ICC-ES Evaluation Report

ESR-5100

Reissued July 2024

Subject to renewal July 2025

This report also contains:

- LABC Supplement

- FBC Supplement

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DIVISION: 05 00 00 – METALS Section: 05 12 00 – Structural Steel Framing Section: 05 59 00 – Metal Specialties	REPORT HOLDER: SIMPSON STRONG-TIE COMPANY INC.	EVALUATION SUBJECT: EDGE-TIE SYSTEM	

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2021, 2018, 2015, and 2012 *International Building Code*® (IBC)
- 2021, 2018, 2015, and 2012 *International Residential Code*® (IRC)

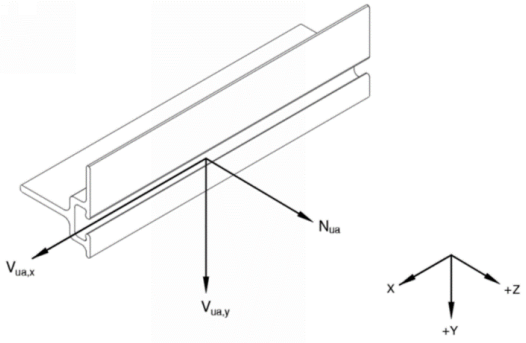
For evaluation for compliance with codes adopted by Los Angeles Department of Building and Safety (LADBS), see ESR-5100 LABC and LARC Supplement.

Property evaluated:

- Structural

2.0 USES

The Simpson Strong-Tie Edge-Tie System is used as a structural cladding support system.



Tension/Compression Load (N_{ua}): ±z-direction (In direction of channel bolt)

Shear Load ($V_{ua,y}$): ±y-direction (Perpendicular to longitudinal axis of channel)

Shear Load ($V_{ua,x}$): ±x-direction (In longitudinal axis of channel)

FIGURE 2-1 — LOAD DIRECTIONS COVERED BY THIS REPORT

The system consists of the Edge-Tie Channel (EDGTS-CH-572) with Edge-Tie T-Bolts (EDGTS-TB) which interlock with the channel slot, to facilitate the connection of appropriate attachments. Edge-Tie System is designed to resist static, wind, and seismic (IBC Seismic Design Categories A through F) tension and compression loads (N_{ua}) and shear loads perpendicular to the longitudinal channel axis ($V_{ua,y}$), shear loads acting in the direction of the longitudinal channel axis ($V_{ua,x}$) or any combination of these loads applied at the connection as illustrated in Figure 2-1 of this report. The Edge-Tie System may also be used where an engineered design is submitted in accordance with Section R301.1.3 of the IRC.

3.0 DESCRIPTION

3.1 General:

The Edge-Tie System consists of a section manufactured from structural steel that has a continuous channel slot with a vertical and horizontal leg to facilitate installation to the support element, and proprietary bolts within the channel slot that facilitate the connection of the cladding support system. The typical dimensions of Edge-Tie System are given in Figure 3-1 of this report. The Edge-Tie Channel is made of ASTM A572 structural steel. The Edge-Tie Channel and section properties are shown in Figure 3-2 and Table 8-2 of this report, respectively. Edge-Tie T-Bolts fit within the channel slot and are rotated into place to provide a consistent interlock and load transfer mechanism to the Edge-Tie Channel. The longitudinal distance between the ends of the Edge-Tie Channel and the nearest T-Bolt must be greater than or equal to 2 in (50.8 mm). Edge-Tie T-Bolts are manufactured in accordance with ASTM A449, Type 1 – carbon steel requirements. The Edge-Tie T-Bolts are illustrated in Figure 3-2 of this report.

3.2 Materials:

Steel specifications for the Edge-Tie Channel, Edge-Tie T-Bolts and matching nuts and washers of the channel bolts are given in Table 8-1 of this report. Hex nut and washer material type and grade must match the channel bolts.

