Institut für Brandschutztechnik
und Sicherheitsforschung

CLASSIFICATION REPORT

Classification report on fire resistance performance in acc. with EN 13501-3: 2009

Report No.: 317111402-A-en
Date: 3 April 2018
Processor: K. Mayr/hofm
EXT: 883

Customer:	**svt Brandschutz Vertriebsgesellschaft mbH International** Glüsinger Straße 86 D-21217 Seevetal
Prepared by:	IBS – Institut für Brandschutztechnik und Sicherheits-forschung Gesellschaft mbH. Petzoldstraße 45, A-4017 Linz
Processor:	Mr. Konrad MAYR
Product name:	Soft penetration seal with fire dampers **Penetration seal type:** **PYRO-SAFE FLAMMOTECT-A**
Brief assessment:	In compliance with EN 13501-3, the above building element is assigned fire resistance class **EI 90 S (ve, ho)** with regard to its fire resistance performance.
Period of validity until:	Five years from date of issue until **3rd April 2023**

This Classification Report contains **6** pages and shall not be utilized or reproduced wholly or in part.

1. Introduction:

This Classification Report defines the fire resistance classification assigned to the building component, soft penetration seal with fire dampers of type PYRO-SAFE FLAMMOTECT-A, intended for installation with fire dampers in accordance with the procedures given in EN 13501-3:2009.

2. Details of classified product

2.1 Function:

The building product, soft penetration seal with fire dampers of type PYRO-SAFE FLAMMOTECT-A, is defined as being a penetration seal of fire dampers. The function of the element is to resist fire with regard to its fire integrity, heat insulation and smoke leakage.

2.2 Description:

The penetration is closed by means of the soft sealing system with fire dampers, PYRO-SAFE FLAMMOTECT-A, which consists of two mineral fibre boards (type: Rockwool Hardrock 040) pre-coated with a 1 mm dry layer of PYRO-SAFE FLAMMOTECT-A coating each 50 mm thick with a density of 150 kg/m^3 and a size of max. 1900 x 1400 mm or 1400 x 1900 mm. The distance between the fire damper and the penetration of the structural element is 40 mm – 400 mm. The transitions between the mineral fibre boards and the supporting structure or between the mineral fibre boards and the fire damper were provided with the filler PYRO-SAFE FLAMMOTECT-A and the coating PYRO-SAFE FLAMMOTECT-A.

The tests of this penetration sealing system were carried out with Trox fire dampers of types FK-EU and FKRS-EU (Trox GmbH, Heinrich-Trox-Platz, D-47504 Neukirchen-Vluyn).

3. Test reports and test results in support of classification:

3.1 Test reports:

	Type	Name of testing body	Name of customer	Test report No.	E	I	S	Orientation (i ↔ o)	Alignment (ho, ve)
1	FK-EU 1500x800	IBS – Institut für Brandschutztechnik und Sicherheitsforschung Gesellschaft mbH. Petzoldstraße 45, A-4017 Linz	svt Brandschutz Vertriebsgesell-schaft mbH International Glüsinger Straße 86 D-21217 Seevetal	316113002-1 of 16/11/2017	134	115	122	(i ↔ o)	ho
	FKRS-EU NW				134	96	92	(i ↔ o)	
2	FKRS-EU NW 315	IBS – Institut für Brandschutztechnik und Sicherheitsforschung Gesellschaft mbH. Petzoldstraße 45, A-4017 Linz	svt Brandschutz Vertriebsgesell-schaft mbH International Glüsinger Straße 86 D-21217 Seevetal	316113004-1 of 21/08/2017	132	97	132	(i ↔ o)	ve
	FK-EU 1500x800				132	100	132	(i ↔ o)	

3.2 Resistance to fire performance:

Table 1: Terms of loading

Temperature-time curve:	Standard temperature-time curve as specified in clause 5.1.1 of OENORM EN 1363-1:2000.

4. Classification and direct field of application:

4.1 Classification reference:

The classification is established in compliance with clause 7 of EN 13501-3:2007 and A 1:2009.

4.2 Classification:

Fire resistance classification:

Classification for soft penetration seal with fire dampers of type PYRO-SAFE FLAMMOTECT-A:

Type	max. size in mm	Assembly	Alignment	E	I	Orientation	S
FKRS-EU	315	Soft seal	ho,ve	90	90	(i ↔ o)	90
FK-EU	1500 x 800	Soft seal	ho,ve	90	90	(i ↔ o)	90

4.3 Field of application:

This Classification shall be valid in the following practical applications (end-use applications) of the soft penetration seal with fire dampers of type PYRO-SAFE FLAMMOTECT-A installed with Trox fire dampers of types FK-EU (FK-K90) and FKRS-EU (Trox GmbH, Heinrich-Trox-Platz, D-47504 Neukirchen-Vluyn). Installation details for each fire damper type are available in the installation guides.

