



The Complete Cladding Solution

 **Freefoam**
Building Products



Contents

Introduction: The Complete Cladding Solution	3
Shiplap and Open V Cladding	4
Woodgrain Shiplap and Open V Cladding	5
Fortex Embossed Cladding: Double Shiplap	6
Weatherboard	7
X-Wood Cladding	8
Fitting Accessories	9-10
Installation instructions	11-17
Maintenance	17
Technical Data	18



The Complete Cladding Solution

Freefoam manufacture a range of long lasting, low maintenance cladding systems. Designed for high performance with high specification standards, Freefoam PVC-UE cladding is produced with our environmentally friendly lead free formulation, and guaranteed to stand the test of time.

Easy to install

All Freefoam cladding products are easy to fit. Both the standard PVC-U and Aluminium range of fitting trims ensure every installation is straightforward, designed to create a neat and professional finish.

Very low maintenance

PVC-UE is a very stable material. Cladding products made from PVC-UE do not require repainting or regular maintenance. A simple wipe-down with a damp cloth is all that's required to keep Freefoam cladding products looking their best. This offers a major long-term advantage over wood cladding saving time and money.



Cut heating costs with exterior cladding

With heating costs always a concern, fitting exterior wall cladding can provide the ideal solution to insulate your home. When installed with generic insulation materials, The Building Research Establishment's (BRE) 'Green Guide to Specification' has given PVC cladding an A+ rating.



Versatile

Freefoam cladding can be used on all types of exteriors including brick, masonry and concrete. Suitable for a wide variety of projects and situations, offering an attractive facade for both traditional and contemporary projects.

- New Build projects, both domestic and commercial
- Feature wall on a home extension.
- Replace timber cladding with long lasting PVC-U
- Replace hanging tiles with cladding.
- Replace tired and cracked render with new PVC cladding.
- Garden room or home office.



Shiplap and Open V Cladding

As the name suggests, shiplap cladding earned its name from the way ships were built in the past.

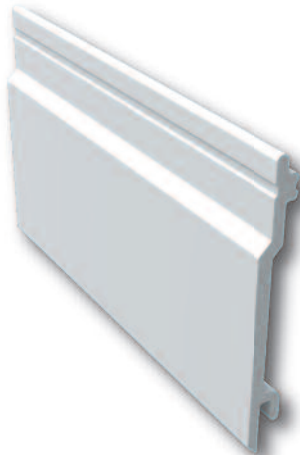
- Shiplap and Open V cladding have a rebate at the bottom of the plank and a scalloped profile at the top.
- Shiplap and Open V cladding can be fitted horizontally or vertically
- Available in smooth gloss white finish
- Ideal for dormer roof extension and gable end.

Guaranteed to stay white

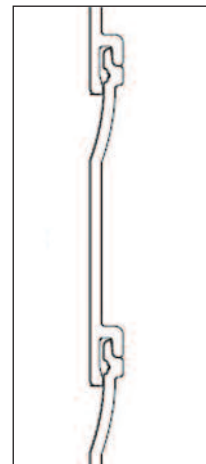
Prolonged exposure to Ultra Violet (UV) light from the sun can damage our skin - and it has the same effect on PVC causing it to degrade over time. Freefoam white cladding is manufactured using a natural mineral called titanium dioxide - the same product is used in sun cream! It guarantees white cladding products to stay bright white for up to 10 years.



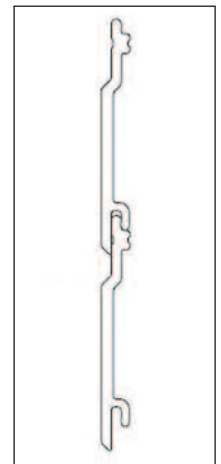
FC151 Shiplap



FV100 Open Vee



Profile of fitted boards (FC151)



Profile of fitted boards (FV100)

Colour Range



White

Nearest RAL 9003



Woodgrain Shiplap and Open V Cladding

Woodgrain finish cladding is suitable for both new installations and refurbishment, including feature walls and dormer extensions. Match to PVC woodgrain fascia, windows and doors.

- Available in two widths, 151mm and 100mm
- Wide colour range

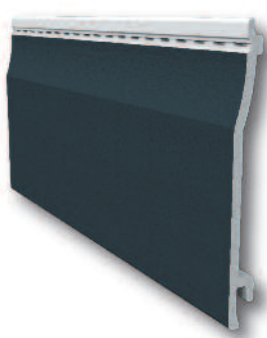


Manufactured to last

Freefoam work with world leading woodgrain film provider Renolit using the Exofoil PVC film for all woodgrain cladding to provide a durable fade resistant product.

The colour pigments in the base film use Solar Shield Technology to protect the cladding against excessive heat build up and the upper transparent layer helps prevent fading caused by UV radiation or other weathering effects.

This technology allows Freefoam to offer a ten year guarantee on all woodgrain cladding products.



FC151 Shiplap



FV100 Open Vee

Colour	Code	FC151	FV100
Anthracite Grey	WGAG	●	
Black Ash	WGB	●	●
Mahogany	WGM	●	●
Light Oak	WGO	●	●
Rosewood	WGR	●	●

Woodgrain Shiplap and Open Vee Cladding Range



Anthracite Grey
Nearest RAL 7016



Black Ash
Nearest RAL 8515



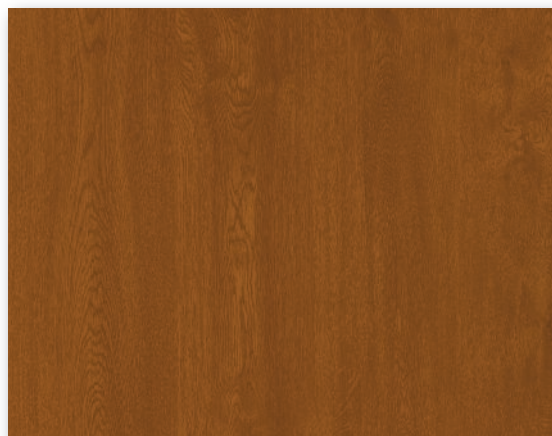
Mahogany



Light Oak

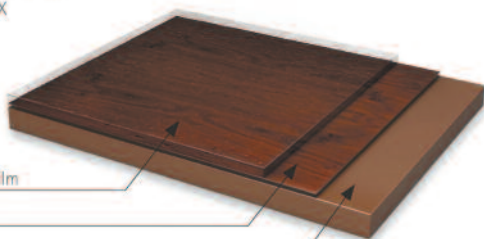


Rosewood



Detail of Woodgrain finish
(Light Oak finish pictured)

Diagram showing the structure of the exterior film
RENOLIT EXOFOL MX



Transparent PMMA film
Printing ink
Pigmented PVC base film with SST



Fortex Embossed Cladding

Fortex® is a range of innovative exterior PVC cladding products that features an authentic embossed wood effect finish.

Two profiles:

- Double Shiplap
- Weatherboard

Double Shiplap

One board with a Shiplap design, covers large areas quickly. Available in two sizes.



FCD333E Double Shiplap



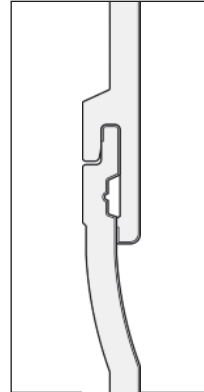
FCD300E Double Shiplap

FORTEX®

Superior Durability

The Fortex® cladding range is manufactured as a long-term decorative cladding solution, designed to withstand weather and external conditions.

Guaranteed for up to 10 years*, backed by Freefoam's environmentally friendly lead-free formulation.

