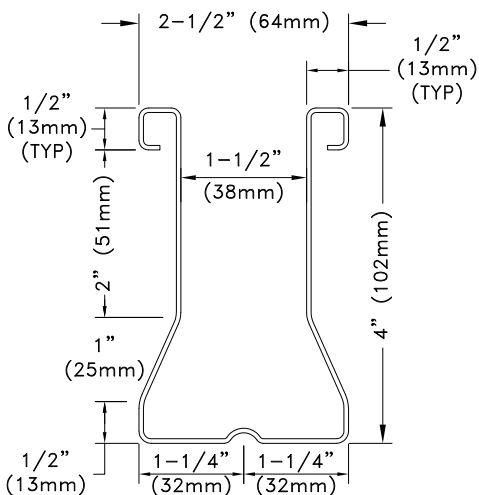


IMPERIAL CHORD VALUES

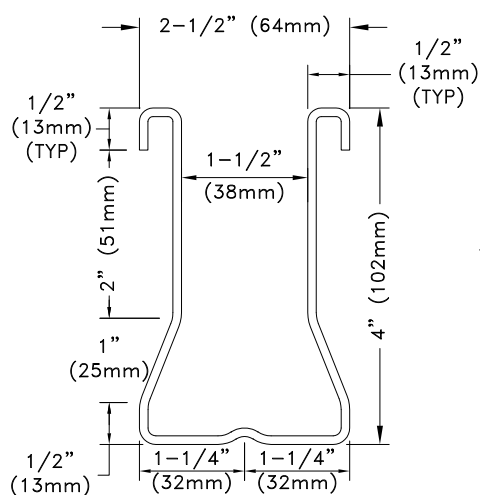
| SECTION NAME | GAUGE | DESIGN THICKNESS (in) | F _y (ksi) | F _u (ksi) | FULL SECTION PROPERTIES | | | | | FULLY BRACED ALLOWABLES | | | WEIGHT (lbs./ft.) |
|--------------|-------|-----------------------|----------------------|----------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------|-----------------------|---------------------------|-------------------|
| | | | | | A _g (in ²) | I _x (in ⁴) | S _x (in ³) | I _y (in ⁴) | S _y (in ³) | T _a (lbs.) | P _a (lbs.) | M _{ax} (in-lbs.) | |
| 28TSC4.00 | 22 | 0.0299 | 55 | 65 | 0.3808 | 0.8080 | 0.3868 | 0.3138 | 0.2506 | 12,375 | 8,586 | 11,284 | 1.29 |
| 33TSC4.00 | 20 | 0.0346 | 55 | 65 | 0.4389 | 0.9282 | 0.4431 | 0.3616 | 0.2887 | 14,266 | 10,368 | 13,299 | 1.49 |
| 43TSC4.00 | 18 | 0.0451 | 55 | 65 | 0.5673 | 1.1900 | 0.5671 | 0.4649 | 0.3716 | 18,437 | 14,495 | 17,879 | 1.93 |
| 54TSC4.00 | 16 | 0.0566 | 55 | 65 | 0.7052 | 1.4660 | 0.6962 | 0.5740 | 0.4597 | 22,918 | 19,286 | 22,240 | 2.40 |
| 68TSC4.00 | 14 | 0.0713 | 50 | 65 | 0.8557 | 1.7450 | 0.8116 | 0.6920 | 0.5531 | 25,621 | 22,871 | 23,839 | 2.91 |
| 97TSC4.00 | 12 | 0.1017 | 50 | 65 | 1.1957 | 2.3780 | 1.1006 | 0.9630 | 0.7704 | 35,798 | 33,213 | 32,952 | 4.07 |

METRIC CHORD VALUES

| SECTION NAME | GAUGE | DESIGN THICKNESS (mm) | F _y (MPa) | F _u (MPa) | FULL SECTION PROPERTIES | | | | | FULLY BRACED ALLOWABLES | | | WEIGHT (kN/m) |
|--------------|-------|-----------------------|----------------------|----------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------|---------------------|-------------------------|---------------|
| | | | | | A _g (mm ²) | I _x (mm ⁴) | S _x (mm ³) | I _y (mm ⁴) | S _y (mm ³) | T _a (kN) | P _a (kN) | M _{ax} (kN-mm) | |
| 28TSC4.00 | 22 | 0.7595 | 379 | 448 | 246 | 336,314 | 6,339 | 130,613 | 4,107 | 55.05 | 38.19 | 1,275 | 0.018 |
| 33TSC4.00 | 20 | 0.8788 | 379 | 448 | 283 | 386,346 | 7,273 | 150,509 | 4,731 | 63.46 | 46.12 | 1,503 | 0.022 |
| 43TSC4.00 | 18 | 1.1455 | 379 | 448 | 366 | 495,315 | 9,293 | 193,506 | 6,089 | 82.01 | 64.48 | 2,020 | 0.028 |
| 54TSC4.00 | 16 | 1.4376 | 379 | 448 | 455 | 610,195 | 11,409 | 238,917 | 7,533 | 101.94 | 85.79 | 2,513 | 0.035 |
| 68TSC4.00 | 14 | 1.8110 | 345 | 448 | 552 | 726,324 | 13,300 | 288,032 | 9,064 | 113.97 | 101.74 | 2,693 | 0.042 |
| 97TSC4.00 | 12 | 2.5832 | 345 | 448 | 771 | 989,798 | 18,036 | 400,831 | 12,625 | 159.24 | 147.74 | 3,723 | 0.059 |



28 to 54TSC4.00 Chord Section



68 and 97TSC4.00 Chord Section

General Notes:

1. All steel is ASTM A653 steel with G90 minimum galvanization. Bare metal thickness is 95% of design thickness.
2. S_x and M_{ax} are for positive bending causing compression at the closed end of the section.
3. T_a = Allowable Tension, P_a = Allowable Compression, M_{ax} = Allowable Moment
4. The allowable values given in this table do not reflect any strength increase due to cold work of forming.
5. Properties determined according to the AISI 2016 "North American Specifications for the Design of Cold-Formed Steel Structural Members" (S100-16).



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 Missouri: 13723 Riverport Drive, Suite 200 / Maryland Heights, MO 63043 / (800) 326-4102

TSC4.00 Chord Properties

Alpine, a division of ITW Building Components Group, Inc. shall not be responsible for any performance failure in a connection due to a deviation from this detail. Any variation from this detail shall be approved in advance by Alpine, a division of ITW Building Components Group, Inc.

Standard Detail:

TS008

Date:

10/11/18

TrusSteel Detail Category:

Member Section Properties