

## Vulcan Cladding



### Overview

Vulcan Cladding is created from thermally modified New Zealand plantation timber and engineered with a patented vertical grain construction for superior weathering characteristics. A fine sawn face allows a depth of grain, and optimal coating performance.

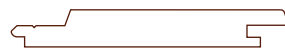
The thermal modification process and vertical grain structure means Vulcan Cladding has enhanced stability, reduced resin content, is a beautiful homogeneous brown colour, and is naturally durable so does not require any chemical preservatives.

When specified and installed in accordance with the manufacturers instructions Vulcan Cladding systems will achieve CodeMark status for guaranteed acceptance with New Zealand building consent authorities.

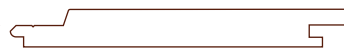
Available in a range of architectural profiles and can be supplied factory coated in Abodo Protector Oil – Abodo's high performance penetrating exterior oil.

Wood species: Thermally Modified Radiata Pine (Pinus Radiata).

### Standard profiles:



WB10 145x20  
(125mm cover) Vertical/Horizontal



WB10 180x20  
(160mm cover) Vertical/Horizontal



WB12 138x20  
(118mm cover) Vertical



WB12 180x20  
(160mm cover) Vertical



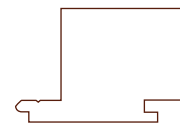
Fineline WB12F 180x20  
(160mm cover) Vertical



WB12 90x20  
(70mm cover) Vertical



WB12 90x40  
(70mm cover) Vertical



WB12 90x60  
(70mm cover) Vertical



Bevelback AW62 180x20  
(148mm cover) Horizontal

All profiles are supplied as standard with band sawn face. Brushed finish available on request subject to price premium.

Lengths: Mixed length – Supplied as packets with 1.8m and longer, or fixed lengths at Abodo's option.

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Colours:

Colours presented are in Protector – Water Borne and are indicative only. Colour may change/fade as a part of the natural weathering process. Coating performance on brushed finish may be lower compared with band sawn finish.

Standard range:



Brushed range:



### Product specifications

Name:	Abodo Vulcan Cladding.
Quality:	<b>Select Grade</b> /Front face and edges virtually free of any defects but with one edge knot and one small face defect allowed per piece in 20% of boards only. Back side with some defects allowed.
Finish:	Fine bandsawn face. Brushed finish available optionally on request (some variation in the visual appearance of the finish can be expected).
Durability:	Thermally modified – INTENZ Thermowood 230 degrees schedule. No chemical preservatives used. Field tested at SCION, Rotorua. Suitable for uses described in NZS3602:2003 Table 2A 'Requirements for wood-based building to achieve a 15 year durability performance Members exposed to exterior weather conditions and dampness'. Durability Class 1 (EN350-1), Class 2 above ground (AS5604).
Insect attack:	Thermally modified pine is resistant to most wood boring insects but is not always resistant to termites. Preservative treatment is required for termite zones.
Intended use:	Intended for above ground use in residential and light commercial buildings with risk score of 20 or below as per 'Weather tightness risk matrix' in E2/AS1.
Serviceable life:	30 years or more when maintained according to manufacturer's recommendations.
Warranty:	15 years against fungal decay (subject to terms and conditions).
Moisture content:	Approx. 7% MC (+/-2%) at time of dispatch.
Construction:	Laminated with vertical grain orientation.

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### Product specifications

Glue:	New generation polyurethane adhesive- VOC, solvent and formaldehyde free. Exterior Type 1- AS/ NZS4364. Approved for Service Class 3 (exposed exterior applications).
Expected dimensional change in structure:	Width expansion approx 2%, length expansion approx 0.25%, thickness expansion approx 2.5% (from 7%MC to fibre saturation -variation will occur between boards).
Density:	~420 kg/m <sup>3</sup> .
Fire:	Group 3, Group 1S with application of intumescent coating (interior only).
Hardness:	Low (2.5kN Janka).
Weight:	~11 kg/m <sup>2</sup> ('light weight cladding' NZS3604).
Thermal properties:	~0.11 W/(mK).
pH (indicative):	~3.9.
Curved walls (min radius):	WB10 145x20 – 2.3m, WB12 90x40, WB12 90x20 – 0.8m.



