

ICC-ES Evaluation Report

ESR-4540

Reissued September 2024


This report also contains:

- CBC Supplement

Subject to renewal September 2025

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<p>DIVISION: 05 00 00 - METALS</p> <p>Section: 05 40 00—Cold-Formed Metal Framing</p> <p>Section: 05 41 00—Structural Metal Stud Framing</p> <p>DIVISION: 09 00 00 - FINISHES</p> <p>Section: 09 22 16.13—Non-Structural Metal Stud Framing</p>	<p>REPORT HOLDER:</p> <p>AMERICA-CHINA STEEL Framing ASSOCIATION (ACSFA)</p> <p>ADDITIONAL LISTEE:</p> <p>XIAMEN DAHEZHONGBANG CONSTRUCTION ENGINEERING Technology SERVICES CO., LTD.</p>	<p>EVALUATION SUBJECT:</p> <p>COLD-FORMED STEEL FRAMING MEMBERS</p>	
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1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2018, 2015 and 2012 [International Building Code® \(IBC\)](#)

Property evaluated:

- Structural

2.0 USES

Members with a minimum G60 (Z180) or AZ50 (AZM150) coating may be used as structural members as defined by the North American Standard for Cold-Formed Steel Structural Framing (AISI S240).

Members with a minimum G40 (Z120) coating may be used as nonstructural members as defined by the North American Standard for Cold-Formed Steel Framing – Nonstructural Members (AISI S220).

3.0 DESCRIPTION

The Cold-Formed Steel Framing Members are divided into three categories: C-shaped structural studs, C-shaped nonstructural studs, and U-shaped tracks. The members are made from materials complying with Section A3.2 of AISI S100. The materials are:

- GB/T 700 Standard, Grade Q235 steel with minimum yield strength of 34 ksi (235 MPa), minimum ultimate tensile strength of 54 ksi (370 MPa), and minimum elongation of 26 percent.
- GB/T 1591 Standard, Grade Q345 with minimum yield strength of 50 ksi (345 MPa), minimum ultimate tensile strength of 68 ksi (470 MPa), and minimum elongation of 21 percent.
- GB/T 2518 Standard, Grade S350GD with minimum yield strength of 51 ksi (350 MPa), minimum ultimate tensile strength of 61 ksi (420 MPa), and minimum elongation of 16 percent.

The minimum galvanized coating is G40 for nonstructural members and G60 or AZ50 for structural members. The C-shaped studs are manufactured with and without web punch-outs. Punch-outs are a maximum of 1.5 inches (38 mm) wide by 4 inches (102 mm) long for members with depth greater than 2.5 inches (64 mm) and a maximum of $\frac{3}{4}$ -inch-wide (19 mm) by 4 inches long (102 mm) for members with 2.5-inch-depth (64 mm) and smaller. When provided, punch-outs are located along the center line of the webs of the members with a minimum center-to-center spacing of 24 inches (610 mm). The minimum distance between the end of the stud and the near edge of the web punch-outs is 10 inches (254 mm). Dimensional properties are provided in [Tables 1A](#), [1B](#), and [2](#) along with [Figures 1](#) and [2](#) for studs and tracks.

4.0 DESIGN AND INSTALLATION

4.1 General:

The Cold-Formed Steel Framing Members and their connections must be designed and installed in accordance with IBC Section 2210 using the section properties referenced in Section 3.

4.2 Design:

The section properties and allowable moments, M_a , indicated in [Tables 3A](#), [3B](#), and [4](#) are for structural studs without punch-outs, nonstructural studs without punch-outs, and track members, respectively. All values have been determined in accordance with the North American Specification for Design of Cold-formed Steel Structural Members (AISI S100-16 / S1-18). The allowable moments, M_a , are for use with Allowable Strength Design (ASD) and are for flexural members installed with the compression flange continuously braced. For other conditions of compression flange bracing, the allowable moment must be determined in accordance with AISI S100. The design of members must address web crippling, combined bending and web crippling, and combined bending and shear, as applicable, in accordance with the AISI S100.

4.3 Installation:

The Cold-Formed Steel Framing Members must be installed in accordance with the applicable code, the approved plans, and this report. If there is a conflict between the plans submitted for approval and this report, this report governs. The approved plans must be available at the jobsite at all times.

5.0 CONDITIONS OF USE:

The Cold-Formed Steel Framing Members described in this report complies with, or is a suitable alternative to what is specified in those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 The Cold-Formed Steel Framing Members must be installed in accordance with the applicable code, the approved plans, and this report.
- 5.2 Minimum uncoated base-metal thickness of the framing members as delivered to the jobsite must be at least 95 percent of the design base-metal thickness (design base-metal thickness) noted in [Tables 1A](#), [1B](#), and [2](#).
- 5.3 Complete plans and calculations verifying compliance with this report must be submitted to the code official for each project at the time of permit application. The calculations and drawings must be prepared and sealed by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.
- 5.4 Effective section properties and allowable capacities, except V_{anet} , of Studs with punch-outs are outside the scope of this evaluation report.
- 5.5 The Cold-Formed Steel Framing Members are manufactured in Fujian, China under an approved quality control program by ICC-ES.

6.0 EVIDENCE SUBMITTED

Data in accordance with the [ICC-ES Acceptance Criteria for Cold-formed Steel Framing Members \(AC46\)](#), dated October 2019.

7.0 IDENTIFICATION

- 7.1 At a spacing not exceeding 96 inches (2440 mm) on center, each cold-formed steel member recognized in this report must be stamped with the report holder's name (ACSFA) or the additional listee; the section identification as described in [Tables 1](#) through [4](#) of this evaluation report; the acronym "ICC-ES"; the evaluation report number (ESR-4540); the minimum uncoated base-metal thickness in mils or decimal inches; the minimum yield strength; and the coating grade [at least G40 (Z120) for nonstructural members and at least G60 (Z180) or AZ50 (AZM150) for structural members.

7.2 The report holder's contact information is the following:

AMERICA-CHINA STEEL FRAMING ASSOCIATION (ACSFA)
950 EAST STATE HIGHWAY 114
SUITE 160
SOUTHLAKE, TEXAS 76092
(817) 873-9631
www.acsfa.org
ylee@acsfa.org

7.3 The additional listee's contact information is the following:

XIAMEN DAHEZHONGBANG CONSTRUCTION ENGINEERING TECHNOLOGY SERVICES CO., LTD.
585 TIESHAN ROAD, A2
XIAGONG MACHINERY PARK,
JIMEI DISTRICT
XIAMEN, FUJIAN 361023
CHINA
+86 138 5990 5957
roger.ding@dahezb.com
www.housebuilding.cn

Definitions of symbols for use with Tables 1 through 4:

F_y : Yield Strength
 L_u : Critical Unbraced Length for lateral-torsional buckling. Members are considered fully braced when unbraced length is less than L_u .
 K_ϕ : Distortional buckling moment (M_{ad}) is calculated without the beneficial effect of sheathing to rotational stiffness, $K_\phi = 0$.

