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**Agrément Certificate**  
**17/5473**  
Product Sheet 1

## LYNVALE SEALING TAPES

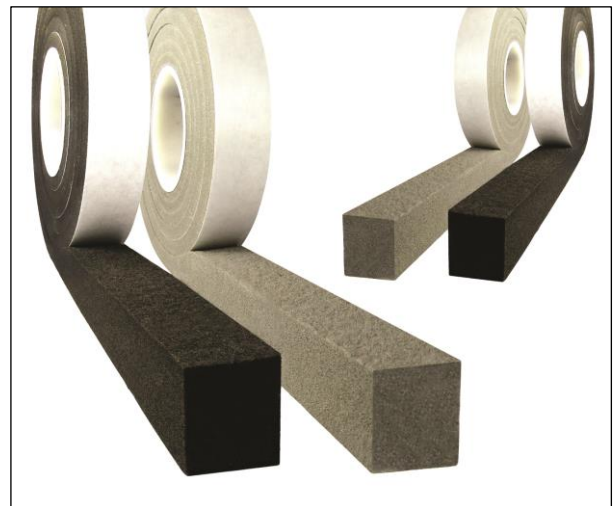
### EXP 6 EXPANDING FOAM TAPES

This Agrément Certificate Product Sheet<sup>(1)</sup> relates to EXP 6 Expanding Foam Tapes, a range of polyurethane foam sealing tapes for use as weathertight seals in structural and expansion joints. The products are suitable for use in new or existing structures of concrete, masonry, metal, PVC-U, acrylic or timber.

(1) Hereinafter referred to as 'Certificate'.

#### CERTIFICATION INCLUDES:

- factors relating to compliance with Building Regulations where applicable
- factors relating to additional non-regulatory information where applicable
- independently verified technical specification
- assessment criteria and technical investigations
- design considerations
- installation guidance
- regular surveillance of production
- formal three-yearly review.



#### KEY FACTORS ASSESSED

**Weathertightness** — the products will resist the passage of wind-driven rain, snow, run-off water and dust into the interior of the building (see section 6).

**Durability** — the products have an anticipated service life of at least 20 years (see section 8).




The BBA has awarded this Certificate to the company named above for the products described herein. These products have been assessed by the BBA as being fit for their intended use provided they are installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of Second issue: 25 September 2020

Originally certificated on 14 December 2017

  
Hardy Giesler  
Chief Executive Officer

The BBA is a UKAS accredited certification body – Number 113.

The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at [www.bbacerts.co.uk](http://www.bbacerts.co.uk)

Readers MUST check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA directly.

Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.

#### British Board of Agrément

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## Regulations

In the opinion of the BBA, EXP 6 Expanding Foam Tapes, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements of the following Building Regulations (the presence of a UK map indicates that the subject is related to the Building Regulations in the region or regions of the UK depicted):



### The Building Regulations 2010 (England and Wales) (as amended)

**Requirement:** C2(b) **Resistance to moisture**  
**Comment:** The products will contribute to a wall satisfying this Requirement. See section 6.1 of this Certificate.

**Regulation:** 7(1) **Materials and workmanship**  
**Comment:** The products are acceptable. See section 8 and the *Installation* part of this Certificate.



### The Building (Scotland) Regulations 2004 (as amended)

**Regulation:** 8(1)(2) **Durability, workmanship and fitness of materials**  
**Comment:** Use of the products satisfies the requirements of this Regulation. See sections 7 and 8 and the *Installation* part of this Certificate.

**Regulation:** 9 **Building standards applicable to construction**  
**Standard:** 3.10 **Precipitation**  
**Comment:** The products will contribute to satisfying this Standard, with reference to clause 3.10.1<sup>(1)(2)</sup>. See section 6.1 of this Certificate.

**Standard:** 7.1(a) **Statement of sustainability**  
**Comment:** The products can contribute to meeting the relevant requirements of Regulation 9, Standards 1 to 6 and therefore will contribute to a construction meeting a bronze level of sustainability as defined in this Standard.

**Regulation:** 12 **Building standards applicable to conversions**  
**Comment:** All comments given for the products under Regulation 9, Standards 1 to 6 also apply to this Regulation, with reference to clause 0.12.1<sup>(1)(2)</sup> and Schedule 6<sup>(1)(2)</sup>.

