

ICC-ES Evaluation Report**ESR-2281**

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DIVISION: 05 00 00—METALS**Section: 05 40 00—Cold-Formed Metal Framing****Section: 05 41 00—Structural Metal Stud Framing****DIVISION: 09 00 00—FINISHES****Section: 09 22 16.13—Non-Structural Metal Stud Framing****REPORT HOLDER:****TELLING INDUSTRIES**
6272 CENTER STREET
MENTOR, OHIO 44060
(440) 974-3370
www.tellingindustries.com**EVALUATION SUBJECT:****METAL FRAMING****1.0 EVALUATION SCOPE****Compliance with the following codes:**

- 2006 *International Building Code*® (IBC)
- 2006 *International Residential Code*® (IRC)

Property evaluated:

Structural

2.0 USES

Telling Industries metal framing is used for nonload-bearing interior walls, curtain walls, load-bearing walls, floor joists, ceiling joists and furring.

3.0 DESCRIPTION**3.1 General:**

The metal framing members described in this report are factory-formed from coils of steel at the facilities noted in Table 8. See Tables 1, 2, 5 and 6, and Figure 1, for recognized profiles and section names. The C-sections (studs) are manufactured with and without web punch-outs. When provided, punch-outs have a width between $\frac{3}{4}$ inch (19 mm) and $1\frac{1}{2}$ inches (38 mm) but in no case greater than one-half the member web height ($d/2$); and a length of 4 inches (102 mm). See Figure 3 for an illustration of punch-outs. The punch-outs are located along the centerline of the webs of the studs with a minimum center-to-center spacing of 24 inches (610 mm). The minimum distance between the end of the stud and the near edge of the web punch-outs is 10 inches (254 mm). The values for studs in each of the tables of

this report are for studs with punch-outs unless otherwise noted.

C-sections with 1.25-inch (32 mm) flanges may have indentations on the flanges. All other surfaces are flat, smooth surfaces. All surfaces of all other members are flat and smooth.

3.2 Materials:

Telling Industries metal framing members are cold-formed from steel coils conforming to ASTM A 1003 ST33H or ASTM A 1003 ST50H for members with a thickness of 33 mils or more, and ASTM A 1003 NS33 for members with a thickness of less than 33 mils [only for use as interior nonload-bearing framing members with a 5 psf (239 Pa) maximum transverse load]. The steel is hot-dipped galvanized with a minimum galvanization coating designation of G60 for all studs, except that the galvanization coating designation may be G40 for use as interior nonload-bearing framing members with a 5 psf (239 Pa) maximum transverse load. The base-metal thickness is specified in Tables 1 through 6.

4.0 DESIGN AND INSTALLATION**4.1 Design:**

The section properties indicated in Tables 3 through 6 have been determined in accordance with the 2001 edition of the North American Specification for Design of Cold-formed Steel Structural Members, including 2004 Supplement (AISI-NAS). The allowable moments, M_a , as indicated in Tables 3 through 6, are for use with Allowable Strength Design (ASD), and are for flexural members installed with the compression flange continuously braced. For other conditions of compression flange bracing, the allowable moment must be determined in accordance with AISI-NAS. The design of members must address web crippling, combined bending and web crippling, and combined bending and shear, as applicable, in accordance with the AISI-NAS.

C-sections (studs) listed in Table 7 and channels (tracks) qualify for use with the prescriptive requirements of the IRC. For use of all other sections under the IRC, the cold-formed steel framing members must be limited to engineered structures, in accordance with IRC Section R301.1.3.

4.2 Installation:

The framing members must be installed in accordance with the code, the approved plans and this report. If there is a conflict between the plans submitted for approval and this report, this report governs. The approved plans must be made available at the jobsite at all times.

5.0 CONDITIONS OF USE

The Telling Industries metal framing described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 The cold-formed steel members are installed in accordance with the code, the approved plans and this report.
- 5.2 Minimum uncoated base-metal thickness of the cold-formed steel members as delivered to the jobsite are at least 95 percent of the design base-metal thickness noted in Tables 1, 2, 5 and 6.
- 5.3 Complete plans and calculations verifying compliance with this report must be submitted to the code official for each project at the time of permit application. The calculations and drawings must be prepared and sealed by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.

- 5.4 Studs and tracks having a galvanized coating weight of less than G60 must be limited to use as nonload-bearing interior wall framing subject to a maximum transverse load of 5 psf (239 Pa).

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Cold-formed Steel Framing Members (AC46), dated February 2007 (editorially revised April 2008).

7.0 IDENTIFICATION

At a spacing not exceeding 48 inches (1219 mm) on center, each cold-formed steel member is stamped with the Telling Industries name or initials (TI); the section name as described in Tables 1 through 6; the evaluation report number (ICC-ES ESR-2281); the minimum uncoated base-metal thickness in mils or decimal inches; the minimum specified yield strength [if greater than 33 ksi (228 MPa)]; and the galvanization coating designation (if G60 or greater).

TABLE 1—C-SECTIONS (STUDS)1

| SECTION | DEPTH ² (in) | FLANGE (in) | LIP (in) | INSIDE CORNER RADII (in) | MILS | DESIGN THICK. (in) | MIN. BASE METAL THICK. ³ (in) | SECTION | DEPTH ² (in) | FLANGE (in) | LIP (in) | INSIDE CORNER RADII (in) | MILS | DESIGN THICK. (in) | MIN. BASE METAL THICK. ³ (in) |
|------------|----------------------------|----------------|-------------|-----------------------------------|------|--------------------------|--|-------------------------|----------------------------|----------------|-------------|-----------------------------------|------|--------------------------|--|
| 162S125-18 | 1.625 | 1.250 | 0.1875 | 0.0843 | 18 | 0.0188 | 0.0179 | 362S125-18 | 3.625 | 1.250 | 0.1875 | 0.0843 | 18 | 0.0188 | 0.0179 |
| 162S125-27 | 1.625 | 1.250 | 0.1875 | 0.0796 | 27 | 0.0283 | 0.0269 | 362S125-27 | 3.625 | 1.250 | 0.1875 | 0.0796 | 27 | 0.0283 | 0.0269 |
| 162S125-30 | 1.625 | 1.250 | 0.1875 | 0.0781 | 30 | 0.0312 | 0.0296 | 362S125-30 | 3.625 | 1.250 | 0.1875 | 0.0781 | 30 | 0.0312 | 0.0296 |
| 162S125-33 | 1.625 | 1.250 | 0.1875 | 0.0764 | 33 | 0.0346 | 0.0329 | 362S125-33 | 3.625 | 1.250 | 0.1875 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 250S125-18 | 2.500 | 1.250 | 0.1875 | 0.0843 | 18 | 0.0188 | 0.0179 | 362S125-43 | 3.625 | 1.250 | 0.1875 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 250S125-27 | 2.500 | 1.250 | 0.1875 | 0.0796 | 27 | 0.0283 | 0.0269 | 362S125-54 | 3.625 | 1.250 | 0.1875 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 250S125-30 | 2.500 | 1.250 | 0.1875 | 0.0781 | 30 | 0.0312 | 0.0296 | 362S125-68 | 3.625 | 1.250 | 0.1875 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 250S125-33 | 2.500 | 1.250 | 0.1875 | 0.0764 | 33 | 0.0346 | 0.0329 | 362S137-33 | 3.625 | 1.375 | 0.375 | 0.0764 | 33 | 0.0346 | 0.0346 |
| 250S125-43 | 2.500 | 1.250 | 0.1875 | 0.0712 | 43 | 0.0451 | 0.0428 | 362S137-43 | 3.625 | 1.375 | 0.375 | 0.0712 | 43 | 0.0451 | 0.0451 |
| 250S125-54 | 2.500 | 1.250 | 0.1875 | 0.0849 | 54 | 0.0566 | 0.0538 | 362S137-54 | 3.625 | 1.375 | 0.375 | 0.0849 | 54 | 0.0566 | 0.0566 |
| 250S125-68 | 2.500 | 1.250 | 0.1875 | 0.1069 | 68 | 0.0713 | 0.0677 | 362S137-68 | 3.625 | 1.375 | 0.375 | 0.1069 | 68 | 0.0713 | 0.0713 |
| 250S137-33 | 2.500 | 1.375 | 0.375 | 0.0764 | 33 | 0.0346 | 0.0329 | 362S137-97 | 3.625 | 1.375 | 0.375 | 0.1525 | 97 | 0.1017 | 0.1017 |
| 250S137-43 | 2.500 | 1.375 | 0.375 | 0.0712 | 43 | 0.0451 | 0.0428 | 362S162-33 | 3.625 | 1.625 | 0.50 | 0.0764 | 33 | 0.0346 | 0.0346 |
| 250S137-54 | 2.500 | 1.375 | 0.375 | 0.0849 | 54 | 0.0566 | 0.0538 | 362S162-43 | 3.625 | 1.625 | 0.50 | 0.0712 | 43 | 0.0451 | 0.0451 |
| 250S137-68 | 2.500 | 1.375 | 0.375 | 0.1069 | 68 | 0.0713 | 0.0677 | 362S162-54 | 3.625 | 1.625 | 0.50 | 0.0849 | 54 | 0.0566 | 0.0566 |
| 250S137-97 | 2.500 | 1.375 | 0.375 | 0.1525 | 97 | 0.1017 | 0.0966 | 362S162-68 | 3.625 | 1.625 | 0.50 | 0.1069 | 68 | 0.0713 | 0.0713 |
| 250S162-33 | 2.500 | 1.625 | 0.50 | 0.0764 | 33 | 0.0346 | 0.0329 | 362S162-97 | 3.625 | 1.625 | 0.50 | 0.1525 | 97 | 0.1017 | 0.1017 |
| 250S162-43 | 2.500 | 1.625 | 0.50 | 0.0712 | 43 | 0.0451 | 0.0428 | 362S200-33 | 3.625 | 2.000 | 0.625 | 0.0764 | 33 | 0.0346 | 0.0346 |
| 250S162-54 | 2.500 | 1.625 | 0.50 | 0.0849 | 54 | 0.0566 | 0.0538 | 362S200-43 | 3.625 | 2.000 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0451 |
| 250S162-68 | 2.500 | 1.625 | 0.50 | 0.1069 | 68 | 0.0713 | 0.0677 | 362S200-54 | 3.625 | 2.000 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0566 |
| 250S162-97 | 2.500 | 1.625 | 0.50 | 0.1525 | 97 | 0.1017 | 0.0966 | 362S200-68 | 3.625 | 2.000 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0713 |
| 250S200-33 | 2.500 | 2.000 | 0.625 | 0.0764 | 33 | 0.0346 | 0.0329 | 362S200-97 | 3.625 | 2.000 | 0.625 | 0.1525 | 97 | 0.1017 | 0.1017 |
| 250S200-43 | 2.500 | 2.000 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0428 | 362S250-43 | 3.625 | 2.500 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0451 |
| 250S200-54 | 2.500 | 2.000 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 | 362S250-54 | 3.625 | 2.500 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0566 |
| 250S200-68 | 2.500 | 2.000 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 | 362S250-68 | 3.625 | 2.500 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0713 |
| 250S200-97 | 2.500 | 2.000 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 | 362S250-97 | 3.625 | 2.500 | 0.625 | 0.1525 | 97 | 0.1017 | 0.1017 |
| 250S250-43 | 2.500 | 2.500 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0428 | 362S300-54 | 3.625 | 3.000 | 1.000 | 0.0849 | 54 | 0.0566 | 0.0566 |
| 250S250-54 | 2.500 | 2.500 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 | 362S300-68 | 3.625 | 3.000 | 1.000 | 0.1069 | 68 | 0.0713 | 0.0713 |
| 250S250-68 | 2.500 | 2.500 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 | 362S300-97 | 3.625 | 3.000 | 1.000 | 0.1525 | 97 | 0.1017 | 0.1017 |
| 250S250-97 | 2.500 | 2.500 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 | 400S125-18 ⁴ | 4.000 | 1.250 | 0.1875 | 0.0843 | 18 | 0.0188 | 0.0179 |
| 350S125-18 | 3.500 | 1.250 | 0.1875 | 0.0843 | 18 | 0.0188 | 0.0179 | 400S125-27 | 4.000 | 1.250 | 0.1875 | 0.0796 | 27 | 0.0283 | 0.0269 |
| 350S125-27 | 3.500 | 1.250 | 0.1875 | 0.0796 | 27 | 0.0283 | 0.0269 | 400S125-30 | 4.000 | 1.250 | 0.1875 | 0.0781 | 30 | 0.0312 | 0.0296 |
| 350S125-30 | 3.500 | 1.250 | 0.1875 | 0.0781 | 30 | 0.0312 | 0.0296 | 400S125-33 | 4.000 | 1.250 | 0.1875 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 350S125-33 | 3.500 | 1.250 | 0.1875 | 0.0764 | 33 | 0.0346 | 0.0329 | 400S125-43 | 4.000 | 1.250 | 0.1875 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 350S125-43 | 3.500 | 1.250 | 0.1875 | 0.0712 | 43 | 0.0451 | 0.0428 | 400S125-54 | 4.000 | 1.250 | 0.1875 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 350S125-54 | 3.500 | 1.250 | 0.1875 | 0.0849 | 54 | 0.0566 | 0.0538 | 400S125-68 | 4.000 | 1.250 | 0.1875 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 350S125-68 | 3.500 | 1.250 | 0.1875 | 0.1069 | 68 | 0.0713 | 0.0677 | 400S137-33 | 4.000 | 1.375 | 0.375 | 0.0764 | 33 | 0.0346 | 0.0346 |
| 350S137-33 | 3.500 | 1.375 | 0.375 | 0.0764 | 33 | 0.0346 | 0.0329 | 400S137-43 | 4.000 | 1.375 | 0.375 | 0.0712 | 43 | 0.0566 | 0.0451 |
| 350S137-43 | 3.500 | 1.375 | 0.375 | 0.0712 | 43 | 0.0451 | 0.0428 | 400S137-54 | 4.000 | 1.375 | 0.375 | 0.0849 | 54 | 0.0713 | 0.0566 |
| 350S137-54 | 3.500 | 1.375 | 0.375 | 0.0849 | 54 | 0.0566 | 0.0538 | 400S137-68 | 4.000 | 1.375 | 0.375 | 0.1069 | 68 | 0.1017 | 0.0713 |
| 350S137-68 | 3.500 | 1.375 | 0.375 | 0.1069 | 68 | 0.0713 | 0.0677 | 400S137-97 | 4.000 | 1.375 | 0.375 | 0.1525 | 97 | 0.1017 | 0.1017 |
| 350S137-97 | 3.500 | 1.375 | 0.375 | 0.1525 | 97 | 0.1017 | 0.0966 | 400S162-33 | 4.000 | 1.625 | 0.50 | 0.0764 | 33 | 0.0346 | 0.0346 |
| 350S162-33 | 3.500 | 1.625 | 0.50 | 0.0764 | 33 | 0.0346 | 0.0329 | 400S162-43 | 4.000 | 1.625 | 0.50 | 0.0712 | 43 | 0.0451 | 0.0451 |
| 350S162-43 | 3.500 | 1.625 | 0.50 | 0.0712 | 43 | 0.0451 | 0.0428 | 400S162-54 | 4.000 | 1.625 | 0.50 | 0.0849 | 54 | 0.0566 | 0.0566 |
| 350S162-54 | 3.500 | 1.625 | 0.50 | 0.0849 | 54 | 0.0566 | 0.0538 | 400S162-68 | 4.000 | 1.625 | 0.50 | 0.1069 | 68 | 0.0713 | 0.0713 |
| 350S162-68 | 3.500 | 1.625 | 0.50 | 0.1069 | 68 | 0.0713 | 0.0677 | 400S162-97 | 4.000 | 1.625 | 0.50 | 0.1525 | 97 | 0.1017 | 0.1017 |
| 350S162-97 | 3.500 | 1.625 | 0.50 | 0.1525 | 97 | 0.1017 | 0.0966 | 400S200-33 | 4.000 | 2.000 | 0.625 | 0.0764 | 33 | 0.0346 | 0.0346 |
| 350S200-33 | 3.500 | 2.000 | 0.625 | 0.0764 | 33 | 0.0346 | 0.0329 | 400S200-43 | 4.000 | 2.000 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0451 |
| 350S200-43 | 3.500 | 2.000 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0428 | 400S200-54 | 4.000 | 2.000 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0566 |
| 350S200-54 | 3.500 | 2.000 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 | 400S200-68 | 4.000 | 2.000 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0713 |
| 350S200-68 | 3.500 | 2.000 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 | 400S200-97 | 4.000 | 2.000 | 0.625 | 0.1525 | 97 | 0.1017 | 0.1017 |
| 350S200-97 | 3.500 | 2.000 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 | 400S250-43 | 4.000 | 2.500 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0451 |
| 350S250-43 | 3.500 | 2.500 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0428 | 400S250-54 | 4.000 | 2.500 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0566 |
| 350S250-54 | 3.500 | 2.500 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 | 400S250-68 | 4.000 | 2.500 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0713 |
| 350S250-68 | 3.500 | 2.500 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 | 400S250-97 | 4.000 | 2.500 | 0.625 | 0.1525 | 97 | 0.1017 | 0.1017 |
| 350S250-97 | 3.500 | 2.500 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 | 400S300-54 | 4.000 | 3.000 | 1.000 | 0.0849 | 54 | 0.0566 | 0.0566 |
| 350S300-54 | 3.500 | 3.000 | 1.000 | 0.0849 | 54 | 0.0566 | 0.0538 | 400S300-68 | 4.000 | 3.000 | 1.000 | 0.1069 | 68 | 0.0713 | 0.0713 |
| 350S300-68 | 3.500 | 3.000 | 1.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 400S300-97 | 4.000 | 3.000 | 1.000 | 0.1525 | 97 | 0.1017 | 0.1017 |
| 350S300-97 | 3.500 | 3.000 | 1.000 | 0.1525 | 97 | 0.1017 | 0.0966 | | | | | | | | |

For SI: 1 inch = 25.4 mm.

¹ See Table 3 for member properties. See Figure 1 for illustration of member cross section.

² Depth measured from outside face to outside face of flanges.

³ Base metal thickness of members, exclusive of coatings, delivered to the jobsite must be a minimum of 95 percent of design the thickness.

⁴ Web height-to-thickness ratio, h/t, exceeds 200. Web stiffeners in accordance with Sections B1.2 and C3.6.1 of AISI-NAS are required. No holes or punch-outs are permitted in the web.

Table 1 continued on next page.

TABLE 1—C-SECTIONS (STUDS)¹ (Continued)

| SECTION | DEPTH ² (in) | FLANGE (in) | LIP (in) | INSIDE CORNER RADII (in) | MILS | DESIGN THICK. (in) | MIN. BASE METAL THICK. ³ (in) | SECTION | DEPTH ² (in) | FLANGE (in) | LIP (in) | INSIDE CORNER RADII (in) | MILS | DESIGN THICK. (in) | MIN. BASE METAL THICK. ³ (in) |
|-------------------------|----------------------------|----------------|-------------|-----------------------------------|------|--------------------------|--|-------------------------|----------------------------|----------------|-------------|-----------------------------------|------|--------------------------|--|
| 550S125-27 | 5.500 | 1.250 | 0.1875 | 0.0796 | 27 | 0.0283 | 0.0269 | 725S125-27 ⁴ | 7.250 | 1.250 | 0.1875 | 0.0796 | 27 | 0.0283 | 0.0269 |
| 550S125-30 | 5.500 | 1.250 | 0.1875 | 0.0781 | 30 | 0.0312 | 0.0296 | 725S125-30 ⁴ | 7.250 | 1.250 | 0.1875 | 0.0781 | 30 | 0.0312 | 0.0296 |
| 550S125-33 | 5.500 | 1.250 | 0.1875 | 0.0764 | 33 | 0.0346 | 0.0329 | 725S125-33 ⁴ | 7.250 | 1.250 | 0.1875 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 550S125-43 | 5.500 | 1.250 | 0.1875 | 0.0712 | 43 | 0.0451 | 0.0428 | 725S125-43 | 7.250 | 1.250 | 0.1875 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 550S125-54 | 5.500 | 1.250 | 0.1875 | 0.0849 | 54 | 0.0566 | 0.0538 | 725S125-54 | 7.250 | 1.250 | 0.1875 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 550S125-68 | 5.500 | 1.250 | 0.1875 | 0.1069 | 68 | 0.0713 | 0.0677 | 725S125-68 | 7.250 | 1.250 | 0.1875 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 550S137-33 | 5.500 | 1.375 | 0.375 | 0.0764 | 33 | 0.0346 | 0.0329 | 725S137-33 ⁴ | 7.250 | 1.375 | 0.375 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 550S137-43 | 5.500 | 1.375 | 0.375 | 0.0712 | 43 | 0.0451 | 0.0428 | 725S137-43 | 7.250 | 1.375 | 0.375 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 550S137-54 | 5.500 | 1.375 | 0.375 | 0.0849 | 54 | 0.0566 | 0.0538 | 725S137-54 | 7.250 | 1.375 | 0.375 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 550S137-68 | 5.500 | 1.375 | 0.375 | 0.1069 | 68 | 0.0713 | 0.0677 | 725S137-68 | 7.250 | 1.375 | 0.375 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 550S137-97 | 5.500 | 1.375 | 0.375 | 0.1525 | 97 | 0.1017 | 0.0966 | 725S137-97 | 7.250 | 1.375 | 0.375 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 550S162-33 | 5.500 | 1.625 | 0.50 | 0.0764 | 33 | 0.0346 | 0.0329 | 725S162-33 ⁴ | 7.250 | 1.625 | 0.50 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 550S162-43 | 5.500 | 1.625 | 0.50 | 0.0712 | 43 | 0.0451 | 0.0428 | 725S162-43 | 7.250 | 1.625 | 0.50 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 550S162-54 | 5.500 | 1.625 | 0.50 | 0.0849 | 54 | 0.0566 | 0.0538 | 725S162-54 | 7.250 | 1.625 | 0.50 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 550S162-68 | 5.500 | 1.625 | 0.50 | 0.1069 | 68 | 0.0713 | 0.0677 | 725S162-68 | 7.250 | 1.625 | 0.50 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 550S162-97 | 5.500 | 1.625 | 0.50 | 0.1525 | 97 | 0.1017 | 0.0966 | 725S162-97 | 7.250 | 1.625 | 0.50 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 550S200-33 | 5.500 | 2.000 | 0.625 | 0.0764 | 33 | 0.0346 | 0.0329 | 725S200-33 ⁴ | 7.250 | 2.000 | 0.625 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 550S200-43 | 5.500 | 2.000 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0428 | 725S200-43 | 7.250 | 2.000 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 550S200-54 | 5.500 | 2.000 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 | 725S200-54 | 7.250 | 2.000 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 550S200-68 | 5.500 | 2.000 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 | 725S200-68 | 7.250 | 2.000 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 550S200-97 | 5.500 | 2.000 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 | 725S200-97 | 7.250 | 2.000 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 550S250-43 | 5.500 | 2.500 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0428 | 725S250-43 | 7.250 | 2.500 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 550S250-54 | 5.500 | 2.500 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 | 725S250-54 | 7.250 | 2.500 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 550S250-68 | 5.500 | 2.500 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 | 725S250-68 | 7.250 | 2.500 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 550S250-97 | 5.500 | 2.500 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 | 725S250-97 | 7.250 | 2.500 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 550S300-54 | 5.500 | 3.000 | 1.000 | 0.0849 | 54 | 0.0566 | 0.0538 | 725S300-54 | 7.250 | 3.000 | 1.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 550S300-68 | 5.500 | 3.000 | 1.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 725S300-68 | 7.250 | 3.000 | 1.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 550S300-97 | 5.500 | 3.000 | 1.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 725S300-97 | 7.250 | 3.000 | 1.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 600S125-27 ⁴ | 6.000 | 1.250 | 0.1875 | 0.0796 | 27 | 0.0283 | 0.0269 | 800S125-30 ⁴ | 8.000 | 1.250 | 0.1875 | 0.0781 | 30 | 0.0312 | 0.0296 |
| 600S125-30 | 6.000 | 1.250 | 0.1875 | 0.0781 | 30 | 0.0312 | 0.0296 | 800S125-33 ⁴ | 8.000 | 1.250 | 0.1875 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 600S125-33 | 6.000 | 1.250 | 0.1875 | 0.0764 | 33 | 0.0346 | 0.0329 | 800S125-43 | 8.000 | 1.250 | 0.1875 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 600S125-43 | 6.000 | 1.250 | 0.1875 | 0.0712 | 43 | 0.0451 | 0.0428 | 800S125-54 | 8.000 | 1.250 | 0.1875 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 600S125-54 | 6.000 | 1.250 | 0.1875 | 0.0849 | 54 | 0.0566 | 0.0538 | 800S125-68 | 8.000 | 1.250 | 0.1875 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 600S125-68 | 6.000 | 1.250 | 0.1875 | 0.1069 | 68 | 0.0713 | 0.0677 | 800S137-33 ⁴ | 8.000 | 1.375 | 0.375 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 600S125-97 | 6.000 | 1.250 | 0.1875 | 0.1525 | 97 | 0.1017 | 0.0966 | 800S137-43 | 8.000 | 1.375 | 0.375 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 600S137-33 | 6.000 | 1.375 | 0.375 | 0.0764 | 33 | 0.0346 | 0.0329 | 800S137-54 | 8.000 | 1.375 | 0.375 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 600S137-43 | 6.000 | 1.375 | 0.375 | 0.0712 | 43 | 0.0451 | 0.0428 | 800S137-68 | 8.000 | 1.375 | 0.375 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 600S137-54 | 6.000 | 1.375 | 0.375 | 0.0849 | 54 | 0.0566 | 0.0538 | 800S137-97 | 8.000 | 1.375 | 0.375 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 600S137-68 | 6.000 | 1.375 | 0.375 | 0.1069 | 68 | 0.0713 | 0.0677 | 800S162-33 ⁴ | 8.000 | 1.625 | 0.50 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 600S137-97 | 6.000 | 1.375 | 0.375 | 0.1525 | 97 | 0.1017 | 0.0966 | 800S162-43 | 8.000 | 1.625 | 0.50 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 600S162-33 | 6.000 | 1.625 | 0.50 | 0.0764 | 33 | 0.0346 | 0.0329 | 800S162-54 | 8.000 | 1.625 | 0.50 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 600S162-43 | 6.000 | 1.625 | 0.50 | 0.0712 | 43 | 0.0451 | 0.0428 | 800S162-68 | 8.000 | 1.625 | 0.50 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 600S162-54 | 6.000 | 1.625 | 0.50 | 0.0849 | 54 | 0.0566 | 0.0538 | 800S162-97 | 8.000 | 1.625 | 0.50 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 600S162-68 | 6.000 | 1.625 | 0.50 | 0.1069 | 68 | 0.0713 | 0.0677 | 800S200-33 ⁴ | 8.000 | 2.000 | 0.625 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 600S162-97 | 6.000 | 1.625 | 0.50 | 0.1525 | 97 | 0.1017 | 0.0966 | 800S200-43 | 8.000 | 2.000 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 600S200-33 | 6.000 | 2.000 | 0.625 | 0.0764 | 33 | 0.0346 | 0.0329 | 800S200-54 | 8.000 | 2.000 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 600S200-43 | 6.000 | 2.000 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0428 | 800S200-68 | 8.000 | 2.000 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 600S200-54 | 6.000 | 2.000 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 | 800S200-97 | 8.000 | 2.000 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 600S200-68 | 6.000 | 2.000 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 | 800S250-43 | 8.000 | 2.500 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 600S200-97 | 6.000 | 2.000 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 | 800S250-54 | 8.000 | 2.500 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 600S250-43 | 6.000 | 2.500 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0428 | 800S250-68 | 8.000 | 2.500 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 600S250-54 | 6.000 | 2.500 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 | 800S250-97 | 8.000 | 2.500 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 600S250-68 | 6.000 | 2.500 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 | 800S300-54 | 8.000 | 3.000 | 1.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 600S250-97 | 6.000 | 2.500 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 | 800S300-68 | 8.000 | 3.000 | 1.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 600S300-54 | 6.000 | 3.000 | 1.000 | 0.0849 | 54 | 0.0566 | 0.0538 | 800S300-97 | 8.000 | 3.000 | 1.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 600S300-68 | 6.000 | 3.000 | 1.000 | 0.1069 | 68 | 0.0713 | 0.0677 | | | | | | | | |
| 600S300-97 | 6.000 | 3.000 | 1.000 | 0.1525 | 97 | 0.1017 | 0.0966 | | | | | | | | |

For SI: 1 inch = 25.4 mm.

¹ See Table 3 for member properties. See Figure 1 for illustration of member cross section.

² Depth measured from outside face to outside face of flanges.

³ Base metal thickness of members, exclusive of coatings, delivered to the jobsite must be a minimum of 95 percent of design the thickness.

⁴ Web height-to-thickness ratio, h/t, exceeds 200. Web stiffeners in accordance with Sections B1.2 and C3.6.1 of AISI-NAS are required. No holes or punch-outs are permitted in the web.

Table 1 continued on next page.

TABLE 1—C-SECTIONS (STUDS)¹ (Continued)

| SECTION | DEPTH ² (in) | FLANGE (in) | LIP (in) | INSIDE CORNER RADII (in) | MILS | DESIGN THICK. (in) | MIN. BASE METAL THICK. ³ (in) | SECTION | DEPTH ² (in) | FLANGE (in) | LIP (in) | INSIDE CORNER RADII (in) | MILS | DESIGN THICK. (in) | MIN. BASE METAL THICK. ³ (in) |
|--------------------------|----------------------------|----------------|-------------|-----------------------------------|------|--------------------------|--|--------------------------|----------------------------|----------------|-------------|-----------------------------------|------|--------------------------|--|
| 925S137-43 | 9.250 | 1.375 | 0.375 | 0.0712 | 43 | 0.0451 | 0.0428 | 1150S300-54 | 11.500 | 3.000 | 1.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 925S137-54 | 9.250 | 1.375 | 0.375 | 0.0849 | 54 | 0.0566 | 0.0538 | 1150S300-68 | 11.500 | 3.000 | 1.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 925S137-68 | 9.250 | 1.375 | 0.375 | 0.1069 | 68 | 0.0713 | 0.0677 | 1150S300-97 | 11.500 | 3.000 | 1.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 925S137-97 | 9.250 | 1.375 | 0.375 | 0.1525 | 97 | 0.1017 | 0.0966 | 1200S137-54 ⁴ | 12.000 | 1.375 | 0.375 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 925S162-43 | 9.250 | 1.625 | 0.50 | 0.0712 | 43 | 0.0451 | 0.0428 | 1200S137-68 | 12.000 | 1.375 | 0.375 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 925S162-54 | 9.250 | 1.625 | 0.50 | 0.0849 | 54 | 0.0566 | 0.0538 | 1200S137-97 | 12.000 | 1.375 | 0.375 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 925S162-68 | 9.250 | 1.625 | 0.50 | 0.1069 | 68 | 0.0713 | 0.0677 | 1200S162-54 ⁴ | 12.000 | 1.625 | 0.50 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 925S162-97 | 9.250 | 1.625 | 0.50 | 0.1525 | 97 | 0.1017 | 0.0966 | 1200S162-68 | 12.000 | 1.625 | 0.50 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 925S200-43 | 9.250 | 2.000 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0428 | 1200S162-97 | 12.000 | 1.625 | 0.50 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 925S200-54 | 9.250 | 2.000 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 | 1200S200-54 ⁴ | 12.000 | 2.000 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 925S200-68 | 9.250 | 2.000 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 | 1200S200-68 | 12.000 | 2.000 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 925S200-97 | 9.250 | 2.000 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 | 1200S200-97 | 12.000 | 2.000 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 925S250-43 | 9.250 | 2.500 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0428 | 1200S250-54 ⁴ | 12.000 | 2.500 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 925S250-54 | 9.250 | 2.500 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 | 1200S250-68 | 12.000 | 2.500 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 925S250-68 | 9.250 | 2.500 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 | 1200S250-97 | 12.000 | 2.500 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 925S250-97 | 9.250 | 2.500 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 | 1200S300-54 ⁴ | 12.000 | 3.000 | 1.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 925S300-54 | 9.250 | 3.000 | 1.000 | 0.0849 | 54 | 0.0566 | 0.0538 | 1200S300-68 | 12.000 | 3.000 | 1.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 925S300-68 | 9.250 | 3.000 | 1.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 1200S300-97 | 12.000 | 3.000 | 1.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 925S300-97 | 9.250 | 3.000 | 1.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 1350S137-54 ⁴ | 13.500 | 1.375 | 0.375 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 1000S137-43 ⁴ | 10.000 | 1.375 | 0.375 | 0.0712 | 43 | 0.0451 | 0.0428 | 1350S137-68 | 13.500 | 1.375 | 0.375 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1000S137-54 | 10.000 | 1.375 | 0.375 | 0.0849 | 54 | 0.0566 | 0.0538 | 1350S137-97 | 13.500 | 1.375 | 0.375 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1000S137-68 | 10.000 | 1.375 | 0.375 | 0.1069 | 68 | 0.0713 | 0.0677 | 1350S162-54 ⁴ | 13.500 | 1.625 | 0.50 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 1000S137-97 | 10.000 | 1.375 | 0.375 | 0.1525 | 97 | 0.1017 | 0.0966 | 1350S162-68 | 13.500 | 1.625 | 0.50 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1000S162-43 ⁴ | 10.000 | 1.625 | 0.50 | 0.0712 | 43 | 0.0451 | 0.0428 | 1350S162-97 | 13.500 | 1.625 | 0.50 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1000S162-54 | 10.000 | 1.625 | 0.50 | 0.0849 | 54 | 0.0566 | 0.0538 | 1350S200-54 ⁴ | 13.500 | 2.000 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 1000S162-68 | 10.000 | 1.625 | 0.50 | 0.1069 | 68 | 0.0713 | 0.0677 | 1350S200-68 | 13.500 | 2.000 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1000S162-97 | 10.000 | 1.625 | 0.50 | 0.1525 | 97 | 0.1017 | 0.0966 | 1350S200-97 | 13.500 | 2.000 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1000S200-43 ⁴ | 10.000 | 2.000 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0428 | 1350S250-54 ⁴ | 13.500 | 2.500 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 1000S200-54 | 10.000 | 2.000 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 | 1350S250-68 | 13.500 | 2.500 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1000S200-68 | 10.000 | 2.000 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 | 1350S250-97 | 13.500 | 2.500 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1000S200-97 | 10.000 | 2.000 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 | 1350S300-54 ⁴ | 13.500 | 3.000 | 1.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 1000S250-43 ⁴ | 10.000 | 2.500 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0428 | 1350S300-68 | 13.500 | 3.000 | 1.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1000S250-54 | 10.000 | 2.500 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 | 1350S300-97 | 13.500 | 3.000 | 1.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1000S250-68 | 10.000 | 2.500 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 | 1400S137-54 ⁴ | 14.000 | 1.375 | 0.375 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 1000S250-97 | 10.000 | 2.500 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 | 1400S137-68 | 14.000 | 1.375 | 0.375 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1000S300-54 | 10.000 | 3.000 | 1.000 | 0.0849 | 54 | 0.0566 | 0.0538 | 1400S137-97 | 14.000 | 1.375 | 0.375 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1000S300-68 | 10.000 | 3.000 | 1.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 1400S162-54 ⁴ | 14.000 | 1.625 | 0.50 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 1000S300-97 | 10.000 | 3.000 | 1.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 1400S162-68 | 14.000 | 1.625 | 0.50 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1150S137-43 ⁴ | 11.500 | 1.375 | 0.375 | 0.0712 | 43 | 0.0451 | 0.0428 | 1400S162-97 | 14.000 | 1.625 | 0.50 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1150S137-54 | 11.500 | 1.375 | 0.375 | 0.0849 | 54 | 0.0566 | 0.0538 | 1400S200-54 ⁴ | 14.000 | 2.000 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 1150S137-68 | 11.500 | 1.375 | 0.375 | 0.1069 | 68 | 0.0713 | 0.0677 | 1400S200-68 | 14.000 | 2.000 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1150S137-97 | 11.500 | 1.375 | 0.375 | 0.1525 | 97 | 0.1017 | 0.0966 | 1400S200-97 | 14.000 | 2.000 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1150S162-43 ⁴ | 11.500 | 1.625 | 0.50 | 0.0712 | 43 | 0.0451 | 0.0428 | 1400S250-54 ⁴ | 14.000 | 2.500 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 1150S162-54 | 11.500 | 1.625 | 0.50 | 0.0849 | 54 | 0.0566 | 0.0538 | 1400S250-68 | 14.000 | 2.500 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1150S162-68 | 11.500 | 1.625 | 0.50 | 0.1069 | 68 | 0.0713 | 0.0677 | 1400S250-97 | 14.000 | 2.500 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1150S162-97 | 11.500 | 1.625 | 0.50 | 0.1525 | 97 | 0.1017 | 0.0966 | 1400S300-54 ⁴ | 14.000 | 3.000 | 1.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 1150S200-43 ⁴ | 11.500 | 2.000 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0428 | 1400S300-68 | 14.000 | 3.000 | 1.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1150S200-54 | 11.500 | 2.000 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 | 1400S300-97 | 14.000 | 3.000 | 1.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1150S200-68 | 11.500 | 2.000 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 | | | | | | | | |
| 1150S200-97 | 11.500 | 2.000 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 | | | | | | | | |
| 1150S250-43 ⁴ | 11.500 | 2.500 | 0.625 | 0.0712 | 43 | 0.0451 | 0.0428 | | | | | | | | |
| 1150S250-54 | 11.500 | 2.500 | 0.625 | 0.0849 | 54 | 0.0566 | 0.0538 | | | | | | | | |
| 1150S250-68 | 11.500 | 2.500 | 0.625 | 0.1069 | 68 | 0.0713 | 0.0677 | | | | | | | | |
| 1150S250-97 | 11.500 | 2.500 | 0.625 | 0.1525 | 97 | 0.1017 | 0.0966 | | | | | | | | |

For SI: 1 inch = 25.4 mm.

