UBAtc
Union belge pour l'Agrément technique de la construction

member of EOTA and UEAtc

EUROPEAN TECHNICAL ASSESSMENT

ETA 13/0281
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UBAtc Assessment Operator:
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Technical Assessment Body issuing the European Technical Assessment: UBAtc.
UBAtc has been designated according to Article 29 of Regulation (EU) No 305/2011 and is member of EOTA (European Organisation for Technical Assessment)

Trade name of the construction product:	Dow Corning Firestop 700
Product family to which the construction product belongs:	Fire stopping sealant for fire stopping of linear gap seals
Manufacturer:	Dow Corning Parc Industriel Zone C BE – 7180 SENEFFE
Manufacturing plant(s):	Dow Corning Parc Industriel Zone C BE – 7180 SENEFFE
Website:	www.dowcorning.com
This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of:	European Assessment Document (EAD) : Guideline for European technical approval (ETAG 026-3), used as European Assessment Document (EAD)
This version replaces:	ETA 13/0281 issued on 2013/06/27
This European Technical Assessment contains:	9 pages, with 3 annex(es) which form an integral part of this European Technical Assessment

European Organisation for Technical Assessment

Legal bases and general conditions

1 This European Technical Assessment is issued by UBAtc (Union belge pour l'Agrément technique de la construction, i.e. Belgian Union for technical Approval in construction), in accordance with:

- Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC
- Commission Implementing Regulation (EU) No 1062/2013 of 30 October 2013 on the format of the European Technical Assessment for construction products
- Guideline for European technical approval (ETAG 026-3), used as European Assessment Document (EAD)

2 Under the provisions of Regulation (EU) No 3205/2011, UBAtc is not authorized to check whether the provisions of this European Technical Assessment are met once the ETA has been issued.

3 The responsibility for the conformity of the performances of the products with this European Technical Assessment and the suitability of the products for the intended use remains with the holder of the European Technical Assessment.

4 Depending on the applicable Assessment and verification of constancy of performance (AVCP) system, (a) notified body(ies) may carry out third-party tasks in the process of assessment and verification of constancy of performance under this Regulation once the European Technical Assessment has been issued.

5 This European Technical Assessment allows the manufacturer of the construction product covered by this ETA to draw up a declaration of performance for the construction product.

6 CE marking should be affixed to all construction products for which the manufacturer has drawn up a declaration of performance.

7 This European Technical Assessment is not to be transferred to other manufacturers, agents of manufacturers, or manufacturing plants other than those indicated on page 1 of this European Technical Assessment.

8 The European Technical Assessment holder confirms to guarantee that the product(-s) to which this assessment relates, is/are produced and marketed in accordance with and comply with all applicable legal and regulatory provisions, including, without limitation, national and European legislation on the safety of products and services. The ETA-holder shall notify the UBAtc immediately in writing of any circumstance affecting the aforementioned guarantee. This assessment is issued under the condition that the aforementioned guarantee by the ETA-holder will be continuously observed.

9 According to Article 11(6) of Regulation (EU) No 305/2011, when making a construction product available on the market, the manufacturer shall ensure that the product is accompanied by instructions and safety information in a language determined by the Member State concerned which can be easily understood by users. These instructions and safety information should fully correspond with the technical information about the product and its intended use which the manufacturer has submitted to the responsible Technical Assessment Body for the issuing of the European Technical Assessment.

10 Pursuant to Article 11(3) of Regulation (EU) No 305/2011, manufacturers shall adequately take into account changes in the product-type and in the applicable harmonised technical specifications. Therefore, when the contents of the issued European Technical Assessment do not any longer correspond to the product-type, the manufacturer should refrain from using this European Technical Assessment as the basis for their declaration of performance.

11 All rights of exploitation in any form and by any means of this European Technical Assessment are reserved for UBAtc and the ETA-holder, subject to the provisions of the applicable UBAtc regulations.

12 Reproduction of this European Technical Assessment including transmission by electronic means shall be in full. However, partial reproduction can be made with the written consent of UBAtc. In this case partial reproduction has to be designated as such. Texts and drawings of advertising brochures shall not contradict or misuse the European Technical Assessment.

