



STRATUM™
WEATHERBOARDS



BGC's stunning InnovaTM range of facade, lining and flooring products will move you to reassess your concept of excellence in facades and flooring systems. Durable and dynamic, fresh and contemporary, InnovaTM is already turning industry heads. Now let the InnovaTM range of cladding and flooring products breathe new life into your creativity and project specification.

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STRATUM™ WEATHERBOARDS

A vibrant, innovative alternative to traditional weatherboards, Stratum™ is an endlessly adaptable range of plank products.

Choose one Stratum™ profile as a standalone, or mix 'n' match two or three to create eye catching and original Innova™ exterior cladding.

- / Easy shiplap joining
- / Factory sealed, ready for painting
- / Quick, simple installation: manual nailing, gun nailing or screw fixing

STRATUM™ Weatherboards

- / Stratum™ is a 300mm wide weatherboard
- / Stratum™ Woodgrain is a 300mm wide weatherboard embossed with a woodgrain pattern giving a timber like appearance
- / Stratum™ Duo is a 300mm wide weatherboard with a 16mm centre groove and the look of two slimmer weatherboards
- / Stratum™ Duo Woodgrain is a 300mm wide weatherboard with a 16mm centre groove and the look of two slimmer weatherboards embossed with a woodgrain pattern giving a timber like appearance
- / Stratum™ Trio is a 300mm wide weatherboard with 2 x 16mm horizontal grooves
- / Stratum™ Contour is a 170mm wide weatherboard with a 2mm indentation at the top of each weatherboard

Specify Stratum™ with confidence



bgcinnovatedesign.com.au





Innova™ deemed to comply external facade systems.

- / Compressed fibre cement range
- / Architectural designed weatherboard range
- / Grooved and profiled cladding range

BGC's products have superior fire performance against four key indices.



Ignition index = 0

Fibre cement does not ignite



Spread of flame index = 0

There is no spread of fire with fibre cement



Heat evolved index = 0

Heat does not evolve from fibre cement



Smoke developed index = 0-1

Smoke is not emitted from fibre cement



Up to **BAL-40**
as per AS3959:2018



Tested in Australia by accredited Australian authorities **CSIRO** and **Exova Warrington**

Case Study 01.

Project: Bellsview - 85 Townhouses
Project: Sebae - 76 Townhouses
Location: Lawson, ACT
Builder & Developer: Art Group

“ The developer chose Stratum™ as it gave a more contemporary look to traditional weatherboards and it is easier and faster to install”.

Product:
Innova™ Stratum™

- 1 Sebae
- 2 Bellsview
- 3 Sebae

Adrian Wood
Account Manager
Bunnings Trade



Case Study 02.

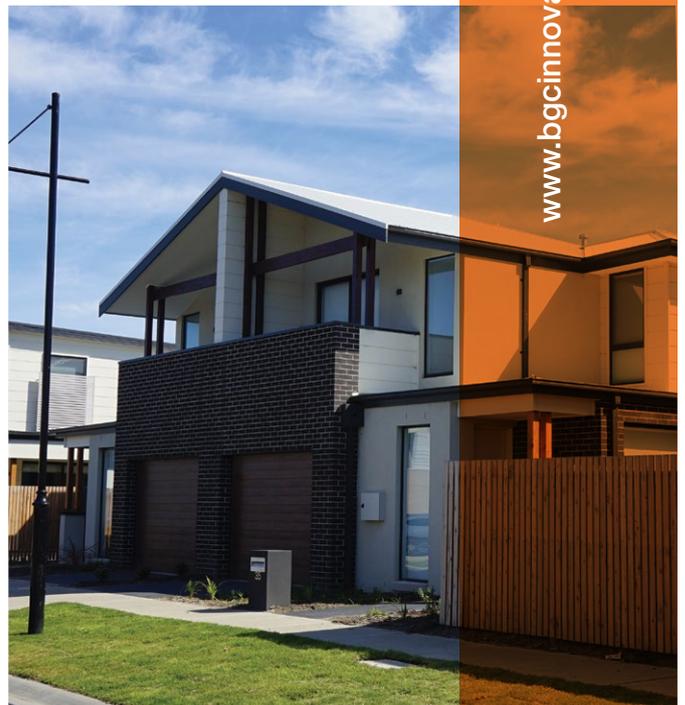
Project: 110 Townhouse Development
Location: Keysborough, Victoria
Builder: Saw Constructions

“Stratum™ weatherboards were ideal for this project, the boards are wider and give us a more contemporary and interesting facade.

The way Stratum™ is designed with the shiplap joins, they are quick to install and every shadow line is perfect and being factory finished they are ready for painting as soon as they are installed on site”.

Andrew Gillespie
Senior Business Manager
Saw Constructions

Products:
Innova™ Stratum™
Innova™ Nuline™ Plus



Product Description

Stratum™ features a shiplap horizontal joining system making it quick and simple to achieve a classic yet contemporary look. With 6 different profiles available, there is sure to be a profile to suit any project.

Stratum™ can be used for exterior cladding on low to medium rise buildings or for a different twist, can be used to create a stunning interior feature wall.

Stratum™ is not subject to timber rot, decay, cracking, twisting or white ant damage and will not support combustion. The result is a safer, more durable cladding that requires minimum maintenance.

Advantages

- / Shiplap joining system makes Stratum™ weatherboards quick and simple to install
- / Gun nailing, manual nailing or screw fixing
- / Quick and easy to cut, handle and install
- / Acrylic sealed, ready for painting
- / Durable and low maintenance

Weatherboard Tolerances

- / Stratum™ complies with the requirements of AS 2908.2

Weatherboard Sizes and Weight - Table 01

THICKNESS mm	PROFILE	WEIGHT kg/m	WIDTH mm	LENGTH mm
12	Stratum™	4.8	300	4200
	Stratum™ Woodgrain			
	Stratum™ Duo	4.7		
	Stratum™ Duo Woodgrain			
	Stratum™ Trio	4.6		
10	Stratum™ Contour	2.2	170	

Weights are based on Equilibrium Moisture Content.



Product Information

Stratum™ is manufactured from Portland cement, finely ground silica, cellulose fibres and water. Weatherboards are cured in a high-pressure steam autoclave to create a durable, dimensionally stable product.

Stratum™ can be installed on both timber and steel frame. Steel frame installation requires a thermal break to be installed.

Stratum™ is manufactured to the Australian / New Zealand Standard AS/NZS 2908.2-2000 Cellulose-Cement Products, Part 2: Flat sheets and Stratum™ is classified as Type A-Category 4.

Fire Resistance

BGC Fibre Cement products have been tested in accordance with Australian Standard AS1530.3.

These tests deemed the following Early Fire Hazard Indices:

/ Ignitability Index	0
/ Spread of Flame Index	0
/ Heat Evolved Index	0
/ Smoke Developed Index	0-1

Stratum™ weatherboards are deemed non-combustible and may be used where non-combustible materials are required.

Thermal Conductivity

Stratum™ weatherboards have thermal conductivity of 0.088 W/mk at equilibrium moisture content.

Weather Resistance

- / Stratum™ conforms to the National Construction Code (NCC) requirements for exterior wall applications.
- / Stratum™ has been tested to AS/NZS 4284 Testing of Building Facades

Moisture Management

Designers, specifiers and builders have a duty of care to identify moisture-associated risks with any individual building design.

Wall construction design should consider both the interior and exterior environments of the building to effectively manage moisture.

Special consideration should be given to buildings that are in extreme climates or at higher risk of wind driven rain.

In addition, all wall openings, penetrations, junctions, connections, window heads, sills and jambs must incorporate appropriate flashing for waterproofing. All other components, materials and installation methods used to manage moisture in walls should comply with the relevant Australian Standards and the National Construction Code (NCC).

Durability

Stratum's™ physical properties make it a very durable product.

- / Stratum™ is immune to permanent water damage in both short and long-term exposure.
- / Stratum™ will not rot or burn and is unaffected by termites, air, steam, salt and sunlight.
- / Stratum™ is not adversely affected over a temperature range of 0°C to 95°C.

Vapour Permeable Moisture Barrier

A vapour permeable moisture barrier must be installed in accordance with the AS 4200.2 – 'Pliable building membranes and underlays – Installation and the vapour permeable moisture barrier manufacturers' guidelines.

The vapour permeable moisture barrier shall comply with AS/NZS 4200.1 and have the following properties:

- / VCM category - Vapour Permeable (Class 3 or Class 4)
- / Water control classification - Water barrier

A vapour permeable moisture barrier is used to prevent moisture ingress by acting as a drainage plane while enabling water vapour build up from inside the frame to escape.

Flashing

It is a requirement of the NCC to install flashings to all penetrations which includes but not limited to windows, doors, meter boxes, intersections etc.

Insulation

Stratum™ weatherboards will require insulation to be installed in some regions that have thermal loss regulations. Insulation should be installed in accordance with the manufacturer's instructions. Insulation batt must fit snugly between framing members to minimise heat loss.

Cutting and Drilling

Stratum™ may be cut to size on site. If using power tools for cutting, drilling or sanding they must be fitted with appropriate dust collection devices or alternatively an approved (P1 or P2) dust mask and safety glasses shall be worn. It is recommended that work always be carried out in a well ventilated location.

The most suitable cutting methods are:

/ DURABLADE

180mm diameter. This unique cutting blade is ideal for cutting fibre cement. It can be fitted to a 185mm circular saw, i.e. Makita or similar. Please ensure safe working practices when using.



/ NOTCHING

Notches can be made by cutting the two sides of the notch. Score along the back edge then snap upwards to remove the notch.

/ DRILLING

Use normal high-speed masonry drill bits. Do not use the drill's hammer function. For small round holes, the use of a hole-saw is recommended. For small rectangular or circular penetrations, drill a series of small holes around the perimeter of the cut out. Tap out the waste piece from the sheet face while supporting the underside of the opening to avoid damage. Clean rough edges with a rasp.

Cutting Around Openings

When cutting weatherboard around window or door openings, a 5mm nominal clearance must be provided at the jamb, head and sill.

Weatherboard courses should be set out so that as near to a full weatherboard width as possible remains under a window, or similar openings.

Flashing and mouldings must be installed as appropriate to prevent ingress of water.

Handling and Storage

Stratum™ must be stacked flat, up off the ground and supported on equally spaced (max 400mm) level gluts. Care should be taken to avoid damage to the ends, edges and surfaces.

Weatherboards must be kept dry. When stored outdoors it must be protected from the weather. Weatherboards must be dry prior to fixing or finishing.

Avoid Inhaling Dust

When cutting sheets, work in a well-ventilated area and use the methods recommended in this literature to minimise dust generation. If using power tools wear an approved (P1 or P2) dust mask and safety glasses.

These precautions are not necessary when stacking, unloading or handling fibre cement products.

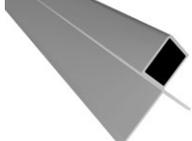
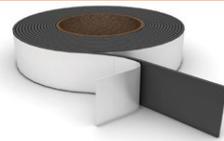
For further information or a Material Safety Data Sheet contact the nearest BGC Sales Office or go to www.bgcinnovadesign.com.au

Coastal Areas

The durability of galvanised nails and screws used for exterior cladding in coastal or similar corrosive environments can be as low as 10 years.

For this reason BGC recommend the use of stainless steel fasteners within 1km of the coast or other large expanses of salt water.

Accessories available from BGC - Table 02

INTERNAL ALUMINIUM CORNER FOR STRATUM™, STRATUM™ DUO AND STRATUM™ TRIO	3000mm x 17mm	BGC PRODUCT CODE INTCNR17	
EXTERNAL ALUMINIUM CORNER FOR STRATUM™, STRATUM™ DUO AND STRATUM™ TRIO	3000mm x 17mm	BGC PRODUCT CODE EXTCNR17	
INTERNAL ALUMINIUM CORNER FOR STRATUM™ CONTOUR	3000mm x 25mm	BGC PRODUCT CODE INTCNR25	
EXTERNAL ALUMINIUM CORNER FOR STRATUM™ CONTOUR	3000mm x 25mm	BGC PRODUCT CODE EXTCNR25	
EXTERNAL ALUMINIUM CORNER SNAP ON CORNER PART A (For use with Stratum™ Contour)	3600mm x 45mm	BGC PRODUCT CODE SNAPC NRA36	
EXTERNAL ALUMINIUM CORNER SNAP ON CORNER PART B (For use with Stratum™, Stratum™ Duo and Stratum™ Trio)	3600mm x 45mm	BGC PRODUCT CODE SNAPC NRB36	
EXTERNAL ALUMINIUM CORNER SNAP ON CORNER PART C (For use with Stratum™, Stratum™ Duo and Stratum™ Trio)	3600mm x 45mm	BGC PRODUCT CODE SNAPC NRC36	
STRATUM™ JOINER (Not Suitable for Stratum™ Contour)	3000mm x 12mm	BGC PRODUCT CODE STRJNR12	
POWDERCOATED STEEL STRATUM™ CONTOUR STARTER STRIP	3000mm	BGC PRODUCT CODE 680	
EPDM FOAM GASKET STRIP	25m	BGC PRODUCT CODE 845	
SEALANT	Sikaflex 11FC or similar	BGC PRODUCT CODE 845	

STRATUM™, STRATUM™ DUO AND STRATUM™ TRIO FIXING GUIDE

Fasteners

Stratum™ to Timber Frame

FACE FIXING

2.8 x 50mm Fibre Cement Nail Class 3



50mm Cladfast 2.87mm Class 3



Paslode ND 50mm 14 Gauge Stainless Steel Brad



CONCEALED FIXING

40mm Fibre Cement Nail Class 3



For details on fixing Stratum™ Contour see page 26

Fasteners

Stratum™ to Steel Frame

FACE FIXING - STEEL FRAME BMT 0.75-1.6mm

40mm Quick drive Screw Class 3



Buildex 8 x 18 x 40 SEH Wingteks or similar Class 3



FACE FIXING - STEEL FRAME BMT 0.5-0.75mm

Fibre Zip M5 - 18 x 40mm Class 3



Stratum™ Plank Coverage - Table 03

NO. OF PLANKS	STRATUM™12mm PRODUCTS	STRATUM™ CONTOUR
	PLANK SIZE	PLANK SIZE
	4200 x 300 x 12mm or	4200 x 170 x 10mm
	PLANK OVERLAP 24mm	PLANK OVERLAP 29mm
	EFFECTIVE COVER PER PLANK	EFFECTIVE COVER PER PLANK
	4200 x 276mm	4200 x 141mm
	or	or
	1.159m ²	0.592m ²
1	300	170
2	576	311
3	852	452
4	1128	593
5	1404	734
6	1680	875
7	1956	1016
8	2232	1157
9	2508	1298
10	2784	1439
11	3060	1580
12	3336	1721
13	3612	1862
14	3888	2003
15	4164	2144
16	4440	2285
17	4716	2426
18	4992	2567
19	5268	2708
20	5544	2849

Table 3 is provided to assist in calculating the number of weatherboards required to cover a given wall height. For triangular areas such as Gable ends, halve the quantities derived for a rectangular wall then add 10% to cover off cuts.

PRE-COUNTERSINK

When using screws to fasten Stratum™, pre-countersinking is suggested so that the fastener is 2mm under the plank surface for filling with epoxy filler and then finished with BGC Exterior and Wet Area Top Coat.



Gun nails should be set to finish proud and hand nail flush. Do not overdrive gun nails.

Stratum™ Fixing and Framing Requirements - Timber and Steel Frame - Table 04

Wind Classification AS47055	Max. Design Ultimate Limit State Wind Pressure AS/ NZS1170.2 (kPa)		Max. Stud Spacing (mm)		Timber Framing (AS1684 or AS1720.1)	Steel Framing (NASH or AS3623)
	Within 1200mm of Corners	Away from Corners	Within 1200mm of Corners	Away from Corners		
N1	-0.94	-0.53, +0.62	600	600	3 x 50 x 14G ND Brads (2 x face fixed, 1 x concealed fixed) OR 2 x 50 x 2.87 fibre cement clouts (1 x face fixed, 1 x concealed fixed) OR 2 x 50 x 2.87 ring shank Dekfast nail (1 x face fixed, 1 x concealed fixed)	min. 0.55mm BMT G550 1 x face fix AND 1 x concealed fixing required ^(5,7)
N2	-1.3	-0.74, +0.86				
N3	-2.03	-1.16, +1.35				
N4	-3.01	-1.72, +2.01	450	450	3 x 50 x 14G ND Brads (2 x face fixed, 1 x concealed fixed)	min. 0.75mm BMT G550 1 x face fix AND 1 x concealed fixing required ^(5,7)
N5	-4.27	-2.14, +2.30	450	450	suitable, screw fixed only ^(6,7) 1 x face fixing AND 1 x concrete fixing required	
N6	-5.77	-2.88, +3.11	300	450	2 x 50 x 2.87 ring shank Dekfast nail (1 x face fixed, 1 x concealed fixed)	
C1	-1.95	-0.98, +1.05	450	450	suitable, screw fixed only ^(6,7) 1 x face fixing AND 1 x concrete fixing required	
C2	-2.9	-1.45, +1.56	450	450	2 x 50 x 2.87 ring shank Dekfast nail (1 x face fixed, 1 x concealed fixed)	
C3	-4.27	-2.14, +2.30	450	450	suitable, screw fixed only ^(6,7) 1 x face fixing AND 1 x concrete fixing required	
C4	-5.77	-2.88, +3.11	300	450	2 x 50 x 2.87 ring shank Dekfast nail (1 x face fixed, 1 x concealed fixed)	

Notes

1 // For Weatherproofing in N1, N2, N3, N4, C1, C2, use either AS/NZS 4200.1 vapour permeable moisture barrier; or Durabarrier Rigid Air Barrier System.

2 // For Weatherproofing in N5, N6, C3, C4, or for max. SLS wind pressures greater than +0.82 kPa & -1.23 kPa (max. ±2.5 kPa), use Durabarrier Rigid Air Barrier System.

3 // Joints may be made off-stud in N1, N2, N3 for max. 450mm stud spacing, only when the boards being joined are supported by a minimum of 3 studs and by continuous boards above & below.

4 // For N4, N5, N6, C1, C2, C3, C4 & for Max, Des. ULS Wind Pressures >2.03kPa, all joints shall be made on double-studs, & all weatherboards shall span at least 3 supports.

5 // Screw fixings shall be at minimum 10-18 Buildex Fibre Teks Climaseal 4 with minimum 2-3 full-threads protruding through the steel supporting member. All screws shall be pre-drilled and countersunk with BGC Countersinking Tool.

