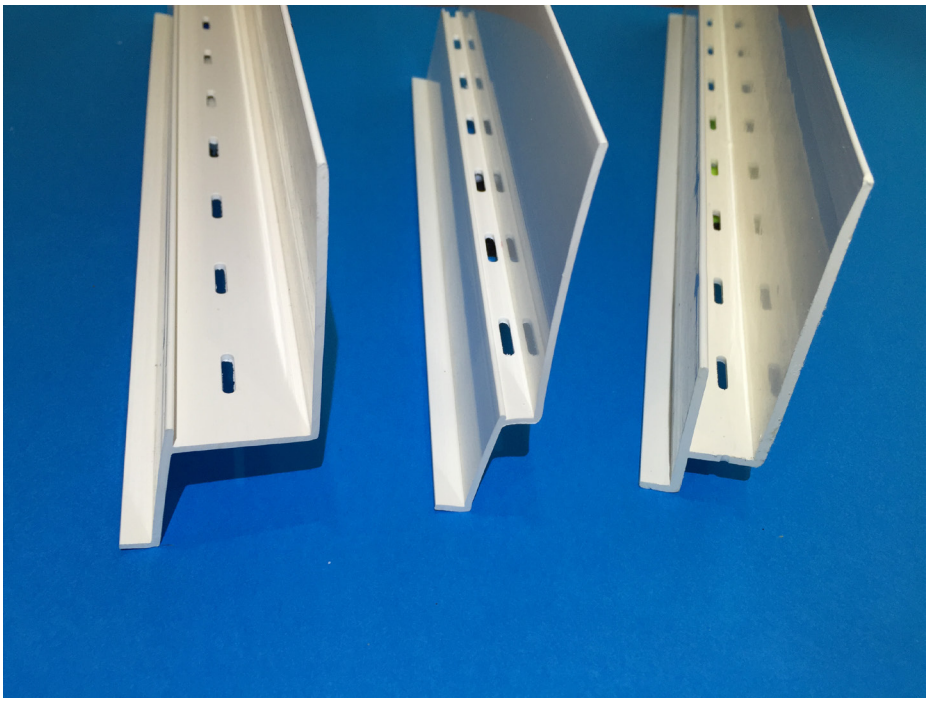
BRANZ Appraised
Appraisal No. 657 [2022]

EZYBUILD K-STRIP AND CONCEALED VENT CAVITY CLOSERS

Appraisal No. 657 (2022)

This Appraisal replaces BRANZ Appraisal No. 657 (2016)



BRANZ Appraisals

Technical Assessments of products for building and construction.

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Product

1.1 EzyBuild K-Strip and Concealed Vent Cavity Closers are a range of uPVC and aluminium cavity closers and cladding base trim supports for weatherboard and flat sheet cladding products.

Scope

2.1 EzyBuild K-Strip and Concealed Vent Cavity Closers have been appraised for use within the following scope:

- as a cladding base trim support for direct-fixed timber and fibre cement bevelback weatherboards; and,
- as a cavity closure and base trim support for timber and fibre cement bevelback weatherboards installed over a nominal 20 mm drained cavity; and,
- as a cavity closure and base trim support for James Hardie Titan® Façade panel; and,
- as a cavity closure and base trim support for plywood and fibre cement sheet cladding installed over a nominal 20 mm, 40 mm and 45 mm drained cavity; and,
- as a cavity closure and base trim support for the rigid backing of stucco plaster cladding installed over a nominal 20 mm, 40 mm and 45 mm drained cavity.

2.2 EzyBuild K-Strip and Concealed Vent Cavity Closers have been appraised for use with the cladding types detailed within Paragraph 2.1 above. Generic cladding systems within these types must comply with NZBC Acceptable Solution E2/AS1 and proprietary cladding systems must be covered by a valid BRANZ Appraisal.

Building Regulations

New Zealand Building Code (NZBC)

3.1 **In the opinion of BRANZ, EzyBuild K-Strip and Concealed Vent Cavity Closers, 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. EzyBuild K-Strip and Concealed Vent Cavity Closers meet these requirements. See Paragraphs 8.1 and 8.2.

