



Finger Jointed Pine and Finger Jointed Treated Pine - General & Technical Information

Overview

Finger Jointed Radiata Pine is a clear grade manufactured in Australia and New Zealand. A finger joint is a joint where the lines resemble interlocking fingers. Finger Jointed Radiata Pine is a long, straight and defect free length of timber less likely to twist than a natural piece of pine. Lamination allows for larger sizes to be produced, which are strong and straight. LOSP treated pine provides long lasting protection against decay and insect attack in above ground applications.

Finger Jointed Pine is used for a wide range of products where appearance is important. For this end use, the 4mm 'micro joint' is offered by our manufacturers. It provides a high quality finish and results in higher timber yields. Unblemished lengths of Finger Jointed Pine produce a product for high value end uses.

Appearance grade Finger Jointed pine products include mouldings, fascia boards, handrails, balustrades, window components, verandah and pergola components, claddings and much more.

Certification & Compliance

All of our products are produced in accordance with all relevant local standards. The following standards are the most common standards we comply to.

Australia

AS5067 Non Structural laminating, AS5069 Non Structural Finger Jointing, AS5068-2006 Structural Finger Joints
AS1720.1-1997 Timber Structures, AS/NZS1328.1:1998 & 1328.2:1998 Glue Laminated Structural Timber,
AS/NZS1604.5:2005 Timber preservation

Handling and Installation

Applications

Finger Jointed Pine products are intended for dry interior use where a paint finish is specified. They should not be used externally. The moisture content of the product should be maintained below 12%. Typical applications are as architraves, door jambs and skirting boards.

Finger Jointed Treated Pine products are suitable for exterior 'above ground' use. It should not make contact with the ground after final installation. A minimum ground clearance of 200mm is recommended. Typical applications are cladding, fascia boards, handrails, balustrades, window components, verandah and pergola components, and much more. Light colours with a light reflective value (LVR) of 45 or more, are the best choice for colour selection as dark colours attract and absorb heat. Consult with your paint supplier.

For the best results when installing any Finger Jointed Pine product, always ensure industry standards and 'best practice' are met throughout all areas of construction. Compliance to national, state and local codes is required.

Storage & Handling

While storing all Finger Jointed Pine or Finger Jointed Treated Pine products, it is important to keep all products dry and off the ground, especially bare concrete using blocks with a plastic sheet below. Do not store directly on the ground, in damp locations or in direct sunlight to avoid water pickup, dirt, gravel and other elements. Always take care to minimise any damage to ensure the best possible finish. Store under cover on a horizontal pallet or on supports spaced at 600mm maximum centres with a plastic sheet below to avoid moisture uptake. Stack individually so that air circulates freely around them to adjust their moisture content to the site conditions, preferably in the room where they are to be installed for Finger Jointed Pine products. The storage area must be dry and well ventilated.

Damp Buildings

Finger Jointed Pine or Finger Jointed Treated Pine products should not be fixed to new cement rendered walls, or walls which are permanently or intermittently damp. The cause of moisture must be corrected and the walls allowed to dry before installing.

Moisture Content and Acclimatization

The following guidelines should be followed to avoid or minimize the effects of moisture uptake and then shrinkage:

1. Keep all products dry and off the ground.
2. Do not store or leave any product in direct sunlight.
3. Do not store outside or in damp conditions.
4. Do not store directly on floors, especially bare concrete.
5. If the surface underneath is damp, place a moisture resistant sheet (ie polythene) under the product with supports above placed at 600mm maximum centres.
6. Acclimatize Finger Jointed Pine products by leaving them in the room to be installed for at least seven days before installation.
7. They should be stacked individually indoors to allow free circulation of air and adjustment of moisture content.

Product complaints are often the result of substandard storage and acclimatization.

IMPORTANT NOTE: We will not offer a warranty on any product that has not been kept dry or that has not been painted according to the specifications outlined.

Installation, Cutting and Shaping

When installing Finger Jointed Pine or Finger Jointed Treated Pine products, always ensure the industry standards and best practice are met throughout all areas of Construction. Compliance to National, State and local codes is required for the correct installation and application for any of our products.

