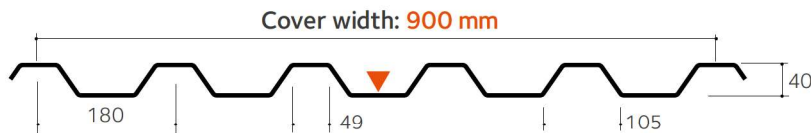


Trapeza® range Chantilly 5.180.40T



ArcelorMittal

Trapezoidal roof profile



Length of profile:
Minimum 1800 mm / Maximum 13,500 mm



The use of this profile on the outer skin of Globalroof® hot roof systems with liner trays is not covered by the ETN

Experimental features

		Thickness (mm)						
		0.63	0.75	0.88	1.00			
		Surface weight (kg/m²)						
		6.51	7.75	9.10	10.34			
Effect of downward loads	Moment of inertia (cm ⁴ /lm)	Single span	I2	21.56	25.66	30.11	34.22	
		Two equal spans	I3	16.51	19.66	23.07	26.21	
		Continuity	Im	19.03	22.66	26.59	30.21	
	Moment of flexion (m.daN/lm)	By the span	Elastic system	Md2T	204.10	242.97	285.09	323.96
			Elasto-plastic system	Md3T	239.76	285.42	334.90	380.57
On support		Md3A	190.26	226.49	265.75	301.99		
Under concentrated load	Mc	144.45	171.96	201.77	229.28			
Reaction at the support (daN/lm)	Rd	671.89	799.87	938.52	1066.50			
Effect of upward loads	Complete fastening at top of rib	By the span	Elastic system	Ma2T	192.62	229.31	269.06	305.74
			Elasto-plastic system	Ma3T	220.31	262.28	307.74	349.70
		On support	Ma3A	156.68	186.52	218.85	248.70	
	Lift-off force on support (daN/lm)	Sa	574.66	684.11	802.69	912.15		
	Reduced fastening at top of rib	By the span	Elastic system	Ma2T	192.62	229.31	269.06	305.74
Elasto-plastic system			Ma3T	226.04	269.10	315.74	358.80	
On support		Ma3A	116.79	139.04	163.14	185.39		
Lift-off force on support (daN/lm)	Sar	513.89	611.77	717.81	815.70			

Loads table under the climatic load effect for equal spans

Chantilly 5.180.40T	Unweighted operating loads (daN/m ²)	2 supports				3 supports				4 supports				
		0.63	0.75	0.88	1.00	0.63	0.75	0.88	1.00	0.63	0.75	0.88	1.00	
Downward loads	45	3.30	3.50	3.70	3.80	3.30	3.50	3.70	3.90	3.30	3.30	3.70	3.90	
	55	3.15	3.35	3.50	3.60	3.30	3.50	3.70	3.90	3.30	3.30	3.70	3.90	
	65	3.00	3.15	3.30	3.45	3.30	3.50	3.70	3.90	3.30	3.30	3.70	3.90	
	75	2.90	3.05	3.20	3.30	3.30	3.50	3.70	3.90	3.30	3.30	3.70	3.90	
	90	2.70	2.85	3.00	3.15	3.30	3.50	3.70	3.90	3.25	3.30	3.60	3.75	
	100	2.65	2.80	2.90	3.05	3.25	3.45	3.60	3.75	3.15	3.30	3.50	3.60	
	125	2.45	2.60	2.70	2.85	3.05	3.20	3.40	3.50	2.90	3.10	3.25	3.40	
	150	2.30	2.45	2.55	2.70	2.85	3.05	3.20	3.30	2.75	2.90	3.05	3.20	
	175	2.20	2.35	2.45	2.55	2.45	2.90	3.05	3.15	2.65	2.80	2.90	3.05	
	200	2.10	2.25	2.35	2.45	2.15	2.55	2.90	3.05	2.35	2.65	2.80	2.90	
	225	1.95	2.15	2.25	2.35	1.95	2.30	2.65	2.90	2.10	2.50	2.70	2.80	
Upward loads	Complete fastening at top of rib	75	3.30	3.95	4.30	4.55	3.30	3.95	4.60	4.85	3.30	3.95	4.60	4.85
		100	3.30	3.60	3.90	4.20	3.30	3.65	3.95	4.25	3.30	3.85	4.20	4.45
		125	2.90	3.20	3.45	3.70	2.95	3.25	3.50	3.75	3.10	3.40	3.70	3.95
		150	2.65	2.90	3.15	3.35	2.65	2.95	3.20	3.40	2.85	3.10	3.40	3.60
		200	1.95	2.35	2.70	2.90	1.95	2.35	2.75	2.95	2.15	2.60	2.90	3.10
	Reduced fastening at top of rib	75					3.30	3.65	4.00	4.30	3.30	3.95	4.35	4.65
		100					2.85	3.15	3.45	3.65	3.10	3.40	3.70	3.95
		125					2.55	2.80	3.05	3.25	2.75	3.00	3.30	3.50
		150					2.30	2.55	2.75	2.95	2.50	2.75	3.00	3.20
		200					1.75	2.10	2.40	2.55	1.90	2.30	2.55	2.75