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**European Technical Assessment ETA 23/ 0804  
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English translation prepared by IETcc. Original version in Spanish language

**General Part**

**Technical Assessment Body issuing the European Technical Assessment:**  
Instituto de Ciencias de la Construcción Eduardo Torroja (IETcc)

<b>Trade name of the construction product</b>	<b>ALSAN® PUR 608 / ALSAN® PUR 608 RAPID</b>
<b>Product family to which the construction product belongs</b>	Liquid Applied Roof Waterproofing Kit, based on polyurethane
<b>Manufacturer</b>	<b>SOPREMA IBERICA, S.L.U</b> C/ Ferro. Polígono industrial Can Pelegrí, 7 Castellbisbal. 08755 Barcelona. Spain
<b>Manufacturing plant(s)</b>	Plant 1.
<b>This European Technical Assessment contains</b>	7 pages including 2 Annex. Annex 2 contains confidential information and is not included in this ETA
<b>This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of</b>	EAD 030350-00-0402 Liquid applied roof waterproofing kits

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## Specific parts

### 1. Technical description of the product

#### 1 Technical description of the product

The Liquid Applied Roof Waterproofing Kit (LARWK) "ALSAN® PUR 608 / ALSAN® PUR 608 RAPID" is designed and installed in accordance with the manufacturer, design and installation instructions, deposited at the IETcc. This LARWK comprises the following components, which are factory produced by the manufacturer or a supplier.

Components	Trade name	Consumption
Primer	ALSAN® EPOXI 131 (epoxy primer in water dispersion)	0,3 – 0,5 kg/m <sup>2</sup>
	ALSAN® PUR 101	0,15 – 0,25 kg/m <sup>2</sup>
	ALSAN® PUR 101 FLEX	0,15 – 0,25 kg/m <sup>2</sup>
Internal reinforcement	ALSAN® VELO P/ALSAN® FLEECE 110P (Geotextile non-woven)	-----
	ALSAN® FLEECE 225 GF (Glass fibre mat)	
Waterproofing membrane	ALSAN® PUR 608	≥ 1,6 kg/m <sup>2</sup>
	ALSAN® PUR 608 RAPID. Alternative version to ALSAN® PUR 608, it has same formulation with <1000 ppm of a moisture-triggering cure catalyst and thixotropic adjustment added after manufacturing and prior to delivery. This helps to improve curing under difficult (cold, dry) conditions	

This kit can be used for different working life depending mainly of this thickness:

Working life	Minimum quantity consumed	Minimum thickness (mm)
10	ALSAN® PUR 608 - ALSAN® PUR 608 RAPID 1,6 kg/m <sup>2</sup>	1,4
	ALSAN® PUR 608 - ALSAN® PUR 608 RAPID 2 kg/m <sup>2</sup>	1,6
25	ALSAN® PUR 608 - ALSAN® PUR 608 RAPID 2 kg/m <sup>2</sup> + ALSAN® FLEECE 225 GF	1,8
	ALSAN® PUR 608 - ALSAN® PUR 608 RAPID 3 kg/m <sup>2</sup> + ALSAN® VELO P/ALSAN® FLEECE 110P	2,2

ALSAN® PUR 608 / ALSAN® PUR 608 RAPID is a liquid applied roof waterproofing kits based on pure polyurethane. It consists of a polyurethane resin, liquid-applied, mono-component, elastomeric with or without internal protection layer. ALSAN® PUR 608 / ALSAN® PUR 608 RAPID reacts with the environmental humidity (direct reaction).

Once polymerised they conform an elastic lining, in form of a layer completely bonded to different supports (steel and other types of metals, concrete, mortar, ceramic, timber, polyurethane foam and other waterproofing membranes like PVC, EPDM and bituminous). Depending on support condition, other type of primer may be advisable.

### 2. Specification of the intended use in accordance with the applicable European Assessment Document (hereinafter EAD)

#### 2.1 Intended use(s)

The intended use of this System is the waterproofing of roof against the water, as in liquid as vapour form, with any slope between 0 and >30 % (S1-S4), for any type of categorisation of user load between P1 a P4 (annex 1) and resists the effects of low surface temperatures of -20 °C (TL3) and high temperatures of 60 (TH2) -90 °C (TH4). This LARWK fulfils the Basic works requirements n.º 2 (Safety in case of fire), n.º 3 (Hygiene, health and the environment) and n.º 4 (Safety in use) of the European Regulation 305/11.

This LARWK is made of non load-bearing construction elements. It does not contribute directly to the stability of the roof on which is installed, but it can contribute its durability by providing enhanced protection from the effect of weathering.

