PRODUCT TECHNICAL STATEMENT & BUILDING PRODUCT INFORMATION SHEET

CLASS 1

November 2023

Product Name: truFRAME

Application: Residential Applications

Product Description and Intended Use:

The Futurebuild® Laminated Veneer Lumber (LVL) range consists of a range of LVL based products featuring unique, specific material property 'recipes' which have been designed to suit common residential applications. truFRAME is an LVL product developed to compete in the 90x45 and 140x45 framing sector or as 240x45 and 300x45 joists/boundary joists in residential applications.

truFRAME is suitable for use as direct replacement for SG6 and SG8 sawn timber sections specified in NZS 3604 Timber Framed Buildings (NZS 3604) or subject to specific design in accordance with NZS 3603, Timber Structures Standard (NZS 3603).

truFRAME is H1.2 glue line and surface spray treated to the requirements of NZS 3640 Chemical Preservation of round and sawn timber, and as such can be used where H1.2 Hazard class is required in accordance with NZS 3602 Timber and Wood-Based Products for use in Building (NZS 3602) and NZS 3604.

Product Identifier:

All Futurebuild LVL products are marked in accordance with the requirements of AS/NZS 4357, and include the stress grade/brand name, bond type (A for structural LVL), formaldehyde emissions class, reference to AS/NZS 4357 and applicable treatment standards. An example of H1.2 treated truFRAME is given below:

t r u F R A M E H 1 . 2 STRUCTURAL LAMINATED VENEER LUMBER TECHNICAL ENQUIRIES
MILL NO:918 dd/mm/yy hhmm A-BOND 0800808131 CHH.COM
EWPAA JAS-ANZ AS/NZS 4357.0 E0 APPROVAL 317 66 H1.2

Place of manufacture: Marsden Point, New Zealand

Legal and trading name of the manufacturer: Carter Holt Harvey LVL Limited, trading as Futurebuild® LVL

Address for Service:
173 Captain Springs Road, Onehunga
Auckland 1061, New Zealand

Website: www.futurebuild.co.nz

Email Address: info@futurebuild.co.nz

Phone Number: 0800 808 131

NZBN: 9429046427342

Relevant New Zealand Building Code Clauses:

- Clause B1 Structure: Performance B1.3.1, B1.3.2, B1.3.3 (a, b, c, g, h, q), B1.3.4(d)
- Clause B2 Durability: Performance B2.3.1(a) when used and treated to the requirements of NZS 3602 and NZS 3604
- Clause C Fire Performance: C1 – C6
- Clause E2 External Moisture: E2.3.4
- Clause F2 Hazardous Building Materials: F2.3.1
- Clause G6 Airborne and Impact Sound G6.3.1, G6.3.2

Statement on how the building product is expected to contribute to compliance:

truFRAME will, if specified and employed in accordance with NZS 3604 for H1.2 treated SG6 and SG8, assist in meeting the following provisions of the NZBC:

Clause B1 Structure: Performance B1.3.1, B1.3.2, B1.3.3 (a, b, c, g, h, q), B1.3.4(d)

The design properties of truFRAME have been determined in accordance with Clause 2.3 of NZS 3603 Timber Structures Standard (NZS 3603).

truFRAME is product certified by the Engineered Wood Products Association of Australasia (EWPAA) as being manufactured in accordance with the joint New Zealand / Australian Standard AS /NZS 4357: Structural Laminated Veneer Lumber (AS/NZS 4357). The EWPAA is accredited for product certification by the Joint Accreditation System of Australia and New Zealand (JAS-ANZ). Comparison of structural properties has been completed in accordance with NZS 3603 (verification method B1/VM1, 6.1).

Clause B2 Durability: Performance B2.3.1(a) when used and treated to the requirements of NZS 3602 and NZS 3604

truFRAME is manufactured to meet the requirements of Clause B2 (Durability) of the NZBC. As such, if the product is used in accordance with the Futurebuild LVL specifications and good building practices, and treated to the required treatment levels prescribed in NZS 3602 and NZS 3604 it will form part of an Acceptable Solution and comply with the requirements of the NZBC (Acceptable Solution B2/AS1, 3.2.1).