6 // Screw fixings to timber framing shall be at minimum 10-8 Fibre Cement Class 4 with minimum 35mm embedment into the timber framing. All screws shall be pre-drilled and countersunk with BGC Countersinking Tool.

7 // All fixing lengths shall be increased; by 6mm when used in conjunction with Durabarrier Rigid Air Barrier System; and, by the thickness of any thermal-break insulation where installed.

Construction Details

Framing

Stratum™ is designed to be installed horizontally to both timber and lightweight steel frames.

Ensure that the frame is square and work from a central datum line. The frame must be straight and true to provide a flush face to receive the panels.

BGC suggest a maximum tolerance of 3mm-4mm in any 3000mm length of frame.

Stratum™ will not straighten warped or distorted frames and any warping may still be visible after Stratum™ weatherboards are applied. Warped framing will require remedial action.

Timber Framing

Use of a timber frame must be in accordance with AS1684 – residential timber-framed construction and the framing manufacturers’ specifications.

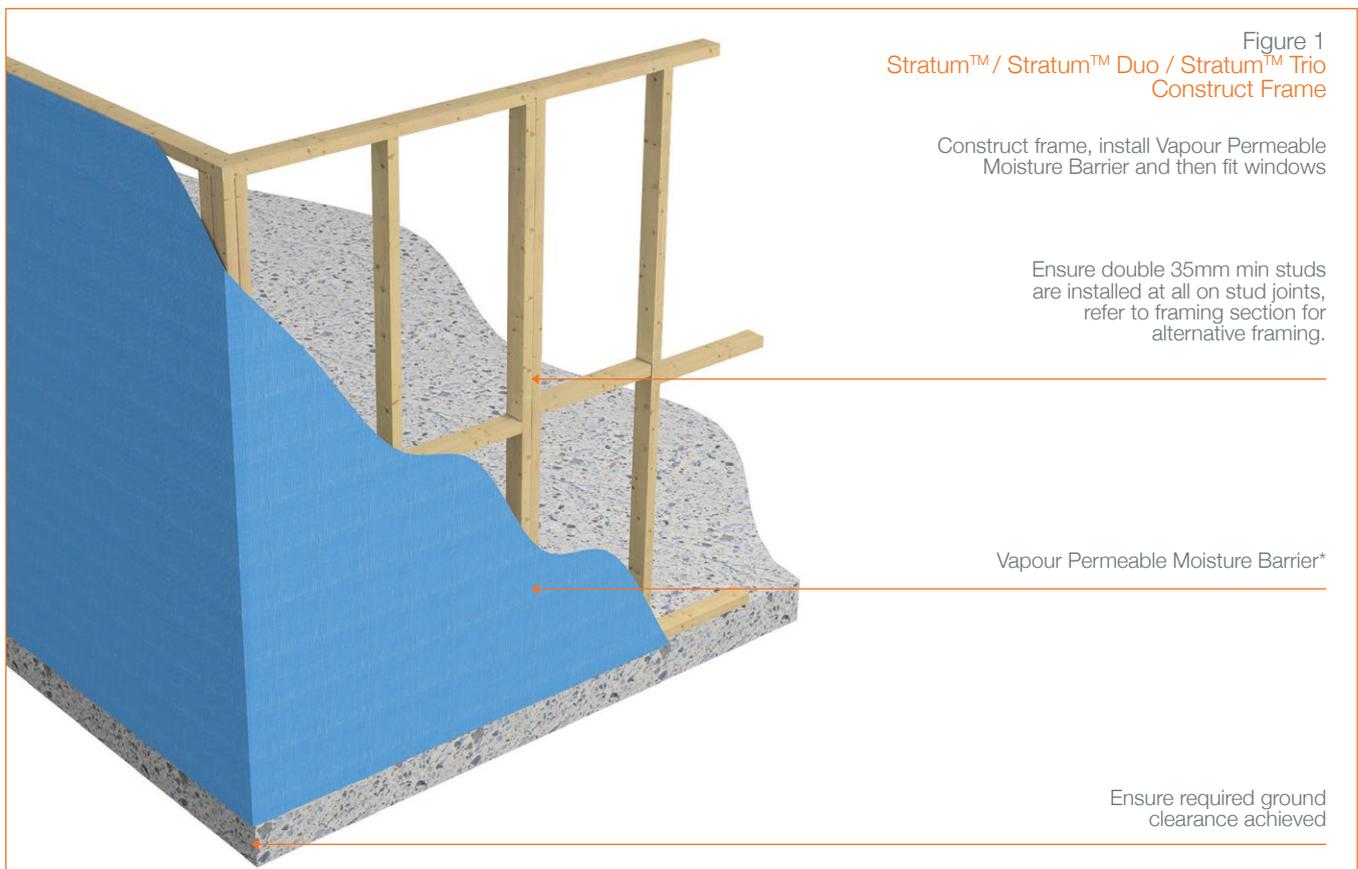
Use only seasoned timber. Do not use unseasoned timber as it is prone to shrinkage and can cause weatherboards and frames to move.

“Timber used for house construction must have the level of durability appropriate for the relevant climate and expected service life conditions including exposure to insect attacks or to moisture which could cause decay” – Reference AS 1684.2.

Lightweight Steel Framing

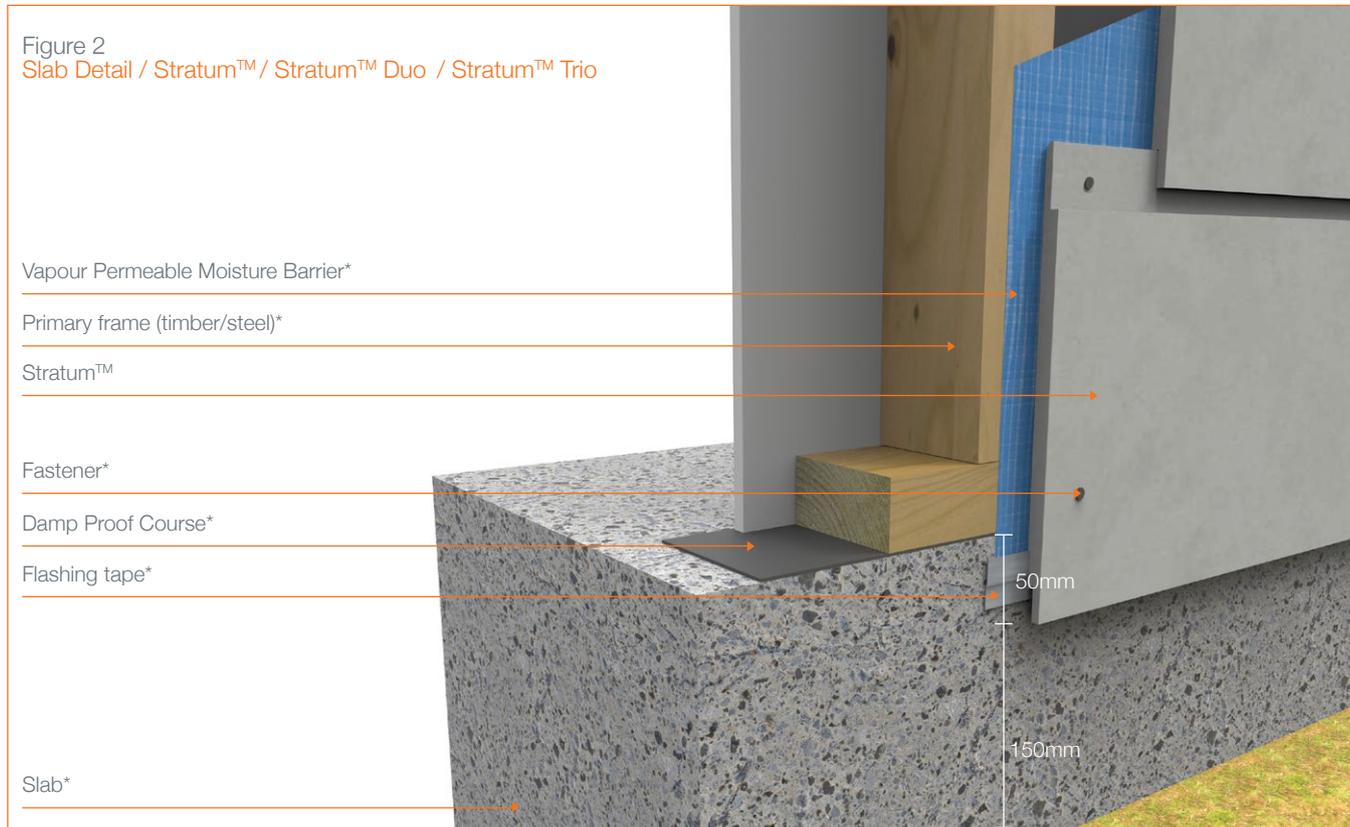
Use of a steel frame must be in accordance with AS3623 – Domestic metal framing and the framing manufacturer’s specifications.

Framing members must have a Base Metal Thickness (BMT) between 0.55 to 1.6mm. The steel framing must have the appropriate level of durability required to prevent corrosion.

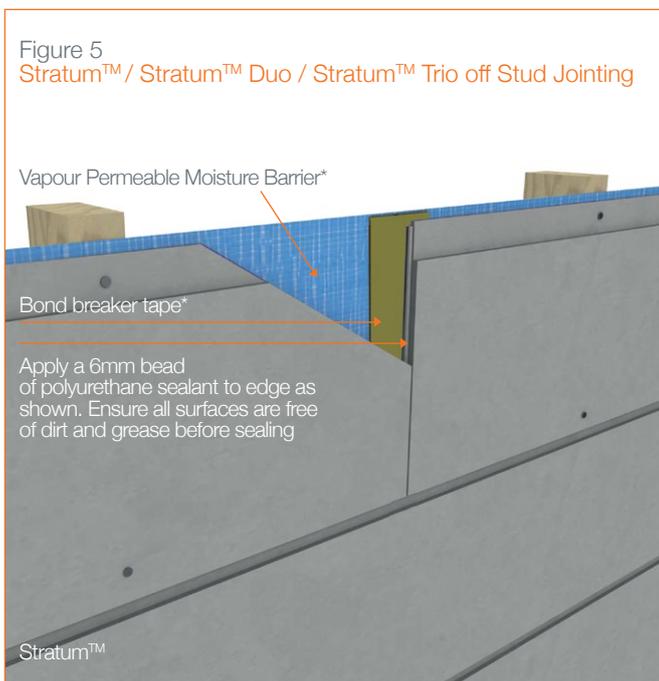
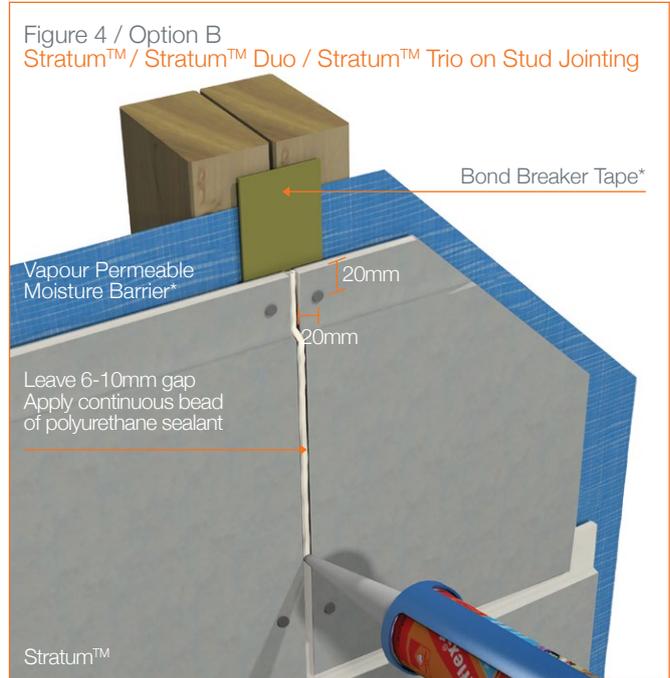
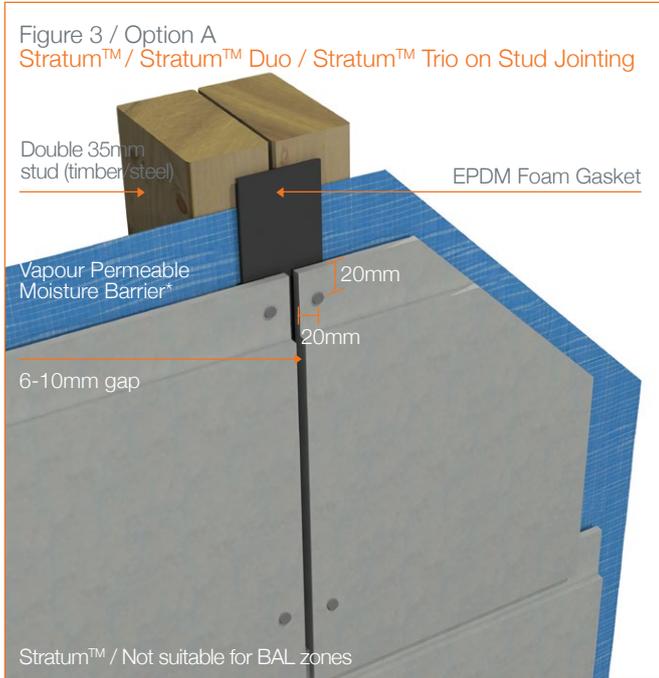


*Components not supplied by BGC

Installation Details



Installation Details



Off stud jointing is suitable up to N3 Wind Zone only.

Installation Details

Figure 6
Stratum™ / Stratum™ Duo / Stratum™ Trio Face Fixing

Vapour Permeable Moisture Barrier*

Primary frame (timber/steel)*

Timber Frame / Hand Nailing (Refer Pg13)

Use 50mm minimum Class 3 Fibre Cement Nails.

Timber Frame / Gun Nailing (Refer Pg13)

Use a minimum Class 3 50mm Coil Nail or
50mm Cladfast 2.8mm Class 3.

Steel Frame / Screw Fixing (Refer Pg13)

Use minimum Class 3 40mm Screws.

Buildex: Fibre Zip or Wingtek.

Suitable for Wind Zone up to N4 Timber Frame
and N6/C4 Steel Frame.