4.0 DESIGN AND INSTALLATION

4.1 General:

Edge-Tie T-Bolt(s) of the Edge-Tie System must be used to transmit tensile loads, compressive loads, shear loads perpendicular to the longitudinal channel axis, shear loads acting in the direction of the longitudinal channel axis, or any combination of these loads applied at any location on the Edge-Tie Channel in accordance with Figure 2-1. Transfer of tension loads takes place via interlock between the Edge-Tie T-Bolt and the Edge-Tie Channel lips and bending of channel, that is resolved into the supporting members. Shear loads perpendicular to the longitudinal channel axis are transferred by the Edge-Tie T-Bolt in bearing with the channel lips and bending of the channel, that are resolved into the supporting members. Shear loads acting in the direction of the longitudinal channel axis are transferred from the Edge-Tie T-Bolt to the Edge-Tie Channel through friction by means of pretensioning and serrations on the face of the T-Bolt heads.

The applicable nominal strength of the Edge-Tie Channel and Edge-Tie T-Bolts are provided in Table 8-3, Table 8-4, Table 8-5 and Table 8-6 of this report. The design of connections of the Edge-Tie Channel to the supporting structure must be prepared by a registered design professional.

4.2 Steel Design of Edge-Tie System:

4.2.1 Flexural Design: The Edge-Tie Channel must be designed for all applicable flexural stresses that may occur from applied loads, per Chapter F of ANSI/AISC 360.

Since the Edge-Tie Channel has a non-symmetrical cross section, flexural analysis for any unbraced length must be based on the principal axes of the section. Bending moments about the global Y and Z axes must be resolved into components along two principal (major and minor) axes and design must account for biaxial bending using the interaction equations in Chapter H of ANSI/AISC 360.

For unbraced lengths that cause lateral-torsional buckling prior to yielding, the buckling stress must be determined per Chapter F, Section 10.2, of ANSI/AISC 360. Leg local buckling due to flexural stress must also be analyzed per Chapter F, Section 10.3 of ANSI/AISC 360, when applicable.

The maximum unbraced length for the Edge-Tie Channel must not exceed 60 in. (1524 mm) when connected between steel outrigger supports.

4.2.2 Shear Design: The Edge-Tie Channel must be designed for all applicable shear stresses that may occur from applied loads, per Chapter G of ANSI/AISC 360. Only the portions of the section contributing to the shear resistance in a given direction must be included in the analysis.

4.2.3 Axial Design: The Edge-Tie Channel may develop axial stress when resisting shear loads acting along the longitudinal axis of the channel slot. When such a loading occurs, the channel must be designed for axial compression per Chapter E of ANSI/AISC 360 and/or axial tension per Chapter D of ANSI/AISC 360.

4.2.4 Design for Combined Loading: The analysis for combined loading interactions, per Chapter H2 of ANSI/AISC 360 must be performed when the Edge-Tie Channel is subjected to simultaneous loadings.

4.3 Design to Supporting Structure:

The Edge-Tie Channel can be attached to the supporting structural steel directly or using steel outrigger supports as shown in Figure 4-1. The Edge-Tie Channel can also be attached to other supporting elements like mass timber and concrete as shown in Figure 4-2.

4.3.1 Local Leg Bending and Shear: The local bending stresses and shear transfer within the Edge-Tie Channel at the connection to supports must be designed per Chapter J of ANSI/AISC 360.

4.3.2 Bearing Strength of Edge-Tie Channel & Support: The local bearing stresses must be analyzed in both the Edge-Tie Channel and the supporting material per the applicable design standards based on the materials involved and the load transfer mechanism.

4.3.3 Fastener, Bolt, Weld or Other Connecting Element Design: All connecting elements must be designed per applicable design standards based on the elements and the materials involved in the load transfer from the channel to the supporting material. All applied loads, acting simultaneously as applicable, along with any additional stresses from connection eccentricities must be included in the design of the connecting elements.