This LARWK can be used on new or existing (retrofit) roofs. It can also be used on vertical surfaces (singular details).

#### 2.2 Relevant general conditions for the use of the kit

The provisions made in this European Technical Assessment are based on an assumed working life of 10-25 years from installation in the works, according to EAD030350-00-0402, provided that the conditions lay down for the installation, packaging, transport and storage as well as appropriate use, maintenance and repair are met. In this respect.



The indications given on the working life (W2-W3) cannot be interpreted as a guarantee given neither by the product manufacturer nor by EOTA nor by the Technical Assessment Body issuing this ETA, but are regarded only as a means for choosing the right product in relation to the expected economically reasonable working life of the works.

**Installation.** The Kit is installed on site. It is the responsibility of the manufacturer to guarantee that the information about design and installation of this system is effectively communicated to the concerned people. This information can be given using reproductions of the respective parts of this ETA. Besides, all the data concerning the execution shall be clearly indicated on the packaging and/or the enclosed instruction sheets using one or several illustrations.

**Design.** In the MTD the manufacture gives information on the quantities consumed and the processing, which shall lead to a thickness of the roof waterproofing  $\geq 1.4$  mm.

**Execution.** Particularly, it is recommended to consider:

- The kit installation has to be carried out by qualified installers,
- it can only be used the components of the kit indicated in this ETA,
- the supervision of the amount of material used ( $\text{kg/m}^2$ ) and the control visual to check that each coat covers totally the one below, can ensure the minimum thickness of the kits,
- inspection of the roof surface (cleanliness and correct preparation) before applying the roof waterproofing,
- the recommended temperature of the product to be assembled will be between  $0^\circ\text{C}$  and  $40^\circ\text{C}$  and it will be not admitted support temperatures upper to  $45^\circ\text{C}$ . In other conditions, it will need to follow the manufacturer's instructions

Before, the installation of the kit, it is recommended to read its security card.

**Use, maintenance and repair of the works.** In those roofs with deteriorated areas of the waterproof layers, they will be repaired carrying out some light grinding to open the pore of the deteriorated layers. Afterwards, the new product will be assembled following the installation instruction and the new coats must overlap, at least 10 cm, to the coat no deteriorated. Further installation details are laid down in the MTD place at IETcc.

### 3 Performance of the product and references to the methods used for its assessment

The identification tests and the assessment for the intended use of "ALSAN® PUR 608" according to the Basic Work Requirements (BWR) were carried out in compliance with EAD 030350-00-0402. The characteristics of each system shall correspond to the respective values laid down in following tables of this ETA, checked by IETcc.

Methods of verification and of assessing and judging are listed afterwards.

#### 3.1 Safety in case of fire (BWR 2)

Basic requirement for construction works 2: Safety in case of fire		
Essential characteristic	Relevant clause in EAD	Performance
External fire performance of roofs	2.2.1	Broof(t1) supports with fire classification A1-A2, NPA. For support with no A1-A2 fire classification
Reaction to fire	2.2.2	NPA