Fastener

Stratum™

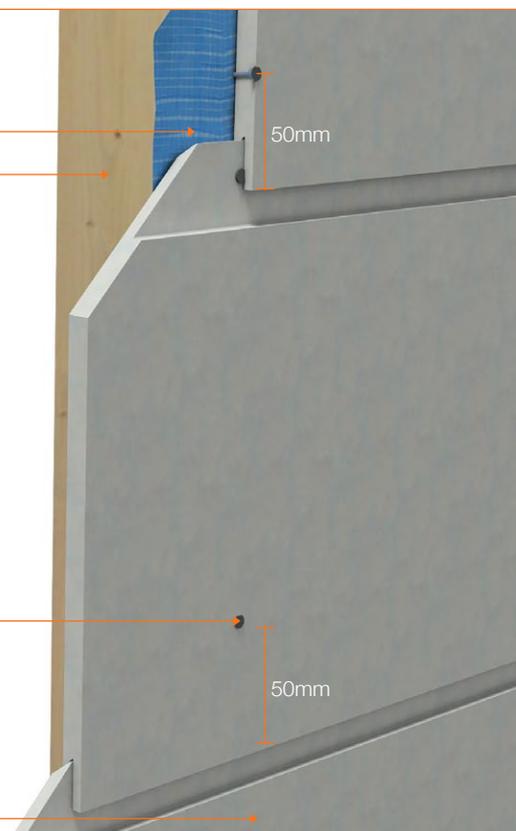


Figure 7
Stratum™ / Stratum™ Duo / Stratum™ Trio Concealed Fixing

Primary frame (steel)*

Thermal Break

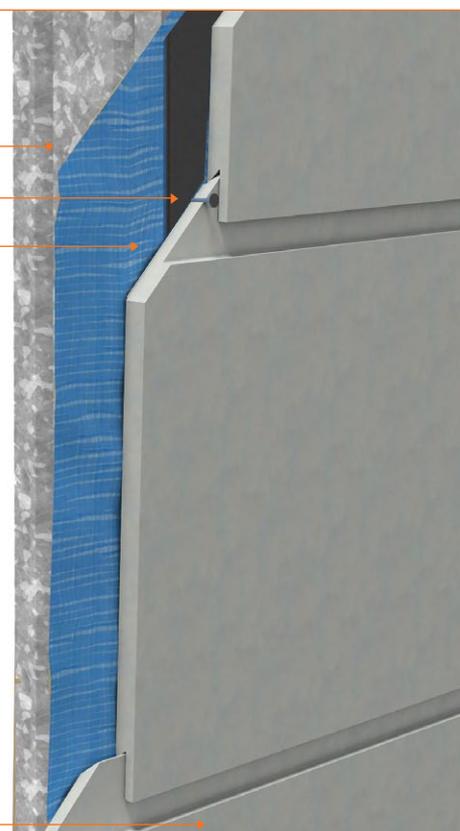
Vapour Permeable Moisture Barrier*

Steel Frame / Screw Fixing

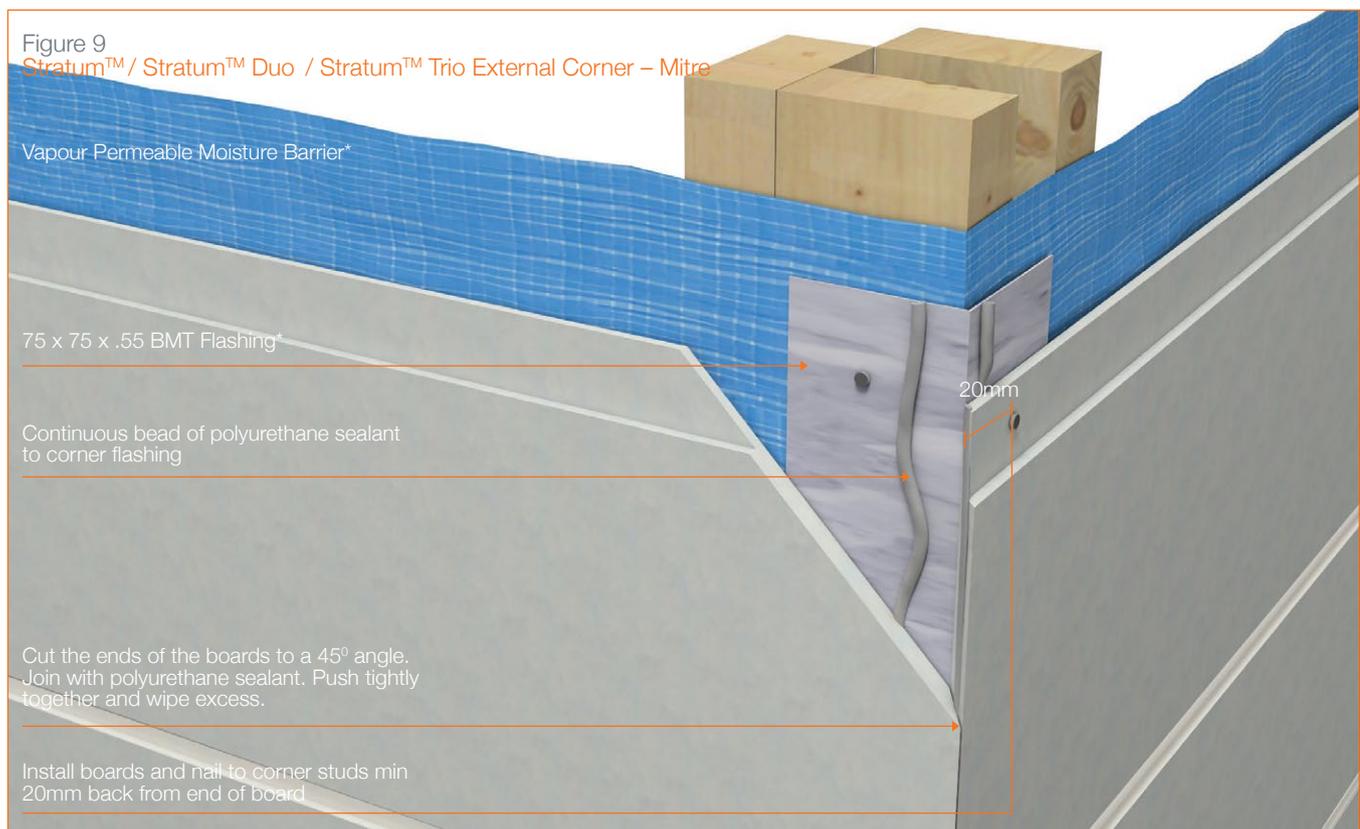
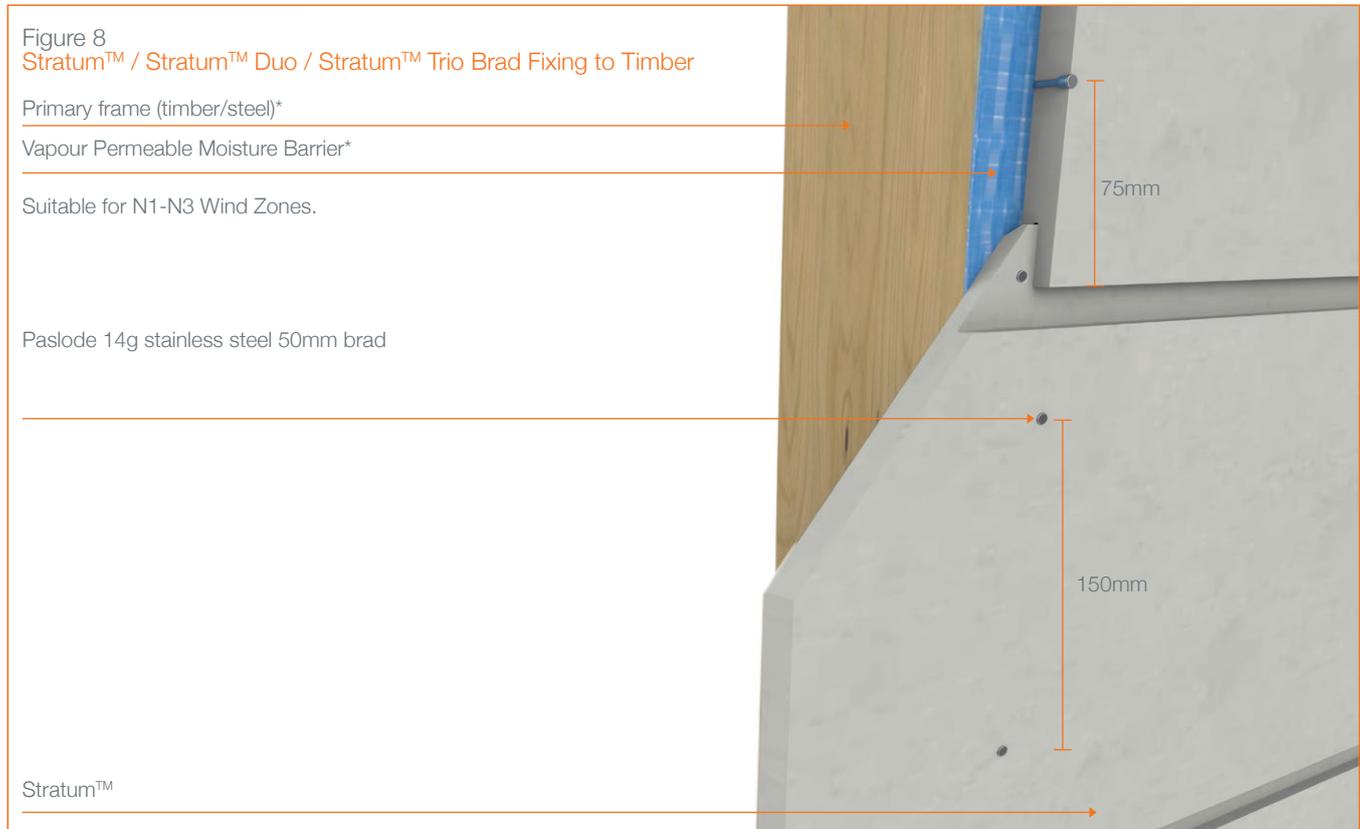
Use Minimum Class 3 32mm Screws.
Buildex Fibrezip or Wingtek.

Suitable For N1-N3 Wind Zones only.

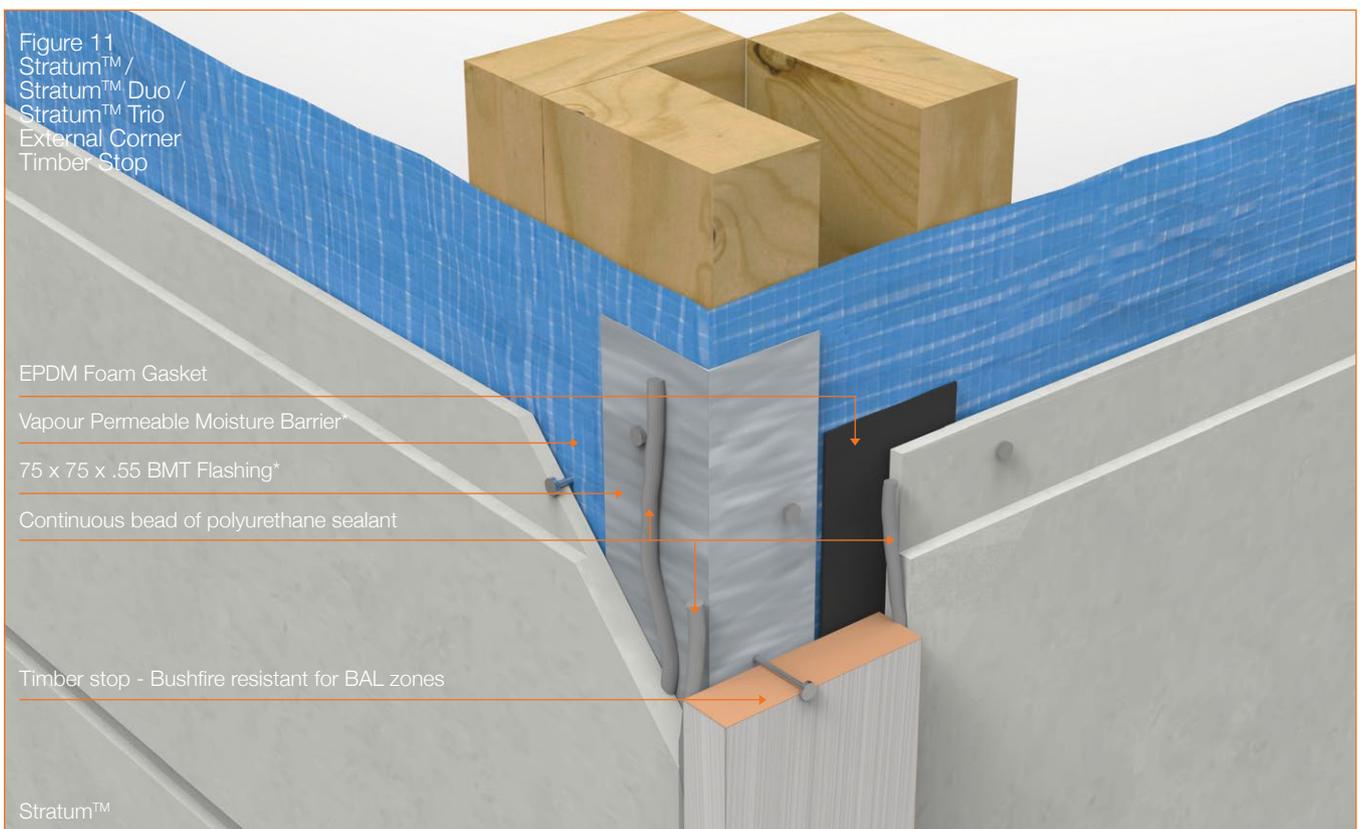
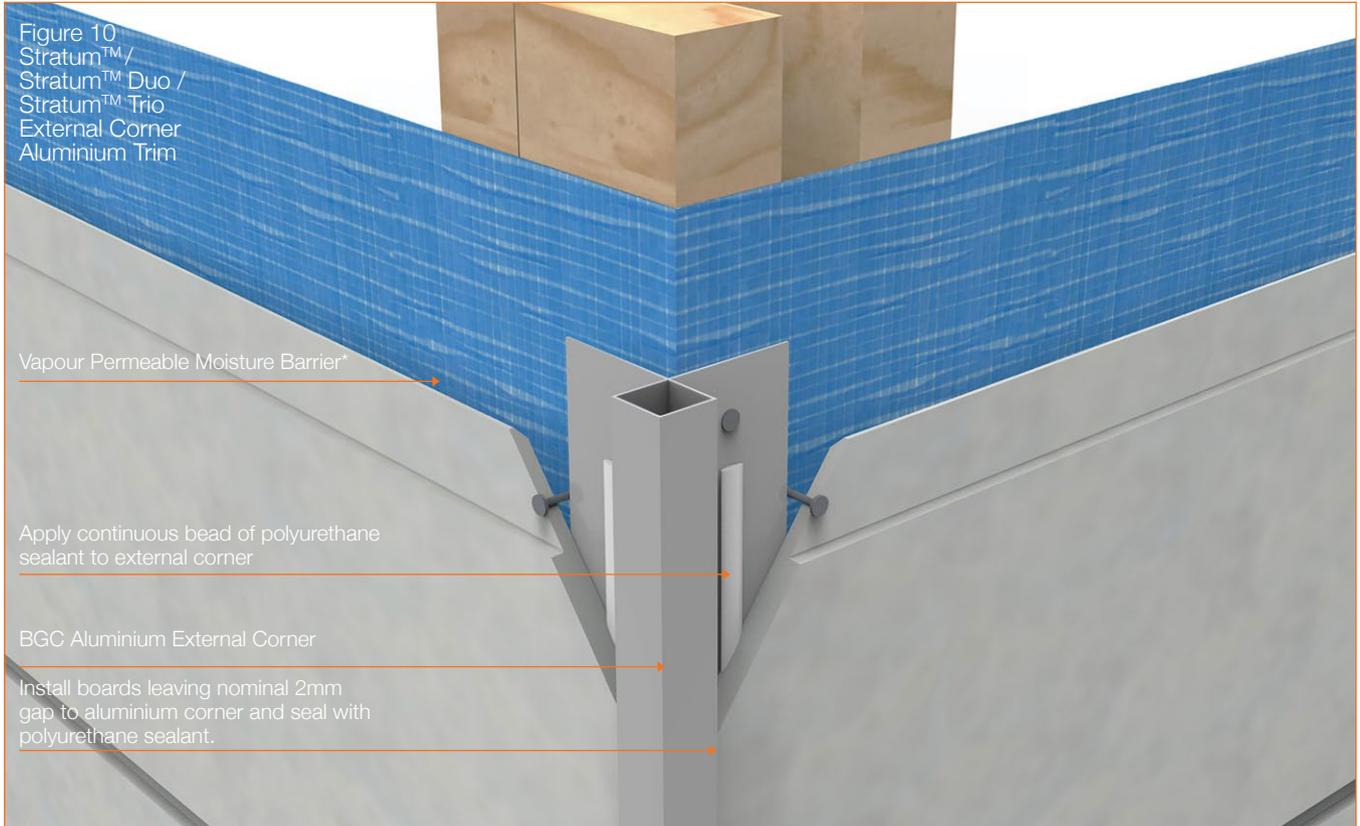
Stratum™



