

## **BRE Global Classification Report**

Classification of reaction to fire performance in accordance with EN 13501-1: 2007 + A1: 2009 on Corium Tile

Prepared for: Wienerberger Ltd.

Date: 20 December 2018

Report Number: P110028-1001 Issue 1

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#### 1 Introduction

This classification report defines the classification assigned to 'Corium Tile' in accordance with the procedures given in EN 13501-1:2007+A1: 2009<sup>1</sup>.

## **BRE Global**

# CLASSIFICATION OF REACTION TO FIRE IN ACCORDANCE WITH EN 13501-1: 2007+A1: 2009

Sponsor: Wienerberger Ltd., Wienerberger House, Brooks Drive, Cheadle Royal,

Business Park, Cheadle, Cheshire, SK8 3SA, United Kingdom

**Prepared for:** Wienerberger Ltd., Wienerberger House, Brooks Drive, Cheadle Royal,

Business Park, Cheadle, Cheshire, SK8 3SA, United Kingdom

Place of Manufacture: Ammonit keramik Rolf Plümacher & Co. KG

Prepared by: BRE Global, Bucknalls Lane, Garston, Watford, Hertfordshire, WD25 9XX,

UK

Notified Body No.: 0832

**Product name:** Corium Tile

Classification report No.: P110028-1001

**Issue number:** One

**Date of issue:** 20 December 2018

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## 2 Details of classified product

### 2.1 General

The product, 'Corium Tile', is defined by the test sponsor as an extruded clay tile in accordance with EN  $1304^2$ .

## 2.2 Product description

The product, 'Corium Tile', is described in section 2.2.2.

## 2.2.1 Traceability

The test samples were supplied by the test sponsor. BRE Global was not involved in the sampling process and therefore cannot comment upon the relationship between the samples supplied for test and the products supplied to market.

## 2.2.2 Sample details

Unless otherwise stated all measurements are nominal.

Parameter	Details
Test sponsor	Wienerberger Ltd. Wienerberger House Brooks Drive Cheadle Royal Business Park Cheadle, Cheshire SK8 3SA United Kingdom
Manufacturer of sample	Ammonit keramik Rolf Plümacher & Co. KG
Place of manufacture	Note 1
Trade name	Corium Tile
Sample reference	Corium Tile
Sample description (as provided by test sponsor/manufacturer)	Extruded clay tile
Description of samples (as received)	Red brick coloured circular tiles as shown in Appendix A
Test sponsor's product data	
Generic type of product	Extruded clay tile
Density (kg/m³)	2500
Mass per unit area (kg/m²)	80
Thickness (mm)	32
Colour	Red/brown (71220)
Flame retardant treatment added or organic content limited during production	No
European product standard, if applicable	EN 1304 <sup>2</sup>



Parameter	Details		
Measured product data			
Density of core (kg/m³)	2339.02 (range 2316.22 - 2375.48)		
Colour	Red/brown		
Test information			
Orientation aspects	Not applicable		
Test sponsor's sampling identification	Note 1		
BRE Global sample number	E10429		
Additional information	The test sponsor stated that the coatings applied to the clay tiles were produced from clay and glass components, mixed with minerals or metallic oxides, which after firing at 1100°C are chemically inert with no organic content.		
	Purchase order: 4504244176 dated 29 September 2017.		

Note 1: This information was not supplied by the test sponsor.

## 3 Reports & results in support of this classification

## 3.1 Reports

Name of Laboratory	Name of test sponsor	Test reports Nos.	Test method/field of application rules	
BRE Global	Wienerberger Ltd.	P1110028-1000 Issue 2	EN ISO 1716 <sup>3</sup>	
BRE Global	Wienerberger Ltd.	P1110028-1003 Issue 1	EN ISO 1182 <sup>4</sup>	

## 3.2 Results

Test method & test number	Parameter	No. test runs	Results		
test number			Continuous parameter - mean (m)	Compliance with parameters Criterion / Compliance status A1	
EN ISO 1716	Q <sub>PCS</sub>	3	-0.0171 MJ/kg	≤ 2.0 MJ/kg / Compliant	
	Q <sub>PCSs</sub> @ 80 kg/m <sup>2</sup>	3	-1.368 MJ/kg	-/-	
EN ISO 1182	ΔΤ		5 °C	≤ 30 °C / Compliant	
	Δm		0.10 %	≤ 50 % / Compliant	
	t <sub>f</sub>		0 s	t <sub>f</sub> = 0s / Compliant	

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## 4 Classification and field of application

### 4.1 Reference of classification

This classification has been carried out in accordance with EN 13501-1:2007+A1: 2009.

### 4.2 Classification

The product, 'Corium Tile', in relation to reaction to fire behaviour is classified:

Δ1

The additional classification in relation to smoke production is:

-

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

-

The format of the reaction to fire classification for construction products excluding floorings and linear pipe thermal insulation products is:

Fire Behaviour		Smoke Production			Flan	ning Droplets
A1	-	s	-	,	d	-

i.e. A1

## Reaction to fire classification: A1

## 4.3 Field of application

This classification is valid for:

i) Extruded clay tiles

And the following product and mounting and fixing parameters:

Colour	Valid for all colours, valid for inorganic pigments only.
Composition	As tested, no variation in composition allowed.
External coatings	Valid for inorganic coatings only
Build up and ordering of layers	As tested, no variation allowed.
Overall thickness	Valid for all thicknesses.
Overall density	As tested, no variation in density allowed
Product orientation and geometry	Valid in all orientations

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#### 5 Limitations

This classification 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 performance by the manufacturer within the context of system 3 of assessment and verification of constancy of performance and CE marking under the Construction Products Regulation.

The manufacturer has made a declaration, which is held on file. This confirms that the product's 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.

#### 6 References

- 1. EN 13501-1: 2007+A1: 2009. Fire classification of construction products and building elements. Part 1: Classification using data from reaction to fire tests. CEN, Avenue Marnix 17, B-1000 Brussels. 2009.
- 2. EN 1304:2013. Clay roofing tiles and fittings Product definitions and specifications. CEN, Avenue Marnix 17, B-1000 Brussels. 2013.
- 3. EN ISO 1716: 2010. Reaction to fire tests for products Determination of the gross heat of combustion (calorific value) (ISO 1716:2010). CEN, Avenue Marnix 17, B-1000 Brussels. 2010.
- 4. EN ISO 1182: 2010 Incorporating corrigendum August 2010. Reaction to fire tests for products Non-combustibility test. CEN, Avenue Marnix 17, B-1000 Brussels. 2010.

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## Appendix A Photograph of extruded clay tile as received

