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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 Ultralite"

Report No:

WF 397737

Issue No:

1

Prepared for:

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

Date:

26th March 2018



0249

1. Introduction

This classification report defines the classification assigned to “Aerolite Ultralite”, a natural stone veneer bonded to a fully enclosed aluminium cassette backer panel with aluminium honeycomb infill, in accordance with the procedures given in EN 13501-1:2007+A1:2009

2. Details of classified product

2.1 General

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

2.2 Product description

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

General description		7mm natural stone veneer bonded to a 20mm thick fully enclosed aluminium cassette backer panel c/w aluminium honeycomb infill
Product reference		“Ultralite”
Name of manufacturer		See Note 1 below
Thickness		27 ±1.5mm (stated by sponsor) 27.28mm (determined by Exova Warringtonfire)
Weight per unit area		25 ±2kg/m ² (stated by sponsor) 23.91kg/m ² (determined by Exova Warringtonfire)
Product configuration		<ul style="list-style-type: none"> • Sandstone tile • Adhesive • Aluminium sides • Aluminium • Adhesive • Honeycomb • Adhesive • Aluminium
Sandstone tile	Generic type	Buff Sandstone
	Product reference	See Note 2 below
	Detailed description / composition details	See Note 2 below
	Name of manufacturer	See Note 2 below
	Thickness	7 ±1mm
	Weight per unit area	16.6kg/m ²
	Colour reference	“Buff”
	Flame retardant details	See Note 3 below

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Adhesive	Generic type	Polyurethane composite adhesive
	Product reference	"UK6000 series and UK 3000 series"
	Name of manufacturer	Henkel
	Colour reference	See Note 2 below
	Application rate	90g/m ²
	Application method	Sprayed
	Flame retardant details	See Note 3 below
	Curing process	See Note 2 below
Aluminium sides	Generic type	Aluminium
	Product reference	"AA3003 H44"
	Name of manufacturer	See Note 2 below
	Thickness	0.07mm
	Weight per unit area	256g/m ²
	Colour reference	"Grey"
	Flame retardant details	This component is inherently flame retardant
Aluminium	Generic type	Aluminium
	Product reference	"T6063 T5"
	Name of manufacturer	See Note 2 below
	Thickness	2mm
	Weight per unit area	560g/m ²
	Colour reference	"Mill Finish"
	Flame retardant details	This component is inherently flame retardant
Honeycomb	Generic type	Aluminium honeycomb
	Product reference	"Grade: AA3003 H44"
	Name of manufacturer	See Note 2 below
	Thickness (height)	16mm
	Wall thickness	0.07mm
	Weight per unit area	850g/m ²
	Cell diameter	9mm
	Colour reference	"Mill Finish"
Flame retardant details	This component is inherently flame retardant	
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		See Note 2 below

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 395524	EN 13823
Exova Warringtonfire	TI Tiles International Ltd	WF 388275, 392038	EN ISO 1716
Exova Warringtonfire	TI Tiles International Ltd	WF 392990	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 _{0.2MJ}	3	0.00	Compliant
	FIGRA _{0.4MJ}		0.00	Compliant
	THR _{600s}		0.07	Compliant
	LFS		None	Compliant
	SMOGRA		0.00	Compliant
	TSP _{600s}		5.10	Compliant
EN ISO 1716	Sandstone – PCS (a)	3	0.0760 MJ/kg	Compliant
	Adhesive – PCS (d)	3	3.0601 MJ/m ²	Compliant
	Aluminium Sides – PCS (a)	3	0.000 MJ/kg	Compliant
	Aluminium – PCS (a)	3	0.000 MJ/kg	Compliant
	Adhesive – PCS (d)	3	3.0601 MJ/m ²	Compliant
	Honeycomb – PCS (a)	3	0.000 MJ/kg	Compliant
	Adhesive – PCS (d)	3	3.0601 MJ/m ²	Compliant
	Aluminium – PCS (a)	3	0.000 MJ/kg	Compliant
For the product as a whole PCS €	Summary result		0.5417 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 Ultralite", a natural stone veneer bonded to a fully enclosed aluminium cassette backer panel with aluminium honeycomb infill, 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/m³ 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

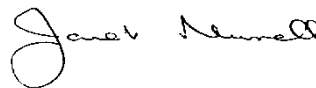
SIGNED



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on behalf of **Exova Warringtonfire**

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