

### RIGID FOAM



The Isolparma EPS Retrofit Board is an insulating and waterproofing roofing component made of an Expanded Polystyrene Board cut to shape from blocks, torch-bonded in a factory controlled environment to a polymer-modified bituminous membrane of choice

#### Production range

The Isolparma EPS Retrofit Board can be supplied with different corrugation shapes at the lower side, and/or with various types of insulation board (EPS 100, EPS 150 and EPS 200), torch-bonded to an APP- or an SBS-polymer modified bituminous waterproofing membrane of choice for type of carrier, thickness or unit weight and surface finish (see technical data overleaf).

#### Main applications




Retrofit thermal insulation and base sheet waterproofing of industrial roofs of corrugated fibre cement.

#### Specification wording

The insulation and the waterproofing base sheet will consist of a layer of Isolparma EPS Retrofit Board, lower face with corrugation profile.....  
EPS board type .... lined with a polymer bitumen membrane (type) .....

#### Sizes and packaging

Isolparma EPS Retrofit Boards are available in standard sizes as listed below.

Type of EPS board and dimensions	Mean thickness mm	Thickness on corrugation top mm	Boards per pallet
 7 corrugations: pitch 146 – height 48 - mm 1054 x 1000	55	30	22
	65	40	20
	75	50	18
	85	60	14
	95	70	12
	105	80	12
	115	90	10
	125	100	10
 6 corrugations: pitch 177 – height 51 - mm 1085 x 1000	55	30	22
	65	40	20
	75	50	18
	85	60	14
	95	70	12
	105	80	12
	115	90	10
	125	100	10
 5 corrugations: pitch 177 – height 51 - mm 910 x 1000	55	30	22
	65	40	20
	75	50	18
	85	60	14
	95	70	12
	105	80	12
	115	90	10
	125	100	10



Retrofit EPS boards can also be profiled on client's sample. Limitations and minimum quantities apply

## EPS RETROFIT

#### Main applications



Corrugated roofs

#### CE marking



Polystyrene Foam Insulation (EPS)



Polymer Bitumen Membrane

Laboratory tests have compared the thermal transmittance values of standard flat boards, of rolls of scored boards and of cut-in boards. When correctly installed, all three types show comparable values except for minor variations.

**isolparma****RIGID FOAM****Insulating and Waterproofing Roofing Board****EPS RETROFIT****TECHNICAL DATA SHEET BOARD OF POLYSTYRENE FOAM**

UNI EN 13163

Properties	Code	Norm	Description	EPS Class			Unit	
				100	150	200		
Density				19 - 20	25	30 - 32	kg/mc	
Declared heat conductivity	$\lambda_D$	UNI EN 12667	value measured at a mean temperature of 10 °C	$\leq 0,035$	$\leq 0,034$	$\leq 0,033$	W/mK	
Declared heat resistance	$R_D$	UNI EN 12667	related to thickness $R_D=d/\lambda_D$	mm 30	0,86	0,88	0,91	(m <sup>2</sup> K)/W
				mm 40	1,14	1,18	1,21	
				mm 50	1,43	1,47	1,52	
				mm 60	1,71	1,76	1,82	
Resistance to compression	CS(10/Y)	UNI EN 826	compression to 10% of thickness	$\geq 100$ CS(10)100	$\geq 150$ CS(10)150	$\geq 200$ CS(10)200	KPa	
Resistance to flexibility	BS	UNI EN 12089		$\geq 150$ BS150	$\geq 200$ BS 200	$\geq 250$ BS 250	KPa	
Dimensional stability	DS(N)	UNI EN 1603	test conditions (23 °C - 50% U.R.)	$\pm 0,5$ DS (N) 5	$\pm 0,5$ DS (N) 5	$\pm 0,5$ DS (N) 5	%	
Fire rating	euroclasse	UNI EN 13501-1		E	E	E		
Specific heat		UNI EN 12524		1450	1450	1450	J/(KgK)	
Resistance to water vapour diffusion	MU	UNI EN 12086		30-70	30-70	40-100	$\mu$	
Water absorption	WL(T)	UNI EN 12087	total immersion for 28 days	$\leq 3$ WL(T) 3	$\leq 3$ WL(T) 3	$\leq 3$ WL(T) 3	% volume	
Thickness tolerance				75	75	75	°C	

**TECHNICAL DATA SHEET OF THE POLYMER BITUMEN MEMBRANES**UNI EN 13707  
UNI EN 13859-1

Properties	Norm	Description	TYPES OF MEMBRANE AND CARRIERS										Unit
			APP VV	APP VV	APP PE	APP PE	APP PE	APP PE	APP PE Min	APP PE Min	APP PE Min	SBS PE	
Mass	UNI EN 1849-1		2	3	-	-	3	4	3,5	4	4,5	3	Kg/m <sup>2</sup>
Thickness	UNI EN 1849-1		-	-	3	4	-	-	-	-	-	-	mm
Tensile Strength	UNI EN 12311-1	Longitudinal	300	300	400	400	400	400	400	400	400	400	N/5 cm
		Transversal	200	200	300	300	300	300	300	300	300	300	
Elongation at break	UNI EN 12311-1	Longitudinal	2	2	35	35	35	35	35	35	35	35	%
		Transversal	2	2	35	35	35	35	35	35	35	35	
Tear resistance	UNI EN 12310-1	Longitudinal	70	70	130	130	130	130	130	130	130	130	N
		Transversal	70	70	130	130	130	130	130	130	130	130	
Cold flexibility	UNI EN 1109		0	0	-5	-5	-5	-5	-5	-5	-5	-10	°C
Heat resistance	UNI EN 1110		110	110	110	110	110	110	110	110	110	90	°C

APP = Atactic Polypropylene ; SBS = Styrene butadiene styrene; VV = glass fibre reinforcement; PE = polyester reinforcement; MIN = slate finish

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