



FORM AND FUNCTION

Stratco Hiland Interlock Cladding is a modern architectural wall cladding system ideal for domestic and commercial applications.

Stratco Hiland Interlock Cladding can be fixed either by conventional screw-fix techniques through the overlap along the recessed joint of the adjoining panels, or by using the innovative Hiland Interlock Bracket that conceals all fasteners and achieves:

- a superior architectural finish
- enhanced corrosion performance, and
- a stronger, more reliable connection.

Stratco Hiland Interlock Cladding can be installed either vertically or horizontally to achieve the perfect look for any project.

Available in a full range of roofing colours including matt and metallic options and a variety of specialty architectural finishes including copper, Corten and stainless steel, there is a finish that will compliment your building and its surrounds.

Stratco Hiland Interlock Cladding is available in three standard pan widths and three shadow line options. These can be mixed and matched on a project to achieve a truly unique aesthetic with maximum visual impact.

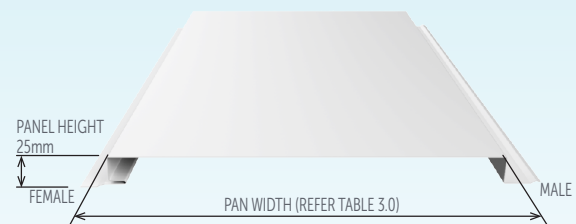


FIGURE 1.0: INTERLOCK PANEL PROFILE

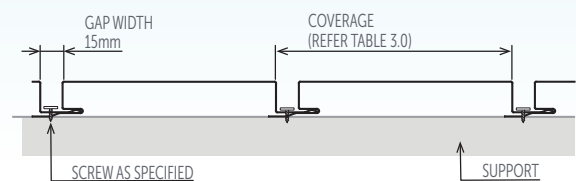


FIGURE 2.0A: EXPOSED FIXING DETAIL

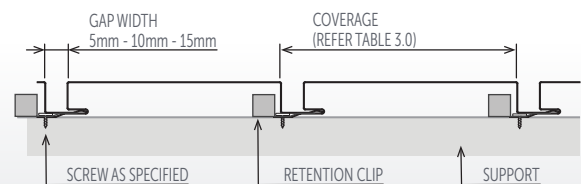


FIGURE 2.0B: CONCEALED FIXING DETAIL

STRATCO INTERLOCK CLADDING

DESIGN GUIDE: STRATCO HILAND INTERLOCK CLADDING

DESIGN CONSIDERATIONS

Interlock sheeting shall be installed continuous over two spans minimum and restrained to timber supports or metal studs or battens with a minimum base metal thickness (BMT) of 0.55mm.

The Quick Selection Guide has been prepared based on loading imposed from wind classification up to and including non-cyclonic domestic classification N5.

Stratco does not accept liability for any loss or damage suffered as a result of any errors in the interpretation of these span tables.

Light gauge steel cladding with wide pans may exhibit oil canning which can affect the aesthetics of the building design. Oil canning will vary depending on the time of day and angle of viewing and will likely be more noticeable in darker colours. Oil canning will also be more prevalent in wider pans and longer sheet runs. Building designers and homeowners should be aware of this and take it into consideration.

Please take note of the installation recommendations for horizontal cladding to minimise the risk of moisture ingress.

QUICK SELECTION GUIDE

The wind classifications are based on a building eaves height not exceeding 6.0m and a building aspect ratio not exceeding 1.

The building aspect ratio is defined as the average roof height divided by the smaller of the building's width or length. Walling calculations are based on $C_{pe} = -0.65$ and $C_{pi} = 0.2$.

A local pressure factor, $K_l = 1.5$ has been used for all spans for both strength and serviceability limit states.

Additional engineering advice may be obtained from Stratco if any design parameters vary from those indicated above.