13 Subject to the application introduced, this European Technical Assessment is issued in English and may be issued by the UBAtc in its official languages. The translations correspond fully to the English reference version circulated in EOTA.

14. A European Technical Approval (ETA) was first issued by UBAtc on 27 June 2013. This ETA is superseded by the current European Technical Assessment and comprises the following changes:

European Technical Approval, ETA 13/0281, issued 27/06/2013	European Technical Assessment, ETA 13/0281, issued on the date as mentioned on the front page of this European Technical Assessment
Exposition class Z2	Exposition class X

Technical Provisions

1. Technical description of the product

1.1. Characteristics of the products

This European Technical Assessment is being issued for Dow Corning Firestop 700 on the basis of agreed data/information, deposited with the UBAtc, which identifies the product that has been assessed. Changes to the product/production process, which could result in the deposited data/information being incorrect, should be notified to the UBAtc before the changes are introduced. The UBAtc will decide whether or not such changes affect the ETA and consequently the validity of the CE marking on the basis of the ETA and if so whether further assessment/alterations to the ETA, shall be necessary.

The provisions made in this European Technical Assessment are based on an assumed intended working life of 10 years.

Indications given regarding the working life cannot be interpreted as a guarantee given by the producer or the UBAtc, but are to be regarded only as a means for choosing the appropriate product(s) in relation to the expected economically reasonable working life of the construction works.

1.2 Dow Corning Firestop 700

Dow Corning Firestop 700 is a one component neutral cross linking silicone sealant with elastic properties, without fire retardants or biocides. The sealant is delivered in different colours.

Dow Corning Firestop 700 is a sealant used to form a linear joint seal with a backfilling material. The backfilling material is not part of the ETA

Installation of Dow Corning Firestop 700: see clause 2.3.

2. Specification of the intended use in accordance with the applicable EAD

2.1 Intended use

The intended use of Dow Corning Firestop 700 is to reinstate the fire resistance performance of non-movement joints in rigid walls.

The specific elements of construction for which Dow Corning Firestop 700 may be used to provide a linear joint seal, are rigid walls. These walls shall have a minimum thickness of 150 mm and comprise concrete or masonry with a minimum density of 550 kg/m³.

The supporting construction shall be classified in accordance with EN 13501-2 for the required fire resistance period.

2.2 Use Category

The use category of Dow Corning Firestop 700 is Type X intended for use in the following conditions:

Table 1 – Intended use

Environmental conditions	ETAG 026-3 Type
For use in conditions exposed to weathering	X

2.3 Assumptions under which the product was assessed

2.3.1 Manufacturing directives

The ire stopping and sealing product Dow Corning Firestop 700 is manufactured and packaged by Dow Corning Europe SA. In Seneffe, Belgium.

2.3.2 Installation

Installation of the Dow Corning Firestop 700 should be conducted as follows:

- Clean joint faces. Surfaces to which Dow Corning Firestop 700 will be applied should be cleaned of loose debris, dirt, oil, wax and grease.
- Insert backing material; leave sufficient gap/joint depth for application of the Dow Corning Firestop 700.
- Cement and concrete surface: apply Dow Corning P Primer for optimum adhesion.
- Apply Dow Corning Firestop 700.
- Smoothen the sealant surface. Use either a diluted liquid soap or smoothing agent and carefully smooth using a finger or narrow spatula.

Application temperature: +5°C to +40°C.

Expiry date: See date of use printed on the cartridge / foil pack (month/year). Use of the cartridge / foil pack after this date is not permissible!

2.3.3 Packaging, transport and storage

The following measures should be adopted with regard to handling and storage of the Dow Corning Firestop 700:

Handling
- Information for safe handling: no special precautions required;
- Information about protection against explosions and fires: No special precautions required.

Storage
- The maximum storage life of the sealant is 12 months after the production date in the original unopened packaging when stored below 30°C.
- Recommended storage and transport temperature: 5 °C to 25 °C;
- Information about storage in one common storage facility: not required.
- Further information about storage conditions: none.

