

**4.00 (IN) DRYWALL STUD WITH 1.625 (IN) FLANGE - 54MILS (16GA)  
COATING: G60**

|                            |             |
|----------------------------|-------------|
| Web Depth                  | 4.000 (in)  |
| Flange Width               | 1.625 (in)  |
| Lip Length                 | 0.5 (in)    |
| Design Thickness           | 0.0566 (in) |
| Min. Deliverable Thickness | 0.0538 (in) |
| Punchout Width             | 1.5 (in)    |
| Punchout Length            | 4 (in)      |
| Yield Strength, Fy         | 50 (ksi)    |

**GROSS SECTION PROPERTIES (FULL SECTION)**

|                                  |                           |
|----------------------------------|---------------------------|
| Area (Ag)                        | 0.4431 (in <sup>2</sup> ) |
| Member weight per foot of length | 1.5079 (lb/ft)            |
| Moment of inertia X-X axis (Ix)  | 1.0977 (in <sup>4</sup> ) |
| Section Modulus X-X axis (Sxx)   | 0.5489 (in <sup>3</sup> ) |
| Radius of gyration X-X Axis (Rx) | 1.5739 (in)               |
| Moment of inertia Y-Y axis (Iyy) | 0.1594 (in <sup>4</sup> ) |
| Radius of gyration Y-Y axis (Ry) | 0.5997 (in)               |

**EFFECTIVE SECTION PROPERTIES**

|                                                  |                           |
|--------------------------------------------------|---------------------------|
| Moment of inertia for deflection (Ixe)           | 1.0977 (in <sup>4</sup> ) |
| Section Modulus (Sxe)                            | 0.4975 (in <sup>3</sup> ) |
| Allowable Local Buckling Moment (Ma)             | 14.90 (in-k)              |
| Allowable Distortional Buckling Moment (Ma-d)    | 14.52 (in-k)              |
| Allowable shear force in web (Va-g)              | 3373 (lb)                 |
| Allowable shear force in web at Punchout (Vanet) | 1223 (lb)                 |

**TORSIONAL PROPERTIES**

|                                                 |                           |
|-------------------------------------------------|---------------------------|
| St. Venant torsional constant (J x 1000)        | 0.4732 (in <sup>4</sup> ) |
| Warping Constant (Cw)                           | 0.5595 (in <sup>6</sup> ) |
| Distance from shear center to neutral axis (Xo) | -1.2378 (in)              |
| Radii of gyration (Ro)                          | 2.0902 (in)               |
| Torsional flexural constant (b)                 | 0.6493 (in)               |