Finger Jointed Pine Primed or Unprimed is easy to rout and shape with woodworking tools and equipment. Cut mouldings with a fine-toothed handsaw or power saw. Use sharp chisels or gouges to carve moulding ends to scribed shapes. Rebates are easily machined into the mouldings using power routers. Care should be taken when cutting or shaping, to avoid damage to the primed surfaces if installing a pre primed product.

Finger Jointed Pine products are suitable for internal use only. They can be fixed to lined timber or metal framed assemblies using normal carpentry and joinery techniques. They are also suitable for use over dry-rendered or masonry walls, which have been plugged to receive mechanical fixings. Adhesive fixing methods may also be used for decorative, non-structural applications. Apply PVA adhesive to mitred ends. Always follow the paint manufacturer's label instructions. Always hand nail where possible to help protect the factory coating if applicable. In cases when nail gun use is required, ensure to adjust to the correct pressure so the nail head is no more than 2.0mm below the surface.

Finger Jointed Treated Pine Primed products are suitable for all above ground exterior applications. To help reinforce the natural strength and durability of Finger Jointed Treated Pine products, it is vital that any saw cuts, length wise rip cutting, machining, or profiling resulting in exposed wood, be resealed with the appropriate wood preservative end sealer such as Osmose Protim Solignum “XJ Clear” and Tanalized “Ecoseal” and “Enseal Clear” prior to re priming. Allow the preservative to dry and then apply a premium quality alkyd based primer or quality solvent alkyd (oil) based primer before being fixed into position. Always follow the paint manufacturer’s label instructions.

Should any Finger Jointed Treated Pine product be exposed to moisture prior to end sealing or re priming, it is essential the product be given time to dry out and return to its natural moisture levels before applying an undercoat and two top coats.

Primed Colours

Our Finger Jointed Pine primed colour is white and our Finger Jointed Treated Pine Primed colour is beige.

Adhesive Fixing

Wallboard or construction-grade, contact-type adhesives can be used to secure Finger Jointed Pine Mouldings skirting’s and architraves. Apply the adhesive in continuous beads along the moulding and approximately 15mm from moulding edges. Bond the moulding to the wall using the contact bond method in accordance with the adhesive manufacturer’s recommendations. PVA adhesive should also be applied to moulding joints, including rebates, scarf’s and mitres.

Finger Jointed Pine products are not intended for structural uses, for glue-joints under high stress, or where impact adhesives are used.

Mechanical Fixing

Finger Jointed Pine Mouldings readily accept nail, staple and screw fixings. As a guide, fastener spacing’s should not exceed 600mm centres for 18 and 30mm thicknesses and 450mm centres for 12mm-thick mouldings. The use of adhesive in conjunction with the fixings will consolidate joints and is recommended. To avoid splitting, fasteners driven into moulding edges should be kept at least 25mm from moulding ends and corners. For screw fixing, always drill pilot holes to receive the screws.

Fastener Length: Fastener lengths will depend on the nature of the application. For timber frames lined with 10mm plasterboard, typical lengths are 50mm for 18mm thick Finger Jointed Pine Mouldings and 40mm for 12mm thicknesses. The fastener heads should be driven slightly below the moulding surface and not more than 2.0 mm deep.

Nails: Finger Jointed Pine Primed or Unprimed.

It is recommended that Hand Driven Nails be (Bright Finish)

11mm thick – 2.0 gauge

18mm thick – 2.5 gauge

In some instances, you may need to pre-drill depending on the application, followed by nail punching to correctly centre the fixing just below the moulding surface. If uncertain, confirm your fixing choice with your Timber and Hardware store. Where necessary, use a construction adhesive to assist in the installation process in difficult to nail areas.

