Approved on 01.06.2016

PLASTFOIL® CLASSIC

Polymeric PVC membrane for waterproofing of roofs

PRODUCT DESCRIPTION

PLASTFOIL® CLASSIC — is a polymeric waterproofing PVC-based membrane, reinforced with plastic mesh. Due to reinforcement, it has high rupture strength.

APPLICATION

Polymeric membrane is intended for water-proofing flat mechanically fastened roofs (is possible for waterproofing of ballasted roofs). It is also acceptable to apply it on pitched roofs with an inclination angle more than 7° (12%). In pitched roofs system width of PVC membrane should not exceed 1,05 m, or applying a system of closed lines. It is more aesthetically pleasing to apply a rebate simulation of omega-profile PVC.

CHARACTERISTICS/ADVANTAGES

Features

- Outstanding resistance to weathering, including permanent UV irradiation
- High resistance to aging
- High resistance to mechanical influences
- High resistance to hailstones
- High resistance under tension
- Excellent flexibility in cold temperatures
- High vapor permeability
- Outstanding weldability
- Recyclable, does not pollute the environment
- Fire performances are adapted to the European and Russian Requirements to fire safety

Approval/standards

- Polymer membranes for roof waterproofing according to EN 13956:2012
- Tech. specifications 23.99.12.110-012- 54349294-2016

Technical regulations on fire safety requirements No.123-Federal Law

Production control and evaluation are performed by the certified laboratories.

Standard sizes of rolls

Thickness, mm	**Width**, m	**Length,** m	**Weight**, kg/m²
1,2 (-5% / +5 %)	2,1 (-0,5% / +1,0%)	25,0 (-0% / +1,0 %)	1,5 (-5% / +10%)
1,5 (-5% / +5 %)	2,1 (-0,5% / +1,0%)	20,0 (-0% / +1,0 %)	1,9 (-5% / +10%)
1,8 (-5% / +5 %)	2,1 (-0,5% / +1,0%)	20,0 (-0% / +1,0 %)	2,2 (-5% / +10%)

It is possible to produce material up to 2 mm in thickness.

TECHNICAL DATA			
Product declaration	Tech. specifications 23.99.12.110-012- 54349294-2016 and EN 13956		
Visible defects	none		EN 1850-2
Straightness, not more than, mm on 10m	30		EN 1848-2
Flatness, not more than, mm	10		EN 1848-2
Tensile strength, method A, H/50 mm, not less than **- longitudinal** **- transversal**	 1100 900		EN 12311-2
Elongation at maximum load conditions, %, not less than **- longitudinal** **- transversal**	 17 19		EN 12311-2
Tear strength (waterproofing polymer membrane), H, not less than	200		EN 12310-2
Full collapsibility at low temperatures , °C, not more than	-35		EN 495-5
Weld strength at tearing, N/50mm, not less than	350		EN 12316-2
Weld strength at break, N/50mm, not less than	700		EN 12317-2
Water resistance (2 hours at 0,2 Mpa)	Impervious to water		EN 1928 (B)
Resistance to hail, not less than m/s	25		EN 13583
Resistance to dynamic burst (impact resistance) - on a solid ground (in brackets on soft ground), mm, not less than	1,2 mm in thickness 400 (700*)	1,5 mm in thickness 700 (1000*)	EN 12691
Resistance to static pressing, kg, not less than	20		EN 12730
Resistance to fire	B_{ROOF}(t1) B_{ROOF}(t2) B_{ROOF}(t3)		EN 13501-5
Fire reaction	Class E		EN 13501-1
Aging under the influence of artificial climatic factors (UV exposure, not less than 8000 hours)	responds		EN 1297
Linear changes when heated 6h at 80°C, %, not more than	0,5		EN 1107-2
Water vapour transmission properties	μ = 20 000		EN 1931

RELATED MATERIALS	
	To ensure a high quality and durability of roof waterproofing it is recommended to apply the following constituent parts: Unreinforced membrane for making amplifier elements - PLASTFOIL® ART • Formable elements and joints • Rainwater funnels • Omega-profile of PVC • Laminated tin • Mechanical fastener • Compression and edging aluminium planks Membrane cleaner
APPLICATION DETAILS	
Substrate quality	The substrate must be uniform, smooth and free of any sharp protrusions or burrs. Metal surface should be degreased with cleaner before the adhesive is applied.
Compatibility	Not compatible with materials containing bitumen, tallow, tar, oils, solvents. In order to prevent a direct contact to polymers of other groups, such as: foamed polystyrene, polyurethane, polyisocyanurate, phenol-containing foams it is recommended to apply a separation geotextile or glass-fiber mat layer.
Application method / tools	**Installation procedure** According to the valid installation instructions for mechanically fastened roof systems using PLASTFOIL PVC-membrane. **Fixing method:** Loosely laid and mechanically fastened. The roof waterproofing sheet is installed by loose laying and mechanical fastening in seam overlaps or independent from overlaps. An additional mechanical fastening of the membrane around the roof perimeter is obligatory. Technical department of the “Penoplex” company perform calculation on number of fasteners. Primary calculation can be made using a special program on the company website www.plastfoil.com. **Welding method:** Overlap seams are welded by electric hot welding equipment, such as manual hot air welding machines and pressure rollers or automatic hot air welding machines with controlled hot air temperature capability of minimum +600^{0}C. **Recommended type of equipment:** Leister Triac, Dohle RION – for manual welding or some other similar types. Dohle LarOn, Leister Varimat (220W *или* 380W) – for automatic welding. Welding parameters including temperature, machine speed, air flow , pressure and machine settings must be evaluated, adapted and checked on site according to type of equipment and the climatic situation prior to welding. The effective width of welded overlaps should be equal to 20 mm - for manual welding, and 40 mm - for automatic welding.
Notes on application / Limitations	Installation works of the PVC-membrane must be carried out in strict adherence to the guidelines on application a polymeric PLASTFOIL® membrane on the roofs. Polymeric membrane may be applied in any climatic zones; herewith installation of the PVC-membrane should be performed at an ambient air temperature of -20°C to +50°C. Application of chemical constituent parts such as: contact adhesive/membrane cleaner is possible at an ambient air temperature not lower than +5°C. Please refer to the technical information on this product.

PROTECTIVE MEASURES	
	Fresh air ventilation must be ensured when working (welding) in closed rooms. Local safety regulations must be observed.
TRANSPORTATION CLASS	
	The product is not classified as hazardous good for transport.
PACKAGING	
	Packing unit: 17 rolls Roll weight: 1,2 mm in thickness - 82,3 kg 1,5 mm in thickness - 80,1 kg 1,8 mm in thickness - 70,4 kg
STORAGE	
	Rolls must be stored in horizontal position on pallets in original package protected from direct sunlight, rain, snow. Product does not expire during correct storage.
DISPOSAL	
	The material is recyclable. Disposal must be performed according to the local regulations. Please contact your local representative office for more information.