CLASSIFICATION REPORT

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Prepared by:
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Approved body No.:
0843

Product Name:
ROCKWOOL FirePro® SP FireStop EN 120

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TABLE OF CONTENTS

1. Introduction

This classification report defines the classification assigned to the element, ROCKWOOL FirePro® SP FireStop EN 120, in accordance with the procedures given in EN 13501-2:2016.

2. Details of classification product

2.1 General

The element, ROCKWOOL FirePro® SP FireStop EN 120, is defined as a fire resisting linear joint seal, to be used as a perimeter seal to reinstate the fire resistance performance where a curtain wall meets a concrete floor.

2.2 Product description

The element, ROCKWOOL FirePro® SP FireStop EN 120, is an aluminium faced stone wool component for linear joints in perimeter seal systems. The element, ROCKWOOL FirePro® SP FireStop EN 120, is fully described in the test reports provided in support of the classification, as detailed in clause 3.1.

3. Test reports in support of classification

3.1 Summary of test reports

Name of laboratory	Name of sponsor	Test and Date	Test method
UL International Germany GmbH, Am Oberfeld 19, 83026 Rosenheim, Germany	ROCKWOOL Limited	4790615824.4-1, 6th July 2023	EN 1364-4:2014

3.2 Results

3.2.1. Summary of report No.: 4790615824.4-1

A fire resistance test in accordance with EN 1364-4:2014, on perimeter seal installed in the void between an aluminium framed, glazed, curtain wall and a 200 mm thick concrete (2500 kg/m³) floor construction.

3.2.1.1 Results of ROCKWOOL FirePro® SP FireStop EN 120 in perimeter seal

Type of curtain walling	Fire exposure	Component / Surface	Integrity (mins)			Insulation (mins)		Radiation (mins)
			Cotton pad	Gap gauge	Flaming	Mean temp. rise	Max. temp. rise	
A	Internal + external	S3	n/a	n/a	n/a	n/a	n/a	n/a
B	Internal	S2	144*	144*	144*	144*	144*	-
B	Internal	S3	-	-	144*	144*	144*	-
B	Internal	S5	144*	-	144*	-	-	-
B	External	S1	n/a	n/a	n/a	n/a	n/a	n/a
A, B	Internal	Perimeter seal	144*	144*	144*	-	144*	--

*no failure until discontinuation of test

- Perimeter seal cycle tested for 500 cycles at 10 cpm with compression and extension of 2.85% (10 mm) and fire tested at max. opening width of 360 mm.

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with Clause 7 of EN 13501-2:2016.

4.2 Classification

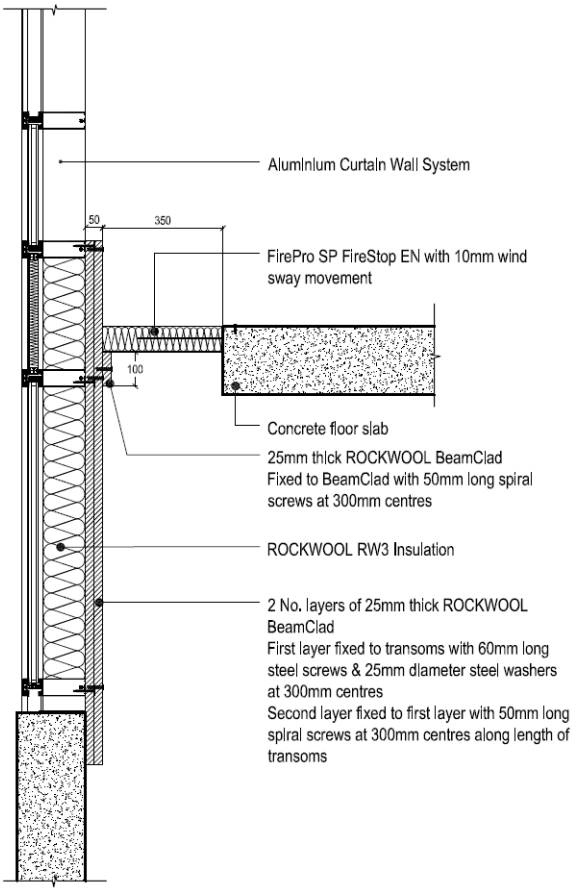
The element, product name ROCKWOOL FirePro® SP FireStop EN 120, is classified according to the following combinations of performance parameters and classes as appropriate.

R	E	I	W		t	t	-	M	C	S	IncSlow	sn	ef	r

Non-fire rated curtain wall façade abutting a rigid floor with a minimum thickness of 200 mm
Aluminium foil faced stone wool perimeter seal installed to the top side of the floor

Perimeter Seal: ROCKWOOL FirePro® SP FireStop EN 120 fixed via brackets to the top side of the floor against ROCKWOOL BeamClad spandrel protection

Construction details:
Section View



Substrate	Seal thickness	Movement capability*	Backing material**	Classification
Aluminium curtain wall*** /Concrete (2500 kg/m^3)	90 mm	±2.85%	2no. layers of 25mm thick ROCKWOOL BeamClad (165 kg/m^3) & ROCKWOOL RW3 (60 kg/m3) infill between mullions and transoms	**EI 120 – H – M2.85 – F – W 0 to W 350**

* movement per EAD 350141-00-1106 with 500 cycles at a rate of 10 cycles per minute compression and extension
** Stone wool protection of spandrel area, additional section of 100mm high ROCKWOOL BeamClad installed below perimeter seal adjacent to first 2no . layers
*** Curtain walls with aluminium framing (made of transoms and mullions (profile 124 x 50, reference no. FWS50 as per ift Certificate of Conformity 15-001311-PR01) with a maximum width of 1030 mm centres between the mullions).