4.4 Installation:

Edge-Tie Channel installation parameters are provided in Table 8-3 and Table 8-4 of this report. Edge-Tie Channel and T-Bolt locations must comply with this report and the plans and specifications approved by the building official. Installation of the channel and T-Bolts must conform to the manufacturer's printed installation instructions (MPII) included in each shipment, as provided in Figure 4-3 of this report. Minimum end distances and bolt spacing must be measured per additional details provided in Figure 4-4 of this report.

4.5 Special Inspection:

Inspections must be performed as required in accordance with Section 1705.1.1 of the IBC, Section N5 of ANSI/AISC 360, and ANSI/AISC 348 (Section 9 of RCSC, *Specification for structural joints using High-Strength Bolts*) in accordance with this report. The Edge-Tie System must be inspected per inspection procedures provided by the manufacturer to verify proper

5.0 CONDITIONS OF USE:

The Edge-Tie System described in this report is a suitable alternative to what is specified in the codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 The Edge-Tie Channel and Edge-Tie T-Bolts are evaluated for use to resist static short- and long-term loads, including wind and seismic loads (IBC Seismic Design Categories A through F), subject to the conditions of this report.

5.2 The Edge-Tie Channel and Edge-Tie T-Bolts must be installed in accordance with the manufacturer's printed installation instructions (MPII), as included in the shipment and as shown in Figure 4-3 of this report.

5.3 Evaluation and design of attached fixtures and the capacity of the supporting elements are outside the scope of this report.

5.4 The connection of the Edge-Tie Channel to the supporting structure must be designed per Section 4.3 of this report by a registered design professional.

5.5 Bending strength design values must be established in accordance with Section 4.2.1 of this report. Shear and axial strength design values must be established in accordance with Section 4.2.2 and Section 4.2.3 of this report respectively.

5.6 Installation conditions that induce global torsional bending within the Edge-Tie Channel between the supporting members (due to eccentric loads, fixture installation, or any other mechanism) are beyond the scope of this report.

5.6.1 When transferring only shear and axial loads through a fixture designed for such loads, installations with a shim space (dimension between the inside face of fixture and the outside face of channel) of 0.25 in. or less and fixture thicknesses of 0.5 in. or less can assume negligible torsional effects.

5.7 The Edge-Tie System design and detailing for a specific project must be performed and/or reviewed by a registered design professional in accordance with this report and the applicable codes and is subject to the approval of the authority having jurisdiction.

5.8 Installations must be performed in accordance with Section 4.4 of this report and the approved construction documents, as prepared by a registered design professional and approved by the authority having jurisdiction.

5.9 Evaluation for use of the Edge-Tie System in fire-resistive construction is beyond the scope of this report.

5.10 Evaluation for the use of the Edge-Tie System under fatigue or shock loading is beyond the scope of this report.

5.11 Special inspection must be provided in accordance with Section 4.5 of this report.

5.12 Manufacturing of the Edge-Tie Channel and Edge-Tie T-Bolts is not recognized under this ICC-ES Evaluation Report until the manufacturing locations are qualified and under an inspection program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

Data in accordance with ICC-ES Acceptance Criteria for Steel Channel Slot Cladding Support Systems (AC541), dated October 2022.

7.0 IDENTIFICATION

7.1 The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-5100) along with the name, registered trademark, or registered logo of the report holder, Simpson Strong-Tie Company Inc., must be included in the product label.

7.2 The Edge-Tie Channels bundles are identified by labels with the manufacturer's name, model number, and lot number. Each channel is identified using dot-peen marking with the manufacturer's branding, model number, evaluation report number and lot number.

7.3 The Edge-Tie T-Bolts are identified by packaging labeled with the manufacturer's name, bolt type, bolt diameter, length and bolt grade. The bolt grade and registered logo of the report holder is embossed on the top of the head of the T-Bolt.