Gross Properties

A_r : The cross-sectional area of the full unreduced cross-section of the studs, away from the punch-outs.
Weight: The weight per foot of the full unreduced cross-section of the studs, away from the punch-outs.
 I_x : Moment of inertia of the gross section about the strong axis (X-X).
 R_x : Radius of gyration of the gross section about the X-X axis.
 S_x : Gross section-modulus about the strong axis (X-X).
 I_y : Moment of inertia of the gross section about the weak axis (Y-Y).
 R_y : Radius of gyration of the gross section about the Y-Y axis.
 t : Design base metal thickness.

Effective Properties

I_{ex} : Effective moment of inertia about the strong axis (X-X).
 S_{ex} : Effective section-modulus about the strong axis (X-X).
 M_{al} : Allowable bending moment based on local buckling.
 M_{ad} : Allowable bending moment based on distortional buckling, assuming $K_\phi = 0$.
 V_{ag} : Allowable strong axis shear away from punch-out.
 V_{anet} : Allowable strong axis shear at punch-out.

Torsional Properties

J : St. Venant torsional constant.
 C_w : Torsional warping constant.
 m : Distance from shear center to mid-plane of web.
 X_o : Distance from the shear center to the centroid along the principal X-axis.
 R_o : Polar radius of gyration about the centroidal principal axis.
 β : Torsional flexural constant: $1 - (X_o / R_o)^2$

TABLE 1A—STRUCTURAL C-SHAPE STUD SECTIONS⁶

SECTION	DEPTH ⁴ (in)	FLANGE (in)	LIP (in)	DESIGN THICK., t ⁵ (in)	SECTION	DEPTH ⁴ (in)	FLANGE (in)	LIP (in)	DESIGN THICK., t ⁵ (in)
250S137-33	2.5	1.375	0.375	0.0346	362S150-27	3.625	1.5	0.375	0.0283
250S137-43	2.5	1.375	0.375	0.0451	362S150-30	3.625	1.5	0.375	0.0312
250S137-54	2.5	1.375	0.375	0.0566	362S162-18	3.625	1.625	0.5	0.0188
250S137-68	2.5	1.375	0.375	0.0713	362S162-27	3.625	1.625	0.5	0.0283
250S137-97	2.5	1.375	0.375	0.1017	362S162-30	3.625	1.625	0.5	0.0312
250S162-33	2.5	1.625	0.5	0.0346	362S162-33	3.625	1.625	0.5	0.0346
250S162-43	2.5	1.625	0.5	0.0451	362S162-43	3.625	1.625	0.5	0.0451
250S162-54	2.5	1.625	0.5	0.0566	362S162-54	3.625	1.625	0.5	0.0566
250S162-68	2.5	1.625	0.5	0.0713	362S162-68	3.625	1.625	0.5	0.0713
250S162-97	2.5	1.625	0.5	0.1017	362S162-97	3.625	1.625	0.5	0.1017
250S200-33	2.5	2	0.625	0.0346	362S200-18 ³	3.625	2	0.625	0.0188
250S200-43	2.5	2	0.625	0.0451	362S200-27	3.625	2	0.625	0.0283
250S200-54	2.5	2	0.625	0.0566	362S200-30	3.625	2	0.625	0.0312
250S200-68	2.5	2	0.625	0.0713	362S200-33	3.625	2	0.625	0.0346
250S200-97	2.5	2	0.625	0.1017	362S200-43	3.625	2	0.625	0.0451
250S250-43	2.5	2.5	0.625	0.0451	362S200-54	3.625	2	0.625	0.0566
250S250-54	2.5	2.5	0.625	0.0566	362S200-68	3.625	2	0.625	0.0713
250S250-68	2.5	2.5	0.625	0.0713	362S200-97	3.625	2	0.625	0.1017
250S250-97	2.5	2.5	0.625	0.1017	400S150-18 ¹	4	1.5	0.375	0.0188
300S137-33	3	1.375	0.375	0.0346	400S150-27	4	1.5	0.375	0.0283
300S137-43	3	1.375	0.375	0.0451	400S150-30	4	1.5	0.375	0.0312
300S137-54	3	1.375	0.375	0.0566	400S137-33	4	1.375	0.375	0.0346
300S137-68	3	1.375	0.375	0.0713	400S137-43	4	1.375	0.375	0.0451
300S137-97	3	1.375	0.375	0.1017	400S137-54	4	1.375	0.375	0.0566
300S162-33	3	1.625	0.5	0.0346	400S137-68	4	1.375	0.375	0.0713
300S162-43	3	1.625	0.5	0.0451	400S137-97	4	1.375	0.375	0.1017
300S162-54	3	1.625	0.5	0.0566	400S162-18 ¹	4	1.625	0.5	0.0188
300S162-68	3	1.625	0.5	0.0713	400S162-27	4	1.625	0.5	0.0283
300S162-97	3	1.625	0.5	0.1017	400S162-30	4	1.625	0.5	0.0312
300S200-33	3	2	0.625	0.0346	400S162-33	4	1.625	0.5	0.0346
300S200-43	3	2	0.625	0.0451	400S162-43	4	1.625	0.5	0.0451
300S200-54	3	2	0.625	0.0566	400S162-54	4	1.625	0.5	0.0566
300S200-68	3	2	0.625	0.0713	400S162-68	4	1.625	0.5	0.0713
300S200-97	3	2	0.625	0.1017	400S162-97	4	1.625	0.5	0.1017
350S137-33	3.5	1.375	0.375	0.0346	400S200-18 ³	4	2	0.625	0.0188
350S137-43	3.5	1.375	0.375	0.0451	400S200-27	4	2	0.625	0.0283
350S137-54	3.5	1.375	0.375	0.0566	400S200-30	4	2	0.625	0.0312
350S137-68	3.5	1.375	0.375	0.0713	400S200-33	4	2	0.625	0.0346
350S137-97	3.5	1.375	0.375	0.1017	400S200-43	4	2	0.625	0.0451
350S162-27	3.5	1.625	0.5	0.0346	400S200-54	4	2	0.625	0.0566
350S162-43	3.5	1.625	0.5	0.0451	400S200-68	4	2	0.625	0.0713
350S162-54	3.5	1.625	0.5	0.0566	400S200-97	4	2	0.625	0.1017
350S162-68	3.5	1.625	0.5	0.0713	550S137-33	5.5	1.375	0.375	0.0346
350S162-97	3.5	1.625	0.5	0.1017	550S137-43	5.5	1.375	0.375	0.0451
350S200-33	3.5	2	0.625	0.0346	550S137-54	5.5	1.375	0.375	0.0566
350S200-43	3.5	2	0.625	0.0451	550S137-68	5.5	1.375	0.375	0.0713
350S200-54	3.5	2	0.625	0.0566	550S137-97	5.5	1.375	0.375	0.1017
350S200-68	3.5	2	0.625	0.0713	550S162-33	5.5	1.625	0.5	0.0346
350S200-97	3.5	2	0.625	0.1017	550S162-43	5.5	1.625	0.5	0.0451
350S250-43	3.5	2.5	0.625	0.0451	550S162-54	5.5	1.625	0.5	0.0566
350S250-54	3.5	2.5	0.625	0.0566	550S162-68	5.5	1.625	0.5	0.0713
350S250-68	3.5	2.5	0.625	0.0713	550S162-97	5.5	1.625	0.5	0.1017
350S250-97	3.5	2.5	0.625	0.1017	550S200-33	5.5	2	0.625	0.0346
362S137-33	3.625	1.375	0.375	0.0346	550S200-43	5.5	2	0.625	0.0451
362S137-43	3.625	1.375	0.375	0.0451	550S200-54	5.5	2	0.625	0.0566
362S137-54	3.625	1.375	0.375	0.0566	550S200-68	5.5	2	0.625	0.0713
362S137-68	3.625	1.375	0.375	0.0713	550S200-97	5.5	2	0.625	0.1017
362S137-97	3.625	1.375	0.375	0.1017	600S137-33	6	1.375	0.375	0.0346
362S150-18	3.625	1.5	0.375	0.0188	600S137-43	6	1.375	0.375	0.0451

