## PRODUCT TECHNICAL STATEMENT & BUILDING PRODUCT INFORMATION SHEET

CLASS I November 2023

futurebuild

#### Product Name: Futurebuild® LVL Products

Application: General/Specific Design

#### Product Description and Intended Use:

The Futurebuild<sup>®</sup> Laminated Veneer Lumber (LVL) range consists of a range of solid LVL based timber products including composite plywood and LVL beams. The Futurebuild LVL range of products features unique, specific material property 'recipes' and are subject to specific design via the 'Futurebuild LVL Specific Engineering Design Guide''.

Futurebuild LVL members, subject to specific engineering design, are suitable for use as structural members in the framing and connection of structural systems designed and specified by engineers. Futurebuild LVL members are to be installed in accordance with the specifications and details provided by design professionals.

The durability of Futurebuild LVL should be detailed by qualified design professionals to meet the requirements of New Zealand Building Code (NZBC) Durability Clause B2.

#### 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 hySPAN is given below:

hySPAN H1.2 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

hyJOIST products are marked and include brand name, bond type (A for structural LVL and plywood), formaldehyde emissions class, and applicable treatment standards and warnings about penetrations. An example of untreated hyJOIST is given below:

hyjOISTONOSCONDECTOR BORE TOP OR BOTTOM FLANGES WEB HOLES

IN NEW ZEALAND ENQUIRIES 0800808131 CHH.COM & INSTALLATION IN ACCORDANCE WITH PRODUCT LITERATRE

Place of manufacture: Marsden Point, New Zealand

Legal and trading name of the manufacturer: Carter Holt Harvey LVL Limited, trading as Futurebuild <sup>®</sup> 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 BI Structure: Performance BI.3.1, BI.3.2, BI.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: CI-C6
- 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:

Futurebuild LVL will, if designed, specified and employed in accordance with the NZS 3603 Timber Structures Standard (NZS 3603), assist in meeting the following provisions of the NZBC:

#### Clause BI Structure: Performance BI.3.1, BI.3.2, BI.3.4(d)

The characteristic design properties of Futurebuild LVL were determined in accordance with Clause 2.3 of NZS 3603.

Futurebuild LVL 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). hyJOIST is product certified by the Engineered Wood Products Association of Australasia (EWPAA) as meeting or exceeding the Characteristic Structural Properties for each individual size. The EWPAA is accredited for product certification by the Joint Accreditation System of Australia and New Zealand (JAS-ANZ).

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

Futurebuild LVL is manufactured to meet the requirements of the NZBC Clause B2 Durability. As such, if the product is used in accordance with good building practices, and treated to the required treatment levels prescribed in NZS 3602, Timber and Wood Based Products for Use in Buildings (NZS 3602), it will form part of an Acceptable Solution complying with the requirements of the NZBC (Acceptable Solution B2/AS1, 3.2.1).

#### Clause C Fire: Performance: CI – C6

Futurebuild LVL members may be used as part of a fire resistant solution when used in accordance with GIB<sup>®</sup> Fire Rated Systems that provide passive fire protection in accordance with the requirements of NZBC Clauses CI - C6 – Protection from Fire. Refer "GIB Fire rated systems Specification and Installation Manual".

#### Clause F2 Hazardous Building Materials: F2.3.1

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

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

Solid Futurebuild LVL 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:

- Futurebuild LVL members may not be used in weather exposed applications
- 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:

Futurebuild LVL, 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. Futurebuild LVL is to be installed in accordance with the specifications and details provided by design professionals.

The characteristic design properties of Futurebuild LVL were determined in accordance with Clause 2.3 of NZS 3603. hyJOIST is product certified by the Engineered Wood Products Association of Australasia (EWPAA) as meeting or exceeding the Characteristic Structural Properties for each individual size.

#### Installation requirements:

Futurebuild LVL members are to be installed in accordance with the specifications and installation details provided by the engineer and/or other qualified design professional.

#### Maintenance Requirements:

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

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



**Date:** 21<sup>st</sup> 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 polices 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.

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

#### 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<sup>®</sup> (FSC<sup>®</sup>) Chain of Custody certification (FSC<sup>®</sup> 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

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

#### 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 <u>www.futurebuild.co.nz</u> 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**.

Legal Disclaimer: The information contained in this document is current as at published date and is based on data available to CHH LVL at the time of going to print. CHH LVL reserves the right to change the information contained in this document without prior notice. It is your responsibility to ensure that you have the most up to date information available. You can call toll free on 0800 808 131 or visit www.futurebuild.co.nz to obtain current information. CHH LVL has used all reasonable endeavours to ensure the accuracy and reliability of the information contained in this document. However, to the maximum extent permitted by law, CHH LVL assumes no responsibility or liability for any inaccuracies, omissions or errors in this information nor for any actions taken in reliance on this information.