



Vulcan® Cladding – Vertical Grain

○ Architectural Series



○ Overview

Vulcan Cladding – Vertical Grain 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.

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

○ Wood Species

Thermally Modified Radiata Pine (Pinus Radiata).

○ Standard Profiles

○ WB18



180x18 (160mm cover)
Vertical/Horizontal



135x18 (115mm cover)
Vertical/Horizontal

○ WB21



135x18 (115mm cover)
Vertical*

○ WB12



180x18 (160mm cover)
Vertical

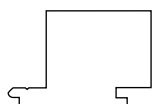


135x18 (115mm cover)
Vertical

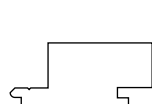
○ Fineline WB12F



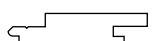
180x18 (160mm cover)
Vertical



90x60 (70mm cover)
Vertical



90x40 (70mm cover)
Vertical



90x18 (70mm cover)
Vertical

*Non-standard profile, please contact distributor for availability.

○ Lengths

Typical: 3.6, 4.2 and 4.8m, with mixed lengths from 1.2m and longer possible

Lengths are subject to availability at time of order. Please check with local resellers for pricing, availability, and lead times.



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○ Colours

Colours are indicative only and as they would appear on Vulcan timber. Protector – Water Borne is a pigmented penetrating natural oil and is an Abodo proprietary product.

Colour may change/fade as a part of the natural weathering process. See abodo.com.au for Maintenance Guide.

Coating performance on brushed finish may be lower compared with bandsawn finish.

Vulcan Cladding is usually factory pre-coated with 1 or 2 coats in a colour as selected.



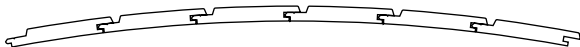
* Sioo:x is a specialist 3 coat exterior coating system for a long term silver weathered look. Refer Sioox Manual abodo.com.au

Product Specifications

○ Name	Abodo Vulcan Cladding – Vertical Grain Architectural Series.
○ Quality	Select Grade /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, skip dress and stepping in laminations allowed.
○ Finish	Fine bandsawn face as standard (some variation in the visual appearance of the bandsawn finish can be expected). Brushed face available optionally.
○ Durability	Class 1 (EN350-1), Class 2 above ground (AS5604).
○ Treatment	Thermally modified – 230 degrees schedule. TPX ‘H2F’ treated (AS1604). Available optionally H3 LOSP treated (AS1604).
○ Insect Attack	TPX suitable for use in areas south of Tropic of Capricorn. H3 LOSP treated suitable for use in all areas.
○ Intended Use	Intended for above ground use in residential and light commercial buildings – wall cladding, soffits, interior linings.
○ Serviceable Life	30 years or more when maintained according to manufacturer’s recommendations.



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- Warranty 25 years against fungal and termite attack (subject to terms and conditions). See separate Warranty Statement.
- Moisture Content Approx. 7% MC (+/-2%) at time of dispatch.
- Construction Laminated with vertical grain orientation.
- Glue Polyurethane adhesive – VOC, solvent and formaldehyde free. Exterior Type 1 – AS/NZS4364. Approved for Service Class 3 (exposed exterior applications) (AS1328).
- 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).
- Average Density 420kg/m³.
- Fire Group 3, (AS5637), please inquire for solutions to cladding in bush fire zones.
- Hardness Low (2.5kN Janka).
- Weight Dry ~7.5 kg/m²; Wet ~11 kg/m².
(Values are approximate only and subject to variation).
- Thermal Properties ~0.095 W/(mK).
(Thermal conductivity is reduced by 20-25% compared with radiata pine).
- pH (Indicative) 3.9.
- Curved Walls (Min Radius) WB18 135x18 – 2.3m, WB12 90x40, WB12 90x18 – 0.8m.

- Compatibility Vulcan has little corrosiveness on most metals and can be placed in contact with most building materials. In general cross linking PVA, PU, MUF epoxy glues and RF resins can be used, however a specific adhesive specification may be required considering the low moisture content and unique characteristics of the timber. Stainless steel fasteners are recommend in exterior applications.

Care should be taken to separate from zinc.
- 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 at least two coats to the front face and edges with Abodo Protector Oil or other approved proprietary wood stain.

Available factory pre-coated.
- Patent AU Pat. 2012101047.
- Certification FSC®-certified mixed, No.: SGS-COC-004944.
- Environmental Product Declaration (EPD) Registration Number S-P-01543.
- Place of Manufacture Grown and manufactured in New Zealand.



Vulcan® Cladding – Vertical Grain

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 clean gloves during installation to avoid marking the face of 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.

Fixing Overview

- Timber framing is to be in accordance with AS1684, steel framing in accordance with NCC and manufacturer requirements. Studs at max 600mm centres.
- Fix cladding over a water proof, breathable building wrap (sarking), rigid air barrier or other suitable waterproof substrate in conformance with the NCC.
- Horizontal cladding may be direct fixed or fixed over cavity battens. Vertical cladding must be fixed over horizontal structural cavity battens. Cavity method is recommended for optimal weather tightness and in wet or humid climates.
- Horizontal structural cavity battens must be minimum 70x35mm or 45x45mm H3 treated MGP10 or equivalent timber over continuous vertical timber counter-battens; or 10mm plastic or timber spacers placed every 600mm at each stud fixing point.

Vertical cavity battens must be minimum 35x18mm H3 timber sized to match the stud width.