Clause C Fire Performance: C1 – C6

truFRAME may be used as part of a fire-resistant solution when used in accordance with GIB® Fire Rated Systems that provide passive fire protection in accordance with the requirements of NZBC Clauses C1 - C6 – Protection from Fire. Refer "GIB Fire Rated systems Specification and Installation Manual".

Clause E2 External Moisture: E2.3.4

truFRAME may be provided treated to the requirements of NZS 3602 when sub floor ventilation and ground cover requirements comply with NZS 3604, Clause 6.14 Prevention of Dampness.

Clause F2 Hazardous Building Materials: F2.3.1

truFRAME meets this requirement and will not present a health hazard to people.

Clause G6 Airborne and Impact Sound G6.3.1, G6.3.2

truFRAME can be used as a part of framing solutions for walls and floors (Acceptable Solution G6/AS1).

Limitations on the use of the building product:

- truFRAME members may not be used in:
    - Weather exposed applications.
    - Buildings outside the scope of NZS 3604.

- Please refer to the current Futurebuild LVL literature for information, limitations, and cautions regarding the storage, handling, installation, usage, and maintenance of LVL.

Design requirements that would support the appropriate use of the building product:

The design properties of truFRAME have been determined in accordance with Clause 2.3 of NZS 3603 Timber Structures Standard (NZS 3603).

truFRAME is suitable for use as direct replacement for SG6 and SG8 sawn timber sections specified in NZS 3604 Timber Framed Buildings (NZS 3604) or subject to specific design in accordance with NZS 3603, Timber Structures Standard (NZS 3603). Comparison of structural properties has been completed in accordance with NZS 3603 (verification method B1/VM1, 6.1).

Further, truFRAME, designed in accordance with Verification Method B1/VM1, is suitable for use as structural beams within structural systems designed and specified by engineers and other suitable design professionals.

Installation requirements:

truFRAME members must be installed in accordance with traditionally recognised framing practice as described in NZS 3604, and good building practice. The specifications and details are available in NZS 3604 or contact the Futurebuild LVL team by calling 0800 808 131 for information.

Maintenance Requirements:

Futurebuild LVL components will not normally require maintenance. However, in circumstances, where coatings have been applied, maintain in accordance with the coating manufacturer's requirements.

Is the building product/building product line subject to warning or ban under section 26 of the Building Act 2004?

☐ Yes ☑ No

Date: 21st November 2023

Additional Information:

Further to the minimum regulatory requirements for Building Product information Sheets, Futurebuild LVL also provides the following additional information in relation to Quality Assurance, Sustainability, Service Life and Product Support.

Quality Assurance:

Futurebuild LVL has strict quality assurance processes in place to monitor that Futurebuild LVL is manufactured in a manner that meets both the structural and visual requirements of the specific product.

Futurebuild LVL is independently third party audited by the EWPAA. The EWPAA certifies Futurebuild LVL manufactured at its Marsden Point mill. Participation and compliance with the requirements of the EWPAA's process based quality control scheme includes product testing and monitoring of properties. It provides the basis for the EWPAA's Product Certification of Futurebuild LVL as conforming to the requirements of AS/NZS 4357.

Conformance with AS/NZS 4357 ensures that Futurebuild LVL is suitable for structural applications in accordance with NZS 3603 and NZS 3604.

The EWPAA's product certification scheme is accredited under JAS-ANZ.

Sustainability:

Carter Holt Harvey's commitment to the environment is fundamental to its business. From the use of plantation forests to promoting policies minimizing waste and emissions, CHH is proud of the sustainable base for its products.