Installation Details



Installation Details



Installation Details

Figure 12
Stratum™ / Stratum™ Duo / Stratum™ Trio
Internal Corner – Mitre

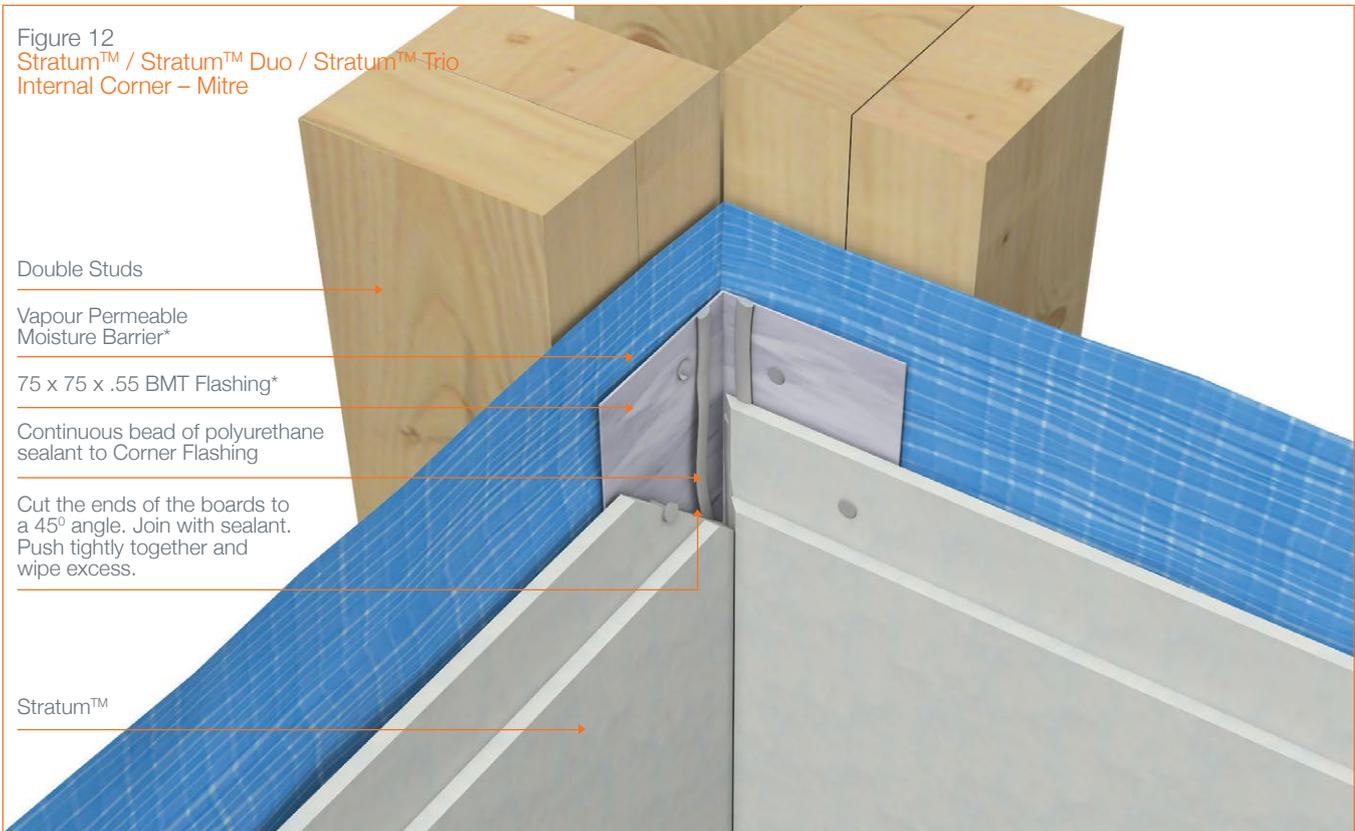
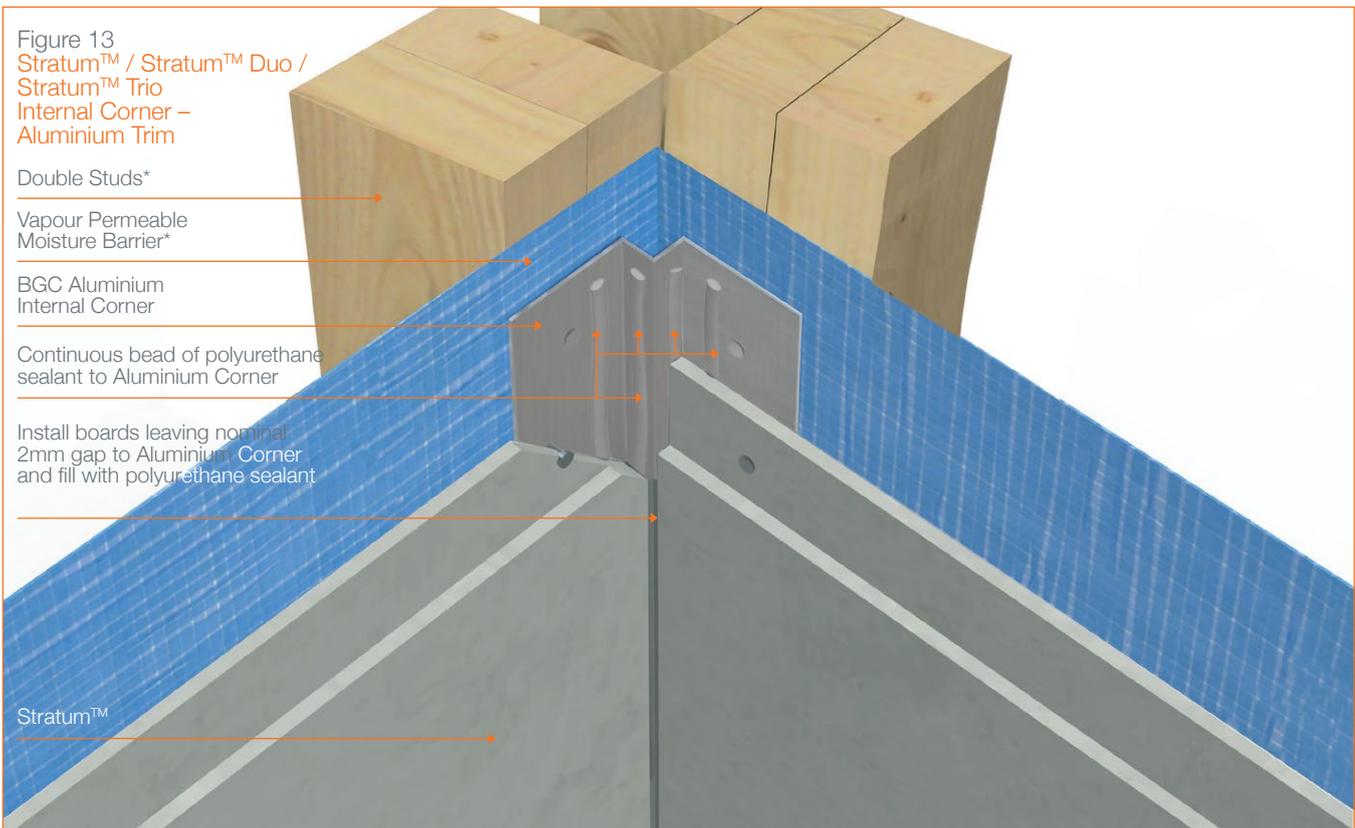
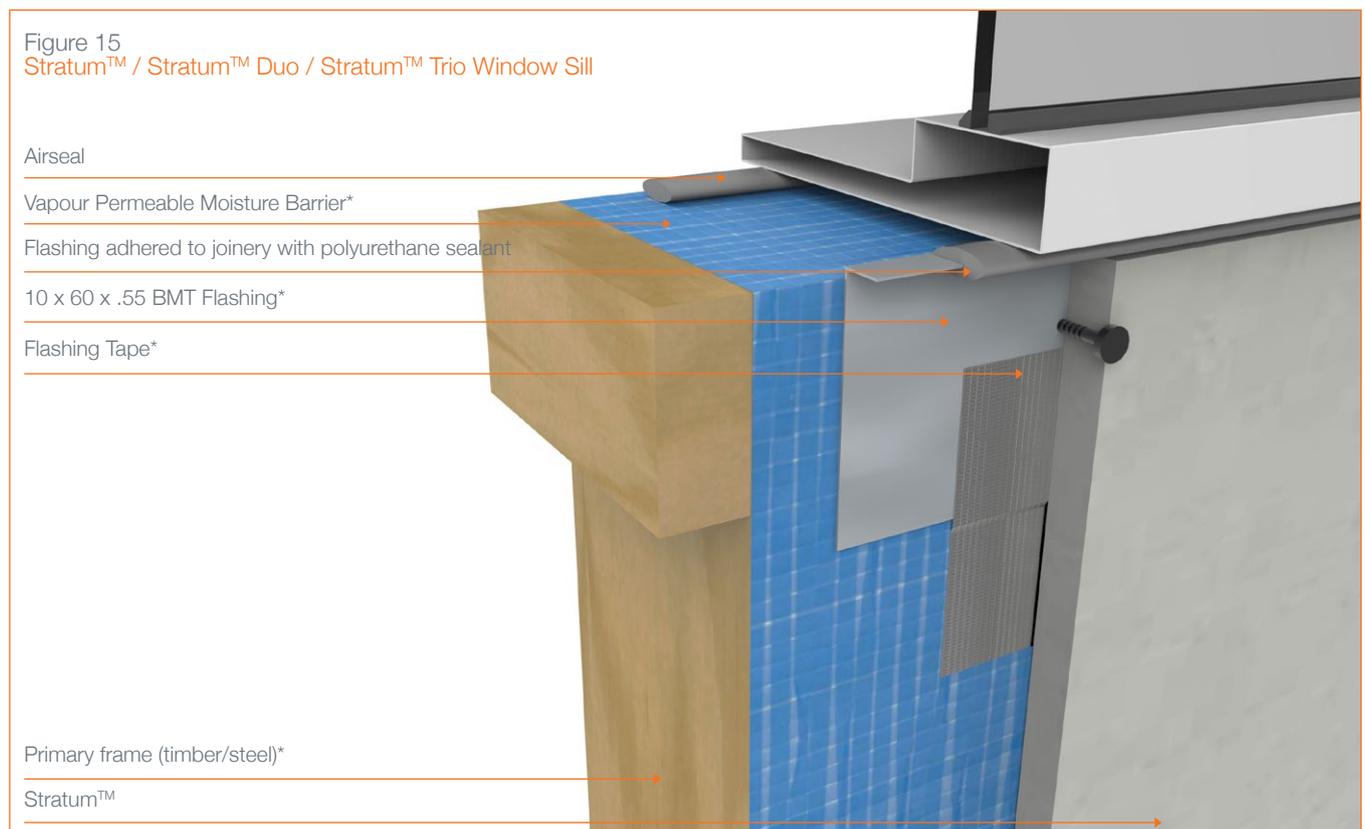
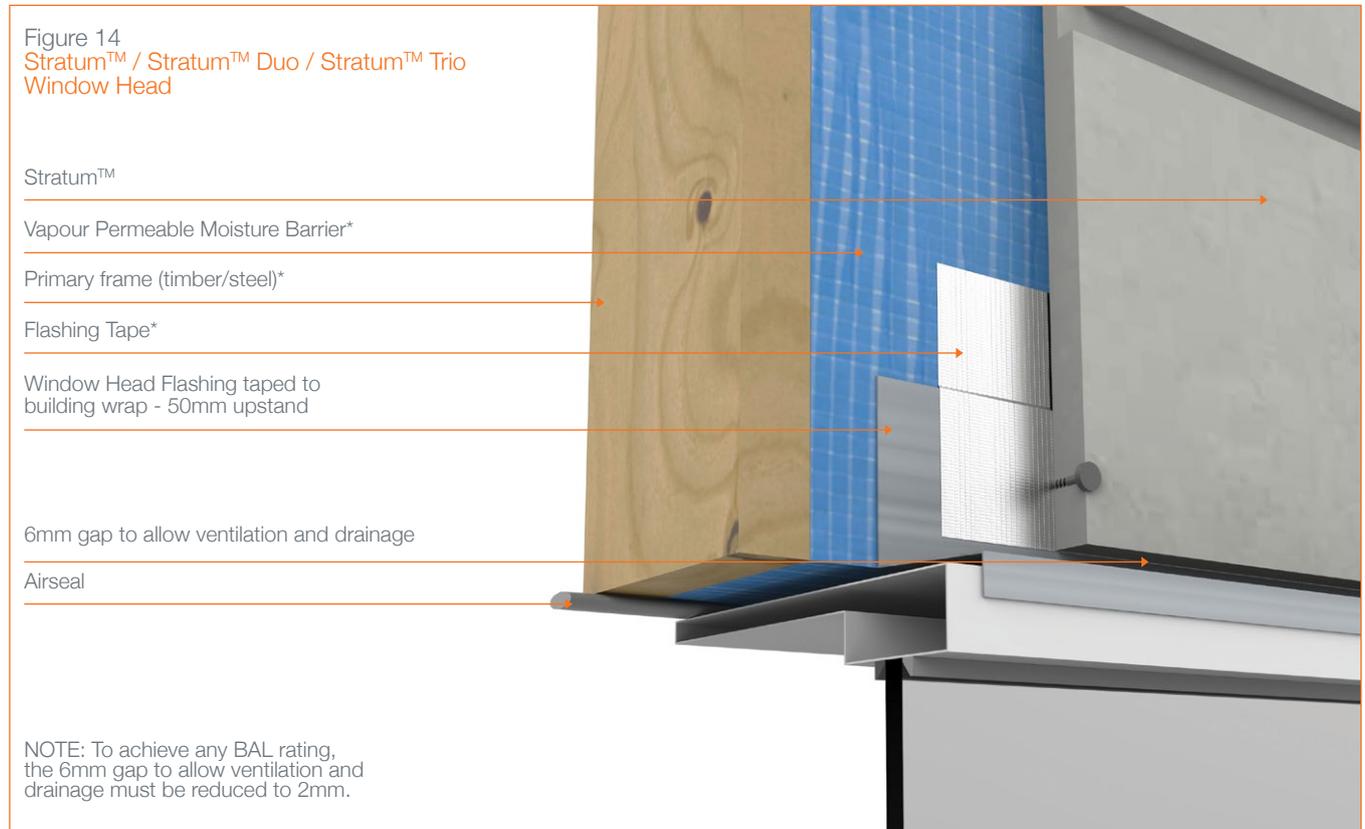


Figure 13
Stratum™ / Stratum™ Duo / Stratum™ Trio
Internal Corner – Aluminium Trim



Installation Details



Installation Details

Figure 16
Stratum™ / Stratum™ Duo / Stratum™ Trio Window Jamb

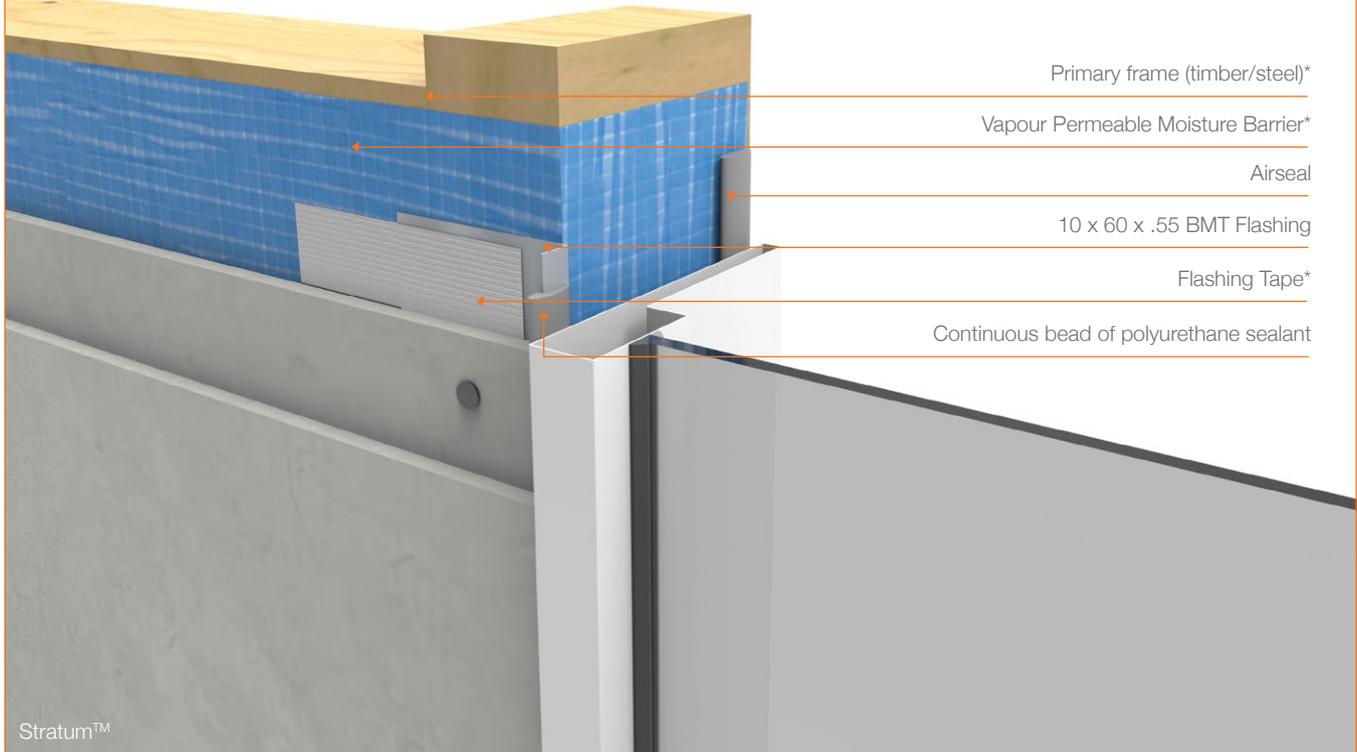
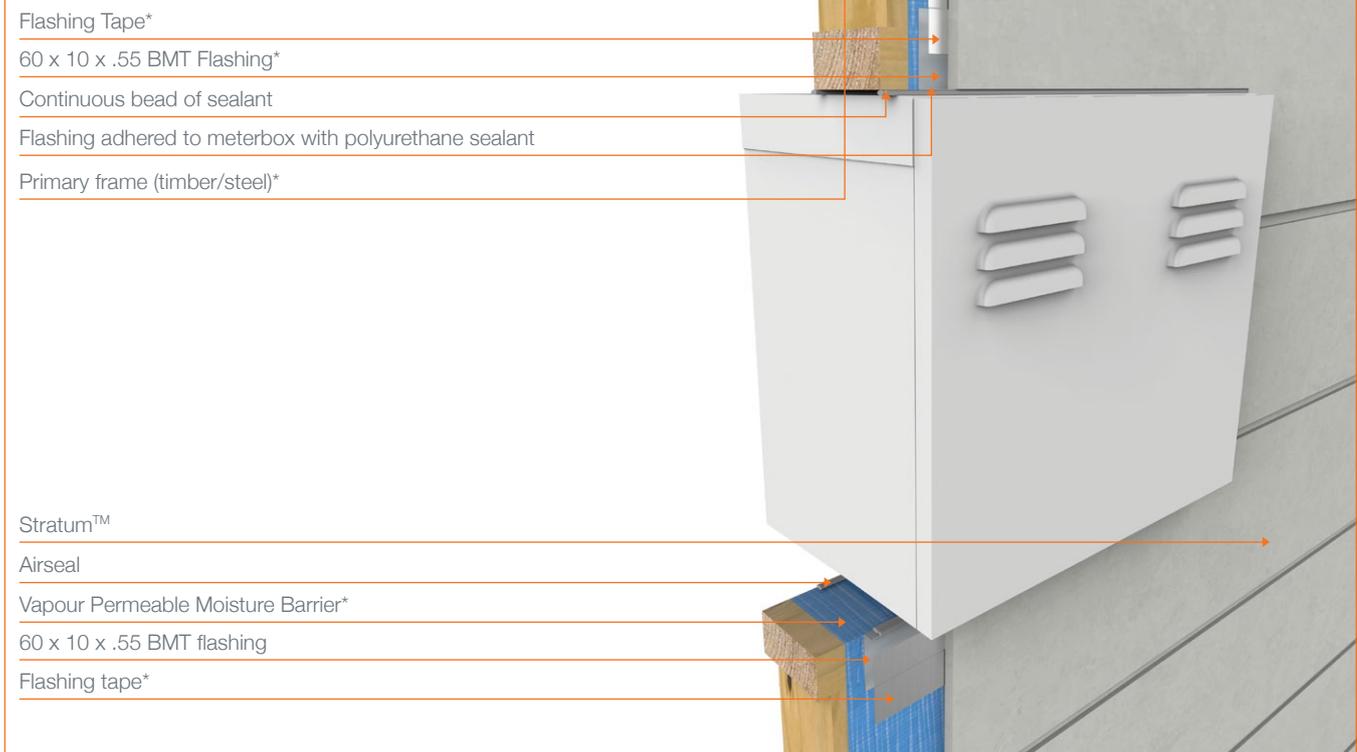
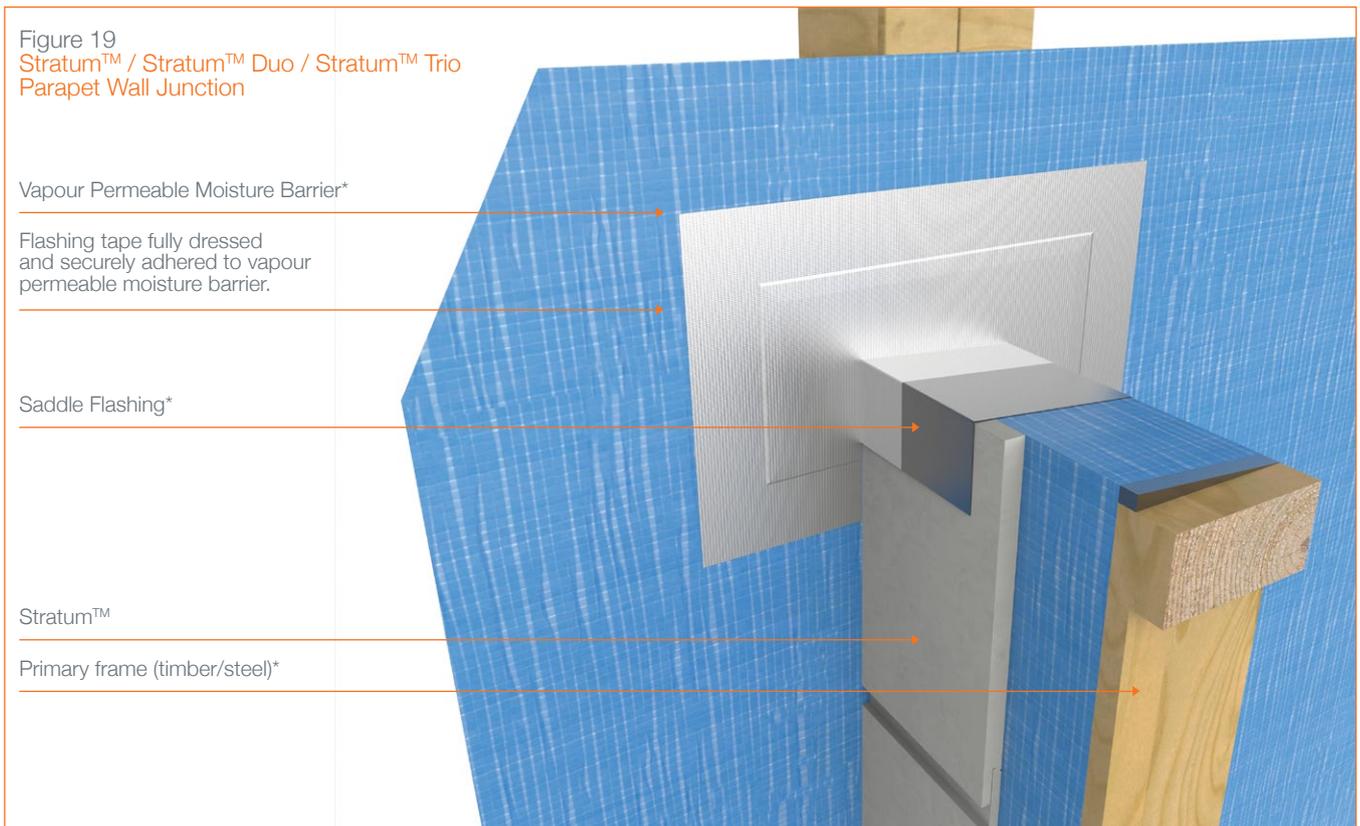
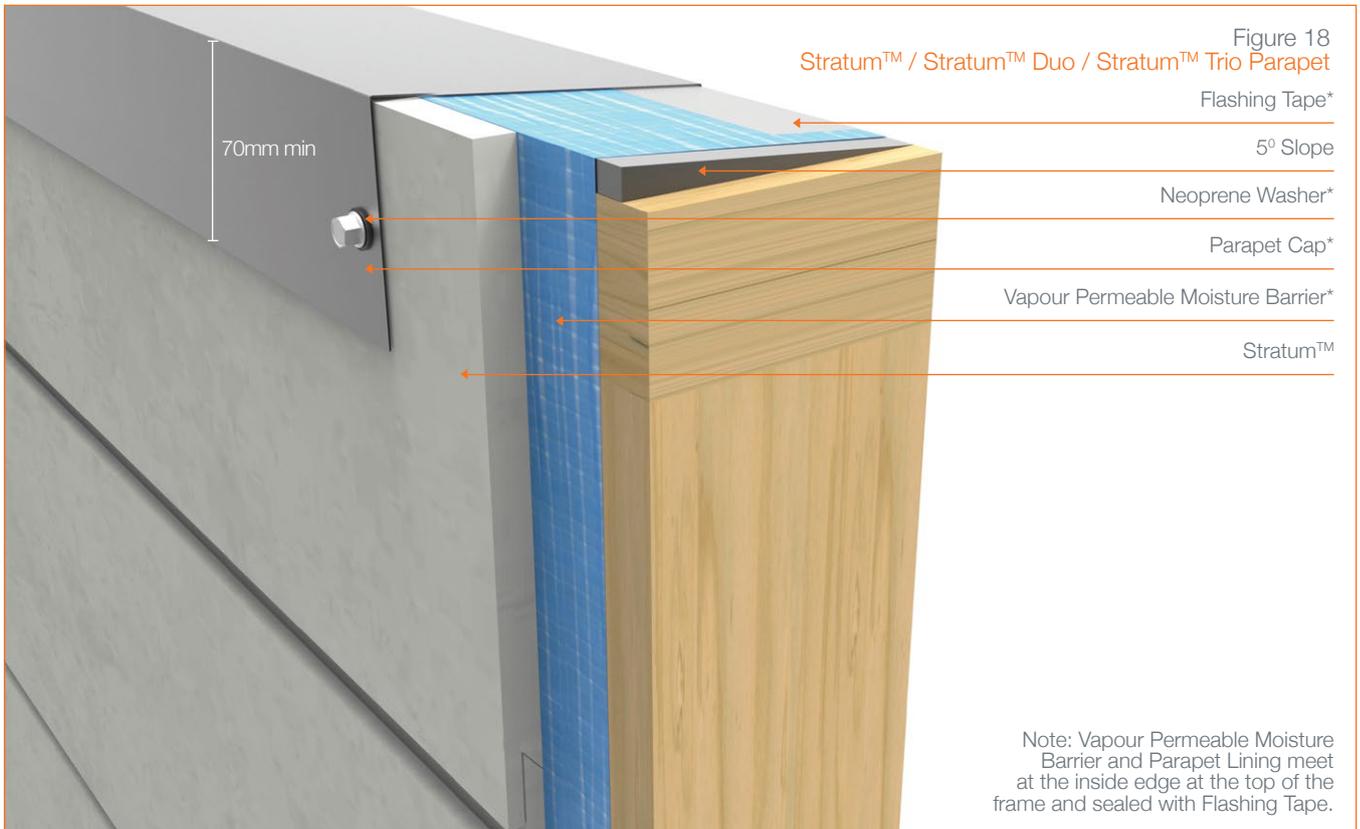


