COLD APPLIED LIQUID POLYUREA

PRO-ROOF-ULTRA is a 2-component, aromatic, liquid polyurea waterproofing membrane that is applied cold by roller, trowel, or rubber trowel. Its high performance allows to create a continuous waterproof coating without joints that is flexible, fully adhered to the substrate, and of great elasticity that provides an optimum watertightness of long duration, with an estimated useful life of more than 25 years.

APPLICATIONS

PRO-ROOF-ULTRA has been developed for waterproofing:

- All roof types: flat, pitched, inverted, landscaped, etc.
- Trafficable roofs with vehicular traffic or surfaces requiring high-mechanical resistance, for private or industrial use.
- Structural elements (floor slabs, walls, foundations).
- Suitable for waterproofing, ponds, pools, swimming pools, aquariums and other water containers.
- For protection lining of truck and van cargo beds.

PRO-ROOF -ULTRA provides easy application to all types of surfaces and shape, without the requirement to use any reinforcement additions, i.e. fleece or glass fibre mat.
Compatible with a wide range of substrates: wood, concrete, ceramic, metal, fibre cement, bituminous, asphalt, butyl, acrylic, PVC membranes…
Suitable for subsequent paving.
Trafficable, allows for both pedestrian and vehicular traffic.

Recommended thickness	1,5 mm (mín. 1,2 mm)
Recommended consumption	2 Kg/m2 in 1 layer (1.7 to 2.4 Kg/m2)
Application	Roller, trowel or rubber trowel
Temperature range of application	+3° C to +35° C (ambient)
Maximum relative humidity	80 % (ambient)
Initial drying	±2 hours
Pot life	±20-25 minutes
Anti-Roots	Yes
Trafficable	Yes
Estimated useful	+25 years

** Values tested in laboratory (23ºC; 50% RH). They may vary according to application, weather and substrate conditions.*

Application Guide
Substrate

► Before applying PRO-ROOF-ULTRA, ensure that the substrate is firm and dry, and that there is no moisture trapped within the substrate or rising damp (phreatic pressure). Remove all traces of old waterproofing that could compromise the adhesion of the system. Clean the substrate of any dirt, dust, moss, moss, contaminants, etc. Repair and fill cracks and irregularities with PR-Primer. Execute and treat expansion joints as per architect's instructions. Seal all cracks and crevices and fix all elements with PU Adhesive & Sealant (MS Polymer) paintable in 10 min or, alternatively, use a conventional polyurethane filler (in this case, pay attention to the recoating time). **Do not use silicones.**

► If the substrate is a ceramic floor, clean the surface by sanding to open the pores, remove efflorescence, adhering dirt and regularise the surface and then vacuum. Fill empty joints with PU Adhesive & Sealant. Remove any residue by (dry) vacuuming or using pressurised water. Ensure that the water used to clean has evaporated and no moisture remains at the time of application.

► On concrete surfaces, ensure that the concrete is fully cured (28 days) and free of dirt, dust, and other contaminants. Treat joints, cracks, and crevices with PU Adhesive & Sealant.

► If the substrate where PRU is to be applied is a sheet (asphalt, PVC, butyl...) make sure that the surface is in good condition. Repair and glue the strips of the old fabric to obtain a continuous surface on which to apply the membrane. Clean the surface with water and ensure that it has evaporated completely, and no moisture remains when applying the membrane.

Membrane Application

► Apply PR primer with a short nap roller on a smooth substrate or on a porous, rough and/or uneven substrate. Consult the recoating time for each case.
► Apply by roller, trowel, or rubber trowel PRU, in a thick layer (approx. 2 to 2.5 kg/m2) to produce a 1.5 mm thick membrane. Then allow the membrane to cure. Its initial drying time will be approx. 2 hours, depending on weather conditions. Finishing can proceed within 2 to 48 hours after application of the membrane.