(1) Technical Handbook (Domestic).  
(2) Technical Handbook (Non-Domestic).



### The Building Regulations (Northern Ireland) 2012 (as amended)

**Regulation:** 23(a)(i) **Fitness of materials and workmanship**  
**Comment:** (iii)(b)(i) The products are acceptable. See section 8 and the *Installation* part of this Certificate.

**Regulation:** 28(b) **Resistance to moisture and weather**  
**Comment:** The products will contribute to a wall satisfying this Regulation. See section 6.1 of this Certificate.

## Construction (Design and Management) Regulations 2015

## Construction (Design and Management) Regulations (Northern Ireland) 2016

Information in this Certificate may assist the client, designer (including Principal Designer) and contractor (including Principal Contractor) to address their obligations under these Regulations.

See section: 3 *Delivery and site handling* (3.3) of this Certificate.

## Additional Information

### NHBC Standards 2020

In the opinion of the BBA, EXP 6 Expanding Foam Tapes, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Chapters 6.1 *External masonry walls*, 6.2 *External timber framed walls* and 6.9 *Curtain walling and cladding*.

## Technical Specification

### 1 Description

1.1 EXP 6 Expanding Foam Tapes are a range of sealing tapes manufactured from polyurethane foam impregnated with an acrylic-based polymer dispersion. One side of the strip has a self-adhesive film to aid installation. Whilst rolled, the adhesive is protected with a release paper.

1.2 The tapes are supplied compressed by approximately 80% and are available in a range of thicknesses (suitable for joint widths ranging from 1 to 42 mm), and in black and grey colours (see Table 1 for available sizes).

*Table 1 Tape dimensions*

Tape reference/Suitable for joint widths (mm)	Available widths (mm) (joint depth)
1-2	8, 10, 15, 20, 25, 30, 40, 50
1-4	10, 15, 20, 25, 30, 40, 50
2-6	10, 15, 20, 25, 30, 40, 50
4-9	10, 15, 20, 25, 30, 40, 50
5-12	12, 15, 20, 25, 30, 40, 50
6-15	15, 20, 25, 30, 40, 50
9-20	20, 25, 30, 40, 50
11-25	20, 25, 30, 40, 50
18-34	30, 35, 40, 50
24-42	30, 40, 50

1.3 The products' declared characteristics are given in Table 2.

*Table 2 Product characteristics*

Characteristic (unit)	Value	Classification (EN)
Driving rain resistance (Pa)	tight up to 600	Class 9a (EN 12208)
Air permeability of joints ( $\text{m}^3 \cdot \text{h}^{-1} \cdot \text{m}^{-1}$ )	$\leq 1$	at least Class 2 (EN 12207)
Resistance to water vapour diffusion – $\mu$	$\leq 100$	

### 2 Manufacture

2.1 The products are manufactured by passing the polyurethane foam through an impregnation bath, applying a self-adhesive film to one side and cutting to size.

2.2 As part of the assessment and ongoing surveillance of product quality, the BBA has:

- agreed with the manufacturer the quality control procedures and product testing to be undertaken
- assessed and agreed the quality control operated over batches of incoming materials
- monitored the production process and verified that it is in accordance with the documented process

- evaluated the process for management of nonconformities
- checked that equipment has been properly tested and calibrated
- undertaken to carry out the above measures on a regular basis through a surveillance process, to verify that the specifications and quality control operated by the manufacturer are being maintained.

2.3 The management systems of the manufacturer have been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2015 by Dakks (Certificate A 170304).

### 3 Delivery and site handling

3.1 The tapes are supplied pre-compressed as rolls in cartons. The contents of the carton vary according to the size of the tape. Labels are attached to the carton bearing the product name, dimensions, roll length and number of rolls. A label bearing the batch reference is located on the mandrel.

3.2 The tapes should be stored horizontally in cool, dry conditions in the original packaging. To avoid distorting the tapes, excessive weight must not be placed on the cartons.

3.3 The Certificate holder has taken the responsibility of classifying and labelling the products under the *CLP Regulation (EC) No 1272 / 2008 on the classification, labelling and packaging of substances and mixtures*. Users must refer to the current Safety Data Sheet(s).

## Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on EXP 6 Expanding Foam Tapes.