¹ See Table 3 for member properties. See Figure 1 for illustration of member cross section.

² Depth measured from outside face to outside face of flanges.

³ Base metal thickness of members, exclusive of coatings, delivered to the jobsite must be a minimum of 95 percent of design the thickness.

⁴ Web height-to-thickness ratio, h/t, exceeds 200. Web stiffeners in accordance with Sections B1.2 and C3.6.1 of AISI-NAS are required. No holes or punch-outs are permitted in the web.

TABLE 2—CHANNEL (TRACK) SECTIONS¹

| SECTION | DEPTH ² (in) | FLANGE (in) | INSIDE CORNER RADII (in) | MILS | DESIGN THICK. (in) | MIN. BASE METAL THICK. ³ (in) | SECTION | DEPTH ² (in) | FLANGE (in) | INSIDE CORNER RADII (in) | MILS | DESIGN THICK. (in) | MIN. BASE METAL THICK. ³ (in) |
|------------|----------------------------|----------------|-----------------------------------|------|--------------------------|--|-------------------------|----------------------------|----------------|-----------------------------------|------|--------------------------|--|
| 162T125-18 | 1.625 | 1.250 | 0.0843 | 18 | 0.0188 | 0.0179 | 350T150-27 | 3.500 | 1.500 | 0.0796 | 27 | 0.0283 | 0.0269 |
| 162T125-27 | 1.625 | 1.250 | 0.0796 | 27 | 0.0283 | 0.0269 | 350T150-30 | 3.500 | 1.500 | 0.0781 | 30 | 0.0312 | 0.0296 |
| 162T125-30 | 1.625 | 1.250 | 0.0781 | 30 | 0.0312 | 0.0296 | 350T150-33 | 3.500 | 1.500 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 162T125-33 | 1.625 | 1.250 | 0.0764 | 33 | 0.0346 | 0.0329 | 350T150-43 | 3.500 | 1.500 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 162T125-43 | 1.625 | 1.250 | 0.0712 | 43 | 0.0451 | 0.0428 | 350T150-54 | 3.500 | 1.500 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 162T125-54 | 1.625 | 1.250 | 0.0849 | 54 | 0.0566 | 0.0538 | 350T150-68 | 3.500 | 1.500 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 162T125-68 | 1.625 | 1.250 | 0.1069 | 68 | 0.0713 | 0.0677 | 350T150-97 | 3.500 | 1.500 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 162T125-97 | 1.625 | 1.250 | 0.1525 | 97 | 0.1017 | 0.0966 | 350T200-33 | 3.500 | 2.000 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 162T150-18 | 1.625 | 1.500 | 0.0843 | 18 | 0.0188 | 0.0179 | 350T200-43 | 3.500 | 2.000 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 162T150-27 | 1.625 | 1.500 | 0.0796 | 27 | 0.0283 | 0.0269 | 350T200-54 | 3.500 | 2.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 162T150-30 | 1.625 | 1.500 | 0.0781 | 30 | 0.0312 | 0.0296 | 350T200-68 | 3.500 | 2.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 162T150-33 | 1.625 | 1.500 | 0.0764 | 33 | 0.0346 | 0.0329 | 350T200-97 | 3.500 | 2.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 162T150-43 | 1.625 | 1.500 | 0.0712 | 43 | 0.0451 | 0.0428 | 350T250-43 | 3.500 | 2.500 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 162T150-54 | 1.625 | 1.500 | 0.0849 | 54 | 0.0566 | 0.0538 | 350T250-54 | 3.500 | 2.500 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 162T150-68 | 1.625 | 1.500 | 0.1069 | 68 | 0.0713 | 0.0677 | 350T250-68 | 3.500 | 2.500 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 162T150-97 | 1.625 | 1.500 | 0.1525 | 97 | 0.1017 | 0.0966 | 350T250-97 | 3.500 | 2.500 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 162T200-33 | 1.625 | 2.000 | 0.0764 | 33 | 0.0346 | 0.0329 | 350T300-54 | 3.500 | 3.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 162T200-43 | 1.625 | 2.000 | 0.0712 | 43 | 0.0451 | 0.0428 | 350T300-68 | 3.500 | 3.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 162T200-54 | 1.625 | 2.000 | 0.0849 | 54 | 0.0566 | 0.0538 | 350T300-97 | 3.500 | 3.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 162T200-68 | 1.625 | 2.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 350T400-68 | 3.500 | 4.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 162T200-97 | 1.625 | 2.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 350T400-97 | 3.500 | 4.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 250T125-18 | 2.500 | 1.250 | 0.0843 | 18 | 0.0188 | 0.0179 | 362T125-18 | 3.625 | 1.250 | 0.0843 | 18 | 0.0188 | 0.0179 |
| 250T125-27 | 2.500 | 1.250 | 0.0796 | 27 | 0.0283 | 0.0269 | 362T125-27 | 3.625 | 1.250 | 0.0796 | 27 | 0.0283 | 0.0269 |
| 250T125-30 | 2.500 | 1.250 | 0.0781 | 30 | 0.0312 | 0.0296 | 362T125-30 | 3.625 | 1.250 | 0.0781 | 30 | 0.0312 | 0.0296 |
| 250T125-33 | 2.500 | 1.250 | 0.0764 | 33 | 0.0346 | 0.0329 | 362T125-33 | 3.625 | 1.250 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 250T125-43 | 2.500 | 1.250 | 0.0712 | 43 | 0.0451 | 0.0428 | 362T125-43 | 3.625 | 1.250 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 250T125-54 | 2.500 | 1.250 | 0.0849 | 54 | 0.0566 | 0.0538 | 362T125-54 | 3.625 | 1.250 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 250T125-68 | 2.500 | 1.250 | 0.1069 | 68 | 0.0713 | 0.0677 | 362T125-68 | 3.625 | 1.250 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 250T125-97 | 2.500 | 1.250 | 0.1525 | 97 | 0.1017 | 0.0966 | 362T125-97 | 3.625 | 1.250 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 250T150-27 | 2.500 | 1.500 | 0.0796 | 27 | 0.0283 | 0.0269 | 362T150-27 | 3.625 | 1.500 | 0.0796 | 27 | 0.0283 | 0.0269 |
| 250T150-30 | 2.500 | 1.500 | 0.0781 | 30 | 0.0312 | 0.0296 | 362T150-30 | 3.625 | 1.500 | 0.0781 | 30 | 0.0312 | 0.0296 |
| 250T150-33 | 2.500 | 1.500 | 0.0764 | 33 | 0.0346 | 0.0329 | 362T150-33 | 3.625 | 1.500 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 250T150-43 | 2.500 | 1.500 | 0.0712 | 43 | 0.0451 | 0.0428 | 362T150-43 | 3.625 | 1.500 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 250T150-54 | 2.500 | 1.500 | 0.0849 | 54 | 0.0566 | 0.0538 | 362T150-54 | 3.625 | 1.500 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 250T150-68 | 2.500 | 1.500 | 0.1069 | 68 | 0.0713 | 0.0677 | 362T150-68 | 3.625 | 1.500 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 250T150-97 | 2.500 | 1.500 | 0.1525 | 97 | 0.1017 | 0.0966 | 362T150-97 | 3.625 | 1.500 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 250T200-33 | 2.500 | 2.000 | 0.0764 | 33 | 0.0346 | 0.0329 | 362T200-33 | 3.625 | 2.000 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 250T200-43 | 2.500 | 2.000 | 0.0712 | 43 | 0.0451 | 0.0428 | 362T200-43 | 3.625 | 2.000 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 250T200-54 | 2.500 | 2.000 | 0.0849 | 54 | 0.0566 | 0.0538 | 362T200-54 | 3.625 | 2.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 250T200-68 | 2.500 | 2.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 362T200-68 | 3.625 | 2.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 250T200-97 | 2.500 | 2.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 362T200-97 | 3.625 | 2.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 250T250-43 | 2.500 | 2.500 | 0.0712 | 43 | 0.0451 | 0.0428 | 362T250-43 | 3.625 | 2.500 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 250T250-54 | 2.500 | 2.500 | 0.0849 | 54 | 0.0566 | 0.0538 | 362T250-54 | 3.625 | 2.500 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 250T250-68 | 2.500 | 2.500 | 0.1069 | 68 | 0.0713 | 0.0677 | 362T250-68 | 3.625 | 2.500 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 250T250-97 | 2.500 | 2.500 | 0.1525 | 97 | 0.1017 | 0.0966 | 362T250-97 | 3.625 | 2.500 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 250T300-54 | 2.500 | 3.000 | 0.0849 | 54 | 0.0566 | 0.0538 | 362T300-54 | 3.625 | 3.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 250T300-68 | 2.500 | 3.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 362T300-68 | 3.625 | 3.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 250T300-97 | 2.500 | 3.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 362T300-97 | 3.625 | 3.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 350T125-18 | 3.500 | 1.250 | 0.0843 | 18 | 0.0188 | 0.0179 | 362T400-68 | 3.625 | 4.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 350T125-27 | 3.500 | 1.250 | 0.0796 | 27 | 0.0283 | 0.0269 | 362T400-97 | 3.625 | 4.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 350T125-30 | 3.500 | 1.250 | 0.0781 | 30 | 0.0312 | 0.0296 | 400T125-18 ¹ | 4.000 | 1.250 | 0.0843 | 18 | 0.0188 | 0.0179 |
| 350T125-33 | 3.500 | 1.250 | 0.0764 | 33 | 0.0346 | 0.0329 | 400T125-27 | 4.000 | 1.250 | 0.0796 | 27 | 0.0283 | 0.0269 |
| 350T125-43 | 3.500 | 1.250 | 0.0712 | 43 | 0.0451 | 0.0428 | 400T125-30 | 4.000 | 1.250 | 0.0781 | 30 | 0.0312 | 0.0296 |
| 350T125-54 | 3.500 | 1.250 | 0.0849 | 54 | 0.0566 | 0.0538 | 400T125-33 | 4.000 | 1.250 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 350T125-68 | 3.500 | 1.250 | 0.1069 | 68 | 0.0713 | 0.0677 | 400T125-43 | 4.000 | 1.250 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 350T125-97 | 3.500 | 1.250 | 0.1525 | 97 | 0.1017 | 0.0966 | 400T125-54 | 4.000 | 1.250 | 0.0849 | 54 | 0.0566 | 0.0538 |
| | | | | | | | 400T125-68 | 4.000 | 1.250 | 0.1069 | 68 | 0.0713 | 0.0677 |
| | | | | | | | 400T125-97 | 4.000 | 1.250 | 0.1525 | 97 | 0.1017 | 0.0966 |

For SI: 1 inch = 25.4 mm

¹ See Table 4 for member properties. See Figure 1 for illustration of member cross section.

² Depth measured from inside face to inside face of flanges.

³ Base metal thickness of members, exclusive of coatings, delivered to the jobsite must be a minimum of 95 percent of design the thickness.

⁴ Web height-to-thickness ratio, h/t, exceeds 200. Web stiffeners in accordance with Sections B1.2 and C3.6.1 of AISI-NAS are required.

Table 2 continued on next page.

TABLE 2—CHANNEL (TRACK) SECTIONS¹ (Continued)

| SECTION | DEPTH ² (in) | FLANGE (in) | INSIDE CORNER RADII (in) | MILS | DESIGN THICK. (in) | MIN. BASE METAL THICK. ³ (in) | SECTION | DEPTH ² (in) | FLANGE (in) | INSIDE CORNER RADII (in) | MILS | DESIGN THICK. (in) | MIN. BASE METAL THICK. ³ (in) |
|-------------------------|----------------------------|----------------|-----------------------------------|------|--------------------------|--|-------------------------|----------------------------|----------------|-----------------------------------|------|--------------------------|--|
| 400T150-27 | 4.000 | 1.500 | 0.0796 | 27 | 0.0283 | 0.0269 | 600T150-27 ⁴ | 6.000 | 1.500 | 0.0796 | 27 | 0.0283 | 0.0269 |
| 400T150-30 | 4.000 | 1.500 | 0.0781 | 30 | 0.0312 | 0.0296 | 600T150-30 | 6.000 | 1.500 | 0.0781 | 30 | 0.0312 | 0.0296 |
| 400T150-33 | 4.000 | 1.500 | 0.0764 | 33 | 0.0346 | 0.0329 | 600T150-33 | 6.000 | 1.500 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 400T150-43 | 4.000 | 1.500 | 0.0712 | 43 | 0.0451 | 0.0428 | 600T150-43 | 6.000 | 1.500 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 400T150-54 | 4.000 | 1.500 | 0.0849 | 54 | 0.0566 | 0.0538 | 600T150-54 | 6.000 | 1.500 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 400T150-68 | 4.000 | 1.500 | 0.1069 | 68 | 0.0713 | 0.0677 | 600T150-68 | 6.000 | 1.500 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 400T150-97 | 4.000 | 1.500 | 0.1525 | 97 | 0.1017 | 0.0966 | 600T150-97 | 6.000 | 1.500 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 400T200-33 | 4.000 | 2.000 | 0.0764 | 33 | 0.0346 | 0.0329 | 600T150-118 | 6.000 | 1.500 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 400T200-43 | 4.000 | 2.000 | 0.0712 | 43 | 0.0451 | 0.0428 | 600T200-33 | 6.000 | 2.000 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 400T200-54 | 4.000 | 2.000 | 0.0849 | 54 | 0.0566 | 0.0538 | 600T200-43 | 6.000 | 2.000 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 400T200-68 | 4.000 | 2.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 600T200-54 | 6.000 | 2.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 400T200-97 | 4.000 | 2.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 600T200-68 | 6.000 | 2.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 400T250-43 | 4.000 | 2.500 | 0.0712 | 43 | 0.0451 | 0.0428 | 600T200-97 | 6.000 | 2.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 400T250-54 | 4.000 | 2.500 | 0.0849 | 54 | 0.0566 | 0.0538 | 600T200-118 | 6.000 | 2.000 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 400T250-68 | 4.000 | 2.500 | 0.1069 | 68 | 0.0713 | 0.0677 | 600T250-43 | 6.000 | 2.500 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 400T250-97 | 4.000 | 2.500 | 0.1525 | 97 | 0.1017 | 0.0966 | 600T250-54 | 6.000 | 2.500 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 400T300-54 | 4.000 | 3.000 | 0.0849 | 54 | 0.0566 | 0.0538 | 600T250-68 | 6.000 | 2.500 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 400T300-68 | 4.000 | 3.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 600T250-97 | 6.000 | 2.500 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 400T300-97 | 4.000 | 3.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 600T250-118 | 6.000 | 2.500 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 400T400-68 | 4.000 | 4.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 600T300-54 | 6.000 | 3.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 400T400-97 | 4.000 | 4.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 600T300-68 | 6.000 | 3.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 550T125-27 | 5.500 | 1.250 | 0.0796 | 27 | 0.0283 | 0.0269 | 600T300-97 | 6.000 | 3.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 550T125-30 | 5.500 | 1.250 | 0.0781 | 30 | 0.0312 | 0.0296 | 600T300-118 | 6.000 | 3.000 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 550T125-33 | 5.500 | 1.250 | 0.0764 | 33 | 0.0346 | 0.0329 | 600T400-68 | 6.000 | 4.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 550T125-43 | 5.500 | 1.250 | 0.0712 | 43 | 0.0451 | 0.0428 | 600T400-97 | 6.000 | 4.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 550T125-54 | 5.500 | 1.250 | 0.0849 | 54 | 0.0566 | 0.0538 | 600T400-118 | 6.000 | 4.000 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 550T125-68 | 5.500 | 1.250 | 0.1069 | 68 | 0.0713 | 0.0677 | 725T125-27 ⁴ | 7.250 | 1.250 | 0.0796 | 27 | 0.0283 | 0.0269 |
| 550T125-97 | 5.500 | 1.250 | 0.1525 | 97 | 0.1017 | 0.0966 | 725T125-30 ¹ | 7.250 | 1.250 | 0.0781 | 30 | 0.0312 | 0.0296 |
| 550T150-27 | 5.500 | 1.500 | 0.0796 | 27 | 0.0283 | 0.0269 | 725T125-33 ¹ | 7.250 | 1.250 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 550T150-30 | 5.500 | 1.500 | 0.0781 | 30 | 0.0312 | 0.0296 | 725T125-43 | 7.250 | 1.250 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 550T150-33 | 5.500 | 1.500 | 0.0764 | 33 | 0.0346 | 0.0329 | 725T125-54 | 7.250 | 1.250 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 550T150-43 | 5.500 | 1.500 | 0.0712 | 43 | 0.0451 | 0.0428 | 725T125-68 | 7.250 | 1.250 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 550T150-54 | 5.500 | 1.500 | 0.0849 | 54 | 0.0566 | 0.0538 | 725T125-97 | 7.250 | 1.250 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 550T150-68 | 5.500 | 1.500 | 0.1069 | 68 | 0.0713 | 0.0677 | 725T125-118 | 7.250 | 1.250 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 550T150-97 | 5.500 | 1.500 | 0.1525 | 97 | 0.1017 | 0.0966 | 725T150-27 ⁴ | 7.250 | 1.500 | 0.0796 | 27 | 0.0283 | 0.0269 |
| 550T200-33 | 5.500 | 2.000 | 0.0764 | 33 | 0.0346 | 0.0329 | 725T150-30 ¹ | 7.250 | 1.500 | 0.0781 | 30 | 0.0312 | 0.0296 |
| 550T200-43 | 5.500 | 2.000 | 0.0712 | 43 | 0.0451 | 0.0428 | 725T150-33 ¹ | 7.250 | 1.500 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 550T200-54 | 5.500 | 2.000 | 0.0849 | 54 | 0.0566 | 0.0538 | 725T150-43 | 7.250 | 1.500 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 550T200-68 | 5.500 | 2.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 725T150-54 | 7.250 | 1.500 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 550T200-97 | 5.500 | 2.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 725T150-68 | 7.250 | 1.500 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 550T250-43 | 5.500 | 2.500 | 0.0712 | 43 | 0.0451 | 0.0428 | 725T150-97 | 7.250 | 1.500 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 550T250-54 | 5.500 | 2.500 | 0.0849 | 54 | 0.0566 | 0.0538 | 725T150-118 | 7.250 | 1.500 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 550T250-68 | 5.500 | 2.500 | 0.1069 | 68 | 0.0713 | 0.0677 | 725T200-33 ¹ | 7.250 | 2.000 | 0.0764 | 33 | 0.0346 | 0.0329 |
| 550T250-97 | 5.500 | 2.500 | 0.1525 | 97 | 0.1017 | 0.0966 | 725T200-43 | 7.250 | 2.000 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 550T300-54 | 5.500 | 3.000 | 0.0849 | 54 | 0.0566 | 0.0538 | 725T200-54 | 7.250 | 2.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 550T300-68 | 5.500 | 3.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 725T200-68 | 7.250 | 2.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 550T300-97 | 5.500 | 3.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 725T200-97 | 7.250 | 2.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 550T400-68 | 5.500 | 4.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 725T200-118 | 7.250 | 2.000 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 550T400-97 | 5.500 | 4.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 725T250-43 | 7.250 | 2.500 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 600T125-27 ⁴ | 6.000 | 1.250 | 0.0796 | 27 | 0.0283 | 0.0269 | 725T250-54 | 7.250 | 2.500 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 600T125-30 | 6.000 | 1.250 | 0.0781 | 30 | 0.0312 | 0.0296 | 725T250-68 | 7.250 | 2.500 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 600T125-33 | 6.000 | 1.250 | 0.0764 | 33 | 0.0346 | 0.0329 | 725T250-97 | 7.250 | 2.500 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 600T125-43 | 6.000 | 1.250 | 0.0712 | 43 | 0.0451 | 0.0428 | 725T250-118 | 7.250 | 2.500 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 600T125-54 | 6.000 | 1.250 | 0.0849 | 54 | 0.0566 | 0.0538 | 725T300-54 | 7.250 | 3.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 600T125-68 | 6.000 | 1.250 | 0.1069 | 68 | 0.0713 | 0.0677 | 725T300-68 | 7.250 | 3.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 600T125-97 | 6.000 | 1.250 | 0.1525 | 97 | 0.1017 | 0.0966 | 725T300-97 | 7.250 | 3.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 600T125-118 | 6.000 | 1.250 | 0.1863 | 118 | 0.1242 | 0.1180 | 725T300-118 | 7.250 | 3.000 | 0.1863 | 118 | 0.1242 | 0.1180 |

For SI: 1 inch = 25.4 mm.

¹ See Table 4 for member properties. See Figure 1 for illustration of member cross section.

² Depth measured from inside face to inside face of flanges.

³ Base metal thickness of members, exclusive of coatings, delivered to the jobsite must be a minimum of 95 percent of design the thickness.

⁴ Web height-to-thickness ratio, h/t, exceeds 200. Web stiffeners in accordance with Sections B1.2 and C3.6.1 of AISI-NAS are required.

Table 2 continued on next page.

TABLE 2—CHANNEL (TRACK) SECTIONS¹ (Continued)

| SECTION | DEPTH ² (in) | FLANGE (in) | INSIDE CORNER RADII (in) | MILS | DESIGN THICK. (in) | MIN. BASE METAL THICK. ³ (in) | SECTION | DEPTH ² (in) | FLANGE (in) | INSIDE CORNER RADII (in) | MILS | DESIGN THICK. (in) | MIN. BASE METAL THICK. ³ (in) |
|-------------------------|----------------------------|----------------|-----------------------------------|------|--------------------------|--|--------------------------|----------------------------|----------------|-----------------------------------|------|--------------------------|--|
| 725T400-68 | 7.250 | 4.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 925T300-54 | 9.250 | 3.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 725T400-97 | 7.250 | 4.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 925T300-68 | 9.250 | 3.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 725T400-118 | 7.250 | 4.000 | 0.1863 | 118 | 0.1242 | 0.1180 | 925T300-97 | 9.250 | 3.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 800T125-30 ⁴ | 8.000 | 1.250 | 0.0781 | 30 | 0.0312 | 0.0296 | 925T300-118 | 9.250 | 3.000 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 800T125-33 ⁴ | 8.000 | 1.250 | 0.0764 | 33 | 0.0346 | 0.0329 | 925T400-68 | 9.250 | 4.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 800T125-43 | 8.000 | 1.250 | 0.0712 | 43 | 0.0451 | 0.0428 | 925T400-97 | 9.250 | 4.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 800T125-54 | 8.000 | 1.250 | 0.0849 | 54 | 0.0566 | 0.0538 | 925T400-118 | 9.250 | 4.000 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 800T125-68 | 8.000 | 1.250 | 0.1069 | 68 | 0.0713 | 0.0677 | 1000T125-43 ⁴ | 10.000 | 1.250 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 800T125-97 | 8.000 | 1.250 | 0.1525 | 97 | 0.1017 | 0.0966 | 1000T125-54 | 10.000 | 1.250 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 800T125-118 | 8.000 | 1.250 | 0.1863 | 118 | 0.1242 | 0.1180 | 1000T125-68 | 10.000 | 1.250 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 800T150-30 ⁴ | 8.000 | 1.500 | 0.0781 | 30 | 0.0312 | 0.0296 | 1000T125-97 | 10.000 | 1.250 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 800T150-33 ⁴ | 8.000 | 1.500 | 0.0764 | 33 | 0.0346 | 0.0329 | 1000T125-118 | 10.000 | 1.250 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 800T150-43 | 8.000 | 1.500 | 0.0712 | 43 | 0.0451 | 0.0428 | 1000T150-43 ⁴ | 10.000 | 1.500 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 800T150-54 | 8.000 | 1.500 | 0.0849 | 54 | 0.0566 | 0.0538 | 1000T150-54 | 10.000 | 1.500 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 800T150-68 | 8.000 | 1.500 | 0.1069 | 68 | 0.0713 | 0.0677 | 1000T150-68 | 10.000 | 1.500 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 800T150-97 | 8.000 | 1.500 | 0.1525 | 97 | 0.1017 | 0.0966 | 1000T150-97 | 10.000 | 1.500 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 800T150-118 | 8.000 | 1.500 | 0.1863 | 118 | 0.1242 | 0.1180 | 1000T150-118 | 10.000 | 1.500 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 800T200-33 ⁴ | 8.000 | 2.000 | 0.0764 | 33 | 0.0346 | 0.0329 | 1000T150-118 | 10.000 | 1.500 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 800T200-43 | 8.000 | 2.000 | 0.0712 | 43 | 0.0451 | 0.0428 | 1000T200-43 ⁴ | 10.000 | 2.000 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 800T200-54 | 8.000 | 2.000 | 0.0849 | 54 | 0.0566 | 0.0538 | 1000T200-54 | 10.000 | 2.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 800T200-68 | 8.000 | 2.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 1000T200-68 | 10.000 | 2.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 800T200-97 | 8.000 | 2.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 1000T200-97 | 10.000 | 2.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 800T200-118 | 8.000 | 2.000 | 0.1863 | 118 | 0.1242 | 0.1180 | 1000T200-118 | 10.000 | 2.000 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 800T250-43 | 8.000 | 2.500 | 0.0712 | 43 | 0.0451 | 0.0428 | 1000T250-43 ⁴ | 10.000 | 2.500 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 800T250-54 | 8.000 | 2.500 | 0.0849 | 54 | 0.0566 | 0.0538 | 1000T250-54 | 10.000 | 2.500 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 800T250-68 | 8.000 | 2.500 | 0.1069 | 68 | 0.0713 | 0.0677 | 1000T250-68 | 10.000 | 2.500 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 800T250-97 | 8.000 | 2.500 | 0.1525 | 97 | 0.1017 | 0.0966 | 1000T250-97 | 10.000 | 2.500 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 800T250-118 | 8.000 | 2.500 | 0.1863 | 118 | 0.1242 | 0.1180 | 1000T250-118 | 10.000 | 2.500 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 80T3000-54 | 8.000 | 3.000 | 0.0849 | 54 | 0.0566 | 0.0538 | 1000T300-54 | 10.000 | 3.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 800T300-68 | 8.000 | 3.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 1000T300-68 | 10.000 | 3.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 800T300-97 | 8.000 | 3.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 1000T300-97 | 10.000 | 3.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 800T300-118 | 8.000 | 3.000 | 0.1863 | 118 | 0.1242 | 0.1180 | 1000T300-118 | 10.000 | 3.000 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 800T400-68 | 8.000 | 4.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 1000T400-68 | 10.000 | 4.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 800T400-97 | 8.000 | 4.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 1000T400-97 | 10.000 | 4.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 800T400-118 | 8.000 | 4.000 | 0.1863 | 118 | 0.1242 | 0.1180 | 1000T400-118 | 10.000 | 4.000 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 925T125-43 ⁴ | 9.250 | 1.250 | 0.0712 | 43 | 0.0451 | 0.0428 | 1150T125-43 ⁴ | 11.500 | 1.250 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 925T125-54 | 9.250 | 1.250 | 0.0849 | 54 | 0.0566 | 0.0538 | 1150T125-54 ⁴ | 11.500 | 1.250 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 925T125-68 | 9.250 | 1.250 | 0.1069 | 68 | 0.0713 | 0.0677 | 1150T125-68 | 11.500 | 1.250 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 925T125-97 | 9.250 | 1.250 | 0.1525 | 97 | 0.1017 | 0.0966 | 1150T125-97 | 11.500 | 1.250 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 925T125-118 | 9.250 | 1.250 | 0.1863 | 118 | 0.1242 | 0.1180 | 1150T125-118 | 11.500 | 1.250 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 925T150-43 ⁴ | 9.250 | 1.500 | 0.0712 | 43 | 0.0451 | 0.0428 | 1150T150-43 ⁴ | 11.500 | 1.500 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 925T150-54 | 9.250 | 1.500 | 0.0849 | 54 | 0.0566 | 0.0538 | 1150T150-54 ⁴ | 11.500 | 1.500 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 925T150-68 | 9.250 | 1.500 | 0.1069 | 68 | 0.0713 | 0.0677 | 1150T150-68 | 11.500 | 1.500 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 925T150-97 | 9.250 | 1.500 | 0.1525 | 97 | 0.1017 | 0.0966 | 1150T150-97 | 11.500 | 1.500 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 925T150-118 | 9.250 | 1.500 | 0.1863 | 118 | 0.1242 | 0.1180 | 1150T150-118 | 11.500 | 1.500 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 925T200-43 ⁴ | 9.250 | 2.000 | 0.0712 | 43 | 0.0451 | 0.0428 | 1150T200-43 ⁴ | 11.500 | 2.000 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 925T200-54 | 9.250 | 2.000 | 0.0849 | 54 | 0.0566 | 0.0538 | 1150T200-54 ⁴ | 11.500 | 2.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 925T200-68 | 9.250 | 2.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 1150T200-68 | 11.500 | 2.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 925T200-97 | 9.250 | 2.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 1150T200-97 | 11.500 | 2.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 925T200-118 | 9.250 | 2.000 | 0.1863 | 118 | 0.1242 | 0.1180 | 1150T200-118 | 11.500 | 2.000 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 925T250-43 ⁴ | 9.250 | 2.500 | 0.0712 | 43 | 0.0451 | 0.0428 | 1150T250-43 ⁴ | 11.500 | 2.500 | 0.0712 | 43 | 0.0451 | 0.0428 |
| 925T250-54 | 9.250 | 2.500 | 0.0849 | 54 | 0.0566 | 0.0538 | 1150T250-54 ⁴ | 11.500 | 2.500 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 925T250-68 | 9.250 | 2.500 | 0.1069 | 68 | 0.0713 | 0.0677 | 1150T250-68 | 11.500 | 2.500 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 925T250-97 | 9.250 | 2.500 | 0.1525 | 97 | 0.1017 | 0.0966 | 1150T250-97 | 11.500 | 2.500 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 925T250-118 | 9.250 | 2.500 | 0.1863 | 118 | 0.1242 | 0.1180 | 1150T250-118 | 11.500 | 2.500 | 0.1863 | 118 | 0.1242 | 0.1180 |

For SI: 1 inch = 25.4 mm.

¹ See Table 4 for member properties. See Figure 1 for illustration of member cross section.

² Depth measured from inside face to inside face of flanges.

³ Base metal thickness of members, exclusive of coatings, delivered to the jobsite must be a minimum of 95 percent of design the thickness.

⁴ Web height-to-thickness ratio, h/t, exceeds 200. Web stiffeners in accordance with Sections B1.2 and C3.6.1 of AISI-NAS are required.

Table 2 continued on next page.