4.3.1. Fire damper sizes

The svt soft penetration seal with fire dampers of type PYRO-SAFE FLAMMOTECT-A may be applied in fire dampers up to 1500 x 800 mm and penetration sizes up to 1900 x 1400 mm or 1400 x 1900 mm, but the distance between the fire damper and the penetration may only lie between 40 mm and 400 mm.

4.3.2. Fire dampers in structural penetrations

The penetration sealing system may only be installed in wall or ceiling assemblies.

4.3.3. Distance between fire dampers and between fire damper and loadbearing structural members

The test results based on fire tests of one or two fire dampers with a minimum distance of 200 mm shall find practical application to the following minimum distances:

a) 200 mm between fire dampers in separate installations

b) 75 mm between a fire damper and a loadbearing structural member

4.3.4. Distances between fire dampers and supporting structure

The distance (gap dimensions of soft seal) between fire damper and supporting structure may max. be 400 mm.

4.3.5. Supporting constructions

The svt soft penetration seal with fire dampers of type PYRO-SAFE FLAMMOTECT-A may be used in standard supporting constructions (see EN 1366-2, charts 3-5) whose fire resistance duration is higher or the same as the one of the standard supporting construction used during fire testing (greater thickness, greater density, more sheets).

The svt soft penetration seal with fire dampers of type PYRO-SAFE FLAMMOTECT-A may also be mounted into solid standard supporting constructions.

The minimum wall thickness for wall installation shall be 100 mm and for ceiling installation 150 mm.

5. Limitations:

5.1 Validity:

This Classification shall be valid for five years as from the date of issue of the classification report, i.e. **until 3 April 2023**. Under the provision that the product and product application ranges are not subjected to changes, the validity can be prolonged by another two years after prior written application.

This Classification shall lose validity before expiry date in case the test and assessment criteria are subject to substantial modifications. Furthermore, the validity shall also expire if the customer undertakes improper technical modifications to the building element that are not covered by the direct field of application.

5.2 Legal notice:

This document does not represent any type of approval or certification of the product.

IBS-INSTITUT FÜR BRANDSCHUTZTECHNIK UND SICHERHEITSFORSCHUNG GESELLSCHAFT M.B.H.
Akkreditierte Prüf-, Inspektions- und Zertifizierungsstelle

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Engineer

Mr. Josef STOCKINGER
Authorised Signatory

Mr. M. EICHHORN-GRUBER
Monitoring

TROX® TECHNIK

TROX GmbH
Heinrich-Trox-Platz
D-47504 Neukirchen-Vluyn

Zeichnung 1R150326

Absperrvorrichtung FK-K90 1500x800 und FKRS-EU NW315 in Weichschott

Wandeinbau

Anlage 1 PK 1 und PK 2

* Achsmitte zur Brandraum beflammten Seite

svt. Weichschott ist bestehend aus:

svt. Mineralfaserplatte MFP 150/50; svt. Brandschutzbeschichtung PYRO-SAVE Flammotect A