- Cavity battens must be structurally fixed to studs with HDG or stainless steel flat head nails or 10g screws staggered at min 600mm centres and with min 45mm fixing penetration into timber stud or 3 heads deep into steel stud.
- Fix cladding either vertically or horizontally as appropriate to the profile type specified at maximum 600mm centres.
- 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.

- Fix with self drilling self countersinking head screws so as to achieve 30mm penetration into timber stud or structural cavity batten; or 3 threads deep into steel stud 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 cut end grains, ripped edges and notches must be sealed with timber insecticide preservative such as Tanalised Enseal Clear or equivalent. All exposed end grains 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.



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- Joins between board ends must be made over studs/battens only, with joins off-set by minimum 400mm, using a 35degree mitre, and application of sealant at the join eg: Sikaflex 11FC. Excess sealant can be cut and peeled away once cured.
- 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 corrosion resistant 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 to exposed face and edges 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:

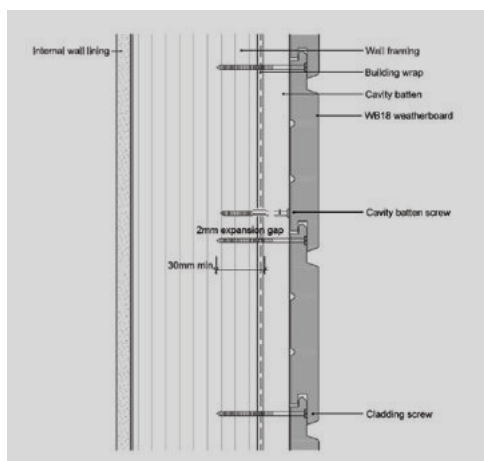
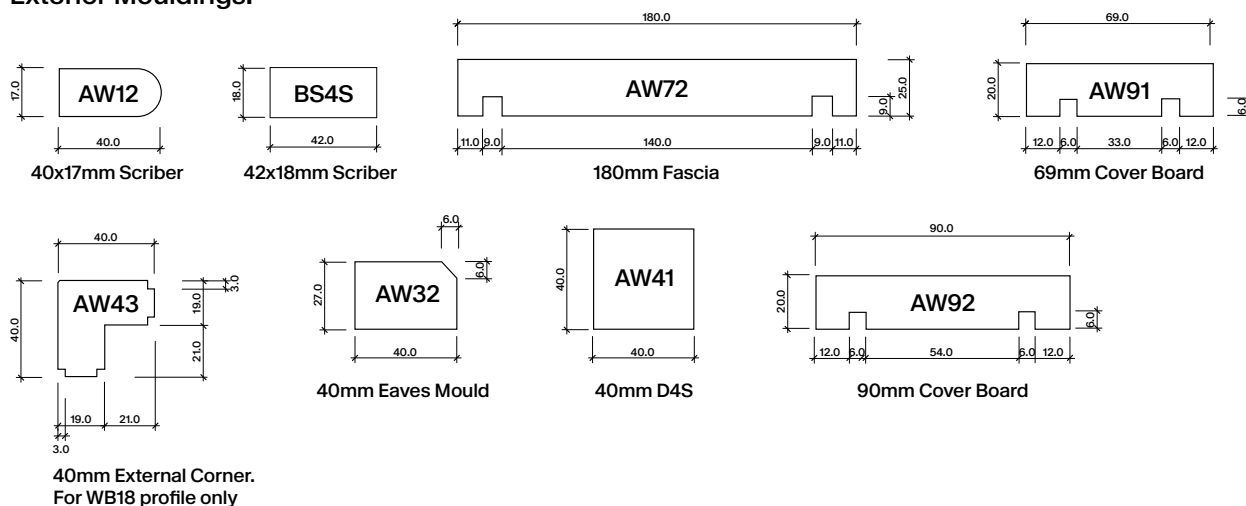


Fig 1: WB18 Secret Fix

Note: The above is an overview only.

Please refer installation manual for full install details.

Exterior Mouldings:



Note: Other profiles are available and should be specified according to the system being used.

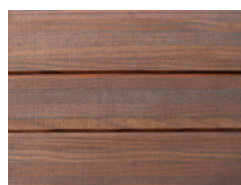


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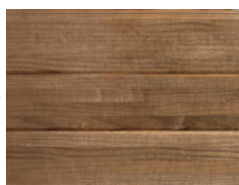
Maintenance

- 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. Brushed finish is recommended to have a third coat applied within 12 months of installation.
- 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.
- 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 heavily soiled or mouldy areas use Rejuvenator or similar timber cleaner, apply active mouldicide and recoat with penetrating oil.
- For other specialty finishes such as Sioo:x please refer to specific maintenance literature.

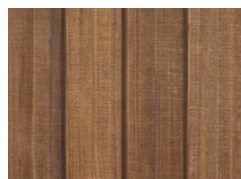
○ Lightening of the Timber



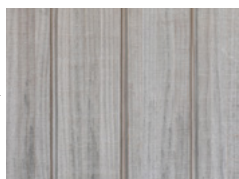
Vulcan Teak
As delivered



Vulcan Teak
Weathered exterior
install



Vulcan Sioo:x
As delivered

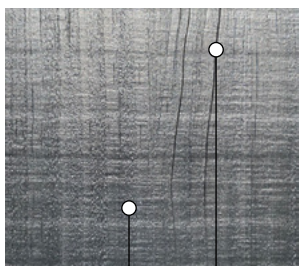


Vulcan Sioo:x
Weathered exterior
install

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



End split/
Glue pull



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Accessories

Abodo Protector, 4L, 10L:



Abodo Protector – End Seal, 1L:



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



Note: Abodo weatherboards require a minimum 30mm embedment into framing or structural batten and framing.