### 3.2 Hygiene, health and environment (BWR 3)

Basic requirement for construction works 3: Hygiene, health, and the environment		
Essential characteristic	Relevant clause in EAD	Performance
Content, emission and/or release of dangerous substances	2.2.3	NPA
Resistance to water vapour	2.2.4	$\mu = 1485$ (1.4 mm thickness)
Watertightness	2.2.5	Watertight
Resistance to wind loads	2.2.6	Delamination strength: <b>Support + Primer + membrane</b>
		Concrete + without primer
		Concrete + ALSAN® EPOXI 131
		Hormigón + ALSAN® PUR 101
		Hormigón + ALSAN® PUR 101Flex
		Steel + without primer
		Steel + ALSAN® EPOXI 131
		Concrete + ALSAN® PUR 101
		Concrete + ALSAN® PUR 101Flex
		PU foam + any primer
		The failure mode was between support and membrane on concrete – steel support, on the PU support collapse the support
Resistance to mechanical damage (perforation)	2.2.7	<b>P1 - P4 (annex 1)</b>
		Resistance to static indentation (23 °C)
		2 kg/m <sup>2</sup> (without internal mesh)
		1,6 kg/m <sup>2</sup>
	2.2.7.1	Steel: I4 (6 mm)
		PU: I4 (6 mm)
		Steel: I4 (6 mm)
		PU: NPA
2.2.7.2	Resistance to static indentation (23 °C)	
	2 kg/m <sup>2</sup> (without internal mesh)	
	1,6 kg/m <sup>2</sup>	
	Steel: L4 (25 kg)	
2.2.7.2	PU: L3 (20 kg)	
	Steel: L3 (20 kg)	
	PU: NPA	
	PU: NPA	
Resistance to fatigue movement	2.2.8	W3 1000 cycles (-10 °C) with any mesh - 2 kg/m <sup>2</sup>
		W2: 500 cycles (-10 °C) without mesh -1.6 kg/m <sup>2</sup>
Resistance to the effects of low and high surface temperatures	2.2.9	<b>Low temperatures: TL3</b>
		<b>High temperatures: TH2 -TH4</b>
	2.2.9.1	R. Dynamic Indentation at TL3
		2 kg/m <sup>2</sup> (without internal mesh)
		1,6 kg/m <sup>2</sup>
		Steel: I4 (6 mm) at -20 °C
	2.2.9.3	R. Static indentation (60 – 90 °C)
		2 kg/m <sup>2</sup> (without internal mesh)
		1,6 kg/m <sup>2</sup>
		Steel: L2 (15 kg) at 90 °C
		Steel: L3 (20 kg) at 80 °C
Steel: L4 (25 kg) at 60 °C		
PU: L1 (7 kg) at 60 °C		
Steel: L3 (20 kg) at 80 °C		
Steel: L1 (7 kg) at 90 °C		
2.2.9.3	PU: NPA	
	2 kg/m <sup>2</sup> With Internal reinforcement (+ALSAN® FLEECE 225 GF)	
	3 kg/m <sup>2</sup> With Internal reinforcement (+ ALSAN® VELO P/ALSAN® FLEECE 110P)	
	Steel: L3 (20 kg) at 90 °C	
2.2.10.1	Steel: L4 (25 kg) at 80 °C	
	PU: NPA	
	Steel: L3 (20 kg) at 90 °C	
	Steel: L4 (25 kg) at 90 °C	
Resistance to ageing media (heat and water)	2.2.10.1	<b>Resistance to heat ageing W2- W3, S (severe)</b> (100 - 200 days at 80 °C)
		R. Dynamic Indentation (-20 °C) W3
		2 kg/m <sup>2</sup> (without internal mesh)
		1,6 kg/m <sup>2</sup>
		Steel: I4 (6 mm) at -20 °C
		PU: I4 (6 mm) at -20 °C
		Steel: I4 (6 mm) at -20 °C
		PU: NPA
		Fatigue movement (50 cycles) at -10 °C: Pass
		Tensile properties (MPa / %)
1,6 kg/m <sup>2</sup> W2 (without internal mesh)		
2 kg/m <sup>2</sup> W3 (without internal mesh)		
Initial: 3.5 / 694		
Initial: 2.4 / 460		
Ageing: 3.3 / 192		



Resistance to ageing media (heat and water)	2.2.10.3	3 kg/m <sup>2</sup> W3 (without internal mesh)	Initial: 5.4 / 690 Ageing: 5.5 / 860
		3 kg/m <sup>2</sup> W3 + ALSAN® VELO P/ALSAN® FLEECE 110P	Initial: 5.6 / 48 Ageing: 5.8 / 40
		2 kg/m <sup>2</sup> W3 + ALSAN® FLEECE 225 GF	Initial: 6 / 6
		<b>Resistance to water ageing W2 –W3, S1-S2, P4</b> (30 – 60 -180 days at 60 °C)	
	R. Static indentation		
	2 kg/m <sup>2</sup> - 60d (without internal mesh)	90 °C -Steel: L2 (15 kg) 80 °C -Steel: L3 (20 kg) 60 °C -Steel: L4 (25 kg)	
	1,6 kg/m <sup>2</sup> – 30d	90 °C -Steel: L1 (7 kg) 80 °C -Steel: L2 (15 kg) 60 °C -Steel: L3 (20 kg)	
	2 kg/m <sup>2</sup> + ALSAN® FLEECE 225 GF- 60d	60 -90 °C -Steel: L3 (20 kg)	
	3 kg/m <sup>2</sup> + ALSAN® VELO P/ALSAN® FLEECE 110P - 60d	80- 90 °C -Steel: L3 (20 kg) 60 °C -Steel: L4 (25 kg)	
	Resistance to delamination (kPa) ≥ 50 kPa (60 / 180 days)		
Concrete + without primer	NPA		
Concrete + ALSAN® EPOXI 131	3000 / 2000		
Resistance to UV radiation in the presence of moisture	2.2.10.2	W3-W2, S (severe), 5000-2000 hours without finishing layers	
		R. Dynamic Indentation (-20 °C) W3	
		2 kg/m <sup>2</sup> (without internal mesh)	Steel: I4 (6 mm) PU: I4 (6 mm)
		1,6 kg/m <sup>2</sup>	Steel: I4 (6 mm) PU: NPA
	Tensile properties (MPa / %)		
	2 kg/m <sup>2</sup> W2 (without internal mesh)	Initial: 2.4 / 460 Ageing: 3.1 / 193	
	3 kg/m <sup>2</sup> W3 (without internal mesh)	Initial: 5.4 / 690 Ageing: 2.0 / 180	
	3 kg/m <sup>2</sup> W3 + ALSAN® VELO P/ALSAN® FLEECE 110P	Initial: 5.6 / 48 Ageing: 7 / 46	
Resistance to plant roots	2.2.11	NPA	
Effects of variations in kit components and site practices	2.2.12	2 kg/m <sup>2</sup> (without internal mesh)	
		0 °C. Tensile properties (MPa / %)	4 / 384
		40 °C. Tensile properties (MPa / %)	3 / 240
		0 °C. R. Dynamic Indentation	Steel: I4 (6 mm) at 23 °C
40 °C. R. Dynamic Indentation	Steel: I4 (6 mm) at 23 °C		
Effects of the days joint	2.2.13	Delamination strength: 1800 kPa	

