

Additional classification report for roofs/roof coverings exposed to external fire No. 20533F

Owner of the additional classification report

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Introduction

This classification report defines the classification assigned to the roof/roof covering «**ELASTOPAINT 350 MONO TIXO BBA/BROOF / ELASTOPAINT MONO TOP / ELASTOPAINT 350 MONO BBA/BROOF**» 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 additional classification report consists of 9 pages

This report is additional to that issued as No. 20533D, dated 16/11/2020. This report is drafted in accordance with the regulations of EGOLF Agreement EGA 08rev2:2013 "Application note: clause 5.10 / 4-2 – Amendment of reports: client changing product/company names (ii) for commercial reasons – Issue of additional reports". The original report remains valid and is not replaced by this report. The product has not been retested and this report does not involve technical changes or technical reviews of the original report. The original and the new name of the product and of the company commercially responsible for the product, as well as the declarations concerning this additional report, are documented by the laboratory and maintained in the laboratory records. / The original and the new name of the sponsor, as well as the declarations concerning this additional report, are documented by the laboratory and maintained in the laboratory records.

1. DESCRIPTION OF THE ROOF/ROOF COVERING

This description is based on information given by the sponsor.

	Nominal value	Measured value
SUPPORTING DECK		
Material	Asbestos free double pressed and autoclaved fiber cement boards They are reinforced with mineralized cellulose fibres and through coloured, with smoothed surface and rectified edges.	
Trade name	Silbonith HA-HC	
Density (kg/m ³)	1600±50	(3)
Thickness (mm)	8,0	(3)
Reaction to fire classification according to EN 13501-1	A2-s1-d0	
SECOND BASE LAYER		
A) ELASTOPAINT 350 MONO BBA/BROOF		
Material	One component moisture curing liquid polyurethane membrane.	
Manufacturer / Supplier	Mixer SRL	
Thickness (mm)	0,75 & 1,35	(3)
Surface weight (g/m ²)	1500 & 2700	(3)
Flame retardants	Yes	(3)
Fixing method	Self-adhesive	
B) ELASTOPAINT 350 MONO TIXO BBA/BROOF		
Material	One component thixotropic moisture curing liquid polyurethane membrane	
Manufacturer / Supplier	Mixer SRL	
Thickness (mm)	0,74 & 0,99	(3)
Surface weight (g/m ²)	1500 & 2000	(3)
Flame retardants	Yes	(3)
Fixing method	Self-adhesive	
REINFORCEMENT LAYER		
Material	Non-woven polyester reinforcement layer	
Trade name	TNT	
Manufacturer / Supplier	Membrapol	
Thickness (mm)	0,5	0,3
Surface weight (g/m ²)	60	76
Flame retardants	No	(3)
Fixing method	Loose laid	

(1) Based on the information given by the sponsor

(2) Values verified by the laboratory

(3) Unverifiable by the laboratory

FIRST BASE COAT (OPTIONAL)		
A) ELASTOPAINT 350 MONO BBA/BROOF		
Material	One component moisture curing liquid polyurethane membrane.	
Trade name	ELASTOPAINT 350 MONO BBA/BROOF	
Manufacturer / Supplier	Mixer SRL	
Thickness (mm)	0,5	(3)
Surface weight (g/m ²)	1000	(3)
Flame retardants	Yes	(3)
Fixing method	Self-adhesive	
B) ELASTOPAINT 350 MONO TIXO BBA/BROOF		
Material	One component thixotropic moisture curing liquid polyurethane membrane	
Manufacturer / Supplier	Mixer SRL	
Thickness (mm)	0,5	(3)
Surface weight (g/m ²)	1000	(3)
Flame retardants	Yes	(3)
Fixing method	Self-adhesive	
TOP COAT		
A) ELASTOPAINT MONO TOP		
Material	One component aliphatic polyurethane coloured top coat	
Manufacturer / Supplier	Mixer SRL	
Thickness (mm)	0,13	(3)
Surface weight (g/m ²)	300	(3)
Flame retardants	No	(3)
Fixing method	Self-adhesive	
B) ELASTOPAINT 350 MONO TIXO BBA/BROOF		
Material	One component thixotropic moisture curing liquid polyurethane membrane	
Manufacturer / Supplier	Mixer SRL	
Thickness (mm)	1,94	(3)
Surface weight (g/m ²)	3900	(3)
Flame retardants	Yes	(3)
Fixing method	Self-adhesive	
C) ELASTOPAINT 350 MONO BBA/BROOF		
Material	One component moisture curing liquid polyurethane membrane	
Manufacturer / Supplier	Mixer SRL	
Thickness (mm)	1,5	(3)
Surface weight (g/m ²)	3000	(3)
Flame retardants	Yes	(3)
Fixing method	Self-adhesive	

- (1) Based on the information given by the sponsor
(2) Values verified by the laboratory
(3) Unverifiable by the laboratory

Summary of tested systems and parameters

	A-1	A-2	A-3	A-4
Top coat	1,94 mm ELASTOPAINT 350 MONO TIXO BBA/BROOF	1,50 mm ELASTOPAINT 350 MONO BBA/BROOF	0,13 mm ELASTOPAINT MONO TOP	0,13 mm ELASTOPAINT MONO TOP
Fixation	Self-adhesive	Self-adhesive	Self-adhesive	Self-adhesive
First base coat	N/A	N/A	0,5 mm ELASTOPAINT 350 MONO BBA/BROOF	0,5 mm ELASTOPAINT 350 MONO TIXO BBA/BROOF
Fixation	N/A	N/A	Self-adhesive	Self-adhesive
Reinforcement	TNT	TNT	TNT	TNT
Fixation	N/A	N/A	N/A	N/A
Second base coat	0,99 mm ELASTOPAINT 350 MONO TIXO BBA/BROOF	1,35 mm ELASTOPAINT 350 MONO BBA/BROOF	0,75 mm ELASTOPAINT 350 MONO BBA/BROOF	0,74 mm ELASTOPAINT 350 MONO TIXO BBA/BROOF
Fixation	Self-adhesive	Self-adhesive	Self-adhesive	Self-adhesive
Substrate	Silbonith HA-HC (8,0 mm, 1600 kg/m ³)			

