Vulcan® Cladding – Vertical Grain

New Growth Feature Timbers

ABODO

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 – Vertical Grain has enhanced stability, reduced resin content, is a beautiful homogeneous brown colour, and is naturally durable so does not require any chemical preservatives.

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

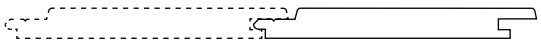
The Standard Series is designed to be an affordable cladding material with visual features and defects present as part of the timber grade. For a higher aesthetic appearance with less visual features the Architectural Series is recommended.

Wood Species

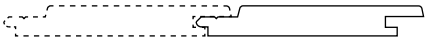
Thermally Modified Radiata Pine (Pinus Radiata).

Standard Profiles

WB18 **New Profile**



180x18 (160mm cover)
Vertical/Horizontal



135x18 (115mm cover)
Vertical/Horizontal

All profiles supplied with band sawn face.

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.

Vulcan® Cladding – Vertical Grain

○ Colours

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

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

Product Specifications

○ Name

Abodo Vulcan Cladding – Vertical Grain Standard Series.

○ Quality

C2LAMVG Grade/A good appearance grade that combines some clear three sides product, along with product containing defects including knots, resin pockets and glue cavities individually up to 1/3rd of the board width. Reverse side with knots and defects allowed according to Standard Grade.
The reverse face may also have skip dress present and one under-thickness lamina up to 4mm depth, provided the function of the product is not compromised ie: boards fit together correctly and will sit flat on a wall. See Abodo Appearance grade rules for full grade specification.

NOTE: As this is a visually graded product up to 5% of the volume may be supplied as 'out of grade', allowing for variation in grade interpretation. Some grading and cutting out of defects may be required to meet customer expectations and/or requirements of the ABCB.

○ Grade Indication

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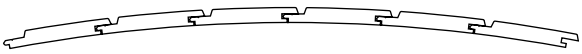
ABODO

Vulcan® Cladding – Vertical Grain

○ Finish	Fine band sawn face (some variation in the visual appearance of the finish can be expected).
○ Intended Use	Above ground applications for residential and light commercial buildings – wall cladding, soffits, interior linings.
○ Durability	Class 1 (EN350-1), Class 2 above ground (AS5604).
○ Insect Attack	TPX is suitable for use in areas south of Tropic of Capricorn. H3 LOSP treated suitable for use in all areas.
○ Expected Serviceable Life	30 years or more when installed and maintained according to manufacturer's recommendations.
○ 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	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 3% (from 7%MC to fibre saturation – variation will occur between boards).
○ Average Dry Density	420kg/m3.
○ Fire	Group 3 (interior).
○ Hardness	Low (2.5kN Janka).
○ Weight	Dry ~7.5 kg/m2; Wet ~11 kg/m^2. (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. 
○ Compatibility	Vulcan has little corrosiveness on most metals and can be placed in contact with most building materials. Care should be taken to separate timber from zinc. 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.
○ 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 or other approved proprietary wood stain or paint system. Available factory pre-coated.
○ Certification	FSC®-certified mixed, No.: SGS-COC-004944.

New Growth Feature Timbers

ABODO

Vulcan® Cladding – Vertical Grain

○ Environmental Product Declaration (EPD) Registration Number	S-P-01543.
○ Living Building Challenge	Declare Certified, Red List Free.
○ Place of Manufacture	Grown and manufactured in New Zealand.

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.

Vulcan® Cladding – Vertical Grain

- 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.
- 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:

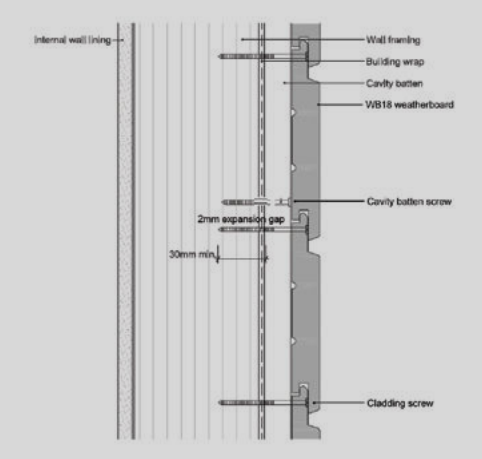


Fig 1: WB18 Secret Fix

Note: The above is an overview only.
Please refer to detail drawings at: abodo.com.au for detailed installation information prior to specification or commencement of construction.

