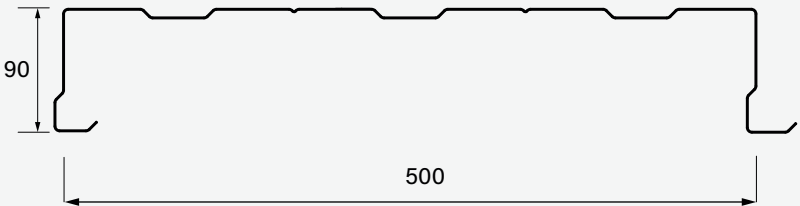
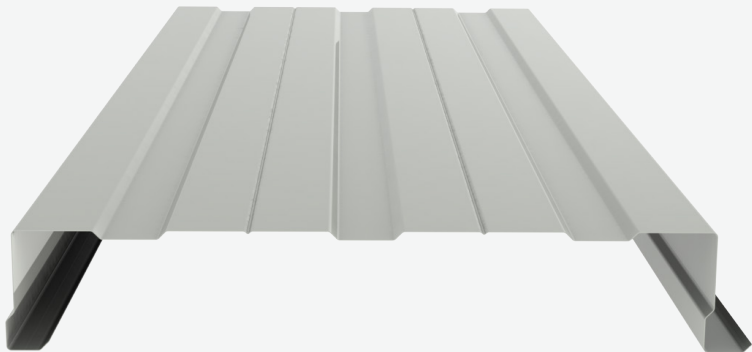


90/500



Technical properties

Profile plate type	Steel thickness [mm]	Weight [kg/m ²]	I _{eff} [cm ⁴ /m]	PERFO weight[kg/m ²]	I _{eff} [cm ⁴ /m]
90/500	0.70	8.2	87.40	7.3	73.8
	0.75	8.8	101.20	7.9	85.4
	0.88	10.4	118.40	9.3	98.9
	1.00	11.8	134.20	10.5	111.4

Steel grade	S280GD, S320GD		
Coatings	Polyester, Magnelis® ZM120, Galvanised Z275, Interior coating		
Optional	Perforated		
Dimensions	Standard	1,000 - 15,000	
Length [mm]	Minimum	250	
	Maximum	20,000	
Packaging	Max. number per package	24 off	
	Max. weight per package	1,500kg	

Certificates



Span table external wall profile

Deflection requirement	L/150
Steel grade	S320GD
Bearing	160mm
Consequence class (CC)	CC1

Maximum span [m] at specified wind load in kN/m².

The units used in the table above are based on Dutch norms.

Wind area I

Profile plate type	Thick- ness	Steel sheet	Terrain category 0 (coastal area)			Terrain category I (flat and horizontal area)			Terrain category II (area with isolated obstacles (trees, buildings))		
			$q_p = 1.55 \text{ kN/m}^2 \text{ \& } W_e + W_i = 1.79 \text{ kN/m}^2$			$q_p = 0.98 \text{ kN/m}^2 \text{ \& } W_e + W_i = 1.14 \text{ kN/m}^2$			$q_p = 0.77 \text{ kN/m}^2 \text{ \& } W_e + W_i = 0.90 \text{ kN/m}^2$		
			1 field	2 fields	3 fields	1 field	2 fields	3 fields	1 field	2 fields	3 fields
	[mm]	[kg/m ²]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]
90/500	0.70	8.2	3.51	3.55	3.95	4.36	4.43	4.95	4.89	4.97	5.55
	0.75	8.8	3.67	3.73	4.15	4.57	4.65	5.20	5.08	5.23	5.83
	0.88	10.4	4.07	4.25	4.74	4.96	5.31	5.93	5.35	5.97	6.49
	1.00	11.8	4.40	4.67	5.22	5.17	5.85	6.27	5.57	6.57	6.77

Wind area I

Profile plate type	Thick- ness	Steel sheet	Terrain category 0 (coastal area)			Terrain category I (flat and horizontal area)			Terrain category II (area with isolated obstacles (trees, buildings))		
			$q_p = 1.29 \text{ kN/m}^2 \text{ \& } W_e + W_i = 1.5 \text{ kN/m}^2$			$q_p = 0.82 \text{ kN/m}^2 \text{ \& } W_e + W_i = 0.95 \text{ kN/m}^2$			$q_p = 0.65 \text{ kN/m}^2 \text{ \& } W_e + W_i = 0.75 \text{ kN/m}^2$		
			1 field	2 fields	3 fields	1 field	2 fields	3 fields	1 field	2 fields	3 fields
	[mm]	[kg/m ²]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]
90/500 PERFO	0.70	8.2	3.34	3.50	3.91	4.15	4.38	4.88	4.64	4.91	5.49
	0.75	8.8	3.50	3.68	4.10	4.35	4.60	5.13	4.79	5.16	5.76
	0.88	10.4	3.87	4.20	4.68	4.67	5.25	5.65	5.04	5.89	6.11
	1.00	11.8	4.19	4.61	5.08	4.87	5.76	5.90	5.25	6.48	6.37

