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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:**

"ISOAFS-ALU.70 ECOSOFT" /  
"SONOAFS-ALU.70 Ecosoft"

**Report No:**

WF 356612

**Issue No:**

2

**Prepared for:**

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

**Date:**

18<sup>th</sup> September 2015



0249

### 3. Test reports/extended application reports & test results in support of classification

#### 3.1 Test reports/extended application reports

Name of Laboratory	Name of sponsor	Test reports/extended application report Nos.	Test method / extended application rules & date
Exova Warringtonfire	AFS Boru Sanayi A.S	WF 352421	EN ISO 11925-2
Exova Warringtonfire	AFS Boru Sanayi A.S	WF 351646, WF 351647	EN 13823
Exova Warringtonfire	AFS Boru Sanayi A.S	WF 356611	EN/TS 15117

#### 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	6	$F_s$	Nil	Compliant
			Flaming droplets/ particles	None	Compliant
	30s exposure - edge	6	$F_s$	16.7	Compliant
			Flaming droplets/ particles	None	Compliant
	30s exposure - edge turned at 90 degrees	6	$F_s$	Nil	Compliant
			Flaming droplets/ particles	None	Compliant
EN 13823	FIGRA <sub>0.2MJ</sub>	6	<b>Formal test average</b>	107.39	Compliant
			Indicative 1	0.00	
	FIGRA <sub>0.4MJ</sub>	6	<b>Formal test average</b>	5.62	Compliant
			Indicative 1	0.00	
	THR <sub>600s</sub>	6	<b>Formal test average</b>	0.50	Compliant
			Indicative 1	0.60	
	LFS	6	<b>Formal test average</b>	None	Compliant
			Indicative 1	None	
	SMOGRA	6	<b>Formal test average</b>	10.97	Compliant
			Indicative 1	0.00	
	TSP <sub>600s</sub>	6	<b>Formal test average</b>	10.23	Compliant
			Indicative 1	7.21	

#### 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, "ISOAFS-ALU.70 ECOSOFT" / "SONOAFS-ALU.70 Ecosoft", a family of insulated flexible air ducts, 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 applications, excluding flooring and linear pipe thermal insulation is:

Fire Behaviour		Smoke Production			Flaming Droplets	
<b>B</b>	-	<b>s</b>	<b>1</b>	,	<b>d</b>	<b>0</b>

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:

- i) Construction applications used over any substrate with a density equal to or greater than  $870\text{kg/m}^3$ , having a minimum thickness of 12mm and a fire performance of A2 or better (excluding paper faced gypsum plasterboard).
- ii) Construction applications with a minimum airspace 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
Inner duct surface perforations	With or without
Product colour/pattern	Any variation allowed
Product composition	No variation allowed
Product construction	No variation allowed

**SIGNED**

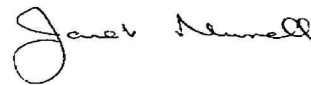


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**Matthew Dale**

Senior Certification Engineer  
Technical Department

**APPROVED**



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**Janet Murrell**

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

**Issue 2:** 6<sup>th</sup> October 2015

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