### Design Considerations

#### 4 Use

4.1 The tapes are satisfactory for use as weathertight seals in structural and expansion joints in walls and around door and window frames. The products are suitable for use in new or existing structures constructed from concrete, masonry, metal, PVC-U, acrylic or timber.

4.2 When installed into a joint, the tapes begin to expand and fill the gap. The expanding tape will accommodate minor undulations and surface irregularities in the joint faces.

#### 5 Practicability of installation

The products are designed to be installed by competent operatives.

#### 6 Weathertightness



6.1 To provide a weathertight seal, a tape should be chosen with a thickness suitable for the operational joint widths, as detailed in Table 1.

6.2 The installed tapes are not designed to withstand hydrostatic water pressure.

#### 7 Maintenance



Installations should be periodically inspected for damage. Damaged sections of tape must be replaced as soon as possible.

## 8 Durability



Under normal service conditions, the tapes will have a service life of at least 20 years.

## Installation

### 9 General

9.1 Installation of EXP 6 Expanding Foam Tapes must be carried out in accordance with the Certificate holder's instructions. Typical applications are shown in Figure 1. The products can be installed in all conditions likely to occur in practice; however, care should be taken when installing at low temperatures (see section 9.4).

9.2 Joints must be clean and free from debris, eg dirt, mortar residue and other contaminants or extrusions that could affect the integrity of the seal. The inner surfaces of the joints to be sealed should be as smooth as possible. To achieve a weathertight seal in masonry, the changes in level at mortar joints must be as small as possible.

9.3 To ensure a weathertight seal, the tape size for the joint width to be sealed must be chosen in accordance with Table 1.

9.4 The tapes will start to expand gradually as soon as they are unwound from the roll. The rate of expansion is temperature dependent and will be slower at low temperatures. The tapes should therefore be stored at room temperature. At low ambient temperatures, the rate of expansion after installation can be accelerated by the gentle application of heat from an indirect heat source.

9.5 At high ambient temperatures, the tapes should be stored in a cool environment prior to use to slow down the rate of expansion.

9.6 The tapes are suitable for use on the substrates listed in section 4.1. The compatibility with other substrates, eg plasticised PVC, should be confirmed by test in consultation with the Certificate holder.

