Technický list TL 5-1008-06



Waterproofing membrane FATRAFOL 810

Účinnost:10.09.2017 Vydání: 19

Product description	FATRAFOL 810 (810/V) 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.						
	The membrane is not compatible with bitumen. FATRAFOL 810 is produced by calendering and lamination,						
							FATRAFOL 810/V by a multi-extrusion processing.
	Usage	FATRAFOL 810 (810/V) is intended for:					
	 mechanically fastened roofs (membrane) 						
	- with spot or linear fastening						
	- using fastened fixing discs adhered to membrane						
	• ballasted flat roofs, when ballast is placed later in time						
	 pitched ballasted roofs 						
	 other ballasted roofs, where due to small size, logistics or other reasons the use of FATRAFOL 810 is more advantagous than that of FATRAFOL 818/V-UV 						
Application	The laying of FATRAFOL 810 (810/V) can be made by specialized and for this purpose trained firms at the constructions.						
	FATRAFOL 810 (810/V) 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 (810/V) fulfils requirements of the Standard EN 13956.						
	FATRAFOL 810 (810/V) is as a part of roof waterproofing system						

FATRAFOL-S certified according to European Technical Approval ETA-12/0013 (Systems of mechanically fastened flexible roof waterproofing membranes FATRAFOL-S), emitted in accordance with ETAG 006.

Dimensions:

Thickness	Width	Length *)	Quantity	Weight					
[mm]	[mm]	[m]	$[\mathbf{m}^2]$	of the roll					
(EN 1849-2)	(EN 1848-2)	(EN 1848-2)		[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					
	120 (-2; +4)	40 (-0; +2)	4.8	8					
1.50 (-0.07; +0.15)	1500 (-7; +15)	20 (-0; +1)	30	58					
	1300 (-6; +13)	20 (-0; +1)	26	51					
	1000 (-5; +10)	20 (-0; +1)	20	38					
	650 (-3; +6)	20 (-0; +1)	13	26					
	215 (-2; +4)	32 (-0; +1.5)	6.88	14					
	160 (-2; +4)	32 (-0; +1.5)	5.12	10					
1.80 (-0,09; +0,18)	1300 (-6; +13)	17 (-0; +0,8)	22.1	51					
	625 (-3; +7)	17 (-0; +0,8)	10.625	24					
2.00 (-0.10; +0.20)	1300 (-6; +13)	15.4 (-0; +0.7)	20	51					
	200 (-2; +4)	18 (-0; +1)	3.6	10					
	FATRAF			<u> </u>					
1.20 (-0.06; +0.12)	2000 (-10; +20)	25 (-0; +1)	50	78					
1.20 (0.00, 10.12)	2000 (-10; +20)	20 (-0; +1)	40	61					
	1000 (-5; +10)	25 (-0; +1)	25	39					
	2050 (-10; +20)	25 (-0; +1)	51.25	75					
	1025 (-5; +10)	25 (-0; +1)	25.625	37					
	1600 (-10; +20)	25 (-0; +1)	40	61					
	1600 (-10; +20)	20 (-0; +1)	32	49					
1.50 (-0.07; +0.15)	2000 (-10; +20)	20 (-0; +1)	40	78					
1.00 (0.07, 10.10)	1000 (-5; +10)	20 (-0; +1)	20	39					
	2050 (-10; +20)	20 (-0; +1)	41	75					
	1025 (-5; +10)	20 (-0; +1)	20.5	38					
	1600 (-10; +20)	20 (-0; +1)	32	61					
	1600 (-10; +20)		24	46					
	1300 (-10; +20)	20 (-0; +1)	26	47					
	750 (-10; +20)	20 (-0; +1)	15	27					
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	78					
	1025 (-5; +10)	16.5 (-0; +0.8)	16.9	37					
	1600 (-10; +20)	16.5 (-0; +0.8)	26.4	61					
2.00 (-0.10; +0.20)	2000 (-10; +20)	15 (-0; +0.7)	30	78					
(= = = = = = = = = = = = = = = = = = =	1000 (-5; +10)	15 (-0; +0.7)	15	39					
	2050 (-10; +20)	15 (-0; +0.7)	15	74					
	1025 (-5; +10)	15 (-0; +0.7)	15	37					
	1600 (-10; +20)	15 (-0; +0.7)	24	61					
2.40 (-0.12. +0.24)	2000 (-10; +20)	13 (-0; +0.65)	26	81					
	1600 (-10; +20)	13 (-0; +0.65)	20.8	64					

^{*)} 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

Colour:

FATRAFOL 810 is produced in a basic colour of the top layer of light grey RAL 7040 and in colour variants of dark grey RAL 7012, green RAL 6000, red RAL 3016, blue RAL 5015, copper brown RAL 8004, white-grey RAL 7047, white RAL 9010 and black grey RAL 7021.

FATRAFOL 810/V is produced in a basic colour of the top layer of light grey RAL 7040 and dark grey RAL 7012. It can be produced in other coloures after agreement between producer and customer.

The colour of a back layer is grey.