Figure 17
Stratum™ / Stratum™ Duo / Stratum™ Trio Meterbox



Installation Details



Installation Details

Figure 20
Stratum™ / Stratum™ Duo /
Stratum™ Trio Scupper Outlet

Flashing Tape*

Stratum™

Primary frame (timber/steel)*

Continuous bead of polyurethane sealant

Scupper Outlet*

Continuous bead of sealant

Flashing Tape*

Vapour Permeable Moisture Barrier*

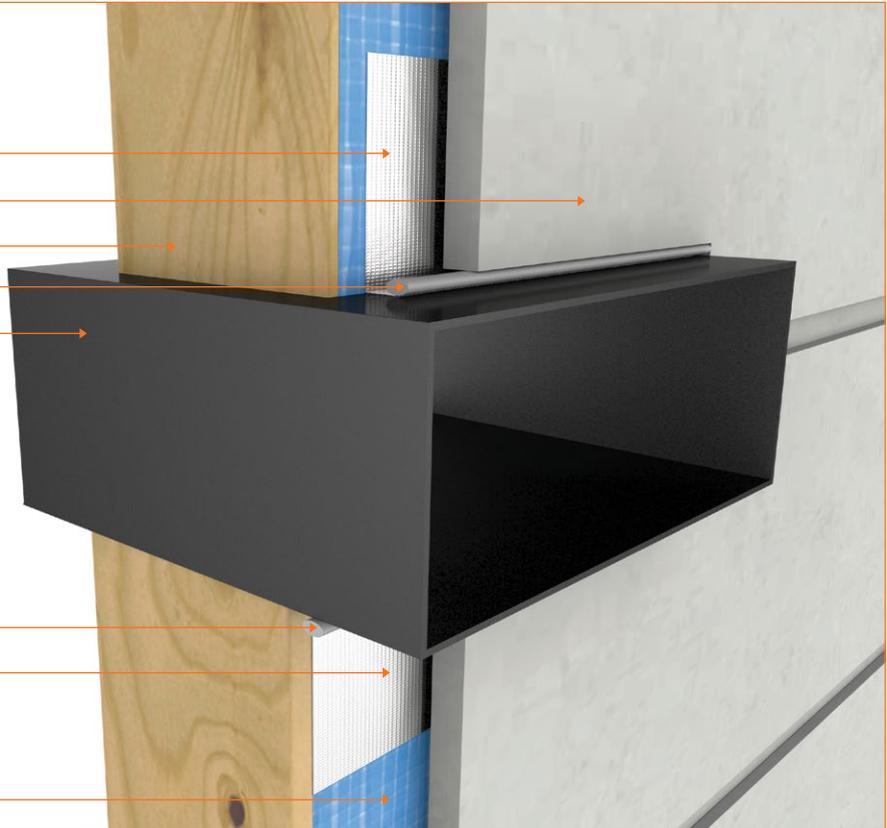


Figure 21
Stratum™ Duo / Stratum™ Trio
Vertical Control Joint

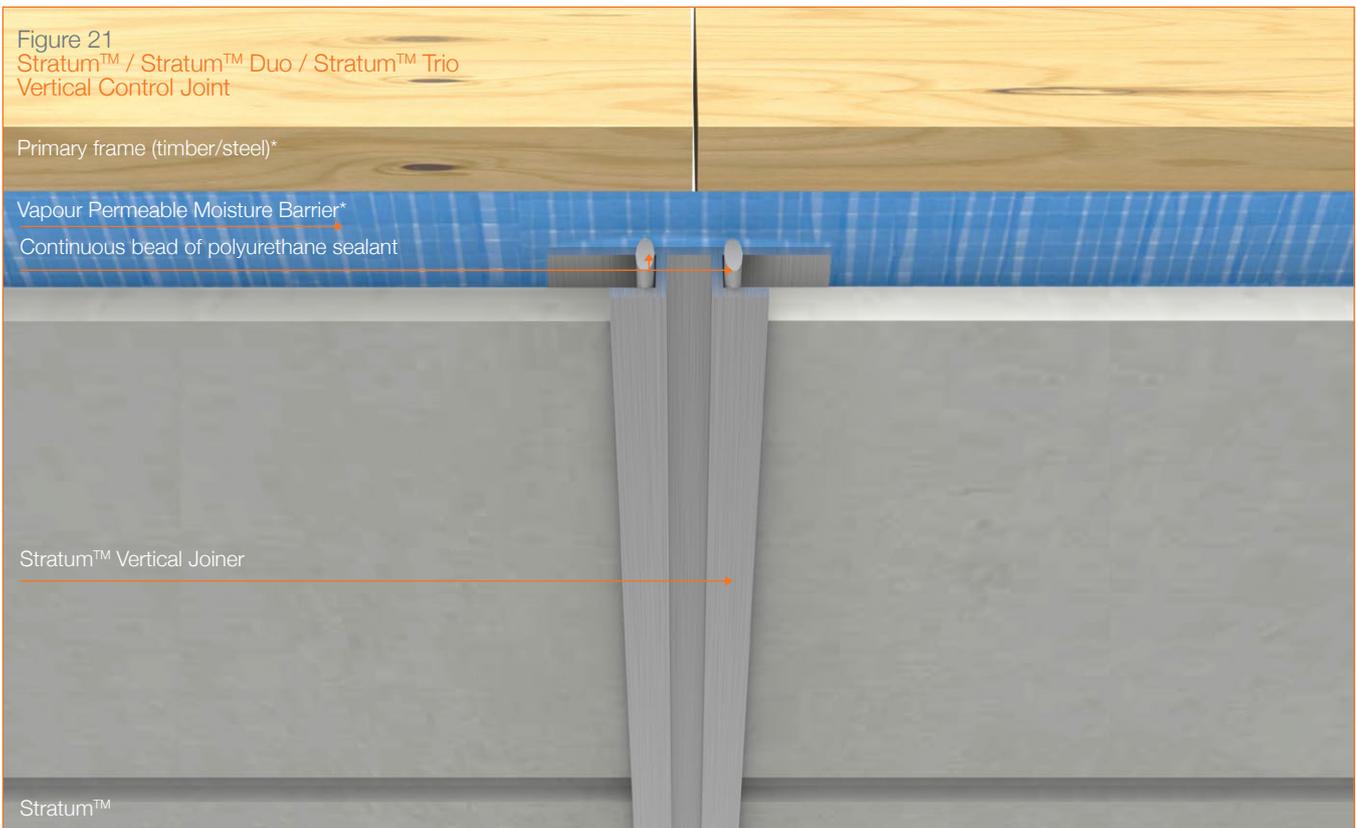
Primary frame (timber/steel)*

Vapour Permeable Moisture Barrier*

Continuous bead of polyurethane sealant

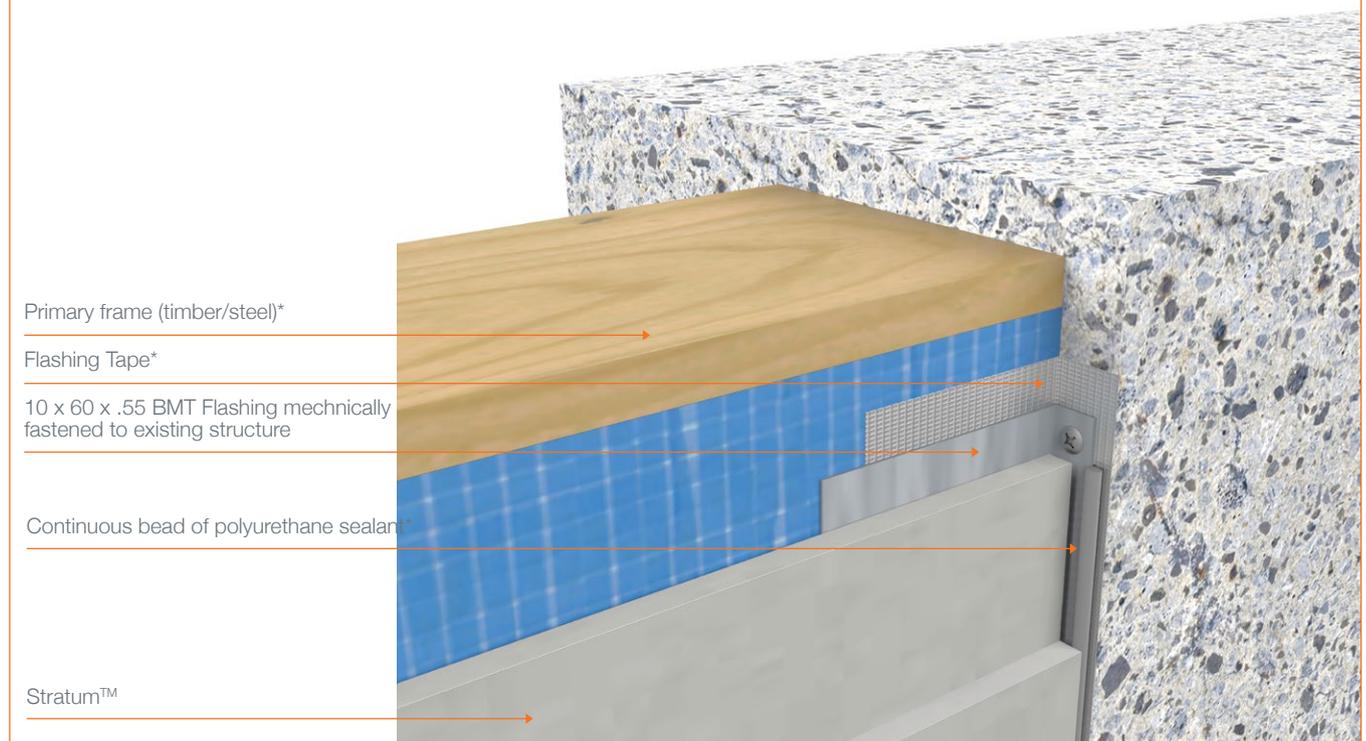
Stratum™ Vertical Joiner

Stratum™



Installation Details

Figure 22
Stratum™ / Stratum™ Duo / Stratum™ Trio Wall Abutment



STRATUM™ CONTOUR FIXING GUIDE

Product Description

Stratum™ Contour is a profiled 170mm wide, 10mm thick weatherboard. Stratum™ Contour has an interlocking shiplap feature which allows fasteners to be concealed by way of a horizontal shiplap joining system, which creates a 16mm horizontal groove where the weatherboards intersect.

Stratum™ Contour can be installed on both timber and steel frame. Steel frame installation requires a thermal break.

Stratum™ Contour is a profiled fibre cement panel manufactured to AS/NZS 2908.2-2000 and is classified as a Type A-Category 4 product. Stratum™ Contour is factory sealed on both sides.

Fasteners

Stratum™ Contour to primary frame (steel)

0.55-0.75BMT - M5 x 18 x 40mm countersink screw Class 3



0.75-1.6BMT - 8 x 18 x 40mm wingtek countersink screw Class 3



Vapour Permeable Moisture Barrier

A vapour permeable moisture barrier must be installed in accordance with the AS 4200.2 – 'Pliable building membranes and underlays – Installation and the vapour permeable moisture barrier manufacturers' guidelines.

The vapour permeable moisture barrier shall comply with AS/NZS 4200.1 and have the following properties:

/ VCM category - Vapour Permeable (Class 3 or Class 4)
/ Water control classification - Water barrier

A vapour permeable moisture barrier is used to prevent moisture ingress by acting as a drainage plane while enabling water vapour build up from inside the frame to escape.

Stratum™ Contour to primary frame (timber)

Class 3 2.8 x 50mm fibre cement nail



Class 3 2.87 x 50mm Cladfast gun nail



Paslode ND 50mm 14 Gauge Stainless Steel Brad



Class 3 2.5 x 50mm coil nail



Product Description

Stratum™ Contour features a shiplap horizontal joining system making it quick and simple to achieve a classic yet contemporary look. Stratum™ Contour is a fully concealed fixing cladding system.

Stratum™ Contour can be used for exterior cladding on low to medium rise buildings or for a different twist, can be used to create a stunning interior feature wall.

Stratum™ Contour is not subject to timber rot, decay, cracking, twisting or white ant damage and will not support combustion. The result is a safer, more durable cladding that requires minimum maintenance.

Stratum™ Contour Fixing and Framing Requirements - Timber and Steel Frame - Table 05

Wind Classification AS47055	Max. Design Ultimate Limit State Wind Pressure AS/ NZS1170.2 (kPa)		Max. Stud Spacing (mm)		Timber Framing (AS1684 or AS1720.1)	Steel Framing (NASH or AS3623)
	Within 1200mm of Corners	Away from Corners	Within 1200mm of Corners	Away from Corners		
N1	-0.94	-0.53, +0.62	600	600	1 x 50 x 14G ND Brad fastener OR 1 x 50 x 2.87 fibre cement clout OR 1 x 50 x 2.87 ring shank Dekfast nail	min. 0.55mm BMT G550 1 x concealed fixing required ^(5,7)
N2	-1.3	-0.74, +0.86				
N3	-2.03	-1.16, +1.35				
N4	-3.01	-1.72, +2.01	450	450	suitable, screw fixed only ^(6,7) 1 x concealed fix	min. 0.75mm BMT G550 1 x concealed fixing required ^(5,7)
N5	-4.27	-2.14, +2.30	450	450		
N6	-5.77	-2.88, +3.11	300	450		
C1	-1.95	-0.98, +1.05	450	450	1 x 50 x 2.87 ring shank Dekfast nail	
C2	-2.9	-1.45, +1.56	450	450		
C3	-4.27	-2.14, +2.30	450	450	suitable, screw fixed only ^(6,7) 1 x concealed fix	
C4	-5.77	-2.88, +3.11	300	450		

Notes

1 // For Weatherproofing in N1, N2, N3, N4, C1, C2, use either AS/NZS 4200.1 vapour permeable moisture barrier; or DurabARRIER Rigid Air Barrier System.

2 // For Weatherproofing in N5, N6, C3, C4, or for max. SLS wind pressures greater than +0.82 kPa & -1.23 kPa (max. ±2.5 kPa), use DurabARRIER Rigid Air Barrier System.

3 // Joints may be made off-stud in N1, N2, N3 for max. 450mm stud spacing, only when the boards being joined are supported by a minimum of 3 studs and by continuous boards above & below.