Figure 1 Typical applications

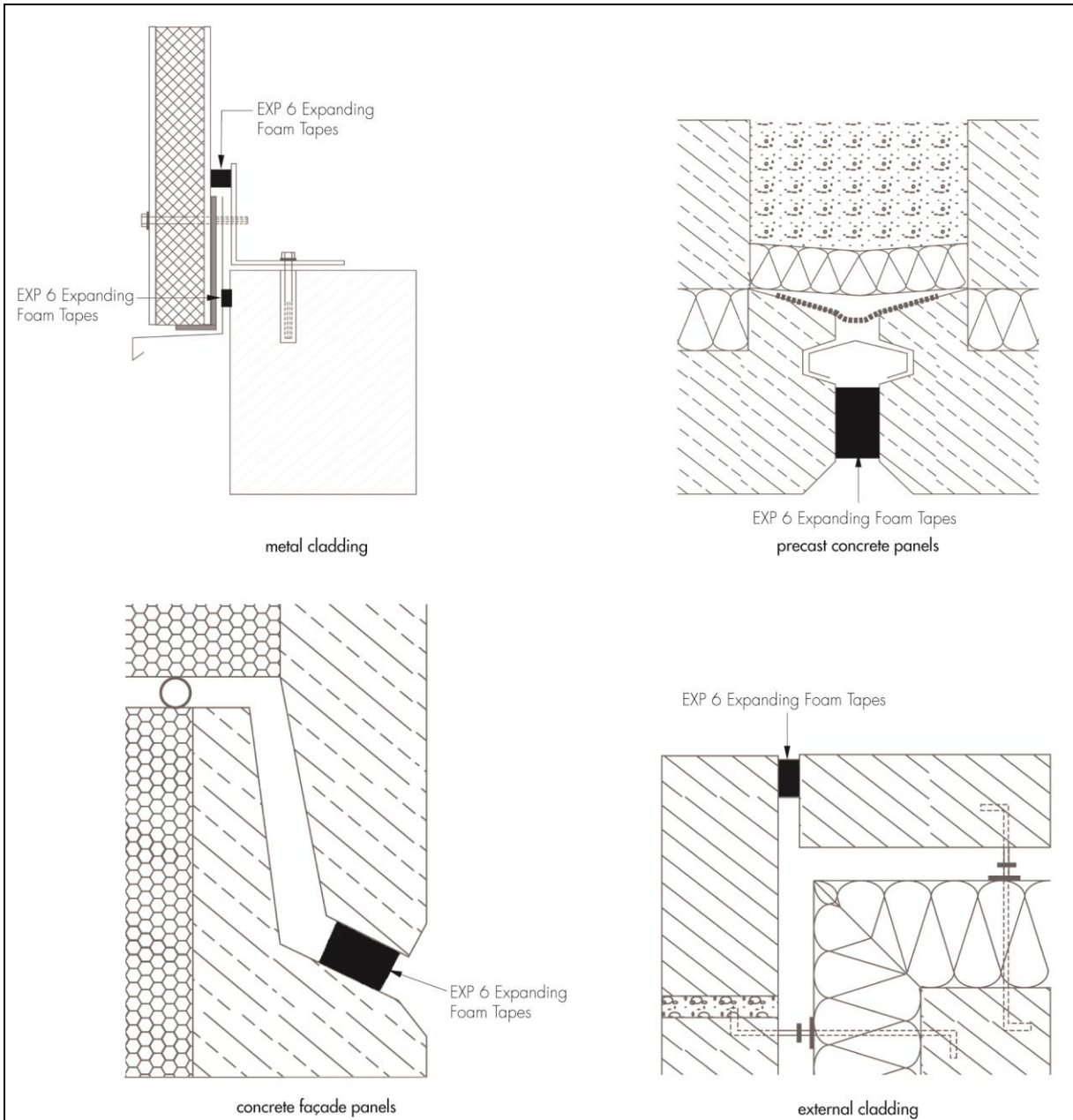
