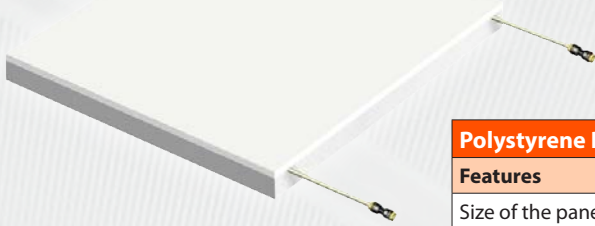


RADIANT PLASTERBOARD QUADROTTO 600X600 WITH INSULATING POLYSTYRENE

B!klimax+ plasterboard Quadrotto consists of a 9-mm thick non-perforated plasterboard, white colour RAL 9003 with high light reflectance and acoustic reverberation performance. One hydraulic circuit, made of PE-HDXc pipe Ø 6 mm with push-fit fittings and oxygen barrier according to DIN 4726, is fixed to the panel through an aluminium metal diffuser. Size 600x600x50 mm.



Radiant Plasterboard Quadrotto	Weight (Kg)	Code
Radiant Plasterboard Quadrotto 600x600	3.7	6140500

Polystyrene Panel				
Features		600	Unit	Standard
Size of the panel		593x593	mm	UNI EN 822
Standard thickness		40	mm	UNI EN 823
Thickness of the insulating base		34	mm	UNI EN 1264-3
Equivalent total thickness		37.0	mm	UNI EN 1264-3
Bending strenght	BS	170	kPa	UNI EN 12089
Compressive stress at 10% deformation	CS(10)	120	kPa	UNI EN 826
Thermal conductivity at 10 °C	λ_d	0.035	W/(m · K)	UNI EN 12667
Thermal resistance	Rd	1.05	(m ² · K)/W	UNI EN 12667
Thermal transmittance	U	0.95	W/(m ² · K)	
Water vapour diffusion resistance factor	μ	30 ÷ 70		UNI EN 12086
Water vapour permeability	δ	0.009 ÷ 0.020	mg/(Pa · h · m)	UNI EN 12086
Dimensional stability at 48h and 70 °C	DS(70,-)	1	%	UNI EN 1604
Long term water absorption by partial immersion	Wlp	0.5	Kg / m ²	UNI EN 12087
Long term water absorption by total immersion	WI(T)	≤3	%	UNI EN 12087
Reaction to fire	Euroclasse	E		EN ISO 11925-2
Limit of operating temperature		70	°C	
Declaration according to UNI EN 13163	T1-L3-W2-S2-P5-BS170-CS(10)120-DS(70,-)1-WL(T)3-MU(30-70)			

Plasterboard Panel		
Feature	Panel	Unit
Sizes	600x600	mm
Standard thickness	9.5	mm
Reaction to fire	A2-s1,d0	
Thermal conductivity λ	0.2108	W/(m · K)

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 ISO 15875-2

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