(Continued)

TABLE 1A—STRUCTURAL C-SHAPE STUD SECTIONS⁶ (CONTINUED)

SECTION	DEPTH ⁴ (in)	FLANGE (in)	LIP (in)	DESIGN THICK. ⁵ (in)	SECTION	DEPTH ⁴ (in)	FLANGE (in)	LIP (in)	DESIGN THICK. ⁵ (in)
600S137-54	6	1.375	0.375	0.0566	800S200-33 ¹	8	2	0.625	0.0346
600S137-68	6	1.375	0.375	0.0713	800S200-43	8	2	0.625	0.0451
600S137-97	6	1.375	0.375	0.1017	800S200-54	8	2	0.625	0.0566
600S137-118	6	1.375	0.375	0.1242	800S200-68	8	2	0.625	0.0713
600S150-18 ²	6	1.5	0.375	0.0188	800S200-97	8	2	0.625	0.1017
600S150-27 ¹	6	1.5	0.375	0.0283	800S200-118	8	2	0.625	0.1242
600S150-30	6	1.5	0.375	0.0312	1000S162-43 ¹	10	1.625	0.5	0.0451
600S162-18 ²	6	1.625	0.5	0.0188	1000S162-54	10	1.625	0.5	0.0566
600S162-27 ¹	6	1.625	0.5	0.0283	1000S162-68	10	1.625	0.5	0.0713
600S162-30	6	1.625	0.5	0.0312	1000S162-97	10	1.625	0.5	0.1017
600S162-33	6	1.625	0.5	0.0346	1000S162-118	10	1.625	0.5	0.1242
600S162-43	6	1.625	0.5	0.0451	1000S200-43 ¹	10	2	0.625	0.0451
600S162-54	6	1.625	0.5	0.0566	1000S200-54	10	2	0.625	0.0566
600S162-68	6	1.625	0.5	0.0713	1000S200-68	10	2	0.625	0.0713
600S162-97	6	1.625	0.5	0.1017	1000S200-97	10	2	0.625	0.1017
600S162-118	6	1.625	0.5	0.1242	1000S200-118	10	2	0.625	0.1242
600S200-18 ²	6	2	0.625	0.0188	1200S162-54 ¹	12	1.625	0.5	0.0566
600S200-27 ¹	6	2	0.625	0.0283	1200S162-68	12	1.625	0.5	0.0713
600S200-30	6	2	0.625	0.0312	1200S162-97	12	1.625	0.5	0.1017
600S200-33	6	2	0.625	0.0346	1200S162-118	12	1.625	0.5	0.1242
600S200-43	6	2	0.625	0.0451	1200S200-54 ¹	12	2	0.625	0.0566
600S200-54	6	2	0.625	0.0566	1200S200-68	12	2	0.625	0.0713
600S200-68	6	2	0.625	0.0713	1200S200-97	12	2	0.625	0.1017
600S200-97	6	2	0.625	0.1017	1200S200-118	12	2	0.625	0.1242
600S200-118	6	2	0.625	0.1242	1400S162-54 ¹	14	1.625	0.5	0.0566
800S137-33 ¹	8	1.375	0.375	0.0346	1400S162-68	14	1.625	0.5	0.0713
800S137-43	8	1.375	0.375	0.0451	1400S162-97	14	1.625	0.5	0.1017
800S137-54	8	1.375	0.375	0.0566	1400S162-118	14	1.625	0.5	0.1242
800S137-68	8	1.375	0.375	0.0713	1400S200-54 ¹	14	2	0.625	0.0566
800S137-97	8	1.375	0.375	0.1017	1400S200-68	14	2	0.625	0.0713
800S137-118	8	1.375	0.375	0.1242	1400S200-97	14	2	0.625	0.1017
800S162-33 ¹	8	1.625	0.5	0.0346	1400S200-118	14	2	0.625	0.1242
800S162-43	8	1.625	0.5	0.0451	1400S250-54 ¹	14	2.5	0.625	0.0566
800S162-54	8	1.625	0.5	0.0566	1400S250-68	14	2.5	0.625	0.0713
800S162-68	8	1.625	0.5	0.0713	1400S250-97	14	2.5	0.625	0.1017
800S162-97	8	1.625	0.5	0.1017	1400S250-118	14	2.5	0.625	0.1242
800S162-118	8	1.625	0.5	0.1242					

For SI: 1 inch = 25.4 mm.

¹Web height-to-thickness ratio, h/t, exceeds 200 but is less than 260. Web must have bearing stiffeners at all support points and concentrated loads in accordance with AISI S100. No holes or punch-outs are permitted in the web at these locations.

²Web height-to-thickness ratio, h/t, exceeds 300. Allowable design values are outside the scope of this evaluation report and may be determined in accordance with Section B4.2 of AISI100.

³Flange width-to-thickness ratio, b/t, exceeds 90 but is less than 160. Allowable design values are outside the scope of this evaluation report and may be determined by the direct strength method as indicated by AISI S100, Table B4.1-1.

