CHEMA FOAM
BUILD YOUR DREAM

CHEMA WHITE

CHEMA WHITE is expanded polystyrene foam used for multi applications such as Expansion joint, void filling & wall thermal insulation.



APPLICATIONS

- Thermal insulation for roofs, walls, and floors
- Lightweight expansion joint filler in concrete structures
- Insulation for refrigerated trucks, containers, and mobile cooling systems
- Packaging and Protection Solutions
- Floor leveling & lightweight fill applications

KEY FEATURES

- Classified according to ***the specification ASTM C578***
- saves electricity power up to 40%.
- Easy Handling and Installation.
- Excellent Thermal Insulation.
- Dimensionally Stable.

SAFETY PRECAUTIONS

- CHEMA WHITE boards are breakable.
- Keep away from sparks and flame.
- Avoid strong oxidizing agents and aromatic solvents.
- avoid stacking on the edge of the product.

CHEMA WHITE

PHYSICAL & MECHANICAL PROPERTIES

Property	Test Method	10 kg/m³	12 kg/m³	15 kg/m³	20 kg/m³	25 kg/m³	30 kg/m³	35 kg/m³	Unit
Compressive Strength (%10)	ASTM D1621	≥35	≥50	≥80	≥110	≥165	≥210	≥240	kPa
Flexural Strength	ASTM C203	≥100	≥130	≥180	≥280	≥340	≥430	≥520	kPa
Tensile Strength	EN 1607	≥60	≥80	≥100	≥120	≥150	≥180	≥200	kPa
Dimensional Stability	EN 1604	≤2	≤2	≤2	≤2	≤2	≤2	≤2	%

THERMAL PROPERTIES

Property	Test Method	10 kg/m³	12 kg/m³	15 kg/m³	20 kg/m³	25 kg/m³	30 kg/m³	35 kg/m³	Unit
Thermal Conductivity (λ)	ASTM C518	≤0.041	≤0.040	≤0.039	≤0.037	≤0.035	≤0.034	≤0.033	W/m·K
Thermal Resistance (50 mm)	EN 12667	1.22	1.25	1.28	1.35	1.42	1.47	1.52	m^2·K/W
R-Value (50 mm)	ASTM C518	6.9	7.1	7.3	7.7	8.1	8.3	8.6	–
Specific Heat Capacity	EN 12524	1450	1450	1450	1450	1450	1450	1450	J/kg·K
Maximum Service Temperature	–	74	74	74	74	74	74	74	°C

MOISTURE PROPERTIES

Property	Test Method	10 kg/m³	12 kg/m³	15 kg/m³	20 kg/m³	25 kg/m³	30 kg/m³	35 kg/m³	Unit
Water Absorption	ASTM C272	≤1.8	≤1.5	≤1.25	≤0.95	≤0.70	≤0.60	≤0.50	% vol
Water Vapor Diffusion Resistance	EN 12086	40–20	70–30	70–30	80–40	80–40	100–40	120–40	μ
Water Absorption by Immersion	EN 12087	≤3	≤3	≤3	≤3	≤3	≤3	≤3	% vol

FIRE PERFORMANCE

Property	Test Method	Result
Flame Spread Index	ASTM E84	≤75
Smoke Developed Index	ASTM E84	≤450
Single Flame Test	EN ISO 2-11925	Pass (<150 mm flame height)
Reaction to Fire	ASTM E84	Class B

NOTE: Kpa = 0.01 ton/m^2
Related to thicknes (RD = d/D)
GIVEN THICKNESS = 50 mm