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	TCPM418 PA24
Total Heat Capacity	418kJ/m2
Tile Size	600mm x 600mm
Modular Grid	ThermaCool Clic In. 24mm or 15mm.
Thickness	40mm.
Edge Detail	Square Edge, Tegular.
Acoustic Performance	Class A absorption. EN150 354.
Reaction to Fire	A2. s1. d0. EN13501.1
Light Reflection	84%



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Equivalent Thickness:

Equivalent Thickness of Building Material	Specific Heat Capacity [J/(kg)]	Density [kg/m3]	Required thickness of building material [mm]
ThermaCool TCPM418 PA24			24.0
Concrete	1	2	69.8

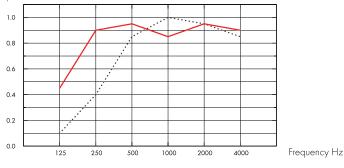
1 m2 of ThermaCool is equal to 168kg of concrete with a density of 2400kg/m3. Equivalent to 84 bricks

Acoustic

Sound Absorption:

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

 $\alpha_{
m p'}$ Practical sound absorption coefficient



- ···· ThermaCool® Medical 40mm, 200mm
- ThermaCool® Medical 40mm, 50mm o.d.s
 o.d.s = overall depth of system

ТНК	o.d.s. mm		$lpha_{p'}$ Pr	actical soun	d absorption c	coefficient		α_{w}	Sound absorption class
mm	0.0.3. 1111	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	~w	
40	50	0.10	0.40	0.85	1.00	0.95	0.85	0.70	С
40	200	0.45	0.90	0.95	0.85	0.95	0.90	0.95	A

THK mm	o.d.s. mm	NRC	SAA
40	50	0.80	0.83
40	400	0.85	0.89



Indoor Air Quality

Certificate / Label		goon AIR COMPO	
Eurofins Indoor Air Comfort®	IAC Gold	RATIFIED PROB	
French VOC	A+		



Cradle to Cradle Certified®

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

Material Health

CERTER

CERTIFIED

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 CO2 equiv/m²	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		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

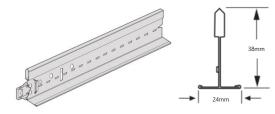
	Chemical	Active Substance		Tested according to ISC following chemicals or c
J	Ethanol	Ethanol	70%	
	Chlorine	Sodium Hypochlorite solution	2,5%	
	Virkon S	Dipotassium peroxodisulphate; Sulphamidic acid	1%	
	Isopropanol	Isopropyl Alcohol	70%	

ested according to ISO 11998 and withstand the Ilowing chemicals or disinfectants.

ChermaCool[®] Profiles 24

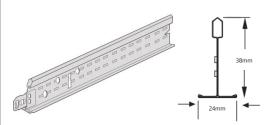
Exposed 24mm grid system

ThermaCool® Profiles 24 Main Runner



Product.Code	Dimensions		Content / Carton		Weight / Carton
Product.Code	Length (mm)	Height (mm)	pcs	lm	(kg)
T24370	3700	38	25	92.50	32
			European Fire	Resistance Cla	assification: A2, S1-d0
				Durability	Classification: Class B

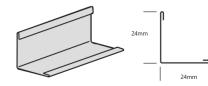
ThermaCool® Profiles 24 Cross Tees



	Dimensions		Content / Carton		Weight / Cartor
Product.Code	Length (mm)	Height (mm)	pcs	lm	(kg)
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

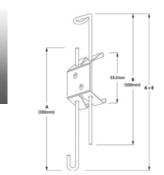
ThermaCool® Profiles 24 Perimeter Angle



Product.Code	Dimensions		Content / Carton		Weight / Carton		
	Length (mm)	Height (mm)	pcs	lm	(kg)		
T24300	3000	24	30	90.00	15		
			Europear	European Fire Resistance Classification: A2, S1-de			
			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. CE