The date of use (12 months) is printed on the
- 310 ml cartridge
- 600 ml foil pack

2.3.4 Use, maintenance and repair

Dow Corning Firestop 700 should be installed and used as described earlier in this document.

In the area covered by this ETA, the product does not need any maintenance in the working life indicated in the ETA (see clause 1.1), if the installation instructions have been followed.

The assessment is based on the assumption that damage, for example caused by accidental impact, is repaired. The relevant manufacturer's instructions shall be followed.

3. Performance of the product and references to the methods used for its assessment

The assessment has been made in accordance with ETAG 026: Parts 1 and 3: 2008.

3.1 Safety in the case of fire

3.1.1 Reaction to fire

The reaction to fire classification for Dow Corning Firestop 700 is class 'B – s2 d0' in accordance with EN 13501-1.

3.1.2 Resistance to fire

Dow Corning Firestop 700 has been tested in accordance with EN 1366-4:2006, installed in linear joints in rigid walls. As backfilling material a PU or PE backer rod or mineral wool has been used.

Based upon these test results and the field of direct application specified in EN 1366-4:2006, Dow Corning Firestop 700 has been classified in accordance with EN 13501-2, as shown in Annex III.

For details of suitable wall constructions for linear joint seals see annex III.

3.2 Hygiene, health and environment

3.2.1 Air permeability

No performance determined.

3.2.2 Water permeability

No performance determined.

3.2.3 Dangerous substances

Dow Corning has presented a Material Safety Data Sheet according to Regulation 1907/2006/EC and a declaration that Dow Corning Firestop 700 is in accordance with Regulation 1907/2006/EC concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

The manufacturer has declared that the product contains no toxic, carcinogenic, teratogenic and mutagenic chemical substances of category 1 or 2 ≥ 0.1 % w/w according to Regulation 1272/2008/EC (classification, labelling and packaging of substances and mixtures, including amendments) and listed in the "indicative list on dangerous substances" of the EGDS- taking into account the installation conditions of the construction product and the release scenarios resulting from there that would lead to classification T and sentences R45 and/or R46 and that all other dangerous substances have been considered for the classification of the product according to the Regulation 1272/2008/EC.

All dangerous chemical substances are below the classification limits of Regulation 1272/2008/EC.

3.3 Safety in use

3.3.1 Mechanical resistance and stability

The maximum joint width is smaller than 150 mm, so impact tests are not required according to ETAG 026-3 and therefore no performance has been determined.

3.3.2 Resistance to impact/movement

See 3.6.

3.3.3 Adhesion

Adhesion is covered by tests for determining movement capability according to EN ISO 11600. For the resulting classification see 2.6.2.

3.4 Protection against noise

3.4.1 Airborne sound insulation

No performance determined.

3.4.2 Impact sound insulation

No performance determined.

3.5 Energy economy and heat retention

3.5.1 Thermal properties

No performance determined.

3.5.2 Water vapour permeability

No performance determined.

3.6 General aspects

3.6.1 Durability

Dow Corning Firestop 700 has been tested in accordance with EOTA Technical Report, TR 024 – Edition November 2006, Table 4.1 for the X use category as specified in ETAG 026-3.

3.6.2 Serviceability

3.6.2.1 Curing behaviour

- Curing rate (at 23°C and 50% relative humidity): approximately 2 mm / day;
- Skin-forming time (at 23°C and 50% relative humidity): approximately 90 min;
- Volume shrinkage: less than 5%.

3.6.2.2 Movement capability

Classification EN ISO 11600: 25LM

4. Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

In accordance with Regulation (EU) N° 305/2011[1], Article 65, Directive 89/106/EEC is repealed, but references to the repealed Directive shall be construed as references to the Regulation.

The system of assessment and verification of constancy of performance, specified in the Decision of the Commission 1999/454/EC of 1999/07/14[2], as amended, is specified in the following Table.

