



FIREWALL-FWUQ - 100 mm. (TS-0.5 mm. Steel) (BS-0.5 mm.Steel)

Section Properties

Nominal Thickness mm	Nominal Weight kg/m ²	Core Area cm ²	Effective Top In Compression			Effective Bottom In Compression			Shear Va kN		
			Ix cm ⁴	Zx-Top cm ³	Zx-Bott. cm ³	Ma kN.m	Ix cm ⁴	Zx-Top cm ³		Zx-Bott. cm ³	Ma kN.m
Ext.0.5-Int.0.5	19.39	10.67	180.00	24.06	44.35	1.55	180.00	44.39	24.04	1.55	2.18

Load Table [kN/m²]

Panel Thickness mm	Number of Spans	Load Case	Span in meters									
			1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75
Ext.0.5-Int.0.5	1	D+L	2.91	2.49	2.18	1.94	1.74	1.59	1.38	1.17	1.01	0.88
		WP	2.91	2.49	2.18	1.94	1.74	1.59	1.38	1.17	1.01	0.88
		WS	2.91	2.49	2.18	1.94	1.74	1.59	1.38	1.17	1.01	0.88
	2	D+L	2.33	1.99	1.74	1.55	1.40	1.27	1.16	1.07	1.00	0.88
		WP	2.33	1.99	1.74	1.55	1.40	1.27	1.16	1.07	1.00	0.88
		WS	1.72	1.47	1.29	1.14	1.03	0.94	0.86	0.79	0.74	0.69
3	D+L	2.41	2.07	1.81	1.61	1.45	1.32	1.21	1.11	1.03	0.97	
	WP	2.41	2.07	1.81	1.61	1.45	1.32	1.21	1.11	1.03	0.97	
	WS	1.95	1.67	1.46	1.30	1.17	1.06	0.98	0.90	0.84	0.78	

Notes :-

- Top Skin Steel : Material conforming to ASTM A 792M SS Grade 345B Coating AZM150 (Fy = 34.5 kN/cm²) or equivalent
- Bottom Skin: Steel : Material conforming to ASTM A 792M SS Grade 345B Coating AZM150 (Fy = 34.5 kN/cm²) or equivalent
- * Effective section and allowances calculated according to AISI 2001
- * No Capacity Factor Has Been Considered
- * D + L = Dead + Live Load (Deflection limit Span / 180
- * WP = Wind Pressure(Deflection limit Span / 120
- * Ws = Wind Suction(Deflection limit Span / 120
- * Purlin Thickness has been Considered 1.5 mm.
- * Number Of S. D.S Considered / m is 4
- * Bearing Width = 60 mm

Limit States

Deflection
Bending
S. D. S
Wrinkling
shear failure of Core
Core Crushing
Bond Failure