PRODUCT TECHNICAL STATEMENT & **BUILDING PRODUCT INFORMATION SHEET**

OCTOBER 2023

Product Name: Ecoply® Barrier

Application: Rigid Air Barrier

Product Description and Intended Use:



Ecoply® Barrier provides a weathertight rigid air barrier for drained and vented cavity systems outside the building frame. It effectively replaces traditional building wrap in the cavity while providing structural bracing and forms a strong secondary line of defence against moisture penetration into the building envelope.

Ecoply Barrier is suitable for use in both residential and commercial buildings. It consists of a 7mm thick CCA treated structural plywood panel which is coated on the face and edges using a polyester powder coating process for increased sheet durability and protection from moisture penetration.

The Ecoply Barrier system is BRANZ appraised (No 827 [2019]) for use as a rigid sheathing and temporary weather-protecting sheathing on timber framed buildings.

Ecoply Barrier meets the New Zealand Building Code (NZBC) requirements for rigid underlays as outlined in Section 9.1.4, the performance requirements of Table 23 of E2/ASI, and has been tested for wind speed exceeding Extra High Wind Zone as defined in NZS 3604 Timber Framed Buildings (NZS 3604) as detailed above when installed in accordance with Ecoply Barrier Specification & Installation Guide.

Ecoply Barrier, specified in bracing applications, or subject to specific engineering design, is suitable for use as structural bracing when:

- Specified in and installed in accordance with the requirements of EPBI, EPBS or EPBG bracing specification; or
- Specifically designed and detailed by a Chartered Professional Engineer

For non-residential applications the Ecoply Barrier system has been tested (with an E2 compliant cladding) for wind pressures up to ULS 4.5 kPa and SLS of 3.3 kPa in accordance with AS/NZS 4284 Testing of Building Facades (AS/NZS 4284) demonstrating compliance with all aspects of the test procedure.

The durability of Ecoply Barrier in residential applications is subject to the requirements of NZS 3602 Timber and Wood Based Products for use in building (NZS 3602), in accordance with NZBC Clause B2 Durability and the requirements of E2 External Moisture.

Product Identifier:

All Ecoply® Barrier sheets are marked in accordance with the requirements of AS/NZS 2269, and include the brand name Ecoply® Barrier. An example is given below:

> ECOPLY DD BARRIER STRUCTURAL 7-24-3 A BOND EO AS/NZS 2269.0:2012 AS/NZS1604.3:2012 046 01 H3 E H3.2 CCA RETREAT CUTS PAT 12/12/2023 12:23:45 F8/F8 CHH.COM

Place of manufacture: Tokoroa, New Zealand

Legal and trading name of the manufacturer: Carter Holt Harvey Plywood Limited

Address for Service:

173 Captain Springs Road, Onehunga Auckland 1061. New Zealand

Website: www.chhply.co.nz

Email Address: info@chhply.co.nz

Phone Number: 0800 326 759

NZBN: 9429046427366

Relevant New Zealand Building Code Clauses:

- Clause B1 Structure: Performance B1.3.1, B1.3.2, B1.3.3(a,c,f,h,l,q), B1.3.4(d)
- Clause B2 Durability: Performance B2.3.1(a, b) when used and treated to the requirements of NZS 3602
- Clause E2 External Moisture E2.3.2, E2.3.5, E2.3.7
- Clause F2 Hazardous Building Materials: F2.3.1

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

Ecoply Barrier, specified and employed in accordance with the current "Ecoply Barrier Specification & Installation Guide", assists in meeting the following provisions of the NZBC:

Clause BI Structure: Performance BI.3.1, BI.3.2, BI.3.3(a,c,f,h,l,q), BI.3.4(d)

Ecoply Barrier 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 2269, Structural Plywood (AS/ NZS 2269). The EWPAA is accredited for product certification by the Joint Accreditation System of Australia and New Zealand (JAS -ANZ).

Bracing capacities have been determined in accordance with P21 testing methods, part of NZS 3604, an Acceptable Solution of the NZBC (Acceptable Solution B1/AS1, 4.1).



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

Carter Holt Harvey Plywood Limited (CHH Plywood) Ecoply Barrier is compliant with NZBC Clause B2.3.1 (a), not less than 50 years when used where the cladding durability requirement or serviceable life is not less than 50 years, e.g. structural bracing, and compliant with NZBC Clause B2.3.1 (b), 15 years where the cladding durability requirement is 15 years.