TABLE 2—CHANNEL (TRACK) SECTIONS¹ (Continued)

| SECTION | DEPTH ² (in) | FLANGE (in) | INSIDE CORNER RADII (in) | MILS | DESIGN THICK. (in) | MIN. BASE METAL THICK. ³ (in) | SECTION | DEPTH ² (in) | FLANGE (in) | INSIDE CORNER RADII (in) | MILS | DESIGN THICK. (in) | MIN. BASE METAL THICK. ³ (in) |
|--------------------------|----------------------------|----------------|-----------------------------------|------|--------------------------|--|--------------------------|----------------------------|----------------|-----------------------------------|------|--------------------------|--|
| 1150T300-54 ⁴ | 11.500 | 3.000 | 0.0849 | 54 | 0.0566 | 0.0538 | 1350T200-54 ⁴ | 13.500 | 2.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 1150T300-68 | 11.500 | 3.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 1350T200-68 | 13.500 | 2.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1150T300-97 | 11.500 | 3.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 1350T200-97 | 13.500 | 2.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1150T300-118 | 11.500 | 3.000 | 0.1863 | 118 | 0.1242 | 0.1180 | 1350T200-118 | 13.500 | 2.000 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 1150T400-68 | 11.500 | 4.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 1350T250-54 ⁴ | 13.500 | 2.500 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 1150T400-97 | 11.500 | 4.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 1350T250-68 | 13.500 | 2.500 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1150T400-118 | 11.500 | 4.000 | 0.1863 | 118 | 0.1242 | 0.1180 | 1350T250-97 | 13.500 | 2.500 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1200T125-54 ⁴ | 12.000 | 1.250 | 0.0849 | 54 | 0.0566 | 0.0538 | 1350T250-118 | 13.500 | 2.500 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 1200T125-68 | 12.000 | 1.250 | 0.1069 | 68 | 0.0713 | 0.0677 | 1350T300-54 ⁴ | 13.500 | 3.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 1200T125-97 | 12.000 | 1.250 | 0.1525 | 97 | 0.1017 | 0.0966 | 1350T300-68 | 13.500 | 3.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1200T125-118 | 12.000 | 1.250 | 0.1863 | 118 | 0.1242 | 0.1180 | 1350T300-97 | 13.500 | 3.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1200T150-54 ⁴ | 12.000 | 1.500 | 0.0849 | 54 | 0.0566 | 0.0538 | 1350T300-118 | 13.500 | 3.000 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 1200T150-68 | 12.000 | 1.500 | 0.1069 | 68 | 0.0713 | 0.0677 | 1350T400-68 | 13.500 | 4.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1200T150-97 | 12.000 | 1.500 | 0.1525 | 97 | 0.1017 | 0.0966 | 1350T400-97 | 13.500 | 4.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1200T150-118 | 12.000 | 1.500 | 0.1863 | 118 | 0.1242 | 0.1180 | 1350T400-118 | 13.500 | 4.000 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 1200T200-54 ⁴ | 12.000 | 2.000 | 0.0849 | 54 | 0.0566 | 0.0538 | 1400T125-54 ⁴ | 14.000 | 1.250 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 1200T200-68 | 12.000 | 2.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 1400T125-68 | 14.000 | 1.250 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1200T200-97 | 12.000 | 2.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 1400T125-97 | 14.000 | 1.250 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1200T200-118 | 12.000 | 2.000 | 0.1863 | 118 | 0.1242 | 0.1180 | 1400T125-118 | 14.000 | 1.250 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 1200T250-54 ⁴ | 12.000 | 2.500 | 0.0849 | 54 | 0.0566 | 0.0538 | 1400T150-54 ⁴ | 14.000 | 1.500 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 1200T250-68 | 12.000 | 2.500 | 0.1069 | 68 | 0.0713 | 0.0677 | 1400T150-68 | 14.000 | 1.500 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1200T250-97 | 12.000 | 2.500 | 0.1525 | 97 | 0.1017 | 0.0966 | 1400T150-97 | 14.000 | 1.500 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1200T250-118 | 12.000 | 2.500 | 0.1863 | 118 | 0.1242 | 0.1180 | 1400T150-118 | 14.000 | 1.500 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 1200T300-54 ⁴ | 12.000 | 3.000 | 0.0849 | 54 | 0.0566 | 0.0538 | 1400T200-54 ⁴ | 14.000 | 2.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 1200T300-68 | 12.000 | 3.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 1400T200-68 | 14.000 | 2.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1200T300-97 | 12.000 | 3.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 1400T200-97 | 14.000 | 2.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1200T300-118 | 12.000 | 3.000 | 0.1863 | 118 | 0.1242 | 0.1180 | 1400T200-118 | 14.000 | 2.000 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 1200T400-68 | 12.000 | 4.000 | 0.1069 | 68 | 0.0713 | 0.0677 | 1400T250-54 ⁴ | 14.000 | 2.500 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 1200T400-97 | 12.000 | 4.000 | 0.1525 | 97 | 0.1017 | 0.0966 | 1400T250-68 | 14.000 | 2.500 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1200T400-118 | 12.000 | 4.000 | 0.1863 | 118 | 0.1242 | 0.1180 | 1400T250-97 | 14.000 | 2.500 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1350T125-54 ⁴ | 13.500 | 1.250 | 0.0849 | 54 | 0.0566 | 0.0538 | 1400T250-118 | 14.000 | 2.500 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 1350T125-68 | 13.500 | 1.250 | 0.1069 | 68 | 0.0713 | 0.0677 | 1400T300-54 ⁴ | 14.000 | 3.000 | 0.0849 | 54 | 0.0566 | 0.0538 |
| 1350T125-97 | 13.500 | 1.250 | 0.1525 | 97 | 0.1017 | 0.0966 | 1400T300-68 | 14.000 | 3.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1350T125-118 | 13.500 | 1.250 | 0.1863 | 118 | 0.1242 | 0.1180 | 1400T300-97 | 14.000 | 3.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1350T150-54 ⁴ | 13.500 | 1.500 | 0.0849 | 54 | 0.0566 | 0.0538 | 1400T300-118 | 14.000 | 3.000 | 0.1863 | 118 | 0.1242 | 0.1180 |
| 1350T150-68 | 13.500 | 1.500 | 0.1069 | 68 | 0.0713 | 0.0677 | 1400T400-68 | 14.000 | 4.000 | 0.1069 | 68 | 0.0713 | 0.0677 |
| 1350T150-97 | 13.500 | 1.500 | 0.1525 | 97 | 0.1017 | 0.0966 | 1400T400-97 | 14.000 | 4.000 | 0.1525 | 97 | 0.1017 | 0.0966 |
| 1350T150-118 | 13.500 | 1.500 | 0.1863 | 118 | 0.1242 | 0.1180 | 1400T400-118 | 14.000 | 4.000 | 0.1863 | 118 | 0.1242 | 0.1180 |

For SI: 1 inch = 25.4 mm.

¹ See Table 4 for member properties. See Figure 1 for illustration of member cross section.

² Depth measured from inside face to inside face of flanges.

³ Base metal thickness of members, exclusive of coatings, delivered to the jobsite must be a minimum of 95 percent of design the thickness.

⁴ Web height-to-thickness ratio, h/t, exceeds 200. Web stiffeners in accordance with Sections B1.2 and C3.6.1 of AISI-NAS are required.

TABLE 3—C-SECTION (STUD) SECTION PROPERTIES

| Section | Gross Properties | | | | | | 33 ksi Effective Properties | | | | | 50 ksi Effective | | | | | Torsional Properties | | | | |
|------------|------------------|--------|------------------------|---------|------------------------|---------|-----------------------------|------------------------|-----------|---------|----------|------------------------|------------------------|-----------|---------|----------|---------------------------|-----------------------|---------|---------|-------|
| | Area | Weight | Ixx (in ⁴) | Rx (in) | Iyy (in ⁴) | Ry (in) | Ixx (in ⁴) | Sxx (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | Ixx (in ⁴) | Sxx (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | Jx1000 (in ⁴) | Cw (in ⁶) | Xo (in) | Ro (in) | β |
| 162S125-18 | 0.080 | 0.27 | 0.038 | 0.686 | 0.016 | 0.447 | 0.034 | 0.031 | 0.61 | 302 | 0.962 | --- | --- | --- | --- | --- | 0.009 | 0.009 | -1.029 | 1.315 | 0.388 |
| 162S125-27 | 0.120 | 0.41 | 0.056 | 0.682 | 0.023 | 0.443 | 0.055 | 0.053 | 1.05 | 494 | 0.903 | --- | --- | --- | --- | --- | 0.032 | 0.013 | -1.017 | 1.302 | 0.390 |
| 162S125-30 | 0.131 | 0.45 | 0.061 | 0.681 | 0.026 | 0.441 | 0.060 | 0.060 | 1.19 | 543 | 0.889 | --- | --- | --- | --- | --- | 0.043 | 0.014 | -1.014 | 1.298 | 0.390 |
| 162S125-33 | 0.145 | 0.49 | 0.067 | 0.679 | 0.028 | 0.440 | 0.066 | 0.069 | 1.37 | 601 | 0.873 | --- | --- | --- | --- | --- | 0.058 | 0.016 | -1.010 | 1.294 | 0.391 |
| 250S125-18 | 0.097 | 0.33 | 0.099 | 1.014 | 0.019 | 0.439 | 0.089 | 0.059 | 1.17 | 258 | 1.391 | --- | --- | --- | --- | --- | 0.011 | 0.023 | -0.904 | 1.427 | 0.599 |
| 250S125-27 | 0.144 | 0.49 | 0.147 | 1.009 | 0.027 | 0.434 | 0.144 | 0.097 | 1.92 | 685 | 1.343 | --- | --- | --- | --- | --- | 0.039 | 0.034 | -0.893 | 1.416 | 0.602 |
| 250S125-30 | 0.159 | 0.54 | 0.161 | 1.008 | 0.030 | 0.433 | 0.159 | 0.110 | 2.17 | 832 | 1.329 | --- | --- | --- | --- | --- | 0.052 | 0.037 | -0.889 | 1.412 | 0.603 |
| 250S125-33 | 0.176 | 0.60 | 0.178 | 1.006 | 0.033 | 0.431 | 0.175 | 0.125 | 2.48 | 975 | 1.313 | --- | --- | --- | --- | --- | 0.070 | 0.040 | -0.885 | 1.408 | 0.605 |
| 250S125-43 | 0.227 | 0.77 | 0.228 | 1.001 | 0.041 | 0.426 | 0.225 | 0.177 | 3.49 | 1265 | 1.266 | --- | --- | --- | --- | --- | 0.154 | 0.050 | -0.873 | 1.396 | 0.608 |
| 250S125-54 | 0.280 | 0.95 | 0.277 | 0.994 | 0.049 | 0.419 | 0.277 | 0.218 | 4.98 | 1553 | 1.260 | 0.274 | 0.209 | 6.25 | 2353 | 1.280 | 0.299 | 0.060 | -0.859 | 1.379 | 0.612 |
| 250S125-68 | 0.345 | 1.18 | 0.334 | 0.984 | 0.057 | 0.408 | 0.334 | 0.266 | 6.30 | 1891 | 1.252 | 0.334 | 0.262 | 7.84 | 2866 | 1.261 | 0.585 | 0.072 | -0.839 | 1.356 | 0.617 |
| 250S137-33 | 0.197 | 0.67 | 0.203 | 1.015 | 0.052 | 0.515 | 0.203 | 0.158 | 3.11 | 975 | 1.268 | --- | --- | --- | --- | --- | 0.079 | 0.076 | -1.141 | 1.612 | 0.499 |
| 250S137-43 | 0.255 | 0.87 | 0.261 | 1.010 | 0.067 | 0.511 | 0.261 | 0.205 | 4.53 | 1265 | 1.260 | --- | --- | --- | --- | --- | 0.173 | 0.096 | -1.129 | 1.599 | 0.501 |
| 250S137-54 | 0.316 | 1.07 | 0.318 | 1.004 | 0.080 | 0.504 | 0.318 | 0.255 | 5.76 | 1553 | 1.250 | 0.318 | 0.244 | 8.22 | 2353 | 1.274 | 0.337 | 0.115 | -1.115 | 1.583 | 0.504 |
| 250S137-68 | 0.390 | 1.33 | 0.386 | 0.994 | 0.095 | 0.495 | 0.386 | 0.309 | 7.19 | 1891 | 1.250 | 0.386 | 0.308 | 10.65 | 2866 | 1.251 | 0.661 | 0.138 | -1.096 | 1.561 | 0.507 |
| 250S137-97 | 0.533 | 1.81 | 0.506 | 0.975 | 0.120 | 0.475 | 0.506 | 0.405 | 10.01 | 2506 | 1.250 | 0.506 | 0.405 | 14.75 | 3798 | 1.250 | 1.839 | 0.176 | -1.057 | 1.514 | 0.513 |
| 250S162-33 | 0.223 | 0.76 | 0.235 | 1.027 | 0.087 | 0.624 | 0.235 | 0.180 | 3.55 | 975 | 1.274 | --- | --- | --- | --- | --- | 0.089 | 0.146 | -1.470 | 1.898 | 0.401 |
| 250S162-43 | 0.289 | 0.98 | 0.302 | 1.022 | 0.111 | 0.620 | 0.302 | 0.240 | 5.22 | 1265 | 1.253 | --- | --- | --- | --- | --- | 0.196 | 0.184 | -1.457 | 1.885 | 0.402 |
| 250S162-54 | 0.358 | 1.22 | 0.370 | 1.016 | 0.135 | 0.613 | 0.370 | 0.296 | 6.57 | 1553 | 1.250 | 0.370 | 0.284 | 9.42 | 2353 | 1.275 | 0.383 | 0.223 | -1.443 | 1.868 | 0.403 |
| 250S162-68 | 0.443 | 1.51 | 0.450 | 1.007 | 0.162 | 0.605 | 0.450 | 0.360 | 8.21 | 1891 | 1.250 | 0.450 | 0.357 | 12.11 | 2866 | 1.255 | 0.752 | 0.268 | -1.424 | 1.846 | 0.405 |
| 250S162-97 | 0.610 | 2.07 | 0.596 | 0.989 | 0.209 | 0.586 | 0.596 | 0.477 | 11.45 | 2506 | 1.250 | 0.596 | 0.477 | 16.93 | 3798 | 1.250 | 2.102 | 0.346 | -1.386 | 1.801 | 0.408 |
| 250S200-33 | 0.258 | 0.88 | 0.279 | 1.040 | 0.154 | 0.773 | 0.276 | 0.197 | 3.9 | 975 | 1.312 | --- | --- | --- | --- | --- | 0.103 | 0.302 | -1.926 | 2.321 | 0.312 |
| 250S200-43 | 0.334 | 1.14 | 0.358 | 1.036 | 0.198 | 0.769 | 0.358 | 0.278 | 5.49 | 1265 | 1.266 | --- | --- | --- | --- | --- | 0.227 | 0.382 | -1.914 | 2.308 | 0.312 |
| 250S200-54 | 0.415 | 1.41 | 0.440 | 1.030 | 0.241 | 0.763 | 0.440 | 0.352 | 7.65 | 1553 | 1.250 | 0.440 | 0.321 | 9.60 | 2353 | 1.303 | 0.443 | 0.464 | -1.899 | 2.291 | 0.313 |
| 250S200-68 | 0.515 | 1.75 | 0.537 | 1.022 | 0.293 | 0.754 | 0.537 | 0.430 | 9.57 | 1891 | 1.250 | 0.537 | 0.417 | 13.84 | 2866 | 1.271 | 0.872 | 0.561 | -1.881 | 2.270 | 0.313 |
| 250S200-97 | 0.711 | 2.42 | 0.718 | 1.005 | 0.386 | 0.736 | 0.718 | 0.575 | 13.36 | 2506 | 1.250 | 0.718 | 0.575 | 19.82 | 3798 | 1.250 | 2.452 | 0.735 | -1.843 | 2.224 | 0.314 |
| 250S250-43 | 0.379 | 1.29 | 0.426 | 1.060 | 0.336 | 0.941 | 0.426 | 0.297 | 5.87 | 1265 | 1.325 | --- | --- | --- | --- | --- | 0.257 | 0.638 | -2.404 | 2.791 | 0.258 |
| 250S250-54 | 0.471 | 1.60 | 0.524 | 1.055 | 0.412 | 0.935 | 0.524 | 0.379 | 7.49 | 1553 | 1.309 | 0.521 | 0.341 | 10.22 | 2353 | 1.364 | 0.503 | 0.778 | -2.389 | 2.774 | 0.258 |
| 250S250-68 | 0.586 | 1.99 | 0.643 | 1.047 | 0.503 | 0.926 | 0.643 | 0.495 | 10.79 | 1891 | 1.275 | 0.643 | 0.446 | 13.35 | 2866 | 1.331 | 0.993 | 0.944 | -2.371 | 2.752 | 0.258 |
| 250S250-97 | 0.813 | 2.77 | 0.864 | 1.031 | 0.670 | 0.908 | 0.864 | 0.690 | 15.6 | 2506 | 1.251 | 0.864 | 0.663 | 22.31 | 3798 | 1.277 | 2.803 | 1.245 | -2.332 | 2.707 | 0.258 |
| 350S125-18 | 0.115 | 0.39 | 0.215 | 1.366 | 0.021 | 0.423 | 0.203 | 0.072 | 1.42 | 180 | 2.175 | --- | --- | --- | --- | --- | 0.014 | 0.050 | -0.797 | 1.637 | 0.763 |
| 350S125-27 | 0.173 | 0.59 | 0.320 | 1.361 | 0.030 | 0.418 | 0.315 | 0.130 | 2.57 | 614 | 2.020 | --- | --- | --- | --- | --- | 0.046 | 0.072 | -0.787 | 1.627 | 0.766 |
| 350S125-30 | 0.190 | 0.65 | 0.351 | 1.359 | 0.033 | 0.417 | 0.346 | 0.150 | 2.96 | 824 | 1.979 | --- | --- | --- | --- | --- | 0.062 | 0.079 | -0.784 | 1.624 | 0.767 |
| 350S125-33 | 0.210 | 0.72 | 0.387 | 1.358 | 0.036 | 0.415 | 0.382 | 0.175 | 3.45 | 1024 | 1.935 | --- | --- | --- | --- | --- | 0.084 | 0.087 | -0.780 | 1.620 | 0.768 |
| 350S125-43 | 0.272 | 0.93 | 0.498 | 1.352 | 0.046 | 0.410 | 0.495 | 0.258 | 5.10 | 1739 | 1.818 | --- | --- | --- | --- | --- | 0.184 | 0.109 | -0.769 | 1.609 | 0.771 |
| 350S125-54 | 0.337 | 1.15 | 0.608 | 1.344 | 0.055 | 0.402 | 0.608 | 0.328 | 6.49 | 2253 | 1.778 | 0.604 | 0.308 | 9.22 | 3372 | 1.834 | 0.360 | 0.131 | -0.755 | 1.593 | 0.775 |
| 350S125-68 | 0.417 | 1.42 | 0.739 | 1.332 | 0.064 | 0.391 | 0.737 | 0.409 | 9.67 | 2774 | 1.753 | 0.737 | 0.400 | 11.97 | 4202 | 1.772 | 0.706 | 0.156 | -0.737 | 1.571 | 0.780 |
| 350S137-33 | 0.232 | 0.79 | 0.441 | 1.380 | 0.059 | 0.503 | 0.441 | 0.223 | 4.41 | 1024 | 1.848 | --- | --- | --- | --- | --- | 0.093 | 0.153 | -1.016 | 1.786 | 0.676 |
| 350S137-43 | 0.300 | 1.02 | 0.568 | 1.375 | 0.075 | 0.498 | 0.568 | 0.307 | 6.07 | 1739 | 1.785 | --- | --- | --- | --- | --- | 0.204 | 0.193 | -1.005 | 1.774 | 0.679 |
| 350S137-54 | 0.372 | 1.27 | 0.696 | 1.367 | 0.090 | 0.492 | 0.696 | 0.385 | 7.61 | 2253 | 1.761 | 0.696 | 0.366 | 10.95 | 3372 | 1.808 | 0.398 | 0.233 | -0.991 | 1.759 | 0.683 |
| 350S137-68 | 0.461 | 1.57 | 0.849 | 1.357 | 0.107 | 0.482 | 0.849 | 0.474 | 11.04 | 2774 | 1.750 | 0.849 | 0.472 | 14.12 | 4202 | 1.755 | 0.782 | 0.280 | -0.973 | 1.738 | 0.687 |
| 350S137-97 | 0.635 | 2.16 | 1.130 | 1.334 | 0.136 | 0.462 | 1.130 | 0.629 | 15.54 | 3765 | 1.750 | 1.130 | 0.629 | 22.90 | 5704 | 1.750 | 2.189 | 0.361 | -0.935 | 1.693 | 0.695 |
| 350S162-33 | 0.258 | 0.88 | 0.508 | 1.404 | 0.098 | 0.617 | 0.508 | 0.257 | 5.08 | 1024 | 1.845 | --- | --- | --- | --- | --- | 0.103 | 0.277 | -1.324 | 2.026 | 0.573 |
| 350S162-43 | 0.334 | 1.14 | 0.654 | 1.400 | 0.125 | 0.612 | 0.654 | 0.357 | 7.05 | 1739 | 1.780 | --- | --- | --- | --- | --- | 0.227 | 0.350 | -1.312 | 2.014 | 0.575 |
| 350S162-54 | 0.415 | 1.41 | 0.804 | 1.392 | 0.152 | 0.606 | 0.804 | 0.447 | 8.83 | 2253 | 1.759 | 0.804 | 0.426 | 12.74 | 3372 | 1.806 | 0.443 | 0.426 | -1.298 | 1.998 | 0.578 |
| 350S162-68 | 0.515 | 1.75 | 0.985 | 1.383 | 0.184 | 0.597 | 0.985 | 0.551 | 12.56 | 2774 | 1.750 | 0.985 | 0.549 | 16.44 | 4202 | 1.754 | 0.872 | 0.514 | -1.280 | 1.977 | 0.581 |
| 350S162-97 | 0.711 | 2.42 | 1.320 | 1.362 | 0.238 | 0.578 | 1.320 | 0.738 | 17.71 | 3765 | 1.750 | 1.320 | 0.738 | 26.18 | 5704 | 1.750 | 2.452 | 0.672 | -1.242 | 1.932 | 0.587 |
| 350S200-33 | 0.292 | 0.99 | 0.598 | 1.431 | 0.175 | 0.773 | 0.597 | 0.283 | 5.59 | 1024 | 1.899 | --- | --- | --- | --- | --- | 0.117 | 0.541 | -1.760 | 2.396 | 0.461 |
| 350S200-43 | 0.379 | 1.29 | 0.771 | 1.426 | 0.224 | 0.768 | 0.771 | 0.410 | 8.09 | 1739 | 1.802 | --- | --- | --- | --- | --- | 0.257 | 0.687 | -1.748 | 2.383 | 0.462 |
| 350S200-54 | 0.471 | 1.60 | 0.950 | 1.420 | 0.274 | 0.762 | 0.950 | 0.530 | 10.47 | 2253 | 1.758 | 0.950 | 0.470 | 14.07 | 3372 | 1.864 | 0.503 | 0.838 | -1.733 | 2.367 | 0.464 |
| 350S200-68 | 0.586 | 1.99 | 1.167 | 1.411 | 0.333 | 0.754 | 1.167 | 0.655 | 14.58 | 2774 | 1.750 | 1.167 | 0.638 | 19.10 | 4202 | 1.776 | 0.993 | 1.018 | -1.715 | 2.345 | 0.465 |
| 350S200-97 | 0.813 | 2.77 | 1.576 | 1.393 | 0.440 | 0.736 | 1.576 | 0.884 | 20.57 | 3765 | 1.750 | 1.576 | 0.884 | 30.51 | 5704 | 1.750 | 2.803 | 1.347 | -1.676 | 2.300 | 0.469 |
| 350S250-43 | 0.424 | 1.44 | 0.906 | 1.461 | 0.380 | 0.946 | 0.906 | 0.431 | 8.52 | 1739 | 1.893 | --- | --- | --- | --- | --- | 0.288 | 1.151 | -2.220 | 2.821 | 0.381 |
| 350S250-54 | 0.528 | 1.80 | 1.118 | 1.455 | 0.467 | 0.940 | 1.118 | 0.559 | 11.04 | 2253 | 1.854 | 1.113 | 0.494 | 14.78 | 3372 | 1.956 | 0.564 | 1.409 | -2.205 | 2.804 | 0.382 |
| 350S250-68 | 0.657 | 2.24 | 1.376 | 1.447 | 0.570 | 0.931 | 1.376 | 0.739 | 16.1 | 2774 | 1.794 | 1.376 | 0.661 | 19.78 | 4202 | 1.885 | 1.114 | 1.718 | -2.186 | 2.782 | 0.383 |
| 350S250-97 | 0.915 | 3.11 | 1.870 | 1.430 | 0.762 | 0.913 | 1.870 | 1.050 | 23.72 | 3765 | 1.752</ | | | | | | | | | | |

TABLE 3—C-SECTION (STUD) SECTION PROPERTIES (Continued)

| Section | Gross Properties | | | | | 33 ksi Effective Properties | | | | | 50 ksi Effective | | | | | Torsional Properties | | | | | |
|-------------------------|------------------|--------|------------------------|---------|------------------------|-----------------------------|------------------------|------------------------|-----------|---------|------------------|------------------------|------------------------|-----------|---------|----------------------|---------------------------|-----------------------|---------|---------|-------|
| | Area | Weight | Ixx (in ⁴) | Rx (in) | Iyy (in ⁴) | Ry (in) | Ixx (in ⁴) | Sxx (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | Ixx (in ⁴) | Sxx (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | Jx1000 (in ⁴) | Cw (in ⁶) | Xo (in) | Ro (in) | β |
| 362S200-33 | 0.297 | 1.01 | 0.648 | 1.478 | 0.177 | 0.772 | 0.647 | 0.294 | 5.81 | 1024 | 1.974 | --- | --- | --- | --- | --- | 0.118 | 0.577 | -1.741 | 2.411 | 0.478 |
| 362S200-43 | 0.385 | 1.31 | 0.836 | 1.474 | 0.227 | 0.767 | 0.836 | 0.427 | 8.43 | 1739 | 1.873 | --- | --- | --- | --- | --- | 0.261 | 0.734 | -1.729 | 2.398 | 0.480 |
| 362S200-54 | 0.479 | 1.63 | 1.030 | 1.467 | 0.277 | 0.761 | 1.030 | 0.553 | 10.93 | 2341 | 1.826 | 1.030 | 0.490 | 14.66 | 3372 | 1.936 | 0.511 | 0.896 | -1.715 | 2.382 | 0.482 |
| 362S200-68 | 0.595 | 2.02 | 1.265 | 1.458 | 0.337 | 0.753 | 1.265 | 0.687 | 15.29 | 2884 | 1.813 | 1.265 | 0.666 | 19.95 | 4370 | 1.844 | 1.008 | 1.089 | -1.696 | 2.360 | 0.484 |
| 362S200-97 | 0.826 | 2.81 | 1.711 | 1.440 | 0.446 | 0.735 | 1.711 | 0.928 | 21.59 | 3922 | 1.813 | 1.711 | 0.928 | 32.03 | 5943 | 1.813 | 2.847 | 1.441 | -1.658 | 2.315 | 0.487 |
| 362S250-43 | 0.430 | 1.46 | 0.980 | 1.510 | 0.385 | 0.946 | 0.980 | 0.449 | 8.88 | 1739 | 1.966 | --- | --- | --- | --- | --- | 0.292 | 1.230 | -2.199 | 2.830 | 0.396 |
| 362S250-54 | 0.535 | 1.82 | 1.210 | 1.504 | 0.473 | 0.940 | 1.210 | 0.582 | 11.51 | 2341 | 1.924 | 1.205 | 0.514 | 15.40 | 3372 | 2.030 | 0.571 | 1.506 | -2.184 | 2.813 | 0.397 |
| 362S250-68 | 0.666 | 2.27 | 1.490 | 1.496 | 0.578 | 0.931 | 1.490 | 0.774 | 16.85 | 2884 | 1.858 | 1.490 | 0.689 | 20.63 | 4370 | 1.956 | 1.129 | 1.837 | -2.165 | 2.791 | 0.398 |
| 362S250-97 | 0.927 | 3.16 | 2.027 | 1.478 | 0.772 | 0.912 | 2.027 | 1.100 | 24.85 | 3922 | 1.815 | 2.027 | 1.046 | 35.17 | 5943 | 1.862 | 3.197 | 2.452 | -2.126 | 2.746 | 0.400 |
| 362S300-54 | 0.592 | 2.01 | 1.390 | 1.533 | 0.734 | 1.114 | 1.383 | 0.607 | 11.99 | 2341 | 2.006 | 1.312 | 0.529 | 15.83 | 3372 | 2.122 | 0.632 | 2.316 | -2.659 | 3.265 | 0.337 |
| 362S300-68 | 0.738 | 2.51 | 1.716 | 1.525 | 0.900 | 1.105 | 1.716 | 0.811 | 16.02 | 2884 | 1.938 | 1.684 | 0.716 | 21.44 | 4370 | 2.041 | 1.250 | 2.833 | -2.640 | 3.243 | 0.337 |
| 362S300-97 | 1.029 | 3.50 | 2.343 | 1.509 | 1.213 | 1.086 | 2.343 | 1.217 | 26.95 | 3922 | 1.858 | 2.320 | 1.150 | 34.42 | 5943 | 1.905 | 3.548 | 3.803 | -2.600 | 3.196 | 0.338 |
| 400S125-18 ⁴ | 0.125 | 0.42 | 0.294 | 1.536 | 0.021 | 0.414 | 0.281 | 0.083 | 1.64 | 156 | 2.524 | --- | --- | --- | --- | --- | 0.015 | 0.068 | -0.754 | 1.760 | 0.816 |
| 400S125-27 | 0.187 | 0.64 | 0.438 | 1.531 | 0.031 | 0.410 | 0.431 | 0.151 | 2.97 | 533 | 2.349 | --- | --- | --- | --- | --- | 0.050 | 0.098 | -0.744 | 1.751 | 0.819 |
| 400S125-30 | 0.206 | 0.70 | 0.481 | 1.529 | 0.034 | 0.408 | 0.474 | 0.174 | 3.44 | 715 | 2.303 | --- | --- | --- | --- | --- | 0.067 | 0.107 | -0.741 | 1.748 | 0.820 |
| 400S125-33 | 0.228 | 0.77 | 0.531 | 1.527 | 0.038 | 0.407 | 0.524 | 0.203 | 4.01 | 976 | 2.252 | --- | --- | --- | --- | --- | 0.091 | 0.118 | -0.738 | 1.744 | 0.821 |
| 400S125-43 | 0.295 | 1.00 | 0.682 | 1.521 | 0.048 | 0.402 | 0.680 | 0.301 | 5.96 | 1739 | 2.117 | --- | --- | --- | --- | --- | 0.200 | 0.148 | -0.727 | 1.733 | 0.824 |
| 400S125-54 | 0.365 | 1.24 | 0.835 | 1.512 | 0.057 | 0.394 | 0.835 | 0.387 | 7.65 | 2603 | 2.064 | 0.830 | 0.361 | 10.81 | 3372 | 2.133 | 0.390 | 0.178 | -0.713 | 1.718 | 0.828 |
| 400S125-68 | 0.452 | 1.54 | 1.017 | 1.499 | 0.066 | 0.383 | 1.015 | 0.492 | 9.72 | 3215 | 2.016 | 1.015 | 0.474 | 14.18 | 4871 | 2.056 | 0.767 | 0.213 | -0.695 | 1.696 | 0.832 |
| 400S137-33 | 0.249 | 0.85 | 0.603 | 1.556 | 0.061 | 0.496 | 0.603 | 0.259 | 5.12 | 976 | 2.152 | --- | --- | --- | --- | --- | 0.099 | 0.204 | -0.965 | 1.897 | 0.741 |
| 400S137-43 | 0.323 | 1.10 | 0.776 | 1.551 | 0.078 | 0.491 | 0.776 | 0.359 | 7.09 | 1739 | 2.076 | --- | --- | --- | --- | --- | 0.219 | 0.257 | -0.954 | 1.885 | 0.744 |
| 400S137-54 | 0.401 | 1.36 | 0.953 | 1.542 | 0.094 | 0.484 | 0.953 | 0.453 | 8.96 | 2603 | 2.042 | 0.953 | 0.428 | 12.82 | 3372 | 2.101 | 0.428 | 0.311 | -0.940 | 1.870 | 0.747 |
| 400S137-68 | 0.497 | 1.69 | 1.165 | 1.531 | 0.112 | 0.475 | 1.165 | 0.567 | 11.21 | 3215 | 2.011 | 1.165 | 0.558 | 16.70 | 4871 | 2.033 | 0.842 | 0.375 | -0.922 | 1.849 | 0.751 |
| 400S137-97 | 0.686 | 2.33 | 1.557 | 1.507 | 0.142 | 0.454 | 1.557 | 0.764 | 18.88 | 4394 | 2.000 | 1.557 | 0.764 | 27.81 | 6658 | 2.000 | 2.365 | 0.486 | -0.885 | 1.806 | 0.760 |
| 400S162-33 | 0.275 | 0.94 | 0.692 | 1.586 | 0.103 | 0.611 | 0.692 | 0.299 | 5.91 | 976 | 2.144 | --- | --- | --- | --- | --- | 0.110 | 0.363 | -1.263 | 2.118 | 0.644 |
| 400S162-43 | 0.357 | 1.21 | 0.892 | 1.581 | 0.131 | 0.606 | 0.892 | 0.417 | 8.23 | 1739 | 2.066 | --- | --- | --- | --- | --- | 0.242 | 0.460 | -1.252 | 2.106 | 0.647 |
| 400S162-54 | 0.443 | 1.51 | 1.098 | 1.574 | 0.159 | 0.600 | 1.098 | 0.526 | 10.39 | 2603 | 2.036 | 1.098 | 0.498 | 14.90 | 3372 | 2.095 | 0.473 | 0.560 | -1.238 | 2.090 | 0.649 |
| 400S162-68 | 0.550 | 1.87 | 1.346 | 1.564 | 0.192 | 0.591 | 1.346 | 0.658 | 13 | 3215 | 2.010 | 1.346 | 0.648 | 19.41 | 4871 | 2.029 | 0.933 | 0.677 | -1.220 | 2.069 | 0.653 |
| 400S162-97 | 0.762 | 2.59 | 1.812 | 1.542 | 0.249 | 0.572 | 1.812 | 0.892 | 21.4 | 4394 | 2.000 | 1.812 | 0.892 | 31.64 | 6658 | 2.000 | 2.628 | 0.889 | -1.182 | 2.025 | 0.659 |
| 400S200-33 | 0.310 | 1.05 | 0.812 | 1.619 | 0.183 | 0.769 | 0.812 | 0.328 | 6.49 | 976 | 2.200 | --- | --- | --- | --- | --- | 0.124 | 0.697 | -1.688 | 2.462 | 0.530 |
| 400S200-43 | 0.402 | 1.37 | 1.047 | 1.615 | 0.235 | 0.764 | 1.047 | 0.478 | 9.45 | 1739 | 2.086 | --- | --- | --- | --- | --- | 0.272 | 0.886 | -1.676 | 2.449 | 0.532 |
| 400S200-54 | 0.500 | 1.70 | 1.292 | 1.608 | 0.287 | 0.758 | 1.292 | 0.623 | 12.3 | 2603 | 2.031 | 1.292 | 0.549 | 16.43 | 3372 | 2.156 | 0.534 | 1.083 | -1.662 | 2.433 | 0.534 |
| 400S200-68 | 0.622 | 2.12 | 1.589 | 1.599 | 0.349 | 0.750 | 1.589 | 0.780 | 15.4 | 3215 | 2.009 | 1.589 | 0.751 | 22.48 | 4871 | 2.051 | 1.054 | 1.318 | -1.643 | 2.412 | 0.536 |
| 400S200-97 | 0.864 | 2.94 | 2.155 | 1.579 | 0.462 | 0.731 | 2.155 | 1.063 | 24.72 | 4394 | 2.000 | 2.155 | 1.063 | 36.68 | 6658 | 2.000 | 2.978 | 1.749 | -1.605 | 2.368 | 0.540 |
| 400S250-43 | 0.447 | 1.52 | 1.224 | 1.655 | 0.399 | 0.945 | 1.224 | 0.503 | 9.93 | 1739 | 2.185 | --- | --- | --- | --- | --- | 0.303 | 1.486 | -2.139 | 2.864 | 0.443 |
| 400S250-54 | 0.556 | 1.89 | 1.512 | 1.649 | 0.490 | 0.938 | 1.512 | 0.653 | 12.9 | 2603 | 2.138 | 1.506 | 0.576 | 17.24 | 3372 | 2.256 | 0.594 | 1.821 | -2.124 | 2.848 | 0.444 |
| 400S250-68 | 0.693 | 2.36 | 1.864 | 1.640 | 0.599 | 0.929 | 1.864 | 0.883 | 17.45 | 3215 | 2.046 | 1.864 | 0.775 | 23.19 | 4871 | 2.171 | 1.174 | 2.225 | -2.105 | 2.826 | 0.445 |
| 400S250-97 | 0.966 | 3.29 | 2.541 | 1.622 | 0.801 | 0.911 | 2.541 | 1.253 | 28.31 | 4394 | 2.002 | 2.541 | 1.191 | 40.06 | 6658 | 2.054 | 3.329 | 2.978 | -2.066 | 2.780 | 0.448 |
| 400S300-54 | 0.613 | 2.09 | 1.732 | 1.681 | 0.760 | 1.114 | 1.723 | 0.680 | 13.44 | 2603 | 2.225 | 1.637 | 0.592 | 17.72 | 3372 | 2.353 | 0.655 | 2.802 | -2.594 | 3.285 | 0.377 |
| 400S300-68 | 0.764 | 2.60 | 2.139 | 1.673 | 0.933 | 1.105 | 2.139 | 0.914 | 18.06 | 3215 | 2.143 | 2.099 | 0.805 | 24.09 | 4871 | 2.261 | 1.295 | 3.432 | -2.574 | 3.263 | 0.378 |
| 400S300-97 | 1.067 | 3.63 | 2.928 | 1.656 | 1.258 | 1.086 | 2.928 | 1.381 | 30.58 | 4394 | 2.049 | 2.897 | 1.307 | 39.12 | 6658 | 2.100 | 3.679 | 4.619 | -2.535 | 3.216 | 0.379 |
| 550S125-27 | 0.229 | 0.78 | 0.938 | 2.023 | 0.034 | 0.385 | 0.938 | 0.246 | 4.86 | 382 | 3.150 | --- | --- | --- | --- | --- | 0.061 | 0.205 | -0.641 | 2.157 | 0.912 |
| 550S125-30 | 0.252 | 0.86 | 1.031 | 2.021 | 0.037 | 0.384 | 0.996 | 0.286 | 5.65 | 512 | 3.083 | --- | --- | --- | --- | --- | 0.082 | 0.224 | -0.639 | 2.154 | 0.912 |
| 550S125-33 | 0.279 | 0.95 | 1.139 | 2.019 | 0.041 | 0.382 | 1.111 | 0.335 | 6.62 | 699 | 3.012 | --- | --- | --- | --- | --- | 0.112 | 0.246 | -0.635 | 2.151 | 0.913 |
| 550S125-43 | 0.362 | 1.23 | 1.468 | 2.013 | 0.052 | 0.377 | 1.458 | 0.500 | 9.88 | 1550 | 2.834 | --- | --- | --- | --- | --- | 0.246 | 0.309 | -0.625 | 2.141 | 0.915 |
| 550S125-54 | 0.450 | 1.53 | 1.805 | 2.002 | 0.061 | 0.369 | 1.805 | 0.647 | 12.79 | 2739 | 2.764 | 1.791 | 0.606 | 18.13 | 3093 | 2.845 | 0.481 | 0.374 | -0.613 | 2.126 | 0.917 |
| 550S125-68 | 0.559 | 1.90 | 2.209 | 1.987 | 0.072 | 0.358 | 2.205 | 0.801 | 18.94 | 4347 | 2.753 | 2.205 | 0.791 | 23.68 | 5350 | 2.765 | 0.948 | 0.448 | -0.597 | 2.106 | 0.920 |
| 550S137-33 | 0.301 | 1.02 | 1.283 | 2.064 | 0.067 | 0.472 | 1.283 | 0.453 | 8.95 | 699 | 2.781 | --- | --- | --- | --- | --- | 0.120 | 0.411 | -0.841 | 2.278 | 0.864 |
| 550S137-43 | 0.391 | 1.33 | 1.655 | 2.059 | 0.085 | 0.467 | 1.655 | 0.592 | 13.08 | 1550 | 2.767 | --- | --- | --- | --- | --- | 0.265 | 0.520 | -0.830 | 2.268 | 0.866 |
| 550S137-54 | 0.486 | 1.65 | 2.039 | 2.049 | 0.103 | 0.460 | 2.039 | 0.741 | 16.77 | 2739 | 2.750 | 2.039 | 0.714 | 24.03 | 3093 | 2.790 | 0.519 | 0.632 | -0.817 | 2.254 | 0.868 |
| 550S137-68 | 0.604 | 2.05 | 2.503 | 2.036 | 0.123 | 0.451 | 2.503 | 0.910 | 21.22 | 4347 | 2.750 | 2.503 | 0.909 | 31.42 | 5350 | 2.752 | 1.023 | 0.764 | -0.801 | 2.234 | 0.871 |
| 550S137-97 | 0.838 | 2.85 | 3.380 | 2.008 | 0.155 | 0.430 | 3.380 | 1.229 | 30.35 | 6282 | 2.750 | 3.380 | 1.229 | 44.72 | 9518 | 2.750 | 2.891 | 0.997 | -0.766 | 2.192 | 0.878 |
| 550S162-33 | 0.327 | 1.11 | 1.458 | 2.112 | 0.113 | 0.589 | 1.458 | 0.512 | 10.11 | 699 | 2.787 | --- | --- | --- | --- | --- | 0.130 | 0.713 | -1.114 | 2.459 | 0.795 |
| 550S162-43 | 0.424 | 1.44 | 1.883 | 2.107 | 0.145 | 0.584 | 1.883 | 0.681 | 14.79 | 1550 | 2.757 | --- | --- | --- | --- | --- | 0.288 | 0.905 | -1.103 | 2.448 | 0.797 |
| 550S162-54 | 0.528 | 1.80 | 2.324 | 2.098 | 0.176 | 0.577 | 2.324 | 0.845 | 18.76 | 2739 | 2.750 | 2.324 | 0.811 | 26.86 | 3093 | 2.796 | 0.564 | 1.105 | -1.0 | | |

