Technical Datasheet

JOINT TAPE FPO 250

Waterproofing tape with perforated edges

Description

High-performance flexible polyolefin (FPO) waterproofing tape, with an additional 20mm perforation at both edges for better bonding.
Certified according to DIN EN 13967 as flexible sheet for waterproofing. Certificate No.: 0761-CPR-0897, MPA Braunschweig.

Fields of application

Suitable for waterproofing of outside expansion and construction joints. Also used for installation with suitable adhesives and sealants on various building substrates in critical areas with high and/or frequent movements. Used for covered outdoor application, as flashing for expansion joints and other construction joints with high and/or frequent movements. It is applied with an adequate adhesive on many different surfaces but only if it is covered with panels, plaster, or waterproofing products, as it cannot be constantly exposed to UV rays. Also suitable for underground waterproofing, waterproofing against groundwater, waterproofing for basements, houses, parking garages, containers and tanks, swimming pools, roofs and facades, mines and tunnel construction, roads and bridges.

Technical data

Material composition:	thermoplastic elastomer, resistant to aging
Color:	grey
Standard widths:	250 mm
Total thickness:	approx. 1.0 mm
Material weight:	approx. 930 g/m^2
Resistance to temperature (min/max):	-30°C / +90°C
Shore-A-hardness:	87

Physical properties

Maximum burst pressure:	≥ 4 bar
Tear resistance - lengthwise: (DIN EN 12311-2 Method B)	15 N/mm^2
Tear resistance - across: (DIN EN 12311-2 Method B)	15 N/mm^2
Elongation at break lengthwise: (DIN EN 12311-2 Method B)	620%
Elongation at break across: (DIN EN 12311-2 Method B)	670%
Watertightness: (DIN EN 1928 Method A&B)	Watertight
Bonding strength: (DIN EN 1348)	≥ 4 N/mm^2
Tear resistance (nail shank) - lengthwise (DIN EN 12310-1):	260 N
Tear resistance (nail shank) - across (DIN EN 12310-1):	260 N
Peel test wood: (depending on the adhesive used)	≥ 100 N
UV Resistance (min): (DIN EN ISO 4892-3)	≥ 6,500 h
Water vapor permeability: (DIN EN 1931 Method B)	60 m
Reaction to fire: (EN 13501-1, DIN ISO 11925-2)	class E

Chemical properties

Resistance after storage over 7 days by room temperature to the following chemicals: Hydrochloric acid, Sulphuric acid, Citric acid, Lactic acid, Potassium hydroxide, Sodium hypochlorite, salt water and further substances.

Tape width	Joint width	EPOMAX-PL total consumption* for 3 - 3.5 mm thickness
25 cm	10 cm	~ 1.0 - 1.2 kg/m

*Consumption may vary depending on the roughness of the surface.

Directions for use

1. Substrate preparation

Step 1:
Prepare the substrate by means of sandblasting, grinding, etc., followed by vacuuming and cleaning.

JOINT TAPE FPO 250

2. Application

Step 2:
In case of expansion joints or cracks, it is essential that a stripe of width equal to the width of the joint in the center of the tape remains unbounded, which means free of adhesive. For this reason, insert a foam backer rod inside the joint and apply a masking tape on top of the joint / crack.

Step 3:
Apply the epoxy adhesive on the left-hand and the right-hand side of the joints. Do not cover the central masking tape with adhesive.

Step 4:
No activation on job site is required. In case of dirt, clean the surface of the tape with a dry or wet cloth. Use nothing but water for cleaning, **NO SOLVENTS**.
Apply the tape on the joint and firmly press the tape into the adhesive bed. Avoid air pockets by using a suitable tool. Apply a masking tape in the middle of the tape.

Step 5:
Cover the tape with a second layer of the adhesive. In order to guarantee good adhesion with the surface, the adhesive should exceed the tape about 3 cm.

Step 6:
Remove the masking tape from the center of the tape, as well as both lateral masking tapes, some minutes after the application.

Step 7:
After drying, the epoxy resin gets very hard and could create a "knife effect" on the edges. In order to avoid damages of both the user and the tape, it is suggested to smooth the edges of epoxy with a brush some minutes after removing the masking tape.

Step 8:
In case of higher water pressure (>1.5 bar up to 3 bar) or negative pressure, protect the joint with a metal plate.

Overlapping by hot welding process in case of expansion joints:

The product is fusible with standard hot-air dryers. It is important to select a low temperature setting so that only the surface of the tape melts in order not to affect the tightness of the product.

Step 1:
Use a proper air gun tool with the right setting
- Recommendation: ≥ 1150 Watt / 340°C
- Air Power: 3
- Nozzle: 20 or 40 mm
- Roller

Step 2
Parts to be welded must be roughened or sanded.

Step 3
Proceed with the hot air welding. The minimum overlapping must be 100mm.
In order to guarantee a good elasticity to the tape, it is better to weld the two pieces before the installation.

Overlapping by epoxy in case of joints with no or micro-movements:

Step 1:
Bond the two pieces of the tape together, using an epoxy resin. Minimum overlapping must be 100mm. Press the two pieces firmly onto each other and avoid air pockets by using a suitable tool.

Step 2:
Cover the tape applying the second layer of the adhesive.

Packaging

Standard length per roll: 20m.

Shelf life – Storage

12 months from production date, in original unopened packaging, if kept in a cool, dry place, protected from direct sunlight. If packaging film has been opened, apply the material within 2 months.

The technical information and instructions supplied in this data sheet are based on the knowledge and experience of the Department of Research and Development of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore, the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical data sheet automatically cancels any previous one concerning the same product. | 20.04.2021

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isomat building quality	CE 0761 – CPR -0897
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JOINT TAPE FPO EN 13967 : 2012	
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Properties	Test conditions	Unit	Tolerance
Mass per unit area	DIN EN 1849-2	g/m²	880-980
Thickness	DIN EN 1849-2	mm	0,9-1,1
Tensile properties	DIN EN 12311-2 Method B	N/mm²	longitudinal: ≥ 12,5 lateral: ≥ 12,5
Elongation	DIN EN 12311-2 Method B	%	longitudinal: ≥ 500 lateral: ≥ 500
Tear resistance (Nail shank)	DIN EN 12310-1	N	longitudinal: ≥ 200 lateral: ≥ 200
Water tightness	DIN EN 1928-B 400kPa/72 Std.	passed	
Resistance to impact	DIN EN 12691 A: Alu plate B: EPS panel	mm	≤ 250 ≤1500
Shear resistance of the joint seams	DIN EN 12317-2	N/50mm	≤ 300
Reaction to fire	EN 13501-1		Class E

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