CertMark Australia

CMI Evaluation Report

Evaluation No.CMI-ER30098 [2016]

Technical Assessment and performance solution of products for compliance under the New Zealand Building Code

CERTMARK INTERNATIONAL EVALUATION REPORT

CMI-ER30098

40 Below Window Tape

Masons Plastabrick Ltd
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1 PRODUCT INFORMATION

1.1 This Evaluation Report relates to the 40 Below Window Tape.

40 Below Window Tape is a self-adhesive flashing tape to seal around windows, doors, and other joinery openings as a secondary defence against water penetration. 40 Below™ is also tested and approved as a suitable tape for Rigid Air Barriers.

Roll Sizes
H 75mm x L 20m
H 150mm x L 10m
H 100mm x L 20m
H 200mm x L 20m
H 150mm x L 20m

2 ASSESSED COMPLIANCE

New Zealand Building Code:

- B2.3.1 (b).
- B2.3.2.
- E2.3.2.
- F2.3.1.

2.1 CertMark International Pty Ltd (CMI) has awarded this Certification to the company named above for the Product/system described herein. The Product/ System have been assessed by CMI as Being fit for purpose providing they are installed, used and maintained as set out in this Evaluation Report.

2.2 This document has been produced by the Administration Department of CertMark International (CMI).

2.3 For technical information on the matters discussed in the document, contact us on 1800 CertMark (237 862), International Call +612 6100 4300 or e-mail Info@CertMark.org.

3 CONFIDENTIAL INFORMATION

3.1 This document is made available to the authorised recipients on the express understanding that the information contained in it be regarded and treated by the authorised recipients as strictly confidential.
3.2 The contents of this document is intended only for the sole use of the authorised recipients and should not be disclosed or furnished to any other persons unless warranted in the course of appropriate building design and approval.

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4 EXECUTIVE SUMMARY

4.1 CertMark International has been engaged by Masons Plastabrick Ltd to evaluate their 40 below window tape for compliance against the NZBC. CMI is to conduct an evaluation review on a case by case basis and ensure that any clause(s) of the NZBC that relate to the Product are identified.

4.2 The evaluation report is to summarise all aspects associated with the evaluation as identified in the evaluation plan and any nonconformities, recommendations and opportunities for improvement that the CMI has identified as part of the evaluation.

4.3 In accordance with ISO/IEC 17065:2013 clause 7.4 an evaluation of the product is to be undertaken with the following key points.

4.4 The certification body is to have a plan for the evaluation activities to allow for the necessary arrangements to be managed.

- The certification body shall assign personnel to perform each evaluation task that it undertakes with its internal resources.
- All necessary information and/or documentation is to be made available for the evaluation.
- The product is to be evaluated against the requirements covered by the scope of certification.
- Any non-conformities are to be identified and provided to the client for resolve. Information regarding resolve of the non-conformities will be provided on a case by case basis. The evaluation is not to continue until the non-conformities are resolved.
- The results of the evaluation activities shall be documented prior to review.

4.5 This report documents the evaluation of the product in accordance with Clause 7.4 of ISO/IEC 17065:2013.

5 REGULATIONS

5.1 In the opinion of CMI 40 Below Window Tape if installed, used and maintained in accordance with this Certificate, will meet with or contribute to meeting the relevant requirements of the following New Zealand Building Regulations.

B1 Structure

N/A

B2 Durability

B2.3.1

(a) Building elements must, with only normal maintenance, continue to satisfy the performance requirements of this code for the lesser of the specified intended life of the building, if stated, or:
(b) 50 years if:
Those building elements (including the building envelope, exposed plumbing in the subfloor space, and inbuilt chimneys and flues) are moderately difficult to access or replace, or
Failure of those building elements to comply with the building code would go undetected during normal use of the building, but would be easily detected during normal maintenance.

B2.3.2

Individual building elements which are components of a building system and are difficult
to access or replace must either:

(a) All have the same durability, or
(b) Be installed in a manner that permits the replacement of building elements of lesser durability without removing building elements that have greater durability and are not specifically designed for removal and replacement

5.2 Assessment Method/Means of Compliance

Evidence to support that the use of a material, form of construction or design meets a performance clause.

