ICC-ES Evaluation Report

ESR-2457*

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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
Section: 05 42 00 Cold-Formed Metal Joist Framing

DIVISION: 09 00 00 FINISHES
Section: 09 22 16.13 Non-Structural Metal Stud Framing

REPORT HOLDER:

STEEL FRAMING INDUSTRY ASSOCIATION
513 WEST BROAD STREET, SUITE 210
FALLS CHURCH, VIRGINIA 22046
(703) 538-1601
www.steelframingassociation.org

ADDITIONAL LISTEE:

CLARKDIETRICH BUILDING SYSTEMS
9100 CENTRE POINTE DRIVE, SUITE 210
WEST CHESTER, OHIO 45069
www.clarkdietrich.com
michael.kerner@clarkdietrich.com

EVALUATION SUBJECT:

STANDARD LIGHT-GAUGE STEEL FRAMING MEMBERS

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

The steel framing members recognized in this report are used for framing of curtain walls, nonload-bearing interior walls, load-bearing walls, floors and roofs.

3.0 DESCRIPTION

3.1 General:

The framing members described in this report are factory-formed from coils of steel at the manufacturing facilities noted in Table 1.

The standard light-gauge steel framing members include C-sections (studs), tracks, and U-channels. See Tables 3, 4 and 8 and Figure 1 for recognized profiles, section names and design properties. The C-sections (studs) are manufactured with and without web punch-outs. All other framing members (tracks and U-channels) are manufactured without web punch-outs. When provided, punch-outs have a width between $^3/_4$ inch (19 mm) and $2^1/_2$ inches (64 mm) but in no case greater than one-half the member web depth (d/2); and a length between $1^1/_2$ (38 mm) and 4 inches (102 mm). The minimum spacing of punch-outs is 24 inches (610 mm) o.c. and the minimum distance between the end of the stud and the near edge of the web punch-out is 10 inches (254 mm). See Figure 2 for punch-out details. The values for studs in each of the tables in this report are for studs with punch-outs unless otherwise noted.

3.2 Material:

The framing members are cold-formed from steel coils complying with ASTM A1003 Structural Grade 50 Type H (ST50H), ASTM A1003 Structural Grade 33 Type H (ST33H) or ASTM A1003 Nonstructural Grade 33 (NS33). The coating is minimum G60, A60, AZ50, GF30, T1-25, T2-100 for ST50H and ST33H steel, and G40, A40, AZ50, GF30, T1-25, or T2-100 for NS33 steel in accordance with ASTM A1003-10. The base-metal thickness is specified in Tables 2 through 4.

4.0 DESIGN AND INSTALLATION

4.1 Design:

4.1.1 General: The section properties indicated in Tables 3B, 4B, and 8 have been determined in accordance with the North American Specification for Design of Cold-formed Steel Structural Members, including 2004 Supplement (AISI-NAS). The allowable moments, M_a, are for use with Allowable Stress 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. Allowable concentrated loads and reactions based on web crippling are shown in Tables 6 and 7. The design of flexural members must address combined bending and web crippling, and combined bending and shear, as applicable, in accordance with the AISI-NAS. As an alternate, nonload-bearing wall heights may be determined in accordance with Section 4.1.2.

4.1.2 Exterior Nonload-bearing Wall Heights: Allowable wall heights for exterior nonload-bearing walls are shown in Table 5. The allowable wall heights are based on the compression flange being continuously braced. The end reactions of the studs due to the applied transverse loads must not exceed the allowable loads based on web crippling.

4.1.3 Ceiling Spans: Allowable ceiling spans for U channels are shown in Table 8. The allowable spans are based on the compression flange being continuously braced.

4.1.4 IRC: C-sections (studs) listed in Table 9 and all tracks (except for the 162T100 series of tracks), when formed from ASTM A1003 ST33H or ASTM A1003 ST50H steel, meet the prescriptive requirements of the IRC. For use of all other sections under the IRC, the 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 construction documents and this report. If there is a conflict between the construction documents submitted for approval and this report, this report governs. The approved construction documents must be available on the jobsite at all times during installation. Use of framing members designated as ASTM A1003 NS33 is limited to interior nonload-bearing walls with transverse loads of 5 psf (239 Pa) or less.

5.0 CONDITIONS OF USE

The steel framing members described in this report comply with, or are suitable alternatives 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 framing members are installed in accordance with the code, the approved construction documents and this report.

5.2 Minimum uncoated base-metal thickness of the cold-formed steel members as delivered to the jobsite is at least 95 percent of the design base-metal thickness noted in Tables 3 and 4.

5.3 Complete construction documents 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 Cold-formed steel framing member end reactions resulting from allowable heights and loads, as noted in the tables of this report, must be less than the web crippling loads indicated in the tables.

5.5 No holes or punch-outs are permitted in the web of members with an h/t greater than 200.

5.6 Studs and tracks formed from steel complying with ASTM A1003 NS33 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 ICC-ES Acceptance Criteria for Cold-formed Steel Framing Members (AC46), dated February 2011.

7.0 IDENTIFICATION

At a spacing not exceeding 48 inches (1219 mm) on center, each light-gauge steel framing member is stamped with the SFIA member name or initials; the section name; the evaluation report number (ICC-ES ESR-2457); the minimum uncoated base-metal thickness in decimal inches or mils; the metallic coating designation; and the specified yield strength. Skids are also labeled with the plant number.

TABLE 1□ MANUFACTURING LOCATIONS

Plant No. 06 ClarkDietrich□ □Dallas Dallas, Texas 75220 214-350-1716	Plant No.18 ClarkDietrich□ □Bristol Bristol, Connecticut 06010 (866) 921-0023	Plant No. 60 ClarkDietrich□ □Baytown Baytown, Texas 77520 (281) 383-1617	Plant No. 63 ClarkDietrich□ □McDonough McDonough, Georgia 30253 (678) 304-5500
Plant No. 09 ClarkDietrich□ □Baltimore Baltimore, Maryland 21219 410-477-4000	Plant No. 50 Clark Dietrich□ □Riverside Riverside, California 92509 951-360-3500	Plant No. 61 ClarkDietrich□ □Hawaii Kapolei, Hawaii 96707 (808) 682-5747	Plant No. 64 ClarkDietrich□ □Warren East Warren, Ohio 44483 (330) 372-5564
Plant No. 15 ClarkDietrich□ □Rochelle Rochelle, Illinois 61068 (800) 659-0745	Plant No. 51 ClarkDietrich□ □Woodland Woodland, California 95776 (530) 668-1987	Plant No.62 ClarkDietrich□ □Lenexa Lenexa, Kansas 66219 (913) 599-2026	Plant No. 65 ClarkDietrich□ □Warren West Warren, Ohio 44483 (330) 372-4014
Plant No. 17 ClarkDietrich□ □Dade City Dade City, Florida 33523 352-518-4400			

TABLE 2□ MATERIAL THICKNESSES

THICKNESS DESIGNATION (mils)	DESIGN THICKNESS (in)	MINIMUM BASE-METAL THICKNESS[1] (in)
18	0.0188	0.0179
22	0.0232	0.0220
26	0.0274	0.0260
27	0.0283	0.0269
30	0.0312	0.0296
33	0.0346	0.0329
43	0.0451	0.0428
54	0.0566	0.0538
68	0.0713	0.0677
97	0.1017	0.0966
118	0.1242	0.1180

For **SI:** 1 inch = 25.4 mm.[1]Minimum base-metal thickness represents 95 percent of the design thickness and is the minimum acceptable thickness of the uncoated base-metal delivered to the jobsite.

TABLE 3A STANDARD C-SECTIONS

MEMBER	DESIGN THICK. (in)	GROSS AREA (in^2)	GROSS WEIGHT (lb/ft)	MEMBER DEPTH[2] (in)	FLANGE WIDTH (in)	LIP LENGTH (in)	INSIDE CORNER RADII (in)
162S125-18	0.0188	0.080	0.27	1.625	1.250	0.188	0.0843
162S125-27	0.0283	0.120	0.41	1.625	1.250	0.188	0.0796
162S125-30	0.0312	0.131	0.45	1.625	1.250	0.188	0.0781
250S125-18	0.0188	0.097	0.33	2.500	1.250	0.188	0.0843
250S125-27	0.0283	0.144	0.49	2.500	1.250	0.188	0.0796
250S125-30	0.0312	0.159	0.54	2.500	1.250	0.188	0.0781
250S125-33	0.0346	0.176	0.60	2.500	1.250	0.188	0.0764
250S125-43	0.0451	0.227	0.77	2.500	1.250	0.188	0.0712
250S125-54	0.0566	0.280	0.95	2.500	1.250	0.188	0.0849
250S125-68	0.0713	0.345	1.18	2.500	1.250	0.188	0.1069
250S162-27	0.0283	0.176	0.60	2.500	1.625	0.500	0.0796
250S162-30	0.0312	0.194	0.66	2.500	1.625	0.500	0.0781
250S162-33	0.0346	0.223	0.76	2.500	1.625	0.500	0.0764
250S162-43	0.0451	0.289	0.98	2.500	1.625	0.500	0.0712
250S162-54	0.0566	0.358	1.22	2.500	1.625	0.500	0.0849
250S162-68	0.0713	0.443	1.51	2.500	1.625	0.500	0.1069
350S162-33	0.0346	0.258	0.88	3.500	1.625	0.500	0.0764
350S162-43	0.0451	0.334	1.14	3.500	1.625	0.500	0.0712
350S162-54	0.0566	0.415	1.41	3.500	1.625	0.500	0.0849
350S162-68	0.0713	0.515	1.75	3.500	1.625	0.500	0.1069
362S125-18	0.0188	0.118	0.40	3.625	1.250	0.188	0.0843
362S125-27	0.0283	0.176	0.60	3.625	1.250	0.188	0.0796
362S125-30	0.0312	0.194	0.66	3.625	1.250	0.188	0.0781
362S125-33	0.0346	0.215	0.73	3.625	1.250	0.188	0.0764
362S125-43	0.0451	0.278	0.95	3.625	1.250	0.188	0.0712
362S125-54	0.0566	0.344	1.17	3.625	1.250	0.188	0.0849
362S125-68	0.0713	0.426	1.45	3.625	1.250	0.188	0.1069
362S125-97	0.1017	0.426	1.45	3.625	1.250	0.188	0.1525
362S125-118	0.1242	0.426	1.45	3.625	1.250	0.188	0.1863
362S137-27	0.0283	0.194	0.66	3.625	1.375	0.375	0.0796
362S137-30	0.0312	0.213	0.73	3.625	1.375	0.375	0.0781
362S137-33	0.0346	0.236	0.80	3.625	1.375	0.375	0.0764
362S137-43	0.0451	0.306	1.04	3.625	1.375	0.375	0.0712
362S137-54	0.0566	0.379	1.29	3.625	1.375	0.375	0.0849
362S137-68	0.0713	0.470	1.60	3.625	1.375	0.375	0.1069
362S137-97	0.1017	0.648	2.20	3.625	1.375	0.375	0.1525
362S137-118	0.1242	0.770	2.62	3.625	1.375	0.375	0.1863
362S162-27	0.0283	0.208	0.71	3.625	1.625	0.500	0.0796
362S162-30	0.0312	0.229	0.78	3.625	1.625	0.500	0.0781
362S162-33	0.0346	0.262	0.89	3.625	1.625	0.500	0.0764
362S162-43	0.0451	0.340	1.16	3.625	1.625	0.500	0.0712
362S162-54	0.0566	0.422	1.44	3.625	1.625	0.500	0.0849
362S162-68	0.0713	0.524	1.78	3.625	1.625	0.500	0.1069
362S162-97	0.1017	0.724	2.46	3.625	1.625	0.500	0.1525
362S162-118	0.1242	0.863	2.94	3.625	1.625	0.500	0.1863
362S200-30	0.0312	0.260	0.89	3.625	2.000	0.625	0.0781
362S200-33	0.0346	0.297	1.01	3.625	2.000	0.625	0.0764
362S200-43	0.0451	0.385	1.31	3.625	2.000	0.625	0.0712
362S200-54	0.0566	0.479	1.63	3.625	2.000	0.625	0.0849
362S200-68	0.0713	0.595	2.02	3.625	2.000	0.625	0.1069
362S200-97	0.1017	0.826	2.81	3.625	2.000	0.625	0.1525
362S200-118	0.1242	0.988	3.36	3.625	2.000	0.625	0.1863
362S250-43	0.0451	0.430	1.46	3.625	2.500	0.625	0.0712
362S250-54	0.0566	0.535	1.82	3.625	2.500	0.625	0.0849
362S250-68	0.0713	0.666	2.27	3.625	2.500	0.625	0.1069
362S250-97	0.1017	0.927	3.16	3.625	2.500	0.625	0.1525
362S250-118	0.1242	1.112	3.78	3.625	2.500	0.625	0.1863
362S300-54	0.0566	0.634	2.16	3.625	3.000	0.625	0.0849
362S300-68	0.0713	0.791	2.69	3.625	3.000	0.625	0.1069
362S300-97	0.1017	1.105	3.76	3.625	3.000	0.625	0.1525
362S300-118	0.1242	1.329	4.52	3.625	3.000	0.625	0.1863
400S125-18[1]	0.0188	0.125	0.42	4.000	1.250	0.188	0.0188
400S125-27	0.0283	0.187	0.64	4.000	1.250	0.188	0.0796
400S125-30	0.0312	0.206	0.70	4.000	1.250	0.188	0.0781
400S125-33	0.0346	0.228	0.77	4.000	1.250	0.188	0.0764
400S125-43	0.0451	0.295	1.00	4.000	1.250	0.188	0.0712
400S125-54	0.0566	0.365	1.24	4.000	1.250	0.188	0.0849
400S125-68	0.0713	0.452	1.54	4.000	1.250	0.188	0.1069
400S125-97	0.1017	0.452	1.54	4.000	1.250	0.188	0.1525
400S137-27	0.0283	0.204	0.70	4.000	1.375	0.375	0.0796
400S137-30	0.0312	0.225	0.77	4.000	1.375	0.375	0.0781
400S137-33	0.0346	0.249	0.85	4.000	1.375	0.375	0.0764
400S137-43	0.0451	0.323	1.10	4.000	1.375	0.375	0.0712
400S137-54	0.0566	0.401	1.36	4.000	1.375	0.375	0.0849
400S137-68	0.0713	0.497	1.69	4.000	1.375	0.375	0.1069
400S137-97	0.1017	0.686	2.33	4.000	1.375	0.375	0.1525
400S162-27	0.0283	0.219	0.74	4.000	1.625	0.500	0.0796
400S162-30	0.0312	0.241	0.82	4.000	1.625	0.500	0.0781
400S162-33	0.0346	0.275	0.94	4.000	1.625	0.500	0.0764
400S162-43	0.0451	0.357	1.21	4.000	1.625	0.500	0.0712
400S162-54	0.0566	0.443	1.51	4.000	1.625	0.500	0.0849
400S162-68	0.0713	0.550	1.87	4.000	1.625	0.500	0.1069
400S162-97	0.1017	0.762	2.59	4.000	1.625	0.500	0.1525
400S200-30	0.0312	0.272	0.93	4.000	2.000	0.625	0.0781
400S200-33	0.0346	0.310	1.05	4.000	2.000	0.625	0.0764
400S200-43	0.0451	0.402	1.37	4.000	2.000	0.625	0.0712
400S200-54	0.0566	0.500	1.70	4.000	2.000	0.625	0.0849
400S200-68	0.0713	0.622	2.12	4.000	2.000	0.625	0.1069
400S200-97	0.1017	0.864	2.94	4.000	2.000	0.625	0.1525

For **SI:** 1 inch = 25.4 mm.

TABLE 3A STANDARD C-SECTIONS (Continued)

MEMBER	DESIGN THICK. (in)	GROSS AREA (in^2)	GROSS WEIGHT (lb/ft)	MEMBER DEPTH[2] (in)	FLANGE WIDTH (in)	LIP LENGTH (in)	INSIDE CORNER RADII (in)
400S250-43	0.0451	0.447	1.52	4.000	2.500	0.625	0.0712
400S250-54	0.0566	0.556	1.89	4.000	2.500	0.625	0.0849
400S250-68	0.0713	0.693	2.36	4.000	2.500	0.625	0.1069
400S250-97	0.1017	0.966	3.29	4.000	2.500	0.625	0.1525
400S300-54	0.0566	0.655	2.23	4.000	3.000	0.625	0.0849
400S300-68	0.0713	0.818	2.78	4.000	3.000	0.625	0.1069
400S300-97	0.1017	1.144	3.89	4.000	3.000	0.625	0.1525
550S162-33	0.0346	0.327	1.11	5.500	1.625	0.500	0.0764
550S162-43	0.0451	0.424	1.44	5.500	1.625	0.500	0.0712
550S162-54	0.0566	0.528	1.80	5.500	1.625	0.500	0.0849
550S162-68	0.0713	0.657	2.24	5.500	1.625	0.500	0.1069
550S162-97	0.1017	0.915	3.11	5.500	1.625	0.500	0.1525
550S200-33	0.0346	0.362	1.23	5.500	2.000	0.625	0.0764
550S200-43	0.0451	0.469	1.60	5.500	2.000	0.625	0.0712
550S200-54	0.0566	0.585	1.99	5.500	2.000	0.625	0.0849
550S200-68	0.0713	0.729	2.48	5.500	2.000	0.625	0.1069
550S200-97	0.1017	1.016	3.46	5.500	2.000	0.625	0.1525
550S250-43	0.0451	0.515	1.75	5.500	2.500	0.625	0.0712
550S250-54	0.0566	0.641	2.18	5.500	2.500	0.625	0.0849
550S250-68	0.0713	0.800	2.72	5.500	2.500	0.625	0.1069
550S250-97	0.1017	1.118	3.80	5.500	2.500	0.625	0.1525
600S125-18[1]	0.0188	0.162	0.55	6.000	1.250	0.188	0.0843
600S125-27[1]	0.0283	0.243	0.83	6.000	1.250	0.188	0.0796
600S125-30	0.0312	0.268	0.91	6.000	1.250	0.188	0.0781
600S125-33	0.0346	0.297	1.01	6.000	1.250	0.188	0.0764
600S125-43	0.0451	0.385	1.31	6.000	1.250	0.188	0.0712
600S125-54	0.0566	0.479	1.63	6.000	1.250	0.188	0.0849
600S125-68	0.0713	0.595	2.02	6.000	1.250	0.188	0.1069
600S125-97	0.1017	0.595	2.02	6.000	1.250	0.188	0.1525
600S125-118	0.1242	0.595	2.02	6.000	1.250	0.188	0.1863
600S137-27[1]	0.0283	0.261	0.89	6.000	1.375	0.375	0.0796
600S137-30	0.0312	0.287	0.98	6.000	1.375	0.375	0.0781
600S137-33	0.0346	0.318	1.08	6.000	1.375	0.375	0.0764
600S137-43	0.0451	0.413	1.41	6.000	1.375	0.375	0.0712
600S137-54	0.0566	0.514	1.75	6.000	1.375	0.375	0.0849
600S137-68	0.0713	0.640	2.18	6.000	1.375	0.375	0.1069
600S137-97	0.1017	0.889	3.03	6.000	1.375	0.375	0.1525
600S137-118	0.1242	1.065	3.62	6.000	1.375	0.375	0.1863
600S162-27[1]	0.0283	0.275	0.94	6.000	1.625	0.500	0.0796
600S162-30	0.0312	0.303	1.03	6.000	1.625	0.500	0.0781
600S162-33	0.0346	0.344	1.17	6.000	1.625	0.500	0.0764
600S162-43	0.0451	0.447	1.52	6.000	1.625	0.500	0.0712
600S162-54	0.0566	0.556	1.89	6.000	1.625	0.500	0.0849
600S162-68	0.0713	0.693	2.36	6.000	1.625	0.500	0.1069
600S162-97	0.1017	0.966	3.29	6.000	1.625	0.500	0.1525
600S162-118	0.1242	1.158	3.94	6.000	1.625	0.500	0.1863
600S200-30	0.0312	0.334	1.14	6.000	2.000	0.625	0.0781
600S200-33	0.0346	0.379	1.29	6.000	2.000	0.625	0.0764
600S200-43	0.0451	0.492	1.67	6.000	2.000	0.625	0.0712
600S200-54	0.0566	0.613	2.09	6.000	2.000	0.625	0.0849
600S200-68	0.0713	0.764	2.60	6.000	2.000	0.625	0.1069
600S200-97	0.1017	1.067	3.63	6.000	2.000	0.625	0.1525
600S200-118	0.1242	1.283	4.36	6.000	2.000	0.625	0.1863
600S250-43	0.0451	0.537	1.83	6.000	2.500	0.625	0.0712
600S250-54	0.0566	0.670	2.28	6.000	2.500	0.625	0.0849
600S250-68	0.0713	0.836	2.84	6.000	2.500	0.625	0.1069
600S250-97	0.1017	1.169	3.98	6.000	2.500	0.625	0.1525
600S250-118	0.1242	1.407	4.79	6.000	2.500	0.625	0.1863
600S300-54	0.0566	0.769	2.62	6.000	3.000	0.625	0.0849
600S300-68	0.0713	0.960	3.27	6.000	3.000	0.625	0.1069
600S300-97	0.1017	1.347	4.58	6.000	3.000	0.625	0.1525
600S300-118	0.1242	1.624	5.53	6.000	3.000	0.625	0.1863
600S350-54	0.0566	0.825	2.81	6.000	3.500	1.000	0.0849
600S350-68	0.0713	1.032	3.51	6.000	3.500	1.000	0.1069
600S350-97	0.1017	1.449	4.93	6.000	3.500	1.000	0.1525
600S350-118	0.1242	1.748	5.95	6.000	3.500	1.000	0.1863
725S162-33[1]	0.0346	0.388	1.32	7.250	1.625	0.500	0.0764
725S162-43	0.0451	0.503	1.71	7.250	1.625	0.500	0.0712
725S162-54	0.0566	0.627	2.13	7.250	1.625	0.500	0.0849
725S162-68	0.0713	0.782	2.66	7.250	1.625	0.500	0.1069
725S162-97	0.1017	1.093	3.72	7.250	1.625	0.500	0.1525
725S200-33[1]	0.0346	0.422	1.44	7.250	2.000	0.625	0.0764
725S200-43	0.0451	0.548	1.87	7.250	2.000	0.625	0.0712
725S200-54	0.0566	0.684	2.33	7.250	2.000	0.625	0.0849
725S200-68	0.0713	0.853	2.90	7.250	2.000	0.625	0.1069
725S200-97	0.1017	1.194	4.06	7.250	2.000	0.625	0.1525
725S250-43	0.0451	0.593	2.02	7.250	2.500	0.625	0.0712
725S250-54	0.0566	0.740	2.52	7.250	2.500	0.625	0.0849
725S250-68	0.0713	0.925	3.15	7.250	2.500	0.625	0.1069
725S250-97	0.1017	1.296	4.41	7.250	2.500	0.625	0.1525
800S137-33[1]	0.0346	0.388	1.32	8.000	1.375	0.375	0.0764
800S137-43	0.0451	0.503	1.71	8.000	1.375	0.375	0.0712
800S137-54	0.0566	0.627	2.13	8.000	1.375	0.375	0.0849
800S137-68	0.0713	0.782	2.66	8.000	1.375	0.375	0.1069
800S137-97	0.1017	1.093	3.72	8.000	1.375	0.375	0.1525
800S137-118	0.1242	1.314	4.47	8.000	1.375	0.375	0.1863
800S162-33[1]	0.0346	0.413	1.41	8.000	1.625	0.500	0.0764
800S162-43	0.0451	0.537	1.83	8.000	1.625	0.500	0.0712
800S162-54	0.0566	0.670	2.28	8.000	1.625	0.500	0.0849
800S162-68	0.0713	0.836	2.84	8.000	1.625	0.500	0.1069
800S162-97	0.1017	1.169	3.98	8.000	1.625	0.500	0.1525
800S162-118	0.1242	1.407	4.79	8.000	1.625	0.500	0.1863

For **SI:** 1 Inch = 25.4 mm.

TABLE 3A□ STANDARD C-SECTIONS (Continued)

MEMBER	DESIGN THICK. (in)	GROSS AREA (in^2)	GROSS WEIGHT (lb/ft)	MEMBER DEPTH[2] (in)	FLANGE WIDTH (in)	LIP LENGTH (in)	INSIDE CORNER RADII (in)
800S200-33[1]	0.0346	0.448	1.52	8.000	2.000	0.625	0.0764
800S200-43	0.0451	0.582	1.98	8.000	2.000	0.625	0.0712
800S200-54	0.0566	0.726	2.47	8.000	2.000	0.625	0.0849
800S200-68	0.0713	0.907	3.09	8.000	2.000	0.625	0.1069
800S200-97	0.1017	1.271	4.32	8.000	2.000	0.625	0.1525
800S200-118	0.1242	1.531	5.21	8.000	2.000	0.625	0.1863
800S250-43	0.0451	0.627	2.13	8.000	2.500	0.625	0.0712
800S250-54	0.0566	0.783	2.66	8.000	2.500	0.625	0.0849
800S250-68	0.0713	0.978	3.33	8.000	2.500	0.625	0.1069
800S250-97	0.1017	1.372	4.67	8.000	2.500	0.625	0.1525
800S250-118	0.1242	1.655	5.63	8.000	2.500	0.625	0.1863
800S300-54	0.0566	0.882	3.00	8.000	3.000	0.625	0.0849
800S300-68	0.0713	1.103	3.75	8.000	3.000	0.625	0.1069
800S300-97	0.1017	1.550	5.28	8.000	3.000	0.625	0.1525
800S300-118	0.1242	1.873	6.37	8.000	3.000	0.625	0.1863
800S350-54	0.0566	0.938	3.19	8.000	3.500	1.000	0.0849
800S350-68	0.0713	1.174	4.00	8.000	3.500	1.000	0.1069
800S350-97	0.1017	1.652	5.62	8.000	3.500	1.000	0.1525
800S350-118	0.1242	1.997	6.79	8.000	3.500	1.000	0.1863
925S162-43	0.0451	0.593	2.02	9.250	1.625	0.500	0.0712
925S162-54	0.0566	0.740	2.52	9.250	1.625	0.500	0.0849
925S162-68	0.0713	0.925	3.15	9.250	1.625	0.500	0.1069
925S162-97	0.1017	1.296	4.41	9.250	1.625	0.500	0.1525
925S200-43	0.0451	0.639	2.17	9.250	2.000	0.625	0.0712
925S200-54	0.0566	0.797	2.71	9.250	2.000	0.625	0.0849
925S200-68	0.0713	0.996	3.39	9.250	2.000	0.625	0.1069
925S200-97	0.1017	1.398	4.76	9.250	2.000	0.625	0.1525
925S250-43	0.0451	0.684	2.33	9.250	2.500	0.625	0.0712
925S250-54	0.0566	0.853	2.90	9.250	2.500	0.625	0.0849
925S250-68	0.0713	1.067	3.63	9.250	2.500	0.625	0.1069
925S250-97	0.1017	1.499	5.10	9.250	2.500	0.625	0.1525
1000S162-43[1]	0.0451	0.627	2.13	10.000	1.625	0.500	0.0712
1000S162-54	0.0566	0.783	2.66	10.000	1.625	0.500	0.0849
1000S162-68	0.0713	0.978	3.33	10.000	1.625	0.500	0.1069
1000S162-97	0.1017	1.372	4.67	10.000	1.625	0.500	0.1525
1000S162-118	0.1242	1.655	5.63	10.000	1.625	0.500	0.1863
1000S200-43[1]	0.0451	0.672	2.29	10.000	2.000	0.625	0.0712
1000S200-54	0.0566	0.839	2.86	10.000	2.000	0.625	0.0849
1000S200-68	0.0713	1.050	3.57	10.000	2.000	0.625	0.1069
1000S200-97	0.1017	1.474	5.02	10.000	2.000	0.625	0.1525
1000S200-118	0.1242	1.779	6.05	10.000	2.000	0.625	0.1863
1000S250-43[1]	0.0451	0.717	2.44	10.000	2.500	0.625	0.0712
1000S250-54	0.0566	0.896	3.05	10.000	2.500	0.625	0.0849
1000S250-68	0.0713	1.121	3.81	10.000	2.500	0.625	0.1069
1000S250-97	0.1017	1.576	5.36	10.000	2.500	0.625	0.1525
1000S250-118	0.1242	1.904	6.48	10.000	2.500	0.625	0.1863

MEMBER	DESIGN THICK. (in)	GROSS AREA (in^2)	GROSS WEIGHT (lb/ft)	MEMBER DEPTH[2] (in)	FLANGE WIDTH (in)	LIP LENGTH (in)	INSIDE CORNER RADII (in)
1000S300-54	0.0566	0.995	3.39	10.000	3.000	0.625	0.0849
1000S300-68	0.0713	1.246	4.24	10.000	3.000	0.625	0.1069
1000S300-97	0.1017	1.754	5.97	10.000	3.000	0.625	0.1525
1000S300-118	0.1242	2.121	7.22	10.000	3.000	0.625	0.1863
1000S350-54	0.0566	1.052	3.58	10.000	3.500	1.000	0.0849
1000S350-68	0.0713	1.317	4.48	10.000	3.500	1.000	0.1069
1000S350-97	0.1017	1.855	6.31	10.000	3.500	1.000	0.1525
1000S350-118	0.1242	2.245	7.64	10.000	3.500	1.000	0.1863
1150S162-43[1]	0.0451	0.695	2.36	11.500	1.625	0.500	0.0712
1150S162-54	0.0566	0.868	2.95	11.500	1.625	0.500	0.0849
1150S162-68	0.0713	1.085	3.69	11.500	1.625	0.500	0.1069
1150S162-97	0.1017	1.525	5.19	11.500	1.625	0.500	0.1525
1150S200-43[1]	0.0451	0.740	2.52	11.500	2.000	0.625	0.0712
1150S200-54	0.0566	0.924	3.14	11.500	2.000	0.625	0.0849
1150S200-68	0.0713	1.156	3.94	11.500	2.000	0.625	0.1069
1150S200-97	0.1017	1.627	5.53	11.500	2.000	0.625	0.1525
1150S250-43[1]	0.0451	0.785	2.67	11.500	2.500	0.625	0.0712
1150S250-54	0.0566	0.981	3.34	11.500	2.500	0.625	0.0849
1150S250-68	0.0713	1.228	4.18	11.500	2.500	0.625	0.1069
1150S250-97	0.1017	1.728	5.88	11.500	2.500	0.625	0.1525
1200S162-54[1]	0.0566	0.896	3.05	12.000	1.625	0.500	0.0849
1200S162-68	0.0713	1.121	3.81	12.000	1.625	0.500	0.1069
1200S162-97	0.1017	1.576	5.36	12.000	1.625	0.500	0.1525
1200S162-118	0.1242	1.904	6.48	12.000	1.625	0.500	0.1863
1200S200-54[1]	0.0566	0.953	3.24	12.000	2.000	0.625	0.0849
1200S200-68	0.0713	1.192	4.06	12.000	2.000	0.625	0.1069
1200S200-97	0.1017	1.677	5.71	12.000	2.000	0.625	0.1525
1200S200-118	0.1242	2.028	6.90	12.000	2.000	0.625	0.1863
1200S250-54[1]	0.0566	1.009	3.43	12.000	2.500	0.625	0.0849
1200S250-68	0.0713	1.263	4.30	12.000	2.500	0.625	0.1069
1200S250-97	0.1017	1.779	6.05	12.000	2.500	0.625	0.1525
1200S250-118	0.1242	2.152	7.32	12.000	2.500	0.625	0.1863
1200S300-54[1]	0.0566	1.108	3.77	12.000	3.000	0.625	0.0849
1200S300-68	0.0713	1.388	4.72	12.000	3.000	0.625	0.1069
1200S300-97	0.1017	1.957	6.66	12.000	3.000	0.625	0.1525
1200S300-118	0.1242	2.369	8.06	12.000	3.000	0.625	0.1863
1200S350-54[1]	0.0566	1.165	3.96	12.000	3.500	1.000	0.0849
1200S350-68	0.0713	1.460	4.97	12.000	3.500	1.000	0.1069
1200S350-97	0.1017	2.059	7.01	12.000	3.500	1.000	0.1525
1200S350-118	0.1242	2.494	8.48	12.000	3.500	1.000	0.1863
1350S162-54[1]	0.0566	0.981	3.34	13.500	1.625	0.500	0.0849
1350S162-68	0.0713	1.228	4.18	13.500	1.625	0.500	0.1069
1350S162-97	0.1017	1.728	5.88	13.500	1.625	0.500	0.1525
1350S162-118	0.1242	2.090	7.11	13.500	1.625	0.500	0.1863

For **SI:** 1 Inch = 25.4 mm.

TABLE 3A STANDARD C-SECTIONS (Continued)

MEMBER	DESIGN THICK. (in)	GROSS AREA (in^2)	GROSS WEIGHT (lb/ft)	MEMBER DEPTH[2] (in)	FLANGE WIDTH (in)	LIP LENGTH (in)	INSIDE CORNER RADII (in)
1350S200-54[1]	0.0566	1.037	3.53	13.500	2.000	0.625	0.0849
1350S200-68	0.0713	1.299	4.42	13.500	2.000	0.625	0.1069
1350S200-97	0.1017	1.830	6.23	13.500	2.000	0.625	0.1525
1350S200-118	0.1242	2.214	7.53	13.500	2.000	0.625	0.1863
1350S250-54[1]	0.0566	1.094	3.72	13.500	2.500	0.625	0.0849
1350S250-68	0.0713	1.370	4.66	13.500	2.500	0.625	0.1069
1350S250-97	0.1017	1.932	6.57	13.500	2.500	0.625	0.1525
1350S250-118	0.1242	2.338	7.96	13.500	2.500	0.625	0.1863
1350S300-54[1]	0.0566	1.193	4.06	13.500	3.000	0.625	0.0849
1350S300-68	0.0713	1.495	5.09	13.500	3.000	0.625	0.1069
1350S300-97	0.1017	2.110	7.18	13.500	3.000	0.625	0.1525
1350S300-118	0.1242	2.556	8.70	13.500	3.000	0.625	0.1863
1350S350-54[1]	0.0566	1.250	4.25	13.500	3.500	1.000	0.0849
1350S350-68	0.0713	1.566	5.33	13.500	3.500	1.000	0.1069
1350S350-97	0.1017	2.211	7.52	13.500	3.500	1.000	0.1525
1350S350-118	0.1242	2.680	9.12	13.500	3.500	1.000	0.1863
1400S162-54[1]	0.0566	1.009	3.43	14.000	1.625	0.500	0.0849
1400S162-68	0.0713	1.263	4.30	14.000	1.625	0.500	0.1069
1400S162-97	0.1017	1.779	6.05	14.000	1.625	0.500	0.1525
1400S162-118	0.1242	2.152	7.32	14.000	1.625	0.500	0.1863
1400S200-54[1]	0.0566	1.066	3.63	14.000	2.000	0.625	0.0849
1400S200-68	0.0713	1.335	4.54	14.000	2.000	0.625	0.1069
1400S200-97	0.1017	1.881	6.40	14.000	2.000	0.625	0.1525
1400S200-118	0.1242	2.276	7.75	14.000	2.000	0.625	0.1863
1400S250-54[1]	0.0566	1.122	3.82	14.000	2.500	0.625	0.0849
1400S250-68	0.0713	1.406	4.78	14.000	2.500	0.625	0.1069
1400S250-97	0.1017	1.983	6.75	14.000	2.500	0.625	0.1525
1400S250-118	0.1242	2.400	8.17	14.000	2.500	0.625	0.1863
1400S300-54[1]	0.0566	1.221	4.16	14.000	3.000	0.625	0.0849
1400S300-68	0.0713	1.531	5.21	14.000	3.000	0.625	0.1069
1400S300-97	0.1017	2.161	7.35	14.000	3.000	0.625	0.1525
1400S300-118	0.1242	2.618	8.91	14.000	3.000	0.625	0.1863
1400S350-54[1]	0.0566	1.278	4.35	14.000	3.500	1.000	0.0849
1400S350-68	0.0713	1.602	5.45	14.000	3.500	1.000	0.1069
1400S350-97	0.1017	2.262	7.70	14.000	3.500	1.000	0.1525
1400S350-118	0.1242	2.742	9.33	14.000	3.500	1.000	0.1863
1600S162-54[1]	0.0566	1.122	3.82	16.000	1.625	0.500	0.0849
1600S162-68[1]	0.0713	1.406	4.78	16.000	1.625	0.500	0.1069
1600S162-97	0.1017	1.983	6.75	16.000	1.625	0.500	0.1525
1600S162-118	0.1242	2.400	8.17	16.000	1.625	0.500	0.1863
1600S200-68[1]	0.0713	1.477	5.03	16.000	2.000	0.625	0.1069
1600S200-97	0.1017	2.084	7.09	16.000	2.000	0.625	0.1525
1600S200-118	0.1242	2.525	8.59	16.000	2.000	0.625	0.1863
1600S250-68[1]	0.0713	1.549	5.27	16.000	2.500	0.625	0.1069
1600S250-97	0.1017	2.186	7.44	16.000	2.500	0.625	0.1525
1600S250-118	0.1242	2.649	9.01	16.000	2.500	0.625	0.1863
1600S300-68[1]	0.0713	1.673	5.69	16.000	3.000	0.625	0.1069
1600S300-97	0.1017	2.364	8.04	16.000	3.000	0.625	0.1525
1600S300-118	0.1242	2.866	9.75	16.000	3.000	0.625	0.1863
1600S350-68[1]	0.0713	1.745	5.94	16.000	3.500	1.000	0.1069
1600S350-97	0.1017	2.466	8.39	16.000	3.500	1.000	0.1525
1600S350-118	0.1242	2.990	10.18	16.000	3.500	1.000	0.1863

For **SI:** 1 Inch = 25.4 mm.

[1]Web-height to thickness ratio exceeds 200. Web stiffeners are required in accordance with AISI-NAS Section B1.2 and C3.6.1. No holes or punchouts are allowed in the web.
[2]Member depth measured from outside face to outside face of flanges.

TABLE 3B□ STANDARD C-SECTION DESIGN PROPERTIES

Member	Gross Properties[2]					Effective Properties 33 ksi					Effective Properties 50 ksi					Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix^3 (in^4)	Sx (in^3)	Ma^4 (in-k)	Vag (lb)	Vanet (lb)	Ix^3 (in^4)	Sx (in^3)	Ma^4 (in-k)	Vag (lb)	Vanet (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
162S125-18	0.038	0.046	0.686	0.016	0.447	0.034	0.031	0.61	302	100	0.032	0.027	0.81	372	123	0.009	0.009	-1.029	0.594	1.315	0.388
162S125-27	0.056	0.068	0.682	0.023	0.443	0.055	0.053	1.05	494	106	0.052	0.047	1.42	748	161	0.032	0.013	-1.017	0.587	1.302	0.390
162S125-30	0.061	0.075	0.681	0.026	0.441	0.060	0.060	1.19	543	106	0.058	0.054	1.62	823	160	0.043	0.014	-1.014	0.585	1.298	0.390
250S125-18	0.099	0.079	1.014	0.019	0.439	0.089	0.059	1.17	258	196	0.085	0.053	1.57	258	196	0.011	0.023	-0.904	0.543	1.427	0.599
250S125-27	0.147	0.118	1.009	0.027	0.434	0.144	0.097	1.92	685	344	0.135	0.090	2.70	843	423	0.039	0.034	-0.893	0.536	1.416	0.602
250S125-30	0.161	0.129	1.008	0.030	0.433	0.159	0.110	2.17	832	378	0.151	0.101	3.03	1024	466	0.052	0.037	-0.889	0.534	1.412	0.603
250S125-33	0.178	0.142	1.006	0.033	0.431	0.175	0.125	2.48	975	399	0.171	0.115	3.44	1260	515	0.070	0.040	-0.885	0.532	1.408	0.605
250S125-43	0.228	0.182	1.001	0.041	0.426	0.225	0.177	3.49	1265	394	0.224	0.159	4.77	1917	597	0.154	0.050	-0.873	0.525	1.396	0.608
250S125-54	0.277	0.222	0.994	0.049	0.419	0.277	0.218	4.98	1553	373	0.274	0.209	6.25	2353	565	0.299	0.060	-0.859	0.518	1.379	0.612
250S125-68	0.334	0.267	0.984	0.057	0.408	0.334	0.266	6.30	1891	342	0.334	0.262	7.84	2866	519	0.585	0.072	-0.839	0.508	1.356	0.617
250S162-27	0.189	0.152	1.037	0.065	0.607	0.188	0.128	2.53	685	344	0.177	0.116	3.48	843	423	0.047	0.094	-1.381	0.807	1.830	0.431
250S162-30	0.208	0.166	1.036	0.071	0.606	0.208	0.143	2.82	832	378	0.196	0.130	3.89	1024	466	0.063	0.103	-1.377	0.805	1.827	0.432
250S162-33	0.235	0.188	1.027	0.087	0.624	0.235	0.180	3.55	975	399	0.235	0.164	4.91	1260	515	0.089	0.146	-1.470	0.859	1.898	0.401
250S162-43	0.302	0.242	1.022	0.111	0.620	0.302	0.240	5.22	1265	394	0.302	0.217	6.50	1917	597	0.196	0.184	-1.457	0.852	1.885	0.402
250S162-54	0.370	0.296	1.016	0.135	0.613	0.370	0.296	6.57	1553	373	0.370	0.284	9.42	2353	565	0.383	0.223	-1.443	0.845	1.868	0.403
250S162-68	0.450	0.360	1.007	0.162	0.605	0.450	0.360	8.21	1891	342	0.450	0.357	12.11	2866	519	0.752	0.268	-1.424	0.835	1.846	0.405
350S162-33	0.508	0.290	1.404	0.098	0.617	0.508	0.257	5.08	1024	487	0.508	0.227	6.78	1125	535	0.103	0.277	-1.324	0.796	2.026	0.573
350S162-43	0.654	0.374	1.400	0.125	0.612	0.654	0.357	7.05	1739	631	0.654	0.309	9.25	2141	777	0.227	0.350	-1.312	0.789	2.014	0.575
350S162-54	0.804	0.460	1.392	0.152	0.606	0.804	0.447	8.83	2253	633	0.804	0.426	12.74	3372	947	0.443	0.426	-1.298	0.782	1.998	0.578
350S162-68	0.985	0.563	1.383	0.184	0.597	0.985	0.551	12.56	2774	592	0.985	0.549	16.44	4202	897	0.872	0.514	-1.280	0.772	1.977	0.581
362S125-18	0.234	0.129	1.409	0.021	0.421	0.221	0.075	1.48	173	163	0.212	0.065	1.96	173	163	0.014	0.054	-0.786	0.490	1.667	0.778
362S125-27	0.347	0.192	1.404	0.031	0.416	0.342	0.135	2.67	592	370	0.334	0.119	3.55	592	370	0.047	0.079	-0.776	0.484	1.657	0.781
362S125-30	0.381	0.210	1.402	0.033	0.415	0.376	0.156	3.08	794	449	0.372	0.137	4.09	794	449	0.063	0.086	-0.773	0.482	1.654	0.782
362S125-33	0.421	0.232	1.400	0.037	0.413	0.415	0.182	3.59	1024	521	0.414	0.159	4.75	1083	552	0.086	0.094	-0.769	0.480	1.650	0.783
362S125-43	0.540	0.298	1.395	0.046	0.408	0.537	0.269	5.31	1739	676	0.533	0.234	7.00	2141	832	0.188	0.118	-0.758	0.473	1.639	0.786
362S125-54	0.661	0.365	1.386	0.055	0.400	0.661	0.343	6.78	2341	705	0.656	0.321	9.62	3372	1016	0.367	0.142	-0.744	0.466	1.623	0.790
362S125-68	0.803	0.443	1.374	0.065	0.389	0.802	0.430	8.51	2884	662	0.802	0.418	12.52	4370	1004	0.721	0.169	-0.726	0.457	1.602	0.795
362S125-97	0.803	0.443	1.374	0.065	0.389	0.802	0.418	12.52	4370	1004	0.802	0.418	12.52	4370	1004	0.721	0.169	-0.726	0.457	1.602	0.795
362S125-118	0.803	0.443	1.374	0.065	0.389	0.802	0.418	12.52	4370	1004	0.802	0.418	12.52	4370	1004	0.721	0.169	-0.726	0.457	1.602	0.795
362S137-27	0.395	0.218	1.427	0.049	0.504	0.395	0.174	3.44	592	370	0.395	0.153	4.58	592	370	0.052	0.137	-1.010	0.619	1.820	0.692
362S137-30	0.434	0.239	1.426	0.054	0.503	0.434	0.198	3.91	794	449	0.434	0.173	5.18	794	449	0.069	0.150	-1.007	0.617	1.816	0.693
362S137-33	0.479	0.264	1.424	0.059	0.501	0.479	0.232	4.59	1024	521	0.479	0.198	5.92	1083	552	0.094	0.165	-1.003	0.615	1.813	0.694
362S137-43	0.616	0.340	1.419	0.075	0.497	0.616	0.320	6.32	1739	676	0.616	0.292	8.73	2141	832	0.207	0.208	-0.991	0.608	1.801	0.697
362S137-54	0.756	0.417	1.411	0.091	0.490	0.756	0.402	7.94	2341	705	0.756	0.381	11.42	3372	1016	0.405	0.251	-0.978	0.601	1.785	0.700
362S137-68	0.922	0.509	1.401	0.109	0.480	0.922	0.498	9.84	2884	662	0.922	0.493	14.77	4370	1004	0.797	0.302	-0.959	0.592	1.764	0.704
362S137-97	1.229	0.678	1.377	0.137	0.460	1.229	0.662	16.36	3922	577	1.229	0.662	24.10	5943	875	2.233	0.390	-0.922	0.573	1.720	0.713
362S137-118	1.423	0.785	1.359	0.152	0.444	1.423	0.766	19.67	4617	518	1.423	0.766	28.86	6996	784	3.961	0.443	-0.894	0.558	1.686	0.719
362S162-27	0.441	0.243	1.455	0.074	0.596	0.441	0.181	3.57	592	370	0.425	0.157	4.70	592	370	0.056	0.203	-1.227	0.740	1.994	0.622
362S162-30	0.484	0.267	1.454	0.081	0.594	0.484	0.205	4.04	794	449	0.474	0.179	5.35	794	449	0.074	0.222	-1.223	0.739	1.991	0.623
362S162-33	0.551	0.304	1.450	0.099	0.616	0.551	0.268	5.29	1024	521	0.551	0.236	7.05	1083	552	0.105	0.297	-1.308	0.789	2.048	0.592
362S162-43	0.710	0.392	1.445	0.127	0.611	0.710	0.372	7.34	1739	676	0.710	0.321	9.62	2141	832	0.230	0.376	-1.297	0.782	2.036	0.594
362S162-54	0.873	0.481	1.438	0.154	0.604	0.873	0.466	9.22	2341	705	0.873	0.444	13.28	3372	1016	0.451	0.457	-1.283	0.774	2.020	0.597
362S162-68	1.069	0.590	1.429	0.186	0.596	1.069	0.579	11.43	2884	662	1.069	0.574	17.18	4370	1004	0.887	0.552	-1.264	0.765	1.998	0.600
362S162-97	1.435	0.792	1.408	0.241	0.577	1.435	0.776	18.62	3922	577	1.435	0.776	27.52	5943	875	2.496	0.723	-1.226	0.745	1.954	0.606
362S162-118	1.672	0.923	1.392	0.273	0.562	1.672	0.903	22.45	4617	518	1.672	0.903	33.05	6996	784	4.440	0.827	-1.198	0.731	1.920	0.611

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

TABLE 3B□ STANDARD C-SECTION DESIGN PROPERTIES (Continued)