### 3.3 Safety and accessibility in use (BWR 4)

Basic requirement for construction works 4: Safety and accessibility in use		
Essential characteristic	Relevant clause in EAD	Performance
Slipperiness	2.2.14	NPA



## 4 Assessment and verification of constancy of performance (hereinafter AVCP) system applied, with reference to its legal base

### 4.1 System of assessment and verification of constancy of performance

According to the decision 98/599/EC of October 1998, Official Journal of the European Communities N° L 287, 24.10.1998) of the European Commission<sup>1</sup>, system 3 of assessment and verification of constancy of performance (see EC delegated regulation (EU) No 568/2014 amending Annex V to Regulation (EU) N° 305/2011) applies.

Product	Intended uses	Level or Classes	System
ALSAN® PUR 608 / ALSAN® PUR 608 RAPID	Liquid Applied Roof Waterproofing Kit	Any	3

## 5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan which is deposited at IETcc<sup>2</sup>.

### 5.1 Tasks of the manufacturer

**Factory production control.** The manufacturer shall exercise permanent internal control of production. All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures, including records of results performed. This production control system shall ensure that the product is in conformity with this ETA.

The manufacturer may only use components stated in the technical documentation of this ETA including Control Plan. The incoming raw materials are subjected to verifications by the manufacturer before acceptance.

The factory production control shall be in accordance with the Control Plan. The results of factory production control shall be recorded and evaluated in accordance with the provisions of the Control Plan

**Other tasks of the manufacturer.** The manufacturer shall make a declaration of conformity, stating that the construction product is in conformity with the provisions of this ETA.

### 5.2 Tasks of notified bodies.

**Initial type-testing of the product.** For type testing, the results of the tests performed as part of the assessment for the European Technical Assessment shall be used unless there are changes in the production line or plant. In such cases, the necessary type testing has to be agreed between IETcc and the notified body.

The initial type-testing have been conducted by the IETcc to issue this ETA in accordance with the EAD 030350-00-0402 "Liquid applied roof waterproofing kits". The verifications underlying this ETA have been furnished on samples from the current production.

<sup>1</sup> Published in the Official Journal of the European Union (OJEU) L 262, 14/10/2003 P. 0034 - 0036.  
See [www.new.eur-lex.europa.eu/oj/direct-access.html](http://www.new.eur-lex.europa.eu/oj/direct-access.html)

<sup>2</sup> The Control Plan is a confidential part of the ETA and only handed over to the notified certification body involved in the assessment and verification of constancy of performance.



Issued in Madrid on 9 of October 2023

By

Director

on behalf of Instituto de Ciencias de la Construcción Eduardo Torroja (IETcc – CSIC)

### Annex 1.

#### Resistance to mechanical damage (perforation)

Levels	1,6 kg/m <sup>2</sup>	2 kg/m <sup>2</sup>	3 kg/m <sup>2</sup> + ALSAN® VELO P/ALSAN® FLEECE 110P	2 kg/m <sup>2</sup> + ALSAN® FLEECE 225 GF
Working life	W2 (10 years)	W3 (25 years)		
User load	Concrete / steel			
	P3: TH2 P2: TH3 P1:TH4	P3: TH2, P3: TH3 P2:TH4	P4: TH2 P3: TH3 P3:TH4	P4: TH2, TH3 P3: TH4

**NOTE:** For a polyurethane foam support, the system has been only test for a working life of 10 years (W2) and 2 kg/m<sup>2</sup> of ALSAN® PUR 608 with a User load of P1

