

## Acoustic Ceiling Tile

Innovative Thermal Technology in a suspended ceiling.

Our ThermaCool<sup>®</sup> ceiling tile incorporates phase change material to provide a complete suspended ceiling 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<sup>®</sup> tile offers an easy to install, cost effective and lightweight thermal mass solution with combined acoustic performance.

DETAIL	VALUE	
Product Code:	TCP418-PA24	
Composition:	Natural mined gypsum (Calcium Sulphate Bihydrate – CaSO <sub>4</sub> 2H <sub>2</sub> O) with reinforced glass fibres and incorporating an organic microencapsulated phase change material.	
Total Heat Capacity:	418kJ/m2	
Dimensions:	600mm x 600mm	
Thickness:	16mm	
Weight:	4.4kg per panel / 12.5kg/m <sup>2</sup>	
Edge Profile:	Square	
Surface Finish:	Perforated	
Acoustic Performance (EN ISO 354:2004):	Class C (alpha <sub>w</sub> = 0.45 (L), Class D $/$ alpha <sub>w</sub> = 0.7 (C), Class C )	
Reaction to Fire (Test Standard EN13501-1):	Euroclass B (s2, d0)	
Thermal Conductivity:	λ 0.35W/mK	
Humidity Resistance:	10μ (dry), 4μ (dry)	
Installation:	To be installed into ThermaCool 24mm Clic-In ceiling grid. Main runners installed at 600mm centres with support hangers at 800mm centres along the main runner.	
Light Reflection:	75% - 80%	
Clean ability:	Periodic cleaning with a vacuum and wet wiped with a damp cloth. In extreme cases the tiles can be painted.	
Tolerances:	Thickness: +/- 2mm Length: +/- 1mm Diagonal: +/- 1mm	

Equivalent Thickness of Building Material	Specific Heat Capacity [J/(kg)]	Density [kg/dm <sup>3</sup> ]	Required thickness of building material [mm]
ThermaCool TCP418-PA24			24.0
Concrete	1	2	69.8