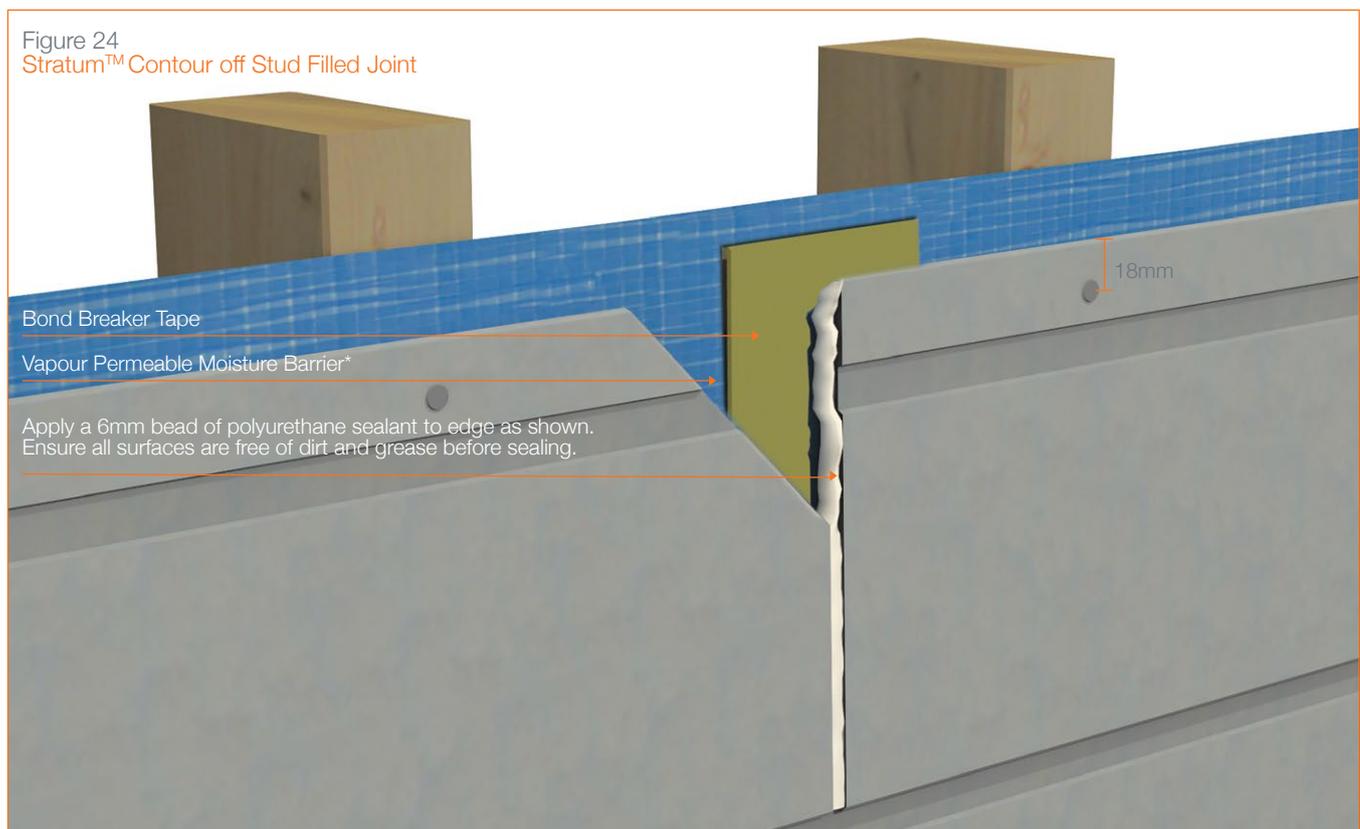
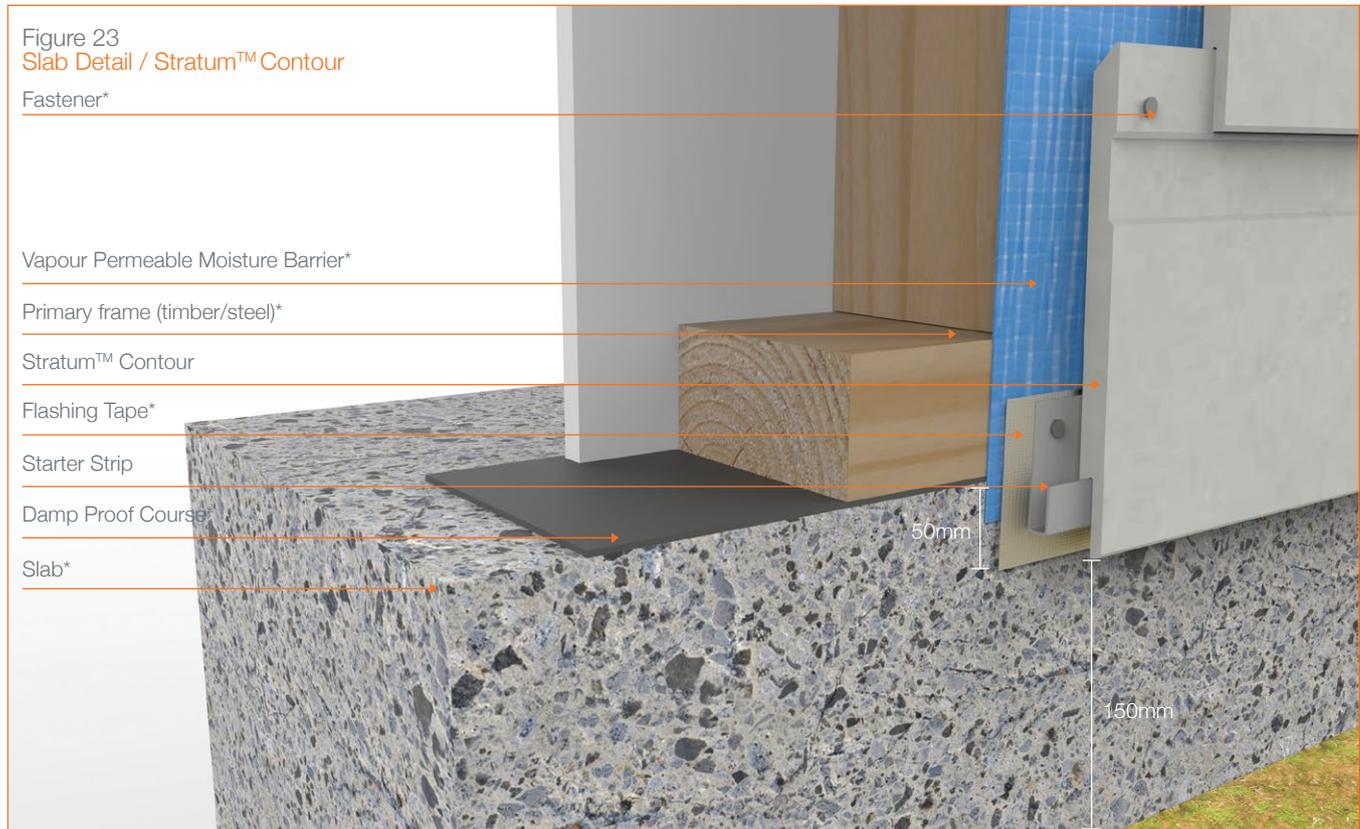
4 // For N3(>450mm stud spacing), N4, N5, N6, C1, C2, C3, C4 & for Max, Des. ULS Wind Pressures >2.03kPa, all joints shall be made on double-studs, & all weatherboards shall span at least 3 supports.

5 // Screw fixings to steel framing shall be at minimum 10-18 Buildex Fibre Teks Climaseal 4 with minimum 2-3 full-threads protruding through the steel supporting member. All screws shall be pre-drilled and countersunk with BGC Countersinking Tool.

6 // Screw fixings to timber framing shall be at minimum 10-8 Fibre Cement Class 4 with minimum 35mm embedment into the timber framing. All screws shall be pre-drilled and countersunk with BGC Countersinking Tool.

7 // All fixing lengths shall be increased; by 6mm when used in conjunction with DurabARRIER Rigid Air Barrier System; and, by the thickness of any thermal-break insulation where installed.

Installation Details



Installation Details

Figure 25
Stratum™ Contour Concealed Fixing

Primary frame (timber/steel)*

Fastener*

Vapour Permeable Moisture Barrier*

Suitable for concealed fixing on both timber and steel frame up to N4-C2.

Stratum™ Contour

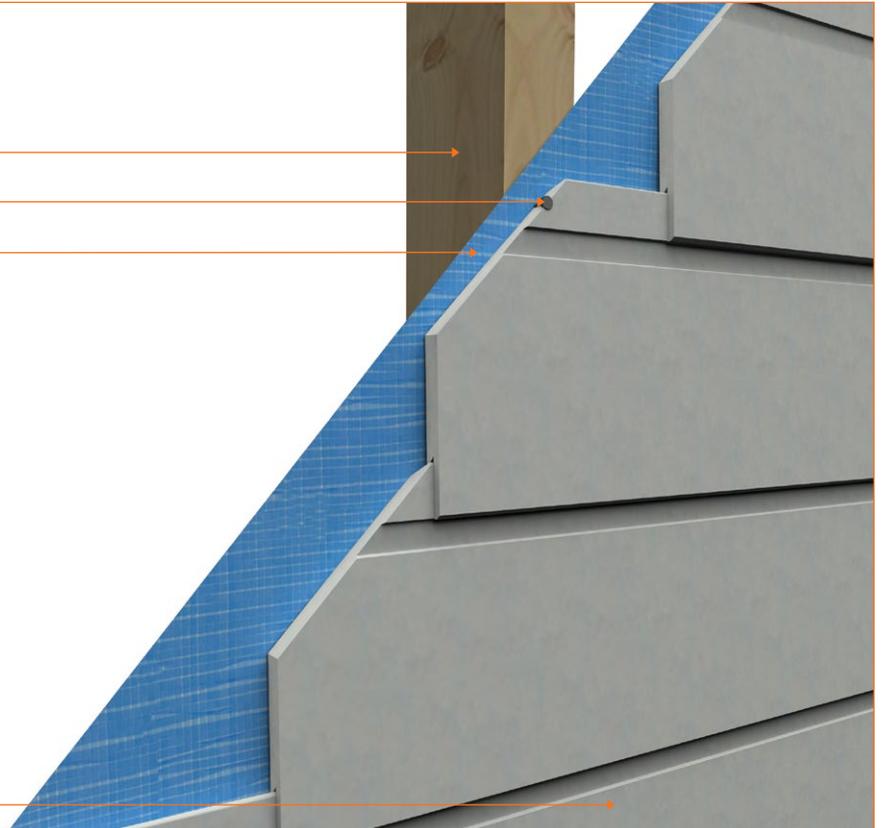


Figure 26
Stratum™ Contour External Corner

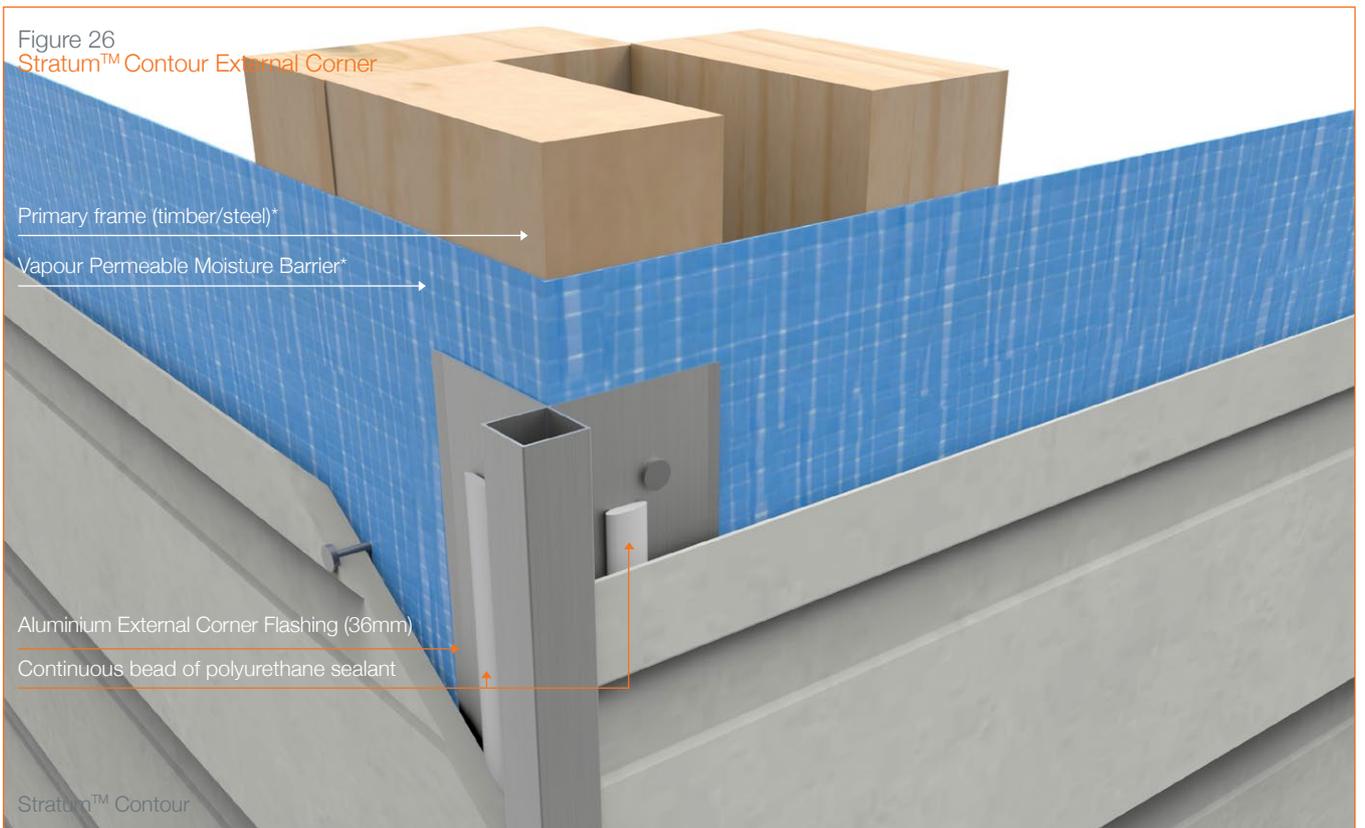
Primary frame (timber/steel)*

Vapour Permeable Moisture Barrier*

Aluminium External Corner Flashing (36mm)