7.4 The report holder's contact information is as follows:

SIMPSON STRONG-TIE COMPANY INC.
5956 WEST LAS POSITAS BOULEVARD
PLEASANTON, CALIFORNIA 94588
(800) 999-5099
www.strongtie.com

NOTATIONS

Equations are provided in units of inches and pounds. For convenience, SI (metric) units are provided in parentheses where appropriate. Unless otherwise noted, values in SI units must be not used in equations without conversion to units of inches and pounds.

A_g = Gross cross-sectional area of Edge-Tie Channel, as shown in Figure 3-1 of this report, in^2. (mm^2)

b_{cm} = Overall width of Edge-Tie Channel, as shown in Figure 3-1 of this report, in. (mm)

b_{cs} = Width of Edge-Tie Channel slot, center-to-center of steel legs, per Figure 3-1 of this report, in. (mm)

d_s = Diameter of channel boll, as shown in Figure 3-1 of this criteria, in. (mm)

f_{utc} = Specified ultimate tensile strength of Edge-Tie Channel, psi (MPa)

f_{utb} = Specified ultimate tensile strength of Edge-Tie T-Bolt, psi (MPa)

f_y = Specified yield strength of steel, psi (MPa)

f_{yb} = Specified yield strength of Edge-Tie T-Bolt, psi (MPa)

f_{yc} = Specified yield strength of channel slot member, psi (MPa)

h_{cm} = Height of Edge-Tie Channel, as shown in Figure 3-1 of this criteria, in. (mm)

I_x = Moment of Inertia about minor geometric axis of Edge-Tie Channel, in^4. (mm^4)

I_y = Moment of Inertia about major geometric axis of Edge-Tie Channel, in^4. (mm^4)

$M_{s,flex,w}$ = Max. nominal flexural strength of the Edge-Tie Channel about major principal axis, lbf-in. (Nm)

$M_{s,flex,z}$ = Max. nominal flexural strength of the Edge-Tie Channel about minor principal axis, lbf-in. (Nm)

$M_{s,s}$ = Flexural strength of the Edge-Tie T-Bolt, lbf-in. (Nm)

$M^0_{s,s}$ = Nominal flexural strength of the Edge-Tie T-Bolt, lbf-in. (Nm)

N_{sl} = Nominal tensile strength of the local bending of Edge-Tie Channel lips, lbf. (N)

$N_{sl,seis}$ = Nominal seismic tensile strength of the local bending of Edge-Tie Channel lips, lbf. (N)

N_{ua} = Ultimate tension or compression load per Edge-Tie T-Bolt, lbf. (N)

r_z = Radius of gyration of the Edge-Tie Channel along minor principal axis, in. (mm)

s_{chb} = Center-to-center distance between T-Bolts in direction of longitudinal axis of channel slot, in. (mm)

$s_{chb,cr}$ = Center-to-center distance between T-Bolts required to develop full capacity of channel lips, in. (mm)

$s_{chb,min}$ = Center-to-center distance between T-Bolts as specified by the manufacturer, in. (mm)

S_{chb} = Elastic section modulus of Edge-Tie T-Bolt, in^3. (mm^3)

$S_{ch,z}$ = Elastic section modulus of Edge-Tie Channel along principal minor axis, in^3. (mm^3)

$S_{ch,w}$ = Elastic section modulus of Edge-Tie Channel along principal major axis, in^3. (mm^3)

T_{inst} = Suggested installation torque moment per manufacturer's installation instructions, lbf-in. (Nm)

$t_{leg,h}$ = Thickness of Edge-Tie Channel horizontal leg, in. (mm)

$t_{leg,v}$ = Thickness of Edge-Tie Channel vertical leg, in. (mm)

t_{lip} = Thickness of Edge-Tie Channel lips, in. (mm)

$V_{sl,y\ (gravity)}$ = Nominal shear strength perpendicular to Edge-Tie Channel axis along gravity, lbf. (N)

$V_{sl,y\ (uplift)}$ = Nominal shear strength perpendicular to Edge-Tie Channel axis along uplift, lbf. (N)

