

# SIGA WIGLUV® FLEXIBLE FLASHING TAPE



#### Appraisal No. 1156 (2021)

Amended 09 December 2021

#### **BRANZ Appraisals**

Technical Assessments of products for building and construction.

# 5Merchants.

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# **Product**

- 1.1 SIGA Wigluv® Flexible Fleashing Tape is a diffusible, elastic and strongly adhesive tape for use around window and door joinery openings as a secondary weather resistant barrier.
- 1.2 SIGA Wigluv® Flexible Flashing Tape can also be used as a jointing tape for rigid wall underlays (fibre cement sheet and H3.2 treated plywood) before they are over-fixed with a flexible wall underlay. SIGA Wigluv® Flexible Flashing Tape can also be used to seal flashing upstands to the wall underlay and as a lap sealing tape for flexible wall and roof underlays.

# Scope

- 2.1 SIGA Wigluv® Flexible Flashing Tape has been appraised as a flexible flashing tape system 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 for timber-framed buildings; or,
  - the scope limitations of NASH Building Envelope Solutions, Paragraph 1.1 for steel-framed buildings; and,
  - with a risk score of 0-20, calculated in accordance with NZBC Acceptable Solution E2/AS1 or NASH Building Envelope Solutions, Table 2; and,
  - with wall cladding systems complying with NZBC Acceptable Solution E2/AS1 or NASH Building Envelope Solutions, or a valid BRANZ Appraisal that specifies a flexible flashing tape system; and,
  - with flexible wall underlays compatible with the flashing tape and complying with the NZBC; and,
  - situated in NZS 3604 and NASH Standard Part 2 Wind Zones up to, and including, Extra High.

(Note: SIGA Cover AG offer SIGA Wigluv® Flexible Flashing Tape as a jointing and flashing tape for use with rigid air barrier systems that do not require a flexible wall underlay, but this aspect is outside the scope of this Appraisal. Contact the rigid air barrier system proprietor for system details including recommended jointing and flashing tapes.)



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# **Building Regulations**

## New Zealand Building Code (NZBC)

3.1 In the opinion of BRANZ, SIGA Wigluv® Flexible Flashing Tape, 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. SIGA Wigluv® Flexible Flashing Tape meets these requirements. See Paragraphs 8.1 and 8.2.

**Clause E2 EXTERNAL MOISTURE:** Performance E2.3.2. SIGA Wigluv® Flexible Flashing Tape contributes to meeting this requirement. See Paragraphs 7.1-7.6 and 11.1-11.3.

**Clause F2 HAZARDOUS BUILDING MATERIALS:** Performance F2.3.1. SIGA Wigluv® Flexible Flashing Tape meets this requirement.

# **Technical Specification**

- 4.1 System components and accessories supplied by SIGA Cover AG are:
  - SIGA Wigluv® Flexible Flashing Tape a diffusible, elastic and strongly adhesive tape that is
     0.35 mm thick, for use around framed joinery openings, available in rolls in a variety of widths
     and lengths as listed below:
    - Wigluv 60 rolls 40 m long by 60 mm wide.
    - Wigluv 100 rolls 25 m long by 100 mm wide.
    - Wlgluv 150 rolls 25 m long by 150 mm wide.
    - Wigluv 200 rolls 25 m long by 200 mm wide.
    - Wigluv 20/40 rolls 25 m long by 60 mm wide (slit 20/40 with paper liner).
  - SIGA Dockskin 100 a water-based, solvent-free acrylate-copolymer dispersion for enhancing adhesion. This deep-penetrating primer is especially suitable as a grounding for wood-fibre boards, plaster and masonry to strengthen sandy and fibrous substrates.

# Handling and Storage

5.1 Handling and storage of all materials supplied by SIGA Cover AG, whether on-site or off-site, is under the control of the installer. SIGA Wigluv® Flexible Flashing Tape and accessories 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

Refer to the Appraisals listing on the BRANZ website for details of current Technical Literature for SIGA Wigluv® Flexible Flashing Tape. 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 SIGA Wigluv® Flexible Flashing Tape meets the requirements of AC148:2001 which is an Alternative Solution to the version of AC148 referenced by NZBC Acceptable Solution E2/AS1 and NASH Building Envelope Solutions, Paragraph 9.1.5. Two layers of SIGA Wigluv® Flexible Flashing Tape must be installed on the horizontal sill surface [a single layer is used in all other locations]. The installation method for SIGA Wigluv® Flexible Flashing Tape is an Alternative Solution to the installation method shown within the NZBC Acceptable Solution E2/AS1, Figures 72A and 72B and NASH Building Envelope Solutions Figures 67A and 67B.