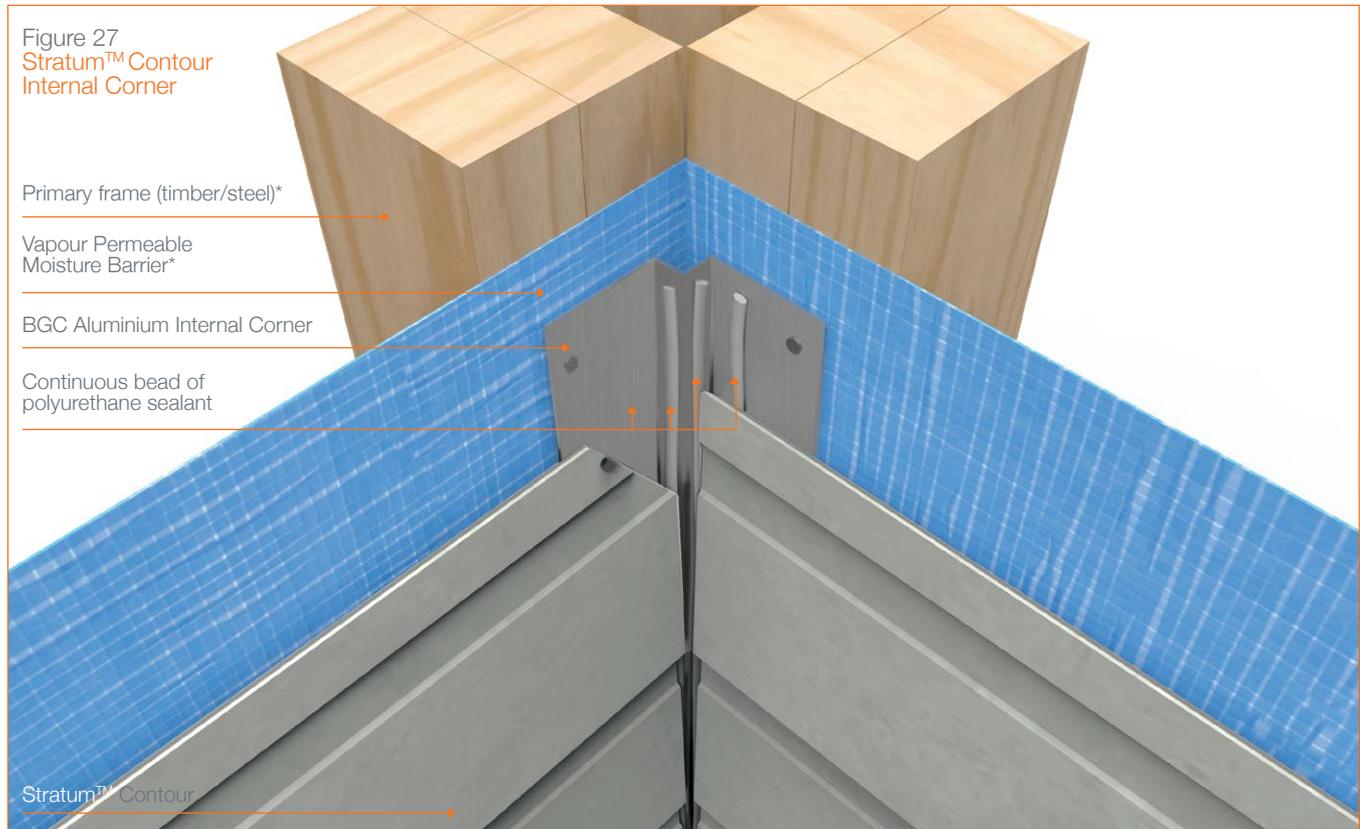
Continuous bead of polyurethane sealant

Stratum™ Contour



Installation Details

Figure 27
Stratum™ Contour
Internal Corner



Primary frame (timber/steel)*

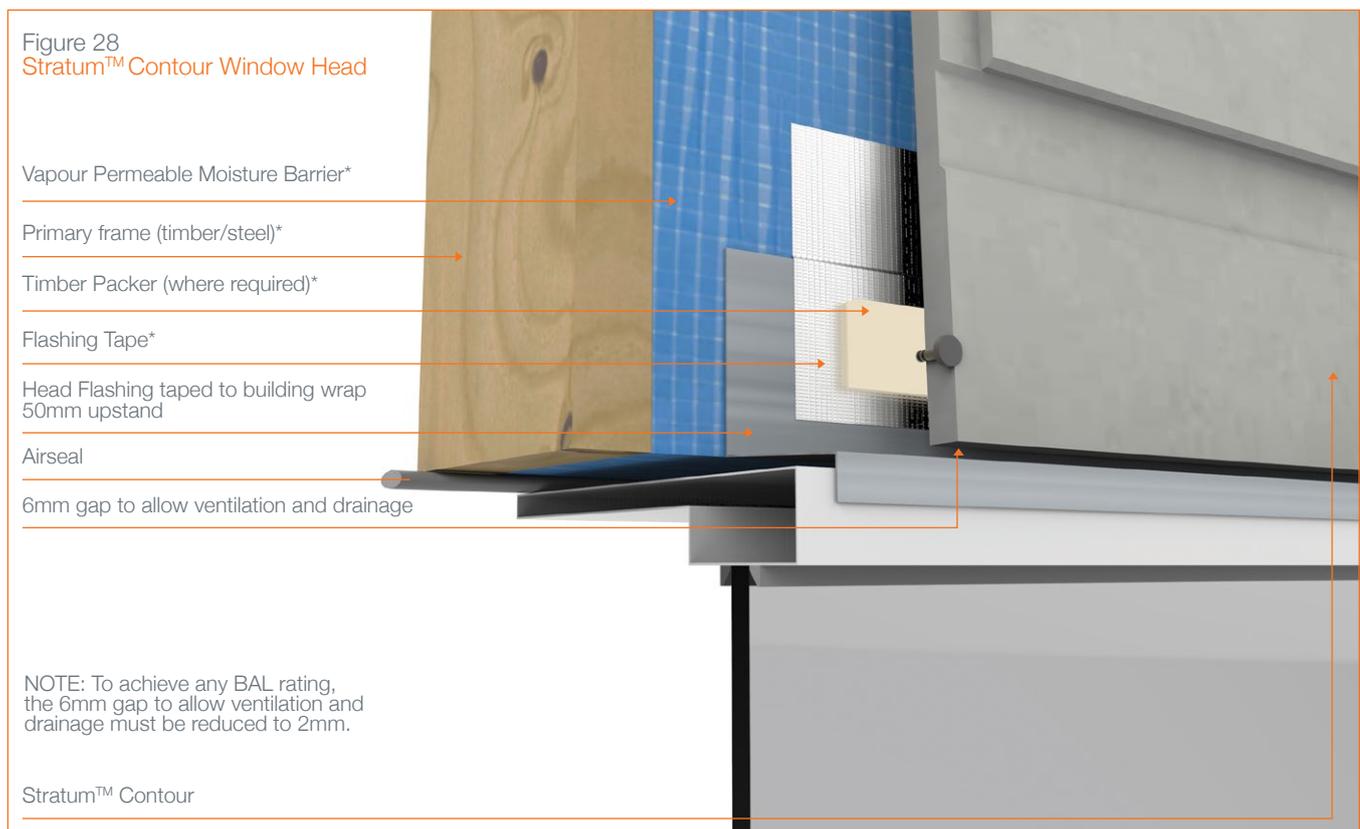
Vapour Permeable
Moisture Barrier*

BGC Aluminium Internal Corner

Continuous bead of
polyurethane sealant

Stratum™ Contour

Figure 28
Stratum™ Contour Window Head



Vapour Permeable Moisture Barrier*

Primary frame (timber/steel)*

Timber Packer (where required)*

Flashing Tape*

Head Flashing taped to building wrap
50mm upstand

Airseal

6mm gap to allow ventilation and drainage

NOTE: To achieve any BAL rating,
the 6mm gap to allow ventilation and
drainage must be reduced to 2mm.

Stratum™ Contour

Installation Details

Figure 29
Stratum™ Contour Window Sill

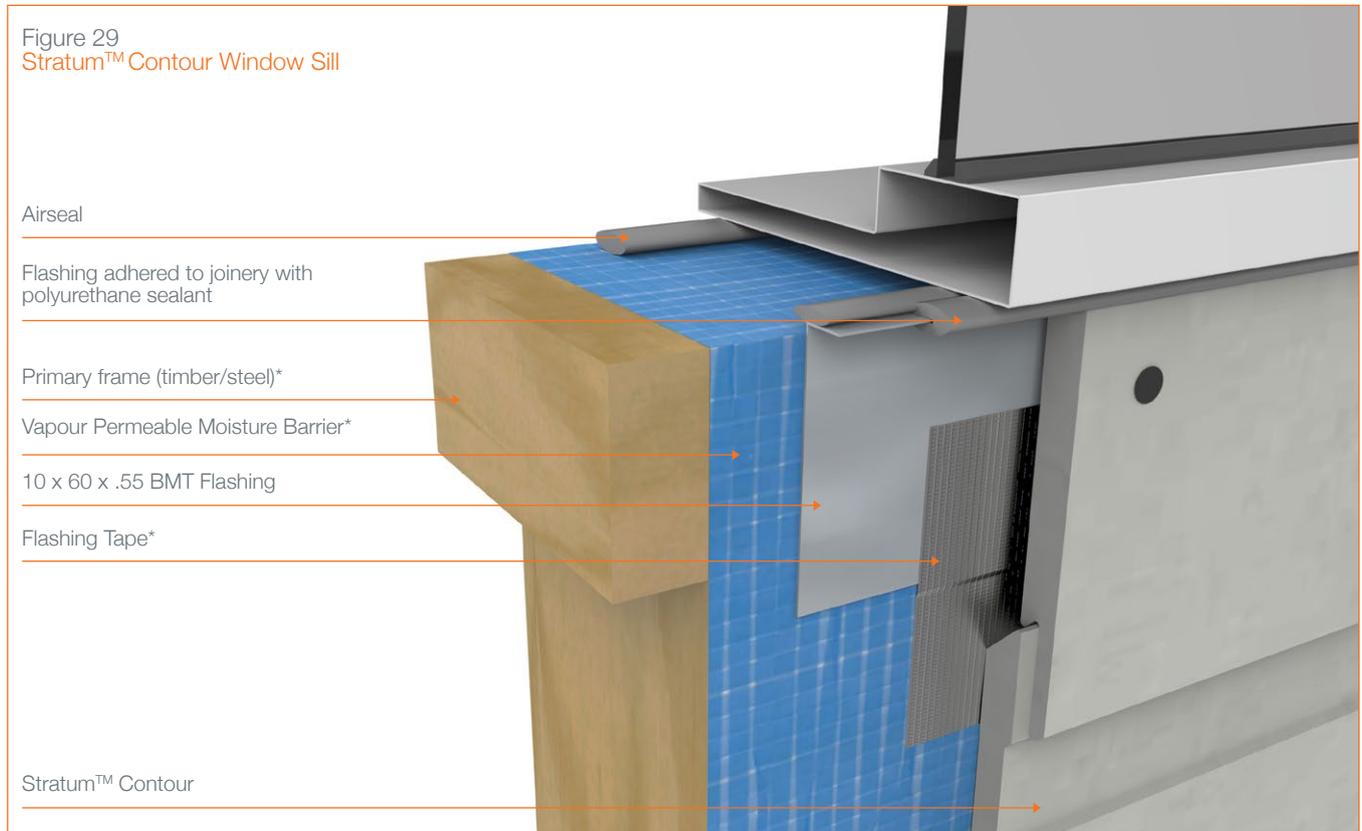
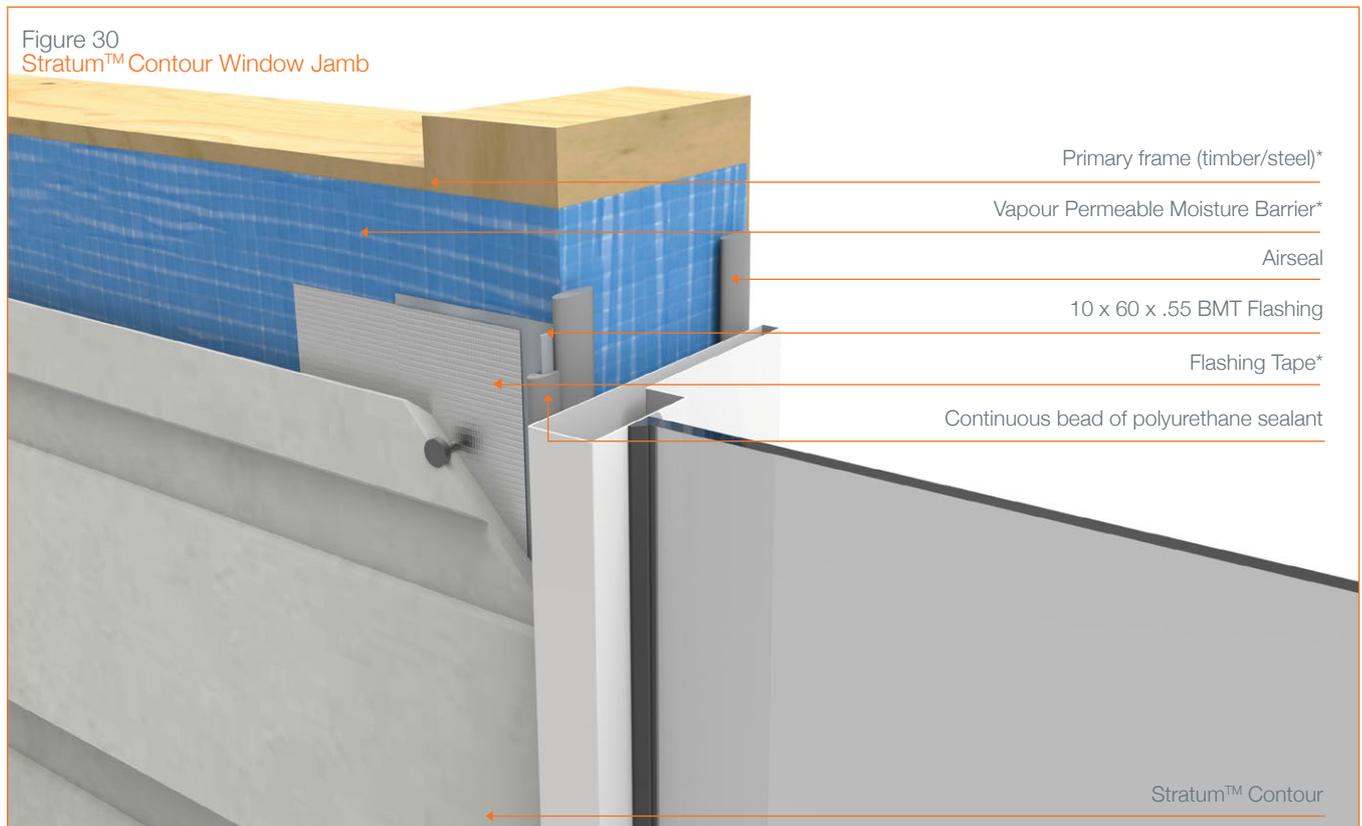


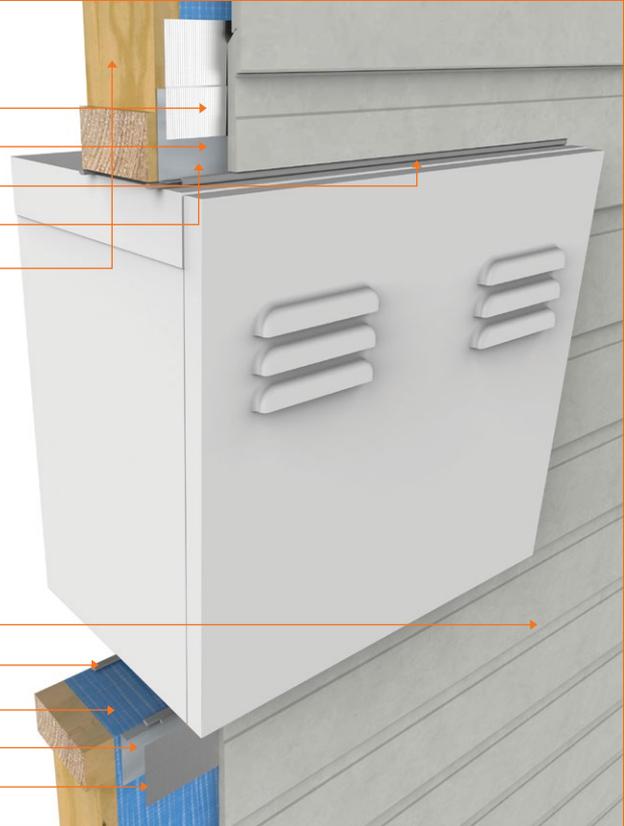
Figure 30
Stratum™ Contour Window Jamb



Installation Details

Figure 31
Stratum™ Contour Meterbox

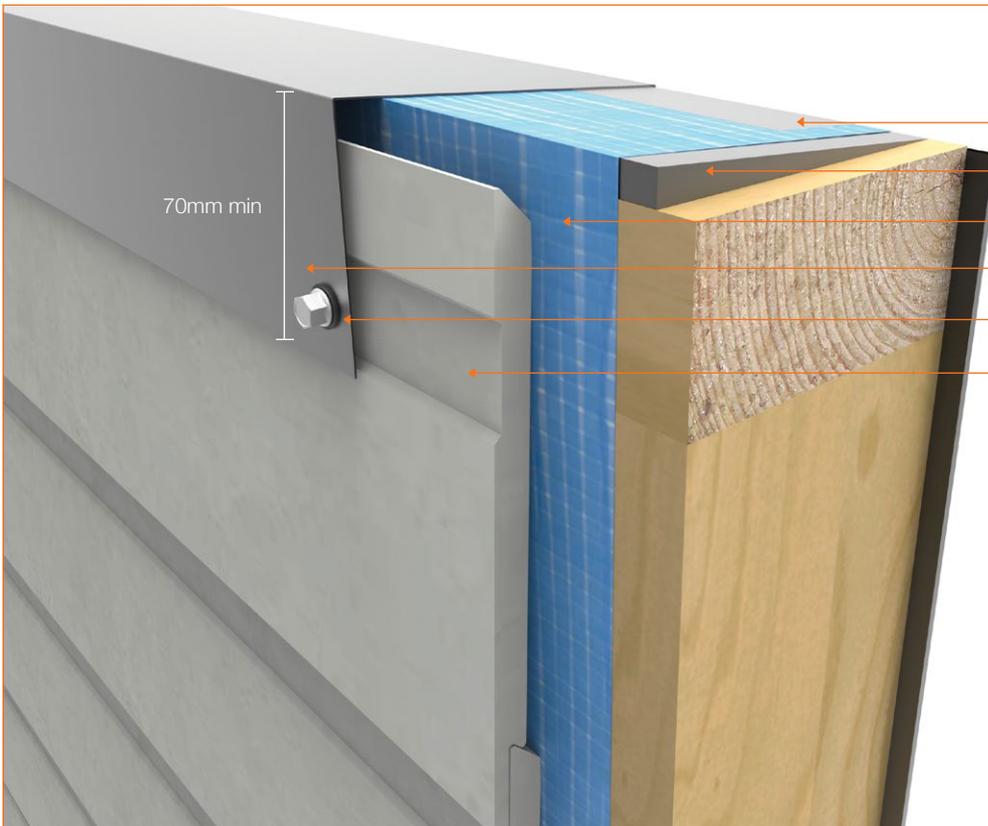
- Flashing Tape*
- 60 x 9 x .55 BMT Flashing
- Continuous bead of polyurethane sealant
- Flashing adhered to meterbox with polyurethane sealant
- Primary frame (timber/steel)*



- Stratum™ Contour
- Airseal
- Vapour Permeable Moisture Barrier*
- 60 x 10 x .55 BMT Flashing
- Flashing tape*

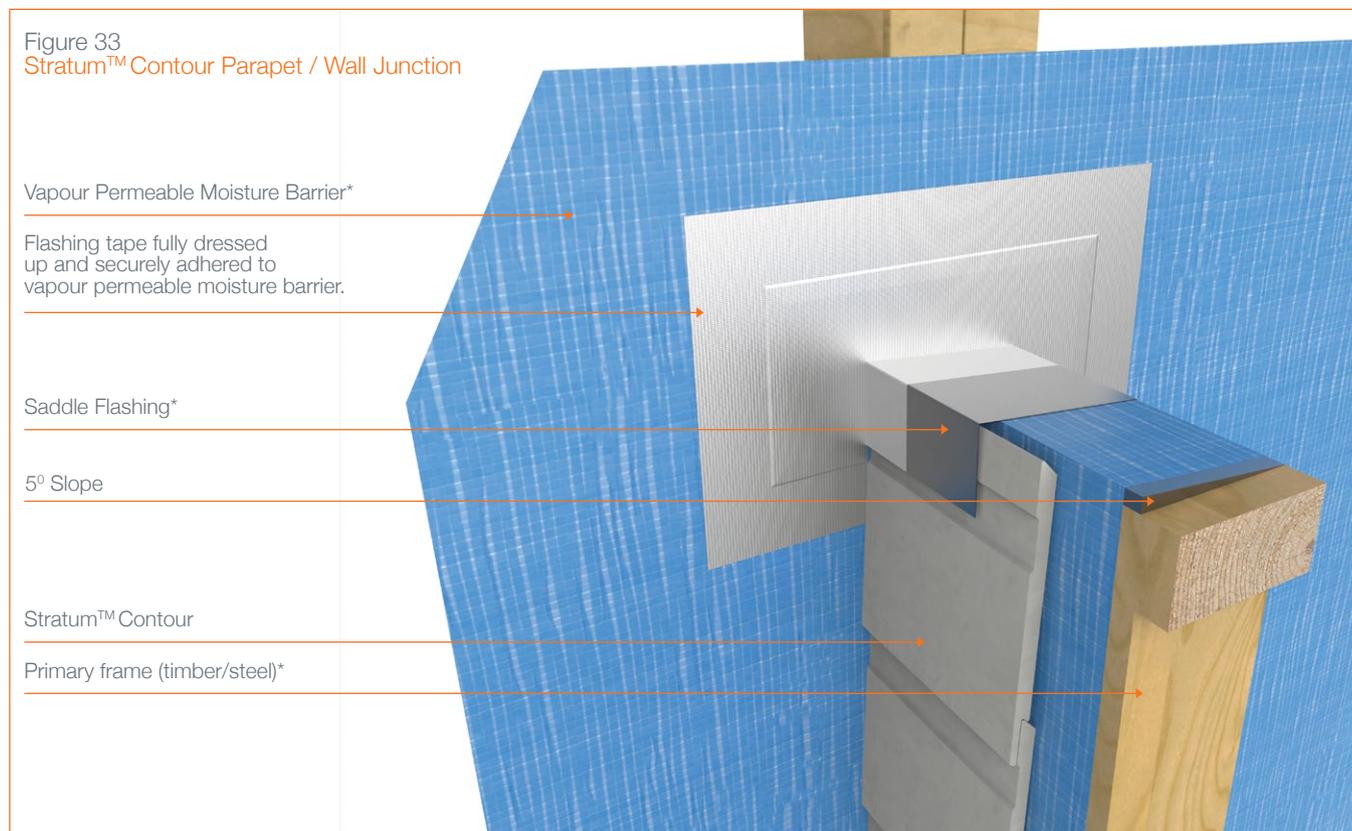
Figure 32
Stratum™ Contour Parapet

- Flashing Tape*
- 5° Slope
- Vapour Permeable Moisture Barrier*
- Parapet Cap*
- Neoprene Washer*
- Stratum™ Contour



