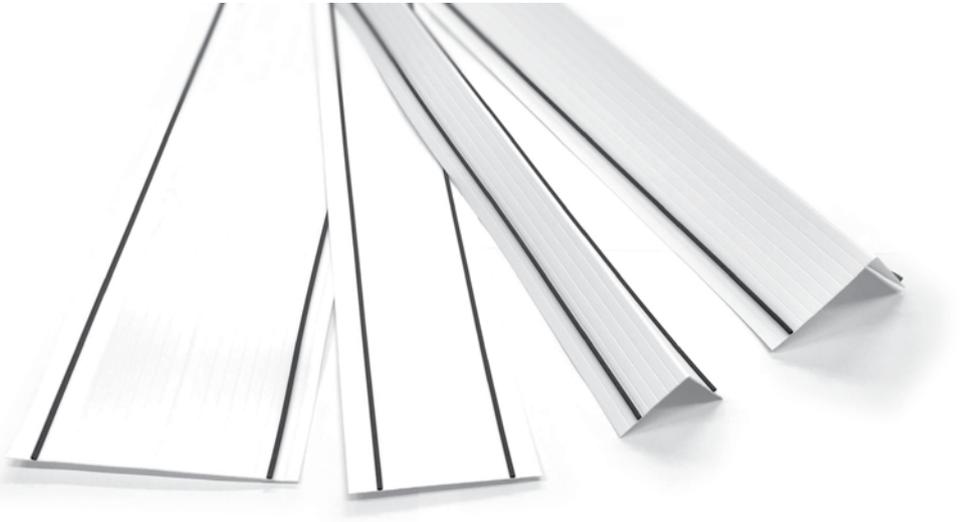


BRANZ Appraised

Appraisal No. 913 [2016]

DYNAFLASH FLASHINGS



Appraisal No. 913 [2016]

BRANZ Appraisals

Technical Assessments of products for building and construction.



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Product

- 1.1 DynaFlash Flashings are concealed corner and flat transition flashings designed to meet the flashing requirements of NZBC Acceptable Solution E2/AS1.

Scope

- 2.1 DynaFlash Flashings have been appraised for use as concealed flashings on timber and steel framed buildings within the following scope:
 - the scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1 with regards to building height and floor plan area; and,
 - with direct fixed or cavity-based wall cladding systems complying with NZBC Acceptable Solution E2/AS1 or with proprietary direct fixed or cavity-based cladding systems covered by a valid BRANZ Appraisal; and,
 - situated in NZS 3604 Wind Zones up to, and including Extra High.

[Note: DynaFlash can also be used on buildings subject to specific weathertightness design. Weathertightness design and detailing of these installations is the responsibility of the designer and is outside the scope of the Appraisal].

Building Regulations

New Zealand Building Code (NZBC)

- 3.1 In the opinion of BRANZ, DynaFlash Flashings 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 B2 DURABILITY:** Performance B2.3.1 [b], 15 years and B2.3.2. DynaFlash Flashings meet these requirements. See Paragraphs 8.1 and 8.2.
 - Clause E2 EXTERNAL MOISTURE:** Performance E2.3.2. DynaFlash Flashings contribute to meeting this requirement. See Paragraphs 11.1 and 11.2.
 - Clause F2 HAZARDOUS BUILDING MATERIALS:** Performance F2.3.1. DynaFlash Flashings meet this requirement and will not present a health hazard to people.
- 3.2 This is an Appraisal of an **Alternative Solution** in terms of New Zealand Building Code compliance.

Technical Specification

- 4.1 DynaFlash Flashings are extruded from white polypropylene with co-extruded black EPDM rubber seals along each edge. The flashings are extruded with a groove along the centre line to enable it to be bent in either direction to suit internal and external corner applications, or they can be left unfolded for flat transition flashing applications. DynaFlash Flashings are 1 mm thick and are available 100 mm wide [50 x 50 mm when folded] and 150 mm wide [75 x 75 mm when folded]. They are supplied in 25 m coils.
- 4.2 Accessories used with the DynaFlash Flashings, which are supplied by the building contractor, are:
- **Fixings [timber frame]** – 30 or 40 x 2.5 mm hot-dip galvanised flat head nails, or staples.
 - **Fixings [steel frame]** – self-drilling 6-gauge AS 3566 Corrosion Class 4 galvanised screws, or staples [when fixing to timber cavity battens].

Handling and Storage

- 5.1 Handling and storage of all materials supplied by Dynex Extrusions Ltd, whether on site or off site, is under the control of the installer. DynaFlash Flashings must be protected from physical damage and must be stored in clean, dry conditions.

Technical Literature

- 6.1 Refer to the Appraisals listing on the BRANZ website for details of the current Technical Literature for DynaFlash Flashings. The Technical Literature must be read in conjunction with this Appraisal. 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

General

- 7.1 DynaFlash Flashings can be used as an alternative to concealed internal and external corner flashings specified within NZBC Acceptable Solution E2/AS1.
- 7.2 DynaFlash Flashings must not be exposed to the weather or ultra violet light for a total of more than 90 days before being covered by the wall cladding.
- 7.3 Where a proprietary cladding manufacturer specifies a specific flashing as part of their system, permission must be obtained from the cladding manufacturer before the flashing system is substituted with DynaFlash Flashings.
- 7.4 Where DynaFlash Flashings are used with other cladding systems not covered by this Appraisal [refer to Paragraph 2.1], designers must detail the junction between the DynaFlash Flashings and the cladding to meet their own requirements and the performance requirements of the NZBC. Details not included within the Technical Literature have not been assessed and are outside the scope of this Appraisal.

