

ENVIRO-KING™ SECTION PROPERTIES TABLE

EK3-43-8

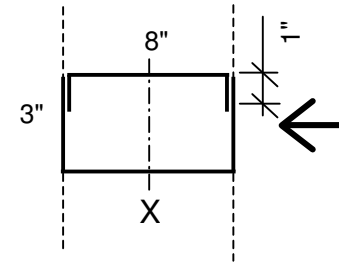
Steel thickness: 43 mil (0.0451 in - 18 ga)

Flange Width: 3.0 in
 Web Depth: 8.0 in
 Fy: 33 ksi

Section Properties:

Gross:	I_{xx} :	9.213 in ⁴	
	S_{xx} :	2.304 in ³	
	A:	1.063 in ²	
	r_x :	2.944 in	
	r_y :	1.311 in	
	Effective:	I_{xx} :	8.917 in ⁴
	S_{xx} :	1.997 in ³	(Flexure)
	A_e :	0.999 in ²	(Effective Area at Fy)
	y_{cg} :	4.213 in	(Distance to Neutral Axis from Top Compression Fiber)
	Ma:	3289 lb-ft	(Max. Allowable Bending Moment)
	Va:	1051 lb	(Max. Allowable Beam Shear)

8" WALL THICKNESS



Notes:

1. Section properties are based on the 2001 NAS Specification.
2. Check End Reaction for Web Crippling.
3. Bending capacities are based on the assumption that the compression flange is adequately laterally braced on both sides.
4. Allowable Moment and Shear Values are calculated assuming a negligible axial load. Load bearing jamb studs are to be designed for combined axial and bending loads by a qualified professional.
5. Strength increase due to cold work of forming has not been incorporated.
6. The effective Moment of Inertia has been calculated for deflection based on Procedure 1 of the 2001 NAS Specification by using the stress at the effective section modulus of the allowable bending moment.