



# ThermaCool®

PHASE CHANGE TECHNOLOGY

## Acoustic Medical Hygienic Ceiling Tile

### ThermaCool® Phase Change Materials

ThermaCool® Composite Ceiling Tiles incorporate Phase Change Materials. PCMs absorb, store and release excess latent heat and add lightweight thermal mass to the building.

### ThermaCool® Medical Hygienic Acoustic Tile

ThermaCool® Medical Hygienic Acoustic tile is a Square edge or Tegular tile installed in our Clic In modular grid 24mm or 15mm. Suitable for dry areas where disinfection and / or cleaning is resistant to mould and bacteria growth and to common detergents and disinfectants.

### System Range

Product Code	TCPM227 PA24
Total Heat Capacity	227kJ/m <sup>2</sup>
Tile Size	600mm x 600mm
Modular Grid	ThermaCool Clic In. 24mm or 15mm.
Thickness	30mm.
Edge Detail	Square Edge, Tegular.
Acoustic Performance	Class A absorption. EN150 354.
Reaction to Fire	A2. s1. d0. EN13501.1
Light Reflection	84%

## Equivalent Thickness:

Equivalent Thickness of Building Material	Specific Heat Capacity [J/(kg)]	Density [kg/m <sup>3</sup> ]	Required thickness of building material [mm]
ThermaCool TCPM418 PA24			16.0
Concrete	1	2	34.2

1m<sup>2</sup> of ThermaCool is equal to 81.6kg of concrete with a density of 2400kg/m<sup>3</sup>. Equivalent to 42 bricks

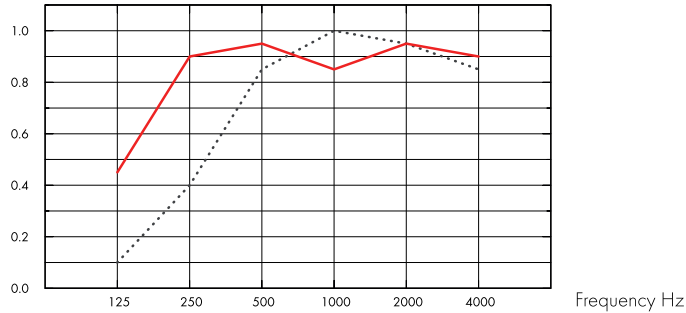
## Acoustic



### Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654.

$\alpha_p$ , Practical sound absorption coefficient



.... ThermaCool® Medical 30mm, 200mm  
 - ThermaCool® Medical 30mm, 50mm o.d.s  
 o.d.s = overall depth of system

THK mm	o.d.s. mm	$\alpha_p$ , Practical sound absorption coefficient						$\alpha_w$	Sound absorption class
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz		
30	50	0.10	0.40	0.85	1.00	0.95	0.85	0.70	C
30	200	0.45	0.90	0.95	0.85	0.95	0.90	0.95	A

THK mm	o.d.s. mm	NRC	SAA
30	50	0.80	0.83
30	400	0.85	0.89

## Indoor Air Quality



Certificate / Label

Eurofins Indoor Air Comfort®

IAC Gold

French VOC

A+



## Cradle to Cradle Certified®



This product is Cradle to Cradle Certified® at Bronze level (version 4.0).



## Material Health



This product has received a C2C Certified Material Health Certificate™ at the Silver level (standard version 4.0). The C2C Certified Material Health Certificate™ is a verification of the health and safety of a product's composition using the Material Health requirements of the Cradle-to-Cradle Certified Product Standard.



## Carbon footprint

	kg CO <sub>2</sub> equiv/m <sup>2</sup>	Life-cycle stages A1 to C4 from EPD, in conformity with ISO 14025 / EN 15804
Medical Hygenic	2,71	



## Circularity

Minimum post-consumer recycled content	44%
Recyclability	Fully recyclable



## Fire safety

Country	Fire standard	Class	The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182.
Europe	EN 13501-1	A2-s1,d0	



## Humidity Resistance

Class C, relative humidity 95% and 30°C, according to EN 13964:2014



## Visual appearance

White 500, nearest NCS colour sample S 0500-N, 84% light reflectance.