Member	Gross Properties[2]					Effective Properties 33 ksi					Effective Properties 50 ksi					Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix^3 (in^4)	Sx (in^3)	Ma^4 (in-k)	Vag (lb)	Vanet (lb)	Ix^3 (in^4)	Sx (in^3)	Ma^4 (in-k)	Vag (lb)	Vanet (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
362S200-30	0.575	0.317	1.486	0.148	0.753	0.570	0.248	4.89	794	449	0.554	0.213	6.38	794	449	0.084	0.437	-1.652	0.978	2.347	0.504
362S200-33	0.648	0.358	1.478	0.177	0.772	0.647	0.294	5.81	1024	521	0.628	0.261	7.82	1083	552	0.118	0.577	-1.741	1.030	2.411	0.478
362S200-43	0.836	0.461	1.474	0.227	0.767	0.836	0.427	8.43	1739	676	0.836	0.377	11.29	2141	832	0.261	0.734	-1.729	1.024	2.398	0.480
362S200-54	1.030	0.568	1.467	0.277	0.761	1.030	0.553	10.93	2341	705	1.030	0.490	14.66	3372	1016	0.511	0.896	-1.715	1.016	2.382	0.482
362S200-68	1.265	0.698	1.458	0.337	0.753	1.265	0.687	15.29	2884	662	1.265	0.666	19.95	4370	1004	1.008	1.089	-1.696	1.006	2.360	0.484
362S200-97	1.711	0.944	1.440	0.446	0.735	1.711	0.928	21.59	3922	577	1.711	0.928	32.03	5943	875	2.847	1.441	-1.658	0.986	2.315	0.487
362S200-118	2.006	1.107	1.425	0.513	0.721	2.006	1.088	26.07	4617	518	2.006	1.088	38.54	6996	784	5.078	1.664	-1.629	0.971	2.281	0.490
362S250-43	0.980	0.541	1.510	0.385	0.946	0.980	0.449	8.88	1739	676	0.958	0.390	11.69	2141	832	0.292	1.230	-2.199	1.277	2.830	0.396
362S250-54	1.210	0.668	1.504	0.473	0.940	1.210	0.582	11.51	2341	705	1.205	0.514	15.40	3372	1016	0.571	1.506	-2.184	1.269	2.813	0.397
362S250-68	1.490	0.822	1.496	0.578	0.931	1.490	0.774	16.85	2884	662	1.490	0.689	20.63	4370	1004	1.129	1.837	-2.165	1.259	2.791	0.398
362S250-97	2.027	1.118	1.478	0.772	0.912	2.027	1.100	24.85	3922	577	2.027	1.046	35.17	5943	875	3.197	2.452	-2.126	1.239	2.746	0.400
362S250-118	2.387	1.317	1.465	0.897	0.898	2.387	1.298	30.07	4617	518	2.387	1.258	43.29	6996	784	5.717	2.849	-2.097	1.224	2.711	0.402
362S300-54	1.433	0.791	1.503	0.863	1.166	1.433	0.693	13.69	2341	705	1.388	0.624	18.67	3372	1016	0.677	3.829	-2.953	1.695	3.513	0.293
362S300-68	1.770	0.976	1.496	1.062	1.158	1.770	0.948	18.73	2884	662	1.770	0.863	25.83	4370	1004	1.341	4.695	-2.935	1.685	3.492	0.294
362S300-97	2.420	1.335	1.480	1.440	1.141	2.420	1.319	29.20	3922	577	2.420	1.288	42.55	5943	875	3.811	6.329	-2.897	1.665	3.448	0.294
362S300-118	2.862	1.579	1.467	1.693	1.129	2.862	1.560	35.30	4617	518	2.862	1.560	52.55	6996	784	6.834	7.409	-2.870	1.650	3.415	0.294
400S125-18[1]	0.294	0.147	1.536	0.021	0.414	0.281	0.083	1.64	156	156	0.269	0.072	2.17	156	156	0.015	0.068	-0.754	0.475	1.760	0.816
400S125-27	0.438	0.219	1.531	0.031	0.410	0.431	0.151	2.97	533	398	0.423	0.132	3.95	533	398	0.050	0.098	-0.744	0.469	1.751	0.819
400S125-30	0.481	0.240	1.529	0.034	0.408	0.474	0.174	3.44	715	484	0.472	0.152	4.56	715	484	0.067	0.107	-0.741	0.467	1.748	0.820
400S125-33	0.531	0.265	1.527	0.038	0.407	0.524	0.203	4.01	976	595	0.522	0.177	5.30	976	595	0.091	0.118	-0.738	0.465	1.744	0.821
400S125-43	0.682	0.341	1.521	0.048	0.402	0.680	0.301	5.96	1739	810	0.673	0.261	7.83	2141	997	0.200	0.148	-0.727	0.459	1.733	0.824
400S125-54	0.835	0.418	1.512	0.057	0.394	0.835	0.387	7.65	2603	944	0.830	0.361	10.81	3372	1223	0.390	0.178	-0.713	0.451	1.718	0.828
400S125-68	1.017	0.509	1.499	0.066	0.383	1.015	0.492	9.72	3215	895	1.015	0.474	14.18	4871	1356	0.767	0.213	-0.695	0.442	1.696	0.832
400S125-97	1.017	0.509	1.499	0.066	0.383	1.015	0.474	14.18	4871	1356	1.015	0.474	14.18	4871	1356	0.767	0.213	-0.695	0.442	1.696	0.832
400S137-27	0.497	0.248	1.559	0.051	0.498	0.497	0.194	3.83	533	398	0.497	0.170	5.09	533	398	0.055	0.170	-0.972	0.601	1.903	0.739
400S137-30	0.546	0.273	1.557	0.056	0.497	0.546	0.220	4.36	715	484	0.546	0.192	5.76	715	484	0.073	0.186	-0.969	0.599	1.900	0.740
400S137-33	0.603	0.301	1.556	0.061	0.496	0.603	0.259	5.12	976	595	0.603	0.220	6.59	976	595	0.099	0.204	-0.965	0.597	1.897	0.741
400S137-43	0.776	0.388	1.551	0.078	0.491	0.776	0.359	7.09	1739	810	0.776	0.326	9.75	2141	997	0.219	0.257	-0.954	0.591	1.885	0.744
400S137-54	0.953	0.477	1.542	0.094	0.484	0.953	0.453	8.96	2603	944	0.953	0.428	12.82	3372	1223	0.428	0.311	-0.940	0.583	1.870	0.747
400S137-68	1.165	0.582	1.531	0.112	0.475	1.165	0.567	11.21	3215	895	1.165	0.558	16.70	4871	1356	0.842	0.375	-0.922	0.574	1.849	0.751
400S137-97	1.557	0.779	1.507	0.142	0.454	1.557	0.764	18.88	4394	797	1.557	0.764	27.81	6658	1207	2.365	0.486	-0.885	0.555	1.806	0.760
400S162-27	0.553	0.276	1.590	0.076	0.590	0.553	0.201	3.97	533	398	0.534	0.174	5.22	533	398	0.058	0.251	-1.184	0.721	2.068	0.672
400S162-30	0.607	0.304	1.589	0.083	0.589	0.607	0.228	4.50	715	484	0.599	0.199	5.95	715	484	0.078	0.274	-1.180	0.719	2.065	0.673
400S162-33	0.692	0.346	1.586	0.103	0.611	0.692	0.299	5.91	976	595	0.692	0.262	7.86	976	595	0.110	0.363	-1.263	0.768	2.118	0.644
400S162-43	0.892	0.446	1.581	0.131	0.606	0.892	0.417	8.23	1739	810	0.892	0.359	10.75	2141	997	0.242	0.460	-1.252	0.761	2.106	0.647
400S162-54	1.098	0.549	1.574	0.159	0.600	1.098	0.526	10.39	2603	944	1.098	0.498	14.90	3372	1223	0.473	0.560	-1.238	0.754	2.090	0.649
400S162-68	1.346	0.673	1.564	0.192	0.591	1.346	0.658	13.00	3215	895	1.346	0.648	19.41	4871	1356	0.933	0.677	-1.220	0.745	2.069	0.653
400S162-97	1.812	0.906	1.542	0.249	0.572	1.812	0.892	21.40	4394	797	1.812	0.892	31.64	6658	1207	2.628	0.889	-1.182	0.725	2.025	0.659
400S200-30	0.719	0.359	1.626	0.153	0.749	0.714	0.276	5.46	715	484	0.695	0.237	7.09	715	484	0.088	0.534	-1.601	0.956	2.402	0.556
400S200-33	0.812	0.406	1.619	0.183	0.769	0.812	0.328	6.49	976	595	0.789	0.291	8.71	976	595	0.124	0.697	-1.688	1.007	2.462	0.530
400S200-43	1.047	0.524	1.615	0.235	0.764	1.047	0.478	9.45	1739	810	1.047	0.422	12.63	2141	997	0.272	0.886	-1.676	1.000	2.449	0.532
400S200-54	1.292	0.646	1.608	0.287	0.758	1.292	0.623	12.30	2603	944	1.292	0.549	16.43	3372	1223	0.534	1.083	-1.662	0.993	2.433	0.534
400S200-68	1.589	0.795	1.599	0.349	0.750	1.589	0.780	15.40	3215	895	1.589	0.751	22.48	4871	1356	1.054	1.318	-1.643	0.983	2.412	0.536
400S200-97	2.155	1.077	1.579	0.462	0.731	2.155	1.063	24.72	4394	797	2.155	1.063	36.68	6658	1207	2.978	1.749	-1.605	0.963	2.368	0.540

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

TABLE 3B□ STANDARD C-SECTION DESIGN PROPERTIES (Continued)

Member	Gross Properties[2]					Effective Properties 33 ksi					Effective Properties 50 ksi					Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix^3 (in^4)	Sx (in^3)	Ma^4 (in-k)	Vag (lb)	Vanet (lb)	Ix^3 (in^4)	Sx (in^3)	Ma^4 (in-k)	Vag (lb)	Vanet (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
400S250-43	1.224	0.612	1.655	0.399	0.945	1.224	0.503	9.93	1739	810	1.199	0.436	13.05	2141	997	0.303	1.486	-2.139	1.252	2.864	0.443
400S250-54	1.512	0.756	1.649	0.490	0.938	1.512	0.653	12.90	2603	944	1.506	0.576	17.24	3372	1223	0.594	1.821	-2.124	1.244	2.848	0.444
400S250-68	1.864	0.932	1.640	0.599	0.929	1.864	0.883	17.45	3215	895	1.864	0.775	23.19	4871	1356	1.174	2.225	-2.105	1.235	2.826	0.445
400S250-97	2.541	1.271	1.622	0.801	0.911	2.541	1.253	28.31	4394	797	2.541	1.191	40.06	6658	1207	3.329	2.978	-2.066	1.214	2.780	0.448
400S300-54	1.792	0.896	1.654	0.895	1.169	1.792	0.781	15.43	2603	944	1.740	0.700	20.97	3372	1223	0.700	4.461	-2.886	1.668	3.525	0.330
400S300-68	2.215	1.108	1.646	1.102	1.161	2.215	1.073	21.21	3215	895	2.215	0.973	29.13	4871	1356	1.386	5.475	-2.868	1.659	3.504	0.330
400S300-97	3.036	1.518	1.629	1.496	1.144	3.036	1.504	33.29	4394	797	3.036	1.465	48.40	6658	1207	3.942	7.395	-2.830	1.638	3.460	0.331
550S162-33	1.458	0.530	2.112	0.113	0.589	1.458	0.512	10.11	699	699	1.458	0.443	13.26	699	699	0.130	0.713	-1.114	0.697	2.459	0.795
550S162-43	1.883	0.685	2.107	0.145	0.584	1.883	0.681	14.79	1550	1199	1.883	0.624	18.69	1550	1199	0.288	0.905	-1.103	0.691	2.448	0.797
550S162-54	2.324	0.845	2.098	0.176	0.577	2.324	0.845	18.76	2739	1666	2.324	0.811	26.86	3093	1881	0.564	1.105	-1.090	0.684	2.434	0.800
550S162-68	2.861	1.040	2.086	0.212	0.568	2.861	1.040	23.72	4347	2057	2.861	1.031	34.94	5350	2532	1.114	1.342	-1.072	0.675	2.414	0.803
550S162-97	3.886	1.413	2.061	0.276	0.549	3.886	1.413	33.91	6282	1997	3.886	1.413	50.13	9518	3026	3.154	1.775	-1.037	0.656	2.372	0.809
550S200-33	1.694	0.616	2.164	0.204	0.751	1.678	0.559	11.05	699	699	1.638	0.481	14.40	699	699	0.144	1.326	-1.508	0.925	2.742	0.698
550S200-43	2.189	0.796	2.159	0.261	0.746	2.189	0.776	15.33	1550	1199	2.189	0.717	21.45	1550	1199	0.318	1.691	-1.496	0.918	2.731	0.700
550S200-54	2.706	0.984	2.152	0.320	0.739	2.706	0.984	21.41	2739	1666	2.706	0.901	26.98	3093	1881	0.624	2.072	-1.483	0.911	2.716	0.702
550S200-68	3.341	1.215	2.141	0.389	0.731	3.341	1.215	27.03	4347	2057	3.341	1.170	38.83	5350	2532	1.235	2.531	-1.465	0.902	2.695	0.705
550S200-97	4.563	1.659	2.119	0.515	0.712	4.563	1.659	38.58	6282	1997	4.563	1.659	57.25	9518	3026	3.504	3.384	-1.428	0.882	2.652	0.710
550S250-43	2.524	0.918	2.215	0.445	0.930	2.524	0.817	16.15	1550	1199	2.427	0.746	22.34	1550	1199	0.349	2.837	-1.933	1.163	3.083	0.607
550S250-54	3.126	1.137	2.208	0.547	0.923	3.126	1.033	20.40	2739	1666	3.084	0.950	28.44	3093	1881	0.685	3.486	-1.919	1.155	3.067	0.609
550S250-68	3.866	1.406	2.198	0.669	0.914	3.866	1.345	29.28	4347	2057	3.864	1.233	36.91	5350	2532	1.356	4.274	-1.900	1.146	3.046	0.611
550S250-97	5.304	1.929	2.178	0.897	0.895	5.304	1.925	43.47	6282	1997	5.304	1.837	61.77	9518	3026	3.855	5.761	-1.862	1.126	3.002	0.615
600S125-27[1]	1.160	0.387	2.183	0.035	0.377	1.097	0.271	5.35	349	349	1.020	0.235	7.04	349	349	0.065	0.251	-0.614	0.402	2.299	0.929
600S125-30	1.275	0.425	2.181	0.038	0.376	1.218	0.315	6.22	468	468	1.161	0.273	8.18	468	468	0.087	0.274	-0.611	0.401	2.296	0.929
600S125-33	1.409	0.470	2.179	0.042	0.374	1.361	0.369	7.30	638	638	1.328	0.320	9.58	638	638	0.118	0.300	-0.608	0.399	2.293	0.930
600S125-43	1.817	0.606	2.173	0.053	0.369	1.807	0.555	10.96	1416	1240	1.766	0.481	14.41	1416	1240	0.261	0.378	-0.598	0.393	2.284	0.931
600S125-54	2.236	0.745	2.161	0.063	0.362	2.236	0.727	14.37	2739	1890	2.220	0.673	20.15	2823	1947	0.511	0.457	-0.586	0.386	2.269	0.933
600S125-68	2.740	0.913	2.146	0.073	0.351	2.735	0.911	21.53	4347	2339	2.735	0.898	26.88	5350	2879	1.008	0.548	-0.570	0.378	2.248	0.936
600S125-97	2.740	0.913	2.146	0.073	0.351	2.735	0.898	26.88	5350	2879	2.735	0.898	26.88	5350	2879	1.008	0.548	-0.570	0.378	2.248	0.936
600S125-118	2.740	0.913	2.146	0.073	0.351	2.735	0.898	26.88	5350	2879	2.735	0.898	26.88	5350	2879	1.008	0.548	-0.570	0.378	2.248	0.936
600S137-27[1]	1.302	0.434	2.233	0.057	0.467	1.253	0.337	6.65	349	349	1.232	0.293	8.78	349	349	0.070	0.416	-0.813	0.523	2.422	0.887
600S137-30	1.431	0.477	2.231	0.062	0.466	1.390	0.386	7.62	468	468	1.368	0.335	10.02	468	468	0.093	0.455	-0.810	0.521	2.419	0.888
600S137-33	1.582	0.527	2.229	0.069	0.464	1.548	0.455	8.98	638	638	1.527	0.386	11.55	638	638	0.127	0.500	-0.807	0.519	2.416	0.889
600S137-43	2.042	0.681	2.223	0.087	0.459	2.041	0.645	12.74	1416	1240	2.012	0.579	17.33	1416	1240	0.280	0.633	-0.796	0.513	2.406	0.890
600S137-54	2.518	0.839	2.213	0.105	0.452	2.518	0.832	16.44	2739	1890	2.518	0.777	23.26	2823	1947	0.549	0.769	-0.784	0.506	2.391	0.893
600S137-68	3.094	1.031	2.200	0.125	0.443	3.094	1.031	24.05	4347	2339	3.094	1.030	30.84	5350	2879	1.084	0.930	-0.768	0.497	2.371	0.895
600S137-97	4.188	1.396	2.170	0.159	0.422	4.188	1.396	34.48	6911	2512	4.188	1.396	50.80	10472	3805	3.066	1.216	-0.734	0.480	2.330	0.901
600S137-118	4.913	1.638	2.147	0.176	0.406	4.913	1.638	42.05	8267	2391	4.913	1.638	61.69	12526	3622	5.477	1.391	-0.709	0.467	2.298	0.905
600S162-27[1]	1.428	0.476	2.278	0.086	0.558	1.428	0.370	7.31	349	349	1.380	0.310	9.29	349	349	0.073	0.615	-1.002	0.635	2.550	0.846
600S162-30	1.570	0.523	2.276	0.094	0.557	1.570	0.431	8.52	468	468	1.531	0.360	10.77	468	468	0.098	0.673	-0.999	0.633	2.547	0.846
600S162-33	1.793	0.598	2.282	0.116	0.581	1.793	0.577	11.41	638	638	1.793	0.481	14.41	638	638	0.137	0.861	-1.072	0.677	2.587	0.828
600S162-43	2.316	0.772	2.276	0.148	0.576	2.316	0.767	16.68	1416	1240	2.316	0.705	21.12	1416	1240	0.303	1.095	-1.062	0.670	2.577	0.830
600S162-54	2.860	0.953	2.267	0.180	0.570	2.860	0.953	21.17	2739	1890	2.860	0.916	30.33	2823	1947	0.594	1.337	-1.049	0.663	2.562	0.832
600S162-68	3.525	1.175	2.255	0.218	0.560	3.525	1.175	26.79	4347	2339	3.525	1.164	39.47	5350	2879	1.174	1.626	-1.032	0.655	2.543	0.835
600S162-97	4.797	1.599	2.229	0.283	0.541	4.797	1.599	38.37	6911	2512	4.797	1.599	56.73	10472	3805	3.329	2.153	-0.997	0.636	2.501	0.841
600S162-118	5.652	1.884	2.209	0.321	0.526	5.652	1.884	46.82	8267	2391	5.652	1.884	68.94	12526	3622	5.956	2.487	-0.971	0.623	2.470	0.845

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

TABLE 3B□ STANDARD C-SECTION DESIGN PROPERTIES (Continued)

Member	Gross Properties[2]					Effective Properties 33 ksi					Effective Properties 50 ksi					Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix^3 (in^4)	Sx (in^3)	Ma^4 (in-k)	Vag (lb)	Vanet (lb)	Ix^3 (in^4)	Sx (in^3)	Ma^4 (in-k)	Vag (lb)	Vanet (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
600S200-30	1.830	0.610	2.340	0.174	0.721	1.808	0.509	10.05	468	468	1.772	0.419	12.55	468	468	0.108	1.266	-1.380	0.855	2.810	0.759
600S200-33	2.075	0.692	2.340	0.209	0.743	2.058	0.621	12.28	638	638	2.015	0.524	15.68	638	638	0.151	1.593	-1.457	0.901	2.855	0.740
600S200-43	2.683	0.894	2.335	0.268	0.739	2.683	0.873	17.24	1416	1240	2.683	0.807	24.17	1416	1240	0.334	2.033	-1.446	0.894	2.844	0.742
600S200-54	3.319	1.106	2.327	0.328	0.732	3.319	1.106	24.07	2739	1890	3.319	1.015	30.40	2823	1947	0.655	2.493	-1.432	0.887	2.829	0.744
600S200-68	4.101	1.367	2.316	0.400	0.723	4.101	1.367	30.42	4347	2339	4.101	1.317	43.71	5350	2879	1.295	3.047	-1.415	0.878	2.809	0.746
600S200-97	5.612	1.871	2.293	0.530	0.705	5.612	1.871	43.49	6911	2512	5.612	1.871	64.53	10472	3805	3.679	4.080	-1.378	0.859	2.767	0.752
600S200-118	6.641	2.214	2.275	0.611	0.690	6.641	2.214	53.05	8267	2391	6.641	2.214	78.44	12526	3622	6.595	4.753	-1.351	0.845	2.735	0.756
600S250-43	3.082	1.027	2.396	0.458	0.923	3.082	0.918	18.14	1416	1240	2.976	0.818	24.50	1416	1240	0.364	3.411	-1.874	1.136	3.179	0.652
600S250-54	3.819	1.273	2.388	0.562	0.917	3.819	1.159	22.90	2739	1890	3.766	1.069	32.00	2823	1947	0.715	4.194	-1.860	1.129	3.163	0.654
600S250-68	4.727	1.576	2.378	0.688	0.908	4.727	1.508	32.82	4347	2339	4.723	1.386	41.49	5350	2879	1.416	5.145	-1.842	1.119	3.142	0.656
600S250-97	6.496	2.165	2.357	0.923	0.889	6.496	2.161	48.81	6911	2512	6.496	2.063	69.38	10472	3805	4.030	6.947	-1.803	1.100	3.098	0.661
600S250-118	7.713	2.571	2.342	1.075	0.874	7.713	2.571	59.58	8267	2391	7.713	2.498	85.92	12526	3622	7.234	8.142	-1.775	1.085	3.066	0.665
600S300-54	4.523	1.508	2.426	1.038	1.162	4.519	1.377	27.21	2739	1890	4.369	1.274	38.13	2823	1947	0.821	9.094	-2.572	1.534	3.722	0.522
600S300-68	5.610	1.870	2.417	1.279	1.154	5.610	1.843	36.42	4347	2339	5.610	1.712	51.27	5350	2879	1.627	11.200	-2.554	1.524	3.701	0.524
600S300-97	7.747	2.582	2.398	1.741	1.137	7.747	2.582	57.16	6911	2512	7.747	2.508	82.86	10472	3805	4.644	15.243	-2.516	1.504	3.657	0.527
600S300-118	9.232	3.077	2.384	2.052	1.124	9.232	3.077	69.65	8267	2391	9.232	3.077	103.69	12526	3622	8.351	17.975	-2.488	1.490	3.624	0.529
600S350-54	5.022	1.674	2.467	1.491	1.344	4.911	1.452	28.70	2739	1890	4.721	1.335	39.97	2823	1947	0.881	12.942	-3.037	1.787	4.137	0.461
600S350-68	6.237	2.079	2.459	1.841	1.336	6.237	1.949	38.50	4347	2339	6.166	1.771	53.01	5350	2879	1.748	15.968	-3.018	1.777	4.115	0.462
600S350-97	8.631	2.877	2.441	2.518	1.318	8.631	2.822	61.55	6911	2512	8.631	2.593	77.64	10472	3805	4.994	21.811	-2.979	1.757	4.071	0.464
600S350-118	10.304	3.435	2.428	2.978	1.305	10.304	3.435	76.39	8267	2391	10.304	3.268	108.43	12526	3622	8.990	25.791	-2.951	1.742	4.038	0.466
725S162-33[1]	2.822	0.778	2.698	0.122	0.562	2.706	0.638	12.61	525	525	2.662	0.553	16.57	525	525	0.155	1.309	-0.982	0.631	2.926	0.887
725S162-43	3.648	1.006	2.692	0.156	0.557	3.585	0.913	18.04	1163	1163	3.535	0.778	23.30	1163	1163	0.341	1.666	-0.972	0.625	2.916	0.889
725S162-54	4.513	1.245	2.683	0.190	0.550	4.513	1.188	23.48	2316	2072	4.455	1.100	32.93	2316	2072	0.670	2.036	-0.960	0.618	2.902	0.891
725S162-68	5.572	1.537	2.669	0.229	0.541	5.572	1.536	30.35	4347	3044	5.572	1.479	44.29	4680	3278	1.325	2.479	-0.944	0.610	2.882	0.893
725S162-97	7.618	2.101	2.640	0.297	0.522	7.618	2.101	50.43	8484	4049	7.618	2.101	74.54	10885	5195	3.767	3.293	-0.911	0.592	2.841	0.897
725S200-33[1]	3.241	0.894	2.771	0.221	0.724	3.234	0.743	14.67	525	525	3.172	0.631	18.90	525	525	0.168	2.395	-1.346	0.847	3.164	0.819
725S200-43	4.193	1.157	2.765	0.284	0.719	4.193	1.131	22.34	1163	1163	4.193	0.971	29.07	1163	1163	0.372	3.059	-1.335	0.840	3.154	0.821
725S200-54	5.195	1.433	2.756	0.347	0.713	5.195	1.433	31.18	2316	2072	5.195	1.321	39.55	2316	2072	0.730	3.755	-1.322	0.833	3.139	0.823
725S200-68	6.428	1.773	2.744	0.423	0.704	6.428	1.773	39.46	4347	3044	6.428	1.710	56.77	4680	3278	1.446	4.596	-1.305	0.824	3.119	0.825
725S200-97	8.831	2.436	2.719	0.561	0.685	8.831	2.436	56.64	8484	4049	8.831	2.436	84.04	10885	5195	4.118	6.175	-1.270	0.806	3.078	0.830
725S250-43	4.778	1.318	2.838	0.486	0.905	4.778	1.186	23.44	1163	1163	4.667	0.981	29.38	1163	1163	0.402	5.134	-1.744	1.076	3.451	0.745
725S250-54	5.927	1.635	2.829	0.597	0.898	5.927	1.495	29.55	2316	2072	5.837	1.388	41.55	2316	2072	0.791	6.319	-1.730	1.069	3.436	0.747
725S250-68	7.347	2.027	2.819	0.730	0.889	7.347	1.942	42.27	4347	3044	7.334	1.795	53.75	4680	3278	1.567	7.765	-1.712	1.059	3.415	0.749
725S250-97	10.130	2.794	2.796	0.980	0.869	10.130	2.788	62.98	8484	4049	10.130	2.666	89.66	10885	5195	4.468	10.516	-1.675	1.040	3.373	0.753
800S137-33[1]	3.198	0.799	2.873	0.073	0.435	2.998	0.622	12.30	474	474	2.939	0.525	15.71	474	474	0.155	0.957	-0.696	0.460	2.987	0.946
800S137-43	4.134	1.033	2.866	0.093	0.430	4.001	0.896	17.70	1051	1051	3.913	0.795	23.80	1051	1051	0.341	1.214	-0.687	0.454	2.978	0.947
800S137-54	5.110	1.277	2.855	0.112	0.423	5.077	1.179	23.29	2091	2091	4.974	1.083	32.42	2091	2091	0.670	1.478	-0.676	0.448	2.964	0.948
800S137-68	6.303	1.576	2.839	0.134	0.414	6.303	1.541	30.45	4221	3367	6.285	1.468	43.96	4221	3367	1.325	1.789	-0.661	0.440	2.944	0.950
800S137-97	8.597	2.149	2.805	0.169	0.394	8.597	2.149	53.09	8843	4824	8.597	2.149	64.35	10885	5938	3.767	2.349	-0.630	0.423	2.902	0.953
800S137-118	10.147	2.537	2.779	0.188	0.378	10.147	2.537	65.14	11341	4971	10.147	2.537	95.56	16235	7115	6.755	2.694	-0.608	0.411	2.870	0.955
800S162-33[1]	3.582	0.896	2.943	0.125	0.550	3.384	0.710	14.03	474	474	3.323	0.614	18.39	474	474	0.165	1.630	-0.936	0.607	3.137	0.911
800S162-43	4.633	1.158	2.937	0.160	0.546	4.500	1.019	20.14	1051	1051	4.428	0.866	25.93	1051	1051	0.364	2.076	-0.926	0.601	3.128	0.912
800S162-54	5.736	1.434	2.927	0.194	0.539	5.702	1.334	26.36	2091	2091	5.600	1.229	36.79	2091	2091	0.715	2.539	-0.914	0.594	3.113	0.914
800S162-68	7.089	1.772	2.913	0.235	0.530	7.089	1.737	34.32	4221	3367	7.070	1.663	49.80	4221	3367	1.416	3.093	-0.899	0.586	3.094	0.916
800S162-97	9.713	2.428	2.883	0.305	0.510	9.713	2.428	58.27	8843	4824	9.713	2.428	72.70	10885	5938	4.030	4.114	-0.866	0.568	3.053	0.919
800S162-118	11.504	2.876	2.860	0.345	0.496	11.504	2.876	71.47	11341	4971	11.504	2.876	105.23	16235	7115	7.234	4.766	-0.842	0.556	3.022	0.922

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

TABLE 3B STANDARD C-SECTION DESIGN PROPERTIES (Continued)

Member	Gross Properties[2]					Effective Properties 33 ksi					Effective Properties 50 ksi					Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix^3 (in^4)	Sx (in^3)	Ma^4 (in-k)	Vag (lb)	Vanet (lb)	Ix^3 (in^4)	Sx (in^3)	Ma^4 (in-k)	Vag (lb)	Vanet (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
800S200-33[1]	4.096	1.024	3.023	0.227	0.712	4.096	0.816	16.12	474	474	3.936	0.696	20.84	474	474	0.179	2.971	-1.288	0.817	3.363	0.853
800S200-43	5.302	1.325	3.018	0.292	0.708	5.302	1.293	25.54	1051	1051	5.302	1.065	31.90	1051	1051	0.395	3.797	-1.277	0.811	3.353	0.855
800S200-54	6.573	1.643	3.009	0.357	0.701	6.573	1.643	35.75	2091	2091	6.573	1.499	44.87	2091	2091	0.775	4.663	-1.265	0.804	3.338	0.856
800S200-68	8.140	2.035	2.996	0.435	0.692	8.140	2.035	45.29	4221	3367	8.140	1.964	65.21	4221	3367	1.537	5.712	-1.248	0.796	3.319	0.859
800S200-97	11.203	2.801	2.969	0.576	0.673	11.203	2.801	65.12	8843	4824	11.203	2.801	96.63	10885	5938	4.381	7.684	-1.214	0.777	3.278	0.863
800S200-118	13.316	3.329	2.949	0.665	0.659	13.316	3.329	79.78	11341	4971	13.316	3.329	117.95	16235	7115	7.872	8.981	-1.188	0.764	3.247	0.866
800S250-43	6.015	1.504	3.097	0.500	0.893	6.015	1.313	25.95	1051	1051	5.909	1.079	32.32	1051	1051	0.425	6.374	-1.675	1.043	3.632	0.787
800S250-54	7.465	1.866	3.088	0.614	0.886	7.465	1.712	33.82	2091	2091	7.378	1.525	45.66	2091	2091	0.836	7.850	-1.661	1.036	3.617	0.789
800S250-68	9.261	2.315	3.077	0.752	0.877	9.261	2.220	48.33	4221	3367	9.240	2.059	61.65	4221	3367	1.658	9.652	-1.644	1.027	3.597	0.791
800S250-97	12.789	3.197	3.053	1.009	0.857	12.789	3.191	72.07	8843	4824	12.789	3.054	102.70	10885	5938	4.731	13.091	-1.607	1.008	3.555	0.796
800S250-118	15.242	3.810	3.035	1.175	0.843	15.242	3.810	88.31	11341	4971	15.242	3.707	127.51	16235	7115	8.511	15.395	-1.580	0.994	3.524	0.799
800S300-54	8.790	2.198	3.157	1.145	1.139	8.778	2.021	39.94	2091	2091	8.541	1.814	54.31	2091	2091	0.942	16.083	-2.326	1.421	4.084	0.676
800S300-68	10.926	2.731	3.147	1.411	1.131	10.926	2.696	53.28	4221	3367	10.926	2.519	75.41	4221	3367	1.869	19.850	-2.308	1.412	4.064	0.677
800S300-97	15.151	3.788	3.126	1.922	1.113	15.151	3.788	83.85	8843	4824	15.151	3.675	121.43	10885	5938	5.345	27.132	-2.271	1.392	4.021	0.681
800S300-118	18.115	4.529	3.110	2.267	1.100	18.115	4.529	102.51	11341	4971	18.115	4.529	152.59	16235	7115	9.628	32.099	-2.244	1.378	3.990	0.684
800S350-54	9.683	2.421	3.212	1.646	1.325	9.477	2.125	41.98	2091	2091	9.191	1.869	55.96	2091	2091	1.002	22.897	-2.766	1.668	4.441	0.612
800S350-68	12.046	3.012	3.203	2.034	1.316	12.046	2.837	56.07	4221	3367	11.909	2.596	77.73	4221	3367	1.990	28.308	-2.748	1.658	4.421	0.614
800S350-97	16.737	4.184	3.183	2.784	1.298	16.737	4.101	89.43	8843	4824	16.737	3.785	113.34	10885	5938	5.696	38.834	-2.710	1.639	4.377	0.617
800S350-118	20.041	5.010	3.168	3.295	1.285	20.041	5.010	111.44	11341	4971	20.041	4.762	158.02	16235	7115	10.267	46.068	-2.682	1.624	4.345	0.619
925S162-43	6.616	1.430	3.339	0.165	0.528	6.288	1.196	23.64	905	905	6.170	1.012	30.30	905	905	0.402	2.877	-0.859	0.564	3.488	0.939
925S162-54	8.198	1.773	3.328	0.201	0.521	8.019	1.576	31.15	1800	1800	7.841	1.443	43.22	1800	1800	0.791	3.521	-0.848	0.558	3.473	0.940
925S162-68	10.148	2.194	3.313	0.242	0.512	10.148	2.074	40.98	3628	3483	9.965	1.970	58.99	3628	3483	1.567	4.293	-0.833	0.550	3.454	0.942
925S162-97	13.947	3.016	3.280	0.315	0.493	13.947	3.016	59.59	8843	5830	13.947	2.962	88.70	10710	7061	4.468	5.719	-0.802	0.533	3.413	0.945
925S200-43	7.519	1.626	3.431	0.303	0.689	7.204	1.351	26.70	905	905	7.081	1.170	35.02	905	905	0.433	5.240	-1.193	0.767	3.697	0.896
925S200-54	9.329	2.017	3.422	0.371	0.682	9.147	1.818	35.92	1800	1800	9.009	1.567	46.91	1800	1800	0.851	6.438	-1.180	0.761	3.683	0.897
925S200-68	11.568	2.501	3.408	0.451	0.673	11.568	2.379	47.00	3628	3483	11.398	2.217	66.36	3628	3483	1.688	7.893	-1.164	0.752	3.664	0.899
925S200-97	15.963	3.451	3.379	0.598	0.654	15.963	3.451	68.20	8843	5830	15.963	3.397	101.71	10710	7061	4.819	10.637	-1.131	0.735	3.623	0.902
925S250-43	8.474	1.832	3.521	0.520	0.872	8.474	1.502	29.69	905	905	8.389	1.243	37.23	905	905	0.464	8.801	-1.573	0.993	3.953	0.842
925S250-54	10.525	2.276	3.512	0.640	0.866	10.525	2.096	41.42	1800	1800	10.469	1.746	52.27	1800	1800	0.911	10.847	-1.559	0.986	3.939	0.843
925S250-68	13.070	2.826	3.499	0.783	0.856	13.070	2.714	59.09	3628	3483	13.031	2.529	75.73	3628	3483	1.809	13.349	-1.542	0.977	3.919	0.845
925S250-97	18.090	3.911	3.473	1.050	0.837	18.090	3.903	88.17	8843	5830	18.090	3.742	125.86	10710	7061	5.170	18.137	-1.507	0.959	3.878	0.849
1000S162-43[1]	8.025	1.605	3.577	0.168	0.518	7.523	1.302	25.74	836	836	7.370	1.099	32.91	836	836	0.425	3.430	-0.823	0.545	3.707	0.951
1000S162-54	9.950	1.990	3.565	0.204	0.511	9.627	1.722	34.02	1661	1661	9.391	1.572	47.07	1661	1661	0.836	4.198	-0.812	0.538	3.692	0.952
1000S162-68	12.325	2.465	3.550	0.246	0.502	12.256	2.276	44.98	3345	3345	11.978	2.154	64.51	3345	3345	1.658	5.121	-0.798	0.531	3.673	0.953
1000S162-97	16.967	3.393	3.516	0.320	0.483	16.967	3.393	67.06	8843	6434	16.967	3.269	97.89	9864	7177	4.731	6.827	-0.768	0.514	3.631	0.955
1000S162-118	20.169	4.034	3.491	0.363	0.468	20.169	4.034	100.24	13189	7747	20.169	4.034	120.77	16235	9536	8.511	7.924	-0.746	0.502	3.600	0.957
1000S200-43[1]	9.085	1.817	3.676	0.309	0.677	8.602	1.470	29.05	836	836	8.443	1.270	38.03	836	836	0.456	6.236	-1.147	0.743	3.910	0.914
1000S200-54	11.278	2.256	3.666	0.378	0.671	10.953	1.984	39.20	1661	1661	10.769	1.705	51.05	1661	1661	0.896	7.665	-1.135	0.737	3.896	0.915
1000S200-68	13.994	2.799	3.652	0.460	0.662	13.920	2.607	51.51	3345	3345	13.665	2.420	72.46	3345	3345	1.779	9.401	-1.120	0.729	3.876	0.917
1000S200-97	19.336	3.867	3.622	0.609	0.643	19.336	3.867	76.42	8843	6434	19.336	3.741	112.00	9864	7177	5.082	12.679	-1.088	0.711	3.836	0.920
1000S200-118	23.052	4.610	3.599	0.703	0.629	23.052	4.610	110.50	13189	7747	23.052	4.610	138.04	16235	9536	9.149	14.848	-1.064	0.699	3.805	0.922
1000S250-43[1]	10.203	2.041	3.771	0.531	0.860	10.203	1.617	31.95	836	836	10.140	1.342	40.19	836	836	0.486	10.481	-1.518	0.965	4.155	0.867
1000S250-54	12.677	2.535	3.762	0.653	0.854	12.677	2.277	44.99	1661	1661	12.660	1.879	56.26	1661	1661	0.957	12.922	-1.505	0.958	4.140	0.868
1000S250-68	15.751	3.150	3.749	0.799	0.844	15.751	3.028	65.93	3345	3345	15.741	2.768	82.89	3345	3345	1.899	15.909	-1.488	0.950	4.121	0.870
1000S250-97	21.827	4.365	3.722	1.072	0.825	21.827	4.357	98.41	8843	6434	21.827	4.181	140.63	9864	7177	5.433	21.632	-1.454	0.932	4.080	0.873
1000S250-118	26.080	5.216	3.701	1.249	0.810	26.080	5.216	120.89	13189	7747	26.080	5.082	174.84	16235	9536	9.788	25.490	-1.428	0.918	4.049	0.876

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

TABLE 3B□ STANDARD C-SECTION DESIGN PROPERTIES (Continued)

Member	Gross Properties[2]					Effective Properties 33 ksi					Effective Properties 50 ksi					Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix^3 (in^4)	Sx (in^3)	Ma^4 (in-k)	Vag (lb)	Vanet (lb)	Ix^3 (in^4)	Sx (in^3)	Ma^4 (in-k)	Vag (lb)	Vanet (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
1000S300-54	14.821	2.964	3.859	1.227	1.110	14.821	2.680	52.97	1661	1661	14.540	2.252	67.41	1661	1661	1.062	25.687	-2.128	1.326	4.545	0.781
1000S300-68	18.447	3.689	3.848	1.513	1.102	18.447	3.646	72.04	3345	3345	18.447	3.397	101.71	3345	3345	2.111	31.744	-2.111	1.317	4.526	0.782
1000S300-97	25.657	5.131	3.825	2.061	1.084	25.657	5.131	113.59	8843	6434	25.657	4.981	164.57	9864	7177	6.046	43.506	-2.075	1.299	4.485	0.786
1000S300-118	30.743	6.149	3.807	2.431	1.071	30.743	6.149	139.18	13189	7747	30.743	6.149	207.18	16235	9536	10.906	51.572	-2.049	1.285	4.454	0.788
1000S350-54	16.220	3.244	3.927	1.768	1.297	15.942	2.772	54.77	1661	1661	15.577	2.328	69.69	1661	1661	1.123	36.575	-2.546	1.566	4.857	0.725
1000S350-68	20.204	4.041	3.917	2.185	1.288	20.204	3.824	75.57	3345	3345	20.026	3.417	102.32	3345	3345	2.232	45.277	-2.529	1.557	4.837	0.727
1000S350-97	28.148	5.630	3.895	2.992	1.270	28.148	5.517	120.33	8843	6434	28.148	5.118	153.25	9864	7177	6.397	62.280	-2.492	1.538	4.795	0.730
1000S350-118	33.772	6.754	3.878	3.543	1.256	33.772	6.754	150.23	13189	7747	33.772	6.427	213.25	16235	9536	11.544	74.030	-2.465	1.524	4.764	0.732
1150S162-43[1]	11.383	1.980	4.047	0.173	0.499	10.366	1.514	29.92	725	725	10.126	1.274	38.14	725	725	0.471	4.703	-0.761	0.509	4.148	0.966
1150S162-54	14.126	2.457	4.035	0.210	0.492	13.350	2.012	39.76	1439	1439	12.964	1.829	54.75	1439	1439	0.927	5.759	-0.750	0.503	4.134	0.967
1150S162-68	17.521	3.047	4.018	0.253	0.483	17.124	2.681	52.99	2895	2895	16.642	2.523	75.52	2895	2895	1.839	7.028	-0.737	0.496	4.114	0.968
1150S162-97	24.186	4.206	3.983	0.329	0.464	24.186	4.098	80.97	8518	7361	24.098	3.885	116.33	8518	7361	5.257	9.379	-0.709	0.480	4.072	0.970
1150S200-43[1]	12.796	2.225	4.158	0.319	0.656	11.815	1.708	33.75	725	725	11.565	1.471	44.04	725	725	0.502	8.534	-1.067	0.700	4.343	0.940
1150S200-54	15.896	2.765	4.147	0.390	0.650	15.121	2.315	45.75	1439	1439	14.823	1.981	59.31	1439	1439	0.987	10.494	-1.056	0.694	4.328	0.941
1150S200-68	19.747	3.434	4.132	0.475	0.641	19.342	3.063	60.53	2895	2895	18.904	2.827	84.65	2895	2895	1.960	12.878	-1.041	0.686	4.309	0.942
1150S200-97	27.348	4.756	4.100	0.629	0.622	27.348	4.645	91.79	8518	7361	27.250	4.430	132.63	8518	7361	5.608	17.390	-1.010	0.669	4.268	0.944
1150S250-43[1]	14.275	2.483	4.264	0.550	0.837	13.394	1.766	34.90	725	725	12.836	1.505	45.05	725	725	0.532	14.361	-1.419	0.915	4.571	0.904
1150S250-54	17.749	3.087	4.254	0.676	0.830	17.089	2.371	46.85	1439	1439	16.736	2.054	61.50	1439	1439	1.047	17.713	-1.407	0.908	4.557	0.905
1150S250-68	22.075	3.839	4.240	0.827	0.821	21.712	3.334	65.87	2895	2895	21.380	2.871	85.97	2895	2895	2.081	21.822	-1.391	0.900	4.537	0.906
1150S250-97	30.651	5.331	4.211	1.110	0.801	30.651	5.217	103.10	8518	7361	30.602	4.794	143.54	8518	7361	5.959	29.711	-1.358	0.882	4.497	0.909
1200S162-54[1]	15.730	2.622	4.190	0.212	0.486	14.743	2.109	41.68	1377	1377	14.298	1.914	57.31	1377	1377	0.957	6.340	-0.732	0.493	4.281	0.971
1200S162-68	19.518	3.253	4.173	0.255	0.477	18.955	2.817	55.66	2771	2771	18.390	2.645	79.19	2771	2771	1.899	7.739	-0.719	0.485	4.261	0.972
1200S162-97	26.966	4.494	4.137	0.331	0.459	26.966	4.327	85.51	8147	7411	26.735	4.091	122.49	8147	7411	5.433	10.331	-0.691	0.470	4.219	0.973
1200S162-118	32.145	5.357	4.109	0.376	0.444	32.145	5.357	105.87	13189	9714	32.145	5.168	154.74	14986	11037	9.788	12.002	-0.670	0.459	4.187	0.974
1200S200-54[1]	17.662	2.944	4.306	0.393	0.643	16.678	2.425	47.93	1377	1377	16.334	2.073	62.07	1377	1377	1.017	11.550	-1.032	0.681	4.474	0.947
1200S200-68	21.947	3.658	4.291	0.479	0.634	21.376	3.215	63.54	2771	2771	20.864	2.963	88.71	2771	2771	2.020	14.176	-1.017	0.673	4.455	0.948
1200S200-97	30.417	5.069	4.258	0.635	0.615	30.417	4.899	96.81	8147	7411	30.175	4.660	139.51	8147	7411	5.783	19.150	-0.987	0.656	4.414	0.950
1200S200-118	36.347	6.058	4.234	0.732	0.601	36.347	6.058	119.71	13189	9714	36.347	5.865	175.59	14986	11037	10.427	22.451	-0.964	0.644	4.384	0.952
1200S250-54[1]	19.681	3.280	4.416	0.683	0.823	18.832	2.482	49.05	1377	1377	18.433	2.149	64.34	1377	1377	1.078	19.505	-1.378	0.892	4.699	0.914
1200S250-68	24.484	4.081	4.402	0.836	0.813	23.963	3.496	69.08	2771	2771	23.575	3.007	90.04	2771	2771	2.141	24.034	-1.362	0.884	4.679	0.915
1200S250-97	34.016	5.669	4.373	1.121	0.794	34.016	5.496	108.60	8147	7411	33.835	5.037	150.82	8147	7411	6.134	32.734	-1.329	0.867	4.639	0.918
1200S250-118	40.726	6.788	4.350	1.307	0.779	40.726	6.788	134.13	13189	9714	40.726	6.541	195.84	14986	11037	11.065	38.619	-1.305	0.854	4.608	0.920
1200S300-54[1]	22.842	3.807	4.540	1.292	1.080	22.842	3.177	62.77	1377	1377	22.564	2.692	80.59	1377	1377	1.183	38.107	-1.965	1.245	5.064	0.849
1200S300-68	28.460	4.743	4.528	1.593	1.071	28.460	4.692	92.71	2771	2771	28.460	4.022	120.42	2771	2771	2.352	47.133	-1.949	1.236	5.044	0.851
1200S300-97	39.669	6.612	4.502	2.171	1.053	39.669	6.612	146.35	8147	7411	39.669	6.424	212.25	8147	7411	6.747	64.712	-1.914	1.218	5.004	0.854
1200S300-118	47.613	7.936	4.483	2.561	1.040	47.613	7.936	179.62	13189	9714	47.613	7.936	267.39	14986	11037	12.183	76.811	-1.889	1.205	4.974	0.856
1200S350-54[1]	24.860	4.143	4.620	1.866	1.266	24.610	3.295	65.12	1377	1377	24.087	2.787	83.46	1377	1377	1.244	54.279	-2.363	1.478	5.341	0.804
1200S350-68	30.996	5.166	4.608	2.306	1.257	30.996	4.908	96.98	2771	2771	30.916	4.061	121.59	2771	2771	2.473	67.251	-2.346	1.469	5.322	0.806
1200S350-97	43.269	7.211	4.584	3.159	1.239	43.269	7.071	154.22	8147	7411	43.269	6.590	197.31	8147	7411	7.098	92.672	-2.310	1.450	5.281	0.809
1200S350-118	51.992	8.665	4.566	3.741	1.225	51.992	8.665	192.74	13189	9714	51.992	8.260	274.07	14986	11037	12.821	110.302	-2.284	1.436	5.250	0.811
1350S162-54[1]	21.228	3.145	4.652	0.216	0.469	19.394	2.399	47.41	1221	1221	18.737	2.170	64.98	1221	1221	1.047	8.273	-0.682	0.463	4.725	0.979
1350S162-68	26.368	3.906	4.634	0.261	0.461	25.092	3.222	63.66	2455	2455	24.228	3.012	90.19	2455	2455	2.081	10.101	-0.669	0.456	4.705	0.980
1350S162-97	36.510	5.409	4.596	0.338	0.442	36.510	5.018	99.15	7206	7206	35.611	4.709	140.98	7206	7206	5.959	13.494	-0.643	0.441	4.662	0.981
1350S162-118	43.598	6.459	4.567	0.383	0.428	43.598	6.346	125.39	13189	11189	43.598	6.003	179.72	13240	11232	10.746	15.684	-0.624	0.431	4.630	0.982

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

TABLE 3B□ STANDARD C-SECTION DESIGN PROPERTIES (Continued)

