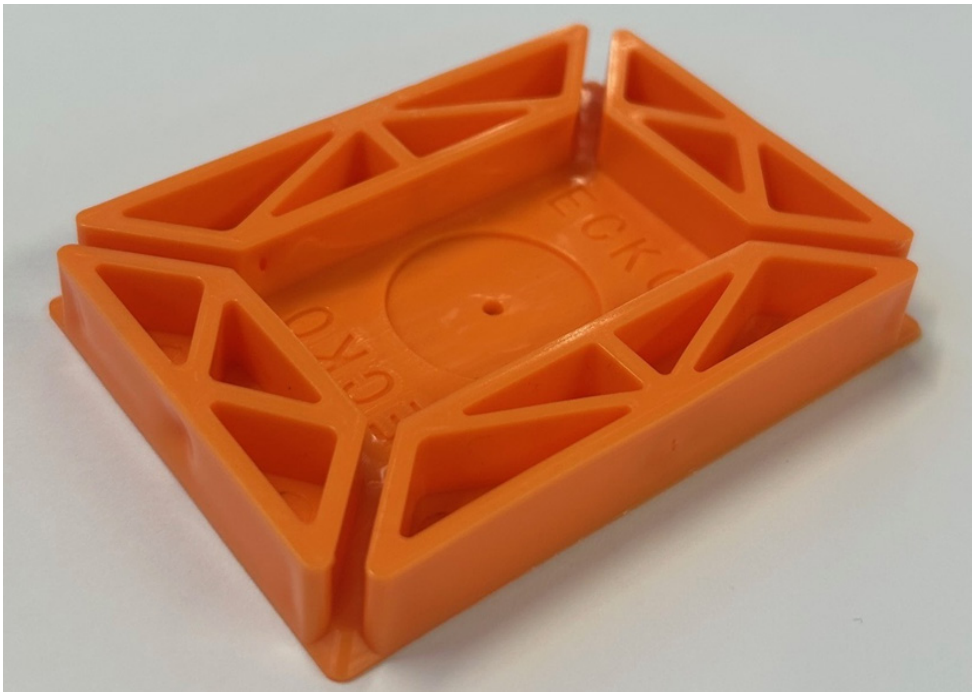
BRANZ Appraised

Appraisal No. 1292 (2025)

ECKO FRAMEFIT



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Amended 15 December 2025

BRANZ Appraisals

Technical Assessments of products for building and construction.

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Product

1.1 Ecko FrameFit provides a 12 mm gap under the bottom plate of lightweight timber framing to allow for unimpeded drainage of water from floors during construction. The packers are manufactured from polypropylene plastic with a plan dimension of 84 x 60 mm and are labelled on the underside with Ecko.

Scope

2.1 Ecko FrameFits are used for separating the bottom plates of internal and external walls from concrete floor slabs or from timber flooring in timber-framed buildings, to allow for unimpeded drainage of water from floors during construction.

2.2 This Appraisal covers the use of Ecko FrameFits in buildings otherwise designed and constructed in accordance with NZS 3604. The use of Ecko FrameFits with steel-framed buildings or under acoustically-rated walls is outside the scope of this Appraisal.

2.3 Ecko Frame Fits can be used with a range of fire rated systems as detailed in Paragraph 11.1 of this Appraisal.

Building Regulations

New Zealand Building Code (NZBC)

3.1 **In the opinion of BRANZ, Ecko FrameFit, if designed, used, installed and maintained in accordance with the statements and conditions of this Appraisal, will meet or contribute to meeting the following provisions of the NZBC:**

Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4. Ecko FrameFit meets the requirements for loads arising from self-weight, imposed gravity loads arising from use, earthquake, snow and wind [i.e. B1.3.3 (a), (b), (f), (g) and (h)]. See Paragraphs 8.1-8.5.

Clause B2 DURABILITY: Performance B2.3.1 (a) not less than 50 years and B2.3.2. Ecko FrameFit meets these requirements. See Paragraph 9.1.

Clause C3 FIRE AFFECTING AREAS BEYOND THE FIRE SOURCE: Performance C3.6. Ecko FrameFit contributes to meeting this requirement. See Paragraph 11.1.

Clause E2 EXTERNAL MOISTURE: Performance E2.3.3 Ecko FrameFit meets this requirement. See Paragraphs 11.1 and 11.2.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. Ecko FrameFit meets this requirement.

Clause H1 ENERGY EFFICIENCY: Performance H1.3.1 and H1.3.2E. Ecko FrameFit contributes to meeting these requirements. See Paragraphs 12.1 and 12.2.

