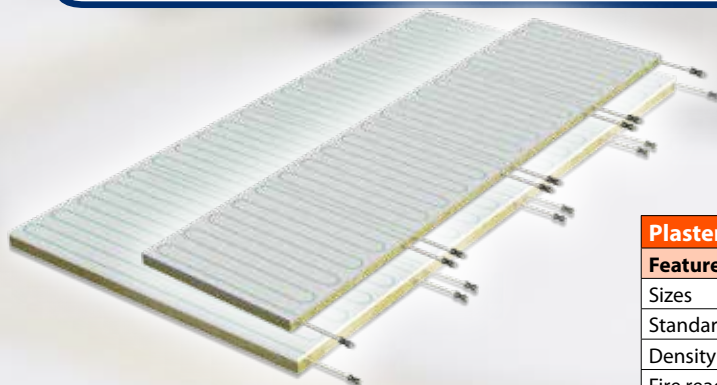


RADIANT PANEL MADE OF PLASTERBOARD WITH INSULATING ROCKWOOL



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 PB pipe O 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	23.8	6142260
Radiant panel 1200x2400	47.6	6142200

Plasterboard Panel				
Feature	600	1200	Unit	Standard
Sizes	600x2400	1200x2400	mm	
Standard thickness:	12.5		mm	
Density	760		Kg / m ³	
Fire reaction	A2-s1,d0			
Thermal conductivity	0.20		W / (m . K)	
Water vapour diffusion	10			EN 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	λ_d	0.040	W/(m · K)	UNI EN 12667, 12939
Thermal resistance	R_d	1	(m ² · 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	W_s	< 1	kg/m ²	EN 1609
Long term water absorption by immersion	$W_l(p)$	< 3	kg/m ²	EN 12087
Specific heat	C_p	1030	J / (KgK)	UNI EN 10456
Density	ρ	165	Kg / m ³	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)			

PB pipe		
Application field	CLASS 4	For use with hot and cold water (T _{max} 60 °C)
	CLASS 5	For use with hot and cold water (T _{max} 80 °C)

Outside diam. (mm)	Thickness (mm)	Weight (g/m)	CLASS 4 (bar)	CLASS 5 (bar)	Water content (l/m)
6	1	15.4	10	10	0,013

Pipe Feature	Value	Unit	Reference law
Standard			DIN 16968
Permeability to oxygen	≤ 0.32	mg O ₂ / (m ² · d)	DIN 4726
Degree of crosslinking	≥ 70	%	
Density	0.920	g/cm ³	ISO 1183
Thermal expansion coefficient at 20 °C	1.3 · 10 ⁻⁴	m/(m·K)	
Thermal conductivity	0.22	W/(m·K)	
Softening temperature	> 130	°C	
Elongation at tear at 20 °C	> 300	%	ISO 8986-1
Ultimate Tensile Stress at 20 °C	19	MPa	ISO 8986-2
Roughness factor	0.0005		

