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Title:

CLASSIFICATION OF
REACTION TO FIRE
PERFORMANCE
IN ACCORDANCE WITH
EN 13501-1: 2007 + A1:2009

Notified Body No:

0833

Product Name:

Hardiplank and Hardipanel

Report No:

408013

Issue No:

4

Prepared for:

James Hardie Building
Products Limited,
Unit 17,
Goodwood Road,
Eastleigh,
Hampshire,
SO50 4NT

Date:

13th December 2018

UKAS TESTING
0249

1. Introduction

This classification report defines the classification assigned to Hardiplank and Hardipanel, decoratively coated fibre cement based board or cladding, in accordance with the procedures given in EN 13501-1:2007 + A1:2009

2. Details of classified product

2.1 General

The product, Hardiplank and Hardipanel, decoratively coated fibre cement based board or cladding, is defined as being suitable for wall or ceiling applications.

2.2 Product description

The product, Hardiplank and Hardipanel, decoratively coated fibre cement based board or cladding, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General Description		A decoratively coated, fibre cement board based cladding or board
Overall thickness		8 -12mm
Overall density/ weight per unit area		Saturated density :1300kgm^{-3} – 1750kgm^{-3}
Product Reference		Hardiplank lap siding or Hardipanel
Generic type of cladding		Fibre cement based board
Manufacturer		James Hardie® Building Products
Final coating product (face)	Generic Type	Water based Acrylic Topcoat
	Name of Manufacturer	See 2 below
	Reference	
	Number of Coats	
	Application Rate	
	Application Method	
	Specific Gravity	
	Flame Retardant Details	
	Curing Process per Coat	
Primer Coating Product	Generic Type	Water based acrylic/ epoxy
	Name of Manufacturer	See note 2 below
	Reference	
	Number of Coats	
	Application Rate	
	Application Method	
	Specific Gravity	
	Flame Retardant Details	
	Curing Process per Coat	
Baseboard	Trade name	Hardiplank lap siding and Hardipanel
	Generic type	Fibre cement based board
	Manufacturer	James Hardie® Building Products

	Full composition details	Sand, Portland Cement, non-asbestos fibres, and additives.
	Thickness	8.0 - 12.0mm
	Density	Saturated density :1300kgm^{-3} – 1750kgm^{-3}
	Flame retardant details	See Note 1 Below
Density of cladding		Manufactured by the Hatschek process and cured by high pressure steam autoclaving. Product is water jet trimmed to target dimensions prior to autoclaving. Coatings are applied to the weather facing side of the product.

Note 1: The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of this product.

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 confidential file relating to this investigation.

Note 3: The sponsor was unable to provide this information.

Further details of the mounting and fixing configurations are fully described in the test reports provided in support of classification listed in Clause 3.1.

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 Report Ref. Nos	Test Method
Warringtonfire	James Hardie Europe BV	WF 157782, 157783, 157784, 157785, 404482	EN 13823
Warringtonfire	James Hardie Europe BV	WF 158938	EN 1182
Warringtonfire	James Hardie Europe BV	WF 165031,165032, 404483	EN 1716
Warringtonfire	James Hardie Europe BV	WF 160917	EN/TS 15117

3.2 Test results

Test Method	Parameter	Number of tests	Results	
			Continuous Parameter - mean (m)	Compliance Parameters
EN ISO 1182	Max Temp. Rise	5	36.3	Compliant
	Duration of Flaming		7	Compliant
	Mass Loss (%)		15.7	Compliant
EN ISO 1716	PCS ≤ 3,0 MJ/kg (1) PCS ≤ 4,0 MJ/ m² (2) PCS ≤ 4.0 MJ/m² (3) PCS ≤ 3,0 MJ/kg (4)			
	Top coat – MJ/kg	3	21.34	Compliant
	Top coat – MJ/ m²	3	2.77	Compliant
EN ISO 1716	PCS ≤ 3,0 MJ/kg (1) PCS ≤ 4,0 MJ/ m² (2) PCS ≤ 4.0 MJ/m² (3) PCS ≤ 3,0 MJ/kg (4)			
	Primer – MJ/kg	3	20.61	Compliant
	Primer – MJ/ m²	3	1.13	Compliant
EN 13823	FIGRA $_{0.2MJ}$	3	11.7	Compliant
	THR_{600s}		3.97	Compliant
	LSF		(-)	Compliant
	SMOGRA		1.08	Compliant
	TSP_{600s}		37.82	Compliant

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with clause 10 of EN 13501-1:2002.

4.2 Classification

The product, Hardiplank and Hardipanel, decoratively coated fibre cement based board or cladding, 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 is:

Fire Behaviour		Smoke Production			Flaming Droplets	
A2	**-**	**s**	**1**	**,**	**d**	**0**

Reaction to fire classification: A2-s1,d0

4.2 Field of application

This classification is valid for the following end use applications:

i) Wall or Ceiling Applications, mounted with or without an air gap on to any substrate with a density equal to or greater than 680kg/m³, with a minimum thickness of 10mm and a fire performance of D or better.

ii) Typical applications* for this product may be:
Cladding (or siding) for timber framed buildings, or brick or cementitious structures

*List not exclusive

This classification is also valid for the following product parameters:

- Product Thickness 8mm or more
- Coatings Top coat and primer as described in product description only.
- Colour Any
- Product Density Saturated density 1300(+/- 10%) kg/m^3
- Fixings Mounted on metal or wooden battens
- Insulation With or without insulation of Class A1 and density 30kg/m3 and above

SIGNED

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Katie Williams
Junior Certification Engineer

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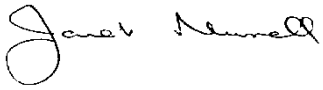

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Janet Murrell
Technical Manager
For and on behalf of **Warringtonfire**

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Issue 4: 20th February 2019, amended report numbers. K. Williams