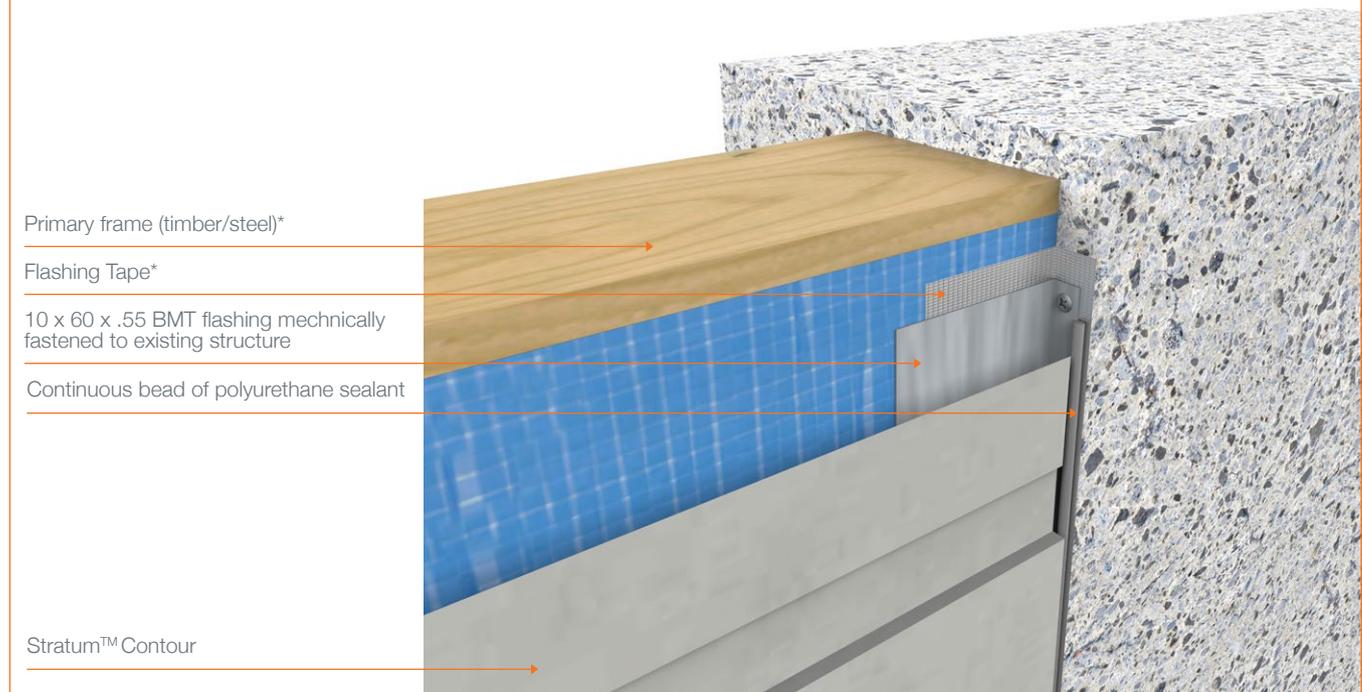
NOTE: Vapour Permeable Moisture Barrier and Parapet Lining meet at the inside edge at the top of the frame and sealed with Flashing Tape.

Installation Details



Installation Details

Figure 35
Stratum™ Contour Wall Abutment

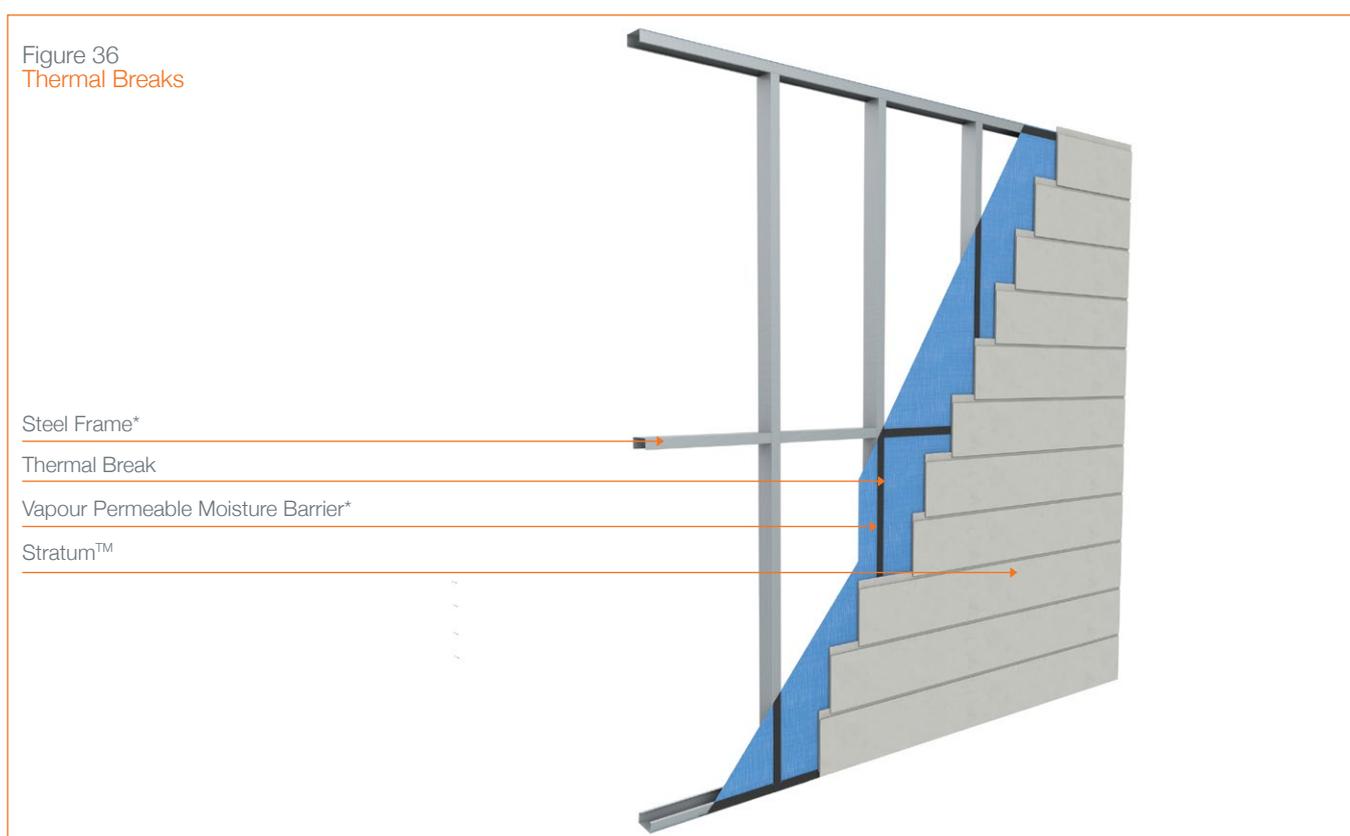


Thermal Breaks - Steel Frame

Thermal breaks may be required for steel framed buildings, in walls that are required to have a minimum total R value. Careful consideration of thermal heat transfer and the position of thermal breaks need to be addressed by the architects, engineers and building designers.

Balustrades, parapets, and other non-enclosing wall elements may not require thermal breaks, except where the possibility of high thermal heat transfer exists through the steel sections to the main structural steel element of the building.

Thermal breaks are required to have an R value of R0.2 in order to meet the NCC requirement for a Thermal Break



Bushfire and Boundary Wall Areas

AS3959:2009 sets out a series of bushfire threat levels to buildings described as BAL (Bushfire Attack Levels) as follows: BAL-Low, BAL-12.5, BAL-19, BAL-29, BAL-40 or BAL-FZ (Flamezone).

Stratum™ is eminently suited for both bushfire and boundary wall applications in residential and multi-residential buildings.

Bushfire AS3959:2018 Applications

Stratum™ may be used as a stand-alone product to achieve up to BAL-40 when fixed direct to frame as per the fixing instructions in this manual.

Stratum™ when used in conjunction with GTEK™ Fire and Wet Area 16mm will comply with the requirements of AS3959:2018 and AS1530.4 to achieve BAL FZ>10.

Boundary/Exterior Walls

Stratum™ in conjunction with GTEK™ Fire and Wet Area 16mm can achieve both 60/60/60 and 90/90/90 FRL fire ratings from the outside as required by the NCC.

In timber frame applications where an exterior wall is required to achieve 60/60/60 FRL, 1 layer of GTEK™ Fire and Wet Area installed with the Stratum™ to the outside walls as well as 10mm GTEK™ Wall on the inside will achieve this result.

In steel frame applications where an exterior wall is required to achieve 60/60/60 FRL 1 layer of GTEK™ Fire and Wet Area installed with the Stratum™ to the outside walls as well as 10mm GTEK™ Wall on the inside will achieve this result.

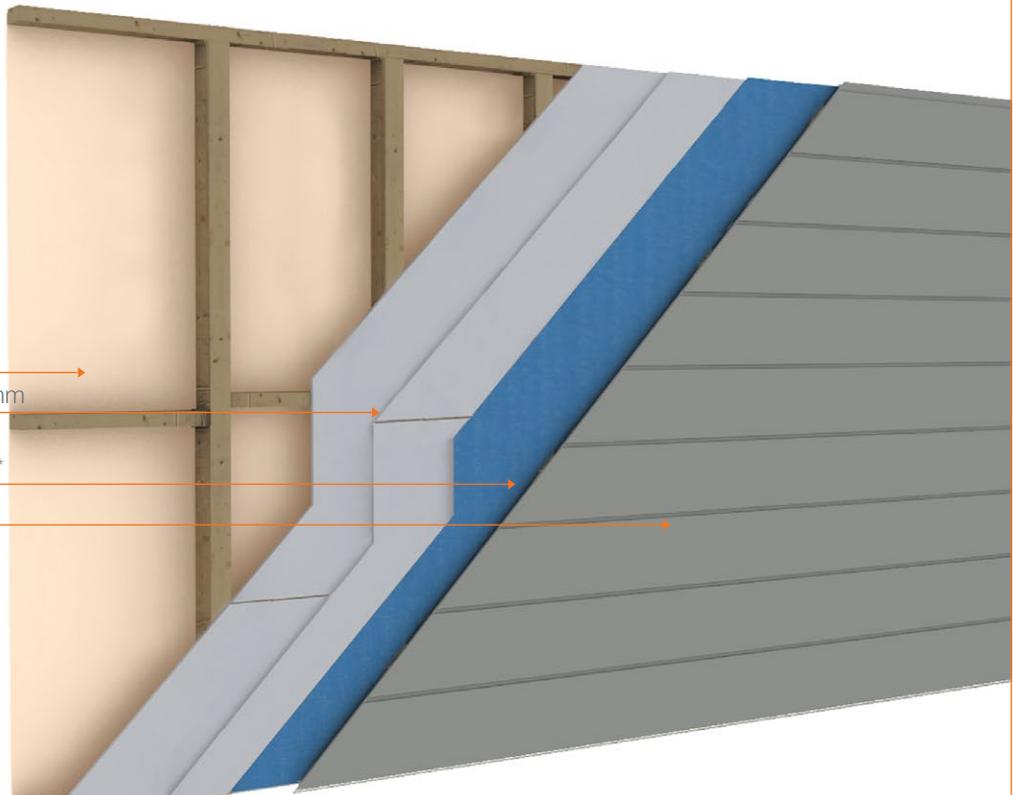
Similarly 2 layers of GTEK™ Fireboard Wet Area 16mm used in conjunction with Stratum™ will achieve 90/90/90 from the outside.

NOTE // All exterior walls must have vapour permeable moisture barrier directly behind the Stratum™. No adhesives are to be used when installing GTEK™ Fire and Wet Area 16mm and the Stratum™. Nails or screws must be used.

For more information please contact your nearest BGC Fibre Cement office. Refer to GTEK™ Fire and Acoustic Guide for installation of fire rated plasterboard.

Figure 37
Boundary Wall System

GTEK™ Wall 10mm
GTEK™ Fire and Wet Area 16mm
Vapour Permeable Moisture Barrier*
Stratum™



Painting

It is recommended that Stratum™ is painted according to the paint manufacturer's instructions within three months following delivery to site with a minimum of two coats of quality exterior paint. Apply chosen paint finish to the manufacturer's recommendations.

Should Stratum™ be exposed to the elements for a period beyond the initial three months, to achieve an optimum finish, an additional priming coat is recommended prior to the top finishing coats being applied.

Ensure that the Stratum™ weatherboards are dry and clean prior to applying a quality exterior paint system.

Maintenance

Stratum™, when used in accordance with this literature, requires no direct maintenance.

To guard against water penetrating the structure and damaging the framework, annual inspections of the cladding system should be carried out. Check flashing, sealant joints and paint work. Flashing and sealants must continue to perform their design function.

Damaged weatherboards should be replaced as originally installed. Paintwork should be maintained.

Deemed to Comply

The NT Deemed to Comply Manual (DTCM) is referenced in the NCC Volume 2 as an acceptable construction manual for high wind areas.

Stratum™, Stratum™ Duo, Stratum™ Trio and Stratum™ Contour are suitable to be used in high wind environments and are Deemed to Comply - M/267/01, M/265/01, M/264/01, M/266.

Warranty

We warrant that our products are free from defects caused by faulty manufacture or materials for the following period from the date of purchase:

- 25 years for the Nuline™ Plus, Stratum™ and Duraplank™ ranges
- 10 years for the Montage™ range and
- 15 years for all other BGC Fibre Cement and Innova™ ranges

If you acquire any defective products, we will repair or replace them, supply equivalent replacement products or refund the purchase price within 30 days of receiving a valid claim, subject to product inspection and confirmation of the existence of a defect by BGC. We will bear the cost of any such repair, replacement or refund.

This warranty is given by:

BGC Fibre Cement Pty Ltd

Ground Floor, 290 Bushmead Road, Hazelmere WA 6055
Phone 08 9374 2900 Fax 08 9374 2901

To claim under this warranty, you must provide proof of purchase as a consumer and make a written claim (including any costs of claiming) to us at the address specified above within 30 days after the defect was reasonably apparent, or if the defect was reasonably apparent prior to installation, the claim must be made prior to installation. You may not claim under this warranty for loss or damage caused by:

- faulty or incorrect installation by non-BGC installers (BGC's installation procedures are at www.bgcinnovadesign.com.au);
- failure to comply with the Building Code of Australia or any applicable legislation, regulations approvals and standards;
- products not made or supplied by BGC;
- abnormal use of the product; or
- normal wear and tear.

The benefits available under this warranty are in addition to other rights and remedies of the consumer under the law. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage.

You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Terms and Conditions

BGC Fibre Cement's Terms and Conditions of Sale ("Agreement"), as in place and published at the date of this brochure, which are available upon request or on our website at www.bgcinnovadesign.com.au. The purchaser's terms and conditions, howsoever provided, do not form part of the Agreement.

Warranty on Metal Components

For warranty information on the metal components specified in this design manual please contact BGC on 1300 652 242 from anywhere in Australia.

Adelaide
Telephone
08 8480 1700

Sydney
Telephone
02 8107 9500

Brisbane
Telephone
07 3548 8400

New Zealand
Telephone
0011 64 9273 1457

Melbourne
Telephone
03 9492 1700

**Technical
help line**
1300 652 242

Perth
Telephone
08 9374 2900

Exterior products and applications
INNOVA™ RANGE OF PRODUCTS

DURACOM™ / A compressed fibre cement facade system.

DURAFLOOR™ / The ultimate flooring product that can be used in both interior and exterior applications.

DURAGRID™ RESIDENTIAL & DURAGRID™ LIGHT COMMERCIAL /
A lightweight facade giving a modern and durable finish.

DURAGROOVE™ / A vertically grooved exterior facade panel.

DURASCAPE™ / A lightweight exterior facade base sheet with a subtle vertical shadow line.

MONTAGE™ / A pre-finished versatile facade system that can be used internally and externally.

NULINE™ PLUS / A weatherboard style cladding system.

STONESHEET™ / Purpose designed substrate for stone tile facade.

STRATUM™ / A range of plank products, each of which can be used as stand-alone products or used together to create a striking exterior cladding solution.

Interior products and applications
INNOVA™ RANGE OF PRODUCTS

INTERGROOVE™ / Internal grooved wall lining.

Exterior products and applications
BGC FIBRE CEMENT RANGE OF PRODUCTS

DURASHEET™ / Ideal for the cladding of gables and lining of eaves. Can also be used on commercial soffits and cladding on non-impact areas.

DURAPLANK™ / Available in Smooth, Woodgrain and Rusticated finishes, Duraplank™ is ideal for exterior cladding of upper storey conversions or ground level extensions.

DURATEX™ / A base sheet used for textured coatings on exterior wall applications.

DURALINER™ PLUS / An exterior lining board that is the perfect substrate for tiles and is ideal for wet areas.

COMPRESSED / Used as a domestic, commercial sheet for wet areas, flooring, partitions, exterior decking, fascia and facade cladding.

DURALUX™ PLUS / Suitable for exterior applications where it will be sheltered from direct weather.

Interior products and applications
BGC FIBRE CEMENT RANGE OF PRODUCTS

DURALUX™ PLUS / An interior lining board suitable for ceilings and soffits.

DURALINER™ PLUS / An interior lining board, this is the perfect substrate for tiles and is ideal for wet areas.

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