





European Technical Assessment

ETA-17/1059 of 13/08/2020

ETA-17/1059 issued on 14/12/2017

General Part

This version replaces

Technical Assessment Body issuing the Instytut Techniki Budowlanej **European Technical Assessment** Trade name of the construction product Piro Acrylic Sealant AC120 Product family to which the construction Fire Stopping and Fire Sealing Products. product belongs Linear Joint and Gap Seals Manufacturer PIROSYSTEM Sp. z o.o. ul. Ogrodnicza 3A PL 83-021 Wiślina Poland Manufacturing plant Manufacturing plant no. 1 This European Technical Assessment 13 pages including 2 Annexes which form an contains integral part of this Assessment This European Technical Assessment is European Assessment Document EAD 350141issued in accordance with regulation (EU) 00-1106 "Fire Stopping and Fire Sealing No 305/2011, on the basis of Products. Linear Joint and Gap Seals"

This European Technical Assessment is issued by the Technical Assessment Body in its official language. Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and shall be identified as such.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full. However, partial reproduction may only be made with the written consent of the issuing Technical Assessment Body. Any partial reproduction has to be identified as such.

Specific Part

1 Technical description of the product

The Piro Acrylic Sealant AC120 is an ablative acrylic sealant used to form linear joint or gap seals in walls and floors.

The Piro Acrylic Sealant AC120 is supplied in liquid form. The sealant is gunned or trowelled into the aperture in or between the separating elements, to a specified depth, using mineral wool as a backing material.

2 Specification of the intended use in accordance with the applicable European Assessment Document (EAD)

2.1 Intended use

The intended use of the Piro Acrylic Sealant AC120 is to reinstate the fire resistance performance of rigid wall and floor constructions where there are linear joints and gaps.

The specific elements of construction, that the Piro Acrylic Sealant AC120 may be used to provide a linear joint or gap seal in, are, depending on the type of the seal, as follows:

Type 1, 2 and 3 – rigid walls: The wall must have a minimum thickness of 150 mm

and comprise concrete, aerated concrete, bricks or

blocks, with a minimum density of 600 kg/m³.

Type 4 – rigid walls: The wall must have a minimum thickness of 100 mm

and comprise concrete, aerated concrete, bricks or

blocks, with a minimum density of 600 kg/m³.

Type 5, 6 and 7 -

rigid walls abutting rigid floors:

The floor must have a minimum thickness of 150 mm and comprise reinforced concrete, with a minimum

density of 1700 kg/m³.

Type 5, 6 and 7 – rigid floors:

The floor must have a minimum thickness of 150 mm and comprise reinforced concrete, with a minimum

density of 1700 kg/m³.

Types of the seals are specified in Annex B.

The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period (equal or greater than specified in Annex B).

The Piro Acrylic Sealant AC120 may be used to provide a linear joint or gap seal with specific supporting constructions and substrates (for details see Annex B).

The permitted joint / gap width is specified in Annex B.

The Piro Acrylic Sealant AC120 shall be used to form linear joint or gap seals with movement capability lower than 7.5%.

The performances given in this European Technical Assessment are based on an assumed working life of the Piro Acrylic Sealant AC120 of 10 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer or the Technical

Assessment Body, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

Additional provisions are given in Annex A.

2.2 Use category

Type Z₂: intended for use in internal conditions with humidity lower than 85% RH, excluding temperatures below 0°C, without exposure to rain or UV.

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

3.1 Performance of the product

3.1.1 Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to fire	Class B-s2,d0
Resistance to fire	Annex B

3.1.2 Hygiene, health and the environment (BWR 3)

No performance assessed.

3.1.3 Safety and accessibility in use (BWR 4)

Essential characteristic	Performance
Mechanical resistance and stability	No performance assessed
Resistance to impact / movement	No performance assessed
Adhesion	No performance assessed
Durability	Use category: Type Z ₂
Movement capability	No performance assessed (non-movement joints)

3.1.4 Protection against noise (BWR 5)

No performance assessed.