- 7.2 SIGA Wigluv® Flexible Flashing Tape must not be exposed to the weather or ultraviolet (UV) light for longer than the exposure period stated for relevant wall underlay. A maximum of 180 days exposure applies to the SIGA Wigluv® Flexible Flashing Tape.
- 7.3 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.
- 7.4 SIGA Wigluv® Flexible Flashing Tape is suitable for use over flexible wall underlays compatible with the flashing tape in NZS 3604 Wind Zones up to, and including, Extra High. In the Extra High Wind Zone, the flexible underlay must be installed over a rigid wall underlay complying with NZBC Acceptable Solution E2/AS1 or NASH Building Envelope Solutions, Table 23.
- 7.5 SIGA Wigluv® Flexible Flashing Tape 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 water that gets past the cladding, or through the joinery, from direct contact with the framing.
- 7.6 SIGA Wigluv® Flexible Flashing Tape 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. SIGA Wigluv® Flexible Flashing Tape is designed to be used in conjunction with air seals and joinery flashing systems, not as a substitute.
- 7.7 When SIGA Wigluv® Flexible Flashing Tape is used in conjunction with LOSP (light organic solvent preservative) treated timber, the solvent from the timber treatment must be allowed to evaporate [qenerally at least one week] prior to the installation of the system.
- 7.8 SIGA Wigluv® Flexible Flashing Tape is compatible with a range of sealants used to provide an air seal between the flashing tape and joinery reveal, without the need for a separation tape. [Note: These sealants have not been assessed by BRANZ and are outside the scope of this Appraisal. Contact SIGA Cover AG for further information.]

## 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 SIGA Wigluv® Flexible Flashing Tape both during normal use and maintenance of the building.

#### Serviceable Life

8.2 Provided the selected wall underlay is not exposed to the weather or UV light for longer than stated in the relevant Appraisal, (a maximum of 180 days applies to the SIGA Wigluv® Flexible Flashing Tape), and provided the exterior cladding is maintained in accordance with the cladding manufacturer's instructions and the cladding remains weather resistant, SIGA Wigluv® Flexible Flashing Tape is expected to have a serviceable life equal to that of the cladding.

#### Maintenance

9.1 No maintenance is required for SIGA Wigluv® Flexible Flashing Tape. 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 SIGA Wigluv® Flexible Flashing Tape from heat sources such as fireplaces, heating appliances and chimneys. Part 7 of NZBC Acceptable Solution C/AS1 and C/AS2, and NZBC Verification Method C/VM1 provide methods for separation and protection of combustible materials from heat sources.



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#### **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 or NASH Building Envelope Solutions, Paragraph 9.1.5, SIGA Wigluv® Flexible Flashing Tape may be used.
- 11.2 SIGA Wigluv® Flexible Flashing Tape can also be used to seal joinery head flashing upstands to wall underlay in accordance with NZBC Acceptable Solution E2/AS1, Paragraph 9.1.10.3 or NASH Building Envelope Solutions, Paragraph 9.1.11.3.
- 11.3 Pipes and service penetrations may be made weathertight using SIGA Wigluv® Flexible Flashing Tape in accordance with NZBC Acceptable Solution E2/AS1, Paragraph 9.1.9.3 or NASH Building Envelope Solutions, Paragraph 9.1.10.3.

## Installation Information

## Installation Skill Level Requirements

12.1 All design and building work must be carried out in accordance with the SIGA Wigluv® Flexible Flashing Tape Technical Literature and this Appraisal by competent and experienced tradespersons conversant with SIGA Wigluv® Flexible Flashing Tape. 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 Before SIGA Wigluv® Flexible Flashing Tape is applied, the substrate surfaces must be clean, dry and free from any surface contaminants such as dust and grease that may cause loss of adhesion.
- 13.2 SIGA Wigluv® Flexible Flashing Tape must not be stretched. To avoid wastage, the tape can be lapped 30 mm minimum onto itself without reducing the performance of the SIGA Wigluv® Flexible Flashing Tape system.
- 13.3 If SIGA Wigluv® Flexible Flashing Tape is exposed to the weather or UV light for more than 180 days (on rigid wall underlay) or 90 days (on flexible underlay), then it must be replaced with new material.
- 13.4 Where SIGA Wigluv® Flexible Flashing Tape is used on concrete, wood-fibre boards, plaster and masonry, the primer SIGA Dockskin 100 is recommended to strengthen such sandy and fibrous substrates.

