

Exova Warringtonfire
Holmesfield Road
Warrington
WA1 2DS
United Kingdom

T : +44 (0) 1925 655 116
F : +44 (0) 1925 655 419
E : warrington@exova.com
W: www.exova.com



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		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		<ul style="list-style-type: none"> • Aluminium foil • Adhesive • Polyester film • Adhesive • Aluminium foil • Adhesive • Polyester film • Adhesive • Aluminium foil.
Aluminium foil (Test Face)	Product reference	See Note 1
	Generic type	Aluminium foil
	Name of manufacturer	See Note 2
	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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Polyester film	Product reference	See Note 1
	Generic type	Polyester film
	Name of manufacturer	See Note 2
	Density	1.40g/cm ³
	Thickness	12 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
Aluminium foil	Product reference	See Note 1
	Generic type	Aluminium foil
	Name of manufacturer	See Note 2
	Density	2.72 g/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
Polyester film	Product reference	See Note 1
	Generic type	Polyester film
	Name of manufacturer	See Note 2
	Density	1.40 g/cm ³
	Thickness	12 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
Aluminium foil	Product reference	See Note 1
	Generic type	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 method & test number		Parameter	No. tests	Results	
				Continuous parameter - mean (m)	Compliance parameters
EN ISO 11925-2	30s exposure - surface	F _s	6	100	Compliant
		Flaming droplets/ particles		None	Compliant
	30s exposure - edge	F _s	6	100	Compliant
		Flaming droplets/ particles		None	Compliant
EN 13823		FIGRA _{0.2MJ}	3	6.53	Compliant
		FIGRA _{0.4MJ}		6.53	Compliant
		THR _{600s}		0.88	Compliant
		LFS		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:
B

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	
B	-	s	1	,	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.

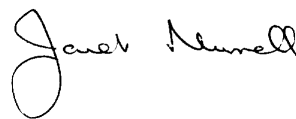
SIGNED



Matthew Dale

Certification Engineer
Technical Department

APPROVED



Janet Murrell

Technical Manager
Technical Department
on behalf of **Exova Warringtonfire**

Issue 2: 16th February 2012

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