

INNO-SEAL

FOX PURMAX® SPRAYTEC FS561

Hybrid Polyurea Based, Two Component, Elastic, Fast Curing, Waterproofing Membrane Applied with Special Spray Machines

Definition

FOX PURMAX® SPRAYTEC FS561 is a Hybrid Polyurea-based, two-component, solvent-free, crack-bridging waterproofing membrane that does not lose its flexibility over time, cures quickly, can be applied in almost all climatic conditions thanks to its unique chemical structure, and does not form joints. Thanks to its application speed and quick curing feature, it minimizes the downtime of businesses compared to traditional waterproofing products. Since its reaction is very fast, it can be applied with the help of special spray machines.

It meets the requirements of EN 1504-2:2004 / Principle 1.3, 2.2, 5.1, 8.2.

Fields of Application

- On terraces exposed to UV and sun rays, with **FOX PURMAX® TOPCOAT** or **FOX PURMAX® POLYUREA TOPCOAT**,
- On terraces, balconies and all wet areas,
- On roofs and garden terraces,
- Swimming pools, ornamental pools,
- In aircraft hangars,
- In parking lot insulation and coatings,
- In water transmission lines and flumes,
- In underground water tanks,
- In tunnels,
- In channels,
- In warehouses,
- In collection tanks,
- In prefabricated buildings,
- In steel structures,
- On wide open terraces,
- In roof streams,
- In flower bed insulation,
- It is used for positive insulation of foundation and curtain walls.

Advantages

- Cures in seconds, can be walked on within minutes,
- Can be applied on horizontal and vertical surfaces,
- Provides easy solutions to difficult details,
- Provides one-piece application. There are no joints or overlapping details,
- Provides excellent adherence,
- It has excellent chemical resistance,
- It has excellent mechanical strength,
- It has high puncture resistance,
- Flexible, resistant to abrasion,
- It has crack bridging ability,
- Excellent adhesion to almost all surfaces (concrete, steel, aluminum, fiber, wood, foam, etc.),
- It has hydrophobic (water repellent) properties,
- It is liquid impermeable, can be used in constant contact with water,
- 100% solid, VOC-Solvent free,
- It has excellent thermal resistance, the product never softens again, maintains its elasticity at low temperatures,



Technical Properties

Structure of the Material		Hybrid Polyurea
Density	A Component	1,12±0,05 gr/cm ³
	B Component	1,02±0,05 gr/cm ³
Color		Grey
Mixing ratio		1:1 by mass
Viscosity	A Komponent	800±200 mPas
	B Komponent	1000±200 mPas
Percentage of Total Solids		%100
Dilution		Not diluted
Tensile Strength	DIN EN ISO 527	≥20 N/mm ²
Breaking Strength	DIN 53515	≥42 N/mm ²
Elongation at Break	DIN EN ISO 527	≥%800
Gel Time		10-15 second
Shore A Hardness	DIN 53 505	1 day 88
Shore D Hardness	DIN 53 505	1 day 35
Carbon Dioxide Permeability		Sd>50 mt
Capillary Water Absorption		W<0,1 kg/(m ² *h ^{0,5})
Applicable Ground Temperature		+5°C / +30°C
Service Temperature		-40°C / +120°C

The above values are given at +23°C and 50% relative humidity. High temperatures shorten the time, low temperatures extend the time

Primer Selection Chart

Surface Condition	Recommended Primer
Concrete conforming to standard	FOX EPOTHANE® PRIMER, FOX EPOTHANE® PRIMER HB, FOX PURMAX® PRIMER 1K RAPID
Moist substrates	FOX EPOTHANE® PRIMER WB
Moist substrates (With Moisture Barrier)	FOX EPOTHANE® PRIMER HB, FOX EPOTHANE® PRIMER HBF
Highly porous substrates	FOX EPOTHANE® PRIMER, FOX EPOTHANE® PRIMER SL,
Highly porous moist substrates	FOX EPOTHANE® PRIMER HB, FOX EPOTHANE® PRIMER HBF
Steel, galvanized steel and aluminum surfaces	FOX EPOTHANE® PRIMER HB, FOX EPOTHANE® PRIMER WA, FOX PURMAX® PRIMER 1K RAPID
Wooden boards and some special surfaces	FOX EPOTHANE® PRIMER, FOX PURMAX® PRIMER 1K RAPID
Asphalt and Bitumen membrane surfaces	FOX EPOTHANE® PRIMER SL, FOX EPOTHANE® PRIMER HBF, FOX PURMAX® PRIMER 1K RAPID, FOX PURMAX® PRIMER 1K
Re-application on application (Old-New)	FOX EPOTHANE® PRIMER, FOX EPOTHANE® PRIMER WA, FOX PURMAX® PRIMER 1K RAPID
On non-porous concrete and non-absorbent surfaces	FOX EPOTHANE® PRIMER SL, FOX EPOTHANE® PRIMER HBF, FOX PURMAX® PRIMER 1K RAPID, FOX PURMAX® PRIMER 1K
For ceramic, marble, granite and shiny surfaces	FOX EPOTHANE® PRIMER WA

Surface quality

The concrete substrates to be applied must be solid and have sufficient compressive strength (at least 25 N/mm²), tensile strength must be at least 1.5 N/mm², humidity rate must be maximum 4%, and ground temperature must be minimum +5°C. Additionally, care should be taken to ensure that the dew point of the ground is above +3°C. The subsurface must be clean, dry and free of any foreign substances such as dirt, oil, grease, coating and surface curing materials.

