

LASERFRAME®
STRUCTURAL
TIMBER

SG8

LASERFRAME®
STRUCTURAL
TIMBER

SG10

LASERFRAME®
TIMBER

Cavity
BATTEN

LASERFRAME®
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Ceiling
BATTEN

Laserframe®

LASERFRAME - CARE AND PROTECTION

1. INTRODUCTION

CHH Woodproducts (CHH) supplies H1.2 treated SG8 to merchants, including frame and truss manufacturers, for use in buildings designed and constructed in accordance with NZS 3604, Timber framed buildings (NZS 3604), and/or Specific Engineering Design. As such, CHH does not control the environment that Laserframe is kept in once it leaves our manufacturing site, although we are often asked about the design properties and timber treatment in Laserframe timber that has been exposed to the elements throughout the construction process.

This information bulletin has been created to provide further guidance to the building industry about the design properties and timber treatment of Laserframe along with general care required throughout the construction process.

2. REQUIREMENTS UNDER THE NEW ZEALAND BUILDING CODE

a. Design properties

The design properties of Laserframe are stress graded to Australian/New Zealand Standard AS/NZS 1748, timber mechanically stress graded for structural purposes (AS/NZS 1748), with properties determined using Australian/New Zealand Standard AS/NZS 4063, Characterisation of structural timber (AS/NZS 4063), and verified to New Zealand Standard NZS 3622, verification of timber properties (NZS 3622), for use with NZS 3603, timber structures, and NZS 3604.

b. Treatment

CHH provide to market a product that has been treated to the requirements of NZS 3640, Chemical preservation of round and sawn timber (NZS 3640), an Acceptable Solution under B2/AS1. This is assessed at the time of treatment as per the requirements of NZS 3640 Clause 1.1.3 "This standard is intended for use by treatment plants. Assessment of compliance is to apply at the plant gate".

3. QUALITY ASSURANCE

CHH Woodproducts has a strict quality assurance process in place to monitor that Laserframe adequately satisfies structural and visual requirements. At our mill sites Bureau Veritas undertake independent, third party audits of the machine stress grading process. Independent audit inspections are carried out bi-annually and include:

- Audit of the machine stress grading process and procedures.
- Verification of the calibration of testing equipment.



4. H1.2 TREATED TIMBER EXPOSED TO THE ELEMENTS

H1.2 boron treated timber can be subject to migratory movement and, as such, the treatment levels may be affected where subjected to prolonged exposure to weather. There is no specific identified timeframe when the treatment level needs to be reassessed. Provided that the timber in question has been returned to its original moisture content, has the appropriate level of treatment remaining and is free of rot and decay, the characteristic properties will remain as determined through CHH's original testing as detailed above and in our Product Technical Statement.

Where the product has been exposed for protracted periods of time and the treatment level is of concern, verification of the treatment level may be required. Unfortunately, CHH do not have the means to provide this service, however, should you wish to obtain further specialist investigation, please contact CHH (Phone 0800 746 399) for further information on who to contact in your region.

Further guidance around weather exposure for timber treated framing can be accessed from Standards New Zealand using the following link; www.standards.govt.nz/touchstone/building/2014/may/treated-timber-framing-maximum-weather-exposure/

5. GOOD BUILDING PRACTICE, STORAGE, HANDLING AND INSTALLATION

For handling of Laserframe please refer to the relevant product safety data sheet (SDS) available on our website.

In transport or storage, store Laserframe at least 100mm clear of the ground or on bearers suited to keeping the timber straight. Always lift packets off transport, do not tip.

Laserframe is sent from the sawmill in wrapped packets and it is important to ensure that the integrity of the wrap is maintained during storage. The benefits of Laserframe are optimised by looking after it as dry timber.

Note the following as good building practice with Laserframe:

- Record and photograph the identifier (marked on the side of the framing. See section 6 - Grades Identification) at the time of receiving your Laserframe. This can be submitted to the local building authority as supporting information showing grade identification at time of pre-wrap.
- Retain and submit a copy the producer statements supplied by your frame and truss pre-nail manufacturer as supporting compliance information for your local building authority.
- Minimise exposure to weather and rain.
- Protect pre-cut and pre-nailed frames and trusses.
- Plan your delivery to site.
- Wrap and enclose frames as soon as possible.

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- Avoid ponding of water on floor and around plates.
- Dry timber to the relevant moisture content in accordance with NZS 3602 after exposure to moisture.
- Supplementary treatment is **not** required for cutting of end sections, holes rebates, notches, machining etc. for H1.2 treated Laserframe (pink in colour for ease of identification).
- Supplementary treatment **is required** for cutting of end sections, holes, rebates, notches, machining etc for H3.2 or higher treated Laserframe (green in colour).
- Exposure to normal weather patterns during ordinary construction will not typically adversely affect the treatment in the product.
- H3.2 treated Laserframe may be corrosive to galvanised fasteners dependent on the levels of moisture present. Refer to NZS 3604 for guidelines on fastener durability when used with copper-based preservatives.

6. GRADE IDENTIFICATION

SG10 Laserframe

SG8 Laserframe

All Laserframe pieces will carry a branded stamp applied to the face of each piece of timber.

1. Brand
2. Grade
3. Size
4. Date of Manufacture at sawmill
5. Machine Stress Grading Standard
6. Kiln dried
7. Sawmill Number

Laserframe¹ SG8²

90x45³ DD/MM/YY⁴

AS/NZS1748⁵ KD⁶ 015⁷

7. REFERENCES AND SOURCES OF INFORMATION

- New Zealand Building Code.
- NZBC Acceptable Solution B2/AS1.
- CHH Woodproducts "Laserframe® Product Guide"
- CHH Woodproducts Product Technical Statement "Laserframe® specified for Residential Applications through NZS 3604 or Specific Design".
- NZS 3604:2011, Timber framed buildings
- NZS 3640:2003, Chemical preservation of round and sawn timber.
- NZS 3622:2004, Verification of timber properties.
- AS/NZS 1748.1:2011, Timber -Solid - Stress Graded for Structural Purposes, Part 1: General Requirements.
- AS/NZS 1748.2:2011, Timber – Solid - Stress Graded for Structural Purposes, Part 2: Qualification of grading method.
- AS/NZS 4063.1:2010, Characterisation of structural timber, Part 1. Test Methods.
- AS/NZS 4063.2:2010, Characterisation of structural timber, Part 2. Determination of Characteristic Values.