Vulcan® Screening

New Growth Feature Timbers

ABODO

○ Overview

Vulcan Screening is created from thermally modified New Zealand plantation timber and engineered with a vertical grain construction for superior weathering characteristics.

The thermal modification process combined with lamination means Vulcan Screening has enhanced stability, reduced resin content, is a beautiful homogenous brown colour, and is naturally durable so does not require any chemical preservatives.

An excellent choice for appearance grade applications such as joinery, pergola, screening, facade fins open-joint rainscreen, and ballustrading in-fill.

○ Wood Species

Thermally Modified Radiata Pine (Pinus Radiata).

○ Lengths

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

Fixed length – 3.6, 4.2, 4.8, 5.4m* (subject to availability).

*5.4m lengths are rare. Please inquire on availability.

Product supplied as standard in mixed length. Specified fixed length orders may be available but are subject to conditions including minimum quantity, price premium and availability. Please check with Abodo prior to placement of order.

○ Sizes

Stock Sizes
42x18
65x18
88x18
138x18
42x25
65x25
88x25
290x32
238x25
42x42
65x42
88x42
138x42
180x42

Made to Order MOQ of 450lm or a set up fee applies.
65x65
88x88
138x138
180x180
180x18
138x25
180x25
42x32
65x32
88x32
138x32
180x32
88x65
138x65
180x65
138x88
180x88

Note: Supplied as standard with fine bandsawn finish four sides. Bandsawn dimension may vary up to +/-2mm. Other sizes are subject to minimum order volumes and lead time.

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○ Colours	Colours presented are in Protector and are indicative only. Colour may change/fade as a part of the natural weathering process.

Product Specifications

○ Name	Abodo Vulcan Screening.
○ 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 allowed.
○ Substrate Colour	Chocolate Brown. (Timber will weather to grey unless a pigmented coating is applied and maintained).
○ Finish	Bandsawn faces as standard (smooth dressed subject to confirmation by Abodo). Bandsawn dimension may vary up to +/-2mm (some variation in the visual appearance of the bandsawn finish can be expected).
○ Durability	Thermally modified – 230 degrees schedule. Suitable for uses described in NZS3602:2003 Table 2A 'Requirements for wood-based building to achieve a 25 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 many 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. Not suitable for use in load bearing structural applications or as a primary safety barrier in exterior situations.
○ Serviceable Life	30 years or more when maintained according to manufacturer's recommendations.
○ Warranty	25 years against fungal decay (subject to terms and conditions).
○ Moisture Content	Approx. 7% MC (+/-2%) at time of dispatch.

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- **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).
- **Fire** — Group 3.
- **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 Dry Density** — ~420 kg/m3.
- **Hardness** — Low (2.5kN Janka).
- **Thermal Properties** — ~0.095 W/(mK).
- **pH (Indicative)** — ~3.9.
- **Compatibility** — Vulcan has low corrosiveness on most metals (separation required to zinc) 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. Please consult with the adhesive supplier and conduct testing prior to commencement of work. Abodo will not be held liable for glue compatibility.
- **Coating** — Vulcan will take most stains, penetrating oils, paints, polyurethanes and varnishes well, though uptake of coating is generally higher than normal.

  Smooth dressed timber must be thoroughly sanded with 120 grit sand paper prior to application of coating.

  For exterior applications at least one coat must be applied all sides including back face and ends, and at least two coats to faces and edges exposed to the weather with Protector, Sioo:x or other approved coating.

  Available factory pre-coated (minimum order quantity of 225LM applies).

  For interior applications film forming or high solids coatings e.g. hard wax oil, acrylic or polyurethane must be used only. Coating can be applied to faces only. Please contact Abodo for further advice on specific application.
- **Quality Assurance** — Third party certified to AS/NZS1328.1 and AS/NZS1491.1.
- **Certification** — FSC®- certified mixed, No.: SGS-COC-004944. Declare Certified – Red List Free.
- **Characteristic Strength/ Stiffness**

Characteristic Strengths (MPa)					Elastic Moduli (GPa)	
GI grade rigidity	Bending (Mor)	Tension parallel to grain	Shear in beam	Compression parallel to grain	Short modulus of elasticity parallel to end grain (Moe)	Short duration modulus for beams
8	20.50	9.60	-	38.50	10.40	-

- **Fastening**

Characteristic Lateral Load Strength	
	Joint Group
Nail:	JD4
Screw:	JD5

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Product Handling

- Must be kept clean dry, under cover and out of the weather prior to installation.
- 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.
- Non-preservative treated timber may be burnt or mulched.
- Wear gloves when handling to avoid marking the timber surface and to protect against splinters.