Compatibility:	Vulcan has little or no corrosiveness on most metals (separation required to zinc) and can be placed in contact with most building materials Normal PVA, PU, MUF glues and RF resins can be used.
Coating:	Vulcan will take most stains, penetrating oils and paints well, though up-take of coating is generally higher than normal. At least one coat must be applied all sides including back face, and ends, and at least two coats to the front face and edges with Abodo Protector Oil or other approved proprietary wood stain.  Available factory pre-coated (minimum order quantity of 225LM applies).
Patent:	NZ Pat. 601245.
Certification:	FSC®-certified mixed, No.: SGS-COC-004944 . Declare Certified - Red List Free.
NZBC compliance:	CodeMark Certified cladding system- certificate number CM70046.
Environmental Product Declaration (EPD) registration number:	S-P-01543
Green building points:	Greenstar - 2.5pts /Homestar - 2pts + 1 innovation pt.

### Product handling

- Weatherboards and accessories must be kept clean dry, under cover and out of the weather prior to installation.
- Timber must be stored horizontally on bearers at least 100mm off the ground.
- Extra care must be taken during installation so as not to damage the factory finish of the boards.
- Wear dust mask, eye protection when cutting timber.
- Do not burn treated timber. Dispose of off-cuts in lined land fill or an approved furnace.
- Wear gloves when handling to avoid marking the timber surface and to protect against splinters.

### Fixing overview

- Timber framing is to be in accordance with NZS3604. Studs at max 600mm centres. If installing horizontal weatherboards nogs must be spaced at max 800mm centres or otherwise according to proprietary wall system requirements. If installing vertical weatherboards nogs must be spaced at max 480mm centres, or max 800mm centres if using structurally fixed CBH-45x45mm cavity battens or otherwise according to proprietary wall system requirements.
- Fix cladding over a water proof, breathable building wrap, rigid air barrier or other suitable waterproof substrate in conformance with NZBC E2/AS1.
- A cavity system is recommended with minimum 45x18mm H3.1 battens (a cavity is required for CodeMark certification).