Technical Specifications

4.1 Components supplied by Ecko Fastening Systems Ltd are:

- **Ecko FrameFit** - a packer manufactured from polypropylene plastic, measuring 84 x 60 x 12 mm and coloured orange.

4.2 Components supplied by the building contractor are:

- **Fixings** - Ecko FrameFit may be fixed to the bottom plate at the pre-cut stage, hand-nailed on-site with a clout, or fixed with a brad by a finishing gun.
- **Air seal** - complying with NZBC Acceptable Solution E2/AS1 or covered by a valid BRANZ Appraisal and installed in accordance with the Technical Literature.
- **Sealant for fire rated systems** - GIB® Fire Sound Seal™.
- **Proprietary bottom plate fixings** - in accordance with NZS 3604.
- **Proprietary bottom plate fixings for bracing elements** - in accordance with the Technical Literature.

Handling and Storage

5.1 Ecko FrameFit and the associated accessories must be stored out of direct sunlight and handled carefully to prevent physical damage.

Technical Literature

6.1 This Appraisal must be read in conjunction with:

- FrameFit Installation Guide, Version 1.1, dated 29 October 2025.

6.2 All aspects of design, use, installation and maintenance contained in the Technical Literature and within the scope of this Appraisal must be followed.

Design Information

7.1 Ecko FrameFits are used for separating the bottom plates of internal and external walls from concrete floor slabs or from timber flooring in timber-framed buildings, to allow for unimpeded drainage of water from floors during construction. They may be used to contribute to meeting requirements as described in NZBC Acceptable Solution E2/AS1.

Structure

General

8.1 Two Ecko FrameFits are required under any supporting stud with a lintel with a span of 1,400 mm or greater.

8.2 Three Ecko FrameFits are required for use under any stud supporting a lintel with a span greater than 4,000 mm and up to 6,000 mm.

8.3 Studs under girder trusses supporting a tributary roof area greater than 36 m^2 and up to 50 m^2 require two packers. Where a girder truss with a tributary roof area greater than 20 m^2 and a mid-floor lintel coincide, three packers are required under the lower storey studs supporting the mid-floor lintel.

8.4 Ecko FrameFit may be fixed to the bottom plate at the pre-cut stage, hand-nailed on-site with clouts or fixed with brads by a finishing gun. Additional packers may be slipped underneath the bottom plate if required and do not have to be fixed in place.

8.5 On 140 x 45 mm frames, two Ecko FrameFits are required, side by side under each stud.

8.6 Ecko FrameFits must not be exposed to ultraviolet (UV) light for a total of more than 30 days before being enclosed by the wall cladding.

Bottom Plate Fixings

8.7 Fixings used for bottom plates must meet the requirements of NZS 3604 when used with Ecko FrameFits.

Bracing

8.8 Whilst no proprietary bracing systems were assessed as part of this Appraisal, Ecko FrameFit has been evaluated to not reduce the effectiveness of proprietary bracing systems. Refer to the Technical Literature for compatible proprietary bracing systems.

Durability

9.1 Ecko FrameFit meets code compliance with NZBC Clause B2.3.1 (a) not less than 50 years. This is provided the cladding is maintained in accordance with the cladding manufacturer's instructions and the Ecko FrameFit is not exposed to UV light for a total of more than 30 days.

Prevention of Fire Occurring

10.1 Separation or protection must be provided to Ecko FrameFit from heat sources such as fireplaces, heating appliances and chimneys. NZBC Acceptable Solutions C/AS1 and C/AS2 provide methods for separation and protection of combustible materials from heat sources.

Fire Affecting Areas Beyond the Source

11.1 Ecko FrameFit has been assessed to not reduce the effectiveness of the proprietary fire rated systems listed in Tables 1-4. Refer to the Technical Literature for installation details of the Ecko FrameFit and the Technical Literature of the proprietary fire rated systems for any specific details for the systems.

Table 1: GIB® Fire Rated Systems assessed to be not reduced in effectiveness when used with Ecko FrameFit.