Installation

- For exterior appearance applications, high quality stainless steel fixings are recommended. Stainless steel 316 (A4) fixings should be used in areas near the sea. Note: Silicone bronze/copper fixings can be subject to oxidation during weathering, resulting in discolouration and weeping around fixing head.
- Fixings at ends of boards must be at least 12mm from edge, and must be pre-drilled before applying fastener.
- Where possible screening (especially square profiles) should be orientated so that vertical grain pattern is exposed to the prevailing weather. This can be checked by looking at end section.

Vertical grain oriented towards the weather

Weather-exposed face

Weather-exposed face

Note: The above is an overview only. Installers should refer to specific design information on the construction specification for more detail.

- All end grains and notches must be sealed using Abodo's Protector End Seal or equivalent wax sealer, or acrylic paint system. Top exposed end grains of screening must have 15 degree angle applied to shed water. In heavily exposed situations metal caps should be considered to protect end grains at tops of posts or battens.
- Vulcan Screening should generally be installed minimum 100mm above paved surface or 175mmm above un-paved surfaces. Base of posts must finish minimum 35mm above paved surface and be sealed to prevent moisture ingress.
- Smooth dressed timber must be thoroughly sanded with 120 grit sand paper prior to application of coating. Bandsawn face timber does not require sanding.
- For exterior applications at least one coat of Protector oil or approved proprietary 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 interior applications timber may be left uncoated or if coated, film forming or high solids coatings e.g. hard wax oil, acrylic or polyurethane must be used only. Coating can be applied to faces only.

For more installation and detailing tips see Vulcan Screening Design Guide abodo.co.nz/resources

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Maintenance

- Wash down every 6-12 months with gentle detergent, warm water and soft brush.
- If possible it is recommended to apply a further coat of oil or stain after approx 12 months of weathering.
- Make a maintenance check every two summers.
- For heavily soiled or mouldy areas use Rejuvenator or similar oxygenating cleaner, 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 timber to the sun. For Sioo:x coated timber refer to specific maintenance information.

○ Lightening of the Timber

Vulcan Teak
As delivered

Vulcan Teak
Weathered exterior install

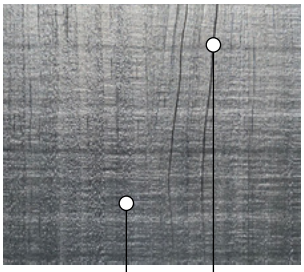
Vulcan Sioo:x
As delivered

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.



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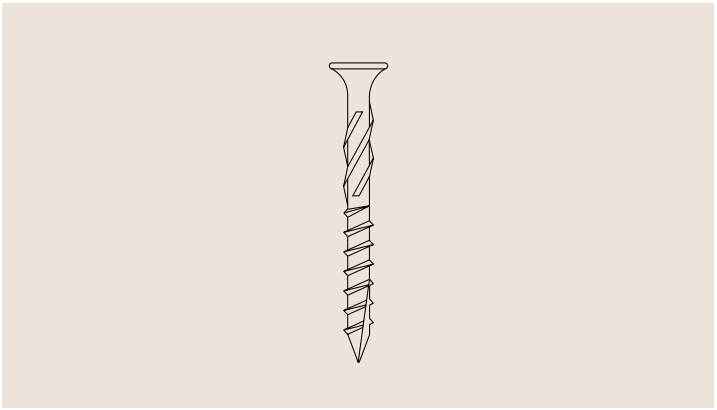
Accessories

Abodo Stainless Steel Cladding Screw 4.0x45mm or 4.5x75mm:



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