5.3 Required Evidence / Acceptance Criteria

5.3.1 The subject material has been tested by QAI Labs an accredited lab to AAMA 711-07 Voluntary Specification for self-adhesive flashing. This standard is referenced by BRANZ as an appropriate test standard for window tape in New Zealand.

5.3.2 Provided the tape is not exposed to weather or Ultraviolet light for a total of more than 180 days and provided the cladding is maintained in accordance with the cladding manufacturer's instructions and the cladding remains weather resistant the Masons 40 Below Window Tape is expected to have a service life equal to the cladding.

5.4 C1 to 6 Protection from Fire

40 Below Window Tape is to be applied only in areas as described in the Masons 40 Below Window Tape installation instruction and on the packaging. It should not be used in areas where it has the potential to be exposed to heat such as chimney flues.

5.5 D Access

Not Applicable

5.6 E Moisture

E2.3.2

Roofs and exterior walls must prevent the penetration of water that could cause undue dampness, damage to building elements, or both.

5.7 Assessment Method/Means of Compliance

Evidence to support that the use of a material, form of construction or design meets a performance clause.

5.8 Required Evidence / Acceptance Criteria

Where the cladding manufacturer specifies the use of generic flashing tapes around windows and joinery openings at frame junctions as part of their system, or they specify the use of flexible flashing tapes that comply with NZBC E2/AS1, paragraph 9.1.5 (b) the Masons 40 Below Flashing System may be used.

5.9 F Moisture

F2.3.1

The quantities of gas, liquid, radiation or solid particles emitted by materials used in the construction of buildings, shall not give rise to harmful concentrations at the surface of the materials where the material is exposed, to hazardous building materials.

5.9.1 Assessment Method/Means of Compliance

Evidence to support that the use of a material, form of construction or design meets a performance clause.

5.9.2 Required Evidence / Acceptance Criteria

Masons 40 Below Window Tape meets the requirements of this clause of the NZBC.

5.10 G Services and Facilities

NZBC G12 and G13 are excluded from the scope of this assessment.

5.11 H Energy Efficiency

N/A

6 CONDITIONS AND LIMITATIONS

a. The certificate holder must maintain compliance with the conditions set out in Section 15 of the Building (Product Certification) Regulations 2008.
b. This product can be applied in temperature ranges of between -40c to +65c.
c. Ensure all surfaces to which 40 Below Window Tape is applied are clean, dry and free of dust.
d. 40 Below Window Tape is to be applied only in areas as described in the Masons 40 Below Window Tape Installation Instruction April 2014 and on the packaging. It should not be used in areas where it has the potential to be exposed to heat such as chimney flues.
e. When applying 40 Below Window Tape to LOSP treated timber, ensure the solvent has been allowed to flash off prior to installing the product. It is suggested that a minimum of one (1) week is allowed for.
f. 40 Below Window Tape when used, installed and maintained in accordance with the requirements outlined in 40 Below Window Tape technical brochure April 2014, contributes to the requirements of Acceptable Solution E2/AS1, Clause 9.1.5 (b) (i).

7 TECHNICAL SPECIFICATION

Raw Material Base	Butyl Rubber
Application Temperature	-40°c to +65°c
Service Temperature	4.5°c – 150°c
Mould Growth	No Growth
Nail Sealability	(AAMA 711-07) Pass
90o Peel Plywood	(AAMA 711-07) 7.2 psi
90o Peel OSB	(AAMA 711-07) 5.5 psi
90o Peel Facer	AAMA 711-07) 6.5 psi
Solids by Weight	100%
UV Exposure	Resistant up to 6 months
Life Expectancy	Provided the tape is not exposed to weather or Ultraviolet light for a total of more than 180 days and provided the cladding is maintained in accordance with the cladding manufacturer's instructions and the cladding remains weather resistant the Masons 40 Below Window Tape is expected to have a service life equal to the cladding.
Shelf Life	18 Months
Physical State	Solid
Adhesive Thickness	0.2 mm

8 INSTALLATION

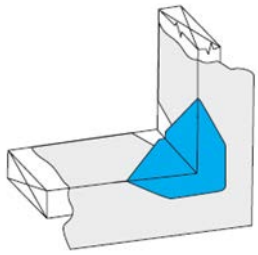
8.1 Windows/Doors/Timber & Steel Frame Flashing
The building wrap is installed to the exterior face of the framing. At window and door openings it is cut on a 45° angle away from each corner, then the flaps are folded into the opening and secured.

