

0418-L-20/5

1 June 2023

# Classification report

for roof coverings exposed to external fire  
Techriet / wood particle board deck



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1 June 2023

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## for roof coverings exposed to external fire

### Techriet / wood particle board deck

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## Details

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Classification report**

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**Contact person  
Email**

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**Date of order  
Project number  
Author  
Subject**

20 February 2023  
0418-L-20/5  
R.J. de Jongh  
classification using test data from  
external fire exposure to roofs tests

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# 1 Introduction

By order of Techriet Holding B.V., Kiwa BDA Testing B.V. has drawn a classification report with reference to a fire test according to CEN/TS 1187:2012, test 1. This concerns the classification of the **Techriet** roofing system directly applied on the supporting deck in accordance with the procedures given in EN 13501-5:2016 – Fire classification of construction products and building elements – Part 5: Classification using data from external fire exposure to roofs tests.

## 2 Description of the roof

The roof is fully described in the test report in support of this classification listed in table 1.

## 3 Test report and test results in support of this classification

*Table 1*

Name of laboratory	Name of sponsor	Number test report	Test method
Kiwa BDA Testing B.V.	Techriet Holding B.V.	0418-L-20/4, dated 1 June 2023	CEN/TS 1187: 2012, test 1

## 4 Results

### Test conditions

- Test pitch : 45°
- Supporting deck : wood particle board deck, constructed from planks 250 mm wide × 16 mm thick, density (680 ± 50) kg/m<sup>3</sup> with plain edges and tightly but jointed so that gaps between planks do not exceed 0,5 mm.

**Table 2**

Parameter	Criteria	Test results on test specimen				Compliance
		1	2	3	4	
Internal fire spread upwards	< 0,700 m	0 mm	0 mm	0 mm	0 mm	yes
External fire spread upwards	< 0,700 m	30 mm	10 mm	5 mm	10 mm	yes
Internal fire spread downwards	< 0,600 m	0 mm	0 mm	0 mm	0 mm	yes
External fire spread downwards	< 0,600 m	75 mm	45 mm	95 mm	70 mm	yes
Maximum burned length internal	< 0,800 m	0 mm	0 mm	0 mm	0 mm	yes
Maximum burned length external	< 0,800 m	105 mm	55 mm	100 mm	80 mm	yes
Burning, droplets/debris falling from exposed side	none	none	none	none	none	yes
Burning, glowing particles penetrating the roof	none	none	none	none	none	yes
Single through opening	< 25 mm <sup>2</sup>	none	none	none	none	yes
Sum of all through openings	< 4500 mm <sup>2</sup>	0 mm <sup>2</sup>	0 mm <sup>2</sup>	0 mm <sup>2</sup>	0 mm <sup>2</sup>	yes
Lateral fire spread, left	< edges <sup>1)</sup>	15 mm	0 mm	20 mm	10 mm	yes
Lateral fire spread, right	< edges <sup>1)</sup>	0 mm	0 mm	5 mm	15 mm	yes
Internal glowing combustion	none	none	none	none	none	yes
Radius of fire spread (horizontal roof)	< 0,200 m	-	-	-	-	n.a.

<sup>1)</sup> Edges of the measuring zone.

## 5 Classification and field of application

### Reference

This classification has been carried out in accordance with EN 13501-5:2016.

### Classification

The roof covering Techriet directly applied on the supporting deck, in relation to its external fire performance is classified: **B<sub>ROOF</sub> (t1)**

### Field of application

This classification is valid for the following conditions:

- range of pitches:  $\geq 20^\circ$ .
- range of decks:
  - any wooden continuous deck (thickness  $\geq 16$  mm) with gaps not exceeding 0,5 mm;
  - any continuous non-combustible board (thickness  $\geq 10$  mm) without gaps;


## 6 Limitations

The classification results relate to the behaviour of a product and/or product family under the particular conditions of the test. The results are not intended to be the sole criteria for assessing the potential fire hazard of the product and/or product family.

This document is not valid as type approval or as certificate of the product.

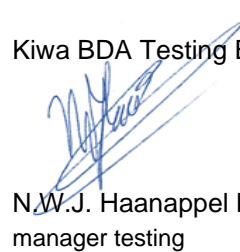
Gorinchem, 1 June 2023  
The laboratory

R.J. de Jongh  
laboratory technician



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