Table 2 – System of assessment and verification of constancy of performance applicable to Dow Corning Firestop 700

Product(s)	Intended use(s)	Level(s) or class(es)	Assessment and verification of constancy of performance system(s)*
Fire Stopping and Fire Sealing Products	For fire compartimentation and/or fire protection or fire performance	Any	1
* See Annex V to Regulation (EU) N° 305/2011			

In addition, according to the decision 1999/454/EC of 1999/07/14 of the European Commission, as amended, the systems of assessment and verification of constancy of performance specified in table 2 apply to fire stopping and fire sealing products with regard to reaction to fire.

[1] OJEU, L 88 of 2011/04/04

[2] OJEU, L 178 of 1999/07/14

Table 3 – Systems of assessment and verification of constancy of performance with respect to the reaction to fire

Product(s)	Intended use(s)	Level(s) or class(es) (reaction to fire)	Assessment and verification of constancy of performance system(s)[a]
Fire Stopping and Fire Sealing Products	For uses subject to regulations on reaction to fire	(A1, A2, B, C)*	1
		(A1, A2, B, C)**, D, E	3
		(A1 to E)*** , F	4

[a] Systems 1, 3 and 4 : See Regulation (EU) N° 305/2011, Annex V
* Products/materials for which a clearly identifiable stage in the production process results in an improvement of the reaction to fire classification (e.g. an addition of fire retardants or a limiting of organic material)
** Products/materials not covered by footnote (*)
*** Products/materials that do not require to be tested for reaction to fire (e.g. products/materials of class A1 according to Commission Decision 96/603/EC[3], as amended)

5. Technical details necessary for the implementation of the AVCP system, as foreseen in the applicable EAD

5.1 Tasks for the ETA-holder

5.1.1 Factory production control (FPC)

The manufacturer shall exercise permanent internal control of production. All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures, including records of results performed. This production control system shall ensure that the product is in conformity with this European technical approval.
The manufacturer may only use constituent materials stated in the technical documentation of this European technical approval.
The factory production control shall be in accordance with the "Control Plan" relating to the European technical approval which is part of the technical documentation of this European technical approval. The "Control Plan" is laid down in the context of the factory production control system operated by the manufacturer and deposited at the UBAtc.
The results of factory production control shall be recorded and evaluated in accordance with the provisions of the "Control Plan".

5.1.2 Other tasks of manufacturer

*Technical data sheet: t*he manufacturer shall provide a technical data sheet and an installation instruction with the following minimum information:

- Field of application:

  Building elements for which the linear joint and gap seal is suitable, type and properties of the building elements like minimum thickness, density, limits in size, minimum thickness etc. of the linear joint seal.
- Construction of the linear joint seal including the backfilling material.

Installation instructions:

- Steps to be followed;
- Procedure in case of repair.

The manufacturer shall, on the basis of a contract, involve a body (bodies) which is (are) notified for the tasks referred to in section 3.1 in the field of linear joint and gap seals in order to undertake the actions laid down in 3.2.2. For this purpose, the "Control Plan" referred to in section 3.2.1.1 and 3.2.2 shall be handed over by the manufacturer to the notified body or bodies involved.

5.2 Tasks of notified bodies

The notified body (bodies) shall perform the

- Initial type-testing of the product;
- Initial inspection of factory and of factory production control;
- Continuous surveillance, assessment and approval of factory production control in accordance with the provisions laid down in the "Control Plan" relating to the European technical approval.

The notified body (bodies) shall retain the essential points of its (their) actions referred to above and state the results obtained and conclusions drawn in (a) written report (reports).

In cases where the provisions of the European technical approval and its "Control Plan" are no longer fulfilled the certification body shall withdraw the certificate of conformity and inform the UBAtc without delay.

[3] OJEC, L 267 of 1996/10/19

Annex I: Reference documents

References to standards mentioned in the ETA:

