BRANZ Appraised
Appraisal No. 775 [2018]

3M ALL WEATHER FLASHING TAPE 8067

Appraisal No. 775 (2018)

This Appraisal replaces BRANZ Appraisal No. 775 [2012]

Amended 03 September 2021

BRANZ Appraisals

Technical Assessments of products for building and construction.

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Product

1.1 3M All Weather Flashing Tape 8067 is a flexible flashing tape for use around framed joinery openings as a secondary weather resistant barrier.

1.2 The tape is installed into and around the framed joinery opening over the building underlay and exposed frame to cover both the face and edge of the opening framing. 3M All Weather Flashing Tape 8067 is also used at joinery heads to seal flashing upstands to the building underlay.

Scope

2.1 3M All Weather Flashing Tape 8067 has been appraised as a flexible flashing tape for use around window and door joinery openings for buildings within the following scope:

- the scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1; and,
- with a risk score of 0-20, calculated in accordance with NZBC Acceptable Solution E2/AS1, Table 2; and,
- with wall cladding systems complying with NZBC Acceptable Solution E2/AS1 or a valid BRANZ Appraisal that specifies a flexible flashing tape; and,
- with flexible building underlays compatible with the flashing tape; and,
- situated in NZS 3604 Wind Zones up to, and including, Extra High.

2.2 3M All Weather Flashing Tape 8067 has also been appraised as a flexible flashing tape for use around window and door joinery openings for steel-framed buildings within the following scope:

- the scope limitations of NZBC Acceptable Solution E2/AS1, with regards to building height and floor plan area; and,
- constructed with steel framing complying with the NZBC; and,
- with a risk score of 0-20, calculated in accordance with NZBC Acceptable Solution E2/AS1, Table 2; and,
- with wall cladding systems covered by a valid BRANZ Appraisal that specifies a flexible flashing tape; and,
- with flexible building underlays compatible with the flashing tape and steel frame; and,
- situated in NZS 3604 Wind Zones up to, and including, Extra High.

[Note: 3M All Weather Flashing Tape 8067 can be used with rigid air barrier systems that do not require a flexible wall underlay, but this aspect has not been addressed by this Appraisal and is outside its scope.]

Building Regulations

New Zealand Building Code (NZBC)

3.1 **In the opinion of BRANZ, 3M All Weather Flashing Tape 8067, 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. 3M All Weather Flashing Tape 8067 meets these requirements. See Paragraphs 8.1 and 8.2.

Clause E2 EXTERNAL MOISTURE: Performance E2.3.2. 3M All Weather Flashing Tape 8067 contributes to meeting this requirement. See Paragraphs 7.1-7.4 and 11.1–11.3.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. 3M All Weather Flashing Tape 8067 meets this requirement.

Technical Specification

4.1 3M All Weather Flashing Tape 8067 is a pressure-sensitive, self-adhering tape with a release backing paper for use as a flexible flashing tape around window and door penetration openings in accordance with NZBC Acceptable Solution E2/AS1. The tape is supplied in rolls 152 and 76 mm wide x 22.8 m long.

Handling and Storage

5.1 Handling and storage of all materials supplied by 3M New Zealand Limited, whether on-site or off-site, is under the control of the installer. 3M All Weather Flashing Tape 8067 must be protected from damage and weather. Rolls must be stored under cover, in clean, dry conditions away from direct exposure to sunlight.

Technical Literature

6.1 Refer to the Appraisals listing on the BRANZ website for details of the current Technical Literature for the 3M All Weather Flashing Tape 8067. 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 3M All Weather Flashing Tape 8067 meets the requirements of AC148:2001 which is an alternative solution to the version of AC148 referenced by NZBC Acceptable Solution E2/AS1, Paragraph 9.1.5 b). Two layers of 3M All Weather Flashing Tape 8067 must be installed on the horizontal sill surface. This installation method is an alternative solution to the installation method shown within NZBC Acceptable Solution E2/AS1, Figures 72 (a) and 72 (b).

7.2 The use of flexible flashing systems around window and door joinery openings is critical to assist the overall weathertightness performance of window and door joinery installations.

7.3 3M All Weather Flashing Tape 8067 is designed to prevent air leakage and water penetration around window and door openings at framing junctions (e.g. at the sill trimmer and opening stud junction), and to keep any water that gets past the cladding, or through the joinery, from direct contact with the framing timber.

