

KARRU Built - EPS Cement Panel Technical Specifications

Panel Dimensions

- Width: 610 mm
- Length: 2440 mm
- Thickness Options: 50, 75, 100, 125, 150 mm
- Tolerance: +/- 0.5 mm

Material Properties

- Density: 1,100 to 1,300 kg/m³
- Thermal Conductivity: ≤ 0.30 W/m.K
- R-Value Estimate: Up to approx. 3.6 m².K/W
- Moisture Content: $\leq 10\%$
- Wet Expansion: $\leq 0.2\%$
- Frost Resistance: -30 C

Structural Performance

- Bending Strength: ≥ 12 MPa (EMC)
- Modulus of Elasticity: 7100 +/- 500 MPa (Wet)
- Compressive Strength: ≥ 3.5 MPa
- Flexural Load Capacity: $\geq 1,000$ N
- Shock Resistance: ≥ 5 sandbags impact

Fire, Sound & Environmental

- Fire Resistance: ≥ 4 hours @ 1000 C, A-class non-combustible
- Sound Insulation (STC): $\geq 40-50$ dB depending on thickness
- Seismic Resistance: Tested up to Richter scale 8
- Waterproof & Shrinkage: Dry shrinkage ≤ 0.5 mm/m
- Panel Lifespan: $\geq 60-70$ years
- Installation Speed: Up to 3x faster than brick/block

Applications

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- Use Cases: Residential, Commercial, Educational, Medical, Warehousing, Utility Units, Eco-Homes, Tanks