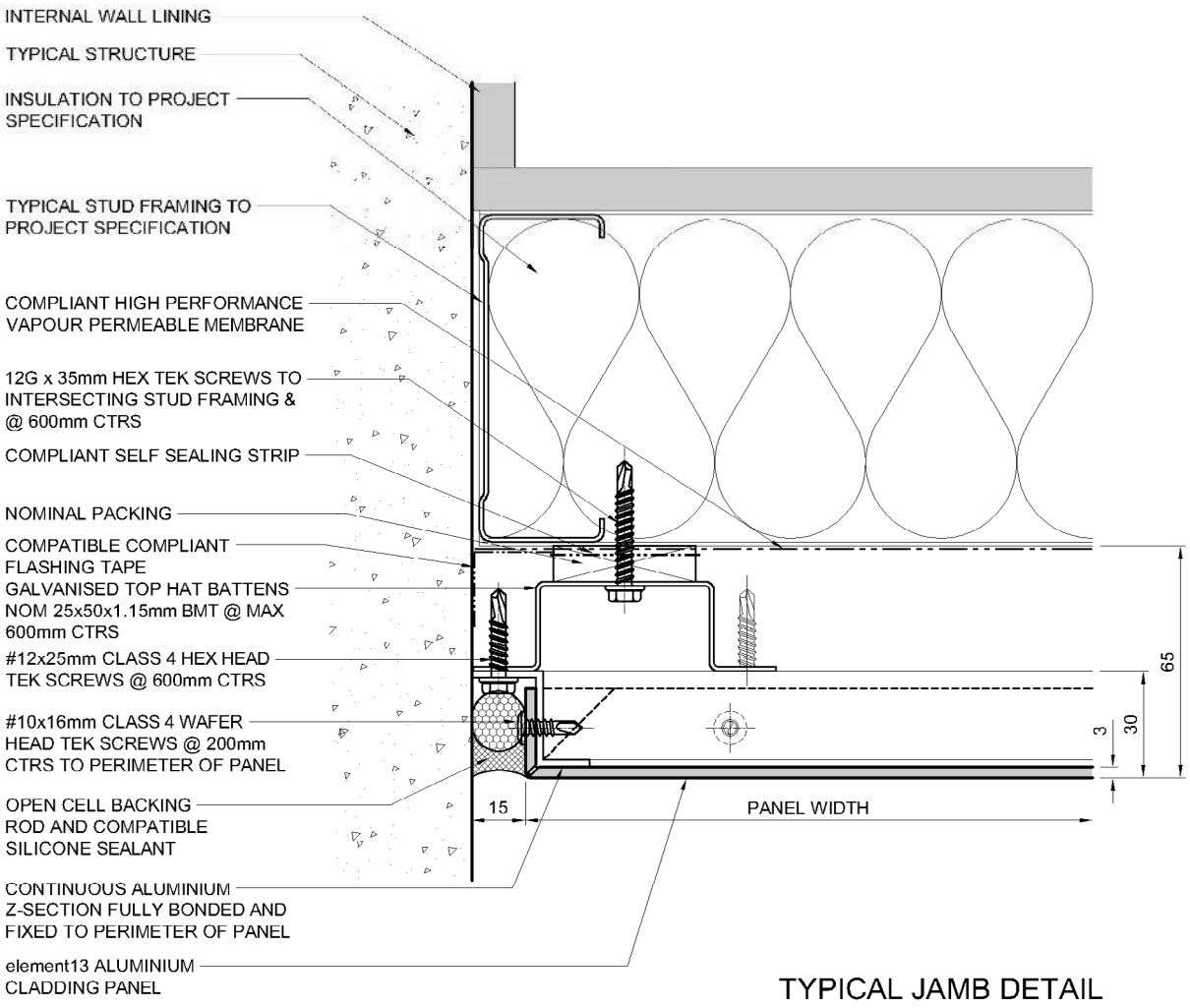
Installation Guidelines

All sheets should be installed in the same direction as marked on the protective film to prevent possible finish variation.

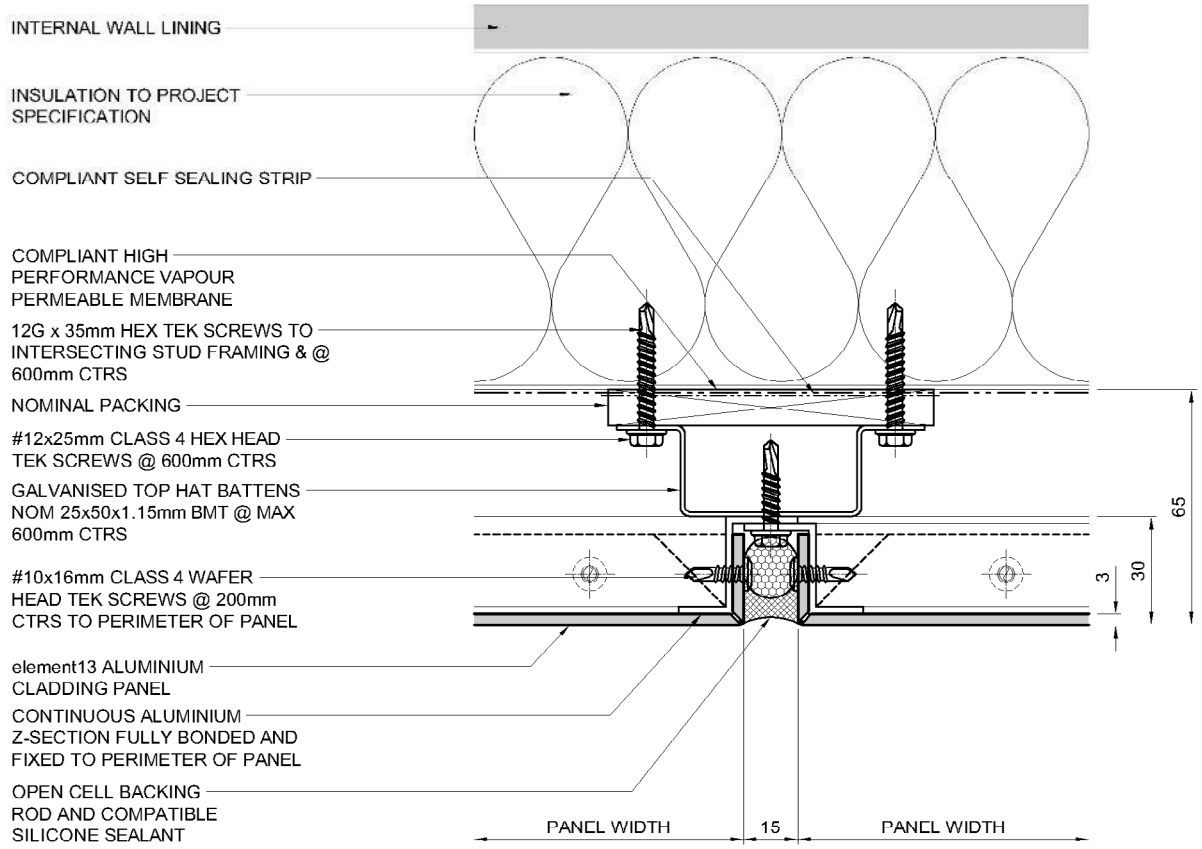
As minor colour variation can occur between production lots, it is recommended to place total requirement for a project in one order to ensure colour consistency.

Where aluminium materials come in contact with dissimilar metals, a proper insulator or caulking tape should be applied to insulate between dissimilar materials in order to avoid corrosive and electrolytic action.