Member	Gross Properties[2]					Effective Properties 33 ksi					Effective Properties 50 ksi					Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix^3 (in^4)	Sx (in^3)	Ma^4 (in-k)	Vag (lb)	Vanet (lb)	Ix^3 (in^4)	Sx (in^3)	Ma^4 (in-k)	Vag (lb)	Vanet (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
1350S200-54[1]	23.688	3.509	4.778	0.403	0.623	21.864	2.756	54.46	1221	1221	21.358	2.348	70.31	1221	1221	1.108	15.066	-0.966	0.644	4.915	0.961
1350S200-68	29.461	4.365	4.762	0.491	0.615	28.180	3.672	72.55	2455	2455	27.397	3.369	100.88	2455	2455	2.201	18.498	-0.952	0.636	4.895	0.962
1350S200-97	40.907	6.060	4.728	0.650	0.596	40.905	5.662	111.89	7206	7206	39.991	5.350	160.18	7206	7206	6.309	25.008	-0.923	0.620	4.854	0.964
1350S200-118	48.953	7.252	4.702	0.750	0.582	48.953	7.137	141.02	13189	11189	48.953	6.788	203.24	13240	11232	11.385	29.336	-0.902	0.609	4.823	0.965
1350S250-54[1]	26.245	3.888	4.898	0.701	0.801	24.632	2.816	55.64	1221	1221	24.075	2.432	72.82	1221	1221	1.168	25.480	-1.296	0.849	5.129	0.936
1350S250-68	32.675	4.841	4.883	0.858	0.791	31.477	3.983	78.70	2455	2455	30.883	3.415	102.23	2455	2455	2.322	31.409	-1.281	0.841	5.110	0.937
1350S250-97	45.471	6.736	4.852	1.151	0.772	45.457	6.332	125.12	7206	7206	44.659	5.767	172.67	7206	7206	6.660	42.816	-1.250	0.824	5.069	0.939
1350S250-118	54.508	8.075	4.828	1.341	0.757	54.508	7.957	157.24	13189	11189	54.508	7.545	225.91	13240	11232	12.023	50.545	-1.226	0.811	5.039	0.941
1350S300-54[1]	30.300	4.489	5.039	1.333	1.057	28.688	3.370	66.60	1221	1221	27.458	2.939	88.00	1221	1221	1.274	49.368	-1.860	1.191	5.475	0.885
1350S300-68	37.776	5.596	5.026	1.644	1.048	36.521	4.821	95.27	2455	2455	35.895	4.247	127.16	2455	2455	2.534	61.089	-1.844	1.182	5.456	0.886
1350S300-97	52.725	7.811	4.999	2.240	1.030	52.695	7.400	146.23	7206	7206	51.826	6.971	208.71	7206	7206	7.273	83.954	-1.810	1.165	5.416	0.888
1350S300-118	63.349	9.385	4.979	2.642	1.017	63.349	9.265	183.07	13189	11189	63.335	8.905	266.61	13240	11232	13.141	99.721	-1.786	1.152	5.386	0.890
1350S350-54[1]	32.857	4.868	5.128	1.928	1.242	32.660	3.690	72.93	1221	1221	30.857	3.133	93.81	1221	1221	1.334	70.347	-2.243	1.418	5.733	0.847
1350S350-68	40.990	6.073	5.115	2.383	1.233	40.990	5.515	108.97	2455	2455	40.990	4.547	136.13	2455	2455	2.654	87.201	-2.227	1.410	5.714	0.848
1350S350-97	57.289	8.487	5.090	3.264	1.215	57.289	8.326	181.59	7206	7206	57.289	7.784	233.07	7206	7206	7.624	120.281	-2.192	1.391	5.673	0.851
1350S350-118	68.904	10.208	5.071	3.865	1.201	68.904	10.208	227.05	13189	11189	68.904	9.744	323.33	13240	11232	13.779	143.266	-2.166	1.378	5.643	0.853
1400S162-54[1]	23.302	3.329	4.805	0.218	0.464	21.103	2.496	49.32	1177	1177	20.365	2.256	67.54	1177	1177	1.078	8.980	-0.667	0.454	4.873	0.981
1400S162-68	28.952	4.136	4.787	0.262	0.456	27.357	3.357	66.33	2365	2365	26.375	3.135	93.85	2365	2365	2.141	10.966	-0.654	0.447	4.853	0.982
1400S162-97	40.115	5.731	4.748	0.340	0.437	39.965	5.248	103.71	6939	6939	38.897	4.915	147.14	6939	6939	6.134	14.651	-0.628	0.433	4.810	0.983
1400S162-118	47.928	6.847	4.719	0.385	0.423	47.928	6.659	131.59	12745	11287	47.772	6.282	188.07	12745	11287	11.065	17.032	-0.609	0.422	4.777	0.984
1400S200-54[1]	25.951	3.707	4.935	0.406	0.617	23.767	2.866	56.63	1177	1177	23.199	2.440	73.05	1177	1177	1.138	16.355	-0.946	0.633	5.062	0.965
1400S200-68	32.284	4.612	4.918	0.494	0.608	30.684	3.824	75.56	2365	2365	29.797	3.505	104.93	2365	2365	2.262	20.083	-0.932	0.625	5.043	0.966
1400S200-97	44.853	6.408	4.883	0.655	0.590	44.683	5.917	116.93	6939	6939	43.616	5.580	167.07	6939	6939	6.484	27.156	-0.904	0.609	5.001	0.967
1400S200-118	53.698	7.671	4.857	0.755	0.576	53.698	7.480	147.81	12745	11287	53.520	7.096	212.47	12745	11287	11.704	31.861	-0.883	0.598	4.970	0.968
1400S250-54[1]	28.702	4.100	5.057	0.707	0.794	26.758	2.927	57.83	1177	1177	26.141	2.527	75.65	1177	1177	1.198	27.675	-1.272	0.835	5.275	0.942
1400S250-68	35.743	5.106	5.042	0.865	0.784	34.239	4.145	81.90	2365	2365	33.565	3.550	106.29	2365	2365	2.383	34.118	-1.257	0.827	5.255	0.943
1400S250-97	49.764	7.109	5.010	1.160	0.765	49.579	6.611	130.64	6939	6939	48.650	6.010	179.95	6939	6939	6.835	46.520	-1.225	0.811	5.214	0.945
1400S250-118	59.676	8.525	4.986	1.352	0.750	59.676	8.330	164.61	12745	11287	59.504	7.881	235.94	12745	11287	12.342	54.927	-1.203	0.798	5.184	0.946
1400S300-54[1]	33.079	4.726	5.204	1.346	1.050	31.140	3.503	69.23	1177	1177	29.787	3.053	91.42	1177	1177	1.304	53.504	-1.827	1.174	5.615	0.894
1400S300-68	41.249	5.893	5.191	1.659	1.041	39.684	5.018	99.15	2365	2365	38.975	4.416	132.21	2365	2365	2.594	66.215	-1.811	1.166	5.596	0.895
1400S300-97	57.596	8.228	5.163	2.260	1.023	57.393	7.722	152.59	6939	6939	56.383	7.263	217.44	6939	6939	7.449	91.024	-1.779	1.148	5.556	0.898
1400S300-118	69.222	9.889	5.142	2.666	1.009	69.222	9.690	191.48	12745	11287	69.004	9.295	278.29	12745	11287	13.460	108.140	-1.754	1.135	5.526	0.899
1400S350-54[1]	35.830	5.119	5.295	1.947	1.234	35.659	3.823	75.54	1177	1177	33.308	3.249	97.27	1177	1177	1.365	76.252	-2.207	1.400	5.868	0.859
1400S350-68	44.707	6.387	5.283	2.406	1.226	44.707	5.700	112.64	2365	2365	44.707	4.709	141.00	2365	2365	2.715	94.534	-2.190	1.391	5.848	0.860
1400S350-97	62.507	8.930	5.257	3.296	1.207	62.507	8.762	191.08	6939	6939	62.507	8.189	245.18	6939	6939	7.799	130.430	-2.156	1.373	5.808	0.862
1400S350-118	75.200	10.743	5.237	3.903	1.193	75.200	10.743	238.95	12745	11287	75.200	10.260	340.44	12745	11287	14.099	155.387	-2.130	1.360	5.778	0.864
1600S162-68[1]	40.913	5.114	5.394	0.268	0.436	37.533	3.896	76.99	2062	2062	35.986	3.624	108.49	2062	2062	2.383	14.816	-0.601	0.415	5.445	0.988
1600S162-97	56.824	7.103	5.354	0.347	0.418	55.563	6.173	121.97	6043	6043	53.725	5.738	171.79	6043	6043	6.835	19.807	-0.577	0.401	5.401	0.989
1600S162-118	68.014	8.502	5.323	0.393	0.405	68.014	7.920	156.50	11088	11088	66.535	7.399	221.51	11088	11088	12.342	23.035	-0.559	0.391	5.368	0.989

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

TABLE 3B STANDARD C-SECTION DESIGN PROPERTIES (Continued)

Member	Gross Properties[2]					Effective Properties 33 ksi					Effective Properties 50 ksi					Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix[3] (in^4)	Sx (in^3)	Ma[4] (in-k)	Vag (lb)	Vanet (lb)	Ix[3] (in^4)	Sx (in^3)	Ma[4] (in-k)	Vag (lb)	Vanet (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
1600S200-68[1]	45.291	5.661	5.537	0.506	0.585	41.916	4.431	87.56	2062	2062	40.523	4.045	121.11	2062	2062	2.503	27.155	-0.862	0.584	5.634	0.977
1600S200-97	63.050	7.881	5.500	0.670	0.567	61.757	6.938	137.10	6043	6043	59.933	6.500	194.61	6043	6043	7.186	36.744	-0.835	0.569	5.592	0.978
1600S200-118	75.601	9.450	5.472	0.773	0.553	75.601	8.859	175.05	11088	11088	74.084	8.331	249.44	11088	11088	12.981	43.132	-0.815	0.558	5.560	0.979
1600S250-68[1]	49.814	6.227	5.672	0.889	0.758	46.607	4.792	94.70	2062	2062	45.550	4.092	122.51	2062	2062	2.624	46.230	-1.167	0.778	5.840	0.960
1600S250-97	69.476	8.685	5.638	1.192	0.738	68.160	7.728	152.72	6043	6043	66.577	6.983	209.06	6043	6043	7.536	63.082	-1.138	0.762	5.799	0.962
1600S250-118	83.427	10.428	5.612	1.389	0.724	83.427	9.827	194.19	11088	11088	81.923	9.222	276.12	11088	11088	13.620	74.524	-1.116	0.750	5.768	0.963
1600S300-68[1]	57.099	7.137	5.841	1.713	1.012	53.813	5.802	114.66	2062	2062	52.707	5.089	152.37	2062	2062	2.836	89.150	-1.694	1.103	6.166	0.925
1600S300-97	79.844	9.980	5.812	2.334	0.994	78.497	9.010	178.05	6043	6043	76.799	8.429	252.35	6043	6043	8.150	122.659	-1.662	1.086	6.126	0.926
1600S300-118	96.066	12.008	5.789	2.753	0.980	96.066	11.396	225.19	11088	11088	94.483	10.857	325.05	11088	11088	14.737	145.819	-1.639	1.073	6.096	0.928
1600S350-68[1]	61.622	7.703	5.943	2.490	1.195	58.537	6.041	119.38	2062	2062	57.437	5.180	155.08	2062	2062	2.957	127.370	-2.055	1.322	6.401	0.897
1600S350-97	86.270	10.784	5.915	3.410	1.176	84.926	9.771	193.09	6043	6043	83.691	8.382	250.96	6043	6043	8.501	175.896	-2.022	1.304	6.361	0.899
1600S350-118	103.892	12.987	5.894	4.038	1.162	103.892	12.367	244.38	11088	11088	102.530	11.305	338.47	11088	11088	15.376	209.692	-1.998	1.291	6.331	0.900

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

Notes to Table 3B:
[1]Web-height to thickness (h/t) ratio exceeds 200. Web stiffeners in accordance with AISI-NAS Sections B1.2 and C3.6.1 are required. No holes or punchouts in the web are permitted.
[2]Gross Properties are based on the full-unreduced cross section of the studs, away from the punch-outs.
[3]Use the effective moment of inertia for deflection calculations.
[4]Allowable moment based on full lateral support of the compression flange.

SYMBOLS:
I_x = Strong axis moment of inertia.
S_x = Strong axis section modulus.
R_x = Strong axis radius of gyration.
I_y = Weak axis moment of inertia.
R_y = Weak axis radius of gyration.
Ma = Allowable moment.
Vag = Allowable shear at unpunched web section.
Vanet = Allow shear at punched web section.
J = St. Venant torsion constant.
C_w = Warping constant.
X_o = Distance from shear center to neutral axis.
m = Distance from shear center to mid-plane of web.
R_o = Radii of gyration.
Beta = Torsional flexural constant.

TABLE 4A□ STANDARD TRACKS

MEMBER	DESIGN THICKNESS (in)	GROSS AREA (in^2)	GROSS WEIGHT (lb/ft)	MEMBER DEPTH[2] (in)	FLANGE WIDTH (in)	INSIDE CORNER RADII (in)
162T100-18	0.0188	0.068	0.23	1.625	1.000	0.0843
162T100-27	0.0283	0.103	0.35	1.625	1.000	0.0796
162T100-30	0.0312	0.113	0.38	1.625	1.000	0.0781
162T100-33	0.0346	0.125	0.43	1.625	1.000	0.0764
162T100-43	0.0451	0.163	0.55	1.625	1.000	0.0712
162T100-54	0.0566	0.204	0.70	1.625	1.000	0.0849
162T100-68	0.0713	0.257	0.88	1.625	1.000	0.1069
162T100-97	0.1017	0.366	1.25	1.625	1.000	0.1525
162T100-118	0.1242	0.447	1.52	1.625	1.000	0.1863
162T125-18	0.0188	0.077	0.26	1.625	1.250	0.0843
162T125-27	0.0283	0.117	0.40	1.625	1.250	0.0796
162T125-30	0.0312	0.129	0.44	1.625	1.250	0.0781
162T125-33	0.0346	0.143	0.49	1.625	1.250	0.0764
162T125-43	0.0451	0.186	0.63	1.625	1.250	0.0712
162T125-54	0.0566	0.233	0.79	1.625	1.250	0.0849
162T125-68	0.0713	0.293	1.00	1.625	1.250	0.1069
162T125-97	0.1017	0.417	1.42	1.625	1.250	0.1525
162T125-118	0.1242	0.509	1.73	1.625	1.250	0.1863
162T150-27	0.0283	0.131	0.45	1.625	1.500	0.0796
162T150-30	0.0312	0.144	0.49	1.625	1.500	0.0781
162T150-33	0.0346	0.160	0.54	1.625	1.500	0.0764
162T150-43	0.0451	0.208	0.71	1.625	1.500	0.0712
162T150-54	0.0566	0.261	0.89	1.625	1.500	0.0849
162T150-68	0.0713	0.329	1.12	1.625	1.500	0.1069
162T150-97	0.1017	0.468	1.59	1.625	1.500	0.1525
162T150-118	0.1242	0.571	1.94	1.625	1.500	0.1863
162T200-33	0.0346	0.194	0.66	1.625	2.000	0.0764
162T200-43	0.0451	0.253	0.86	1.625	2.000	0.0712
162T200-54	0.0566	0.318	1.08	1.625	2.000	0.0849
162T200-68	0.0713	0.400	1.36	1.625	2.000	0.1069
162T200-97	0.1017	0.570	1.94	1.625	2.000	0.1525
162T200-118	0.1242	0.695	2.37	1.625	2.000	0.1863
162T250-43	0.0451	0.298	1.02	1.625	2.500	0.0712
162T250-54	0.0566	0.374	1.27	1.625	2.500	0.0849
162T250-68	0.0713	0.471	1.60	1.625	2.500	0.1069
162T250-97	0.1017	0.672	2.29	1.625	2.500	0.1525
162T250-118	0.1242	0.819	2.79	1.625	2.500	0.1863
162T300-54	0.0566	0.431	1.47	1.625	3.000	0.0849
162T300-68	0.0713	0.543	1.85	1.625	3.000	0.1069
162T300-97	0.1017	0.773	2.63	1.625	3.000	0.1525
162T300-118	0.1242	0.944	3.21	1.625	3.000	0.1863
162T350-54	0.0566	0.487	1.66	1.625	3.500	0.0849
162T350-68	0.0713	0.614	2.09	1.625	3.500	0.1069
162T350-97	0.1017	0.875	2.98	1.625	3.500	0.1525
162T350-118	0.1242	1.068	3.63	1.625	3.500	0.1863
250T100-18	0.0188	0.085	0.29	2.500	1.000	0.0843
250T100-27	0.0283	0.127	0.43	2.500	1.000	0.0796
250T100-30	0.0312	0.140	0.48	2.500	1.000	0.0781
250T100-33	0.0346	0.156	0.53	2.500	1.000	0.0764
250T100-43	0.0451	0.203	0.69	2.500	1.000	0.0712
250T100-54	0.0566	0.254	0.86	2.500	1.000	0.0849
250T100-68	0.0713	0.320	1.09	2.500	1.000	0.1069
250T100-97	0.1017	0.455	1.55	2.500	1.000	0.1525
250T100-118	0.1242	0.556	1.89	2.500	1.000	0.1863
250T125-18	0.0188	0.094	0.32	2.500	1.250	0.0843
250T125-27	0.0283	0.141	0.48	2.500	1.250	0.0796
250T125-30	0.0312	0.156	0.53	2.500	1.250	0.0781
250T125-33	0.0346	0.173	0.59	2.500	1.250	0.0764
250T125-43	0.0451	0.225	0.77	2.500	1.250	0.0712
250T125-54	0.0566	0.282	0.96	2.500	1.250	0.0849
250T125-68	0.0713	0.355	1.21	2.500	1.250	0.1069
250T125-97	0.1017	0.506	1.72	2.500	1.250	0.1525
250T125-118	0.1242	0.618	2.10	2.500	1.250	0.1863
250T150-27	0.0283	0.156	0.53	2.500	1.500	0.0796
250T150-30	0.0312	0.172	0.58	2.500	1.500	0.0781
250T150-33	0.0346	0.190	0.65	2.500	1.500	0.0764
250T150-43	0.0451	0.248	0.84	2.500	1.500	0.0712
250T150-54	0.0566	0.311	1.06	2.500	1.500	0.0849
250T150-68	0.0713	0.391	1.33	2.500	1.500	0.1069
250T150-97	0.1017	0.557	1.90	2.500	1.500	0.1525
250T150-118	0.1242	0.680	2.31	2.500	1.500	0.1863
250T200-33	0.0346	0.225	0.76	2.500	2.000	0.0764
250T200-43	0.0451	0.293	1.00	2.500	2.000	0.0712
250T200-54	0.0566	0.367	1.25	2.500	2.000	0.0849
250T200-68	0.0713	0.462	1.57	2.500	2.000	0.1069
250T200-97	0.1017	0.659	2.24	2.500	2.000	0.1525
250T200-118	0.1242	0.804	2.74	2.500	2.000	0.1863
250T250-43	0.0451	0.338	1.15	2.500	2.500	0.0712
250T250-54	0.0566	0.424	1.44	2.500	2.500	0.0849
250T250-68	0.0713	0.534	1.82	2.500	2.500	0.1069
250T250-97	0.1017	0.761	2.59	2.500	2.500	0.1525
250T250-118	0.1242	0.928	3.16	2.500	2.500	0.1863

For **SI:** 1 inch = 25.4 mm, 1 lb = 0.4536 kg.

TABLE 4A□ STANDARD TRACKS (Continued)

MEMBER	DESIGN THICKNESS (in)	GROSS AREA (in^2)	GROSS WEIGHT (lb/ft)	MEMBER DEPTH[2] (in)	FLANGE WIDTH (in)	INSIDE CORNER RADII (in)
250T300-54	0.0566	0.480	1.63	2.500	3.000	0.0849
250T300-68	0.0713	0.605	2.06	2.500	3.000	0.1069
250T300-97	0.1017	0.862	2.93	2.500	3.000	0.1525
250T300-118	0.1242	1.052	3.58	2.500	3.000	0.1863
250T350-54	0.0566	0.537	1.83	2.500	3.500	0.0849
250T350-68	0.0713	0.676	2.30	2.500	3.500	0.1069
250T350-97	0.1017	0.964	3.28	2.500	3.500	0.1525
250T350-118	0.1242	1.177	4.00	2.500	3.500	0.1863
350T100-18	0.0188	0.103	0.35	3.500	1.000	0.0843
350T100-27	0.0283	0.156	0.53	3.500	1.000	0.0796
350T100-30	0.0312	0.172	0.58	3.500	1.000	0.0781
350T100-33	0.0346	0.190	0.65	3.500	1.000	0.0764
350T100-43	0.0451	0.248	0.84	3.500	1.000	0.0712
350T100-54	0.0566	0.311	1.06	3.500	1.000	0.0849
350T100-68	0.0713	0.391	1.33	3.500	1.000	0.1069
350T100-97	0.1017	0.557	1.90	3.500	1.000	0.1525
350T100-118	0.1242	0.680	2.31	3.500	1.000	0.1863
350T125-18	0.0188	0.113	0.38	3.500	1.250	0.0843
350T125-27	0.0283	0.170	0.58	3.500	1.250	0.0796
350T125-30	0.0312	0.187	0.64	3.500	1.250	0.0781
350T125-33	0.0346	0.207	0.71	3.500	1.250	0.0764
350T125-43	0.0451	0.270	0.92	3.500	1.250	0.0712
350T125-54	0.0566	0.339	1.15	3.500	1.250	0.0849
350T125-68	0.0713	0.427	1.45	3.500	1.250	0.1069
350T125-97	0.1017	0.608	2.07	3.500	1.250	0.1525
350T125-118	0.1242	0.742	2.52	3.500	1.250	0.1863
350T150-27	0.0283	0.184	0.63	3.500	1.500	0.0796
350T150-30	0.0312	0.203	0.69	3.500	1.500	0.0781
350T150-33	0.0346	0.225	0.76	3.500	1.500	0.0764
350T150-43	0.0451	0.293	1.00	3.500	1.500	0.0712
350T150-54	0.0566	0.367	1.25	3.500	1.500	0.0849
350T150-68	0.0713	0.462	1.57	3.500	1.500	0.1069
350T150-97	0.1017	0.659	2.24	3.500	1.500	0.1525
350T150-118	0.1242	0.804	2.74	3.500	1.500	0.1863
350T200-33	0.0346	0.259	0.88	3.500	2.000	0.0764
350T200-43	0.0451	0.338	1.15	3.500	2.000	0.0712
350T200-54	0.0566	0.424	1.44	3.500	2.000	0.0849
350T200-68	0.0713	0.534	1.82	3.500	2.000	0.1069
350T200-97	0.1017	0.761	2.59	3.500	2.000	0.1525
350T200-118	0.1242	0.928	3.16	3.500	2.000	0.1863
350T250-43	0.0451	0.383	1.30	3.500	2.500	0.0712
350T250-54	0.0566	0.480	1.63	3.500	2.500	0.0849
350T250-68	0.0713	0.605	2.06	3.500	2.500	0.1069
350T250-97	0.1017	0.862	2.93	3.500	2.500	0.1525
350T250-118	0.1242	1.052	3.58	3.500	2.500	0.1863
350T300-54	0.0566	0.537	1.83	3.500	3.000	0.0849
350T300-68	0.0713	0.676	2.30	3.500	3.000	0.1069
350T300-97	0.1017	0.964	3.28	3.500	3.000	0.1525
350T300-118	0.1242	1.177	4.00	3.500	3.000	0.1863
350T350-54	0.0566	0.594	2.02	3.500	3.500	0.0849
350T350-68	0.0713	0.748	2.54	3.500	3.500	0.1069
350T350-97	0.1017	1.066	3.63	3.500	3.500	0.1525
350T350-118	0.1242	1.301	4.43	3.500	3.500	0.1863
362T100-18	0.0188	0.106	0.36	3.625	1.000	0.0843
362T100-27	0.0283	0.159	0.54	3.625	1.000	0.0796
362T100-30	0.0312	0.175	0.60	3.625	1.000	0.0781
362T100-33	0.0346	0.194	0.66	3.625	1.000	0.0764
362T100-43	0.0451	0.253	0.86	3.625	1.000	0.0712
362T100-54	0.0566	0.318	1.08	3.625	1.000	0.0849
362T100-68	0.0713	0.400	1.36	3.625	1.000	0.1069
362T100-97	0.1017	0.570	1.94	3.625	1.000	0.1525
362T100-118	0.1242	0.695	2.37	3.625	1.000	0.1863
362T125-18	0.0188	0.115	0.39	3.625	1.250	0.0843
362T125-27	0.0283	0.173	0.59	3.625	1.250	0.0796
362T125-30	0.0312	0.191	0.65	3.625	1.250	0.0781
362T125-33	0.0346	0.212	0.72	3.625	1.250	0.0764
362T125-43	0.0451	0.276	0.94	3.625	1.250	0.0712
362T125-54	0.0566	0.346	1.18	3.625	1.250	0.0849
362T125-68	0.0713	0.436	1.48	3.625	1.250	0.1069
362T125-97	0.1017	0.621	2.11	3.625	1.250	0.1525
362T125-118	0.1242	0.757	2.58	3.625	1.250	0.1863
362T150-27	0.0283	0.187	0.64	3.625	1.500	0.0796
362T150-30	0.0312	0.207	0.70	3.625	1.500	0.0781
362T150-33	0.0346	0.229	0.78	3.625	1.500	0.0764
362T150-43	0.0451	0.298	1.02	3.625	1.500	0.0712
362T150-54	0.0566	0.374	1.27	3.625	1.500	0.0849
362T150-68	0.0713	0.471	1.60	3.625	1.500	0.1069
362T150-97	0.1017	0.672	2.29	3.625	1.500	0.1525
362T150-118	0.1242	0.819	2.79	3.625	1.500	0.1863

For **SI:** 1 inch = 25.4 mm, 1 lb = 0.4536 kg.

TABLE 4A□ STANDARD TRACKS (Continued)

MEMBER	DESIGN THICKNESS (in)	GROSS		MEMBER DEPTH[2] (in)	FLANGE WIDTH (in)	INSIDE CORNER RADII (in)
		AREA (in^2)	WEIGHT (lb/ft)			
362T200-33	0.0346	0.264	0.90	3.625	2.000	0.0764
362T200-43	0.0451	0.343	1.17	3.625	2.000	0.0712
362T200-54	0.0566	0.431	1.47	3.625	2.000	0.0849
362T200-68	0.0713	0.543	1.85	3.625	2.000	0.1069
362T200-97	0.1017	0.773	2.63	3.625	2.000	0.1525
362T200-118	0.1242	0.944	3.21	3.625	2.000	0.1863
362T250-43	0.0451	0.389	1.32	3.625	2.500	0.0712
362T250-54	0.0566	0.487	1.66	3.625	2.500	0.0849
362T250-68	0.0713	0.614	2.09	3.625	2.500	0.1069
362T250-97	0.1017	0.875	2.98	3.625	2.500	0.1525
362T250-118	0.1242	1.068	3.63	3.625	2.500	0.1863
362T300-54	0.0566	0.544	1.85	3.625	3.000	0.0849
362T300-68	0.0713	0.685	2.33	3.625	3.000	0.1069
362T300-97	0.1017	0.977	3.32	3.625	3.000	0.1525
362T300-118	0.1242	1.192	4.06	3.625	3.000	0.1863
362T350-54	0.0566	0.601	2.04	3.625	3.500	0.0849
362T350-68	0.0713	0.756	2.57	3.625	3.500	0.1069
362T350-97	0.1017	1.078	3.67	3.625	3.500	0.1525
362T350-118	0.1242	1.316	4.48	3.625	3.500	0.1863
400T100-18[1]	0.0188	0.113	0.38	4.000	1.000	0.0843
400T100-27	0.0283	0.170	0.58	4.000	1.000	0.0796
400T100-30	0.0312	0.187	0.64	4.000	1.000	0.0781
400T100-33	0.0346	0.207	0.71	4.000	1.000	0.0764
400T100-43	0.0451	0.270	0.92	4.000	1.000	0.0712
400T100-54	0.0566	0.339	1.15	4.000	1.000	0.0849
400T100-68	0.0713	0.427	1.45	4.000	1.000	0.1069
400T100-97	0.1017	0.608	2.07	4.000	1.000	0.1525
400T100-118	0.1242	0.742	2.52	4.000	1.000	0.1863
400T125-18[1]	0.0188	0.122	0.41	4.000	1.250	0.0843
400T125-27	0.0283	0.184	0.63	4.000	1.250	0.0796
400T125-30	0.0312	0.203	0.69	4.000	1.250	0.0781
400T125-33	0.0346	0.225	0.76	4.000	1.250	0.0764
400T125-43	0.0451	0.293	1.00	4.000	1.250	0.0712
400T125-54	0.0566	0.367	1.25	4.000	1.250	0.0849
400T125-68	0.0713	0.462	1.57	4.000	1.250	0.1069
400T125-97	0.1017	0.659	2.24	4.000	1.250	0.1525
400T125-118	0.1242	0.804	2.74	4.000	1.250	0.1863

MEMBER	DESIGN THICKNESS (in)	GROSS		MEMBER DEPTH[2] (in)	FLANGE WIDTH (in)	INSIDE CORNER RADII (in)
		AREA (in^2)	WEIGHT (lb/ft)			
400T150-27	0.0283	0.198	0.67	4.000	1.500	0.0796
400T150-30	0.0312	0.218	0.74	4.000	1.500	0.0781
400T150-33	0.0346	0.242	0.82	4.000	1.500	0.0764
400T150-43	0.0451	0.315	1.07	4.000	1.500	0.0712
400T150-54	0.0566	0.396	1.35	4.000	1.500	0.0849
400T150-68	0.0713	0.498	1.69	4.000	1.500	0.1069
400T150-97	0.1017	0.710	2.41	4.000	1.500	0.1525
400T150-118	0.1242	0.866	2.95	4.000	1.500	0.1863
400T200-33	0.0346	0.277	0.94	4.000	2.000	0.0764
400T200-43	0.0451	0.360	1.23	4.000	2.000	0.0712
400T200-54	0.0566	0.452	1.54	4.000	2.000	0.0849
400T200-68	0.0713	0.569	1.94	4.000	2.000	0.1069
400T200-97	0.1017	0.811	2.76	4.000	2.000	0.1525
400T200-118	0.1242	0.990	3.37	4.000	2.000	0.1863
400T250-43	0.0451	0.405	1.38	4.000	2.500	0.0712
400T250-54	0.0566	0.509	1.73	4.000	2.500	0.0849
400T250-68	0.0713	0.641	2.18	4.000	2.500	0.1069
400T250-97	0.1017	0.913	3.11	4.000	2.500	0.1525
400T250-118	0.1242	1.114	3.79	4.000	2.500	0.1863
400T300-54	0.0566	0.565	1.92	4.000	3.000	0.0849
400T300-68	0.0713	0.712	2.42	4.000	3.000	0.1069
400T300-97	0.1017	1.015	3.45	4.000	3.000	0.1525
400T300-118	0.1242	1.239	4.21	4.000	3.000	0.1863
400T350-54	0.0566	0.622	2.12	4.000	3.500	0.0849
400T350-68	0.0713	0.783	2.67	4.000	3.500	0.1069
400T350-97	0.1017	1.116	3.80	4.000	3.500	0.1525
400T350-118	0.1242	1.363	4.64	4.000	3.500	0.1863
550T100-27	0.0283	0.212	0.72	5.500	1.000	0.0796
550T100-30	0.0312	0.234	0.80	5.500	1.000	0.0781
550T100-33	0.0346	0.259	0.88	5.500	1.000	0.0764
550T100-43	0.0451	0.338	1.15	5.500	1.000	0.0712
550T100-54	0.0566	0.424	1.44	5.500	1.000	0.0849
550T100-68	0.0713	0.534	1.82	5.500	1.000	0.1069
550T100-97	0.1017	0.761	2.59	5.500	1.000	0.1525
550T100-118	0.1242	0.928	3.16	5.500	1.000	0.1863
550T125-27	0.0283	0.226	0.77	5.500	1.250	0.0796
550T125-30	0.0312	0.250	0.85	5.500	1.250	0.0781
550T125-33	0.0346	0.277	0.94	5.500	1.250	0.0764
550T125-43	0.0451	0.360	1.23	5.500	1.250	0.0712
550T125-54	0.0566	0.452	1.54	5.500	1.250	0.0849
550T125-68	0.0713	0.569	1.94	5.500	1.250	0.1069
550T125-97	0.1017	0.811	2.76	5.500	1.250	0.1525
550T125-118	0.1242	0.990	3.37	5.500	1.250	0.1863

For **SI:** 1 inch = 25.4 mm, 1 lb = 0.4536 kg.

TABLE 4A□ STANDARD TRACKS (Continued)

MEMBER	DESIGN THICKNESS (in)	GROSS AREA (in^2)	GROSS WEIGHT (lb/ft)	MEMBER DEPTH[2] (in)	FLANGE WIDTH (in)	INSIDE CORNER RADII (in)
550T150-27	0.0283	0.241	0.82	5.500	1.500	0.0796
550T150-30	0.0312	0.265	0.90	5.500	1.500	0.0781
550T150-33	0.0346	0.294	1.00	5.500	1.500	0.0764
550T150-43	0.0451	0.383	1.30	5.500	1.500	0.0712
550T150-54	0.0566	0.480	1.63	5.500	1.500	0.0849
550T150-68	0.0713	0.605	2.06	5.500	1.500	0.1069
550T150-97	0.1017	0.862	2.93	5.500	1.500	0.1525
550T150-118	0.1242	1.052	3.58	5.500	1.500	0.1863
550T200-33	0.0346	0.329	1.12	5.500	2.000	0.0764
550T200-43	0.0451	0.428	1.46	5.500	2.000	0.0712
550T200-54	0.0566	0.537	1.83	5.500	2.000	0.0849
550T200-68	0.0713	0.676	2.30	5.500	2.000	0.1069
550T200-97	0.1017	0.964	3.28	5.500	2.000	0.1525
550T200-118	0.1242	1.177	4.00	5.500	2.000	0.1863
550T250-43	0.0451	0.473	1.61	5.500	2.500	0.0712
550T250-54	0.0566	0.594	2.02	5.500	2.500	0.0849
550T250-68	0.0713	0.748	2.54	5.500	2.500	0.1069
550T250-97	0.1017	1.066	3.63	5.500	2.500	0.1525
550T250-118	0.1242	1.301	4.43	5.500	2.500	0.1863
550T300-54	0.0566	0.650	2.21	5.500	3.000	0.0849
550T300-68	0.0713	0.819	2.79	5.500	3.000	0.1069
550T300-97	0.1017	1.167	3.97	5.500	3.000	0.1525
550T300-118	0.1242	1.425	4.85	5.500	3.000	0.1863
550T350-54	0.0566	0.707	2.41	5.500	3.500	0.0849
550T350-68	0.0713	0.890	3.03	5.500	3.500	0.1069
550T350-97	0.1017	1.269	4.32	5.500	3.500	0.1525
550T350-118	0.1242	1.549	5.27	5.500	3.500	0.1863
600T100-27[1]	0.0283	0.226	0.77	6.000	1.000	0.0796
600T100-30	0.0312	0.250	0.85	6.000	1.000	0.0781
600T100-33	0.0346	0.277	0.94	6.000	1.000	0.0764
600T100-43	0.0451	0.360	1.23	6.000	1.000	0.0712
600T100-54	0.0566	0.452	1.54	6.000	1.000	0.0849
600T100-68	0.0713	0.569	1.94	6.000	1.000	0.1069
600T100-97	0.1017	0.811	2.76	6.000	1.000	0.1525
600T100-118	0.1242	0.990	3.37	6.000	1.000	0.1863
600T125-27[1]	0.0283	0.241	0.82	6.000	1.250	0.0796
600T125-30	0.0312	0.265	0.90	6.000	1.250	0.0781
600T125-33	0.0346	0.294	1.00	6.000	1.250	0.0764
600T125-43	0.0451	0.383	1.30	6.000	1.250	0.0712
600T125-54	0.0566	0.480	1.63	6.000	1.250	0.0849
600T125-68	0.0713	0.605	2.06	6.000	1.250	0.1069
600T125-97	0.1017	0.862	2.93	6.000	1.250	0.1525
600T125-118	0.1242	1.052	3.58	6.000	1.250	0.1863

MEMBER	DESIGN THICKNESS (in)	GROSS AREA (in^2)	GROSS WEIGHT (lb/ft)	MEMBER DEPTH[2] (in)	FLANGE WIDTH (in)	INSIDE CORNER RADII (in)
600T150-27[1]	0.0283	0.255	0.87	6.000	1.500	0.0796
600T150-30	0.0312	0.281	0.96	6.000	1.500	0.0781
600T150-33	0.0346	0.311	1.06	6.000	1.500	0.0764
600T150-43	0.0451	0.405	1.38	6.000	1.500	0.0712
600T150-54	0.0566	0.509	1.73	6.000	1.500	0.0849
600T150-68	0.0713	0.641	2.18	6.000	1.500	0.1069
600T150-97	0.1017	0.913	3.11	6.000	1.500	0.1525
600T150-118	0.1242	1.114	3.79	6.000	1.500	0.1863
600T200-33	0.0346	0.346	1.18	6.000	2.000	0.0764
600T200-43	0.0451	0.451	1.53	6.000	2.000	0.0712
600T200-54	0.0566	0.565	1.92	6.000	2.000	0.0849
600T200-68	0.0713	0.712	2.42	6.000	2.000	0.1069
600T200-97	0.1017	1.015	3.45	6.000	2.000	0.1525
600T200-118	0.1242	1.239	4.21	6.000	2.000	0.1863
600T250-43	0.0451	0.496	1.69	6.000	2.500	0.0712
600T250-54	0.0566	0.622	2.12	6.000	2.500	0.0849
600T250-68	0.0713	0.783	2.67	6.000	2.500	0.1069
600T250-97	0.1017	1.116	3.80	6.000	2.500	0.1525
600T250-118	0.1242	1.363	4.64	6.000	2.500	0.1863
600T300-54	0.0566	0.679	2.31	6.000	3.000	0.0849
600T300-68	0.0713	0.854	2.91	6.000	3.000	0.1069
600T300-97	0.1017	1.218	4.15	6.000	3.000	0.1525
600T300-118	0.1242	1.487	5.06	6.000	3.000	0.1863
600T350-54	0.0566	0.735	2.50	6.000	3.500	0.0849
600T350-68	0.0713	0.926	3.15	6.000	3.500	0.1069
600T350-97	0.1017	1.320	4.49	6.000	3.500	0.1525
600T350-118	0.1242	1.611	5.48	6.000	3.500	0.1863
725T100-27[1]	0.0283	0.262	0.89	7.250	1.000	0.0796
725T100-30[1]	0.0312	0.289	0.98	7.250	1.000	0.0781
725T100-33[1]	0.0346	0.320	1.09	7.250	1.000	0.0764
725T100-43	0.0451	0.417	1.42	7.250	1.000	0.0712
725T100-54	0.0566	0.523	1.78	7.250	1.000	0.0849
725T100-68	0.0713	0.658	2.24	7.250	1.000	0.1069
725T100-97	0.1017	0.938	3.19	7.250	1.000	0.1525
725T100-118	0.1242	1.146	3.90	7.250	1.000	0.1863
725T125-27[1]	0.0283	0.276	0.94	7.250	1.250	0.0796
725T125-30[1]	0.0312	0.304	1.03	7.250	1.250	0.0781
725T125-33[1]	0.0346	0.337	1.15	7.250	1.250	0.0764
725T125-43	0.0451	0.439	1.49	7.250	1.250	0.0712
725T125-54	0.0566	0.551	1.88	7.250	1.250	0.0849
725T125-68	0.0713	0.694	2.36	7.250	1.250	0.1069
725T125-97	0.1017	0.989	3.37	7.250	1.250	0.1525
725T125-118	0.1242	1.208	4.11	7.250	1.250	0.1863

For **SI:** 1 inch = 25.4 mm, 1 lb = 0.4536 kg.

TABLE 4A□ STANDARD TRACKS (Continued)

MEMBER	DESIGN THICKNESS (in)	GROSS		MEMBER DEPTH[2] (in)	FLANGE WIDTH (in)	INSIDE CORNER RADII (in)
		AREA (in^2)	WEIGHT (lb/ft)			
725T150-27[1]	0.0283	0.290	0.99	7.250	1.500	0.0796
725T150-30[1]	0.0312	0.320	1.09	7.250	1.500	0.0781
725T150-33[1]	0.0346	0.355	1.21	7.250	1.500	0.0764
725T150-43	0.0451	0.462	1.57	7.250	1.500	0.0712
725T150-54	0.0566	0.579	1.97	7.250	1.500	0.0849
725T150-68	0.0713	0.730	2.48	7.250	1.500	0.1069
725T150-97	0.1017	1.040	3.54	7.250	1.500	0.1525
725T150-118	0.1242	1.270	4.32	7.250	1.500	0.1863
725T200-33[1]	0.0346	0.389	1.32	7.250	2.000	0.0764
725T200-43	0.0451	0.507	1.73	7.250	2.000	0.0712
725T200-54	0.0566	0.636	2.16	7.250	2.000	0.0849
725T200-68	0.0713	0.801	2.73	7.250	2.000	0.1069
725T200-97	0.1017	1.142	3.89	7.250	2.000	0.1525
725T200-118	0.1242	1.394	4.74	7.250	2.000	0.1863
725T250-43	0.0451	0.552	1.88	7.250	2.500	0.0712
725T250-54	0.0566	0.693	2.36	7.250	2.500	0.0849
725T250-68	0.0713	0.872	2.97	7.250	2.500	0.1069
725T250-97	0.1017	1.244	4.23	7.250	2.500	0.1525
725T250-118	0.1242	1.518	5.17	7.250	2.500	0.1863
725T300-54	0.0566	0.749	2.55	7.250	3.000	0.0849
725T300-68	0.0713	0.944	3.21	7.250	3.000	0.1069
725T300-97	0.1017	1.345	4.58	7.250	3.000	0.1525
725T300-118	0.1242	1.642	5.59	7.250	3.000	0.1863
725T350-54	0.0566	0.806	2.74	7.250	3.500	0.0849
725T350-68	0.0713	1.015	3.45	7.250	3.500	0.1069
725T350-97	0.1017	1.447	4.92	7.250	3.500	0.1525
725T350-118	0.1242	1.767	6.01	7.250	3.500	0.1863
800T100-30[1]	0.0312	0.312	1.06	8.000	1.000	0.0781
800T100-33[1]	0.0346	0.346	1.18	8.000	1.000	0.0764
800T100-43	0.0451	0.451	1.53	8.000	1.000	0.0712
800T100-54	0.0566	0.565	1.92	8.000	1.000	0.0849
800T100-68	0.0713	0.712	2.42	8.000	1.000	0.1069
800T100-97	0.1017	1.015	3.45	8.000	1.000	0.1525
800T100-118	0.1242	1.239	4.21	8.000	1.000	0.1863
800T125-30[1]	0.0312	0.328	1.11	8.000	1.250	0.0781
800T125-33[1]	0.0346	0.363	1.24	8.000	1.250	0.0764
800T125-43	0.0451	0.473	1.61	8.000	1.250	0.0712
800T125-54	0.0566	0.594	2.02	8.000	1.250	0.0849
800T125-68	0.0713	0.748	2.54	8.000	1.250	0.1069
800T125-97	0.1017	1.066	3.63	8.000	1.250	0.1525
800T125-118	0.1242	1.301	4.43	8.000	1.250	0.1863

MEMBER	DESIGN THICKNESS (in)	GROSS		MEMBER DEPTH[2] (in)	FLANGE WIDTH (in)	INSIDE CORNER RADII (in)
		AREA (in^2)	WEIGHT (lb/ft)			
800T150-30[1]	0.0312	0.343	1.17	8.000	1.500	0.0781
800T150-33[1]	0.0346	0.380	1.29	8.000	1.500	0.0764
800T150-43	0.0451	0.496	1.69	8.000	1.500	0.0712
800T150-54	0.0566	0.622	2.12	8.000	1.500	0.0849
800T150-68	0.0713	0.783	2.67	8.000	1.500	0.1069
800T150-97	0.1017	1.116	3.80	8.000	1.500	0.1525
800T150-118	0.1242	1.363	4.64	8.000	1.500	0.1863
800T200-33[1]	0.0346	0.415	1.41	8.000	2.000	0.0764
800T200-43	0.0451	0.541	1.84	8.000	2.000	0.0712
800T200-54	0.0566	0.679	2.31	8.000	2.000	0.0849
800T200-68	0.0713	0.854	2.91	8.000	2.000	0.1069
800T200-97	0.1017	1.218	4.15	8.000	2.000	0.1525
800T200-118	0.1242	1.487	5.06	8.000	2.000	0.1863
800T250-43	0.0451	0.586	1.99	8.000	2.500	0.0712
800T250-54	0.0566	0.735	2.50	8.000	2.500	0.0849
800T250-68	0.0713	0.926	3.15	8.000	2.500	0.1069
800T250-97	0.1017	1.320	4.49	8.000	2.500	0.1525
800T250-118	0.1242	1.611	5.48	8.000	2.500	0.1863
800T300-54	0.0566	0.792	2.69	8.000	3.000	0.0849
800T300-68	0.0713	0.997	3.39	8.000	3.000	0.1069
800T300-97	0.1017	1.422	4.84	8.000	3.000	0.1525
800T300-118	0.1242	1.735	5.91	8.000	3.000	0.1863
800T350-54	0.0566	0.848	2.89	8.000	3.500	0.0849
800T350-68	0.0713	1.068	3.64	8.000	3.500	0.1069
800T350-97	0.1017	1.523	5.18	8.000	3.500	0.1525
800T350-118	0.1242	1.860	6.33	8.000	3.500	0.1863
925T100-43[1]	0.0451	0.507	1.73	9.250	1.000	0.0712
925T100-54	0.0566	0.636	2.16	9.250	1.000	0.0849
925T100-68	0.0713	0.801	2.73	9.250	1.000	0.1069
925T100-97	0.1017	1.142	3.89	9.250	1.000	0.1525
925T100-118	0.1242	1.394	4.74	9.250	1.000	0.1863
925T125-43[1]	0.0451	0.530	1.80	9.250	1.250	0.0712
925T125-54	0.0566	0.664	2.26	9.250	1.250	0.0849
925T125-68	0.0713	0.837	2.85	9.250	1.250	0.1069
925T125-97	0.1017	1.193	4.06	9.250	1.250	0.1525
925T125-118	0.1242	1.456	4.95	9.250	1.250	0.1863
925T150-43[1]	0.0451	0.552	1.88	9.250	1.500	0.0712
925T150-54	0.0566	0.693	2.36	9.250	1.500	0.0849
925T150-68	0.0713	0.872	2.97	9.250	1.500	0.1069
925T150-97	0.1017	1.244	4.23	9.250	1.500	0.1525
925T150-118	0.1242	1.518	5.17	9.250	1.500	0.1863

For **SI:** 1 inch = 25.4 mm, 1 lb = 0.4536 kg.

