

Exova Warringtonfire
Holmesfield Road
Warrington
WA1 2DS
United Kingdom

T : +44 (0) 1925 655 116
F : +44 (0) 1925 655 419
E : warrington@exova.com
W: www.exova.com



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:

"Steel Lockers And Cupboards"

Report No:

WF 358968

Issue No:

2

Prepared for:

QMP Ltd, Timmis Road
Lye, Stourbridge
West Midlands
DY9 7QB

Date:

15th December 2015



0249

1. Introduction

This classification report defines the classification assigned to “Steel Lockers And Cupboards”, a family of powder coated steel products, in accordance with the procedures given in EN 13501-1:2007+A1: 2009.

2. Details of classified product

2.1 General

The product, “Steel Lockers And Cupboards”, a family of powder coated steel products, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

2.2 Product description

The product, “Steel Lockers And Cupboards”, a family of powder coated steel products, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		Powder coated steel
Product reference		“Steel Lockers And Cupboards”
Name of manufacturer		QMP Ltd
Thickness		0.7 - 0.9mm (stated by sponsor) 0.9mm (determined by Exova Warringtonfire)
Weight per unit area		5.35kg/m ² (stated by sponsor) 5.64 kg/m ² (determined by Exova Warringtonfire)
Coating (test face)	Generic type	Epoxy polyester
	Product reference	“4011”
	Name of manufacturer	HMG Powder Coatings
	Colour reference	“Red RAL 4003”
	Number of coats	One
	Application thickness per coat	60 - 80microns
	Application rate	125g/m ²
	Density	1.4 – 1.7g/cm ³
	Application method	Electro static spray
	Flame retardant details	See Note 1 below
Curing process per coat		10 minutes at 180°C
Substrate	Generic type	Mild steel sheet
	Product reference	“Steel”
	Name of manufacturer	See Note 2 below
	Thickness	0.7mm
	Weight per unit area	5.1kg/m ²
	Colour reference	“Natural”
	Flame retardant details	The component is inherently flame retardant

Continued on next page

Coating (Back face)	Generic type	Epoxy polyester
	Product reference	"4011"
	Name of manufacturer	HMG Powder Coatings
	Colour reference	"Red RAL 4003"
	Number of coats	One
	Application thickness per coat	60 - 80microns
	Density	1.4 – 1.7g/cm ³
	Application method	Electro static spray
	Flame retardant details	See Note 1 below
	Curing process per coat	10 minutes at 180°C
Mounting and fixing details		The specimens were tested clamped into a "window" frame manufactured from 5mm steel sheet
Air space details		A 180mm ventilated cavity was situated between the reverse face of each specimen and the backing board
Brief description of manufacturing process		See Note 1 below

Note 1: The sponsor was unable to provide this information.

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

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	QMP Ltd	WF 357933	EN 13823
Exova Warringtonfire	QMP Ltd	WF 357934, WF 357935 and WF 357936	ISO 1716
Exova Warringtonfire	QMP Ltd	WF 358983	ISO 1716 Summary report
Exova Warringtonfire	QMP Ltd	WF 358967	EN/TS 15117

3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance parameters
EN 13823	FIGRA _{0.2MJ}	3	32.23	Compliant
	FIGRA _{0.4MJ}		0.00	Compliant
	THR _{600s}		0.67	Compliant
	LFS		None	Compliant
	SMOGRA		16.32	Compliant
	TSP _{600s}		56.41	Compliant
EN ISO 1716	Steel - PCS (a)	Deemed to satisfy (0.00)		Compliant
	Powder coating - PCS (b) Indicative test – Yellow	2	17.7631 MJ/kg 17.8230 MJ/kg	N/A, MJ/kg results used only to determine which colour performed the worst
	Powder coating - PCS (b) Indicative test – Grey	2	14.8482 MJ/kg 14.7204 MJ/kg	
	Powder coating - PCS (b) Formal test average - Red	3	18.9226 MJ/kg 2.3653 MJ/m ²	Compliant
	For the product as a whole PCS (e)	Summary result	0.8842 MJ/kg 4.7306 MJ/m ²	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 products, "Steel Lockers And Cupboards", a family of powder coated steel products, in relation to their reaction to fire behaviour are classified:

A2

The additional classification in relation to smoke production is:

s2

The additional classification in relation to flaming droplets / particles is:

d0

The format of the reaction to fire classification for construction applications, excluding flooring and linear pipe thermal insulation is:

Fire Behaviour		Smoke Production			Flaming Droplets	
A2	-	s	2	,	d	0

i.e. A2 – s2 , d0

Reaction to fire classification: A2 – s2, d0

4.6 Extended Field of application

This classification is valid for the following end use applications:

- i) Construction applications, mechanically installed with a minimum air gap of 180mm.

This classification is also valid for the following product parameters:

Coating application rate	No variation allowed
Coating thickness	No variation allowed
Coating composition other than colour	No variation allowed
Coating colour	Any variation allowed

5. Limitations

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

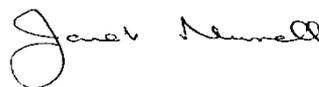
"The classification assigned to the product in this report is appropriate to a declaration of conformity by the manufacturer within the context of system 3 attestation of conformity and CE marking under the Construction Products Directive. The manufacturer has made a declaration, which is held on file. This confirms that the products design requires no specific processes, procedures or stages (e.g. no addition of flame-retardants, limitation of organic content, or addition of fillers) that are aimed at enhancing the fire performance in order to obtain the classification achieved. As a consequence the manufacturer has concluded that system 3 attestation is appropriate. The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of the samples tested."

SIGNED



.....
Matthew Dale
Certification Engineer

APPROVED



.....
Janet Murrell
Technical Manager
on behalf of **Exova Warringtonfire**

This version of the report has been produced from a pdf format electronic file that has been provided by Exova Warringtonfire to the sponsor of the report and must only be reproduced in full Extracts or abridgements of reports must not be published without permission of Exova Warringtonfire