

Reaction to fire classification report

Issuing laboratory: Warringtonfire Testing and
Certification Limited

Classification standard: EN 13501-1: 2018

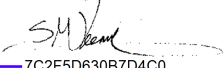
Sponsor(s): earth4Earth

Product(s): "N10"

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Version: 1

Quality management

Version	Date	Summary of amendments including reasons		
1	18 June 2026	Description	Initial issue	
			Prepared by	Authorised by
		Name	Leslie Berry	Stacey Deeming
		Signature	Signed by:  4F525C6BB67A481...	Signed by:  7C2F5D630B7D4C0...
		*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 "N10", 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 sponsor listed in Table 1.

Table 1 Sponsor details

Entity	Address
Sponsor	
earth4Earth	Sheffield Technology Park, Arundel Street, Sheffield, S1 2NS, United Kingdom

2. Details of classified product

2.1 General

The product(s), "N10", are defined as being suitable for construction applications and flooring applications excluding linear thermal pipe insulation applications.

2.2 Product description

The product(s), "N10", are described in Table 2 and in the test reports listed in Section 3.1.

Table 2 Product description

Item	Detail
Generic type	Masonry clay brick, unfired
Product reference	"N10"
Name of manufacturer	earth4Earth
Detailed description/composition details	Unfired clay brick, made of compressed soil, stabilised with 10% proprietary lime binder plus pozzolans, UK standard brick size, solid
Colour reference	"Grey"
Colour	Grey
Thickness of end use brick	102.5mm
Thickness of specimen (as tested)	50.66mm (determined by Warringtonfire)
Density of end use brick	1900kg/m ³
Density of specimen	2084.42kg/m ³ (determined by Warringtonfire)
Flame retardant details	See Note 1 below
Brief description of manufacturing process	Raw materials are treated to target granulometry and moisture content, mixed and compressed into brick moulds, final mild curing to achieve compressive strength.

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

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	earth4Earth	557816	28 and 29 April 2026	EN ISO 1182: 2020
Warringtonfire	earth4Earth	557814	11 March 2026	EN ISO 1716: 2010

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 1182: 2020 557816	Mass loss (%)	5	6	-
	Duration of sustained flaming (s)		0	-
	Average furnace temperature rise, ΔT (°C)		0	-
EN ISO 1716: 2010 557814	Average gross heat of combustion, Q_{PCS} (MJ/kg)	3	0.0	-

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 "N10" 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 and flooring applications excluding linear thermal pipe insulation applications products is:

Fire behaviour
A1 / A1 _{FL}
This classification document does not represent type approval or certification of the product

Alternatively shown:

Reaction to fire classification: A1 / A1 _{FL}
This classification document does not represent type approval or certification of the product

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 thickness
- Density of end use brick: 1900kg/m³ (No variation allowed)
- Density of specimens tested: 2084.42kg/m³ (No variation allowed)
- Colour: Grey (No variation allowed)
- Construction: No variation allowed
- Composition: No variation allowed
- Use of flame retardants: 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 1182: 2020	Mass loss (%)	$\Delta m \leq 50 \%$	-
	Duration of sustained flaming (s)	$t_f = 0 \text{ s}$ (i.e. no sustained flaming)	-
	Average furnace temperature rise, ΔT (°C)	$\Delta T \leq 30 \text{ °C}$	-
EN ISO 1716: 2010	For the product as a whole, (MJ/kg)	$PCS \leq 2,0 \text{ MJ/kg}$	-

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

According to the information mentioned by the sponsor on the technical information sheet there was no harmonised product standard for UKCA or CE+UK(NI) marking available at the time the classification report for the tested material/product was drafted. When such a product standard is published, this report may be submitted again to the laboratory to evaluate the adequacy of the report for UKCA or CE+UK(NI) marking.

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 sponsor. The sponsor 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:

Ghent, Belgium

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

Warrington, United Kingdom

a UKAS accredited testing laboratory No.0249
T: +44 (0) 1925 655 116
Approved Body Number 0833

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