TABLE 4A□ STANDARD TRACKS (Continued)

MEMBER	DESIGN THICKNESS (in)	GROSS		MEMBER DEPTH[2] (in)	FLANGE WIDTH (in)	INSIDE CORNER RADII (in)
		AREA (in^2)	WEIGHT (lb/ft)			
925T200-43[1]	0.0451	0.597	2.03	9.250	2.000	0.0712
925T200-54	0.0566	0.749	2.55	9.250	2.000	0.0849
925T200-68	0.0713	0.944	3.21	9.250	2.000	0.1069
925T200-97	0.1017	1.345	4.58	9.250	2.000	0.1525
925T200-118	0.1242	1.642	5.59	9.250	2.000	0.1863
925T250-43[1]	0.0451	0.642	2.19	9.250	2.500	0.0712
925T250-54	0.0566	0.806	2.74	9.250	2.500	0.0849
925T250-68	0.0713	1.015	3.45	9.250	2.500	0.1069
925T250-97	0.1017	1.447	4.92	9.250	2.500	0.1525
925T250-118	0.1242	1.767	6.01	9.250	2.500	0.1863
925T300-54	0.0566	0.862	2.93	9.250	3.000	0.0849
925T300-68	0.0713	1.086	3.70	9.250	3.000	0.1069
925T300-97	0.1017	1.549	5.27	9.250	3.000	0.1525
925T300-118	0.1242	1.891	6.43	9.250	3.000	0.1863
925T350-54	0.0566	0.919	3.13	9.250	3.500	0.0849
925T350-68	0.0713	1.158	3.94	9.250	3.500	0.1069
925T350-97	0.1017	1.650	5.62	9.250	3.500	0.1525
925T350-118	0.1242	2.015	6.86	9.250	3.500	0.1863
1000T100-43[1]	0.0451	0.541	1.84	10.000	1.000	0.0712
1000T100-54	0.0566	0.679	2.31	10.000	1.000	0.0849
1000T100-68	0.0713	0.854	2.91	10.000	1.000	0.1069
1000T100-97	0.1017	1.218	4.15	10.000	1.000	0.1525
1000T100-118	0.1242	1.487	5.06	10.000	1.000	0.1863
1000T125-43[1]	0.0451	0.563	1.92	10.000	1.250	0.0712
1000T125-54	0.0566	0.707	2.41	10.000	1.250	0.0849
1000T125-68	0.0713	0.890	3.03	10.000	1.250	0.1069
1000T125-97	0.1017	1.269	4.32	10.000	1.250	0.1525
1000T125-118	0.1242	1.549	5.27	10.000	1.250	0.1863
1000T150-43[1]	0.0451	0.586	1.99	10.000	1.500	0.0712
1000T150-54	0.0566	0.735	2.50	10.000	1.500	0.0849
1000T150-68	0.0713	0.926	3.15	10.000	1.500	0.1069
1000T150-97	0.1017	1.320	4.49	10.000	1.500	0.1525
1000T150-118	0.1242	1.611	5.48	10.000	1.500	0.1863
1000T200-43[1]	0.0451	0.631	2.15	10.000	2.000	0.0712
1000T200-54	0.0566	0.792	2.69	10.000	2.000	0.0849
1000T200-68	0.0713	0.997	3.39	10.000	2.000	0.1069
1000T200-97	0.1017	1.422	4.84	10.000	2.000	0.1525
1000T200-118	0.1242	1.735	5.91	10.000	2.000	0.1863
1000T250-43[1]	0.0451	0.676	2.30	10.000	2.500	0.0712
1000T250-54	0.0566	0.848	2.89	10.000	2.500	0.0849
1000T250-68	0.0713	1.068	3.64	10.000	2.500	0.1069
1000T250-97	0.1017	1.523	5.18	10.000	2.500	0.1525
1000T250-118	0.1242	1.860	6.33	10.000	2.500	0.1863
1000T300-54	0.0566	0.905	3.08	10.000	3.000	0.0849
1000T300-68	0.0713	1.140	3.88	10.000	3.000	0.1069
1000T300-97	0.1017	1.625	5.53	10.000	3.000	0.1525
1000T300-118	0.1242	1.984	6.75	10.000	3.000	0.1863
1000T350-54	0.0566	0.962	3.27	10.000	3.500	0.0849
1000T350-68	0.0713	1.211	4.12	10.000	3.500	0.1069
1000T350-97	0.1017	1.727	5.88	10.000	3.500	0.1525
1000T350-118	0.1242	2.108	7.17	10.000	3.500	0.1863
1150T100-43[1]	0.0451	0.608	2.07	11.500	1.000	0.0712
1150T100-54[1]	0.0566	0.763	2.60	11.500	1.000	0.0849
1150T100-68	0.0713	0.961	3.27	11.500	1.000	0.1069
1150T100-97	0.1017	1.371	4.66	11.500	1.000	0.1525
1150T100-118	0.1242	1.673	5.69	11.500	1.000	0.1863
1150T125-43[1]	0.0451	0.631	2.15	11.500	1.250	0.0712
1150T125-54[1]	0.0566	0.792	2.69	11.500	1.250	0.0849
1150T125-68	0.0713	0.997	3.39	11.500	1.250	0.1069
1150T125-97	0.1017	1.422	4.84	11.500	1.250	0.1525
1150T125-118	0.1242	1.735	5.91	11.500	1.250	0.1863
1150T150-43[1]	0.0451	0.654	2.22	11.500	1.500	0.0712
1150T150-54[1]	0.0566	0.820	2.79	11.500	1.500	0.0849
1150T150-68	0.0713	1.033	3.51	11.500	1.500	0.1069
1150T150-97	0.1017	1.472	5.01	11.500	1.500	0.1525
1150T150-118	0.1242	1.798	6.12	11.500	1.500	0.1863
1150T200-43[1]	0.0451	0.699	2.38	11.500	2.000	0.0712
1150T200-54[1]	0.0566	0.877	2.98	11.500	2.000	0.0849
1150T200-68	0.0713	1.104	3.76	11.500	2.000	0.1069
1150T200-97	0.1017	1.574	5.36	11.500	2.000	0.1525
1150T200-118	0.1242	1.922	6.54	11.500	2.000	0.1863
1150T250-43[1]	0.0451	0.744	2.53	11.500	2.500	0.0712
1150T250-54[1]	0.0566	0.933	3.18	11.500	2.500	0.0849
1150T250-68	0.0713	1.175	4.00	11.500	2.500	0.1069
1150T250-97	0.1017	1.676	5.70	11.500	2.500	0.1525
1150T250-118	0.1242	2.046	6.96	11.500	2.500	0.1863
1150T300-54[1]	0.0566	0.990	3.37	11.500	3.000	0.0849
1150T300-68	0.0713	1.247	4.24	11.500	3.000	0.1069
1150T300-97	0.1017	1.778	6.05	11.500	3.000	0.1525
1150T300-118	0.1242	2.170	7.38	11.500	3.000	0.1863
1150T350-54[1]	0.0566	1.046	3.56	11.500	3.500	0.0849
1150T350-68	0.0713	1.318	4.48	11.500	3.500	0.1069
1150T350-97	0.1017	1.879	6.39	11.500	3.500	0.1525
1150T350-118	0.1242	2.294	7.81	11.500	3.500	0.1863

For **SI:** 1 inch = 25.4 mm, 1 lb = 0.4536 kg.

TABLE 4A□ STANDARD TRACKS (Continued)

MEMBER	DESIGN THICKNESS (in)	GROSS AREA (in^2)	GROSS WEIGHT (lb/ft)	MEMBER DEPTH[2] (in)	FLANGE WIDTH (in)	INSIDE CORNER RADII (in)
1200T100-54[1]	0.0566	0.792	2.69	12.000	1.000	0.0849
1200T100-68	0.0713	0.997	3.39	12.000	1.000	0.1069
1200T100-97	0.1017	1.422	4.84	12.000	1.000	0.1525
1200T100-118	0.1242	1.735	5.91	12.000	1.000	0.1863
1200T125-54[1]	0.0566	0.820	2.79	12.000	1.250	0.0849
1200T125-68	0.0713	1.033	3.51	12.000	1.250	0.1069
1200T125-97	0.1017	1.472	5.01	12.000	1.250	0.1525
1200T125-118	0.1242	1.798	6.12	12.000	1.250	0.1863
1200T150-54[1]	0.0566	0.848	2.89	12.000	1.500	0.0849
1200T150-68	0.0713	1.068	3.64	12.000	1.500	0.1069
1200T150-97	0.1017	1.523	5.18	12.000	1.500	0.1525
1200T150-118	0.1242	1.860	6.33	12.000	1.500	0.1863
1200T200-54[1]	0.0566	0.905	3.08	12.000	2.000	0.0849
1200T200-68	0.0713	1.140	3.88	12.000	2.000	0.1069
1200T200-97	0.1017	1.625	5.53	12.000	2.000	0.1525
1200T200-118	0.1242	1.984	6.75	12.000	2.000	0.1863
1200T250-54[1]	0.0566	0.962	3.27	12.000	2.500	0.0849
1200T250-68	0.0713	1.211	4.12	12.000	2.500	0.1069
1200T250-97	0.1017	1.727	5.88	12.000	2.500	0.1525
1200T250-118	0.1242	2.108	7.17	12.000	2.500	0.1863
1200T300-54[1]	0.0566	1.018	3.46	12.000	3.000	0.0849
1200T300-68	0.0713	1.282	4.36	12.000	3.000	0.1069
1200T300-97	0.1017	1.828	6.22	12.000	3.000	0.1525
1200T300-118	0.1242	2.232	7.60	12.000	3.000	0.1863
1200T350-54[1]	0.0566	1.075	3.66	12.000	3.500	0.0849
1200T350-68	0.0713	1.354	4.61	12.000	3.500	0.1069
1200T350-97	0.1017	1.930	6.57	12.000	3.500	0.1525
1200T350-118	0.1242	2.356	8.02	12.000	3.500	0.1863
1350T100-54[1]	0.0566	0.877	2.98	13.500	1.000	0.0849
1350T100-68	0.0713	1.104	3.76	13.500	1.000	0.1069
1350T100-97	0.1017	1.574	5.36	13.500	1.000	0.1525
1350T100-118	0.1242	1.922	6.54	13.500	1.000	0.1863
1350T125-54[1]	0.0566	0.905	3.08	13.500	1.250	0.0849
1350T125-68	0.0713	1.140	3.88	13.500	1.250	0.1069
1350T125-97	0.1017	1.625	5.53	13.500	1.250	0.1525
1350T125-118	0.1242	1.984	6.75	13.500	1.250	0.1863
1350T150-54[1]	0.0566	0.933	3.18	13.500	1.500	0.0849
1350T150-68	0.0713	1.175	4.00	13.500	1.500	0.1069
1350T150-97	0.1017	1.676	5.70	13.500	1.500	0.1525
1350T150-118	0.1242	2.046	6.96	13.500	1.500	0.1863

MEMBER	DESIGN THICKNESS (in)	GROSS AREA (in^2)	GROSS WEIGHT (lb/ft)	MEMBER DEPTH[2] (in)	FLANGE WIDTH (in)	INSIDE CORNER RADII (in)
1350T200-54[1]	0.0566	0.990	3.37	13.500	2.000	0.0849
1350T200-68	0.0713	1.247	4.24	13.500	2.000	0.1069
1350T200-97	0.1017	1.778	6.05	13.500	2.000	0.1525
1350T200-118	0.1242	2.170	7.38	13.500	2.000	0.1863
1350T250-54[1]	0.0566	1.046	3.56	13.500	2.500	0.0849
1350T250-68	0.0713	1.318	4.48	13.500	2.500	0.1069
1350T250-97	0.1017	1.879	6.39	13.500	2.500	0.1525
1350T250-118	0.1242	2.294	7.81	13.500	2.500	0.1863
1350T300-54[1]	0.0566	1.103	3.75	13.500	3.000	0.0849
1350T300-68	0.0713	1.389	4.73	13.500	3.000	0.1069
1350T300-97	0.1017	1.981	6.74	13.500	3.000	0.1525
1350T300-118	0.1242	2.419	8.23	13.500	3.000	0.1863
1350T350-54[1]	0.0566	1.160	3.95	13.500	3.500	0.0849
1350T350-68	0.0713	1.461	4.97	13.500	3.500	0.1069
1350T350-97	0.1017	2.083	7.09	13.500	3.500	0.1525
1350T350-118	0.1242	2.543	8.65	13.500	3.500	0.1863
1400T100-54[1]	0.0566	0.905	3.08	14.000	1.000	0.0849
1400T100-68	0.0713	1.140	3.88	14.000	1.000	0.1069
1400T100-97	0.1017	1.625	5.53	14.000	1.000	0.1525
1400T100-118	0.1242	1.984	6.75	14.000	1.000	0.1863
1400T125-54[1]	0.0566	0.933	3.18	14.000	1.250	0.0849
1400T125-68	0.0713	1.175	4.00	14.000	1.250	0.1069
1400T125-97	0.1017	1.676	5.70	14.000	1.250	0.1525
1400T125-118	0.1242	2.046	6.96	14.000	1.250	0.1863
1400T150-54[1]	0.0566	0.962	3.27	14.000	1.500	0.0849
1400T150-68	0.0713	1.211	4.12	14.000	1.500	0.1069
1400T150-97	0.1017	1.727	5.88	14.000	1.500	0.1525
1400T150-118	0.1242	2.108	7.17	14.000	1.500	0.1863
1400T200-54[1]	0.0566	1.018	3.46	14.000	2.000	0.0849
1400T200-68	0.0713	1.282	4.36	14.000	2.000	0.1069
1400T200-97	0.1017	1.828	6.22	14.000	2.000	0.1525
1400T200-118	0.1242	2.232	7.60	14.000	2.000	0.1863
1400T250-54[1]	0.0566	1.075	3.66	14.000	2.500	0.0849
1400T250-68	0.0713	1.354	4.61	14.000	2.500	0.1069
1400T250-97	0.1017	1.930	6.57	14.000	2.500	0.1525
1400T250-118	0.1242	2.356	8.02	14.000	2.500	0.1863
1400T300-54[1]	0.0566	1.131	3.85	14.000	3.000	0.0849
1400T300-68	0.0713	1.425	4.85	14.000	3.000	0.1069
1400T300-97	0.1017	2.032	6.91	14.000	3.000	0.1525
1400T300-118	0.1242	2.481	8.44	14.000	3.000	0.1863

For **SI:** 1 inch = 25.4 mm, 1 lb = 0.4536 kg.

TABLE 4A□ STANDARD TRACKS (Continued)

MEMBER	DESIGN THICKNESS (in)	GROSS		MEMBER DEPTH[2] (in)	FLANGE WIDTH (in)	INSIDE CORNER RADII (in)
		AREA (in^2)	WEIGHT (lb/ft)			
1400T350-54[1]	0.0566	1.188	4.04	14.000	3.500	0.0849
1400T350-68	0.0713	1.496	5.09	14.000	3.500	0.1069
1400T350-97	0.1017	2.133	7.26	14.000	3.500	0.1525
1400T350-118	0.1242	2.605	8.86	14.000	3.500	0.1863
1600T100-54[1]	0.0566	1.018	3.46	16.000	1.000	0.0849
1600T100-68[1]	0.0713	1.282	4.36	16.000	1.000	0.1069
1600T100-97	0.1017	1.828	6.22	16.000	1.000	0.1525
1600T100-118	0.1242	2.232	7.60	16.000	1.000	0.1863
1600T125-68[1]	0.0713	1.318	4.48	16.000	1.250	0.1069
1600T125-97	0.1017	1.879	6.39	16.000	1.250	0.1525
1600T125-118	0.1242	2.294	7.81	16.000	1.250	0.1863
1600T150-68[1]	0.0713	1.354	4.61	16.000	1.500	0.1069
1600T150-97	0.1017	1.930	6.57	16.000	1.500	0.1525
1600T150-118	0.1242	2.356	8.02	16.000	1.500	0.1863
1600T200-68[1]	0.0713	1.425	4.85	16.000	2.000	0.1069
1600T200-97	0.1017	2.032	6.91	16.000	2.000	0.1525
1600T200-118	0.1242	2.481	8.44	16.000	2.000	0.1863
1600T250-68[1]	0.0713	1.496	5.09	16.000	2.500	0.1069
1600T250-97	0.1017	2.133	7.26	16.000	2.500	0.1525
1600T250-118	0.1242	2.605	8.86	16.000	2.500	0.1863
1600T300-68[1]	0.0713	1.567	5.33	16.000	3.000	0.1069
1600T300-97	0.1017	2.235	7.61	16.000	3.000	0.1525
1600T300-118	0.1242	2.729	9.29	16.000	3.000	0.1863
1600T350-68[1]	0.0713	1.639	5.58	16.000	3.500	0.1069
1600T350-97	0.1017	2.337	7.95	16.000	3.500	0.1525
1600T350-118	0.1242	2.853	9.71	16.000	3.500	0.1863

For **SI:** 1 inch = 25.4 mm, 1 lb = 0.4536 kg.

Notes to Table 4A:
[1]Web-height to thickness ratio exceeds 200. Web Stiffeners are required in accordance with AISI-NAS Sections B1.2 and C3.6.1.
[2]Member depth measured from inside face to inside face of flanges.

TABLE 4B□ STANDARD TRACK DESIGN PROPERTIES

Member	Gross Properties					Effective Properties 33 ksi				Effective Properties 50 ksi				Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
162T100-18	0.035	0.040	0.713	0.007	0.324	0.027	0.024	0.48	302	0.026	0.023	0.68	372	0.008	0.004	-0.654	0.384	1.021	0.589
162T100-27	0.052	0.059	0.715	0.011	0.323	0.046	0.042	0.83	541	0.043	0.039	1.17	820	0.027	0.006	-0.650	0.381	1.018	0.593
162T100-30	0.058	0.065	0.715	0.012	0.322	0.052	0.048	0.95	597	0.049	0.044	1.33	905	0.037	0.006	-0.648	0.380	1.018	0.594
162T100-33	0.064	0.072	0.716	0.013	0.321	0.059	0.055	1.09	663	0.056	0.051	1.53	1005	0.050	0.007	-0.647	0.380	1.017	0.595
162T100-43	0.084	0.094	0.717	0.017	0.320	0.082	0.080	1.58	867	0.078	0.074	2.21	1314	0.111	0.009	-0.641	0.377	1.014	0.600
162T100-54	0.107	0.118	0.724	0.021	0.317	0.107	0.111	2.19	1079	0.106	0.103	3.07	1634	0.218	0.011	-0.635	0.373	1.014	0.608
162T100-68	0.139	0.148	0.735	0.025	0.314	0.139	0.148	3.30	1339	0.139	0.143	4.28	2029	0.436	0.015	-0.626	0.368	1.015	0.620
162T100-97	0.210	0.212	0.756	0.035	0.307	0.210	0.212	4.92	1853	0.210	0.212	7.30	2808	1.263	0.022	-0.608	0.357	1.018	0.643
162T100-118	0.266	0.258	0.771	0.041	0.301	0.266	0.258	6.19	2211	0.266	0.258	9.15	3350	2.298	0.028	-0.596	0.349	1.020	0.659
162T125-18	0.041	0.047	0.733	0.013	0.411	0.030	0.025	0.50	302	0.028	0.024	0.71	372	0.009	0.007	-0.878	0.503	1.215	0.478
162T125-27	0.063	0.072	0.735	0.020	0.410	0.050	0.044	0.87	541	0.048	0.041	1.22	820	0.031	0.010	-0.872	0.501	1.211	0.482
162T125-30	0.070	0.079	0.735	0.022	0.409	0.057	0.050	1.00	597	0.054	0.046	1.39	905	0.042	0.012	-0.870	0.500	1.210	0.483
162T125-33	0.077	0.087	0.736	0.024	0.408	0.066	0.058	1.15	663	0.062	0.054	1.60	1005	0.057	0.013	-0.868	0.499	1.209	0.484
162T125-43	0.101	0.113	0.737	0.031	0.407	0.093	0.085	1.68	867	0.087	0.078	2.33	1314	0.126	0.017	-0.863	0.496	1.206	0.488
162T125-54	0.129	0.142	0.746	0.038	0.404	0.126	0.119	2.36	1079	0.120	0.109	3.27	1634	0.249	0.021	-0.856	0.492	1.205	0.496
162T125-68	0.168	0.179	0.757	0.047	0.401	0.168	0.168	3.33	1339	0.166	0.155	4.65	2029	0.497	0.028	-0.846	0.487	1.205	0.506
162T125-97	0.255	0.257	0.781	0.065	0.395	0.255	0.257	5.81	1853	0.255	0.257	7.70	2808	1.439	0.042	-0.827	0.475	1.204	0.528
162T125-118	0.324	0.315	0.798	0.077	0.390	0.324	0.315	7.29	2211	0.324	0.315	10.82	3350	2.617	0.053	-0.814	0.467	1.204	0.544
162T150-27	0.074	0.084	0.750	0.032	0.495	0.055	0.045	0.90	541	0.051	0.042	1.25	820	0.035	0.017	-1.100	0.622	1.420	0.400
162T150-30	0.081	0.092	0.751	0.035	0.494	0.062	0.052	1.03	597	0.058	0.048	1.43	905	0.047	0.019	-1.098	0.621	1.419	0.401
162T150-33	0.090	0.102	0.751	0.039	0.494	0.072	0.060	1.19	663	0.067	0.055	1.66	1005	0.064	0.021	-1.096	0.620	1.418	0.402
162T150-43	0.118	0.132	0.753	0.050	0.492	0.102	0.089	1.75	867	0.096	0.081	2.41	1314	0.141	0.027	-1.091	0.617	1.414	0.405
162T150-54	0.151	0.166	0.762	0.063	0.490	0.140	0.126	2.48	1079	0.132	0.114	3.42	1634	0.279	0.035	-1.083	0.613	1.412	0.411
162T150-68	0.197	0.210	0.774	0.078	0.487	0.194	0.180	3.55	1339	0.185	0.164	4.91	2029	0.557	0.046	-1.073	0.607	1.410	0.421
162T150-97	0.299	0.302	0.800	0.108	0.481	0.299	0.302	5.97	1853	0.299	0.283	8.48	2808	1.614	0.070	-1.053	0.596	1.407	0.440
162T150-118	0.382	0.371	0.818	0.129	0.476	0.382	0.371	8.40	2211	0.382	0.371	12.50	3350	2.936	0.089	-1.039	0.587	1.405	0.454
162T200-33	0.116	0.131	0.773	0.085	0.660	0.081	0.063	1.25	663	0.076	0.058	1.73	1005	0.078	0.047	-1.565	0.865	1.866	0.297
162T200-43	0.152	0.170	0.775	0.110	0.658	0.117	0.094	1.85	867	0.109	0.085	2.54	1314	0.172	0.061	-1.559	0.862	1.861	0.298
162T200-54	0.196	0.215	0.785	0.137	0.656	0.164	0.134	2.65	1079	0.153	0.121	3.62	1634	0.339	0.078	-1.551	0.858	1.858	0.303
162T200-68	0.255	0.272	0.799	0.171	0.653	0.232	0.195	3.86	1339	0.218	0.176	5.26	2029	0.678	0.102	-1.540	0.852	1.854	0.310
162T200-97	0.389	0.393	0.827	0.239	0.648	0.389	0.345	6.82	1853	0.373	0.313	9.38	2808	1.965	0.157	-1.519	0.840	1.846	0.323
162T200-118	0.499	0.484	0.847	0.288	0.643	0.499	0.470	9.29	2211	0.499	0.432	12.92	3350	3.575	0.201	-1.503	0.831	1.841	0.334
162T250-43	0.186	0.209	0.790	0.200	0.819	0.130	0.097	1.92	867	0.120	0.087	2.62	1314	0.202	0.114	-2.037	1.109	2.333	0.238
162T250-54	0.240	0.263	0.800	0.250	0.817	0.184	0.140	2.76	1079	0.170	0.125	3.76	1634	0.400	0.147	-2.028	1.104	2.329	0.241
162T250-68	0.313	0.334	0.815	0.313	0.815	0.262	0.205	4.05	1339	0.244	0.183	5.49	2029	0.799	0.192	-2.017	1.098	2.324	0.246
162T250-97	0.479	0.484	0.845	0.441	0.810	0.453	0.371	7.32	1853	0.427	0.332	9.95	2808	2.315	0.295	-1.995	1.086	2.313	0.256
162T250-118	0.615	0.597	0.866	0.532	0.806	0.613	0.515	10.17	2211	0.584	0.465	13.91	3350	4.214	0.379	-1.979	1.077	2.305	0.263
162T300-54	0.284	0.311	0.812	0.410	0.976	0.200	0.144	2.84	1079	0.183	0.129	3.85	1634	0.460	0.245	-2.512	1.352	2.815	0.203
162T300-68	0.371	0.396	0.827	0.514	0.973	0.288	0.212	4.19	1339	0.266	0.189	5.65	2029	0.919	0.321	-2.501	1.346	2.808	0.207
162T300-97	0.569	0.574	0.858	0.726	0.969	0.507	0.388	7.67	1853	0.473	0.346	10.35	2808	2.666	0.494	-2.478	1.333	2.795	0.214
162T300-118	0.731	0.710	0.880	0.879	0.965	0.695	0.546	10.78	2211	0.655	0.488	14.60	3350	4.852	0.638	-2.461	1.324	2.786	0.220
162T350-54	0.328	0.360	0.820	0.624	1.131	0.214	0.147	2.90	1079	0.195	0.131	3.92	1634	0.521	0.380	-3.000	1.600	3.309	0.178
162T350-68	0.429	0.458	0.836	0.783	1.129	0.311	0.217	4.29	1339	0.284	0.193	5.78	2029	1.040	0.498	-2.988	1.594	3.302	0.181
162T350-97	0.659	0.665	0.868	1.107	1.125	0.554	0.401	7.93	1853	0.513	0.355	10.64	2808	3.016	0.767	-2.965	1.581	3.287	0.187
162T350-118	0.847	0.823	0.891	1.343	1.121	0.767	0.568	11.23	2211	0.716	0.504	15.10	3350	5.491	0.990	-2.947	1.571	3.277	0.191

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

TABLE 4B□ STANDARD TRACK DESIGN PROPERTIES (Continued)

Member	Gross Properties					Effective Properties 33 ksi				Effective Properties 50 ksi				Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
250T100-18	0.088	0.067	1.020	0.008	0.310	0.071	0.045	0.88	245	0.069	0.037	1.11	245	0.010	0.010	-0.563	0.344	1.206	0.782
250T100-27	0.133	0.101	1.021	0.012	0.308	0.117	0.075	1.49	685	0.112	0.071	2.12	833	0.034	0.015	-0.558	0.342	1.204	0.785
250T100-30	0.146	0.111	1.021	0.013	0.308	0.132	0.085	1.69	832	0.126	0.080	2.40	1024	0.046	0.016	-0.557	0.341	1.203	0.786
250T100-33	0.162	0.123	1.022	0.015	0.307	0.150	0.098	1.93	1024	0.143	0.092	2.75	1260	0.062	0.018	-0.556	0.341	1.203	0.787
250T100-43	0.212	0.159	1.023	0.019	0.305	0.207	0.139	2.74	1356	0.198	0.130	3.88	2054	0.137	0.023	-0.551	0.338	1.201	0.790
250T100-54	0.269	0.199	1.029	0.023	0.303	0.269	0.189	3.73	1692	0.265	0.177	5.31	2563	0.271	0.029	-0.545	0.334	1.203	0.795
250T100-68	0.344	0.251	1.038	0.029	0.300	0.344	0.251	5.58	2111	0.344	0.243	7.26	3199	0.542	0.037	-0.538	0.330	1.207	0.802
250T100-97	0.508	0.356	1.056	0.039	0.293	0.508	0.356	8.27	2954	0.508	0.356	12.27	4476	1.570	0.054	-0.522	0.320	1.214	0.815
250T100-118	0.634	0.432	1.068	0.046	0.288	0.634	0.432	10.36	3556	0.634	0.432	15.31	5388	2.857	0.067	-0.511	0.313	1.219	0.824
250T125-18	0.103	0.079	1.051	0.015	0.400	0.078	0.045	0.90	249	0.076	0.038	1.14	249	0.011	0.018	-0.769	0.460	1.362	0.681
250T125-27	0.157	0.119	1.053	0.022	0.398	0.129	0.079	1.56	685	0.122	0.074	2.21	833	0.038	0.027	-0.763	0.457	1.360	0.685
250T125-30	0.173	0.131	1.053	0.025	0.397	0.145	0.090	1.77	832	0.138	0.084	2.51	1024	0.051	0.030	-0.762	0.456	1.359	0.686
250T125-33	0.192	0.145	1.054	0.027	0.397	0.166	0.103	2.03	1024	0.157	0.096	2.87	1260	0.069	0.033	-0.760	0.456	1.358	0.687
250T125-43	0.250	0.188	1.055	0.035	0.395	0.231	0.147	2.91	1356	0.220	0.137	4.09	2054	0.153	0.042	-0.755	0.453	1.356	0.690
250T125-54	0.318	0.236	1.062	0.043	0.392	0.310	0.203	4.01	1692	0.297	0.188	5.64	2563	0.301	0.054	-0.749	0.449	1.357	0.696
250T125-68	0.408	0.297	1.072	0.054	0.389	0.408	0.281	5.56	2111	0.402	0.262	7.85	3199	0.602	0.069	-0.740	0.444	1.360	0.704
250T125-97	0.604	0.423	1.092	0.074	0.383	0.604	0.423	9.56	2954	0.604	0.423	12.67	4476	1.745	0.101	-0.724	0.434	1.365	0.719
250T125-118	0.757	0.516	1.107	0.088	0.377	0.757	0.516	11.95	3556	0.757	0.516	17.74	5388	3.176	0.127	-0.711	0.426	1.369	0.730
250T150-27	0.181	0.137	1.078	0.037	0.486	0.139	0.082	1.61	685	0.132	0.076	2.29	833	0.042	0.044	-0.976	0.575	1.534	0.595
250T150-30	0.199	0.151	1.078	0.040	0.486	0.157	0.093	1.83	832	0.149	0.087	2.60	1024	0.056	0.049	-0.975	0.574	1.533	0.595
250T150-33	0.221	0.167	1.079	0.045	0.485	0.179	0.107	2.11	1024	0.170	0.099	2.98	1260	0.076	0.054	-0.973	0.573	1.532	0.596
250T150-43	0.289	0.217	1.080	0.058	0.483	0.252	0.154	3.03	1356	0.238	0.142	4.25	2054	0.168	0.070	-0.968	0.570	1.529	0.599
250T150-54	0.368	0.273	1.088	0.072	0.481	0.342	0.213	4.22	1692	0.325	0.197	5.89	2563	0.332	0.089	-0.961	0.566	1.529	0.605
250T150-68	0.472	0.344	1.099	0.089	0.478	0.465	0.299	5.92	2111	0.445	0.276	8.27	3199	0.663	0.114	-0.953	0.561	1.531	0.613
250T150-97	0.701	0.491	1.121	0.124	0.471	0.701	0.491	9.69	2954	0.701	0.463	13.86	4476	1.921	0.168	-0.935	0.550	1.534	0.629
250T150-118	0.879	0.599	1.137	0.148	0.466	0.879	0.599	13.56	3556	0.879	0.599	20.19	5388	3.495	0.211	-0.922	0.542	1.536	0.640
250T200-33	0.280	0.212	1.117	0.097	0.658	0.203	0.112	2.22	1024	0.191	0.104	3.12	1260	0.090	0.118	-1.418	0.813	1.921	0.455
250T200-43	0.366	0.275	1.118	0.126	0.657	0.288	0.163	3.21	1356	0.270	0.150	4.48	2054	0.198	0.153	-1.413	0.810	1.918	0.457
250T200-54	0.466	0.346	1.127	0.157	0.654	0.396	0.228	4.51	1692	0.371	0.209	6.25	2563	0.392	0.195	-1.405	0.806	1.917	0.462
250T200-68	0.600	0.437	1.139	0.196	0.652	0.548	0.324	6.41	2111	0.517	0.296	8.86	3199	0.783	0.251	-1.396	0.800	1.916	0.469
250T200-97	0.893	0.626	1.165	0.275	0.646	0.893	0.556	10.99	2954	0.856	0.510	15.27	4476	2.271	0.374	-1.376	0.789	1.915	0.484
250T200-118	1.125	0.766	1.183	0.330	0.641	1.125	0.746	14.74	3556	1.125	0.691	20.68	5388	4.134	0.471	-1.362	0.780	1.914	0.494
250T250-43	0.443	0.333	1.146	0.230	0.826	0.318	0.169	3.34	1356	0.296	0.155	4.64	2054	0.229	0.283	-1.873	1.053	2.346	0.362
250T250-54	0.565	0.419	1.155	0.287	0.824	0.440	0.238	4.70	1692	0.410	0.217	6.50	2563	0.453	0.361	-1.865	1.049	2.343	0.366
250T250-68	0.728	0.530	1.168	0.360	0.821	0.616	0.341	6.74	2111	0.576	0.310	9.27	3199	0.904	0.466	-1.855	1.043	2.341	0.372
250T250-97	1.086	0.761	1.195	0.506	0.815	1.028	0.596	11.79	2954	0.972	0.541	16.20	4476	2.622	0.696	-1.834	1.031	2.336	0.384
250T250-118	1.370	0.934	1.215	0.610	0.811	1.364	0.815	16.10	3556	1.303	0.742	22.22	5388	4.772	0.879	-1.819	1.022	2.333	0.392
250T300-54	0.664	0.492	1.176	0.470	0.989	0.477	0.245	4.85	1692	0.443	0.223	6.69	2563	0.513	0.599	-2.335	1.294	2.795	0.302
250T300-68	0.856	0.623	1.189	0.589	0.987	0.674	0.353	6.98	2111	0.626	0.319	9.56	3199	1.025	0.773	-2.324	1.288	2.791	0.307
250T300-97	1.279	0.896	1.218	0.830	0.981	1.144	0.625	12.35	2954	1.072	0.563	16.86	4476	2.973	1.158	-2.303	1.276	2.784	0.316
250T300-118	1.615	1.101	1.239	1.005	0.977	1.536	0.863	17.05	3556	1.451	0.779	23.31	5388	5.411	1.464	-2.287	1.267	2.778	0.323
250T350-54	0.763	0.565	1.192	0.712	1.151	0.510	0.251	4.96	1692	0.471	0.228	6.83	2563	0.573	0.921	-2.811	1.540	3.263	0.258
250T350-68	0.984	0.716	1.206	0.893	1.149	0.724	0.362	7.16	2111	0.669	0.327	9.79	3199	1.146	1.189	-2.800	1.534	3.258	0.261
250T350-97	1.472	1.031	1.236	1.262	1.144	1.245	0.646	12.77	2954	1.158	0.580	17.36	4476	3.323	1.784	-2.778	1.522	3.248	0.269
250T350-118	1.860	1.268	1.257	1.530	1.140	1.687	0.898	17.75	3556	1.581	0.806	24.13	5388	6.050	2.258	-2.761	1.513	3.241	0.274

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

TABLE 4B□ STANDARD TRACK DESIGN PROPERTIES (Continued)

Member	Gross Properties					Effective Properties 33 ksi				Effective Properties 50 ksi				Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
350T100-18	0.189	0.104	1.352	0.009	0.293	0.160	0.062	1.22	173	0.156	0.052	1.54	173	0.012	0.021	-0.487	0.308	1.467	0.890
350T100-27	0.285	0.157	1.353	0.013	0.291	0.255	0.122	2.42	590	0.246	0.113	3.37	590	0.042	0.031	-0.483	0.306	1.466	0.891
350T100-30	0.314	0.172	1.353	0.014	0.291	0.286	0.138	2.73	790	0.275	0.131	3.93	790	0.056	0.035	-0.482	0.306	1.465	0.892
350T100-33	0.348	0.191	1.353	0.016	0.290	0.324	0.158	3.11	1024	0.311	0.149	4.47	1077	0.076	0.038	-0.481	0.305	1.465	0.892
350T100-43	0.454	0.248	1.354	0.021	0.288	0.443	0.221	4.36	1739	0.427	0.208	6.24	2141	0.168	0.049	-0.477	0.302	1.464	0.894
350T100-54	0.574	0.310	1.359	0.025	0.286	0.574	0.296	5.86	2392	0.565	0.280	8.40	3372	0.332	0.062	-0.471	0.299	1.467	0.897
350T100-68	0.730	0.390	1.367	0.031	0.283	0.730	0.390	8.67	2994	0.730	0.379	11.34	4536	0.663	0.078	-0.465	0.295	1.471	0.900
350T100-97	1.064	0.552	1.382	0.042	0.276	1.064	0.552	12.83	4213	1.064	0.552	19.03	6383	1.921	0.112	-0.452	0.286	1.480	0.907
350T100-118	1.318	0.670	1.392	0.050	0.271	1.318	0.670	16.05	5093	1.318	0.670	23.73	7717	3.495	0.137	-0.442	0.280	1.486	0.912
350T125-18	0.219	0.121	1.394	0.016	0.383	0.174	0.063	1.25	175	0.165	0.053	1.60	175	0.013	0.038	-0.675	0.418	1.595	0.821
350T125-27	0.331	0.182	1.396	0.025	0.381	0.277	0.128	2.53	590	0.269	0.111	3.34	590	0.045	0.057	-0.670	0.416	1.595	0.823
350T125-30	0.365	0.200	1.396	0.027	0.380	0.312	0.145	2.86	790	0.300	0.136	4.06	790	0.061	0.063	-0.669	0.415	1.594	0.824
350T125-33	0.405	0.222	1.397	0.030	0.379	0.354	0.165	3.27	1024	0.339	0.156	4.67	1077	0.083	0.070	-0.668	0.414	1.594	0.824
350T125-43	0.528	0.288	1.397	0.038	0.377	0.490	0.233	4.61	1739	0.469	0.219	6.55	2141	0.183	0.090	-0.663	0.412	1.592	0.826
350T125-54	0.668	0.361	1.404	0.048	0.375	0.651	0.317	6.26	2392	0.626	0.297	8.89	3372	0.362	0.114	-0.658	0.408	1.595	0.830
350T125-68	0.851	0.454	1.412	0.059	0.372	0.851	0.433	8.55	2994	0.839	0.407	12.18	4536	0.723	0.144	-0.650	0.403	1.599	0.835
350T125-97	1.243	0.645	1.430	0.081	0.366	1.243	0.645	14.56	4213	1.243	0.645	19.30	6383	2.096	0.209	-0.636	0.394	1.607	0.844
350T125-118	1.543	0.784	1.442	0.096	0.360	1.543	0.784	18.18	5093	1.543	0.784	26.98	7717	3.815	0.258	-0.625	0.387	1.613	0.850
350T150-27	0.377	0.207	1.431	0.041	0.470	0.298	0.132	2.62	590	0.289	0.111	3.31	590	0.049	0.094	-0.869	0.529	1.739	0.750
350T150-30	0.416	0.228	1.432	0.045	0.469	0.336	0.150	2.96	790	0.323	0.134	4.01	790	0.066	0.103	-0.867	0.528	1.739	0.751
350T150-33	0.461	0.253	1.432	0.049	0.469	0.382	0.171	3.39	1024	0.364	0.162	4.84	1077	0.090	0.114	-0.866	0.527	1.738	0.752
350T150-43	0.601	0.328	1.433	0.064	0.467	0.531	0.243	4.80	1739	0.505	0.227	6.80	2141	0.198	0.148	-0.861	0.525	1.736	0.754
350T150-54	0.761	0.412	1.440	0.079	0.465	0.712	0.332	6.57	2392	0.679	0.310	9.28	3372	0.392	0.187	-0.855	0.521	1.738	0.758
350T150-68	0.972	0.518	1.450	0.099	0.462	0.957	0.459	9.07	2994	0.919	0.428	12.81	4536	0.783	0.238	-0.847	0.516	1.741	0.763
350T150-97	1.422	0.738	1.469	0.136	0.455	1.422	0.738	14.58	4213	1.422	0.701	20.98	6383	2.271	0.346	-0.831	0.506	1.748	0.774
350T150-118	1.768	0.899	1.483	0.163	0.450	1.768	0.899	20.35	5093	1.768	0.899	30.29	7717	4.134	0.429	-0.819	0.499	1.753	0.782
350T200-33	0.574	0.315	1.487	0.108	0.647	0.428	0.181	3.57	1024	0.410	0.161	4.82	1077	0.103	0.249	-1.285	0.761	2.069	0.614
350T200-43	0.749	0.409	1.489	0.140	0.645	0.600	0.257	5.09	1739	0.568	0.240	7.18	2141	0.229	0.323	-1.280	0.758	2.066	0.616
350T200-54	0.949	0.513	1.496	0.175	0.642	0.814	0.355	7.01	2392	0.770	0.329	9.85	3372	0.453	0.409	-1.273	0.754	2.067	0.621
350T200-68	1.213	0.647	1.508	0.218	0.639	1.112	0.496	9.80	2994	1.054	0.458	13.71	4536	0.904	0.522	-1.264	0.749	2.069	0.626
350T200-97	1.780	0.923	1.530	0.305	0.633	1.779	0.831	16.41	4213	1.708	0.769	23.01	6383	2.622	0.765	-1.247	0.738	2.073	0.638
350T200-118	2.219	1.128	1.546	0.367	0.629	2.219	1.101	21.75	5093	2.219	1.027	30.74	7717	4.772	0.952	-1.233	0.730	2.075	0.647
350T250-43	0.896	0.490	1.530	0.257	0.819	0.659	0.268	5.29	1739	0.621	0.249	7.46	2141	0.260	0.593	-1.719	0.996	2.443	0.505
350T250-54	1.137	0.615	1.538	0.321	0.817	0.900	0.371	7.33	2392	0.846	0.343	10.26	3372	0.513	0.752	-1.712	0.992	2.442	0.509
350T250-68	1.454	0.776	1.550	0.401	0.814	1.241	0.522	10.31	2994	1.168	0.479	14.35	4536	1.025	0.961	-1.703	0.987	2.443	0.514
350T250-97	2.139	1.109	1.575	0.563	0.808	2.027	0.889	17.56	4213	1.924	0.815	24.39	6383	2.973	1.413	-1.684	0.975	2.443	0.525
350T250-118	2.670	1.357	1.593	0.680	0.804	2.657	1.198	23.68	5093	2.543	1.101	32.97	7717	5.411	1.764	-1.669	0.967	2.443	0.533
350T300-54	1.324	0.716	1.570	0.525	0.989	0.974	0.383	7.57	2392	0.912	0.353	10.57	3372	0.573	1.238	-2.165	1.234	2.851	0.424
350T300-68	1.695	0.904	1.583	0.657	0.986	1.352	0.541	10.69	2994	1.265	0.495	14.83	4536	1.146	1.585	-2.155	1.228	2.850	0.428
350T300-97	2.497	1.295	1.610	0.926	0.980	2.242	0.931	18.40	4213	2.110	0.848	25.40	6383	3.323	2.336	-2.135	1.216	2.848	0.438
350T300-118	3.121	1.586	1.629	1.120	0.976	2.970	1.267	25.04	5093	2.815	1.155	34.58	7717	6.050	2.921	-2.120	1.208	2.846	0.445
350T350-54	1.512	0.818	1.596	0.795	1.157	1.039	0.393	7.76	2392	0.969	0.362	10.82	3372	0.634	1.893	-2.627	1.478	3.284	0.360
350T350-68	1.936	1.033	1.609	0.996	1.154	1.449	0.556	10.98	2994	1.351	0.508	15.21	4536	1.267	2.425	-2.617	1.472	3.282	0.364
350T350-97	2.855	1.481	1.637	1.407	1.149	2.430	0.963	19.04	4213	2.273	0.874	26.18	6383	3.674	3.580	-2.596	1.460	3.277	0.373
350T350-118	3.572	1.816	1.657	1.705	1.145	3.247	1.320	26.08	5093	3.054	1.196	35.81	7717	6.688	4.481	-2.580	1.451	3.273	0.379

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

TABLE 4B□ STANDARD TRACK DESIGN PROPERTIES (Continued)

Member	Gross Properties					Effective Properties 33 ksi				Effective Properties 50 ksi				Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
362T100-18	0.205	0.110	1.393	0.009	0.291	0.174	0.064	1.26	167	0.170	0.053	1.60	167	0.012	0.023	-0.479	0.304	1.501	0.898
362T100-27	0.309	0.164	1.393	0.013	0.289	0.277	0.129	2.55	569	0.268	0.116	3.47	569	0.042	0.034	-0.475	0.302	1.500	0.900
362T100-30	0.341	0.181	1.393	0.015	0.289	0.311	0.146	2.88	762	0.299	0.138	4.15	762	0.057	0.037	-0.474	0.302	1.500	0.900
362T100-33	0.378	0.200	1.394	0.016	0.288	0.352	0.166	3.28	1024	0.338	0.157	4.71	1039	0.078	0.041	-0.473	0.301	1.500	0.901
362T100-43	0.492	0.260	1.394	0.021	0.286	0.481	0.232	4.58	1739	0.464	0.219	6.56	2141	0.172	0.053	-0.469	0.298	1.499	0.902
362T100-54	0.622	0.326	1.400	0.026	0.284	0.622	0.311	6.15	2480	0.613	0.295	8.82	3372	0.339	0.067	-0.464	0.295	1.501	0.905
362T100-68	0.792	0.409	1.407	0.032	0.281	0.792	0.409	9.09	3104	0.792	0.398	11.90	4703	0.678	0.084	-0.457	0.291	1.506	0.908
362T100-97	1.152	0.579	1.422	0.043	0.274	1.152	0.579	13.45	4370	1.152	0.579	19.96	6622	1.965	0.121	-0.444	0.282	1.514	0.914
362T100-118	1.426	0.702	1.432	0.050	0.269	1.426	0.702	16.83	5285	1.426	0.702	24.89	8008	3.575	0.148	-0.435	0.276	1.520	0.918
362T125-18	0.237	0.126	1.435	0.017	0.380	0.189	0.065	1.29	169	0.177	0.055	1.66	169	0.014	0.042	-0.665	0.413	1.627	0.833
362T125-27	0.358	0.191	1.438	0.025	0.378	0.301	0.135	2.66	569	0.292	0.115	3.45	569	0.046	0.062	-0.661	0.411	1.627	0.835
362T125-30	0.395	0.210	1.438	0.027	0.378	0.339	0.152	3.01	762	0.326	0.140	4.19	762	0.062	0.068	-0.659	0.410	1.626	0.836
362T125-33	0.438	0.232	1.438	0.030	0.377	0.384	0.174	3.44	1024	0.368	0.164	4.92	1039	0.085	0.076	-0.658	0.409	1.626	0.836
362T125-43	0.571	0.302	1.439	0.039	0.375	0.531	0.245	4.84	1739	0.508	0.230	6.89	2141	0.187	0.098	-0.654	0.407	1.625	0.838
362T125-54	0.723	0.378	1.445	0.048	0.373	0.705	0.332	6.57	2480	0.678	0.312	9.34	3372	0.369	0.123	-0.648	0.404	1.627	0.841
362T125-68	0.921	0.475	1.454	0.060	0.370	0.921	0.453	8.95	3104	0.907	0.427	12.78	4703	0.738	0.156	-0.641	0.399	1.631	0.846
362T125-97	1.343	0.675	1.471	0.082	0.363	1.343	0.675	15.24	4370	1.343	0.675	20.20	6622	2.140	0.226	-0.626	0.390	1.639	0.854
362T125-118	1.666	0.821	1.483	0.097	0.358	1.666	0.821	19.02	5285	1.666	0.821	28.24	8008	3.894	0.278	-0.615	0.383	1.645	0.860
362T150-27	0.408	0.217	1.475	0.041	0.468	0.323	0.140	2.76	569	0.314	0.114	3.43	569	0.050	0.102	-0.857	0.524	1.769	0.765
362T150-30	0.449	0.239	1.475	0.045	0.467	0.364	0.158	3.12	762	0.351	0.139	4.15	762	0.067	0.112	-0.856	0.523	1.768	0.766
362T150-33	0.499	0.264	1.475	0.050	0.467	0.414	0.180	3.56	1024	0.395	0.170	5.09	1039	0.091	0.124	-0.854	0.522	1.767	0.766
362T150-43	0.650	0.343	1.476	0.064	0.465	0.574	0.255	5.04	1739	0.547	0.239	7.15	2141	0.202	0.160	-0.850	0.519	1.766	0.768
362T150-54	0.823	0.431	1.483	0.080	0.462	0.769	0.349	6.89	2480	0.735	0.325	9.74	3372	0.400	0.202	-0.844	0.516	1.768	0.772
362T150-68	1.050	0.542	1.492	0.099	0.459	1.034	0.480	9.49	3104	0.993	0.449	13.43	4703	0.799	0.257	-0.836	0.511	1.771	0.777
362T150-97	1.534	0.771	1.512	0.138	0.453	1.534	0.771	15.23	4370	1.534	0.733	21.94	6622	2.315	0.374	-0.820	0.501	1.778	0.787
362T150-118	1.907	0.939	1.525	0.165	0.448	1.907	0.939	21.26	5285	1.907	0.939	31.65	8008	4.214	0.462	-0.808	0.494	1.784	0.795
362T200-33	0.619	0.328	1.532	0.110	0.645	0.464	0.190	3.76	1024	0.445	0.167	5.00	1039	0.105	0.269	-1.270	0.754	2.092	0.631
362T200-43	0.808	0.427	1.534	0.142	0.643	0.649	0.270	5.34	1739	0.615	0.252	7.55	2141	0.233	0.350	-1.265	0.752	2.090	0.633
362T200-54	1.024	0.536	1.541	0.177	0.640	0.879	0.372	7.35	2480	0.832	0.345	10.34	3372	0.460	0.442	-1.259	0.748	2.091	0.637
362T200-68	1.307	0.675	1.552	0.221	0.638	1.199	0.519	10.26	3104	1.138	0.480	14.37	4703	0.919	0.564	-1.250	0.743	2.093	0.643
362T200-97	1.917	0.963	1.575	0.308	0.631	1.915	0.867	17.14	4370	1.839	0.803	24.06	6622	2.666	0.825	-1.232	0.732	2.097	0.655
362T200-118	2.388	1.176	1.591	0.371	0.627	2.388	1.148	22.69	5285	2.388	1.072	32.09	8008	4.852	1.026	-1.219	0.724	2.100	0.663
362T250-43	0.966	0.510	1.577	0.260	0.818	0.713	0.281	5.56	1739	0.672	0.262	7.85	2141	0.263	0.641	-1.702	0.990	2.460	0.521
362T250-54	1.224	0.641	1.585	0.324	0.816	0.971	0.389	7.69	2480	0.914	0.360	10.77	3372	0.521	0.812	-1.695	0.986	2.460	0.525
362T250-68	1.565	0.808	1.597	0.406	0.813	1.337	0.546	10.79	3104	1.259	0.502	15.04	4703	1.040	1.038	-1.686	0.980	2.460	0.530
362T250-97	2.300	1.155	1.621	0.570	0.807	2.180	0.928	18.34	4370	2.069	0.851	25.49	6622	3.016	1.524	-1.667	0.969	2.461	0.541
362T250-118	2.868	1.413	1.639	0.687	0.802	2.854	1.249	24.68	5285	2.732	1.149	34.41	8008	5.491	1.900	-1.653	0.961	2.462	0.549
362T300-54	1.425	0.746	1.618	0.531	0.988	1.051	0.402	7.94	2480	0.985	0.371	11.11	3372	0.581	1.337	-2.146	1.227	2.863	0.439
362T300-68	1.823	0.941	1.631	0.665	0.985	1.456	0.566	11.19	3104	1.364	0.519	15.55	4703	1.161	1.711	-2.136	1.221	2.862	0.443
362T300-97	2.682	1.348	1.657	0.937	0.979	2.409	0.972	19.21	4370	2.268	0.887	26.54	6622	3.367	2.518	-2.116	1.209	2.860	0.453
362T300-118	3.349	1.650	1.676	1.133	0.975	3.188	1.321	26.10	5285	3.022	1.205	36.09	8008	6.130	3.145	-2.101	1.201	2.859	0.460
362T350-54	1.626	0.851	1.645	0.804	1.157	1.120	0.412	8.14	2480	1.046	0.380	11.37	3372	0.641	2.043	-2.606	1.470	3.292	0.373
362T350-68	2.081	1.074	1.659	1.008	1.154	1.561	0.582	11.50	3104	1.456	0.533	15.95	4703	1.282	2.616	-2.596	1.464	3.290	0.377
362T350-97	3.065	1.540	1.686	1.423	1.149	2.610	1.006	19.87	4370	2.443	0.914	27.36	6622	3.718	3.856	-2.575	1.452	3.285	0.386
362T350-118	3.830	1.887	1.706	1.724	1.145	3.483	1.376	27.18	5285	3.277	1.248	37.37	8008	6.768	4.822	-2.560	1.444	3.282	0.392