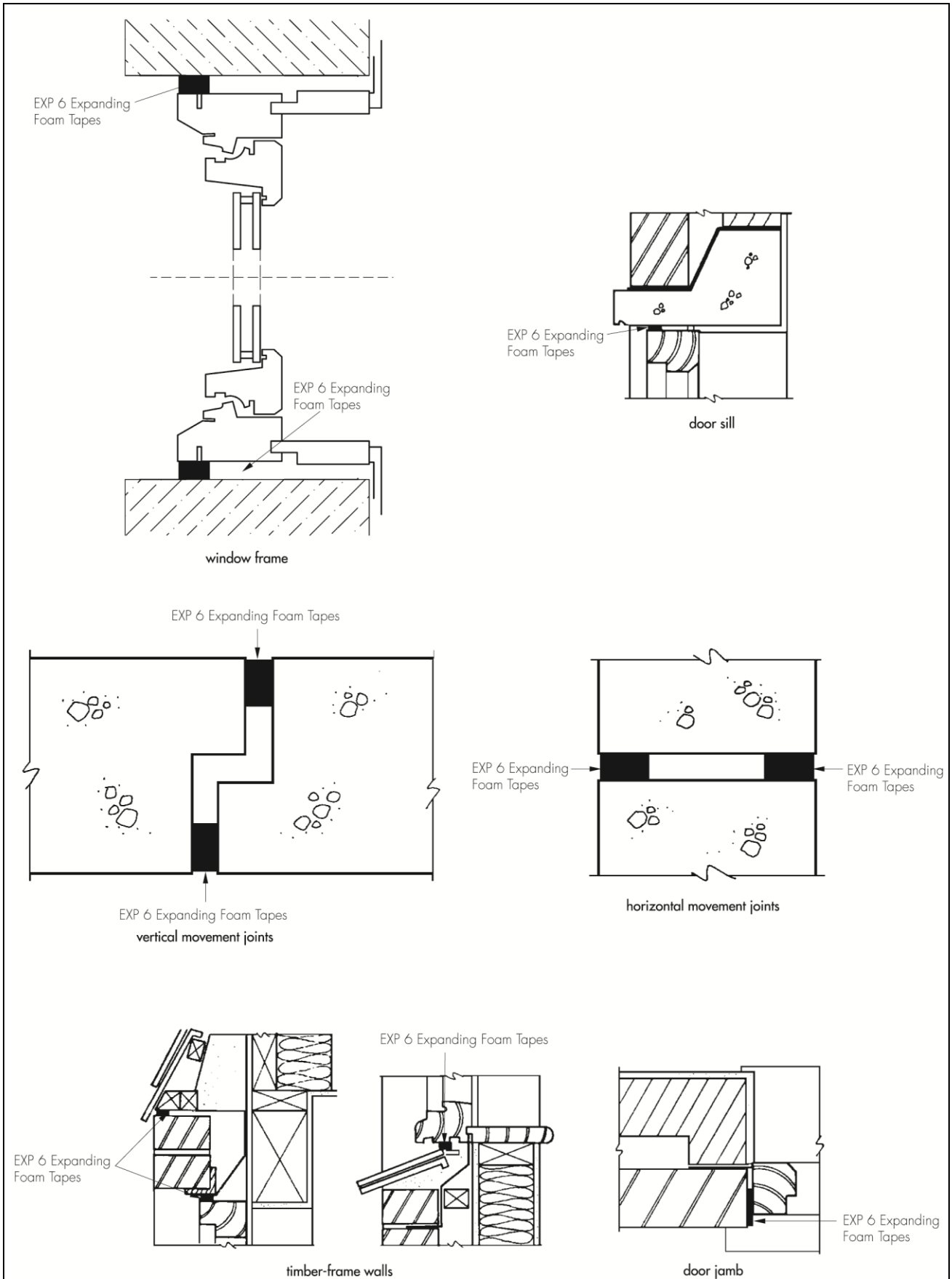


