



Parkside Timber manufacture their stunning hardwood glue laminated beams and posts to comply with the glulam Standard AS/NZS 1328.1. The manufacturing process is audited by a third party auditing body under the Glued Laminated Timber Association of Australia (GLTAA) specifications.

Parkside GL products are produced with Queensland Spotted Gum, helping ensure maximum quality, durability and performance.

In order to optimize the performance of Parkside's GL products, it is a requirement that all products are handled and installed as per the following recommendations.

It is also important to check the environment in which the Glulam will be installed to ensure best performance. Dry, covered and well ventilated areas best suit these products. Parkside Glulam is not designed to be installed in ground.

On Site Handling

Strict adherence to the below requirements will help ensure that the finished product performs to its specifications.

Maintaining and protecting the integrity of Parkside GL products on site is crucial to the overall performance of the product. When delivered, it should be placed on timber gluts, evenly spaced to provide uniform and adequate support to the packs.

Parkside GL product should be stored in dry conditions on site and protected from direct exposure to the weather. If covered storage is not available, the GL packs should be placed evenly on timber gluts well off the ground at a well-drained location and should be covered with suitable non-transparent plastic or tarpaulins. This type of cover precludes moisture whilst maintaining good air circulation in and around the packs.

Installation

Whilst Parkside GL products are produced from Queensland Spotted Gum, which is rated in accordance with AS 5604 for its natural durability as class 1 above-ground (Dag) and class 2 in-ground ((Dai) in exposed above ground conditions, this does not negate the need for proper protection and handling during and after installation.

During the construction process Parkside GL products could be stored on site or even placed in situ, as long as appropriate protection from weather exposure is provided either by using a timber sealant coating or an impervious covering/wrapping.

1. A protective timber sealant coating inhibits moisture from getting into the timber during normal domestic construction periods (6 weeks). Should this period be extended or the timber sealant is no longer performing, renewal of the protective sealant is required. Should the GL products be cut, checked, bolted or otherwise worked on during construction, the protective sealant shall be re-applied to the exposed or unsealed timber. All fasteners used at connections shall be installed in accordance with AS 1720.1.

2. If using an impervious covering/wrapping to protect GL beams/ posts during construction, sufficient ventilation shall be provided at the bottom of the packs to allow moisture to escape and the product should be placed on evenly spaced gluts.

Once construction is completed and the product is in situ, ongoing use of a timber sealant as part of the product's regular maintenance is required.

Protective Measures

It's natural for any timber to be affected by UV light and moisture when exposed to weather. Parkside GL products if used in exposed situations have several different requirements to help prevent the adverse effects that may occur due to these factors.



Best Practices

The design of structures incorporating Parkside GL products which will be fully exposed to the elements should include measures to mitigate exposure to direct sunlight and rising damp, and promote rapid shedding of moisture.

The following detailing and design practices are desirable with regard to enhancing the structure's service life:

1. Joint detailing should comply with the following:
 - a. ensure moisture entering the joint is not trapped but can run away freely;
 - b. keep horizontal contact areas to a minimum, favouring self-draining vertical surfaces;
 - c. use non corroding fasteners which do not cause splitting during installation;
 - d. minimise use of morticed joints.
2. Beams should be given adequate ventilation.
3. Damp proof membranes should be used where timber is in contact with masonry.
4. Metal or plastic shields on the top and ends of laminated timber beams can exclude moisture and sunlight.
5. Arrised edges on timber help prevent the failure of coating systems.
6. Building overhangs will provide protection from moisture and direct sunlight.
7. The use of wire balustrading in external applications presents a risk of water ingress which can affect the performance of the GL product. If wire balustrading is preferred, Parkside recommends that the balustrading be sealed or tied off at every point of entry at each post.

Protective Coatings

As previously mentioned, Parkside requires its GL products to be coated or sealed to ensure the products' overall integrity. We do not recommend a specific brand of product, however the following options available:

1. Oil based surface applied preservatives in brushing and paste forms impart fungal resistance and dimensional stability in the short term. They should be used to provide protection from the elements during construction.
2. Oil based stains are non-film forming and penetrate the timber to provide weathering resistance while leaving the grain semi-exposed. This protective coating should be renewed regularly if adequate protection is to be achieved.
3. Oil based paint systems will provide the best long term protection of laminated timber in fully exposed conditions. Paint manufacturers' instructions should be followed, but will usually recommend: one coat of oil based primer, one coat of oil based undercoat and two coats of oil based exterior house paint.
4. Acrylic paint systems combined with oil based primers and regular recoating.
5. Clear finishes are not recommended for timber used in exposed applications due to an absence in UV filters and a propensity to break down readily in exposed situations. Special attention should be given to sealing exposed end grain at the end of beams/posts and joints. Timber laminated beams/posts in exposed applications will give excellent service life if the protective design and coating measures are maintained, to limit the effect of weathering.
6. Parkside Timber does not recommend mineral based coatings that contain copper for spotted gum glulam products.

A maintenance schedule should be documented and implemented for all structures. Coatings should be renewed in accordance with manufacturers' instructions and joint and capping details kept in good repair.