$V_{sl,y,seis}$ = Nominal seismic shear strength perpendicular to Edge-Tie Channel axis of connection, lbf. (N)

$V_{sl,x}$ = Nominal shear strength in longitudinal Edge-Tie Channel axis of connection, lbf. (N)

$V_{sl,x,seis}$ = Nominal seismic shear strength in longitudinal Edge-Tie Channel axis of connection, lbf. (N)

V_{ss} = Nominal strength of Edge-Tie T-Bolt in shear, lbf. (N)

β_w = Mono-symmetry factor for Edge-Tie Channel, in. (mm)

ϕ_b = Applicable resistance factor for flexural failure of Edge-Tie Channel

ϕ_t = Applicable resistance factor for tension loading perpendicular to Edge-Tie Channel longitudinal axis

$\phi_{v,y}$ = Applicable resistance factor for shear loading perpendicular to Edge-Tie Channel longitudinal axis

$\phi_{v,x}$ = Applicable resistance factor for shear loading along the Edge-Tie Channel longitudinal axis

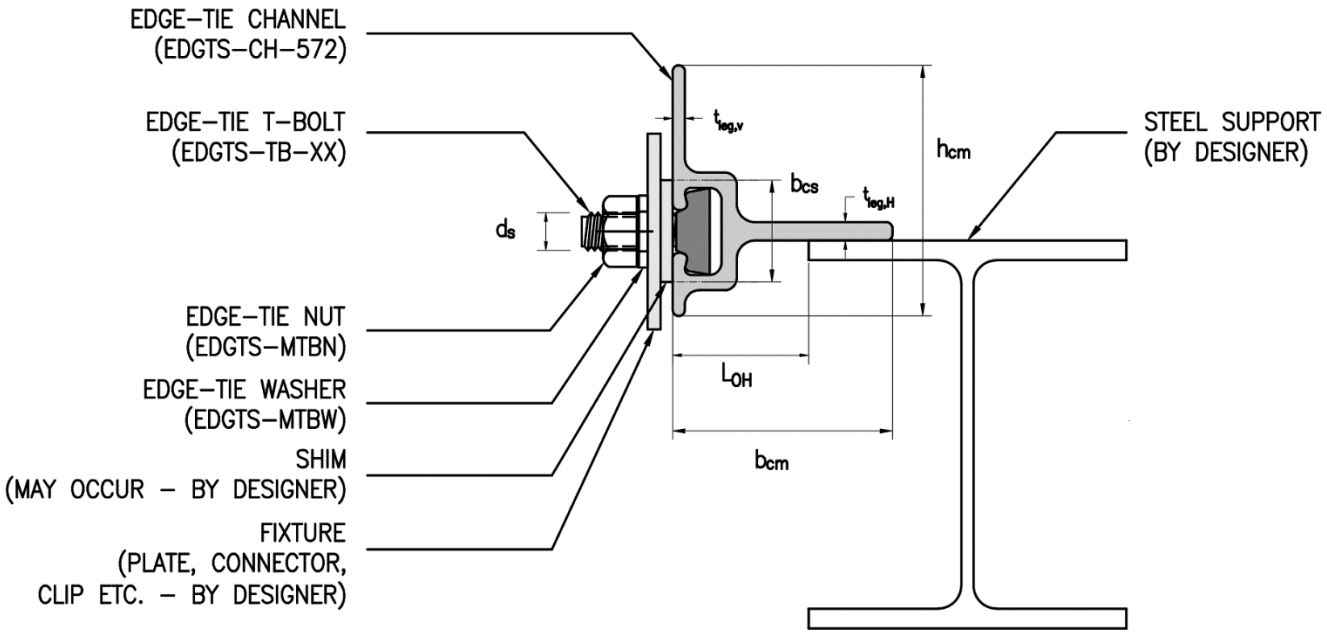
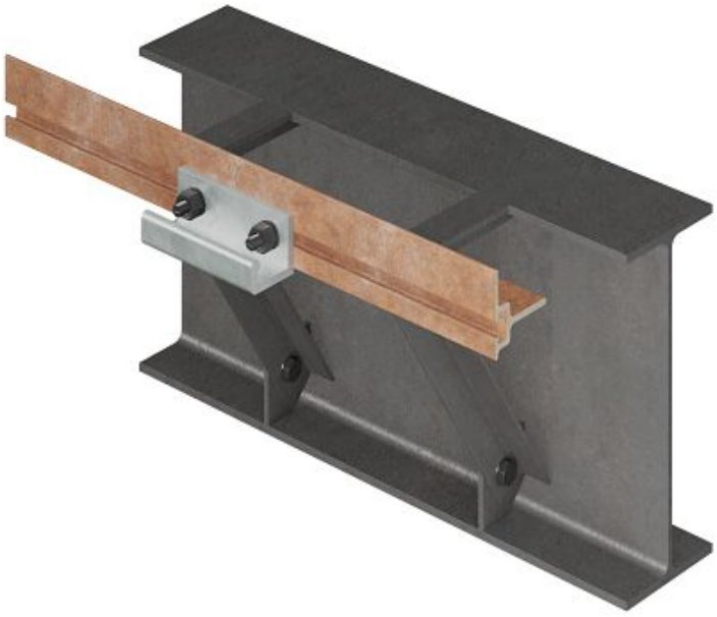