Clause E2 EXTERNAL MOISTURE: Performance E2.3.2. EzyBuild K-Strip and Concealed Vent Cavity Closers, when used to close the drained cavity behind a cladding system, will contribute to meeting this requirement. See Paragraph 11.1.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. EzyBuild K-Strip and Concealed Vent Cavity Closers meet this requirement.

Technical Specification

4.1 EzyBuild K-Strip and Concealed Vent Cavity Closers are available in 2.2 m and 3 m lengths in the following profiles:

K-Strip

- **EB100 EzyBuild K-Strip Sheet Cavity Fix** - a cavity closer and support member for fibre cement and plywood sheets.
- **EB110 EzyBuild K-Strip Weatherboard Direct Fix** - a weatherboard starter for support to the bottom weatherboard.
- **EB120 EzyBuild K-Strip Weatherboard Cavity Fix** - a cavity closer and cant strip for support to the bottom weatherboard.

Concealed Vent Cavity Closers - uPVC

- **EB20 EzyBuild Concealed Vent 20 mm Cavity Closer** - suitable for 20 mm cavity battens available in white uPVC.
- **EB20BLK EzyBuild Concealed Vent 20 mm Cavity Closer** - suitable for 20 mm cavity battens available in black uPVC.
- **EB20S EzyBuild Concealed Vent 20 mm Soffit Cavity Closer** - suitable for cladding on 20 mm cavity battens for soffit and cladding junctions and available in white uPVC.
- **EB35 EzyBuild Concealed Vent 35 mm Cavity Closer** - suitable for bevelback weatherboard cladding over 20 mm cavity battens and available in white uPVC.
- **EB35S EzyBuild Concealed Vent 35 mm Cavity Closer** - suitable for bevelback weatherboard cladding over 20 mm cavity battens for soffit and cladding junctions and available in white uPVC.

Concealed Vent Cavity Closers - Aluminium

- **EBA20 EzyBuild Concealed Vent 20 mm Aluminium Cavity Closer** - suitable for 20 mm cavity battens and available in mill finish aluminium.
- **EBA20BLK EzyBuild Concealed Vent 20 mm Aluminium Cavity Closer** - suitable for 20 mm cavity battens and available in black powder-coated aluminium.
- **EBA40 EzyBuild Concealed Vent 40 mm Aluminium Cavity Closer** - suitable for 40 mm cavity battens and available in mill finish aluminium.
- **EBA40BLK EzyBuild Concealed Vent 40 mm Aluminium Cavity Closer** - suitable for 40 mm cavity battens and available in black powder-coated aluminium.
- **EBA45 EzyBuild Concealed Vent 45 mm Aluminium Cavity Closer** - suitable for 45 mm cavity battens and available in mill finish aluminium.
- **EBA45BLK EzyBuild Concealed Vent 45 mm Aluminium Cavity Closer** - suitable for 45 mm cavity battens and available in black powder-coated aluminium.

4.2 Accessories used with the EzyBuild K-Strip and Concealed Vent Cavity Closers, which are supplied by the building contractor are:

- **Fixings for K-Strip** – 40 x 2.5 mm hot-dip galvanised flat head nails.
- **Adhesive** – uPVC-compatible adhesive for adhering the base closers and cladding trims to the selected cladding, as and where required.
- **Flexible sealant** – Bostik MS Safe Seal.
- **Flashing tape** - flexible flashing tape complying with NZBC Acceptable Solution E2/AS1, Paragraph 4.3.11, or flexible flashing tapes covered by a valid BRANZ Appraisal for use around window and door joinery openings.

Handling and Storage

5.1 Handling and storage of all materials supplied by EzyBuild Products Ltd, whether on-site or off-site, is under the control of the installer. EzyBuild K-Strip and Concealed Vent Cavity Closers must be protected from physical damage and must be stored in clean, dry conditions.

5.2 Handling and storage of all materials supplied by the building contractor, whether on-site or off-site, is under the control of the building contractor. Materials must be handled and stored in accordance with the relevant manufacturer's instructions.

Technical Literature

6.1 Refer to the Appraisals listing on the BRANZ website for details of the current Technical Literature for the EzyBuild K-Strip and Concealed Vent Cavity Closers. 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

7.1 EzyBuild K-Strip and Concealed Vent Cavity Closers can be used as an alternative to the cavity base closure specified within NZBC Acceptable Solution E2/AS1, Paragraph 9.1.8.3 and Figure 66.

