

EPS ROLLS

EPS coupled insulating rolls



Description

EPS ROLLS are an insulating system in rolls, made up of strips of insulating material, combined and coupled by heat on a bituminous waterproofing membrane. The EPS ROLLS can be used for general insulation and waterproofing

of roofs, with the great convenience of using a single product; that in fact combines the high thermal insulation capacity of expanded polystyrene and the impermeability of the bituminous membrane. EPS ROLLS are produced using Sintered Expanded Polystyrene (EPS), with increased thermoinsulating power with closed cells, E-Class, complying with the provisions of European Directive 89/106/ECC and is produced considering and applying the EN 13163 product standards, with CE marking.

Areas of application

The EPS ROLLS are flexible, in fact, they adapt to any type of surface: flat, sloping or curved. They are quick to apply, and once installed, the cover is immediately waterproofed, thanks to the selvage overlap. After laying the EPS ROLLS, we can apply a second waterproofing

membrane, or the final roofing. EPS ROLLS are an insulating system that is adaptable to various forms of coverage, but also for the isolation and the protection of walls against terrain.

Application

EPS ROLLS must be fixed according to the slope of the subfloor and the local weather conditions (windy areas, cold climates etc.) with adequate mechanical fasteners, with suitable bonding systems or with the use of appropriate dimpled membranes. EPS ROLLS have excellent resistance to mechanical stress associated with good thermal and acoustic insulation; the system's bituminous component has an exclusively protective function for the insulating element. The laying of the next layers must be carried out in total adhesion and on top of the underlying membrane.

Technical data bituminous waterproofing membrane

Technical characteristics	M.U.	Reference Norm	P	P	PA	PA	PA	V	V	Tol.	
Reinforcement type			Single strand polyester					Fiber glass			
Upper face finish			PE film		Mineral slate *			PE film			
Lower face finish			PE film								
Thickness	mm	EN 1849-1	3	4				2	3	±5%	
Weight	kg/m ²	EN 1849-1			3,5	4,0	4,5			±10%	
Cold flexibility	°C	EN 1109	NPD								
Heat stability	°C	EN 1110	120								
Heat stability after ageing	°C	EN 1296		110			110			-10°C	
Tensile strength L / T	N / 5 cm	EN 12311-1	400/300				300/200				-20%
Elongation at break L / T	%	EN 12311-1	35/35				2/2				-15 -2
Tear resistance L / T	N	EN 12310-1	130/130				70/70				-30%
Dimensional stability	%	EN 1107-1	-0,3				NPD				
Loss of mineral slate	%	EN 12039					30				
Fire resistance		EN 13501-5	F ROOF								
Reaction to fire		EN 13501-1	F								
Tensile strength after ageing L / T	N / 5 cm	EN 1296					NPD				-20%
Elongation at break after ageing L / T	%	EN 1296					NPD				-15
Impermeability after artificial ageing	kPa	EN 1296					60				
Impermeability to water	kPa	EN 1928					60				

* It is impossible to guarantee the color uniformity on self protected mineral membranes as the suppliers of the same do not provide any also. All self protected mineral finished membranes undergo color variations over time due to the exposure to atmospheric agents. Normally these variations in time will gradually become uniform.

EPS ROLLS technical specifications

(In compliance with current EN 13163 standards)

Characteristics	U.M.	CODE	80	100	120	150	rolls length (m)	STANDARD
Available thicknesses	mm		30	30	30	30	8	
	mm		40	40	40	40	6	
	mm		50	50	50	50	5	
	mm		60	60	60	60	4	
Length tolerance	mm	Li	± 2	± 2	± 2	± 2		EN 822
Width tolerance	mm	Wi	± 2	± 2	± 2	± 2		EN 822
Thickness tolerance	mm	Ti	± 1	± 2	± 2	± 2		EN 823
Orthogonal tolerance	mm	Si	± 2/±1000	± 2/±1000	± 2/±1000	± 2/±1000		EN824
Flatness tolerance	mm	Pi	± 5	± 10	± 10	± 10		EN 825
Declared thermal conductivity	10°C W/mk	λ_0	0.037	0.036	0.035	0.033		EN 12667:2002
Declared heat resistance (thickness in metres / λ_0)	mK/W limit value	R_0	≥ 1.00	≥ 1.00	≥ 1.00	≥ 1.00		PrEN 12667 o EN 12939
Dimensional stability	%	DS(N)i	± 0.2	± 0.2	± 0.2	± 0.2		EN1603
Flexural strength	kPa	BSi	125	150	170	200		EN 12089
Compressive strength at 10% deformation	kPa	CS(10)i	80	100	120	150		EN 826
Tensile strength perpendicular to faces	kPa	TRi	150	-	-	-		EN 1607
Water absorption in the long term by total immersion	% Vol limit value	Wit	≤ 0,5	≤ 0,5	≤ 0,5	≤ 0,5		EN 12087
Water vapour transmission by diffusion	ng/Pa.s.m	Mui/Zi	47	30-70	30-70	30-70		EN 12086
Reaction to fire	class	RF	E	E	E	E		EN 11925-2:2002
Bulk density	kg/m ³	-	16-18	18-20	20-22	23-25		EN 1602
Linear expansion coefficient	K-1	-	0.05x10 ⁻³	0.05x10 ⁻³	0.05x10 ⁻³	0.05x10 ⁻³		-

The data provided in the present table refers to the naked panel without anything bonded to it. The information provided in the data sheet are to our current best knowledge. Pluvitec reserves the right to modify the nominal values without notice. The purchaser must establish under his own responsibility the suitability of the product for the foreseen usage.