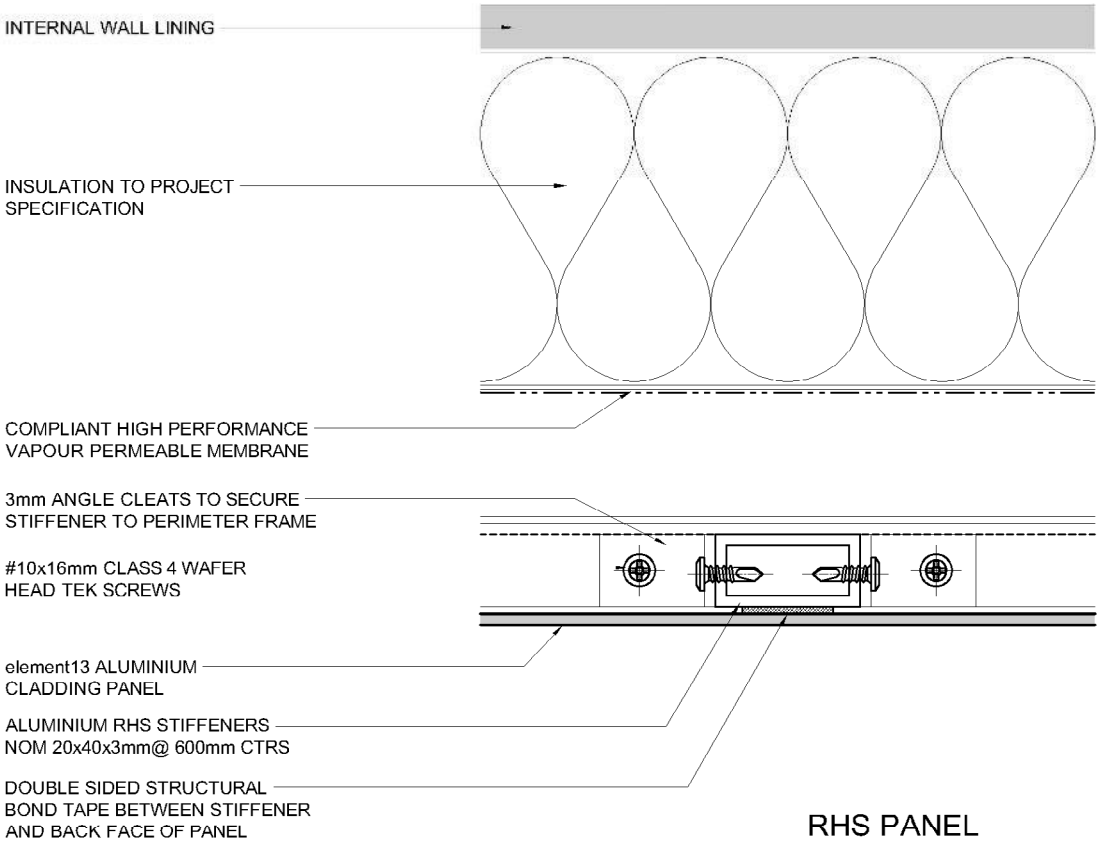
The panel returns should not be caulked before protective film is removed.