Wind area II

Profile plate type	Thick- ness	Steel sheet	Terrain category 0 (coastal area)			Terrain category I (flat and horizontal area)			Terrain category II (area with isolated obstacles (trees, buildings))		
			$q_p = 1.29 \text{ kN/m}^2 \text{ \& } W_e + W_i = 1.5 \text{ kN/m}^2$			$q_p = 0.82 \text{ kN/m}^2 \text{ \& } W_e + W_i = 0.95 \text{ kN/m}^2$			$q_p = 0.65 \text{ kN/m}^2 \text{ \& } W_e + W_i = 0.75 \text{ kN/m}^2$		
			1 field	2 fields	3 fields	1 field	2 fields	3 fields	1 field	2 fields	3 fields
	[mm]	[kg/m ²]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]
90/500	0.70	8.2	3.82	3.87	4.31	4.75	4.84	5.40	5.21	5.42	6.06
	0.75	8.8	4.00	4.06	4.53	4.98	5.08	5.67	5.38	5.70	6.37
	0.88	10.4	4.43	4.64	5.17	5.25	5.80	6.37	5.66	6.52	6.88
	1.00	11.8	4.73	5.10	5.69	5.47	6.37	6.64	5.90	7.17	7.17

Wind area II

Profile plate type	Thick- ness	Steel sheet	Terrain category 0 (coastal area)			Terrain category I (flat and horizontal area)			Terrain category II (area with isolated obstacles (trees, buildings))		
			$q_p = 1.29 \text{ kN/m}^2 \text{ \& } W_e + W_i = 1.5 \text{ kN/m}^2$			$q_p = 0.82 \text{ kN/m}^2 \text{ \& } W_e + W_i = 0.95 \text{ kN/m}^2$			$q_p = 0.65 \text{ kN/m}^2 \text{ \& } W_e + W_i = 0.75 \text{ kN/m}^2$		
			1 field	2 fields	3 fields	1 field	2 fields	3 fields	1 field	2 fields	3 fields
	[mm]	[kg/m ²]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]	[m]
90/500 PERFO	0.70	8.2	3.63	3.82	4.26	4.52	4.77	5.33	4.91	5.36	5.95
	0.75	8.8	3.80	4.01	4.47	4.70	5.02	5.60	5.07	5.63	6.14
	0.88	10.4	4.21	4.57	5.10	4.94	5.72	5.99	5.33	6.43	6.47
	1.00	11.8	4.46	5.03	5.38	5.15	6.30	6.25	5.55	7.07	6.75

Wind area III

Profile plate type	Thick- ness	Steel sheet	Terrain category I (flat and horizontal area)			Terrain category II (area with isolated obstacles (trees, buildings))		
			$q_p = 0.68 \text{ kN/m}^2 \text{ \& } W_e + W_i = 0.79 \text{ kN/m}^2$			$q_p = 0.53 \text{ kN/m}^2 \text{ \& } W_e + W_i = 0.62 \text{ kN/m}^2$		
			1 field	2 fields	3 fields	1 field	2 fields	3 fields
	[mm]	[kg/m ²]	[m]	[m]	[m]	[m]	[m]	[m]
90/500	0.70	8.2	5.15	5.32	5.93	5.55	5.97	6.67
	0.75	8.8	5.31	5.56	6.24	5.72	6.27	6.96
	0.88	10.4	5.58	6.38	6.79	6.02	7.16	7.34
	1.00	11.8	5.82	7.03	7.08	6.28	7.88	7.65

Wind area III

Profile plate type	Thick- ness	Steel sheet	Terrain category I (flat and horizontal area)			Terrain category II (area with isolated obstacles (trees, buildings))		
			$q_p = 0.68 \text{ kN/m}^2 \text{ \& } W_e + W_i = 0.79 \text{ kN/m}^2$			$q_p = 0.53 \text{ kN/m}^2 \text{ \& } W_e + W_i = 0.62 \text{ kN/m}^2$		
			1 field	2 fields	3 fields	1 field	2 fields	3 fields
	[mm]	[kg/m ²]	[m]	[m]	[m]	[m]	[m]	[m]
90/500 PERFO	0.70	8.2	4.85	5.25	5.86	5.23	5.90	6.34
	0.75	8.8	5.00	5.52	6.06	5.39	6.20	6.55
	0.88	10.4	5.26	6.30	6.38	5.67	7.08	6.90
	1.00	11.8	5.48	6.93	6.66	5.91	7.79	7.19

Principles

- Basis of structural design in accordance with NEN-EN 1990/NB
- Actions on structures in accordance with NEN-EN 1991-1-4/NB
- Span table for external wall profile