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## European Technical Assessment **ETA 24/ 1247** of 20/ 07/ 2025

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)

**Trade name of the construction product**

**Neoproof Polyurea R**

**Product family to which the construction product belongs**

Liquid Applied Roof Waterproofing Kit, based on polyaspartic polyurea

**Manufacturer**

**NEOTEX S.A.**  
V. Moira, Industrial Area Mandra 196 00, Greece

**Manufacturing plant(s)**

V. Moira, Industrial Area Mandra 196 00, Greece

**This European Technical Assessment contains**

6 pages.  
included Annex 1, which form an integral part of this assessment  
+ Annex 2 that contains confidential information and is not included in the European Technical Assessment when that assessment is publicly disseminated

**This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of**

EAD 030350-00-0402  
Liquid applied roof waterproofing kits

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## Specific parts

### 1 Technical description of the product

The Liquid Applied Roof Waterproofing Kit (LARWK) Neoproof Polyurea R 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	Concrete	Neodur Primer 1K (Pr1)	$\geq 0,12 \text{ L/m}^2$
		Acqua Primer NP (Pr2)	$\geq 0,12 \text{ kg/m}^2$
	Steel	Neopox Special Primer 1225 (Pr3)	$\geq 0,14 \text{ kg/m}^2$
		Neodur Primer 1K (Pr1)	$\geq 0,12 \text{ L/m}^2$
	PU foam - Bitumen membrane	Acqua Primer NP (Pr2)	$\geq 0,12 \text{ kg/m}^2$
System 1	Waterproofing membrane	Neoproof Polyurea R (without internal reinforcement)	$\geq 1,50 \text{ kg/m}^2$
System 2	Waterproofing membrane	Neoproof Polyurea R (with internal reinforcement)	$\geq 2,30 \text{ kg/m}^2$
	Internal mesh	Neotextile NP	-----

Neoproof Polyurea R (Neorof Polyurea R for the market of Spain) is a liquid cold-applied roof waterproofing membrane based on polyaspartic polyurea, manufactured by the company NEOTEX S.A., intended for long-term protection of various substrates in roofs. It forms a blister-free and impermeable to moisture membrane, with high resistance to UV radiation and mechanical stress. The waterproofing systems are created by applying the elastomeric resin without internal reinforcement mesh (System 1) or with internal mesh (System 2), which, once polymerised, creates a jointless elastic lining, forming a layer completely bonded to the support (concrete, metal, PU foam, ceramics, bitumen membranes with or without mineral slate, PVC/TPO membranes, etc). Depending on support condition other type of primer may be advisable.

The minimum layer thickness of the assembled system has to be 1,0 mm without internal mesh-reinforcement and 1,2 mm with internal mesh-reinforcement.

### 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, both in liquid as well as vapour form, with any slope between 0 and  $> 30\%$  (S1-S4), for any type of categorisation of user load between P1 and P4 and resists the effects of low surface temperatures of  $-30\text{ }^{\circ}\text{C}$  (TL4) and high temperatures from  $+30\text{ }^{\circ}\text{C}$  (TH1) to  $+90\text{ }^{\circ}\text{C}$  (TH4)<sup>1</sup> (Annex 1) for a working life of 25 years (W3). 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).

<sup>1</sup> P3 - P4: System 1 and System 2 on concrete-steel support at any high temperature (TH1-TH4) and low temperature (TL4)

P2: System 2 on PU and bitumen membranes supports at any high temperature TH1-TH4 and low temperature (TL4)

P1: System 1 on PU and bitumen membranes supports at any high temperature TH1-TH4 and low temperature (TL4)



## 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 25 years from installation in the works, according to EAD030350-00-0402, for the system 1 (1mm without internal mesh) and for the system 2 (1,2 mm with internal mesh) , 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 (25 years - 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 respective technical documents.

**Design.** In the MTD the manufacturer gives information on the quantities consumed and the processing, which shall lead to a thickness of the roof waterproofing  $\geq 1.0$  (System 1) and  $\geq 1.2$  mm (System 2).