QUICK SELECTION GUIDE Maximum Wind Classification

TABLE 1.0

Fixing Type	Coverage (mm)	Shadowline Gap (mm)	Span (mm) #		
			450	600	900
Exposed fix	190	15	N5	N4	N1
	290	15			
	490	15			
Concealed fix	190/ 195/ 200	15 / 10 / 5	N5	N3	N2
	290/ 295/ 300				
	490/ 495/ 500				
	500				

#Note: Interlock wall sheeting shall be installed continuous over 2 Spans minimum

WIND CAPACITY (kPa)

TABLE 2.0

Fixing type	Coverage (mm)	Shadowline Gap (mm)	Wind Limit State	Span (mm) #		
				450	600	900
Exposed fix	190/ 290	15	Service ability	2.5	2.83	0.63
			Strength	4.78	3.2	0.86
	490	15	Service ability	3.7	2.83	0.8
			Strength	6.95	3.54	0.99
Concealed fix	195 / 200 / 295 / 300	5 / 10	Service ability	2.5	1.98	0.63
			Strength	4.74	4.09	1.61
	190 / 290	15	Service ability	2.5	1.98	1.58
			Strength	4.74	2.68	1.91
	495 / 500	5 / 10	Service ability	2.57	1.88	1.15
			Strength	6.95	3.08	1.61
	490	15	Service ability	2.59	2.08	0.92
			Strength	6.02	2.67	1.76

#Note: Interlock wall sheeting shall be installed continuous over 2 Spans minimum.

MATERIAL SPECIFICATIONS - 'AZ' COATING

TABLE 3.0

Material Properties	0.55mm BMT Girth 300mm						0.55mm BMT Girth 400mm						0.55mm BMT Girth 600mm					
	ZnAl	Colour	ZnAl	Colour	ZnAl	Colour	ZnAl	Colour	ZnAl	Colour	ZnAl	Colour	ZnAl	Colour	ZnAl	Colour	ZnAl	Colour
Mass (kg/linear metre)	1.35	1.36	1.35	1.36	1.35	1.36	1.80	1.82	1.80	1.82	1.80	1.82	2.69	2.73	2.69	2.73	2.69	2.73
Width Coverage (mm)	190		195		200		290		295		300		490		495		500	
Pan Width (mm)	175		185		195		275		285		295		475		485		495	
Shadowline gap (mm)	15		10		5		15		10		5		15		10		5	
Min. 'AZ' Coating Mass (g/m ²)	150						150						150					
Min. Yield Strength (MPa)	300						300						300					
Sheet Tolerance (mm) Length & Width	±7 ±4						±7 ±4						±7 ±4					
Sheet Length	Min., 1500mm - Max. 8000mm																	

Note: For alternate material options, please refer to Stratco for material specifications.

WIND LOAD CONVERSION

For domestic applications use the appropriate wind classification for the area. To read span tables for commercial and industrial applications, select the region, terrain category and shielding for the area, then convert it to a wind classification using the table below:

APPROXIMATE WIND LOAD CONVERSION

TABLE 4.0

Region	Terrain Cat	Ms (Shielding)	Wind classification
A	3	0.9	N1
		1	N2
	2.5	0.9	N2
		1	N2
	2	0.9	N2
		1	N3
B	3	0.9	N3
		1	N3
	2.5	0.9	N3
		1	N4
	2	0.9	N3
		1	N4

For Commercial and industrial applications

Structure Importance level = 2.0

500 year design return period

Mt (topographic) and Md (directional) multipliers = 1.0

Maximum overall building height = 10m

INSTALLATION RECOMMENDATIONS

For cladding spanning horizontally, the Interlock panels shall be installed with top edge being the 'male' detail. Hence, horizontal Interlock panels are typically installed from top to bottom.

Interlock wall sheeting spanning vertically may be used on angled wall facades.

Horizontal Interlock sheeting is not recommended for angled wall facades due to the potential for water ponding within the shadowline gap.

Interlock sheeting is not suitable for end lapping.

