**Product Name: 362S350-97** 



# Product Category: 05.40.00 - Cold-Formed Metal Framing

Available Finish: G60, G90

\*Other standard coatings referenced in ASTM A1003

Web Depth: 3-5/8 in

Flange Width: 3-1/2 in

Design Thickness: 0.1017 in

Gauge: 97 mils or 12G

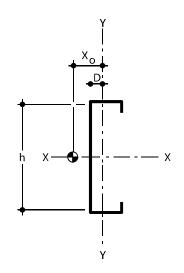
Yield stress, Fy: 50 ksi

Weight: 4.11 lb/ft

- Calculated properties are based on AISI S100-16/S240-20, North American Specification for Design of Cold-Formed Steel Structural Members and meets the requirements of the IBC 2021 Building Code.
- The centerline bend radius is based on inside corner radii shown in thickness chart.
- Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI A7.2.
- Tabulated gross properties are based on full-unreduced cross section of the studs, away from punchouts.
- For deflection calculations, use the effective moment of inertia.
- Allowable moment includes coldwork of forming.
- For the steels that have both 33 and 50 ksi listing, if the design is based on 50 ksi, the 50 ksi steel needs to be specified. (ex. 3.625S137 16-50 (50 ksi))

## **Gross Section Properties**

Cross sectional area (A)	1.207 in <sup>2</sup>	
Moment of inertia (Ix)	2.735 in⁴	
Section Modulus (Sx)	1.509 in <sup>3</sup>	
Radius of gyration (Rx)	1.505 in	
Gross moment of inertia (ly)	2.085 in <sup>4</sup>	
Gross Radius of gyration (Ry)	1.314 in	



### **Effective Section Properties**

Moment of inertia for deflection (Ix)	2.735 in⁴
Section modulus (Sx)	1.339 in <sup>3</sup>
Allowable bending moment (Ma)	40.100 In-k
Allowable bending moment from distortional buckling (Mad)	44.06 In-k
Allowable strong axis shear away from punch-out (Vag)	5943 lb
Allowable strong axis shear at punch out (Vanet)	875 lb

### **Torsional Properties**

St. Venant torsion constant (J x 1000)	4.162 in <sup>4</sup>
Warping constant (Cw)	9.022 in <sup>6</sup>
Distance from shear center to neutral axis (Xo)	-3.391 in
Distance from shear center to mid-plane of web (m)	1.924 in
Radii of gyration (Ro)	3.936 in
Torsional flexural constant (β)	0.258
Unbraced Length (Lu)	79.7 in

### **Additional Information**