FIGURE 3-1 — DIMENSIONS OF EDGE-TIE SYSTEM

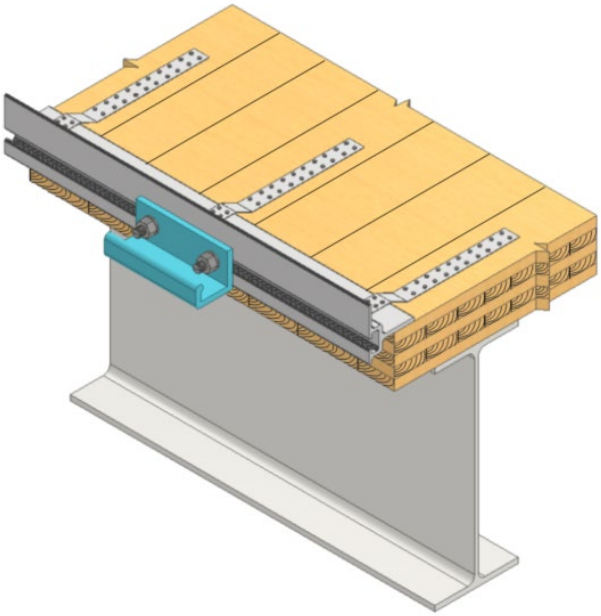
FIGURE 3-2 — EDGE-TIE SYSTEM, CHANNEL & T-BOLT