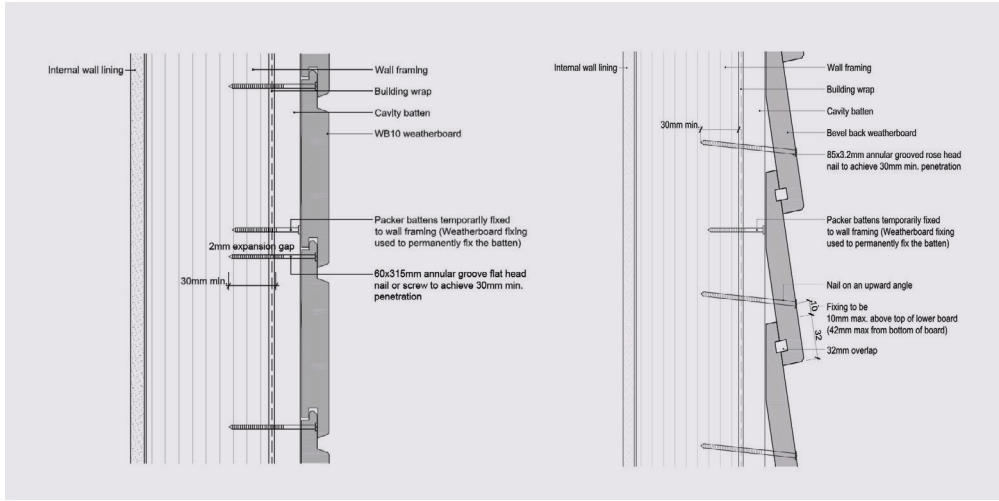
## Vulcan Cladding

### Fixing overview

- Horizontal cavity battens should be castellated (notched) and beveled or Cavibat fluted polypropylene to allow water run-off in service.
- Structurally fixed H3.2 timber cavity battens are allowed, provided battens are fixed with stainless steel flat head nails or 10g screws staggered at min 300mm centres (when using a 20x45mm cavity batten) or min 600mm centres (when using a 45x45mm cavity batten) and with min 40mm fixing penetration into stud.
- Fix boards either vertically or horizontally as appropriate to the profile type specified at the following maximum batten spacings:
  - 480mm centres for vertically fixed weatherboards or
  - 600mm centres for horizontally fixed weatherboards
- High quality hot dipped galvanised fixings (secret fixed profiles only) or stainless steel fixings (face fixed profiles) must be used. Stainless steel fixings must be used in sea spray zones in all cases. Note: Silicone bronze/copper fixings can be subject to oxidation during weathering, resulting in discolouration and weeping around fixing head.
- For Bevelback, Vertical shiplap and Rusticated weatherboards, use rose or pentagon head annular groove nails (hand driven) to achieve minimum 30mm penetration into stud or stud and batten combined (when using a structurally fixed cavity batten) and positioned approximately 10mm beyond the over- lap.
- For WB10 or WB12 secret fix profile, use flat head ring shank nails or self drilling self-countersinking head screws so as to achieve 30mm penetration into stud, or 30mm into the stud and batten combined (when using a structural cavity batten only) and positioned 12mm from the tongue edge. Punching/puttying of fixings is not required. Screw fixing is recommended.
- Fixings at ends of boards must be at least 12mm from edge, and must be pre-drilled before applying fastener. Ensure 2mm expansion gap to back of boards.
- All end grains and notches must be sealed using Abodo's Protector End Seal or equivalent wax sealer, or Sioo:x End Grain Sealer in the case of Sioo:x coated boards.
- Joins between board ends must be made over battens only, using a 35degree mitre, and application of sealant at the join eg: Sikaflex 11FC.
- For cavity systems use perforated cavity base closer flashing at base board to allow drainage, air flow and keep out vermin.
- Cladding must finish 100mm above paved surface or 175mm above un-paved surfaces. Base of cladding must not sit directly into flashings or other cladding materials such as masonry. Minimum 5mm gap must be left to flashings allowing fall to shed water away from the wall cavity.
- Use Abodo finishing mouldings backed by hemmed corrosion resistant internal flashings as required, corners, windows, doors and where cladding meets soffit. Fix mouldings with 40mm stainless flat head ring shank nail (hand driven) at max 450mm centres.
- At least one coat of Protector oil or proprietary specified wood stain must be applied to all sides prior to installation and then a further one or two coats applied once boards are fixed in place according to manufacturer's instructions. For other specialty coatings such as Sioo:x refer to specific literature.

# Vulcan Cladding

Fixing details:

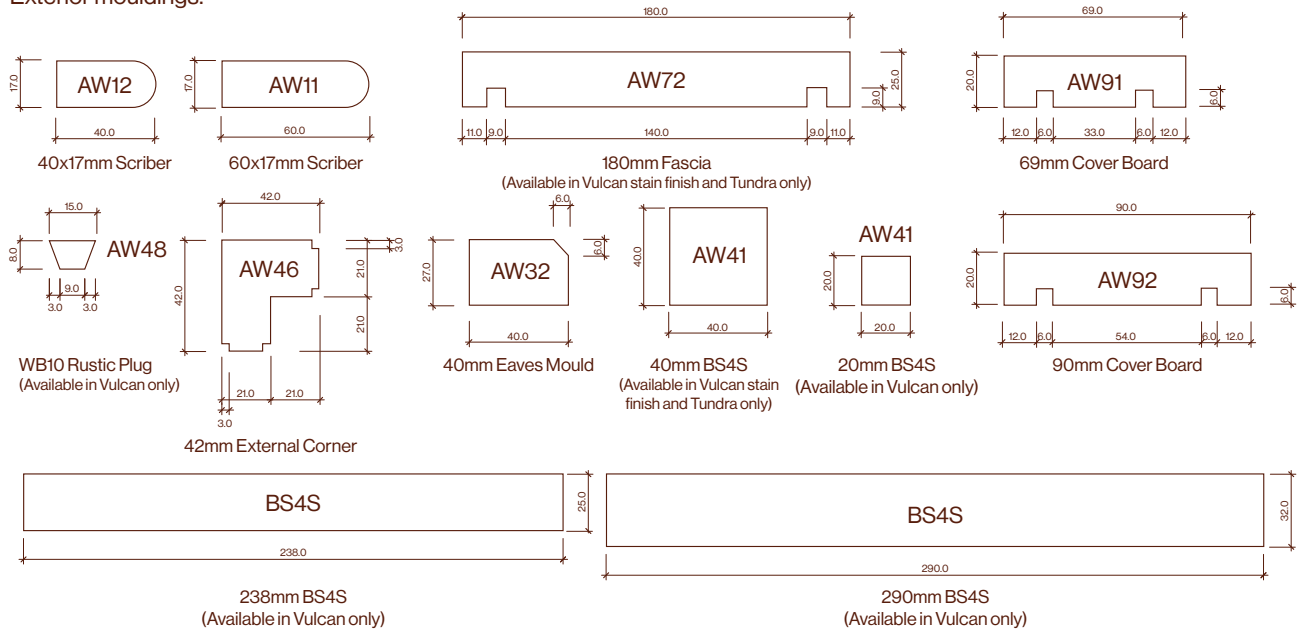


Note: The adjacent is an overview only.  
Please refer to CodeMark Weatherboard Cladding Manual CWB-M-130925 and detail drawings at: [abodo.co.nz/resources](http://abodo.co.nz/resources) for detailed installation information prior to specification or commencement of construction.