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

TABLE 4B□ STANDARD TRACK DESIGN PROPERTIES (Continued)

Member	Gross Properties					Effective Properties 33 ksi				Effective Properties 50 ksi				Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
400T100-18[1]	0.259	0.125	1.513	0.009	0.285	0.204	0.066	1.31	151	0.187	0.057	1.71	151	0.013	0.029	-0.457	0.293	1.606	0.919
400T100-27	0.389	0.188	1.514	0.014	0.283	0.352	0.131	2.59	515	0.331	0.114	3.43	515	0.045	0.043	-0.453	0.291	1.605	0.920
400T100-30	0.429	0.207	1.514	0.015	0.283	0.397	0.154	3.04	689	0.376	0.135	4.03	689	0.061	0.047	-0.452	0.290	1.605	0.921
400T100-33	0.476	0.229	1.514	0.016	0.282	0.447	0.181	3.58	940	0.430	0.160	4.78	940	0.083	0.052	-0.451	0.289	1.605	0.921
400T100-43	0.620	0.298	1.515	0.021	0.280	0.606	0.267	5.28	1739	0.588	0.243	7.29	2078	0.183	0.067	-0.447	0.287	1.604	0.922
400T100-54	0.783	0.373	1.520	0.026	0.278	0.783	0.357	7.06	2739	0.771	0.339	10.16	3372	0.362	0.083	-0.442	0.284	1.607	0.924
400T100-68	0.995	0.468	1.527	0.032	0.275	0.995	0.468	10.42	3435	0.995	0.456	13.65	5205	0.723	0.105	-0.436	0.280	1.611	0.927
400T100-97	1.443	0.663	1.541	0.044	0.268	1.443	0.663	15.40	4842	1.443	0.663	22.86	7337	2.096	0.150	-0.423	0.272	1.620	0.932
400T100-118	1.783	0.804	1.550	0.051	0.263	1.783	0.804	19.27	5862	1.783	0.804	28.49	8881	3.815	0.183	-0.414	0.266	1.626	0.935
400T125-18[1]	0.297	0.144	1.560	0.017	0.374	0.241	0.072	1.42	153	0.215	0.061	1.83	153	0.014	0.052	-0.637	0.400	1.726	0.864
400T125-27	0.449	0.217	1.562	0.025	0.372	0.380	0.156	3.08	515	0.372	0.126	3.78	515	0.049	0.078	-0.633	0.398	1.726	0.866
400T125-30	0.495	0.239	1.562	0.028	0.371	0.427	0.176	3.49	689	0.414	0.153	4.58	689	0.066	0.085	-0.632	0.397	1.726	0.866
400T125-33	0.549	0.265	1.563	0.031	0.371	0.484	0.201	3.97	940	0.465	0.189	5.66	940	0.090	0.095	-0.630	0.396	1.725	0.867
400T125-43	0.716	0.344	1.563	0.040	0.369	0.666	0.282	5.57	1739	0.639	0.266	7.96	2078	0.198	0.122	-0.626	0.394	1.724	0.868
400T125-54	0.904	0.431	1.569	0.049	0.366	0.882	0.381	7.53	2739	0.849	0.359	10.74	3372	0.392	0.154	-0.621	0.390	1.727	0.871
400T125-68	1.150	0.541	1.577	0.061	0.363	1.150	0.517	10.22	3435	1.134	0.488	14.62	5205	0.783	0.194	-0.614	0.386	1.731	0.874
400T125-97	1.673	0.768	1.594	0.084	0.357	1.673	0.768	17.35	4842	1.673	0.768	23.00	7337	2.271	0.280	-0.600	0.377	1.740	0.881
400T125-118	2.071	0.934	1.605	0.100	0.352	2.071	0.934	21.65	5862	2.071	0.934	32.14	8881	4.134	0.343	-0.589	0.370	1.746	0.886
400T150-27	0.509	0.246	1.602	0.042	0.461	0.409	0.154	3.04	515	0.399	0.126	3.77	515	0.053	0.127	-0.824	0.509	1.860	0.804
400T150-30	0.561	0.271	1.603	0.046	0.461	0.458	0.183	3.61	689	0.445	0.152	4.56	689	0.071	0.140	-0.823	0.508	1.859	0.804
400T150-33	0.622	0.300	1.603	0.051	0.460	0.519	0.208	4.12	940	0.500	0.187	5.60	940	0.097	0.155	-0.821	0.507	1.859	0.805
400T150-43	0.811	0.390	1.604	0.066	0.458	0.719	0.293	5.80	1739	0.687	0.276	8.26	2078	0.214	0.200	-0.817	0.504	1.857	0.807
400T150-54	1.025	0.489	1.610	0.082	0.456	0.960	0.399	7.89	2739	0.918	0.374	11.19	3372	0.422	0.252	-0.811	0.501	1.860	0.810
400T150-68	1.306	0.615	1.619	0.102	0.453	1.286	0.548	10.82	3435	1.237	0.513	15.35	5205	0.844	0.320	-0.804	0.496	1.864	0.814
400T150-97	1.903	0.874	1.638	0.141	0.447	1.903	0.874	17.27	4842	1.903	0.832	24.92	7337	2.447	0.463	-0.788	0.487	1.872	0.823
400T150-118	2.360	1.064	1.651	0.169	0.442	2.360	1.064	24.09	5862	2.360	1.064	35.86	8881	4.453	0.572	-0.777	0.479	1.877	0.829
400T200-33	0.768	0.371	1.666	0.113	0.639	0.581	0.220	4.34	940	0.562	0.184	5.51	940	0.110	0.336	-1.229	0.737	2.166	0.678
400T200-43	1.002	0.482	1.668	0.146	0.637	0.811	0.311	6.14	1739	0.769	0.291	8.72	2078	0.244	0.436	-1.224	0.734	2.164	0.680
400T200-54	1.268	0.604	1.675	0.182	0.635	1.093	0.426	8.42	2739	1.037	0.397	11.88	3372	0.483	0.551	-1.217	0.730	2.165	0.684
400T200-68	1.617	0.761	1.685	0.227	0.632	1.485	0.591	11.68	3435	1.412	0.549	16.42	5205	0.965	0.702	-1.209	0.725	2.168	0.689
400T200-97	2.363	1.085	1.707	0.317	0.625	2.360	0.981	19.38	4842	2.268	0.911	27.28	7337	2.797	1.022	-1.192	0.715	2.173	0.699
400T200-118	2.937	1.324	1.722	0.381	0.621	2.937	1.294	25.57	5862	2.937	1.211	36.25	8881	5.092	1.268	-1.179	0.707	2.177	0.707
400T250-43	1.193	0.573	1.715	0.268	0.813	0.888	0.324	6.40	1739	0.840	0.303	9.06	2078	0.275	0.799	-1.653	0.970	2.517	0.569
400T250-54	1.511	0.720	1.723	0.335	0.811	1.205	0.445	8.80	2739	1.137	0.413	12.38	3372	0.543	1.011	-1.646	0.966	2.517	0.572
400T250-68	1.928	0.907	1.735	0.418	0.808	1.652	0.622	12.28	3435	1.559	0.574	17.19	5205	1.086	1.289	-1.637	0.961	2.518	0.578
400T250-97	2.823	1.296	1.758	0.587	0.802	2.679	1.048	20.72	4842	2.546	0.965	28.89	7337	3.148	1.886	-1.618	0.950	2.521	0.588
400T250-118	3.514	1.585	1.776	0.709	0.798	3.495	1.406	27.78	5862	3.348	1.297	38.84	8881	5.730	2.345	-1.605	0.942	2.523	0.595
400T300-54	1.753	0.835	1.761	0.548	0.985	1.302	0.460	9.09	2739	1.224	0.426	12.77	3372	0.604	1.662	-2.090	1.206	2.905	0.482
400T300-68	2.239	1.054	1.774	0.686	0.982	1.797	0.645	12.74	3435	1.687	0.594	17.78	5205	1.206	2.122	-2.081	1.200	2.905	0.487
400T300-97	3.284	1.508	1.799	0.967	0.976	2.953	1.098	21.70	4842	2.786	1.005	30.09	7337	3.499	3.111	-2.061	1.189	2.905	0.496
400T300-118	4.091	1.845	1.817	1.170	0.972	3.895	1.486	29.37	5862	3.696	1.360	40.72	8881	6.369	3.875	-2.047	1.180	2.904	0.503
400T350-54	1.996	0.951	1.792	0.830	1.155	1.388	0.472	9.32	2739	1.300	0.437	13.08	3372	0.664	2.535	-2.545	1.448	3.320	0.412
400T350-68	2.551	1.200	1.805	1.041	1.153	1.924	0.663	13.10	3435	1.800	0.609	18.24	5205	1.327	3.239	-2.535	1.442	3.318	0.416
400T350-97	3.744	1.719	1.831	1.469	1.147	3.196	1.136	22.46	4842	2.997	1.036	31.03	7337	3.849	4.757	-2.515	1.431	3.316	0.425
400T350-118	4.668	2.105	1.851	1.780	1.143	4.248	1.547	30.58	5862	4.003	1.409	42.18	8881	7.008	5.933	-2.500	1.422	3.314	0.431

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

TABLE 4B□ STANDARD TRACK DESIGN PROPERTIES (Continued)

Member	Gross Properties					Effective Properties 33 ksi				Effective Properties 50 ksi				Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
550T100-27	0.837	0.297	1.985	0.014	0.261	0.734	0.187	3.70	372	0.680	0.161	4.83	372	0.057	0.087	-0.383	0.253	2.039	0.965
550T100-30	0.922	0.327	1.985	0.016	0.261	0.835	0.220	4.36	499	0.779	0.191	5.71	499	0.076	0.096	-0.382	0.252	2.039	0.965
550T100-33	1.022	0.362	1.985	0.018	0.260	0.955	0.262	5.17	680	0.896	0.228	6.81	680	0.103	0.106	-0.381	0.252	2.038	0.965
550T100-43	1.332	0.471	1.986	0.023	0.258	1.312	0.400	7.91	1504	1.264	0.354	10.59	1504	0.229	0.137	-0.377	0.250	2.038	0.966
550T100-54	1.678	0.589	1.990	0.028	0.256	1.678	0.567	11.20	2739	1.661	0.513	15.36	2980	0.453	0.170	-0.373	0.247	2.041	0.967
550T100-68	2.125	0.739	1.995	0.034	0.253	2.125	0.739	16.45	4347	2.125	0.723	21.65	5350	0.904	0.214	-0.368	0.243	2.045	0.968
550T100-97	3.062	1.046	2.007	0.047	0.247	3.062	1.046	24.32	6730	3.062	1.046	36.08	10197	2.622	0.301	-0.357	0.236	2.053	0.970
550T100-118	3.767	1.269	2.014	0.055	0.243	3.767	1.269	30.42	8167	3.767	1.269	44.98	12374	4.772	0.364	-0.350	0.231	2.059	0.971
550T125-27	0.948	0.336	2.046	0.027	0.348	0.786	0.192	3.79	372	0.724	0.165	4.93	372	0.060	0.160	-0.543	0.352	2.145	0.936
550T125-30	1.045	0.370	2.046	0.030	0.347	0.897	0.226	4.47	499	0.831	0.195	5.84	499	0.081	0.176	-0.542	0.351	2.145	0.936
550T125-33	1.159	0.410	2.046	0.033	0.346	1.029	0.270	5.33	680	0.959	0.233	6.98	680	0.110	0.195	-0.541	0.350	2.145	0.936
550T125-43	1.510	0.533	2.047	0.043	0.344	1.428	0.416	8.23	1504	1.365	0.365	10.93	1504	0.244	0.252	-0.537	0.348	2.144	0.937
550T125-54	1.903	0.668	2.052	0.053	0.342	1.862	0.597	11.80	2739	1.811	0.535	16.01	2980	0.483	0.315	-0.532	0.345	2.147	0.939
550T125-68	2.412	0.839	2.058	0.066	0.339	2.412	0.807	15.95	4347	2.379	0.769	23.02	5350	0.965	0.397	-0.526	0.341	2.152	0.940
550T125-97	3.483	1.190	2.072	0.090	0.333	3.483	1.190	26.87	6730	3.483	1.190	35.62	10197	2.797	0.564	-0.514	0.333	2.161	0.943
550T125-118	4.291	1.446	2.082	0.107	0.329	4.291	1.446	33.51	8167	4.291	1.446	49.74	12374	5.092	0.687	-0.505	0.327	2.167	0.946
550T150-27	1.059	0.376	2.098	0.046	0.436	0.893	0.207	4.10	372	0.867	0.172	5.16	372	0.064	0.263	-0.716	0.456	2.259	0.900
550T150-30	1.168	0.414	2.098	0.050	0.435	0.995	0.251	4.96	499	0.972	0.207	6.19	499	0.086	0.289	-0.715	0.455	2.259	0.900
550T150-33	1.295	0.459	2.099	0.055	0.434	1.115	0.310	6.12	680	1.091	0.252	7.55	680	0.117	0.320	-0.714	0.455	2.259	0.900
550T150-43	1.688	0.596	2.099	0.072	0.432	1.516	0.468	9.25	1504	1.463	0.430	12.86	1504	0.260	0.414	-0.709	0.452	2.258	0.901
550T150-54	2.128	0.747	2.105	0.089	0.430	2.005	0.628	12.41	2739	1.928	0.595	17.81	2980	0.513	0.519	-0.704	0.449	2.261	0.903
550T150-68	2.699	0.939	2.112	0.110	0.427	2.660	0.850	16.80	4347	2.569	0.804	24.07	5350	1.025	0.655	-0.698	0.445	2.265	0.905
550T150-97	3.904	1.333	2.128	0.153	0.421	3.904	1.333	26.35	6730	3.904	1.278	38.27	10197	2.973	0.937	-0.684	0.436	2.275	0.909
550T150-118	4.815	1.623	2.139	0.182	0.416	4.815	1.623	36.73	8167	4.815	1.623	54.67	12374	5.411	1.147	-0.675	0.430	2.281	0.913
550T200-33	1.567	0.555	2.184	0.123	0.613	1.246	0.307	6.06	680	1.214	0.252	7.55	680	0.131	0.694	-1.088	0.674	2.516	0.813
550T200-43	2.043	0.722	2.185	0.160	0.611	1.690	0.495	9.79	1504	1.637	0.423	12.68	1504	0.290	0.900	-1.083	0.671	2.514	0.814
550T200-54	2.578	0.905	2.191	0.199	0.609	2.253	0.669	13.21	2739	2.153	0.630	18.86	2980	0.573	1.133	-1.077	0.668	2.517	0.817
550T200-68	3.274	1.139	2.200	0.248	0.606	3.027	0.914	18.06	4347	2.894	0.857	25.67	5350	1.146	1.434	-1.070	0.663	2.521	0.820
550T200-97	4.746	1.621	2.219	0.347	0.600	4.735	1.483	29.30	6730	4.566	1.391	41.64	10197	3.323	2.067	-1.055	0.653	2.529	0.826
550T200-118	5.863	1.976	2.232	0.416	0.595	5.863	1.935	38.25	8167	5.863	1.826	54.66	12374	6.050	2.543	-1.043	0.646	2.535	0.831
550T250-43	2.399	0.848	2.252	0.295	0.790	1.841	0.516	10.20	1504	1.790	0.419	12.55	1504	0.321	1.643	-1.484	0.899	2.810	0.721
550T250-54	3.029	1.063	2.259	0.368	0.788	2.466	0.699	13.81	2739	2.346	0.657	19.66	2980	0.634	2.070	-1.478	0.895	2.812	0.724
550T250-68	3.849	1.339	2.269	0.460	0.785	3.338	0.960	18.97	4347	3.172	0.897	26.86	5350	1.267	2.627	-1.470	0.890	2.815	0.727
550T250-97	5.588	1.908	2.290	0.646	0.779	5.314	1.580	31.23	6730	5.073	1.470	44.01	10197	3.674	3.801	-1.453	0.880	2.822	0.735
550T250-118	6.911	2.329	2.305	0.779	0.774	6.869	2.093	41.36	8167	6.601	1.949	58.36	12374	6.688	4.691	-1.441	0.872	2.826	0.740
550T300-54	3.479	1.221	2.313	0.606	0.965	2.654	0.723	14.28	2739	2.526	0.663	19.84	2980	0.694	3.390	-1.898	1.129	3.144	0.636
550T300-68	4.424	1.539	2.324	0.758	0.962	3.610	0.996	19.68	4347	3.417	0.929	27.80	5350	1.388	4.307	-1.889	1.123	3.146	0.639
550T300-97	6.430	2.196	2.347	1.068	0.956	5.816	1.654	32.68	6730	5.516	1.531	45.83	10197	4.024	6.248	-1.871	1.113	3.150	0.647
550T300-118	7.960	2.682	2.363	1.291	0.952	7.592	2.208	43.64	8167	7.232	2.042	61.13	12374	7.327	7.726	-1.858	1.105	3.153	0.653
550T350-54	3.929	1.379	2.358	0.920	1.141	2.822	0.742	14.67	2739	2.695	0.654	19.59	2980	0.755	5.149	-2.331	1.366	3.507	0.558
550T350-68	4.998	1.739	2.370	1.153	1.138	3.854	1.025	20.26	4347	3.636	0.954	28.57	5350	1.508	6.546	-2.322	1.361	3.508	0.562
550T350-97	7.272	2.483	2.394	1.627	1.132	6.262	1.712	33.83	6730	5.910	1.579	47.29	10197	4.375	9.515	-2.303	1.349	3.510	0.569
550T350-118	9.008	3.036	2.411	1.971	1.128	8.231	2.298	45.41	8167	7.792	2.115	63.31	12374	7.966	11.780	-2.289	1.341	3.511	0.575

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

TABLE 4B□ STANDARD TRACK DESIGN PROPERTIES (Continued)

Member	Gross Properties					Effective Properties 33 ksi				Effective Properties 50 ksi				Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
600T100-27[1]	1.036	0.338	2.140	0.015	0.255	0.897	0.206	4.07	341	0.828	0.177	5.30	341	0.060	0.106	-0.364	0.243	2.185	0.972
600T100-30	1.142	0.372	2.140	0.016	0.255	1.022	0.243	4.80	456	0.950	0.210	6.28	456	0.081	0.117	-0.363	0.242	2.185	0.972
600T100-33	1.267	0.412	2.140	0.018	0.254	1.170	0.289	5.71	622	1.094	0.250	7.49	622	0.110	0.129	-0.362	0.241	2.185	0.973
600T100-43	1.650	0.536	2.140	0.023	0.252	1.629	0.444	8.78	1377	1.551	0.391	11.69	1377	0.244	0.166	-0.359	0.239	2.184	0.973
600T100-54	2.077	0.670	2.144	0.028	0.250	2.077	0.633	12.51	2728	2.061	0.569	17.05	2728	0.483	0.207	-0.355	0.237	2.187	0.974
600T100-68	2.629	0.841	2.149	0.035	0.247	2.629	0.841	16.62	4347	2.629	0.813	24.35	5350	0.965	0.259	-0.350	0.233	2.191	0.974
600T100-97	3.784	1.191	2.159	0.047	0.241	3.784	1.191	27.68	7359	3.784	1.191	41.07	10885	2.797	0.364	-0.340	0.226	2.199	0.976
600T100-118	4.649	1.445	2.167	0.056	0.237	4.649	1.445	34.63	8936	4.649	1.445	51.20	13539	5.092	0.440	-0.332	0.221	2.205	0.977
600T125-27[1]	1.168	0.381	2.204	0.028	0.340	0.958	0.210	4.16	341	0.880	0.181	5.40	341	0.064	0.196	-0.519	0.339	2.290	0.949
600T125-30	1.288	0.419	2.204	0.031	0.340	1.095	0.249	4.92	456	1.011	0.214	6.41	456	0.086	0.215	-0.518	0.338	2.289	0.949
600T125-33	1.428	0.465	2.204	0.034	0.339	1.258	0.297	5.87	622	1.169	0.256	7.66	622	0.117	0.238	-0.516	0.337	2.289	0.949
600T125-43	1.861	0.604	2.205	0.044	0.337	1.768	0.461	9.11	1377	1.670	0.402	12.05	1377	0.260	0.307	-0.513	0.335	2.288	0.950
600T125-54	2.344	0.756	2.209	0.054	0.335	2.299	0.666	13.15	2728	2.241	0.592	17.73	2728	0.513	0.384	-0.508	0.332	2.291	0.951
600T125-68	2.969	0.950	2.215	0.067	0.332	2.969	0.916	18.09	4347	2.934	0.858	25.69	5350	1.025	0.483	-0.503	0.329	2.296	0.952
600T125-97	4.281	1.347	2.228	0.092	0.326	4.281	1.347	30.43	7359	4.281	1.347	40.33	10885	2.973	0.685	-0.491	0.321	2.305	0.955
600T125-118	5.268	1.637	2.237	0.109	0.321	5.268	1.637	37.94	8936	5.268	1.637	56.32	13539	5.411	0.832	-0.483	0.315	2.311	0.956
600T150-27[1]	1.300	0.424	2.260	0.047	0.427	1.011	0.214	4.23	341	0.925	0.183	5.48	341	0.068	0.320	-0.686	0.441	2.400	0.918
600T150-30	1.434	0.467	2.260	0.051	0.427	1.159	0.253	5.01	456	1.065	0.217	6.50	456	0.091	0.352	-0.685	0.440	2.400	0.918
600T150-33	1.590	0.517	2.260	0.057	0.426	1.334	0.303	5.99	622	1.234	0.260	7.79	622	0.124	0.390	-0.684	0.439	2.399	0.919
600T150-43	2.072	0.673	2.261	0.073	0.424	1.890	0.474	9.36	1377	1.775	0.411	12.31	1377	0.275	0.504	-0.680	0.437	2.398	0.920
600T150-54	2.611	0.843	2.266	0.091	0.422	2.473	0.689	13.62	2728	2.400	0.609	18.24	2728	0.543	0.632	-0.675	0.434	2.401	0.921
600T150-68	3.309	1.059	2.273	0.113	0.419	3.262	0.963	19.03	4347	3.162	0.891	26.68	5350	1.086	0.797	-0.669	0.430	2.406	0.923
600T150-97	4.778	1.504	2.288	0.156	0.413	4.778	1.504	29.71	7359	4.778	1.444	43.23	10885	3.148	1.138	-0.656	0.421	2.415	0.926
600T150-118	5.886	1.829	2.298	0.186	0.409	5.886	1.829	41.41	8936	5.886	1.829	61.64	13539	5.730	1.389	-0.647	0.415	2.422	0.929
600T200-33	1.913	0.622	2.352	0.126	0.604	1.542	0.333	6.59	622	1.504	0.275	8.23	622	0.138	0.847	-1.048	0.655	2.645	0.843
600T200-43	2.494	0.809	2.353	0.163	0.602	2.076	0.565	11.16	1377	2.025	0.460	13.76	1377	0.305	1.098	-1.044	0.652	2.643	0.844
600T200-54	3.145	1.015	2.359	0.203	0.600	2.759	0.759	15.00	2728	2.641	0.717	21.48	2728	0.604	1.381	-1.038	0.649	2.646	0.846
600T200-68	3.990	1.277	2.367	0.254	0.597	3.696	1.034	20.42	4347	3.540	0.973	29.12	5350	1.206	1.746	-1.031	0.644	2.650	0.849
600T200-97	5.773	1.816	2.385	0.354	0.591	5.758	1.667	32.95	7359	5.558	1.568	46.94	10885	3.499	2.510	-1.016	0.635	2.659	0.854
600T200-118	7.122	2.214	2.398	0.426	0.586	7.122	2.170	42.88	8936	7.122	2.051	61.42	13539	6.369	3.083	-1.006	0.628	2.665	0.858
600T250-43	2.916	0.946	2.425	0.303	0.781	2.269	0.563	11.13	1377	2.210	0.457	13.67	1377	0.336	2.004	-1.436	0.878	2.925	0.759
600T250-54	3.678	1.187	2.432	0.377	0.779	3.014	0.793	15.68	2728	2.881	0.732	21.92	2728	0.664	2.523	-1.430	0.874	2.927	0.761
600T250-68	4.670	1.495	2.442	0.472	0.776	4.065	1.085	21.45	4347	3.871	1.017	30.46	5350	1.327	3.198	-1.422	0.869	2.930	0.764
600T250-97	6.767	2.129	2.462	0.662	0.770	6.441	1.775	35.08	7359	6.157	1.656	49.58	10885	3.849	4.616	-1.406	0.859	2.938	0.771
600T250-118	8.359	2.598	2.477	0.798	0.765	8.306	2.343	46.30	8936	7.990	2.188	65.51	13539	7.008	5.686	-1.394	0.852	2.943	0.776
600T300-54	4.212	1.359	2.492	0.622	0.957	3.239	0.821	16.22	2728	3.108	0.722	21.61	2728	0.725	4.129	-1.842	1.105	3.243	0.677
600T300-68	5.350	1.712	2.502	0.778	0.954	4.389	1.126	22.25	4347	4.164	1.053	31.53	5350	1.448	5.239	-1.834	1.100	3.246	0.681
600T300-97	7.762	2.442	2.524	1.096	0.948	7.034	1.857	36.69	7359	6.681	1.724	51.62	10885	4.200	7.582	-1.816	1.089	3.251	0.688
600T300-118	9.595	2.982	2.540	1.325	0.944	9.157	2.471	48.82	8936	8.734	2.291	68.59	13539	7.646	9.359	-1.803	1.082	3.255	0.693
600T350-54	4.746	1.531	2.541	0.946	1.134	3.441	0.843	16.66	2728	3.313	0.714	21.39	2728	0.785	6.265	-2.269	1.341	3.590	0.601
600T350-68	6.031	1.930	2.552	1.185	1.131	4.680	1.159	22.91	4347	4.427	1.082	32.41	5350	1.569	7.956	-2.260	1.335	3.592	0.604
600T350-97	8.756	2.755	2.576	1.672	1.125	7.563	1.922	37.98	7359	7.150	1.779	53.26	10885	4.550	11.537	-2.241	1.324	3.595	0.611
600T350-118	10.832	3.367	2.593	2.025	1.121	9.911	2.570	50.79	8936	9.396	2.372	71.03	13539	8.285	14.259	-2.228	1.316	3.598	0.616

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

TABLE 4B□ STANDARD TRACK DESIGN PROPERTIES (Continued)

Member	Gross Properties					Effective Properties 33 ksi				Effective Properties 50 ksi				Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
725T100-27[1]	1.664	0.450	2.521	0.015	0.241	1.386	0.252	4.99	281	1.271	0.216	6.48	281	0.070	0.163	-0.325	0.220	2.553	0.984
725T100-30[1]	1.834	0.496	2.521	0.017	0.240	1.586	0.298	5.90	377	1.462	0.256	7.68	377	0.094	0.179	-0.324	0.219	2.553	0.984
725T100-33[1]	2.033	0.550	2.521	0.018	0.240	1.823	0.356	7.04	514	1.691	0.307	9.19	514	0.128	0.198	-0.323	0.219	2.553	0.984
725T100-43	2.649	0.715	2.521	0.024	0.238	2.567	0.554	10.94	1137	2.421	0.483	14.45	1137	0.283	0.254	-0.320	0.217	2.552	0.984
725T100-54	3.331	0.895	2.524	0.029	0.236	3.331	0.800	15.81	2252	3.255	0.711	21.28	2252	0.558	0.316	-0.317	0.214	2.555	0.985
725T100-68	4.210	1.123	2.529	0.036	0.233	4.210	1.112	21.98	4347	4.210	1.030	30.83	4516	1.116	0.395	-0.312	0.211	2.559	0.985
725T100-97	6.045	1.589	2.538	0.049	0.228	6.045	1.589	36.96	8843	6.045	1.589	47.59	10885	3.236	0.552	-0.303	0.205	2.566	0.986
725T100-118	7.415	1.930	2.544	0.057	0.223	7.415	1.930	46.25	10857	7.415	1.930	68.38	16235	5.890	0.664	-0.296	0.200	2.571	0.987
725T125-27[1]	1.855	0.502	2.593	0.029	0.323	1.471	0.258	5.09	281	1.342	0.220	6.59	281	0.074	0.301	-0.467	0.310	2.654	0.969
725T125-30[1]	2.045	0.553	2.593	0.032	0.323	1.688	0.306	6.04	377	1.547	0.261	7.83	377	0.099	0.330	-0.466	0.310	2.654	0.969
725T125-33[1]	2.268	0.613	2.593	0.035	0.322	1.946	0.365	7.22	514	1.794	0.313	9.38	514	0.135	0.365	-0.465	0.309	2.654	0.969
725T125-43	2.955	0.797	2.593	0.045	0.320	2.763	0.573	11.32	1137	2.589	0.496	14.86	1137	0.298	0.471	-0.462	0.307	2.654	0.970
725T125-54	3.718	0.998	2.597	0.056	0.318	3.666	0.837	16.54	2252	3.510	0.737	22.06	2252	0.589	0.589	-0.458	0.304	2.656	0.970
725T125-68	4.702	1.254	2.603	0.069	0.315	4.702	1.198	23.68	4347	4.667	1.081	32.37	4516	1.176	0.738	-0.452	0.301	2.661	0.971
725T125-97	6.761	1.778	2.614	0.095	0.310	6.761	1.778	40.15	8843	6.761	1.778	53.23	10885	3.411	1.042	-0.442	0.293	2.669	0.973
725T125-118	8.303	2.161	2.622	0.113	0.305	8.303	2.161	50.08	10857	8.303	2.161	74.33	16235	6.209	1.262	-0.434	0.288	2.675	0.974
725T150-27[1]	2.047	0.554	2.656	0.048	0.409	1.546	0.262	5.17	281	1.403	0.223	6.68	281	0.077	0.493	-0.623	0.407	2.759	0.949
725T150-30[1]	2.256	0.611	2.656	0.053	0.408	1.776	0.311	6.14	377	1.622	0.265	7.93	377	0.104	0.543	-0.622	0.406	2.759	0.949
725T150-33[1]	2.502	0.677	2.657	0.059	0.407	2.053	0.372	7.36	514	1.885	0.318	9.52	514	0.141	0.601	-0.620	0.406	2.758	0.949
725T150-43	3.260	0.880	2.657	0.076	0.406	2.934	0.587	11.60	1137	2.736	0.506	15.15	1137	0.313	0.777	-0.617	0.403	2.758	0.950
725T150-54	4.104	1.102	2.661	0.094	0.403	3.923	0.864	17.07	2252	3.732	0.756	22.63	2252	0.619	0.972	-0.612	0.401	2.761	0.951
725T150-68	5.194	1.385	2.668	0.117	0.401	5.129	1.251	24.71	4347	5.002	1.118	33.48	4516	1.237	1.222	-0.607	0.397	2.765	0.952
725T150-97	7.477	1.966	2.681	0.162	0.395	7.477	1.966	38.85	8843	7.477	1.895	56.75	10885	3.586	1.735	-0.595	0.389	2.774	0.954
725T150-118	9.190	2.392	2.690	0.193	0.390	9.190	2.392	54.14	10857	9.190	2.392	80.59	16235	6.529	2.112	-0.586	0.383	2.781	0.956
725T200-33[1]	2.971	0.803	2.763	0.132	0.583	2.465	0.400	7.91	514	2.253	0.332	9.95	514	0.155	1.307	-0.962	0.612	2.983	0.896
725T200-43	3.872	1.045	2.764	0.171	0.581	3.307	0.678	13.39	1137	3.236	0.550	16.47	1137	0.344	1.695	-0.958	0.610	2.982	0.897
725T200-54	4.877	1.310	2.769	0.213	0.579	4.319	1.007	19.90	2252	4.188	0.881	26.37	2252	0.679	2.127	-0.953	0.607	2.985	0.898
725T200-68	6.178	1.647	2.777	0.266	0.576	5.749	1.359	26.86	4347	5.526	1.287	38.54	4516	1.357	2.684	-0.946	0.602	2.990	0.900
725T200-97	8.908	2.342	2.793	0.371	0.570	8.881	2.166	42.80	8843	8.593	2.048	61.33	10885	3.937	3.839	-0.933	0.594	2.999	0.903
725T200-118	10.965	2.854	2.805	0.445	0.565	10.965	2.802	55.37	10857	10.965	2.662	79.69	16235	7.167	4.698	-0.923	0.587	3.006	0.906
725T250-43	4.484	1.210	2.850	0.318	0.759	3.602	0.673	13.30	1137	3.514	0.551	16.48	1137	0.374	3.092	-1.330	0.828	3.235	0.831
725T250-54	5.650	1.517	2.856	0.397	0.757	4.693	1.052	20.78	2252	4.564	0.874	26.16	2252	0.740	3.887	-1.324	0.825	3.238	0.833
725T250-68	7.161	1.910	2.865	0.496	0.754	6.285	1.426	28.17	4347	6.011	1.345	40.28	4516	1.478	4.914	-1.317	0.820	3.242	0.835
725T250-97	10.340	2.719	2.884	0.696	0.748	9.863	2.300	45.45	8843	9.457	2.159	64.65	10885	4.287	7.061	-1.302	0.811	3.251	0.840
725T250-118	12.740	3.316	2.897	0.839	0.744	12.655	3.014	59.56	10857	12.200	2.831	84.76	16235	7.806	8.667	-1.291	0.804	3.257	0.843
725T300-54	6.424	1.725	2.928	0.657	0.936	5.034	1.075	21.25	2252	4.905	0.868	25.99	2252	0.800	6.354	-1.718	1.050	3.521	0.762
725T300-68	8.145	2.172	2.938	0.822	0.933	6.761	1.478	29.21	4347	6.444	1.392	41.68	4516	1.599	8.044	-1.710	1.046	3.525	0.765
725T300-97	11.772	3.095	2.958	1.157	0.927	10.717	2.403	47.49	8843	10.216	2.246	67.26	10885	4.638	11.589	-1.693	1.035	3.532	0.770
725T300-118	14.515	3.778	2.973	1.398	0.923	13.873	3.173	62.70	10857	13.268	2.960	88.64	16235	8.445	14.256	-1.681	1.028	3.538	0.774
725T350-54	7.197	1.932	2.988	1.001	1.115	5.367	1.061	20.97	2252	5.218	0.864	25.86	2252	0.861	9.627	-2.128	1.281	3.834	0.692
725T350-68	9.128	2.434	2.999	1.254	1.112	7.190	1.522	30.08	4347	6.861	1.394	41.74	4516	1.720	12.199	-2.119	1.276	3.837	0.695
725T350-97	13.204	3.472	3.021	1.769	1.106	11.482	2.487	49.14	8843	10.899	2.318	69.39	10885	4.989	17.609	-2.102	1.266	3.843	0.701
725T350-118	16.289	4.239	3.037	2.142	1.101	14.955	3.298	65.18	10857	14.223	3.065	91.76	16235	9.083	21.691	-2.089	1.258	3.847	0.705

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

TABLE 4B□ STANDARD TRACK DESIGN PROPERTIES (Continued)

Member	Gross Properties					Effective Properties 33 ksi				Effective Properties 50 ksi				Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
800T100-30[1]	2.355	0.579	2.748	0.017	0.233	1.992	0.332	6.56	341	1.829	0.284	8.52	341	0.101	0.223	-0.304	0.207	2.774	0.988
800T100-33[1]	2.611	0.641	2.748	0.019	0.232	2.295	0.397	7.84	465	2.119	0.341	10.20	465	0.138	0.246	-0.304	0.207	2.774	0.988
800T100-43	3.401	0.833	2.747	0.024	0.230	3.247	0.620	12.24	1030	3.051	0.538	16.11	1030	0.305	0.317	-0.301	0.205	2.773	0.988
800T100-54	4.276	1.043	2.750	0.030	0.229	4.244	0.900	17.79	2039	4.118	0.796	23.83	2039	0.604	0.394	-0.297	0.203	2.776	0.989
800T100-68	5.402	1.310	2.755	0.036	0.226	5.402	1.263	24.95	4087	5.376	1.160	34.74	4087	1.206	0.491	-0.293	0.200	2.779	0.989
800T100-97	7.747	1.854	2.763	0.049	0.221	7.747	1.854	43.11	8843	7.747	1.854	55.52	10885	3.499	0.685	-0.285	0.194	2.786	0.990
800T100-118	9.496	2.252	2.769	0.058	0.216	9.496	2.252	53.97	12009	9.496	2.252	79.79	16235	6.369	0.822	-0.278	0.189	2.791	0.990
800T125-30[1]	2.611	0.642	2.824	0.032	0.314	2.113	0.339	6.71	341	1.930	0.290	8.68	341	0.106	0.413	-0.440	0.295	2.875	0.977
800T125-33[1]	2.895	0.711	2.824	0.036	0.313	2.441	0.407	8.03	465	2.243	0.348	10.41	465	0.145	0.456	-0.439	0.294	2.875	0.977
800T125-43	3.773	0.924	2.824	0.046	0.311	3.484	0.640	12.65	1030	3.252	0.552	16.54	1030	0.321	0.589	-0.436	0.292	2.874	0.977
800T125-54	4.745	1.158	2.827	0.057	0.309	4.668	0.940	18.58	2039	4.426	0.824	24.66	2039	0.634	0.735	-0.432	0.289	2.877	0.977
800T125-68	5.998	1.454	2.833	0.070	0.306	5.998	1.356	26.80	4087	5.956	1.216	36.39	4087	1.267	0.920	-0.427	0.286	2.881	0.978
800T125-97	8.613	2.062	2.843	0.096	0.301	8.613	2.062	40.74	8843	8.613	2.062	61.72	10885	3.674	1.296	-0.417	0.279	2.889	0.979
800T125-118	10.569	2.506	2.850	0.114	0.297	10.569	2.506	58.08	12009	10.569	2.506	86.21	16235	6.688	1.567	-0.410	0.274	2.895	0.980
800T150-30[1]	2.868	0.705	2.891	0.054	0.398	2.219	0.345	6.82	341	2.017	0.294	8.79	341	0.111	0.679	-0.589	0.388	2.977	0.961
800T150-33[1]	3.180	0.781	2.891	0.060	0.397	2.569	0.414	8.18	465	2.350	0.353	10.57	465	0.152	0.751	-0.588	0.388	2.977	0.961
800T150-43	4.144	1.015	2.891	0.077	0.395	3.689	0.655	12.95	1030	3.427	0.563	16.85	1030	0.336	0.972	-0.584	0.386	2.976	0.961
800T150-54	5.214	1.272	2.896	0.096	0.393	4.976	0.969	19.15	2039	4.692	0.844	25.27	2039	0.664	1.215	-0.580	0.383	2.979	0.962
800T150-68	6.594	1.599	2.902	0.119	0.390	6.527	1.412	27.91	4087	6.361	1.255	37.58	4087	1.327	1.526	-0.575	0.379	2.984	0.963
800T150-97	9.479	2.269	2.914	0.165	0.384	9.479	2.269	44.83	8843	9.479	2.192	65.62	10885	3.849	2.162	-0.564	0.372	2.993	0.965
800T150-118	11.641	2.760	2.923	0.197	0.380	11.641	2.760	62.48	12009	11.641	2.760	93.00	16235	7.008	2.627	-0.555	0.366	2.999	0.966
800T200-33[1]	3.749	0.921	3.005	0.135	0.571	2.788	0.424	8.37	465	2.532	0.360	10.77	465	0.166	1.638	-0.917	0.589	3.194	0.918
800T200-43	4.887	1.197	3.006	0.175	0.569	4.043	0.676	13.35	1030	3.728	0.577	17.28	1030	0.367	2.124	-0.913	0.587	3.193	0.918
800T200-54	6.152	1.501	3.011	0.218	0.567	5.505	1.009	19.93	2039	5.149	0.871	26.09	2039	0.725	2.664	-0.908	0.584	3.196	0.919
800T200-68	7.786	1.888	3.019	0.272	0.564	7.306	1.490	29.45	4087	7.051	1.310	39.22	4087	1.448	3.357	-0.902	0.580	3.201	0.921
800T200-97	11.212	2.683	3.034	0.379	0.558	11.176	2.491	49.22	8843	10.833	2.347	70.27	10885	4.200	4.792	-0.889	0.571	3.210	0.923
800T200-118	13.785	3.269	3.045	0.455	0.553	13.785	3.212	63.48	12009	13.785	3.059	91.59	16235	7.646	5.854	-0.879	0.565	3.217	0.925
800T250-43	5.629	1.380	3.100	0.326	0.746	4.593	0.739	14.60	1030	4.485	0.607	18.18	1030	0.397	3.877	-1.274	0.801	3.433	0.862
800T250-54	7.090	1.730	3.106	0.407	0.744	5.948	1.193	23.57	2039	5.816	0.959	28.71	2039	0.785	4.870	-1.268	0.798	3.436	0.864
800T250-68	8.978	2.177	3.114	0.509	0.741	7.917	1.648	32.57	4087	7.588	1.560	46.72	4087	1.569	6.151	-1.261	0.793	3.441	0.866
800T250-97	12.944	3.098	3.132	0.713	0.735	12.361	2.641	52.19	8843	11.872	2.487	74.47	10885	4.550	8.818	-1.247	0.784	3.450	0.869
800T250-118	15.930	3.777	3.144	0.860	0.731	15.822	3.448	68.14	12009	15.272	3.248	97.26	16235	8.285	10.807	-1.236	0.777	3.457	0.872
800T300-54	8.028	1.958	3.184	0.675	0.923	6.396	1.178	23.28	2039	6.237	0.956	28.62	2039	0.845	7.960	-1.652	1.020	3.704	0.801
800T300-68	10.171	2.466	3.194	0.844	0.920	8.497	1.709	33.76	4087	8.160	1.548	46.36	4087	1.690	10.067	-1.644	1.015	3.708	0.803
800T300-97	14.676	3.513	3.213	1.188	0.914	13.395	2.757	54.49	8843	12.794	2.586	77.43	10885	4.901	14.472	-1.628	1.006	3.716	0.808
800T300-118	18.074	4.286	3.227	1.436	0.910	17.291	3.626	71.65	12009	16.563	3.394	101.63	16235	8.924	17.775	-1.617	0.998	3.722	0.811
800T350-54	8.966	2.187	3.251	1.030	1.102	6.808	1.167	23.07	2039	6.625	0.953	28.54	2039	0.906	12.055	-2.052	1.248	3.999	0.737
800T350-68	11.363	2.755	3.261	1.291	1.099	9.023	1.759	34.76	4087	8.690	1.532	45.88	4087	1.810	15.260	-2.044	1.243	4.003	0.739
800T350-97	16.408	3.927	3.282	1.820	1.093	14.323	2.852	56.36	8843	13.626	2.668	79.88	10885	5.252	21.980	-2.028	1.233	4.010	0.744
800T350-118	20.219	4.794	3.297	2.204	1.089	18.598	3.768	74.45	12009	17.720	3.513	105.17	16235	9.562	27.035	-2.015	1.225	4.015	0.748
925T100-43[1]	4.942	1.050	3.122	0.024	0.219	4.590	0.729	14.41	890	4.285	0.630	18.86	890	0.344	0.438	-0.273	0.188	3.142	0.992
925T100-54	6.210	1.315	3.125	0.030	0.218	6.029	1.068	21.11	1761	5.822	0.937	28.06	1761	0.679	0.544	-0.270	0.186	3.144	0.993
925T100-68	7.840	1.651	3.128	0.037	0.215	7.840	1.515	29.94	3528	7.637	1.378	41.27	3528	1.357	0.677	-0.266	0.183	3.147	0.993
925T100-97	11.229	2.338	3.136	0.050	0.210	11.229	2.338	46.20	8843	11.229	2.258	67.60	10291	3.937	0.941	-0.259	0.178	3.154	0.993
925T100-118	13.752	2.840	3.141	0.059	0.206	13.752	2.840	68.06	13189	13.752	2.840	85.03	16235	7.167	1.127	-0.253	0.174	3.158	0.994

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

TABLE 4B□ STANDARD TRACK DESIGN PROPERTIES (Continued)