(A) ATTACHMENT TO STEEL BEAM FLANGE

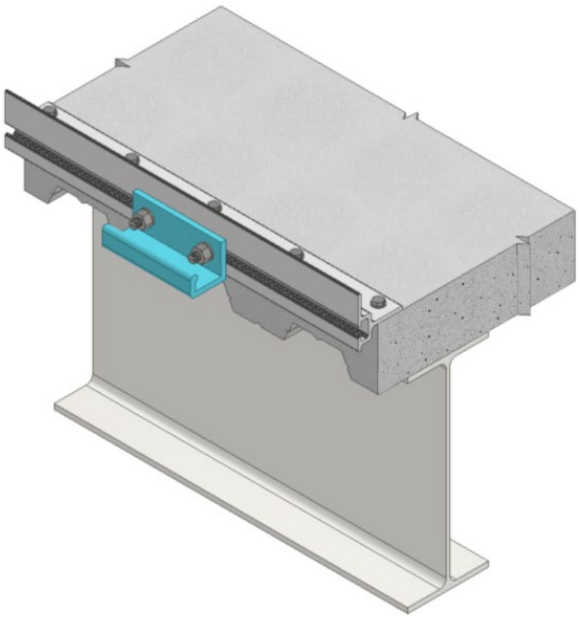


(B) ATTACHMENT TO STEEL OUTRIGGER SUPPORTS

FIGURE 4-1 — EDGE-TIE SYSTEM ATTACHMENT TO STEEL SUPPORTS



(A) ATTACHMENT TO MASS TIMBER DECK



(B) ATTACHMENT TO CONCRETE SLAB

FIGURE 4-2 — EDGE-TIE SYSTEM ATTACHMENT TO OTHER SUPPORTING ELEMENTS

TABLE 8-1 — MATERIAL SPECIFICATION & PROPERTIES FOR EDGE-TIE SYSTEM

Component	Carbon Steel	
	Material /Strength Class	Finish/Coating
Edge-Tie Channel	ASTM 572, Grade 50 (Min. Fy = 60 ksi)	Extruded hot finished, descaled and stretched straight
Edge-Tie T-Bolt	ASTM A449, Type 1	Plain finish with oil/lubricant for rust prevention
Edge-Tie T-Bolt Nut	ASTM A563 Heavy Hex, Grade DH / A194 Grade 2H or Grade 2HB	
Edge-Tie T-Bolt Washer	ASTM F436, Type 1 Hardened Circular	

TABLE 8-2 — GEOMETRIC PROPERTIES FOR EDGE-TIE SYSTEM CHANNEL

Criteria	Symbol	Units	Channel Size
			EDGTS-CH-572
Edge-Tie channel gross cross-sectional area	A_g	$in.^2$	3.571
		mm^2	2,303.700
Edge-Tie channel overall width	b_{cm}	in.	4.500
		mm	114.300
Edge-Tie channel slot width, center to center of steel legs	b_{cs}	in.	2.095
		mm	53.200
Edge-Tie channel height	h_{cm}	in.	5.125
		mm	130.200
Moment of Inertia about minor geometric axis of Edge-Tie Channel	I_x	$in.^4$	4.211
		mm^4	1,752,751
Moment of Inertia about major geometric axis of Edge-Tie Channel	I_y	$in.^4$	5.776
		mm^4	2,404,153
Radius of gyration about minor principal axis of Edge-Tie Channel	r_z	in.	0.988
		mm	25.100
Section modulus about major principal axis of Edge-Tie Channel	s_w	$in.^3$	2.218
		mm^3	36,347
Section modulus about minor principal axis of Edge-Tie Channel	s_z	$in.^3$	1.461
		mm^3	23,942
Edge-Tie channel horizontal leg thickness	$t_{leg,h}$	in.	0.375
		mm	9.500
Edge-Tie channel vertical leg thickness	$t_{leg,v}$	in.	0.250
		mm	6.400
Edge-Tie channel lip thickness	t_{lip}	in.	0.250
		mm	6.400
Mono-symmetry factor for Edge-Tie Channel	β_w	in.	0.205
		mm	5.210

TABLE 8-3 — OUT-OF-PLANE (TENSION / COMPRESSION) STEEL DESIGN INFORMATION FOR EDGE-TIE SYSTEM

Criteria	Symbol	Units	Channel Size
			EDGTS-CH-572
Nominal tension strength of channel slot connection per bolt	N_{sl}	lbf.	26,452
		kN	117.700
Critical Edge-Tie T-Bolt spacing	$s_{chb,cr}$	in.	4.500
		mm	114.300
Nominal tensile strength of connection per bolt at minimum bolt spacing	$N_{sl,min}$	lbf.	20,914
		kN	93.000
Minimum Edge-Tie T-Bolt spacing	$s_{chb,min}$	in.	2.000
		mm	50.800
Nominal seismic out-of-plane strength for channel slot connection per bolt	$N_{sl,\ seis}$	lbf.	26,452
		kN	117.700
Applicable resistance factor for tensile strength (local lip rupture)	ϕ_{Nsl}	-	0.75