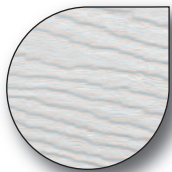


Profile of fitted boards



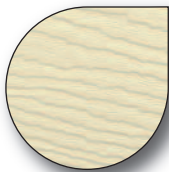
Fortex Double Shiplap

Fortex Embossed PVC-U Cladding Range



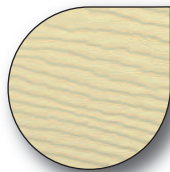
White

Nearest RAL 9003



Pale Gold

Nearest RAL 1013

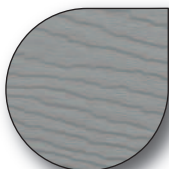


Sand



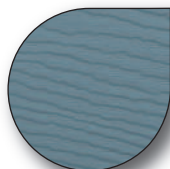
Misty Grey

Nearest RAL 7038



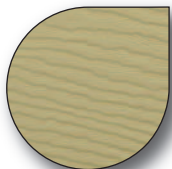
Storm Grey

Nearest RAL 7045

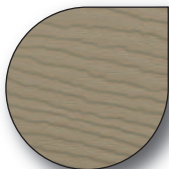


Colonial Blue

Nearest RAL 7000



Cappuccino

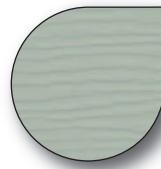


Argyll Brown



Slate Grey

Nearest RAL 7015



Sage Green

Colour	Code	FCD333E	FCD300E
White		●	●
Pale Gold	PG	●	●
Sand	SAND	●	●
Misty Grey	MG	●	
Storm Grey	SG	●	
Colonial Blue	CLB	●	
Cappuccino	CAP	●	
Argyll Brown	AB	●	
Slate Grey	SLG	●	
Sage Green	SAGN	●	

* 5 year guarantee applies to dark colours, Cappuccino, Argyll Brown, Storm Grey, Slate Grey, Colonial Blue and Sage Green



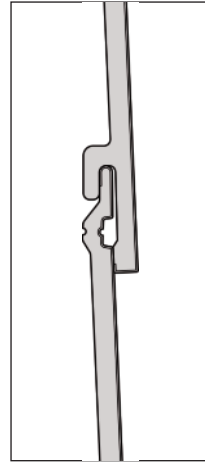
Weatherboard



Weatherboard cladding, sometimes known as featheredge cladding, features a tapered board. Designed to be laid with an overlap to create a 'New England' look.



FCF170E Weatherboard

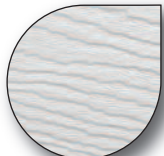


Profile of fitted boards



Fortex Weatherboard

Weatherboard Range



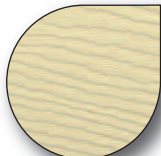
White

Nearest RAL 9003



Pale Gold

Nearest RAL 1013

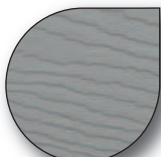


Sand



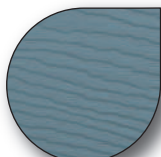
Misty Grey

Nearest RAL 7038



Storm Grey

Nearest RAL 7045



Colonial Blue

Nearest RAL 7000



Pale Blue

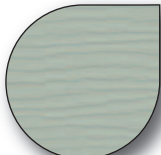


Argyl Brown



Slate Grey

Nearest RAL 7015



Sage Green

Colour	Code	FCF170E
White		●
Pale Gold	PG	●
Sand	SAND	●
Misty Grey	MG	●
Storm Grey	SG	●
Colonial Blue	CLB	●
Cappuccino	CAP	●
Argyl Brown	AB	●
Slate Grey	SLG	●
Sage Green	SAGN	●



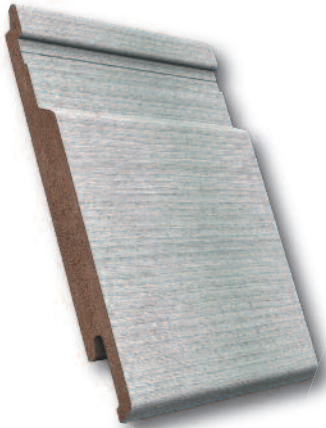
X-Wood Cladding

A highly durable composite cladding system that provides a contemporary attractive exterior façade. Perfect for any new build project or property renovation, X-Wood cladding is guaranteed to provide a weatherproof exterior for 10 years.

- 16mm thick board
- Smooth woodgrain finish featuring industry leading Renolit film
- Aluminium fitting trims



- Heavy duty plastic foam core
- A durable solid plastic skin
- A superior coating from market leading Renolit colour film manufacturer featuring a woodgrain effect finish
- X-Wood is guaranteed for 10 years and offers an attractive contemporary look



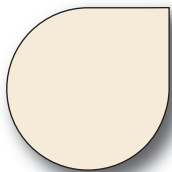
FCV143 X-Wood Cladding



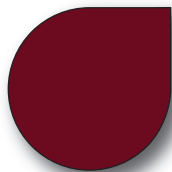
- 1 Heavy Duty Core
- 2 Durable Solid Plastic Skin
- 3 Renolit® Colour Film



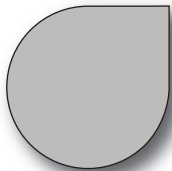
X-Wood Cladding Range



Cream White
Nearest RAL 9001



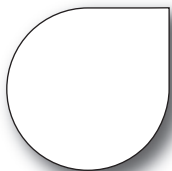
Wine Red
Nearest RAL 3005



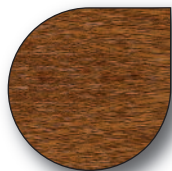
Greyed Cedar



Anthracite
Nearest RAL 7016

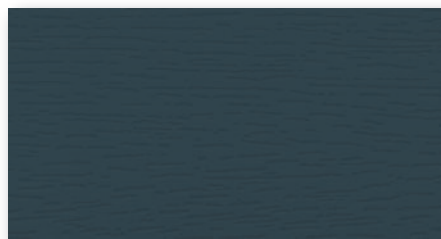


White
Nearest RAL 9016

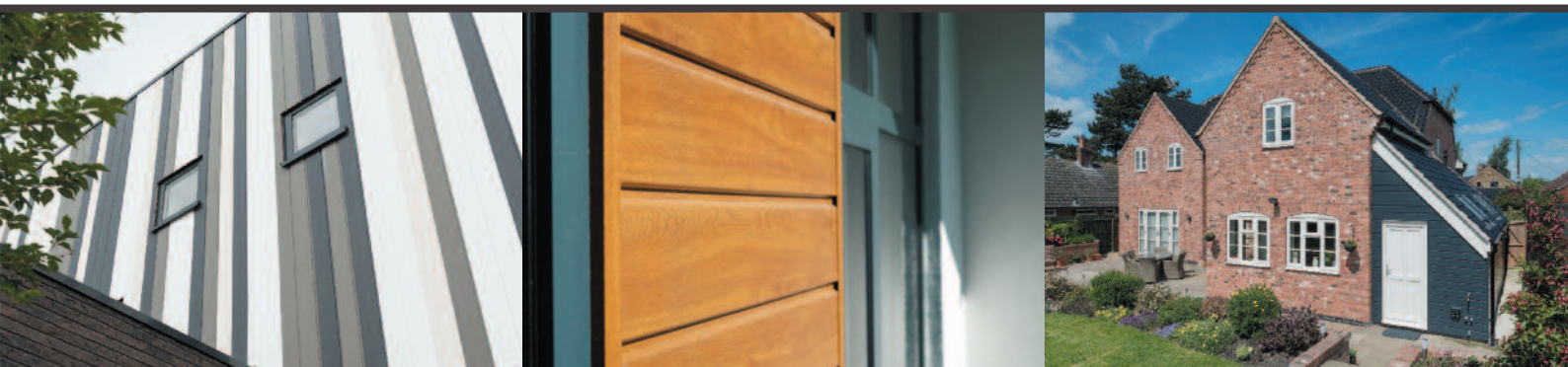


Oak

Colour	Code	FVC143
Cream White	WGCR	●
Wine Red	WGWR	●
Greyed Cedar	WGGC	●
Anthracite	WGAG	●
White	WGW	●
Oak	WGO	●