3.1.5 Energy economy and heat retention (BWR 6)

No performance assessed.

3.2 Methods used for the assessment

The assessment of the product has been made in accordance with EAD 350141-00-1106 "Fire Stopping and Fire Sealing Products. Linear Joint and Gap Seals".

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

According to Decision 99/454/EC of the European Commission, as amended by Decision 2001/596/EC of the European Commission the system 1 of assessment and verification of constancy of performance applies (see Annex V to Regulation (EU) No 305/2011).

5 Technical details necessary for the implementation of the AVCP system, as provided in the applicable European Assessment Document (EAD)

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited in Instytut Techniki Budowlanej.

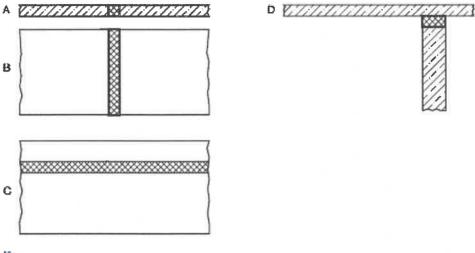
For type testing the results of the tests performed as part of the assessment for the European Technical Assessment shall be used unless there are changes in the production line or plant. In such cases the necessary type testing has to be agreed between Instytut Techniki Budowlanej and the notified body.

Issued in Warsaw on 13/08/2020 by Instytut Techniki Budowlanei

Anna Panek, MSc
Deputy Director of ITB

Additional provisions

- The Piro Acrylic Sealant AC120 shall be applicable only to straight parallel edge surfaces of linear joints or gaps.
- Possible orientation of the linear joint seals is presented in fig. A1 and Table A1.



Key

joint seal

wall - front view

90

wall or floor - section

- A. linear joint in a horizontal test construction
- B vertical linear joint in a vertical test construction
- C horizontal linear joint in a vertical test construction
- D horizontal wall joint abutting a floor, ceiling or roof

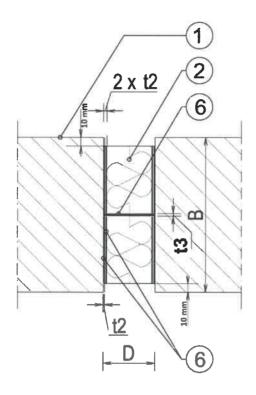
Fig. A1. Possible orientation of linear joints seals

Table A1

Seal type in accordance with Annex B	Possible orientation in accordance with fig. A1
Type 1	B, C
Type 2	B, C
Type 3	B, C
Type 4	B, C
Type 5	A, D
Type 6	A, D
Type 7	A, D

Piro Acrylic Sealant AC120	Annex A
Additional provisions	of European Technical Assessment ETA-17/1059

Fig. B1. Linear joint seal (type 1) in rigid wall.



- 1 rigid wall with thickness B \geq 150 mm, density \geq 600 kg/m³ and D = 5 60 mm
- 2 mineral wool with a minimum density of 120 kg/m³
- 6 Piro Acrylic Sealant AC120, thickness t2 ≥ 2,5 mm, t3 ≥ 3 mm

Resistance to fire classification of linear joint seal in rigid wall, in accordance with fig. B1 and Annex A:

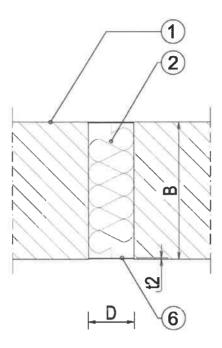
Fire resistance class: El 120 - V - T - X - B - W 05 to W 60

Piro Acrylic Sealant AC1	20
--------------------------	----

Installation details and resistance to fire classification of linear joint seals

Annex B1

Fig. B2. Linear joint seal (type 2) in rigid wall.



