

Classification report for roofs/roof coverings exposed to external fire No. 20028D

Owner of the classification report

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Introduction

This classification report defines the classification assigned to the roof/roof covering «**Kemperol LF**» in accordance with the procedures given in the standard EN 13501-5:2016 : Fire classification of construction products and building elements – Part 5: Classification using data from external fire exposure to roofs tests: Test 4: Method with two stages incorporating burning brands, wind and supplementary radiant heat

This classification report consists of 5 pages

1. DESCRIPTION OF THE ROOF/ROOF COVERING

This description is based on information given by the sponsor.

	Nominal value	Measured value
SUPPORTING DECK		
Material	Supalux calcium silicate board	
Density (kg/m ³)	950	
Thickness (mm)	12	
Reaction to fire classification according to EN 13501-1	A1	
ROOF COVERING		
1.1 <u>Reinforcement layer</u>		
Material	Polyester Fleece	
Trade name	Kemperol 165 Reinforcement Fleece	
Manufacturer / Supplier	Kemper System Limited	
Thickness (mm)	2,0	(1)
Surface weight (g/m ²)	165	(1)
Flame retardants	No	(1)
Fixation	Embedded within Kemperol LF waterproofing resin during application	
1.2 <u>Liquid resin top layer</u>		
Material	Single-component system based on a silane terminated polymer	
Trade name	Kemperol LF	
Manufacturer / Supplier	Kemper System Limited	
Colour	Anthracite	
Thickness (mm)	2,0	(1)
Solid content (m/m %)	N/A	
Applied Surface weight (g/m ²)	3500	(1)
Flame retardants	No	(1)
Fixing method	Liquid applied	

(1) Not verifiable due to sample build-up

2. TEST REPORTS AND TEST RESULTS IN SUPPORT OF THIS CLASSIFICATION

a) Test reports

Name of the laboratory	Name of the sponsor	Test report ref. no.	Test method
WFRGENT nv Ghent - Belgium	Kemper System Limited	20028C	CEN/TS 1187:2012: Test 4

b) Test results

Test conditions:

- Test pitch: 0°
- Deck: CaSi-board (12mm, 950kg/m³)

PRELIMINARY TEST (STAGE 1)

Parameter	Criteria				Test ^(a) results	Compliance			
	Class B _{ROOF} (t4)	Class C _{ROOF} (t4)	Class D _{ROOF} (t4)	Class E _{ROOF} (t4)		Spec. 1	Class B _{ROOF} (t4)	Class C _{ROOF} (t4)	Class D _{ROOF} (t4)
Burn time	< 5 min	< 5 min	< 5 min	< 5 min	00:00	Yes	Yes	Yes	Yes
Flame spread distance	< 0,38 m	< 0,38 m	< 0,38 m	No limit	0,09	Yes	Yes	Yes	Yes
Penetration	None	None	None	None	None	Yes	Yes	Yes	Yes

(a) Not for extended application.

PENETRATION TEST (STAGE 2)

Parameter	Criteria			
	Class B _{ROOF} (t4)	Class C _{ROOF} (t4)	Class D _{ROOF} (t4)	Class E _{ROOF} (t4)
Penetration	≥ 60 min	< 60 min ≥ 30 min	< 30 min	< 30 min
Parameter	Test ^(a) results			
	Spec. 1	Spec. 2	Spec. 3	Mean ^a
Penetration	None	None	None	None
Parameter	Compliance			
	Class B _{ROOF} (t4)	Class C _{ROOF} (t4)	Class D _{ROOF} (t4)	Class E _{ROOF} (t4)
Penetration	Yes	Yes	Yes	Yes

(a) If one or two of the specimens have not failed at one hour, a time of 60 min shall be used in calculating the mean time of penetration.

3. CLASSIFICATION AND FIELD OF APPLICATION

a) Reference

This classification has been carried out in accordance with clause 9 test 4 of EN 13501-5:2016 and ETAG005-11-08-2000.

b) Classification

The roof / roof covering «**Kemperol LF**» in relation to its external fire performance is classified:

BROOF (t4)

c) Direct field of application

The classification is valid for the system as described in §1 for the following conditions:

- Range of pitches: $\leq 10^\circ$
- Deck: As tested

4. LIMITATIONS

At the time the standard EN 13501-5:2016 was published, no decision was made concerning the duration of validity of a classification document.

Provisions of Regulation (EU) 305/2011, commonly known as the Construction Products Regulation (CPR), prevail over any conflicting provisions in the harmonized standards and technical specifications.

5. WARNING

This classification report does not represent type approval nor certification of the product.

6. CONCERNING DECLARATION OF PERFORMANCE (DoP) ACCORDING TO THE CONSTRUCTION PRODUCT REGULATION (CPR)

Annex ZA of the harmonized standard

- ETAG005-11-08-2000: liquid applied waterproofing roof kits

declares that a System 3 Attestation of Conformity (AoC) under the Construction Products Directive (CPD: 89/106/EEC) is required for all external fire performance declarations better than class F_{roof} (t1, t2, t3, t4). Under the Construction Products Regulation (CPR: EU 305/2011) this corresponds with a System 3 of Assessment and Verification of Constancy of Performance (AVCP) as basis for a Declaration of Performance (DoP).

The classification assigned to the product in this report is appropriate to such a Declaration of Performance of the essential characteristics of the construction product by the manufacturer within the context of a System 3 Assessment and Verification of Constancy of Performance. Under the Construction Products Regulation a Declaration of Performance (DoP) is a requirement for affixing the CE marking.

PREPARED BY

APPROVED BY

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