THERMOTOP TECHNOLOGY S.R.L.
3 Spicului Street, 500460 Brașov
www.thermotop.ro office@thermotop.ro

THERMOTOP®
insulation system

TECHNICAL DATA SHEET THERMOTOP KP

DESCRIPTION

THERMOTOP KP – PIR insulation board with 80 g/m² kraft paper facings on both sides.

MAIN APPLICATIONS

✓ Thermal insulation of walkable, non-walkable, and green flat roofs;
✓ Thermal insulation of cold and heated floors;
✓ Thermal insulation for facades
✓ Thermal insulation of industrial roofs

TECHNICAL CHARACTERISTICS:

Characteristics (standard)	**Description**	**Symbol** (UM)	**Values** (some characteristics depend on the thickness)															
			20	30	40	50	60	70	80	90	100	120	140	150	160	170	180	200
Medium thermal conductivity [EN 12667	Value determined at 10℃	$\lambda_{90/90,I}$ [W/mK]	**0.021**															
Declared heat transfer	$U_D = \lambda_D / d$	U_D [W/m² K]	**1,05**	**0,70**	**0,53**	**0,42**	**0,35**	**0,30**	**0,26**	**0.23**	**0,21**	**0,18**	**0,15**	**0,14**	**0,13**	**0,12**	**0,12**	**0,11**
Declared thermal resistance [EN 12667]	$R_D = d/\lambda_D$	R_D [m² K/W]	**0,95**	**1,43**	**1,90**	**2,38**	**2,86**	**3,33**	**3,81**	**4,28**	**4,76**	**5,71**	**6,67**	**7,14**	**7,62**	**8,10**	**8,57**	**9,52**
Tensile strength across the faces [EN 1607]	TR 80	[kPa]	**≥80**															
Compression strength SR EN ISO 29469	Value determined at 10% deformation CS(10\Y)120	[kPa]	**≥120**															
Dimensional stability at a certain temperature and humidity [EN 1609]	48h at 70℃ DS(TH) – level 3	[% length and width	**≤2**															
	Value determined at 10℃	$\lambda_{90/90,I}$ [W/mK]	**≤6**															
Classification of reaction to fire		Euroclass	**F**															
Water Absorption [EN 1609]	Partial immersion	W_{sp} [kg/m²]	**Less than 0.1**															

Water vapour diffusion resistance factor [EN 12086]		μ	**37,52**
Flatness deviation [EN 825]	Value	W_{lp} [kg/m^2]	**≤5 for surfaces ≤ 0.75 m^2** **≤10 for surfaces > 0.75 m^2**

Tolerances and Notes

Tolerances (EN 13165)	Thickness	T2 [mm]	<50 ±2 mm	From 50 to 75 ±3 mm	>75 ±5 mm, -3 mm
	Dimensions		<1000 ±5 mm	From 1000 to 2000 ±7,5 mm	From 2001 to 4000 ± 10 mm
Notes	Stability at temperature	THERMOTOP boards are used at temperatures between -40℃ and +110℃. For short periods of time, they can resist up to 200 ℃ without problems. Long exposure to high temperatures can cause deformation of foam or faces without cause sublimation.			
	Aspect	On small portions, peeling between the faces and the foam can appear, as in some places there can be non-uniformities of the foam support resulting from the production process, without influencing in any way the physical-mechanical characteristics of the panels.			