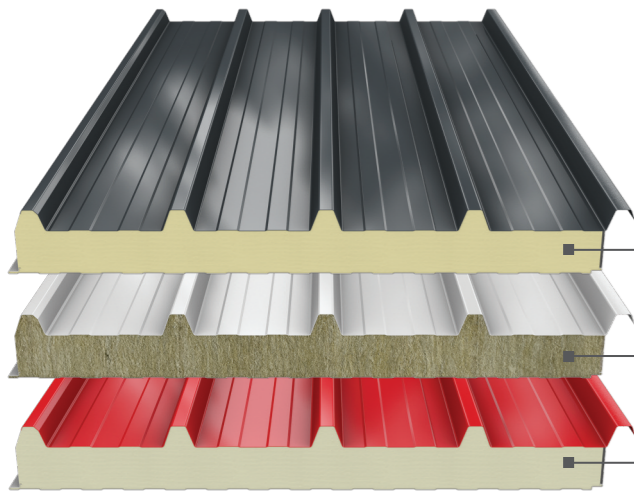


SHAPE YOUR FUTURE!

sandwich panels

TTOP / ROOF PANELS



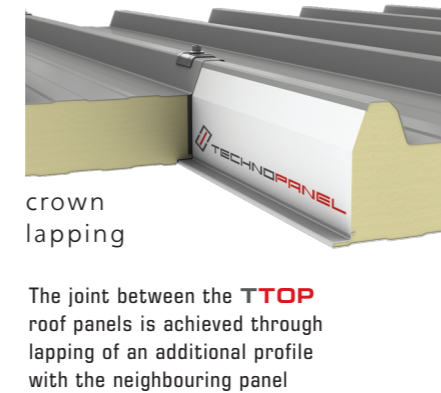
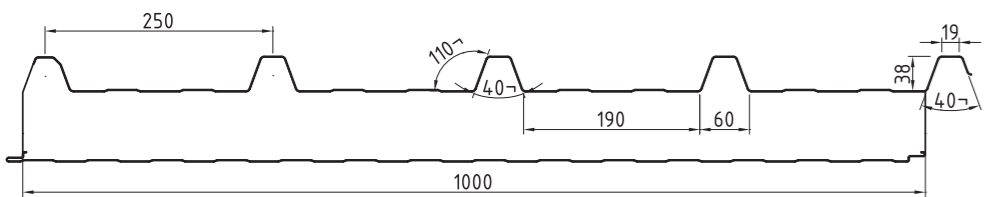
insulation cores:

PU (polyurethane)

MW (mineral wool)

PIR (polyisocyanurate)

Standard thickness range of the **TTOP** sandwich panels: **30 - 160 mm**.
Covering **WIDTH - 1000 mm**, **LENGTH between 3000 and 16000 mm**.
Suitable for roofs with slope $\geq 7\%$.