Detail of X-Wood finish
(Anthracite Grey finish pictured)

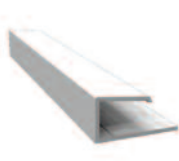


Fitting Accessories

Shiplap, Open V, Double Shiplap and Weatherboard PVC



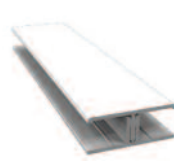
FC3013/FC301E3



FC3023/FC302E3



FC3043/FC304E3



FC3153/FC315E3



FC3123



FC311E3



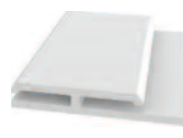
FC206



FC307E3



FCF2123



FC318E3



FC319E3



FC210



FCD210E



FCF209E



FV209



FCD209E



ACSS250

Shiplap & Open Vee

Code	Description	Unit	Per pack	White	Mahogany (WGM)	Light Oak (WGO)	Black Ash (WGB)	Rosewood (WGR)	Anthracite Grey (WGAG)
FC210	150mm Shiplap Cladding Butt Joint	Piece	10	●	●	●	●	●	●
FV209	100mm Open V Cladding Butt Joint	Piece	10	●	●	●	●	●	●
FC3013	2 Part Edge Trim	3m	5	●		●	●	●	●
FC3023	Universal Edge Trim	3m	5	●		●	●	●	●
FC3043	2 Part External Corner Trim	3m	5	●		●	●	●	●
FC3153	2 part H trim	3m	5	●		●	●	●	●
FC3123	25mm Multi Vent Starter Trim	3m	5						●
FC311E3	25mm 2 part Multi Vent Starter/Cover Trim	3m	5	●					
FC206	Drip Trim	5m	5	●					
FCF2123	Starter Trim	3m	5	●					
FC319E3	2 Part Reveal Liner	3m	1	●					
FC318E3	H' Edge/Extension Trim	3m	5	●					
ACSS250	Cladding Screws	30mm	250						

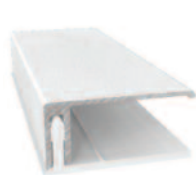
Double Shiplap & Weatherboard

Code	Description	Unit	Per pack	White	Anthracite Grey	Sand (SAND)	Pale Gold (PG)	Pale Blue (PB)	Cappuccino (CAP)	Argyl Brown (AB)	Misty Grey (MG)	Storm Grey (SG)	Slate Grey (SLG)	Colonial Blue (CBL)	Sage Green (SAGN)
FCD209E	300mm Double Shiplap Butt Joint	Piece	10	●	●	●									
FCD210E	333mm Double Shiplap Butt Joint	Piece	10	●	●	●			●	●	●	●	●	●	
FCF209E	170mm Weatherboard Butt Joint	Piece	10	●	●	●	●			●	●	●		●	●
FC301E3*	2 Part Edge Trim	3m	5	●	●	●	●		●	●	●	●	●	●	●
FC302E3*	Universal Edge Trim	3m	5	●	●	●	●		●	●	●	●	●	●	●
FC304E3*	2 Part External Corner Trim	3m	5	●	●	●	●		●	●	●	●	●	●	●
FC315E3*	2 Part 'H' Trim	3m	5	●	●	●	●		●	●	●	●	●	●	●
FC3123*	25mm Multi Vent Starter Trim	3m	5		●										
FC311E3	25mm 2 part Multi Vent Starter/Cover Trim	3m	1	●	●	●	●		●	●	●	●	●	●	●
FC206	Drip Trim	5m	5	●											
FCF2123*	Starter Trim	3m	5	●											
FC319E3	2 Part Reveal Liner	3m	1	●	●	●	●		●	●	●	●	●	●	●
FC318E3	H' Edge/Extension Trim	3m	1	●	●	●			●	●	●	●	●	●	●
ACSS250	Cladding Screws	30mm	250												

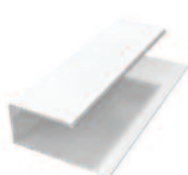
* Can be bought in single pack quantities.

X-Wood Aluminium and PVC Fitting Accessories:

2 part trim with PVC base and aluminium cover



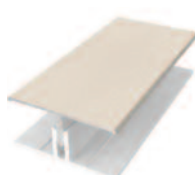
FCA3013



FCA3023



FCA3043



FCA3153



FCA3163



FC3123 PVC



FCA3123



ACSS250

X-Wood

Code	Description	Unit	Per pack	Aluminium	Anthracite Grey	White (WGW)	Cream (WGCR)	Oak (WGO)	Greyed Cedar (WGCC)	Wine Red (WGWR)	Anthracite Grey (WGAG)
FCV209	X-Wood (Woodgrain) Butt Joint	Piece	10			●	●	●	●	●	●
FCA3013	2 Part 'U' Trim	3m	5			●	●	●	●	●	●
FCA3023	J' Trim	3m	5			●	●	●	●	●	●
FCA3043	2 Part External Corner Trim	3m	5			●	●	●	●	●	●
FCA3153	2 Part 'H' Trim	3m	5			●	●	●	●	●	●
FC3123	PVC 25mm Multi Vent Starter Trim	3m	5		●					●	
FCA3123	Aluminium Starter Trim	3m	5	●							
FCA3163	Cover Trim for Vented Starter Trim	3m	5			●	●	●	●	●	●
ACSS250	Cladding Screws	30mm	250								

Cladding Installation

Installation Checklist

To be checked	✓
Correct screws used	
Screws do not puncture the cladding	
Sufficient expansion gaps allowed	
Correct batten size used	
Battens fixed at correct centres - see tables below	
Cladding screw fixed at every batten	
Ventilation profile installed at top and bottom	

Batten Size Guide : Shiplap, Open Vee, Double Shiplap and Weatherboard Cladding

Colour	White	Pale Gold	Sand	Colonial Blue	Argyl Brown	Storm Grey	Slate Grey	Misty Grey	Pale Blue	Sage Green	Cappuccino
Batten Size	25mm x 50mm	25mm x 50mm	25mm x 50mm	25mm x 50mm	25mm x 50mm	25mm x 50mm	25mm x 50mm	25mm x 50mm	25mm x 50mm	25mm x 50mm	25mm x 50mm
Batten Centre	400mm	400mm	400mm	400mm	400mm	400mm	400mm	400mm	400mm	400mm	400mm

Batten Size Guide : X-Wood Cladding

Colour	White	Cream	Greyed Cedar	Oak	Wine Red	Anthracite Grey
Batten Size	25mm x 50mm	25mm x 50mm	25mm x 50mm	37mm x 40mm	37mm x 40mm	37mm x 40mm
Batten Centre	400mm	400mm	400mm	400mm	400mm	400mm

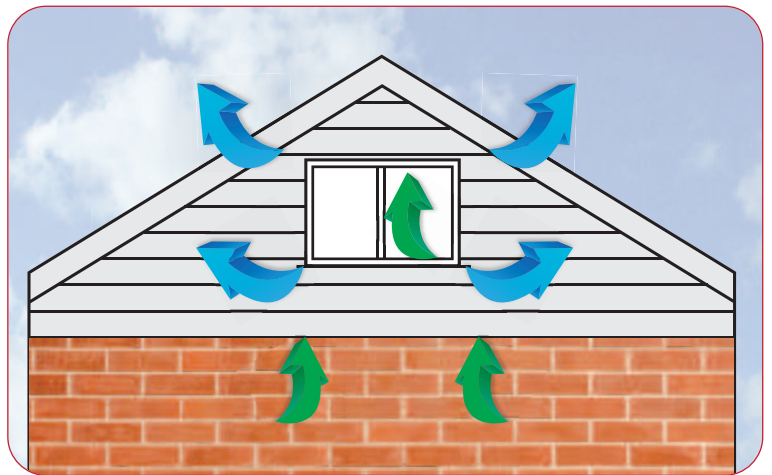
Important Information

VENTILATION

Continuous ventilation from the bottom to the top of the installation is critical to the performance of the cladding. A minimum of 27mm ventilation space should be allowed between the cladding and the breather membrane, insulation or wall.