Perimeter seal installation specifics: ROCKWOOL RW3 backing material is installed between mullions and transoms before 2no. layers of ROCKWOOL BeamClad are fixed to the transoms. The ROCKWOOL FirePro® SP FireStop EN 120 is then fitted with 2.85% compression between the ROCKWOOL BeamClad and rigid floor via ROCKWOOL SP/L fixing brackets which are fixed to the rigid floor and penetrate through the centre of the perimeter seal. Further support is given by an additional section of ROCKWOOL BeamClad. The perimeter seal is joined by splices at 1000 mm, splices joints are covered by aluminium foil tape

4.3 Field of Application for perimeter seal systems

This classification is valid for the following end use applications (as defined in EN1364-4: 2014, referencing the following appropriate clauses of EN1364-4:2014).

13.3 Perimeter seal

13.3.1 General

Perimeter seals tested according to this standard shall not be used where in practice movement of the perimeter joint is expected.

NOTE For information on test requirements for perimeter seals in case of required movement capability see A.3.4.

A.3.4 Perimeter Seal

Where the intention of the test is only the perimeter seal or the fixing of the framing system, standard configuration 5 is recommended but also configuration 1 or 3 depending on the type of curtain walling may be used. Results from standard configuration 3 may be restricted to curtain walling type B.

Rules regarding test requirements in case movement capability for the perimeter seal is required are given in ETAG 026-3 (EAD 350141-00-1106).

13.3.2 Material

Test results for non-faced mineral wool are equally applicable to an aluminium faced version of the same mineral wool product (brand designation) but not vice versa.

Test results for mineral wool are valid for a version with higher density of the same mineral wool product (brand designation) as long as it is compressible to the same extent as in the test, subject to restrictions depending on the direction of compression given in 13.3.4.4.

Test results for compressed mineral wool are equally applicable to mineral wool of higher compression, subject to restrictions depending on the direction of compression given in 13.3.4.4.

Changes to other materials or components are not permitted.

13.3.3 Width/depth

For definition of width and depth of the perimeter seal see Figure 15.

Test results for perimeter seals or seal components with lower depth are equally applicable to perimeter seals with higher depth but not vice versa. For membrane forming coatings and elastomeric strips the results apply for all thicknesses within the tolerance band for the membrane/strip and higher depth of mineral wool (or other backing material).

Test results for perimeter seals with higher nominal width are equally applicable to perimeter seals with narrower nominal width but not vice versa, subject to the depth of the seal or its components being minimum the same as tested and subject to the rules regarding compression (see 13.3.4.4). For membrane forming coatings and elastomeric strips the overlap on the floor and the spandrel shall be in practice minimum the same as tested.

Test results for perimeter seals with an overrun according to Table 3 cover a nominal width range up to 1,2 times the tested nominal width, except for products with distinct sizes for specific gap widths and preformed products which are kept in place by compression (no additional mechanical fixing provided).

In case an intumescent sealant is used as component of the perimeter seal its depth may be increased.

13.3.4 Fixing of the perimeter seal

13.3.4.1 For mechanically fixed seals the fixing of the perimeter seal is restricted to the fixing used in the test.

13.3.4.2 For self-adherant seals or seal components, e.g. membrane forming coatings and sealants, as well as for adhesion fixed seals or seal components, e.g. elastomeric strips, the results apply for all substrates for which the adhesion is shown to be equal to or better than that in the fire test.

NOTE An example for adhesion fixing is the use of a glue to fix the seal or seal component.

13.3.4.3 For friction fixed seals or seal components, e.g. mineral wool and compressible strips, minimum the same compression shall be used in practice as used in the test, subject to the following rule.

13.3.4.4 For mineral wool with compression direction B-B or C-C according to Figure 17 the compression shall be minimum the same as tested but sufficiently low not to induce a mechanical failure of the seal, e.g. by de-lamination fracture.

13.3.5 Covering

Tests without steel sheet covering cover perimeter seal systems including steel sheet covering, provided it is not force-fit fixed to the curtain walling, disregarding whether the steel sheet covering is installed on top or on bottom of the seal, but not vice versa.

Test results are only valid for the covering material used in the test.

No additional coverings of reaction to fire classification B to F according to EN 13501-1 are permitted on bottom side of perimeter seals.

13.4 Supporting floor

Test results obtained with the standard supporting floor construction may be applied to concrete floors of a thickness and density equal to or greater than that of the floor construction used in the test.
The test results of a curtain walling specimen tested in front of a non-standard supporting floor are valid for other floors of the same type provided the thickness as well as the fire resistance with respect to loadbearing capacity, integrity and insulation of these floors are equal to or greater than that of the non-standard floor used in the test.

5. Limitations

This classification report does not represent type approval or certification of the product.

6. Signatories

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For and on behalf of UL International (UK) Ltd.