

Waterproofing membrane FATRAFOL 810

TL 5-1008-06

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Product description

FATRAFOL 810 (810/V, 810 AA, 810/V AA) is a roofing membrane on the basis of PVC-P reinforced with a polyester grid. It is resistant to UV-radiation and can be exposed to the direct weathering influences.

FATRAFOL 810 (810 AA) is produced by calendaring and lamination, FATRAFOL 810/V (810/V AA) by a multi-extrusion processing. FATRAFOL 810 AA has a higher fire resistance. All the production variants are described by this Technical Data Sheet - further like FATRAFOL 810, only.

Usage

FATRAFOL 810 is identified first of all for making the one-layer coating coverings of flat roofs, mechanically anchored to the underley without loading layer. FATRAFOL 810 can be used also for the roofs being partly loaded.

Application

The laying of FATRAFOL 810 can be made by specialized and for this purpose trained firms at the constructions. FATRAFOL 810 is applied conformable with fundamentals being set and described in a Construction and Technologic Instruction of the producer, being valid in the time of waterproofing providing. The membrane must be fixed to a stable part of a roofing coating by suitable way and it is by means of special anchoring elements. The kind of anchoring must be proposed for the particular applications so for being the membrane secured from the dimensional changes and wind suction.

The membrane can be mutual jointed by welding of hot air or heat key (one-trace weld). The laying and jointing can be made under the temperature till up to -5°C .

Product data

FATRAFOL 810 fulfils requirements of the Standard EN 13956.

Colour: FATRAFOL 810 is produced in a basic colour of the upper layer of light gray - No. 2761 and in colour variants of dark gray - No. 2003, orange - No. 3105, red - No. 3104, blue - No. 9113, glaucous - No. 7060, white - RAL 9010 and copper brown - No. 3503.

FATRAFOL 810/V is produced in a basic colour of the upper layer of light gray - No. 2761 and in colour variants of dark gray - No. 2003, red - No. 3104, blue - No. 9113, glaucous - No. 7060, white - RAL 9010, creamy - No. 2732 and green RAL 6002.

Packing, transport, storage: FATRAFOL 810 AA a FATRAFOL 810/V AA are produced in a colour of light gray - No. 2761 and dark gray - No. 2003 only.

FATRAFOL 810 is packed into the rolls, which are laid on the wood pallets and fixed by a packing film. FATRAFOL 810 must be transported in covered transporting means and stored in original closed packing. The recommended storage temperature is from -5 °C to +30 °C. There is necessary to protect the product from pollution at the building site. There is recommended to protect it from weathering influences till the processing time.

Dimensions:

Thickness [mm] (EN 1849-2)	Width [mm] (EN 1848-2)	Length [m] *) (EN 1848-2)	Quantity [m ²]	Weight of the roll [kg] **)
FATRAFOL 810				
1.20 (-0.06; +0.12)	1300 (-6; +13)	20 (-0; +1)	26	41
	650 (-3; +6)	20 (-0; +1)	13	21
	215 (-2; +4)	40 (-0; +2)	8.6	13
	160 (-2; +4)	40 (-0; +2)	6.4	10
1.50 (-0.07; +0.15)	1300 (-6; +13)	20 (-0; +1)	26	51
	650 (-3; +6)	20 (-0; +1)	13	26
2.00 (-0.10; +0.20)	1300 (-6; +13)	15.4 (-0; +0.7)	20	39
FATRAFOL 810/V				
1.20 (-0.06; +0.12)	2000 (-10; +20)	25 (-0; +1)	50	78
	2000 (-10; +20)	20 (-0; +1)	40	62
	1000 (-5; +10)	25 (-0; +1)	25	39
	2050 (-10; +20)	25 (-0; +1)	51.25	80
1.50 (-0.07; +0.15)	2000 (-10; +20)	20 (-0; +1)	40	78
	2000 (-10; +20)	15 (-0; +0.7)	30	59
	1000 (-5; +10)	20 (-0; +1)	20	39
	2050 (-10; +20)	20 (-0; +1)	41	80
1.80 (-0.09; +0.18)	2000 (-10; +20)	16.5 (-0; +0.8)	33	77
	1000 (-5; +10)	16.5 (-0; +0.8)	16.5	39
	2050 (-10; +20)	16.5 (-0; +0.8)	33.825	79
2.00 (-0.10; +0.20)	2000 (-10; +20)	15 (-0; +0.7)	30	78
2.40 (-0.12; +0.24)	2000 (-10; +20)	13 (-0; +0.65)	26	81
FATRAFOL 810 AA				
1.50 (-0.07; +0.15)	1300 (-6; +13)	20 (-0; +1)	26	51
FATRAFOL 810/V AA				
1.50 (-0.07; +0.15)	2000 (-10; +20)	20 (-0; +1)	40	78
1.20 (-0.06; +0.12)	2000 (-10; +20)	25 (-0; +1)	50	78

*) The membrane can be provided also in another winding lengths (deviation from the nominal length is of - 0 %; + 5 %) after agreement between producer and customer.

