

MFPA Leipzig GmbH

Testing, inspection and certification body for building materials, building products and building systems

> **Division III - Structural Fire Protection** Dipl.-Ing. Sebastian Hauswaldt

Team 3.2 - Fire Behaviour of Building Types and **Special Structures**

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Advisory opinion no. GS 3.2/16-129-7-r1

from 9 August 2018

1st copy

Replace GS 3.2/16-129-7 from 18. September 2017

Advisory opinion regarding the transferability of the material properties and test Subject matter:

results of the joint seal defined in PB3.2/16-129-1 onto the joint seal with product name "PUFC750: PU-FC - ESPUMA RESISTENTE FUEGO CANULA" and "PUFP750: PU-FP - ESPUMA RESISTENTE FUEGO

PISTOLA" produced by Técnicas Expansivas S.L.

Client: Técnicas Expansivas S.L.

Polígono Industrial la Portalada II

C/ Segado 13

E-26006 Logroño (La Rioja) España

Date of order: 27 January 2017

J. Peitzmeier, M.Sc.

Person in charge: C. Kramer, M.Eng.

This document consists of 3 pages.

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1. General

MFPA Leipzig GmbH

Structural Fire Protection

The owner of test report PB3.2/16-129-1 dated 9 January 2017 by MFPA Leipzig GmbH (below: "Test report PB3.2/16-129-1") conducted fire tests on the joint seals at MFPA Leipzig GmbH. The joint seal defined in test report PB3.2/16-129-1 was tested in accordance with DIN EN 1366-4:2010-08 in conjunction with DIN EN 1363-1:2012-10 in order to determine the fire resistance duration on the vertically and horizontally aligned construction parts. The results are recorded in test report PB3.2/16-129-1 and are presented in summary below.

Brief summary of the test results of the fire resistance test on the joint seal defined 2. in test report PB3.2/16-129-1.

Table 1 below shows a summary of the results of the fire resistance tests on the joint seal defined in test report PB3.2/16-129-1 in accordance with DIN EN 1366-4:2010-08 in conjunction DIN EN 1363-1:2012-10 with single-sided exposure to fire according to a time/time temperature curve and without the influence of mechanically induced deformations. The results are based on test report PB3.2/16-129-1 dated 9 January 2017 from MFPA Leipzig GmbH.

The joint seal was tested in supporting structures of cellular concrete with a component thickness of 200 mm.

The performance criteria in accordance with DIN EN 1366-4:2010-08 in conjunction with DIN EN 1363-1:2012-10 were guaranteed over the respective test period in accordance with the table below.

Table 1: Time taken to lose the required performance criteria (in minutes)

Sample			Performance criteria		Measured values	
Alignmen t	Type of joint seal	Joint width	Thermal insulation	Integrity	Max. temperature	At minute of test
vertical	200 mm joint seal according to test report PB3.2/16-129-1	10 mm	>243 min	>243 min	55 K	240 min
		20 mm	145 min	145 min	18 K	120 min
		30 mm	111 min	111 min	6 K	90 min
		40 mm	89 min	89 min	8 K	60 min
horizontal	200 mm joint seal according to test report PB3.2/16-129-1	10 mm	>243 min	>243 min	52 K	240 min
		20 mm	156 min	156 min	29 K	120 min
		30 mm	107 min	107 min	11 K	90 min
		40 mm	89 min	89 min	1 K	60 min

The results of the fire resistance tests are directly applicable to similar designs in which one or several of the changes listed below have been carried out.

- The vertical and horizontal joint seals in the tested wall constructions apply for vertical and horizontal joints in walls with the tested joint widths if the relevant tested joint set-up is used.
- The joint seals can be used in space-enclosing components of cellular concrete, normal concrete, hollow blocks and masonry with a bulk density of 600 kg/m³ or more.
- Vertical supporting structures must have a minimum component thickness of 200 mm or more depending on the joint seals used.



- The joints with the joint seals used may not experience any shear movements greater than 7.5 % of the component thickness of the supporting structure.
- The joints with the joint seals used may not experience any lateral strains greater than 7.5 % of the component thickness of the supporting structure.

3. Advisory opinion / special notes

The manufacturer of the product defined in test report PB3.2/16-129-1, and who is therefore the owner of test report PB3.2/16-129-1 dated 9 January 2017 confirms to MFPA Leipzig GmbH with a letter dated 16 July 2018 that the product described and tested in test report PB3.2/16-129-1 corresponds in its material properties to the product sold by

Técnicas Expansivas S.L.
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"PUFC750 : PU-FC - ESPUMA RESISTENTE FUEGO CÁNULA" and "PUFP750 : PU-FP - ESPUMA RESISTENTE FUEGO PISTOLA".

The owner of test report PB3.2/16-129-1 on the one side, and Técnicas Expansivas S.L., represented by Mr Eduardo Poza, on the other, have confirmed to MFPA Leipzig GmbH in writing that the results documented in test report PB3.2/16-129-1 dated 9 January 2017 by MFPA Leipzig GmbH can be used for transferral to the product "PUFC750: PU-FC – ESPUMA RESISTENTE FUEGO CÁNULA" and "PUFP750: PU-FP – ESPUMA RESISTENTE FUEGO PISTOLA".

MFPA Leipzig GmbH does have the relevant confirmation letters.

The results of the tests refer exclusively to the test items described herein. This document does not replace any certificate of conformity or usability as defined by the building regulations (national/European).

Leipzig, 9 August 2017

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