#### Openings/Penetrations of Wall Underlay

- 13.5 The selected wall 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.
- 13.6 A length of 150 or 200 mm wide SIGA Wigluv® Flexible Flashing Tape must be cut to the length of the sill plus a minimum of 200 mm. The tape is installed flush with the interior face of the opening and is applied along the entire length of the sill and 100 mm minimum up each jamb. The overhanging tape is cut at the corner of the opening to allow the tape to be folded onto the face of the building underlay.
- 13.7 A second layer of 150 or 200 mm wide SIGA Wigluv® Flexible Flashing Tape 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 penetration self-seal.
- 13.8 A minimum 200 mm length of SIGA Wigluv® Flexible Flashing Tape must be installed 100 mm minimum down the jamb and 100 mm minimum along the lintel at each of the top corners of the window or door joinery opening.
- 13.9 A piece 'butterfly' of SIGA Wigluv® Flexible Flashing Tape must be installed 45° at all corners of sill/jamb/lintel junction and folded into the opening to create a seal at the corner junction.



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#### **Rigid Wall Underlay Joints**

- 13.10 All vertical and horizontal sheet joints and corners of the rigid wall underlay may be sealed with SIGA Wigluv® Flexible Flashing Tape in accordance with the designer's requirements.
- 13.11 The rigid wall underlay must be over-fixed with a flexible wall underlay in accordance with NZBC Acceptable Solution E2/AS1, Paragraph 9.1.7.2 c). (Note: SIGA Cover AG offers SIGA Wigluv® Flexible Flashing Tape as a jointing and flashing tape for use with rigid air barrier systems that do not require a flexible wall underlay, but this aspect is outside the scope of this Appraisal. Contact the rigid air barrier system proprietor for system details including recommended jointing and flashing tapes.)

#### **Roof and Wall Underlay Lap Sealing**

13.12 Where SIGA Wigluv® Flexible Flashing Tape is used to seal the laps of flexible roof and wall underlays, the laps must still meet the minimum cover requirements of NZBC Acceptable Solution E2/AS1, Paragraphs 8.1.5 and 9.1.7.1, i.e. 150 mm minimum for roof underlay laps, 75 mm minimum for horizontal wall underlay laps and 150 mm minimum for vertical wall underlay laps.

#### **Head Flashing Upstands**

13.13 Where SIGA Wigluv® Flexible Flashing Tape is used to seal the upstands of head flashings to the building underlay, installation must be in accordance with NZBC Acceptable Solution E2/AS1, Paragraph 9.1.10.3.

#### **Installation Temperature**

13.14 SIGA Wigluv® Flexible Flashing Tape must not be installed at temperatures of less than -10 °C.

#### Inspections

14.1 The Technical Literature must be referred to during the inspection of SIGA Wigluv® Flexible Flashing Tape Installations.

# **Basis of Appraisal**

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

#### **Tests**

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

## Other Investigations

- 16.1 An assessment was made of the durability of SIGA Wigluv® Flexible Flashing Tape by BRANZ technical experts.
- 16.2 Site inspections were carried out by BRANZ to examine the practicability of installation.
- 16.3 The Technical Literature has been reviewed by BRANZ and found to be satisfactory.

## Quality

- 17.1 The manufacture of SIGA Wigluv® Flexible Flashing Tape has not been examined by BRANZ, but details of the quality and composition of the materials used were obtained and found to be satisfactory. BRANZ undertakes an ongoing review of product quality on an inwards goods basis.
- 17.2 The quality of supply to the market is the responsibility of SIGA Cover AG.
- 17.3 Designers are responsible for the building design, and building contractors are responsible for the quality of installation of framing systems and wall underlays in accordance with the instructions of the designer.
- 17.4 The quality of installation, handling and storage on site is the responsibility of the installer in accordance with the instructions of SIGA Cover AG.



# Sources of Information

- ICC Evaluation Service, Inc, AC148 Acceptable Criteria for Flexible Flashing Materials, July 2001.
- NASH Building Envelope Solutions:2019 Light steel-framed buildings.
- NASH Standard Part Two:2019 Light steel-framed buildings.
- 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 09 December 2021

This Appraisal has been amended to include the marketers details.





In the opinion of BRANZ, SIGA Wigluv® Flexible Flashing Tape 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 SIGA Cover AG, 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. SIGA Cover AG:
  - 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 SIGA Cover AG.
- 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, quarantee, indemnity or warranty, to SIGA Cover AG or any third party.

For BRANZ

Chelydra Percy Chief Executive Date of Issue:

19 March 2021