- 1 rigid wall with thickness B \geq 150 mm, density \geq 600 kg/m³ and D = 5 60 mm
- 2 mineral wool with a minimum density of 120 kg/m³
- 6 Piro Acrylic Sealant AC120 placed on both sides of the joint, thickness t2 ≥ 0,4 mm

Resistance to fire classification of linear joint seal in rigid wall, in accordance with fig. B2 and Annex A:

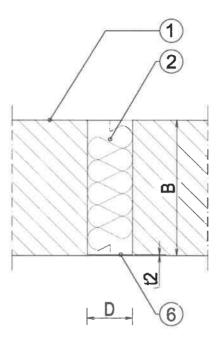
Fire resistance class: El 120 - V - T - X - B - W 05 to W 60

Piro Acrylic Sealant AC120

Installation details and resistance to fire classification of linear joint seals

Annex B2

Fig. B3. Linear joint seal (type 3) in rigid wall.



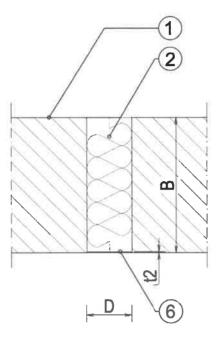
- 1 rigid wall with thickness B \geq 150 mm, density \geq 600 kg/m³ and D = 65 100 mm
- 2 mineral wool with a minimum density of 80 kg/m³
- 6 Piro Acrylic Sealant AC120 placed on one side of the joint, thickness t2 ≥ 1,6 mm

Resistance to fire classification of linear joint seal in rigid wall, in accordance with fig. B3 and Annex A:

Fire resistance class: El 120 - V - T - X - B - W 65 to W 100

Piro Acrylic Sealant AC120	Annex B3
Installation details and resistance to fire classification of linear joint seals	of European Technical Assessment ETA-17/1059

Fig. B4. Linear joint seal (type 4) in rigid wall.



- 1 rigid wall with thickness B \geq 100 mm, density \geq 600 kg/m³ and D = 5 65 mm
- 2 mineral wool with a minimum density of 80 kg/m³
- 6 Piro Acrylic Sealant AC120 placed on one side of the joint, thickness t2 ≥ 1,6 mm

Resistance to fire classification of linear joint seal made in rigid wall, in accordance with fig. B4 and Annex A:

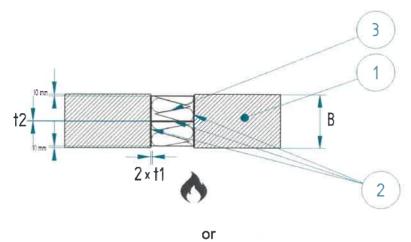
Fire resistance class: El 120 - V - T - X - B - W 05 to W 65

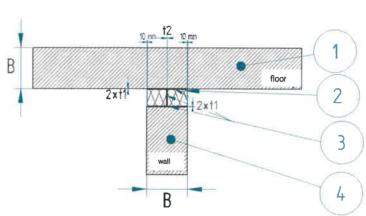
Piro Acrylic Sealant AC120

Installation details and resistance to fire classification of linear joint seals

Annex B4

Fig. B5. Linear joint seal (type 5) in rigid floor or rigid wall abutting a rigid floor.





- rigid floor with thickness B ≥ 150 mm and density ≥ 1700 kg/m³
- mineral wool with a minimum density of 120 kg/m³
- 2 3 4 Piro Acrylic Sealant AC120, thickness t1 ≥ 0,6 mm, t2 ≥ 1,2 mm
 - rigid wall with thickness B ≥ 150 mm and density ≥ 600 kg/m³
 - indicates the side of the supporting construction which is exposed to fire