GIB® Systems	Wall lining	Fire Resistance Rating (FRR)
GIB® Fire Rated Timber-framed Walls		
GBTL30	1 x 10 mm GIB Fyreline®	30/30/30
GBTL 30b	1 x 13 mm GIB® Standard	30/30/30
GBTL 30c	1 x 10 mm GIB® Standard	30/30/30
GBTL 60	1 x 13 mm GIB Fyreline®	60/60/60
GBTL 60b	2 x 10 mm GIB Fyreline®	60/60/60
GBTL 90	1 x 16 mm GIB Fyreline®	90/90/90
GBT 120a	2 x 13 mm GIB Fyreline®	-/120/120
GBTL 120	2 x 16 mm GIB Fyreline®	120/120/120
GIB® Fire Rated Timber-framed Universal Walls		
GBUW 15	1 x 13 mm GIB® Standard	15/15/15
GBUW 30a	1 x 16 mm GIB Fyreline®	30/30/30
GBUW 30b	2 x 10 mm GIB Fyreline®	30/30/30
GBUW 60	2 x 13 mm GIB Fyreline®	60/60/60
GBUW 90	1 x 16 mm GIB Fyreline® + 1 x 19 mm GIB Fyreline®	90/90/90
GBUW 120	2 x 19 mm GIB Fyreline®	120/120/120

GIB® Systems	Wall lining	Fire Resistance Rating (FRR)
GIB® Noise Control Fire Rated Timber-framed Wall Systems		
GBTLA 30a	2 x 10 mm GIB® Standard	30/30/30
GBTLA 30b	Side 1: 1 x 10 mm GIB Braceline®/GIB Noiseline® Side 2: 2 x 10 mm GIB Braceline®/GIB Noiseline®	30/30/30
GBTLA 45r GBTLIC 45	2 x 13 mm GIB® Standard	45/45/45
GBTLA 60	2 x 10 mm GIB Fyreline®	60/60/60
GBTLA 60r GBTLIC 60	2 x 10 mm GIB Braceline®/GIB Noiseline®	60/60/60
GBTLIC 60a	Side 1: 1 x 13 mm GIB Braceline®/GIB Noiseline® Side 2: 2 x 13 mm GIB Braceline®/GIB Noiseline®	60/60/60
GBTLA 90c	2 x 13 mm GIB Fyreline®	90/90/90
GBTLA 90d	2 x 13 mm GIB Braceline®/GIB Noiseline®	90/90/90
GBTLA 90r	2 x 13 mm GIB Fyreline®	90/90/90
GIB® Noise Control Central Barrier Fire Rated Wall Systems		
GBTLAB 60a	2 x 10 mm GIB Fyreline® + GIB® Barrierline	60/60/60
GBTLAB 60b	1 x 10 mm GIB Braceline®/GIB Noiseline® + GIB® Barrierline	60/60/60
GBTLAB 60c	1 x 13 mm GIB Braceline®/GIB Noiseline® + GIB® Barrierline	60/60/60
GBTLAB 60d	1 x 13 mm GIB® Standard + GIB® Barrierline	60/60/60
GIB® Weatherline® Fire Rated Wall Systems – Two Way Exposure		
GWTLE 30	Interior: 10 mm GIB Fyreline® Exterior: 10 mm GIB Weatherline®	30/30/30
GWTLE 60a	Interior: 13 mm GIB Fyreline® Exterior: 13 mm GIB Weatherline®	60/60/60
GWTLE 60b	Interior: 13 mm GIB Fyreline® Exterior: 2 x 10 mm GIB Weatherline®	60/60/60
GWTLP 30	Interior: 10 mm GIB Weatherline® Exterior: 10 mm GIB Weatherline®	30/30/30
GWTLP 60	Interior: 13 mm GIB Weatherline® Exterior: 13 mm GIB Weatherline®	60/60/60

Table 2: Elephant Plasterboard Systems assessed to be not reduced in effectiveness when used with Ecko FrameFit.