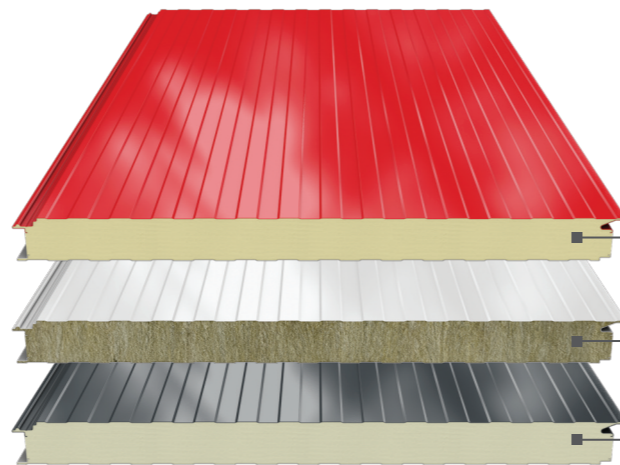


TTOP		PU insulation													
thickness of the panels	(mm)	30	40	50	60	80	100	120	150	160					
height of the rib	(mm)	38													
thickness of the steel sheet	external	(mm)													
	internal	0,40	0,40	0,40	0,40	0,40	0,40	0,40	0,40	0,40	0,40				
weight of the panel	(kg/m ²)	8,33	8,69	9,05	9,41	10,13	10,85	11,57	12,65	13,01					
thermal conductivity coefficient	W/mK	$\lambda = 0,022$ W/mK													
coefficient of thermal transmittance	U (W/m ² K)	0,67	0,51	0,41	0,35	0,26	0,21	0,17	0,14	0,13					
class of reaction to fire		Ds3, d0 // BROOF (t1)* external fire													
fire resistance	min	-	-	-	-	-	-	-	-	-					
		MW insulation													
thickness of the steel sheet	external	(mm)													
	internal	-	-	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50				
density of the insulation core	kg/m ³	100 kg/m ³													
weight of the panel	(kg/m ²)	-	-	14,56	15,56	17,56	19,56	21,56	24,56	25,56					
thermal conductivity coefficient	W/mK	$\lambda = 0,039$ W/mK													
coefficient of thermal transmittance	U (W/m ² K)	-	-	0,70	0,59	0,45	0,37	0,31	0,25	0,23					
class of reaction to fire		A2-s1, d0													
fire resistance	min	-	-	-	REI45	REI60	REI120	REI120	REI120	REI120					
		PIR insulation													
thickness of the steel sheet	external	(mm)													
	internal	-	-	0,40	0,40	0,40	0,40	0,40	0,40	0,40	0,40				
weight of the panel	(kg/m ²)	-	-	10,29	10,70	11,52	12,34	13,16	14,39	14,80					
thermal conductivity coefficient	W/mK	$\lambda = 0,022$ W/mK													
coefficient of thermal transmittance	U (W/m ² K)	-	-	0,42	0,35	0,27	0,22	0,18	0,15	0,14					
class of reaction to fire		Bs2, d0													
fire resistance	min	-	-	-	-	REI30	REI30	REI30	REI30	REI30					



ROOF PANELS • STANDARD COLOURS ACCORDING TO RAL

TFACE S / FACADE PANELS



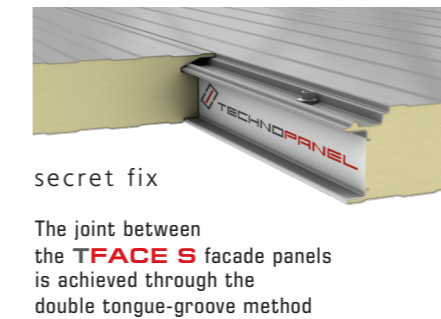
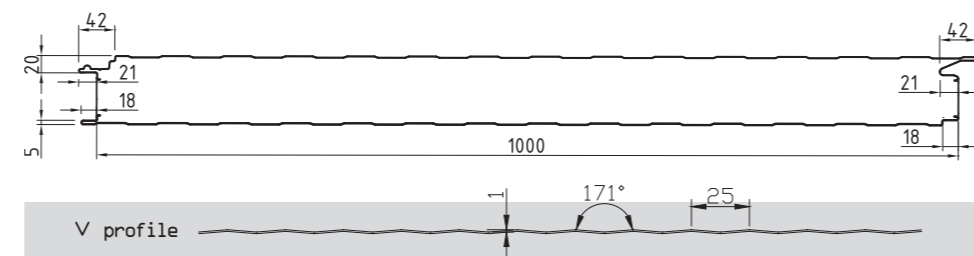
insulation cores:

PU (polyurethane)

MW (mineral wool)

PIR (polyisocyanurate)

Standard thickness range of the **TFACE S** sandwich panels: **40 - 150 mm**.
Covering **WIDTH - 1000 mm**, **LENGTH between 3000 and 16000 mm**.
Suitable for vertical as well as horizontal installation.



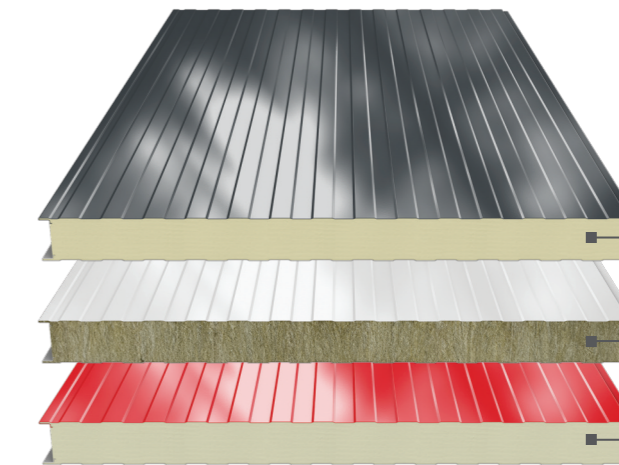
(Panels have a typical ribbing - T, V, D, W or with a smooth surface for the external sheet or T, R and a smooth profile for the internal sheet. The two finishing layers are hot dip galvanized steel sheets with a finishing polyester coloured coating.)

