

EcoScreen: MR3-36 Wall Panel Allowable Wind Loads (psf)

20 Gauge Stainless Steel - 10% Perforated						
Span	Span					
Type	2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	8'-0"
Single	250 *	250 *	250 *	184 ь	127 ь	71 b
Double	250 *	181 f	136 f	108 f	90 f	68 f
Triple	250 *	206 f	154 f	123 f	103 f	77 f

20 Gauge Stainless Steel - 40% Perforated							
Span	Span						
Туре	2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	8'-0"	
Single	250 *	170 ь	95 ь	61 ь	42 b	23 ь	
Double	250 *	170 ь	95 ь	61 ь	42 b	23 ь	
Triple	250 *	206 f	119 ь	76 ь	53 ь	29 ь	

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10% Perforated
1/8" diam. spaced 3/8" o.c.

40% Perforated 3/8" diam. spaced 9/16" o.c.



- 1. Allowable loads are based on uniform span lengths.
- 2. Panel material is ASTM A666 Type 304 annealed stainless steel.
- 3. Failure modes represented are:

f = fastener pullout/pullover

- b = bending
- d = deflection
- * = allowable load limited to 250 psf (contact Metl-Span if higher loads are required)
- 4. Panel properties are calculated per ASCE Specification for the Design of Cold-Formed Stainless Steel Structural Members 2002 Edition and the provisions for Allowable Strength Design (ASD). For ≥20% perforated, equivalent properties of the perforated material are used in place of the properties of the solid material.
- 5. Fastening limitations are based on nominal 1/4" fasteners with 15mm-diameter combination washers; minimum six (6) fasteners per panel width (2 per low cell); and minimum 16 Gauge (50 ksi) steel structural girts. Allowable pullover reactions are 708 lb for <20% perforated and 586 lb for 40% perforated, based on fabricator test data with a safety factor of 2.5; allowable pullout reactions are based on fastener manufacturer test data with a safety factor of 2.5.
- 6. Deflection is based on an effective moment of inertia at Ms = 0.541*Mn applied to the weaker orientation; a deflection ratio of L/120; and the 10-year mean return interval wind speed per IBC 2018 Table 1604.3.
- 7. Panel coverage = 36" and weight = 1.18-1.77 psf.
- 8. Contact Metl-Span for additional perforation patterns or conditions not conforming to these notes.