Member	Gross Properties					Effective Properties 33 ksi				Effective Properties 50 ksi				Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
925T125-43[1]	5.436	1.155	3.204	0.047	0.297	4.902	0.752	14.86	890	4.547	0.646	19.34	890	0.359	0.817	-0.399	0.270	3.243	0.985
925T125-54	6.834	1.447	3.207	0.058	0.296	6.607	1.112	21.98	1761	6.228	0.968	28.99	1761	0.709	1.018	-0.395	0.268	3.245	0.985
925T125-68	8.632	1.817	3.212	0.072	0.293	8.632	1.621	32.04	3528	8.429	1.440	43.11	3528	1.418	1.273	-0.391	0.265	3.249	0.986
925T125-97	12.377	2.577	3.221	0.099	0.288	12.377	2.577	58.21	8843	12.377	2.495	74.71	10291	4.112	1.787	-0.381	0.258	3.257	0.986
925T125-118	15.171	3.133	3.228	0.117	0.283	15.171	3.133	72.61	13189	15.171	3.133	107.78	16235	7.487	2.156	-0.375	0.254	3.262	0.987
925T150-43[1]	5.931	1.260	3.278	0.079	0.379	5.170	0.769	15.19	890	4.774	0.658	19.69	890	0.374	1.351	-0.538	0.359	3.343	0.974
925T150-54	7.458	1.579	3.281	0.099	0.377	7.013	1.144	22.61	1761	6.575	0.991	29.66	1761	0.740	1.688	-0.534	0.357	3.346	0.975
925T150-68	9.424	1.984	3.287	0.122	0.374	9.362	1.683	33.26	3528	8.962	1.484	44.42	3528	1.478	2.117	-0.529	0.353	3.350	0.975
925T150-97	13.526	2.816	3.298	0.169	0.369	13.526	2.816	55.65	8843	13.526	2.636	78.91	10291	4.287	2.990	-0.518	0.346	3.359	0.976
925T150-118	16.590	3.426	3.306	0.202	0.365	16.590	3.426	77.55	13189	16.590	3.426	115.44	16235	7.806	3.624	-0.511	0.341	3.365	0.977
925T200-43[1]	6.920	1.471	3.404	0.180	0.550	5.628	0.791	15.64	890	5.161	0.673	20.16	890	0.405	2.962	-0.848	0.553	3.551	0.943
925T200-54	8.706	1.843	3.409	0.225	0.547	7.706	1.188	23.47	1761	7.168	1.021	30.57	1761	0.800	3.711	-0.843	0.550	3.554	0.944
925T200-68	11.009	2.318	3.416	0.280	0.545	10.412	1.769	34.95	3528	9.868	1.544	46.22	3528	1.599	4.671	-0.837	0.546	3.559	0.945
925T200-97	15.822	3.294	3.429	0.391	0.539	15.769	3.075	60.76	8843	15.362	2.805	83.99	10291	4.638	6.647	-0.825	0.538	3.568	0.947
925T200-118	19.428	4.012	3.439	0.469	0.534	19.428	3.948	78.01	13189	19.423	3.773	112.98	16235	8.445	8.102	-0.816	0.532	3.575	0.948
925T250-43[1]	7.909	1.681	3.509	0.338	0.725	6.597	0.849	16.79	890	6.156	0.702	21.01	890	0.435	5.414	-1.191	0.760	3.776	0.901
925T250-54	9.954	2.107	3.515	0.421	0.723	8.526	1.356	26.79	1761	8.343	1.101	32.97	1761	0.861	6.795	-1.186	0.757	3.779	0.902
925T250-68	12.593	2.651	3.523	0.526	0.720	11.182	2.049	40.50	3528	10.855	1.781	53.33	3528	1.720	8.569	-1.179	0.752	3.784	0.903
925T250-97	18.119	3.772	3.539	0.738	0.714	17.337	3.252	64.26	8843	16.692	3.077	92.13	10291	4.989	12.249	-1.166	0.744	3.794	0.906
925T250-118	22.266	4.598	3.550	0.890	0.710	22.112	4.224	83.47	13189	21.385	3.997	119.66	16235	9.083	14.980	-1.156	0.737	3.801	0.908
925T300-54	11.202	2.371	3.604	0.700	0.901	9.136	1.349	26.66	1761	8.919	1.102	33.01	1761	0.921	11.108	-1.553	0.973	4.026	0.851
925T300-68	14.178	2.985	3.613	0.877	0.898	11.961	2.123	41.96	3528	11.637	1.771	53.01	3528	1.841	14.029	-1.546	0.969	4.031	0.853
925T300-97	20.416	4.251	3.631	1.233	0.892	18.708	3.391	67.01	8843	17.920	3.197	95.71	10291	5.339	20.111	-1.531	0.959	4.040	0.856
925T300-118	25.104	5.184	3.644	1.490	0.888	24.053	4.434	87.62	13189	23.094	4.170	124.86	16235	9.722	24.648	-1.520	0.952	4.047	0.859
925T350-54	12.450	2.636	3.681	1.072	1.080	9.699	1.343	26.54	1761	9.452	1.103	33.01	1761	0.981	16.818	-1.939	1.196	4.298	0.797
925T350-68	15.762	3.319	3.690	1.343	1.077	12.671	2.186	43.19	3528	12.360	1.762	52.74	3528	1.961	21.259	-1.931	1.192	4.302	0.798
925T350-97	22.712	4.729	3.710	1.894	1.071	19.944	3.506	69.28	8843	19.035	3.296	98.69	10291	5.690	30.536	-1.915	1.182	4.310	0.803
925T350-118	27.943	5.770	3.724	2.293	1.067	25.782	4.603	90.96	13189	24.632	4.313	129.14	16235	10.360	37.481	-1.904	1.175	4.316	0.805
1000T100-43[1]	6.053	1.191	3.346	0.025	0.213	5.525	0.795	15.71	822	5.140	0.685	20.51	822	0.367	0.521	-0.259	0.179	3.362	0.994
1000T100-54	7.606	1.492	3.348	0.030	0.212	7.277	1.169	23.10	1628	7.008	1.022	30.61	1628	0.725	0.646	-0.256	0.177	3.364	0.994
1000T100-68	9.598	1.873	3.352	0.037	0.209	9.507	1.667	32.95	3261	9.219	1.509	45.19	3261	1.448	0.804	-0.253	0.175	3.368	0.994
1000T100-97	13.740	2.654	3.358	0.051	0.204	13.740	2.649	52.34	8843	13.740	2.497	74.77	9507	4.200	1.116	-0.245	0.169	3.374	0.995
1000T100-118	16.821	3.224	3.363	0.060	0.200	16.821	3.224	77.27	13189	16.821	3.219	96.38	16235	7.646	1.335	-0.240	0.166	3.378	0.995
1000T125-43[1]	6.630	1.305	3.431	0.047	0.290	5.886	0.819	16.19	822	5.442	0.702	21.02	822	0.382	0.973	-0.379	0.259	3.464	0.988
1000T125-54	8.333	1.634	3.434	0.059	0.288	7.960	1.216	24.03	1628	7.479	1.055	31.59	1628	0.755	1.212	-0.376	0.256	3.466	0.988
1000T125-68	10.522	2.053	3.438	0.073	0.286	10.452	1.781	35.19	3261	10.155	1.575	47.15	3261	1.508	1.515	-0.372	0.253	3.470	0.989
1000T125-97	15.077	2.912	3.447	0.100	0.280	15.077	2.907	57.44	8843	15.077	2.753	82.42	9507	4.375	2.123	-0.363	0.247	3.477	0.989
1000T125-118	18.471	3.540	3.453	0.118	0.276	18.471	3.540	82.05	13189	18.471	3.535	105.85	16235	7.966	2.558	-0.357	0.243	3.482	0.990
1000T150-43[1]	7.207	1.419	3.507	0.080	0.370	6.195	0.837	16.54	822	5.703	0.714	21.39	822	0.397	1.612	-0.513	0.345	3.564	0.979
1000T150-54	9.061	1.777	3.511	0.100	0.368	8.430	1.249	24.69	1628	7.880	1.079	32.29	1628	0.785	2.013	-0.509	0.342	3.567	0.980
1000T150-68	11.445	2.233	3.516	0.124	0.366	11.342	1.846	36.48	3261	10.774	1.621	48.53	3261	1.569	2.522	-0.505	0.339	3.571	0.980
1000T150-97	16.413	3.170	3.526	0.171	0.360	16.413	3.165	62.54	8843	16.413	2.902	86.90	9507	4.550	3.557	-0.495	0.332	3.579	0.981
1000T150-118	20.121	3.857	3.534	0.204	0.356	20.121	3.857	87.30	13189	20.121	3.852	115.32	16235	8.285	4.307	-0.488	0.328	3.585	0.982

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

TABLE 4B□ STANDARD TRACK DESIGN PROPERTIES (Continued)

Member	Gross Properties					Effective Properties 33 ksi				Effective Properties 50 ksi				Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
1000T200-43[1]	8.361	1.646	3.640	0.183	0.539	6.722	0.861	17.01	822	6.145	0.731	21.89	822	0.428	3.540	-0.813	0.534	3.769	0.953
1000T200-54	10.516	2.062	3.645	0.228	0.537	9.231	1.295	25.60	1628	8.560	1.111	33.26	1628	0.845	4.434	-0.809	0.531	3.772	0.954
1000T200-68	13.292	2.594	3.651	0.284	0.534	12.551	1.936	38.26	3261	11.820	1.684	50.42	3261	1.690	5.576	-0.803	0.527	3.776	0.955
1000T200-97	19.087	3.686	3.664	0.397	0.528	19.031	3.427	67.72	8843	18.583	3.081	92.25	9507	4.901	7.924	-0.791	0.519	3.786	0.956
1000T200-118	23.422	4.489	3.674	0.476	0.524	23.422	4.420	87.35	13189	23.422	4.208	125.99	16235	8.924	9.649	-0.783	0.514	3.793	0.957
1000T250-43[1]	9.515	1.873	3.751	0.344	0.713	7.172	0.876	17.32	822	6.519	0.742	22.22	822	0.458	6.477	-1.147	0.737	3.987	0.917
1000T250-54	11.972	2.348	3.757	0.429	0.711	9.913	1.326	26.20	1628	9.141	1.132	33.89	1628	0.906	8.125	-1.142	0.734	3.990	0.918
1000T250-68	15.138	2.954	3.764	0.536	0.708	13.578	1.997	39.46	3261	12.708	1.726	51.68	3261	1.810	10.240	-1.135	0.730	3.995	0.919
1000T250-97	21.760	4.202	3.780	0.751	0.702	20.871	3.596	71.05	8843	20.254	3.201	95.84	9507	5.252	14.617	-1.122	0.721	4.005	0.921
1000T250-118	26.723	5.122	3.791	0.905	0.698	26.538	4.721	93.29	13189	25.721	4.422	132.38	16235	9.562	17.858	-1.112	0.715	4.012	0.923
1000T300-54	13.427	2.633	3.852	0.714	0.888	11.083	1.452	28.69	1628	10.826	1.191	35.65	1628	0.966	13.289	-1.500	0.947	4.228	0.874
1000T300-68	16.985	3.314	3.860	0.893	0.885	14.416	2.377	46.96	3261	14.106	1.904	57.01	3261	1.931	16.771	-1.493	0.943	4.233	0.876
1000T300-97	24.434	4.719	3.878	1.257	0.879	22.441	3.798	75.04	8843	21.530	3.589	107.45	9507	5.602	24.009	-1.478	0.934	4.242	0.879
1000T300-118	30.024	5.755	3.890	1.519	0.875	28.792	4.950	97.82	13189	27.680	4.668	139.76	16235	10.201	29.395	-1.468	0.927	4.249	0.881
1000T350-54	14.882	2.919	3.934	1.095	1.067	11.750	1.449	28.63	1628	11.458	1.192	35.70	1628	1.027	20.119	-1.877	1.167	4.488	0.825
1000T350-68	18.832	3.675	3.943	1.371	1.064	15.325	2.351	46.45	3261	14.960	1.899	56.86	3261	2.052	25.415	-1.870	1.163	4.492	0.827
1000T350-97	27.107	5.235	3.962	1.933	1.058	23.884	3.924	77.55	8843	22.834	3.700	110.77	9507	5.953	36.456	-1.854	1.153	4.501	0.830
1000T350-118	33.325	6.387	3.976	2.340	1.054	30.803	5.136	101.49	13189	29.472	4.826	144.48	16235	10.839	44.703	-1.843	1.146	4.507	0.833
1150T100-43[1]	8.742	1.499	3.791	0.025	0.203	7.693	0.927	18.31	714	7.112	0.795	23.81	714	0.413	0.709	-0.235	0.164	3.803	0.996
1150T100-54[1]	10.981	1.877	3.793	0.031	0.201	10.186	1.370	27.08	1414	9.761	1.192	35.69	1414	0.815	0.879	-0.232	0.162	3.805	0.996
1150T100-68	13.852	2.358	3.796	0.038	0.199	13.403	1.972	38.97	2832	12.906	1.771	53.03	2832	1.629	1.092	-0.229	0.160	3.808	0.996
1150T100-97	19.811	3.342	3.802	0.052	0.194	19.811	3.199	63.22	8250	19.660	2.978	89.17	8250	4.726	1.512	-0.222	0.155	3.813	0.997
1150T100-118	24.238	4.062	3.806	0.061	0.190	24.238	4.062	80.26	13189	24.238	3.890	116.48	15072	8.604	1.806	-0.217	0.151	3.817	0.997
1150T125-43[1]	9.503	1.630	3.881	0.048	0.277	8.164	0.953	18.84	714	7.504	0.814	24.38	714	0.428	1.330	-0.346	0.238	3.906	0.992
1150T125-54[1]	11.940	2.041	3.883	0.060	0.275	11.109	1.423	28.11	1414	10.376	1.228	36.78	1414	0.845	1.656	-0.343	0.236	3.908	0.992
1150T125-68	15.067	2.565	3.887	0.074	0.272	14.658	2.100	41.49	2832	14.174	1.844	55.21	2832	1.690	2.066	-0.339	0.233	3.912	0.992
1150T125-97	21.568	3.638	3.895	0.102	0.267	21.568	3.493	69.03	8250	21.405	3.270	97.89	8250	4.901	2.888	-0.331	0.228	3.918	0.993
1150T125-118	26.404	4.425	3.901	0.120	0.263	26.404	4.425	87.43	13189	26.404	4.251	127.26	15072	8.924	3.474	-0.325	0.224	3.923	0.993
1150T150-43[1]	10.264	1.760	3.963	0.082	0.354	8.563	0.973	19.22	714	7.837	0.828	24.79	714	0.443	2.209	-0.470	0.320	4.006	0.986
1150T150-54[1]	12.898	2.205	3.966	0.102	0.353	11.726	1.460	28.84	1414	10.893	1.254	37.56	1414	0.876	2.757	-0.467	0.317	4.009	0.986
1150T150-68	16.283	2.772	3.971	0.127	0.350	15.864	2.173	42.93	2832	14.986	1.895	56.74	2832	1.750	3.450	-0.463	0.314	4.013	0.987
1150T150-97	23.324	3.935	3.980	0.175	0.345	23.324	3.788	74.85	8250	23.210	3.437	102.92	8250	5.076	4.854	-0.454	0.308	4.021	0.987
1150T150-118	28.569	4.788	3.987	0.209	0.341	28.569	4.788	94.61	13189	28.569	4.611	138.05	15072	9.243	5.866	-0.447	0.303	4.026	0.988
1150T200-43[1]	11.785	2.021	4.107	0.188	0.519	9.239	0.999	19.75	714	8.399	0.847	25.35	714	0.474	4.871	-0.752	0.500	4.208	0.968
1150T200-54[1]	14.816	2.533	4.111	0.234	0.517	12.758	1.510	29.84	1414	11.767	1.290	38.63	1414	0.936	6.095	-0.748	0.497	4.210	0.968
1150T200-68	18.714	3.185	4.117	0.292	0.514	17.440	2.271	44.89	2832	16.335	1.965	58.82	2832	1.871	7.657	-0.743	0.493	4.215	0.969
1150T200-97	26.837	4.527	4.129	0.407	0.508	26.818	4.079	80.61	8250	26.177	3.634	108.82	8250	5.427	10.855	-0.732	0.486	4.224	0.970
1150T200-118	32.901	5.513	4.138	0.488	0.504	32.901	5.435	107.40	13189	32.901	5.010	149.99	15072	9.881	13.195	-0.724	0.481	4.231	0.971
1150T250-43[1]	13.307	2.282	4.230	0.354	0.690	9.811	1.017	20.09	714	8.872	0.859	25.72	714	0.504	8.930	-1.068	0.695	4.417	0.942
1150T250-54[1]	16.734	2.861	4.235	0.442	0.688	13.633	1.544	30.51	1414	12.505	1.314	39.33	1414	0.997	11.194	-1.063	0.692	4.420	0.942
1150T250-68	21.145	3.599	4.242	0.552	0.685	18.774	2.338	46.19	2832	17.476	2.011	60.20	2832	1.992	14.091	-1.057	0.688	4.425	0.943
1150T250-97	30.350	5.120	4.256	0.773	0.679	29.267	4.265	84.27	8250	28.347	3.765	112.73	8250	5.778	20.068	-1.045	0.680	4.434	0.944
1150T250-118	37.232	6.239	4.266	0.932	0.675	36.975	5.784	114.30	13189	36.017	5.244	157.00	15072	10.520	24.476	-1.036	0.674	4.441	0.946

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

TABLE 4B□ STANDARD TRACK DESIGN PROPERTIES (Continued)

Member	Gross Properties					Effective Properties 33 ksi				Effective Properties 50 ksi				Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
1150T300-54[1]	18.651	3.189	4.341	0.738	0.863	15.715	1.659	32.78	1414	14.899	1.368	40.97	1414	1.057	18.327	-1.404	0.899	4.643	0.909
1150T300-68	23.576	4.013	4.349	0.923	0.860	20.405	2.683	53.01	2832	19.977	2.173	65.06	2832	2.113	23.104	-1.397	0.895	4.648	0.910
1150T300-97	33.862	5.712	4.365	1.298	0.855	31.233	4.668	92.25	8250	30.048	4.432	132.69	8250	6.128	32.999	-1.384	0.886	4.658	0.912
1150T300-118	41.563	6.965	4.376	1.569	0.850	39.925	6.054	119.62	13189	38.473	5.734	171.67	15072	11.159	40.336	-1.374	0.880	4.665	0.913
1150T350-54[1]	20.569	3.517	4.434	1.134	1.041	16.616	1.661	32.82	1414	15.203	1.373	41.10	1414	1.117	27.757	-1.766	1.114	4.884	0.869
1150T350-68	26.007	4.427	4.442	1.420	1.038	21.625	2.670	52.76	2832	21.129	2.175	65.12	2832	2.233	35.026	-1.759	1.109	4.889	0.871
1150T350-97	37.375	6.305	4.460	2.002	1.032	33.137	4.820	95.25	8250	31.779	4.566	136.70	8250	6.479	50.130	-1.744	1.100	4.899	0.873
1150T350-118	45.894	7.691	4.472	2.423	1.028	42.565	6.274	123.98	13189	40.835	5.922	177.32	15072	11.797	61.369	-1.733	1.093	4.905	0.875
1200T100-54[1]	12.292	2.015	3.940	0.031	0.198	11.281	1.438	28.41	1354	10.792	1.248	37.38	1354	0.845	0.965	-0.225	0.158	3.952	0.997
1200T100-68	15.504	2.531	3.943	0.038	0.196	14.876	2.074	40.97	2713	14.295	1.859	55.64	2713	1.690	1.199	-0.222	0.155	3.954	0.997
1200T100-97	22.169	3.588	3.949	0.052	0.191	22.169	3.384	66.87	7902	21.856	3.139	93.99	7902	4.901	1.659	-0.215	0.151	3.960	0.997
1200T100-118	27.119	4.362	3.953	0.061	0.187	27.119	4.362	86.19	13189	27.119	4.116	123.22	14434	8.924	1.979	-0.211	0.147	3.963	0.997
1200T125-54[1]	13.335	2.186	4.033	0.060	0.271	12.296	1.491	29.47	1354	11.460	1.286	38.51	1354	0.876	1.820	-0.333	0.230	4.055	0.993
1200T125-68	16.826	2.747	4.036	0.074	0.268	16.246	2.206	43.60	2713	15.686	1.934	57.90	2713	1.750	2.270	-0.329	0.227	4.059	0.993
1200T125-97	24.078	3.897	4.044	0.102	0.263	24.078	3.690	72.92	7902	23.751	3.442	103.06	7902	5.076	3.171	-0.322	0.222	4.065	0.994
1200T125-118	29.472	4.740	4.049	0.121	0.259	29.472	4.740	93.67	13189	29.472	4.490	134.44	14434	9.243	3.812	-0.316	0.218	4.070	0.994
1200T150-54[1]	14.378	2.357	4.117	0.103	0.348	12.962	1.530	30.23	1354	12.020	1.313	39.31	1354	0.906	3.033	-0.454	0.310	4.156	0.988
1200T150-68	18.148	2.963	4.121	0.127	0.345	17.568	2.281	45.08	2713	16.566	1.987	59.48	2713	1.810	3.795	-0.450	0.307	4.160	0.988
1200T150-97	25.987	4.206	4.130	0.176	0.340	25.987	3.996	78.97	7902	25.719	3.616	108.27	7902	5.252	5.335	-0.441	0.301	4.168	0.989
1200T150-118	31.825	5.119	4.137	0.210	0.336	31.825	5.119	101.15	13189	31.825	4.865	145.66	14434	9.562	6.444	-0.435	0.296	4.173	0.989
1200T200-54[1]	16.464	2.699	4.265	0.236	0.510	14.078	1.582	31.26	1354	12.962	1.350	40.41	1354	0.966	6.714	-0.730	0.487	4.357	0.972
1200T200-68	20.791	3.395	4.271	0.294	0.508	19.277	2.383	47.09	2713	18.026	2.058	61.62	2713	1.931	8.431	-0.725	0.483	4.362	0.972
1200T200-97	29.805	4.824	4.283	0.410	0.502	29.805	4.298	84.93	7902	28.959	3.819	114.35	7902	5.602	11.945	-0.714	0.476	4.371	0.973
1200T200-118	36.530	5.876	4.291	0.492	0.498	36.530	5.794	114.50	13189	36.530	5.278	158.02	14434	10.201	14.513	-0.706	0.471	4.377	0.974
1200T250-54[1]	18.550	3.041	4.392	0.445	0.681	15.021	1.617	31.95	1354	13.756	1.374	41.14	1354	1.027	12.339	-1.039	0.680	4.565	0.948
1200T250-68	23.435	3.826	4.399	0.556	0.678	20.720	2.451	48.44	2713	19.255	2.106	63.04	2713	2.052	15.529	-1.033	0.676	4.569	0.949
1200T250-97	33.623	5.442	4.413	0.780	0.672	32.479	4.489	88.70	7902	31.310	3.954	118.37	7902	5.953	22.101	-1.021	0.668	4.579	0.950
1200T250-118	41.236	6.632	4.423	0.940	0.668	40.963	6.138	121.28	13189	39.954	5.519	165.24	14434	10.839	26.943	-1.013	0.662	4.586	0.951
1200T300-54[1]	20.636	3.383	4.502	0.745	0.855	15.856	1.641	32.44	1354	14.451	1.391	41.65	1354	1.087	20.211	-1.375	0.884	4.784	0.917
1200T300-68	26.079	4.258	4.510	0.932	0.852	21.991	2.501	49.41	2713	20.338	2.140	64.06	2713	2.173	25.471	-1.369	0.880	4.789	0.918
1200T300-97	37.441	6.060	4.525	1.310	0.847	34.841	4.629	91.46	7902	33.377	4.051	121.30	7902	6.304	36.357	-1.355	0.871	4.799	0.920
1200T300-118	45.941	7.389	4.537	1.583	0.842	44.194	6.386	126.18	13189	42.885	5.695	170.51	14434	11.478	44.420	-1.346	0.865	4.806	0.922
1200T350-54[1]	22.722	3.725	4.598	1.146	1.033	18.478	1.732	34.22	1354	16.539	1.433	42.90	1354	1.148	30.618	-1.731	1.097	5.021	0.881
1200T350-68	28.722	4.690	4.606	1.435	1.030	24.034	2.777	54.88	2713	23.489	2.267	67.89	2713	2.294	38.623	-1.725	1.092	5.025	0.882
1200T350-97	41.259	6.678	4.624	2.023	1.024	36.652	5.136	101.49	7902	35.270	4.763	142.60	7902	6.654	55.244	-1.710	1.083	5.035	0.885
1200T350-118	50.647	8.146	4.636	2.448	1.019	47.024	6.674	131.89	13189	45.150	6.309	188.90	14434	12.117	67.598	-1.700	1.076	5.042	0.886
1350T100-54[1]	16.834	2.458	4.382	0.031	0.189	14.948	1.639	32.38	1203	14.239	1.418	42.45	1203	0.936	1.249	-0.207	0.145	4.391	0.998
1350T100-68	21.227	3.088	4.385	0.039	0.187	19.835	2.378	47.00	2409	18.946	2.120	63.48	2409	1.871	1.549	-0.204	0.143	4.393	0.998
1350T100-97	30.335	4.379	4.390	0.052	0.182	30.288	3.941	77.87	7014	29.275	3.622	108.44	7014	5.427	2.140	-0.198	0.139	4.398	0.998
1350T100-118	37.093	5.324	4.393	0.061	0.179	37.093	5.155	101.86	12808	37.028	4.794	143.53	12808	9.881	2.550	-0.193	0.136	4.401	0.998
1350T125-54[1]	18.150	2.650	4.479	0.061	0.259	16.262	1.698	33.55	1203	15.078	1.459	43.69	1203	0.966	2.362	-0.307	0.214	4.497	0.995
1350T125-68	22.894	3.330	4.482	0.075	0.257	21.580	2.526	49.91	2409	20.753	2.203	65.96	2409	1.931	2.944	-0.303	0.211	4.500	0.995
1350T125-97	32.740	4.726	4.489	0.103	0.252	32.677	4.282	84.62	7014	31.658	3.961	118.59	7014	5.602	4.105	-0.296	0.206	4.505	0.996
1350T125-118	40.054	5.749	4.493	0.123	0.249	40.054	5.577	110.20	12808	39.969	5.212	156.05	12808	10.201	4.928	-0.291	0.202	4.510	0.996

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

TABLE 4B□ STANDARD TRACK DESIGN PROPERTIES (Continued)

Member	Gross Properties					Effective Properties 33 ksi				Effective Properties 50 ksi				Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
1350T150-54[1]	19.467	2.842	4.567	0.104	0.334	17.098	1.740	34.38	1203	15.773	1.489	44.57	1203	0.997	3.947	-0.421	0.289	4.599	0.992
1350T150-68	24.562	3.573	4.571	0.129	0.332	23.293	2.608	51.53	2409	21.855	2.261	67.68	2409	1.992	4.933	-0.417	0.286	4.602	0.992
1350T150-97	35.144	5.073	4.579	0.179	0.327	35.067	4.624	91.38	7014	34.160	4.153	124.33	7014	5.778	6.924	-0.408	0.281	4.609	0.992
1350T150-118	43.016	6.174	4.585	0.213	0.323	43.016	6.000	118.55	12808	42.912	5.631	168.58	12808	10.520	8.353	-0.402	0.276	4.614	0.992
1350T200-54[1]	22.100	3.227	4.725	0.240	0.493	18.481	1.797	35.50	1203	16.933	1.529	45.78	1203	1.057	8.769	-0.680	0.458	4.799	0.980
1350T200-68	27.896	4.058	4.730	0.299	0.490	25.437	2.719	53.72	2409	23.666	2.339	70.02	2409	2.113	11.002	-0.675	0.455	4.803	0.980
1350T200-97	39.954	5.767	4.741	0.418	0.485	39.954	4.955	97.91	7014	38.298	4.374	130.95	7014	6.128	15.561	-0.666	0.448	4.812	0.981
1350T200-118	48.938	7.024	4.749	0.501	0.481	48.938	6.745	133.29	12808	48.938	6.084	182.17	12808	11.159	18.883	-0.658	0.443	4.818	0.981
1350T250-54[1]	24.733	3.611	4.862	0.455	0.660	19.647	1.834	36.25	1203	17.905	1.556	46.57	1203	1.117	16.152	-0.974	0.644	5.002	0.962
1350T250-68	31.231	4.543	4.868	0.569	0.657	27.222	2.792	55.18	2409	25.180	2.390	71.56	2409	2.233	20.311	-0.969	0.640	5.007	0.963
1350T250-97	44.764	6.461	4.881	0.797	0.651	43.449	5.161	101.99	7014	41.227	4.519	135.30	7014	6.479	28.858	-0.957	0.633	5.016	0.964
1350T250-118	54.860	7.874	4.890	0.961	0.647	54.611	7.112	140.55	12808	53.395	6.346	189.99	12808	11.797	35.137	-0.949	0.627	5.023	0.964
1350T300-54[1]	27.366	3.996	4.981	0.764	0.832	20.668	1.862	36.79	1203	18.754	1.574	47.14	1203	1.178	26.494	-1.295	0.842	5.213	0.938
1350T300-68	34.566	5.028	4.988	0.955	0.829	28.793	2.846	56.23	2409	26.515	2.427	72.67	2409	2.354	33.361	-1.289	0.838	5.218	0.939
1350T300-97	49.574	7.156	5.003	1.343	0.824	46.466	5.312	104.97	7014	43.800	4.624	138.45	7014	6.829	47.541	-1.276	0.830	5.228	0.940
1350T300-118	60.782	8.724	5.013	1.623	0.819	58.718	7.381	145.84	12808	57.131	6.535	195.67	12808	12.436	58.014	-1.267	0.824	5.235	0.941
1350T350-54[1]	29.999	4.380	5.086	1.177	1.008	24.844	1.945	38.44	1203	20.947	1.614	48.32	1203	1.238	40.165	-1.637	1.049	5.438	0.909
1350T350-68	37.901	5.513	5.094	1.475	1.005	32.251	3.099	61.24	2409	31.547	2.546	76.22	2409	2.475	50.626	-1.631	1.045	5.442	0.910
1350T350-97	54.384	7.850	5.110	2.078	0.999	48.578	6.136	121.25	7014	47.239	5.277	158.01	7014	7.180	72.295	-1.617	1.036	5.452	0.912
1350T350-118	66.704	9.574	5.122	2.515	0.995	62.123	7.939	156.87	12808	59.783	7.533	225.53	12808	13.075	88.357	-1.607	1.030	5.459	0.913
1400T100-54[1]	18.562	2.615	4.529	0.031	0.186	16.300	1.706	33.71	1160	15.506	1.474	44.14	1160	0.966	1.352	-0.201	0.142	4.537	0.998
1400T100-68	23.404	3.285	4.532	0.039	0.184	21.674	2.480	49.01	2322	20.662	2.207	66.09	2322	1.931	1.677	-0.198	0.140	4.540	0.998
1400T100-97	33.441	4.659	4.537	0.053	0.180	33.212	4.127	81.54	6761	32.031	3.783	113.27	6761	5.602	2.314	-0.192	0.135	4.544	0.998
1400T100-118	40.888	5.665	4.540	0.062	0.176	40.888	5.416	107.03	12344	40.597	5.021	150.32	12344	10.201	2.757	-0.188	0.132	4.547	0.998
1400T125-54[1]	19.977	2.814	4.627	0.061	0.256	17.725	1.767	34.91	1160	16.407	1.517	45.42	1160	0.997	2.559	-0.299	0.209	4.643	0.996
1400T125-68	25.196	3.536	4.630	0.076	0.254	23.552	2.632	52.01	2322	22.620	2.293	68.64	2322	1.992	3.189	-0.296	0.206	4.646	0.996
1400T125-97	36.024	5.019	4.636	0.104	0.249	35.775	4.480	88.53	6761	34.588	4.134	123.76	6761	5.778	4.445	-0.289	0.201	4.652	0.996
1400T125-118	44.068	6.106	4.641	0.123	0.245	44.068	5.853	115.67	12344	43.752	5.453	163.27	12344	10.520	5.334	-0.284	0.197	4.656	0.996
1400T150-54[1]	21.392	3.013	4.717	0.105	0.330	18.620	1.810	35.76	1160	17.153	1.547	46.33	1160	1.027	4.280	-0.410	0.283	4.746	0.993
1400T150-68	26.987	3.788	4.721	0.130	0.327	25.409	2.717	53.68	2322	23.803	2.352	70.42	2322	2.052	5.349	-0.407	0.280	4.749	0.993
1400T150-97	38.607	5.379	4.729	0.180	0.322	38.340	4.834	95.52	6761	37.285	4.332	129.69	6761	5.953	7.503	-0.399	0.275	4.756	0.993
1400T150-118	47.247	6.546	4.734	0.214	0.319	47.247	6.291	124.31	12344	46.911	5.886	176.24	12344	10.839	9.048	-0.393	0.270	4.761	0.993
1400T200-54[1]	24.221	3.412	4.878	0.242	0.487	20.098	1.868	36.92	1160	18.387	1.589	47.56	1160	1.087	9.520	-0.665	0.449	4.947	0.982
1400T200-68	30.571	4.291	4.883	0.301	0.485	27.707	2.830	55.93	2322	25.738	2.432	72.81	2322	2.173	11.942	-0.661	0.446	4.951	0.982
1400T200-97	43.773	6.098	4.893	0.420	0.479	43.679	5.174	102.24	6761	41.749	4.559	136.48	6761	6.304	16.883	-0.651	0.439	4.959	0.983
1400T200-118	53.606	7.427	4.900	0.504	0.475	53.606	7.062	139.54	12344	53.453	6.354	190.23	12344	11.478	20.479	-0.644	0.434	4.965	0.983
1400T250-54[1]	27.051	3.811	5.017	0.458	0.653	21.342	1.907	37.68	1160	19.421	1.616	48.38	1160	1.148	17.550	-0.954	0.633	5.149	0.966
1400T250-68	34.154	4.794	5.023	0.573	0.650	29.615	2.906	57.42	2322	27.352	2.485	74.40	2322	2.294	22.063	-0.949	0.629	5.153	0.966
1400T250-97	48.939	6.818	5.036	0.803	0.645	47.449	5.386	106.42	6761	44.883	4.708	140.94	6761	6.654	31.333	-0.938	0.622	5.163	0.967
1400T250-118	59.964	8.308	5.044	0.967	0.641	59.734	7.438	146.99	12344	58.277	6.622	198.25	12344	12.117	38.137	-0.930	0.616	5.169	0.968
1400T300-54[1]	29.881	4.209	5.139	0.769	0.825	22.429	1.935	38.24	1160	20.324	1.635	48.96	1160	1.208	28.800	-1.271	0.829	5.358	0.944
1400T300-68	37.737	5.297	5.146	0.962	0.822	31.291	2.961	58.50	2322	28.775	2.523	75.54	2322	2.415	36.257	-1.265	0.825	5.363	0.944
1400T300-97	54.105	7.538	5.160	1.353	0.816	50.615	5.540	109.48	6761	47.633	4.815	144.17	6761	7.005	51.644	-1.252	0.817	5.373	0.946
1400T300-118	66.323	9.189	5.171	1.635	0.812	64.159	7.713	152.42	12344	62.201	6.816	204.06	12344	12.755	62.998	-1.243	0.811	5.380	0.947

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

TABLE 4B□ STANDARD TRACK DESIGN PROPERTIES (Continued)

Member	Gross Properties					Effective Properties 33 ksi				Effective Properties 50 ksi				Torsional Properties					
	Ix (in^4)	Sx (in^3)	Rx (in)	Iy (in^4)	Ry (in)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Ix (in^4)	Sx (in^3)	Ma (in-k)	Vag (lb)	Jx1000 (in^4)	Cw (in^6)	Xo (in)	m (in)	Ro (in)	Beta
1400T350-54[1]	32.711	4.608	5.248	1.187	1.000	23.405	1.956	38.65	1160	21.130	1.650	49.39	1160	1.269	43.674	-1.608	1.034	5.579	0.917
1400T350-68	41.320	5.800	5.255	1.487	0.997	32.801	3.002	59.32	2322	30.045	2.551	76.39	2322	2.535	55.038	-1.602	1.030	5.584	0.918
1400T350-97	59.271	8.257	5.271	2.095	0.991	53.470	5.659	111.83	6761	50.105	4.898	146.63	6761	7.355	78.557	-1.589	1.021	5.594	0.919
1400T350-118	72.682	10.070	5.282	2.535	0.987	68.146	7.926	156.63	12344	65.731	6.965	208.52	12344	13.394	95.978	-1.579	1.015	5.601	0.921
1600T100-68[1]	33.583	4.133	5.118	0.039	0.175	29.960	2.886	57.03	2030	28.366	2.556	76.52	2030	2.173	2.238	-0.179	0.127	5.124	0.999
1600T100-97	47.964	5.865	5.122	0.053	0.170	46.522	4.872	96.27	5908	44.515	4.427	132.55	5908	6.304	3.084	-0.174	0.123	5.128	0.999
1600T100-118	58.625	7.134	5.125	0.062	0.167	58.625	6.470	127.85	10783	56.844	5.929	177.53	10783	11.478	3.669	-0.170	0.120	5.130	0.999
1600T125-68[1]	35.916	4.421	5.220	0.077	0.241	32.443	3.058	60.42	2030	31.004	2.651	79.37	2030	2.233	4.273	-0.268	0.189	5.233	0.997
1600T125-97	51.322	6.276	5.226	0.105	0.237	49.844	5.273	104.19	5908	47.830	4.825	144.47	5908	6.479	5.945	-0.262	0.184	5.238	0.997
1600T125-118	62.755	7.637	5.230	0.125	0.233	62.755	6.965	137.62	10783	60.930	6.420	192.21	10783	11.797	7.126	-0.257	0.181	5.241	0.998
1600T150-68[1]	38.249	4.708	5.316	0.132	0.312	34.945	3.152	62.28	2030	32.537	2.717	81.34	2030	2.294	7.188	-0.371	0.258	5.338	0.995
1600T150-97	54.681	6.686	5.323	0.182	0.307	53.172	5.674	112.12	5908	51.382	5.047	151.11	5908	6.654	10.066	-0.363	0.253	5.344	0.995
1600T150-118	66.886	8.140	5.328	0.217	0.304	66.886	7.460	147.41	10783	65.023	6.911	206.91	10783	12.117	12.124	-0.358	0.249	5.348	0.996
1600T200-68[1]	42.914	5.282	5.488	0.307	0.464	37.904	3.277	64.76	2030	35.009	2.805	83.99	2030	2.415	16.123	-0.607	0.414	5.541	0.988
1600T200-97	61.398	7.508	5.497	0.428	0.459	60.199	6.052	119.60	5908	57.292	5.298	158.62	5908	7.005	22.755	-0.598	0.408	5.549	0.988
1600T200-118	75.146	9.145	5.504	0.514	0.455	75.146	8.331	164.63	10783	73.613	7.433	222.53	10783	12.755	27.568	-0.592	0.403	5.554	0.989
1600T250-68[1]	47.580	5.856	5.639	0.586	0.626	40.337	3.360	66.40	2030	37.060	2.864	85.75	2030	2.535	29.878	-0.878	0.588	5.741	0.977
1600T250-97	68.116	8.329	5.650	0.821	0.620	65.163	6.285	124.19	5908	61.325	5.461	163.51	5908	7.355	42.361	-0.868	0.581	5.750	0.977
1600T250-118	83.406	10.150	5.659	0.989	0.616	83.311	8.747	172.84	10783	79.965	7.726	231.33	10783	13.394	51.497	-0.860	0.576	5.757	0.978
1600T300-68[1]	52.245	6.430	5.773	0.988	0.794	42.461	3.420	67.59	2030	38.843	2.906	87.01	2030	2.656	49.199	-1.176	0.776	5.945	0.961
1600T300-97	74.833	9.151	5.786	1.388	0.788	69.230	6.453	127.52	5908	64.818	5.579	167.04	5908	7.706	69.964	-1.165	0.769	5.955	0.962
1600T300-118	91.666	11.155	5.796	1.677	0.784	89.133	9.047	178.78	10783	85.001	7.938	237.67	10783	14.032	85.244	-1.156	0.763	5.962	0.962
1600T350-68[1]	56.911	7.005	5.893	1.529	0.966	44.381	3.466	68.49	2030	40.440	2.938	87.96	2030	2.777	74.780	-1.496	0.974	6.156	0.941
1600T350-97	81.550	9.972	5.907	2.155	0.960	72.896	6.583	130.07	5908	67.956	5.669	169.74	5908	8.057	106.566	-1.484	0.966	6.166	0.942
1600T350-118	99.927	12.160	5.918	2.608	0.956	94.388	9.279	183.36	10783	89.528	8.100	242.52	10783	14.671	130.044	-1.475	0.960	6.173	0.943

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

Notes to Table 4B:
[1]Web-height to thickness ratio exceeds 200. Web Stiffeners are required in accordance with AISI-NAS Sections B1.2 and C3.6.1.
[2]Allowable Bending Moment for a fully-braced section about its major axis.
[3]Gross Properties are based on the full-unreduced cross section of the studs.
[4]Use the effective moment of inertia for deflection calculations.

SYMBOLS:
I_x = Strong axis moment of inertia.
S_x = Strong axis section modulus.
R_x = Strong axis radius of gyration.
I_y = Weak axis moment of inertia.
R_y = Weak axis radius of gyration.
Ma = Allowable moment.
Vag = Allowable shear.
J = St. Venant torsion constant.
C_w = Warping constant.
X_o = Distance from shear center to neutral axis.
m = Distance from shear center to mid-plane of web.
R_o = Radii of gyration.
Beta = Torsional flexural constant.

TABLE 5 ALLOWABLE HEIGHTS FOR EXTERIOR NON-LOAD BEARING WALLS[1,2,3,4,5]

Member	Spacing (in) oc	15 psf			20 psf			25 psf		
		L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600
350S162-33	12	14' 8"	12' 10"	10' 10"	13' 0"	11' 8"	9' 10"	11' 8"	10' 10"	9' 2"
350S162-33	16	13' 0"	11' 8"	9' 10"	11' 3"	10' 7"	8' 11"	10' 1" e	9' 10"	8' 4"
350S162-33	24	10' 8"	10' 2"	8' 7"	9' 2" e	9' 2" e	7' 10"	8' 3" e	8' 3" e	7' 3" e
350S162-43	12	16' 0"	14' 0"	11' 9"	14' 6"	12' 8"	10' 8"	13' 6"	11' 9"	9' 11"
350S162-43	16	14' 6"	12' 8"	10' 8"	13' 2"	11' 6"	9' 9"	11' 10"	10' 8"	9' 0"
350S162-43	24	12' 6"	11' 1"	9' 4"	10' 10"	10' 1"	8' 6"	9' 8"	9' 4"	7' 11"
350S162-54	12	17' 1"	15' 0"	12' 7"	15' 7"	13' 7"	11' 6"	14' 5"	12' 7"	10' 8"
350S162-54	16	15' 7"	13' 7"	11' 6"	14' 2"	12' 4"	10' 5"	13' 1"	11' 6"	9' 8"
350S162-54	24	13' 7"	11' 10"	10' 0"	12' 2"	10' 9"	9' 1"	10' 10"	10' 0"	8' 5"
350S162-68	12	18' 4"	16' 0"	13' 6"	16' 8"	14' 6"	12' 3"	15' 5"	13' 6"	11' 5"
350S162-68	16	16' 8"	14' 6"	12' 3"	15' 1"	13' 3"	11' 2"	14' 0"	12' 3"	10' 4"
350S162-68	24	14' 6"	12' 8"	10' 9"	13' 3"	11' 6"	9' 9"	12' 1"	10' 9"	9' 0"
362S137-33	12	14' 3"	12' 7"	10' 7"	12' 4"	11' 5"	9' 8"	11' 1"	10' 7"	8' 11"
362S137-33	16	12' 4"	11' 5"	9' 8"	10' 9"	10' 5"	8' 9"	9' 7"	9' 7"	8' 2"
362S137-33	24	10' 1"	10' 0"	8' 5"	8' 9" e	8' 9" e	7' 8"	7' 10" e	7' 10" e	7' 1" e
362S162-33	12	15' 1"	13' 2"	11' 1"	13' 3"	12' 0"	10' 1"	11' 11"	11' 1"	9' 5"
362S162-33	16	13' 3"	12' 0"	10' 1"	11' 6"	10' 11"	9' 2"	10' 3" e	10' 1" e	8' 6"
362S162-33	24	10' 10"	10' 6"	8' 10"	9' 5" e	9' 5" e	8' 0"	8' 5" e	8' 5" e	7' 5" e
362S200-33	12	15' 11"	13' 11"	11' 9"	13' 11"	12' 8"	10' 8"	12' 5"	11' 9"	9' 11"
362S200-33	16	13' 11"	12' 8"	10' 8"	12' 1"	11' 6"	9' 8"	10' 9" e	10' 8" e	9' 0"
362S200-33	24	11' 4" e	11' 1" e	9' 4"	9' 10" e	9' 10" e	8' 6" e	8' 10" e	8' 10" e	7' 10" e
362S137-43	12	15' 8"	13' 8"	11' 7"	14' 3"	12' 5"	10' 6"	13' 0"	11' 7"	9' 9"
362S137-43	16	14' 3"	12' 5"	10' 6"	12' 7"	11' 4"	9' 6"	11' 3"	10' 6"	8' 10"
362S137-43	24	11' 10"	10' 10"	9' 2"	10' 3"	9' 10"	8' 4"	9' 2"	9' 2"	7' 9"
362S162-43	12	16' 5"	14' 4"	12' 1"	14' 11"	13' 0"	11' 0"	13' 10"	12' 1"	10' 2"
362S162-43	16	14' 11"	13' 0"	11' 0"	13' 7"	11' 10"	10' 0"	12' 1"	11' 0"	9' 3"
362S162-43	24	12' 9"	11' 5"	9' 7"	11' 1"	10' 4"	8' 9"	9' 11"	9' 7"	8' 1"
362S200-43	12	17' 4"	15' 2"	12' 9"	15' 9"	13' 9"	11' 7"	14' 8"	12' 9"	10' 9"
362S200-43	16	15' 9"	13' 9"	11' 7"	14' 4"	12' 6"	10' 7"	13' 0"	11' 7"	9' 10"
362S200-43	24	13' 8"	12' 0"	10' 2"	11' 10"	10' 11"	9' 3"	10' 7"	10' 2"	8' 7"
362S137-54	12	16' 9"	14' 8"	12' 4"	15' 3"	13' 4"	11' 3"	14' 2"	12' 4"	10' 5"
362S137-54	16	15' 3"	13' 4"	11' 3"	13' 10"	12' 1"	10' 2"	12' 7"	11' 3"	9' 6"
362S137-54	24	13' 3"	11' 8"	9' 10"	11' 6"	10' 7"	8' 11"	10' 4"	9' 10"	8' 3"
362S162-54	12	17' 7"	15' 4"	13' 0"	16' 0"	14' 0"	11' 9"	14' 10"	13' 0"	10' 11"
362S162-54	16	16' 0"	14' 0"	11' 9"	14' 6"	12' 8"	10' 8"	13' 6"	11' 9"	9' 11"
362S162-54	24	14' 0"	12' 2"	10' 3"	12' 5"	11' 1"	9' 4"	11' 1"	10' 3"	8' 8"
362S200-54	12	18' 7"	16' 3"	13' 8"	16' 11"	14' 9"	12' 5"	15' 8"	13' 8"	11' 7"
362S200-54	16	16' 11"	14' 9"	12' 5"	15' 4"	13' 5"	11' 4"	14' 3"	12' 5"	10' 6"
362S200-54	24	14' 9"	12' 11"	10' 10"	13' 5"	11' 9"	9' 11"	12' 1"	10' 10"	9' 2"
362S137-68	12	17' 11"	15' 8"	13' 2"	16' 3"	14' 3"	12' 0"	15' 1"	13' 2"	11' 2"
362S137-68	16	16' 3"	14' 3"	12' 0"	14' 10"	12' 11"	10' 11"	13' 9"	12' 0"	10' 1"
362S137-68	24	14' 3"	12' 5"	10' 6"	12' 10"	11' 4"	9' 6"	11' 5"	10' 6"	8' 10"
362S162-68	12	18' 10"	16' 5"	13' 10"	17' 1"	14' 11"	12' 7"	15' 11"	13' 10"	11' 8"
362S162-68	16	17' 1"	14' 11"	12' 7"	15' 6"	13' 7"	11' 5"	14' 5"	12' 7"	10' 8"
362S162-68	24	14' 11"	13' 1"	11' 0"	13' 7"	11' 10"	10' 0"	12' 4"	11' 0"	9' 3"
362S200-68	12	19' 11"	17' 5"	14' 8"	18' 1"	15' 10"	13' 4"	16' 10"	14' 8"	12' 5"
362S200-68	16	18' 1"	15' 10"	13' 4"	16' 5"	14' 4"	12' 1"	15' 3"	13' 4"	11' 3"
362S200-68	24	15' 10"	13' 10"	11' 8"	14' 4"	12' 7"	10' 7"	13' 4"	11' 8"	9' 10"
400S137-33	12	15' 1"	13' 7"	11' 6"	13' 1"	12' 4"	10' 5"	11' 8"	11' 6"	9' 8"
400S137-33	16	13' 1"	12' 4"	10' 5"	11' 4"	11' 3"	9' 6"	10' 1" e	10' 1" e	8' 9"
400S137-33	24	10' 8"	10' 8"	9' 1"	9' 3" e	9' 3" e	8' 3" e	8' 3" e	8' 3" e	7' 8" e
400S162-33	12	16' 2"	14' 3"	12' 0"	14' 0"	12' 11"	10' 11"	12' 7"	12' 0"	10' 1"
400S162-33	16	14' 0"	12' 11"	10' 11"	12' 2"	11' 9"	9' 11"	10' 10" e	10' 10" e	9' 2"
400S162-33	24	11' 5" e	11' 4" e	9' 6"	9' 11" e	9' 11" e	8' 8" e	8' 10" e	8' 10" e	8' 0" e
400S200-33	12	17' 0"	15' 0"	12' 8"	14' 9"	13' 8"	11' 6"	13' 2" e	12' 8"	10' 8"
400S200-33	16	14' 9"	13' 8"	11' 6"	12' 9" e	12' 5" e	10' 5"	11' 5" e	11' 5" e	9' 8"
400S200-33	24	12' 0" e	11' 11" e	10' 1"	10' 5" e	10' 5" e	9' 2" e	9' 4" e	9' 4" e	8' 6" e
400S137-43	12	16' 11"	14' 9"	12' 6"	15' 4"	13' 5"	11' 4"	13' 9"	12' 6"	10' 6"
400S137-43	16	15' 4"	13' 5"	11' 4"	13' 4"	12' 2"	10' 4"	11' 11"	11' 4"	9' 7"
400S137-43	24	12' 7"	11' 9"	9' 11"	10' 10"	10' 8"	9' 0"	9' 9"	9' 9"	8' 4"
400S162-43	12	17' 9"	15' 6"	13' 1"	16' 1"	14' 1"	11' 10"	14' 10"	13' 1"	11' 0"
400S162-43	16	16' 1"	14' 1"	11' 10"	14' 4"	12' 9"	10' 9"	12' 10"	11' 10"	10' 0"
400S162-43	24	13' 6"	12' 3"	10' 4"	11' 9"	11' 2"	9' 5"	10' 6"	10' 4"	8' 9"
400S200-43	12	18' 8"	16' 4"	13' 9"	17' 0"	14' 10"	12' 6"	15' 9"	13' 9"	11' 7"
400S200-43	16	17' 0"	14' 10"	12' 6"	15' 4"	13' 6"	11' 4"	13' 9"	12' 6"	10' 7"
400S200-43	24	14' 6"	13' 0"	10' 11"	12' 7"	11' 9"	9' 11"	11' 3" e	10' 11"	9' 3"

For **SI:** 1 inch = 25.4 mm, 1 psf = 47.88 Pa.