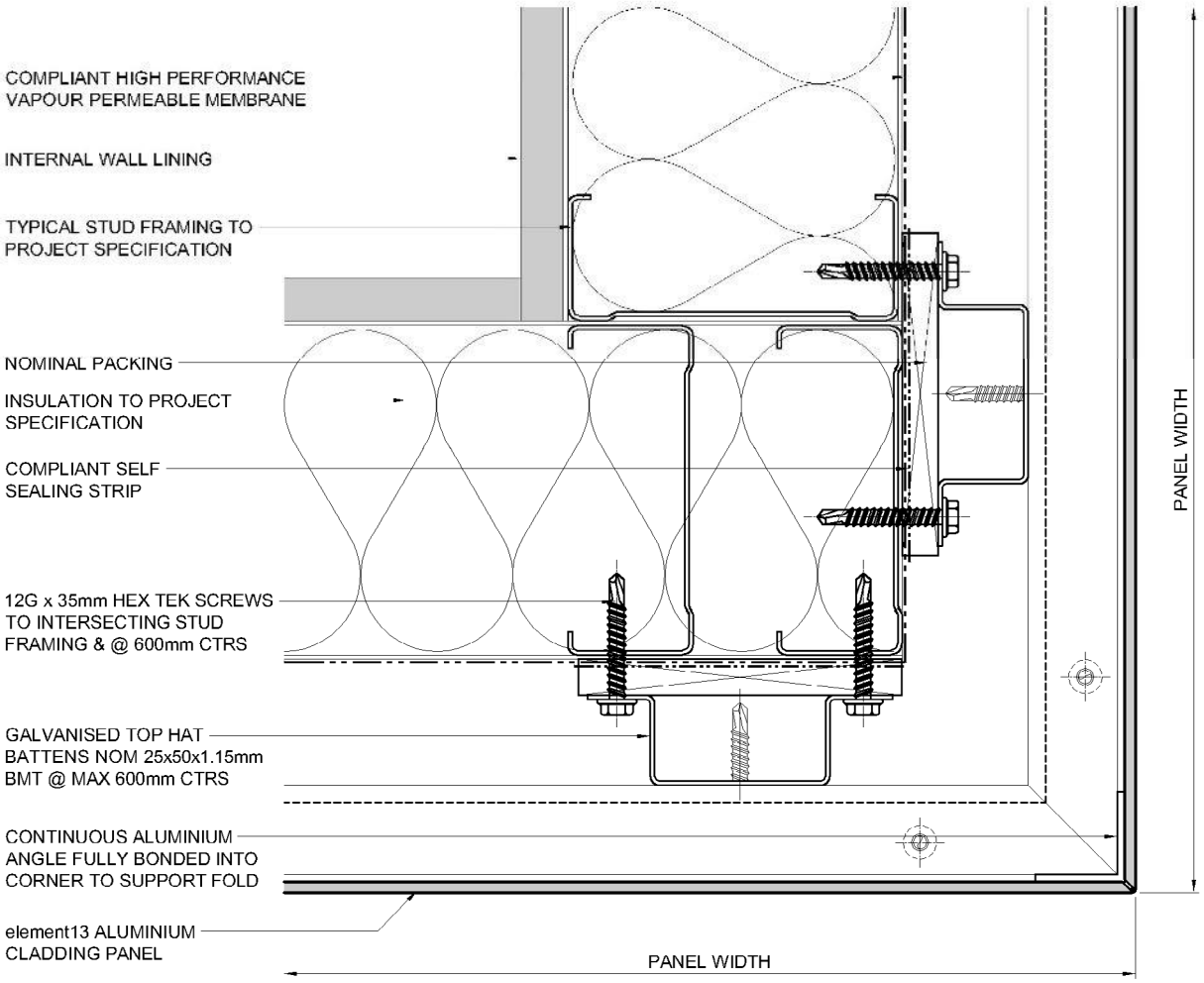
TYPICAL JAMB DETAIL



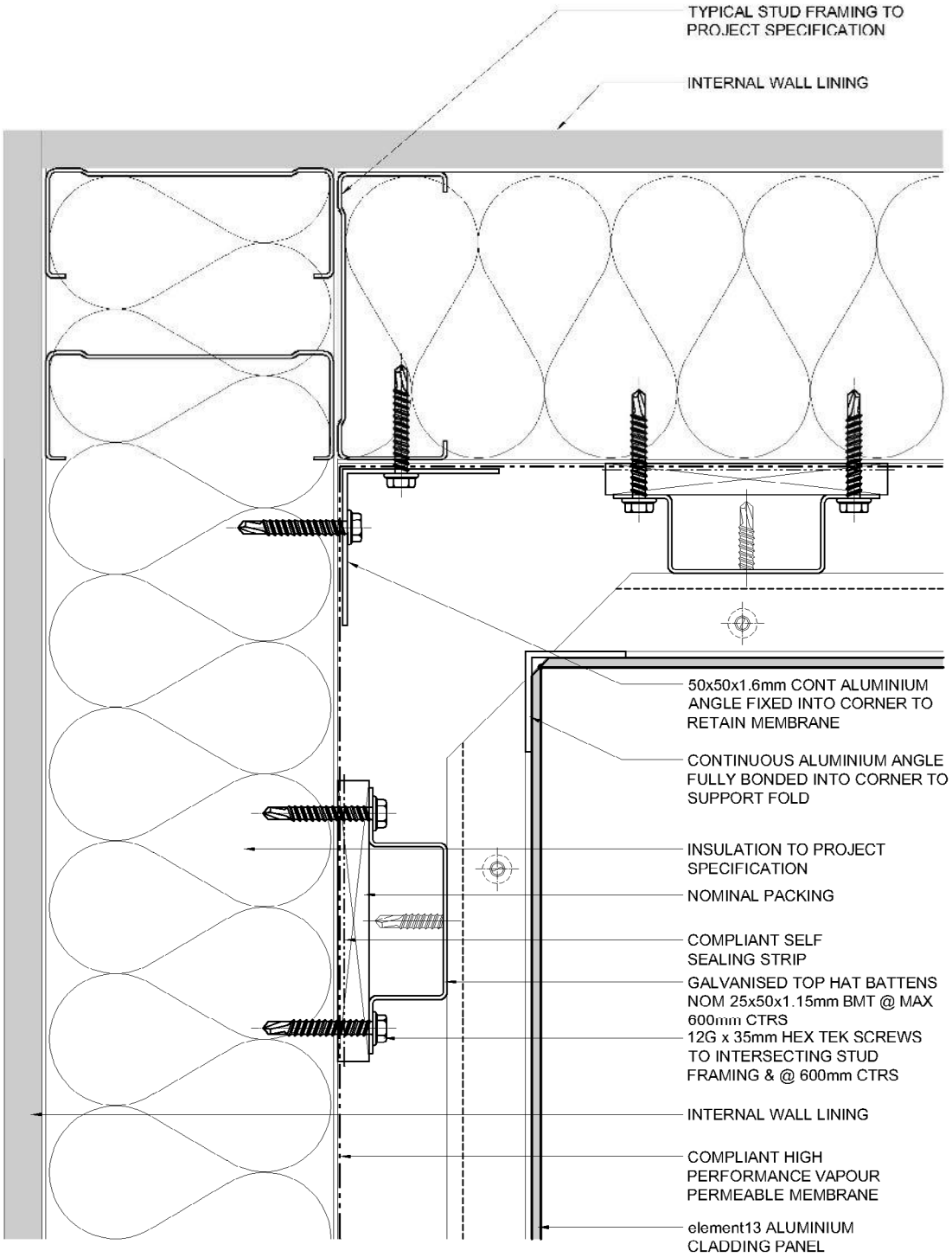
TYPICAL VERTICAL JOINT DETAIL



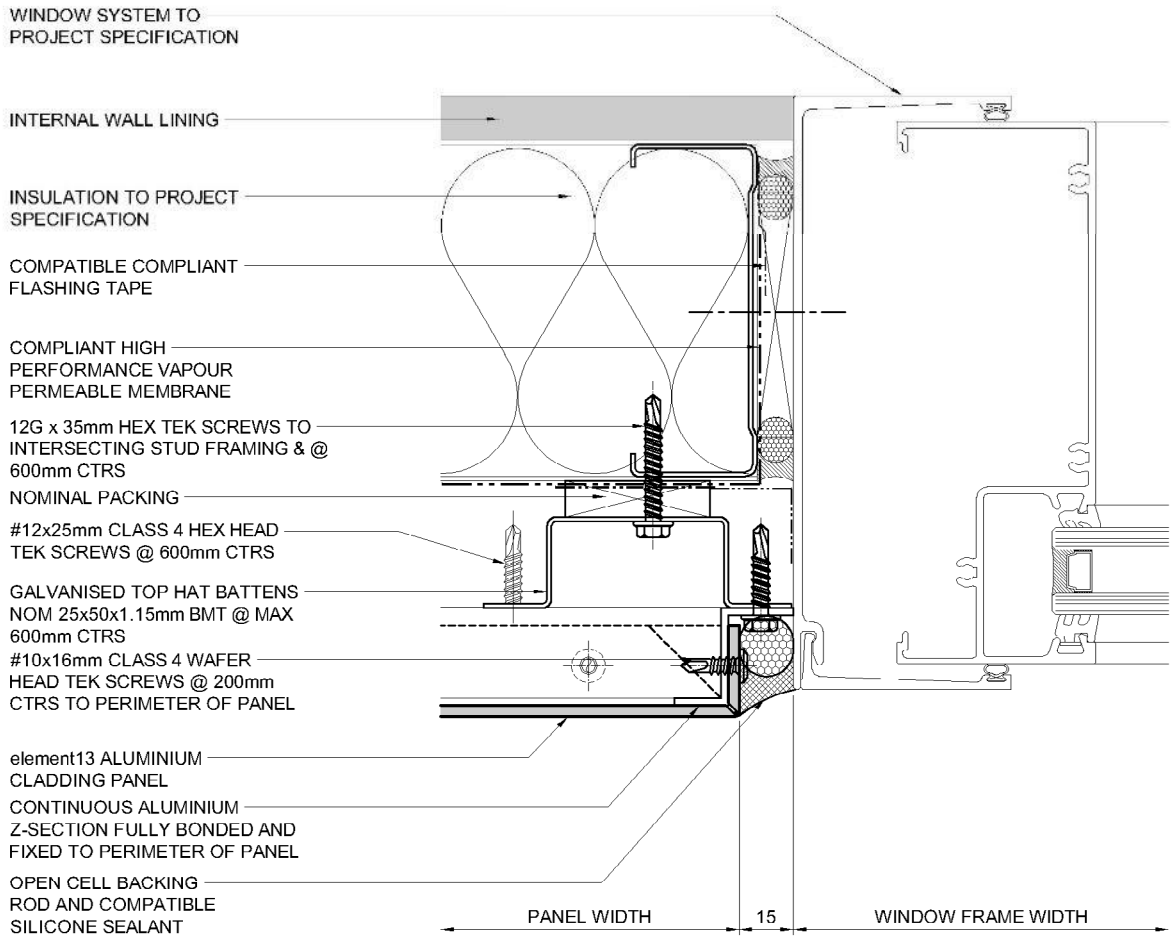
RHS PANEL
STIFFENER DETAIL



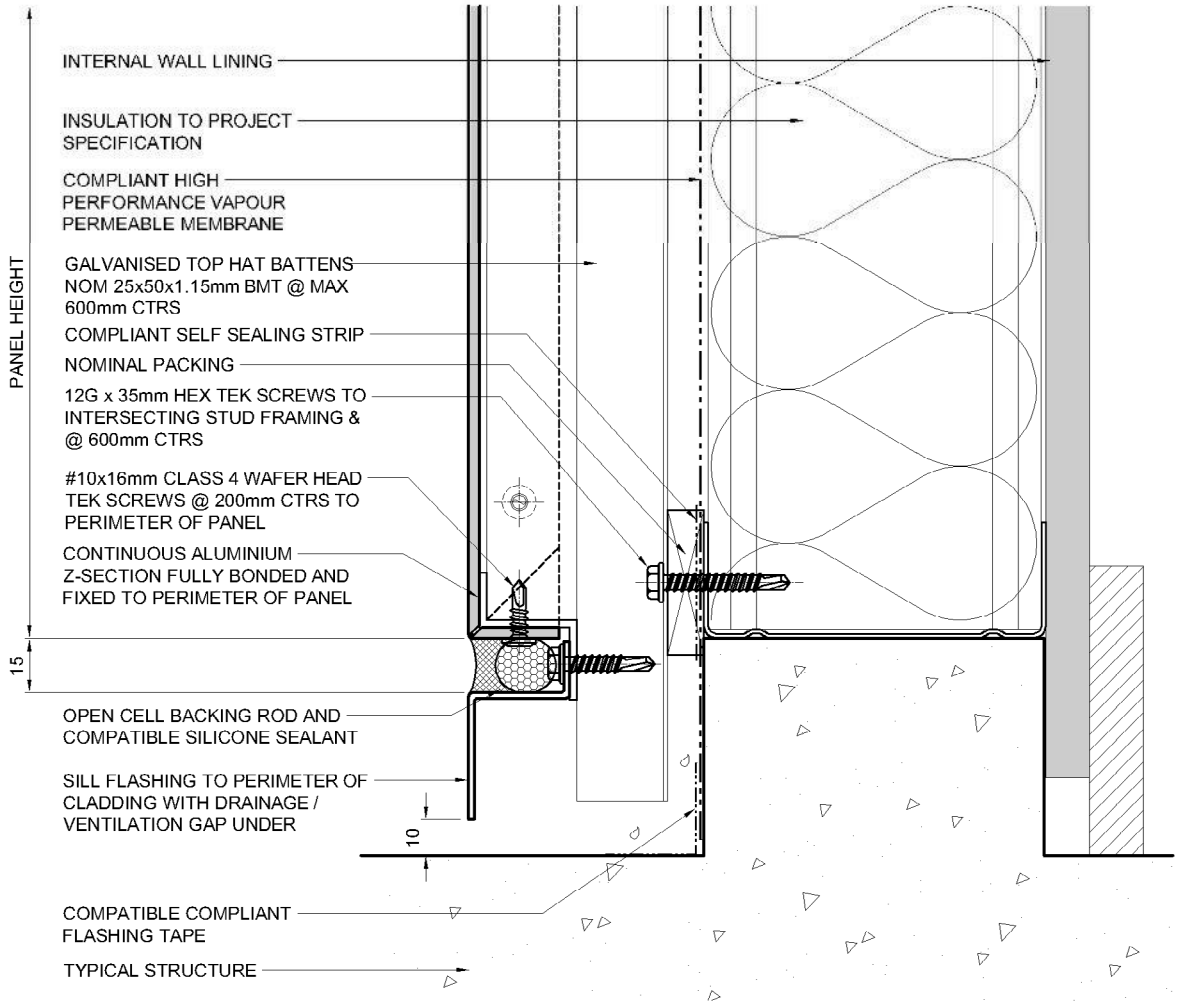
TYPICAL EXTERNAL
CORNER DETAIL



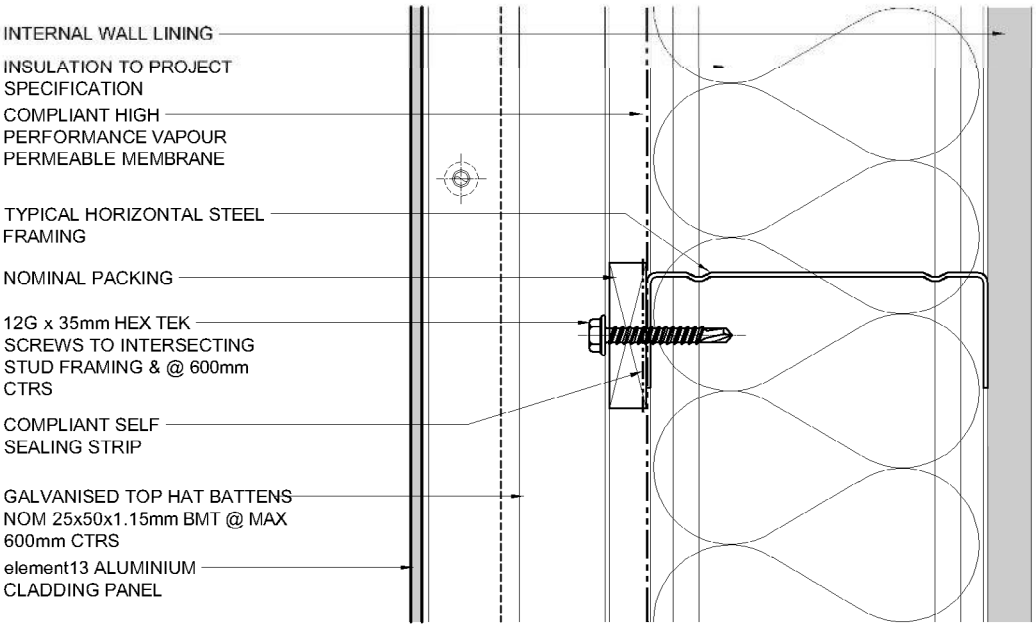
TYPICAL INTERNAL CORNER DETAIL



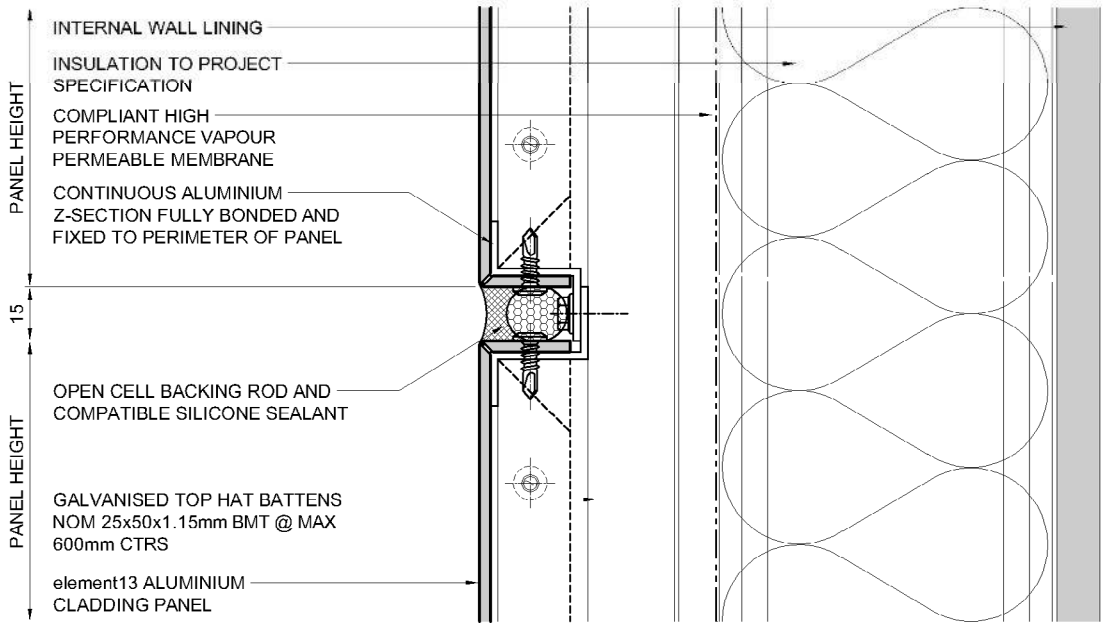
TYPICAL WINDOW
JAMB DETAIL



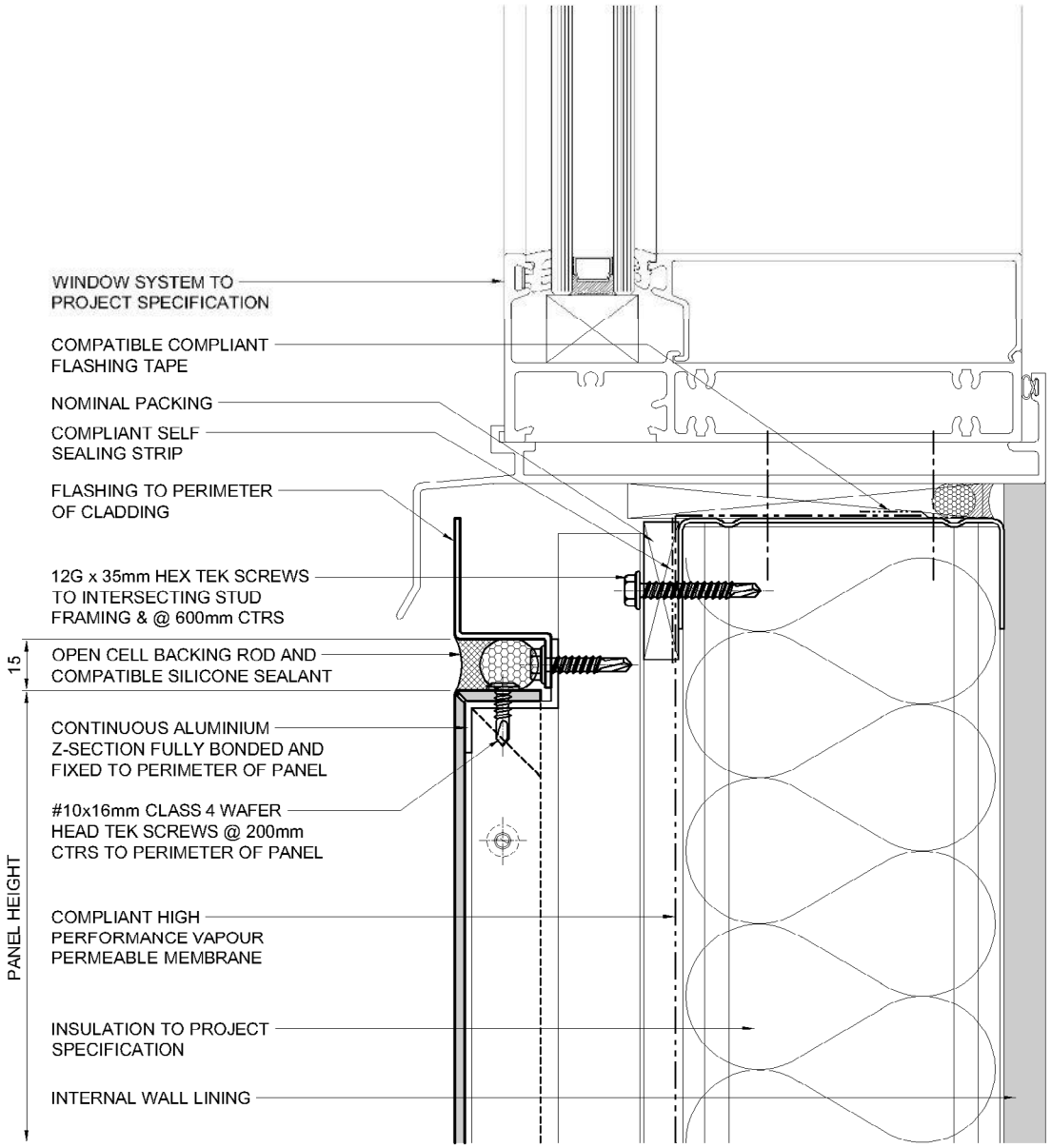
TYPICAL SILL DETAIL



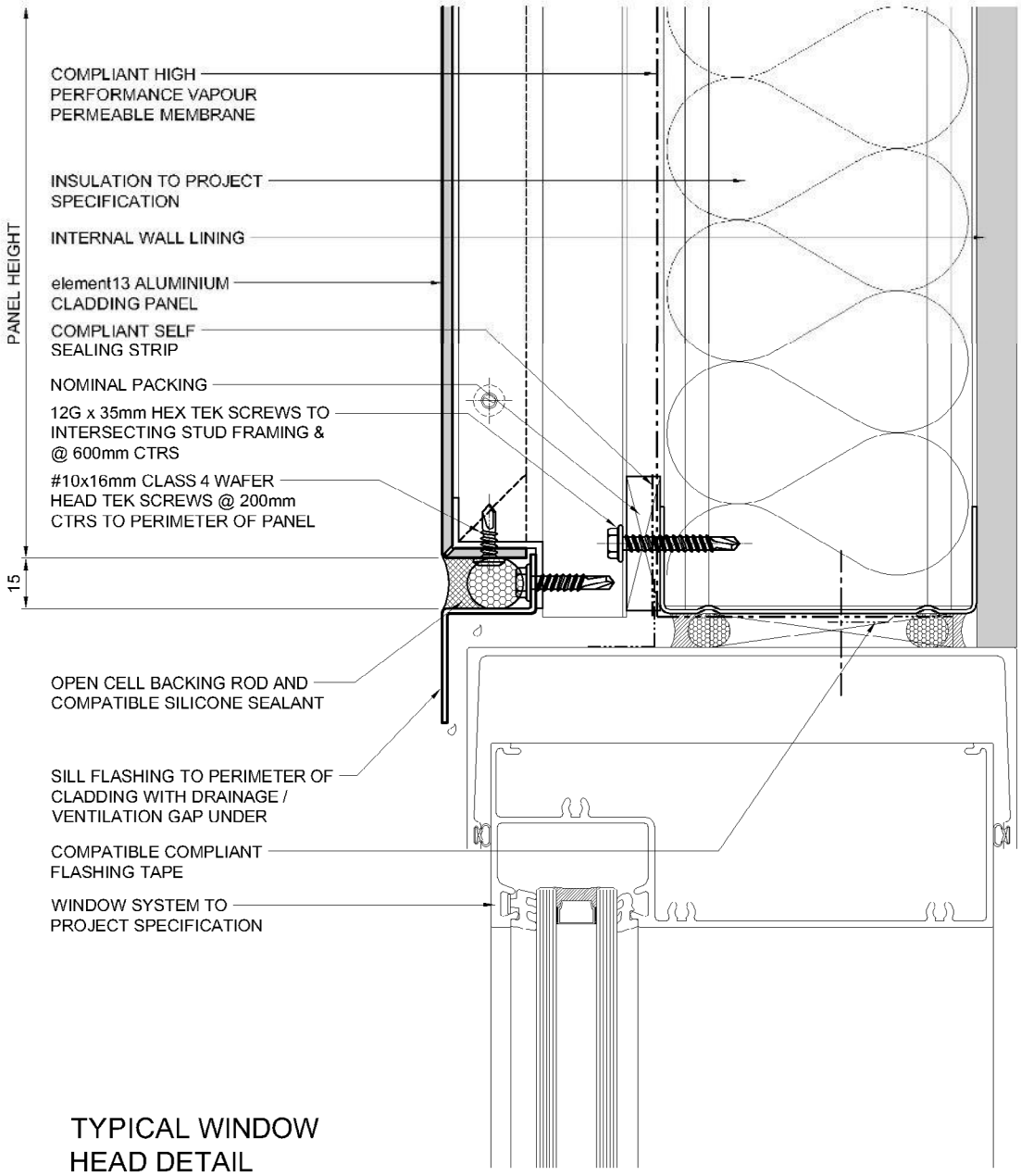
TOPHAT FIXING TO STEEL FRAME DETAIL



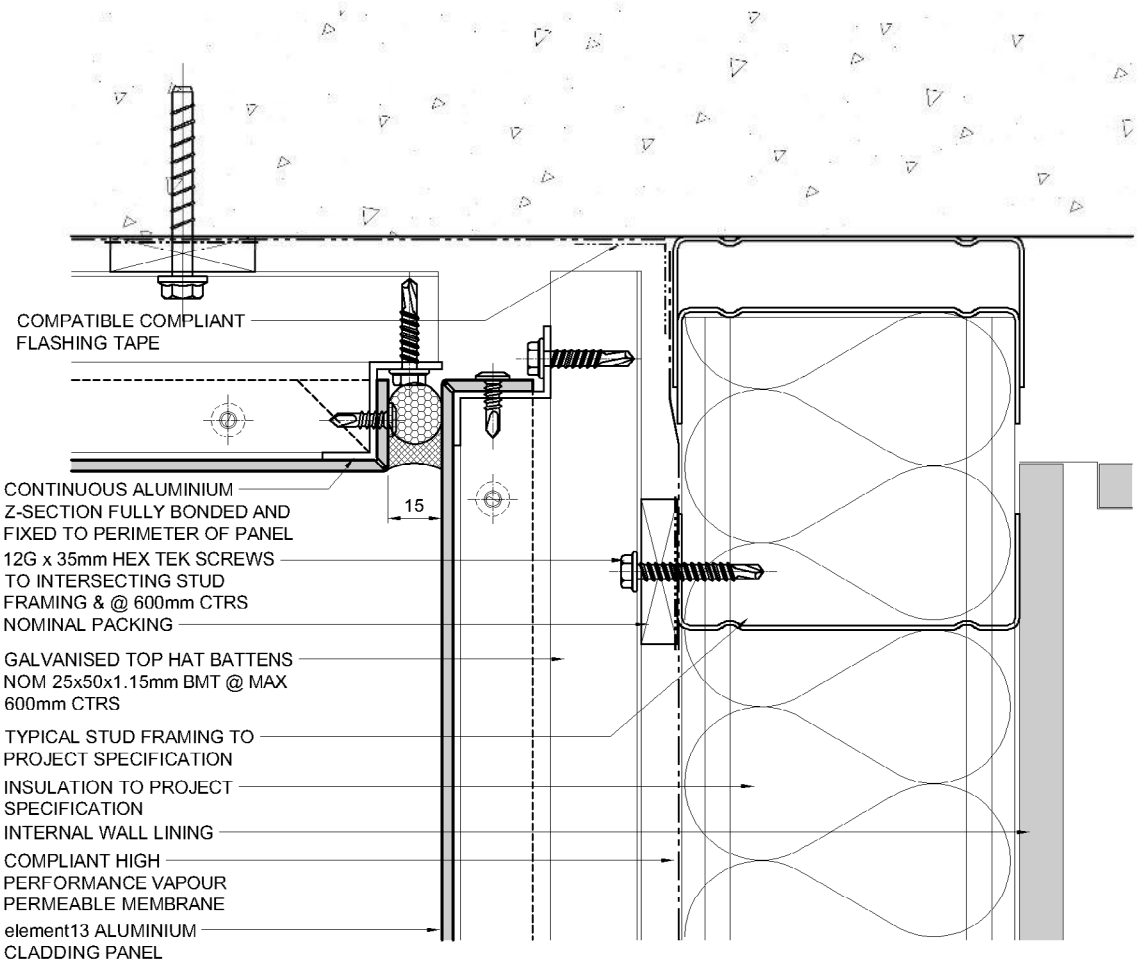
TYPICAL HORIZONTAL
PANEL JOINT DETAIL



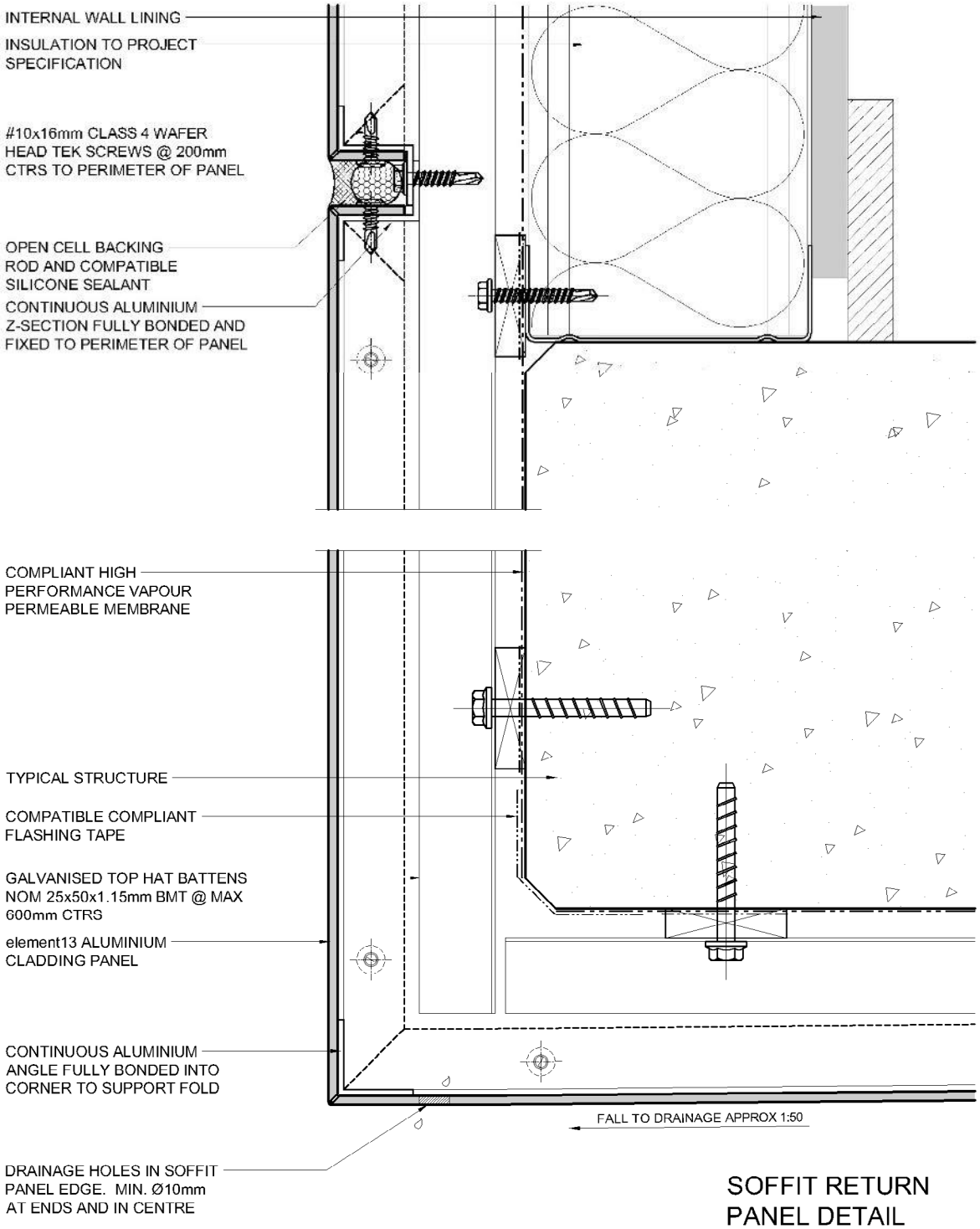
TYPICAL WINDOW SILL DETAIL



TYPICAL WINDOW HEAD DETAIL



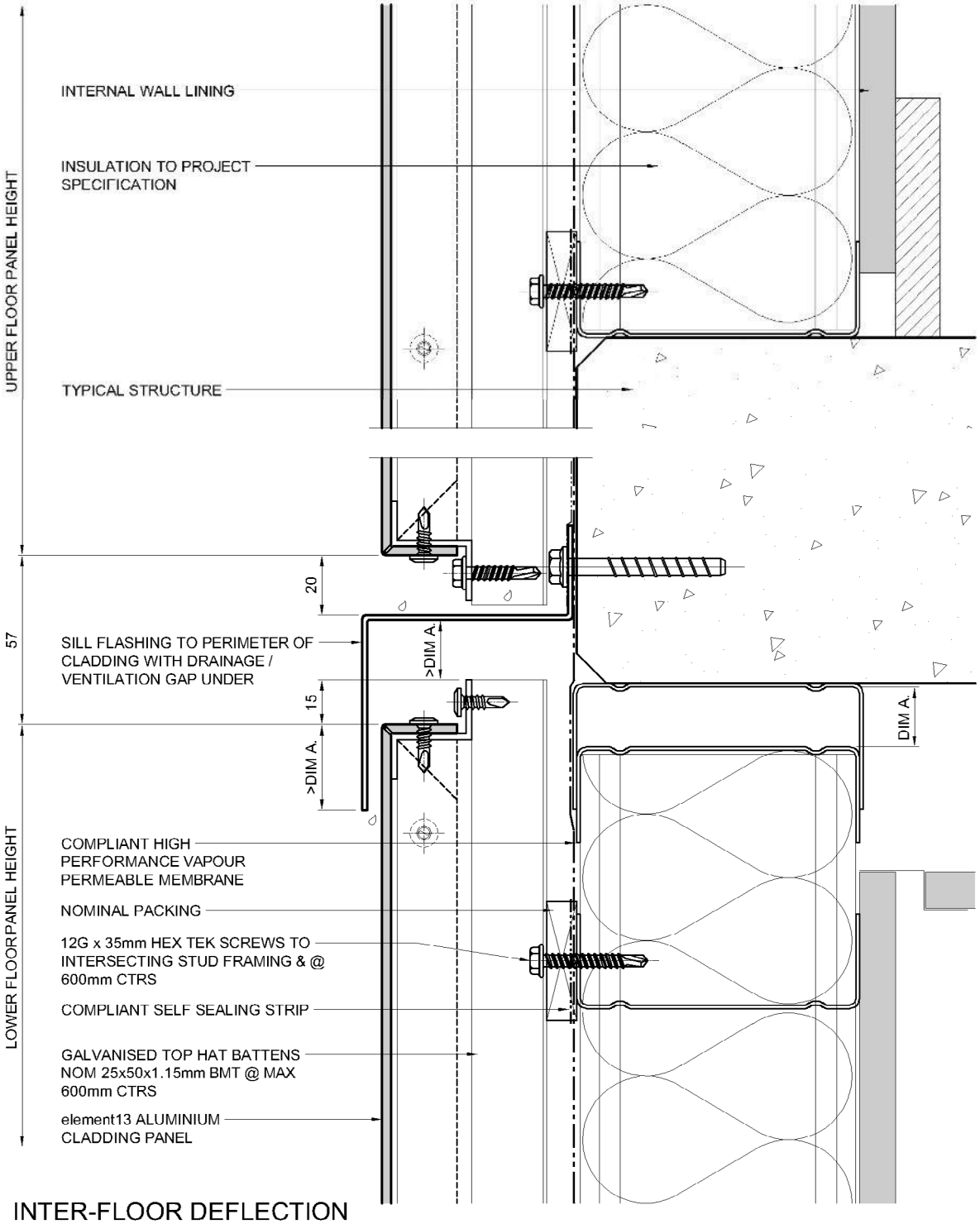
TYPICAL PANEL HEAD
DETAIL @ SOFFIT



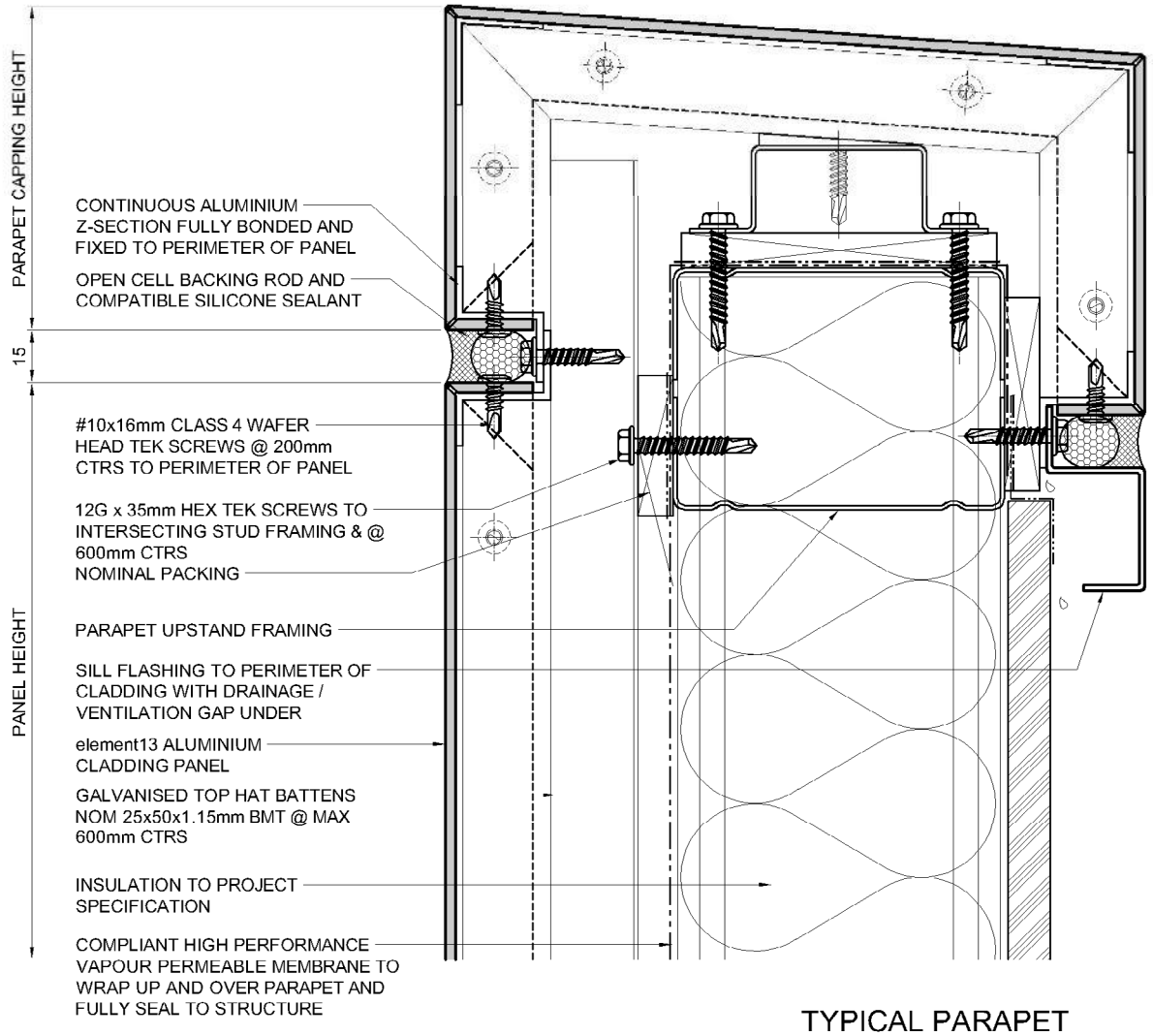
SOFFIT RETURN PANEL DETAIL

DATE: JULY 2022
SCALE: 1:1 @ A4

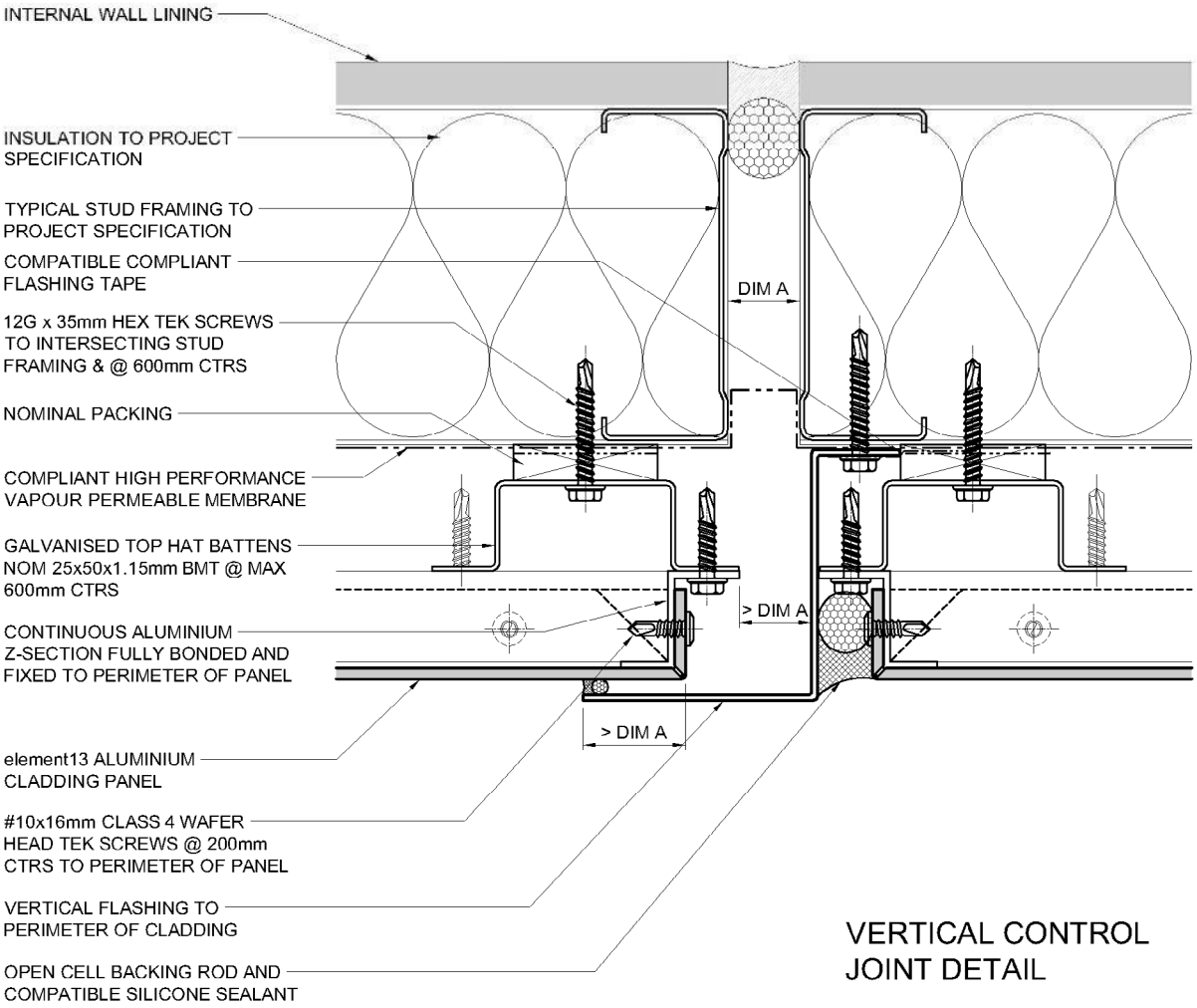
TYPICAL Z-CASSETTE FRAME



INTER-FLOOR DEFLECTION JOINT DETAIL



TYPICAL PARAPET DETAIL



VERTICAL CONTROL JOINT DETAIL

8.1 Cleaning

