



Laboratory for Fire Safety

Reaction to fire test in accordance with EN_ISO_11925-2:2020 of RoofSupport FireWrap

Test report

Report number Y 2586-4E-RA-001 dated 9 May 2022

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Reaction to fire test in accordance with EN_ISO_11925-2:2020 of RoofSupport FireWrap

Test report

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Product **RoofSupport FireWrap**

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1 Introduction

On behalf of Conduct Technical Solutions bv an investigation was performed with respect to the reaction to fire properties of RoofSupport FireWrap.

The investigation was performed in the Peutz Laboratory for Fire safety in accordance with EN-ISO 11925-2:2020 ('Single-flame source test'), further referenced as EN-ISO 11925-2.

This report provides a description of the material tested, the method of mounting in the test apparatus, the method used and the test results.



For this type of measurements the Laboratory for Fire safety has been accredited by the Dutch "Raad voor Accreditatie" (RvA).

The RvA is member of EA MLA (**EA MLA: European Accreditation Organisation MultiLateral Agreement**: <http://www.european-accreditation.org>).

EA: "Certificates and reports issued by bodies accredited by MLA and MRA members are considered to have the same degree of credibility, and are accepted in MLA and MRA countries."

2 Product description

2.1 General

The information in this chapter is based on information provided by the client.

The product investigated is the RoofSupport FireWrap, hereinafter also called 'the product'. The intended application is to protect solar cables against fire and to delay the fire spread between compartments. The FireWrap bag is based on an E-glass fibre silicone coated textile layer filled with an insulation material. The bag is sealed with high temperature resistant threads and provided with stainless steel tensioners.

The materials to be tested were delivered on the date specified in table 2.1. On arrival the material was verified and marked by Peutz.

2.2 Harmonised product standard

According to the client there was no harmonised European product standard published at the time the tests were conducted and this report was drawn up.

2.3 Product identification

The most important parameters for identifying the product are summarised in Tables 2.1 and 2.2 below.

t2.1 General information of product to be tested

Product	
Date of delivery	21 st of March 2022
Commercial name	RoofSupport FireWrap
Manufacturer	Forfyre bv Koopvaardijweg 3A 4906 CV Oosterhout The Netherlands
Client	Conduct Technical Solutions bv Aalborg 4 2993 LP Barendrecht The Netherlands
Identification	N/A
Sampling	N/A

Peutz was not involved in the selection of the test specimen (or of its materials). The laboratory cannot make any declaration about the representativeness of the provided specimen and the samples made available. The results apply to the sample as received.

t2.2 Additional information of product to be tested

Product	Nominal value	Measured value [MV]
Description	The FireWrap bag is based on an E-glass fibre silicone coated textile layer (1) filled with an insulation material (2). The bag is sealed with high temperature resistant threads (3) and provided with stainless steel tensioners (not part of the specimen).	
Intended use	Protect solar cables against fire and to delay the fire propagation between compartments.	
Dimensions [mm]	268 x 92	
Total thickness [mm]	19	29.0
Density [kg/m ³]	-	170
Surface weight [kg/m ²]	-	4.9
Colour	White	
Layer (1)		
Type product	E-glass fibre based textile, silicon coated on both sides	
Commercial name	Fyretex 550 HT SIL	
Manufacturer	Forfyre bv, Koopvaardijweg 3A, 4906 CV Oosterhout NL	
Thickness [mm]	0.80	0.417
Density [kg/m ³]	0.512	*
Surface weight [kg/m ²]	0.64	0.65
Colour	White	White
Layer (2)		
Type product	High temperature insulation wool blanket based on alkaline earth silicate fibres	
Commercial name	FyreBlanket 1200	
Manufacturer	Forfyre bv, Koopvaardijweg 3A, 4906 CV Oosterhout NL	
Thickness [mm]	25	25.0
Density [kg/m ³]	128	138.4
Surface weight [kg/m ²]	3.2	3.46
Binder	None	**
Layer (3)		
Type product	Kevlar covered steel threads	
Commercial name	FyreYarn 1000	
Manufacturer	Forfyre bv, Koopvaardijweg 3A, 4906 CV Oosterhout NL	
Thickness [mm]	0.15	**
Density [kg/m ³]	N/A	**
Surface weight [kg/m ²]	N/A	**
Colour	White/yellow	

* Not verified by the laboratory

** Unverifiable by the laboratory

The values mentioned are the nominal values as given by the client, unless otherwise stated (MV, measured value).

2.4 Conditioning of test specimen

Prior to the tests, the material or the test specimens were stored in a climate room with the environmental conditions as described in EN 13238:2010. On the basis of weighting according to EN 13238:2010 chapter 4.2 has been established that the equilibrium moisture content is reached.

Conditioning took place from 22nd of March 2022 up to the test date 30th of March 2022.

2.5 Mounting of test specimen

According to the client there was no harmonised European product standard published at the time the tests were conducted and this report was drawn. The construction of the test specimens and the mounting in the test apparatus are therefore based on EN-ISO 11925-2.

The test specimens were constructed by the client as described in table 2.3 below.

t2.3 Mounting of test specimen

Product	
Substrate	No substrate was used.
Mounting and fixing	Product is clammed between the specimen holder as described in EN ISO 11925-2 figure 3
Joints	No seams were present.
Product standard	At the time of testing the client was not aware of the existence of a harmonised product standard.

3 Test results

3.1 Results of measurements

In total six tests were performed. For any comments and/or deviations from the standard, please refer to Chapter 3.2. The flame application time was 30 s.

There was no sign of special behaviour of the test specimen during the tests.

The environmental conditions and test results are summarised in the tables below.

t3.1 Environmental conditions immediately prior to test the test

Surface exposure		
Test date		30/03/22
Ambient temperature	[°C]	24
Relative humidity	[%]	38

t3.2 Test results EN-ISO 11925-2

Surface exposure					
Specimen	Ignition occurs Y / N	Max. flame height [mm]	t_{150} [s]	Afterburn time [s]	Ignition filter paper Y / N
1-1	N	15	Not reached	0	N
1-2	N	25	Not reached	0	N
1-3	N	30	Not reached	2	N
1-4	N	20	Not reached	0	N
1-5	N	25	Not reached	0	N
1-6	N	15	Not reached	0	N
Classification parameters:		150 mm not reached within 60 s			N
		ignition of filter paper			N

3.2 Remarks

The specimens were slightly bigger in deviation to the standard ; 92 x 268 mm (width x height), in stead of 90 x 250 mm.

In view of the results obtained, we do not anticipate this to be of any influence on a potential classification.

4 Finally

The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

Information regarding the accuracy of the method can be found in EN-ISO 11925-2, Annex A.

Mook,



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This report contains 9 pages.