⁴Depth measured from outside face to outside face of flanges.

⁵Members delivered to the jobsite must be a minimum of 95 percent of the design thickness.

⁶The inside corner radius for all members is 0.0787 inches (2 mm).

TABLE 1B—NONSTRUCTURAL C-SHAPE STUD SECTIONS⁶

SECTION	DEPTH ⁴ (in)	FLANGE (in)	LIP (in)	DESIGN THICK. ⁵ (in)	SECTION	DEPTH ⁴ (in)	FLANGE (in)	LIP (in)	DESIGN THICK. ⁵ (in)
162S125-18	1.625	1.25	0.188	0.0188	362S125-43	3.625	1.25	0.188	0.0451
162S125-27	1.625	1.25	0.188	0.0283	362S125-54	3.625	1.25	0.188	0.0566
162S125-30	1.625	1.25	0.188	0.0312	362S125-68	3.625	1.25	0.188	0.0713
162S125-33	1.625	1.25	0.188	0.0346	400S125-18 ¹	4	1.25	0.188	0.0188
250S125-18	2.5	1.25	0.188	0.0188	400S125-27	4	1.25	0.188	0.0283
250S125-27	2.5	1.25	0.188	0.0283	400S125-30	4	1.25	0.188	0.0312
250S125-30	2.5	1.25	0.188	0.0312	400S125-33	4	1.25	0.188	0.0346
250S125-33	2.5	1.25	0.188	0.0346	400S125-43	4	1.25	0.188	0.0451
250S125-43	2.5	1.25	0.188	0.0451	400S125-54	4	1.25	0.188	0.0566
250S125-54	2.5	1.25	0.188	0.0566	400S125-68	4	1.25	0.188	0.0713
250S125-68	2.5	1.25	0.188	0.0713	550S125-18 ²	5.5	1.25	0.188	0.0188
300S125-18	3	1.25	0.188	0.0188	550S125-27	5.5	1.25	0.188	0.0283
300S125-27	3	1.25	0.188	0.0283	550S125-30	5.5	1.25	0.188	0.0312
300S125-30	3	1.25	0.188	0.0312	550S125-33	5.5	1.25	0.188	0.0346
300S125-33	3	1.25	0.188	0.0346	550S125-43	5.5	1.25	0.188	0.0451
300S125-43	3	1.25	0.188	0.0451	550S125-54	5.5	1.25	0.188	0.0566
300S125-54	3	1.25	0.188	0.0566	550S125-68	5.5	1.25	0.188	0.0713
300S125-68	3	1.25	0.188	0.0713	600S125-18 ³	6	1.25	0.188	0.0188
350S125-18	3.5	1.25	0.188	0.0188	600S125-27 ¹	6	1.25	0.188	0.0283
350S125-27	3.5	1.25	0.188	0.0283	600S125-30	6	1.25	0.188	0.0312
350S125-30	3.5	1.25	0.188	0.0312	600S125-33	6	1.25	0.188	0.0346
350S125-33	3.5	1.25	0.188	0.0346	600S125-43	6	1.25	0.188	0.0451
350S125-43	3.5	1.25	0.188	0.0451	600S125-54	6	1.25	0.188	0.0566
350S125-54	3.5	1.25	0.188	0.0566	600S125-68	6	1.25	0.188	0.0713
350S125-68	3.5	1.25	0.188	0.0713	800S125-33 ¹	8	1.25	0.188	0.0346
362S125-18	3.625	1.25	0.188	0.0188	800S125-43	8	1.25	0.188	0.0451
362S125-27	3.625	1.25	0.188	0.0283	800S125-54	8	1.25	0.188	0.0566
362S125-30	3.625	1.25	0.188	0.0312	800S125-68	8	1.25	0.188	0.0713
362S125-33	3.625	1.25	0.188	0.0346					

For S1: 1 inch = 25.4 mm.

¹Web height-to-thickness ratio, h/t, exceeds 200 but is less than 260. Web must have bearing stiffeners at all support points and concentrated loads in accordance with AISI S100. No holes or punch-outs are permitted in the web at these locations.

²Web height-to-thickness ratio, h/t, exceeds 260 but is less than 300. Bearing and intermediate stiffeners must be provided in accordance with AISI S100.

³Web height-to-thickness ratio, h/t, exceeds 300. Allowable design values are outside the scope of this evaluation report and may be determined in accordance with Section B4.2 of AISI100.

⁴Depth measured from outside face to outside face of flanges.

⁵Members delivered to the jobsite must be a minimum of 95 percent of the design thickness.

⁶The inside corner radius for all members is 0.0787 inches (2 mm).

TABLE 2—U-SHAPE TRACK SECTIONS⁵

SECTION	DEPTH ³ (in)	FLANGE (in)	DESIGN THICK. ⁴ (in)	SECTION	DEPTH ³ (in)	FLANGE (in)	DESIGN THICK. ⁴ (in)	SECTION	DEPTH ³ (in)	FLANGE (in)	DESIGN THICK. ⁴ (in)
162T125-18 ²	1.741	1.25	0.0188	250T200-68	2.721	2	0.0713	350T125-18 ²	3.616	1.25	0.0188
162T125-27	1.760	1.25	0.0283	250T200-97	2.782	2	0.1017	350T125-27	3.635	1.25	0.0283
162T125-30	1.766	1.25	0.0312	300T125-18 ²	3.116	1.25	0.0188	350T125-30	3.641	1.25	0.0312
162T125-33	1.773	1.25	0.0346	300T125-27	3.135	1.25	0.0283	350T125-33	3.648	1.25	0.0346
250T125-18 ²	2.616	1.25	0.0188	300T125-30	3.141	1.25	0.0312	350T125-43	3.669	1.25	0.0451
250T125-27	2.635	1.25	0.0283	300T125-33	3.148	1.25	0.0346	350T125-54	3.692	1.25	0.0566
250T125-30	2.641	1.25	0.0312	300T125-43	3.169	1.25	0.0451	350T125-68	3.721	1.25	0.0713
250T125-33	2.648	1.25	0.0346	300T125-54	3.192	1.25	0.0566	350T125-97	3.782	1.25	0.1017
250T125-43	2.669	1.25	0.0451	300T125-68	3.221	1.25	0.0713	350T150-27	3.635	1.5	0.0283
250T125-54	2.692	1.25	0.0566	300T125-97	3.282	1.25	0.1017	350T150-30	3.641	1.5	0.0312
250T125-68	2.721	1.25	0.0713	300T150-27	3.135	1.5	0.0283	350T150-33	3.648	1.5	0.0346
250T125-97	2.782	1.25	0.1017	300T150-30	3.141	1.5	0.0312	350T150-43	3.669	1.5	0.0451
250T150-27	2.635	1.5	0.0283	300T150-33	3.148	1.5	0.0346	350T150-54	3.692	1.5	0.0566
250T150-30	2.641	1.5	0.0312	300T150-43	3.169	1.5	0.0451	350T150-68	3.721	1.5	0.0713
250T150-33	2.648	1.5	0.0346	300T150-54	3.192	1.5	0.0566	350T150-97	3.782	1.5	0.1017
250T150-43	2.669	1.5	0.0451	300T150-68	3.221	1.5	0.0713	350T162-33	3.648	1.625	0.0346
250T150-54	2.692	1.5	0.0566	300T150-97	3.282	1.5	0.1017	350T162-43	3.669	1.625	0.0451
250T150-68	2.721	1.5	0.0713	300T200-33	3.148	2	0.0346	350T162-54	3.692	1.625	0.0566
250T150-97	2.782	1.5	0.1017	300T200-43	3.169	2	0.0451	350T162-68	3.721	1.625	0.0713
250T200-33	2.648	2	0.0346	300T200-54	3.192	2	0.0566	350T200-33	3.648	2	0.0346
250T200-43	2.669	2	0.0451	300T200-68	3.221	2	0.0713	350T200-43	3.669	2	0.0451
250T200-54	2.692	2	0.0566	300T200-97	3.282	2	0.1017	350T200-54	3.692	2	0.0566