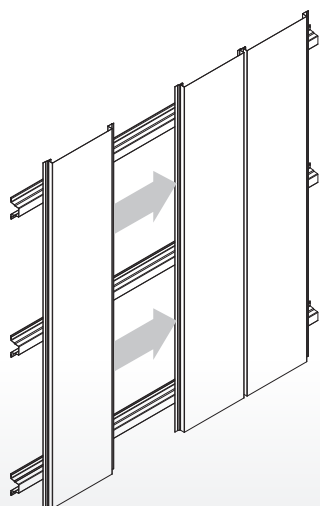


FIGURE 3.0: VERTICAL ORTHO

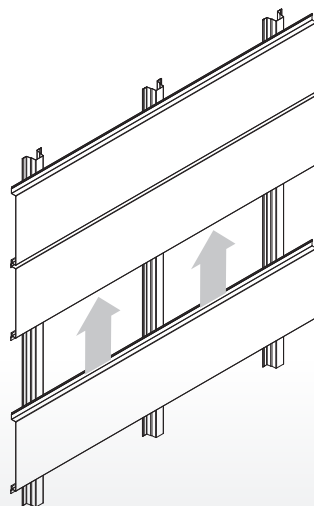


FIGURE 4.0: HORIZONTAL ORTHO

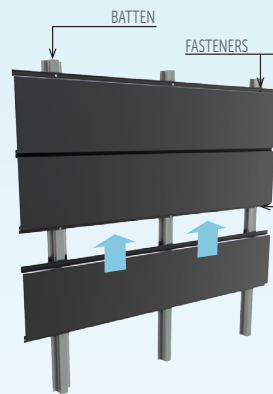


FIGURE 5.0: FIXING DETAIL

FIXING

EXPOSED FIX

At each supporting member, screw fix within the shadowline gap. Ensure the screw engages both legs of each adjoining Stratco Interlock panel.

CONCEALED FIX

At each supporting member, screw fix the supplied retention clip together with the leg of the 'female' side of the Interlock panel.

FASTENER SELECTION

TABLE 5.0

Fixing type	Support	Coverage	Retention Clip	Fastener	
Exposed fix	Steel batten, Minimum 0.55mm BMT G550	200, 300, 500	NA	10g-16x16mm hex head self drilling screws with neoprene washer	Class 4 corrosion protection
	Timber #	200, 300 500	NA	10g-12x25mm type 17 hex head screw with neoprene washer 10g-12x35mm type 17 hex head screw with neoprene washer	Class 4 corrosion protection
Concealed fix	Steel batten, Minimum 0.55mm BMT G550	ANY	0.75 BMT G550	10g-15x16mm needle point flat head screw	Class 3 corrosion protection
	Timber #	190 to 300 490, 495, 500	0.75 BMT G550	10g-12x25mm type 17 wafer head screw 10g-12x35mm type 17 wafer head screw	Class 3 corrosion protection

Note: Fastener allocation is for 'A2' coated steel only. Refer Stratco if alternative material options are to be used.

Fixing to Timber Notes:

- T1. Screws into Seasoned timber only
- T2. Minimum MGP10 or F7 stress grade
- T3. Minimum timber edge distance = 25mm
- T4. Minimum timber batten depth = 45mm
- T5. Prebore hole to suit shank diameter

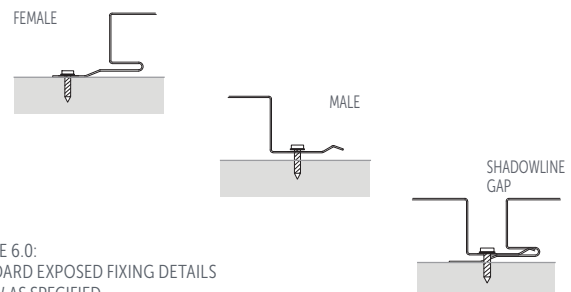


FIGURE 6.0: STANDARD EXPOSED FIXING DETAILS SCREW AS SPECIFIED

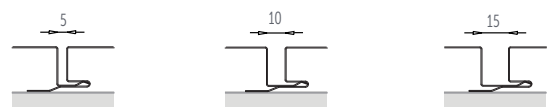
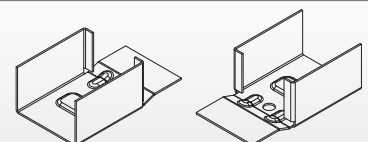


FIGURE 7.0: SHADOWLINE GAP RANGE BETWEEN PANELS

FIGURE 8.0: STRATCO RETENTION CLIP DETAIL (USED IN CONCEALED FIX APPLICATIONS ONLY)