TFACE		SECRET FIX							THROUGH FIX													
									FRIGOPANELS													
thickness of the panels	(mm)	40	50	60	80	100	120	150	25	30	40	50	60	80	100	120	140	150	160	180	200	
		PU insulation							PU insulation													
thickness of the steel sheet	external	(mm)							(mm)													
	internal	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,40	0,40	0,40	0,40	0,40	0,40	0,40	0,40	0,40	0,40	0,40	0,40	0,40	0,40
weight of the panel	(kg/m ²)	9,36	9,72	10,08	10,80	11,52	12,24	13,32	7,55	7,73	8,09	8,45	8,81	9,53	10,25	10,97	11,69	12,05	12,41	13,13	13,85	
thermal conductivity coefficient	W/mK	$\lambda = 0,022$ W/mK							$\lambda = 0,022$ W/mK													
coefficient of thermal transmittance	U (W/m ² K)	0,50	0,41	0,35	0,26	0,21	0,18	0,14	0,75	0,64	0,49	0,40	0,34	0,26	0,21	0,17	0,15	0,14	0,13	0,12	0,11	
class of reaction to fire		Bs2, d0							Ds3, d0													
fire resistance	min	-	-	-	EI15	EI15	EI15	EI15	-	-	-	-	-	EI15	EI15	EI15	EI15	EI15	EI15	EI15	EI15	EI15
		MW insulation							MW insulation													
thickness of the steel sheet	external	(mm)							(mm)													
	internal	-	0,50	0,50	0,50	0,50	0,50	0,50	-	-	-	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50
density of the insulation core	kg/m ³	100 kg/m ³							100 kg/m ³													
weight of the panel	(kg/m ²)	-	14,23	15,23	17,23	19,23	21,23	24,23	-	-	-	13,80	14,80	16,80	18,80	20,80	22,80	23,80	24,80	26,80	28,80	
thermal conductivity coefficient	W/mK	$\lambda = 0,039$ W/mK							$\lambda = 0,039$ W/mK													
coefficient of thermal transmittance	U (W/m ² K)	-	0,68	0,58	0,45	0,36	0,31	0,25	-	-	-	0,68	0,58	0,45	0,36	0,31	0,26	0,25	0,23	0,21	0,19	
class of reaction to fire		A2-s1, d0							A2-s1, d0													
fire resistance	min	-	-	-	EI60	EI60	EI60	EI180	-	-	-	EI60	EI60	EI60	EI120	EI120	EI120	EI180	EI180	EI180	EI180	
		PIR insulation							PIR insulation													
thickness of the steel sheet	external	(mm)							(mm)													
	internal	-	0,60	0,60	0,60	0,60	0,60	0,60	-	-	-	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50
weight of the panel	(kg/m ²)	-	10,88	11,29	12,11	12,93	13,75	14,98	-	-	-	9,53	9,94	11,58	12,40	13,22	13,63	14,04	14,86	15,68		
thermal conductivity coefficient	W/mK	$\lambda = 0,022$ W/mK							$\lambda = 0,022$ W/mK													
coefficient of thermal transmittance	U (W/m ² K)	-	0,41	0,35	0,27	0,21	0,18	0,14	-	-	-	0,44	0,37	0,29	0,23	0,19	0,17	0,16	0,15	0,13	0,12	
class of reaction to fire		Bs1, d0							Bs1, d0													
fire resistance	min	-	-	-	-	EI30	EI30	EI30	-	-	-	-	-	EI30	EI30	EI30	EI30	EI30	EI30	EI30	EI60	



FACADE PANELS • STANDARD COLOURS ACCORDING TO RAL

TFACE T / FRIGOPANEL / WALL PANELS / REFRIGERATOR PANELS



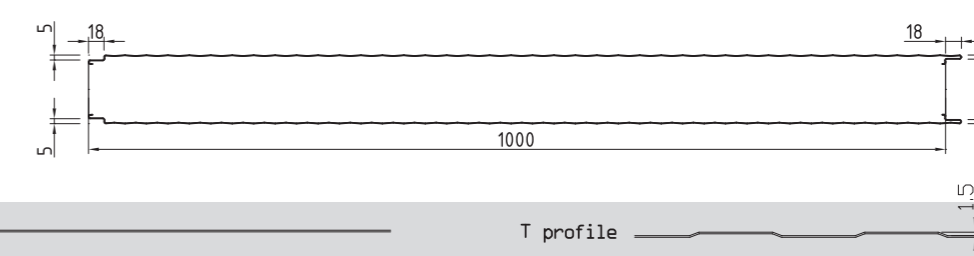
insulation cores:

PU (polyurethane)

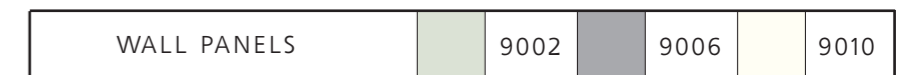
MW (mineral wool)

PIR (polyisocyanurate)

Standard thickness range of the **TFACE T** sandwich panels: **25 - 200 mm**.
Covering **WIDTH - 1000 mm**, **LENGTH between 3000 and 16000 mm**.
Suitable for vertical as well as horizontal installation.



(Panels have a typical ribbing - T, V, D, W or with a smooth surface for the external sheet or T, R and a smooth profile for the internal sheet. The two finishing layers are hot dip galvanized steel sheets with a finishing polyester coloured coating.)



WALL PANELS • STANDARD COLOURS ACCORDING TO RAL