It is essential that continuous ventilation is maintained between the vertical battens from top to bottom and adequate expansion is allowed for at the ends of the boards.

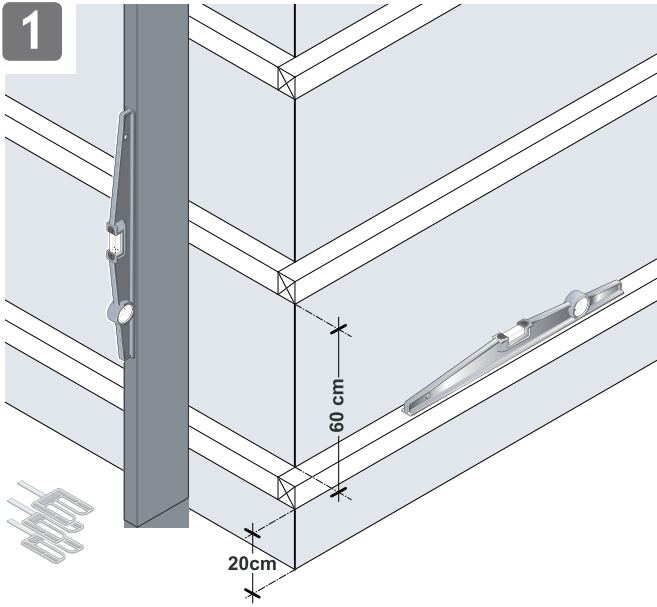


Green - Air Inlet • Blue - Air Outlet

Installation instructions

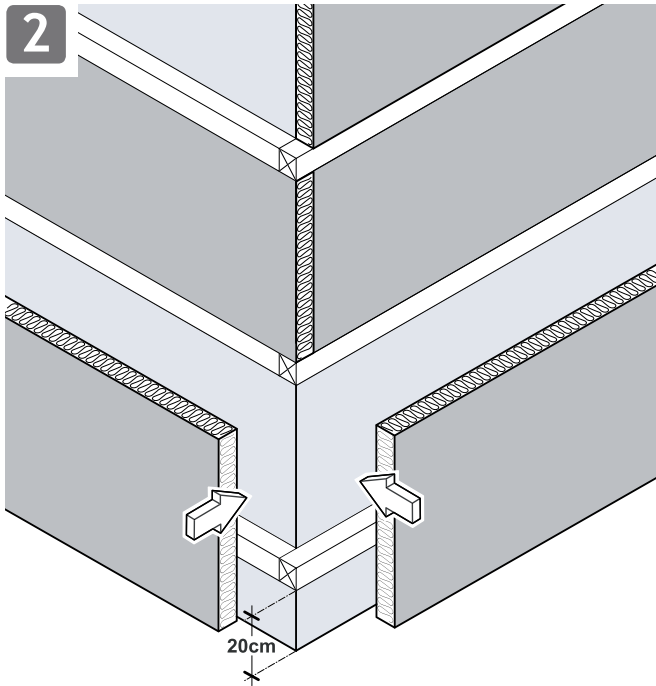
If no insulation is being fitted, continue to Figure 3

1



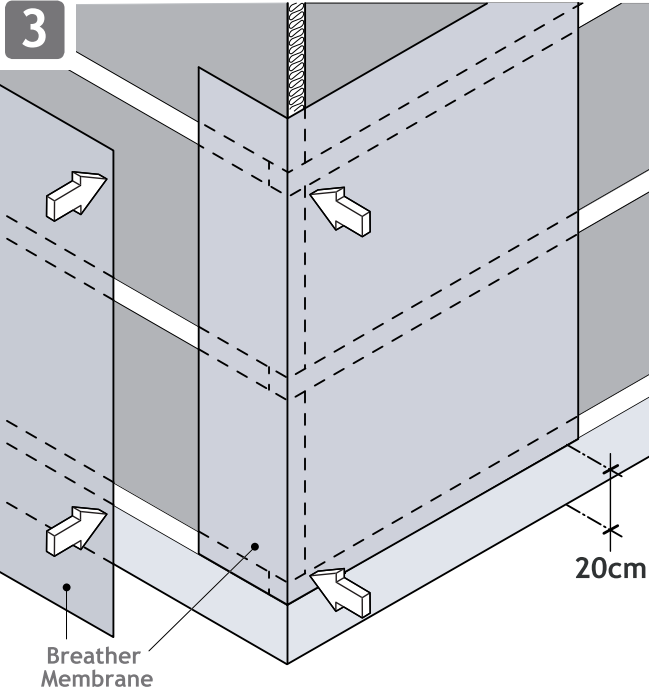
Affix softwood counter battens to suit chosen insulation in accordance with the spacings specified. Secure with suitable screws.

2



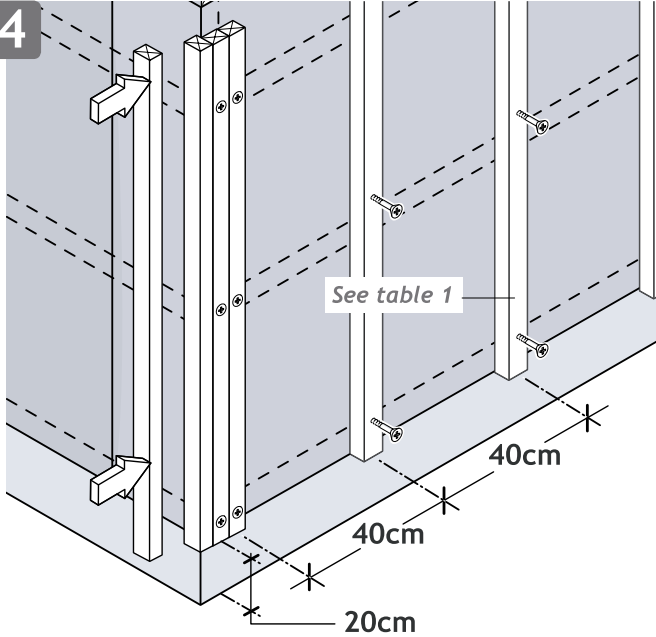
Place your thermal insulation between the counter battens with reference to insulation manufacturers instructions.

3



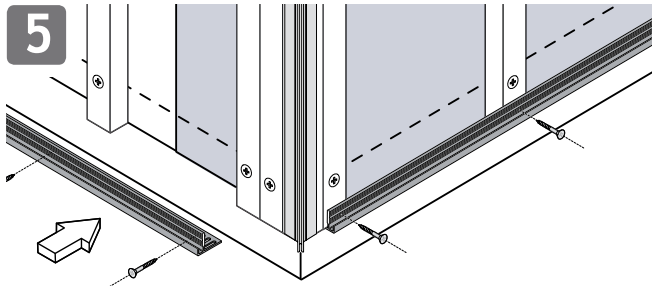
Affix breather membrane to cover entire surface to be clad. (Ensure membrane is lapped according to manufacturer's instructions)

4



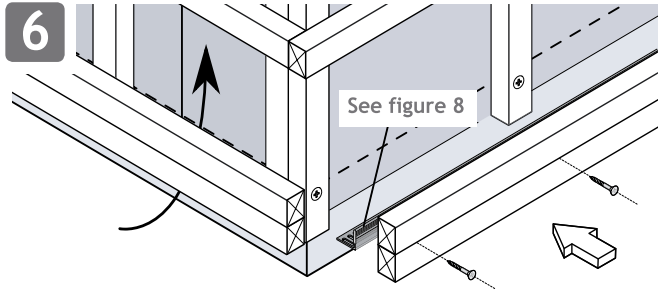
Fix cladding battens; Use double battens at corners, edges and junctions. Refer to Diagrams 7 & 8 before cutting battens to length.