Finger Jointed Treated Pine Primed. It is recommended that hot-dipped galvanized, high-tensile, aluminium or stainless steel fasteners are used when installing. All products are manufactured with an active treatment that is non-reactive to all nails and fastening, however, when used in combination with this level of fastener quality, the long-term durability of a project can be greatly increased. Always hand nail where possible to help protect the factory coating and enhance the finish. In cases when nail gun use is required, ensure to adjust to the correct pressure to achieve the nails end slightly below the surface. Alternatively, countersink the nails 2.0mm and fill with putty to obtain a smooth surface. It is also important to drill pilot holes when nailing closer to the ends of the product to avoid any possibility of end splitting. To allow for normal seasonal movement, nailing should not restrict movement, and always avoid nailing through overlapping pieces. Finger Jointed Treated Pine products should always be nailed over studs. Total effective penetration into a solid wood base should be at least 50mm. Nailing patterns should comply with industry standards and best practice.

Screws: Only use light-gauge countersunk head parallel shank (particleboard) screws for joining Finger Jointed Pine Mouldings, fixing hinges or fixing mouldings to timber frames.

If screwing into Finger Jointed Pine Mouldings, drill a pilot hole approximately 2mm deeper than the depth or screw penetration. The screws should not be over-tightened.

Moulding Thickness (mm)	Typical Screw Gauge	Pilot Hole Diameter (mm)
12	No. 6 (3.5mm)	2.0
18	No. 8 (4.2mm)	2.5
30	No. 8 (4.2mm)	2.5

Similar-gauge screws should also be used to fix Finger Jointed Pine Mouldings to metal frames. For 1.2mm minimum metal frames, use self-drilling, self-embedding head screws with self-breaking cutter nibs, such as WA Deutscher 'Wingteks' screws. On thinner gauge frames, needle point, self-drilling, countersunk head screws are recommended.

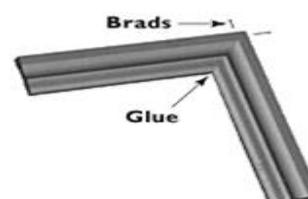
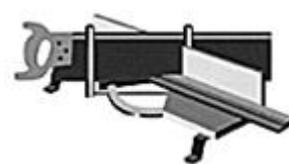
Nailing Architraves to the edge of jambs: Nails should be skewed towards the core of the jamb. Best results are achieved by also gluing the architraves to the jamb.

Mitres are used when two pieces of moulding meet at an outside corner, an inside corner (when the moulding is applied flat to the wall), or around doors and windows. First set the mitre box at 45 degrees

Nail and Glue Mitres: Trim each of the two mitring members at opposite angles. When fitted together they should form a tight right angle. For tight mitre joints, nail and glue joint. Make sure the nails are countersunk below the surface.

SPLICING

Moulding installation covering large spans may require a splice or a joint. Position the moulding in the mitre box as if the back of the mitre box were the wall. Without changing the angle of the saw, make a 15-degree cut in the ends of both pieces. Position the joint over a solid base such as a stud, top plate or bottom plate. Glue edges, then nail through both mitred cuts.

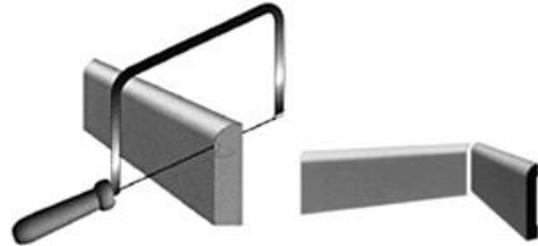


Coping

The coping technique is used when butting ceiling mouldings at an inside corner. One piece is cut flat to the wall at a right angle, while the end of the other moulding must be coped, or shaped, to match the profile of the adjoining moulding. Set moulding on wall, upright against back plate.



Trim at 45 degree angle. The resulting cut exposes the profile of the moulding, serving as a template. Following this profile with the coping saw at a 90 degree angle to the face of the moulding results in a duplication of the pattern, which fits over the face of the adjoining moulding.



Painting

Putties, Mastics and Sealants

When using putties, mastics and sealants with Finger Jointed Pine and Treated Pine mouldings, ensure they are compatible with the undercoat and top coat paint to be used. If you are unsure, seek advice from the paint manufacturer.