HILAND TRAY INTERLOCK CLADDING

FIXING

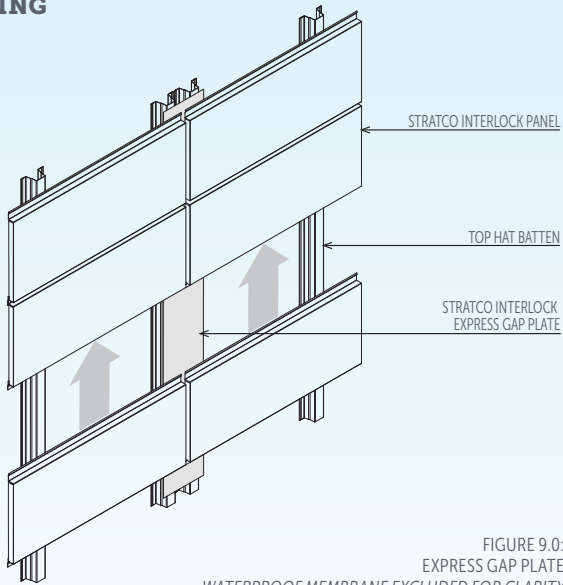


FIGURE 9.0:
EXPRESS GAP PLATE
WATERPROOF MEMBRANE EXCLUDED FOR CLARITY

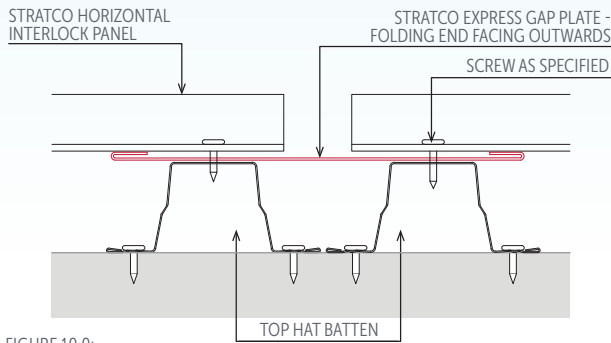


FIGURE 10.0:
EXPRESS GAP PLATE DETAIL
WATERPROOF MEMBRANE EXCLUDED FOR CLARITY

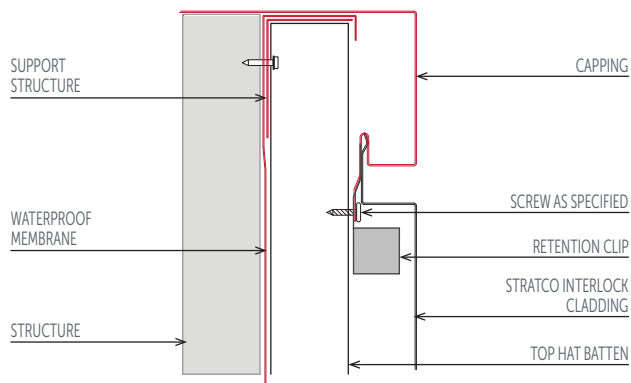


FIGURE 11.0: TOP OF FACADE CAPPING DETAIL

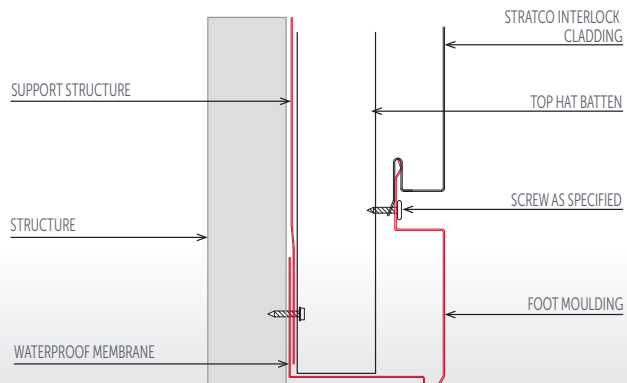


FIGURE 12.0: BOTTOM OF FACADE MOULDING DETAIL

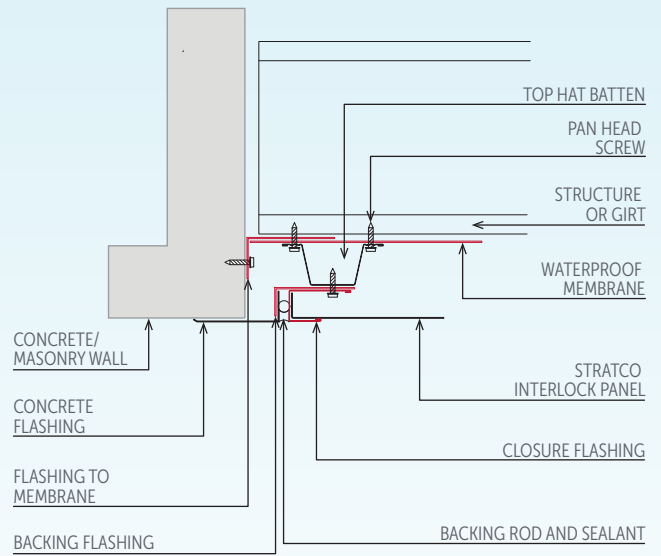


FIGURE 13.0: SIDE OF FACADE FLASHING DETAIL

FLASHINGS

CORNER PANELS

Mitred corner details can be custom made to allow horizontally mounted panels to continue seamlessly around