(Continued)

TABLE 2—U-SHAPE TRACK SECTIONS⁵ (CONTINUED)

SECTION	DEPTH ³ (in)	FLANGE (in)	DESIGN THICK. ⁴ (in)	SECTION	DEPTH ³ (in)	FLANGE (in)	DESIGN THICK. ⁴ (in)	SECTION	DEPTH ³ (in)	FLANGE (in)	DESIGN THICK. ⁴ (in)
350T200-68	3.721	2	0.0713	550T125-68	5.721	1.25	0.0713	800T200-68	8.221	2	0.0713
350T200-97	3.782	2	0.1017	550T125-97	5.782	1.25	0.1017	800T200-97	8.282	2	0.1017
362T125-18 ²	3.741	1.25	0.0188	550T150-27	5.635	1.5	0.0283	800T200-118	8.327	2	0.1242
362T125-27	3.760	1.25	0.0283	550T150-30	5.641	1.5	0.0312	1000T125-43 ¹	10.169	1.25	0.0451
362T125-30	3.766	1.25	0.0312	550T150-33	5.648	1.5	0.0346	1000T125-54	10.192	1.25	0.0566
362T125-33	3.773	1.25	0.0346	550T150-43	5.669	1.5	0.0451	1000T125-68	10.221	1.25	0.0713
362T125-43	3.794	1.25	0.0451	550T150-54	5.692	1.5	0.0566	1000T125-97	10.282	1.25	0.1017
362T125-54	3.817	1.25	0.0566	550T150-68	5.721	1.5	0.0713	1000T125-118	10.327	1.25	0.1242
362T125-68	3.846	1.25	0.0713	550T150-97	5.782	1.5	0.1017	1000T150-43 ¹	10.169	1.5	0.0451
362T125-97	3.907	1.25	0.1017	550T200-33	5.648	2	0.0346	1000T150-54	10.192	1.5	0.0566
362T150-18 ²	3.741	1.5	0.0188	550T200-43	5.669	2	0.0451	1000T150-68	10.221	1.5	0.0713
362T150-27	3.760	1.5	0.0283	550T200-54	5.692	2	0.0566	1000T150-97	10.282	1.5	0.1017
362T150-30	3.766	1.5	0.0312	550T200-68	5.721	2	0.0713	1000T150-118	10.327	1.5	0.1242
362T150-33	3.773	1.5	0.0346	550T200-97	5.782	2	0.1017	1000T200-43 ¹	10.169	2	0.0451
362T150-43	3.794	1.5	0.0451	600T125-18 ²	6.116	1.25	0.0188	1000T200-54	10.192	2	0.0566
362T150-54	3.817	1.5	0.0566	600T125-27 ¹	6.135	1.25	0.0283	1000T200-68	10.221	2	0.0713
362T150-68	3.846	1.5	0.0713	600T125-30	6.141	1.25	0.0312	1000T200-97	10.282	2	0.1017
362T150-97	3.907	1.5	0.1017	600T125-33	6.148	1.25	0.0346	1000T200-118	10.327	2	0.1242
362T200-18 ²	3.741	2	0.0188	600T125-43	6.169	1.25	0.0451	1000T250-43 ¹	10.169	2.5	0.0451
362T200-27 ²	3.760	2	0.0283	600T125-54	6.192	1.25	0.0566	1000T250-54	10.192	2.5	0.0566
362T200-30 ²	3.766	2	0.0312	600T125-68	6.221	1.25	0.0713	1000T250-68	10.221	2.5	0.0713
362T200-33	3.773	2	0.0346	600T125-97	6.282	1.25	0.1017	1000T250-97	10.282	2.5	0.1017
362T200-43	3.794	2	0.0451	600T125-118	6.327	1.25	0.1242	1000T250-118	10.327	2.5	0.1242
362T200-54	3.817	2	0.0566	600T150-18 ²	6.116	1.5	0.0188	1200T125-54 ¹	12.192	1.25	0.0566
362T200-68	3.846	2	0.0713	600T150-27 ¹	6.135	1.5	0.0283	1200T125-68	12.221	1.25	0.0713
362T200-97	3.907	2	0.1017	600T150-30	6.141	1.5	0.0312	1200T125-97	12.282	1.25	0.1017
400T125-18 ²	4.116	1.25	0.0188	600T150-33	6.148	1.5	0.0346	1200T125-118	12.327	1.25	0.1242
400T125-27	4.135	1.25	0.0283	600T150-43	6.169	1.5	0.0451	1200T150-54 ¹	12.192	1.5	0.0566
400T125-30	4.141	1.25	0.0312	600T150-54	6.192	1.5	0.0566	1200T150-68	12.221	1.5	0.0713
400T125-33	4.148	1.25	0.0346	600T150-68	6.221	1.5	0.0713	1200T150-97	12.282	1.5	0.1017
400T125-43	4.169	1.25	0.0451	600T150-97	6.282	1.5	0.1017	1200T150-118	12.327	1.5	0.1242
400T125-54	4.192	1.25	0.0566	600T150-118	6.327	1.5	0.1242	1200T200-54 ¹	12.192	2	0.0566
400T125-68	4.221	1.25	0.0713	600T200-18 ²	6.116	2	0.0188	1200T200-68	12.221	2	0.0713
400T125-97	4.282	1.25	0.1017	600T200-27 ²	6.135	2	0.0283	1200T200-97	12.282	2	0.1017
400T150-18 ²	4.116	1.5	0.0188	600T200-30 ²	6.141	2	0.0312	1200T200-118	12.327	2	0.1242
400T150-27	4.135	1.5	0.0283	600T200-33	6.148	2	0.0346	1200T250-54 ¹	12.192	2.5	0.0566
400T150-30	4.141	1.5	0.0312	600T200-43	6.169	2	0.0451	1200T250-68	12.221	2.5	0.0713
400T150-33	4.148	1.5	0.0346	600T200-54	6.192	2	0.0566	1200T250-97	12.282	2.5	0.1017
400T150-43	4.169	1.5	0.0451	600T200-68	6.221	2	0.0713	1200T250-118	12.327	2.5	0.1242
400T150-54	4.192	1.5	0.0566	600T200-97	6.282	2	0.1017	1400T125-54 ¹	14.192	1.25	0.0566
400T150-68	4.221	1.5	0.0713	600T200-118	6.327	2	0.1242	1400T125-68	14.221	1.25	0.0713
400T150-97	4.282	1.5	0.1017	800T125-33 ¹	8.148	1.25	0.0346	1400T125-97	14.282	1.25	0.1017
400T200-18 ²	4.116	2	0.0188	800T125-43	8.169	1.25	0.0451	1400T125-118	14.327	1.25	0.1242
400T200-27 ²	4.135	2	0.0283	800T125-54	8.192	1.25	0.0566	1400T150-54 ¹	14.192	1.5	0.0566
400T200-30 ²	4.141	2	0.0312	800T125-68	8.221	1.25	0.0713	1400T150-68	14.221	1.5	0.0713
400T200-33	4.148	2	0.0346	800T125-97	8.282	1.25	0.1017	1400T150-97	14.282	1.5	0.1017
400T200-43	4.169	2	0.0451	800T125-118	8.327	1.25	0.1242	1400T150-118	14.327	1.5	0.1242
400T200-54	4.192	2	0.0566	800T150-33 ¹	8.148	1.5	0.0346	1400T200-54 ¹	14.192	2	0.0566
400T200-68	4.221	2	0.0713	800T150-43	8.169	1.5	0.0451	1400T200-68	14.221	2	0.0713
400T200-97	4.282	2	0.1017	800T150-54	8.192	1.5	0.0566	1400T200-97	14.282	2	0.1017
550T125-18 ²	5.616	1.25	0.0188	800T150-68	8.221	1.5	0.0713	1400T200-118	14.327	2	0.1242
550T125-27	5.635	1.25	0.0283	800T150-97	8.282	1.5	0.1017	1400T250-54 ¹	14.192	2.5	0.0566
550T125-30	5.641	1.25	0.0312	800T150-118	8.327	1.5	0.1242	1400T250-68	14.221	2.5	0.0713
550T125-33	5.648	1.25	0.0346	800T200-33 ¹	8.148	2	0.0346	1400T250-97	14.282	2.5	0.1017
550T125-43	5.669	1.25	0.0451	800T200-43	8.169	2	0.0451	1400T250-118	14.327	2.5	0.1242
550T125-54	5.692	1.25	0.0566	800T200-54	8.192	2	0.0566				