Elephant Plasterboard System	Sub system	Wall lining	Fire Resistance Rating (FRR)
Elephant Plasterboard Fire Rated Timber-framed Wall Systems			
E2TL30	-S20	1 x 10 mm EPB Standard	30/30/30
	-F20	1 x 10 mm EPB FireSmart	
	-S26	1 x 10 mm EPB Standard	
E4TL45	-S40	2 x 10 mm EPB Standard	45/45/45
E4T60	-S40	2 x 10 mm EPB Standard	-/60/60
E2TL60	-F26	1 x 13 mm EPB FireSmart	60/60/60
E4TL60	-F40	2 x 10 mm EPB FireSmart	60/60/60
	-S46	1 x 10 mm EPB Standard + 1 x 13 mm EPB Standard	
	-MS40	1 x 10 mm EPB Standard + 1 x 10 mm EPB MultiSmart	
	-S52	2 x 13 mm EPB Standard	
E2TL75	-F32	1 x 16 mm EPB FireSmart	75/75/75
E4T90	-FS52	1 x 13 mm EPB FireSmart + 1 x 13 mm EPB Standard	-/90/90
	-FM46	1 x 13 mm EPB FireSmart + 1 x 10 mm EPB MultiSmart	
E4TL90	-F52	2 x 13 mm EPB FireSmart	90/90/90
E4T105	-F52	2 x 13 mm EPB FireSmart	-/105/105
E4T120	-F58	1 x 16 mm EPB FireSmart + 1 x 13 mm EPB FireSmart	-/120/120
E6TL120	-F78	3 x 13 mm EPB FireSmart	120/120/120
EBV1TL30	-F10	1 x 10 mm EPB FireSmart one side Brick Veneer other side	30/30/30
	-S13	1 x 13 mm EPB Standard one side Brick Veneer other side	
EBV1TL60	-F13	1 x 13 mm EPB FireSmart one side Brick Veneer other side	60/60/60
Elephant Plasterboard Fire Rated Timber-framed Universal Wall Systems			
E1UW15	-S13	1 x 13 mm EPB Standard	15/15/15
E1UW30	-F16a	1 x 13 mm EPB FireSmart	30/30/30
E2UW30	-F20	2 x 10 mm EPB FireSmart	30/30/30
E2UW45	-F26	2 x 13 mm EPB FireSmart	45/45/45
E2UW60	-F26a	2 x 13 mm EPB FireSmart	60/60/60
	-F29	1 x 16 mm EPB FireSmart + 1 x 13 mm EPB FireSmart	
E3UW90	-F39a	3 x 13 mm EPB FireSmart	90/90/90
	-F42	1 x 16 mm EPB FireSmart 2 x 13 mm EPB FireSmart	
E3UW10	-F45a	1 x 13 mm EPB FireSmart 2 x 16 mm EPB FireSmart	120/120/120

Table 3: INTEGRA® Systems assessed to be not reduced in effectiveness when used with Ecko FrameFit.

INTEGRA® System	Wall Lining	Fire Resistance Rating (FRR)
INTA120a	1 x 10 mm plasterboard	120/120/120
INTA120b	1 x 13 mm plasterboard	120/120/120
INTA120c	2 x 10 mm plasterboard	120/120/120
INTA120d	1 x 10 mm Noise Rated plasterboard	120/120/120
INTA120e	1 x 13 mm Noise Rated plasterboard	120/120/120

Table 4: KOROK® Intertenancy Systems assessed to be not reduced in effectiveness when used with Ecko FrameFit.

KOROK® Intertenancy System	Wall lining	Fire Resistance Rating (FRR)
KIT01, KIT01 modified	KOROK® 51 mm panel, 1 x 10 mm GIB® Standard plasterboard	60/60/60
KIT02	KOROK® 51 mm panel, 1 x 10 mm GIB® Standard plasterboard + 1 x 10 mm GIB® Noiseline ® to the other side	60/60/60
KIT01A	KOROK® 51 mm panel, 1 x 10 mm GIB® Standard plasterboard	60/60/30
KIT03	KOROK® 51 mm panel, 1 x 10 mm GIB® Noiseline ® to the other side	60/60/60
KIT04	KOROK® 51 mm panel, 1 x 13 mm GIB® Noiseline® plasterboard	60/60/60
KIT05	KOROK® 51 mm panel, 1 x 13 mm GIB® Standard plasterboard	60/60/60
KIT06	KOROK® 78 mm panel, 1 x 10 mm GIB® Standard plasterboard	120/120/120
KIT06A	KOROK® 78 mm panel, 1 x 10 mm GIB® Standard plasterboard	120/120/60
KIT07	KOROK® 78 mm panel, 1 x 10 mm GIB® Standard plasterboard + 1 x 10 mm GIB® Noiseline ® to the other side	120/120/120
KIT08	KOROK® 78 mm panel, 1 x 10 mm GIB Noiseline® plasterboard + 1 x 10 mm GIB® Aqualine® to the other side	120/120/120
KIT09	KOROK® 78 mm panel, 1 x 13 mm GIB Noiseline® plasterboard + 1 x 13 mm GIB® Aqualine® to the other side	120/120/60
KIT10	KOROK® 78 mm panel, 1 x 13 mm GIB® Standard plasterboard	120/120/120

External Moisture

12.1 The total building envelope must be weathertight and comply with the requirements of NZBC.

12.2 Ecko FrameFits can be used for compliance with NZS 3604, requiring separation between framing timbers and concrete. Air seals must be installed to all exterior frames when using Ecko FrameFit. The air seal must comply with NZBC Acceptable Solution E2/AS1 or be covered by a valid BRANZ Appraisal and be installed in accordance with the instructions in the Technical Literature.