TABLE 3—C-SECTION (STUD) SECTION PROPERTIES (Continued)

| Section | Gross Properties | | | | | 33 ksi Effective Properties | | | | | 50 ksi Effective | | | | | Torsional Properties | | | | | |
|-------------|------------------|--------|------------------------|---------|------------------------|-----------------------------|------------------------|------------------------|-----------|---------|------------------|------------------------|------------------------|-----------|---------|----------------------|---------------------------|-----------------------|---------|---------|-------|
| | Area | Weight | Ixx (in ⁴) | Rx (in) | Iyy (in ⁴) | Ry (in) | Ixx (in ⁴) | Sxx (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | Ixx (in ⁴) | Sxx (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | Jx1000 (in ⁴) | Cw (in ⁶) | Xo (in) | Ro (in) | β |
| 600S137-33 | 0.318 | 1.08 | 1.582 | 2.229 | 0.069 | 0.464 | 1.548 | 0.455 | 8.98 | 638 | 3.224 | --- | --- | --- | --- | --- | 0.127 | 0.500 | -0.807 | 2.416 | 0.889 |
| 600S137-43 | 0.413 | 1.41 | 2.042 | 2.223 | 0.087 | 0.459 | 2.041 | 0.645 | 12.74 | 1416 | 3.087 | --- | --- | --- | --- | --- | 0.280 | 0.633 | -0.796 | 2.406 | 0.890 |
| 600S137-54 | 0.514 | 1.75 | 2.518 | 2.213 | 0.105 | 0.452 | 2.518 | 0.832 | 16.44 | 2739 | 3.013 | 2.518 | 0.777 | 23.26 | 2823 | 3.112 | 0.549 | 0.769 | -0.784 | 2.391 | 0.893 |
| 600S137-68 | 0.640 | 2.18 | 3.094 | 2.200 | 0.125 | 0.443 | 3.094 | 1.031 | 24.05 | 4347 | 3.000 | 3.094 | 1.030 | 30.84 | 5350 | 3.002 | 1.084 | 0.930 | -0.768 | 2.371 | 0.895 |
| 600S137-97 | 0.889 | 3.03 | 4.188 | 2.170 | 0.159 | 0.422 | 4.188 | 1.396 | 34.48 | 6911 | 3.000 | 4.188 | 1.396 | 50.80 | 10472 | 3.000 | 3.066 | 1.216 | -0.734 | 2.330 | 0.901 |
| 600S162-33 | 0.344 | 1.17 | 1.793 | 2.282 | 0.116 | 0.581 | 1.793 | 0.577 | 11.41 | 638 | 3.039 | --- | --- | --- | --- | --- | 0.137 | 0.861 | -1.072 | 2.587 | 0.828 |
| 600S162-43 | 0.447 | 1.52 | 2.316 | 2.276 | 0.148 | 0.576 | 2.316 | 0.767 | 16.68 | 1416 | 3.007 | --- | --- | --- | --- | --- | 0.303 | 1.095 | -1.062 | 2.577 | 0.830 |
| 600S162-54 | 0.556 | 1.89 | 2.860 | 2.267 | 0.180 | 0.570 | 2.860 | 0.953 | 21.17 | 2739 | 3.000 | 2.860 | 0.916 | 30.33 | 2823 | 3.048 | 0.594 | 1.337 | -1.049 | 2.562 | 0.832 |
| 600S162-68 | 0.693 | 2.36 | 3.525 | 2.255 | 0.218 | 0.560 | 3.525 | 1.175 | 26.79 | 4347 | 3.000 | 3.525 | 1.164 | 39.47 | 5350 | 3.011 | 1.174 | 1.626 | -1.032 | 2.543 | 0.835 |
| 600S162-97 | 0.966 | 3.29 | 4.797 | 2.229 | 0.283 | 0.541 | 4.797 | 1.599 | 38.37 | 6911 | 3.000 | 4.797 | 1.599 | 56.73 | 10472 | 3.000 | 3.329 | 2.153 | -0.997 | 2.501 | 0.841 |
| 600S200-33 | 0.379 | 1.29 | 2.075 | 2.340 | 0.209 | 0.743 | 2.058 | 0.621 | 12.28 | 638 | 3.126 | --- | --- | --- | --- | --- | 0.151 | 1.593 | -1.457 | 2.855 | 0.740 |
| 600S200-43 | 0.492 | 1.67 | 2.683 | 2.335 | 0.268 | 0.739 | 2.683 | 0.873 | 17.24 | 1416 | 3.028 | --- | --- | --- | --- | --- | 0.334 | 2.033 | -1.446 | 2.844 | 0.742 |
| 600S200-54 | 0.613 | 2.09 | 3.319 | 2.327 | 0.328 | 0.732 | 3.319 | 1.106 | 24.07 | 2739 | 3.000 | 3.319 | 1.015 | 30.40 | 2823 | 3.103 | 0.655 | 2.493 | -1.432 | 2.829 | 0.744 |
| 600S200-68 | 0.764 | 2.60 | 4.101 | 2.316 | 0.400 | 0.723 | 4.101 | 1.367 | 30.42 | 4347 | 3.000 | 4.101 | 1.317 | 43.71 | 5350 | 3.047 | 1.295 | 3.047 | -1.415 | 2.809 | 0.746 |
| 600S200-97 | 1.067 | 3.63 | 5.612 | 2.293 | 0.530 | 0.705 | 5.612 | 1.871 | 43.49 | 6911 | 3.000 | 5.612 | 1.871 | 64.53 | 10472 | 3.000 | 3.679 | 4.080 | -1.378 | 2.767 | 0.752 |
| 600S250-43 | 0.537 | 1.83 | 3.082 | 2.396 | 0.458 | 0.923 | 3.082 | 0.918 | 18.14 | 1416 | 3.134 | --- | --- | --- | --- | --- | 0.364 | 3.411 | -1.874 | 3.179 | 0.652 |
| 600S250-54 | 0.670 | 2.28 | 3.819 | 2.388 | 0.562 | 0.917 | 3.819 | 1.159 | 22.9 | 2739 | 3.115 | 3.766 | 1.069 | 32.00 | 2823 | 3.207 | 0.715 | 4.194 | -1.860 | 3.163 | 0.654 |
| 600S250-68 | 0.836 | 2.84 | 4.727 | 2.378 | 0.688 | 0.908 | 4.727 | 1.508 | 32.82 | 4347 | 3.057 | 4.723 | 1.386 | 41.49 | 5350 | 3.155 | 1.416 | 5.145 | -1.842 | 3.142 | 0.656 |
| 600S250-97 | 1.169 | 3.98 | 6.496 | 2.357 | 0.923 | 0.889 | 6.496 | 2.161 | 48.81 | 6911 | 3.003 | 6.496 | 2.063 | 69.38 | 10472 | 3.062 | 4.030 | 6.947 | -1.803 | 3.098 | 0.661 |
| 600S300-54 | 0.726 | 2.47 | 4.319 | 2.439 | 0.875 | 1.098 | 4.269 | 1.211 | 23.93 | 2739 | 3.210 | 4.014 | 1.106 | 33.13 | 2823 | 3.313 | 0.775 | 6.452 | -2.299 | 3.527 | 0.575 |
| 600S300-68 | 0.907 | 3.09 | 5.354 | 2.430 | 1.075 | 1.089 | 5.344 | 1.581 | 31.23 | 4347 | 3.150 | 5.221 | 1.446 | 43.30 | 5350 | 3.253 | 1.537 | 7.937 | -2.280 | 3.505 | 0.577 |
| 600S300-97 | 1.271 | 4.32 | 7.381 | 2.410 | 1.454 | 1.070 | 7.381 | 2.352 | 52.07 | 6911 | 3.058 | 7.280 | 2.247 | 67.28 | 10472 | 3.113 | 4.381 | 10.776 | -2.241 | 3.461 | 0.581 |
| 725S125-27* | 0.279 | 0.95 | 1.852 | 2.577 | 0.036 | 0.360 | 1.693 | 0.332 | 6.56 | 287 | 4.324 | --- | --- | --- | --- | --- | 0.074 | 0.387 | -0.554 | 2.661 | 0.957 |
| 725S125-30* | 0.307 | 1.04 | 2.036 | 2.575 | 0.039 | 0.358 | 1.886 | 0.387 | 7.65 | 384 | 4.235 | --- | --- | --- | --- | --- | 0.100 | 0.423 | -0.552 | 2.658 | 0.957 |
| 725S125-33* | 0.340 | 1.16 | 2.251 | 2.573 | 0.043 | 0.357 | 2.114 | 0.456 | 9.00 | 525 | 4.137 | --- | --- | --- | --- | --- | 0.136 | 0.464 | -0.549 | 2.655 | 0.957 |
| 725S125-43* | 0.441 | 1.50 | 2.905 | 2.566 | 0.055 | 0.352 | 2.835 | 0.691 | 13.65 | 1163 | 3.886 | --- | --- | --- | --- | --- | 0.299 | 0.586 | -0.540 | 2.646 | 0.958 |
| 725S125-54 | 0.549 | 1.87 | 3.582 | 2.554 | 0.065 | 0.344 | 3.582 | 0.920 | 18.17 | 2316 | 3.750 | 3.504 | 0.841 | 25.18 | 2316 | 3.897 | 0.587 | 0.708 | -0.528 | 2.631 | 0.960 |
| 725S125-68 | 0.684 | 2.33 | 4.403 | 2.537 | 0.076 | 0.334 | 4.396 | 1.210 | 23.91 | 4347 | 3.631 | 4.396 | 1.141 | 34.15 | 4680 | 3.732 | 1.159 | 0.851 | -0.514 | 2.610 | 0.961 |
| 725S137-33* | 0.362 | 1.23 | 2.509 | 2.634 | 0.072 | 0.445 | 2.392 | 0.559 | 11.05 | 525 | 4.009 | --- | --- | --- | --- | --- | 0.144 | 0.766 | -0.733 | 2.770 | 0.930 |
| 725S137-43 | 0.469 | 1.60 | 3.241 | 2.628 | 0.091 | 0.441 | 3.178 | 0.802 | 15.84 | 1163 | 3.832 | --- | --- | --- | --- | --- | 0.318 | 0.971 | -0.724 | 2.761 | 0.931 |
| 725S137-54 | 0.585 | 1.99 | 4.003 | 2.617 | 0.110 | 0.434 | 4.003 | 1.048 | 20.72 | 2316 | 3.723 | 3.945 | 0.968 | 28.99 | 2316 | 3.859 | 0.624 | 1.181 | -0.712 | 2.746 | 0.933 |
| 725S137-68 | 0.729 | 2.48 | 4.932 | 2.602 | 0.131 | 0.424 | 4.932 | 1.359 | 26.86 | 4347 | 3.627 | 4.932 | 1.304 | 39.03 | 4680 | 3.706 | 1.235 | 1.430 | -0.697 | 2.726 | 0.935 |
| 725S137-97 | 1.016 | 3.46 | 6.710 | 2.569 | 0.166 | 0.404 | 6.710 | 1.851 | 36.58 | 8484 | 3.625 | 6.710 | 1.851 | 55.42 | 10885 | 3.625 | 3.504 | 1.875 | -0.665 | 2.685 | 0.939 |
| 725S162-33* | 0.388 | 1.32 | 2.822 | 2.698 | 0.122 | 0.562 | 2.706 | 0.638 | 12.61 | 525 | 3.986 | --- | --- | --- | --- | --- | 0.155 | 1.309 | -0.982 | 2.926 | 0.887 |
| 725S162-43 | 0.503 | 1.71 | 3.648 | 2.692 | 0.156 | 0.557 | 3.585 | 0.913 | 18.04 | 1163 | 3.814 | --- | --- | --- | --- | --- | 0.341 | 1.666 | -0.972 | 2.916 | 0.889 |
| 725S162-54 | 0.627 | 2.13 | 4.513 | 2.683 | 0.190 | 0.550 | 4.513 | 1.188 | 23.48 | 2316 | 3.715 | 4.455 | 1.100 | 32.93 | 2316 | 3.850 | 0.670 | 2.036 | -0.960 | 2.902 | 0.891 |
| 725S162-68 | 0.782 | 2.66 | 5.572 | 2.669 | 0.229 | 0.541 | 5.572 | 1.536 | 30.35 | 4347 | 3.627 | 5.572 | 1.479 | 44.29 | 4680 | 3.699 | 1.325 | 2.479 | -0.944 | 2.882 | 0.893 |
| 725S162-97 | 1.093 | 3.72 | 7.618 | 2.640 | 0.297 | 0.522 | 7.618 | 2.101 | 50.43 | 8484 | 3.625 | 7.618 | 2.101 | 74.54 | 10885 | 3.625 | 3.767 | 3.293 | -0.911 | 2.841 | 0.897 |
| 725S200-33* | 0.422 | 1.44 | 3.241 | 2.771 | 0.221 | 0.724 | 3.234 | 0.743 | 14.67 | 525 | 3.915 | --- | --- | --- | --- | --- | 0.168 | 2.395 | -1.346 | 3.164 | 0.819 |
| 725S200-43 | 0.548 | 1.87 | 4.193 | 2.765 | 0.284 | 0.719 | 4.193 | 1.131 | 22.34 | 1163 | 3.656 | --- | --- | --- | --- | --- | 0.372 | 3.059 | -1.335 | 3.154 | 0.821 |
| 725S200-54 | 0.684 | 2.33 | 5.195 | 2.756 | 0.347 | 0.713 | 5.195 | 1.433 | 31.18 | 2316 | 3.625 | 5.195 | 1.321 | 39.55 | 2316 | 3.738 | 0.730 | 3.755 | -1.322 | 3.139 | 0.823 |
| 725S200-68 | 0.853 | 2.90 | 6.428 | 2.744 | 0.423 | 0.704 | 6.428 | 1.773 | 39.46 | 4347 | 3.625 | 6.428 | 1.710 | 56.77 | 4680 | 3.677 | 1.446 | 4.596 | -1.305 | 3.119 | 0.825 |
| 725S200-97 | 1.194 | 4.06 | 8.831 | 2.719 | 0.561 | 0.685 | 8.831 | 2.436 | 56.64 | 8484 | 3.625 | 8.831 | 2.436 | 84.04 | 10885 | 3.625 | 4.118 | 6.175 | -1.270 | 3.078 | 0.830 |
| 725S250-43 | 0.593 | 2.02 | 4.778 | 2.838 | 0.486 | 0.905 | 4.778 | 1.186 | 23.44 | 1163 | 3.772 | --- | --- | --- | --- | --- | 0.402 | 5.134 | -1.744 | 3.451 | 0.745 |
| 725S250-54 | 0.740 | 2.52 | 5.927 | 2.829 | 0.597 | 0.898 | 5.927 | 1.495 | 29.55 | 2316 | 3.752 | 5.837 | 1.388 | 41.55 | 2316 | 3.853 | 0.791 | 6.319 | -1.730 | 3.436 | 0.747 |
| 725S250-68 | 0.925 | 3.15 | 7.347 | 2.819 | 0.730 | 0.889 | 7.347 | 1.942 | 42.27 | 4347 | 3.689 | 7.334 | 1.795 | 53.75 | 4680 | 3.796 | 1.567 | 7.765 | -1.712 | 3.415 | 0.749 |
| 725S250-97 | 1.296 | 4.41 | 10.130 | 2.796 | 0.980 | 0.869 | 10.130 | 2.788 | 62.98 | 8484 | 3.628 | 10.130 | 2.666 | 89.66 | 10885 | 3.694 | 4.468 | 10.516 | -1.675 | 3.373 | 0.753 |
| 725S300-54 | 0.797 | 2.71 | 6.659 | 2.891 | 0.931 | 1.081 | 6.575 | 1.561 | 30.84 | 2316 | 3.857 | 6.219 | 1.398 | 41.84 | 2316 | 4.018 | 0.851 | 9.721 | -2.152 | 3.762 | 0.673 |
| 725S300-68 | 0.996 | 3.39 | 8.265 | 2.881 | 1.144 | 1.071 | 8.244 | 2.032 | 40.15 | 4347 | 3.792 | 8.037 | 1.871 | 56.02 | 4680 | 3.904 | 1.688 | 11.976 | -2.133 | 3.741 | 0.675 |
| 725S300-97 | 1.398 | 4.76 | 11.429 | 2.859 | 1.547 | 1.052 | 11.429 | 3.018 | 66.8 | 8484 | 3.691 | 11.267 | 2.891 | 86.57 | 10885 | 3.751 | 4.819 | 16.310 | -2.095 | 3.697 | 0.679 |
| 800S125-30* | 0.330 | 1.12 | 2.606 | 2.808 | 0.040 | 0.349 | 2.366 | 0.430 | 8.50 | 347 | 4.746 | --- | --- | --- | --- | --- | 0.107 | 0.531 | -0.522 | 2.878 | 0.967 |
| 800S125-33* | 0.366 | 1.25 | 2.881 | 2.806 | 0.044 | 0.347 | 2.656 | 0.507 | 10.02 | 474 | 4.639 | --- | --- | --- | --- | --- | 0.146 | 0.582 | -0.519 | 2.875 | 0.967 |
| 800S125-43 | 0.475 | 1.62 | 3.721 | 2.799 | 0.056 | 0.342 | 3.581 | 0.773 | 15.27 | 1051 | 4.359 | --- | --- | --- | --- | --- | 0.322 | 0.735 | -0.510 | 2.865 | 0.968 |
| 800S125-54 | 0.592 | 2.01 | 4.593 | 2.786 | 0.066 | 0.335 | 4.566 | 1.035 | 20.46 | 2091 | 4.200 | 4.431 | 0.942 | 28.21 | 2091 | 4.370 | 0.632 | 0.889 | -0.499 | 2.850 | 0.969 |
| 800S125-68 | 0.738 | 2.51 | 5.653 | 2.768 | 0.078 | 0.324 | 5.644 | 1.375 | 27.18 | 4221</ | | | | | | | | | | | |

TABLE 3—C-SECTION (STUD) SECTION PROPERTIES (Continued)

| Section | Gross Properties | | | | | | 33 ksi Effective Properties | | | | | 50 ksi Effective | | | | | Torsional Properties | | | | |
|--------------------------|------------------|--------|---------------------------------------|------------------------|---------------------------------------|------------------------|---------------------------------------|---------------------------------------|--------------|------------------------|-------------------------|---------------------------------------|---------------------------------------|--------------|------------------------|-------------------------|---|--------------------------------------|------------------------|------------------------|-------|
| | Area | Weight | I _{xx} (in ⁴) | R _x (in) | I _{yy} (in ⁴) | R _y (in) | I _{xx} (in ⁴) | S _{xx} (in ³) | Ma (in-k) | V _a (lb) | Y _{cg} (in) | I _{xx} (in ⁴) | S _{xx} (in ³) | Ma (in-k) | V _a (lb) | Y _{cg} (in) | J _x 1000 (in ⁴) | C _w (in ⁶) | X _o (in) | R _o (in) | β |
| 800S250-43 | 0.627 | 2.13 | 6.015 | 3.097 | 0.500 | 0.893 | 6.015 | 1.313 | 25.95 | 1051 | 4.219 | --- | --- | --- | --- | --- | 0.425 | 6.374 | -1.675 | 3.632 | 0.787 |
| 800S250-54 | 0.783 | 2.66 | 7.465 | 3.088 | 0.614 | 0.886 | 7.465 | 1.712 | 33.82 | 2091 | 4.134 | 7.378 | 1.525 | 45.66 | 2091 | 4.323 | 0.836 | 7.850 | -1.661 | 3.617 | 0.789 |
| 800S250-68 | 0.978 | 3.33 | 9.261 | 3.077 | 0.752 | 0.877 | 9.261 | 2.220 | 48.33 | 4221 | 4.068 | 9.240 | 2.059 | 61.65 | 4221 | 4.179 | 1.658 | 9.652 | -1.644 | 3.597 | 0.791 |
| 800S250-97 | 1.372 | 4.67 | 12.789 | 3.053 | 1.009 | 0.857 | 12.789 | 3.191 | 72.07 | 8843 | 4.003 | 12.789 | 3.054 | 102.70 | 10885 | 4.073 | 4.731 | 13.091 | -1.607 | 3.555 | 0.796 |
| 800S300-54 | 0.839 | 2.86 | 8.358 | 3.156 | 0.960 | 1.069 | 8.249 | 1.785 | 35.28 | 2091 | 4.244 | 7.862 | 1.535 | 45.96 | 2091 | 4.500 | 0.896 | 12.076 | -2.073 | 3.924 | 0.721 |
| 800S300-68 | 1.050 | 3.57 | 10.382 | 3.145 | 1.179 | 1.060 | 10.351 | 2.321 | 45.86 | 4221 | 4.175 | 10.082 | 2.145 | 64.21 | 4221 | 4.292 | 1.779 | 14.888 | -2.055 | 3.903 | 0.723 |
| 800S300-97 | 1.474 | 5.02 | 14.375 | 3.123 | 1.595 | 1.040 | 14.375 | 3.443 | 76.21 | 8843 | 4.070 | 14.170 | 3.304 | 98.92 | 10885 | 4.133 | 5.082 | 20.304 | -2.017 | 3.860 | 0.727 |
| 925S137-43 | 0.560 | 1.90 | 5.941 | 3.258 | 0.096 | 0.414 | 5.612 | 1.053 | 20.8 | 905 | 5.088 | --- | --- | --- | --- | --- | 0.379 | 1.688 | -0.633 | 3.345 | 0.964 |
| 925S137-54 | 0.698 | 2.37 | 7.352 | 3.246 | 0.116 | 0.407 | 7.175 | 1.396 | 27.58 | 1800 | 4.930 | 6.993 | 1.274 | 38.15 | 1800 | 5.122 | 0.745 | 2.055 | -0.623 | 3.330 | 0.965 |
| 925S137-68 | 0.871 | 2.96 | 9.084 | 3.229 | 0.138 | 0.398 | 9.084 | 1.846 | 36.47 | 3628 | 4.771 | 8.905 | 1.743 | 52.19 | 3628 | 4.904 | 1.476 | 2.491 | -0.609 | 3.310 | 0.966 |
| 925S137-97 | 1.220 | 4.15 | 12.437 | 3.193 | 0.174 | 0.378 | 12.437 | 2.689 | 66.42 | 8843 | 4.625 | 12.437 | 2.637 | 78.95 | 10710 | 4.671 | 4.205 | 3.275 | -0.580 | 3.267 | 0.968 |
| 925S162-43 | 0.593 | 2.02 | 6.616 | 3.339 | 0.165 | 0.528 | 6.288 | 1.196 | 23.64 | 905 | 5.051 | --- | --- | --- | --- | --- | 0.402 | 2.877 | -0.859 | 3.488 | 0.939 |
| 925S162-54 | 0.740 | 2.52 | 8.198 | 3.328 | 0.201 | 0.521 | 8.019 | 1.576 | 31.15 | 1800 | 4.907 | 7.841 | 1.443 | 43.22 | 1800 | 5.096 | 0.791 | 3.521 | -0.848 | 3.473 | 0.940 |
| 925S162-68 | 0.925 | 3.15 | 10.148 | 3.313 | 0.242 | 0.512 | 10.148 | 2.074 | 40.98 | 3628 | 4.760 | 9.965 | 1.970 | 58.99 | 3628 | 4.883 | 1.567 | 4.293 | -0.833 | 3.454 | 0.942 |
| 925S162-97 | 1.296 | 4.41 | 13.947 | 3.280 | 0.315 | 0.493 | 13.947 | 3.016 | 59.59 | 8843 | 4.625 | 13.947 | 2.962 | 88.70 | 10710 | 4.667 | 4.468 | 5.719 | -0.802 | 3.413 | 0.945 |
| 925S200-43 | 0.639 | 2.17 | 7.519 | 3.431 | 0.303 | 0.689 | 7.204 | 1.351 | 26.7 | 905 | 5.060 | --- | --- | --- | --- | --- | 0.433 | 5.240 | -1.193 | 3.697 | 0.896 |
| 925S200-54 | 0.797 | 2.71 | 9.329 | 3.422 | 0.371 | 0.682 | 9.147 | 1.818 | 35.92 | 1800 | 4.881 | 9.009 | 1.567 | 46.91 | 1800 | 5.181 | 0.851 | 6.438 | -1.180 | 3.683 | 0.897 |
| 925S200-68 | 0.996 | 3.39 | 11.568 | 3.408 | 0.451 | 0.673 | 11.568 | 2.379 | 47 | 3628 | 4.749 | 11.398 | 2.217 | 66.36 | 3628 | 4.908 | 1.688 | 7.893 | -1.164 | 3.664 | 0.899 |
| 925S200-97 | 1.398 | 4.76 | 15.963 | 3.379 | 0.598 | 0.654 | 15.963 | 3.451 | 68.2 | 8843 | 4.625 | 15.963 | 3.397 | 101.71 | 10710 | 4.664 | 4.819 | 10.637 | -1.131 | 3.623 | 0.902 |
| 925S250-43 | 0.684 | 2.33 | 8.474 | 3.521 | 0.520 | 0.872 | 8.474 | 1.502 | 29.69 | 905 | 5.018 | --- | --- | --- | --- | --- | 0.464 | 8.801 | -1.573 | 3.953 | 0.842 |
| 925S250-54 | 0.853 | 2.90 | 10.525 | 3.512 | 0.640 | 0.866 | 10.525 | 2.096 | 41.42 | 1800 | 4.768 | 10.469 | 1.746 | 52.27 | 1800 | 5.137 | 0.911 | 10.847 | -1.559 | 3.939 | 0.843 |
| 925S250-68 | 1.067 | 3.63 | 13.070 | 3.499 | 0.783 | 0.856 | 13.070 | 2.714 | 59.09 | 3628 | 4.698 | 13.031 | 2.529 | 75.73 | 3628 | 4.816 | 1.809 | 13.349 | -1.542 | 3.919 | 0.845 |
| 925S250-97 | 1.499 | 5.10 | 18.090 | 3.473 | 1.050 | 0.837 | 18.090 | 3.903 | 88.17 | 8843 | 4.629 | 18.090 | 3.742 | 125.86 | 10710 | 4.704 | 5.170 | 18.137 | -1.507 | 3.878 | 0.849 |
| 925S300-54 | 0.910 | 3.10 | 11.721 | 3.589 | 1.001 | 1.049 | 11.573 | 2.155 | 42.57 | 1800 | 4.915 | 11.135 | 1.764 | 52.83 | 1800 | 5.323 | 0.972 | 16.911 | -1.956 | 4.219 | 0.785 |
| 925S300-68 | 1.139 | 3.87 | 14.572 | 3.577 | 1.231 | 1.040 | 14.520 | 2.833 | 55.98 | 3628 | 4.813 | 14.158 | 2.610 | 78.14 | 3628 | 4.955 | 1.930 | 20.596 | -1.938 | 4.199 | 0.787 |
| 925S300-97 | 1.601 | 5.45 | 20.218 | 3.553 | 1.665 | 1.020 | 20.218 | 4.194 | 92.84 | 8843 | 4.701 | 19.928 | 4.035 | 120.79 | 10710 | 4.767 | 5.520 | 28.138 | -1.901 | 4.157 | 0.791 |
| 1000S137-43 [†] | 0.593 | 2.02 | 7.232 | 3.491 | 0.097 | 0.405 | 6.727 | 1.147 | 22.66 | 836 | 5.577 | --- | --- | --- | --- | --- | 0.402 | 2.014 | -0.605 | 3.566 | 0.971 |
| 1000S137-54 | 0.740 | 2.52 | 8.956 | 3.478 | 0.117 | 0.398 | 8.636 | 1.526 | 30.15 | 1661 | 5.401 | 8.393 | 1.389 | 41.58 | 1661 | 5.613 | 0.791 | 2.454 | -0.595 | 3.551 | 0.972 |
| 1000S137-68 | 0.925 | 3.15 | 11.076 | 3.461 | 0.140 | 0.389 | 11.010 | 2.029 | 40.09 | 3345 | 5.220 | 10.732 | 1.908 | 57.13 | 3345 | 5.373 | 1.567 | 2.975 | -0.581 | 3.531 | 0.973 |
| 1000S137-97 | 1.296 | 4.41 | 15.192 | 3.424 | 0.177 | 0.369 | 15.192 | 3.038 | 60.04 | 8843 | 5.000 | 15.192 | 2.917 | 87.32 | 9864 | 5.102 | 4.468 | 3.913 | -0.554 | 3.488 | 0.975 |
| 1000S162-43 [†] | 0.627 | 2.13 | 8.025 | 3.577 | 0.168 | 0.518 | 7.523 | 1.302 | 25.74 | 836 | 5.532 | --- | --- | --- | --- | --- | 0.425 | 3.430 | -0.823 | 3.707 | 0.951 |
| 1000S162-54 | 0.783 | 2.66 | 9.950 | 3.565 | 0.204 | 0.511 | 9.627 | 1.722 | 34.02 | 1661 | 5.371 | 9.391 | 1.572 | 47.07 | 1661 | 5.580 | 0.836 | 4.198 | -0.812 | 3.692 | 0.952 |
| 1000S162-68 | 0.978 | 3.33 | 12.325 | 3.550 | 0.246 | 0.502 | 12.256 | 2.276 | 44.98 | 3345 | 5.205 | 11.978 | 2.154 | 64.51 | 3345 | 5.345 | 1.658 | 5.121 | -0.798 | 3.673 | 0.953 |
| 1000S162-97 | 1.372 | 4.67 | 16.967 | 3.516 | 0.320 | 0.483 | 16.967 | 3.393 | 67.06 | 8843 | 5.000 | 16.967 | 3.269 | 97.89 | 9864 | 5.095 | 4.731 | 6.827 | -0.768 | 3.631 | 0.955 |
| 1000S200-43 [†] | 0.672 | 2.29 | 9.085 | 3.676 | 0.309 | 0.677 | 8.602 | 1.470 | 29.05 | 836 | 5.535 | --- | --- | --- | --- | --- | 0.456 | 6.236 | -1.147 | 3.910 | 0.914 |
| 1000S200-54 | 0.839 | 2.86 | 11.278 | 3.666 | 0.378 | 0.671 | 10.953 | 1.984 | 39.2 | 1661 | 5.338 | 10.769 | 1.705 | 51.05 | 1661 | 5.666 | 0.896 | 7.665 | -1.135 | 3.896 | 0.915 |
| 1000S200-68 | 1.050 | 3.57 | 13.994 | 3.652 | 0.460 | 0.662 | 13.920 | 2.607 | 51.51 | 3345 | 5.188 | 13.665 | 2.420 | 72.46 | 3345 | 5.367 | 1.779 | 9.401 | -1.120 | 3.876 | 0.917 |
| 1000S200-97 | 1.474 | 5.02 | 19.336 | 3.622 | 0.609 | 0.643 | 19.336 | 3.867 | 76.42 | 8843 | 5.000 | 19.336 | 3.741 | 112.00 | 9864 | 5.088 | 5.082 | 12.679 | -1.088 | 3.836 | 0.920 |
| 1000S250-43 [†] | 0.717 | 2.44 | 10.203 | 3.771 | 0.531 | 0.860 | 10.203 | 1.617 | 31.95 | 836 | 5.508 | --- | --- | --- | --- | --- | 0.486 | 10.481 | -1.518 | 4.155 | 0.867 |
| 1000S250-54 | 0.896 | 3.05 | 12.677 | 3.762 | 0.653 | 0.854 | 12.677 | 2.277 | 44.99 | 1661 | 5.213 | 12.660 | 1.879 | 56.26 | 1661 | 5.635 | 0.957 | 12.922 | -1.505 | 4.140 | 0.868 |
| 1000S250-68 | 1.121 | 3.81 | 15.751 | 3.749 | 0.799 | 0.844 | 15.751 | 3.028 | 65.93 | 3345 | 5.076 | 15.741 | 2.768 | 82.89 | 3345 | 5.248 | 1.899 | 15.909 | -1.488 | 4.121 | 0.870 |
| 1000S250-97 | 1.576 | 5.36 | 21.827 | 3.722 | 1.072 | 0.825 | 21.827 | 4.357 | 98.41 | 8843 | 5.004 | 21.827 | 4.181 | 140.63 | 9864 | 5.082 | 5.433 | 21.632 | -1.454 | 4.080 | 0.873 |
| 1000S300-54 | 0.953 | 3.24 | 14.076 | 3.844 | 1.024 | 1.037 | 13.938 | 2.312 | 45.69 | 1661 | 5.394 | 13.440 | 1.902 | 56.96 | 1661 | 5.826 | 1.017 | 19.888 | -1.892 | 4.408 | 0.816 |
| 1000S300-68 | 1.192 | 4.06 | 17.509 | 3.832 | 1.258 | 1.027 | 17.441 | 3.158 | 62.41 | 3345 | 5.195 | 17.099 | 2.802 | 83.89 | 3345 | 5.437 | 2.020 | 24.551 | -1.874 | 4.388 | 0.818 |
| 1000S300-97 | 1.677 | 5.71 | 24.318 | 3.808 | 1.702 | 1.007 | 24.318 | 4.671 | 103.39 | 8843 | 5.079 | 23.970 | 4.499 | 134.69 | 9864 | 5.148 | 5.783 | 33.570 | -1.838 | 4.346 | 0.821 |
| 1150S137-43 [†] | 0.661 | 2.25 | 10.325 | 3.952 | 0.100 | 0.388 | 9.301 | 1.334 | 26.36 | 725 | 6.577 | --- | --- | --- | --- | --- | 0.448 | 2.764 | -0.556 | 4.010 | 0.981 |
| 1150S137-54 | 0.825 | 2.81 | 12.800 | 3.938 | 0.120 | 0.381 | 12.025 | 1.786 | 35.3 | 1439 | 6.369 | 11.627 | 1.617 | 48.43 | 1439 | 6.618 | 0.881 | 3.369 | -0.546 | 3.994 | 0.981 |
| 1150S137-68 | 1.032 | 3.51 | 15.854 | 3.920 | 0.143 | 0.372 | 15.463 | 2.396 | 47.34 | 2895 | 6.147 | 14.977 | 2.238 | 67.01 | 2895 | 6.336 | 1.748 | 4.085 | -0.534 | 3.974 | 0.982 |
| 1150S137-97 | 1.449 | 4.93 | 21.817 | 3.881 | 0.181 | 0.353 | 21.817 | 3.687 | 72.87 | 8518 | 5.830 | 21.738 | 3.478 | 104.13 | 8518 | 5.995 | 4.994 | 5.379 | -0.508 | 3.930 | 0.983 |
| 1150S162-43 [†] | 0.695 | 2.36 | 11.383 | 4.047 | 0.173 | 0.499 | 10.366 | 1.514 | 29.92 | 725 | 6.516 | --- | --- | --- | --- | --- | 0.471 | 4.703 | -0.761 | 4.148 | 0.966 |
| 1150S162-54 | 0.868 | 2.95 | 14.126 | 4.035 | 0.210 | 0.492 | 13.350 | 2.012 | 39.76 | 1439 | 6.325 | 12.964 | 1.829 | 54.75 | 1439 | 6.570 | 0.927 | 5.759 | -0.750 | 4.134 | 0.967 |
| 1150S162-68 | 1.085 | 3.69 | 17.521 | 4.018 | 0.253 | 0.483 | 17.124 | 2.681 | 52.99 | 2895 | 6.120 | 16.642 | 2.523 | 75.52 | 2895 | 6.295 | 1.839 | 7.028 | -0.737 | 4.114 | 0.968 |
| 1150S162-97 | 1.52 | | | | | | | | | | | | | | | | | | | | |