For SI: 1 inch = 25.4 mm.

¹Web height-to-thickness ratio, h/t, exceeds 200 but is less than 260. Web must have bearing stiffeners at all support points and concentrated loads in accordance with AISI S100.
²Web height-to-thickness ratio, h/t, exceeds 300 or flange width-to-thickness ratio, b/t, exceeds 60. Allowable design values are outside the scope of this evaluation report and may be determined in accordance with Section B4.2 of AISI100.
³Depth measured from outside face to outside face of flanges.
⁴Delivered members to the jobsite must be a minimum of 95 percent of the design thickness.
⁵The inside corner radius for all members is 0.0787 inches (2 mm).

TABLE 3A—STRUCTURAL C-SHAPE STUD SECTION PROPERTIES⁴ (CONTINUED)

Table with 23 columns: Section, Fy6 (ksi), Gross Properties (Ar, Wt, lx, Sx, Rx, ly, Ry), Effective Properties (Iox5, Sex, Mal, Mad, Vag, Vanel), Torsional Properties (Jx100, Cw, X0, m, Ro, beta), and Lu (in). Rows include section types like 400S162-181, 550S137-33, etc.

(Continued)

TABLE 3B—NONSTRUCTURAL C-SHAPE STUD SECTION PROPERTIES⁴ (CONTINUED)

Section	F _y ⁶ (ksi)	Gross Properties							Effective Properties						Torsional Properties					L _u (in)	
		A _r	Wt.	I _x	S _x	R _x	I _y	R _y	I _{ex} ⁵	S _{ex}	M _{al}	M _{ad}	V _{ag}	V _{anet}	Jx1000	C _w	X _o	m	R _o		β
		(in ²)	(lb/ft)	(in ⁴)	(in ³)	(in)	(in ⁴)	(in)	(in ⁴)	(in ³)	(in-k)	(in-k)	(lb)	(lb)	(in ⁴)	(in ⁶)	(in)	(in)	(in)		
600S125-43	33	0.384	1.31	1.813	0.604	2.172	0.052	0.369	1.729	0.553	10.93	9.45	1419	1239	0.261	0.379	-0.598	0.393	2.282	0.931	27.3
600S125-54	33	0.479	1.63	2.242	0.747	2.163	0.063	0.363	2.207	0.728	14.38	13.23	2740	1896	0.512	0.457	-0.587	0.386	2.271	0.933	27.1
600S125-54	50	0.479	1.63	2.242	0.747	2.163	0.063	0.363	2.121	0.677	20.26	17.41	2816	1949	0.512	0.457	-0.587	0.386	2.271	0.933	21.9
600S125-68	33	0.599	2.04	2.773	0.924	2.152	0.075	0.355	2.772	0.924	18.26	18.26	4348	2371	1.014	0.549	-0.573	0.378	2.255	0.936	26.8
600S125-68	50	0.599	2.04	2.773	0.924	2.152	0.075	0.355	2.744	0.909	27.20	24.65	5352	2919	1.014	0.549	-0.573	0.378	2.255	0.936	21.6
800S125-33 ¹	33	0.366	1.24	2.881	0.720	2.806	0.044	0.347	2.392	0.516	10.19	8.22	474	474	0.146	0.583	-0.519	0.350	2.875	0.967	26.6
800S125-43	33	0.475	1.61	3.714	0.929	2.798	0.055	0.342	3.374	0.774	15.30	12.55	1053	1053	0.322	0.735	-0.510	0.344	2.864	0.968	26.3
800S125-54	33	0.592	2.01	4.605	1.151	2.788	0.067	0.336	4.355	1.036	20.47	17.93	2088	2088	0.633	0.890	-0.500	0.338	2.853	0.969	26.0
800S125-54	50	0.592	2.01	4.605	1.151	2.788	0.067	0.336	4.150	0.950	28.45	23.26	2088	2088	0.633	0.890	-0.500	0.338	2.853	0.969	21.1
800S125-68	33	0.741	2.52	5.712	1.428	2.776	0.080	0.328	5.632	1.389	27.45	25.49	4189	3373	1.256	1.069	-0.487	0.330	2.838	0.971	25.7
800S125-68	50	0.741	2.52	5.712	1.428	2.776	0.080	0.328	5.436	1.300	38.92	33.59	4189	3373	1.256	1.069	-0.487	0.330	2.838	0.971	20.8