external corners, maintaining a smooth appearance. Vertically installed panels meeting at external or internal corners can be joined with a custom folded corner panel to continue the flow of panels around the corner.

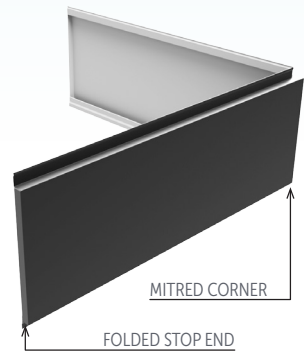


FIGURE 14.0: MITRED CORNER & FOLDED STOP END

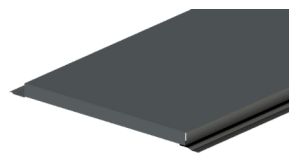


FIGURE 15.0: FOLDED STOP END DETAIL

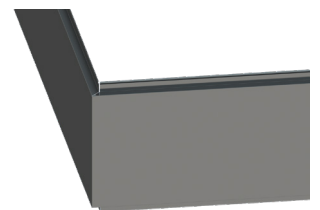


FIGURE 16.0: MITRED CORNER DETAIL

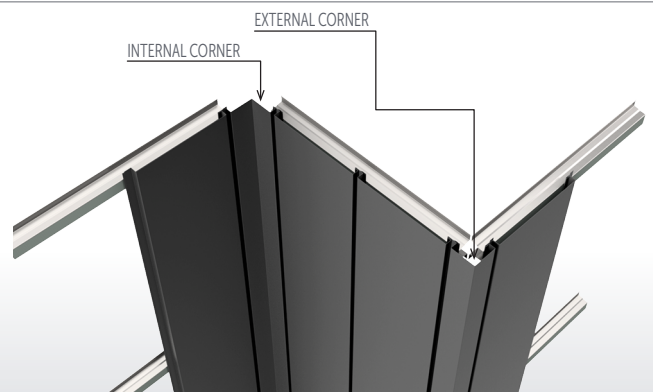


FIGURE 17.0: INTERNAL & EXTERNAL CORNER REPRESENTATION

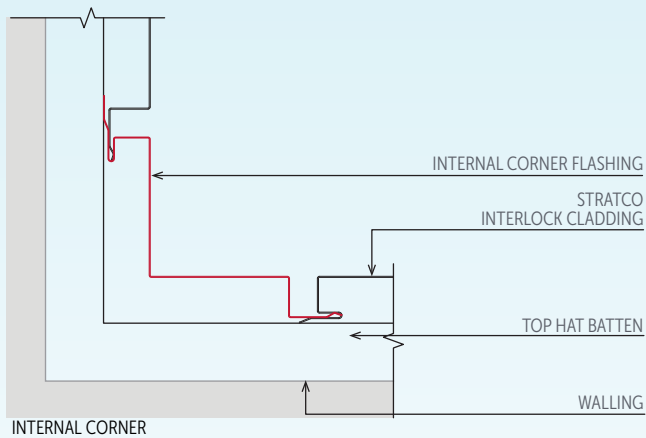


FIGURE 18.0: INTERNAL CORNER WALL FLASHING DETAIL (PLAN VIEW)