7.4 3M All Weather Flashing Tape 8067 is not designed to overcome poor detailing and workmanship of the window or door joinery installation. The system must not be considered in isolation, but be considered as part of the wall cladding system. 3M All Weather Flashing Tape 8067 is designed to be used in conjunction with air seals and joinery flashing systems, not as a substitute.

7.5 When the 3M All Weather Flashing Tape 8067 is used in conjunction with LOSP [light organic solvent preservative] treated timber, the solvent from the timber treatment must be allowed to evaporate [generally at least one week] prior to the installation of the system.

7.6 3M All Weather Flashing Tape 8067 must not be exposed to the weather or ultraviolet [UV] light for longer than the permitted exposure of the selected flexible building wrap [typically 42 to 60 days] up to a maximum of 90 days.

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 the 3M All Weather Flashing Tape 8067 both during normal use and maintenance of the building.

Serviceable Life

8.2 Provided it is not exposed to the weather or UV 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, 3M All Weather Flashing Tape 8067 is expected to have a serviceable life equal to that of the cladding.

Maintenance

9.1 No maintenance is required for 3M All Weather Flashing Tape 8067. Regular checks, at least annually, must be made of the junctions between the joinery and wall cladding to ensure that they are maintained weathertight and that the primary means of weather resistance for the junction e.g. flashing, sealant, etc continues to perform its function, to ensure that water will not penetrate the cladding.

Prevention of Fire Occurring

10.1 Separation or protection must be provided to the 3M All Weather Flashing Tape 8067 from heat sources such as fireplaces, heating appliances and chimneys. Part 7 of NZBC Verification Method C/VM1 and Acceptable Solution C/AS1, and Acceptable Solution C/AS2 provide methods for separation and protection of combustible materials from heat sources.

External Moisture

11.1 Where a cladding manufacturer specifies the use of generic flashing tapes around window and door joinery openings at framing junctions as part of their system, or they specify the use of flexible flashing tapes that comply with NZBC Acceptable Solution E2/AS1, Paragraph 9.1.5 b), 3M All Weather Flashing Tape 8067 may be used.

11.2 Where a cladding manufacturer specifies the use of flexible flashing tapes to seal the upstands of head flashings to the building underlay in accordance with NZBC Acceptable Solution E2/AS1, Paragraph 9.1.10.3, 3M All Weather Flashing Tape 8067 may be used.

11.3 Where a cladding manufacturer specifies the use of flexible flashing tapes complying with NZBC Acceptable Solution E2/AS1, Paragraph 4.3.11, to seal around pipes and services penetrations [in accordance with NZBC Acceptable Solution E2/AS1, Paragraph 9.1.9.3], 3M All Weather Flashing Tape 8067 may be used.

Installation Information

Installation Skill Level Requirements

12.1 All design and building work must be carried out in accordance with the 3M All Weather Flashing Tape 8067 Technical Literature and this Appraisal by competent and experienced tradespersons conversant with the 3M All Weather Flashing Tape 8067. 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.

General

13.1 The selected flexible building underlay must be installed in accordance with the manufacturer's instructions, and must completely cover the joinery opening. The underlay is then cut on a 45° angle away from each corner of the opening so the flaps can be folded into the opening and secured to the interior face of the timber framing.

13.2 Before the 3M All Weather Flashing Tape 8067 is applied, the substrate surfaces must be clean, dry and free from any surface contaminants such as frost, dust and grease that may cause loss of adhesion.

Internal Corner Gusset

13.3 Cut a 150 mm long x 76 mm wide strip of 3M All Weather Flashing Tape 8067 for each of the bottom and top internal corners of the opening. Fold in half lengthways and after removing the backing strip, install tight into the corner starting flush with the back of the opening. Apply pressure to the tape to ensure adequate adhesion is achieved. The overhanging section of tape at the front of the opening must then be pulled over and adhered to the outside face of the building underlay sealing the corner junction.

