

Reaction to fire classification report No. 17195C

Owner of the classification report

Muylle Facon nv
Ambachtenstraat 58
8870 Izegem
Belgium

Introduction

This classification report defines the classification assigned to the product '**Multi-layered engineered parquet floor, treated with RMC FR System**' in accordance with the procedures given in the standard EN 13501-1:2007+A1:2009: Fire classification of construction products and building elements - Part 1: classification using data from reaction to fire tests.

This classification report consists of 6 pages

1. DETAILS OF CLASSIFIED PRODUCT

a) Nature and end use application

The product **Multi-layered engineered parquet floor, treated with RMC FR System** is defined as an 'engineered oak parquet on birch multiplex'.

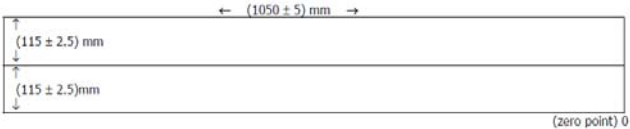
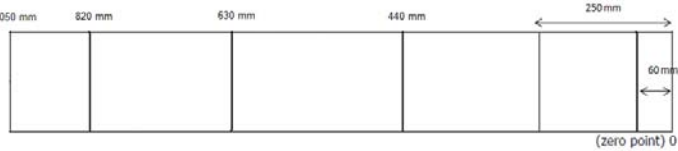
Its classification is valid for the following end use application(s):

Used as parquet floor.

b) Description of the tested product

This description is based on information given by the sponsor.

Nominal values	
Multi-layered engineered parquet floor, treated with RMC FR System	
Type of product	The tested product is multi-layered parquet, consisting of a bottom layer out of birch multiplex and a top layer of oak. The top layer is applied onto the bottom layer using a polyvinyl acetate (PVA _c) glue. The top layer is treated with a fire retardant system provided by Muylle Facon which is called RMC FR system.
Manufacturer	Muylle Facon nv
Total thickness (mm)	10
Width (mm)	190
Total surface mass (6683 (measured in the laboratory)
Bottom layer: Birch multiplex	
Type of product	Birch multiplex
Manufacturer	Vanlandschoot Hout bvba
Thickness (mm)	7,5
Density (kg/m ³)	700 ± 15
Use of fire retardants	No
Polyvinyl acetate (PVA_c) glue between bottom layer and top layer	
Type of glue	Polyvinyl acetate (PVA _c) glue with an aliphatic isocyanate hardener.
Used amount (g/m ²) (viscous application)	175 ± 25
Top layer: Fire retardant treated oak	
Type of product	Oak treated with a fire retardant primer (finishing coat 1; RMC FR Base) and a fire retardant oil (finishing coat 2; RMC FR Oil).
Manufacturer (of the untreated oak)	Vanlandschoot Hout bvba
Thickness (mm)	2,5
Density (of the untreated oak) (kg/m ³)	750 ± 25
Use of fire retardants	Yes

Nominal values	
Finishing coat 1: RMC FR Base	
Type of product	Fire retardant primer (proprietary formula)
Commercial name	RMC FR Base
Manufacturer	Muylle Facon nv
Method of application	Roll
Used amount (g/m ²) (wet application)	35 ± 5
Active amount (g/m ²) (retention)	35 ± 5
Finishing coat 2: RMC FR Oil	
Type of product	Fire retardant oil (proprietary formula)
Commercial name	RMC FR Oil
Manufacturer	Muylle Facon nv
Method of application	Roll + cleaning/finishing
Used amount (g/m ²) (wet application)	16 ± 2
Active amount (g/m ²) (retention)	14 ± 2
Mounting and fixing: EN ISO 11925-2	
The product was tested freehanging with the top layer (fire retardant treated oak) as the fire exposed side. The first 3 samples were tested lengthwise and the next 3 samples were tested crosswise.	
Mounting and fixing: EN ISO 9239-1	
Mounting	The total product was loosely placed onto a fibre cement substrate (7,9 mm; 1916 kg/m ³) according to EN 13238. The flame was exposed to the top layer (fire retardant treated oak).
Direction	<p>The test was executed both lengthwise and crosswise. In the sample lengthwise a closed joint along the length was used at (115 ± 2,5) mm (see figure 1 below) and in the samples crosswise a closed joint at 250 mm from the edge (see figure 2 below) (according to Egolf Recommendation ER 12:2008). For the samples tested crosswise, also closed joints at every 190 mm (width of the sample) from each other were used.</p> <p>Figure 1</p>  <p>Figure 2</p> 