The PVDF coating on element13 is formulated to present a relatively non-adherent, inert surface to airborne soil. To maintain the appearance and performance of your product we recommend a routine basic cleaning of the panels. Below are a variety of methods available for removal of surface deposits.

Before beginning to clean coatings, note these precautions:

- Do not use wire brushes, steel wool, sandpaper, abrasives or other similar cleaning tools, which will mechanically abrade the coating surface.
- Some cleaning agents listed below should be tested in an inconspicuous area before use on a large scale. Always test a small area first.
- Warm or cold detergent solutions (recommended)
- A 5% solution in water of commonly used commercial and industrial detergents will not have any deleterious effect on the panel's surface. Use a cloth, sponge or soft bristle brush for application. Cleaning should be done on the shaded side of the building or, ideally, on a mild, cloudy day. Application of these solutions should be followed by an adequate rinse of water.

Solvents (only if necessary)

Most organic solvents are flammable and/or toxic, and must be handled accordingly. Keep away from open flames, sparks and electric motors. Use adequate ventilation, protective clothing and goggles. Remove non-water-soluble deposits (tar, grease, oil paint, graffiti, etc.) from the coated surfaces using these solvents with caution:

- Alcohols
- Denatured alcohol (ethanol)
- Isopropyl (rubbing) alcohol
- Methanol (wood alcohol)
- Petroleum Solvents
- VM&P naphtha
- Mineral spirits
- Turpentine (wood or gum spirits)
- Aromatic Solvents
- Xylol (xylene)
- Toluol (toluene)

(These solvents should be used with caution. Limit contact to five minutes and rinse well. Test a small area first.)

DO NOT use the following solvents on element13® panels.

- Ketones, Esters, Lacquer thinner, Methyl Ethyl Ketone (MEK)
- Methyl isobutyl ketone (MIBK)
- Ethyl acetate (nail polish remover)
- Lacquer thinner
- Acetone/Paint Remover

Chemical solutions (only if necessary)

- Sodium hypochlorite solution (laundry bleach, Clorox)
- Hydrochloric acid (muriatic acid)
- Oxalic acid
- Acetic acid (vinegar)
