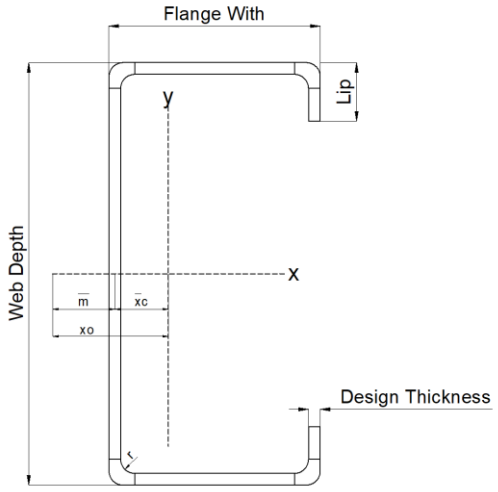
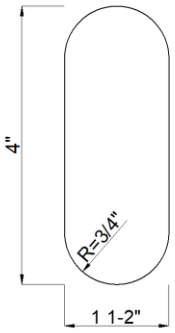
PRODUCT SUBMITTAL SHEET

Product Type: Structural Stud

Product Definition: 400S162-54 (50ksi)

CSI Code: 05 41 00





Profile Properties:

Web Depth	4.000 in	Yield Strength Fy:	50 ksi
Flange Width	1.625 in	Unit Weight	1.51 lb/ft
Stiffening Lip	0.5000 in	Punchout Width / Length	1-1/2'' – 4''
Design Thickness	0.0566 in	Coating	G60
Thickness	54mils (16Ga)		

Gross Section Properties:

Cross Sectional Area	Agross	0.4431 in2
Member weight per foot of length		1.51 lb/ft
Moment of Inertia. x-axis	Ix	1.0980 in4
Radius of Gyration. x-axis	rx	1.5741 in
Moment of Inertia. y-axis	Iy	0.1594 in4
Radius of Gyration. y-axis	ry	0.5998 in

Torsional Properties:

St. Venant Torsion Constant	J x 1000	0.4732 in4
Warping Constant	Cw	0.5595 in6
Distance Between Shear Axis and Neutral Axis	x0	-1.2378 in
Polar Radius of Gyration	r0	2.0903 in
Torsional Flexural Constant	β	0.6494
Limit of Unbraced Length	Lu	33.35 in

Effective Section Properties:

Effective Area	Aeff	0.3435 in2
Effective Moment of Inertia for Deflection	Ixe	1.0798 in4
Effective Section Modulus	Sxe	0.5331 in3
Allowable Bending Moment	Ma	15.9609 in.k
Allowable Moment (Distortional Buckling)	Mad	15.2514 in.k
Allowable Shear Force (Solid Section)	Vag	3372 lbs
Allowable Shear Force (Perforated Section)	VaPO	1223 lbs

Codes & Standards:

- Calculations are based on AISI S240-20 and AISI S100-16 (2020) w/S2-20.
- Complies with IBC 2024. ASTM C955. ASTM C754. ASTM A653. ASTM A1003. ASTM E72
- LEED / Sustainability Credits: Environmental Product Declaration S-P Code: S-P-00869