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

¹Web height-to-thickness ratio, h/t, exceeds 200 but is less than 260. Web must have bearing stiffeners at all support points and concentrated loads in accordance with AISI S100. No holes or punch-outs are permitted in the web at these locations.

²Web height-to-thickness ratio, h/t, exceeds 260 but is less than 300. Bearing and intermediate stiffeners must be provided in accordance with AISI S100.

³Web height-to-thickness ratio, h/t, exceeds 300. Allowable design values are outside the scope of this evaluation report and may be determined in accordance with Section B4.2 of AISI100.

⁴All properties are based on the full-unreduced cross section of the studs, away from web punch-outs, except for V_{anet}.

⁵Use the effective moment of inertia for deflection calculations. The calculated deflection will be for studs without punch-outs.

⁶Values for members with F_y=33ksi apply to members made from Q235 steel. Values for members with F_y=50ksi apply to members made from Q345 and S350GD steels.

TABLE 4—U-SHAPE TRACK SECTION PROPERTIES (CONTINUED)

Section	Gross Properties							33ksi Effective Properties ⁴				50ksi Effective Properties ⁵				Torsional Properties					
	A _r	Wt.	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	I _{ex} ³ (in ⁴)	S _{ex} (in ³)	M _{al} (in-k)	V _{ag} (lb)	I _{ex} ³ (in ⁴)	S _{ex} (in ³)	M _{al} (in-k)	V _{ag} (lb)	Jx1000 (in ⁴)	C _w (in ⁶)	X _o (in)	m (in)	R _o (in)	β
1200T150-97	1.522	5.18	25.837	4.207	4.120	0.176	0.340	24.985	3.954	78.14	7852	23.426	3.545	106.12	7852	5.248	5.262	-0.442	0.302	4.158	0.989
1200T150-118	1.858	6.32	31.555	5.120	4.121	0.211	0.337	31.517	5.110	100.98	13193	30.521	4.811	144.06	14301	9.552	6.317	-0.436	0.298	4.158	0.989
1200T200-54 ¹	0.905	3.08	16.460	2.700	4.265	0.236	0.510	12.002	1.612	31.85	1354	11.028	1.409	42.18	1354	0.966	6.706	-0.730	0.487	4.357	0.972
1200T200-68	1.139	3.87	20.743	3.395	4.267	0.294	0.508	16.684	2.372	46.87	2706	15.322	2.068	61.92	2706	1.931	8.386	-0.725	0.484	4.358	0.972
1200T200-97	1.624	5.52	29.609	4.822	4.270	0.410	0.503	27.301	4.219	83.38	7852	25.364	3.733	111.77	7852	5.599	11.781	-0.715	0.477	4.359	0.973
1200T200-118	1.982	6.74	36.179	5.870	4.273	0.493	0.499	35.454	5.693	112.49	13193	33.371	5.138	153.84	14301	10.191	14.224	-0.708	0.473	4.359	0.974
1200T250-54 ¹	0.961	3.27	18.544	3.042	4.392	0.445	0.681	12.663	1.651	32.62	1354	11.604	1.440	43.11	1354	1.027	12.325	-1.039	0.680	4.564	0.948
1200T250-68	1.211	4.12	23.374	3.825	4.394	0.556	0.678	17.683	2.441	48.24	2706	16.176	2.120	63.46	2706	2.052	15.445	-1.034	0.676	4.565	0.949
1200T250-97	1.726	5.87	33.381	5.436	4.398	0.780	0.672	29.227	4.398	86.90	7852	26.993	3.861	115.59	7852	5.949	21.794	-1.023	0.670	4.566	0.950
1200T250-118	2.106	7.16	40.803	6.620	4.402	0.941	0.668	38.255	6.001	118.59	13193	35.734	5.357	160.38	14301	10.830	26.401	-1.015	0.665	4.566	0.951
1400T125-54 ¹	0.933	3.17	19.979	2.816	4.627	0.061	0.256	15.528	1.824	36.04	1159	14.416	1.615	48.36	1159	0.996	2.557	-0.299	0.209	4.644	0.996
1400T125-68	1.175	4.00	25.162	3.539	4.628	0.076	0.254	21.321	2.641	52.20	2317	19.782	2.335	69.90	2317	1.991	3.175	-0.296	0.206	4.644	0.996
1400T125-97	1.675	5.69	35.874	5.024	4.628	0.104	0.249	33.622	4.460	88.14	6724	32.100	4.105	122.90	6724	5.774	4.394	-0.289	0.202	4.644	0.996
1400T125-118	2.044	6.95	43.794	6.114	4.629	0.124	0.246	42.647	5.823	115.07	12246	40.991	5.416	162.15	12246	10.510	5.245	-0.284	0.198	4.644	0.996
1400T150-54 ¹	0.961	3.27	21.392	3.015	4.717	0.105	0.330	16.130	1.870	36.94	1159	14.933	1.650	49.41	1159	1.027	4.276	-0.411	0.283	4.746	0.993
1400T150-68	1.211	4.12	26.947	3.790	4.718	0.130	0.328	22.252	2.725	53.84	2317	20.562	2.396	71.72	2317	2.052	5.325	-0.407	0.280	4.747	0.993
1400T150-97	1.726	5.87	38.430	5.382	4.719	0.180	0.323	36.056	4.785	94.55	6724	33.657	4.262	127.59	6724	5.949	7.416	-0.399	0.275	4.747	0.993
1400T150-118	2.106	7.16	46.926	6.551	4.720	0.215	0.319	45.786	6.257	123.64	12246	44.024	5.822	174.30	12246	10.830	8.896	-0.394	0.272	4.747	0.993
1400T200-54 ¹	1.018	3.46	24.220	3.413	4.878	0.242	0.487	17.155	1.935	38.23	1159	15.828	1.701	50.94	1159	1.087	9.511	-0.665	0.449	4.947	0.982
1400T200-68	1.282	4.36	30.516	4.292	4.879	0.301	0.485	23.805	2.840	56.12	2317	21.888	2.481	74.29	2317	2.173	11.888	-0.661	0.446	4.947	0.982
1400T200-97	1.827	6.21	43.543	6.098	4.882	0.420	0.480	39.114	5.083	100.44	6724	36.208	4.474	133.96	6724	6.300	16.684	-0.652	0.440	4.948	0.983
1400T200-118	2.230	7.58	53.190	7.425	4.883	0.505	0.476	51.087	6.927	136.88	12246	47.787	6.189	185.30	12246	11.468	20.129	-0.645	0.436	4.949	0.983
1400T250-54 ¹	1.075	3.65	27.047	3.812	5.017	0.458	0.653	18.034	1.981	39.14	1159	16.603	1.739	52.06	1159	1.148	17.533	-0.955	0.633	5.148	0.966
1400T250-68	1.353	4.60	34.085	4.794	5.019	0.573	0.651	25.119	2.919	57.68	2317	23.020	2.542	76.10	2317	2.293	21.962	-0.950	0.630	5.149	0.966
1400T250-97	1.929	6.56	48.655	6.814	5.022	0.803	0.645	41.644	5.283	104.39	6724	38.342	4.618	138.27	6724	6.651	30.960	-0.940	0.623	5.150	0.967
1400T250-118	2.355	8.01	59.453	8.299	5.025	0.968	0.641	54.781	7.272	143.71	12246	50.891	6.435	192.66	12246	12.107	37.480	-0.932	0.618	5.151	0.967