Energy Efficiency

13.1 The 12 mm gap created by Ecko FrameFits must be sealed with an air seal complying with either NZBC Acceptable Solution E2/AS1 or covered by a valid BRANZ Appraisal for use around window, door and other wall penetration openings.

13.2 Ecko FrameFits, when installed in accordance with the Technical Literature and this Appraisal, will not impact on the thermal performance of the wall.

Maintenance

14.1 Ecko FrameFits do not require maintenance.

Installation Information

15.1 Installation of Ecko FrameFits must be in accordance with the Technical Literature.

15.2 Ecko FrameFits are installed to the underside of the bottom plate prior to the erection of the structural framing of the wall.

15.3 The orientation of the Ecko FrameFit is dependent on the slab overhang and the size of the bottom plate. Refer to the Technical Literature for the suitable orientation of the Ecko FrameFit for the individual design of the building.

15.4 An air seal complying with NZBC Acceptable Solution E2/AS1 or covered by a valid BRANZ Appraisal must be installed to all exterior walls, including first floor exterior walls, after the framing is erected and before the framing is closed in by external claddings and internal linings.

Basis of Appraisal

The following is a summary of the technical investigations carried out:

Tests

16.1 Comprehensive strength tests have been carried out on the Ecko FrameFit. The results of these tests have been reviewed by BRANZ and found to be satisfactory.

16.2 Fire testing to AS 1530.4 has been carried out on the Ecko FrameFit. The results of this test has been reviewed by BRANZ and found to be satisfactory.

Other Investigations

17.1 A structural assessment by BRANZ has been completed.

17.2 A durability assessment has been carried out on the Ecko FrameFit by BRANZ experts.

17.3 A fire assessment has been carried out on the Ecko FrameFit by BRANZ experts.

17.4 An assessment has been completed by BRANZ of the Ecko FrameFit to ensure that it does not affect the thermal performance of the wall design when installed in accordance with the Technical Literature.

Quality

18.1 The manufacture of the Ecko FrameFit has not been examined by BRANZ but details regarding the quality and composition of the materials used were obtained by BRANZ and found to be satisfactory.

18.2 Quality of the supply of the product to the market is the responsibility of Ecko Fastening Systems Ltd.

18.3 Designers are responsible for the design of the building and incorporating Ecko FrameFit in accordance with this Appraisal and the Technical Literature.

18.4 Quality of the installation is the responsibility of the installer.

Sources of Information

- AS 1530.4 :2014 Methods for fire tests on building materials, components and structure – Part 4: Fire-resistance tests of elements of construction.
- NZS 3604:2011 Timber-framed buildings.
- Ministry of Business, Innovation and Employment Record of amendments - Acceptable Solutions, Verification Methods and handbooks.
- The Building Regulations 1992.

Amendments

Amendment No. 1, dated 15 December 2025

This Appraisal has been amended to include the results of the fire testing and assessment and to reflect the changes made to the NZBC compliance documentation.

In the opinion of BRANZ, Ecko FrameFit is fit for purpose and will comply with the Building Code to the extent specified in this Appraisal provided it is used, designed, installed and maintained as set out in this Appraisal.

The Appraisal is issued only to Ecko Fastening Systems Ltd, and is valid until further notice, subject to the Conditions of Appraisal.

Conditions of Appraisal

1. This Appraisal:
   a) relates only to the product as described herein;
   b) must be read, considered and used in full together with the Technical Literature;
   c) does not address any Legislation, Regulations, Codes or Standards, not specifically named herein;
   d) is copyright of BRANZ.
2. Ecko Fastening Systems Ltd:
   a) continues to have the product reviewed by BRANZ;
   b) shall notify BRANZ of any changes in product specification or quality assurance measures prior to the product being marketed;
   c) abides by the BRANZ Appraisals Services Terms and Conditions;
   d) warrants that the product and the manufacturing process for the product are maintained at or above the standards, levels and quality assessed and found satisfactory by BRANZ pursuant to BRANZ's Appraisal of the product.
3. BRANZ makes no representation or warranty as to:
   a) the nature of individual examples of, batches of, or individual installations of the product, including methods and quality of work;
   b) the presence or absence of any patent or similar rights subsisting in the product or any other product;
   c) any guarantee or warranty offered by Ecko Fastening Systems Ltd.
4. Any reference in this Appraisal to any other publication shall be read as a reference to the version of the publication specified in this Appraisal.
5. BRANZ provides no certification, guarantee, indemnity or warranty, to Ecko Fastening Systems Ltd or any third party.

For BRANZ

Claire Falck
Chief Executive

Date of Issue:
05 August 2025