

H-LAM™ Care & Handling Guide

1.0 About

1.1 Introduction

This HTL™ Guide covers all HTL™ H-LAM™ Glue Laminated Timber Posts, Beams and Structural Flooring.

1.2 Building Code Compliance

All H-LAM™ products are manufactured to the requirements of the following Standards:

- AS/NZS 1328:1998 Glued Laminated Structural Timber
- AS/NZS 1491:1996 Finger Jointed Structural Timber
- AS/NZS 1604.5:2012 Preservative Treatment of Glued Laminated Timber Products

1.3 H-LAM™ Properties

Laminated for Stability & Strength

- Kiln dried ready for paint or stain
- Strengths = GL8, GL10, GL12
- Adhesive Type = R15 or PURBOND
- Service = 3
- AS/NZS 1328:1:1998 – Licence No. 2073

2.0 Handling

2.1 On Delivery

When receiving your H-LAM, check that the protective wrapping has not been damaged during transport. If damage has occurred, follow these steps:

- Note the damage in writing on the Freight Company Consignment Docket
- And/or Notify the Freight Company immediately so they can note details electronically on their system
- Notify HTL™ immediately
- Email photo's to HTL™
- All Damage claims with freight companies must be lodged within 7 days

2.2 Handling

Do not drop, jar or drag when handling the H-LAM™. Such treatment can cause damage to the surface and possible splitting and structural weakening.

Care should be taken when lifting the H-LAM™ to avoid damage and that undue stresses do not occur. The use of webbing or fabric strops is recommended. Spreader bars and guy lines should be used when handling long beams. If the use of chains or wire ropes is unavoidable, ensure the H-LAM™ is adequately protected.

2.3 Storage

Ensure the H-LAM™ is stored on several level bearers evenly spaced to minimise twisting, bowing and warping, and at least 200mm above ground level.

Leave the protective wrapping on the H-LAM™ for as long as possible allowing adequate ventilation around the H-LAM™. And if the H-LAM™ is to be stored for some time, cut slits in the wrapping on the underside to reduce moisture build-up inside the wrapping.

Where H-LAM™ are stored on top of each other, then ensure intermediate bearers are positioned in between each item and in line with the ground level bearers.

3.0 Coating

3.1 Code Compliance

NZS 3604:2011, para. 4.3.2 states: 'All timber and wood-based building components shall be protected against damage from moisture, and against significant variations of moisture content, both before and after installation or enclosure.'

All H-LAM™ products must be protected with a quality coating system (Paint, Oil or Stain). Hydration of the timber cell structure with a coating system will protect the product against the drying and wetting cycles. Timber fibers will continuously move as H-LAM™ and timber is a non-homogeneous product.

3.2 Factory applied Primer/Sealer

Depending on order specification, the H-LAM™ will leave the HTL™ factory either pre-primed or have a temporary sealer [Resene Weathershield] or no primer/sealer.

The primer/sealer is only a temporary measure and good for only 3 months of exposure to the elements. If the H-LAM™ is **not** going to be 'finished' with-in this timeframe, then a more permanent primer/sealer should be applied.

Where no primer/sealer has been applied then a good quality primer/sealer should be applied when the H-LAM™ is unwrapped, prior to installation.

3.3 Procedure

H-LAM™ products must be protected from the elements until it is sealed. Timber naturally absorbs moisture from the surrounding environment, and this can cause the product to alter dimensionally. Sealing the product with a quality coating system dramatically reduces the incidence of dimensional change and increases its longevity.



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Recommended procedure:

- Fill nail holes with an exterior grade wood filler.
- Sand back until surface is smooth and completely free from dirt and dust.
- If painting, prime all surfaces, cut ends and joints with a good quality alkyd primer and allow drying as per paint manufacturer's instructions.
- Apply two full coats of a premium brand acrylic or enamel topcoat.
- If oiling, apply three full coats of a premium stain including any cut ends and joints.
- Product must be recoated minimum every two years to the manufacture's recommendations.
- NOTE: Timber generally requires an LRV of 40% or greater to minimise the amount of heat build-up in the timber and the resultant thermal movement [Light Reflectance Value (LRV), (2014, Feb) BRANZ Guideline, 1-2].

3.4 H-LAM Posts in Ground

For Posts to be installed in-ground, the in-ground section must be coated to stop moisture uptake while the concrete is curing. It is recommended to paint this section, as noted above.

3.5 Final Coating

Please ensure that the final coating is compatible with the preservative/sealer used on the H-LAM™.

Give the H-LAM™ a light sand before applying the first layer of the final coatings. Then follow the coating manufacturers recommendations to achieve the required finish.

The coating shall be kept up to date with the maintenance program of the coating manufacturer.

If the specifier / builder / owner does not follow the requirements of the protection of exposed timber products, then the appearance and structure of the product can be compromised and may void the manufacturer's warranty.

3.6 WARRANTY VOID

NO WARRANTY APPLYS TO ANY H-LAM™ PRODUCT THAT HAS NOT BEEN KEPT DRY AND OR HAS NOT BEEN COATED (Oiled / Stained / Painted) AS RECOMMENDED ABOVE.

4.0 Installation

4.1 Installation

Cutting, drilling or machining of CCA & LOSP treated timber may affect the integrity of the treatment. To counter this all cut surfaces should be coated with a brush on preservative (see <http://www.nztpc.co.nz/>). This treatment is available from your local merchant.

H-LAM™ cutting and or machining must be carried out in a well-ventilated area. Protective equipment including dust masks and hearing and eye protection must be worn.

Ensure the H-LAM™ is protected from the elements until the structure is "roofed in". This will reduce moisture absorption, discolouration from excessive sunlight and the development of cracks and shakes. The best protection is with tarpaulins, but heavy craft paper may be used for short timeframes.

If an end of the H-LAM™ is going to be exposed to the weather, then an end-cap flashing must be fitted.

HTL™ recommends the use of zinc or galvanized fixings, or if required – stainless steel.

5.0 Maintenance

The building owner should inspect the surface finish annually to ensure that the H-LAM™ is still protected. And the surface should be cleaned at least annually using a mild detergent and water to maintain the integrity of the finish.

The coating shall be kept up to date with the maintenance program of the coating manufacturer.

6.0 Disclaimer

Project specifiers must ensure the H-LAM™ detailed in this Guide are suitable for its intended use. Any specific design or areas that fall outside the specifications of this Guide will require additional detailing. These must meet all requirements of the New Zealand Building Code. HTL™ will not be liable for any claims, damages or defects arising from, or in any way attributed to:

- Poor design or detailing
- Incorrect design of the structure
- Poor workmanship
- Settlement or structural movement and/or movement of materials to which the H-LAM™ are attached
- Acts of God including, but not limited to: earthquakes, cyclones, floods or other severe weather conditions or unusual climatic conditions.
- Efflorescence performance of coatings applied to the H-LAM™.
- Normal wear and tear or: growth of mould, mildew, fungi, bacteria, or any organism on the surface of any H-LAM™ (whether on the exposed or unexposed surfaces).

7.0 Current warnings or bans

This product is not subject to a warning or ban under Section 26 of the Building Act 2004.