8.2 To ensure maximum adhesion, make sure the substrate surface is clean, dry and free from any dust or other contaminants.

8.3 40 Below must not be stretched. When joining 2 sections of tape, overlap by 100mm or more.

NOTE: 150mm wide tape is used for 100mm wide window or door framing. 200mm wide tape is used for 140mm—150mm wide revels.

8.4 Corner Guard Option 1
Place the Masons™ Corner Guard over the building wrap and into the BOTTOM corners of the window or door sill, staple to the jamb. With steel frames use double sided tape to attach the Corner Guard to the metal.

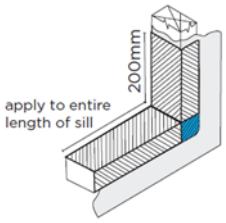


8.5 Corner Guard Option 2
Cut a 150mm square of 40 Below tape into two equal triangular pieces. Install these at the bottom corners of the frame opening. The triangle needs to reach 40mm in from the extreme end of the window sill. With the remainder overlapping the building paper.

8.6 Sill Guard
Install sill tape flush with the interior face of the opening. Apply along the entire length of the sill and continue up each jamb to a minimum of 200mm

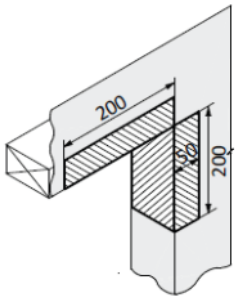
8.6.1Press tape firmly into the corner over the corner guard first, then fold around into the frame face.

8.6.2 Fold remaining 40 Below against the inside and outside of the frame/ building. Smooth out all creases and press firmly for good adhesion

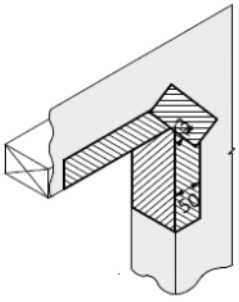


8.7 Window Head Installation
8.7.1 Install Lintel pieces on top corners of opening, 200mm along the lintel and 200mm down the jamb.

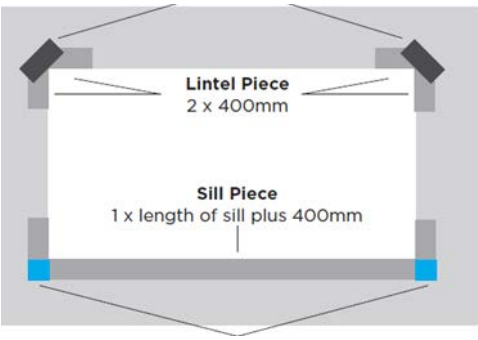
8.7.2 Slit at each corner & fold onto the outer face of building wrap (at least 50mm).



8.7.3 To create a seal at corner junction, Install butterflies at 45° across the corner of head/jamb.



8.7.4 Apply Masons Flashing Tape to the top of window head flashing, up-stand and building wrap.
Refer to window & cladding details for specific application



9 TECHNICAL INVESTIGATIONS

9.1 The following is a summary of the assessment and technical investigations carried out on Masons 40 Below Window Tape.

9.2 ICC-ES Acceptance Criteria AC148

Nature of document - ICC-ES acceptance criteria used in NZ by BRANZ for evaluation of flexible flashing materials.
References AAMA 711-07 which is the testing undertaken by the manufacturer key element of the document- Demonstrates the relevance of the manufacturers test data.

9.3 QAI Labs Certification of Testing and Inspection

Testing report to AAMA 711-07 Voluntary Specification for self-adhesive flashing used for Installations of exterior wall Fenestration products.
The validity of document- NRTL accredited test facility
Key elements of Document-

- Tensile Strength
- Water Penetration Around Nails
- Peel Adhesion
- Accelerated Aging
- Elevated Temperature
- Thermal Cycling
- Adhesion of Self-Adhering Flashing After Water Immersion
- Pliability
- Resistance to Peeling from Itself

9.4 Manufacturers Technical Document

- Manufacturers technical report
- Validity of document- Reference relevant ASTM standards
- Key element of Document- Physical profile of the subject material
- MSDS
- Validity of Document- current
- Key element of Document- supports F2.3.1 claim

9.5 40 Below Flashing Label

Nature of Document- General information for the installation of the product validity of document- Current

Key element of Document- Installation of the product

10 CONCLUSION

10.1 The evaluation indicates the 40 Below Window Tape complies with the requirement of the NZBC. This evaluation is valid for the use of 40 Below Window Tape in accordance with the reference documentation only. Any change in the information referenced including product design as detailed in this report to suit future re-organisation or planning including the superseding of the reference documents will require further assessment to confirm compliance with the appropriate references.

