

# ENVIRO-KING™ SECTION PROPERTIES TABLE

## EK3-68-8

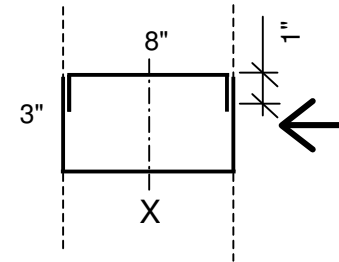
Steel thickness: 68 mil (0.0713 in - 14 ga)

Flange Width: 3.0 in  
 Web Depth: 8.0 in  
 Fy: 50 ksi

### Section Properties:

Gross:	$I_{xx}$ :	14.204 in <sup>4</sup>	
	$S_{xx}$ :	3.552 in <sup>3</sup>	
	A:	1.663 in <sup>2</sup>	
	$r_x$ :	2.922 in	
	$r_y$ :	1.299 in	
	Effective:	$I_{xx}$ :	14.204 in <sup>4</sup>
	$S_{xx}$ :	3.391 in <sup>3</sup>	(Flexure)
	$A_e$ :	1.637 in <sup>2</sup>	(Effective Area at Fy)
	$y_{cg}$ :	4.063 in	(Distance to Neutral Axis from Top Compression Fiber)
	Ma:	8460 lb-ft	(Max. Allowable Bending Moment)
	Va:	4221 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.