Undercoat and top coats

Although many of our products are pre primed, we do not offer any product in our range as a 'Top Coat' only product. The best finish and long life of all our products is best achieved with the traditional premium quality undercoat followed by two premium quality top coats.

Finger Jointed Pine Products - Unprimed

To ensure the optimum finish, the following is recommended:

1. Remove all dirt, dust, grease, or other contaminants before painting.
2. Set fasteners slightly below the moulding surface and fill with proprietary non-shrinking, fast-dry wood filler.
3. All nail holes should be filled with interior grade wood filler.
4. Lightly sandpaper smooth and remove any nibs or blemishes, which have occurred during fixing.
5. Apply one full undercoat of the selected premium quality paint to the prepared moulding surface.
All products should be painted as soon as possible after installation, and no more than 60 days after installation;
6. Two second top coats are then required. Before applying the second top coat, allow the first coat to dry. Ascertain if a very light sand between coats is required. Always follow the paint manufacturer's recommendations. To protect against dimensional change, applying the manufacturer's recommended painting specification will provide protection against moisture uptake.
7. Should any Finger Jointed Pine Unprimed product be exposed to moisture prior to final painting and this results in temporary dimensional swelling, it is essential the product be given time to dry out and return to its natural moisture levels before the final coats are applied

Finger Jointed Pine Products - Primed

The primer on all Finger Jointed Pine Products is uniformly applied and will help minimize preparatory painting. Finger Jointed Pine - Primed is manufactured and delivered pre-primed. The primer does not take the place of a premium quality undercoat. Should the product be exposed to moisture prior to undercoating, the primer will not protect against moisture uptake. Should this result in temporary dimensional swelling, it is essential the product be given time to dry out and return to its natural moisture levels before the undercoat and then final coats are applied. To ensure the optimum finish, the following is recommended:

1. Remove all dirt, dust, grease, chalk, or other contaminants before painting; if necessary, clean gently with detergent and water, or similar to prepare for undercoating. Allow to dry before undercoating.
2. Thoroughly reprime and seal all saw cuts for product going in to wet area installations to minimise moisture uptake.
3. Set fasteners slightly below the moulding surface and fill with proprietary non-shrinking, fast-dry wood filler.
4. All nail holes should be filled with interior grade wood filler.
5. Lightly sandpaper smooth and remove any nibs or blemishes, which have occurred during fixing.
6. If the primer appears to, or becomes chalky or loose, lightly sand these areas as required and re prime with a quality primer.
7. Apply one full undercoat of the selected premium quality paint to the prepared moulding surface. All products should be painted as soon as possible after installation, and no more than 60 days after installation;
8. Two second top coats are then required. Before applying the second top coat, allow the first coat to dry. Ascertain if a very light sand between coats is required. Always follow the paint manufacturer's recommendations. To protect against dimensional change, applying the manufacturer's recommended painting specification will provide protection against moisture uptake.
9. Pre Primed Finger Jointed Pine will restrict moisture uptake, however, should they be exposed to moisture prior to installation of final painting and this results in temporary dimensional swelling, it is essential the product be given time to dry out and return to its natural moisture levels before the final coats are applied.

Finger Jointed Treated Pine – Primed

The primer on all Finger Jointed Pine Products is uniformly applied and will help minimize preparatory painting. Finger Jointed Treated Pine is manufactured and delivered pre-primed. The primer does not take the place of a premium quality undercoat. Should the product be exposed to moisture prior to undercoating, the primer will not protect against moisture uptake. Should this result in temporary dimensional swelling, it is essential the product be given time to dry out and return to its natural moisture levels before the undercoat and then final coats are applied.

To help reinforce the natural strength and durability, it is vital that any saw cuts, length wise rip cutting, machining, or profiling resulting in exposed wood, be resealed with the appropriate wood preservative end sealer such as Osiose Protim Solignum "XJ Clear" and Tanalized "Ecoseal" and "Enseal Clear" prior to re priming. Allow the preservative to dry and then apply a premium quality alkyd based primer or quality solvent alkyd (oil) based primer before being fixed into position.