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. and test date	Test method
WFRGENT nv Ghent, Belgium	Muylle Facon nv Izegem, Belgium	17195A: 27/05/2015	EN ISO 11925-2 (November 2010/AC:2011)
WFRGENT nv Ghent, Belgium	Muylle Facon nv Izegem, Belgium	17195B: 27/05/2015	EN ISO 9239-1 (June 2010)

b) Test samples

Test report ref. No.	Sampling procedure: Assessment and Verification of Constancy of Performance (AVCP)	Conditioning	Number of samples tested
17195A	System 3	To constant mass	6
17195B	System 3	To constant mass	4

c) Test results

Test method	Parameter	Number of tests	Results		Criteria for Class C _{FL} -s1	
			Continuous parameters Mean	Compliance parameters	Continuous parameters	Compliance parameters
EN ISO 11925-2 (*) (1) 15 s flame application (**): <u>Surface exposure</u> - front side	F _s ≤ 150 mm Ignition filter paper	6	(-)	Yes	(-)	Yes
			(-)	No	(-)	No
(*) The material didn't melt nor pull away from the pilot burner. (**) According to Egolf Recommendation ER 29:2004 "material which passes the EN ISO 11925-2 test with a flame exposure time of 30 s shall be considered as passing the test with a 15 s flame exposure time". 1. Based on the results obtained in test report No. 17195A.						
EN ISO 9239-1 (2)	Critical flux (kW/m ²)	4	4,5	(-)	≥ 4,5	(-)
	Smoke production (%.min)		4	(-)	≤ 750	(-)
2. Based on the results obtained in test report No. 17195B.						

(-) Not applicable.

3. CLASSIFICATION AND FIELD OF APPLICATION

a) Reference of classification

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

b) Classification

The product **Multi-layered engineered parquet floor, treated with RMC FR System** in relation to its reaction to fire behavior is classified as:

Fire behavior	Smoke production
C_{FL}	s1

c) Field of application

This classification for the product as described in §1b, is valid for the following end use conditions:

- Substrate: Euroclass A2-s1,d0 or better with a nominal thickness of at least 6 mm and a nominal density of at least 1350 kg/m³.
- Without air gap.
- Fixing: Loosely mounted onto the substrate. Also valid for applications where the product is glued onto the substrate.
- With or without closed horizontal and/or vertical joints.

This classification is valid for the following product parameters:

Total product: Multi-layered engineered parquet floor, treated with RMC FR System	Total thickness	10 mm
	Total surface mass	6683 g/m ² (measured in the laboratory)
Bottom layer: Birch multiplex	Nominal thickness	7,5 mm
	Nominal density	(700 ± 15) kg/m ³
	Use of fire retardants	No
Glue between bottom layer and top layer	Type of glue	Polyvinyl acetate (PVAc) glue with an aliphatic isocyanate hardener.
	Used amount (viscous application)	(175 ± 25) g/m ²

Top layer: Fire retardant treated oak	Nominal thickness	2,5 mm
	Nominal density (of the untreated oak)	(750 ± 25) kg/m ³
Finishing coat 1: RMC FR Base	Method of application	Roll
	Used amount (wet application)	(35 ± 5) g/m ²
	Active amount (retention)	(35 ± 5) g/m ²
Finishing coat 2: RMC FR Oil	Method of application	Roll + cleaning/polishing
	Used amount (wet application)	(16 ± 2) g/m ²
	Active amount (retention)	(14 ± 2) g/m ²

4. RESTRICTIONS

At the time the standard EN 13501-1:2007+A1:2009 was published, no decision was made concerning the duration of validity of a classification report.

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

5. WARNING

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

Although at the time the classification report for the tested material/product was drafted there was a product standard for CE marking available, the sponsor specifically requested not to follow the requirements given by this product standard.

Therefore, no CE marking could be affixed under the Construction Products Regulation (CPR: EU 305/2011) / Construction Products Directive and the classification obtained in this classification report is only valid for the tested product, without the application of any extended application rules.

PREPARED BY

APPROVED BY

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