5

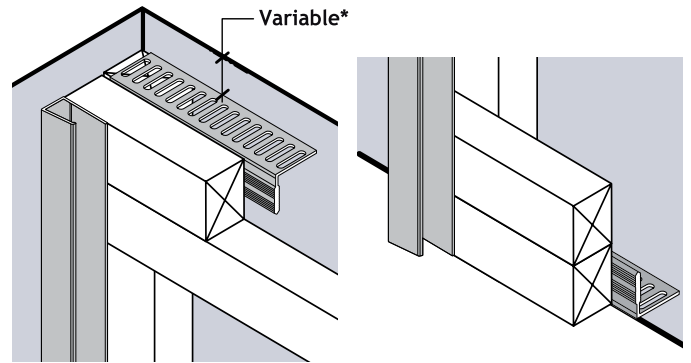
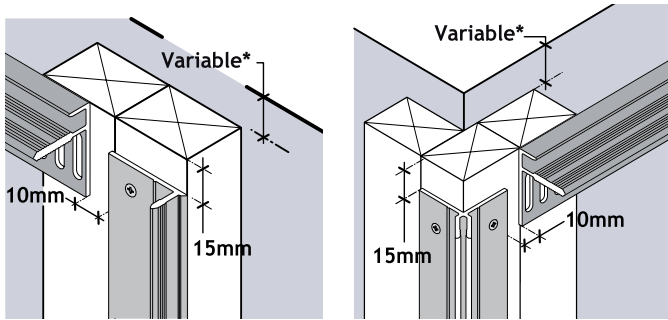


Fix ventilated starter trim. see Diagram 7.

6



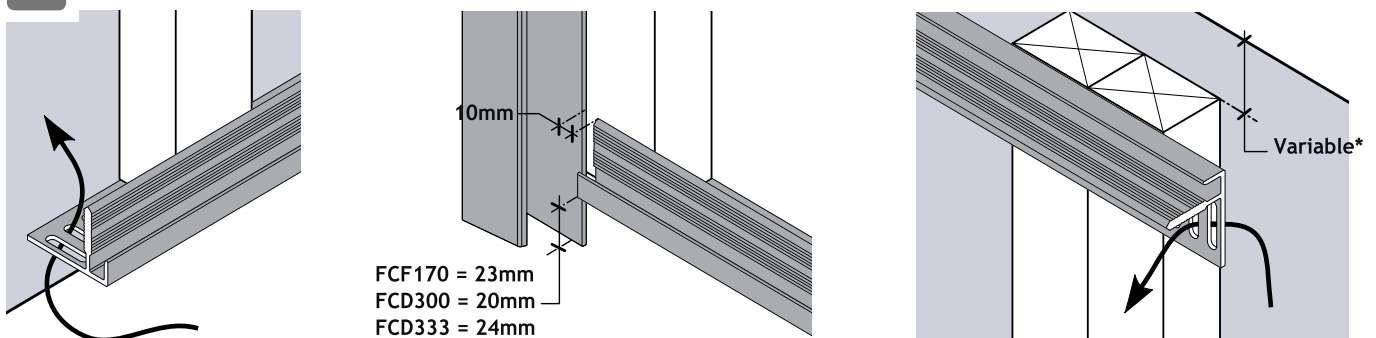
If fixing cladding vertically, fix horizontal battens over vertical counter battens.



Fix 1 part trims, first part of 2 part trims & vented starter trims. Refer to Diagrams 5, 6, 7 & 8.

7

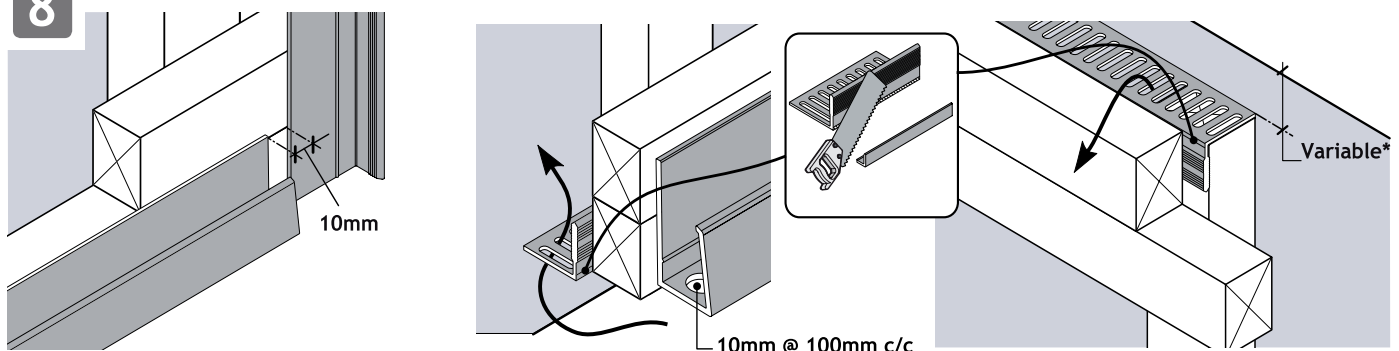
PVC Vented Starter/Closer



*Allow space for fixing cover trim if required. See figure 14

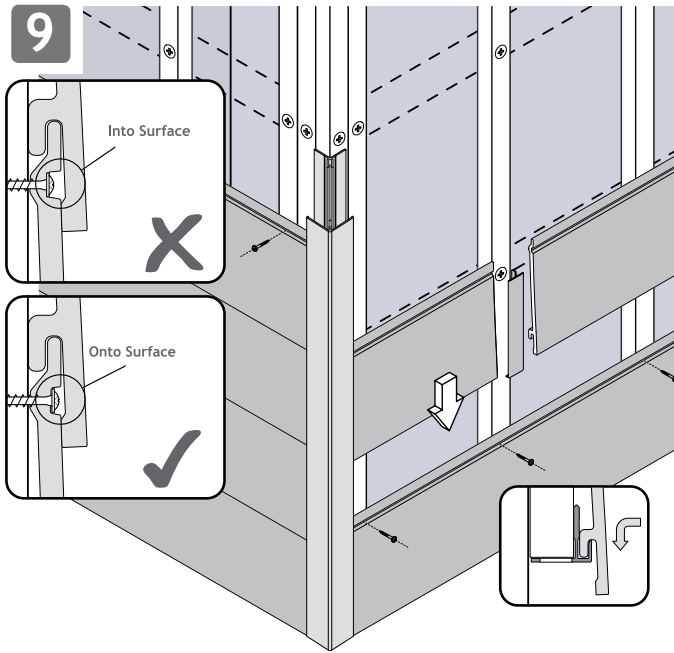
8

Vertical Cladding Details



*Allow space for fixing cover trim if required. See figure 14

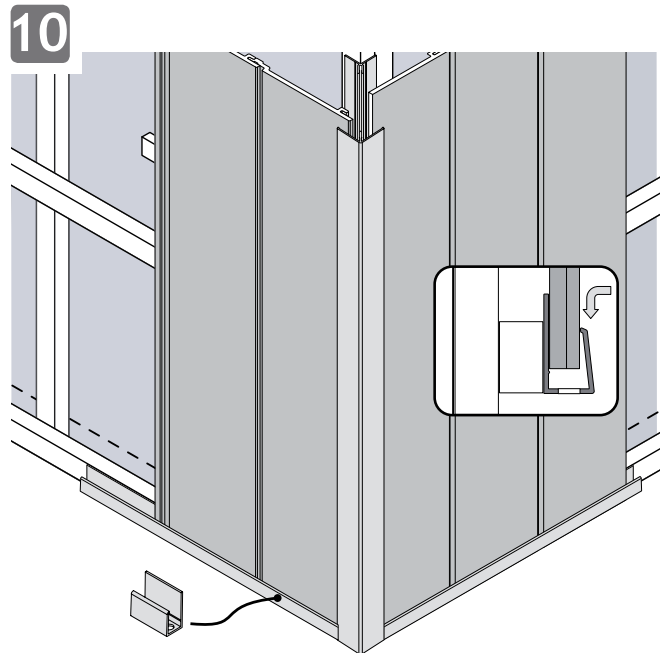
Both multifunction & standard trims can be used for vertical and horizontal cladding



Slot the first row of cladding planks into the vented starter trim. (or starter trim) Allow expansion gaps at all edges and junctions. See Diagrams 11, 12, 13 & 14. Do not drive the screw or nail through the surface of the cladding as this will prevent the plank from moving if it expands.

