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Bellaterra: 7<sup>th</sup> June, 2016

File number:

16/12318-1032 Part 2 English Version

Petitioner's references:

**RUVITEX INDUSTRY AD** 23 A Tutrakan Blvd. 7003 Ruse, Bulgaria

**ASFALTOS CHOVA, S.A.** Ctra. Tavernes-Liria, km. 4.3 Apartado de correos 5 46760 Tavernes de la Valldigna (Valencia)- Spain



Tests marked with (\*) are not covered by the ENAC accreditation.

# **CLASIFICATION REPORT**

# 1.- PRODUCT CHARACTERISTICS

Roofs samples were received with the following indications according to technical specifications provided by the petitioner:

-PVC membrane RUVIMAT D15 – ChovIPOL RP 1.5 INTEMPERIE

Flexible polymeric membrane made of PVC with 1.5 mm thickness. It has an inner polyester reinforcement scrim. UV resistant membrane, produced accordint to EN13956:2012.

-PVC membrane RUVIMAT D12 – ChovIPOL RP 1.2 INTEMPERIE

Flexible polymeric membrane made of PVC with 1.2 mm thickness. It has an inner polyester reinforcement scrim. UV resistant membrane, produced according to EN 13956:2012.

-Stone wool panel LAROC N 150/

Stone wool panels, water resistant with no bituminous coating, LAROC N150/, produced according to UNE EN 13162, thermal conductivity 0.035 W/(mK) with a density of 150 kg/m<sup>3</sup> and specific thickness. Resistant to compression. Allowing rooftop access.

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\*Product trade name:
PVC membrane:

RUVIMAT D 12 – ChovIPOL RP 1.2 INTEMPERIE
RUVIMAT D 15 – ChovIPOL RP 1.5 INTEMPERIE

Thermal Insulation panels:

Stone wool panels LAROC N 150/ with density of 150 kg/m<sup>3</sup> y specific thickness.

# SAMPLE 1

The product has three layers:

- -Layer 1: RUVIMAT D 12 ChovIPOL RP 1.2 INTEMPERIE, with 1.2 mm in thickness, superficial density of 1.45 kg/m<sup>2</sup>, top face: light grey/white colour and bottom face: black colour, smooth appearance and without orientability.
- -Layer 2: Stone wool panel ,water resistant with no bituminous coating LAROC N 150/5, with 5 cm in thickness, density of 150 kg/m<sup>3</sup>, yellow colour and rough appearance.
- -Layer 3: Curved profile INCO 70.4-galvanised steel, 0.7 mm in thickness, superficial density of 8.13 kg/m<sup>2</sup>, metallic color and smooth appearance.

# SAMPLE 2

The product has three layers:

- -Layer 1: RUVIMAT D 15 ChovIPOL RP 1.5 INTEMPERIE, with 1.5 mm in thickness, superficial density of 1.90 kg/m<sup>2</sup>, top face: light grey/white colour and bottom face: black colour, smooth appearance and without orientability.
- -Layer 2: Stone wool panel ,water resistant with no bituminous coating LAROC N 150/5, with 5 cm in thickness, density of 150 kg/m<sup>3</sup>, yellow colour and rough appearance.
- -Layer 3: Curved profile INCO 70.4-galvanised steel, 0.7 mm in thickness, superficial density of 8.13 kg/m<sup>2</sup>, metallic color and smooth appearance.

## Manufacturer :

-RUVITEX INDUSTRY AD. Dirección: 23 A Tutrakan Blvd. 7003, Bulgary -ASFALTOS CHOVA, S.A. Dirección: Ctra. Tavernes-Liria, km. 4.3, Apartado de Correos 5, 46760 Tavernes de la Valldigna (Valencia)-Spain

Note: test samples were manufactured by RUVITEX INDUSTRY AD and the assembling was carried out by ASFALTOS CHOVA S.A.

Manufacturer prepared the test samples in its own facilities without any supervision of the laboratory.

Measurements of the deck samples: 1800 x 800 mm.

Mechanical fixing based on screws was used as fixing method. Mechanical fixing was carried out as can be seen in the pictures attached in this report



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# 2. – <u>CLASSIFICATION AND DIRECT APPLICATION FIELD</u>

Test classification has been conducted in compliance with the instructions contained in European Standard UNE EN 123501-5:2005+A1:2010.

