

Title:

CLASSIFICATION OF REACTION TO FIRE
PERFORMANCE
IN ACCORDANCE WITH
EN 13501-1: 2018.

Product Name:

"FCLW36"

Report No:

WF 519938

Issue No:

1

Prepared for:

Cladco Profiles Ltd
Beardown Road
Exeter Road Industrial Estate
Okehampton
Devon
EX20 1UA

Date:

13th February 2023

1. Introduction

This classification report defines the classification assigned to "FCLW36", a family of fibre cement external wall cladding products, in line with the procedures given in EN 13501-1: 2018.

2. Details of classified product

2.1 General

The products, "FCLW36", are defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

2.2 Product description

The products, "FCLW36", is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

Item		Detail
General description / generic type		Coated fibre cement external wall cladding
Product reference of overall composite		"FCLW36"
Thickness of overall composite		7.5mm (without timber battens (determined by Warringtonfire) 43mm with timber battens (determined by Warringtonfire)
Weight per unit area of overall composite (including battens)		16.80kg/m ² (determined by Warringtonfire)
Coating (test face)	General description	Water soluble paint
	Product reference	"FCLWGG36", "FCLWWH36", "FCLWSG36"
	Number of coats	Three
	Weight per unit length	700g total in 3 coats per 3.66m length
	Colour reference	"RAL 7024" "RAL 9016" "RAL 7030"
	Colour	"Slate Grey", "White", "Sage Green"
	Flame retardant details	See Note 1 below

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Substrate	General description	Cement board
	Product reference	"FCLW36"
	Detailed composition	Cement 50%, Sand 40%, Pulp 9.95%
	Thickness	7.233mm
	Weight per unit area	11.91kg/m ²
	Colour	Grey (observed by Warringtonfire)
	Flame retardant details	See Note 2 below
Mounting and fixing details		The specimens were mounted on timber battens as described below to create a 40mm ventilated cavity between the reverse face of the specimens and the calcium silicate substrate as defined in EN 13238:2010
Timber battens	General description	50mm x 38mm treated timber batten
	Product reference	"TIM502542"
	Detailed description	TIMBER batten/joist, Type A, Use Class 2 Green treated 50mm x 38mm, 4.8m long
	Name of supplier	Price & Pierce
	Thickness	50mm x 38mm
	Weight per unit area	16.86kg/m ²
	Flame retardant details	See Note 2 below
Joint details		Vertical and horizontal joints were incorporated in the specimen
Specimen orientation		The specimens were tested in a horizontal orientation. The board dimensions are 3.66m x 210mm width and overlap for fitting at 20mm.
Brief description of manufacturing process		Pulp is added to sand and cement to form the board which is then left to air dry before being oven dried, then coated in 3 coatings of paint

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

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

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/classification report Nos.	Test method / classification rules & date
Warringtonfire	Cladco Profiles Ltd	Formal: 514057 (Issue 2) Indicative: 507409 (Issue 2), 507412 (Issue 2)	EN 13823: 2020
Warringtonfire	Cladco Profiles Ltd	Formal: 522542 (Issue 2) Indicative: 523866 (Issue 2), 523867 (Issue 2)	EN ISO 11925-2:2020
Warringtonfire	Cladco Profiles Ltd	519939	BS EN 15725: 2010 & EN/TS 15117: 2005

3.2 Test results

Test method & test number	Parameter	No. tests	Report	Results	
				Continuous parameter - mean (m)	Compliance parameters
EN 13823	FIGRA _{0.2MJ}	3	514057	18 W/s	-
		1	507409	12 W/s	-
		1	507412	15 W/s	-
	FIGRA _{0.4MJ}	3	514057	18 W/s	-
		1	507409	12 W/s	-
		1	507412	15 W/s	-
	THR _{600s}	3	514057	1.9 MJ	-
		1	507409	1.0 MJ	-
		1	507412	0.7 MJ	-
	LFS	3	514057	-	Compliant
		1	507409	-	Compliant
		1	507412	-	Compliant
	SMOGRA	3	514057	2 m ² /s ²	-
		1	507409	2 m ² /s ²	-
		1	507412	3 m ² /s ²	-
	TSP _{600s}	3	514057	24 m ²	-
		1	507409	6 m ²	-
		1	507412	16 m ²	-
	Fall of Flaming Droplet/Particle?	3	514057	-	Compliant
		1	507409	-	Compliant
		1	507412	-	Compliant
	Flaming of Fallen Particle Exceeding 10s?	3	514057	-	Compliant
		1	507409	-	Compliant
		1	507412	-	Compliant

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EN ISO 11925-2 (30s exposure - surface)	F _s	6	522542	-	Compliant (Nil mm)
		2	523866	-	Compliant (Nil mm)
		6	523867	-	Compliant (Nil mm)
	Flaming droplets/ particles	6	522542	-	Compliant
		2	523866	-	Compliant
		6	523867	-	Compliant
EN ISO 11925-2 (30s exposure - edge)	F _s	6	522542	-	Compliant (Nil mm)
		2	523866	-	Compliant (Nil mm)
		6	523867	-	Compliant (Nil mm)
	Flaming droplets/ particles	6	522542	-	Compliant
		2	523866	-	Compliant
		6	523867	-	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: 2018, BS EN 15725: 2010 & EN/TS 15117: 2005.

4.2 Classification

The products, "FCLW36", a family of fibre cement external wall cladding products, 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 applications, 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 mounted on a timber frame to form a 40mm ventilated cavity over any substrate with a density equal to or greater than 652.5kg/m³, having a minimum thickness of 9mm and a fire performance of A2-s1,d0 or better (excluding paper faced gypsum plasterboard).

This classification is also valid for the following product parameters:

Product thickness	No variation allowed
Product weight per unit area	No variation allowed
Coating colour	Sage Green, White, Slate Grey
Coating application rate	700g per 3.66m length (total for 3 coats)
Plank dimensions	210mm width with an overlap for fitting at 20mm
Plank orientation	Mounted horizontally only
Product composition	No variation allowed
Product construction	No variation allowed
Joints	Horizontal and vertical allowed.

5. Limitations

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

SIGNED



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Claire Lawrence

Product Assessor
Technical Department

APPROVED



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Stacey Deeming

Principal Product Assessor
Technical Department
on behalf of [Warringtonfire](#)

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