Install the cladding planks from left to right and secure with 3.5 x 30mm corrosion resistant screws. Do not use force during the installation and screwing.

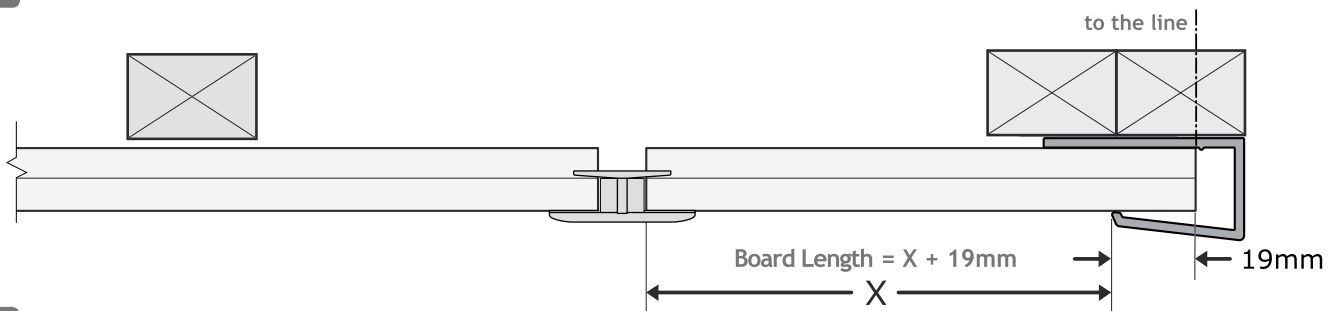
When all cladding is in place. Fix second parts of finishing trims. See figures 13 & 15



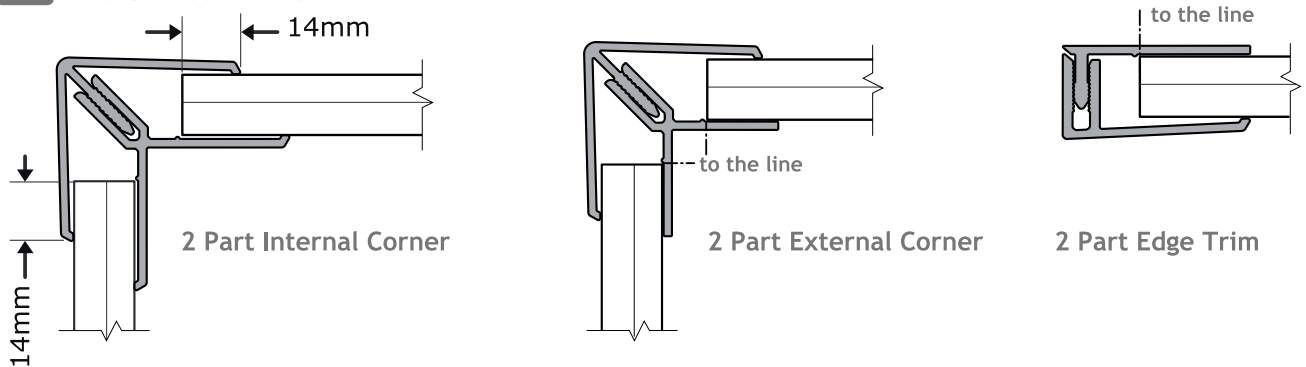
slot vertical planks into a J trim with 10mm drainage holes drilled at 100mm centres. Allow expansion gaps at all edges and junctions. See Diagrams 11, 12 & 13. Do not drive the screw or nail through the surface of the cladding as this will prevent the plank from moving if it expands.

Install vertical cladding planks from right to left and secure with 3.5 x 30mm corrosion resistant screws. Do not use force during the installation and screwing.

11 Expansion

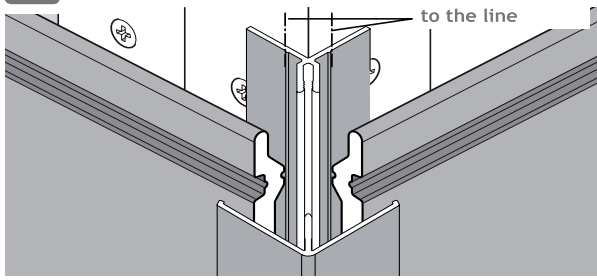


12 3 Series Trims

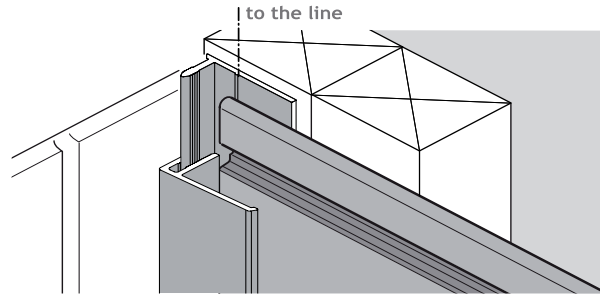


13

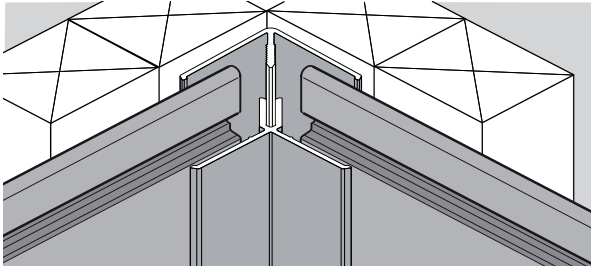
3 Series Trim Details



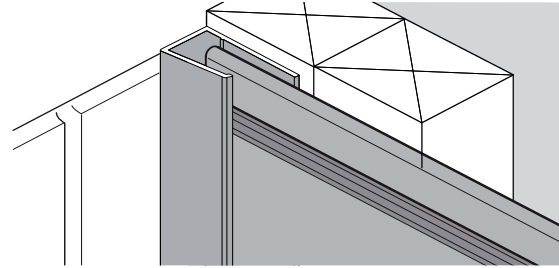
External Corner Trim



2 Part Edge Trim

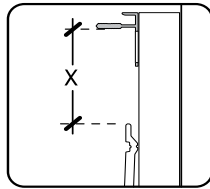
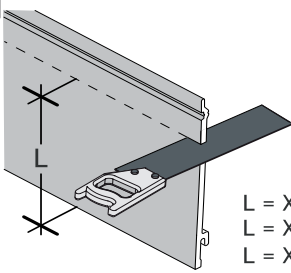