TABLE 3—C-SECTION (STUD) SECTION PROPERTIES (Continued)

| Section | Gross Properties ¹ | | | | | | 33 ksi Effective Properties ^{2,3} | | | | | 50 ksi Effective ^{2,3} | | | | | Torsional Properties | | | | |
|--------------------------|-------------------------------|--------|------------------------|---------|------------------------|---------|--|------------------------|-----------|---------|----------|---------------------------------|------------------------|-----------|---------|----------|---------------------------|-----------------------|---------|---------|-------|
| | Area | Weight | Ixx (in ⁴) | Rx (in) | Iyy (in ⁴) | Ry (in) | Ixx (in ⁴) | Sxx (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | Ixx (in ⁴) | Sxx (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | Jx1000 (in ⁴) | Cw (in ⁶) | Xo (in) | Ro (in) | β |
| 1200S250-54 ⁴ | 1.009 | 3.43 | 19.681 | 4.416 | 0.683 | 0.823 | 18.832 | 2.482 | 49.05 | 1377 | 6.794 | 18.433 | 2.149 | 64.34 | 1377 | 7.159 | 1.078 | 19.505 | -1.378 | 4.699 | 0.914 |
| 1200S250-68 | 1.263 | 4.30 | 24.484 | 4.402 | 0.836 | 0.813 | 23.963 | 3.496 | 69.08 | 2771 | 6.460 | 23.575 | 3.007 | 90.04 | 2771 | 6.846 | 2.141 | 24.034 | -1.362 | 4.679 | 0.915 |
| 1200S250-97 | 1.779 | 6.05 | 34.016 | 4.373 | 1.121 | 0.794 | 34.016 | 5.496 | 108.6 | 8147 | 6.098 | 33.835 | 5.037 | 150.82 | 8147 | 6.340 | 6.134 | 32.734 | -1.329 | 4.639 | 0.918 |
| 1200S300-54 ⁴ | 1.066 | 3.63 | 21.699 | 4.512 | 1.074 | 1.004 | 21.648 | 2.736 | 54.06 | 1377 | 6.708 | 21.043 | 2.272 | 68.04 | 1377 | 7.195 | 1.138 | 30.051 | -1.743 | 4.940 | 0.876 |
| 1200S300-68 | 1.335 | 4.54 | 27.020 | 4.499 | 1.320 | 0.994 | 26.918 | 4.064 | 80.3 | 2771 | 6.229 | 26.510 | 3.317 | 99.32 | 2771 | 6.759 | 2.262 | 37.126 | -1.726 | 4.921 | 0.877 |
| 1200S300-97 | 1.881 | 6.40 | 37.616 | 4.472 | 1.786 | 0.974 | 37.616 | 6.035 | 133.59 | 8147 | 6.086 | 37.085 | 5.831 | 174.57 | 8147 | 6.159 | 6.484 | 50.853 | -1.691 | 4.880 | 0.880 |
| 1350S137-54 ⁴ | 0.938 | 3.19 | 19.386 | 4.545 | 0.123 | 0.362 | 17.546 | 2.133 | 42.14 | 1221 | 7.705 | 16.866 | 1.922 | 57.54 | 1221 | 8.001 | 1.002 | 4.839 | -0.493 | 4.586 | 0.988 |
| 1350S137-68 | 1.174 | 4.00 | 24.050 | 4.526 | 0.147 | 0.353 | 22.783 | 2.885 | 57.02 | 2455 | 7.432 | 21.907 | 2.677 | 80.15 | 2455 | 7.667 | 1.990 | 5.870 | -0.482 | 4.565 | 0.989 |
| 1350S137-97 | 1.652 | 5.62 | 33.215 | 4.484 | 0.185 | 0.335 | 33.215 | 4.535 | 89.62 | 7206 | 7.015 | 32.333 | 4.229 | 126.61 | 7206 | 7.240 | 5.696 | 7.735 | -0.458 | 4.520 | 0.990 |
| 1350S162-54 ⁴ | 0.981 | 3.34 | 21.228 | 4.652 | 0.216 | 0.469 | 19.394 | 2.399 | 47.41 | 1221 | 7.641 | 18.737 | 2.170 | 64.98 | 1221 | 7.932 | 1.047 | 8.273 | -0.682 | 4.725 | 0.979 |
| 1350S162-68 | 1.228 | 4.18 | 26.368 | 4.634 | 0.261 | 0.461 | 25.092 | 3.222 | 63.66 | 2455 | 7.389 | 24.228 | 3.012 | 90.19 | 2455 | 7.606 | 2.081 | 10.101 | -0.669 | 4.705 | 0.980 |
| 1350S162-97 | 1.728 | 5.88 | 36.510 | 4.596 | 0.338 | 0.442 | 36.510 | 5.018 | 99.15 | 7206 | 7.000 | 35.611 | 4.709 | 140.98 | 7206 | 7.211 | 5.959 | 13.494 | -0.643 | 4.662 | 0.981 |
| 1350S200-54 ⁴ | 1.037 | 3.53 | 23.688 | 4.778 | 0.403 | 0.623 | 21.864 | 2.756 | 54.46 | 1221 | 7.568 | 21.358 | 2.348 | 70.31 | 1221 | 8.013 | 1.108 | 15.066 | -0.966 | 4.915 | 0.961 |
| 1350S200-68 | 1.299 | 4.42 | 29.461 | 4.762 | 0.491 | 0.615 | 28.180 | 3.672 | 72.55 | 2455 | 7.340 | 27.397 | 3.369 | 100.88 | 2455 | 7.606 | 2.201 | 18.498 | -0.952 | 4.895 | 0.962 |
| 1350S200-97 | 1.830 | 6.23 | 40.907 | 4.728 | 0.650 | 0.596 | 40.905 | 5.662 | 111.89 | 7206 | 6.983 | 39.991 | 5.350 | 160.18 | 7206 | 7.176 | 6.309 | 25.008 | -0.923 | 4.854 | 0.964 |
| 1350S250-54 ⁴ | 1.094 | 3.72 | 26.245 | 4.898 | 0.701 | 0.801 | 24.632 | 2.816 | 55.64 | 1221 | 7.780 | 24.075 | 2.432 | 72.82 | 1221 | 8.188 | 1.168 | 25.480 | -1.296 | 5.129 | 0.936 |
| 1350S250-68 | 1.370 | 4.66 | 32.675 | 4.883 | 0.858 | 0.791 | 31.477 | 3.983 | 78.7 | 2455 | 7.400 | 30.883 | 3.415 | 102.23 | 2455 | 7.837 | 2.322 | 31.409 | -1.281 | 5.110 | 0.937 |
| 1350S250-97 | 1.932 | 6.57 | 45.471 | 4.852 | 1.151 | 0.772 | 45.457 | 6.332 | 125.12 | 7206 | 6.967 | 44.659 | 5.767 | 172.67 | 7206 | 7.257 | 6.660 | 42.816 | -1.250 | 5.069 | 0.939 |
| 1350S300-54 ⁴ | 1.151 | 3.92 | 28.803 | 5.003 | 1.106 | 0.980 | 27.240 | 2.905 | 57.41 | 1221 | 7.941 | 25.104 | 2.484 | 74.37 | 1221 | 8.375 | 1.229 | 39.293 | -1.647 | 5.358 | 0.906 |
| 1350S300-68 | 1.442 | 4.91 | 35.890 | 4.989 | 1.358 | 0.971 | 34.869 | 4.072 | 80.46 | 2455 | 7.586 | 33.417 | 3.516 | 105.27 | 2455 | 8.006 | 2.443 | 48.565 | -1.631 | 5.338 | 0.907 |
| 1350S300-97 | 2.033 | 6.92 | 50.035 | 4.961 | 1.838 | 0.951 | 50.035 | 6.743 | 133.25 | 7206 | 7.053 | 48.895 | 6.117 | 183.16 | 7206 | 7.352 | 7.010 | 66.580 | -1.597 | 5.297 | 0.909 |
| 1400S137-54 ⁴ | 0.967 | 3.29 | 21.317 | 4.696 | 0.124 | 0.358 | 19.109 | 2.219 | 43.85 | 1177 | 8.046 | 18.345 | 1.998 | 59.82 | 1177 | 8.353 | 1.032 | 5.251 | -0.482 | 4.734 | 0.990 |
| 1400S137-68 | 1.210 | 4.12 | 26.455 | 4.676 | 0.147 | 0.349 | 24.868 | 3.008 | 59.43 | 2365 | 7.761 | 23.871 | 2.787 | 83.44 | 2365 | 8.007 | 2.050 | 6.372 | -0.470 | 4.712 | 0.990 |
| 1400S137-97 | 1.703 | 5.79 | 36.565 | 4.634 | 0.186 | 0.331 | 36.434 | 4.748 | 93.82 | 6939 | 7.320 | 35.366 | 4.417 | 132.24 | 6939 | 7.560 | 5.871 | 8.397 | -0.447 | 4.667 | 0.991 |
| 1400S162-54 ⁴ | 1.009 | 3.43 | 23.302 | 4.805 | 0.218 | 0.464 | 21.103 | 2.496 | 49.32 | 1177 | 7.977 | 20.365 | 2.256 | 67.54 | 1177 | 8.278 | 1.078 | 8.980 | -0.667 | 4.873 | 0.981 |
| 1400S162-68 | 1.263 | 4.30 | 28.952 | 4.787 | 0.262 | 0.456 | 27.357 | 3.357 | 66.33 | 2365 | 7.714 | 26.375 | 3.135 | 93.85 | 2365 | 7.940 | 2.141 | 10.966 | -0.654 | 4.853 | 0.982 |
| 1400S162-97 | 1.779 | 6.05 | 40.115 | 4.748 | 0.340 | 0.437 | 39.965 | 5.248 | 103.71 | 6939 | 7.302 | 38.897 | 4.915 | 147.14 | 6939 | 7.527 | 6.134 | 14.651 | -0.628 | 4.810 | 0.983 |
| 1400S200-54 ⁴ | 1.066 | 3.63 | 25.951 | 4.935 | 0.406 | 0.617 | 23.767 | 2.866 | 56.63 | 1177 | 7.898 | 23.199 | 2.440 | 73.05 | 1177 | 8.359 | 1.138 | 16.355 | -0.946 | 5.062 | 0.965 |
| 1400S200-68 | 1.335 | 4.54 | 32.284 | 4.918 | 0.494 | 0.608 | 30.684 | 3.824 | 75.56 | 2365 | 7.660 | 29.797 | 3.505 | 104.93 | 2365 | 7.937 | 2.262 | 20.083 | -0.932 | 5.043 | 0.966 |
| 1400S200-97 | 1.881 | 6.40 | 44.853 | 4.883 | 0.655 | 0.590 | 44.683 | 5.917 | 116.93 | 6939 | 7.281 | 43.616 | 5.580 | 167.07 | 6939 | 7.488 | 6.484 | 27.156 | -0.904 | 5.001 | 0.967 |
| 1400S250-54 ⁴ | 1.122 | 3.82 | 28.702 | 5.057 | 0.707 | 0.794 | 26.758 | 2.927 | 57.83 | 1177 | 8.113 | 26.141 | 2.527 | 75.65 | 1177 | 8.535 | 1.198 | 27.675 | -1.272 | 5.275 | 0.942 |
| 1400S250-68 | 1.406 | 4.78 | 35.743 | 5.042 | 0.865 | 0.784 | 34.239 | 4.145 | 81.9 | 2365 | 7.718 | 33.565 | 3.550 | 106.29 | 2365 | 8.173 | 2.383 | 34.118 | -1.257 | 5.255 | 0.943 |
| 1400S250-97 | 1.983 | 6.75 | 49.764 | 5.010 | 1.160 | 0.765 | 49.579 | 6.611 | 130.64 | 6939 | 7.263 | 48.650 | 6.010 | 179.95 | 6939 | 7.568 | 6.835 | 46.520 | -1.225 | 5.214 | 0.945 |
| 1400S300-54 ⁴ | 1.179 | 4.01 | 31.453 | 5.165 | 1.115 | 0.972 | 29.581 | 3.019 | 59.66 | 1177 | 8.277 | 27.227 | 2.580 | 77.25 | 1177 | 8.726 | 1.259 | 42.690 | -1.617 | 5.499 | 0.914 |
| 1400S300-68 | 1.477 | 5.03 | 39.201 | 5.151 | 1.370 | 0.963 | 37.902 | 4.236 | 83.71 | 2365 | 7.908 | 36.290 | 3.655 | 109.42 | 2365 | 8.344 | 2.503 | 52.772 | -1.601 | 5.480 | 0.915 |
| 1400S300-97 | 2.084 | 7.09 | 54.675 | 5.122 | 1.854 | 0.943 | 54.574 | 7.035 | 139.02 | 6939 | 7.350 | 53.226 | 6.372 | 190.78 | 6939 | 7.664 | 7.186 | 72.365 | -1.568 | 5.439 | 0.917 |

For **SI**: 1 inch = 25.4mm, 1 pound = 4.4482 N.

¹Gross properties are based on the full-unreduced cross section of the studs, away from web punch-outs.

²Effective properties are based on punched sections.

³Use the effective moment of inertia for deflection calculations.

⁴Web height to thickness ratio, h/t, exceeds 200. Web stiffeners in accordance with Sections B1.2 and C3.6.1 of AISI-NAS are required. No holes or punch-outs are permitted in the web.

SYMBOLS:

- Ixx=Strong axis moment of inertia.
- Rx=Strong axis radius of gyration.
- Iyy=Weak axis moment of inertia.
- Ry=Weak axis radius of gyration.
- Sxx=Strong axis section modulus.
- Va = Allowable shear at unpunched web section.
- Ycg= Distance from top of flange to effective center of gravity.
- J=St. Venant torsion constant.
- Cw=Warping constant.
- Xo=Distance from shear center to neutral axis.
- β=Torsional flexural constant.

TABLE 4—CHANNEL (TRACK) SECTION PROPERTIES

| Section | Gross Properties ¹ | | | | | | 33 ksi Effective Properties ² | | | | | 50 ksi Effective ² | | | | | Torsional Properties | | | | |
|------------|-------------------------------|--------|------------------------|---------|------------------------|---------|--|------------------------|-----------|---------|----------|-------------------------------|------------------------|-----------|---------|----------|---------------------------|-----------------------|---------|---------|-------|
| | Area | Weight | Ixx (in ⁴) | Rx (in) | Iyy (in ⁴) | Ry (in) | Ixx (in ⁴) | Sxx (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | Ixx (in ⁴) | Sxx (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | Jx1000 (in ⁴) | Cw (in ⁶) | Xo (in) | Ro (in) | β |
| 162T125-18 | 0.077 | 0.26 | 0.041 | 0.733 | 0.013 | 0.411 | 0.030 | 0.025 | 0.50 | 302 | 1.082 | --- | --- | --- | --- | --- | 0.009 | 0.007 | -0.878 | 1.215 | 0.478 |
| 162T125-27 | 0.117 | 0.40 | 0.063 | 0.735 | 0.020 | 0.410 | 0.050 | 0.044 | 0.87 | 541 | 1.048 | --- | --- | --- | --- | --- | 0.031 | 0.010 | -0.872 | 1.211 | 0.482 |
| 162T125-30 | 0.129 | 0.44 | 0.070 | 0.735 | 0.022 | 0.409 | 0.057 | 0.050 | 1.00 | 597 | 1.038 | --- | --- | --- | --- | --- | 0.042 | 0.012 | -0.870 | 1.210 | 0.483 |
| 162T125-33 | 0.143 | 0.49 | 0.077 | 0.736 | 0.024 | 0.408 | 0.066 | 0.058 | 1.15 | 663 | 1.026 | --- | --- | --- | --- | --- | 0.057 | 0.013 | -0.868 | 1.209 | 0.484 |
| 162T125-43 | 0.186 | 0.63 | 0.101 | 0.737 | 0.031 | 0.407 | 0.093 | 0.085 | 1.68 | 867 | 0.995 | --- | --- | --- | --- | --- | 0.126 | 0.017 | -0.863 | 1.206 | 0.488 |
| 162T125-54 | 0.233 | 0.79 | 0.129 | 0.746 | 0.038 | 0.404 | 0.126 | 0.119 | 2.36 | 1079 | 0.975 | 0.120 | 0.109 | 3.27 | 1634 | 1.006 | 0.249 | 0.021 | -0.856 | 1.205 | 0.496 |
| 162T125-68 | 0.293 | 1.00 | 0.168 | 0.757 | 0.047 | 0.401 | 0.168 | 0.168 | 3.33 | 1339 | 0.961 | 0.166 | 0.155 | 4.65 | 2029 | 0.991 | 0.497 | 0.028 | -0.846 | 1.205 | 0.506 |
| 162T125-97 | 0.417 | 1.42 | 0.255 | 0.781 | 0.065 | 0.395 | 0.255 | 0.257 | 5.81 | 1853 | 0.990 | 0.255 | 0.257 | 7.70 | 2808 | 0.990 | 1.439 | 0.042 | -0.827 | 1.204 | 0.528 |
| 162T150-27 | 0.131 | 0.45 | 0.074 | 0.750 | 0.032 | 0.495 | 0.055 | 0.045 | 0.90 | 541 | 1.092 | --- | --- | --- | --- | --- | 0.035 | 0.017 | -1.100 | 1.420 | 0.400 |
| 162T150-30 | 0.144 | 0.49 | 0.081 | 0.751 | 0.035 | 0.494 | 0.062 | 0.052 | 1.03 | 597 | 1.082 | --- | --- | --- | --- | --- | 0.047 | 0.019 | -1.098 | 1.419 | 0.401 |
| 162T150-33 | 0.160 | 0.54 | 0.090 | 0.751 | 0.039 | 0.494 | 0.072 | 0.060 | 1.19 | 663 | 1.070 | --- | --- | --- | --- | --- | 0.064 | 0.021 | -1.096 | 1.418 | 0.402 |
| 162T150-43 | 0.208 | 0.71 | 0.118 | 0.753 | 0.050 | 0.492 | 0.102 | 0.089 | 1.75 | 867 | 1.037 | --- | --- | --- | --- | --- | 0.141 | 0.027 | -1.091 | 1.414 | 0.405 |
| 162T150-54 | 0.261 | 0.89 | 0.151 | 0.762 | 0.063 | 0.490 | 0.140 | 0.126 | 2.48 | 1079 | 1.015 | 0.132 | 0.114 | 3.42 | 1634 | 1.049 | 0.279 | 0.035 | -1.083 | 1.412 | 0.411 |
| 162T150-68 | 0.329 | 1.12 | 0.197 | 0.774 | 0.078 | 0.487 | 0.190 | 0.180 | 3.55 | 1339 | 0.997 | 0.185 | 0.164 | 4.91 | 2029 | 1.032 | 0.557 | 0.046 | -1.073 | 1.410 | 0.421 |
| 162T150-97 | 0.468 | 1.59 | 0.299 | 0.800 | 0.108 | 0.481 | 0.299 | 0.302 | 5.97 | 1853 | 0.990 | 0.299 | 0.283 | 8.48 | 2808 | 1.017 | 1.614 | 0.070 | -1.053 | 1.407 | 0.440 |
| 162T200-33 | 0.194 | 0.66 | 0.116 | 0.773 | 0.085 | 0.660 | 0.081 | 0.063 | 1.25 | 663 | 1.145 | --- | --- | --- | --- | --- | 0.078 | 0.047 | -1.565 | 1.866 | 0.297 |
| 162T200-43 | 0.253 | 0.86 | 0.152 | 0.775 | 0.110 | 0.658 | 0.117 | 0.094 | 1.85 | 867 | 1.111 | --- | --- | --- | --- | --- | 0.172 | 0.061 | -1.559 | 1.861 | 0.298 |
| 162T200-54 | 0.318 | 1.08 | 0.196 | 0.785 | 0.137 | 0.656 | 0.164 | 0.134 | 2.65 | 1079 | 1.088 | 0.153 | 0.121 | 3.62 | 1634 | 1.124 | 0.339 | 0.078 | -1.551 | 1.858 | 0.303 |
| 162T200-68 | 0.400 | 1.36 | 0.255 | 0.799 | 0.171 | 0.653 | 0.232 | 0.195 | 3.86 | 1339 | 1.067 | 0.218 | 0.176 | 5.26 | 2029 | 1.106 | 0.678 | 0.102 | -1.540 | 1.854 | 0.310 |
| 162T200-97 | 0.570 | 1.94 | 0.389 | 0.827 | 0.239 | 0.648 | 0.389 | 0.345 | 6.82 | 1853 | 1.044 | 0.373 | 0.313 | 9.38 | 2808 | 1.084 | 1.965 | 0.157 | -1.519 | 1.846 | 0.323 |
| 250T125-18 | 0.094 | 0.32 | 0.103 | 1.051 | 0.015 | 0.400 | 0.078 | 0.045 | 0.90 | 249 | 1.580 | --- | --- | --- | --- | --- | 0.011 | 0.018 | -0.769 | 1.362 | 0.681 |
| 250T125-27 | 0.141 | 0.48 | 0.157 | 1.053 | 0.022 | 0.398 | 0.129 | 0.079 | 1.56 | 685 | 1.519 | --- | --- | --- | --- | --- | 0.038 | 0.027 | -0.763 | 1.360 | 0.685 |
| 250T125-30 | 0.156 | 0.53 | 0.173 | 1.053 | 0.025 | 0.397 | 0.145 | 0.090 | 1.77 | 832 | 1.507 | --- | --- | --- | --- | --- | 0.051 | 0.030 | -0.762 | 1.359 | 0.686 |
| 250T125-33 | 0.173 | 0.59 | 0.192 | 1.054 | 0.027 | 0.397 | 0.166 | 0.103 | 2.03 | 1024 | 1.492 | --- | --- | --- | --- | --- | 0.069 | 0.033 | -0.760 | 1.358 | 0.687 |
| 250T125-43 | 0.225 | 0.77 | 0.250 | 1.055 | 0.035 | 0.395 | 0.231 | 0.147 | 2.91 | 1356 | 1.454 | --- | --- | --- | --- | --- | 0.153 | 0.042 | -0.755 | 1.356 | 0.690 |
| 250T125-54 | 0.282 | 0.96 | 0.318 | 1.062 | 0.043 | 0.392 | 0.310 | 0.203 | 4.01 | 1692 | 1.426 | 0.297 | 0.188 | 5.64 | 2563 | 1.463 | 0.301 | 0.054 | -0.749 | 1.357 | 0.696 |
| 250T125-68 | 0.355 | 1.21 | 0.408 | 1.072 | 0.054 | 0.389 | 0.408 | 0.281 | 5.56 | 2111 | 1.404 | 0.402 | 0.262 | 7.85 | 3199 | 1.440 | 0.602 | 0.069 | -0.740 | 1.360 | 0.704 |
| 250T125-97 | 0.506 | 1.72 | 0.604 | 1.092 | 0.074 | 0.383 | 0.604 | 0.423 | 9.56 | 2954 | 1.428 | 0.604 | 0.423 | 12.67 | 4476 | 1.428 | 1.745 | 0.101 | -0.724 | 1.365 | 0.719 |
| 250T150-27 | 0.156 | 0.53 | 0.181 | 1.078 | 0.037 | 0.486 | 0.139 | 0.082 | 1.61 | 685 | 1.576 | --- | --- | --- | --- | --- | 0.042 | 0.044 | -0.976 | 1.534 | 0.595 |
| 250T150-30 | 0.172 | 0.58 | 0.199 | 1.078 | 0.040 | 0.486 | 0.157 | 0.093 | 1.83 | 832 | 1.563 | --- | --- | --- | --- | --- | 0.056 | 0.049 | -0.975 | 1.533 | 0.595 |
| 250T150-33 | 0.190 | 0.65 | 0.221 | 1.079 | 0.045 | 0.485 | 0.179 | 0.107 | 2.11 | 1024 | 1.548 | --- | --- | --- | --- | --- | 0.076 | 0.054 | -0.973 | 1.532 | 0.596 |
| 250T150-43 | 0.248 | 0.84 | 0.289 | 1.080 | 0.058 | 0.483 | 0.252 | 0.154 | 3.03 | 1356 | 1.508 | --- | --- | --- | --- | --- | 0.168 | 0.070 | -0.968 | 1.529 | 0.599 |
| 250T150-54 | 0.311 | 1.06 | 0.368 | 1.088 | 0.072 | 0.481 | 0.342 | 0.213 | 4.22 | 1692 | 1.477 | 0.325 | 0.197 | 5.89 | 2563 | 1.517 | 0.332 | 0.089 | -0.961 | 1.529 | 0.605 |
| 250T150-68 | 0.391 | 1.33 | 0.472 | 1.099 | 0.089 | 0.478 | 0.465 | 0.299 | 5.92 | 2111 | 1.449 | 0.445 | 0.276 | 8.27 | 3199 | 1.490 | 0.663 | 0.114 | -0.953 | 1.531 | 0.613 |
| 250T150-97 | 0.557 | 1.90 | 0.701 | 1.121 | 0.124 | 0.471 | 0.701 | 0.491 | 9.69 | 2954 | 1.428 | 0.701 | 0.463 | 13.86 | 4476 | 1.460 | 1.921 | 0.168 | -0.935 | 1.534 | 0.629 |
| 250T200-33 | 0.225 | 0.76 | 0.280 | 1.117 | 0.097 | 0.658 | 0.203 | 0.112 | 2.22 | 1024 | 1.627 | --- | --- | --- | --- | --- | 0.090 | 0.118 | -1.418 | 1.921 | 0.455 |
| 250T200-43 | 0.293 | 1.00 | 0.366 | 1.118 | 0.126 | 0.657 | 0.288 | 0.163 | 3.21 | 1356 | 1.605 | --- | --- | --- | --- | --- | 0.198 | 0.153 | -1.413 | 1.918 | 0.457 |
| 250T200-54 | 0.367 | 1.25 | 0.466 | 1.127 | 0.157 | 0.654 | 0.396 | 0.228 | 4.51 | 1692 | 1.572 | 0.371 | 0.209 | 6.25 | 2563 | 1.615 | 0.392 | 0.195 | -1.405 | 1.917 | 0.462 |
| 250T200-68 | 0.462 | 1.57 | 0.600 | 1.139 | 0.196 | 0.652 | 0.548 | 0.324 | 6.41 | 2111 | 1.538 | 0.517 | 0.296 | 8.86 | 3199 | 1.586 | 0.783 | 0.251 | -1.396 | 1.916 | 0.469 |
| 250T200-97 | 0.659 | 2.24 | 0.893 | 1.165 | 0.275 | 0.646 | 0.893 | 0.556 | 10.99 | 2954 | 1.496 | 0.856 | 0.510 | 15.27 | 4476 | 1.544 | 2.271 | 0.374 | -1.376 | 1.915 | 0.484 |
| 250T250-43 | 0.338 | 1.15 | 0.443 | 1.146 | 0.230 | 0.826 | 0.318 | 0.169 | 3.34 | 1356 | 1.688 | --- | --- | --- | --- | --- | 0.229 | 0.283 | -1.873 | 2.346 | 0.362 |
| 250T250-54 | 0.424 | 1.44 | 0.565 | 1.155 | 0.287 | 0.824 | 0.440 | 0.238 | 4.70 | 1692 | 1.655 | 0.410 | 0.217 | 6.50 | 2563 | 1.699 | 0.453 | 0.361 | -1.865 | 2.343 | 0.366 |
| 250T250-68 | 0.534 | 1.82 | 0.728 | 1.168 | 0.360 | 0.821 | 0.616 | 0.341 | 6.74 | 2111 | 1.620 | 0.576 | 0.310 | 9.27 | 3199 | 1.670 | 0.904 | 0.466 | -1.855 | 2.341 | 0.372 |
| 250T250-97 | 0.761 | 2.59 | 1.086 | 1.195 | 0.506 | 0.815 | 1.028 | 0.596 | 11.79 | 2954 | 1.571 | 0.972 | 0.541 | 16.20 | 4476 | 1.626 | 2.622 | 0.696 | -1.834 | 2.336 | 0.384 |
| 250T300-54 | 0.480 | 1.63 | 0.664 | 1.176 | 0.470 | 0.989 | 0.477 | 0.245 | 4.85 | 1692 | 1.727 | 0.443 | 0.223 | 6.69 | 2563 | 1.772 | 0.513 | 0.599 | -2.335 | 2.795 | 0.302 |
| 250T300-68 | 0.605 | 2.06 | 0.856 | 1.189 | 0.589 | 0.987 | 0.674 | 0.353 | 6.98 | 2111 | 1.693 | 0.626 | 0.319 | 9.56 | 3199 | 1.744 | 1.025 | 0.773 | -2.324 | 2.791 | 0.307 |
| 250T300-97 | 0.862 | 2.93 | 1.279 | 1.218 | 0.830 | 0.981 | 1.144 | 0.625 | 12.35 | 2954 | 1.642 | 1.072 | 0.563 | 16.86 | 4476 | 1.699 | 2.973 | 1.158 | -2.303 | 2.784 | 0.316 |
| 350T125-18 | 0.113 | 0.38 | 0.219 | 1.394 | 0.016 | 0.383 | 0.174 | 0.063 | 1.25 | 175 | 2.264 | --- | --- | --- | --- | --- | 0.013 | 0.038 | -0.675 | 1.595 | 0.821 |
| 350T125-27 | 0.170 | 0.58 | 0.331 | 1.396 | 0.025 | 0.381 | 0.277 | 0.128 | 2.53 | 590 | 2.044 | --- | --- | --- | --- | --- | 0.045 | 0.057 | -0.670 | 1.595 | 0.823 |
| 350T125-30 | 0.187 | 0.64 | 0.365 | 1.396 | 0.027 | 0.380 | 0.312 | 0.145 | 2.86 | 790 | 2.030 | --- | --- | --- | --- | --- | 0.061 | 0.063 | -0.669 | 1.594 | 0.824 |
| 350T125-33 | 0.207 | 0.71 | 0.405 | 1.397 | 0.030 | 0.379 | 0.354 | 0.165 | 3.27 | 1024 | 2.014 | --- | --- | --- | --- | --- | 0.083 | 0.070 | -0.668 | 1.594 | 0.824 |
| 350T125-43 | 0.270 | 0.92 | 0.528 | 1.397 | 0.038 | 0.377 | 0.490 | 0.233 | 4.61 | 1739 | 1.971 | --- | --- | --- | --- | --- | 0.183 | 0.090 | -0.663 | 1.592 | 0.826 |
| 350T125-54 | 0.339 | 1.15 | 0.668 | 1.404 | 0.048 | 0.375 | 0.651 | 0.317 | 6.26 | 2392 | 1.937 | 0.626 | 0.297 | 8.89 | 3372 | 1.978 | 0.362 | 0.114 | -0.658 | 1.595 | 0.830 |
| 350T125-68 | 0.427 | 1.45 | 0.851 | 1.412 | 0.059 | 0.372 | 0.851 | 0.433 | 8.55 | 2994 | 1.908 | 0.839 | 0.407 | 12.18 | 4536 | 1.949 | 0.723 | 0.144 | -0.650 | 1.599 | 0.835 |
| 350T125-97 | 0.608 | 2.07 | 1.243 | 1.430 | 0.081 | 0.366 | 1.243 | 0.645 | 14.56 | 4213 | 1.928 | 1.243 | 0.645 | 19.30 | 6383 | 1.928 | 2.096 | 0.209 | -0.636 | 1.607 | 0.844 |
| 350T150-27 | 0.184 | 0.63 | 0.377 | 1.431 | 0.041 | 0.470 | 0.298 | 0.132 | 2.62 | 590 | 2.111 | --- | --- | | | | | | | | |