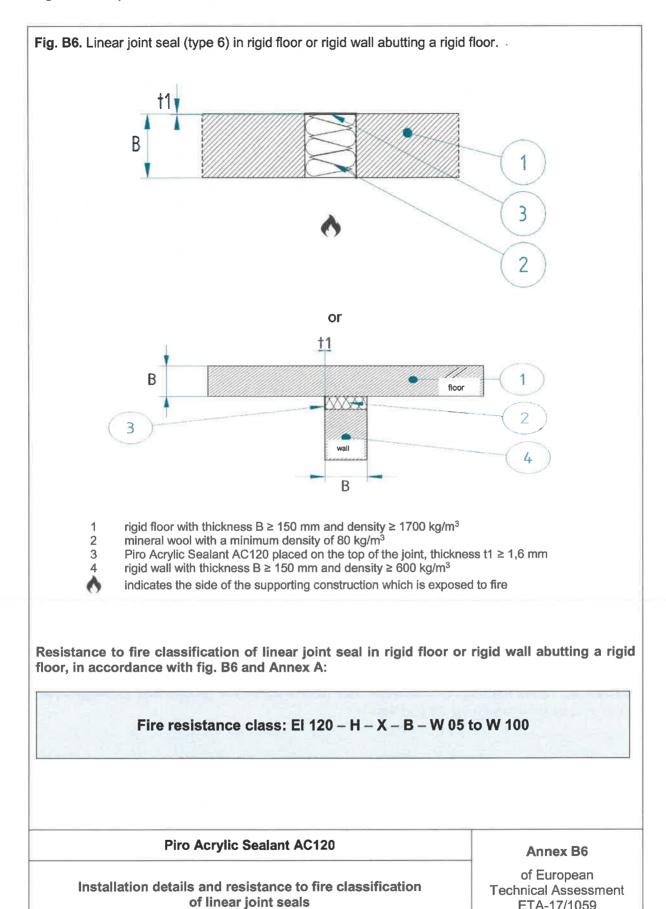
Resistance to fire classification of linear joint seal in rigid floor or rigid wall abutting a rigid floor, in accordance with fig. B5 and Annex A:

Fire resistance class: El 120 - H - X - B - W 05 to W 60

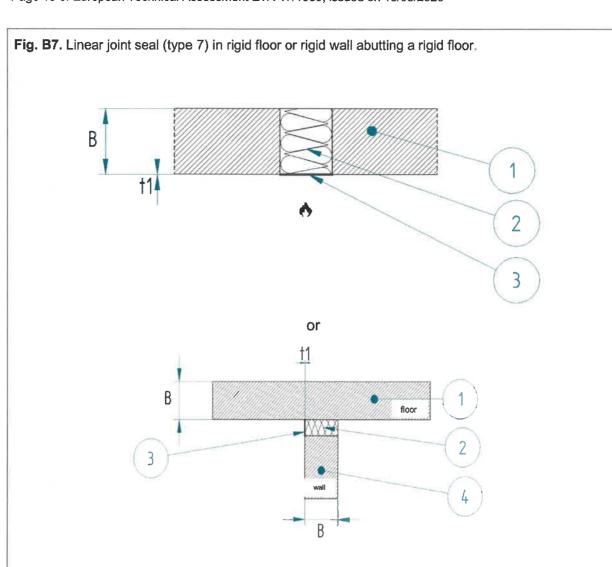
Piro Acrylic Sealant AC120

Installation details and resistance to fire classification of linear joint seals

Annex B5



ETA-17/1059



- 1 rigid floor with thickness B \geq 150 mm and density \geq 1700 kg/m³
- 2 mineral wool with a minimum density of 80 kg/m³
- 3 Piro Acrylic Sealant AC120 placed on the bottom of the joint, thickness t1 ≥ 1,6 mm
- 4 rigid wall with thickness B ≥ 150 mm and density ≥ 600 kg/m³

indicates the side of the supporting construction which is exposed to fire

Resistance to fire classification of linear joint seal in rigid floor or rigid wall abutting a rigid floor, in accordance with fig. B7 and Annex A:

Fire resistance class: El 120 – H – X – B – W 05 to W 100 $\,$

Piro Acrylic Sealant AC120	Annex B7
Installation details and resistance to fire classification of linear joint seals	of European Technical Assessment ETA-17/1059