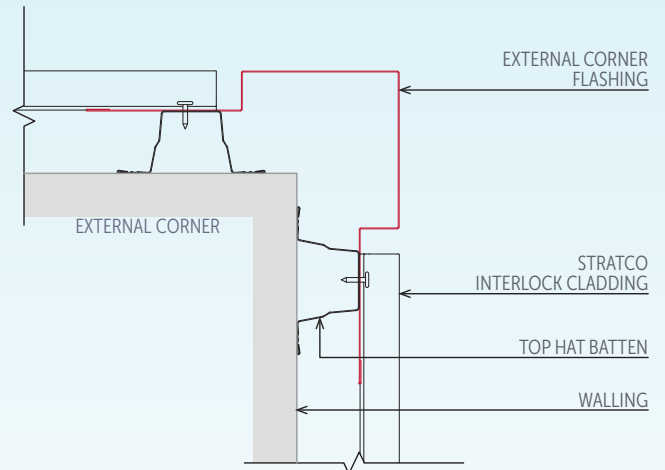


FIGURE 19.0: EXTERNAL CORNER WALL FLASHING DETAIL (PLAN VIEW)

FLASHINGS AROUND OPENINGS VERTICAL SPAN

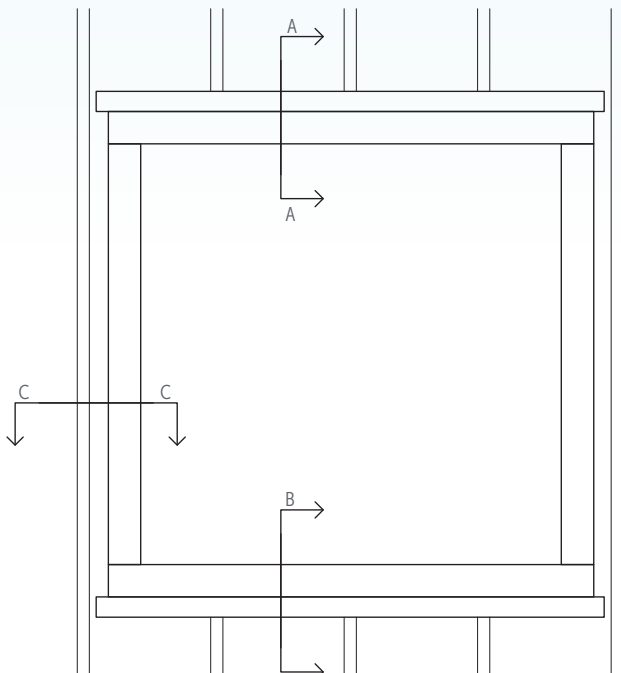


FIGURE 20.0: FLASHING AROUND OPENING - VERTICAL FRONT VIEW

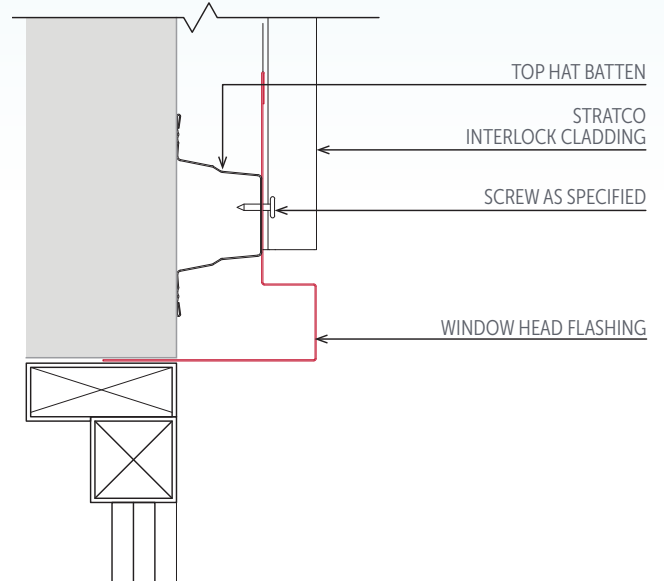


FIGURE 21.0: SECTION A-A
HEAD & SILL FLASHING TO BE TURNED UP AND DOWN BEHIND JAMB FLASHING
WATERPROOF MEMBRANE EXCLUDED FOR CLARITY