Futurebuild LVL uses waste handling procedures to optimise recovery and manages the use of arisings whilst limiting waste. This starts with the use of only radiata pine sourced from sustainably managed renewable plantation and includes the application of optimisation algorithms for veneer peeling to enhance finished goods recovery as well as the development of markets for the downgrading of arising product for use in industrial applications including packaging. Peeler cores are typically reprocessed for use as bearers whilst downgraded product is reprocessed into products including fillet sticks and bearers as well as being on-sold for use in furniture as applicable. All waste product derived is assessed for downstream applications including bark for landscaping, boiler fuel and/or sold for use in wood fibre products.

ENVIRONMENTAL PRODUCT DECLARATION (EPD)

The CHH Futurebuild LVL Environmental Product Declaration (EPD) is a demonstration of the continual focus and commitment to sustainability, through a science driven, independently verifiable process with standard methodology across all products.

View and Download the EPD for Futurebuild LVL –
https://futurebuild.co.nz/assets/Futurebuild-LVL-EPD-Current.pdf

ENVIRONMENT, SOCIAL AND GOVERNANCE (ESG)

Carter Holt Harvey has developed a new ESG reporting programme. The company has focused on setting out what its stakeholders have identified as material ESG issues, how it manages, or plans to manage those issues, and key environmental indicators. In the future, Carter Holt Harvey will celebrate its ESG achievements and acknowledge those areas where it needs to improve, keeping on a path of steady improvement that will further strengthen Carter Holt Harvey in the years to come.

View and Download ESG Report -
https://futurebuild.co.nz/assets/CarterHoltHarveyESGReportCurrent.pdf

FSC® AND SUSTAINABILITY ACCREDITATIONS

Futurebuild LVL sources logs from sustainably managed plantation forests and other controlled sources, and has the Forest Stewardship Council® (FSC®) Chain of Custody certification (FSC® C007103). This measure provides a formal assurance that gives Futurebuild LVL's customers confidence about its sustainability credentials.

All Futurebuild LVL products can be supplied with a FSC certificate (FSC® C007103) if requested.

View and Download Certificate – https://futurebuild.co.nz/assets/Futurebuild-LVL-FSC-Certificate-Marsden-Current.pdf

DECLARE LABEL

The Futurebuild LVL range of untreated and H1.2 treated products have been issued Declare labels and determined to be Red List Free through the International Living Future Institute, and as such the untreated and H1.2 treated range can be used in Living Building Challenge projects.

View the Declare labels - https://futurebuild.co.nz/assets/Declare-Futurebuild-Hyjoist-Untreated-Current.pdf https://futurebuild.co.nz/assets/Declare-Futurebuild-Hyjoist-H1.2-Treated-Current.pdf

EWPAA FORMALDEHYDE EMISSION CLASSIFICATIONS CERTIFICATE

Formaldehyde Emissions for Futurebuild LVL products are measured as being less than 0.5 mg/L, classed as E0.

View and Download Certificate - https://futurebuild.co.nz/assets/FuturebuildEWPAAFormaldehydeEmissionClassificationsCertCurrent.pdf

CARTER HOLT HARVEY ENVIRONMENTALLY RESPONSIBLE WOOD & WOOD FIBRE PROCUREMENT POLICY

View and Download Policy - https://chhply.co.nz/assets/Uploads/CHH-Environmentally-Responsible-Wood-Wood-Fibre-Policy-Current.pdf

Service Life:

Futurebuild LVL products will continue to satisfy the relevant performance requirements of the NZBC for 50 years (or other time periods as specified by the designer relative to the specific project) provided that all of the requirements set out in this Product Technical Statement and the specific design parameters of the project are satisfied.

Product Support:

Futurebuild LVL provides extensive product support for our full range of wood based building products. By visiting www.futurebuild.co.nz you can access all the latest information regarding our products including Product Guides, Specification and Installation Guides, Technical Notes, Information Bulletins, CAD Drawings, Design Software and other useful information. In addition to this Futurebuild LVL have a team of Engineers and Technical Experts available to assist with any product enquiries. You can contact the team by calling 0800 808 131 or by emailing info@futurebuild.co.nz.