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

- The kit installation has to be carried out by qualified installers,
- The components of the kit indicated in this ETA can only be used,
- The supervision of the amount of material used ( $\text{kg/m}^2$ ) and the visual control 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  $+5^\circ\text{C}$  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 Neoproof Polyurea R, it is recommended to read its safety data sheet.

**Use, maintenance and repair of the works.** Roofs with deteriorated areas of waterproofing layers will be repaired following the installation instructions of the manufacturer. Further installation details are laid down in the MTD placed 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 Neoproof Polyurea R 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	$B_{\text{roof}}(t_1)$ Pitch $\leq 20^\circ$ for non-combustibles support
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	μ = 1923			
Watertightness	2.2.5	Watertight			
Resistance to wind loads	2.2.6	Delamination strength		Pass ≥ 50 kPa (kPa)	
		Concrete + Pr1		2090	
		Concrete + Pr2		NPA	
		Steel + Pr1		2320	
		Steel + Pr3		NPA	
		PU + Pr2		250	
		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	P1 – P4 (annex 1)			
	2.2.7.1	Resistance to dynamic indentation (23 °C) System 1: 1.5 kg/m² // System 2: 2.3 kg/m² + internal mesh			
		Support		Indentor	(mm)
		Steel + System 1		I4	6
		PU + System 1		I2	20
		Steel + System 2		I4	6
		PU + System 2		I2	20
	2.2.7.2	Resistance to static indentation (23 °C)			
		Support		Indentor	(N)
		Steel + System 1		L4	250
		PU + System 1		L3	200
		Steel + System 2		L4	250
		PU + System 1		L4	250
	Resistance to fatigue movement	2.2.8	System 1 and System 2 W3: 1000 cycles (-10 °C): Pass		
Resistance to the effects of low and high surface temperatures	2.2.9	Low temperatures: TL4 Extreme low temperatures: TL4 High temperatures: TH4			
	2.2.9.1	R. Dynamic Indentation at TL4 (-30 °C) System 1: 1.5 kg/m² // System 2: 2.3 kg/m² + internal mesh			
		Temperature (°C)	Support	Level resistance	(mm)
		-30 °C	Steel + System 1	I4	6
			PU + System 1	I2	20
			Steel + System 2	I4	6
			PU + System 2	I2	20
	2.2.9.2	Crack bridging capacity: Pass			
	2.2.9.3	R. Static indentation (30 – 90 °C)			
		Temperature (°C)	Support	Level resistance	(N)
		30 - 60 °C	PU + System 1	L4	250
			PU + System 2	L4	250
			PU + System 1	L3	200
		80 - 90 °C	PU + System 2	L4	250
			Steel + System 1	L4	250
			Steel + System 2	L4	250
Resistance to ageing media (Heat and water)	2.2.10.1	Resistance to heat ageing W3, S (severe) (100 / 200 days at 80 °C)			
		R. Dynamic Indentation (-30 °C) W3 System 1: 1.5 kg/m² // System 2: 2.3 kg/m² + internal mesh			
		T °C	Days	Support	Level resistance (mm)
		-30 °C	100 days	Steel + System 1	I4 6
				PU + System 1	I1 30
				Steel + System 2	I4 6
			200 days	PU + System 2	I2 20
				Steel + System 1	I4 6
				PU + System 1	I1 30
		Steel + System 2	I4 6		
		PU + System 2	I2 20		
		Resistance to fatigue movement System 1 and System 2 after 200 days at 80°C (50 cycles) at -10 °C: Pass			
		Tensile properties (MPa / %) (200 days)			
		System 1: 1.5 kg/m² mesh		Without internal mesh	Initial: 6.8 / 447 Ageing: 4.6 / 376