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	Mixer SRL – Italchimica Division	20533A&B	CEN/TS 1187:2012: Test 4
WFRGENT nv Ghent - Belgium	Mixer SRL – Italchimica Division	20533C	CEN/TS 16459:2019

b) Test results

Test conditions: 20533A

Test date: 29/07/2020

Test pitch: 0°

Temperature: 19 °C

PRELIMINARY IGNITION TEST WITH BURNING BRANDS (STAGE 1)

Specimen No:	A-1'	A-2'	A-3'	A-4'
Duration of flaming after withdrawal of the test flame (min:sec)	00:00	00:00	00:00	00:00
Maximum flame spread distance (mm)	100	110	110	80
Time to fire penetration (min:sec)	Did not penetrate	Did not penetrate	Did not penetrate	Did not penetrate
Nature of the penetration	N.a.	N.a.	N.a.	N.a.

PENETRATION TEST WITH BURNING BRANDS, WIND AND SUPPLEMENTARY RADIANT HEAT (STAGE 2)

Specimen No:	A-1	A-2	A-3	A-4	Average
Time to fire penetration (min:sec)	Did not penetrate	Did not penetrate	Did not penetrate	Did not penetrate	Did not penetrate
Nature of the penetration	N.a.	N.a.	N.a.	N.a.	N.a.
Additional observations: all panels except A-2 ignited, flame out around the 10 minute mark, carbonization, melting					

Test conditions: 20533B

Test date: 29/07/2020

Test pitch: 0°

Temperature: 19 °C

Build-up: Silbonith + ELASTOPAINT 350 MONO BBA/BROOF + TNT + ELASTOPAINT 350 MONO BBA/BROOF + ELASTOPAINT MONO TOP

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)	Class E _{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	0,11	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 EN13501-5:2016 and EN1504-2.

b) Classification

The roof / roof coverings «**ELASTOPAINT 350 MONO BBA/BROOF / ELASTOPAINT 350 MONO TIXO BBA/BROOF / ELASTOPAINT MONO TOP** » in relation to its external fire performance are classified:

B_{ROOF} (t4)

c) Direct field of application

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

- Range of pitches: ≤ 10°

d) Extended field of application

Systems with ELASTOPAINT 350 MONO TIXO BBA/BROOF top coat

- Range of layer 0 (Top coat): ELASTOPAINT 350 MONO TIXO BBA/BROOF

Thickness:	1,94 mm
Surface weight:	3900 kg/m ²
Fixing method:	Self-adhesive

- Range of layer 1: Non-woven polyester or glass fleece reinforcement layer

Surface weight (g/m ²)	60
Fixing method:	Loose laid

- Range of layer 2 (Base coat): ELASTOPAINT 350 MONO TIXO BBA/BROOF

Thickness:	0,99
Surface weight:	2000 g/m ²
Fixing method:	Self-adhesive

- Range of layer 3: Supporting deck

Range of supporting deck:	Silbonith HA-HC (density 1600 kg/m ³ , thickness: 8,0 mm or more)
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Systems with ELASTOPAINT MONO TOP top coat

- Range of layer 0 (Top coat): ELASTOPAINT MONO TOP

Thickness:	0,13 mm
Surface weight:	300 g/m ²
Fixing method:	Self-adhesive

- Range of layer 1: base coat: ELASTOPAINT 350 MONO BBA/BROOF or ELASTOPAINT 350 MONO TIXO BBA/BROOF

Thickness:	0,5
Surface weight:	1000 g/m ²
Fixing method:	Self-adhesive

- Range of layer 2: Non-woven polyester or glass fleece reinforcement layer

Surface weight (g/m ²)	60
Fixing method:	Loose laid

- Range of layer 3: base coat: ELASTOPAINT 350 MONO BBA/BROOF or ELASTOPAINT 350 MONO TIXO BBA/BROOF

Thickness:	0,74-0,75
Surface weight:	1500 g/m ²
Fixing method:	Self-adhesive

- Range of layer 4: Supporting deck

Range of supporting deck:	Silbonith HA-HC (density 1600 kg/m ³ , thickness: 8,0 mm or more)
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Systems with ELASTOPAINT 350 MONO BBA/BROOF top coat

- Range of layer 0 (Top coat): ELASTOPAINT 350 MONO BBA/BROOF

Thickness:	1,50
Surface weight:	3000 g/m ²
Fixing method:	Self-adhesive

- Range of layer 1: Non-woven polyester or glass fleece reinforcement layer

Surface weight (g/m ²)	60
Fixing method:	Loose laid

- Range of layer 2 (Base coat): ELASTOPAINT 350 MONO BBA/BROOF

Thickness:	1,35
Surface weight:	2700 g/m ²
Fixing method:	Self-adhesive

- Range of layer 3: Supporting deck

Range of supporting deck:	Silbonith HA-HC (density 1600 kg/m ³ , thickness: 8,0 mm or more)
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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

- EN 1504-2 : Products and systems for the protection and repair of concrete structures - Definitions, requirements, quality control and evaluation of conformity - Part 2: Surface protection systems for concrete

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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