

www.millsteelframing.com │ 2905 Lucerne Dr. SE Grand Rapids, MI 49546 │ (812) 670-4195

## Structural Stud 800S162-43

Product Description 18 GA GALV 8.00" WEB x 1.62"

FLANGE C-STUD .043 MIN

**GAUGE** 

Coating G60

**Physical Properties** 

Design Thickness (in)0.0451Minimum Thickness (in)0.0428Web Width (in)8.0000Flange Width (in)1.6250Stiffening Lip (in)0.5000Yield Strength (ksi)33.0000

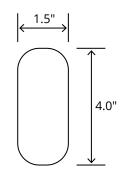


| Gross Section Properties      |       |
|-------------------------------|-------|
| Cross Sectional Area (A)      | 0.537 |
| Weight of Member (lb/ft)      | 1.83  |
| Section Modulus (Sx)          | 1.159 |
| Moment of Inertia (lx)        | 4.635 |
| Radius of Gyration (Rx)       | 2.938 |
| Gross Moment of Inertia (ly)  | 0.160 |
| Gross Radium of Gyration (Ry) | 0.546 |

| Effective Section Properties           |       |
|--|-------|
| Moment of Inertia for deflection (lxe) | 4.500 |
| Section Modulus (Sxe)                  | 1.019 |
| Allowable Bending moment (Ma)          | 20.14 |
| Allowable shear force in web (U)(Vag)  | 1051  |
| Allowable shear at punch (Vanet)       | 1051  |

| Torsional Properties                            |        |
|---|--------|
| St. Venant torsion constant (J x 1000)          | 0.364  |
| Warping constant (Cw)                           | 2.076  |
| Distance from shear center to neutral axis (Xo) | -0.926 |
| Radii of gyration (Ro)                          | 3.128  |
| Torsional flexural constant (Beta)              | 0.912  |

### **Punch Out**



# ASTM & Code Standards

- AISI S100-12 & ICC ES ESR-4062
- Framing meets ASTM A1003, A653 & C955

#### **Notes**

- Calculated properties are based on AISI S100-16, North American Specification for Design of Cold-Formed Steel Structural Members.
- 2. The centerline bend radius is based on inside corner radii shown in thickness chart.
- 3. Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI A3.3.2.
- 4. Tabulated gross properties are based on fullunreduced cross section of the studs, away from punch outs.
- 5. For deflection calculations, use the effective moment of inertia.
- 6. Allowable moment includes cold-work of forming.

### **Mill Steel Framing LEED Green Credits**

MR Credit 2 MR Credit 4

- ConstructionWaste Management Mill Steel Framing steel framing is 100% recyclable
- Recycled Content Mill Steel Framing products contain no less than 25.5% post-consumer and 6.8% pre-consumer recycled content

MR Credit 5

• Regional Materials - Mill Steel Framing has manufacturing facilities in Indiana, Alabama & Texas

**V4 MR Credits** • Building Product Disclosure and Optimization EPD (1 point)

· Materials Ingredients (1 point) - Construction and Demolition Waste Management (1 point)

