

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.F and ALUAFS.F
FORTE”

Additional Class Report

No: 383804

Issue No:

2

Prepared for:

AFS Boru Sanayi A.S.,
Kuskondu Sk. 1, Çankaya,
Ankara, Turkey

Date:

12th June 2017



1. Introduction

This classification report defines the classification assigned to "ALUAFS.F and ALUAFS.F FORTE", a flexible duct consisting of a composite aluminium panel, in accordance with the procedures given in EN 13501-1:2007 +A1: 2009

2. Details of classified product

2.1 General

The product, "ALUAFS.F and ALUAFS.F FORTE", a flexible duct consisting of a composite aluminium panel is defined as suitable for construction applications, excluding flooring and linear pipe thermal insulation.

2.2 Product description

The product, "ALUAFS.F and ALUAFS.F FORTE", a flexible duct consisting of a composite aluminium panel, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		A flexible duct consisting of a composite aluminium panel
Product reference of overall composite		"ALUAFS.F" "ALUAFS.F FORTE"
Name of manufacturer of overall composite		AFS Boru Sanayi A.Ş.
Thickness of overall composite		0.74mm
Weight per unit area of overall composite		153 g/m ²
Aluminium	Generic type	Aluminium foil
	Thickness	16 microns
Adhesive	Generic type	See Note 2 below
	Product reference	See Note 1 below
	Application rate	See Note 2 below
	Application method	See Note 1 below
	Flame retardant details	See Note 3 below
	Curing process	See Note 1 below
Polyester	Generic type	Polyester film
	Product reference	See Note 1 below
	Thickness	9 microns
	Weight per unit area	See Note 2 below
	Flame retardant details	See Note 3 below
Adhesive	Generic type	See Note 2 below
	Product reference	See Note 1 below
	Application rate	See Note 2 below
	Application method	See Note 1 below
	Flame retardant details	See Note 3 below
	Curing process	See Note 1 below
Aluminium	Generic type	Aluminium foil
	Thickness	16 microns

Adhesive	Generic type	See Note 2 below
	Product reference	See Note 1 below
	Application rate	See Note 2 below
	Application method	See Note 1 below
	Flame retardant details	See Note 3 below
	Curing process	See Note 1 below
Aluminium	Generic type	Aluminium foil
	Thickness	16 microns
Brief description of manufacturing process		See Note 1 below

Note 1: The sponsor of the test was unwilling 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 instead 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 this component.

3. Test reports & test results in support of classification

3.1 Test reports

Name of Laboratory	Name of sponsor	Test report Nos.	Test method
Exova Warringtonfire	AFS Boru Sanayi A.S.	WF 388979	EN 13823
CSTB	AFS Boru Sanayi A.S.	RA17-0083	EN ISO 1716

3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance parameters
EN ISO 1716	PCS polyester film	3	22.099 MJ/kg	
	PCS adhesive	3	24.477 MJ/kg	
	Combined non-substantial component		0.3658 MJ/m²	compliant
	product as a whole		2.4 MJ/kg	Compliant
EN 13823	FIGRA _{0.2MJ}	3	0	Compliant
	THR _{600s}		0.35	Compliant
	LFS		None	Compliant
	SMOGRA		0	Compliant
	TSP _{600s}		1	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.F and ALUAFS.F FORTE", a flexible duct consisting of a composite aluminium panel, in relation to its reaction to fire behaviour is classified:

Reaction to fire classification: A2-s1, d0

4.3 Field of application

This classification is valid for the following end use applications:

- i. Wall and ceiling applications
- ii. Cylindrical ducts with an outer diameter larger than 300 mm
- iii. Used free-standing

This classification is also valid for the following product parameters:

Product thickness	The aluminium foil may be increased in thickness
Product composition	No other variation allowed

SIGNED



.....
Jennifer Lucas-Cox
Certification Engineer

APPROVED



.....
Matthew Dale
Senior Certification Engineer
on behalf of **Exova Warringtonfire**

This copy has been produced from a .pdf format electronic file that has been provided by Exova Warringtonfire to the sponsor of the report and must only be reproduced in full. Extracts or abridgements of reports must not be published without permission of Exova Warringtonfire. The pdf copy supplied is the sole authentic version of this document. All pdf versions of this report bear authentic signatures of the responsible Exova Warringtonfire staff.

This classification report is additional to that issued as 349447 dated the 2nd March 2015 and has been issued at the request of the sponsor. The original classification report remains valid and is not replaced by this additional classification report. The product referred to in the original report and this additional classification report has not been re-tested since the original test and neither has a technical review of the original classification report resulting in any technical changes been carried out.

The original product reference of the product has been removed and the reference "ALUAFS.F and ALUAFS.F FORTE" has been inserted. The sponsor of the classification report has stated that the material described in this additional report is identical to the material which was tested. Both the original and the alternative trade names of the product have been documented and the documentation is maintained in the confidential file covering this investigation.