TABLE 5 ALLOWABLE HEIGHTS FOR EXTERIOR NON-LOAD BEARING WALLS[1,2,3,4,5] (Continued)

Member	Spacing (in) oc	15 psf			20 psf			25 psf		
		L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600
400S137-54	12	18' 1"	15' 10"	13' 4"	16' 6"	14' 5"	12' 2"	15' 3"	13' 4"	11' 3"
400S137-54	16	16' 6"	14' 5"	12' 2"	15' 0"	13' 1"	11' 0"	13' 5"	12' 2"	10' 3"
400S137-54	24	14' 1"	12' 7"	10' 7"	12' 3"	11' 5"	9' 8"	10' 11"	10' 7"	8' 11"
400S162-54	12	19' 0"	16' 7"	14' 0"	17' 3"	15' 1"	12' 9"	16' 0"	14' 0"	11' 10"
400S162-54	16	17' 3"	15' 1"	12' 9"	15' 8"	13' 8"	11' 7"	14' 5"	12' 9"	10' 9"
400S162-54	24	15' 1"	13' 2"	11' 1"	13' 2"	12' 0"	10' 1"	11' 9"	11' 1"	9' 4"
400S200-54	12	20' 1"	17' 6"	14' 9"	18' 3"	15' 11"	13' 5"	16' 11"	14' 9"	12' 6"
400S200-54	16	18' 3"	15' 11"	13' 5"	16' 7"	14' 6"	12' 2"	15' 4"	13' 5"	11' 4"
400S200-54	24	15' 11"	13' 11"	11' 9"	14' 4"	12' 8"	10' 8"	12' 10"	11' 9"	9' 11"
400S137-68	12	19' 4"	16' 11"	14' 3"	17' 7"	15' 5"	13' 0"	16' 4"	14' 3"	12' 0"
400S137-68	16	17' 7"	15' 5"	13' 0"	16' 0"	14' 0"	11' 9"	14' 10"	13' 0"	10' 11"
400S137-68	24	15' 5"	13' 5"	11' 4"	13' 8"	12' 2"	10' 4"	12' 3"	11' 4"	9' 7"
400S162-68	12	20' 4"	17' 9"	15' 0"	18' 6"	16' 2"	13' 7"	17' 2"	15' 0"	12' 8"
400S162-68	16	18' 6"	16' 2"	13' 7"	16' 9"	14' 8"	12' 4"	15' 7"	13' 7"	11' 6"
400S162-68	24	16' 2"	14' 1"	11' 11"	14' 8"	12' 10"	10' 10"	13' 2"	11' 11"	10' 0"
400S200-68	12	21' 6"	18' 9"	15' 10"	19' 6"	17' 1"	14' 5"	18' 1"	15' 10"	13' 4"
400S200-68	16	19' 6"	17' 1"	14' 5"	17' 9"	15' 6"	13' 1"	16' 6"	14' 5"	12' 2"
400S200-68	24	17' 1"	14' 11"	12' 7"	15' 6"	13' 6"	11' 5"	14' 4"	12' 7"	10' 7"
550S162-33	12	20' 11" e	18' 3"	15' 5"	18' 4" e	16' 7" e	14' 0"	16' 5" e	15' 5" e	13' 0" e
550S162-33	16	18' 4" e	16' 7" e	14' 0"	15' 11" e	15' 1" e	12' 8" e	14' 3" e	14' 0" e	11' 9" e
550S162-33	24	15' 0" e	14' 6" e	12' 3" e	13' 0" e	13' 0" e	11' 1" e	11' 7" e	11' 7" e	10' 4" e
550S162-43	12	22' 9"	19' 10"	16' 9"	20' 8"	18' 1"	15' 3"	19' 2"	16' 9"	14' 2"
550S162-43	16	20' 8"	18' 1"	15' 3"	18' 9"	16' 5"	13' 10"	17' 2" e	15' 3"	12' 10"
550S162-43	24	18' 1" e	15' 9"	13' 4"	15' 8" e	14' 4" e	12' 1"	14' 1" e	13' 4" e	11' 3" e
550S162-54	12	24' 5"	21' 4"	18' 0"	22' 2"	19' 4"	16' 4"	20' 7"	18' 0"	15' 2"
550S162-54	16	22' 2"	19' 4"	16' 4"	20' 2"	17' 7"	14' 10"	18' 8"	16' 4"	13' 9"
550S162-54	24	19' 4"	16' 11"	14' 3"	17' 7"	15' 4"	13' 0"	15' 10"	14' 3"	12' 0"
550S162-68	12	26' 2"	22' 10"	19' 3"	23' 9"	20' 9"	17' 6"	22' 1"	19' 3"	16' 3"
550S162-68	16	23' 9"	20' 9"	17' 6"	21' 7"	18' 10"	15' 11"	20' 0"	17' 6"	14' 9"
550S162-68	24	20' 9"	18' 2"	15' 3"	18' 10"	16' 6"	13' 11"	17' 6"	15' 3"	12' 11"
600S137-33	12	20' 0"	18' 7"	15' 8"	17' 4" e	16' 11" e	14' 3"	15' 6" e	15' 6" e	13' 3" e
600S137-33	16	17' 4" e	16' 11" e	14' 3"	15' 0" e	15' 0" e	12' 11" e	13' 5" e	13' 5" e	12' 0" e
600S137-33	24	14' 2" e	14' 2" e	12' 5" e	12' 3" e	12' 3" e	11' 4" e	10' 11" e	10' 11" e	10' 6" e
600S162-33	12	22' 4" e	19' 6"	16' 6"	19' 6" e	17' 9" e	15' 0"	17' 5" e	16' 6" e	13' 11" e
600S162-33	16	19' 6" e	17' 9" e	15' 0"	16' 11" e	16' 2" e	13' 7" e	15' 1" e	15' 0" e	12' 8" e
600S162-33	24	15' 11" e	15' 6" e	13' 1" e	13' 9" e	13' 9" e	11' 11" e	12' 4" e	12' 4" e	11' 0" e
600S200-33	12	23' 4" e	20' 6" e	17' 3"	20' 3" e	18' 7" e	15' 8" e	18' 1" e	17' 3" e	14' 7" e
600S200-33	16	20' 3" e	18' 7" e	15' 8" e	17' 6" e	16' 11" e	14' 3" e	15' 8" e	15' 8" e	13' 3" e
600S200-33	24	16' 6" e	16' 3" e	13' 8" e	14' 4" e	14' 4" e	12' 5" e	12' 10" e	12' 10" e	11' 7" e
600S137-43	12	23' 4"	20' 5"	17' 3"	20' 7"	18' 6"	15' 8"	18' 5"	17' 3"	14' 6"
600S137-43	16	20' 7"	18' 6"	15' 8"	17' 10"	16' 10"	14' 2"	16' 0" e	15' 8" e	13' 2"
600S137-43	24	16' 10"	16' 2"	13' 8"	14' 7" e	14' 7" e	12' 5"	13' 0" e	13' 0" e	11' 6" e
600S162-43	12	24' 4"	21' 3"	17' 11"	22' 2"	19' 4"	16' 4"	20' 7"	17' 11"	15' 2"
600S162-43	16	22' 2"	19' 4"	16' 4"	20' 1" e	17' 7"	14' 10"	18' 3" e	16' 4" e	13' 9"
600S162-43	24	19' 3" e	16' 11"	14' 3"	16' 8" e	15' 4" e	12' 11"	14' 11" e	14' 3" e	12' 0" e
600S200-43	12	25' 7"	22' 4"	18' 10"	23' 3"	20' 4"	17' 2"	21' 5" e	18' 10"	15' 11"
600S200-43	16	23' 3"	20' 4"	17' 2"	20' 9" e	18' 5"	15' 7"	18' 7" e	17' 2" e	14' 5"
600S200-43	24	19' 7" e	17' 9" e	15' 0"	16' 11" e	16' 1" e	13' 7" e	15' 2" e	15' 0" e	12' 7" e
600S137-54	12	25' 1"	21' 11"	18' 5"	22' 9"	19' 11"	16' 9"	20' 11"	18' 5"	15' 7"
600S137-54	16	22' 9"	19' 11"	16' 9"	20' 3"	18' 1"	15' 3"	18' 2"	16' 9"	14' 2"
600S137-54	24	19' 1"	17' 4"	14' 8"	16' 7"	15' 9"	13' 4"	14' 10"	14' 8"	12' 4"
600S162-54	12	26' 2"	22' 10"	19' 3"	23' 9"	20' 9"	17' 6"	22' 1"	19' 3"	16' 3"
600S162-54	16	23' 9"	20' 9"	17' 6"	21' 7"	18' 10"	15' 11"	20' 0"	17' 6"	14' 9"
600S162-54	24	20' 9"	18' 1"	15' 3"	18' 9"	16' 6"	13' 11"	16' 10" e	15' 3"	12' 11"
600S200-54	12	27' 6"	24' 0"	20' 3"	24' 11"	21' 10"	18' 5"	23' 2"	20' 3"	17' 1"
600S200-54	16	24' 11"	21' 10"	18' 5"	22' 8"	19' 10"	16' 8"	21' 1"	18' 5"	15' 6"
600S200-54	24	21' 10"	19' 1"	16' 1"	19' 10" e	17' 4"	14' 7"	17' 11" e	16' 1" e	13' 7"
600S137-68	12	26' 10"	23' 5"	19' 9"	24' 5"	21' 4"	18' 0"	22' 8"	19' 9"	16' 8"
600S137-68	16	24' 5"	21' 4"	18' 0"	22' 2"	19' 4"	16' 4"	20' 7"	18' 0"	15' 2"
600S137-68	24	21' 4"	18' 7"	15' 8"	19' 4"	16' 11"	14' 3"	17' 11"	15' 8"	13' 3"
600S162-68	12	28' 0"	24' 6"	20' 8"	25' 6"	22' 3"	18' 9"	23' 8"	20' 8"	17' 5"
600S162-68	16	25' 6"	22' 3"	18' 9"	23' 2"	20' 2"	17' 1"	21' 6"	18' 9"	15' 10"
600S162-68	24	22' 3"	19' 5"	16' 5"	20' 2"	17' 8"	14' 11"	18' 9"	16' 5"	13' 10"
600S200-68	12	29' 6"	25' 9"	21' 9"	26' 9"	23' 5"	19' 9"	24' 10"	21' 9"	18' 4"
600S200-68	16	26' 9"	23' 5"	19' 9"	24' 4"	21' 3"	17' 11"	22' 7"	19' 9"	16' 8"
600S200-68	24	23' 5"	20' 5"	17' 3"	21' 3"	18' 7"	15' 8"	19' 9"	17' 3"	14' 6"

For **SI:** 1 inch = 25.4 mm, 1 psf = 47.88 Pa.

TABLE 5□ ALLOWABLE HEIGHTS FOR EXTERIOR NON-LOAD BEARING WALLS[1,2,3,4,5] (Continued)

Member	Spacing (in) oc	15 psf			20 psf			25 psf		
		L/240	L/360	L/600	L/240	L/360	L/600	L/240	L/360	L/600
600S137-97	12	29' 8"	25' 11"	21' 10"	27' 0"	23' 7"	19' 10"	25' 0"	21' 10"	18' 5"
600S137-97	16	27' 0"	23' 7"	19' 10"	24' 6"	21' 5"	18' 1"	22' 9"	19' 10"	16' 9"
600S137-97	24	23' 7"	20' 7"	17' 4"	21' 5"	18' 8"	15' 9"	19' 10"	17' 4"	14' 8"
600S162-97	12	31' 1"	27' 2"	22' 11"	28' 3"	24' 8"	20' 9"	26' 2"	22' 11"	19' 4"
600S162-97	16	28' 3"	24' 8"	20' 9"	25' 8"	22' 5"	18' 11"	23' 10"	20' 9"	17' 6"
600S162-97	24	24' 8"	21' 6"	18' 2"	22' 5"	19' 7"	16' 6"	20' 9"	18' 2"	15' 4"
600S200-97	12	32' 9"	28' 7"	24' 1"	29' 9"	26' 0"	21' 11"	27' 7"	24' 1"	20' 4"
600S200-97	16	29' 9"	26' 0"	21' 11"	27' 0"	23' 7"	19' 11"	25' 1"	21' 11"	18' 6"
600S200-97	24	26' 0"	22' 8"	19' 2"	23' 7"	20' 7"	17' 5"	21' 11"	19' 2"	16' 2"
800S137-33	12	23' 5" e	23' 2" e	19' 7" e	20' 3" e	20' 3" e	17' 9" e	18' 1" e	18' 1" e	16' 6" e
800S137-33	16	20' 3" e	20' 3" e	17' 9" e	17' 6" e	17' 6" e	16' 2" e	15' 8" e	15' 8" e	15' 0" e
800S137-33	24	16' 6" e	16' 6" e	15' 6" e	14' 4" e	14' 4" e	14' 1" e	12' 10" e	12' 10" e	12' 10" e
800S162-33	12	25' 0" e	24' 2" e	20' 4" e	21' 7" e	21' 7" e	18' 6" e	19' 4" e	19' 4" e	17' 2" e
800S162-33	16	21' 7" e	21' 7" e	18' 6" e	18' 9" e	18' 9" e	16' 10" e	16' 9" e	16' 9" e	15' 7" e
800S162-33	24	17' 8" e	17' 8" e	16' 2" e	15' 3" e	15' 3" e	14' 8" e	13' 8" e	13' 8" e	13' 8" e
800S200-33	12	26' 9" e	25' 9" e	21' 8" e	23' 2" e	23' 2" e	19' 9" e	20' 9" e	20' 9" e	18' 4" e
800S200-33	16	23' 2" e	23' 2" e	19' 9" e	20' 1" e	20' 1" e	17' 11" e	17' 11" e	17' 11" e	16' 8" e
800S200-33	24	18' 11" e	18' 11" e	17' 3" e	16' 5" e	16' 5" e	15' 8" e	14' 8" e	14' 8" e	14' 6" e
800S137-43	12	28' 1"	25' 6"	21' 6"	24' 3"	23' 2"	19' 7"	21' 9" e	21' 6" e	18' 2"
800S137-43	16	24' 3"	23' 2"	19' 7"	21' 0" e	21' 0" e	17' 9"	18' 10" e	18' 10" e	16' 6" e
800S137-43	24	19' 10" e	19' 10" e	17' 1" e	17' 2" e	17' 2" e	15' 6" e	15' 4" e	15' 4" e	14' 5" e
800S162-43	12	29' 11"	26' 7"	22' 5"	25' 11" e	24' 2"	20' 4"	23' 2" e	22' 5" e	18' 11"
800S162-43	16	25' 11" e	24' 2"	20' 4"	22' 5" e	21' 11" e	18' 6"	20' 1" e	20' 1" e	17' 2" e
800S162-43	24	21' 2" e	21' 1" e	17' 9" e	18' 4" e	18' 4" e	16' 2" e	16' 5" e	16' 5" e	15' 0" e
800S200-43	12	32' 1"	28' 1"	23' 8"	29' 2" e	25' 6" e	21' 6"	26' 1" e	23' 8" e	19' 11" e
800S200-43	16	29' 2" e	25' 6" e	21' 6"	25' 3" e	23' 2" e	19' 6" e	22' 7" e	21' 6" e	18' 2" e
800S200-43	24	23' 10" e	22' 3" e	18' 9" e	20' 8" e	20' 3" e	17' 1" e	18' 5" e	18' 5" e	15' 10" e
800S137-54	12	31' 8"	27' 8"	23' 4"	27' 10"	25' 1"	21' 2"	24' 11"	23' 4"	19' 8"
800S137-54	16	27' 10"	25' 1"	21' 2"	24' 2"	22' 10"	19' 3"	21' 7"	21' 2"	17' 10"
800S137-54	24	22' 9"	21' 11"	18' 6"	19' 8" e	19' 8" e	16' 10"	17' 7" e	17' 7" e	15' 7" e
800S162-54	12	32' 11"	28' 9"	24' 3"	29' 8"	26' 1"	22' 0"	26' 6"	24' 3"	20' 5"
800S162-54	16	29' 8"	26' 1"	22' 0"	25' 8"	23' 9"	20' 0"	23' 0" e	22' 0"	18' 7"
800S162-54	24	24' 2"	22' 10"	19' 3"	21' 0" e	20' 9" e	17' 6"	18' 9" e	18' 9" e	16' 3" e
800S200-54	12	34' 6"	30' 2"	25' 5"	31' 4"	27' 5"	23' 1"	29' 1"	25' 5"	21' 5"
800S200-54	16	31' 4"	27' 5"	23' 1"	28' 6" e	24' 10"	21' 0"	26' 5" e	23' 1" e	19' 6"
800S200-54	24	27' 5" e	23' 11"	20' 2"	24' 5" e	21' 9" e	18' 4"	21' 10" e	20' 2" e	17' 0" e
800S137-68	12	34' 0"	29' 9"	25' 1"	30' 11"	27' 0"	22' 9"	28' 6"	25' 1"	21' 2"
800S137-68	16	30' 11"	27' 0"	22' 9"	27' 7"	24' 6"	20' 8"	24' 8"	22' 9"	19' 2"
800S137-68	24	26' 0"	23' 7"	19' 11"	22' 6"	21' 5"	18' 1"	20' 2"	19' 11"	16' 9"
800S162-68	12	35' 4"	30' 11"	26' 1"	32' 2"	28' 1"	23' 8"	29' 10"	26' 1"	22' 0"
800S162-68	16	32' 2"	28' 1"	23' 8"	29' 2"	25' 6"	21' 6"	26' 2"	23' 8"	20' 0"
800S162-68	24	27' 7"	24' 6"	20' 8"	23' 11"	22' 3"	18' 10"	21' 5"	20' 8"	17' 5"
800S200-68	12	37' 0"	32' 4"	27' 4"	33' 8"	29' 5"	24' 10"	31' 3"	27' 4"	23' 0"
800S200-68	16	33' 8"	29' 5"	24' 10"	30' 7"	26' 9"	22' 6"	28' 5"	24' 10"	20' 11"
800S200-68	24	29' 5"	25' 8"	21' 8"	26' 9"	23' 4"	19' 8"	24' 7" e	21' 8"	18' 3"
800S137-97	12	37' 9"	32' 11"	27' 10"	34' 3"	29' 11"	25' 3"	31' 10"	27' 10"	23' 5"
800S137-97	16	34' 3"	29' 11"	25' 3"	31' 2"	27' 2"	22' 11"	28' 11"	25' 3"	21' 4"
800S137-97	24	29' 11"	26' 2"	22' 1"	27' 2"	23' 9"	20' 1"	25' 3"	22' 1"	18' 7"
800S162-97	12	39' 3"	34' 4"	28' 11"	35' 8"	31' 2"	26' 4"	33' 2"	28' 11"	24' 5"
800S162-97	16	35' 8"	31' 2"	26' 4"	32' 5"	28' 4"	23' 11"	30' 1"	26' 4"	22' 2"
800S162-97	24	31' 2"	27' 3"	23' 0"	28' 4"	24' 9"	20' 10"	26' 4"	23' 0"	19' 5"
800S200-97	12	41' 2"	36' 0"	30' 4"	37' 5"	32' 8"	27' 7"	34' 9"	30' 4"	25' 7"
800S200-97	16	37' 5"	32' 8"	27' 7"	34' 0"	29' 9"	25' 1"	31' 7"	27' 7"	23' 3"
800S200-97	24	32' 8"	28' 7"	24' 1"	29' 9"	25' 11"	21' 11"	27' 7"	24' 1"	20' 4"

For **SI:** 1 inch = 25.4 mm, 1 psf = 47.88 Pa.

Notes to Table 5:

1All members formed from ASTM A1003 ST33H steel.

[2]Limiting heights are based on continuous lateral support of each flange over the full height of the stud.

[3]For deflection calculations, wind loads have been multiplied by 0.7 per the AISI Standard for Cold-Formed Steel Framing-Wall Stud Design 2004 Edition and footnote f. to IBC Table 1604.3.

[4]End reactions must be checked for web crippling separately.

[5]Cells having an □e□ indicate the limiting height is controlled by stress.

TABLE 6□ STANDARD C-SECTION WEB CRIPPLING[6] (SINGLE MEMBERS)

Member	Fy (ksi)	Condition 1 Bearing Length (in)				Condition 2 Bearing Length (in)				Condition 3 Bearing Length (in)				Condition 4 Bearing Length (in)				Punchout Reductions[3]	
		1	3.5	4	6	1	3.5	4	6	1	3.5	4	6	1	3.5	4	6	Rc (E1F)	Rc (I1F)
162S__-18	33	55	---[1]	---[1,2]	---[1,2]	---[4]	---[1]	---[1,2]	---[1,2]	45	---[1]	---[1,2]	---[1,2]	122	---[1]	---[1,2]	---[1,2]	0.838 + 0.059x <= 1.0	0.875 + 0.037x <= 1.0
162S__-27	33	122	---[1]	---[1]	---[1,2]	---[4]	---[1]	---[1]	---[1,2]	111	---[1]	---[1]	---[1,2]	290	---[1]	---[1]	---[1,2]	0.837 + 0.059x <= 1.0	0.875 + 0.038x <= 1.0
162S__-30	33	148	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	137	---[1]	---[1]	---[1]	356	---[1]	---[1]	---[1]	0.837 + 0.059x <= 1.0	0.875 + 0.038x <= 1.0
162S__-33	33	180	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	170	---[1]	---[1]	---[1]	441	---[1]	---[1]	---[1]	0.836 + 0.059x <= 1.0	0.875 + 0.038x <= 1.0
162S__-43	33	298	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	297	---[1]	---[1]	---[1]	764	---[1]	---[1]	---[1]	0.835 + 0.060x <= 1.0	0.875 + 0.038x <= 1.0
162S__-54	33	447	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	471	---[1]	---[1]	---[1]	1203	---[1]	---[1]	---[1]	0.828 + 0.062x <= 1.0	0.874 + 0.039x <= 1.0
162S__-54	50	677	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	714	---[1]	---[1]	---[1]	1823	---[1]	---[1]	---[1]	0.828 + 0.062x <= 1.0	0.874 + 0.039x <= 1.0
162S__-68	33	672	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	750	---[1]	---[1]	---[1]	1901	---[1]	---[1]	---[1]	0.818 + 0.065x <= 1.0	0.872 + 0.042x <= 1.0
162S__-68	50	1019	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	1136	---[1]	---[1]	---[1]	2880	---[1]	---[1]	---[1]	0.818 + 0.065x <= 1.0	0.872 + 0.042x <= 1.0
250S__-18	33	52	84	---[2]	---[1,2]	---[4]	122	---[2]	---[1,2]	37	51	---[2]	---[1,2]	109	145	---[2]	---[1,2]	0.904 + 0.036x <= 1.0	0.885 + 0.023x <= 1.0
250S__-27	33	117	186	196	---[1,2]	---[4]	298	310	---[1,2]	96	130	135	---[1,2]	268	343	354	---[1,2]	0.903 + 0.036x <= 1.0	0.885 + 0.023x <= 1.0
250S__-30	33	141	223	235	---[1]	---[4]	365	381	---[1]	119	161	167	---[1]	330	420	433	---[1]	0.903 + 0.036x <= 1.0	0.885 + 0.023x <= 1.0
250S__-33	33	173	271	285	---[1]	---[4]	453	472	---[1]	150	201	209	---[1]	411	519	535	---[1]	0.903 + 0.036x <= 1.0	0.885 + 0.023x <= 1.0
250S__-43	33	287	443	466	---[1]	---[4]	780	810	---[1]	267	351	364	---[1]	720	892	918	---[1]	0.902 + 0.037x <= 1.0	0.884 + 0.023x <= 1.0
250S__-54	33	433	657	690	---[1]	---[4]	1178	1221	---[1]	430	556	574	---[1]	1142	1392	1429	---[1]	0.900 + 0.037x <= 1.0	0.884 + 0.024x <= 1.0
250S__-54	50	656	996	1046	---[1]	---[4]	1785	1850	---[1]	652	842	870	---[1]	1730	2109	2165	---[1]	0.900 + 0.037x <= 1.0	0.884 + 0.024x <= 1.0
250S__-68	33	654	977	1024	---[1]	---[4]	1778	1838	---[1]	693	880	907	---[1]	1815	2179	2233	---[1]	0.896 + 0.039x <= 1.0	0.884 + 0.025x <= 1.0
250S__-68	50	990	1480	1552	---[1]	---[4]	2693	2785	---[1]	1049	1333	1375	---[1]	2750	3302	3384	---[1]	0.896 + 0.039x <= 1.0	0.884 + 0.025x <= 1.0
250S__-97	33	1236	1799	---[1]	---[1]	---[4]	3362	---[1]	---[1]	1430	1771	---[1]	---[1]	3694	4340	---[1]	---[1]	0.888 + 0.042x <= 1.0	0.882 + 0.027x <= 1.0
250S__-97	50	1872	2726	---[1]	---[1]	---[4]	5095	---[1]	---[1]	2167	2683	---[1]	---[1]	5597	6575	---[1]	---[1]	0.888 + 0.042x <= 1.0	0.882 + 0.027x <= 1.0
350S__-18	33	49	80	---[2]	---[2]	---[4]	119	---[2]	---[2]	28	40	---[2]	---[2]	98	130	---[2]	---[2]	0.862 + 0.025x <= 1.0	0.879 + 0.016x <= 1.0
350S__-27	33	112	177	187	---[2]	---[4]	292	304	---[2]	81	111	115	---[2]	247	316	327	---[2]	0.862 + 0.025x <= 1.0	0.879 + 0.016x <= 1.0
350S__-30	33	135	214	225	266	---[4]	359	373	425	103	139	144	163	306	389	402	445	0.861 + 0.025x <= 1.0	0.879 + 0.016x <= 1.0
350S__-33	33	166	260	274	323	---[4]	445	463	526	131	175	182	205	384	484	499	551	0.861 + 0.025x <= 1.0	0.878 + 0.016x <= 1.0
350S__-43	33	278	428	451	528	---[4]	768	798	900	240	315	326	365	680	842	866	949	0.861 + 0.025x <= 1.0	0.878 + 0.016x <= 1.0
350S__-54	33	420	638	670	783	---[4]	1162	1204	1351	392	507	524	583	1086	1324	1359	1482	0.858 + 0.026x <= 1.0	0.878 + 0.016x <= 1.0
350S__-54	50	637	967	1016	1186	---[4]	1761	1825	2046	594	768	794	883	1645	2005	2059	2245	0.858 + 0.026x <= 1.0	0.878 + 0.016x <= 1.0
350S__-68	33	637	951	998	1160	---[4]	1756	1816	2025	640	813	839	928	1736	2085	2137	2317	0.855 + 0.026x <= 1.0	0.878 + 0.017x <= 1.0
350S__-68	50	965	1441	1512	1758	---[4]	2660	2751	3068	970	1232	1271	1406	2631	3159	3238	3510	0.855 + 0.026x <= 1.0	0.878 + 0.017x <= 1.0
350S__-97	33	1209	1759	1841	---[1]	---[4]	3327	3431	---[1]	1343	1663	1710	---[1]	3562	4184	4276	---[1]	0.847 + 0.028x <= 1.0	0.876 + 0.018x <= 1.0
350S__-97	50	1831	2666	2790	---[1]	---[4]	5041	5198	---[1]	2035	2520	2592	---[1]	5397	6339	6479	---[1]	0.847 + 0.028x <= 1.0	0.876 + 0.018x <= 1.0
362S__-18	33	49	79	---[2]	---[2]	---[4]	119	---[2]	---[2]	27	39	---[2]	---[2]	97	128	---[2]	---[2]	0.867 + 0.024x <= 1.0	0.879 + 0.016x <= 1.0
362S__-27	33	111	177	186	---[2]	---[4]	291	303	---[2]	80	108	113	---[2]	245	313	324	---[2]	0.867 + 0.024x <= 1.0	0.879 + 0.016x <= 1.0
362S__-30	33	135	213	224	265	---[4]	358	373	424	101	136	141	160	304	386	398	441	0.867 + 0.024x <= 1.0	0.879 + 0.016x <= 1.0
362S__-33	33	165	259	273	322	---[4]	444	462	525	129	173	179	202	381	480	495	547	0.867 + 0.024x <= 1.0	0.879 + 0.016x <= 1.0
362S__-43	33	277	427	449	526	---[4]	767	796	898	236	311	322	360	675	836	860	943	0.866 + 0.024x <= 1.0	0.879 + 0.016x <= 1.0
362S__-54	33	419	636	668	780	---[4]	1160	1202	1348	388	501	518	577	1079	1316	1351	1473	0.864 + 0.025x <= 1.0	0.879 + 0.016x <= 1.0
362S__-54	50	634	963	1012	1182	---[4]	1758	1822	2043	588	760	785	874	1635	1994	2047	2232	0.864 + 0.025x <= 1.0	0.879 + 0.016x <= 1.0
362S__-68	33	635	948	995	1157	---[4]	1753	1813	2022	635	806	831	920	1728	2074	2126	2305	0.861 + 0.025x <= 1.0	0.878 + 0.016x <= 1.0
362S__-68	50	962	1437	1507	1752	---[4]	2657	2747	3064	961	1221	1259	1393	2618	3143	3221	3492	0.861 + 0.025x <= 1.0	0.878 + 0.016x <= 1.0
362S__-97	33	1206	1755	1837	2120	---[4]	3323	3427	3787	1333	1651	1698	1862	3547	4166	4258	4578	0.854 + 0.027x <= 1.0	0.877 + 0.017x <= 1.0
362S__-97	50	1827	2659	2783	3212	---[4]	5035	5192	5738	2020	2501	2573	2821	5374	6313	6452	6936	0.854 + 0.027x <= 1.0	0.877 + 0.017x <= 1.0
400S__-27	33	109	174	183	---[2]	---[4]	289	301	---[2]	75	102	106	---[2]	238	305	315	---[2]	0.881 + 0.022x <= 1.0	0.881 + 0.014x <= 1.0
400S__-30	33	133	210	221	261	---[4]	356	370	421	95	129	134	151	296	376	388	429	0.881 + 0.022x <= 1.0	0.881 + 0.014x <= 1.0
400S__-33	33	163	256	269	317	---[4]	442	460	522	122	164	170	192	372	469	483	534	0.881 + 0.022x <= 1.0	0.881 + 0.014x <= 1.0
400S__-43	33	274	422	444	520	---[4]	763	792	893	227	299	309	346	662	819	843	924	0.881 + 0.022x <= 1.0	0.881 + 0.014x <= 1.0
400S__-54	33	415	629	661	772	---[4]	1155	1197	1342	376	485	502	558	1061	1293	1328	1448	0.879 + 0.022x <= 1.0	0.881 + 0.014x <= 1.0
400S__-54	50	628	954	1002	1170	---[4]	1750	1813	2034	569	735	760	846	1607	1960	2012	2194	0.879 + 0.022x <= 1.0	0.881 + 0.014x <= 1.0
400S__-68	33	629	940	986	1147	---[4]	1746	1806	2014	617	784	809	895	1702	2044	2094	2271	0.876 + 0.023x <= 1.0	0.881 + 0.015x <= 1.0
400S__-68	50	953	1424	1494	1737	---[4]	2646	2736	3051	936	1188	1226	1356	2579	3096	3173	3440	0.876 + 0.023x <= 1.0	0.881 + 0.015x <= 1.0

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

TABLE 6□ STANDARD C-SECTION WEB CRIPPLING[6] (SINGLE MEMBERS) (Continued)

Member	Fy (ksi)	Condition 1 Bearing Length (in)				Condition 2 Bearing Length (in)				Condition 3 Bearing Length (in)				Condition 4 Bearing Length (in)				Punchout Reductions[3]	
		1	3.5	4	6	1	3.5	4	6	1	3.5	4	6	1	3.5	4	6	Rc (E1F)	Rc (I1F)
550S__-27	33	103	164	173	---[2]	---[4]	282	294	---[2]	58	79	82	---[2]	214	274	283	---[2]	0.918 + 0.016x <= 1.0	0.887 + 0.010x <= 1.0
550S__-30	33	126	199	210	248	---[4]	348	362	412	76	103	106	120	268	341	351	389	0.918 + 0.016x <= 1.0	0.887 + 0.010x <= 1.0
550S__-33	33	155	243	256	302	---[4]	432	450	511	100	134	139	157	339	428	441	487	0.918 + 0.016x <= 1.0	0.887 + 0.010x <= 1.0
550S__-43	33	262	405	426	499	---[4]	749	778	877	195	256	265	297	614	760	782	858	0.917 + 0.016x <= 1.0	0.887 + 0.010x <= 1.0
550S__-54	33	400	607	638	745	---[4]	1136	1177	1320	331	428	443	493	995	1213	1246	1358	0.917 + 0.016x <= 1.0	0.886 + 0.010x <= 1.0
550S__-54	50	606	920	966	1128	---[4]	1722	1784	2001	502	649	671	746	1508	1838	1887	2058	0.917 + 0.016x <= 1.0	0.886 + 0.010x <= 1.0
550S__-68	33	609	910	955	1111	---[4]	1721	1780	1985	557	707	729	807	1611	1934	1982	2149	0.915 + 0.016x <= 1.0	0.886 + 0.010x <= 1.0
550S__-68	50	923	1380	1447	1683	---[4]	2608	2697	3007	844	1071	1105	1223	2441	2931	3003	3256	0.915 + 0.016x <= 1.0	0.886 + 0.010x <= 1.0
550S__-30	33	124	196	206	243	---[4]	345	359	409	70	95	98	111	260	330	340	377	0.926 + 0.014x <= 1.0	0.888 + 0.009x <= 1.0
550S__-33	33	153	240	253	297	---[4]	430	447	507	93	125	130	146	329	416	429	473	0.926 + 0.014x <= 1.0	0.888 + 0.009x <= 1.0
550S__-43	33	259	400	420	493	---[4]	745	773	872	185	243	252	282	600	743	764	838	0.925 + 0.014x <= 1.0	0.888 + 0.009x <= 1.0
550S__-54	33	395	600	631	736	---[4]	1131	1172	1314	318	411	425	473	975	1189	1221	1331	0.925 + 0.015x <= 1.0	0.888 + 0.009x <= 1.0
550S__-54	50	599	909	956	1116	---[4]	1713	1775	1991	482	623	644	716	1478	1802	1850	2017	0.925 + 0.015x <= 1.0	0.888 + 0.009x <= 1.0
550S__-68	33	604	902	946	1100	---[4]	1713	1772	1976	539	684	706	781	1583	1901	1949	2113	0.924 + 0.015x <= 1.0	0.888 + 0.009x <= 1.0
550S__-68	50	914	1366	1433	1666	---[4]	2596	2685	2994	816	1036	1069	1183	2399	2881	2952	3201	0.924 + 0.015x <= 1.0	0.888 + 0.009x <= 1.0
550S__-97	33	1157	1684	1762	2034	---[4]	3260	3361	3714	1175	1455	1497	1641	3306	3884	3969	4267	0.921 + 0.015x <= 1.0	0.887 + 0.010x <= 1.0
550S__-97	50	1752	2551	2669	3081	---[4]	4939	5093	5628	1781	2205	2268	2487	5010	5885	6014	6466	0.921 + 0.015x <= 1.0	0.887 + 0.010x <= 1.0
550S__-118	33	1669	2393	2500	2874	---[4]	4691	4830	5310	1805	2204	2263	2469	4986	5789	5909	6323	0.919 + 0.015x <= 1.0	0.887 + 0.010x <= 1.0
550S__-118	50	2528	3625	3788	4354	---[4]	7108	7318	8046	2734	3339	3429	3741	7555	8772	8952	9581	0.919 + 0.015x <= 1.0	0.887 + 0.010x <= 1.0
725S__-43	33	251	387	408	478	---[4]	735	763	861	162	214	221	248	566	701	721	791	0.941 + 0.012x <= 1.0	0.890 + 0.008x <= 1.0
725S__-54	33	385	585	614	717	---[4]	1118	1158	1299	287	371	384	427	929	1133	1163	1269	0.940 + 0.012x <= 1.0	0.890 + 0.008x <= 1.0
725S__-54	50	583	886	931	1087	---[4]	1693	1754	1968	435	563	581	647	1408	1717	1763	1922	0.940 + 0.012x <= 1.0	0.890 + 0.008x <= 1.0
725S__-68	33	590	881	924	1075	---[4]	1696	1754	1956	496	630	650	719	1520	1825	1870	2028	0.939 + 0.012x <= 1.0	0.890 + 0.008x <= 1.0
725S__-68	50	894	1335	1400	1628	---[4]	2569	2657	2963	752	955	985	1090	2303	2765	2834	3073	0.939 + 0.012x <= 1.0	0.890 + 0.008x <= 1.0
725S__-97	33	1135	1652	1729	1996	---[4]	3232	3332	3682	1106	1370	1409	1545	3201	3760	3843	4132	0.938 + 0.012x <= 1.0	0.890 + 0.008x <= 1.0
725S__-97	50	1720	2503	2620	3024	---[4]	4896	5049	5579	1676	2075	2134	2340	4850	5697	5823	6260	0.938 + 0.012x <= 1.0	0.890 + 0.008x <= 1.0
800S__-43	33	247	381	401	470	---[4]	730	757	854	150	197	204	228	548	678	698	765	0.947 + 0.011x <= 1.0	0.891 + 0.007x <= 1.0
800S__-54	33	379	576	605	706	---[4]	1110	1150	1290	270	349	361	402	904	1102	1131	1234	0.947 + 0.011x <= 1.0	0.891 + 0.007x <= 1.0
800S__-54	50	575	872	917	1070	---[4]	1682	1743	1955	409	529	547	608	1370	1670	1714	1869	0.947 + 0.011x <= 1.0	0.891 + 0.007x <= 1.0
800S__-68	33	582	870	912	1061	---[4]	1686	1744	1944	473	600	619	685	1485	1783	1827	1981	0.946 + 0.011x <= 1.0	0.891 + 0.007x <= 1.0
800S__-68	50	882	1318	1382	1607	---[4]	2555	2642	2946	716	910	939	1038	2250	2701	2768	3001	0.946 + 0.011x <= 1.0	0.891 + 0.007x <= 1.0
800S__-97	33	1123	1635	1711	1975	---[4]	3216	3316	3665	1068	1322	1360	1491	3142	3691	3773	4056	0.945 + 0.011x <= 1.0	0.891 + 0.007x <= 1.0
800S__-97	50	1702	2477	2592	2992	---[4]	4873	5025	5553	1618	2003	2060	2259	4761	5593	5716	6145	0.945 + 0.011x <= 1.0	0.891 + 0.007x <= 1.0
800S__-118	33	1625	2330	2435	2799	---[4]	4635	4771	5246	1662	2030	2084	2274	4767	5535	5649	6046	0.944 + 0.011x <= 1.0	0.890 + 0.007x <= 1.0
800S__-118	50	2462	3531	3689	4241	---[4]	7023	7229	7949	2518	3075	3158	3445	7223	8387	8559	9160	0.944 + 0.011x <= 1.0	0.890 + 0.007x <= 1.0
925S__-43	33	240	370	390	457	---[4]	721	749	844	130	171	177	198	519	642	661	724	0.956 + 0.009x <= 1.0	0.892 + 0.006x <= 1.0
925S__-54	33	370	562	591	690	---[4]	1099	1139	1277	243	314	325	362	864	1053	1081	1179	0.956 + 0.009x <= 1.0	0.892 + 0.006x <= 1.0
925S__-54	50	561	852	895	1045	---[4]	1665	1725	1935	369	476	492	548	1309	1596	1638	1786	0.956 + 0.009x <= 1.0	0.892 + 0.006x <= 1.0
925S__-68	33	570	852	894	1039	---[4]	1671	1728	1927	436	554	571	632	1430	1716	1759	1907	0.955 + 0.009x <= 1.0	0.892 + 0.006x <= 1.0
925S__-68	50	864	1291	1354	1574	---[4]	2531	2618	2919	661	839	866	958	2166	2601	2665	2890	0.955 + 0.009x <= 1.0	0.892 + 0.006x <= 1.0
925S__-97	33	1104	1608	1682	1942	---[4]	3192	3291	3637	1008	1248	1283	1407	3051	3584	3663	3938	0.954 + 0.009x <= 1.0	0.892 + 0.006x <= 1.0
925S__-97	50	1673	2436	2549	2942	---[4]	4836	4987	5511	1527	1891	1945	2132	4623	5430	5550	5967	0.954 + 0.009x <= 1.0	0.892 + 0.006x <= 1.0
1000S__-54	33	365	554	582	680	---[4]	1092	1132	1269	228	295	305	339	841	1026	1053	1148	0.960 + 0.009x <= 1.0	0.893 + 0.005x <= 1.0
1000S__-54	50	553	840	882	1031	---[4]	1655	1715	1923	346	447	462	514	1275	1554	1595	1740	0.960 + 0.009x <= 1.0	0.893 + 0.005x <= 1.0
1000S__-68	33	563	842	883	1027	---[4]	1662	1719	1917	415	527	544	602	1398	1679	1721	1865	0.959 + 0.009x <= 1.0	0.893 + 0.005x <= 1.0
1000S__-68	50	854	1275	1338	1555	---[4]	2518	2604	2904	629	799	824	912	2119	2544	2607	2826	0.959 + 0.009x <= 1.0	0.893 + 0.005x <= 1.0
1000S__-97	33	1094	1592	1666	1923	---[4]	3178	3277	3622	974	1206	1240	1360	2999	3523	3601	3871	0.959 + 0.009x <= 1.0	0.893 + 0.006x <= 1.0
1000S__-97	50	1657	2412	2525	2914	---[4]	4815	4965	5487	1476	1827	1879	2060	4545	5338	5456	5866	0.959 + 0.009x <= 1.0	0.893 + 0.006x <= 1.0
1000S__-118	33	1587	2276	2379	2734	---[4]	4586	4721	5190	1538	1878	1928	2104	4577	5314	5423	5804	0.958 + 0.009x <= 1.0	0.892 + 0.006x <= 1.0
1000S__-118	50	2405	3449	3604	4143	---[4]	6948	7152	7864	2330	2845	2921	3187	6934	8051	8217	8794	0.958 + 0.009x <= 1.0	0.892 + 0.006x <= 1.0

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

TABLE 6□ STANDARD C-SECTION WEB CRIPPLING[6] (SINGLE MEMBERS) (Continued)

Member	Fy (ksi)	Condition 1 Bearing Length (in)				Condition 2 Bearing Length (in)				Condition 3 Bearing Length (in)				Condition 4 Bearing Length (in)				Punchout Reductions[3]	
		1	3.5	4	6	1	3.5	4	6	1	3.5	4	6	1	3.5	4	6	Rc (E1F)	Rc (I1F)
1150S__-54	33	355	540	567	662	---[4]	1080	1119	1255	199	258	266	296	798	973	999	1090	0.967 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1150S__-54	50	539	818	859	1003	---[4]	1636	1696	1902	302	390	403	449	1210	1475	1514	1651	0.967 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1150S__-68	33	551	823	863	1003	---[4]	1646	1702	1898	376	477	492	545	1339	1608	1648	1787	0.966 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1150S__-68	50	834	1246	1307	1520	---[4]	2493	2579	2875	570	723	746	826	2029	2436	2497	2707	0.966 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1150S__-97	33	1074	1563	1636	1888	---[4]	3152	3251	3592	910	1126	1159	1270	2902	3409	3484	3745	0.966 + 0.008x <= 1.0	0.894 + 0.005x <= 1.0
1150S__-97	50	1627	2369	2478	2861	---[4]	4776	4925	5442	1378	1707	1755	1925	4397	5165	5278	5675	0.966 + 0.008x <= 1.0	0.894 + 0.005x <= 1.0
1200S__-68	33	547	816	857	996	---[4]	1640	1696	1892	363	462	476	527	1320	1585	1625	1762	0.968 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1200S__-68	50	828	1237	1298	1509	---[4]	2485	2570	2866	551	699	721	798	2001	2402	2462	2669	0.968 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1200S__-97	33	1068	1554	1626	1877	---[4]	3144	3242	3583	889	1101	1133	1242	2871	3372	3446	3705	0.968 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1200S__-97	50	1618	2355	2464	2844	---[4]	4764	4912	5428	1348	1668	1716	1882	4350	5109	5222	5614	0.968 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1200S__-118	33	1554	2228	2328	2676	---[4]	4541	4675	5140	1426	1741	1788	1951	4405	5115	5220	5587	0.967 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1200S__-118	50	2354	3375	3527	4054	---[4]	6881	7083	7788	2161	2638	2709	2956	6675	7750	7910	8465	0.967 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1350S__-68	33	535	799	838	975	---[4]	1625	1681	1874	327	416	429	475	1266	1520	1558	1689	0.973 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1350S__-68	50	810	1211	1270	1477	---[4]	2463	2547	2840	496	630	650	719	1919	2304	2361	2560	0.973 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1350S__-97	33	1049	1527	1598	1845	---[4]	3120	3218	3556	831	1029	1058	1160	2782	3267	3339	3590	0.972 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1350S__-97	50	1590	2314	2422	2796	---[4]	4728	4875	5387	1259	1558	1603	1758	4214	4950	5060	5440	0.972 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1400S__-68	33	531	793	832	968	---[4]	1621	1676	1869	316	401	414	458	1249	1500	1537	1666	0.974 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1400S__-68	50	805	1202	1261	1466	---[4]	2455	2539	2831	479	608	627	694	1892	2272	2328	2525	0.974 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1400S__-97	33	1043	1519	1589	1835	---[4]	3113	3210	3547	812	1005	1034	1134	2753	3234	3305	3553	0.974 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1400S__-97	50	1581	2301	2408	2780	---[4]	4716	4863	5374	1230	1523	1567	1718	4171	4900	5008	5384	0.974 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1400S__-118	33	1523	2183	2281	2622	---[4]	4501	4633	5094	1324	1617	1660	1811	4249	4933	5035	5388	0.974 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1400S__-118	50	2307	3308	3456	3973	---[4]	6819	7020	7719	2006	2449	2515	2744	6437	7474	7628	8164	0.974 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1600S__-97	33	1021	1486	1555	1796	---[4]	3084	3180	3514	740	916	943	1033	2644	3105	3174	3412	0.979 + 0.005x <= 1.0	0.895 + 0.003x <= 1.0
1600S__-97	50	1547	2252	2357	2721	---[4]	4673	4818	5324	1121	1388	1428	1566	4005	4705	4809	5170	0.979 + 0.005x <= 1.0	0.895 + 0.003x <= 1.0
1600S__-118	33	1494	2142	2238	2573	---[4]	4463	4595	5052	1229	1501	1541	1681	4103	4764	4862	5204	0.978 + 0.005x <= 1.0	0.895 + 0.003x <= 1.0
1600S__-118	50	2263	3245	3391	3898	---[4]	6762	6961	7654	1862	2274	2335	2548	6217	7219	7367	7884	0.978 + 0.005x <= 1.0	0.895 + 0.003x <= 1.0

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

Notes:

[1]Bearing length to web height ratio, N/h, exceeds AISI-NAS limit of 2. Web stiffeners in accordance with AISI-NAS Section C3.6.1 are required.

