

INNO- PROOF FOX PURMAX® MASTIC

Polyurethane Based, Two Component, Applied Horizontally, Continuously Elastic, Joint and Dilatation Mastic

Description

FOX PURMAX® MASTIC is a polyurethane based, two-component, high performance, continuous elastic material specially formulated for filling and waterproofing for dilatation and wide joints. After curing, it is a high performance joint and dilatation sealant with high waterproofing resistance against all kinds of weather conditions, chemicals, resistant to jet fuel, diesel fuel and oils, with effective waterproofing.

Fields of Application

- In filling all kinds of horizontal dilation spaces for the purpose of insulation,
- Filling of all kinds of expansion and wide joints,
- Airport runways and aprons,
- Energy plants,
- Highways, bridges and viaducts
- Fuel storage tanks,
- Gas stations,
- On industrial floors exposed to pedestrian and heavy vehicle traffic,
- Stadiums,
- Terraces and balconies,
- In filling the joints of the irrigation channels,
- Used horizontally in gypsum, cement chip and OSB board panel joints.

Advantages

- It has excellent resistance to aging, microorganisms, fungi and various chemicals.
- It is suitable for drinking water.
- Can be painted.
- Resumes elasticity up to -40°C.
- Resistant to saline and fresh water.
- It resists high tensile, flexing and tearing forces.
- High abrasion resistance.
- It gives excellent results even in dilatation spaces over 10 cm width.
- It is resistant to chemicals and petroleum derivatives.

Technical Features

Structure of the Material	Modified Polyurethane
Density	1,32 gr/cm ³
Colour	Grey
Splice Strength Breaking the concrete	>1,5 N/mm ²
Tear Strength DIN 53 504	>5,7 N/mm
Tensile Strength DIN 53 504	>5,2 N/mm ²
Breaking Point DIN 53 504	>620%
Solids by %	100%
Dilution	No dilution
Application Time	45 minutes
Shore A Hardness	25
Application Temperature	+5°C / +40°C
Service Temperature	-40°C / +90°C



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



Chemical Resistance

Diesel	+	Motor Oil	+	Acetic Acid 10%	+	Sodium Hydroxide	+
Jet A 1	+	Heating Oils	+	Sulphuric Acid 20%	+	Aliphatic esters, ketones	+

Application Procedure

Joint Filler Design

For joints where **FOX PURMAX® MASTIC** will be used, the width must be between 10mm and 100mm. In joints with a width of 10-50mm; **FOX PURMAX® MASTIC** application thickness should be approximately half of the joint width. (thickness / width = $\sim 1/2$). It is sufficient to have **FOX PURMAX® MASTIC** application thickness 2.5-3cm in joints of width 50mm and above. Movements in dilatation joints should not exceed $\pm 35\%$ of the joint width.

Substrate Preparation

Concrete Surfaces

Care should be taken to ensure that the inner and outer surfaces of the dilatation joints are dry, solid, dust-free, clean, on the balance and smooth. The surface should be cleaned from any oil, paraffin and silicone residues that would weaken adherence and loose particles on the surface should be removed. Defects on the surface must be repaired with **FOX EPOMORTAR FC510**.

Steel Surfaces

It must be thoroughly cleaned from any oil and rust residues that will weaken adherence and sanded. In cases where it is not possible to sandblast, cleaning should be done with the help of mechanical tools. In cases where the surface is greasy and oily, oil removers are used.

Mixing

FOX PURMAX® MASTIC is produced in ready-to-use sets according to the mixing ratio. Before starting the mixture, make sure that the material temperatures are between +15°C and +25°C. The entire B component must be emptied into the A component and ensure that no material remains in the B component packaging. **FOX PURMAX® MASTIC** should be mixed with a 300 rpm electric mixer with mastic mixing nozzle without dragging air into it for at least 5 minutes until a homogeneous mixture is obtained, making sure that no unmixed material remains on the packaging edges and base.

Application Procedure

Primer Application

The outer edges of joints whose surface preparation has been completed should be protected by affixing appropriate width masking tape. Then, polyethylene wick should be used in order to prevent the sealant from sticking to the lower surface and to make the sealant consumption in accordance with the proposed joint design. Polyethylene wick with a diameter of 5 mm wider than the joint width is placed in the joint by compression. The insertion depth should be half the width of the joint. Then the concrete surfaces of the joint should be primed with **FOX PURMAX® PRIMER** series primers using a suitable brush. Primer should not be applied on polyethylene wick surface. After the primer comes to wet / dry consistency (the material should not stick to the finger when the primer surface is touched with a finger, there should be fingerprints on the primer surface), mastic application can be started. Mastic application must be made the next day on surfaces primed with **FOX PURMAX® PRIMER** series primers. If this period has passed, primer application should be repeated.

Mastic Application

FOX PURMAX® MASTIC is used only on horizontal joints. The material made ready for use as described above must be filled into the joint with a polyethylene wick inserted and primed with the aid of a pouring container or a mouth-filled aluminium mastic gun. To prevent the formation of air gaps, filling the joint should be started from below (from the surface of the wick) and continued until the desired surface is obtained. Following the completion of the sealant application, masking tapes should be removed from the surface without distorting the shape of the joint.

Cleaning of the Tools

Tools and equipment should be cleaned with a paper towel and then wiped with solvent. Do not try to clean the rolls and brushes used, they cannot be used a second time.



Coverage

Joint Length with 1 kg of **FOX PURMAX® MASTIC**;

Width Depth	Joint Width				
	10 mm	20 mm	30 mm	40 mm	50 mm
5 mm	17,5 mt				
10 mm		5 mt			
15 mm			2,2 mt		
20 mm				1,25 mt	
25 mm					0,80 mt

Package

5 kg Set

4,20 kg tin bucket

0,80 kg plastic bottle

Shelf Life

When stored properly at room temperature, away from direct sunlight, between +5°C and +30°C, its shelf life is 6 months from the date of manufacture.

Storage

It should be stored in its original package, in a cool and dry place protected from frost. In short-term storage, maximum 3 pallets should be placed on top of each other and shipment should be made with the first in, first out system. In long-term storage, pallets should not be placed on top of each other.

Safety Precautions

It is dangerous to approach the storage and application areas with fire. Storage and application areas should be ventilated. During the application, work clothes, protective gloves, goggles, masks in accordance with the occupational health and safety rules should be used. During storage and application, it should not be contacted with the skin and eyes, should be washed immediately with plenty of water and soap, and if swallowed, seek medical attention immediately. Food and drink materials should not be brought to the application areas. It should be stored out of the reach of children.

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

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