

# Non-Structural Stud (s)



| MATERIAL                  |        |
|---------------------------|--------|
| Web (in)                  | 4      |
| Flange (in)               | 1¼     |
| Lip (in)                  | 0.188  |
| Yield Strength Fy (KSI)   | 70     |
| Tensile Strength Fu (KSI) | 80     |
| Design Thickness (in)     | 0.0188 |
| Minimum Thickness (mil)   | 18     |
| Gauge                     | 20Eq   |
| Available Finish G60, G90 |        |

| GROSS SECTION PROPERTIES                   |       |
|--------------------------------------------|-------|
| Weight of Member: (lb/ft)                  | 0.424 |
| Cross Sectional Area: A (in <sup>2</sup> ) | 0.125 |
| Moment of Inertia: Ix (in <sup>4</sup> )   | 0.294 |
| Section Modulus: Sx (in <sup>3</sup> )     | 0.147 |
| Radius of Gyration: Rx (in)                | 1.536 |
| Moment of Inertia: Iy (in <sup>4</sup> )   | 0.022 |
| Radius of Gyration: Ry (in)                | 0.415 |

| EFFECTIVE SECTION PROPERTIES                          |       |
|-------------------------------------------------------|-------|
| Moment of Inertia-Deflection: Ixe (in <sup>4</sup> )  | 0.192 |
| Section Modulus: Sxe (in <sup>3</sup> )               | 0.075 |
| Allowable Moment: Mal (in-k)                          | 2.61  |
| Allowable strong axis shear away from punch: Vag (lb) | 125   |
| Allowable strong axis shear at punch: Va net (lb)     | 125   |
| (check web crippling)                                 |       |

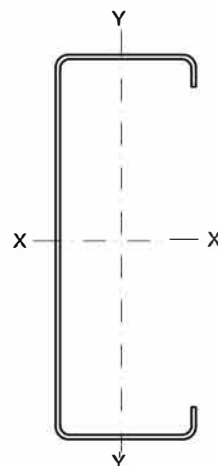
| TORSIONAL SECTION PROPERTIES                               |        |
|------------------------------------------------------------|--------|
| St. Venant Torsional Constant: Jx1000 (in <sup>4</sup> )   | 0.0147 |
| Torsional Warping Constant: Cw (in <sup>6</sup> )          | 0.062  |
| Shear Center to Centroid on Principal X-axis: Xo (in)      | -0.748 |
| Radius of Gyration on the Centroid Principal axis: Ro (in) | 1.758  |

## PRODUCT ID

400S 125-18 (4x1¼x20gaEq)

## CODES & STANDARDS

- ASTM A 1003, A 653, & C 955
- AISI S 100-16



See Hermes/Hephaistos Technical Manual  
for complete design data