Performance:

FATRAFOL 810 and FATRAFOL 810/V basic constructions have reinforcment fabric finely designed top smooth matte surface layers. FATRAFOL 810 can be produced on surface by designed D205 and D336 quality (according to Fatra Sampler), and depending on agreement between producer and subscriber.

Packing, transport, storage:

FATRAFOL 810 (810/V) 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.

Technical parameters:

FATRAFOL 810							
Characteristic		Test standard	Values of individual product Thicknesses				
			1.20 mm	1.50 mm	1.80 mm	2.00 mm	
Visible defects		EN 1850-2	meets				
Straightness		EN 1848-2		≤ 5 0	mm		
Flatness		EN 1848-2	≤ 10 mm				
Dimensional stability		EN 1107-2	max. ± 0,3 %				
Maximum tensile force	MD CD	EN 12311-2 method A	≥ 1000 N/50 mm ≥ 950 N/50 mm				
Elongation at maximum tensile for MD	ce CD		≥ 15 % ≥ 15 %				
Tear resistance	MD CD	EN 12310-2	≥ 180 N ≥ 180 N				
Foldability at low temperature		EN 495-5		≤ -2	5 °C		
Joint peel resistance	MD CD	EN 12316-2	≥ 260 N/50 mm ≥ 260 N/50 mm				
Joint shear resistance	MD CD	EN 12317-2	≥ 900 N/50 mm ≥ 850 N/50 mm				
Water tightness, 400 kPa		EN 1928 method B	meets				
Resistance to static load		EN 12730 method B	meets 20 kg				
Reaction to fire		EN 13501-1		Cla	ss E		
Impact resistance		EN 12691 method A EN 12691 method B	meets 1000 mm	125	eets 0 mm 000 mm		
Exposure to UV radiation, elevated temperature and water (50	000 h)	EN 1297	meets, grade 0				
Water vapour properties - factor μ		EN 1931	15000 ± 4500				
Rezistance to root penetration		EN 13948 FLL test	meets				

MD - Machine Direction, CD - Cross Direction

		FATRAFOL 8	810/V				
Characteristic		Test standard	Values of individual product Thicknesses				
			1.20	1.50	1.80	2.00	2.40
			mm	mm	mm	mm	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 %				
Maximum tensile force	MD	EN 12311-2	≥ 1000 $\geq 1000 \text{ N/50 mm}$			≥ 1100	
		method A	N/50 mm				N/50 mm
	CD		≥ 1000	≥ 1	000 N/50	mm	≥ 1100
			N/50 mm				N/50 mm
Elongation at maximum tensile for	orce		≥ 15 %				
MD	~~				\geq 20 %		
	CD						1
Tear resistance	MD	EN 12310-2			$\geq 200 \text{ N}$		\geq 250 N
	CD				≥ 220 N		≥ 270 N
Foldability at low temperature		EN 495-5	≤ -25 °C				
Joint peel resistance	MD	EN 12316-2			60 N/50 m		
	CD				60 N/50 m		_
Joint shear resistance	MD	EN 12317-2		≥ 10	00 N/50 n	nm	≥ 1100
							N/50 mm
	CD			≥ 10	00 N/50 n	nm	≥ 1100
Water tightness 400 kPa		EN 1928			maata		N/50 mm
Water tightness, 400 kPa		method B			meets		
Desistance to static load					a a ta 20 1 a		
Resistance to static load		EN 12730 method B		m	eets 20 kg	5	
Reaction to fire		EN 13501-1			Class E		
Resistance to impact		EN 12691	meets		meets		meets
		method A	1000 mm		1250 mm		1750 mn
		EN 12691		mee	ets 2000 m	ım	
E IN THE		method B			, 1	0	
Exposure to UV radiation,		EN 1297	meets, grade 0				
elevated temperature and water (5000 n)	EN 1021		1.7	000 + 450	0	
Water vapour properties -		EN 1931	15000 ± 4500				
factor µ		EN 12040					
Resistance to root penetration		EN 13948			meets		
		FLL test					

MD - Machine Direction, CD - Cross Direction

Safety at work and health protection **Safety instruction** 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 (PN 5415/2011) • 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 • European Technical Approval ETA-12/0013, emitted by Technický a zkušební ústav stavební Praha, s. p. **Legal Clause** The technical data contained herein are based on our current knowledge and experience and relate to the use of products under normal application conditions. The information that is included in the current technical data sheet is provided according to a method of use and is incomplete. Before using this product, the user has to check whether the product is suitable for intended use. In addition to that, all the users should contact the dealer or manufacturer of this product to obtain further technical information regarding its use if they are of the opinion that the information available to them requires any explanation, for both the normal and specific use of this product. Please always check that you have the latest version of the product technical data sheet at your disposal. This data sheet and further information can be obtained from the sales or technical representative of the manufacturer or at the website www.fatrafol.cz. Fatra, j.c., třída Tomáše Bati 1541, 763 61 Napajedla, Czech Republic **Producer** tel.: +420 577 50 3323 (1111) e-mail: studio@fatrafol.cz fax: +420 577 50 2253 (3001) http://www.fatrafol.cz

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Číslo výtisku

Konec dokumentu