Finishes

► Where the membrane is exposed to sunlight, apply SRS topcoat aliphatic polyurethane in case of light traffic or topcoat WR in case of heavy traffic or permanent contact with water. It can be applied in 1 or 2 coats depending on the system.
► To create an anti-slip treatment use PRO GRIP, suitable for all trafficable areas that require an anti-slip finish such as pedestrian walkways, stairs, ramps, etc. Add PRO GRIP directly with topcoat aliphatic polyurethane resin at a ratio of 8% to obtain a slip coefficient of Rd=50. Alternatively, you can proceed according to the traditional system where you would apply a coat of aliphatic polyurethane resin, spread aggregate over the wet resin, sweep up the excess and apply a new coat of resin to encapsulate the aggregate.
► To prepare the surface for a screed finish, we recommend applying an additional very thin coat of PRU or Primer and spreading aggregate to create surface roughness and increase anchorage with the screed system.

► If the membrane needs to be repaired, cut out and remove the affected area. Sand the perimeter of the area with a 20 cm margin approx., clean the dust generated, ideally using a

vacuum cleaner. If wet cleaning (pressurised water) is used, consider the residual moisture before applying the membrane. Acetone-based solvents may be used. On the clean, dry substrate, apply a ±125 g/m² coat of Primer and spread silica aggregate to in-crease the adhesion of the coating to be repaired. Once dry, PRU can be applied and finished with topcoat or topcoat WR aliphatic polyurethane depending on the desired system. Proceed in the same way (surface sanding and cleaning) whenever you have exceeded the recoating time (+48h).
► When working on vertical or steeply sloping surfaces, apply in thin coats or use our thixo-tropic additive TIXAL to apply a thick coat of PRU. This will prevent sagging of the membrane on vertical or steeply sloped surfaces and will make it easier to work on difficult or awkwardly executed single points. When mixing, mix at a maximum rate of 1 litre per 20 kg of PRU (250 ml per 5 kg).

PERFORMANCE
For guaranteed waterproofing, a thickness of 1.5 mm should be applied, which would result in a

GENERAL CHARACTERISTICS OF THE PRODUCT

Density	±1.40 g/cm³ (ISO 1675)
Viscosity	±6.000 cps (ISO 2555)
Density A/B components at 23°C	1,35 g/cm³ / 1,55 g/cm³ (ISO 1675)
Viscosity A/B components	5.000 - 7.000 cps / 8.000 - 10.000 cps (ISO 2555)
Shore hardness	>85 / >35 (DIN 53.505)
Solids content	90%
Tensile strength	7 MPa (ISO 527-3)
Elongation	600% (ISO 527-3)
Total drying	±1 day
Full cure	±6 days
Recoating time	2 to 48 h
VOC	140 g/l comp. A + 0 g/l comp. B
Adhesion to concrete	>2,1 MPa
Reaction to fire	NPA

** Values tested in laboratory. These may vary depending on the application, climate and substrate conditions.*

consumption of approximately 2 kg/m². Please note that this calculation may vary depending on the weather or the condition of the substrate.

Supply
Tin in two formats:
Pack 6 Kg: Component A (4,3kg) + Component B (1,7 kg)
Pack 20 Kg: Component A (14,3 kg) + Component B (5,7 kg)

SHELF LIFE

Store PRO-ROOF-ULTRA in its original, sealed container. Protect it from sunlight and store it in a cool, dry place at a temperature between 5ºC and 35ºC for a maximum of 12 months. Once opened, use immediately.

HANDLING AND TRANSPORT

► Skin protection: Wear rubber gloves. Remove immediately after contamination. Wear clean clothing covering the whole body. Wash thoroughly with soap and water after the task and before eating, drinking, or smoking.
► Eye/face protection: Wear safety goggles to avoid splashing and exposure to airborne particles produced by the aerosol.
► Waste: Generating waste should be avoided or minimised. Incinerate under controlled conditions in accordance with local and national laws and regulations.