RINOL *PL AE FLEX*

FAST-CURING, ELASTIC POLYUREA MEMBRANE FOR DURABLE WATERPROOFING SOLUTIONS

1 General Information

Product Description/Use

RINOL PL AE FLEX is a 100% solids liquid pure polyurea membrane, based on isocyanates and special flexible amines, for waterproofing, flooring, metal and concrete protection. RINOL PL AE FLEX is an elastomeric formulation in liquid state that, after reaction, forms an elastic but resistant membrane, with no loss of weight or shrinkage; thanks to its rapid polymerisation, RINOL PL AE FLEX can be applied even at low temperatures and relatively high humidity.

Certified according to Broof T4 method CEN/TS 1187:2012 + EN 13501-5:2016.

Application fields of RINOL PL AE FLEX:

- Waterproofing of roofs, bridges, decks and tunnels
- Secondary containment structures
- Water retaining structures
- Waterproofing on floors and car park decks
- Abrasion resistant protective coating in industrial and manufacturing facilities

2 Application guide

Substrate Preparation

The substrate must have sufficient load bearing capacity (compressive strength at least 25 N/mm^2). Adhesive tensile strength must be at least 1.5 N/mm^2. Compatibility with existing coatings must be checked by the installer. In this case we recommend a test application. The substrate must be clean and free from oil, release agents and any other contaminants. In general, it is important to check whether the substrate is open-pore, porous, etc. as in these cases blisters and pores may form in the coating. This should be checked by the applicator and corrected if necessary.

Before the application of RINOL PL AE FLEX, the substrate must be primed with an epoxy or polyurethane primer, scattered with RINOL QS10 or RINOL QS20 quartz sand, according to the respective product data sheets.

Before application, the temperature should be at least 3°C above the dew point temperature to ensure good adhesion.

In case of damp substrates it is recommended to apply RINOL EP-P242 primer followed by another even coat of epoxy or polyurethane primer.

Care should be taken to ensure that RINOL PL AE FLEX does not come into contact with silicone-containing materials or other materials that could interfere with the reaction, both before and during the curing phase.

Application

Dose and mix with a suitable air or electric multi-component heated sprayer. Both components must be heated to +60°C. Check mixing and metering accuracy regularly. Before use, stir Part A (Resin) thoroughly with a drum stirrer until a homogeneous colour is obtained.

Safety measures

For information on handling the product, refer to the current Safety Data Sheet and the Chemicals Regulations for the Handling of Coating Materials (M004/M023). Wear suitable protective clothing and goggles during

Technical data		
Liquid material (A+B)		
1	Density (A+B)	Approx. 1,12 g/cm^3
2	Packaging and mixing ratio (2-components)	41 kg / 410 kg 1:1 in volume
3	Shelf life / storage	6 months at 5–20°C, store above freezing and out of direct sunlight (even during transport)
4	Colors	See RINOL colour chart

Technical data		
Cured material		
1	Adhesion strength on concrete (UNI 8276/6)	>1,5 Mpa
2	Adhesion strength on metal (UNI 8276/6)	>7 Mpa
3	Tensile strength (UNI EN ISO 527/2)	>13 N/mm^2
4	Elongation at break (UNI EN ISO 527/2)	>450%
5	Elastic modulus (UNI 2876/6)	>20 N/mm^2
6	Shore A hardness (UNI EN ISO 868)	70-75
7	Water vapour permeability (UNI EN ISO 7783)	μ > 1500

Technical data		
Liquid material (A+B)		
1	Material consumption	2-3 Kg/m^2
2	Application temperature	5 - 40°C
3	Rel. Humidity	Max. 80 %
4	Gel time (depending on application temperature)	Approx. 10 seconds
5	Full properties (20°C)	After 12 hours

RCR Flooring Products Italia S.r.l.
Via V. Chiarugi 76/U
I - 45100 Rovigo
Tel : +39 (0) 425 411 200
Fax : +39 (0) 425 411 222
info.Italy@rcrif.com
www.rinol.com

application.

Skin contact with liquid resins can be harmful and may cause allergies.

Note

The technical data for the Company's products and systems have been compiled with due care. However, any recommendations or suggestions made with regard to the use of these products are made without guarantee as the conditions under which they are used are beyond the control of the Company. It is the responsibility of the customer to determine whether the products are suitable for the particular application and whether the conditions of use are appropriate for the particular product. No liability can therefore be derived from the product data sheet.

Please note that only the latest version of the data sheet is valid and replaces all previous versions. The technical data given are approximate values determined by us and do not constitute a guarantee of properties. Misprints, errors, translation errors and changes reserved. Please note that the information in the system datasheets may differ in different languages/ countries. For further information please visit our website at www.rinol.com.

The technical data sheet does not exempt the user from carrying out his own application tests, if necessary, within the limits of his capabilities. Please refer to the RINOL Technical Guide for information on coating options and more detailed information on the installation of RINOL products.

Important note

Due to the aromatic composition, coatings with RINOL PL AE FLEX tend to yellow over time when exposed to UV light. The yellowing does not affect the technical properties of the product, but in order to keep the colour stable we recommend to protect the coating with the aliphatic coloured topcoat RINOL PU-S603.

Legal note

RCR Flooring Products Italia S.r.l. does not guarantee the results or adhesion, for whatever reason and/or legal nature, due to differences in materials, substrates and working conditions. The latest General Terms and Conditions of RCR Flooring Products Italia S.r.l. apply and can be requested from us or viewed and printed in their latest version at www.rinol.com. Product specifications are subject to change without notice.

CE marking

CE

RCR Flooring Products Italia S.r.l.
Via V. Chiarugi 76/U
I-45100 Rovigo

1119-CPR-0833
09[1]
EN 1504-2

Synthetic resin screed/coating for internal use in buildings (superstructures in accordance with techn. data sheets)	
Abrasion resistance:	< 200 mg
CO_2 permeability:	s_D > 50 m
Water vapour permeability:	Classe I
Capillary absorption and water permeability:	< 0,1 kg*m^{-2}*h$^{-0,5}$
Resistance to cracking:	A5 (-10°C), B4.2 (+23°C)
Impact resistance:	Class III
Adhesion by direct traction:	≥ 1,5 N/mm^2
Reaction to fire:	Class E
Artificial ageing:	No visible defects (slight colour change)
Hazardous substances:	NPD

-1) the last two numbers of the year in which the CE marking was applied

-2) NPD = no performance determined;

European Regulation 2004/42 (Decopaint Directive)

The maximum VOC content (product category IIA/j type sb) allowed by European Regulation 2004/42 is 500g/l (limit 2010) in the ready to use state. The maximum content of RINOL PL AE FLEX ready for use is < 500 g/l VOC.

RCR Flooring Products
RCR Flooring Products Italia S.r.l. | Via V. Chiarugi 76/U, I - 45100 Rovigo | Tel : +39 (0) 425 411 200, Fax : +39 (0) 425 411 222 | info.Italy@rcrif.com, www.rinol.com