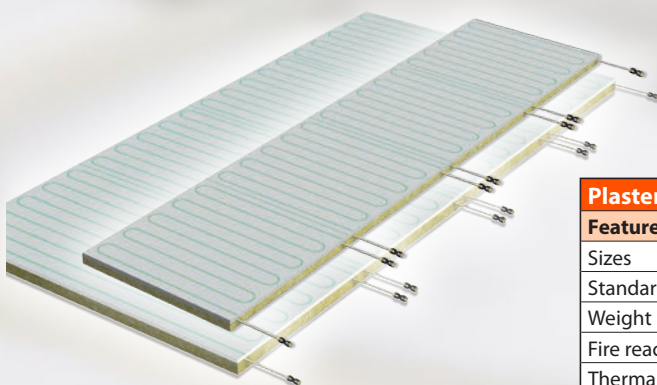


RADIANT PANEL MADE OF PLASTERBOARD WITH INSULATING ROCKWOOL



b!klimax+ radiant panels are made up of plasterboard and a insulation layer of rockwool. The plasterboard shows a drawing of the hydraulic circuits. b!klimax+ radiant panels contain 4 hydraulic circuits, made of PE-HDXc pipe Ø 6 mm with anti-oxygen barrier according to DIN 4726 and provided with push-fit fittings. Pipes are fixed to the panel through an aluminium metal diffuser, while thermal insulation is represented by a layer of rockwool, thickness 40 mm and density 165 Kg/m³, specifically designed to accommodate PB pipes.



Radiant Panel	Weight (Kg)	Code
Radiant panel 600x2400	24,8	6142260
Radiant panel 1200x2400	49,6	6142200

Plasterboard Panel				
Feature	600	1200	Unit	Standard
Sizes	600x2400	1200x2400	mm	
Standard thickness	12,5		mm	
Weight	9,20		Kg / m ²	
Fire reaction Class	A2-s1,d0			EN13501-1
Thermal conductivity	0,21		W / (m · K)	EN ISO 10456
Water vapour diffusion resistance factor	μ dry: 10, humid: 4			EN ISO 10456

Rockwool Panel					
Feature		600	1200	Unit	Standard
Size of insulating panel		600x2400	1200x2400	mm	UNI 822
Standard thickness		40		mm	UNI 823
Declared thermal conductivity	λd	0,040		W/(m • K)	UNI EN 12667, 12939
Thermal resistance	Rd	1		(m² • K)/W	
Resistance to compression 10%	σ ₁₀	70		kPa	UNI EN 826
Resistance to point load	F _p	600		N	UNI EN 12430
Tensile bond strength:	σ _{mt}	15		kPa	UNI EN 1607
Water vapour diffusion resistance factor	μ	1			UNI EN 12086
Short term water absorption by partial immersion	Ws	< 1		kg/m²	EN 1609
Long term water absorption by immersion	Wl(p)	< 3		kg/m²	EN 12087
Specific heat	C _p	1030		J / (KgK)	UNI EN 10456
Density	ρ	165		Kg / m³	UNI EN 1602
Reaction to fire	Euroclass	A1			UNI EN 13501-1
Declaration according to UNI EN 13162	MW-EN 13162 T5-CS(10/Y)70-PL(5)600-TR15-DS(TH)-DS(T+)-MU1-WS-WL(p)				

PE-HDXc pipe								
Outer diameter (mm)	Thickness (mm)	S-value	SDR-value	CLASS 4		CLASS 5		Water Content (l/m)
6	1	2.5	6	T _{MAX} 60 °C	10 bar	T _{MAX} 80 °C	10 bar	0,013
S = nominal pipe serial number according to ISO 4065. SDR = standard dimension ratio, allocation of SDR values, according to DIN 16893 and/or DIN EN ISO15875-2								

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Feature		Value	Unit	Reference law
Degree of cross-linking	23°C	≥ 60	%	DIN 16892
Density	23°C	≈ 0,94	g/cm ³	DIN 16892/DIN 53479
Flexural impact strength according to Charpy	23°C	no failure	kJ/m ²	DIN EN ISO 179-1/2
Tensile strength	23°C	24 ÷ 30	N/mm ²	DIN EN ISO 6259-1
Tenacity	23°C	24 ÷ 26	N/mm ²	DIN EN ISO 6259-1
Elongation at break	23°C	400 ÷ 600	%	DIN EN ISO 6259-1
Elastic modulus (Emodule)	23°C	600 ÷ 800	N/mm ²	DIN 16892/DIN EN ISO 128
Stress crack resistance		no failure		ASTM D 1693
Moisture absorption		<0,01	mg (4d)	DIN EN ISO 62
Coefficient of linear expansion	0°C – 70°C	1,5 · 10 ⁻⁴	1/K	DIN 16892 / DIN 53752
Thermal conductivity		≤ 0,41	W/(K · m)	DIN 16892 / DIN EN 12664
Smallest bend radius		≥ 5 · D	mm	DIN 4726
Oxygen tightness	40°C	≤ 0,32	mg/(m ² · d)	DIN 4726

