

Ecoply Barrier® for Steel Product Technical Statement

Product Description

Ecoply Barrier for Steel provides a weather-tight 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 forming a strong secondary line of defence against moisture penetration into the building envelope.

Ecoply Barrier for Steel is suitable for use in residential buildings and consists of a 7mm thick H3.2 CCA (Copper Chrome Arsenate) water borne 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. **Ecoply Barrier for Steel** panels include a 10mm Expol Platinum thermal break, which, when combined with Ecoply Barrier plywood panels, provides an R value of 0.36m² °C/W.

The **Ecoply Barrier for Steel** system is BRANZ appraised (No 1017 [2018]) for use as a rigid sheathing, and temporary weather-protecting sheathing on steel framed buildings.

Scope of Use

Ecoply Barrier for Steel 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/AS1, and is suitable for wind zones up to and including Extra High as defined in NASH Standard Part Two: 2019 'Light Steel Framed Buildings'.

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

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

The durability of **Ecoply Barrier for Steel** 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.

Limitations / Disclaimer

Ecoply Barrier for Steel should not be used on timber frames. Please refer to the current **Ecoply Barrier for Steel Specification & Installation Guide** for information and limitations, and cautions regarding the storage, handling, installation, usage, and maintenance of **Ecoply Barrier for Steel** Plywood, Expol Platinum backing Board and Ecoply Barrier Tapes.

Compliance with the New Zealand Building Code

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

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

Ecoply Barrier for Steel 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 BRANZ P21 testing methods, referenced in NASH Standard Part Two: 2019 Light Steel Framed Buildings (NASH Standard Part 2) part of an Acceptable Solution of the NZBC (Acceptable Solution B1/AS1, 9.1).

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

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 for Steel 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 and NASH Standard Part 2.

Clause F2 Hazardous Building Materials: F2.3.1

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

Quality Assurance

Carter Holt Harvey Plywood Limited (CHH Plywood) has strict quality assurance processes in place to monitor that **Ecoply Barrier for Steel** plywood 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.

Expol products are independently tested by BRANZ, AWTA and Opus International and comply with the manufacturing standard ASI 366 Part 2.

Sustainability

Ecoply is manufactured from plantation pine grown in New Zealand. It is grown on tree farms which are tended and harvested to provide wood for plywood manufacture and other applications. The crop is managed on a sustainable basis to yield mill-able trees. New Zealand plantations are managed in compliance with the New Zealand Forest Accord, a voluntary agreement signed in 1991 between New Zealand forest managers and environmental non-government organisations.

Ecoply is manufactured in New Zealand by CHH Plywood, at the Tokoroa Plywood Mill. Ecoply is

available Forestry Stewardship Council (FSC) Certified on request (FSC-C012019). Expol Platinum Board does not contain or use in the production HBCD's or HCFC's. All Expol products are recyclable – more information can be found at www.airpop.co.nz.

Installation Requirements

Ecoply Barrier for Steel must be installed in accordance with good building practice, sound design principles, and the requirements of the current **Ecoply Barrier for Steel Specification & Installation Guide**. The specifications and details are available at CHH Plywood web site www.ecoply.co.nz or ask CHH Plywood by calling 0800 326 759 for information.

Note: PVC cables must be prevented from direct contact with the Expol Platinum Backing Board (EPS). A physical separation must be provided by placing cables within the wall cavity in a way they are prevented from contacting the EPS, or by wrapping the cables with a suitable separating material.

Service Life

Ecoply Barrier for Steel will continue to satisfy the relevant performance requirements of the NZBC for 50 years (or 15 years as required) provided all the requirements set out in this Product Technical Statement and the specific design parameters of the project are met.

Maintenance Requirements

Ecoply Barrier for Steel components will not normally require maintenance.

Product Support

CHH Plywood provides extensive product support for our full range of wood-based building products. By visiting www.ecoply.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 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@ecoply.co.nz.

Legal Disclaimer

The information contained in this document is current as of October 2019 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 www.ecoply.co.nz 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 any actions taken in reliance on this information.