

### Description

One component, highly elastic, fast-curing, bitumen-polyurethane based liquid waterproofing material that provides strong adhesion to almost any surface.

### Fields of Application

- Waterproofing of flat roofs, balconies and terraces,
- Waterproofing of old bituminous and EPDM membranes,
- In foundation walls and structures below ground level,
- In retaining walls,
- Waterproofing of car parking areas,
- Protection and waterproofing of concrete structures such as bridges, tunnels.

### Properties

- Fast curing.
- It provides seamless and uninterrupted waterproofing on the applied surface.
- It has high flexibility and crack-bridging capability.
- It is resistant to chemicals.
- It is resistant to water and frost.
- It adheres excellently to both primed and unprimed surfaces. (It is recommended to perform a controlled sample before unprimed application.)
- It can be easily repaired locally.
- It is easily and quickly applied with a brush, roller, or airless spray.

### Preparation of Substrate

- The substrate must be sound, dry, clean and free of any contaminants like dirt, oils, dust etc. That may prevent good adhesion. The surface must be cleaned from all materials like existing coating prior to application.
- Where necessary, surface preparation should be done through sanding or similar mechanical surface abrasion processes, and all surfaces should be thoroughly cleaned from dust by using industrial vacuum equipment.
- Concrete and cement-based surfaces should be mechanically sound, with a minimum tensile strength of 1.4 MPa and a compressive strength of 25 MPa.
- Care should be taken to ensure that newly constructed reinforced concrete structures have completed their 28-day curing period before application.
- The moisture content in concrete must be checked before application. The surface moisture should be maximum 4%.
- Any potential pits, cracks, pores, segregation, cracks, and defects in the concrete should be repaired with Tamirart 40 or Tamirart S40.
- Sharp corners at corners and junctions in the applied area should be rounded, and horizontal and vertical junctions should be puttied with Tamirart S40 or Kalepolymas.
- Tecnica 3100 P should be applied to absorbent surfaces such as concrete, cement, screed, wood, etc. If the surface moisture content is greater than 4% by weight, Tecnica 152 moisture barrier epoxy primer should be used.
- After applying Tecnica 3100 P or Tecnica 152, Tecnica 3145 WP bitumen-polyurethane based waterproofing material should be applied while the material is still in a tacky state, typically 6-12 hours later (not exceeding 24 hours).
- Dust on the surface of old bitumen membranes should be removed using a vacuum cleaner or compressed air. The membrane surface must be completely dry, and if there is any damage such as blistering, tearing, or detachment, it should be repaired before primer application.
- On steel and metal surfaces, after the surface is properly cleaned, Tecnica 162 multi-purpose epoxy primer should be applied as a primer.

**Application**

- Before applying Tecnica 3145 WP, it should be thoroughly mixed with a low-speed mixer.
- The prepared Tecnica 3145 WP should be applied to the surface in two coats using a brush or roller.
- The second coat should be applied within 12 hours after the first coat (within 24 hours at the latest).
- To achieve the intended and desired long-term performance of the product, it is necessary to protect or cover the application with a suitable coating (such as plaster, screed, ceramic, etc.) as soon as possible after the completion of the entire application, typically within 3-7 days depending on the drying time of the applied product, in accordance with the purpose and details of the work.
- The application thickness should be a minimum of 2 mm. Regular checks of the application thickness should be conducted to ensure compliance.

**Post-Application Protection & Suggestions**

- Tecnica 3145 WP should be applied by trained and experienced professionals.
- For Tecnica 3145 WP, thinning with any solvent and applying thick coats is not recommended.
- Smoking should be avoided during application, and work should be carried out in well-ventilated areas, away from naked flames.
- Hands and eyes should be protected with gloves and safety goggles during application.
- Surfaces that have completed application should be protected from mechanical stress for at least 24 hours. Fresh surfaces should be protected from water, dew, dust, dirt, and solvents.
- The working time of resin-based systems are influenced by ambient and substrate temperatures and relative humidity in the air. The working time of the product increases at low temperatures and decreases at high temperatures.
- If Tecnica 3145 WP is applied indoors, a suitable ventilation system should be used.
- Do not apply in extremely hot, rainy, windy weather.
- Do not apply on damp, wet or frozen surfaces.
- Necessary precautions should be taken in areas where water or water vapor is observed from the negative side.
- Before application, substrate moisture and adhesion should be checked, and the dew point should be determined.

**Storage**

- The product should be stored in its original unopened undamaged packaging, in a clean and dry area, between +5°C and +25°C, away from direct sunlight.
- It should be protected against water, frost, and severe weather conditions. Provided that the storage conditions mentioned above are followed, the storage life is a maximum of 6 months.

**Storage**

- 20 kg tin pail

**Tecnica 3145 WP**

Bitumen Polyurethane Based One-Component Waterproofing Material

**Technical Properties**

(25 °C and %50 RH)

**General Data**

Appearance	Black
Shelf Life	6 months when stored in the original packaging
Density	~ 1,0 ± 0,05 g/cm <sup>3</sup>
Shore A (DIN 53505)	35
Drying time	2.5 hours
Full cure mechanical strength	7 days
Consumption (for 1 mm thickness)	Approximately 0.75-1.00 kg/m <sup>2</sup> for each coat Total theoretical consumption 1.50-2.00 kg/m <sup>2</sup>

**Performance Data**

Elongation at Break (ASTM D412)	≥ 800 %
Tensile Strength (ASTM D412)	≥ 4 N/mm <sup>2</sup>
Adhesion to concrete (ASTM D 903)	≥ 0.8 N/mm <sup>2</sup>

**Application Data**

Temperature	+5 °C / +35 °C
Max. surface moisture	4%

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