



# ECOPLY<sup>®</sup> BRACING SPECIFICATIONS: EP2

### Table 1: Structural plywood brace with Ecoply<sup>®</sup> to both sides

Specification No.	Minimum Wall Length	Lining Requirements	BUs/m Wind	BUs/m Earthquake
EP2_0.6	0.6 m	Ecoply® or Ecoply Barrier each side	105	115

## FRAMING

Wall framing must comply with:

- NZBC B1 Structure: AS1 Clause 3 Timber (NZS 3604:2011)
- NZBC B2 Durability: AS1 Clause 3.2 Timber (NZS 3602)

Framing dimensions and height are as determined by the NZS 3604 stud and top plate tables for load bearing and non load bearing walls. Kiln dried verified structural grade timber must be used. Machine stress graded timber, such as Laserframe<sup>®</sup> of SG8 stress grade minimum, is recommended.

# BOTTOM PLATE FIXING

Use GIB Handibrac<sup>®</sup> hold-down connections at each end of the bracing element. Refer to manufacturer installation instructions supplied with the connectors for correct installation instructions and bolt types to be used for either concrete or timber floors. Within the length of the bracing element, bottom plates are fixed in accordance with the requirements of NZS 3604.

## LINING EACH SIDE

One layer of 7 mm, 9 mm or 12 mm Ecoply plywood or Ecoply Barrier fixed directly to framing. If part sheets are used, ensure nailing at required centres is carried out around the perimeter of each sheet or part sheet. A 2-3 mm expansion gap should be left between sheets.

# FASTENING THE ECOPLY®

#### Fasteners

Fasten with  $50 \times 2.8$  mm galvanised or stainless steel flat head nails for direct fix. Place fasteners no less than 7 mm from sheet edges. Screws cannot be used. Power driven nails are suitable. Do not overdrive, nails must be full round head.

**TECHNICAL NOTE** 

April 2016

## Fasteners for H3.2 CCA treated Ecoply

Where fasteners are in contact with H3.2 CCA treated timber or plywood (such as Ecoply H3.2 CCA treated plywood), fasteners shall be a minimum of hot dip galvanised. In certain circumstances stainless steel fasteners may be required. Refer to table 2 of the Ecoply Specification and Installation Guide for these circumstances and further fastener selection advice. Where stainless steel nails are required, annular grooved nails must be used.

Ecoply® Bracing Systems are designed to meet the requirements of the New Zealand Building Code and have been tested and analysed using the P21 method referenced in NZS 3604:2011 listed as an acceptable solution B1/AS1 Structure. Testing was carried out using Ecoply manufactured by Carter Holt Harvey and SG8 timber framing, and GIB® products manufactured by Winstone Wallboards Ltd. Substituting materials may compromise performance of the system. GIB® and GIB HandiBrac® are registered trade marks of Fletcher Building Holdings Ltd.



Information contained in this document is specific to the Ecoply® range of plywood products and must not be used with any other plywood products no matter how similar they may appear.

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## Table 2: Ecoply® Suitability For Bracing Applications Including Treatment Type and Fastener Material\*

Application	Plywood Treatment	Fastener Material
Plywood bracing in interior spaces with no risk of exposure to weather or moisture penetration conducive to decay (all exposure zones as per section 4 of NZS 3604, including sea spray): E.g. Interior linings	Ecoply Untreated	Hot dipped galvanised or better
Plywood bracing in enclosed spaces (protected from the weather) but with a risk of moisture penetration conducive to decay in exposure zones B & C, as per section 4 of NZS 3604:E.g. Plywood bracing and/or rigid underlay (rigid air barrier), fixed to framing with/ without building paper/ wrap over, with/ without cavity battens behind cladding	Ecoply H3.1 LOSP/H3.2 CCA treatedEcoply Barrier (rigid air barrier)	Hot dipped galvanised or better
Plywood bracing in enclosed spaces (protected from the weather) but with a risk of moisture penetration conducive to decay in exposure zone D (sea spray), as per section 4 of NZS 3604:E.g. Plywood bracing and/or rigid underlay (rigid air barrier), fixed to framing with/without building paper/wrap over, with/without cavity battens behind cladding	Ecoply H3.1 LOSP/H3.2 CCA treatedEcoply Barrier (rigid air barrier)	Stainless steel
Rigid Air Barrier	Refer to Ecoply® Barrier Specification and Installation Guide	
Bracing on framing exposed to ground atmosphere in exposure zones B & C, as per section 4 of NZS 3604	Ecoply H3.1 LOSP/H3.2 CCA treated	Hot dipped galvanised or better
Bracing on framing exposed to ground atmosphere in exposure zones I D	Ecoply H3.1 LOSP/H3.2 CCA treated	Stainless steel
Bracing in wet process buildings in all exposure zones, as per section 4 of NZS 3604 (including sea spray)	Ecoply H3.1 LOSP/H3.2 CCA treated	Stainless steel

NOTE: Power driven nails are suitable for use. Do not overdrive, nails must be full round head

#### **Fastening Centres**

Fasteners are placed at 150 mm centres around the perimeter of each sheet and 300 mm centres to intermediate studs. Each sheet must be nailed off independently.



Ecoply<sup>®</sup> fixed with 50 × 2.8 mm nails at 150 mm centres to perimeter of each sheet at no less than 7 mm or 3 fastener diameters from sheet edge and at 300 mm centres to intermediate studs

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For further information contact Customer Services on 0800 326 759 or visit www.chhwoodproducts.co.nz

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