Clause E2 External Moisture E2.3.2, E2.3.5, E2.3.7

Ecoply® Barrier meets the NZBC requirements for rigid underlays as outlined in Section 9.1.4, the performance requirements of Table 23 of E2/ AS1 and has been tested for wind speed exceeding Extra High wind zone as defined in NZS 3604.

Clause F2 Hazardous Building Materials: F2.3.1

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

Limitations on the use of the building product:

- Ecoply Barrier must not be installed in direct contact to steel frames.
- Appropriate clearances to ground must be provided to meet durability requirements as detailed by design professionals.
- Please refer to the current "Ecoply Barrier Specification & Installation Guide" for information, limitations, and cautions regarding the storage, handling, installation, usage, and maintenance of Ecoply Barrier plywood and Ecoply Barrier Tape.

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

Ecoply Barrier meets the New Zealand Building Code (NZBC) requirements for rigid underlays as outlined in Section 9.1.4, the performance requirements of Table 23 of E2/ ASI, and has been tested for wind speed exceeding Extra High Wind Zone as defined in NZS 3604 Timber Framed Buildings (NZS 3604) as detailed above when installed in accordance with Ecoply Barrier Specification & Installation Guide.

Bracing Capacities, determined in accordance with P21 testing methods, are published for use in conjunction with bracing demand determined in accordance with NZS 3604 (P21 tests form part of an Acceptable Solution of NZS 3604, (Acceptable Solution B1/AS1, 3.1)).

Installation requirements:

Ecoply structural plywood must be installed in accordance with good building practice, sound design principles, and in accordance with the specifications and installation details provided within the current "Ecoply Barrier Specification & Installation Guide" or by the engineer and/or other qualified design professionals as applicable.

The Ecoply Barrier sITe App is also available for download. The App contains installation details as well as animations of common Ecoply Barrier Junctions and an interactive site specific installation checklist.

The specifications and details are available at our web site www.chhply.co.nz/librarytools



Maintenance Requirements:

Ecoply Barrier plywood components will not normally require maintenance.

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

Yes ✓ No

Date: 5th October 2023

Additional Information:

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

Quality Assurance:

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

Ecoply is independently third party audited by the EWPAA. The EWPAA certifies Ecoply manufactured by CHH Plywood at its Tokoroa 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 Ecoply as conforming to the requirements of AS/NZS 2269.

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.

CHH Plywood uses waste handling procedures to optimise recovery and manage the creation of arisings. This starts with the use of only radiata pine sourced from sustainably managed renewable plantations and includes the application of optimisation algorithms for veneer peeling to enhance finished goods recovery.

CHH Plywood has been actively involved in the development of markets for the use of downgraded arising product for use in industrial applications including packaging whilst peeler cores are often reprocessed for use as bearers. 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 Plywood 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 Plywood - https://chhply.co.nz/assets/CHHPlyEPDCurrent.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://chhply.co.nz/assets/CarterHoltHarveyESGReportCurrent.pdf

FSC® AND SUSTAINABILITY ACCREDITATIONS

CHH Plywood sources logs from sustainably managed plantation forests, and has the Forest Stewardship Council® (FSC®) Chain of Custody certification (FSC® C012019). This measure provides a formal assurance that gives CHH Plywood's customers confidence about its sustainability credentials. CHH Plywood's products can be supplied with a FSC certificate on request.

<u>View and Download Certificate - https://chhply.co.nz/assets/CHHPlyFSCCertificateTokoroaCurrent.pdf</u>

EWPAA FORMALDEHYDE EMISSION CLASSIFICATIONS CERTIFICATE

Formaldehyde Emissions for CHH Plywood products are measured as being less than 0.5 mg/L, classed as E0

<u>View and Download Certificate -</u>

https://chhply.co.nz/assets/Tokoroa-Formaldehyde-Certificate_Nov-2016.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:

Ecoply Barrier will continue to satisfy the relevant performance requirements of the NZBC for 50 years (or 15 years as required) 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:

CHH Plywood provides extensive product support for our full range of wood-based building products. By visiting <u>www.chhply.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 CHH Plywood have a team of Technical Experts available to assist with any product enquiries. You can contact the team by calling 0800 326 759 or by emailing info@chhply.co.nz.

Legal Disclaimer: The information contained in this document is current as at published date and is based on data available to CHH Plywood at the time of going to print. CHH Plywood 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 326 759 or visit <u>www.chhply.co.nz</u> to obtain current information.

CHH Plywood 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 Plywood assumes no responsibility or liability for any inaccuracies, omissions or errors in this information nor for any actions taken in reliance on this information.

