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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:

'10mm Coretinium'

Report No:

341526

Issue No:

1

Prepared for:

Tata Steel UK Limited,
Shotton Works, Deeside,
Flintshire, CH5 2NH

Date:

6th June 2014

1. Introduction

This classification report defines the classification assigned to '10mm Coretinium' a coated steel panel with a honeycomb core in line with the procedures given in EN 13501-1:2007

2. Details of classified product

2.1 General

The product, '10mm Coretinium' a coated steel panel with a honeycomb core, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

2.2 Product description

The product, '10mm Coretinium' a coated steel panel with a honeycomb core, are fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		Coated steel with a honeycomb core
Product reference		"10mm Coretinium"
Name of manufacturer		Tata Steel UK Limited
Thickness		10mm (stated by sponsor) 10.51mm (determined by Exova Warringtonfire)
Weight per unit area		7.5kg/m ² (stated by sponsor) 7.60kg/m ² (determined by Exova Warringtonfire)
Product configuration		<ul style="list-style-type: none"> • Polyurethane coating • Steel • Adhesive • Honeycomb • Adhesive • Steel • Coating
Coating	Generic type	Polyurethane
	Product reference	"Colorcoat Prisma"
	Name of manufacturer	Tata Steel UK Ltd
	Colour reference	"Metallic Silver "
	Number of coats	Two
	Application thickness per coat	25 microns
	Application method	Coil coating
	Curing process per coat	Thermal
	Flame retardant details	See Note 1 Below
Steel	Generic type	Steel
	Product reference	"S220 GA 255"
	Composition details	S220 Mild Steel 255g/m ² Galvalloy treatment coating
	Name of manufacturer	Tata Steel UK Ltd
	Thickness	0.40mm
	Weight per unit area	3.18kg/m ²
	Flame retardant details	See Note 1 Below

Adhesive	Generic type	Polyester and polyurethane
	Product reference	"Thermo Active Adhesive"
	Name of manufacturer	See Note 2 Below
	Colour reference	See Note 2 Below
	Application thickness	See Note 3 Below
	Application method	Coil coating
	Flame retardant details	See Note 1 Below
	Curing process	See Note 2 Below
Honeycomb	Generic type	Polypropylene
	Product reference	"Polypropylene Honeycomb"
	Name of manufacturer	Tata Steel UK Ltd
	Thickness	9mm
	Weight per unit area	1.256kg/m ²
	Cell diameter	7mm
	Wall thickness	400 microns
	Colour reference	"Clear"
Flame retardant details	See Note 1 Below	
Brief description of manufacturing process		The steel skins are bonded to the honeycomb via a continuous lamination process, using heat and pressure to trigger bonding. The adhesive is set under pressure inside a cooling zone, before the product is cut into customer lengths and palletised.

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

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

Note 3: The sponsor of the this test has provided this information but at the specific request of the sponsor these details have been omitted from the report and are held instead on the confidential file relating to this investigation

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	Tata Steel UK Ltd	WF 340154	EN ISO 11925-2
Exova warringtonfire	Tata Steel UK Ltd	WF 340150	EN 13823

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)	F _s	6	0	Compliant
	Flaming droplets/ particles		None	Compliant
EN ISO 11925-2 (30s exposure – edge)	F _s	6	10	Compliant
	Flaming droplets/ particles		None	Compliant
EN 13823	FIGRA _{0.2MJ}	3, 1, 3	8.53	Compliant
	FIGRA _{0.4 MJ}		8.53	Compliant
	THR _{600s}		1.1	Compliant
	LFS		N, N, N	Compliant
	SMOGRA		0	Compliant
	TSP _{600s}		29.18	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, "10mm Coretinium" a coated steel panel with a honeycomb core, in relation to their reaction to fire behaviour are 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 excluding flooring and linear pipe thermal insulation is:

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

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 installed without the presence of a substrate.
- ii) Installed as per manufacturers instructions utilising one of the profile and joint assemblies presented in Annex 1.
- iii) Internal profile tested only.

This classification is also valid for the following product parameters:

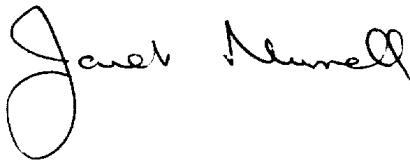
Product thickness	12mm only
Product weight per unit area	Between 7.5±0.5 Kg/m ²
Colour of coating	No variation allowed
Thickness of coating	No variation allowed
Honeycomb components	No variation allowed
Product construction	No variation allowed
Profile	None (flat)

5. Limitations

This classification document does not represent type approval or certification of the product.

SIGNED

APPROVED



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Matthew Dale
Certification Engineer
Technical Department

.....
Janet Murrell
Technical Manager
Technical Department
on behalf of **Exova warringtonfire**

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