TABLE 4—CHANNEL (TRACK) SECTION PROPERTIES (Continued)

| Section | Gross Properties ¹ | | | | | | 33 ksi Effective Properties ² | | | | | 50 ksi Effective ² | | | | | Torsional Properties | | | | |
|-------------------------|-------------------------------|--------|------------------------|---------|------------------------|---------|--|------------------------|-----------|---------|----------|-------------------------------|------------------------|-----------|---------|----------|---------------------------|-----------------------|---------|---------|-------|
| | Area | Weight | Ixx (in ⁴) | Rx (in) | Iyy (in ⁴) | Ry (in) | Ixx (in ⁴) | Sxx (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | Ixx (in ⁴) | Sxx (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | Jx1000 (in ⁴) | Cw (in ⁶) | Xo (in) | Ro (in) | β |
| 362T125-18 | 0.115 | 0.39 | 0.237 | 1.435 | 0.017 | 0.380 | 0.189 | 0.065 | 1.29 | 169 | 2.352 | --- | --- | --- | --- | --- | 0.014 | 0.042 | -0.665 | 1.627 | 0.833 |
| 362T125-27 | 0.173 | 0.59 | 0.358 | 1.438 | 0.025 | 0.378 | 0.301 | 0.135 | 2.66 | 569 | 2.109 | --- | --- | --- | --- | --- | 0.046 | 0.062 | -0.661 | 1.627 | 0.835 |
| 362T125-30 | 0.191 | 0.65 | 0.395 | 1.438 | 0.027 | 0.378 | 0.339 | 0.152 | 3.01 | 762 | 2.095 | --- | --- | --- | --- | --- | 0.062 | 0.068 | -0.659 | 1.626 | 0.836 |
| 362T125-33 | 0.212 | 0.72 | 0.438 | 1.438 | 0.030 | 0.377 | 0.384 | 0.174 | 3.44 | 1024 | 2.079 | --- | --- | --- | --- | --- | 0.085 | 0.076 | -0.658 | 1.626 | 0.836 |
| 362T125-43 | 0.276 | 0.94 | 0.571 | 1.439 | 0.039 | 0.375 | 0.531 | 0.245 | 4.84 | 1739 | 2.035 | --- | --- | --- | --- | --- | 0.187 | 0.098 | -0.654 | 1.625 | 0.838 |
| 362T125-54 | 0.346 | 1.18 | 0.723 | 1.445 | 0.048 | 0.373 | 0.705 | 0.332 | 6.57 | 2480 | 2.000 | 0.678 | 0.312 | 9.34 | 3372 | 2.042 | 0.369 | 0.123 | -0.648 | 1.627 | 0.841 |
| 362T125-68 | 0.436 | 1.48 | 0.921 | 1.454 | 0.060 | 0.370 | 0.921 | 0.453 | 8.95 | 3104 | 1.971 | 0.907 | 0.427 | 12.78 | 4703 | 2.012 | 0.738 | 0.156 | -0.641 | 1.631 | 0.846 |
| 362T125-97 | 0.621 | 2.11 | 1.343 | 1.471 | 0.082 | 0.363 | 1.343 | 0.675 | 15.24 | 4370 | 1.990 | 1.343 | 0.675 | 20.20 | 6622 | 1.990 | 2.140 | 0.226 | -0.626 | 1.639 | 0.854 |
| 362T150-27 | 0.187 | 0.64 | 0.408 | 1.475 | 0.041 | 0.468 | 0.323 | 0.140 | 2.76 | 569 | 2.177 | --- | --- | --- | --- | --- | 0.050 | 0.102 | -0.857 | 1.769 | 0.765 |
| 362T150-30 | 0.207 | 0.70 | 0.449 | 1.475 | 0.045 | 0.467 | 0.364 | 0.158 | 3.12 | 762 | 2.162 | --- | --- | --- | --- | --- | 0.067 | 0.112 | -0.856 | 1.768 | 0.766 |
| 362T150-33 | 0.229 | 0.78 | 0.499 | 1.475 | 0.050 | 0.467 | 0.414 | 0.180 | 3.56 | 1024 | 2.146 | --- | --- | --- | --- | --- | 0.091 | 0.124 | -0.854 | 1.767 | 0.766 |
| 362T150-43 | 0.298 | 1.02 | 0.650 | 1.476 | 0.064 | 0.465 | 0.574 | 0.255 | 5.04 | 1739 | 2.099 | --- | --- | --- | --- | --- | 0.202 | 0.160 | -0.850 | 1.766 | 0.768 |
| 362T150-54 | 0.374 | 1.27 | 0.823 | 1.483 | 0.080 | 0.462 | 0.769 | 0.349 | 6.89 | 2480 | 2.060 | 0.735 | 0.325 | 9.74 | 3372 | 2.107 | 0.400 | 0.202 | -0.844 | 1.768 | 0.772 |
| 362T150-68 | 0.471 | 1.60 | 1.050 | 1.492 | 0.099 | 0.459 | 1.034 | 0.480 | 9.49 | 3104 | 2.024 | 0.993 | 0.449 | 13.43 | 4703 | 2.072 | 0.799 | 0.257 | -0.836 | 1.771 | 0.777 |
| 362T150-97 | 0.672 | 2.29 | 1.534 | 1.512 | 0.138 | 0.453 | 1.534 | 0.771 | 15.23 | 4370 | 1.990 | 1.534 | 0.733 | 21.94 | 6622 | 2.028 | 2.315 | 0.374 | -0.820 | 1.778 | 0.787 |
| 362T200-33 | 0.264 | 0.90 | 0.619 | 1.532 | 0.110 | 0.645 | 0.464 | 0.190 | 3.76 | 1024 | 2.267 | --- | --- | --- | --- | --- | 0.105 | 0.269 | -1.270 | 2.092 | 0.631 |
| 362T200-43 | 0.343 | 1.17 | 0.808 | 1.534 | 0.142 | 0.643 | 0.649 | 0.270 | 5.34 | 1739 | 2.218 | --- | --- | --- | --- | --- | 0.233 | 0.560 | -1.265 | 2.090 | 0.633 |
| 362T200-54 | 0.431 | 1.47 | 1.024 | 1.541 | 0.177 | 0.640 | 0.879 | 0.372 | 7.35 | 2480 | 2.175 | 0.832 | 0.345 | 10.34 | 3372 | 2.226 | 0.460 | 0.442 | -1.259 | 2.091 | 0.637 |
| 362T200-68 | 0.543 | 1.85 | 1.307 | 1.552 | 0.221 | 0.638 | 1.199 | 0.519 | 10.26 | 3104 | 2.132 | 1.138 | 0.480 | 14.37 | 4703 | 2.187 | 0.919 | 0.564 | -1.250 | 2.093 | 0.643 |
| 362T200-97 | 0.773 | 2.63 | 1.917 | 1.575 | 0.308 | 0.631 | 1.915 | 0.867 | 17.14 | 4370 | 2.071 | 1.839 | 0.803 | 24.06 | 6622 | 2.128 | 2.666 | 0.825 | -1.232 | 2.097 | 0.655 |
| 362T250-43 | 0.389 | 1.32 | 0.966 | 1.577 | 0.260 | 0.818 | 0.713 | 0.281 | 5.56 | 1739 | 2.323 | --- | --- | --- | --- | --- | 0.263 | 0.641 | -1.702 | 2.460 | 0.521 |
| 362T250-54 | 0.487 | 1.66 | 1.224 | 1.585 | 0.324 | 0.816 | 0.971 | 0.389 | 7.69 | 2480 | 2.279 | 0.914 | 0.360 | 10.77 | 3372 | 2.331 | 0.521 | 0.812 | -1.695 | 2.460 | 0.525 |
| 362T250-68 | 0.614 | 2.09 | 1.565 | 1.597 | 0.406 | 0.813 | 1.337 | 0.546 | 10.79 | 3104 | 2.233 | 1.259 | 0.502 | 15.04 | 4703 | 2.292 | 1.040 | 1.038 | -1.686 | 2.460 | 0.530 |
| 362T250-97 | 0.875 | 2.98 | 2.300 | 1.621 | 0.570 | 0.807 | 2.180 | 0.928 | 18.34 | 4370 | 2.163 | 2.069 | 0.851 | 25.49 | 6622 | 2.228 | 3.016 | 1.524 | -1.667 | 2.461 | 0.541 |
| 362T300-54 | 0.544 | 1.85 | 1.425 | 1.618 | 0.531 | 0.988 | 1.051 | 0.402 | 7.94 | 2480 | 2.372 | 0.985 | 0.371 | 11.11 | 3372 | 2.425 | 0.581 | 1.337 | -2.146 | 2.863 | 0.439 |
| 362T300-68 | 0.685 | 2.33 | 1.823 | 1.631 | 0.665 | 0.985 | 1.456 | 0.566 | 11.19 | 3104 | 2.326 | 1.364 | 0.519 | 15.55 | 4703 | 2.386 | 1.161 | 1.711 | -2.136 | 2.862 | 0.443 |
| 362T300-97 | 0.977 | 3.32 | 2.682 | 1.657 | 0.937 | 0.979 | 2.409 | 0.972 | 19.21 | 4370 | 2.251 | 2.268 | 0.887 | 26.54 | 6622 | 2.320 | 3.367 | 2.518 | -2.116 | 2.860 | 0.453 |
| 362T400-68 | 0.828 | 2.82 | 2.339 | 1.681 | 1.444 | 1.321 | 1.654 | 0.595 | 11.75 | 3104 | 2.485 | 1.537 | 0.544 | 16.28 | 4703 | 2.544 | 1.403 | 3.785 | -3.063 | 3.735 | 0.328 |
| 362T400-97 | 1.180 | 4.02 | 3.447 | 1.709 | 2.042 | 1.316 | 2.790 | 1.033 | 20.41 | 4370 | 2.410 | 2.599 | 0.936 | 28.02 | 6622 | 2.482 | 4.068 | 5.585 | -3.041 | 3.729 | 0.335 |
| 400T125-18 ³ | 0.122 | 0.41 | 0.297 | 1.560 | 0.017 | 0.374 | 0.241 | 0.072 | 1.42 | 153 | 2.619 | --- | --- | --- | --- | --- | 0.014 | 0.052 | -0.637 | 1.726 | 0.864 |
| 400T125-27 | 0.184 | 0.63 | 0.449 | 1.562 | 0.025 | 0.372 | 0.380 | 0.156 | 3.08 | 515 | 2.306 | --- | --- | --- | --- | --- | 0.049 | 0.078 | -0.633 | 1.726 | 0.866 |
| 400T125-30 | 0.203 | 0.69 | 0.495 | 1.562 | 0.028 | 0.371 | 0.427 | 0.176 | 3.49 | 689 | 2.289 | --- | --- | --- | --- | --- | 0.066 | 0.085 | -0.632 | 1.726 | 0.866 |
| 400T125-33 | 0.225 | 0.76 | 0.549 | 1.563 | 0.031 | 0.371 | 0.484 | 0.201 | 3.97 | 940 | 2.272 | --- | --- | --- | --- | --- | 0.090 | 0.095 | -0.630 | 1.725 | 0.867 |
| 400T125-43 | 0.293 | 1.00 | 0.716 | 1.563 | 0.040 | 0.369 | 0.666 | 0.282 | 5.57 | 1739 | 2.227 | --- | --- | --- | --- | --- | 0.198 | 0.122 | -0.626 | 1.724 | 0.868 |
| 400T125-54 | 0.367 | 1.25 | 0.904 | 1.569 | 0.049 | 0.366 | 0.882 | 0.381 | 7.53 | 2739 | 2.191 | 0.849 | 0.359 | 10.74 | 3372 | 2.234 | 0.392 | 0.154 | -0.621 | 1.727 | 0.871 |
| 400T125-68 | 0.462 | 1.57 | 1.150 | 1.577 | 0.061 | 0.363 | 1.150 | 0.517 | 10.22 | 3435 | 2.159 | 1.134 | 0.488 | 14.62 | 5205 | 2.202 | 0.783 | 0.194 | -0.614 | 1.731 | 0.874 |
| 400T125-97 | 0.659 | 2.24 | 1.673 | 1.594 | 0.084 | 0.357 | 1.673 | 0.768 | 17.35 | 4842 | 2.178 | 1.673 | 0.768 | 23.00 | 7337 | 2.178 | 2.271 | 0.280 | -0.600 | 1.740 | 0.881 |
| 400T150-27 | 0.198 | 0.67 | 0.509 | 1.602 | 0.042 | 0.461 | 0.409 | 0.154 | 3.04 | 515 | 2.420 | --- | --- | --- | --- | --- | 0.053 | 0.127 | -0.824 | 1.860 | 0.804 |
| 400T150-30 | 0.218 | 0.74 | 0.561 | 1.603 | 0.046 | 0.461 | 0.458 | 0.183 | 3.61 | 689 | 2.359 | --- | --- | --- | --- | --- | 0.071 | 0.140 | -0.823 | 1.859 | 0.804 |
| 400T150-33 | 0.242 | 0.82 | 0.622 | 1.603 | 0.051 | 0.460 | 0.519 | 0.208 | 4.12 | 940 | 2.342 | --- | --- | --- | --- | --- | 0.097 | 0.155 | -0.821 | 1.859 | 0.805 |
| 400T150-43 | 0.315 | 1.07 | 0.811 | 1.604 | 0.066 | 0.458 | 0.719 | 0.293 | 5.80 | 1739 | 2.294 | --- | --- | --- | --- | --- | 0.214 | 0.200 | -0.817 | 1.857 | 0.807 |
| 400T150-54 | 0.396 | 1.35 | 1.025 | 1.610 | 0.082 | 0.456 | 0.960 | 0.399 | 7.89 | 2739 | 2.253 | 0.918 | 0.374 | 11.19 | 3372 | 2.301 | 0.422 | 0.252 | -0.811 | 1.860 | 0.810 |
| 400T150-68 | 0.498 | 1.69 | 1.306 | 1.619 | 0.102 | 0.453 | 1.286 | 0.548 | 10.82 | 3435 | 2.214 | 1.237 | 0.513 | 15.35 | 5205 | 2.264 | 0.844 | 0.320 | -0.804 | 1.864 | 0.814 |
| 400T150-97 | 0.710 | 2.41 | 1.903 | 1.638 | 0.141 | 0.447 | 1.903 | 0.874 | 17.27 | 4842 | 2.178 | 1.903 | 0.832 | 24.92 | 7337 | 2.217 | 2.447 | 0.463 | -0.788 | 1.872 | 0.823 |
| 400T200-33 | 0.277 | 0.94 | 0.768 | 1.666 | 0.113 | 0.639 | 0.581 | 0.220 | 4.34 | 940 | 2.469 | --- | --- | --- | --- | --- | 0.110 | 0.336 | -1.229 | 2.166 | 0.678 |
| 400T200-43 | 0.360 | 1.23 | 1.002 | 1.668 | 0.146 | 0.637 | 0.811 | 0.311 | 6.14 | 1739 | 2.418 | --- | --- | --- | --- | --- | 0.244 | 0.436 | -1.224 | 2.164 | 0.680 |
| 400T200-54 | 0.452 | 1.54 | 1.268 | 1.675 | 0.182 | 0.635 | 1.093 | 0.426 | 8.42 | 2739 | 2.374 | 1.037 | 0.397 | 11.88 | 3372 | 2.426 | 0.483 | 0.551 | -1.217 | 2.165 | 0.684 |
| 400T200-68 | 0.569 | 1.94 | 1.617 | 1.685 | 0.227 | 0.632 | 1.485 | 0.591 | 11.68 | 3435 | 2.327 | 1.412 | 0.549 | 16.42 | 5205 | 2.385 | 0.965 | 0.702 | -1.209 | 2.168 | 0.689 |
| 400T200-97 | 0.811 | 2.76 | 2.363 | 1.707 | 0.317 | 0.625 | 2.360 | 0.981 | 19.38 | 4842 | 2.262 | 2.268 | 0.911 | 27.28 | 7337 | 2.322 | 2.797 | 1.022 | -1.192 | 2.173 | 0.699 |
| 400T250-43 | 0.405 | 1.38 | 1.193 | 1.715 | 0.268 | 0.813 | 0.888 | 0.324 | 6.40 | 1739 | 2.529 | --- | --- | --- | --- | --- | 0.275 | 0.799 | -1.653 | 2.517 | 0.569 |
| 400T250-54 | 0.509 | 1.73 | 1.511 | 1.723 | 0.335 | 0.811 | 1.205 | 0.445 | 8.80 | 2739 | 2.484 | 1.137 | 0.413 | 12.38 | 3372 | 2.537 | 0.543 | 1.011 | -1.646 | 2.517 | 0.572 |
| 400T250-68 | 0.641 | 2.18 | 1.928 | 1.735 | 0.418 | 0.808 | 1.652 | 0.622 | 12.28 | 3435 | 2.435 | 1.559 | 0.574 | 17.19 | 5205 | 2.495 | 1.086 | 1.289 | -1.637 | 2.518 | 0.578 |
| 400T250-97 | 0.913 | 3.11 | 2.823 | 1.758 | 0.587 | 0.802 | 2.679 | 1.048 | 20.72 | 4842 | 2.358 | 2.546 | 0.965 | 28.89 | 7337 | 2.426 | 3.148 | 1.886 | -1.618 | 2.521 | 0.588 |
| 400T300-54 | 0.565 | 1.92 | 1.753 | 1.761 | 0.548 | 0.985 | 1.302 | 0.460 | 9.09 | 2739 | 2.582 | 1.224 | 0.426 | 12.77 | 3372 | 2.636 | 0.604 | 1.662 | -2.090 | 2.905 | 0.482 |
| 400T300-68 | 0.712 | 2.42 | 2.239 | 1.774 | 0.686 | 0.982 | 1.797 | 0.645 | 12.74 | 3435 | 2.533 | 1.687 | 0.594 | 17.78 | 5205 | 2.595 | 1.206 | 2.122 | -2.081 | 2.905 | 0 |

TABLE 4—CHANNEL (TRACK) SECTION PROPERTIES (Continued)

| Section | Gross Properties ¹ | | | | | 33 ksi Effective Properties ² | | | | | 50 ksi Effective ² | | | | | Torsional Properties | | | | | |
|-------------------------|-------------------------------|--------|---------------------------------------|------------------------|---------------------------------------|--|---------------------------------------|---------------------------------------|--------------|------------|-------------------------------|---------------------------------------|---------------------------------------|--------------|------------|----------------------|------------------------------|--------------------------|------------|------------|-------|
| | Area | Weight | I _{xx} (in ⁴) | R _x (in) | I _{yy} (in ⁴) | R _y (in) | I _{xx} (in ⁴) | S _{xx} (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | I _{xx} (in ⁴) | S _{xx} (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | Jx1000 (in ⁴) | Cw (in ⁶) | Xo (in) | Ro (in) | β |
| 550T200-33 | 0.329 | 1.12 | 1.567 | 2.184 | 0.123 | 0.613 | 1.246 | 0.307 | 6.06 | 680 | 3.453 | --- | --- | --- | --- | --- | 0.131 | 0.694 | -1.088 | 2.516 | 0.813 |
| 550T200-43 | 0.428 | 1.46 | 2.043 | 2.185 | 0.160 | 0.611 | 1.690 | 0.495 | 9.79 | 1504 | 3.209 | --- | --- | --- | --- | --- | 0.290 | 0.900 | -1.083 | 2.514 | 0.814 |
| 550T200-54 | 0.537 | 1.83 | 2.578 | 2.191 | 0.199 | 0.609 | 2.253 | 0.669 | 13.21 | 2739 | 3.158 | 2.153 | 0.630 | 18.86 | 2980 | 3.215 | 0.573 | 1.133 | -1.077 | 2.517 | 0.817 |
| 550T200-68 | 0.676 | 2.30 | 3.274 | 2.200 | 0.248 | 0.606 | 3.027 | 0.914 | 18.06 | 4347 | 3.103 | 2.894 | 0.857 | 25.67 | 5350 | 3.166 | 1.146 | 1.434 | -1.070 | 2.521 | 0.820 |
| 550T200-97 | 0.964 | 3.28 | 4.746 | 2.219 | 0.347 | 0.600 | 4.735 | 1.483 | 29.30 | 6730 | 3.023 | 4.566 | 1.391 | 41.64 | 10197 | 3.090 | 3.323 | 2.067 | -1.055 | 2.529 | 0.826 |
| 550T250-43 | 0.473 | 1.61 | 2.399 | 2.252 | 0.295 | 0.790 | 1.841 | 0.516 | 10.20 | 1504 | 3.339 | --- | --- | --- | --- | --- | 0.321 | 1.643 | -1.484 | 2.810 | 0.721 |
| 550T250-54 | 0.594 | 2.02 | 3.029 | 2.259 | 0.368 | 0.788 | 2.466 | 0.699 | 13.81 | 2739 | 3.286 | 2.346 | 0.657 | 19.66 | 2980 | 3.346 | 0.634 | 2.070 | -1.478 | 2.812 | 0.724 |
| 550T250-68 | 0.748 | 2.54 | 3.849 | 2.269 | 0.460 | 0.785 | 3.338 | 0.960 | 18.97 | 4347 | 3.228 | 3.338 | 0.929 | 27.80 | 5350 | 3.295 | 1.267 | 2.627 | -1.470 | 2.815 | 0.727 |
| 550T250-97 | 1.066 | 3.63 | 5.588 | 2.290 | 0.646 | 0.779 | 5.314 | 1.580 | 31.23 | 6730 | 3.135 | 5.073 | 1.470 | 44.01 | 10197 | 3.211 | 3.674 | 3.801 | -1.453 | 2.822 | 0.735 |
| 550T300-54 | 0.650 | 2.21 | 3.479 | 2.313 | 0.606 | 0.965 | 2.654 | 0.723 | 14.28 | 2739 | 3.404 | 2.526 | 0.663 | 19.84 | 2980 | 3.495 | 0.694 | 3.390 | -1.898 | 3.144 | 0.636 |
| 550T300-68 | 0.819 | 2.79 | 4.424 | 2.324 | 0.758 | 0.962 | 3.610 | 0.996 | 19.68 | 4347 | 3.345 | 3.417 | 0.929 | 27.80 | 5350 | 3.414 | 1.388 | 4.307 | -1.889 | 3.146 | 0.639 |
| 550T300-97 | 1.167 | 3.97 | 6.430 | 2.347 | 1.068 | 0.956 | 5.816 | 1.654 | 32.68 | 6730 | 3.245 | 5.516 | 1.531 | 45.83 | 10197 | 3.326 | 4.024 | 6.248 | -1.871 | 3.150 | 0.647 |
| 550T400-68 | 0.961 | 3.27 | 5.573 | 2.408 | 1.655 | 1.312 | 4.073 | 1.049 | 20.74 | 4347 | 3.551 | 3.834 | 0.976 | 29.21 | 5350 | 3.622 | 1.629 | 9.418 | -2.766 | 3.895 | 0.496 |
| 550T400-97 | 1.371 | 4.66 | 8.113 | 2.433 | 2.339 | 1.306 | 6.666 | 1.759 | 34.76 | 6730 | 3.447 | 6.265 | 1.619 | 48.49 | 10197 | 3.534 | 4.726 | 13.707 | -2.746 | 3.895 | 0.503 |
| 600T125-27 ³ | 0.241 | 0.82 | 1.168 | 2.204 | 0.028 | 0.340 | 0.958 | 0.210 | 4.16 | 341 | 3.812 | --- | --- | --- | --- | --- | 0.064 | 0.196 | -0.519 | 2.290 | 0.949 |
| 600T125-30 | 0.265 | 0.90 | 1.288 | 2.204 | 0.031 | 0.340 | 1.095 | 0.249 | 4.92 | 456 | 3.726 | --- | --- | --- | --- | --- | 0.086 | 0.215 | -0.518 | 2.289 | 0.949 |
| 600T125-33 | 0.294 | 1.00 | 1.428 | 2.204 | 0.034 | 0.339 | 1.258 | 0.297 | 5.87 | 622 | 3.635 | --- | --- | --- | --- | --- | 0.117 | 0.238 | -0.516 | 2.289 | 0.949 |
| 600T125-43 | 0.383 | 1.30 | 1.861 | 2.205 | 0.044 | 0.337 | 1.768 | 0.461 | 9.11 | 1377 | 3.412 | --- | --- | --- | --- | --- | 0.260 | 0.307 | -0.513 | 2.288 | 0.950 |
| 600T125-54 | 0.480 | 1.63 | 2.344 | 2.209 | 0.054 | 0.335 | 2.299 | 0.666 | 13.15 | 2728 | 3.246 | 2.241 | 0.592 | 17.73 | 2728 | 3.400 | 0.513 | 0.384 | -0.508 | 2.291 | 0.951 |
| 600T125-68 | 0.605 | 2.06 | 2.969 | 2.215 | 0.067 | 0.332 | 2.969 | 0.916 | 18.09 | 4347 | 3.164 | 2.934 | 0.858 | 25.69 | 5350 | 3.241 | 1.025 | 0.483 | -0.503 | 2.296 | 0.952 |
| 600T125-97 | 0.862 | 2.93 | 4.281 | 2.228 | 0.092 | 0.326 | 4.281 | 1.347 | 30.43 | 7359 | 3.178 | 4.281 | 1.347 | 40.33 | 10885 | 3.178 | 2.973 | 0.685 | -0.491 | 2.305 | 0.955 |
| 600T125-118 | 1.052 | 3.58 | 5.268 | 2.237 | 0.109 | 0.321 | 5.268 | 1.637 | 37.94 | 8936 | 3.217 | 5.268 | 1.637 | 56.32 | 13539 | 3.217 | 5.411 | 0.832 | -0.483 | 2.311 | 0.956 |
| 600T150-27 ³ | 0.255 | 0.87 | 1.300 | 2.260 | 0.047 | 0.427 | 1.011 | 0.214 | 4.23 | 341 | 3.919 | --- | --- | --- | --- | --- | 0.068 | 0.320 | -0.686 | 2.400 | 0.918 |
| 600T150-30 | 0.281 | 0.96 | 1.434 | 2.260 | 0.051 | 0.427 | 1.159 | 0.253 | 5.01 | 456 | 3.831 | --- | --- | --- | --- | --- | 0.091 | 0.352 | -0.685 | 2.400 | 0.918 |
| 600T150-33 | 0.311 | 1.06 | 1.590 | 2.260 | 0.057 | 0.426 | 1.334 | 0.303 | 5.99 | 622 | 3.737 | --- | --- | --- | --- | --- | 0.124 | 0.390 | -0.684 | 2.399 | 0.919 |
| 600T150-43 | 0.405 | 1.38 | 2.072 | 2.261 | 0.073 | 0.424 | 1.890 | 0.474 | 9.36 | 1377 | 3.506 | --- | --- | --- | --- | --- | 0.275 | 0.504 | -0.680 | 2.398 | 0.920 |
| 600T150-54 | 0.509 | 1.73 | 2.611 | 2.266 | 0.091 | 0.422 | 2.473 | 0.689 | 13.62 | 2728 | 3.330 | 2.400 | 0.609 | 18.24 | 2728 | 3.493 | 0.543 | 0.632 | -0.675 | 2.401 | 0.921 |
| 600T150-68 | 0.641 | 2.18 | 3.309 | 2.273 | 0.113 | 0.419 | 3.262 | 0.963 | 19.03 | 4347 | 3.227 | 3.162 | 0.891 | 26.68 | 5350 | 3.322 | 1.086 | 0.797 | -0.669 | 2.406 | 0.923 |
| 600T150-97 | 0.913 | 3.11 | 4.778 | 2.288 | 0.156 | 0.413 | 4.778 | 1.504 | 29.71 | 7359 | 3.178 | 4.778 | 1.444 | 43.23 | 10885 | 3.222 | 3.148 | 1.138 | -0.656 | 2.415 | 0.926 |
| 600T150-118 | 1.114 | 3.79 | 5.886 | 2.298 | 0.186 | 0.409 | 5.886 | 1.829 | 41.41 | 8936 | 3.217 | 5.886 | 1.829 | 61.64 | 13539 | 3.217 | 5.730 | 1.389 | -0.647 | 2.422 | 0.929 |
| 600T200-33 | 0.346 | 1.18 | 1.913 | 2.352 | 0.126 | 0.604 | 1.542 | 0.333 | 6.59 | 622 | 3.803 | --- | --- | --- | --- | --- | 0.138 | 0.847 | -1.048 | 2.645 | 0.843 |
| 600T200-43 | 0.451 | 1.53 | 2.494 | 2.353 | 0.163 | 0.602 | 2.076 | 0.565 | 11.16 | 1377 | 3.469 | --- | --- | --- | --- | --- | 0.305 | 1.098 | -1.044 | 2.643 | 0.844 |
| 600T200-54 | 0.565 | 1.92 | 3.145 | 2.359 | 0.203 | 0.600 | 2.759 | 0.759 | 15.00 | 2728 | 3.416 | 2.641 | 0.717 | 21.48 | 2728 | 3.475 | 0.604 | 1.381 | -1.038 | 2.646 | 0.846 |
| 600T200-68 | 0.712 | 2.42 | 3.990 | 2.367 | 0.254 | 0.597 | 3.696 | 1.034 | 20.42 | 4347 | 3.360 | 3.540 | 0.973 | 29.12 | 5350 | 3.424 | 1.206 | 1.746 | -1.031 | 2.650 | 0.849 |
| 600T200-97 | 1.015 | 3.45 | 5.773 | 2.385 | 0.354 | 0.591 | 5.758 | 1.667 | 32.95 | 7359 | 3.276 | 5.558 | 1.568 | 46.94 | 10885 | 3.345 | 3.499 | 2.510 | -1.016 | 2.659 | 0.854 |
| 600T200-118 | 1.239 | 4.21 | 7.122 | 2.398 | 0.426 | 0.586 | 7.122 | 2.170 | 42.88 | 8936 | 3.240 | 7.122 | 2.051 | 61.42 | 13539 | 3.305 | 6.369 | 3.083 | -1.006 | 2.665 | 0.858 |
| 600T250-43 | 0.496 | 1.69 | 2.916 | 2.425 | 0.303 | 0.781 | 2.269 | 0.563 | 11.13 | 1377 | 3.666 | --- | --- | --- | --- | --- | 0.336 | 2.004 | -1.436 | 2.925 | 0.759 |
| 600T250-54 | 0.622 | 2.12 | 3.678 | 2.432 | 0.377 | 0.779 | 3.014 | 0.793 | 15.68 | 2728 | 3.550 | 2.881 | 0.732 | 21.92 | 2728 | 3.641 | 0.664 | 2.523 | -1.430 | 2.927 | 0.761 |
| 600T250-68 | 0.783 | 2.67 | 4.670 | 2.442 | 0.472 | 0.776 | 4.065 | 1.085 | 21.45 | 4347 | 3.490 | 3.871 | 1.017 | 30.46 | 5350 | 3.559 | 1.327 | 3.198 | -1.422 | 2.930 | 0.764 |
| 600T250-97 | 1.116 | 3.80 | 6.767 | 2.462 | 0.662 | 0.770 | 6.441 | 1.775 | 35.08 | 7359 | 3.392 | 6.157 | 1.656 | 49.58 | 10885 | 3.470 | 3.849 | 4.616 | -1.406 | 2.938 | 0.771 |
| 600T250-118 | 1.363 | 4.64 | 8.359 | 2.477 | 0.798 | 0.765 | 8.306 | 2.343 | 46.30 | 8936 | 3.341 | 7.990 | 2.188 | 65.51 | 13539 | 3.421 | 7.008 | 5.686 | -1.394 | 2.943 | 0.776 |
| 600T300-54 | 0.679 | 2.31 | 4.212 | 2.492 | 0.622 | 0.957 | 3.239 | 0.821 | 16.22 | 2728 | 3.674 | 3.108 | 0.722 | 21.61 | 2728 | 3.832 | 0.725 | 4.129 | -1.842 | 3.243 | 0.677 |
| 600T300-68 | 0.854 | 2.91 | 5.350 | 2.502 | 0.778 | 0.954 | 4.389 | 1.126 | 22.25 | 4347 | 3.611 | 4.164 | 1.053 | 31.53 | 5350 | 3.683 | 1.448 | 5.239 | -1.834 | 3.246 | 0.681 |
| 600T300-97 | 1.218 | 4.15 | 7.762 | 2.524 | 1.096 | 0.948 | 7.034 | 1.857 | 36.69 | 7359 | 3.506 | 6.681 | 1.724 | 51.62 | 10885 | 3.590 | 4.200 | 7.582 | -1.816 | 3.251 | 0.688 |
| 600T300-118 | 1.487 | 5.06 | 9.955 | 2.540 | 1.325 | 0.944 | 9.157 | 2.471 | 48.82 | 8936 | 3.447 | 8.734 | 2.291 | 68.59 | 13539 | 3.536 | 7.646 | 9.359 | -1.803 | 3.255 | 0.693 |
| 600T400-68 | 0.997 | 3.39 | 6.711 | 2.594 | 1.702 | 1.306 | 4.943 | 1.187 | 23.45 | 4347 | 3.828 | 4.665 | 1.107 | 33.15 | 5350 | 3.901 | 1.690 | 11.435 | -2.697 | 3.964 | 0.537 |
| 600T400-97 | 1.422 | 4.84 | 9.751 | 2.619 | 2.405 | 1.301 | 8.042 | 1.975 | 39.03 | 7359 | 3.719 | 7.574 | 1.824 | 54.62 | 10885 | 3.808 | 4.901 | 16.604 | -2.678 | 3.965 | 0.544 |
| 600T400-118 | 1.735 | 5.91 | 12.068 | 2.637 | 2.916 | 1.296 | 10.593 | 2.651 | 52.39 | 8936 | 3.653 | 9.994 | 2.439 | 73.03 | 13539 | 3.751 | 8.924 | 20.542 | -2.664 | 3.966 | 0.549 |
| 725T125-27 ³ | 0.276 | 0.94 | 1.855 | 2.593 | 0.029 | 0.323 | 1.471 | 0.258 | 5.09 | 281 | 4.703 | --- | --- | --- | --- | --- | 0.074 | 0.301 | -0.467 | 2.654 | 0.969 |
| 725T125-30 ³ | 0.304 | 1.03 | 2.045 | 2.593 | 0.032 | 0.323 | 1.688 | 0.306 | 6.04 | 377 | 4.599 | --- | --- | --- | --- | --- | 0.099 | 0.330 | -0.466 | 2.654 | 0.969 |
| 725T125-33 ³ | 0.337 | 1.15 | 2.268 | 2.593 | 0.035 | 0.322 | 1.946 | 0.365 | 7.22 | 514 | 4.489 | --- | --- | --- | --- | --- | 0.135 | 0.365 | -0.465 | 2.654 | 0.969 |
| 725T125-43 | 0.439 | 1.49 | 2.955 | 2.593 | 0.045 | 0.320 | 2.763 | 0.573 | 11.32 | 1137 | 4.212 | --- | --- | --- | --- | --- | 0.298 | 0.471 | -0.462 | 2.654 | 0.970 |
| 725T125-54 | 0.551 | 1.88 | 3.718 | 2.597 | 0.056 | 0.318 | 3.666 | 0.837 | 16.54 | 2252 | 3.992 | 3.510 | 0.737 | 22.06 | 2252 | 4.193 | 0.589 | 0.589 | -0.458 | 2.656 | 0.970 |
| 725T125-68 | 0.694 | 2.36 | 4.702 | 2.603 | 0.069 | 0.315 | 4.702 | 1.198 | 23.68 | 4347 | 3.813 | 4.667 | 1.0 | | | | | | | | |