Internal Corner Trim

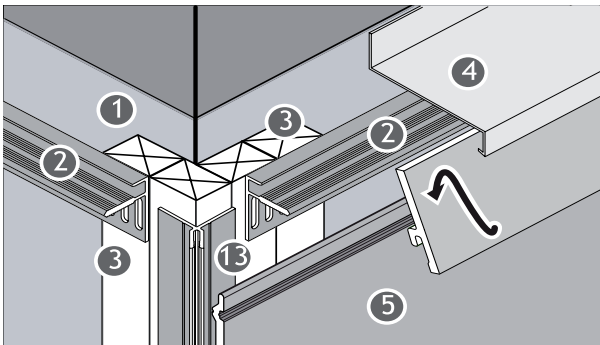


1 Part Edge Trim

14

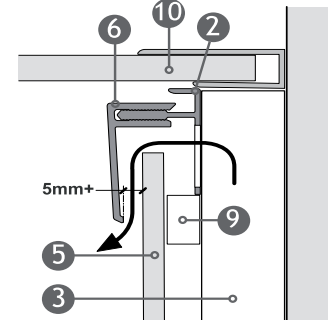
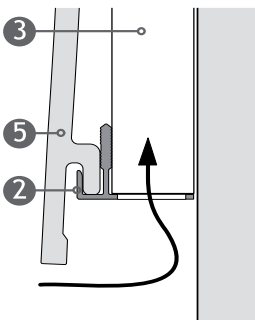
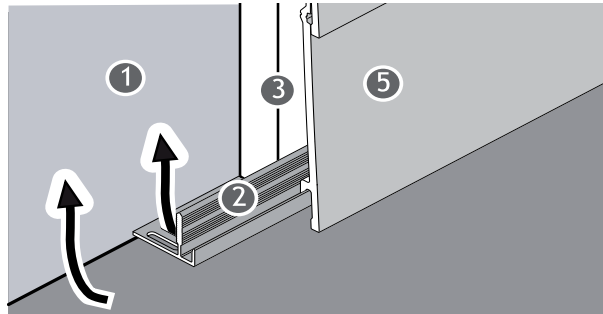
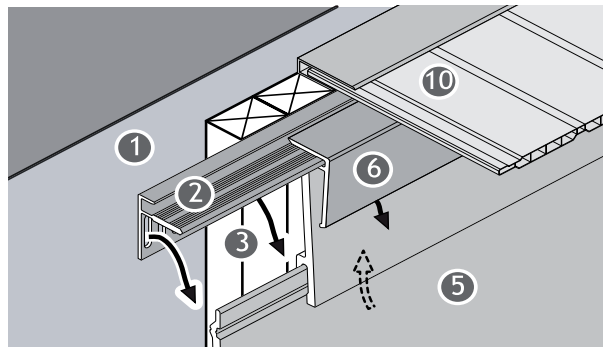


- L = X + 19mm (FCF170)
- L = X + 21mm (FCD300)
- L = X + 23mm (FCD333)



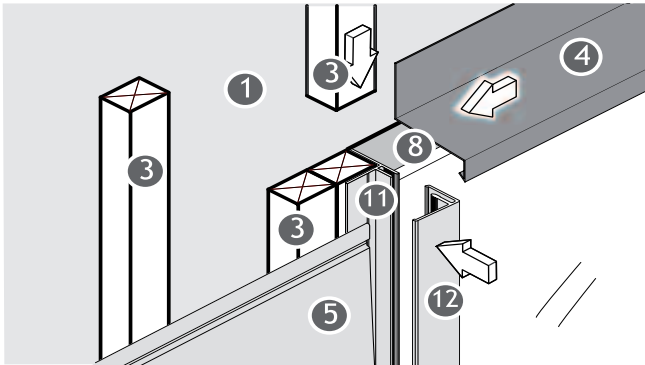
Fix vented starter/closer trim. Refer to Diagrams 7 & 8. Cut your cladding plank using the formula given.

Ventilation detail

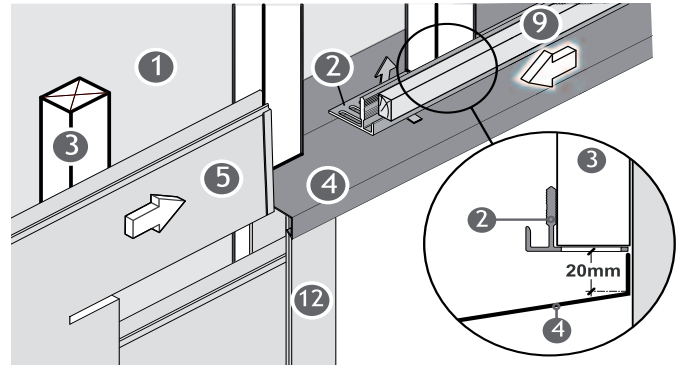


- | | | | | | |
|---|------------------------------|----|---------------------------|----|--------------------------------|
| 1 | Breather Membrane | 6 | Ventilated Closer | 11 | FC319 Reveal Liner - Part 1 |
| 2 | Ventilated Starter/Closer | 7 | Cill | 12 | FC319 Reveal Liner - Part 2 |
| 3 | Pre-treated softwood battens | 8 | GPB General Purpose Board | 13 | FC304 Ext Corner Trim - Part 1 |
| 4 | Drip Trim | 9 | Timber Packing | 14 | FC302 Universal Edge Trim |
| 5 | Cladding | 10 | Soffit | 15 | FC318 Reveal Liner Edge Trim |

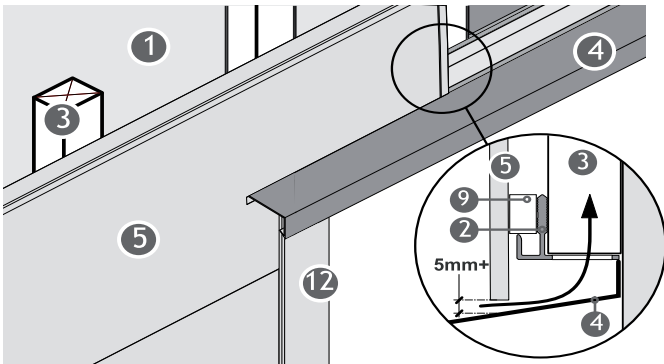
15a Window jamb with FC319 Reveal Liner 1/3



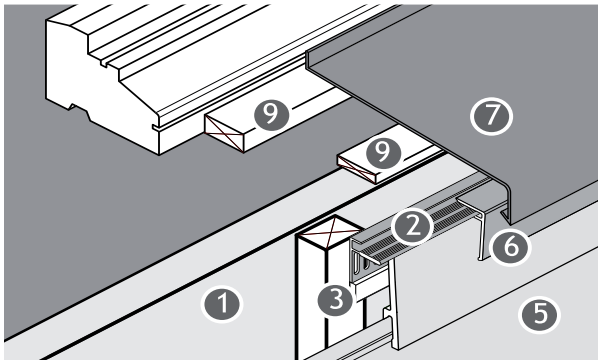
15b Window jamb with FC319 Reveal Liner 2/3



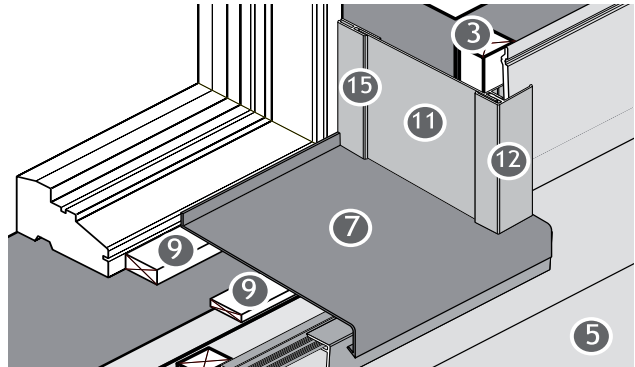
15c Window jamb with FC319 Reveal Liner 3/3



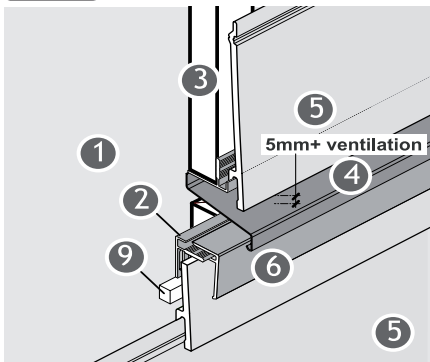
16 Window Cill detail



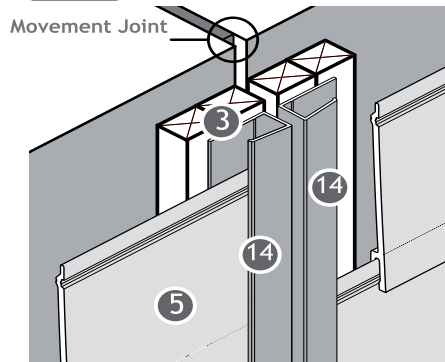
16a Window Cill & Jamb Junction



17a Horizontal break
See page 17 for full instructions.