- Hydrochloric acid (10% muriatic acid), diluted with 10 volumes of water, may assist in removing rust or alkali mortar stains from coil and extrusion surfaces. Limit contact to five minutes and rinse well.

Caution
Acid solutions are corrosive and toxic. Oxalic acid solutions or acetic acid (vinegar) may be used for the same purpose. Laundry bleach may assist in removing certain stains. Flush all surfaces with water after use.

Excess sealant removal

Precautions should be taken to prevent sealants from contacting the visible coated surface. Sealants may be very difficult to remove. If any does get on the element13 coated surface, it should be removed promptly with a solvent, such as an alcohol or naphtha type.

Caution
It may be possible for solvents to extract materials from sealants, which could then stain the painted surface or prove harmful to sealants. Always test a small area first.

8.2 Product care and handling

Surface Protection film:

element13® surface protection film is designed to remain on the panel during transportation, fabrication and installation. In order to achieve best results note the following:

- Remove element13 surface protection film within 45 days of installation to avoid adhesive residual on the coated surface.
- Do not apply tapes, sealants or any adhesives to the protection film as this may cause substances to penetrate the film and affect the coated surface below.
- Do not apply spray paints, permanent markers or attempt to write on the film as colours may penetrate the film and affect the coated surface below.

Handling and Storage:

element13® is a pre-finished product. While there is a surface protection film applied to the coated surface care must be taken during transport, fabrication and installation to avoid dents and scratches. For best results please note the following:

- Avoid contact with sharp edges as these may scratch the coated surface through the protection film.
- Ensure swarf is removed from the surface during and after fabrication.
- Allow a minimum of two people to manoeuvre large panels to avoid scratching or injury.
- When stacking element13 panels ensure surfaces are clean, dry and free from swarf, dirt and foreign objects.
- element13® should be stored horizontally in a flat, cool, dry environment with relatively stable temperatures.