TABLE 4—CHANNEL (TRACK) SECTION PROPERTIES (Continued)

| Section | Gross Properties ¹ | | | | | 33 ksi Effective Properties ² | | | | | 50 ksi Effective ² | | | | | Torsional Properties | | | | | |
|-------------------------|-------------------------------|--------|---------------------------------------|------------------------|---------------------------------------|--|---------------------------------------|---------------------------------------|--------------|------------|-------------------------------|---------------------------------------|---------------------------------------|--------------|------------|----------------------|------------------------------|--------------------------|------------|------------|-------|
| | Area | Weight | I _{xx} (in ⁴) | R _x (in) | I _{yy} (in ⁴) | R _y (in) | I _{xx} (in ⁴) | S _{xx} (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | I _{xx} (in ⁴) | S _{xx} (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | Jx1000 (in ⁴) | Cw (in ⁶) | Xo (in) | Ro (in) | β |
| 725T300-54 | 0.749 | 2.55 | 6.424 | 2.928 | 0.657 | 0.936 | 5.034 | 1.075 | 21.25 | 2252 | 4.358 | 4.905 | 0.868 | 25.99 | 2252 | 4.696 | 0.800 | 6.354 | -1.718 | 3.521 | 0.762 |
| 725T300-68 | 0.944 | 3.21 | 8.145 | 2.938 | 0.822 | 0.933 | 6.761 | 1.478 | 29.21 | 4347 | 4.272 | 6.444 | 1.392 | 41.68 | 4516 | 4.347 | 1.599 | 8.044 | -1.710 | 3.525 | 0.765 |
| 725T300-97 | 1.345 | 4.58 | 11.772 | 2.958 | 1.157 | 0.927 | 10.717 | 2.403 | 47.49 | 8843 | 4.156 | 10.216 | 2.246 | 67.26 | 10885 | 4.246 | 4.638 | 11.589 | -1.693 | 3.532 | 0.770 |
| 725T300-118 | 1.642 | 5.59 | 14.515 | 2.973 | 1.398 | 0.923 | 13.873 | 3.173 | 62.70 | 10857 | 4.090 | 13.268 | 2.960 | 88.64 | 16235 | 4.185 | 8.445 | 14.256 | -1.681 | 3.538 | 0.774 |
| 725T400-68 | 1.086 | 3.70 | 10.112 | 3.051 | 1.805 | 1.289 | 7.582 | 1.559 | 30.81 | 4347 | 4.512 | 7.256 | 1.379 | 41.29 | 4516 | 4.693 | 1.841 | 17.505 | -2.542 | 4.175 | 0.629 |
| 725T400-97 | 1.549 | 5.27 | 14.635 | 3.074 | 2.550 | 1.283 | 12.177 | 2.556 | 50.51 | 8843 | 4.390 | 11.522 | 2.378 | 71.19 | 10885 | 4.486 | 5.339 | 25.302 | -2.524 | 4.180 | 0.635 |
| 725T400-118 | 1.891 | 6.43 | 18.064 | 3.091 | 3.092 | 1.279 | 15.935 | 3.402 | 67.22 | 10857 | 4.316 | 15.091 | 3.151 | 94.35 | 16235 | 4.421 | 9.722 | 31.200 | -2.511 | 4.183 | 0.640 |
| 800T125-30 ³ | 0.328 | 1.11 | 2.611 | 2.824 | 0.032 | 0.314 | 2.113 | 0.339 | 6.71 | 341 | 5.136 | --- | --- | --- | --- | --- | 0.106 | 0.413 | -0.440 | 2.875 | 0.977 |
| 800T125-33 ³ | 0.363 | 1.24 | 2.895 | 2.824 | 0.036 | 0.313 | 2.441 | 0.407 | 8.03 | 465 | 5.015 | --- | --- | --- | --- | --- | 0.145 | 0.456 | -0.439 | 2.875 | 0.977 |
| 800T125-43 | 0.473 | 1.61 | 3.773 | 2.824 | 0.046 | 0.311 | 3.484 | 0.640 | 12.65 | 1030 | 4.708 | --- | --- | --- | --- | --- | 0.321 | 0.589 | -0.436 | 2.874 | 0.977 |
| 800T125-54 | 0.594 | 2.02 | 4.745 | 2.827 | 0.057 | 0.309 | 4.668 | 0.940 | 18.58 | 2039 | 4.457 | 4.426 | 0.824 | 24.66 | 2039 | 4.684 | 0.634 | 0.735 | -0.432 | 2.877 | 0.977 |
| 800T125-68 | 0.748 | 2.54 | 5.998 | 2.833 | 0.070 | 0.306 | 5.998 | 1.356 | 26.80 | 4087 | 4.244 | 5.956 | 1.216 | 36.39 | 4087 | 4.437 | 1.267 | 0.920 | -0.427 | 2.881 | 0.978 |
| 800T125-97 | 1.066 | 3.63 | 8.613 | 2.843 | 0.096 | 0.301 | 8.613 | 2.062 | 40.74 | 8843 | 4.178 | 8.613 | 2.062 | 61.72 | 10885 | 4.178 | 3.674 | 1.296 | -0.417 | 2.889 | 0.979 |
| 800T125-118 | 1.301 | 4.43 | 10.569 | 2.850 | 0.114 | 0.297 | 10.569 | 2.506 | 58.08 | 12009 | 4.217 | 10.569 | 2.506 | 86.21 | 16235 | 4.217 | 6.688 | 1.567 | -0.410 | 2.895 | 0.980 |
| 800T150-30 ¹ | 0.343 | 1.17 | 2.868 | 2.891 | 0.054 | 0.398 | 2.219 | 0.345 | 6.82 | 341 | 5.254 | --- | --- | --- | --- | --- | 0.111 | 0.679 | -0.589 | 2.977 | 0.961 |
| 800T150-33 ³ | 0.380 | 1.29 | 3.180 | 2.891 | 0.060 | 0.397 | 2.569 | 0.414 | 8.18 | 465 | 5.131 | --- | --- | --- | --- | --- | 0.152 | 0.751 | -0.588 | 2.977 | 0.961 |
| 800T150-43 | 0.496 | 1.69 | 4.144 | 2.891 | 0.077 | 0.395 | 3.689 | 0.655 | 12.95 | 1030 | 4.815 | --- | --- | --- | --- | --- | 0.336 | 0.972 | -0.584 | 2.976 | 0.961 |
| 800T150-54 | 0.622 | 2.12 | 5.214 | 2.896 | 0.096 | 0.393 | 4.976 | 0.969 | 19.15 | 2039 | 4.552 | 4.692 | 0.844 | 25.27 | 2039 | 4.790 | 0.664 | 1.215 | -0.580 | 2.979 | 0.962 |
| 800T150-68 | 0.783 | 2.67 | 6.594 | 2.902 | 0.119 | 0.390 | 6.527 | 1.412 | 27.91 | 4087 | 4.323 | 6.361 | 1.255 | 37.58 | 4087 | 4.530 | 1.327 | 1.526 | -0.575 | 2.984 | 0.963 |
| 800T150-97 | 1.116 | 3.80 | 9.479 | 2.914 | 0.165 | 0.384 | 9.479 | 2.269 | 44.83 | 8843 | 4.178 | 9.479 | 2.192 | 65.62 | 10885 | 4.225 | 3.849 | 2.162 | -0.564 | 2.993 | 0.965 |
| 800T150-118 | 1.363 | 4.64 | 11.641 | 2.923 | 0.197 | 0.380 | 11.641 | 2.760 | 62.48 | 12009 | 4.217 | 11.641 | 2.760 | 93.00 | 16235 | 4.217 | 7.008 | 2.627 | -0.555 | 2.999 | 0.966 |
| 800T200-33 ³ | 0.415 | 1.41 | 3.749 | 3.005 | 0.135 | 0.571 | 2.788 | 0.424 | 8.37 | 465 | 5.349 | --- | --- | --- | --- | --- | 0.166 | 1.638 | -0.917 | 3.194 | 0.918 |
| 800T200-43 | 0.541 | 1.84 | 4.887 | 3.006 | 0.175 | 0.569 | 4.043 | 0.676 | 13.35 | 1030 | 5.023 | --- | --- | --- | --- | --- | 0.367 | 2.124 | -0.913 | 3.193 | 0.918 |
| 800T200-54 | 0.679 | 2.31 | 6.152 | 3.011 | 0.218 | 0.567 | 5.505 | 1.009 | 19.93 | 2039 | 4.746 | 5.149 | 0.871 | 26.09 | 2039 | 4.998 | 0.725 | 2.664 | -0.908 | 3.196 | 0.919 |
| 800T200-68 | 0.854 | 2.91 | 7.786 | 3.019 | 0.272 | 0.564 | 7.306 | 1.490 | 29.45 | 4087 | 4.494 | 7.051 | 1.310 | 39.22 | 4087 | 4.721 | 1.448 | 3.357 | -0.902 | 3.201 | 0.921 |
| 800T200-97 | 1.218 | 4.15 | 11.212 | 3.034 | 0.379 | 0.558 | 11.176 | 2.491 | 49.22 | 8843 | 4.285 | 10.833 | 2.347 | 70.27 | 10885 | 4.373 | 4.200 | 4.792 | -0.889 | 3.210 | 0.923 |
| 800T200-118 | 1.487 | 5.06 | 13.785 | 3.045 | 0.455 | 0.553 | 13.785 | 3.212 | 63.48 | 12009 | 4.243 | 13.785 | 3.059 | 91.59 | 16235 | 4.313 | 7.646 | 5.854 | -0.879 | 3.217 | 0.925 |
| 800T250-43 | 0.586 | 1.99 | 5.629 | 3.100 | 0.326 | 0.746 | 4.593 | 0.739 | 14.60 | 1030 | 5.051 | --- | --- | --- | --- | --- | 0.397 | 3.877 | -1.274 | 3.433 | 0.862 |
| 800T250-54 | 0.735 | 2.50 | 7.090 | 3.106 | 0.407 | 0.744 | 5.948 | 1.193 | 23.57 | 2039 | 4.636 | 5.816 | 0.959 | 28.71 | 2039 | 5.015 | 0.785 | 4.870 | -1.268 | 3.436 | 0.864 |
| 800T250-68 | 0.926 | 3.15 | 8.978 | 3.114 | 0.509 | 0.741 | 7.917 | 1.648 | 32.57 | 4087 | 4.526 | 7.588 | 1.560 | 46.72 | 4087 | 4.600 | 1.569 | 6.151 | -1.261 | 3.441 | 0.866 |
| 800T250-97 | 1.320 | 4.49 | 12.944 | 3.132 | 0.713 | 0.735 | 12.361 | 2.641 | 52.19 | 8843 | 4.414 | 11.872 | 2.487 | 74.47 | 10885 | 4.500 | 4.550 | 8.818 | -1.247 | 3.450 | 0.869 |
| 800T250-118 | 1.611 | 5.48 | 15.930 | 3.144 | 0.860 | 0.731 | 15.822 | 3.448 | 68.14 | 12009 | 4.354 | 15.272 | 3.248 | 97.26 | 16235 | 4.442 | 8.285 | 10.807 | -1.236 | 3.457 | 0.872 |
| 80T3000-54 | 0.792 | 2.69 | 8.028 | 3.184 | 0.675 | 0.923 | 6.396 | 1.178 | 23.28 | 2039 | 4.862 | 6.237 | 0.956 | 28.62 | 2039 | 5.227 | 0.845 | 7.960 | -1.652 | 3.704 | 0.801 |
| 800T300-68 | 0.997 | 3.39 | 10.171 | 3.194 | 0.844 | 0.920 | 8.497 | 1.709 | 33.76 | 4087 | 4.665 | 8.160 | 1.548 | 46.36 | 4087 | 4.819 | 1.690 | 10.067 | -1.644 | 3.708 | 0.803 |
| 800T300-97 | 1.422 | 4.84 | 14.676 | 3.213 | 1.188 | 0.914 | 13.395 | 2.757 | 54.49 | 8843 | 4.544 | 12.794 | 2.586 | 77.43 | 10885 | 4.636 | 4.901 | 14.472 | -1.628 | 3.716 | 0.808 |
| 800T300-118 | 1.735 | 5.91 | 18.074 | 3.227 | 1.436 | 0.910 | 17.291 | 3.626 | 71.65 | 12009 | 4.474 | 16.563 | 3.394 | 101.63 | 16235 | 4.572 | 8.924 | 17.775 | -1.617 | 3.722 | 0.811 |
| 800T400-68 | 1.140 | 3.88 | 12.555 | 3.319 | 1.859 | 1.277 | 9.505 | 1.802 | 35.62 | 4087 | 4.917 | 9.180 | 1.520 | 45.51 | 4087 | 5.208 | 1.931 | 21.882 | -2.458 | 4.323 | 0.677 |
| 800T400-97 | 1.625 | 5.53 | 18.141 | 3.341 | 2.626 | 1.271 | 15.169 | 2.932 | 57.93 | 8843 | 4.789 | 14.387 | 2.737 | 81.95 | 10885 | 4.888 | 5.602 | 31.564 | -2.441 | 4.329 | 0.682 |
| 800T400-118 | 1.984 | 6.75 | 22.363 | 3.357 | 3.184 | 1.267 | 19.784 | 3.885 | 76.76 | 12009 | 4.710 | 18.774 | 3.612 | 108.14 | 16235 | 4.819 | 10.201 | 38.863 | -2.428 | 4.333 | 0.686 |
| 925T125-43 ³ | 0.530 | 1.80 | 5.436 | 3.204 | 0.047 | 0.297 | 4.902 | 0.752 | 14.86 | 890 | 5.556 | --- | --- | --- | --- | --- | 0.359 | 0.817 | -0.399 | 3.243 | 0.985 |
| 925T125-54 | 0.664 | 2.26 | 6.834 | 3.207 | 0.058 | 0.296 | 6.607 | 1.112 | 21.98 | 1761 | 5.257 | 6.228 | 0.968 | 28.99 | 1761 | 5.527 | 0.709 | 1.018 | -0.395 | 3.245 | 0.985 |
| 925T125-68 | 0.837 | 2.85 | 8.632 | 3.212 | 0.072 | 0.293 | 8.632 | 1.621 | 32.04 | 3528 | 4.990 | 8.429 | 1.440 | 43.11 | 3528 | 5.228 | 1.418 | 1.273 | -0.391 | 3.249 | 0.986 |
| 925T125-97 | 1.193 | 4.06 | 12.377 | 3.221 | 0.099 | 0.288 | 12.377 | 2.577 | 58.21 | 8843 | 4.803 | 12.377 | 2.495 | 74.71 | 10291 | 4.878 | 4.112 | 1.787 | -0.381 | 3.257 | 0.986 |
| 925T125-118 | 1.456 | 4.95 | 15.171 | 3.228 | 0.117 | 0.283 | 15.171 | 3.133 | 72.61 | 13189 | 4.842 | 15.171 | 3.133 | 107.78 | 16235 | 4.842 | 7.487 | 2.156 | -0.375 | 3.262 | 0.987 |
| 925T150-43 ³ | 0.552 | 1.88 | 5.931 | 3.278 | 0.079 | 0.379 | 5.170 | 0.769 | 15.19 | 890 | 5.669 | --- | --- | --- | --- | --- | 0.374 | 1.351 | -0.538 | 3.343 | 0.974 |
| 925T150-54 | 0.693 | 2.36 | 7.458 | 3.281 | 0.099 | 0.377 | 7.013 | 1.144 | 22.61 | 1761 | 5.358 | 6.575 | 0.991 | 29.66 | 1761 | 5.639 | 0.740 | 1.688 | -0.534 | 3.346 | 0.975 |
| 925T150-68 | 0.872 | 2.97 | 9.424 | 3.287 | 0.122 | 0.374 | 9.362 | 1.683 | 33.26 | 3528 | 5.073 | 8.962 | 1.484 | 44.42 | 3528 | 5.327 | 1.478 | 2.117 | -0.529 | 3.350 | 0.975 |
| 925T150-97 | 1.244 | 4.23 | 13.526 | 3.298 | 0.169 | 0.369 | 13.526 | 2.816 | 55.65 | 8843 | 4.803 | 13.526 | 2.636 | 78.91 | 10291 | 4.934 | 4.287 | 2.990 | -0.518 | 3.359 | 0.976 |
| 925T150-118 | 1.518 | 5.17 | 16.590 | 3.306 | 0.202 | 0.365 | 16.590 | 3.426 | 77.55 | 13189 | 4.842 | 16.590 | 3.426 | 115.44 | 16235 | 4.842 | 7.806 | 3.624 | -0.511 | 3.365 | 0.977 |
| 925T200-43 ³ | 0.597 | 2.03 | 6.920 | 3.404 | 0.180 | 0.550 | 5.628 | 0.791 | 15.64 | 890 | 5.891 | --- | --- | --- | --- | --- | 0.405 | 2.962 | -0.848 | 3.551 | 0.943 |
| 925T200-54 | 0.749 | 2.55 | 8.706 | 3.409 | 0.225 | 0.547 | 7.706 | 1.188 | 23.47 | 1761 | 5.565 | 7.168 | 1.021 | 30.57 | 1761 | 5.859 | 0.800 | 3.711 | -0.843 | 3.554 | 0.944 |
| 925T200-68 | 0.944 | 3.21 | 11.009 | 3.416 | 0.280 | 0.545 | 10.412 | 1.769 | 34.95 | 3528 | 5.257 | 9.868 | 1.544 | 46.22 | 3528 | 5.531 | 1.599 | 4.671 | -0.837 | 3.559 | 0.945 |
| 925T200-97 | 1.345 | 4.58 | 15.822 | 3.429 | 0.391 | 0.539 | 15.769 | 3.075 | 60.76 | | | | | | | | | | | | |

TABLE 4—CHANNEL (TRACK) SECTION PROPERTIES (Continued)

| Section | Gross Properties ¹ | | | | | 33 ksi Effective Properties ² | | | | | 50 ksi Effective ² | | | | | Torsional Properties | | | | | |
|--------------------------|-------------------------------|--------|------------------------|---------|------------------------|--|------------------------|------------------------|-----------|---------|-------------------------------|------------------------|------------------------|-----------|---------|----------------------|---------------------------|-----------------------|---------|---------|-------|
| | Area | Weight | Ixx (in ⁴) | Rx (in) | Iyy (in ⁴) | Ry (in) | Ixx (in ⁴) | Sxx (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | Ixx (in ⁴) | Sxx (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | Jx1000 (in ⁴) | Cw (in ⁶) | Xo (in) | Ro (in) | β |
| 1000T200-43 ³ | 0.631 | 2.15 | 8.361 | 3.640 | 0.183 | 0.539 | 6.722 | 0.861 | 17.01 | 822 | 6.422 | --- | --- | --- | --- | --- | 0.428 | 3.540 | -0.813 | 3.769 | 0.953 |
| 1000T200-54 | 0.792 | 2.69 | 10.516 | 3.645 | 0.228 | 0.537 | 9.231 | 1.295 | 25.60 | 1628 | 6.067 | 8.560 | 1.111 | 33.26 | 1628 | 6.386 | 0.845 | 4.434 | -0.809 | 3.772 | 0.954 |
| 1000T200-68 | 0.997 | 3.39 | 13.292 | 3.651 | 0.284 | 0.534 | 12.551 | 1.936 | 38.26 | 3261 | 5.728 | 11.820 | 1.684 | 50.42 | 3261 | 6.029 | 1.690 | 5.576 | -0.803 | 3.776 | 0.955 |
| 1000T200-97 | 1.422 | 4.84 | 19.087 | 3.664 | 0.397 | 0.528 | 19.031 | 3.427 | 67.72 | 8843 | 5.310 | 18.583 | 3.081 | 92.25 | 9507 | 5.543 | 4.901 | 7.924 | -0.791 | 3.786 | 0.956 |
| 1000T200-118 | 1.735 | 5.91 | 23.422 | 3.674 | 0.476 | 0.524 | 23.422 | 4.420 | 87.35 | 13189 | 5.244 | 23.422 | 4.208 | 125.99 | 16235 | 5.334 | 8.924 | 9.649 | -0.783 | 3.793 | 0.957 |
| 1000T250-43 ³ | 0.676 | 2.30 | 9.515 | 3.751 | 0.344 | 0.713 | 7.172 | 0.876 | 17.32 | 822 | 6.637 | --- | --- | --- | --- | --- | 0.458 | 6.477 | -1.147 | 3.987 | 0.917 |
| 1000T250-54 | 0.848 | 2.89 | 11.972 | 3.757 | 0.429 | 0.711 | 9.913 | 1.326 | 26.20 | 1628 | 6.274 | 9.141 | 1.132 | 33.89 | 1628 | 6.601 | 0.906 | 8.125 | -1.142 | 3.990 | 0.918 |
| 1000T250-68 | 1.068 | 3.64 | 15.138 | 3.764 | 0.536 | 0.708 | 13.578 | 1.997 | 39.46 | 3261 | 5.921 | 12.708 | 1.726 | 51.68 | 3261 | 6.235 | 1.810 | 10.240 | -1.135 | 3.995 | 0.919 |
| 1000T250-97 | 1.523 | 5.18 | 21.760 | 3.780 | 0.751 | 0.702 | 20.871 | 3.596 | 71.05 | 8843 | 5.466 | 20.254 | 3.201 | 95.84 | 9507 | 5.722 | 5.252 | 14.617 | -1.122 | 4.005 | 0.921 |
| 1000T250-118 | 1.860 | 6.33 | 26.723 | 3.791 | 0.905 | 0.698 | 26.538 | 4.721 | 93.29 | 13189 | 5.364 | 25.721 | 4.422 | 132.38 | 16235 | 5.490 | 9.562 | 17.858 | -1.112 | 4.012 | 0.923 |
| 1000T300-54 | 0.905 | 3.08 | 13.427 | 3.852 | 0.714 | 0.888 | 11.083 | 1.452 | 28.69 | 1628 | 6.250 | 10.826 | 1.191 | 35.65 | 1628 | 6.676 | 0.966 | 13.289 | -1.500 | 4.228 | 0.874 |
| 1000T300-68 | 1.140 | 3.88 | 16.985 | 3.860 | 0.893 | 0.885 | 14.416 | 2.377 | 46.96 | 3261 | 5.716 | 14.106 | 1.904 | 57.01 | 3261 | 6.194 | 1.931 | 16.771 | -1.493 | 4.233 | 0.876 |
| 1000T300-97 | 1.625 | 5.53 | 24.434 | 3.878 | 1.257 | 0.879 | 22.441 | 3.798 | 75.04 | 8843 | 5.571 | 21.530 | 3.589 | 107.45 | 9507 | 5.669 | 5.602 | 24.009 | -1.478 | 4.242 | 0.879 |
| 1000T300-118 | 1.984 | 6.75 | 30.523 | 3.890 | 1.519 | 0.875 | 28.792 | 4.950 | 97.82 | 13189 | 5.494 | 27.680 | 4.668 | 139.76 | 16235 | 5.598 | 10.201 | 29.395 | -1.468 | 4.249 | 0.881 |
| 1000T400-68 | 1.282 | 4.36 | 20.678 | 4.016 | 1.982 | 1.243 | 16.172 | 2.330 | 46.04 | 3261 | 6.165 | 15.757 | 1.894 | 56.72 | 3261 | 6.616 | 2.173 | 36.414 | -2.262 | 4.774 | 0.775 |
| 1000T400-97 | 1.828 | 6.22 | 29.671 | 4.036 | 2.799 | 1.237 | 25.207 | 4.032 | 79.68 | 8843 | 5.842 | 24.036 | 3.795 | 113.63 | 9507 | 5.947 | 6.304 | 52.310 | -2.246 | 4.782 | 0.779 |
| 1000T400-118 | 2.232 | 7.60 | 36.826 | 4.051 | 3.392 | 1.233 | 32.638 | 5.292 | 104.58 | 13189 | 5.754 | 31.116 | 4.960 | 148.50 | 16235 | 5.870 | 11.478 | 64.212 | -2.234 | 4.787 | 0.782 |
| 1150T125-43 ³ | 0.631 | 2.15 | 9.503 | 3.881 | 0.048 | 0.277 | 8.164 | 0.953 | 18.84 | 714 | 7.141 | --- | --- | --- | --- | --- | 0.428 | 1.330 | -0.346 | 3.906 | 0.992 |
| 1150T125-54 ³ | 0.792 | 2.69 | 11.940 | 3.883 | 0.060 | 0.275 | 11.109 | 1.423 | 28.11 | 1414 | 6.762 | 10.376 | 1.228 | 36.78 | 1414 | 7.102 | 0.845 | 1.656 | -0.343 | 3.908 | 0.992 |
| 1150T125-68 | 0.997 | 3.39 | 15.067 | 3.887 | 0.074 | 0.272 | 14.658 | 2.100 | 41.49 | 2832 | 6.404 | 14.174 | 1.844 | 55.21 | 2832 | 6.720 | 1.690 | 2.066 | -0.339 | 3.912 | 0.992 |
| 1150T125-97 | 1.422 | 4.84 | 21.568 | 3.895 | 0.102 | 0.267 | 21.568 | 3.493 | 69.03 | 8250 | 6.043 | 21.405 | 3.270 | 97.89 | 8250 | 6.230 | 4.901 | 2.888 | -0.331 | 3.918 | 0.993 |
| 1150T125-118 | 1.735 | 5.91 | 26.404 | 3.901 | 0.120 | 0.263 | 26.404 | 4.425 | 87.43 | 13189 | 5.967 | 26.404 | 4.251 | 127.26 | 15072 | 6.081 | 8.924 | 3.474 | -0.325 | 3.923 | 0.993 |
| 1150T150-43 ³ | 0.654 | 2.22 | 3.963 | 0.082 | 0.354 | 8.563 | 0.973 | 19.22 | 714 | 7.262 | --- | --- | --- | --- | --- | 0.443 | 2.209 | -0.470 | 4.006 | 0.986 | 0.986 |
| 1150T150-54 ³ | 0.820 | 2.79 | 3.966 | 0.102 | 0.353 | 11.726 | 1.460 | 28.84 | 1414 | 6.870 | 10.893 | 1.254 | 37.56 | 1414 | 7.221 | 0.876 | 2.757 | -0.467 | 4.009 | 0.986 | 0.986 |
| 1150T150-68 | 1.033 | 3.51 | 3.971 | 0.127 | 0.350 | 15.864 | 2.173 | 42.93 | 2832 | 6.494 | 14.986 | 1.895 | 56.74 | 2832 | 6.825 | 1.750 | 3.450 | -0.463 | 4.013 | 0.987 | 0.987 |
| 1150T150-97 | 1.472 | 5.01 | 3.980 | 0.175 | 0.345 | 23.324 | 3.788 | 74.85 | 8250 | 6.038 | 23.210 | 3.437 | 102.92 | 8250 | 6.287 | 5.076 | 4.854 | -0.454 | 4.021 | 0.987 | 0.987 |
| 1150T150-118 | 1.798 | 6.12 | 3.987 | 0.209 | 0.341 | 28.569 | 4.788 | 94.61 | 13189 | 5.967 | 28.569 | 4.611 | 138.05 | 15072 | 6.077 | 9.243 | 5.866 | -0.447 | 4.026 | 0.988 | 0.988 |
| 1150T200-43 ³ | 0.699 | 2.38 | 4.107 | 0.188 | 0.519 | 9.239 | 0.999 | 19.75 | 714 | 7.502 | --- | --- | --- | --- | --- | 0.474 | 4.871 | -0.752 | 4.208 | 0.968 | 0.968 |
| 1150T200-54 ³ | 0.877 | 2.98 | 4.111 | 0.234 | 0.517 | 12.758 | 1.510 | 29.84 | 1414 | 7.095 | 11.767 | 1.290 | 38.63 | 1414 | 7.460 | 0.936 | 6.095 | -0.748 | 4.210 | 0.968 | 0.968 |
| 1150T200-68 | 1.104 | 3.76 | 4.117 | 0.292 | 0.514 | 17.440 | 2.271 | 44.89 | 2832 | 6.695 | 16.335 | 1.965 | 58.82 | 2832 | 7.048 | 1.871 | 7.657 | -0.743 | 4.215 | 0.969 | 0.969 |
| 1150T200-97 | 1.574 | 5.36 | 4.129 | 0.407 | 0.508 | 26.818 | 4.079 | 80.61 | 8250 | 6.173 | 26.177 | 3.634 | 108.82 | 8250 | 6.464 | 5.427 | 10.855 | -0.732 | 4.224 | 0.970 | 0.970 |
| 1150T200-118 | 1.922 | 6.54 | 4.138 | 0.488 | 0.504 | 32.901 | 5.435 | 107.40 | 13189 | 5.995 | 32.901 | 5.010 | 149.99 | 15072 | 6.196 | 9.881 | 13.195 | -0.724 | 4.231 | 0.971 | 0.971 |
| 1150T250-43 ³ | 0.744 | 2.53 | 13.307 | 4.230 | 0.354 | 0.690 | 9.811 | 1.017 | 20.09 | 714 | 7.730 | --- | --- | --- | --- | --- | 0.504 | 8.930 | -1.068 | 4.417 | 0.942 |
| 1150T250-54 ³ | 0.933 | 3.18 | 16.734 | 4.235 | 0.442 | 0.688 | 13.633 | 1.544 | 30.51 | 1414 | 7.315 | 12.505 | 1.314 | 39.33 | 1414 | 7.688 | 0.997 | 11.194 | -1.063 | 4.420 | 0.942 |
| 1150T250-68 | 1.175 | 4.00 | 21.145 | 4.242 | 0.552 | 0.685 | 18.774 | 2.338 | 46.19 | 2832 | 6.901 | 17.476 | 2.011 | 60.20 | 2832 | 7.267 | 1.992 | 14.091 | -1.057 | 4.425 | 0.943 |
| 1150T250-97 | 1.676 | 5.70 | 30.350 | 4.256 | 0.773 | 0.679 | 29.267 | 4.265 | 84.27 | 8250 | 6.341 | 28.347 | 3.765 | 112.73 | 8250 | 6.656 | 5.778 | 20.068 | -1.045 | 4.434 | 0.944 |
| 1150T250-118 | 2.046 | 6.96 | 37.232 | 4.266 | 0.932 | 0.675 | 36.975 | 5.784 | 114.30 | 13189 | 6.119 | 36.017 | 5.244 | 157.00 | 15072 | 6.363 | 10.520 | 24.476 | -1.036 | 4.441 | 0.946 |
| 1150T300-54 ³ | 0.990 | 3.37 | 18.651 | 4.341 | 0.738 | 0.863 | 15.715 | 1.659 | 32.78 | 1414 | 7.323 | 14.899 | 1.368 | 40.97 | 1414 | 7.788 | 1.057 | 18.327 | -1.404 | 4.643 | 0.909 |
| 1150T300-68 | 1.247 | 4.24 | 23.576 | 4.349 | 0.923 | 0.860 | 20.405 | 2.683 | 53.01 | 2832 | 6.734 | 19.977 | 2.173 | 65.06 | 2832 | 7.258 | 2.113 | 23.104 | -1.397 | 4.648 | 0.910 |
| 1150T300-97 | 1.778 | 6.05 | 33.862 | 4.365 | 1.298 | 0.855 | 31.233 | 4.668 | 92.25 | 8250 | 6.337 | 30.048 | 4.432 | 132.69 | 8250 | 6.438 | 6.128 | 32.999 | -1.384 | 4.658 | 0.912 |
| 1150T300-118 | 2.170 | 7.38 | 41.563 | 4.376 | 1.569 | 0.850 | 39.925 | 6.054 | 119.62 | 13189 | 6.256 | 38.473 | 5.734 | 171.67 | 15072 | 6.363 | 11.159 | 40.336 | -1.374 | 4.665 | 0.913 |
| 1150T400-68 | 1.389 | 4.73 | 28.438 | 4.524 | 2.057 | 1.217 | 22.766 | 2.659 | 52.54 | 2832 | 7.200 | 22.207 | 2.176 | 65.14 | 2832 | 7.699 | 2.354 | 50.181 | -2.136 | 5.149 | 0.828 |
| 1150T400-97 | 1.981 | 6.74 | 40.888 | 4.543 | 2.905 | 1.211 | 34.891 | 4.950 | 97.82 | 8250 | 6.624 | 33.497 | 4.547 | 136.13 | 8250 | 6.810 | 6.829 | 71.928 | -2.121 | 5.158 | 0.831 |
| 1150T400-118 | 2.419 | 8.23 | 50.225 | 4.557 | 3.520 | 1.206 | 44.979 | 6.460 | 127.66 | 13189 | 6.530 | 43.009 | 6.084 | 182.16 | 15072 | 6.651 | 12.436 | 88.152 | -2.110 | 5.165 | 0.833 |
| 1200T125-54 ³ | 0.820 | 2.79 | 13.335 | 4.033 | 0.060 | 0.271 | 12.296 | 1.491 | 29.47 | 1354 | 7.106 | 11.460 | 1.286 | 38.51 | 1354 | 7.460 | 0.876 | 1.820 | -0.333 | 4.055 | 993 |
| 1200T125-68 | 1.033 | 3.51 | 16.826 | 4.036 | 0.074 | 0.268 | 16.246 | 2.206 | 43.60 | 2713 | 6.730 | 15.686 | 1.934 | 57.90 | 2713 | 7.061 | 1.750 | 2.270 | -0.329 | 4.059 | 993 |
| 1200T125-97 | 1.472 | 5.01 | 24.078 | 4.044 | 0.102 | 0.263 | 24.078 | 3.690 | 72.92 | 7902 | 6.338 | 23.751 | 3.442 | 103.06 | 7902 | 6.541 | 5.076 | 3.171 | -0.322 | 4.065 | 994 |
| 1200T125-118 | 1.798 | 6.12 | 29.472 | 4.049 | 0.121 | 0.259 | 29.472 | 4.740 | 93.67 | 13189 | 6.217 | 29.472 | 4.490 | 134.44 | 14434 | 6.377 | 9.243 | 3.812 | -0.316 | 4.070 | 994 |
| 1200T150-54 ³ | 0.848 | 2.89 | 14.378 | 4.117 | 0.103 | 0.348 | 12.962 | 1.530 | 30.23 | 1354 | 7.215 | 12.020 | 1.313 | 39.31 | 1354 | 7.581 | 0.906 | 3.033 | -0.454 | 4.156 | 988 |
| 1200T150-68 | 1.068 | 3.64 | 18.148 | 4.121 | 0.127 | 0.345 | 17.568 | 2.281 | 45.08 | 2713 | 6.820 | 16.566 | 1.987 | 59.48 | 2713 | 7.168 | 1.810 | 3.795 | -0.450 | 4.160 | 988 |
| 1200T150-97 | 1.523 | 5.18 | 25.987 | 4.130 | 0.176 | 0.340 | 25.987 | 3.996 | 78.97 | 7902 | 6.331 | 25.719 | 3.616 | 108.27 | 7902 | 6.598 | 5.252 | 5.335 | -0.441 | 4.168 | 989 |
| 1200T150-118 | 1.860 | 6.33 | 31.825 | 4.137 | 0.210 | 0.336 | 31.825 | 5.119 | | | | | | | | | | | | | |