ETAG 026-1	Fire Stopping and Fire Sealing Products - Part 1- General
ETAG 026-3	Fire Stopping and Fire Sealing Products - Part 3 - Linear Joint and Gap Sea
EN 1026	Windows and doors – Air permeability – Test method
EN 1366-4	Fire resistance tests for service installations - Part 4: Linear joint seals
EN 13501-1	Fire classification of construction products and building elements – Part 1: Classification using test data from reaction to fire tests
EN 13501-2	Fire classification of construction products and building elements – Part 2: Classification using test data from fire resistance tests
EN ISO 140-3	Acoustics – Measurement of sound insulation in buildings and of building elements – Part 3: Laboratory measurements of airborne sound insulation of building elements
EN ISO 140-10	Acoustics – Measurements of sound insulation in buildings and of building elements – Part 10: Laboratory measurement of airborne sound insulation of small building elements
EN ISO 717-1	Acoustics – Rating of sound insulation of buildings and of building elements – Part 1: Airborne sound insulation
EN 15651-1:	Sealants for joints in building construction – Definitions, requirement and evaluation of conformity – Part 1: Sealants for facade
EN 15651-2:	Sealants for joints in building construction – Definitions, requirement and evaluation of conformity – Part 2: Sealants for glazing
EN ISO 11600	Building construction — Jointing products — Classification and requirements for sealants

Other reference documents:

EOTA TR 024	Characterization, Aspects of Durability and Factory Production Control for Reactive Materials, Components and Products

Annex II: Description of the products

1. DC 700

A detailed specification of the product is contained in document "Identification / product specification and control plan to the European Technical Approval ETA 13/0281 of Dow Corning Firestop 700 which is a non-public part of this ETA.

2. Backfilling materials

2.1 General

The backfilling materials only serve to limit the thickness of the sealant and have no influence on the fire resistance of the sealant.

2.2 Mineral Wool

Mineral stone wool in accordance with EN 13162, reaction to fire class E in accordance with EN 13501-1 or better, and a density that is at least 90 kg/m³

2.3 PU Backfilling material

Foam from open cell polyurethane used as a non-adhesive backfilling. The PU-foam has a reaction to fire class E in accordance with EN 13501-1 or better, but does not have a fire retardant function.

2.4 PE Backfilling material

Foam from closed-cell polyethylene used as a non-adhesive backfilling. The PE-backfilling material has a reaction to fire class E in accordance with EN 13501-1 or better, does not have a fire retardant function.

Annex III: Resistance to fire classification of linear joint seals made with Firestop 700

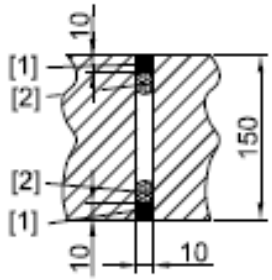
Linear joints in rigid wall constructions according to 1.2.1

No	Seal width (mm)	Seal depth (mm)	Backing material	Position of seal in joint	Orientation of the joint	Classification	Fig.
1	10	10	PU (1)	Both sides	Vertical	EI 240 - V - X – W 0 to 10	Seals Nos. 1 and 8
2	10	10	MW (5)	Both sides	Vertical	EI 240 - V - X – W 0 to 10	Seals Nos. 2 and 9
3	30	10	MW (5)	Both sides	Vertical	EI 240 - V - X – W 10 to 30	Seals Nos. 3 and 10
4	30	10	PU (1) + (2)	Both sides	Vertical	EI 180 - V - X – W 10 to 30 E 240 – V – X – W 10 tot 30	Seals Nos. 4 and 11
5	30	10	PE (3) + (4)	Both sides	Vertical	EI 180 - V - X – W 10 to 30 E 240 – V – X – W 10 tot 30	Seal Nos. 5 and 12
6	10	10	PE (3)	Both sides	Vertical	EI 240 - V - X – W 0 to 10	Seals Nos. 6 and 13
7	30	15	MW (5)	Unexposed side	Vertical	EI 240 - V - X – W 10 to 30	Seals No. 7
8	10	10	PU (1)	Both sides	Horizontal	EI 240 – T – X – W 0 to 10	Seals Nos. 1 and 8
9	10	10	MW (5)	Both sides	Horizontal	EI 240 – T – X – W 0 to 10	Seals Nos. 2 and 9
10	30	10	MW (5)	Both sides	Horizontal	EI 240 – T – X – W 0 to 10	Seals Nos. 3 and 10
11	30	10	PU (1) + (2)	Both sides	Horizontal	EI 180 - T - X – W 10 to 30 E 240 – T – X – W 10 tot 30	Seals Nos. 4 and 11
12	30	10	PE (3) + (4)	Both sides	Horizontal	EI 180 - T - X – W 10 to 30 E 240 – T – X – W 10 tot 30	Seal Nos. 5 and 12
13	10	10	PE (3)	Both sides	Horizontal	EI 240 – T – X – W 0 to 10	Seals Nos. 6 and 13
14	30	15	MW (5)	Unexposed side	Horizontal	EI 240 - T - X – W 10 to 30	Seals No. 14