# 2.1. – <u>Test reports</u>

Name of Laboratory	Applus - LGAI			
Name of Petitioner	Ruvitex Industry AD			
	Asfaltos Chova, S.A.			
Test Report Number	15/12318-1032 Part 1 English Version			
Testing Method	UNE-CEN/TS 1187:2013 (test 1)			

# 2.2. – <u>Test results</u>

In accordance with section 8 of the classification guideline, each test must comply with all of the following requirements:

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		Results of tests on samples				
Parameter	Criterion	Sample	Sample	Sample	Sample	Compliance
Inner, upward fire	. 0 7	-	2	3	4	VEC
Outer, upward fire propagation	< 0,7 m	-	-	-	-	YES
Inner, downward fire propagation	< 0,6 m	-	-	-	-	YES
Outer, downward fire propagation	< 0,6 m	-	-	-	-	YES
Maximum inner burnt length	< 0,8 m	-	-	-	-	YES
Maximum outer burnt length	< 0,8 m	-	-	-	-	YES
Incandescent drops/slag released from the exposed side	NO	NO	NO	NO	NO	YES
Particles in flame, incandescent particles entering the roof	NO	NO	NO	NO	NO	YES
One single opening through the sample	< 25 mm2	-	-	-	-	YES
Sum total of the areas of all the openings	< 4500 mm2	-	-	-	-	YES
Side propagation of fire	< to edge	< to edge	< to edge	< to edge	< to edge	YES
Inner incandescent combustion	NO	NO	NO	NO	NO	YES
Fire propagation radius (on horizontal roofs)	< 0,2 m	-	-	-	-	YES



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### SAMPLE 2

	Results of tests on samples					
Parameter	Criterion	Sample	Sample	Sample	Sample	Compliance
Inner, upward fire	< 0.7 m		-		-	YES
Outer, upward fire propagation	< 0,7 m	-	-	-	-	YES
Inner, downward fire propagation	< 0,6 m	-	-	-	-	YES
Outer, downward fire propagation	< 0,6 m	-	-	-	-	YES
Maximum inner burnt length	< 0,8 m	-	-	-	-	YES
Maximum outer burnt length	< 0,8 m	-	-	-	-	YES
Incandescent drops/slag released from the exposed side	NO	NO	NO	NO	NO	YES
Particles in flame, incandescent particles entering the roof	NO	NO	NO	NO	NO	YES
One single opening through the sample	< 25 mm2	-	-	-	-	YES
Sum total of the areas of all the openings	< 4500 mm2	-	-	-	-	YES
Side propagation of fire	< to edge	< to edge	< to edge	< to edge	< to edge	YES
Inner incandescent combustion	NO	NO	NO	NO	NO	YES
Fire propagation radius (on horizontal roofs)	< 0,2 m	-	-	-	-	YES

## **CLASIFICATION**

As regards its behaviour to exterior fire, the product:

PVC membrane:

•RUVIMAT D 12 - ChovIPOL RP 1.2 INTEMPERIE

•RUVIMAT D 15 – ChovIPOL RP 1.5 INTEMPERIE

Thermal Insulation panels:

•Stone wool panels LAROC N 150/ with density of 150 kg/m<sup>3</sup> y specific thickness.

is classified as follows:

Fire reaction classification: CLASS B<sub>ROOF</sub> (t1)

This class is only valid for the application scope described in the present classification report.



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# 2.3- Field of Application

This classification is valid for the following conditions:

# **B**<sub>ROOF</sub>(t1):

### • Interval of slopes:

- results obtained at  $15^{\circ}$  may apply to roofs with slopes <  $20^{\circ}$ .

# •PVC sheet thickness(\*):

- Once performed the tests on the 1.2 mm and 1.5 mm in thickness sheets, sheets with intermediate thickness are included within the same classification.

### •Substrate:

-The results obtained with a trapezoidal profiles Steel deck as defined in 4.4.2.2, d) apply to:

-Any profiled and non perforated Steel deck

-Any non-combustible continuous deck with a minimum thickness of 10 mm.

## 2.4- Limitations

#### Restrictions

The indications regarding any type of restriction pertaining to the validity duration of the present classification report.

## Warning

This European standard should not be construed as a standard approval or Certification of the product.

Chief of the Fire Laboratory LGAI Technological Center S.A.

Chief of Euroclass LGAI Technological Center S.A.

The results refer exclusively to the samples tested at the time and under the conditions indicated. The uncertainties expressed in this document pertain to the expanded uncertainty, which has been obtained by multiplying the typical measurement uncertainty by the coverage factor k=2 which, for a regular distribution, corresponds to a coverage probability of approximately 95%.

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In the event of litigation, the Spanish version will be valid