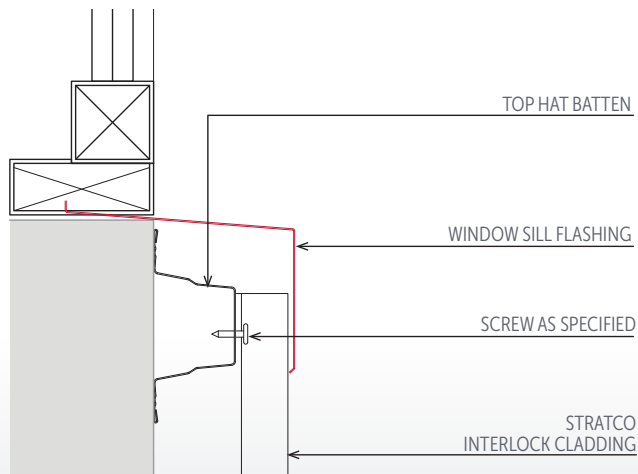


FIGURE 22.0: SECTION B-B
WATERPROOF MEMBRANE EXCLUDED FOR CLARITY

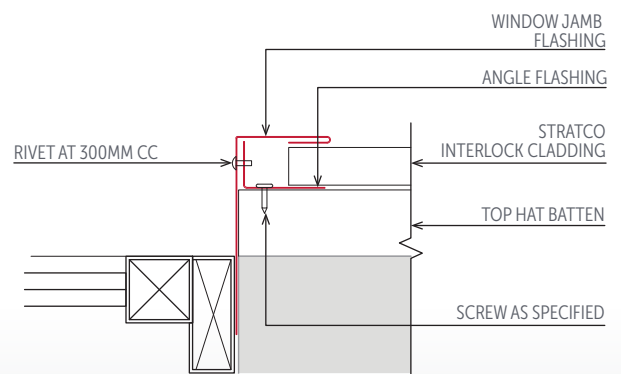


FIGURE 23.0: SECTION C-C
FLASHING FIXED PRIOR TO PANEL, IF NOT FIXED THROUGH EXPRESS JOINT
WATERPROOF MEMBRANE EXCLUDED FOR CLARITY

