

Wall & Ceiling PANEL



Innovative Thermal Technology in a wall and ceiling Panel

Our ThermaCool® panel incorporates phase change material to provide a complete construction board for light weight systems that absorb, store and release excess latent heat from within the building, as well as stabilising the moisture content within the room.

The ThermaCool® panel offers an easy to install, cost effective and lightweight thermal mass solution.

| DETAIL | VALUE |
|--|--|
| Product Code: | TCWP418-26 |
| Composition: | Natural mined gypsum (Calcium Sulphate Bihydrate – CaSO ₄ 2H ₂ O) with reinforced glass fibres and incorporating an organic microencapsulated phase change material. |
| Latent Heat Capacity / Total Heat Capacity: | 302.6 kJ/m ² (LH) / 418.6kJ/m ² (TH) |
| Dimensions: | 600mm x 1000mm |
| Thickness: | 25mm |
| Weight: | 11.85 kg per panel / 19.75 kg/m ² |
| Edge Profile: | Tongue and Groove |
| Surface Finish: | Smooth with tapered edges to face side |
| Reaction to Fire (Test Standard EN13501-1): | Euroclass B (s2, d0) |
| Thermal Conductivity: | λ 0.35W/mK |
| Density: | Approx. 1000 – 1100kg/m ³ |
| Flexural Strength: | 8.8kg/cm ² |
| Hardness (Shore): | D 45 - 55 |
| Load Strength: | Max. 30kg (using nylon hammer fixing 8/45mm) Resistance to eccentric vertical loads: Loading using category A |
| Adhesive Strength: | > 0.25 N/mm ² |
| Water Vapour Diffusion Resistance: | μ 5.6 / 4.5 |

| Equivalent Thickness of Building Material | Specific Heat Capacity [J/(kg)] | Density [kg/dm ³] | Required thickness of building material [mm] |
|---|---------------------------------|-------------------------------|--|
| ThermaCool TCWP418-26 Panel | | | 25.0 |
| Concrete | 1 | 2 | 69.8 |