Numerous products including cladding, lining board and weatherboards must be undercoated on the face, edges and back of the board, before installation with the undercoat paint pre mixed to the same colour as the chosen top coat colour. This will give these boards an extra level of protection during the construction process as well as giving good cover at the laps that may move as the total building settles over time. It will avoid joint 'see through' when the natural expansion and contraction of boards joined together occurs.

To ensure the optimum finish, the following is recommended:

1. Remove all dirt, dust, grease, chalk, or other contaminants before painting; if necessary, clean gently with detergent and water, or similar to prepare for undercoating. Allow to dry before undercoating.
2. Cladding, lining board and weatherboards must be undercoated on the face, edges and back of the board, before installation with the undercoat paint pre mixed to the same colour as the chosen top coat colour.
3. Set fasteners slightly below the product surface if using a nail gun.
4. All nail holes should be filled with exterior grade wood filler.
5. Lightly sandpaper smooth and remove any nibs or blemishes, which have occurred during fixing.
6. If the primer appears to, or becomes chalky or loose, lightly sand these areas as required and re prime with a quality primer.
7. Apply one full undercoat of the selected premium quality paint to the prepared product surface. All products should be painted as soon as possible after installation, and no more than 60 days after installation:

8. Two second top coats are then required. Before applying the second top coat, allow the first coat to dry. Ascertain if a very light sand between coats is required. Always follow the paint manufacturer's recommendations. To protect against dimensional change, applying the manufacturer's recommended painting specification will provide protection against moisture uptake.
9. Pre Primed Finger Jointed Pine will restrict moisture uptake, however, should they be exposed to moisture prior to installation or final painting and this results in temporary dimensional swelling, it is essential the product be given time to dry out and return to its natural moisture levels before the final coats are applied.

IMPORTANT NOTE: Our manufacturers will not offer a warranty on any product that has not been kept dry or that has not been painted according to the specifications outlined above.

Paint Colours

Light colours are the best choice for colour selection as dark colours attract and absorb heat.

Dark colours have the potential of resin bleed and surface cracking problems due to their propensity to attract and absorb heat. Colours that have a higher Light Reflectance Value (LVR) rating of 45 or more should be chosen to minimize these issues. Consult with your paint supplier for further advice when selecting top coat colours.

Heat – Resin Bleed

As wood is a natural product, and resin is a natural component of pine, any products exposed to extreme heat, especially when painted in a dark colour, resin bleed may occur. By following the paint manufacturer's recommendations, the potential for resin bleed can be reduced; avoiding darker colour paints or high-gloss finished will also help.

Health & Safety

Risk: The dust is irritating to eyes, skin and respiratory system. May cause sensitisation by inhalation (asthma). Repeated inhalation of wood dust increases the risk of nasal-cavity cancer and may increase the risk of lung fibrosis (scarring).

Safety: Always wear a filter mask and eye protection when machining, sanding or docking Finger Jointed Pine treated pine products. Wear gloves at all times. Avoid repeated or prolonged contact with skin. Avoid contact with eyes. Avoid breathing dust. Wear suitable clothing, gloves (AS 2161), and eye protection (AS/NZS 1337). If machining without adequate dust extraction, respiratory protection (dust mask) must be worn (AS/NZS 1715 and 1716). Keep work areas clean by wet sweeping and/or vacuuming. Wash work clothes regularly and separately from other clothes. Wash hands after handling treated pine products.

First Aid: Irrigate eyes with plenty of water. Wash skin with soap and water.

Disposal: All Finger Jointed Pine or Treated Pine product off cuts or shavings should not be incinerated or burnt in open fires or barbecues. They should not be used in gardens or for landscaping. All waste materials should be directed towards normal household or building site waste disposal.

Fire: Dust may form an explosive mixture in air. Earth all exhaust equipment and prevent high dust concentrations in confined spaces. Extinguish with water, CO2 foam or dry chemical extinguishers. Storage and work areas should be adequately ventilated.