- When stacking pallets ensure to adopt safe work procedures to avoid damage and injury.

8.3 Warranty

The element13 product, when fabricated and installed in accordance with this Technical Manual, has a warranty period of up to 20 years pending project specific finishes, specified use and location.

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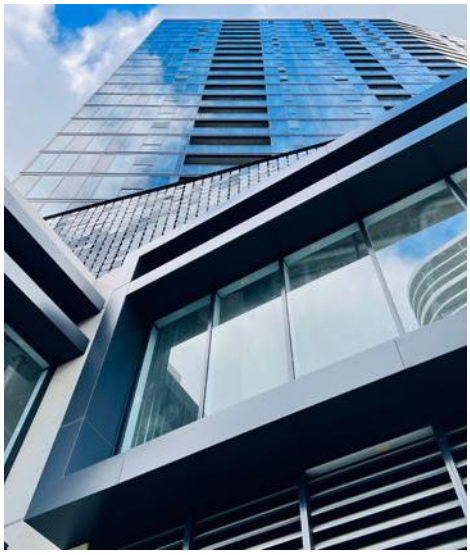

For more information

For information about
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1300 097 999

Or visit valmondgibson.com where you'll find resources detailing:

- Architectural details
- Finishing options and colour selections
- Valmond & Gibson technical data
- Product brochure downloads
- Machining & installation guides
- Specifiers kit
- Warranty information
- Contact information

All colours represented in all imagery have been reproduced as a guide only.

For precise colour representation please refer to physical product samples.

You can order Valmond & Gibson samples online at **valmondgibson.com**

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element 13

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Version 08-23.AUS