[2]Bearing Length to thickness ratio, N/t, exceeds AISI-NAS limit of 210. Web stiffeners in accordance with AISI-NAS Section C3.6.1 are required.

[3]Reduction factors (Rc) are applicable for the noted web conditions, with "x" being the nearest distance between the punch-out and the edge of bearing in inches.

[4]Bearing length, N, is less than AISI-NAS minimum of 3 inches for Condition 2 (Interior one flange loading). Reduction factor, Rc(I1F) is not applicable. Bearing stiffeners are required.

[5]See Figure 3 for illustration of loading conditions.

Condition 1 □ End Reaction □ One Flange Loading
Condition 2 □ Interior Reaction □ One Flange Loading
Condition 3 □ End Reaction □ Two Flange Loading
Condition 4 □ Interior Reaction □ Two Flange Loading

[6]C-Sections fastened to support.

TABLE 7□ STANDARDC-SECTION WEB CRIPPLING[6] (BACK-TO-BACK MEMBERS)

Member	Fy (ksi)	Condition 1 Bearing Length (in)				Condition 2 Bearing Length (in)				Condition 3 Bearing Length (in)				Condition 4 Bearing Length (in)				Punchout Reductions[3]	
		1	3.5	4	6	1	3.5	4	6	1	3.5	4	6	1	3.5	4	6	Rc (E1F)	Rc (I1F)
162S__-18	33	247	---[1]	---[1,2]	---[1,2]	---[4]	---[1]	---[1,2]	---[1,2]	151	---[1]	---[1,2]	---[1,2]	305	---[1]	---[1,2]	---[1,2]	0.838 + 0.059x <= 1.0	0.875 + 0.037x <= 1.0
162S__-27	33	535	---[1]	---[1]	---[1,2]	---[4]	---[1]	---[1]	---[1,2]	368	---[1]	---[1]	---[1,2]	771	---[1]	---[1]	---[1,2]	0.837 + 0.059x <= 1.0	0.875 + 0.038x <= 1.0
162S__-30	33	642	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	454	---[1]	---[1]	---[1]	957	---[1]	---[1]	---[1]	0.837 + 0.059x <= 1.0	0.875 + 0.038x <= 1.0
162S__-33	33	779	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	565	---[1]	---[1]	---[1]	1200	---[1]	---[1]	---[1]	0.836 + 0.059x <= 1.0	0.875 + 0.038x <= 1.0
162S__-43	33	1275	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	988	---[1]	---[1]	---[1]	2132	---[1]	---[1]	---[1]	0.835 + 0.060x <= 1.0	0.875 + 0.038x <= 1.0
162S__-54	33	1898	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	1569	---[1]	---[1]	---[1]	3393	---[1]	---[1]	---[1]	0.828 + 0.062x <= 1.0	0.874 + 0.039x <= 1.0
162S__-54	50	2875	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	2377	---[1]	---[1]	---[1]	5141	---[1]	---[1]	---[1]	0.828 + 0.062x <= 1.0	0.874 + 0.039x <= 1.0
162S__-68	33	2835	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	2500	---[1]	---[1]	---[1]	5406	---[1]	---[1]	---[1]	0.818 + 0.065x <= 1.0	0.872 + 0.042x <= 1.0
162S__-68	50	4296	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	3787	---[1]	---[1]	---[1]	8191	---[1]	---[1]	---[1]	0.818 + 0.065x <= 1.0	0.872 + 0.042x <= 1.0
250S__-18	33	247	---[1]	---[1,2]	---[1,2]	---[4]	---[1]	---[1,2]	---[1,2]	129	---[1]	---[1,2]	---[1,2]	261	---[1]	---[1,2]	---[1,2]	0.904 + 0.036x <= 1.0	0.885 + 0.023x <= 1.0
250S__-27	33	534	---[1]	---[1]	---[1,2]	---[4]	---[1]	---[1]	---[1,2]	329	---[1]	---[1]	---[1,2]	688	---[1]	---[1]	---[1,2]	0.903 + 0.036x <= 1.0	0.885 + 0.023x <= 1.0
250S__-30	33	641	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	408	---[1]	---[1]	---[1]	861	---[1]	---[1]	---[1]	0.903 + 0.036x <= 1.0	0.885 + 0.023x <= 1.0
250S__-33	33	777	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	512	---[1]	---[1]	---[1]	1088	---[1]	---[1]	---[1]	0.903 + 0.036x <= 1.0	0.885 + 0.023x <= 1.0
250S__-43	33	1273	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	910	---[1]	---[1]	---[1]	1964	---[1]	---[1]	---[1]	0.902 + 0.037x <= 1.0	0.884 + 0.023x <= 1.0
250S__-54	33	1895	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	1461	---[1]	---[1]	---[1]	3159	---[1]	---[1]	---[1]	0.900 + 0.037x <= 1.0	0.884 + 0.024x <= 1.0
250S__-54	50	2871	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	2213	---[1]	---[1]	---[1]	4786	---[1]	---[1]	---[1]	0.900 + 0.037x <= 1.0	0.884 + 0.024x <= 1.0
250S__-68	33	2832	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	2347	---[1]	---[1]	---[1]	5077	---[1]	---[1]	---[1]	0.896 + 0.039x <= 1.0	0.884 + 0.025x <= 1.0
250S__-68	50	4291	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	3557	---[1]	---[1]	---[1]	7692	---[1]	---[1]	---[1]	0.896 + 0.039x <= 1.0	0.884 + 0.025x <= 1.0
250S__-97	33	5287	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	4846	---[1]	---[1]	---[1]	10480	---[1]	---[1]	---[1]	0.888 + 0.042x <= 1.0	0.882 + 0.027x <= 1.0
250S__-97	50	8011	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	7342	---[1]	---[1]	---[1]	15879	---[1]	---[1]	---[1]	0.888 + 0.042x <= 1.0	0.882 + 0.027x <= 1.0
350S__-18	33	246	---[1]	---[1,2]	---[1,2]	---[4]	---[1]	---[1,2]	---[1,2]	109	---[1]	---[1,2]	---[1,2]	220	---[1]	---[1,2]	---[1,2]	0.862 + 0.025x <= 1.0	0.879 + 0.016x <= 1.0
350S__-27	33	533	---[1]	---[1]	---[1,2]	---[4]	---[1]	---[1]	---[1,2]	292	---[1]	---[1]	---[1,2]	611	---[1]	---[1]	---[1,2]	0.862 + 0.025x <= 1.0	0.879 + 0.016x <= 1.0
350S__-30	33	640	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	366	---[1]	---[1]	---[1]	771	---[1]	---[1]	---[1]	0.861 + 0.025x <= 1.0	0.879 + 0.016x <= 1.0
350S__-33	33	776	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	463	---[1]	---[1]	---[1]	984	---[1]	---[1]	---[1]	0.861 + 0.025x <= 1.0	0.878 + 0.016x <= 1.0
350S__-43	33	1272	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	838	---[1]	---[1]	---[1]	1808	---[1]	---[1]	---[1]	0.861 + 0.025x <= 1.0	0.878 + 0.016x <= 1.0
350S__-54	33	1892	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	1361	---[1]	---[1]	---[1]	2943	---[1]	---[1]	---[1]	0.858 + 0.026x <= 1.0	0.878 + 0.016x <= 1.0
350S__-54	50	2867	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	2062	---[1]	---[1]	---[1]	4459	---[1]	---[1]	---[1]	0.858 + 0.026x <= 1.0	0.878 + 0.016x <= 1.0
350S__-68	33	2829	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	2208	---[1]	---[1]	---[1]	4776	---[1]	---[1]	---[1]	0.855 + 0.026x <= 1.0	0.878 + 0.017x <= 1.0
350S__-68	50	4286	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	3346	---[1]	---[1]	---[1]	7236	---[1]	---[1]	---[1]	0.855 + 0.026x <= 1.0	0.878 + 0.017x <= 1.0
350S__-97	33	5282	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	4611	---[1]	---[1]	---[1]	9972	---[1]	---[1]	---[1]	0.847 + 0.028x <= 1.0	0.876 + 0.018x <= 1.0
350S__-97	50	8003	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	6986	---[1]	---[1]	---[1]	15109	---[1]	---[1]	---[1]	0.847 + 0.028x <= 1.0	0.876 + 0.018x <= 1.0
362S__-18	33	246	---[1]	---[1,2]	---[1,2]	---[4]	---[1]	---[1,2]	---[1,2]	107	---[1]	---[1,2]	---[1,2]	215	---[1]	---[1,2]	---[1,2]	0.867 + 0.024x <= 1.0	0.879 + 0.016x <= 1.0
362S__-27	33	533	---[1]	---[1]	---[1,2]	---[4]	---[1]	---[1]	---[1,2]	288	---[1]	---[1]	---[1,2]	603	---[1]	---[1]	---[1,2]	0.867 + 0.024x <= 1.0	0.879 + 0.016x <= 1.0
362S__-30	33	640	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	361	---[1]	---[1]	---[1]	761	---[1]	---[1]	---[1]	0.867 + 0.024x <= 1.0	0.879 + 0.016x <= 1.0
362S__-33	33	776	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	458	---[1]	---[1]	---[1]	972	---[1]	---[1]	---[1]	0.867 + 0.024x <= 1.0	0.879 + 0.016x <= 1.0
362S__-43	33	1271	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	830	---[1]	---[1]	---[1]	1790	---[1]	---[1]	---[1]	0.866 + 0.024x <= 1.0	0.879 + 0.016x <= 1.0
362S__-54	33	1892	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	1349	---[1]	---[1]	---[1]	2918	---[1]	---[1]	---[1]	0.864 + 0.025x <= 1.0	0.879 + 0.016x <= 1.0
362S__-54	50	2867	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	2045	---[1]	---[1]	---[1]	4422	---[1]	---[1]	---[1]	0.864 + 0.025x <= 1.0	0.879 + 0.016x <= 1.0
362S__-68	33	2828	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	2193	---[1]	---[1]	---[1]	4742	---[1]	---[1]	---[1]	0.861 + 0.025x <= 1.0	0.878 + 0.016x <= 1.0
362S__-68	50	4285	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	3322	---[1]	---[1]	---[1]	7185	---[1]	---[1]	---[1]	0.861 + 0.025x <= 1.0	0.878 + 0.016x <= 1.0
362S__-97	33	5281	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	4584	---[1]	---[1]	---[1]	9915	---[1]	---[1]	---[1]	0.854 + 0.027x <= 1.0	0.877 + 0.017x <= 1.0
362S__-97	50	8002	---[1]	---[1]	---[1]	---[4]	---[1]	---[1]	---[1]	6946	---[1]	---[1]	---[1]	15022	---[1]	---[1]	---[1]	0.854 + 0.027x <= 1.0	0.877 + 0.017x <= 1.0
400S__-27	33	533	822	---[1]	---[1,2]	---[4]	720	---[1]	---[1,2]	276	353	---[1]	---[1,2]	577	739	---[1]	---[1,2]	0.881 + 0.022x <= 1.0	0.881 + 0.014x <= 1.0
400S__-30	33	639	981	---[1]	---[1]	---[4]	878	---[1]	---[1]	347	441	---[1]	---[1]	732	931	---[1]	---[1]	0.881 + 0.022x <= 1.0	0.881 + 0.014x <= 1.0
400S__-33	33	776	1181	---[1]	---[1]	---[4]	1083	---[1]	---[1]	442	557	---[1]	---[1]	937	1183	---[1]	---[1]	0.881 + 0.022x <= 1.0	0.881 + 0.014x <= 1.0
400S__-43	33	1271	1900	---[1]	---[1]	---[4]	1850	---[1]	---[1]	806	998	---[1]	---[1]	1739	2154	---[1]	---[1]	0.881 + 0.022x <= 1.0	0.881 + 0.014x <= 1.0
400S__-54	33	1891	2782	---[1]	---[1]	---[4]	2844	---[1]	---[1]	1317	1605	---[1]	---[1]	2848	3472	---[1]	---[1]	0.879 + 0.022x <= 1.0	0.881 + 0.014x <= 1.0
400S__-54	50	2866	4215	---[1]	---[1]	---[4]	4309	---[1]	---[1]	1995	2432	---[1]	---[1]	4315	5260	---[1]	---[1]	0.879 + 0.022x <= 1.0	0.881 + 0.014x <= 1.0
400S__-68	33	2827	4087	---[1]	---[1]	---[4]	4387	---[1]	---[1]	2147	2578	---[1]	---[1]	4644	5576	---[1]	---[1]	0.876 + 0.023x <= 1.0	0.881 + 0.015x <= 1.0
400S__-68	50	4284	6193	---[1]	---[1]	---[4]	6646	---[1]	---[1]	3253	3906	---[1]	---[1]	7036	8448	---[1]	---[1]	0.876 + 0.023x <= 1.0	0.881 + 0.015x <= 1.0

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

TABLE 7□ STANDARD C-SECTION WEB CRIPPLING[6] (BACK-TO-BACK MEMBERS) (Continued)

Member	Fy (ksi)	Condition 1 Bearing Length (in)				Condition 2 Bearing Length (in)				Condition 3 Bearing Length (in)				Condition 4 Bearing Length (in)				Punchout Reductions[3]	
		1	3.5	4	6	1	3.5	4	6	1	3.5	4	6	1	3.5	4	6	Rc (E1F)	Rc (I1F)
550S__-27	33	531	821	863	---[1,2]	---[4]	716	733	---[1,2]	233	298	308	---[1,2]	487	624	644	---[1,2]	0.918 + 0.016x <= 1.0	0.887 + 0.010x <= 1.0
550S__-30	33	638	979	1029	---[1]	---[4]	873	894	---[1]	298	378	390	---[1]	627	798	823	---[1]	0.918 + 0.016x <= 1.0	0.887 + 0.010x <= 1.0
550S__-33	33	774	1179	1239	---[1]	---[4]	1077	1102	---[1]	384	484	499	---[1]	815	1028	1060	---[1]	0.918 + 0.016x <= 1.0	0.887 + 0.010x <= 1.0
550S__-43	33	1269	1897	1990	---[1]	---[4]	1841	1879	---[1]	721	893	919	---[1]	1556	1927	1982	---[1]	0.917 + 0.016x <= 1.0	0.887 + 0.010x <= 1.0
550S__-54	33	1888	2778	2909	---[1]	---[4]	2831	2886	---[1]	1200	1463	1502	---[1]	2595	3164	3249	---[1]	0.917 + 0.016x <= 1.0	0.886 + 0.010x <= 1.0
550S__-54	50	2861	4208	4408	---[1]	---[4]	4289	4372	---[1]	1818	2217	2276	---[1]	3933	4794	4922	---[1]	0.917 + 0.016x <= 1.0	0.886 + 0.010x <= 1.0
550S__-68	33	2823	4082	4268	---[1]	---[4]	4369	4447	---[1]	1985	2384	2443	---[1]	4294	5156	5284	---[1]	0.915 + 0.016x <= 1.0	0.886 + 0.010x <= 1.0
550S__-68	50	4278	6185	6467	---[1]	---[4]	6619	6738	---[1]	3008	3612	3702	---[1]	6506	7812	8005	---[1]	0.915 + 0.016x <= 1.0	0.886 + 0.010x <= 1.0
550S__-30	33	638	978	1029	---[1]	---[4]	871	892	---[1]	283	359	371	---[1]	596	757	781	---[1]	0.926 + 0.014x <= 1.0	0.888 + 0.009x <= 1.0
550S__-33	33	774	1178	1238	---[1]	---[4]	1075	1100	---[1]	366	462	477	---[1]	778	982	1012	---[1]	0.926 + 0.014x <= 1.0	0.888 + 0.009x <= 1.0
550S__-43	33	1268	1896	1989	---[1]	---[4]	1838	1876	---[1]	696	862	886	---[1]	1501	1859	1912	---[1]	0.925 + 0.014x <= 1.0	0.888 + 0.009x <= 1.0
550S__-54	33	1888	2776	2908	---[1]	---[4]	2827	2882	---[1]	1165	1420	1458	---[1]	2520	3072	3154	---[1]	0.925 + 0.015x <= 1.0	0.888 + 0.009x <= 1.0
550S__-54	50	2860	4207	4406	---[1]	---[4]	4283	4366	---[1]	1765	2152	2209	---[1]	3818	4654	4778	---[1]	0.925 + 0.015x <= 1.0	0.888 + 0.009x <= 1.0
550S__-68	33	2822	4080	4267	---[1]	---[4]	4363	4441	---[1]	1937	2326	2383	---[1]	4189	5030	5154	---[1]	0.924 + 0.015x <= 1.0	0.888 + 0.009x <= 1.0
550S__-68	50	4276	6182	6465	---[1]	---[4]	6611	6729	---[1]	2935	3524	3611	---[1]	6347	7621	7810	---[1]	0.924 + 0.015x <= 1.0	0.888 + 0.009x <= 1.0
550S__-97	33	5272	7418	7737	---[1]	---[4]	8543	8677	---[1]	4157	4883	4991	---[1]	8991	10562	10795	---[1]	0.921 + 0.015x <= 1.0	0.887 + 0.010x <= 1.0
550S__-97	50	7988	11240	11722	---[1]	---[4]	12944	13146	---[1]	6299	7399	7562	---[1]	13623	16002	16355	---[1]	0.921 + 0.015x <= 1.0	0.887 + 0.010x <= 1.0
550S__-118	33	7519	10418	10848	---[1]	---[4]	12495	12676	---[1]	6347	7369	7521	---[1]	13726	15937	16265	---[1]	0.919 + 0.015x <= 1.0	0.887 + 0.010x <= 1.0
550S__-118	50	11392	15784	16436	---[1]	---[4]	18933	19207	---[1]	9616	11165	11395	---[1]	20797	24147	24644	---[1]	0.919 + 0.015x <= 1.0	0.887 + 0.010x <= 1.0
725S__-43	33	1266	1894	1987	2310	---[4]	1831	1870	2004	637	788	811	889	1374	1701	1749	1918	0.941 + 0.012x <= 1.0	0.890 + 0.008x <= 1.0
725S__-54	33	1886	2773	2905	3363	---[4]	2818	2872	3064	1084	1321	1356	1479	2344	2857	2933	3199	0.940 + 0.012x <= 1.0	0.890 + 0.008x <= 1.0
725S__-54	50	2857	4202	4402	5096	---[4]	4269	4352	4642	1642	2002	2055	2241	3551	4329	4445	4846	0.940 + 0.012x <= 1.0	0.890 + 0.008x <= 1.0
725S__-68	33	2819	4076	4263	4911	---[4]	4351	4428	4700	1824	2190	2245	2434	3945	4737	4855	5264	0.939 + 0.012x <= 1.0	0.890 + 0.008x <= 1.0
725S__-68	50	4272	6176	6459	7442	---[4]	6592	6710	7121	2764	3319	3401	3688	5978	7178	7356	7975	0.939 + 0.012x <= 1.0	0.890 + 0.008x <= 1.0
725S__-97	33	5268	7412	7730	8837	---[4]	8522	8655	9120	3971	4664	4767	5125	8587	10087	10309	11083	0.938 + 0.012x <= 1.0	0.890 + 0.008x <= 1.0
725S__-97	50	7981	11231	11713	13390	---[4]	12912	13114	13818	6016	7067	7222	7765	13011	15283	15620	16793	0.938 + 0.012x <= 1.0	0.890 + 0.008x <= 1.0
800S__-43	33	1266	1892	1985	2309	---[4]	1827	1866	2000	603	747	769	843	1302	1613	1659	1819	0.947 + 0.011x <= 1.0	0.891 + 0.007x <= 1.0
800S__-54	33	1885	2772	2903	3361	---[4]	2812	2867	3058	1038	1266	1300	1417	2246	2738	2811	3065	0.947 + 0.011x <= 1.0	0.891 + 0.007x <= 1.0
800S__-54	50	2855	4200	4399	5093	---[4]	4261	4344	4633	1573	1918	1969	2147	3402	4148	4259	4643	0.947 + 0.011x <= 1.0	0.891 + 0.007x <= 1.0
800S__-68	33	2818	4074	4260	4909	---[4]	4344	4421	4692	1762	2115	2168	2350	3810	4575	4688	5083	0.946 + 0.011x <= 1.0	0.891 + 0.007x <= 1.0
800S__-68	50	4270	6173	6455	7438	---[4]	6581	6699	7109	2669	3205	3284	3561	5772	6931	7103	7701	0.946 + 0.011x <= 1.0	0.891 + 0.007x <= 1.0
800S__-97	33	5265	7409	7727	8833	---[4]	8510	8644	9107	3867	4542	4642	4991	8363	9823	10040	10794	0.945 + 0.011x <= 1.0	0.891 + 0.007x <= 1.0
800S__-97	50	7978	11226	11707	13384	---[4]	12895	13097	13799	5859	6882	7034	7562	12671	14883	15212	16354	0.945 + 0.011x <= 1.0	0.891 + 0.007x <= 1.0
800S__-118	33	7510	10406	10835	12330	---[4]	12452	12633	13260	5958	6918	7061	7556	12886	14962	15270	16342	0.944 + 0.011x <= 1.0	0.890 + 0.007x <= 1.0
800S__-118	50	11379	15766	16417	18682	---[4]	18867	19141	20091	9028	10482	10698	11449	19524	22670	23137	24760	0.944 + 0.011x <= 1.0	0.890 + 0.007x <= 1.0
925S__-43	33	1264	1890	1983	2307	---[4]	1821	1860	1994	552	683	703	771	1191	1475	1517	1663	0.956 + 0.009x <= 1.0	0.892 + 0.006x <= 1.0
925S__-54	33	1883	2769	2901	3358	---[4]	2805	2859	3049	967	1179	1211	1320	2092	2551	2619	2855	0.956 + 0.009x <= 1.0	0.892 + 0.006x <= 1.0
925S__-54	50	2853	4196	4395	5088	---[4]	4249	4332	4620	1466	1787	1835	2000	3170	3865	3968	4326	0.956 + 0.009x <= 1.0	0.892 + 0.006x <= 1.0
925S__-68	33	2816	4071	4257	4905	---[4]	4333	4410	4680	1664	1998	2047	2219	3598	4320	4427	4800	0.955 + 0.009x <= 1.0	0.892 + 0.006x <= 1.0
925S__-68	50	4266	6168	6450	7431	---[4]	6565	6682	7091	2521	3027	3102	3363	5451	6546	6708	7273	0.955 + 0.009x <= 1.0	0.892 + 0.006x <= 1.0
925S__-97	33	5262	7404	7722	8827	---[4]	8492	8625	9088	3705	4352	4447	4781	8012	9411	9619	10341	0.954 + 0.009x <= 1.0	0.892 + 0.006x <= 1.0
925S__-97	50	7972	11218	11699	13375	---[4]	12867	13069	13770	5613	6593	6739	7245	12139	14259	14574	15668	0.954 + 0.009x <= 1.0	0.892 + 0.006x <= 1.0
1000S__-54	33	1882	2768	2899	3356	---[4]	2800	2855	3044	927	1130	1160	1265	2005	2445	2510	2737	0.960 + 0.009x <= 1.0	0.893 + 0.005x <= 1.0
1000S__-54	50	2851	4194	4393	5086	---[4]	4242	4325	4613	1405	1713	1758	1917	3038	3704	3803	4146	0.960 + 0.009x <= 1.0	0.893 + 0.005x <= 1.0
1000S__-68	33	2814	4069	4255	4902	---[4]	4326	4404	4674	1608	1931	1979	2145	3478	4176	4280	4640	0.959 + 0.009x <= 1.0	0.893 + 0.005x <= 1.0
1000S__-68	50	4264	6165	6447	7428	---[4]	6555	6673	7081	2437	2926	2998	3251	5270	6327	6484	7030	0.959 + 0.009x <= 1.0	0.893 + 0.005x <= 1.0
1000S__-97	33	5260	7401	7718	8824	---[4]	8482	8615	9077	3613	4244	4337	4663	7813	9178	9380	10085	0.959 + 0.009x <= 1.0	0.893 + 0.006x <= 1.0
1000S__-97	50	7969	11213	11695	13369	---[4]	12852	13053	13753	5474	6430	6572	7065	11839	13906	14213	15280	0.959 + 0.009x <= 1.0	0.893 + 0.006x <= 1.0
1000S__-118	33	7503	10396	10825	12318	---[4]	12415	12595	13220	5620	6525	6660	7127	12154	14113	14403	15414	0.958 + 0.009x <= 1.0	0.892 + 0.006x <= 1.0
1000S__-118	50	11368	15751	16401	18663	---[4]	18810	19083	20031	8515	9887	10090	10798	18416	21383	21823	23354	0.958 + 0.009x <= 1.0	0.892 + 0.006x <= 1.0

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

TABLE 7□ STANDARD C-SECTION WEB CRIPPLING[6] (BACK-TO-BACK MEMBERS) (Continued)

Member	Fy	Condition 1 Bearing Length (in)				Condition 2 Bearing Length (in)				Condition 3 Bearing Length (in)				Condition 4 Bearing Length (in)				Punchout Reductions[3]	
	(ksi)	1	3.5	4	6	1	3.5	4	6	1	3.5	4	6	1	3.5	4	6	Rc (E1F)	Rc (I1F)
1150S__-54	33	1880	2765	2896	3353	---[4]	2791	2846	3035	851	1038	1065	1162	1841	2244	2304	2512	0.967 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1150S__-54	50	2848	4189	4388	5081	---[4]	4230	4312	4599	1290	1572	1614	1760	2789	3400	3491	3807	0.967 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1150S__-68	33	2812	4065	4251	4898	---[4]	4315	4392	4661	1503	1805	1850	2006	3251	3904	4001	4337	0.966 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1150S__-68	50	4260	6160	6441	7421	---[4]	6537	6654	7062	2278	2735	2803	3039	4926	5915	6062	6572	0.966 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1150S__-97	33	5256	7395	7713	8817	---[4]	8463	8595	9057	3440	4040	4129	4439	7439	8738	8931	9601	0.966 + 0.008x <= 1.0	0.894 + 0.005x <= 1.0
1150S__-97	50	7963	11205	11686	13359	---[4]	12823	13023	13722	5211	6122	6257	6726	11271	13239	13531	14547	0.966 + 0.008x <= 1.0	0.894 + 0.005x <= 1.0
1200S__-68	33	2811	4064	4250	4897	---[4]	4311	4388	4657	1470	1765	1809	1961	3179	3817	3912	4241	0.968 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1200S__-68	50	4259	6158	6439	7419	---[4]	6532	6649	7056	2227	2674	2741	2971	4817	5784	5927	6426	0.968 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1200S__-97	33	5254	7394	7711	8815	---[4]	8457	8589	9050	3385	3976	4063	4368	7320	8598	8788	9448	0.968 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1200S__-97	50	7961	11202	11683	13356	---[4]	12813	13014	13712	5128	6024	6156	6619	11091	13028	13315	14315	0.968 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1200S__-118	33	7496	10386	10815	12307	---[4]	12381	12560	13184	5316	6173	6300	6742	11497	13350	13624	14580	0.967 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1200S__-118	50	11358	15737	16386	18647	---[4]	18759	19031	19976	8055	9352	9545	10215	17420	20227	20643	22091	0.967 + 0.007x <= 1.0	0.894 + 0.005x <= 1.0
1350S__-68	33	2809	4061	4247	4893	---[4]	4300	4377	4645	1374	1650	1691	1833	2971	3568	3656	3964	0.973 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1350S__-68	50	4256	6153	6434	7413	---[4]	6515	6632	7038	2082	2500	2562	2777	4502	5406	5540	6006	0.973 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1350S__-97	33	5251	7389	7706	8809	---[4]	8439	8571	9031	3226	3790	3873	4164	6977	8196	8377	9005	0.972 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1350S__-97	50	7956	11195	11675	13347	---[4]	12787	12987	13684	4888	5742	5868	6309	10572	12418	12692	13645	0.972 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1400S__-68	33	2808	4060	4245	4892	---[4]	4297	4374	4642	1343	1613	1653	1792	2905	3488	3574	3875	0.974 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1400S__-68	50	4255	6151	6433	7411	---[4]	6510	6627	7033	2035	2444	2504	2715	4401	5285	5416	5872	0.974 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1400S__-97	33	5250	7387	7704	8807	---[4]	8434	8566	9025	3175	3730	3812	4098	6867	8067	8245	8864	0.974 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1400S__-97	50	7954	11192	11673	13344	---[4]	12778	12978	13674	4811	5651	5776	6210	10405	12223	12492	13430	0.974 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1400S__-118	33	7490	10378	10806	12297	---[4]	12350	12529	13152	5038	5850	5970	6389	10896	12651	12912	13818	0.974 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1400S__-118	50	11349	15724	16373	18631	---[4]	18713	18984	19927	7633	8863	9045	9680	16509	19168	19563	20936	0.974 + 0.006x <= 1.0	0.895 + 0.004x <= 1.0
1600S__-97	33	5245	7381	7698	8800	---[4]	8412	8544	9002	2981	3502	3579	3848	6448	7574	7741	8322	0.979 + 0.005x <= 1.0	0.895 + 0.003x <= 1.0
1600S__-97	50	7947	11183	11663	13333	---[4]	12745	12945	13639	4517	5306	5423	5830	9769	11475	11728	12609	0.979 + 0.005x <= 1.0	0.895 + 0.003x <= 1.0
1600S__-118	33	7484	10370	10798	12287	---[4]	12322	12500	13121	4780	5550	5664	6062	10338	12003	12250	13110	0.978 + 0.005x <= 1.0	0.895 + 0.003x <= 1.0
1600S__-118	50	11340	15712	16361	18617	---[4]	18669	18940	19880	7242	8409	8582	9184	15663	18187	18561	19864	0.978 + 0.005x <= 1.0	0.895 + 0.003x <= 1.0

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

Notes:

[1]Bearing length to web height ratio, N/h, exceeds AISI-NAS limit of 2. Web stiffeners in accordance with AISI-NAS Section C3.6.1 are required.

[2]Bearing Length to thickness ratio, N/t, exceeds AISI-NAS limit of 210. Web stiffeners in accordance with AISI-NAS Section C3.6.1 are required.

[3]Reduction factors are applicable for the noted web conditions, with "x" being the nearest distance between the punch-out and the edge of bearing in inches.

[4]Bearing length, N, is less than AISI-NAS minimum of 3 inches for Condition 2 (Interior one flange loading). Reduction factor, Rc(I1F) is not applicable. Bearing stiffeners are required.

[5]See Figure 3 for illustration of loading conditions.

Condition 1 □ End Reaction □ One Flange Loading
Condition 2 □ Interior Reaction □ One Flange Loading
Condition 3 □ End Reaction □ Two Flange Loading
Condition 4 □ Interior Reaction □ Two Flange Loading

[6]C-Sections fastened to support.

TABLE 8□ U CHANNELS

Member	Design Thickness (in)	Mem. Depth (in)	Flange Width (in)	Inside Corner Radii (in)	Gross						Effective Properties 33 ksi			
					Area (in^2)	Weight (lb/ft)	Ix (in^4)	Rx (in)	Iy (in^4)	Ry (in)	Ix (in^4)	Sx (in^3)	Ma (ft-lb)	Va (lb)
75U050-54	0.0566	0.75	0.50	0.0849	0.087	0.30	0.007	0.288	0.002	0.155	0.0072	0.019	38	315
150U050-54	0.0566	1.50	0.50	0.0849	0.129	0.44	0.039	0.547	0.003	0.144	0.0390	0.052	102	840
200U050-54	0.0566	2.00	0.50	0.0849	0.157	0.54	0.079	0.709	0.003	0.136	0.079	0.079	2	1190
250U050-54	0.0566	2.50	0.50	0.0849	0.186	0.63	0.139	0.866	0.003	0.128	0.139	0.111	3	1540

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

SYMBOLS:
I_x = Strong axis moment of inertia. I_y = Weak axis moment of inertia. S_x = Strong axis section modulus. V_a = Allowable shear.
R_x = Strong axis radius of gyration. R_y = Weak axis radius of gyration. M_a = Allowable moment.

U-Channel Allowable Ceiling Spans □ L/240

Member	Span	4 psf					6 psf					13 psf					15 psf				
		Channel Spacing (in) o.c.					Channel Spacing (in) o.c.					Channel Spacing (in) o.c.					Channel Spacing (in) o.c.				
		24	36	48	60	72	24	36	48	60	72	24	36	48	60	72	24	36	48	60	72
75U050-54	Single	3' 11"	3' 5"	3' 1"	2' 10"	2' 8"	3' 5"	3' 0"	2' 8"	2' 6"	2' 4"	2' 7"	2' 4"	2' 1"	1' 11"	1' 9"	2' 6"	2' 2"	2' 0"	1' 10"	1' 8"
	Multiple	4' 10"	4' 2"	3' 10"	3' 7"	3' 4"	4' 2"	3' 8"	3' 4"	3' 1"	2' 10"	3' 3"	2' 9"	2' 4"	2' 1"	1' 11"	3' 1"	2' 7"	2' 2"	2' 0"	1' 9"
150U050-54	Single	5' 6"	4' 10"	4' 5"	4' 1"	3' 10"	4' 10"	4' 3"	3' 10"	3' 7"	3' 5"	3' 9"	3' 3"	3' 0"	2' 9"	2' 7"	3' 7"	3' 2"	2' 10"	2' 7"	2' 5"
	Multiple	7' 1"	6' 2"	5' 8"	5' 3"	4' 11"	6' 2"	5' 5"	4' 11"	4' 7"	4' 4"	4' 10"	4' 2"	3' 9"	3' 4"	3' 0"	4' 7"	4' 0"	3' 6"	3' 1"	2' 9"
200U050-54	Single	5' 10"	5' 1"	4' 8"	4' 4"	4' 1"	5' 1"	4' 6"	4' 1"	3' 10"	3' 7"	4' 0"	3' 6"	3' 2"	3' 0"	2' 10"	3' 10"	3' 4"	3' 1"	2' 10"	2' 8"
	Multiple	7' 5"	6' 6"	5' 11"	5' 6"	5' 2"	6' 6"	5' 8"	5' 2"	4' 10"	4' 7"	5' 1"	4' 5"	4' 0"	3' 9"	3' 6"	4' 10"	4' 3"	3' 10"	3' 7"	3' 2"
250U050-54	Single	6' 1"	5' 4"	4' 10"	4' 6"	4' 3"	5' 4"	4' 8"	4' 3"	4' 0"	3' 9"	4' 2"	3' 8"	3' 4"	3' 1"	2' 11"	4' 0"	3' 6"	3' 2"	3' 0"	2' 10"
	Multiple	7' 9"	6' 9"	6' 2"	5' 9"	5' 5"	6' 9"	5' 11"	5' 5"	5' 0"	4' 9"	5' 3"	4' 7"	4' 3"	3' 11"	3' 9"	5' 0"	4' 5"	4' 0"	3' 9"	3' 7"

For **SI:** 1 inch = 25.4 mm, 1 psf = 47.88 Pa.

U-Channel Allowable Ceiling Spans □ L/360

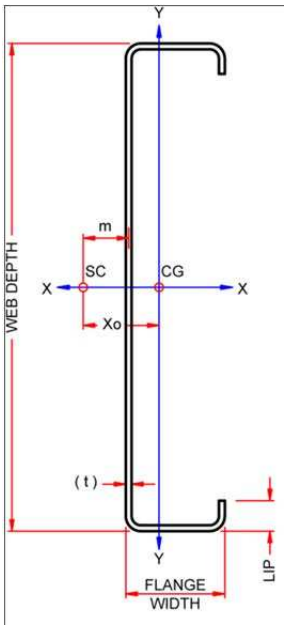
Member	Span	4 psf					6 psf					13 psf					15 psf				
		Channel Spacing (in) o.c.					Channel Spacing (in) o.c.					Channel Spacing (in) o.c.					Channel Spacing (in) o.c.				
		24	36	48	60	72	24	36	48	60	72	24	36	48	60	72	24	36	48	60	72
75U050-54	Single	3' 5"	3' 0"	2' 8"	2' 6"	2' 4"	3' 0"	2' 7"	2' 4"	2' 2"	2' 1"	2' 4"	2' 0"	1' 10"	1' 8"	1' 7"	2' 2"	1' 11"	1' 9"	1' 7"	1' 6"
	Multiple	4' 2"	3' 8"	3' 4"	3' 1"	2' 11"	3' 8"	3' 2"	2' 11"	2' 8"	2' 7"	2' 10"	2' 6"	2' 3"	2' 1"	1' 11"	2' 8"	2' 4"	2' 2"	2' 0"	1' 9"
150U050-54	Single	5' 6"	4' 10"	4' 5"	4' 1"	3' 10"	4' 10"	4' 3"	3' 10"	3' 7"	3' 5"	3' 9"	3' 3"	3' 0"	2' 9"	2' 7"	3' 7"	3' 2"	2' 10"	2' 7"	2' 5"
	Multiple	7' 1"	6' 2"	5' 8"	5' 3"	4' 11"	6' 2"	5' 5"	4' 11"	4' 7"	4' 4"	4' 10"	4' 2"	3' 9"	3' 4"	3' 0"	4' 7"	4' 0"	3' 6"	3' 1"	2' 9"
200U050-54	Single	5' 10"	5' 1"	4' 8"	4' 4"	4' 1"	5' 1"	4' 6"	4' 1"	3' 10"	3' 7"	4' 0"	3' 6"	3' 2"	3' 0"	2' 10"	3' 10"	3' 4"	3' 1"	2' 10"	2' 8"
	Multiple	7' 5"	6' 6"	5' 11"	5' 6"	5' 2"	6' 6"	5' 8"	5' 2"	4' 10"	4' 7"	5' 1"	4' 5"	4' 0"	3' 9"	3' 6"	4' 10"	4' 3"	3' 10"	3' 7"	3' 2"
250U050-54	Single	6' 1"	5' 4"	4' 10"	4' 6"	4' 3"	5' 4"	4' 8"	4' 3"	4' 0"	3' 9"	4' 2"	3' 8"	3' 4"	3' 1"	2' 11"	4' 0"	3' 6"	3' 2"	3' 0"	2' 10"
	Multiple	7' 9"	6' 9"	6' 2"	5' 9"	5' 5"	6' 9"	5' 11"	5' 5"	5' 0"	4' 9"	5' 3"	4' 7"	4' 3"	3' 11"	3' 9"	5' 0"	4' 5"	4' 0"	3' 9"	3' 7"

For **SI:** 1 inch = 25.4 mm, 1 psf = 47.88 Pa.

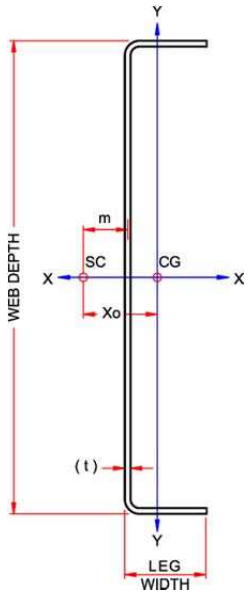
End bearing and interior bearing lengths are 0.75 inch.

TABLE 9□ C-SECTIONS (STUDS) FOR USE WITH THE IRC

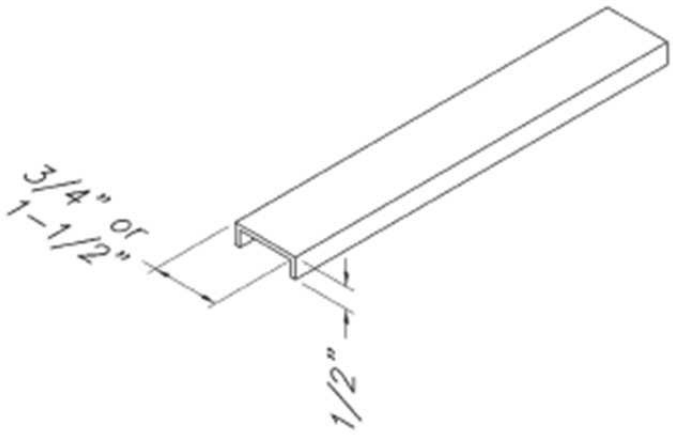
IRC MEMBER DESIGNATION	EQUIVALENT STEEL FRAMING INDUSTRY ASSOCIATION MEMBER DESIGNATION			
	t = 33	t = 43	t = 54	t = 68
350S162-t	350S162-33 350S200-33	350S162-43 350S200-43	350S162-54 350S200-54	350S162-68 350S200-68
550S162-t	550S162-33 550S200-33	550S162-43 550S200-43	550S162-54 550S200-54	550S162-68 550S200-68
800S162-t	800S162-33 800S200-33	800S162-43 800S200-43	800S162-54 800S200-54	800S162-68 800S200-68
1000S162-t	--- ---	1000S162-43 1000S200-43	1000S162-54 1000S200-54	1000S162-68 1000S200-68
1200S162-t	--- ---	--- ---	1200S162-54 1200S200-54	1200S162-68 1200S200-68



C-SECTIONS



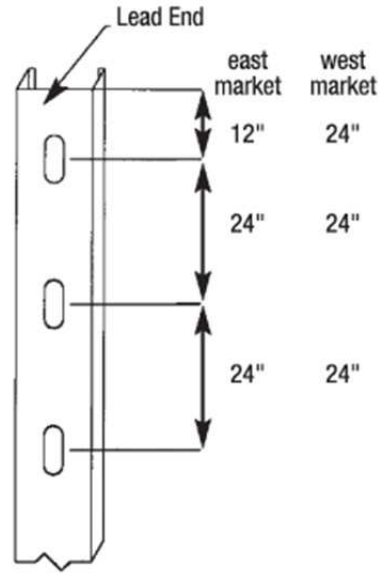
TRACKS



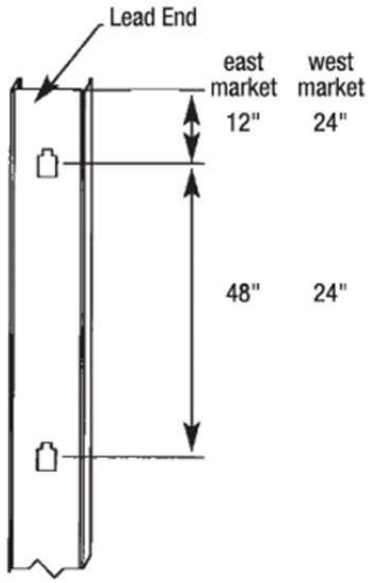
COLD-ROLLED CHANNEL
75U50 & 150U50

U-CHANNELS

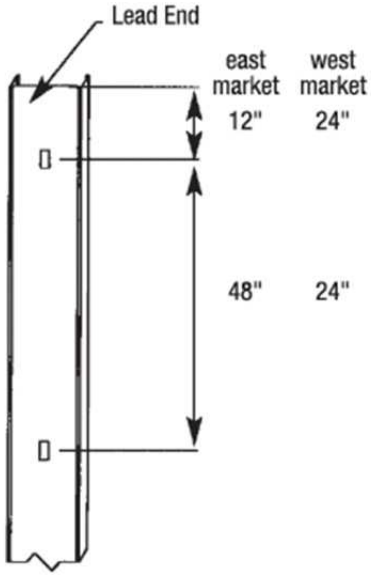
FIGURE 1□ STEEL FRAMING INDUSTRY ASSOCIATION



Structural stud punchout

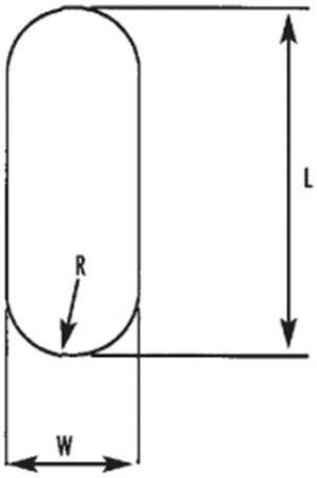


Non-structural keyhole punchout



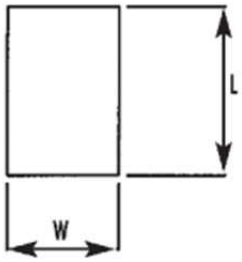
Non-structural rectangle punchout

Stud sizes	250	350-1600
W	0.75"	1.5"
L	2"	4"
R	0.375"	0.75"

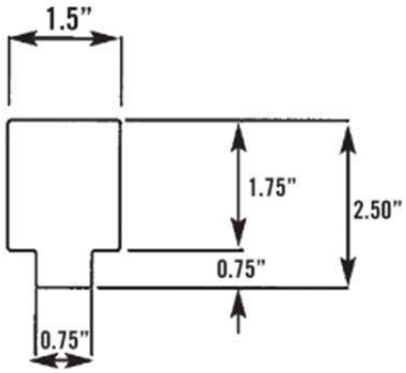


Oval punch

Stud sizes	162-250
W	0.75"
L	1.75"



Rectangle punch



Keyhole punch

FIGURE 2 PUNCH-OUTS

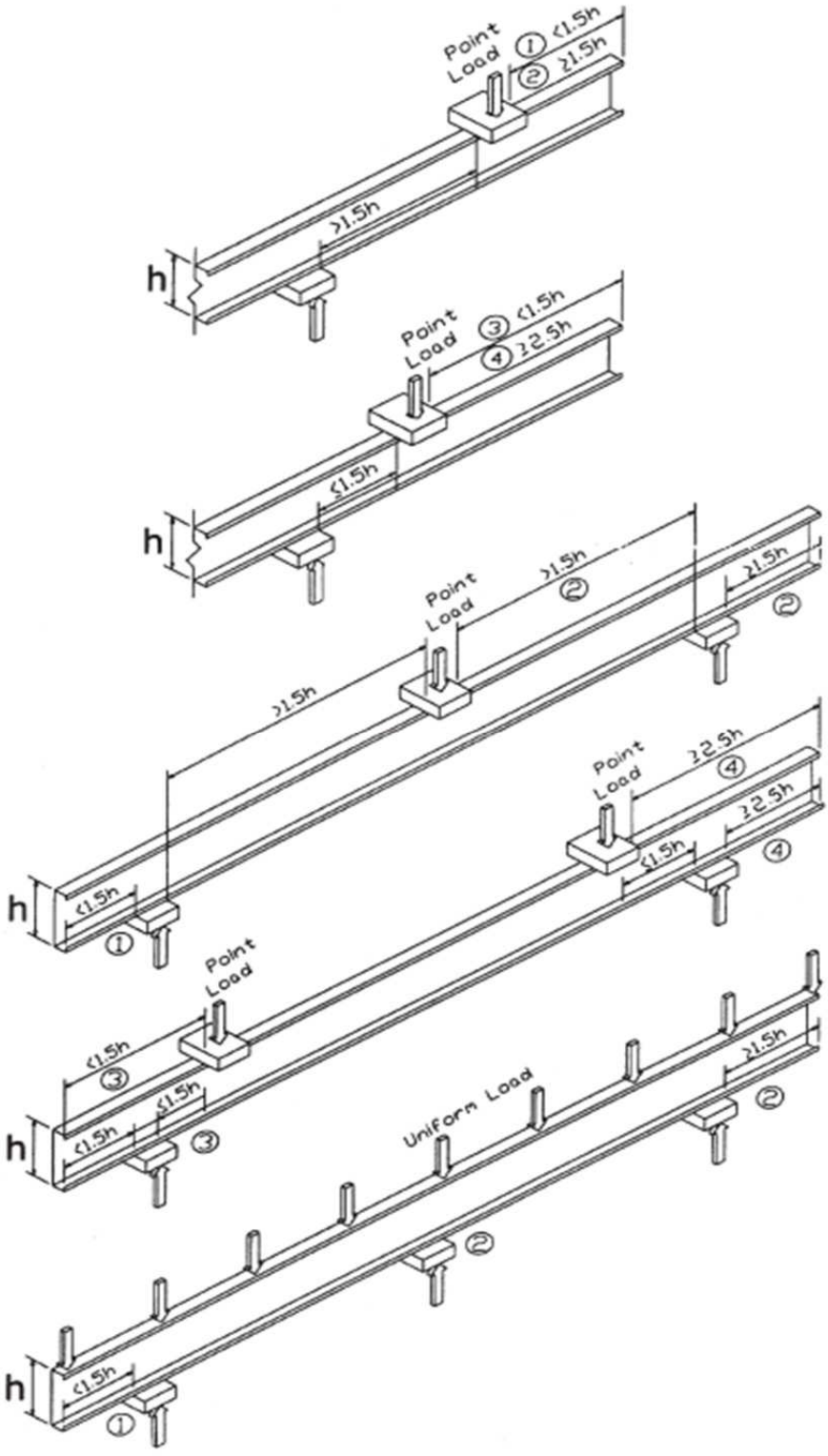


FIGURE 3 FLANGE LOADING CONDITONS