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

¹Web height-to-thickness ratio, h/t, exceeds 200 but is less than 260. Web must have bearing stiffeners at all support points and concentrated loads in accordance with AISI S100.

²Web height-to-thickness ratio, h/t, exceeds 300 or flange width-to-thickness ratio, b/t, exceeds 60. Allowable design values are outside the scope of this evaluation report and may be determined in accordance with Section B4.2 of AISI100.

³Use the effective moment of inertia for deflection calculations.

⁴Values for members with F_y=33ksi apply to members made from Q235 steel.

⁵Values for members with F_y=50ksi apply to members made from Q345 and S350GD steels.

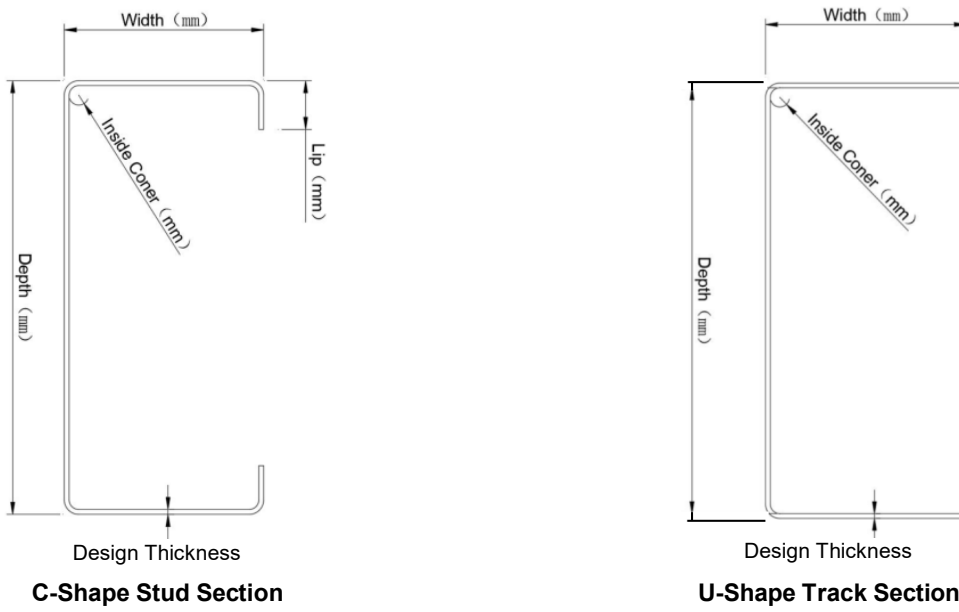


FIGURE 1—STUD AND TRACK PROFILES

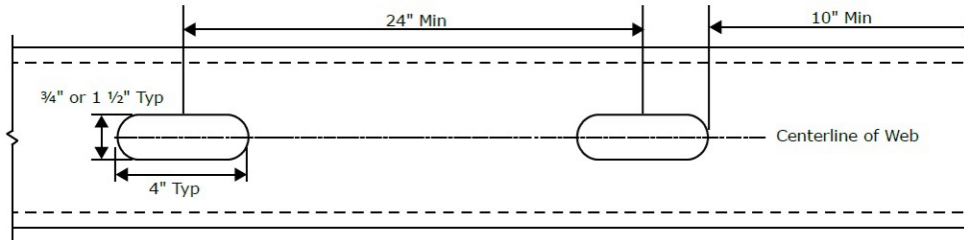


FIGURE 2—PUNCH-OUTS (STUDS ONLY)

DIVISION: 05 00 00—METALS

Section: 05 40 00— Cold-Formed Metal Framing

Section: 05 41 00—Structural Metal Stud Framing

DIVISION: 09 00 00—FINISHES

Section: 09 22 16.13—Non-Structural Metal Stud Framing

REPORT HOLDER:

AMERICA-CHINA STEEL FRAMING ASSOCIATION (ACSFA)

EVALUATION SUBJECT:

COLD-FORMED STEEL FRAMING MEMBERS

1.0 REPORT PURPOSE AND SCOPE**Purpose:**

The purpose of this evaluation report supplement is to indicate that the Cold-Formed Steel Framing Members, described in ICC-ES evaluation report ESR-4540, have also been evaluated for compliance with the code noted below.

Applicable code edition:

- 2019 *California Building Code* (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) and Division of State Architect (DSA), see Sections 2.1 and 2.2 below.

2.0 CONCLUSIONS

The Cold-Formed Steel Framing Members, described in Sections 2.0 through 7.0 of the evaluation report ESR-4540, comply with CBC Chapter 22, provided the design and installation are in accordance with the 2018 *International Building Code*® (IBC) provisions noted in the evaluation report and the additional requirements of the CBC Chapters 16, 17 and 22, as applicable.

2.1 OSHPD: The applicable OSHPD Sections of the CBC are beyond the scope of this supplement.

2.2 DSA: The applicable DSA Sections of the CBC are beyond the scope of this supplement.

This supplement expires concurrently with the evaluation report, reissued September 2024.