Durability

- 8.1 Assessment of durability to meet the NZBC is based on difficulty of access and replacement, and the ability to detect failure of DynaFlash Flashings both during normal use and maintenance of the building.

Serviceable Life

- 8.2 Provided they are not exposed to the weather or ultra-violet light for a total of more than 90 days, and provided the exterior cladding is maintained in accordance with the cladding manufacturer's instructions and the cladding remains weather resistant, DynaFlash Flashings are expected to have a serviceable life equal to that of the cladding.

Maintenance

- 9.1 No maintenance is required for DynaFlash Flashings. Annual inspections must be made to ensure that all aspects of the cladding system, and any sealed joints remain in a weatherproof condition. Any damaged areas or areas showing signs of deterioration which would allow water ingress must be repaired immediately.

Prevention of Fire Occurring

- 10.1 Separation or protection must be provided to the DynaFlash Flashings from heat sources such as flues and chimneys. Part 7 of NZBC Acceptable Solutions C/AS1 – C/AS6 and NZBC Verification Method C/VM1 provide methods for separation and protection of combustible materials from heat sources.

External Moisture

- 11.1 DynaFlash Flashings when installed in accordance with this Appraisal and the Technical Literature assist in preventing the penetration of moisture that could cause undue dampness or damage to building elements.
- 11.2 The details given in the Technical Literature for weather sealing are based on the design principle of having a first and second line of defence against moisture entry for all joints, penetrations and junctions. The ingress of moisture must be excluded by detailing flashings and wall interfaces as shown in NZBC Acceptable Solution E2/AS1 and the Technical Literature. Weathertightness details that are developed by the designer are outside the scope of this Appraisal and are the responsibility of the designer for compliance with the NZBC.

Installation Information

Installation Skill Level Requirements

- 12.1 Installation of DynaFlash Flashings must be completed by, or under the supervision of Licensed Building Contractors with the relevant Licence Class, in accordance with instructions given within the DynaFlash Technical Literature and this Appraisal.

System Installation

DynaFlash Flashings Installation

- 13.1 DynaFlash Flashings are supplied in coils and are cut to length on site. Flashings must be installed in a continuous length where possible, but to avoid wastage, the flashing can be lapped 100 mm. The direction of the lap must ensure that water is shed to the outer face of the flashing.
- 13.2 DynaFlash Flashings must be installed over the wall underlay [for direct fixed wall cladding], or cavity battens [for cavity-based wall cladding]. The flashings must be fixed in place with 30 or 40 x 2.5 mm hot-dip galvanised flat head nails or staples [timber frame construction], or self-drilling 6-gauge AS 3566 Corrosion Class 4 galvanised screws [steel frame construction] at approximately 400 mm centres. The fixings should be installed through the section of flashing between the EPDM seal and outside edge.
- 13.3 DynaFlash Flashings must be used and installed in conjunction with the selected cladding system in accordance with the installation methods and requirements of NZBC Acceptable Solution E2/AS1, or the proprietary cladding system manufacturer.

Basis of Appraisal

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

- 14.1 BRANZ expert opinion on NZBC E2 code compliance for DynaFlash Flashings was based on evaluation of all details within the scope and as stated within this Appraisal. The details contained within the Technical Literature have been reviewed, and an opinion has been given by BRANZ technical experts that the flashings will meet the performance levels of NZBC Acceptable Solution E2/AS1.
- 14.2 The practicability of installation of DynaFlash Flashings has been assessed by BRANZ.
- 14.3 The Technical Literature for DynaFlash Flashings has been examined by BRANZ and found to be satisfactory.

Quality

- 15.1 The manufacture of Dynex Cavity Closers has been examined by BRANZ, and details regarding the quality and composition of the materials used were obtained by BRANZ and found to be satisfactory.
- 15.2 The quality of materials, components and accessories supplied by Dynex Extrusions Ltd is the responsibility of Dynex Extrusions Ltd. The quality control system of Dynex Extrusions Ltd has been assessed and registered as meeting the requirements of ISO 9001: 2008.
- 15.3 The environmental management system of Dynex Extrusions Ltd has been assessed and registered as meeting the requirements of ISO 14001: 2004.
- 15.4 Quality on site is the responsibility of the installer.
- 15.5 Designers are responsible for the building design, and building contractors are responsible for the quality of installation of the framing systems, wall underlays, cavity battens and cladding system in accordance with the instructions of the designer.
- 15.6 Building owners are responsible for the maintenance of the cladding system in accordance with the instructions of cladding manufacturer and designer.

Sources of Information

- NZS 3604: 2011 Timber-framed buildings.
- Compliance Document for New Zealand Building Code External Moisture Clause E2, Department of Building and Housing, Third Edition July 2005 [Amendment 6, 14 February 2014].
- Ministry of Business, Innovation and Employment Record of Amendments for Compliance Documents and Handbooks.
- The Building Regulations 1992.



In the opinion of BRANZ, **DynaFlash Flashings** are fit for purpose and will comply with the Building Code to the extent specified in this Appraisal provided they are used, designed, installed and maintained as set out in this Appraisal.

The Appraisal is issued only to **Dynex Extrusions Limited**, 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. **Dynex Extrusions Limited**:
 - 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 workmanship;
 - 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 **Dynex Extrusions Limited**.
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 **Dynex Extrusions Limited** or any third party.

For BRANZ



Chelydra Percy

Chief Executive

Date of Issue:

29 April 2016