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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:**

"Aerolite Stonework"

**Report No:**

WF 397752

**Issue No:**

1

**Prepared for:**

TI Tiles International Ltd,  
Westview House,  
Devro Campus,  
Gartferry Road,  
Glasgow,  
G69 0JE

**Date:**

26<sup>th</sup> March 2018



0249

## 1. Introduction

This classification report defines the classification assigned to “Aerolite Stonework”, a 20mm thick Aerolite stonework façade panel, in accordance with the procedures given in EN 13501-1:2007+A1:2009

## 2. Details of classified product

### 2.1 General

The product, “Aerolite Stonework”, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

### 2.2 Product description

The product, “Aerolite Stonework” is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		20mm thick Aerolite stonework facade panel
Product reference		“Aerolite Stonework”
Name of manufacturer		<b>See Note 1 below</b>
Thickness		20 ±1.5mm
Weight per unit area		54kg/m <sup>2</sup>
Product configuration		<ul style="list-style-type: none"> <li>• Sandstone tile</li> <li>• Adhesive</li> <li>• Granite</li> <li>• Adhesive</li> <li>• Moulded sheet</li> </ul>
Sandstone tile	Generic type	Buff Sandstone
	Product reference	<b>See Note 2 below</b>
	Detailed description / composition details	<b>See Note 2 below</b>
	Name of manufacturer	<b>See Note 2 below</b>
	Thickness	5 ±1mm
	Weight per unit area	2.6kg/m <sup>2</sup>
	Colour reference	“Buff”
Flame retardant details		<b>See Note 3 below</b>
Adhesive	Generic type	Polyurethane composite adhesive
	Product reference	“Aerolite Stonework Adhesive”
	Name of manufacturer	Henkel
	Colour reference	<b>See Note 2 below</b>
	Application rate / thickness	90g/m <sup>2</sup>
	Application method	Sprayed
	Flame retardant details	<b>See Note 3 below</b>
Curing process		<b>See Note 2 below</b>

Continued on next page

Granite	Generic type	Silver grey granite
	Product reference	"G603"
	Name of manufacturer	<b>See Note 2 below</b>
	Thickness	15mm
	Weight per unit area	2.7kg/m <sup>2</sup>
	Colour reference	"Silver Grey"
	Flame retardant details	<b>See Note 3 below</b>
Fibreglass mesh	Generic type	Woven roving cloth
	Product reference	"Alkali Free Fibreglass"
	Name of manufacturer	Stonevic
	Thickness	0.6mm
	Weight per unit area	570g/m <sup>2</sup>
	Colour reference	"White"
	Flame retardant details	<b>See Note 3 below</b>
Mounting and fixing details		The tiles were fixed to aluminium horizontal runners, fixed to steel uprights.
Air space details		A 40mm ventilated cavity was situated between the reverse face of each specimen and the calcium silicate backing board
Brief description of manufacturing process		<b>See Note 2 below</b>

**Note 1:** The sponsor was unwilling to provide this information.

**Note 2:** The sponsor was unable to provide this information.

**Note 3:** The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the component.

### 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	TI Tiles International Ltd	WF 395525	EN 13823
Exova Warringtonfire	TI Tiles International Ltd	WF 388275, 392037, 388281, 388283	EN ISO 1716
Exova Warringtonfire	TI Tiles International Ltd	WF 392889	EN ISO 1716 (Summary report)

### 3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance parameters
EN 13823	FIGRA <sub>0.2MJ</sub>	3	0.00	Compliant
	FIGRA <sub>0.4MJ</sub>		0.00	Compliant
	THR <sub>600s</sub>		0.13	Compliant
	LFS		None	Compliant
	SMOGRA		0.00	Compliant
	TSP <sub>600s</sub>		2.61	Compliant
EN ISO 1716	Sandstone – PCS (a)	3	0.0760 MJ/kg	Compliant
	Adhesive – PCS (b)	3	2.5568 MJ/m <sup>2</sup>	Compliant
	Granite – PCS (a)	3	0.1820 MJ/kg	Compliant
	Adhesive – PCS (b)	3	2.5568 MJ/m <sup>2</sup>	Compliant
	Mesh – PCS (b)	3	0.2210 MJ/m <sup>2</sup>	Compliant
	For the product as a whole PCS – PCS (e)	Summary result	0.2506 MJ/Kg	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, "Aerolite Stonework", a 20mm thick Aerolite stonework façade panel, in relation to its reaction to fire behaviour is classified:

**A2**

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	
A2	-	s	1	,	d	0

i.e. A2 – s1 , d0

**Reaction to fire classification: A2-s1, d0**

##### 4.3 Field of application

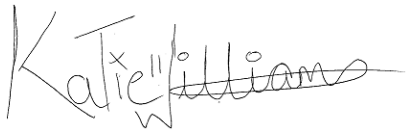
This classification is valid for the following end use applications:

- i) Wall and ceiling applications
- ii) Mechanically fixed with a minimum airspace of 40mm over any substrate having a minimum thickness of 9mm, a minimum density of 615kg/m<sup>3</sup> and a fire performance of A2-s1, d0 or better, except paper faced plasterboard.

This classification is also valid for the following product parameters:

Product thickness	No variation allowed
Product density	No variation allowed
Product composition	No variation allowed

**SIGNED**

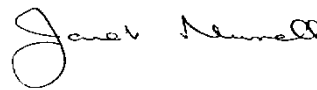


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**APPROVED**



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

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