TROX® TECHNIK

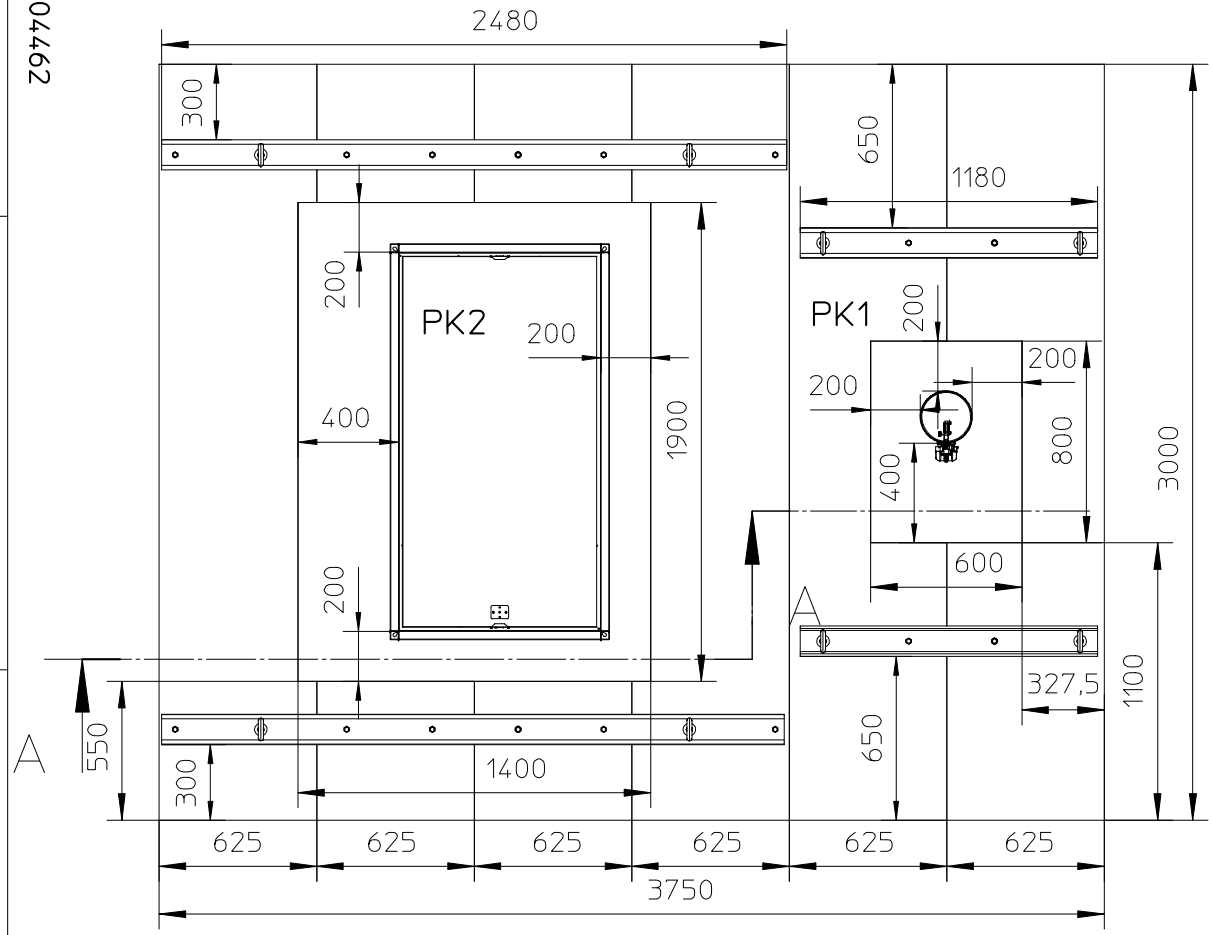
TROX GmbH
Heinrich-Trox-Platz
D-47504 Neukirchen-Vluyn

Brandschutzklappe
FK-K90 und FKRS-EU
mit Weichschott in
Porenbetondecke
Absperrklappe

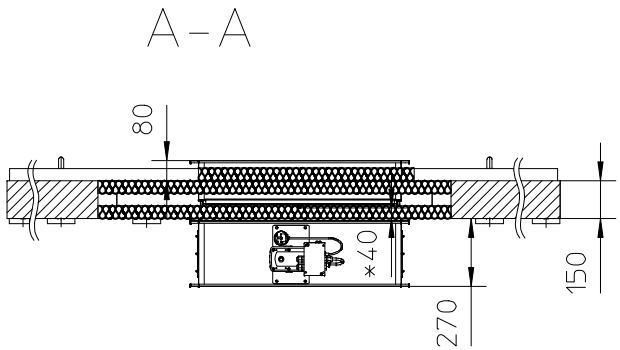
Anlage 1
PK 1 und PK2

Zeichnung 1R1504462

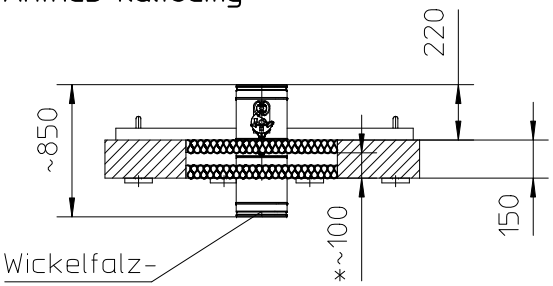
Ansicht Draufsicht Kaltseite



FK-K90 1500x800
im Weichschott
Antrieb beflammte Seite



FKRS-EU NW200
im Weichschott
Antrieb kaltseitig



*Abstand
Klappenblattmitte
zur OF beflammte Seite
Tragkonstruktion

svt. Weichschott ist bestehend aus:
svt. Mineralfaserplatte MFP 150/50; svt. Brandschutzbeschichtung PYRO-SAVE Flammotect A