***) Informative value

Technical parameters:

FATRAFOL 810, FATRAFOL 810 AA				
Characteristic	Test standard	Values of individual product Thicknesses		
		1.20 mm	1.50 mm	2.00 mm
Visible defects	EN 1850-2	meets		
Straightness	EN 1848-2	≤ 50 mm		
Flatness	EN 1848-2	≤ 10 mm		
Dimensional stability	EN 1107-2	max. ± 0,3 %		
Tensile strength	MD	≥ 1000 N/50 mm		
	CD	method A ≥ 950 N/50 mm		
Elongation at break	MD	≥ 15 %		
	CD	≥ 15 %		
Tear resistance	MD	≥ 180 N		
	CD	≥ 180 N		
Foldability at low temperature	EN 495-5	≤ -25 °C		
Joint peel resistance	MD	≥ 260 N/50 mm		
	CD	≥ 260 N/50 mm		
Joint shear resistance	MD	≥ 900 N/50 mm		
	CD	≥ 850 N/50 mm		
Water tightness to liquid state 10 kPa *)	EN 1928 method B	meets		
Resistance to static load	EN 12730 method B	meets 20 kg		
Reaction to fire	EN 13501-1	Class E		
Impact resistance	EN 12691 method A	meets 1000 mm	meets 1250 mm	
	EN 12691 method B	meets 2000 mm		
Exposure to UV radiation, elevated temperature and water	EN 1297	meets, grade 0		
Water vapour properties - factor μ	EN 1931	21000 ± 3000		
External fire performance **)	P ENV 1187	B _{ROOF} (t1), B _{ROOF} (t3), C _{ROOF} (t4)		
Resistance to root penetration	EN 13948 FLL test	meets		

*) The membranes meet the test pressure of 60 kPa.

**) The FATRAFOL 810 AA achieved within a given ply-structure of roofing coat a classification of AA rating according to BS 476-3:1958.

MD - Machine Direction, CD - Cross Direction

FATRAFOL 810/V, FATRAFOL 810/V AA						
Characteristic	Test standard	Values of individual product Thicknesses				
		1.20 mm	1.50 mm	1.80 mm	2.00 mm	2.40 mm
Visible defects	EN 1850-2	meets				
Straightness	EN 1848-2	≤ 50 mm				
Flatness	EN 1848-2	≤ 10 mm				
Dimensional stability	EN 1107-2	max. ± 0,3 %				
Tensile strength	MD	EN 12311-2 method A	≥ 1000 N/50 mm	≥ 1000 N/50 mm		≥ 1100 N/50 mm
	CD		≥ 1000 N/50 mm	≥ 1100 N/50 mm		≥ 1200 N/50 mm
Elongation at break	MD	≥ 15 %				
	CD	≥ 20 %				
Tear resistance	MD	EN 12310-2	≥ 200 N			≥ 250 N
	CD		≥ 220 N			≥ 270 N
Foldability at low temperature	EN 495-5	≤ -25 °C				
Joint peel resistance ^{ei}	MD	EN 12316-2	≥ 260 N/50 mm			
	CD		≥ 260 N/50 mm			
Joint shear resistance	MD	EN 12317-2	≥ 1000 N/50 mm			≥ 1100 N/50 mm
	CD		≥ 1000 N/50 mm			≥ 1100 N/50 mm
Water tightness 10 kPa *)	EN 1928 method B	meets				
Resistance to static load	EN 12730 method B	meets 20 kg				
Resistance to fire	EN 13501-1	Class E				
Resistance to impact	EN 12691 method A	meets 1000 mm	meets 1250 mm			meets 1750 mm
	EN 12691 method B	meets 2000 mm				
Exposure to UV radiation, elevated temperature and water	EN 1297	meets, grade 0				
Water vapour properties - factor μ	EN 1931	21000 ± 3000				
External fire performance **)	P ENV 1187	B _{ROOF} (t1), B _{ROOF} (t2), B _{ROOF} (t3)				
Resistance to root penetration	EN 13948 FLL test	meets				

*) The membranes meet the test pressure of 60 kPa.

**) The FATRAFOL 810 AA achieved within a given ply-structure of roofing coat a classification of AA rating according to BS 476-3:1958.

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Safety instruction**Scrap disposal**

FATRAFOL 810 must be disposed conformable with valid legal regulations. The clear scrap can be recycled, scrap not suitable for recycling you can depony. Waste, polluted by dangerous substances, is necessary to dispose by burning in the incinerator of dangerous wastes.

Safety at work and health protection

There is necessary to keep all safety, hygienic and fire regulations valid in the time of laying and membrane joining.

Related documentation

- Construction and technologic regulation of roofing waterproofing system FATRAFOL-S
- Manufacturing control system certificate No. 1390-CPD-0026/06/Z of waterproofing membrane FATRAFOL 810 according to Standard
- ČSN EN 13956:2006, emitted by CSI, a. s., Prague, workstation Zlín
- Manufacturing control system certificate No. 1390-CPD-0033/06/Z of waterproofing membranes FATRAFOL 810/V according to Standard ČSN EN 13956:2006, emitted by CSI, a. s., Prague, workstation Zlín

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