## Cleanability

Standard/Method	Frequency
Dusting	Daily
Wet wiping	Daily
Steam cleaning	1/year
Hydrogen peroxide vapor	•



## Surface Endurance

Product tested according to ISO 11998, and withstand 200 cycles.

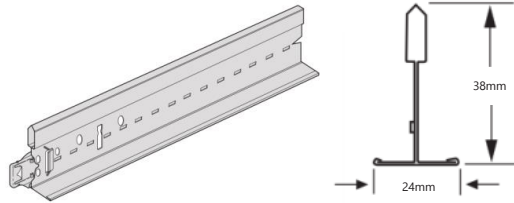


## Chemical resistance/Disinfection

Chemical	Active Substance	Concentration	Tested according to ISO 11998 and withstand the following chemicals or disinfectants.
Ethanol	Ethanol	70%	
Chlorine	Sodium Hypochlorite solution	2,5%	
Virkon S	Dipotassium peroxodisulphate; Sulphamic acid	1%	
Isopropanol	Isopropyl Alcohol	70%	

**Exposed 24mm grid system**

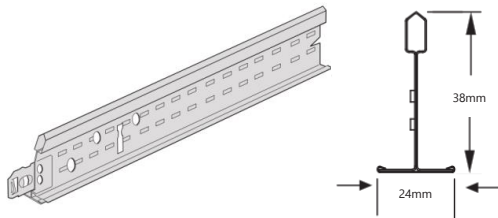
**ThermaCool® Profiles 24 Main Runner**



Product Code	Dimensions		Content / Carton		Weight / Carton (kg)
	Length (mm)	Height (mm)	pcs	lm	
T24370	3700	38	25	92.50	32

European Fire Resistance Classification: A2, S1-d0  
Durability Classification: Class B

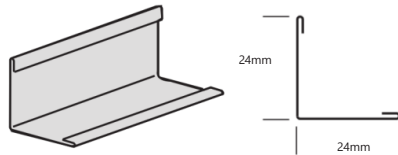
**ThermaCool® Profiles 24 Cross Tees**



Product Code	Dimensions		Content / Carton		Weight / Carton (kg)
	Length (mm)	Height (mm)	pcs	lm	
T24120	1200	32	75	90.00	26
T24060	600	32	75	45.00	13

European Fire Resistance Classification: A2, S1-d0  
Durability Classification: Class B

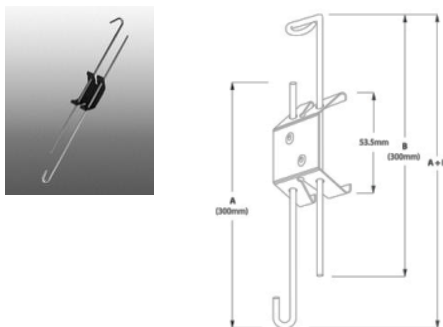
**ThermaCool® Profiles 24 Perimeter Angle**



Product Code	Dimensions		Content / Carton		Weight / Carton (kg)
	Length (mm)	Height (mm)	pcs	lm	
T24300	3000	24	30	90.00	15

European Fire Resistance Classification: A2, S1-d0  
Durability Classification: Class B

**ThermaCool® Profiles 24 Support Hanger**



Length of Bottom Hanger (mm) A	Length of Top Hanger (mm) B	Minimum Overall Length (mm) B	Maximum Overall Length (mm) (A+B)
250	250	250	450
300	300	300	550
300	500	500	750
300	600	600	850
300	750	750	1000
300	1000	1000	1250
300	1200	1200	1450
300	1500	1500	1750
300	2000	2000	2250
300	3000	3000	3250

**Certifications**

ThermaCool® Profiles 24 Suspended Ceiling Grid has been tested and certified to European Standard EN 13964: 2006.

ThermaCool® Profiles 24 Suspended Ceiling Grid is CE accredited.

