

Reaction to fire classification report

Issuing laboratory: Warringtonfire Testing and Certification Limited

Classification standard: EN 13501-1: 2018

Report owner(s): Echo Facades Engineering Solutions Ltd.

Product(s): "EcoBoard"

Report number: 539364

Version: 1

Quality management

Version	Date	Summary of amendments including reasons	
1	16 February 2024	Description	Initial issue
			Prepared by
		Name	Michael Walford
		Signature	
			Authorised by
			Stacey Deeming
			
*Signed for and on behalf of Warringtonfire Testing and Certification Limited			

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1. Introduction

This classification report defines the classification assigned to "EcoBoard", in line with the procedures given in EN 13501-1: 2018.

Warringtonfire Testing and Certification Limited (Warringtonfire) issued the classification report at the request of the report owner listed in Table 1.

Table 1 Report owner details

Entity	Address
Report owner	
Echo Facades Engineering Solutions Ltd.	Unit 10 Churchill House, 114 Windmill Road, Brentford, TW8 9NB, United Kingdom

2. Details of classified product

2.1 General

The product(s), "EcoBoard", are defined as being suitable for construction applications and flooring applications.

The related harmonised product standard is EN 12467: 2012 + A2: 2018.

2.2 Product description

The product(s), "EcoBoard", are described in Table 2 and in the test reports listed in Section 3.1.

Table 2 Product description

Item	Detail
General description	Fibre cement board
Product reference	"EcoBoard"
Detailed description / composition details	Smooth double pressed and autoclave fibre cement flat sheet
Name of manufacturer	Echo Facades Engineering Solutions Ltd
Thickness	11.59 mm (based on EN ISO 1182 samples)
Density	1549.33 kg/m ³ (as tested by Warringtonfire)
Colour	Off white / light brown
Flame retardant details	See Note 1 below
Brief description of manufacturing process	See Note 2 below

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

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

3. Test reports and test results in support of classification

3.1 Test reports

Table 3 details the test reports that have been used in support of classification.

Table 3 Test reports

Name of laboratory	Name of sponsor(s)	Test report no.	Test date	Test and extended application standard
Warringtonfire	Echo Facades Engineering Solutions Ltd.	539309	19 December 2023	EN ISO 1716: 2018 (*)
Warringtonfire	Echo Facades Engineering Solutions Ltd.	539308	13 December 2023	EN ISO 1182: 2020

(*) As the test procedure for EN ISO 1716 remained identical for versions 2010 & 2018 and no substantial technical changes were noticed in the most recent version 2018, results obtained with the 2018 version can also be considered valid for classification purposes (where only the 2010 version is mentioned).

3.2 Test results

3.2.1 Official test results used for the classification

Table 4 details the test results that have been used in support of classification. The fire performance parameters for class A1 / A1_{FL} can be found in Table 5.

Table 4 Test data

Test method Report number	Parameter	Number of tests	Results	
			Continuous parameters	Compliance with parameters
EN ISO 1716: 2018 539309	Average gross heat of combustion, Q _{PCS} (MJ/kg)	3	0.5	-
EN ISO 1182: 2020 539308	Mass loss (%)	5	15	-
	Duration of sustained flaming (s)		0	-
	Average furnace temperature rise, ΔT (°C)		16	-

Note: '-' symbol confirms this parameter is not applicable.

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with EN 13501-1:2018.

4.2 Classification

The product "EcoBoard" in relation to its reaction to fire behavior is classified as:

A1 / A1_{FL}

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

Fire behaviour

A1 / A1_{FL}

Alternatively shown:

Reaction to fire classification: A1 / A1_{FL}

4.3 Field of application

The classification for the product described in Section 2.2 of this report is valid for product as such.

This classification is valid for the following product parameters:

- Thickness: Any variation allowed
- Density: 1549 ± 150 kg/m³
- Colour: No variation allowed
- Surface texture: Smooth or embossed allowed
- Construction: No variation allowed
- Composition: No variation allowed

4.4 Fire performance parameters for A1 / A1_{FL}

All the products described in Section 2.2 and within the field of application defined in Section 4.3 comply with the fire performance parameters shown in Table 5. The test results can be found in Section 3.2.