10.2 This evaluation is prepared in good faith and with due care for information purposes only from the reference documents, and should not be relied upon as providing any warranty or guarantee on the products installation. In particular, attention is drawn to the nature of the inspection and investigations undertaken and the limitations these impose in determining with accuracy the state of the product, its services, equipment, installation control and associated quality assurance during the construction of a building.

10.3 From the above evaluation of the product, sufficient information has been provided to certify the product.

11 CONDITIONS OF CERTIFICATION

This Certificate:

- Relates only to the system that is named and described on the front page.
- Is issued only to the company, firm, organisation or person named on the front page — no other company, firm, organisation or person may hold or claim that this Certificate has been issued to them.
- Is valid only within New Zealand.
- Has to be read, considered and used as a whole document — it may be misleading and will be incomplete to be Selective;
- Is copyright of CMI.
- Is subject to New Zealand Law.
- Publications, documents, specifications, legislation, regulations, standards and the like referenced in this Certificate are those that were current and/or deemed relevant by CMI at the date of issue or reissue of this Certificate.
- This Certificate will remain valid for an unlimited period provided that the system and its manufacture and/or fabrication, including all related and relevant parts and processes thereof:
- Are maintained at or above the levels which have been assessed and found to be satisfactory by CMI.
- Continue to be checked as and when deemed appropriate by the CMI under arrangements that it will determine.
- Are reviewed by CMI as and when it considers appropriate.
- CMI has used due skill, care and diligence in preparing this Certificate, but no warranty is provided.
- In issuing this Certificate, CMI is not responsible and is excluded from any liability to any company, firm, organisation or person, for any matters arising directly or indirectly from:
- the presence or absence of any patent, intellectual property or similar rights subsisting in the system or any other System;
- the right of the Certificate holder to manufacture, supply, install, maintain or market the system;
- actual installations of the system, including their nature, design, methods, performance, workmanship and maintenance;
- any works and constructions in which the system is installed, including their nature, design, methods, performance, workmanship and maintenance;
- any loss or damage, including personal injury, howsoever caused by the system, including its manufacture, supply, installation, use, maintenance and removal;
- Any information relating to the manufacture, supply, installation, use, maintenance and removal of this system which is contained or referred to in this Certificate is the minimum required to be met when the system is manufactured, supplied, installed, used, maintained and removed. It does not purport in any way to restate the requirements of the Health and Safety at Worksafe New Zealand or of any other statutory, common law or other duty which may exist at the date of issue or reissue of this Certificate; nor is conformity with such information to be taken as satisfying the requirements of Worksafe New Zealand or of any statutory, common law or other duty of care.

12 DISCLAIMER OF LIABILITY
The information contained in this document is provided for the sole use of the recipient and no reliance should be placed on the information by any other person, CertMark International Pty Ltd accepts no liability for any loss or damage incurred by actions undertaken by others
It is assumed that the following compliance measures, limitations and assumptions of this report are read, understood and implemented. CMI should be contacted if there are queries in regards to the content. CMI takes no responsibility for the misinterpretation by others.

In the opinion of CertMark International, that the 40 Below Window Tape is fit for purpose to the extent specified in this Evaluation Report provided it is used, designed, installed and maintained as set out in this Evaluation Report.
The Evaluation Report is issued only to Masons Plastabrick Ltd and is valid until expiry, subject to the Conditions of Evaluation Report.

Conditions of Evaluation Report

1. This Evaluation Report:
   (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;
2. CertMark International 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 Masons Plastabrick Ltd.
3. Any reference in this Evaluation Report to any other publication shall be read as a reference to the version of the publication specified in this Evaluation Report.
4. CertMark International provides no certification, guarantee, indemnity or warranty, to Masons Plastabrick Ltd or any third party.

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