

## EcoScreen: Style-Rib Wall Panel Allowable Wind Loads (psf)

0.040" Aluminum - 10% Perforated						
Span	Span					
Type	1'-4"	2'-0"	3'-0"	4'-0"	5'-0"	6'-0"
Single	250 *	250 *	144 ь	81 ь	52 ь	36 ь
Double	250 *	172 f	114 f	81 ь	52 ь	36 ь
Triple	250 *	195 f	130 f	97 f	65 ь	45 ь

0.040" Aluminum - 40% Perforated							
Span	Span						
Туре	1'-4"	2'-0"	3'-0"	4'-0"	5'-0"	6'-0"	
Single	243 ь	108 ь	48 b	27 ь	17 ь	12 ь	
Double	167 f	108 ь	48 b	27 ь	17 ь	12 ь	
Triple	189 f	126 f	60 ь	33 ь	21 ь	15 ь	

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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 B209 3003-H14 aluminum alloy.
- 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 the Aluminum Association *Specification for Aluminum Structures* 2015 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 five (5) fasteners per panel width; and minimum 16 Gauge (50 ksi) steel structural girts. Allowable pullover reactions are 258 lb for <20% perforated and 167 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 per *Specification for Aluminum Structures* 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 = 0.40-0.60 psf.
- 8. Contact Metl-Span for additional perforation patterns or conditions not conforming to these notes.