HORIZONTAL SPAN

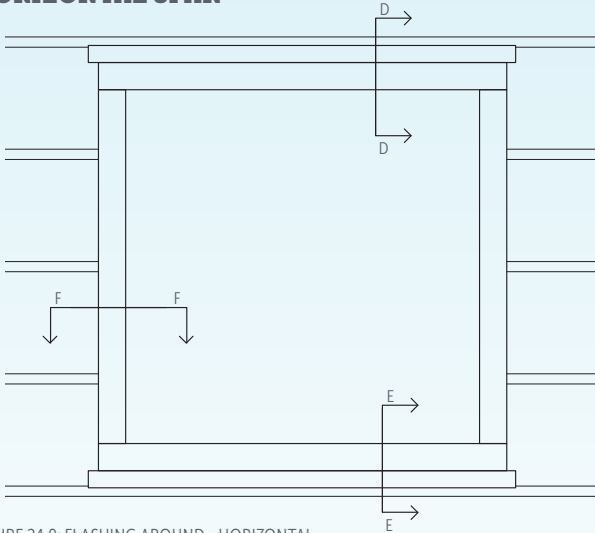


FIGURE 24.0: FLASHING AROUND - HORIZONTAL FRONT VIEW

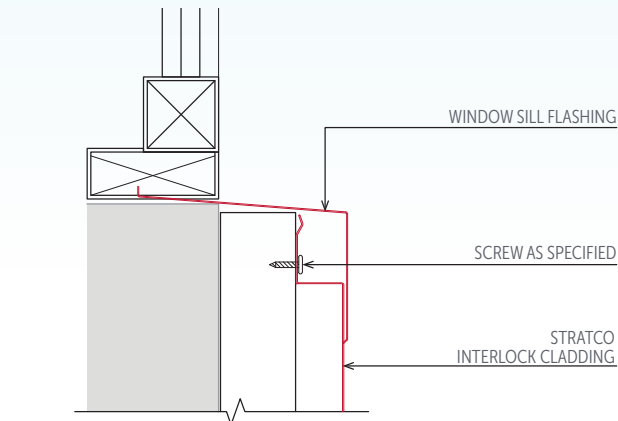


FIGURE 26.0: SECTION E-E
WATERPROOF MEMBRANE EXCLUDED FOR CLARITY

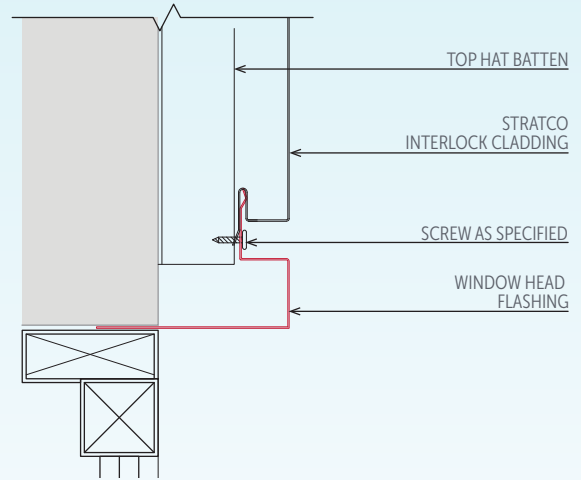


FIGURE 25.0: SECTION D-D
HEAD & SILL FLASHINGS TO BE TURNED UP AND BEHIND JAMB FLASHING
WATERPROOF MEMBRANE EXCLUDED FOR CLARITY

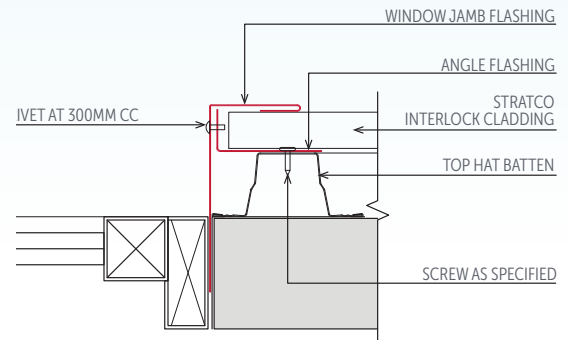


FIGURE 27.0: SECTION F-F
FLASHING FIXED PRIOR TO PANEL, IF NOT FIXED THROUGH EXPRESS JOINT
WATERPROOF MEMBRANE EXCLUDED FOR CLARITY

COMPLIANCE

Testing has been performed in accordance with AS1562.1-2018 and AS4040.0, 1 & 2-1992. Walling allowable spans and fastener allocation have been determined based on relevant pressures determined in accordance with AS4055, Wind Loads for Housing, for domestic applications and AS/NZS1170.2-2016 for industrial/ commercial applications.

Interlock wall sheeting is classified as a "non-combustible" material in accordance with NCC 2019, Building Code of Australia.

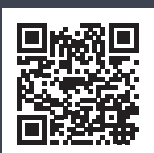
MAINTENANCE REQUIREMENTS

The performance of Interlock walling over time depends on its correct application and maintenance. Maintenance should be performed as often as is required to remove any dirt, salt and pollutants.

Where Interlock cladding is used in severely corrosive environments, cleaning should be performed more often. It is important that screws have the same life expectancy as the Interlock cladding.

Packs of Interlock sheeting should always be kept dry and stored above ground level on site. If the sheets have become wet, they should be separated, wiped and placed in the open to dry.

Refer to the Stratco 'Selection, Use and Maintenance' brochure for more detailed information about the correct use and maintenance of this product.



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