

## EcoScreen: Econolap 3/4" Wall Panel Allowable Wind Loads (psf)

20 Gauge Stainless Steel - 10% Perforated							
Span	Span						
Туре	1'-4"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	
Single	250 *	250 *	212 ь	147 ь	108 ь	<b>83</b> b	
Double	211 f	141 f	112 f	94 f	80 f	70 f	
Triple	240 f	160 f	128 f	106 f	91 f	80 f	

20 Gauge Stainless Steel - 40% Perforated						
Span	Span					
Type	1'-4"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"
Single	249 b	110 ь	70 b	49 ь	36 ь	<b>27</b> b
Double	211 f	110 ь	70 b	49 ь	36 ь	<b>27</b> b
Triple	240 f	138 ь	<b>88</b> b	61 ь	45 ь	34 ь

10% Perforated	40% Perforated
0 0 0 0	00000
0 0 0 0	00000
	00000
0 0 0 0	00000
0 0 0 0	00000
0 0 0 0	$\Delta U \Delta U \Delta U$

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

3/8" diam. spaced 9/16" o.c.

## NOTES:

- 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 three (3) fasteners per panel width (plus stitch fastener); 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 = 34-2/3" and weight = 1.11-1.67 psf.
- 8. Contact Metl-Span for additional perforation patterns or conditions not conforming to these notes.