DANAK
TEST Reg. No. 12

DBI

Resistance to fire Classification report

Merbenit FS30

Linear joint seals in various supporting constructions

---

merz+benteli ag
Freiburgstrasse 616
CH-3172 Niederwangen
Switzerland

File:	PCA10094b
Serial No.:	14024
Ref.:	DB/TDJ
Pages:	5
Encl.:	0
Date:	2013-07-09

Danish Institute of Fire and Security Technology

Jernholmen 12, DK-2650 Hvidovre
Tel: +45 36 34 90 00
Website: www.dbi-net.dk

E-mail: dbi@dbi-net.dk
Fax: +45 36 34 90 01

1 OWNER

merz+benteli ag
Freiburgstrasse 616
CH-3172 Niederwangen
Switzerland

2 INTRODUCTION

This classification report defines the classification assigned to the product in accordance with the procedures given in DS/EN 13501-2:2007+A1:2009 clause 7.5.9.

The product has the designation: Merbenit FS30.

3 DETAILS OF CLASSIFIED PRODUCT

3.1 GENERAL

The product Merbenit FS30 is an elastic one-component sealing based on MS-Hybrid-Polymer.

The sealant is used together with a backing material designated Feuer-Flex Brand-schutz-Fugenschnur, which is a mineral wool based roll with a glass fibre net.

The classification is valid for the following end use application: Linear joint seals.

3.2 PRODUCT DESCRIPTION

The linear joints are sealed in the following way:

A roll of Feuer-Flex Brandschutz-Fugenschnur with a nominal diameter of 30 mm is compressed into the joint. The roll is placed approx. 10 mm behind the surface of the joint. The remaining 10 mm is filled with sealant Merbenit FS30.

The joints are sealed on both sides of the wall or floor construction, e.g. the joint seals are symmetrical.

4 TEST REPORTS AND TEST RESULTS IN SUPPORT OF THIS CLASSIFICATION

4.1 FIRE RESISTANCE TEST REPORTS

The classifications are based on the following test report.

Name of Laboratory	Name of sponsor	Test report File No.	Test method	Date of test
Danish Institute of Fire and Security Technology	merz+benteli ag	PGA10240b, 2013-07-04	EN 1366-4: 2006+ A1:2010	2013-04-24

4.2 TEST RESULTS

The fire resistance test PGA10240 was a classification test performed with a total of 6 individual test specimens. A detailed description of each test specimen is given in the test report.

The fire resistance test PGA10240 was performed on a vertical and a horizontal construction simultaneously. The test duration was 122 minutes.

The test had the following results:

Test specimen				**Results (minutes)**	
no	Mounted in	Orientation	Supporting construction	**Insulation**	**Integrity**
1	Wall	Vertical	Softwood/ Lightweight concrete	**122**	**122**
2	Wall	Vertical	Lightweight concrete/ Lightweight concrete	**122**	**122**
3	Wall	Vertical	Steel/ Steel	**66**	**122**
4	Wall	Vertical	Gypsum plasterboard/ Gypsum plasterboard	**122**	**122**
5	Wall	Horizontal	Steel/ Lightweight concrete	**71**	**122**
6	Floor	Horizontal	Lightweight concrete/ Lightweight concrete	**122**	**122**

5 CLASSIFICATION AND FIELD OF APPLICATION

5.1 REFERENCE

This classification has been carried out in accordance with clause 7.5.9 of EN 13501-2:2007+A1:2009.

5.2 CLASSIFICATION

The linear joint seals are classified according to the following combinations of performance and classes as appropriate.

The classes obtained for the linear joint seals, specified by letters indicating the test conditions, cf. clause 7.5.9.4 of EN 13501-2:2007+A1:2009, are given in the following table:

Test specimen:	Classes specified by letters indicating test conditions:
1	EI 120/E 120 – V – X – B – W20
2	EI 120/E 120 – V – X – B – W20
3	EI 60/E 120 – V – X – B – W20
4	EI 120/E 120 – V – X – B – W20
5	EI 60/E 120 – T – X – B – W20
6	EI 120/E 120 – H – X – B – W20

5.3 FIELD OF APPLICATION

The classifications are valid for linear joints seals with a width of 20 mm, a depth of minimum 150 m and unlimited length and in the following end use conditions:

For classifications up to EI 60/E 120:

- Vertical linear joints in vertical steel constructions and other metal constructions with melting points higher than 1000 C° (represented by test specimen 3).

- Horizontal linear joints in vertical constructions where concrete, block work or masonry forms one face of the joint and steel or other metal constructions with melting points higher than 1000 C° forms the other joint face (represented by test specimen 5).

- Linear joints as specified above with a movement capability up to 7.5%.

For classifications up to EI 120/E 120:

- Vertical linear joints in vertical constructions where autoclaved concrete, regular concrete, block work or masonry forms one face of the joint and timber constructions with density equal to or greater than 450 kg/m^3 forms the other joint face (represented by test specimen 1).

- Vertical linear joints in vertical constructions made of autoclaved concrete, regular concrete, block work and masonry with thickness and density equal to or greater than tested (150 mm and 700 kg/m^3) (represented by test specimen 2).

- Vertical linear joints in vertical gypsum plasterboard constructions with minimum thickness 150 mm (represented by test specimen 4).

- Linear joints in horizontal constructions made of autoclaved concrete, regular concrete, block work and masonry with thickness and density equal to or greater than tested (150 mm and 700 kg/m^3) (represented by test specimen 6).

- Horizontal linear joints in wall constructions where the joint is abutting a floor, ceiling or roof and where the constructions are made of autoclaved concrete, regular concrete, block work and masonry with thickness and density equal to or greater than tested (150 mm and 700 kg/m^3) (represented by test specimen 6).

- Linear joints as specified above with a movement capability up to 7.5%.

6 LIMITATIONS

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

Dan Bluhme
M. Sc. (Eng.)

/

Trine Dalsgaard Jensen
M. Sc. (Eng.)

merz+benteli ag
Freiburgstrasse 616
CH-3172 Niederwangen
Switzerland