Fig 1 – WB10 Secret Fix

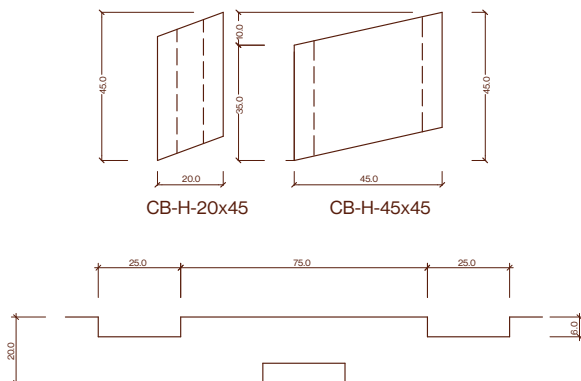
Fig 2 – Bevel Back Face Fix

Exterior mouldings:



Note: Other profiles are available and should be specified according to the system being used - please refer to CodeMark Weatherboard Cladding Manual CWB-M-130925 for more details.

Horizontal castellated cavity battens:



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### Maintenance

- Wash down every 12 months with gentle detergent, warm water and soft brush.
- If possible it is recommended to apply a further coat of oil after approx 12 months of weathering.
- Make a maintenance check every two summers. Check all weatherboards, junctions, flashings, mouldings and replace or remediate as required to maintain weather tightness of the cladding system.
- For heavily soiled or mouldy areas use Rejuvenator or similar timber cleaner, apply active mouldicide and recoat with penetrating oil.
- Re-coat every 2-3 years or as required to maintain colour and integrity of coating. Re-coat period may be longer or shorter depending on climatic conditions and/or positioning of cladding to the sun. Preparation with Rejuvenator or other similar oxalic timber cleaner is recommended prior to coating. For Sioo:x coated timber refer to specific maintenance information.

### Lightening of the timber:



Vulcan Teak  
As delivered

Vulcan Teak  
Weathered exterior install



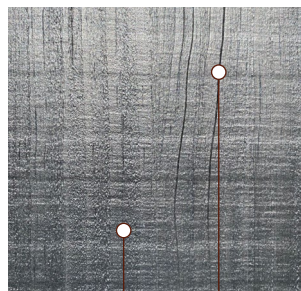
Vulcan Sioo:x  
As delivered

Vulcan Sioo:x  
Weathered exterior install

We cannot guarantee against wear or color changes to any products which result from weather, sun, wind and/or the natural aging process of the wood.

### Surface checking:

- Checking (cracks) may be observed on the face and ends of Vulcan timber. Checks are acceptable to install. Checking may become more apparent as the material weathers naturally in place. Fibre pull at laminated glue lines is also possible. These are not defects and are considered a natural part of this wood product. Maintenance with a coating and thorough sealing of end grains with wax sealer will improve long term weathering characteristics.

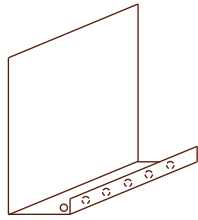


Laminated glue  
seams

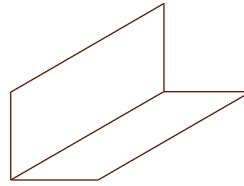
Face check

## Vulcan Cladding

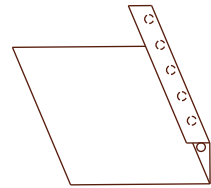
### Abodo flashings



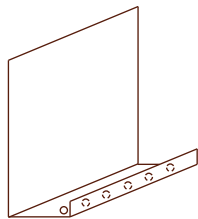
AWF1 Abodo 20mm WB10  
Horizontal Base  
Cavity Closer  
S/Steel 3m  
(for use with horizontal WB10 only)



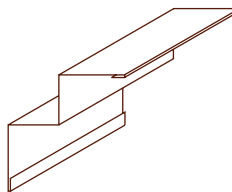
AWF4/ AWF2 Abodo  
Unhemmed Corner Flashings  
S/Steel 100x100 mm/  
120x120mm 3m



AWF3 Abodo Window  
Jamb Flashing  
S/Steel 3m



AWF6 Abodo 45mm WB10  
Horizontal Base  
Cavity Closer  
S/Steel 3m  
(for use with horizontal WB10 only)



AWF5  
W flashing  
Internal corner

### Accessories

#### Abodo Protector – Water Borne, 4L, 10L:



## Vulcan Cladding

### Accessories

Abodo Protector – End Seal, 1L:



Abodo Stainless Steel Cladding Screw 4.0 x 45mm  
or 4.5 x 65mm:



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