Figure 1 Typical applications (continued)



## 10 Procedure

10.1 The leader strip is removed from the roll and the end of the tape cut straight with a pair of scissors.

10.2 Approximately 10 to 20 cm of the protective release paper is peeled from the self-adhesive side of the tape (see Figure 2).

10.3 The self-adhesive face of the tape is then positioned 1 to 2 mm back from the edge of the joint (see Figure 3), allowing at least a 10 mm overlap at the top of the joint, and pressed against the smoothest face of the joint using a suitable tool, eg a trowel. If necessary, especially in vertical applications where the surfaces are damp, the tape can be held in position until expansion is complete using a suitable wedge. When starting or finishing at a blind end to the joint, ensure the tape is oversized in length sufficiently to allow for movement and still form a good tight butt joint between the end of the tape and the substrate.

*Figure 2 Peeling back release paper*

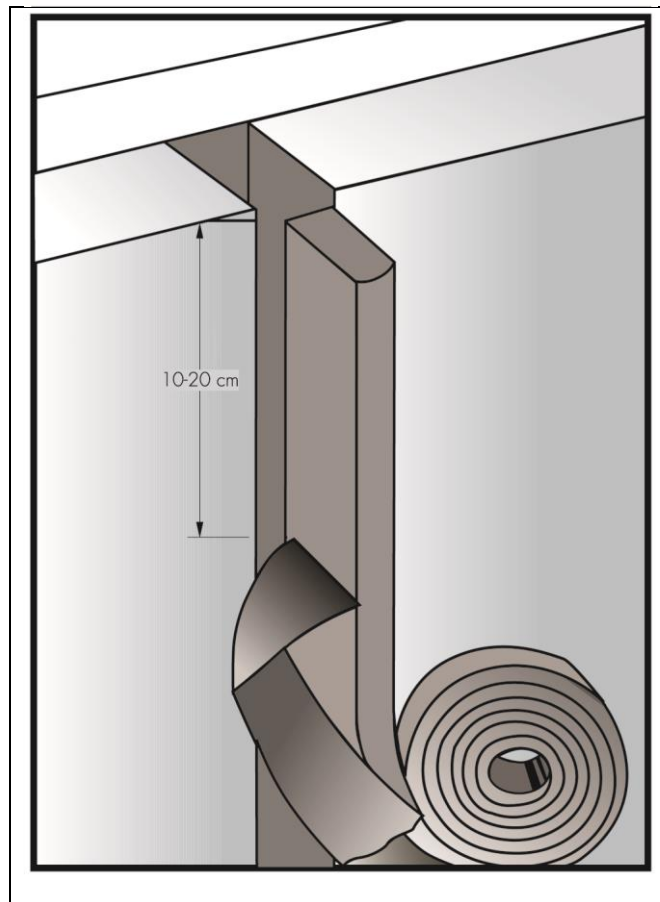
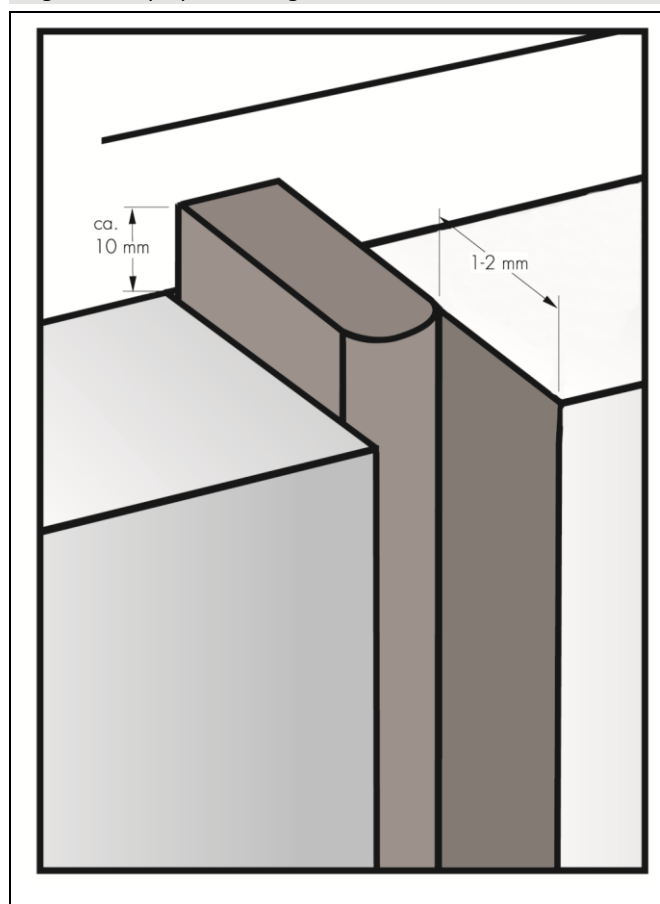




Figure 3 Tape positioning



10.4 The protective release paper is continuously peeled off as the tape is installed, taking care to minimise stretching of the tape during the process. When cutting the tape to length, approximately 10 mm per metre length should be allowed for recovery following any stretching that may have occurred.

#### **Butt joints**

10.5 The tape can be joined by butting two sections together. Both tape ends must be cut straight and butted against each other allowing an excess of tape to ensure a tight seal is formed. Stretching must be kept to a minimum to ensure the butt joints do not open on recovery of any stretching that may have occurred.

#### **Cross joints**

10.6 Where joints cross, the vertically running joint should be sealed first. Horizontal joints should then be sealed by cutting the tape end straight and stubbing it against the vertically applied tape, allowing an excess of tape to ensure a tight seal is formed. Stretching must be kept to a minimum to ensure the butt joints do not open on recovery of any stretching that may have occurred (see Figure 4).

#### **Frames**

10.7 When installing the tapes around a window or door frame, each side of the aperture (not the frame) should be measured and the tape cut to the required lengths allowing 1 cm per metre length for any stretching that may occur during the installation process. It is advised to install the horizontal strip first. At corners and butt joints, tape ends must be cut straight and butted against each other to ensure a tight seal is formed (see Figure 5).

10.8 In certain situations the tape can be applied in one piece around the frame. The Certificate holder must be consulted on the circumstances and techniques required for the specific application.

