



#### Overview

Vulcan Cladding is created from thermally modified New Zealand plantation timber and engineered with a patented vertical grain construction for superior weathering characteristics. Finger jointing the timber prior to lamination creates consistent long lengths of timber. 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 180x20 (160mm cover) Vertical/Horizontal  Note: Other Abodo profiles may be available subject to minimum order quantity. Please enquire prior to order time.
Lengths:	6.1m*  *Other custom lengths may be available subject to minimum order quantity.



Colours: Colours presented are in Protector – Water Borne and are indicative only. Colour may change/fade

as a part of the natural weathering process. Darker tones will hide the finger joint better than lighter

tones that will tend to show up more after weathering.





Vulcan White Vulcan Sioo:x (Weathered 1 yr)

#### **Product specifications**

Name: Abodo Vulcan Finger Jointed Cladding.

Quality: Finger Jointed Select Grade/ Individual laminations finger jointed. 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 (some variation in the visual appearance of the bandsawn 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.

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).



### **Product specifications**

Density: ~420 kg/m3.

Fire: Group 3, Group 1S with application of intumescent coating (interior only). Hardness: Low (2.5kN

Janka).

Weight: ~11 kg/m2 ('light weight cladding' NZS3604).

Thermal properties: ~0.11 W/(mK).

pH (indicative): ~3.9.

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

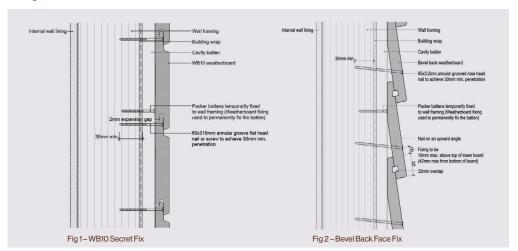
- Timber framing is to be in accordance with NZS3604. Studs at max 600mm centres. If installing horizontal weatherboards nogs must be spaced at max 800mm centres or otherwise according to proprietary wall system requirements. If installing vertical weatherboards nogs must be spaced at max 480mm centres, 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).
- 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



#### **Fixing overview**

- 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.

#### Fixing details:



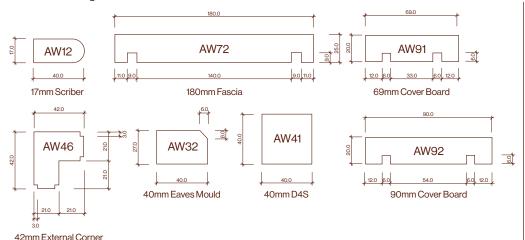
Note: The adjacent is an overview only.

Please refer to CodeMark

Please refer to CodeMark
Weatherboard Cladding
Manual CWB-M-130925 and
detail drawings at:
abodo.co.nz/resources for
detailed installation information
prior to specification or
commencement of construction.

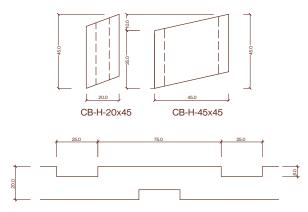


#### Exterior mouldings:



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:



#### Maintenance

- Wash down every 12 months with gentle detergent such as Sioo:x Maintenance wash, 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.



#### Maintenance

Lightening of the timber:



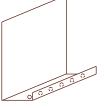
We cannot guarantee against wear or color changes to any products which result from weather, sun, wind and/or the natural aging process of the wood.

Surface checking:

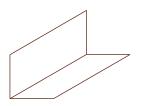
Checking (cracks) may be observed on the face and ends of Vulcan timber. Checks are acceptable to install. Checking may become more apparent as the material weathers naturally in place. Fibre pull at laminated glue lines is also possible. These are not defects and are considered a natural part of this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



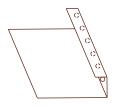
### Abodo flashings



AWF1 Abodo WB10 Horizontal Base Cavity Closer S/Steel 3m



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



AWF3 Abodo Window Jamb Flashing S/Steel 3m



**Accessories** 

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



Abodo Protector - End Seal, 1L:



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



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