APSE®
floor products since 1964

No. 574 – Rev. 11/2026

POLIFLEX AL

ELASTIC, COLD-APPLIED, MANUAL POLYUREA WATERPROOFING MEMBRANE, ALIPHATIC

DESCRIPTION

A two-component waterproofing membrane based on aliphatic polyurea, offering excellent mechanical strength and flexibility.

APPLICATION

Thanks to the membrane's high waterproofing performance once cured, POLIFLEX AL is suitable for waterproofing surfaces subject to standing water, such as roofs, tanks, terraces, flower beds, and roofs with polyurethane foam insulation, etc.

PACKAGING

Comp. A + Comp. B = 23.6+ 2.4 kg

COVERAGE

1.4–1.8 kg/m² in one or two coats, depending on the unevenness of the substrate.

CERTIFICATIONS

ISO 9001-certified quality management system (Certificate No. IT.17.0227.01.QMS).
APSE S.r.l. is an active member of CONPAVIPER.

FEATURES AND BENEFITS

- Easy to apply with a brush, roller or airless sprayer.
- Long-lasting waterproofing and protection.
- Highly resistant to standing water. Does not flake.
- Does not cause blistering during the curing process.
- Forms a continuous, joint-free membrane with 100% adhesion to the substrate. Even in the event of damage, water does not spread across the entire surface of the substrate and the membrane can be easily repaired locally.
- Excellent resistance to weathering: rain, frost, UV rays.
- Excellent elastic properties even at very low temperatures (-40 °C). Excellent crack-bridging properties.
- Excellent thermal resistance. The membrane does not soften or become sticky at high temperatures (+80 °C).
- High mechanical properties such as tensile strength, tear resistance and abrasion resistance. Suitable for foot traffic.
- Vapour-permeable. Does not cause moisture build-up on the ceiling.
- Good resistance to chemicals and cleaning agents.
- High solar energy reflectance (white colour only) and significant reduction in the building's internal temperature during the summer.
- Does not release hazardous substances once fully cured.
- No chalking.

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PREPARATION OF THE SUBSTRATE

The application surface must be free from loose particles, dust, oil, etc.
POLIFLEX AL must be applied to dry, sound surfaces. Any existing coatings must be removed. The substrate must not be washed with water prior to application of the coating. For concrete surfaces, a moisture content of less than 5% is generally recommended.
Joints and cracks must be sealed with APSEGOM 40 joint sealant.

Application of the primer

POLIFLEX AL can also be applied without a primer. However, the use of a specific primer, depending on the surface, is recommended to improve adhesion.
If it is necessary to improve the mechanical properties of the concrete surface, apply PAVINRESIN MONO or APSEPRIMER NS 125
In the case of damp concrete, use UMIFOND 3C as a damp-proof barrier and then apply the coating.
For application onto bituminous membranes, use PAVINRESIN MONO to prevent the formation of blisters on the substrate.
For non-absorbent surfaces such as ceramic tiles, the use of APSEPRIMER NS 125 is recommended.
For metal surfaces, apply METALPRIMER.

PRODUCT PREPARATION

The two components, supplied in a 10:1 ratio, must be mixed thoroughly using an electric mixer (300–400 rpm). Mixing must continue until the mixture is completely homogenised.

APPLICATION

Apply POLIFLEX AL by brush, roller or spray in one or two coats. For layers 1.5 mm thick or more, it can also be applied with a trowel and then finished with a bubble-breaking roller to remove air bubbles and level the surface further.
If applied in two coats, wait at least one hour before applying the second coat, but do not exceed 48 hours.

CURING

The curing time of POLIFLEX AL is influenced by the ambient temperature.
For drying and curing times (at 20°C), refer to the table below.

Pot Life	1.5 hours
Application of second coat	min. 1 hour max 48 hours
Walkability	4–6 hours
Full curing	2–3 days

WARNINGS

- Never dilute the product with water;
- Do not add any additives or fillers;
- Do not use if the container is damaged;
- Protect from water, rain, mist and snow during the first few hours

CLEANING OF TOOLS

Equipment used for the preparation and application of POLIFLEX AL must be cleaned immediately after use with DILUEPOL. Once the product has set, it can only be removed mechanically.

HEALTH AND SAFETY

For information on safety regulations, hazard warnings and precautionary advice, please refer to the latest safety data sheet, which can be requested at: ufficiotecnico@apsebg.it

STORAGE

Shelf life of 12 months when stored in the original packaging in a dry, moisture-free place.
Store at temperatures between +5°C and +35°C.

DISPOSAL

Dispose of the contents and/or the container in accordance with local regulations.

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PRODUCT TECHNICAL DATA

PHYSICAL PROPERTIES (at +20°C)

CHARACTERISTIC	STANDARD	RESULT
Appearance	-	Coloured liquid
Dynamic viscosity	EN ISO 3219	1500 mPa·s
Density	DIN EN ISO 2811-1	1.40 g/cm³

PRODUCT PERFORMANCE CHARACTERISTICS

CHARACTERISTIC	STANDARD	RESULT
Operating temperature:	-	from -40 to 90 °C.
Elongation at break	DIN 53504	400%
Tensile strength	DIN 53504	3.80 N/mm²
Shore A hardness	DIN 53505	81
Water vapour permeability	EN 1931	12.1 g/m²/day
Water resistance	EN 1928	Waterproof (1 m water column, 24 hours)
Adhesion to concrete with primer	EN 1542	> 2 N/mm²
Accelerated ageing test (UV exposure and radiant water exposure 1000 MJ/m², 4000 hours)	EOTA TR-010	Passed. No significant changes
Thermal ageing resistance (200 days at 80 °C)	EOTA TR-011	Passed, no significant changes
Fatigue resistance at -10 °C Initial opening: 1 mm Change in opening: 1 mm Number of cycles: 1000	EOTA TR-008	No breakage

The data given above is based on our best technical and practical knowledge, as well as our research experience.
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