

European Technical Assessment

ETA 22/0697
of 10.03.2023



General part

Technical Assessment Body issuing the ETA: ITeC

ITeC 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

PENSIL * 300

Product family to which the construction product belongs

Linear joint and gap seals.

Manufacturer

MOMENTIVE PERFORMANCE MATERIALS
Chempark, building V7
51368 Leverkusen
Germany

Manufacturing plant(s)

MOMENTIVE PERFORMANCE MATERIALS (Nantong) Co Ltd
Nº 9 Jiang Hai Road, Nantong Economic and Technological Development Zone
226009 Nantong
China

This European Technical Assessment contains

6 pages

This European Technical Assessment is issued in accordance with Regulation (EU) 305/2011, on the basis of

European Assessment Document EAD 350141-00-1106 *Linear joint and gap seals.*

General comments

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full (excepted the confidential Annex(es)).

Specific parts of the European Technical Assessment

1 Technical description of the product

PENSIL* 300 is a one-component neutral cure silicone used as fire protective joint sealant. It is applied in-situ together with a primer (reference SS4044P) and a backing material. The backing material can be a polyethylene rod or stone wool. PENSIL* 300 can be supplied in three colours (white, grey and black) with the same performance.

PENSIL* 300 is applied in joints with a maximum width of 50 mm. Quantity of silicone (depth) to apply depends on the width of the joint, values given in the next table.

Table 1: Application characteristics of the joint seal.

Width of joint (mm)	Minimum depth of silicone applied (mm)	Backing material
≤ 10	5	Polyethylene rod
$10 < w \leq 20$	10	
$20 < w \leq 40$	15	
$40 < w \leq 50$	15	Mineral wool*

* Minimum values: density of 70 kg/m³, degree of compression 37,5 % and depth of 80 mm.

The primer is applied to the joint edge surfaces in the depth where silicone will be employed.

The primer and backing material are part of the assessment but cannot be CE marked based on this ETA.

2 Specification of the intended use(s) in accordance with the applicable EAD

The seals are intended to prevent or to restrict the passage of fire (and/or hot smoke) between elements or components or to maintain the integrity and insulation performance of one or more fire separating elements at linear discontinuities for a specified duration and are designed not to accommodate movement (hereafter designated as “non-movement joints”).

PENSIL* 300 can be used in joints of walls of aerated concrete, concrete, blockwork and masonry. It can be used both in horizontal and vertical joints (according to resistance to fire classification given in table 3) not abutting another constructive element.

It can be used in internal conditions (type Z₁ and Z₂), at temperatures below 0 °C (type Y₁ and Y₂) and external conditions exposed to weathering (type X).

The provisions made in this ETA are based on a working life of PENSIL* 300 of at least 10 years, provided that the conditions laid down in the manufacturer’s instructions for the installation, use and maintenance are met. These provisions are based upon the current state of the art and the available knowledge and experience.

The indications given as to the working life of the product cannot be interpreted as a guarantee but are regarded only as a means for choosing the appropriate products in relation to the expected economically reasonable working life of the works.

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

3.1 Performance of the product

The assessment of PENSIL* 300 has been performed in accordance with EAD 350141-00-1106 for *Linear joint and gap seals*.

Table 2: Performance of the product.

Product: PENSIL* 300		Intended use: Linear joint fire seal in walls
Basic requirement	Essential characteristic	Performance
BWR 2 Safety in case of fire	Reaction to fire	B-s2,d0
	Resistance to fire	See Table 3
BWR 4 Safety and accessibility in use	Adhesion	No loss of adhesion
	Durability	Types X, Y ₁ , Y ₂ , Z ₁ and Z ₂
	Movement capability	Pass ⁽¹⁾

⁽¹⁾ The product passed the tests required for movement capability performance. Yet, resistance to fire of the product has not been tested for uses where movement capability is needed, i.e., movement joints (e.g., joints between walls and floors).

The rest of characteristics included in EAD 350141-00-1106 have not been assessed in this ETA.

Table 3: Resistance to fire classification of PENSIL* 300.

Orientation	Support of sealant	Width of joint (mm)	Depth of sealant (mm)	Sealant exposed to fire (A) / Support exposed to fire (B)*	Classification		
Horizontal	Polyethylene backer rod	10	5	A	E 180-T-X-W10		
		10	5	B	EI 120-T-X-W10		
		20	10	A	EI 20-T-X-W20		
		20	10	B	EI 60-T-X-W20		
		40	15	A	EI 90-T-X-W40		
		40	15	B	EI 60-T-X-W40		
	Mineral wool**	50	15	A	EI 90-T-X-W50		
		50	15	B	EI 120-T-X-W50		
		Vertical	Backer rod	10	5	A	E 180-V-X-W10
				10	5	B	EI 120-V-X-W10
20	10			A	EI 20-V-X-W20		
20	10			B	EI 30-V-X-W20		
40	15			A	EI 120-V-X-W40		
40	15			B	EI 30-V-X-W40		
Mineral wool**	50		15	A	EI 90-V-X-W50		
	50		15	B	EI 180-V-X-W50		

Classification valid for a supporting construction of aerated concrete, concrete, blockwork and masonry of a minimum thickness of 200 mm and minimum density of 550 kg/m³.

Classification valid for higher depths and lower widths of sealant.

* Classification with exposure to fire (A) valid for joints seals at top of the joint or centred in the joint depth. Classification with exposure to fire (B) valid for joints seals at bottom of the joint.

** Minimum values: density of 70 kg/m³, degree of compression 37,5 % and depth of 80 mm.

3.2 Methods used for the assessment

3.2.1 Reaction to fire

PENSIL* 300 has been tested according to EN 13823 and EN ISO 11925-2, and classification is given in accordance with EN 13501-1 for the products classification following Regulation (EU) 2016/364. The product has been mounted and fixed following the provisions of Annex A.1 of the EAD 350141-00-1106.

3.2.2 Resistance to fire

PENSIL* 300 has been tested according to EN 1366-4 and classified according to EN 13501-2.

3.2.3 Adhesion

PENSIL* 300 has been tested according to EN ISO 9047.

3.2.4 Durability

For intended uses Z₁ and Z₂, PENSIL* 300 has been tested according to:

- EN ISO 7390: Flow of sealants.

- EN ISO 8340: Tensile properties.
- EN ISO 9047: Adhesion.

For intended uses X, Y₁ and Y₂, PENSIL* 300 has been aged according to EOTA TR 024, clause 2.2.3 and then tested for the same characteristics said above.

3.2.5 Movement capability

PENSIL* 300 has been tested and assessed according to:

- EN ISO 7389, conditioning method B: Elastic recovery.
- EN ISO 10563: Loss of volume.

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

According to the Decision 1999/454/EC of the European Commission the system of AVCP (see EC delegated Regulation (EU) No 568/2014 amending Annex V to Regulation (EU) 305/2011) given in the following table applies.

Table 4: AVCP system.

Product(s)	Intended use(s)	System
Fire sealing products	For fire compartmentation and/or fire protection or fire performance	1

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

All the necessary technical details for the implementation of the AVCP system are laid down in the *Control Plan* deposited with the ITeC and agreed in accordance with EAD 350141-00-1106, section 3.

The *Control Plan* is a confidential part of the ETA and only handed over to the notified product certification body involved in the assessment and verification of constancy of performance.

The factory production control operated by the manufacturer shall be in accordance with the above-mentioned *Control Plan*.

Issued in Barcelona on 10th March 2023

by the Catalonia Institute of Construction Technology.



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