

Installation Best Practices

Prior to the construction of any structure taking place all necessary approvals should be granted by local authorities and be designed in accordance with the Building code of Australian (BCA).

Prolam suppliers are registered members of GLTAA (Glue Laminated Timber Association of Australia. **(insert gltaa logo)**All products are manufactured to exceed the requirements set out in the Australian Standards and are independently third party audited to ensure conformity.

Finger joint and lamination technology is utilised in the manufacturing process to assist suppliers to reduce waste from the sawmilling process as short shooks of timber are joined to create larger and more diverse profiles. The Merbau timber used in the manufacture of Prolam products is certified Indonesian legal wood products. **(insert logo)**

Prolam posts are **not to be used in ground**, as Merbau is only a durability class 3 in ground (Class 1 is required). To maximise performance of post the bases should be well ventilated to avoid moisture entrapment.

Natural Durability of Prolam

In ground 3 - expected 8-15 years (not recommended)

Above Ground 1 - expected 50+ years

Naturally termites resistant

All the timber used in the manufacture of Prolam has moisture content between 12-15%. The equilibrium moisture content should be checked prior to installation to ensure it is within the range of 12-15%. The adhesive used in the manufacturing process is proven to last the test of time in ground or out allowing all profiles to be used on Service Class 3 applications – fully exposed.

Prolam products can be used in **Bushfire attack level 29 (BAL 29)** as it is deemed as a Bushfire resisting timber

Pre drill Prolam products minimise splitting and cracking around the screws or nails from the pressure in the wood fibre. Best pre drill all holes for screws, nails or bolt, this will prevent splitting

First coat of oil or stain should be applied prior to installation once cut to size, notches made and holes are drill, this gives maximum protection for the timber. This should be applied to all sides edges, notches and ends.

If installing Prolam product near light coloured products (painted surfaces, concrete, or renders) ensure plans are put in place to manage the Tannin (brown liquid) that will come from the products. This is a natural process to help protect the boards against the weather. As the boards pass through more wet dry cycles from the weather the effect should reduce

When painting Prolam it is recommended either use a tannin blocking primer prior to top coating or you leave the products exposed to allow for the tannin to come out. Otherwise it may come through the painted topcoat. Best discuss it with you paint supplier to ensure you have the best products for your application.

Avoid using any tools which may deposit fine iron filings on the timber surface. Any iron filings which are not cleaned from the surface are likely to create unsightly black staining of the

timber. An angle grinder cutting bricks creates iron filings from the metal mesh which forms the base of the cutting disk.

Prolam beams are GL17 and posts are GL 13, Span tables for these products can be found on the website www.prolam.com.au

The Merbau in Prolam products are very stable with minimal shrinkage (1.5% radial and 2.5% tangential). Combine this with the finger joint and lamination processes Prolam products will stay straight over time.

Maintenance

Like all natural products Prolam products are affected by climatic changes and exposure, therefore maintenance is required to keep them looking as good as possible. Regular maintenance will help to prevent the onset of cracking or surface deteriorating. Frequency of the maintenance is dependent on the exposure of the product to weather and the oil / stain applied. Best contact your oil/ stain supplier for further information.

If regular maintenance does not occur it can be expected that Prolam product will grey off over time and surface cracking may appear.

We recommend the use of good quality decking oil, which can be wiped over with a lint free cloth, maintaining the colour and grain of the timber. However, any oil with a UV stabiliser and anti-fungal additive will maximise performance

What about rain and saltwater?

Kwila is resistant to them. As the tannin in the product acts as a natural preservative it has minimal shrinkage and can withstand extreme climate conditions. Even rain and saltwater will not deteriorate the timber

Good Design Practice for Prolam

Most wood products undergo some degree of expansion and contraction with changes of weather and season. To compensate for these effects the following installation recommendations should be followed to ensure optimum performance of the deck.

1. **Underside Ventilation** — it is recommended that you build your deck a minimum of 300mm off the ground. This allows the deck to 'breathe' and will mitigate mould and mildew issues that occur as a result of humidity build up under the deck.
2. **Prevent ponding under the deck** – water must be able to drain away from under the deck to allow it to dry out
3. **Gap spacing's**
 - o Between deck boards — minimum 3mm
 - o Beside a building — 10mm minimum
 - o Around a post – 5mm Minimum
 - o Between deck board Ends —2-3mm gap.
4. **Fall** — your deck should have adequate fall to stop pooling of surface water. We recommend a minimum of 10mm fall per lineal metre of deck.

Note: All Prolam products are manufactured from natural timber species, therefore climatic changes will effect there long term performance. This is not limited to the appearance but

includes movement as boards will expand and contract as temperature and moisture content varies.