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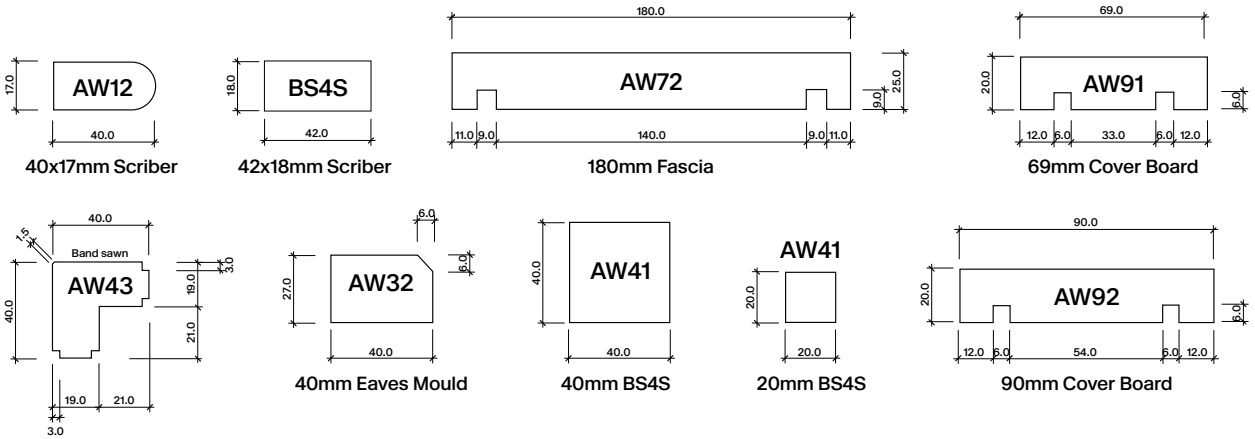
Exterior Mouldings:

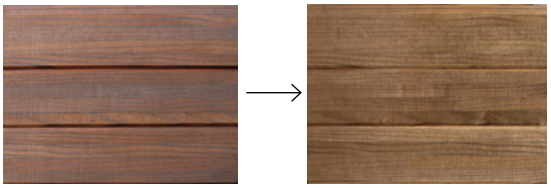


Exterior mouldings may be supplied as Vulcan C1LAMVG Grade.

Maintenance

- Wash down every 12 months with gentle detergent, warm water and soft brush. High pressure water blasting is not permitted.
- If possible for optimal long term coating performance 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 re-coat 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.

○ Lightening of the Timber



Vulcan Teak
As delivered

Vulcan Teak
Weathered exterior install

Vulcan White
As delivered

Vulcan White
Weathered exterior install

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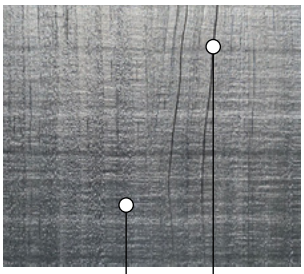
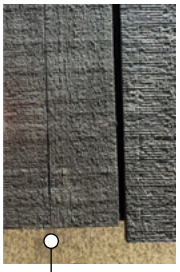
○ Surface Checking

- 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. Some dimensional movement of boards is also possible including slight cupping and lifting at the ship lap area. These are not defects and are considered a natural part of this wood product. Maintenance with a coating and thorough sealing of end grains and notches with Abodo's Protector End Seal or equivalent wax sealer will improve long term weathering characteristics.





Accessories

Abodo Protector, 4L, 10L:

Abodo Protector – End Seal, 1L:

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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.

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