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**1 Task** **Reaction to fire classification report of product AcousticOne facing**

**2 Introduction** This classification report defines the classification assigned to product AcousticOne facing in accordance with the procedures given in EN 13501-1.

**3 Details of classified product**

**3.1 Nature and end use application**

The product AcousticOne facing with mineral wool board is defined as sound-absorbent panel. Its classification is valid for use as internal ceiling or wall panels.

**3.2 Description**

The product AcousticOne facing comprises of cellulose based facing on mineral wool board.

Facing:

Carboxy-methyl cellulose, cotton cellulose, boric acid, borax, crown filler and fire retardant (nitrogen- phosphorous)

Thickness: 2...4 mm

Mineral wool board:

Fibre type: glass

Thickness: 20 mm

Nominal density: 100 kg/m<sup>2</sup>

Organic content: 12 %

**4 Test reports and test results in support of this classification**

**4.1 Test reports**

Name of laboratory	Name of customer	Test report ref. no	Test method
VTT	AcousticOne Ltd.	VTT-S-4726-06	EN ISO 11925-2:2002
VTT	AcousticOne Ltd.	VTT-S-4725-06	EN 13823:2002

**4.2 Test results**

Test method	Parameter	Number of tests	Continuous parameter mean	Compliance parameters
EN ISO 11925-2 surface flame attack 30 s exposure flaming droplets/particles	$F_s \leq 150$ mm	6	-	Y
	ignition of the filter paper	6	-	Y
EN 13823	FIGRA <sub>0,2 MJ</sub> (W/s)	1 <sup>1)</sup>	186	-
	FIGRA <sub>0,4 MJ</sub> (W/s)	1 <sup>1)</sup>	133	-
	THR <sub>600s</sub> (MJ)	1 <sup>1)</sup>	5,1	-
	LFS edge	1 <sup>1)</sup>	-	Y
	SMOGRA (m <sup>2</sup> /s <sup>2</sup> )	1 <sup>1)</sup>	14,5	-
	TSP <sub>600s</sub> (m <sup>2</sup> )	1 <sup>1)</sup>	56	-
	Flaming droplets / particles	1 <sup>1)</sup>	-	Y
EN 13823	FIGRA <sub>0,2 MJ</sub> (W/s)	1 <sup>2)</sup>	168	-
	FIGRA <sub>0,4 MJ</sub> (W/s)	1 <sup>2)</sup>	113	-
	THR <sub>600s</sub> (MJ)	1 <sup>2)</sup>	3,5	-
	LFS edge	1 <sup>2)</sup>	-	Y
	SMOGRA (m <sup>2</sup> /s <sup>2</sup> )	1 <sup>2)</sup>	0	-
	TSP <sub>600s</sub> (m <sup>2</sup> )	1 <sup>2)</sup>	45	-
	Flaming droplets / particles	1 <sup>2)</sup>	-	Y
EN 13823	FIGRA <sub>0,2 MJ</sub> (W/s)	3 <sup>3)</sup>	112	-
	FIGRA <sub>0,4 MJ</sub> (W/s)	3 <sup>3)</sup>	65	-
	THR <sub>600s</sub> (MJ)	3 <sup>3)</sup>	3,2	-
	LFS edge	3 <sup>3)</sup>	-	Y
	SMOGRA (m <sup>2</sup> /s <sup>2</sup> )	3 <sup>3)</sup>	1	-
	TSP <sub>600s</sub> (m <sup>2</sup> )	3 <sup>3)</sup>	33	-
	Flaming droplets / particles	3 <sup>3)</sup>	-	Y

1) A preliminary test without a substrate with the product under developing (facing without boric acid, borax and crown filler)

2) A preliminary test with fibre cement board (6 mm, 1800 kg/m<sup>2</sup>) as standard substrate with the product under developing (facing without boric acid, borax and crown filler)

3) Tests without a substrate with the final product

**5 Classification and direct field of application**

**5.1 Reference and direct field of application**

This classification has been carried out in accordance with clause 10.6 of EN 13501-1:2002.

**5.2 Classification**

The product AcousticOne facing 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 except floorings is:

Fire behaviour		Smoke production			Flaming droplets	
B	-	s	1	,	d	0

i.e.: B-s1, d0

**5.3 Field of application**

This classification is valid for the following end use conditions:

- with or without a void
- with backing of class A1 or A2 with a density of at least 1800 kg/m<sup>3</sup> and a thickness at least 6 mm
- with mechanical fixings

This classification is valid also for the following product parameters

- thickness of facing ≤ 2 mm
- density of mineral wool board ≥100 kg/m<sup>3</sup>
- thickness of mineral wool board ≥20 mm
- organic content of mineral wool board ≤ 12 %

## 6 Limitations

### 6.1 Restrictions

This classification report is valid as long as the composition and structure of the product is not changed.


### 6.2 Warning

This classification report does not represent type approval or certification of the products.

Espoo 29 June 2006



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