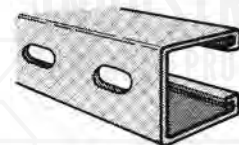
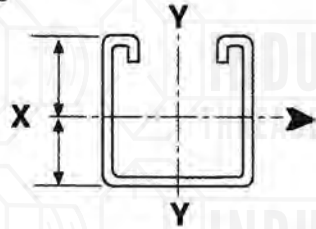
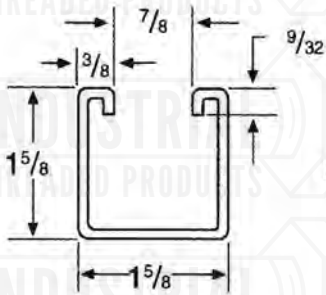




**7100 & 7101**



1-5/8" x 1-5/8"

**14 GAUGE STRUT SOLID & SLOTTED**

| I.T.P. Part #  | Finish                                   | Standard Length | Weight Per foot (Lbs.) |
|----------------|--|-----------------|------------------------|
| 7100 (SOLID)   | Plain<br>Pre-Galvanized<br>Green Painted | 10' or 20'      | 1.40                   |
| 7101 (SLOTTED) |  |                 | 1.36                   |

NOTE: 304 and 316 stainless, PVC coated and hot-dipped galvanized are available.



## Properties of Section

| I.T.P. FIGURE NUMBER | Wt./Ft. Lbs. | Area of Section Sq. In. | X-X Axis |        |       | Y-Y Axis |        |       |
|----------------------|--------------|-------------------------|----------|--------|-------|----------|--------|-------|
|                      |              |                         | I in 4   | S in 3 | r in. | I in 4   | S in 3 | r in. |
| 7100                 | 1.45         | .407                    | 0.143    | 0.158  | 0.593 | 0.179    | 0.221  | 0.664 |

I = Moment of Inertia  
 S = Section Modulus  
 r = Radius of Gyration

## Beam and Column Loads

| SPAN OR COLUMN (IN) | I.T.P. FIGURE NUMBER | MAX LOAD OF COLUMN LOADED @ C.G. (LBS) | STATIC BEAM LOAD (X-X AXIS)               |                              |                            |                            |
|---------------------|----------------------|--|---|------------------------------|----------------------------|----------------------------|
|                     |                      |  | ALLOWABLE UNIFORM LOAD @ 25,000 PSI (LBS) | DEFLECTION @ 25,000 PSI (IN) | UNIFORM LOAD @ L/240 (LBS) | UNIFORM LOAD @ L/360 (LBS) |
| 12                  | 7100                 | 5,548                                  | 2,631                                     | 0.014                        | **                         | **                         |
| 18                  | 7100                 | 5,066                                  | 1,754                                     | 0.032                        | **                         | **                         |
| 24                  | 7100                 | 4,473                                  | 1,316                                     | 0.056                        | **                         | **                         |
| 30                  | 7100                 | 3,817                                  | 1,052                                     | 0.088                        | **                         | **                         |
| 36                  | 7100                 | 3,141                                  | 877                                       | 0.126                        | **                         | 695                        |
| 42                  | 7100                 | 2,546                                  | 752                                       | 0.172                        | **                         | 511                        |
| 48                  | 7100                 | 2,148                                  | 658                                       | 0.224                        | 587                        | 391                        |
| 60                  | 7100                 | 1,659                                  | 526                                       | 0.350                        | 376                        | 250                        |
| 72                  | 7100                 | 1,370                                  | 439                                       | 0.504                        | 261                        | 174                        |
| 84                  | 7100                 | 1,174                                  | 376                                       | 0.687                        | 192                        | 128                        |
| 96                  | 7100                 | 1,028                                  | 329                                       | 0.897                        | 147                        | 98                         |
| 108                 | 7100                 | 911                                    | 292                                       | 1.135                        | 116                        | 77                         |
| 120                 | 7100                 | *                                      | 263                                       | 1.140                        | 94                         | 63                         |
| 180                 | 7100                 | *                                      | 175                                       | 3.153                        | 42                         | 28                         |
| 240                 | 7100                 | *                                      | 132                                       | 5.605                        | 23                         | 16                         |

\* Not recommended - KL/r exceeds 200

\*\* For these loads, the uniform beam capacity is lower than the L/240 or L/360 beam capacity and is therefore the governing restraint

\*\*\* Load limited by spotweld shear

### NOTES

- The beam capacities shown above include the weight of the strut beam. The beam weight must be subtracted from these capacities to arrive at the net beam capacity.
- Allowable beam loads are based on a uniform loaded, simply supported beam. For capacities of a beam loaded at midspan at a single point, multiply the beam capacity by 50% and deflection by 80%.
- The above chart shows beam capacities for strut without holes.** For strut with holes, multiply the following:  $\frac{7}{8}$ " diameter Knockout by 82%, Round Hole  $\frac{3}{4}$ " by 85% and Round Hole  $\frac{9}{16}$ " by 88%, Slotted  $\frac{9}{16}$ " x  $1-\frac{1}{8}$ " by 88% and Slotted  $\frac{13}{32}$ " x 3" by 90%.