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Testing. Advising. Assuring.



Title:

CLASSIFICATION OF REACTION TO FIRE PERFORMANCE IN ACCORDANCE WITH EN 13501-1:2007+A1: 2009

Notified Body No:

0833

Product Name:

"ALUAFS-70"

Report No:

313683

Issue No:

2

Prepared for:

AFS Boru Sanayi AS Kuskondu Sk. 1 Çankaya Ankara Turkey

Date:

29th November 2011



1. Introduction

This classification report defines the classification assigned to "ALUAFS-70", a flexible duct, in line with the procedures given in EN 13501-1:2007+A1: 2009.

2. Details of classified product

2.1 General

The product, "ALUAFS-70", a flexible duct, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

2.2 Product description

The product, "ALUAFS-70", a flexible duct, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description	า	Flexible ducting foil product		
Product reference		"ALUAFS-70"		
Overall weight per	unit area	135g/m ² (stated by sponsor)		
		120.9g/m ²		
		(determined by Exova Warringtonfire)		
Overall thickness		0.074mm (stated by sponsor)		
		0.07mm		
		(determined by Exova Warringtonfire)		
Product configuration		Aluminium foil		
		Adhesive		
		Polyester film		
		Adhesive		
		Aluminium foil		
		Adhesive		
		Polyester film		
		Adhesive		
1		Aluminium foil.		
	Product reference	See Note 1		
	Generic type	Aluminium foil		
Aluminium foil	Name of manufacturer	See Note 2		
(Test Face)	Density	2.72g/cm ³		
	Thickness	9 microns		
	Fame retardant details	See Note 3		
Adhesive	Product reference	See Note 1		
	Generic type	See Note 2		
	Name of manufacturer	See Note 2		
	Thickness	6 microns		
	Application rate	See Note 1		
	Fame retardant details	See Note 3		

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	Product reference	See Note 1		
	Generic type	Polyester film		
	Name of manufacturer	See Note 2		
Polyester film	Density	1.40g/cm ³		
	Thickness	12 microns		
	Fame retardant details	See Note 3		
	Product reference	See Note 1		
	Generic type	See Note 2		
	Name of manufacturer	See Note 2		
Adhesive	Thickness	6 microns		
	Application rate	See Note 1		
	Fame retardant details	See Note 3		
	Product reference	See Note 1		
	Generic type	Aluminium foil		
A1 1 6 11	Name of manufacturer	See Note 2		
Aluminium foil	Density	2.72 g/cm ³		
	Thickness	9 microns		
	Fame retardant details	See Note 3		
	Product reference	See Note 1		
	Generic type	See Note 2		
Adhesive	Name of manufacturer	See Note 2		
Auriesive	Thickness	6 microns		
	Application rate	See Note 1		
	Fame retardant details	See Note 3		
	Product reference	See Note 1		
	Generic type	Polyester film		
Polyester film	Name of manufacturer	See Note 2		
1 Olycster Illin	Density	1.40 g/cm ³		
	Thickness	12 microns		
	Fame retardant details	See Note 3		
	Product reference	See Note 1		
	Generic type	See Note 2		
Adhesive	Name of manufacturer	See Note 2		
7.0.100100	Thickness	6 microns		
	Application rate	See Note 1		
	Fame retardant details	See Note 3		
	Product reference	See Note 1		
	Generic type	Aluminium foil		
Aluminium foil	Name of manufacturer	See Note 2		
	Density	2.72 g/cm ³		
	Thickness	9 microns		
	Flame retardant details	See Note 3		

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Mounting and fixing details	The specimens were tested clamped into a "window" frame manufactured from 5mm steel sheet
Air space details	A 180mm ventilated cavity was situated between the reverse face of each specimen
	and the calcium silicate based backing board
Brief description of manufacturing process	The sponsor of the test was unwilling to provide this information

- Note 1. The sponsor of the test was unable to provide this information
- Note 2. The sponsor of the test has provided this information, but at the specific request of the sponsor, these details have been omitted from the report and are held on the confidential file relating to this investigation
- Note 3. The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the component.

The description of the specimens given above is not as complete as would normally be the case for descriptions included in Exova Warringtonfire test reports and the description may not fully comply with the requirements of the test standard. In all other respects however the tests were conducted fully in accordance with the requirements of the test standard and the test results are valid.

3. Test reports & test results in support of classification.

3.1 Test reports.

Name of Laboratory	Name of sponsor	Test reports/extended application report Nos.	Test method / extended application rules & date
Exova Warringtonfire	AFS Boru Sanayi AS	WF 310869	EN ISO 11925-2
Exova Warringtonfire	AFS Boru Sanayi AS	WF 310868	EN 13823

3.2 Test results

Test				Results		
	ethod & st number	Parameter	No. tests	Continuous parameter - mean (m)	Compliance parameters	
	30s	F_s	6	100	Compliant	
11925-2	exposure - surface	Flaming droplets/ particles		None	Compliant	
EN ISO	30s	F_s	6	100	Compliant	
EN	exposure - edge	Flaming droplets/ particles		None	Compliant	
		FIGRA _{0.2MJ}		6.53	Compliant	
		FIGRA _{0.4MJ}		6.53	Compliant	
	EN 40000	THR _{600s}	2	0.88	Compliant	
EN 13823	LFS	3	None	Compliant		
		SMOGRA		0.00	Compliant	
		TSP _{600s}		16.11	Compliant	

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with clause 8 of EN 13501-1:2007+A1: 2009.

4.2 Classification

The product, "ALUAFS-70", a flexible duct, in relation to its reaction to fire behaviour is classified:

The additional classification in relation to smoke production is:

s1

The additional classification in relation to flaming droplets / particles is:

d0

The format of the reaction to fire classification for construction products excluding flooring and linear pipe thermal insulation is:

Fire Behaviour		Smoke Production			Flaming	Droplets
В	-	s	1	ı	d	0

i.e. B - s1, d0

Reaction to fire classification: B - s1, d0

4.3 Field of application

This classification is valid for the following end use applications:

Construction applications mechanically installed without the presence of a substrate and with a minimum air gap of 180mm.

This classification is also valid for the following product parameters:

Product thickness	No variation allowed
Product weight per unit area	No variation allowed
Product colour	No variation allowed
Product construction	No variation allowed
Product components	No variation allowed

5. Limitations

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

SIGNED

APPROVED

Matthew Dale

Certification Engineer Technical Department **Janet Murrell**

Technical Manager Technical Department

on behalf of Exova Warringtonfire

Issue 2: 16th February 2012

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