Table 5 Fire performance parameters for A1 / A1_{FL}

Test method	Parameter	Continuous parameters	Compliance with parameters
EN ISO 1716: 2018	Average gross heat of combustion for homogenous products, Q _{PCS} (MJ/kg)	PCS ≤ 2,0 MJ/kg	-
EN ISO 1182: 2020	Mass loss (%)	Δm ≤ 50 %	-
	Duration of sustained flaming (s)	t _f = 0 s (i.e. no sustained flaming)	-
	Average furnace temperature rise, ΔT (°C)	ΔT ≤ 30 °C	-

Note: ‘-’ symbol confirms this parameter is not applicable.

5. Restrictions

At the time the standard EN 13501-1: 2018 was published, no decision was made about the duration of validity of a classification report.

When this report is used to support UKCA marking under the Construction Products Regulation 2011 (retained EU law EUR 2011/305) as amended by the Construction Products (Amendment etc.) (EU Exit) Regulations 2019 and the Construction Products (Amendment etc.) (EU Exit) Regulations 2020 and/or ‘CE+UK(NI)’ marking for Northern Ireland under the Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011, the provisions of those regulations prevail over any conflicting provisions in the designated/harmonised standards and technical specifications.

6. Limitations

The classification assigned to the product in this report is appropriate to a Declaration of Performance (DoP) by the manufacturer within the context of System 3 of AVCP and UKCA marking under the Construction Products Regulation 2011 (retained EU law EUR 2011/305) as amended by the Construction Products (Amendment etc.) (EU Exit) Regulations 2019 and the Construction Products (Amendment etc.) (EU Exit) Regulations 2020 and/or ‘CE+UK(NI)’ marking for Northern Ireland under the Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011, laying down harmonised conditions for the marketing of construction products.

The test laboratory played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide evidence for the traceability of the samples tested.

7. Validity

This document is the original version of this classification report and is written in English. In case of doubt the original version prevails over a translation.

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The classification results relate to the behaviour of a product under the particular conditions of the test(s); they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use, nor can the classification results be extrapolated and applied to other products, or imply suitability for use in configurations not specifically detailed in the classification report. The classification is based on the information available to Warringtonfire at the time of the report. Should conflicting or contradictory evidence become available, Warringtonfire reserves the right to unconditionally withdraw the classification report forthwith upon giving written notice of the same.

Reports are statements of fact prepared in accordance with the referenced version of the standards stated in Section 3 of this report. Test, classification and extended application are based upon the information provided to Warringtonfire. Warringtonfire takes no responsibility for the accuracy or completeness of such information.

The results stated in this classification report apply to the test specimens as received and/or specified in the referenced/supporting test reports. Any differences in composition, production process, thickness, density or colour of the product may significantly affect the performance and will therefore invalidate the application of the test and classification results to the variant product. It is recommended that any proposed variation to the tested configuration or product should be referred to the report owner. The report owner should then obtain appropriate documentary evidence of compliance from Warringtonfire or another accredited testing authority. The supplier of the product is responsible for ensuring that the product which is supplied for use is identical to the test specimens that were tested.

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This document does not represent type approval or certification of the product. Warringtonfire does not give an opinion nor is it Warringtonfire's responsibility to determine or state whether the product meets any particular fire or life safety standards as set out in the Building Regulations or any other appropriate document.



Registered office:

Warringtonfire Testing and Certification Limited
3rd Floor, Davidson Building, 5 Southampton Street, London, WC2E 7HA, United Kingdom
Registered Company No. 11371436

Name & address of issuing laboratory:

Warringtonfire Testing and Certification Limited
Holmesfield Road, Warrington WA1 2DS, United Kingdom

Reaction to Fire laboratory locations:

Frankfurt, Germany

DAkkS accredited laboratory D-PL-18354-01-00
T: +49 69 506 089445
Notified Body Number 1378

Ghent, Belgium

BELAC accredited laboratory 196-TEST
T: +32 9 243 77 50
Notified Body Number 1173

Melbourne, Australia

NATA accredited laboratory 3277
T: +61 3 9767 1000

Warrington, United Kingdom

UKAS accredited laboratory 0249
T: +44 (0) 1925 655 116
Approved Body Number 0833

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