Metal Roof and Wall Systems

Eco-ficient™ ThermalSafe

Allowable Span (ft) for Inward or Outward Load of 5 psf

Design Criteria					Allowable Span (ft)
Thickness (in.)	Bending Stress (ft)	Shear Stress (ft)	Deflection Limit (ft)	Fastener Capacity (ft)	
3	30.30	62.30	21.20	41.80	21.20
4	34.40	79.00	25.90	49.80	25.90
5	37.80	93.50	30.10	57.90	30.10
6	40.60	104.50	34.00	66.10	34.00
7	43.90	122.10	37.90	74.20	37.90
8	47.00	139.70	41.60	74.20	41.60

Notes:

1. *Based on TS panel with 26 Ga. exterior & 26 Ga. interior face (min Fy = 33 ksi) for single span condition.*
2. *Allowable span is the lowest value of panel bending strength, shear strength, deflection limit and connection strength.*
3. *The spans based on panel stress and deflection design criteria are derived from ASTM E-72 structural testing. The allowable loads are calculated with a factor of safety of 2.5 and 3.0 for bending and shear stresses, respectively, and deflection limitation of L/240.*
4. *The connection strengths are derived from ASTM E-72 structural testing and the allowable loads are calculated with a factor of safety of 2.5.*
5. *Based on attachment with 14 Ga. steel girt with fastener spacing 3"-18"-18"-3" across panel width.*
6. *The structural capacity of the girts are not considered and must be examined independently.*
7. *This information is subject to change without notice. Please contact MBCI for most current information.*