POLYWAP 9401 SHIELD PU AROMATIC COLD POLYUREA E-CATALOG

TWO COMPONENT, POLYUREA BASED LIQUID WATERPROOFING MEMBRANE



DESCRIPTION FOR IT

It is a two component, aromatic, polyurea based liquid waterproofing membrane designed for cold application via brushing, rolling, or troweling. It possesses excellent elasticity and features a specially formulated polymer structure to enhance adhesion. It is an ideal product for commercial and industrial applications requiring high levels of abrasion and impact resistance. For outdoor use, a non yellowing (aliphatic) polyurethane topcoat must be applied.

AREAS OF USE

They are used for the waterproofing of gypsum and cement panels, bathrooms, verandas and balconies, roofs, lightweight roofs made of metal or fiber-cement, bituminous membranes, epdm membranes, stadium stands, parking lots, and bridge decks.

ADVANTAGES

It cures rapidly. It does not blister or degrade. It consists of 95% solids and contains no plasticizers. It possesses excellent thermal resistance; the product does not soften again after curing. It is resistant to cold, with the film retaining its elasticity even at -40°C. It exhibits excellent mechanical properties, including high tensile and tear strength and high abrasion resistance. It demonstrates good chemical resistance and effective moisture vapor transmission; the film is breathable, thereby preventing moisture accumulation beneath the film layer.

TOOLS USED

Hand mixer, roller, trowel.

APPLICATION INFORMATION

The application surface must be sound. The surface must have a minimum compressive strength of 25 N/mm² and a minimum pull off strength of 1.5 N/mm². New concrete must be at least 28 days old (depending on the season), and concrete surfaces must have a moisture content of no more than 5-6%.All loose or detached particles, oil and paint residues, and cement laitance must be removed. Large cracks and defects must be repaired beforehand. Cement laitance and glossy screed on the concrete surface must be removed and the surface roughened using tools such as sandblasting equipment, scabblers, diamond drum grinders, or power grinders. The entire surface must be cleared of dust using an industrial vacuum cleaner.

APPLICATION CONDITIONS

The relative humidity of the air must not exceed 80%, and the application temperature (ambient and surface) must be between +5°C and +35°C. For outdoor applications, there must be no rain for 24 hours prior to, during, and for 24 hours after the application. The substrate temperature must be at least 3°C above the current dew point temperature. (Please request the ambient temperature ambient humidity dew point temperature chart from our company.)

MIXING

As this is a two component product, it must be prepared in the specified mixing ratio limiting the quantity to what will actually be used while taking the pot life into account. To ensure a homogeneous mixture, the product temperature must be at least 10°C. Component A should first be briefly mixed using a mechanical mixer; then, the hardener (Component B) should be added, adhering to the specified mixing ratio. Components A and B must be mixed together using a mechanical mixer until the mixture is homogeneous.

APPLICATION

The prepared mixture is applied using a roller or trowel, ensuring the surface is saturated and the pores are sealed. The recoating interval is a minimum of 8 hours (at 20°C) and a maximum of 1 day. It is crucial to apply the second coat within the specified recoating timeframe.

CLEANING

Clean the tools used with cellulosic thinner before they dry. Rollers cannot be reused.

CONSUMPTION

Minimum consumption 1.5–1.8 kg/m²

PACKAGING

26.5 kg Set (Component A: 25 kg, Component B: 1.5 kg).

STORAGE AND SHELF LIFE

The material must be stored in a cool, dry place. When stored correctly in its original, unopened packaging, the shelf life of the material is one year for components A and B. The packaging must be protected from frost and heat. Pallets must not be stacked on top of each other during transport and storage.

STANDARD

EN 1504-2:2004 CE Certificate

TECHNICAL SPECIFICATIONS

LIQUID PRODUCT (BEFORE APPLICATION)

QUALIFICATION	UNIT	METHOD	FEATURE
Viscosity (Brookfield)	cP	ASTM D2196-86, 25°C	2500-3500
Period of use	Minute	25°C	30 Minutes
Touch dry time	Hour	25°C	2
Curing time	Hour	25°C	12

CURED PRODUCT (AFTER APPLICATION)

QUALIFICATION	UNIT	METHOD	FEATURE
Hardness	Shore A	ASTM D2240 / DIN	60
Tensile strength at 23°C	(N/mm2)	ASTM D412 / DIN 52455	8
Elongation percentage at 23°C	%	ASTM D412 / DIN 52455	500