



## ISOROLL MW

### Main applications



Flat roofs with exposed waterproofing layer



Pitched roofs below tiles or slates



Shed roofs



Prefabricated R.C. roofs elements



Vaulted roofs

### CE marking



Mineral Wool Insulation (MW)



Polymer Bitumen Membrane

ISOROLL MW is an insulating and waterproofing roofing roll made of a scored Mineral Wool board torch-bonded in a factory controlled environment to a polymer modified bituminous waterproofing membrane

### Production Range

ISOROLL MW is available with different classes of insulation board (MW 100, MW 120 and MW 150) 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

Thermal insulation and waterproofing of most civil and industrial flat roofs and other constructions.

### Specification wording

The insulation and the waterproofing will consist of a layer of ISOLPARMA ISOROLL MW with scored Mineral Fibre board (type...) ... mm thick, lined with a polymer bitumen membrane (type ) .....

### Sizes and packaging

ISOROLL MW is available in rolls 100 cm or 120 cm wide with a side selvedge of 5 to 10 cm. Rolls are packed in PE bags on pallets (4 rolls/pallet). Roll length varies with the thickness of the insulating material (see table).

MW Thickness mm	Rooll sizes m
30	7,5 x 1 o 1,2
40	6 x 1 o 1,2
50	5 x 1 o 1,2
60	4 x 1 o 1,2
80	3 x 1 o 1,2
100	2 x 1 o 1,2

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.


**SPECIFICATION WORDING**

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**TECHNICAL DATA SHEET OF THE MW BOARD**
**UNI EN 13162**

Properties	Code	Norm	Description	Classes MW			Unit	
				100	120	150		
Declared heat conductivity	$\lambda_D$	UNI EN 12667	value measured at a mean temperature of 10 °C	0,035	0,037	0,038	W/mK	
Declared heat conductivity	$R_D$	UNI EN 12667	related to thickness $R_D=d/\lambda_D$	mm 30	0,86	0,81	0,79	(m <sup>2</sup> K)/W
				mm 40	1,14	1,08	1,05	
				mm 50	1,43	1,35	1,32	
				mm 60	1,71	1,62	1,58	
				mm 80	2,29		2,11	
				mm 100			2,63	
Specific heat	Cp			840	840	840	J/kgK	
Resistance to compression	$\sigma_{10}$	UNI EN 6350		0,025	0,048	0,072	N/mm <sup>2</sup>	
Resistance to water vapour diffusion	MU	UNI EN 12086		1,3-1,4	1,3-1,4	1,3-1,4	$\mu$	
Water absorption by immersion	WL(T)	UNI EN 12087		≤ 2	≤ 2	≤ 2	% volume	
Fire rating	euroclass	UNI EN 13501-1		A1	A1	A1		

**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

Technical Data Sheet issued in November 2007