Resistance to ageing media (Heat and water)	2.2.10.3	Resistance to water ageing W3, System 1 – System 2, (60, 90 and 180 days at 60 °C)				
		R. Static indentation System 1: 1.5 kg/m <sup>2</sup> // System 2: 2.3 kg/m <sup>2</sup> + internal mesh				
		Days	T °C	Support	Level resistance	(N)
		60 days	30-60 °C	PU + System 1	L3	200
				PU + System 2	L4	250
			80-90 °C	Steel + System 1	L4	250
				Steel + System 2	L4	250
				PU + System 1	L1	70
				PU + System 2	L2	150
		90 days	30 °C	PU + System 2	L3	200
				Steel + System 1	L4	250
			90 °C	Steel + System 2	L4	250
				PU + System 1	L4	250
				PU + System 2	L2	150
				PU + System 1	L2	150
		180 days	30-60 °C	PU + System 2	L3	200
				Steel + System 1	L4	250
			80-90 °C	Steel + System 2	L3	250
				PU + System 1	L1	70
				PU + System 2	L1	70
				Resistance to delamination (kPa) ≥ 50 kPa (60 °C / 180 days) with system System 2		
		Concrete + Pr1			1920	
		Concrete + Pr2			NPA	
		Steel + Pr1			1520	
		Steel + Pr3			NPA	
		PU + Pr2			210	
		The failure mode was between support and membrane on concrete - steel support, on the PU support collapse the support				
Resistance to UV radiation in the presence of moisture	2.2.10.2	W3, S (severe), 5000 hours				
		R. Dynamic Indentation (-10 °C) W3 System 1: 1.5 kg/m <sup>2</sup> // System 2: 2.3 kg/m <sup>2</sup> + internal mesh				
		Temperature (°C)	Support	Level resistance	(mm)	
		-10 °C	Steel + System 1	I4	6	
			PU + System 1	I2	20	
			Steel + System 2	I4	6	
			PU + System 2	I2	20	
		Tensile properties (MPa / %)				
		System 1 (Without internal mesh)	Initial:	7 / 447		
			Ageing:	5 / 388		
		System 2 (With internal mesh)	Initial:	7.6 / 42		
			Ageing:	-----		
		Resistance to plant roots	2.2.11	NPA		
Effects of variations in kit components and site practices	2.2.12	R. Dynamic indentation at 23 °C				
		Curing Temperature	Support	Level resistance	(mm)	
		5 °C	Steel + System 1	I4	6	
			PU + System 1	I2	20	
		40 °C	Steel + System 1	I4	6	
			PU + System 1	I2	20	
		Tensile properties				
		Curing Temperature	MPa / %			
		5 °C	NPA			
		40 °C	NPA			
Effects of the days joint	2.2.13	Delamination strength: 2.2 MPa				

### 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

According to the decision 98/599/EC of October 1998, Official Journal of the European Communities N.º L 287, 24.10.1998) of the European Commission<sup>2</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
Neoproof Polyurea R	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>3</sup>.

Prepared by: PhD Julián Rivera (Innovative Products Assessment Unit, IETcc-CSIC)

Issued in Madrid on 20 of July 2025

By

Director

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

#### Annex 1.

##### Characteristics of the “Neoproof Polyurea R System”

Minimum thickness	Without internal mesh (System 1): 1.0 mm With internal mesh (System 2): 1.2 mm
Water vapour diffusion resistant factor	$\mu=1923$
Resistance to wind loads	$\geq 50\text{kPa}$
Resistance to plant roots	NPA
Statement on dangerous substances	NPA
Resistance to slipperiness	NPA

##### Performance levels according to the intended use

External fire performance	$B_{\text{roof}}(t_1)$ Pitch $\leq 20^\circ$ for non-combustibles support	
Fire reaction	NPA	
Expected working life	W3	
Climatic zone of use	S (Severe)	
User loads	System 1: 1.5 kg/m <sup>2</sup> // System 2: 2.3 kg/m <sup>2</sup> + internal mesh	
	Support; Concrete / steel: System 1 (without mesh) and System 2 (with mesh) P4: TH1-TH4 // TL4 P3: TH1-TH4 // TL4	Support; PU foam / bitumen membrane System 1 (without mesh) P1: TH1 – TH4 // TL4 System 2 (with mesh) P2: TH1 – TH4 // TL4
Roof slopes	S1 - S4	
Minimum surface temperature	TL4 (-30 °C)	
Maximum surface temperature	TH4 (90 °C) – TH1 (30 °C)	

<sup>2</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>3</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.