17b Vertical break



VERTICAL CLADDING

All Freefoam cladding profiles can be fitted vertically. See freefoam.com/downloads for instructions.

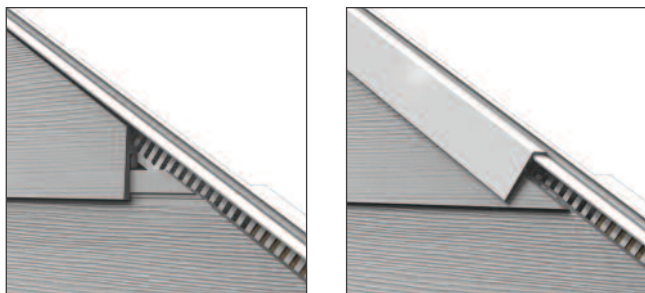
DORMER WINDOWS

Cladding is ideal for a dormer elevation. For full fitting instructions See freefoam.com/downloads

GABLE END

Install ventilated trim and cover trim to gable angle.

Use Ventilated Trim (FC311E3) for edge of gable.



INSTALLATION NOTES

Fixing

Only use corrosion resistant screws for fixing cladding planks and accessories.

Expansion

The recommended minimum expansion gaps at the ends and between cladding planks (See Diagram 11,12,13 & 14) should be strictly adhered to. A minimum of 27mm

Breaks

Where a cladding panel exceeds 6m in height, a horizontal break should be provided by use of a drip trim to facilitate ventilation openings. See figure 17a. For installations greater than 10m long a vertical break will be required. Vertical breaks mitigate any cumulative expansion. Horizontal breaks aid cooling of cavity and in some cases are required as cavity breaks for preventing spread of flame between storeys, such as in cases where there are different occupancies.

Finishing

Where required fit a cover strip or drip trim to prevent rain from entering the cavity at the top of the installation.

The guidance for provision of expansion and ventilation provided in this document applies in all cases including windows, doors, gables ends, dormers etc.

Ensure that all installations comply with local Building Regulations and general good building practice. Consult you local Planning Department for guidance.

MAINTENANCE

Regular Inspection

Under normal conditions Freefoam cladding requires minimal maintenance. Environmental impacts may effect the visual appearance of the façade. An annual inspection of the ventilation gaps, joints and fixings is recommended. Detection and repair of possible damage ensures longer life for our cladding.

Cleaning

Clean Freefoam cladding with cold or lukewarm water. If necessary add mild household cleaning detergent that does not contain solvents. You can also use High Pressure washer (on half power) to clean cladding. Do not use solvents or aggressive cleaning products. Start at the top. At least once a year is recommended.

Impact from Nature

Coastal locations are subject to more extreme conditions due to salt laden moist air and wind-blown sand. We recommend more regular inspections in such locations. Pay particular attention to corners of cladding, around windows and doors particularly those facing the prevailing wind.

STORAGE

- Prior to installation cladding should be stored out of direct sunlight.
- Check the cladding surface for damage prior to installation.
- Complaints of surface defects will not be accepted after installation is complete.

CLADDING CALCULATOR

Use the handy online tool to help you estimate the number of boards and pack quantities for a project. Eliminate wastage to save money.

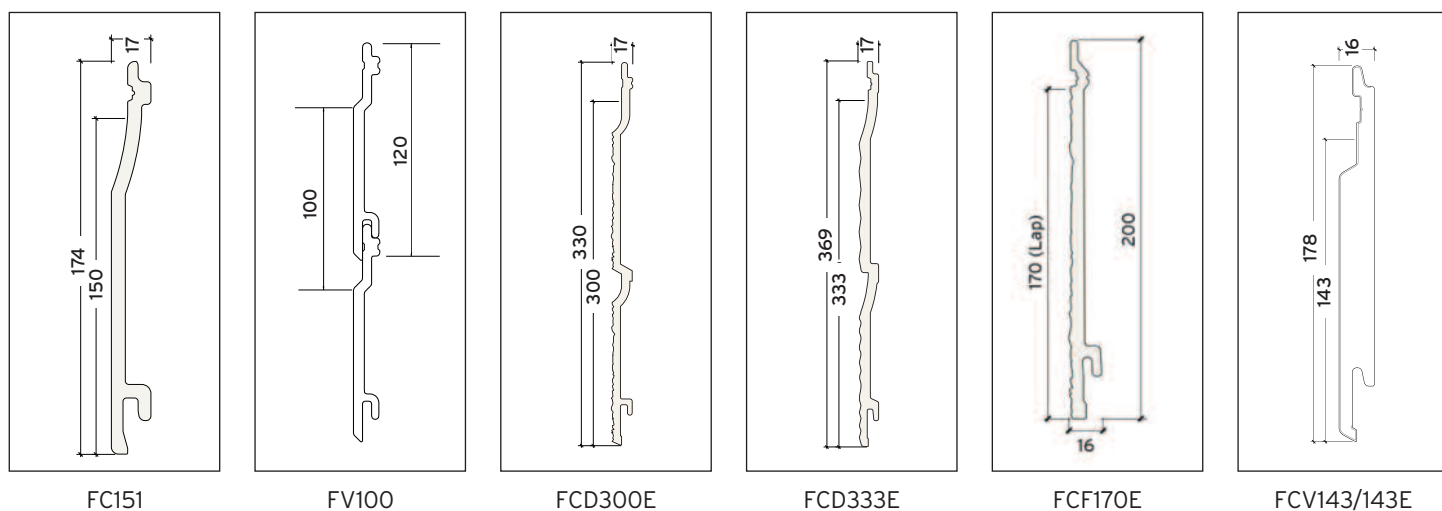
Go to www.freefoam.com

EASY TO ORDER

Freefoam Cladding is available nationwide.

To find your local supplier go to www.freefoam.com

Dimensions (mm)



Technical Data

Freefoam cladding products are produced from cellular PVC. A co-extrusion process enables them to be covered with a layer of PVC resistant to UV rays and discolouration. An additional embossing process gives the Fortex and X-Wood products their textured effect.

	Length	Pack Quantity	Material	Coverage Per Board Length	Density	Expansion Coefficient	Weight per board	Fire Rating
Shiplap FC151	5m	5	Cellular PVC & UV Resistant co-extruded skin/Cellular PVC & Renolit High Performance Film	0.75m ²	510kg/m ³	5 x 10 / °C	2.75kg	White Cladding: D-s3,d2/AHM Wood grain Finish Cladding: E
Open V FV100	5m	5	Cellular PVC & UV Resistant co-extruded skin/Cellular PVC & Renolit High Performance Film	0.5m ²	510kg/m ³	5 x 10 / °C	1.95kg	White Cladding: D-s3,d2/AHM Wood grain Finish Cladding: E
Double Shiplap 300mm FCD300E	5m	2	Cellular PVC & UV Resistant co-extruded skin	1.5m ²	510kg/m ³	5 x 10 / °C	6kg	D-s3,d2/AHM
Double Shiplap 333mm FCD333E	5m	2	Cellular PVC & UV Resistant co-extruded skin	1.65m ²	510kg/m ³	5 x 10 / °C	7.85kg	D-s3,d2/AHM
Weatherboard FCF170E	5m	6	Cellular PVC & UV Resistant co-extruded skin	0.85m ²	510kg/m ³	5 x 10 / °C	3.15kg	D-s3,d2/AHM
X-Wood FCV143	5m	5	Cellular PVC & Renolit High Performance Film	0.71m ²	500kg/m ³	40 x 10-6/°C (DIN53377)	6.25kg	E

Accreditation

Freefoam Fortex Cladding is accredited by the CSTB.



77-83 St James Mill Road
Northampton
NN5 5JP, UK
T: 01604 591110
E: orders@freefoam.com

Central Commercial Park
Centre Park Road
Cork T12 KC96
IRELAND
T: 021 496 6311

www.freefoam.com

Summer 2019