Application Procedure

Surface preparation

Concrete Surfaces

Oil, grease, fuel and paraffin waste must be removed, as well as mold release agents, cement residues, shavings, loose particles and cured membranes. Surface defects and uneven surfaces should be repaired with **FOX EPOMORTAR FC510** or **FOX EPOMORTAR** series epoxy repair mortar. Surface cracks should be repaired by filling with **FOX PURSEAL PS600** polyurethane mastic. It should be primed with suitable **FOX EPOTHANE®** series primers.



Asphalt Surfaces

The asphalt surface should be cleaned with water jet. In applications that will be under vehicle traffic, the load-bearing capacity of asphalt must be suitable for the loads in use. The asphalt surface should be sandblasted with shotblast to reveal at least 60% of the aggregates and should be primed with suitable **FOX EPOTHANE®** series primers.

Bitumen Surfaces

Loose pieces on the bitumen surface should be removed, the swells should be opened and dried. Main cracks should be opened, repaired, taped and primed with suitable **FOX EPOTHANE®** series primers.

Plywood / OSB Surfaces

It should be ensured that the mounting of the plates is done correctly, all joints should be cleaned and taped with appropriate tapes, and they should be primed with suitable **FOX EPOTHANE®** series primers.

Iron and Steel Surfaces

Before applying the primer, it should be sandblasted in SA 2.5 quality and primed with suitable **FOX EPOTHANE®** series primers.

Application Conditions

- Surface moisture content should be below 4%.
- Test method: CM - measurement or oven drying method.
- According to ASTM, there should be no rising moisture. (Polyethylene cover test).
- Relative air humidity should be 100% maximum

Points to be taken into consideration in application:

Surface Temperature ; Minimum +5°C - Maximum +30°C
Ambient temperature ; Minimum +5°C - Maximum +30°C

Application

Priming

The surfaces on which **FOX PURMAX® SPRAYTEC FS561** will be applied must be previously primed with **FOX EPOTHANE®** series primer. Attention must be paid to the ground temperature (min +5°C).

Coating

FOX PURMAX® SPRAYTEC FS561 system solutions and applications must be applied through Expert Applicator Dealers certified by **FOX BAU PROFESSIONAL®** Technical Service.

Top Coat

FOX PURMAX® SPRAYTEC FS561 does not have sufficient UV resistance. To ensure adequate UV resistance, **FOX PURMAX® POLYUREA TOPCOAT** or **FOX PURMAX® TOPCOAT** products are applied with the help of a roller or airless spraying machine.

Cleaning Application Tools

Tools and equipment used should be cleaned with solvent immediately after application. After **FOX PURMAX® SPRAYTEC FS561** hardens, it can only be cleaned from the surface by mechanical methods.

Consumption

FOX PURMAX® SPRAYTEC FS561, under normal conditions, a thickness of approximately 2.0-2.5 mm is obtained with a consumption of 2.0-2.5 kg/m². In some special cases, consumption may reach up to 4.0 kg/m².

Watch Points

- Concrete surfaces to be coated with polyurea must be at least 3 weeks old before application, a vapor barrier layer must be created on floors resting on soil ground, the roof, walls, doors and windows of the building must be made, and the ambient and surface temperature must be at least +5°C and at most +30°C. must.
- Relative Humidity should be maximum 90%.
- The materials to be used must be brought to the application site 1-2 days in advance and must adapt to the environmental conditions.
- Rain, dust, wind, animals and insects should be prevented from entering the building while the coating is fresh.
- Consumptions are given for ideal conditions where the ambient and surface temperature is assumed to be 20°C. Actual consumptions may vary depending on the surface structure. It should not be forgotten that consumption will increase on damaged surfaces.



- **FOX PURMAX® SPRAYTEC FS561**, A and B components are ready-to-use products. Do not add solvent etc. during application. Should not participate.
- Used packaging should be stocked to prevent reuse.

Packaging

Component A; 225 kg barrel

Component B; 200 kg barrel

Shelf life

When stored correctly at room temperature, between +15°C and +25°C, away from direct sunlight, the shelf life is 6 months from the date of production. Opened packages should be stored under appropriate storage conditions and used within 1 week.

Storage

It should be stored in its unopened original packaging, in a cool and dry environment, protected from frost. For short-term storage, a maximum of 3 pallets should be stacked on top of each other and shipment should be made on a first-in, first-out system. For long-term storage, pallets should not be stacked on top of each other.

It is dangerous to approach storage and application areas with fire. Storage and application areas should be ventilated. During application, work clothes, protective gloves, glasses and masks in accordance with occupational and worker health rules should be used. It should not be contacted with skin or eyes during storage and application. In case of contact, it should be washed immediately with plenty of water and soap. If swallowed, a doctor should be consulted immediately. Food and beverage materials should not be brought into application areas. It should be stored in places inaccessible to children.

For detailed information, please refer to the Material Safety Data Sheet.

Disclaimer

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