Poly Cold P500

Construction Chemicals > Waterproofing Products > Polyurea-Based



Poly Cold P500 is a two-component, polyurea-based, cold-applied liquid insulation material. It offers high chemical and mechanical resistance. By adhering strongly to the surface, it forms an elastic film, providing excellent resistance strength to the material. This product contains pure elastomeric hydrophobic polyurethane resin.

■ Fields of Application

- Roofs, terraces, and balconies
- Tiles/ceramics (undercoating)
- Bridges and tunnels
- Parking lots
- Stadium stands

■ Advantages

- It possesses excellent mechanical properties
- It exhibits effective resistance to chemicals
- It contains no toxic substances after curing
- It is highly effective in water vapor transmission: it breathes, preventing moisture buildup under the coating
- Its thermal resistance is excellent; the product never softens
- The maximum service temperature is 90°C, and the maximum shock temperature is 200°C
- It is resistant to cold: the film remains elastic down to -40°C

Preparation of Substrate

The surface must be clean, dry, solid, and free from any contaminants that may adversely affect adhesion. Ensure that the moisture content of the concrete to be applied is not above 5%. New concrete must be allowed to cure for 28 days. Loose and unstable particles should be removed from the surface using a brush and/or vacuum cleaner before applying the product. The surface should not be washed with water; if it is washed, the moisture content must be allowed to drop below 5%. Before applying POLY COLD P500, the concrete surface must be polished with diamond-tipped special grinding machines to remove the laitance layer, and then vacuumed to remove any dust. The product should be applied after the concrete surface has been ground, cleaned, and any cracks or other repairs have been made, and the surface has been primed if necessary.

Priming

Concrete surfaces should be primed with Epoprime EB 710, EB 712, or PU Primer PB720 before application. Depending on the air temperature, the primer should be allowed to cure for a minimum of 4 hours and up to 12 hours.

E Application

POLY COLD P500 can be applied to the surface using a brush, roller, or suitable airless spray equipment. The application should be done in 2 coats, with a waiting time of 12 hours between coats. Optionally, a third coat can be applied. Final curing is achieved in 7 days.

Consumption Amount

 $1700 - 2000 \text{ g/m}^2 \text{ in 2 coats.}$

Points to Consider

- Do not apply poly cold P500 at temperatures below +5 °C or above +35 °C.
- Hands and eyes should be protected with gloves and safety glasses.
 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Adequate ventilation is required during application. Ensure that ventilation in enclosed spaces is sufficient.

Packaging

25 kg + 1.5 kg set in metal cans.

Storage Life

At least 12 months when kept in unopened packaging and protected from frost.







TECHNICAL DATAS

Color	Colorful
Density	~1.40 kg/l (20°C)
Hardness	65 Shore A
Viscosity	3000-4500 cP (25°C)
Water Vapor Permeability	0.8 g/m² per hour
Adhesion to Concrete	≥ 2,5 N/mm2
Tensile Strength	>8 (N/mm2) (+23o C)
Elongation Percentage	≥ %500
Mixing Pot Life	30 min
Drying Percentage	4-6 hours
Reapplication	12-24 hours
Chemical Curing	7 days
Storage Life	12 months when kept in unopened packaging and protected from frost
Packaging	26.5 kg set (25 kg tin can, 1.5 kg tin can)

Not

The technical specifications listed above are based on test results conducted at 23°C and 50% relative humidity. Values may vary under different temperature and humidity conditions.