

## Technical Data Sheet

# GT



### Description

GT is a high performance insulation sandwich board made with GT, a rigid polyisocyanurate polyiso foam core, blown without the use of CFC or HCFC. Each side is covered with Duotwin® facing.

### Main Applications

Insulation of roofs  
Insulation of floors  
Insulation of walls

### Characteristics and performance

Characteristics [Standard]	Description	Symbol [Units]	Value									
			Some characteristics depend on the thickness (mm)									
			20	30	40	50	60	70	80	90	100	120
Average initial thermal conductivity [EN 12667]	Value determined at 10 °C	$\lambda_{90/90,1}$ [W/mK]	0.022									
Declared thermal conductivity [UNI EN 13165 annex A & C]	Value determined at 10 °C	$\lambda_D$ [W/mk]	0.024									
Declared thermal transmittance	$U_D = \lambda_D / d$	$U_D$ [W/m <sup>2</sup> K]	1.20	0.80	0.60	0.48	0.40	0.34	0.30	0.27	0.24	0.20
Declared thermal resistance	$R_D = d / \lambda_D$	$R_D$ [m <sup>2</sup> K/W]	0.83	1.25	1.67	2.08	2.50	2.92	3.33	3.75	4.17	5.00
Compressive strength [EN 826]	Value determined at 10% deformation	$\sigma_{10} @ \sigma_m$ [kPa] (Tons/m <sup>2</sup> )	150 (15)	150 (15)	140 (14)	150 (15)	150 (15)	150 (15)	130 (13)	130 (13)	130 (13)	130 (13)
Dimensional stability under specified temperature and humidity [EN 1604]	48h (±1) to 70°C (±2) at 90% UR (±5)	DS(TH) [% dimensions]	1	1	1	1	1	1	1	1	1	1
		[% thickness]	4	4	4	4	4	4	4	4	4	4
	48h (±1) to -20°C (±3)	[% dimensions]	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
		[% thickness]	1	1	1	1	1	1	1	1	1	1
Nominal thickness [EN 823]		$d_N$ [mm]	production from 20 to 120 mm									

Board density	Average value with facing characteristics	$\rho$ [Kg/m <sup>3</sup> ]	36
Euro class reaction to fire [EN 13501-1] [EN 11925 -2] [EN 13823 (SBI)]	Class	Euroclass	F
Euroclass reaction to fire [EN 11925 -2]	Foam	Euroclass	E
Specific heat capacity	Value	C <sub>p</sub> [J/kg°C]	1453
Acoustic isolation to wall [UNI EN ISO 140-3] [UNI EN ISO 717-1]	Stratigraphy: ○ 15 mm plaster ○ Brick from 12 mm ○ R <sub>w</sub> [dB] GT from 40 mm ○ Air from 10 mm ○ Brick from 8 mm ○ 15 mm plaster	R <sub>w</sub> [dB]	54
Water vapor diffusion resistance factor [EN 12086]	Value	$\mu$ (MU)	148 ± 24
Water vapor diffusion resistance [EN 12086]	Value	Z [m <sup>2</sup> /hPa]	21 ± 3
Water absorption [EN 12087]	Total immersion for 28 days	WL [%]	Less then 1% <sub>w</sub>

## Tolerances and Notes

Tolerances [UNI EN 13165]	Thickness	T2 [mm]	<50 ±2 mm	from 50 to 75 ±3 mm		>75 +5 /-2 mm
	Length and breath		< 1000 ±5 mm	from 1000 to 2000 ±7,5 mm	from 2000 to 4000 ±10 mm	> 4000 ±15 mm
Notes	Temperature range	The GT panels are used in a range of continuous temperatures normally included between -40°C and +110°C. For a short period of time they can resist to temperatures up to +200 °C, equivalent to the temperature of melt bitumen, without particular problems. Long exposures to the temperatures could cause deformations to the foam or to its coat, but without causing sublimation or fusion. Resistance to the direct flame and some other reactions to fire are characteristics connected with the kind of material (see euroclass).				
	Resistance to the torch for bituminous membrane application	The board is not usable for directly torch. For torch application use Stiferite GT3, GT4 and GT5.				
	Visual aesthetics	Any possible little areas of non-adhesion between coats and foam are originated by the production process and don't prejudice in any way the physical-mechanical properties of the panels.				

The manufacturer is certified according to UNI EN ISO 9001:2000 specifications, and all products are CE certified