Sill Tape

13.4 A length of 152 mm wide 3M All Weather Flashing Tape 8067 must then be cut to the length of the sill. The tape is aligned flush with the interior face of the opening and is applied along the entire length of the sill. The overhanging tape is then folded onto the face of the building underlay. Ensure that adequate adhesion of the tape is achieved and that the tape is installed tight into the sill/jamb junction. A second layer of 76 mm wide 3M All Weather Flashing Tape 8067 must then be installed along the entire length of the sill. The tape is installed flush with the exterior face of the opening. This is a mandatory requirement for horizontal surfaces to ensure nail penetrations self seal. *[Note: 3M All Weather Flashing Tape 8067 does not need to be applied to the sills of window and door openings that finish on a concrete slab. Refer to the Technical Literature for guidance.]*

Jamb / Sill

13.5 Measure vertically up the jamb from the internal corner of the sill allowing minimum 50 mm cover onto the building underlay (minimum 100 mm overall). Cut a 152 mm wide piece of 3M All Weather Flashing Tape 8067 to this measurement for each jamb. Remove the backing strip and install starting tight into the sill/jamb junction. Align flush with the interior face of the opening and fold the overhanging tape onto the face of the building underlay.

Jamb / Head

13.6 Measure vertically down the jamb from the jamb/head junction allowing minimum 50 mm cover onto the building underlay (minimum 100 mm overall). Cut a 152 mm wide piece of 3M All Weather Flashing Tape 8067 to this measurement for each jamb and the same for the lintel on each side of the opening. Remove the backing strip and install starting tight into the jamb/head junction. Align flush with the interior face of the opening and fold the overhanging tape onto the face of the building underlay. *[Note: Where flexible building underlay is not used, such as with some proprietary Rigid Air Barrier systems, all exposed timber around the opening must be protected with 3M All Weather Flashing Tape 8067.]*

13.7 After installation of the window or door joinery head flashing, a continuous length of 75 mm wide 3M All Weather Flashing Tape 8067 can be used to seal the head flashing upstand to the building underlay.

13.8 3M All Weather Flashing Tape 8067 must not be stretched. To avoid wastage, the tape can be lapped 100 mm minimum onto itself without reducing the performance of the 3M All Weather Flashing Tape 8067.

13.9 If the 3M All Weather Flashing Tape 8067 is exposed to the weather or UV light for more than 90 days, then it must be replaced with new material.

Installation Temperature

13.10 The 3M All Weather Flashing Tape 8067 must not be installed where the ambient air and substrate temperatures are less than -5°C. *(Note: 3M New Zealand Ltd approve the installation of 3M All Weather Flashing Tape 8067 within the temperature range of -18°C to +49°C. This has not been addressed by this Appraisal and is outside its scope.)*

Inspections

13.11 The Technical Literature must be referred to during the inspection of 3M All Weather Flashing Tape 8067 installations.

Basis of Appraisal

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

Tests

14.1 Testing of 3M All Weather Flashing Tape 8067 has been completed by BRANZ to the requirements of ICC Evaluation Service Acceptance Criteria for Flashing Materials AC148:2001. The adhesion of 3M All Weather Flashing Tape 8067 to black bituminous Kraft building paper complying with the requirements of NZBC Acceptable Solution E2/AS1, Table 23 and selected other synthetic building underlays has been tested and found to be satisfactory.

Other Investigations

15.1 An assessment was made of the durability of the 3M All Weather Flashing Tape 8067 by BRANZ technical experts.

15.2 The practicability of installation was reviewed by BRANZ and found to be satisfactory.

15.3 The Technical Literature has been reviewed by BRANZ and found to be satisfactory.

Quality

16.1 The manufacture of the 3M All Weather Flashing Tape 8067 has not been examined by BRANZ, but details of the quality and composition of the materials used were obtained and found to be satisfactory.

16.2 The quality of supply to the market is the responsibility of 3M New Zealand Ltd.

16.3 Designers are responsible for the building design, and building contractors are responsible for the quality of installation of framing systems and building underlays in accordance with the instructions of the designer.

16.4 The quality of installation, handling and storage on-site is the responsibility of the installer, in accordance with the instructions of 3M New Zealand Ltd.

Sources of Information

- ICC Evaluation Service, Inc, AC148 Acceptable Criteria for Flashing Materials, July 2001.
- 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 03 September 2021.

This Appraisal has been amended to reflect building code updates relating to fire.

BRANZ

In the opinion of BRANZ, 3M All Weather Flashing Tape 8067 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 3M New Zealand 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. 3M New Zealand 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 3M New Zealand 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 3M New Zealand Ltd or any third party.

For BRANZ

Chelydra Percy
Chief Executive

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20 December 2018