Figure 4 Sealing cross-joints

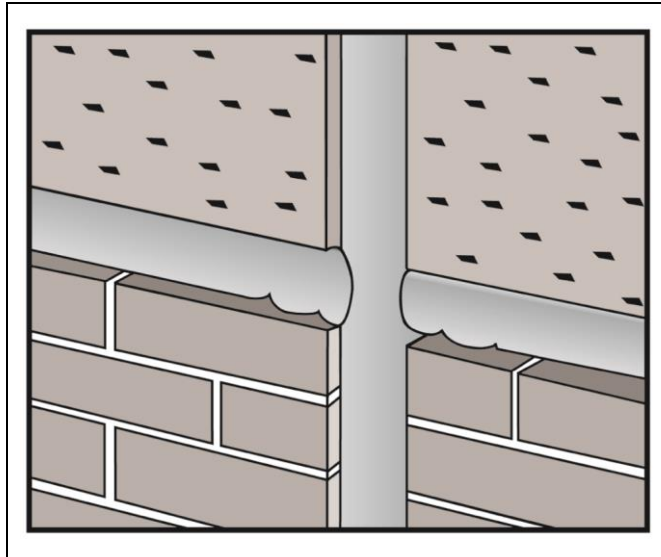
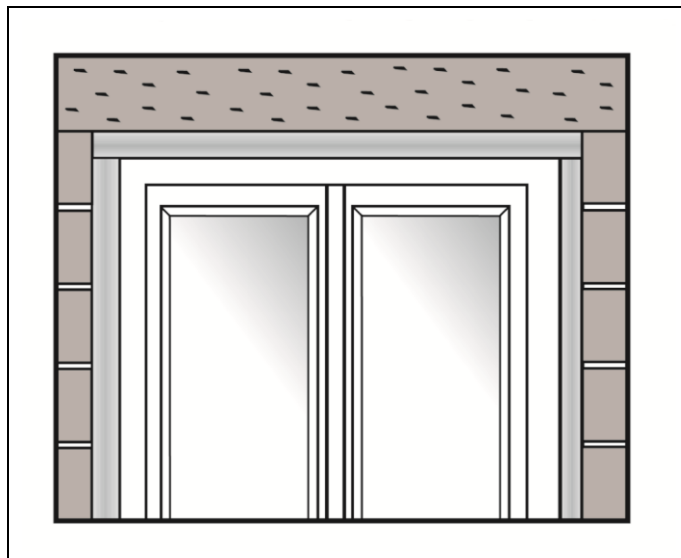


Figure 5 Sealing frames



## 11 Repair

Damaged sections of the tapes can be replaced using the installation techniques described in section 10.

## Technical Investigations

## 12 Tests

Tests were conducted on EXP 6 Expanding Foam Tapes and the results assessed to determine:

- density
- tensile strength/elongation at break (control and heat aged)
- compression set (control and heat aged)
- low temperature flexibility.

## 13 Investigations

13.1 The manufacturing process was evaluated, including the methods adopted for quality control, and details were obtained of the quality and composition of the materials used.

13.2 Test data from independent test laboratories relating to the issue of ETA 07/0072 was assessed to establish:

- weathertightness, including at joint intersections
- air permeability
- resistance to thermal shock
- moisture penetration following UV ageing
- compatibility with concrete, masonry, PVC-U, acrylic and timber
- water vapour transmission.

## Bibliography

BS EN ISO 9001 : 2015 *Quality management systems — Requirements*

EN 12207 : 2016 *Windows and doors — Air permeability — Classification*

EN 12208 : 2000 *Windows and doors — Watertightness — Classification*

### 14 Conditions

#### 14.1 This Certificate:

- relates only to the product/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 the UK
- 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 the BBA
- is subject to English Law.

14.2 Publications, documents, specifications, legislation, regulations, standards and the like referenced in this Certificate are those that were current and/or deemed relevant by the BBA at the date of issue or reissue of this Certificate.

14.3 This Certificate will remain valid for an unlimited period provided that the product/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 the BBA
- continue to be checked as and when deemed appropriate by the BBA under arrangements that it will determine
- are reviewed by the BBA as and when it considers appropriate.

14.4 The BBA has used due skill, care and diligence in preparing this Certificate, but no warranty is provided.

14.5 In issuing this Certificate the BBA 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 product/system or any other product/system
- the right of the Certificate holder to manufacture, supply, install, maintain or market the product/system
- actual installations of the product/system, including their nature, design, methods, performance, workmanship and maintenance
- any works and constructions in which the product/system is installed, including their nature, design, methods, performance, workmanship and maintenance
- any loss or damage, including personal injury, howsoever caused by the product/system, including its manufacture, supply, installation, use, maintenance and removal
- any claims by the manufacturer relating to CE marking.

14.6 Any information relating to the manufacture, supply, installation, use, maintenance and removal of this product/system which is contained or referred to in this Certificate is the minimum required to be met when the product/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 Work etc. Act 1974, 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 the 1974 Act or of any statutory, common law or other duty of care.