7.2 Punchings in the EzyBuild K-Strip and Concealed Vent Cavity Closers provide a minimum ventilation opening area of 1,000 mm^2 per lineal metre of wall, in accordance with the requirements of NZBC Acceptable Solution E2/AS1, Paragraph 9.1.8.3 b).

7.3 The ground clearance to finished floor levels as set out in NZS 3604 must be adhered to at all times. At ground level, paved surfaces, such as footpaths, must be kept clear of the bottom edge of the EzyBuild K-Strip and Concealed Vent Cavity Closers by a minimum of 100 mm, and unpaved surfaces by 175 mm in accordance with the requirements of NZBC Acceptable Solution E2/AS1, Table 18.

7.4 At balcony, deck or roof/wall junctions, the bottom edge of the EzyBuild K-Strip and Concealed Vent Cavity Closers must be kept clear of any adjacent surface, or above the top surface of any adjacent roof flashing by a minimum of 35 mm in accordance with the requirements of NZBC Acceptable Solution E2/AS1, Paragraph 9.1.3.

7.5 Where a proprietary cladding manufacturer specifies a cladding base trim or cavity closure as part of their system, permission must be obtained from the cladding manufacturer before the cladding base trim or cavity closure is substituted with the EzyBuild K-Strip and Concealed Vent Cavity Closers.

7.6 Where the EzyBuild K-Strip and Concealed Vent Cavity Closers are used with other cladding systems not covered by this Appraisal (refer to Paragraph 2.1), designers must detail the junction between EzyBuild K-Strip and Concealed Vent Cavity Closers 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

Serviceable Life

8.1 The EzyBuild K-Strip and Concealed Vent Cavity Closers are expected to have a serviceable life of at least 15 years.

8.2 The EzyBuild K-Strip and Concealed Vent Cavity Closers will have a durability equivalent to that of the cladding to meet code compliance with NZBC Clause B2.3.2, provided the cladding is maintained in accordance with this Appraisal.

Maintenance

9.1 Regular maintenance is essential for exposed sections of EzyBuild K-Strip and Concealed Vent Cavity Closers to continue to meet the NZBC durability performance provision and to maximise their serviceable life.

9.2 Regular cleaning (at least annually) of the exposed sections of EzyBuild K-Strip and Concealed Vent Cavity Closers is recommended to remove grime, dirt and organic growth and to maximise the life and appearance of the surface finish. Build-up of residue, mould or dirt can be removed by brushing with a soft brush, warm water and detergent. Abrasive cleaners, thinners, solvents or petrol must not be used to clean the EzyBuild K-Strip and Concealed Vent Cavity Closers.

9.3 Regular checks, at least annually, must be made of the wall cladding, flashings and penetrations to ensure they are maintained weathertight and continue to perform their function, to ensure that water will not penetrate the cladding.

Prevention of Fire Occurring

10.1 Separation or protection must be provided to the EzyBuild K-Strip and Concealed Vent Cavity Closers from heat sources such as fireplaces, heating appliances, flues and chimneys. Part 7 of NZBC Verification Method C/VM1 and Acceptable Solution C/AS1, and NZBC Acceptable Solution C/AS2 provide methods for separation and protection of combustible materials from heat sources.

External Moisture

11.1 In cavity construction, the EzyBuild K-Strip and Concealed Vent Cavity Closers, when installed in accordance with this Appraisal and the Technical Literature, allow the cavity to be drained and open to the exterior at the bottom of the cavity in accordance with NZBC Acceptable Solution E2/AS1, Paragraph 9.1.8.2 d). They also provide vermin proofing at the cavity base in accordance with NZBC Acceptable Solution E2/AS1, Paragraph 9.1.8.2 e).

Installation Information

Installation Skill Level Requirements

12.1 All design and building work must be carried out in accordance with the EzyBuild K-Strip and Concealed Vent Cavity Closers Technical Literature and this Appraisal by competent and experienced tradespersons conversant with EzyBuild K-Strip and Concealed Vent Cavity Closers. Where the work involves Restricted Building Work (RBW), this must be completed by, or under the supervision of, a Licensed Building Practitioner (LBP) with the relevant License Class.