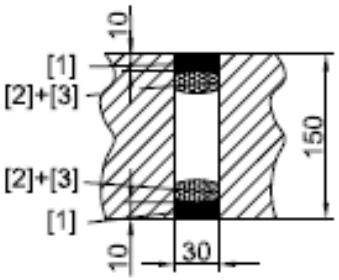
Both sides: the sealant and backing material are placed on both sides of the wall.
Unexposed side: the sealant and backing material are placed only on the side of the wall that is not directly exposed to the fire.
Joint depth = wall thickness = 150 mm.

(1) Polyurethane backer rod, round, diameter 12 mm
(2) Polyurethane backer rod, round, diameter 25 mm
(3) Polyethylene backer rod, round, diameter 12 mm
(4) Polyethylene backer rod, round, diameter 25 mm
(5) Stone wool, tightly compressed, depth 60 mm

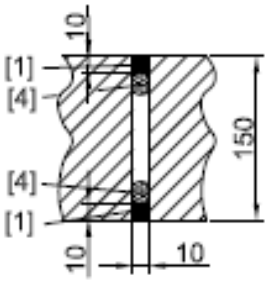
Seals Nos. 1 and 8



Seals Nos, 4 and 11



Seals Nos, 6 and 13



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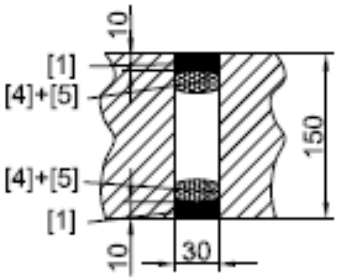
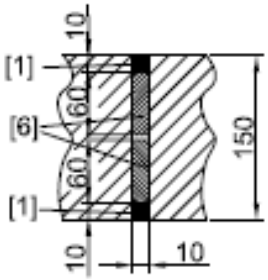


Seals Nos, 2 and 9



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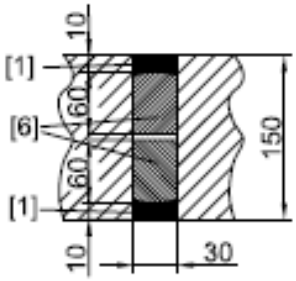
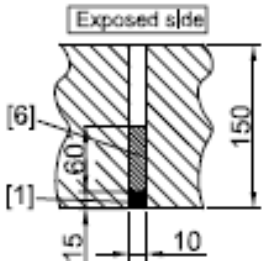
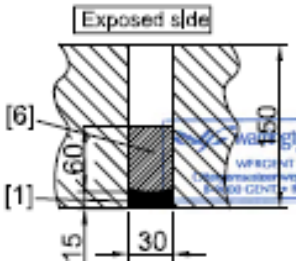


Seals No. 7



Seal No. 14



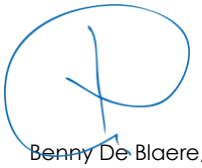
UBAtc asbl is a non-profit organization according to Belgian law. It is a Technical Assessment Body notified by the Belgian notifying authority, the Federal Public Services Economy, SMEs, Self-Employed and Energy, on 17 July 2013 in the framework of Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC and is member of the European Organisation for Technical Assessment, EOTA (www.eota.eu).

This European Technical Assessment has been issued by UBAtc asbl on the basis of the technical work carried out by the Assessment Operator, BCCA.

On behalf of UBAtc asbl,

Peter Wouters,
director

On behalf of the Assessment Operator, BCCA, responsible for the technical content of the ETA,



Benny De Blaere,
director general

The most recent version of this European Technical Assessment may be consulted on the UBAtc website (www.ubatc.be).