TABLE 4—CHANNEL (TRACK) SECTION PROPERTIES (Continued)

| Section | Gross Properties ¹ | | | | | 33 ksi Effective Properties ² | | | | | 50 ksi Effective ² | | | | | Torsional Properties | | | | | |
|--------------------------|-------------------------------|--------|------------------------|---------|------------------------|--|------------------------|------------------------|-----------|---------|-------------------------------|------------------------|------------------------|-----------|---------|----------------------|---------------------------|-----------------------|---------|---------|-------|
| | Area | Weight | Ixx (in ⁴) | Rx (in) | Iyy (in ⁴) | Ry (in) | Ixx (in ⁴) | Sxx (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | Ixx (in ⁴) | Sxx (in ³) | Ma (in-k) | Va (lb) | Ycg (in) | Jx1000 (in ⁴) | Cw (in ⁶) | Xo (in) | Ro (in) | β |
| 1350T200-54 ³ | 0.990 | 3.37 | 22.100 | 4.725 | 0.240 | 0.493 | 18.481 | 1.797 | 35.50 | 1203 | 8.504 | 16.933 | 1.529 | 45.78 | 1203 | 8.926 | 1.057 | 8.769 | -0.680 | 4.799 | 0.980 |
| 1350T200-68 | 1.247 | 4.24 | 27.896 | 4.730 | 0.299 | 0.490 | 25.437 | 2.719 | 53.72 | 2409 | 8.029 | 23.666 | 2.339 | 70.02 | 2409 | 8.446 | 2.113 | 11.002 | -0.675 | 4.803 | 0.980 |
| 1350T200-97 | 1.778 | 6.05 | 39.954 | 4.741 | 0.418 | 0.485 | 39.954 | 4.955 | 97.91 | 7014 | 7.376 | 38.298 | 4.374 | 130.95 | 7014 | 7.741 | 6.128 | 15.561 | -0.666 | 4.812 | 0.981 |
| 1350T200-118 | 2.170 | 7.38 | 48.938 | 4.749 | 0.501 | 0.481 | 48.938 | 6.745 | 133.29 | 12808 | 7.090 | 48.938 | 6.084 | 182.17 | 12808 | 7.397 | 11.159 | 18.883 | -0.658 | 4.818 | 0.981 |
| 1350T250-54 ³ | 1.046 | 3.56 | 24.733 | 4.862 | 0.455 | 0.660 | 19.647 | 1.834 | 36.25 | 1203 | 8.738 | 17.905 | 1.556 | 46.57 | 1203 | 9.168 | 1.117 | 16.152 | -0.974 | 5.002 | 0.962 |
| 1350T250-68 | 1.318 | 4.48 | 31.231 | 4.868 | 0.569 | 0.657 | 27.222 | 2.792 | 55.18 | 2409 | 8.249 | 25.180 | 2.390 | 71.56 | 2409 | 8.679 | 2.233 | 20.311 | -0.969 | 5.007 | 0.963 |
| 1350T250-97 | 1.879 | 6.39 | 44.764 | 4.881 | 0.797 | 0.651 | 43.449 | 5.161 | 101.99 | 7014 | 7.557 | 41.227 | 4.519 | 135.30 | 7014 | 7.946 | 6.479 | 28.858 | -0.957 | 5.016 | 0.964 |
| 1350T250-118 | 2.294 | 7.81 | 54.860 | 4.890 | 0.961 | 0.647 | 54.611 | 7.112 | 140.55 | 12808 | 7.239 | 53.395 | 6.346 | 189.99 | 12808 | 7.577 | 11.797 | 35.137 | -0.949 | 5.023 | 0.964 |
| 1350T300-54 ³ | 1.103 | 3.75 | 27.366 | 4.981 | 0.764 | 0.832 | 20.668 | 1.862 | 36.79 | 1203 | 8.962 | 18.754 | 1.574 | 47.14 | 1203 | 9.396 | 1.178 | 26.494 | -1.295 | 5.213 | 0.938 |
| 1350T300-68 | 1.389 | 4.73 | 34.566 | 4.988 | 0.955 | 0.829 | 28.793 | 2.846 | 56.23 | 2409 | 8.464 | 26.515 | 2.427 | 72.67 | 2409 | 8.902 | 2.354 | 33.361 | -1.289 | 5.218 | 0.939 |
| 1350T300-97 | 1.981 | 6.74 | 49.574 | 5.003 | 1.343 | 0.824 | 46.466 | 5.312 | 104.97 | 7014 | 7.745 | 43.800 | 4.624 | 138.45 | 7014 | 8.152 | 6.829 | 47.541 | -1.276 | 5.228 | 0.940 |
| 1350T300-118 | 2.419 | 8.23 | 60.782 | 5.013 | 1.623 | 0.819 | 58.718 | 7.381 | 145.84 | 12808 | 7.404 | 57.131 | 6.535 | 195.67 | 12808 | 7.765 | 12.436 | 58.014 | -1.267 | 5.235 | 0.941 |
| 1350T400-68 | 1.532 | 5.21 | 41.236 | 5.188 | 2.141 | 1.182 | 33.862 | 3.099 | 61.24 | 2409 | 8.617 | 33.002 | 2.552 | 76.41 | 2409 | 9.172 | 2.596 | 72.561 | -1.990 | 5.681 | 0.877 |
| 1350T400-97 | 2.184 | 7.43 | 59.194 | 5.206 | 3.023 | 1.176 | 51.002 | 6.297 | 124.44 | 7014 | 7.658 | 49.671 | 5.259 | 157.45 | 7014 | 8.173 | 7.531 | 103.775 | -1.976 | 5.691 | 0.879 |
| 1350T400-118 | 2.667 | 9.08 | 72.626 | 5.218 | 3.663 | 1.172 | 65.435 | 8.167 | 161.38 | 12808 | 7.559 | 62.783 | 7.733 | 231.52 | 12808 | 7.684 | 13.713 | 126.976 | -1.965 | 5.698 | 0.881 |
| 1400T125-54 ³ | 0.933 | 3.18 | 19.977 | 4.627 | 0.061 | 0.256 | 17.725 | 1.767 | 34.91 | 1160 | 8.511 | 16.407 | 1.517 | 45.42 | 1160 | 8.920 | 0.997 | 2.559 | -0.299 | 4.643 | 0.996 |
| 1400T125-68 | 1.175 | 4.00 | 25.196 | 4.630 | 0.076 | 0.254 | 23.552 | 2.632 | 52.01 | 2322 | 8.063 | 22.620 | 2.293 | 68.64 | 2322 | 8.456 | 1.992 | 3.189 | -0.296 | 4.646 | 0.996 |
| 1400T125-97 | 1.676 | 5.70 | 36.024 | 4.636 | 0.104 | 0.249 | 35.775 | 4.480 | 88.53 | 6761 | 7.557 | 34.588 | 4.134 | 123.76 | 6761 | 7.823 | 5.778 | 4.445 | -0.289 | 4.652 | 0.996 |
| 1400T125-118 | 2.046 | 6.96 | 44.068 | 4.641 | 0.123 | 0.245 | 44.068 | 5.853 | 115.67 | 12344 | 7.359 | 43.752 | 5.453 | 163.27 | 12344 | 7.597 | 10.520 | 5.334 | -0.284 | 4.656 | 0.996 |
| 1400T150-54 ³ | 0.962 | 3.27 | 21.392 | 4.717 | 0.105 | 0.330 | 18.620 | 1.810 | 35.76 | 1160 | 8.624 | 17.153 | 1.547 | 46.33 | 1160 | 9.044 | 1.027 | 4.280 | -0.410 | 4.746 | 0.993 |
| 1400T150-68 | 1.211 | 4.12 | 26.987 | 4.721 | 0.130 | 0.327 | 25.409 | 2.717 | 53.68 | 2322 | 8.155 | 23.803 | 2.352 | 70.42 | 2322 | 8.565 | 2.052 | 5.349 | -0.407 | 4.749 | 0.993 |
| 1400T150-97 | 1.727 | 5.88 | 38.607 | 4.729 | 0.180 | 0.322 | 38.340 | 4.834 | 95.52 | 6761 | 7.542 | 37.285 | 4.332 | 129.69 | 6761 | 7.879 | 5.953 | 7.503 | -0.399 | 4.756 | 0.993 |
| 1400T150-118 | 2.108 | 7.17 | 47.247 | 4.734 | 0.214 | 0.319 | 47.247 | 6.291 | 124.31 | 12344 | 7.354 | 46.911 | 5.886 | 176.24 | 12344 | 7.582 | 10.839 | 9.048 | -0.393 | 4.761 | 0.993 |
| 1400T200-54 ³ | 1.018 | 3.46 | 24.221 | 4.878 | 0.242 | 0.487 | 20.098 | 1.868 | 36.92 | 1160 | 8.863 | 18.387 | 1.589 | 47.56 | 1160 | 9.298 | 1.087 | 9.520 | -0.665 | 4.947 | 0.982 |
| 1400T200-68 | 1.282 | 4.36 | 30.571 | 4.883 | 0.301 | 0.485 | 27.707 | 2.830 | 55.93 | 2322 | 8.370 | 25.738 | 2.432 | 72.81 | 2322 | 8.801 | 2.173 | 11.942 | -0.661 | 4.951 | 0.982 |
| 1400T200-97 | 1.828 | 6.22 | 43.773 | 4.893 | 0.420 | 0.479 | 43.679 | 5.174 | 102.24 | 6761 | 7.685 | 41.749 | 4.559 | 136.48 | 6761 | 8.068 | 6.304 | 16.883 | -0.651 | 4.959 | 0.983 |
| 1400T200-118 | 2.232 | 7.60 | 53.606 | 4.900 | 0.504 | 0.475 | 53.606 | 7.062 | 139.54 | 12344 | 7.380 | 53.453 | 6.354 | 190.23 | 12344 | 7.706 | 11.478 | 20.479 | -0.644 | 4.965 | 0.983 |
| 1400T250-54 ³ | 1.075 | 3.66 | 27.051 | 5.017 | 0.458 | 0.653 | 21.342 | 1.907 | 37.68 | 1160 | 9.100 | 19.421 | 1.616 | 48.38 | 1160 | 9.543 | 1.148 | 17.550 | -0.954 | 5.149 | 0.966 |
| 1400T250-68 | 1.354 | 4.61 | 34.154 | 5.023 | 0.573 | 0.650 | 29.615 | 2.906 | 57.42 | 2322 | 8.592 | 27.352 | 2.485 | 74.40 | 2322 | 9.037 | 2.294 | 22.063 | -0.949 | 5.153 | 0.966 |
| 1400T250-97 | 1.930 | 6.57 | 48.939 | 5.036 | 0.803 | 0.645 | 47.449 | 5.386 | 106.42 | 6761 | 7.869 | 44.883 | 4.708 | 140.94 | 6761 | 8.276 | 6.654 | 31.333 | -0.938 | 5.163 | 0.967 |
| 1400T250-118 | 2.356 | 8.02 | 59.964 | 5.044 | 0.967 | 0.641 | 59.734 | 7.438 | 146.99 | 12344 | 7.531 | 58.277 | 6.622 | 198.25 | 12344 | 7.888 | 12.117 | 38.137 | -0.930 | 5.169 | 0.968 |
| 1400T300-54 ³ | 1.131 | 3.85 | 29.881 | 5.139 | 0.769 | 0.825 | 22.429 | 1.935 | 38.24 | 1160 | 9.327 | 20.324 | 1.635 | 48.96 | 1160 | 9.774 | 1.208 | 28.800 | -1.271 | 5.358 | 0.944 |
| 1400T300-68 | 1.425 | 4.85 | 37.737 | 5.146 | 0.962 | 0.822 | 31.291 | 2.961 | 58.50 | 2322 | 8.810 | 28.775 | 2.523 | 75.54 | 2322 | 9.264 | 2.415 | 36.257 | -1.265 | 5.363 | 0.944 |
| 1400T300-97 | 2.032 | 6.91 | 54.105 | 5.160 | 1.353 | 0.816 | 50.615 | 5.540 | 109.48 | 6761 | 8.061 | 47.633 | 4.815 | 144.17 | 6761 | 8.485 | 7.005 | 51.644 | -1.252 | 5.373 | 0.946 |
| 1400T300-118 | 2.481 | 8.44 | 66.323 | 5.171 | 1.635 | 0.812 | 64.159 | 7.713 | 152.42 | 12344 | 7.699 | 62.201 | 6.816 | 204.06 | 12344 | 8.080 | 12.755 | 62.998 | -1.243 | 5.380 | 0.947 |
| 1400T400-68 | 1.567 | 5.33 | 44.903 | 5.352 | 2.160 | 1.174 | 37.078 | 3.210 | 63.43 | 2322 | 8.976 | 35.376 | 2.647 | 79.24 | 2322 | 9.545 | 2.656 | 78.896 | -1.957 | 5.818 | 0.887 |
| 1400T400-97 | 2.235 | 7.61 | 64.437 | 5.369 | 3.049 | 1.168 | 55.644 | 6.656 | 131.52 | 6761 | 7.916 | 54.354 | 5.437 | 162.79 | 6761 | 8.520 | 7.706 | 112.783 | -1.943 | 5.828 | 0.889 |
| 1400T400-118 | 2.729 | 9.29 | 79.041 | 5.382 | 3.695 | 1.164 | 71.315 | 8.620 | 170.34 | 12344 | 7.815 | 68.478 | 8.172 | 244.66 | 12344 | 7.942 | 14.032 | 137.951 | -1.932 | 5.835 | 0.890 |

For SI: 1 inch = 25.4mm, 1 pound = 4.4482 N.

¹Gross properties are based on the full-unreduced cross section of the studs, away from web punch-outs.

²Use the effective moment of inertia for deflection calculations.

³Web height to thickness ratio, h/t, exceeds 200. Web stiffeners in accordance with Sections B1.2 and C3.6.1 of AISI-NAS are required.

SYMBOLS:

- Ixx=Strong axis moment of inertia.
- Rx=Strong axis radius of gyration.
- Iyy=Weak axis moment of inertia.
- Ry=Weak axis radius of gyration.
- Sxx=Strong axis section modulus.
- Ma=Allowable bending moment
- Va = Allowable shear.
- Ycg= Distance from top of flange to effective center of gravity.
- J=St. Venant torsion constant.
- Cw=Warping constant.
- Xo=Distance from shear center to neutral axis.
- Ro=Radii of gyration.
- β=Torsional flexural constant.

TABLE 5—U CHANNELS STRUCTURAL PROPERTIES^{1,2}

| SECTION ⁵ | MILS | DESIGN THICK. (in) | MIN. BASE METAL THICK. (in) | INSIDE CORNER RADII (in) | WEIGHT (lb/ft) | GROSS SECTION PROPERTIES ³ | | | | | EFFECTIVE SECTION PROPERTIES | | | ALLOWABLE MOMENT ⁴ M _a (in-k) |
|----------------------|------|--------------------|-----------------------------|--------------------------|----------------|---------------------------------------|-----------------------------------|---------------------|-----------------------------------|---------------------|-----------------------------------|-----------------------------------|-------------------------|---|
| | | | | | | Area (in ²) | I _x (in ⁴) | r _x (in) | I _y (in ⁴) | r _y (in) | I _x (in ⁴) | S _x (in ³) | Area (in ²) | |
| 75U050-54 | 54 | 0.0566 | 0.0538 | 0.0849 | 0.30 | 0.087 | 0.007 | 0.288 | 0.002 | 0.155 | 0.007 | 0.019 | 0.087 | 0.45 |
| 150U050-54 | 54 | 0.0566 | 0.0538 | 0.0849 | 0.44 | 0.129 | 0.039 | 0.547 | 0.003 | 0.144 | 0.039 | 0.052 | 0.129 | 1.22 |
| 200U050-54 | 54 | 0.0566 | 0.0538 | 0.0849 | 0.54 | 0.157 | 0.079 | 0.709 | 0.003 | 0.136 | 0.079 | 0.079 | 0.157 | 1.87 |
| 250U050-54 | 54 | 0.0566 | 0.0538 | 0.0849 | 0.63 | 0.186 | 0.139 | 0.866 | 0.003 | 0.128 | 0.139 | 0.111 | 0.186 | 2.64 |

For SI: 1 inch = 25.4 mm, 1 lb/ft = 1.488 kg/m, 1 in-lb = 11.30 N-m.

I_x = Strong axis moment of inertia. r_y = Weak axis radius of gyration.
 r_x = Strong axis radius of gyration. S_x = Strong axis section modulus.
 I_y = Weak axis moment of inertia.

¹F_y = 33 ksi.

²Use the effective moment of inertia for deflection calculations.

³Gross properties are based on the full-unreduced cross section of the U channel.

⁴Full lateral support of compression flanges must be provided.

⁵Depth of member is measured from outside face to outside face of flanges. See Figure 1.

TABLE 6—HAT FURRING CHANNEL PROPERTIES^{1,3}

| SECTION | MILS | DESIGN THICK. (in) | MIN. BASE METAL THICK. (in) | INSIDE CORNER RADII (in) | WEIGHT (lb/ft) | DEPTH (in) | GROSS SECTION PROPERTIES | | | | | EFFECTIVE SECTION PROPERTIES | | ALLOWABLE MOMENT ² M _a (ft-lb) |
|------------|------|--------------------|-----------------------------|--------------------------|----------------|------------|--------------------------|-----------------------------------|---------------------|-----------------------------------|---------------------|-----------------------------------|-----------------------------------|--|
| | | | | | | | Area (in ²) | I _x (in ⁴) | r _x (in) | I _y (in ⁴) | r _y (in) | I _x (in ⁴) | S _x (in ³) | |
| 087F125-18 | 18 | 0.0188 | 0.0179 | 0.0843 | 0.239 | 0.875 | 0.0702 | 0.0089 | 0.356 | 0.0354 | 0.710 | 0.0086 | 0.0160 | 26.41 |
| 087F125-30 | 30 | 0.0312 | 0.0296 | 0.0784 | 0.391 | 0.875 | 0.1149 | 0.0143 | 0.353 | 0.0580 | 0.710 | 0.0143 | 0.0365 | 50.47 |
| 150F125-18 | 18 | 0.0188 | 0.0179 | 0.0843 | 0.320 | 1.500 | 0.0939 | 0.0311 | 0.575 | 0.0467 | 0.705 | 0.0299 | 0.0344 | 56.59 |
| 150F125-30 | 30 | 0.0312 | 0.0296 | 0.0784 | 0.525 | 1.500 | 0.1543 | 0.0503 | 0.571 | 0.0797 | 0.705 | 0.0503 | 0.0639 | 105.25 |

For SI: 1 inch = 25.4 mm, 1 lb/ft = 1.488 kg/m, 1 in-lb = 11.30 N-m.

I_x = Strong axis moment of inertia.
 r_x = Strong axis radius of gyration.
 I_y = Weak axis moment of inertia.
 r_y = Weak axis radius of gyration.
 S_x = Strong axis section modulus.

¹F_y = 33 ksi.

²Allowable moment is applicable for both positive and negative moments. Full lateral support of compression flanges must be provided.

³Use the effective moment of inertia for deflection calculations.

TABLE 7—C-SECTIONS (STUDS) FOR USE WITH THE IRC

| IRC MEMBER DESIGNATION | EQUIVALENT TELLING INDUSTRIES MEMBER DESIGNATION | | | |
|------------------------|--|-------------|-------------|-------------|
| | t = 33 | t = 43 | t = 54 | t = 68 |
| 350S162-t | 350S162-33 | 350S162-43 | 350S162-54 | 350S162-68 |
| | 350S200-33 | 350S200-43 | 350S200-54 | 350S200-68 |
| 550S162-t | 550S162-33 | 550S162-43 | 550S162-54 | 550S162-68 |
| | 550S200-33 | 550S200-43 | 550S200-54 | 550S200-68 |
| 800S162-t | 800S162-33 | 800S162-43 | 800S162-54 | 800S162-68 |
| | 800S200-33 | 800S200-43 | 800S200-54 | 800S200-68 |
| 1000S162-t | --- | 1000S162-43 | 1000S162-54 | 1000S162-68 |
| | --- | 1000S200-43 | 1000S200-54 | 1000S200-68 |
| 1200S162-t | --- | --- | 1200S162-54 | 1200S162-68 |
| | --- | --- | 1200S200-54 | 1200S200-68 |

TABLE 8—MANUFACTURING LOCATIONS

| | |
|--|---|
| Telling Industries Kingman, Arizona 86409 928-681-8409 | Telling Industries Osceola, Arkansas 72370 870-563-2597 |
| Telling Industries Cambridge, Ohio 43725 740-435-8900 | |

SECTION PROFILES

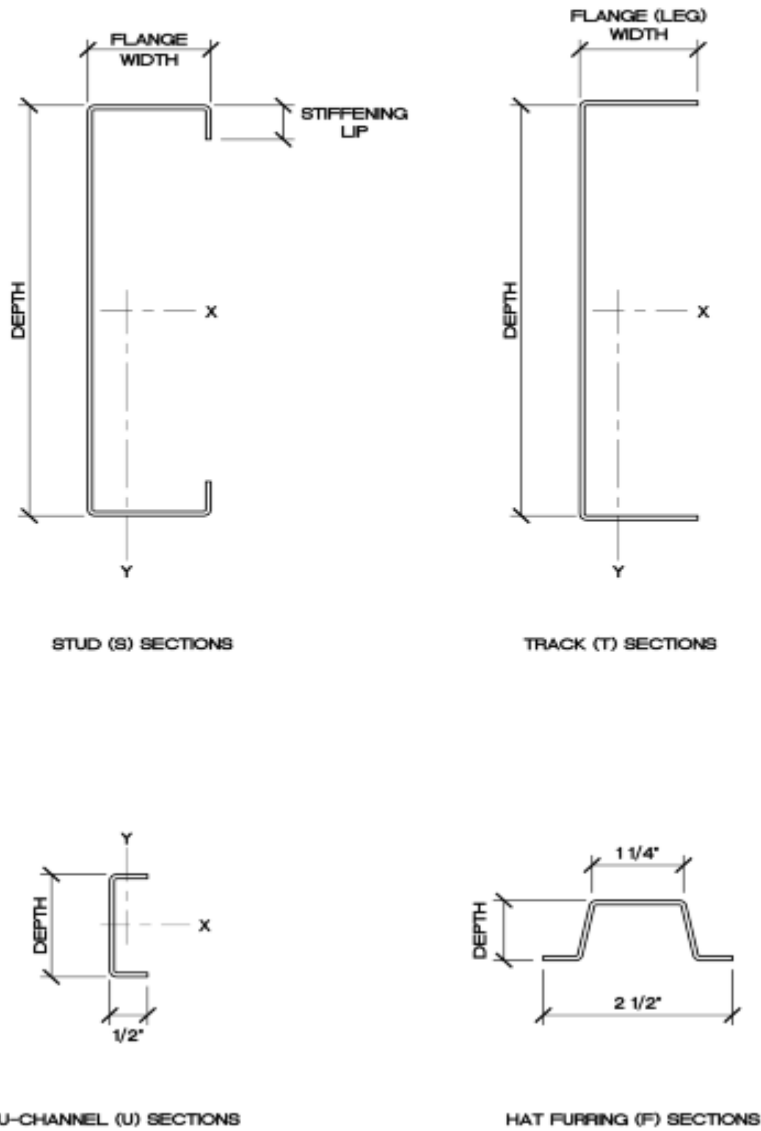
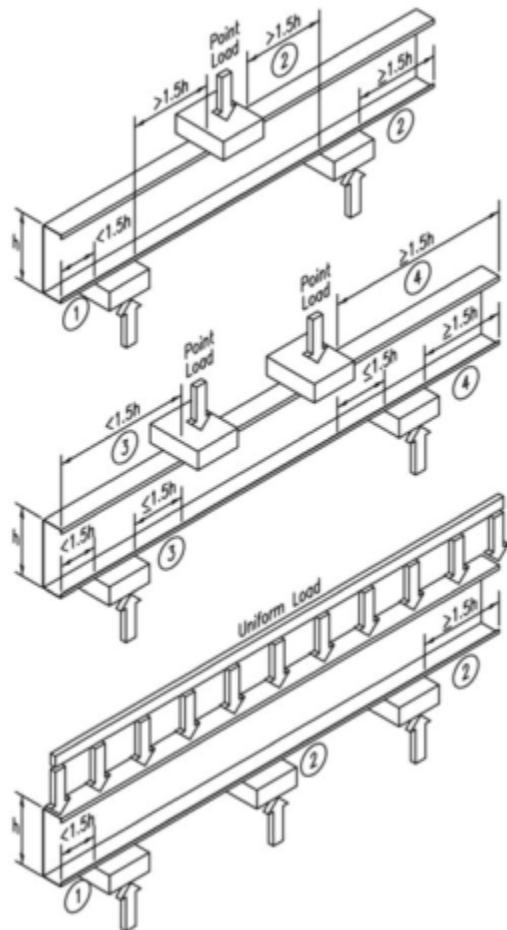
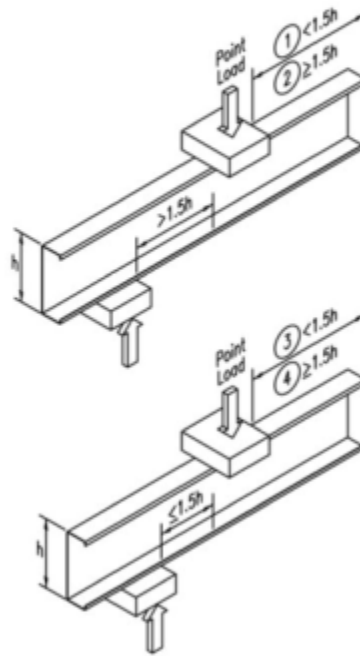


FIGURE 1—SECTION PROFILES



Web Crippling Load Table Notes:

1. Listed allowable loads apply only to members with stiffened flanges (i.e. S-sections).
2. For back-to-back members, the listed allowable loads are for the entire two-member assembly.
3. Listed allowable loads are based on members 'fastened to support', except back-to-back members under two-flange loading (conditions 3 and 4) for which data for 'fastened to support' is unavailable in the NASPEC.
4. For back-to-back members, the distance between the web connectors and the flange shall be kept to a minimum.
5. Listed allowable loads are for unpunched webs.

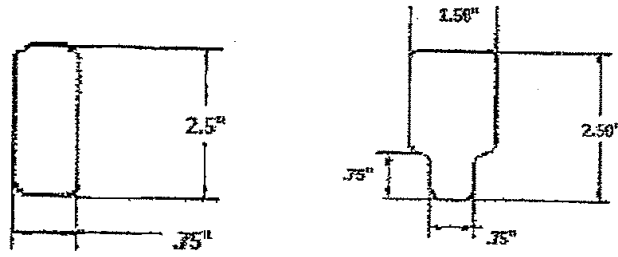


Web Crippling Conditions:

- ① Condition 1 - End One Flange Loading
- ② Condition 2 - Interior One Flange Loading
- ③ Condition 3 - End Two Flange Loading
- ④ Condition 4 - Interior Two Flange Loading

FIGURE 2—WEB CRIPPLING LOADING CONDITIONS

NON-LOAD BEARING KNOCKOUT SIZES



LOAD BEARING KNOCKOUT SIZES

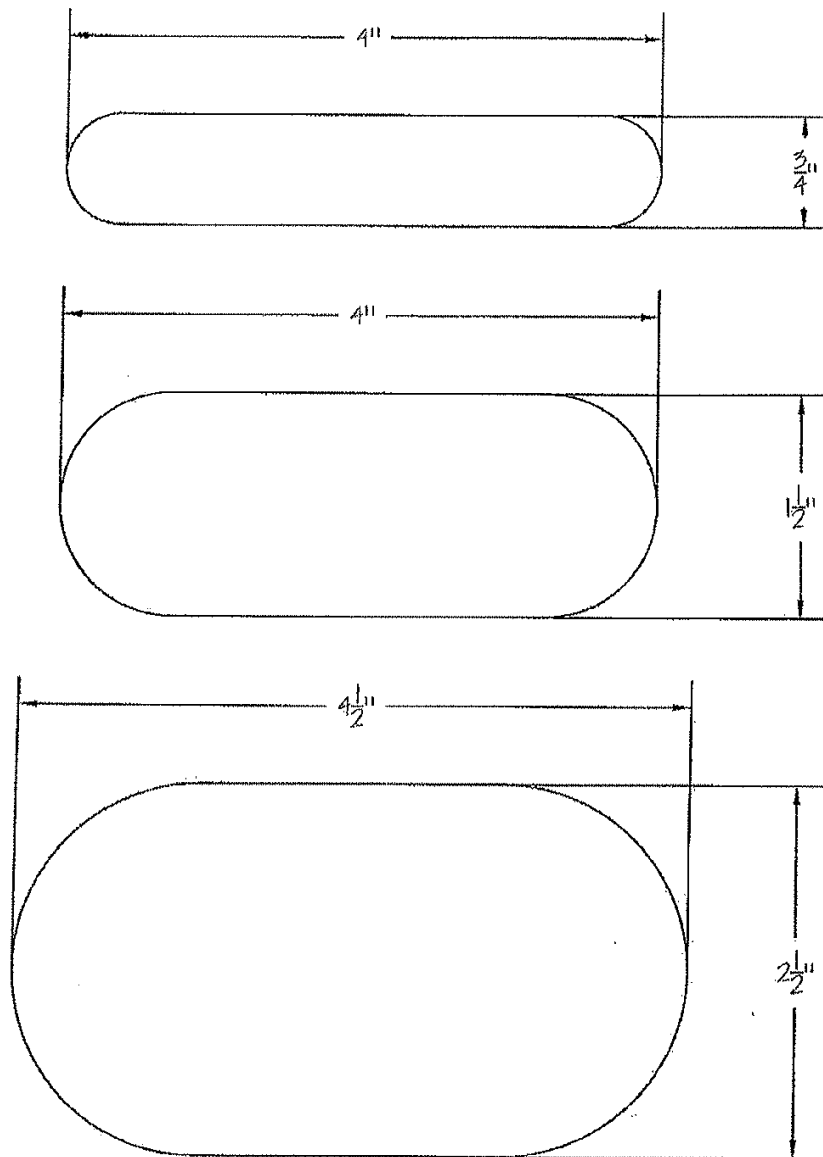


FIGURE 3—PUNCHOUTS