System Installation

Wall Underlay Installation

13.1 The selected wall underlay must be installed by the building contractor in accordance with the underlay manufacturer's instructions prior to the installation of EzyBuild K-Strip and Concealed Vent Cavity Closers.

EzyBuild K-Strip and Concealed Vent Cavity Closers Installation

13.2 The appropriate EzyBuild K-Strip and Concealed Vent Cavity Closers section must be selected depending on the cladding system being installed. EzyBuild K-Strip and Concealed Vent Cavity Closers may be cut with a hand saw or drop saw.

13.3 The EzyBuild K-Strip and Concealed Vent Cavity Closers must be set to the correct height and line and must be positioned to overhang the bottom plate by a minimum of 50 mm. They are to be installed in continuous lengths and must be mitred at internal and external corners. They must be installed over the building underlay to the wall framing and must be fixed in place with 40 x 2.5 mm hot-dip galvanised flat head nails at approximately 400 mm centres.

13.4 When EzyBuild K-Strip and Concealed Vent Cavity Closers are used with plywood and fibre cement sheet cladding, the cavity battens must be checked 3 mm to allow for the thickness of the EzyBuild K-Strip and Concealed Vent Cavity Closer. Where cavity spacers are required at the base of the cladding, these must be 15 mm thick.

13.5 The bottom edge of plywood and fibre cement sheets must be sealed before installation.

13.6 The selected cladding is fixed to the wall framing directly or over battens in the normal manner in accordance with NZBC Acceptable Solution E2/AS1, or the manufacturer's instructions.

13.7 A construction adhesive is used to hold the cladding to the EzyBuild K-Strip Cavity Closers. This adhesive is additional to the structural fixing of the cladding. Stainless steel screws 20 mm long may also be used to fix plywood and fibre cement sheets at the base to the EzyBuild K-Strip Cavity Closers. These are counter sunk and fixed 25 mm from the sheet bottom at 400 mm centres.

13.8 When using the concealed vent soffit cavity closer, flashing tape is to be used continuously along the top edge of the closer. When multiple lengths of cavity closer are used, flashing tape must be used on the internal side, over the joints between closers, and must be lapped 50 mm each side of the joint.

K-Strip Sheet Cavity Fix and James Hardie Titan® Panel

13.9 When the K-Strip Sheet Cavity Fix is used with James Hardie Titan® Facade panel, the K-Strip Sheet Cavity Fix must be cut and fixed between CLD® Structural Cavity Battens fixed under panel joints.

Finishing

13.10 The EzyBuild K-Strip and Concealed Vent Cavity Closers in uPVC and powder-coated aluminium do not require painting at the completion of installation. If the trim is painted, the paint manufacturer's instructions for painting uPVC must be followed. The mill finish aluminium requires powder-coating or painting with an etch primer undercoat and an epoxy enamel top coat.

Basis of Appraisal

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

Investigations

14.1 BRANZ expert opinion on NZBC Clause E2 code compliance for the EzyBuild K-Strip and Concealed Vent Cavity Closers 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 system will meet the performance levels of NZBC Acceptable Solution E2/AS1 for cavity closures.

14.2 A durability opinion has been provided by BRANZ technical experts.

14.3 The practicability of installation has been assessed by BRANZ.

14.4 The Technical Literature for the EzyBuild K-Strip and Concealed Vent Cavity Closers has been examined by BRANZ and found to be satisfactory.

Quality

15.1 The manufacture of the EzyBuild K-Strip and Concealed Vent 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 EzyBuild Products Ltd is the responsibility of EzyBuild Products Ltd.

15.3 Quality on-site is the responsibility of the installer.

15.4 Designers are responsible for the building design, and building contractors are responsible for the quality of installation of the framing systems, building underlays, cavity battens and cladding system in accordance with the instructions of the designer.

15.5 Building owners are responsible for the maintenance of the EzyBuild K-Strip and Concealed Vent Cavity Closers and cladding system in accordance with the instructions of EzyBuild Products Ltd and the designer.

Sources of Information

- 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.

BRANZ

In the opinion of BRANZ, EzyBuild K-Strip and Concealed Vent Cavity Closers 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 EzyBuild Products 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. EzyBuild Products 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 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 EzyBuild Products 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 EzyBuild Products Ltd or any third party.

For BRANZ

Chelydra Percy
Chief Executive

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14 April 2022