TABLE 8-4 — FLEXURAL STEEL DESIGN INFORMATION FOR EDGE-TIE SYSTEM

Criteria	Symbol	Units	Channel Size
			EDGTS-CH-572
Maximum nominal bending strength about major principal channel axis[1]	$M_{s,flex,w}$	in.-lbf.	199,620
		Nm	22,554
Maximum nominal bending strength about minor principal channel axis[1]	$M_{s,flex,z}$	in.-lbf.	131,517
		Nm	14,859
Maximum nominal bending strength about major principal channel axis for seismic design[1]	$M_{s,flex,w,seis}$	in.-lbf.	199,620
		Nm	22,554
Maximum nominal bending strength about minor principal channel axis for seismic design[1]	$M_{s,flex,z,seis}$	in.-lbf.	131,517
		Nm	14,859
Applicable resistance factor for flexural strength	ϕ_b	-	0.90
Maximum unbraced span length for flexural design	$L_{b,max}$	in.	60.000
		mm	1,524
Maximum overhang distance from channel outer face to edge of support	$L_{oh,max}$	in.	3.500
		mm	88.900
Minimum overhang distance from channel outer face to edge of support	$L_{oh,min}$	in.	1.750
		mm	44.450

Note [1]: Assuming Flexural Yielding controls. For longer unbraced lengths, member-buckling capacity may reduce Flexural strength. Flexural strength must be calculated per AISC 360, Section F.10

TABLE 8-5 — SHEAR STEEL DESIGN INFORMATION FOR EDGE-TIE SYSTEM

Criteria	Symbol	Units	Channel Size
			EDGTS-CH-572
Nominal vertical shear strength of channel slot connection per bolt (gravity)	$V_{sl,y\ (gravity)}$	lbf.	14,294
		kN	63.600
Nominal vertical shear strength of channel slot connection per bolt (uplift)	$V_{sl,y\ (uplift)}$	lbf.	13,671
		kN	61.000
Nominal seismic shear strength for channel slot connection per bolt	$V_{sl,y,seis}$	lbf.	14,294
		kN	63.600
Applicable resistance factor for vertical shear strength (bolt rupture)	$\phi_{v,y}$	-	0.75
Nominal shear strength of channel slot connection per bolt along the longitudinal channel axis	$V_{sl,x}$	lbf.	5,421
		kN	24.110
Nominal seismic shear strength of channel slot connection per bolt along the longitudinal channel axis	$V_{sl,x,seis}$	lbf.	5,421
		kN	24.110
Applicable resistance factor for longitudinal shear strength (bolt sliding)	$\phi_{v,x}$	-	0.70

TABLE 8-6 — STEEL DESIGN INFORMATION FOR EDGE-TIE T-BOLTS

Criteria	Symbol	Units	T-Bolt Size
			EDGTS-TB-XX[1]
Nominal tensile strength of a Edge-Tie T-Bolt	N_{ss}	lbf.	39,761
		kN	176.900
Applicable resistance factor for tension loading	ϕ_t	-	0.75
Nominal bending strength of a Edge-Tie T-Bolt	$M^o_{s,s}$	in.-lbf.	5,964
		Nm	673.800
Applicable resistance factor for bolt bending	ϕ_b	-	0.90
Nominal shear strength of a Edge-Tie T-Bolt	V_{ss}	lbf.	23,856
		kN	106.120
Applicable resistance factor for shear loading	ϕ_v	-	0.75
Minimum end distance	le_{min}	in.	2.000
		mm	50.800
Recommended Torque for pretensioning (Follow RCSC Protocols)	T_{inst}	in.-lbf.	4,080
		Nm	461

Note [1]: XX corresponds ETS T-Bolt length. (Currently offered bolt lengths are 1.5 in. thru 3.0 in. (38.1 mm thru 76.2 mm))

SIMPSON Strong-Tie

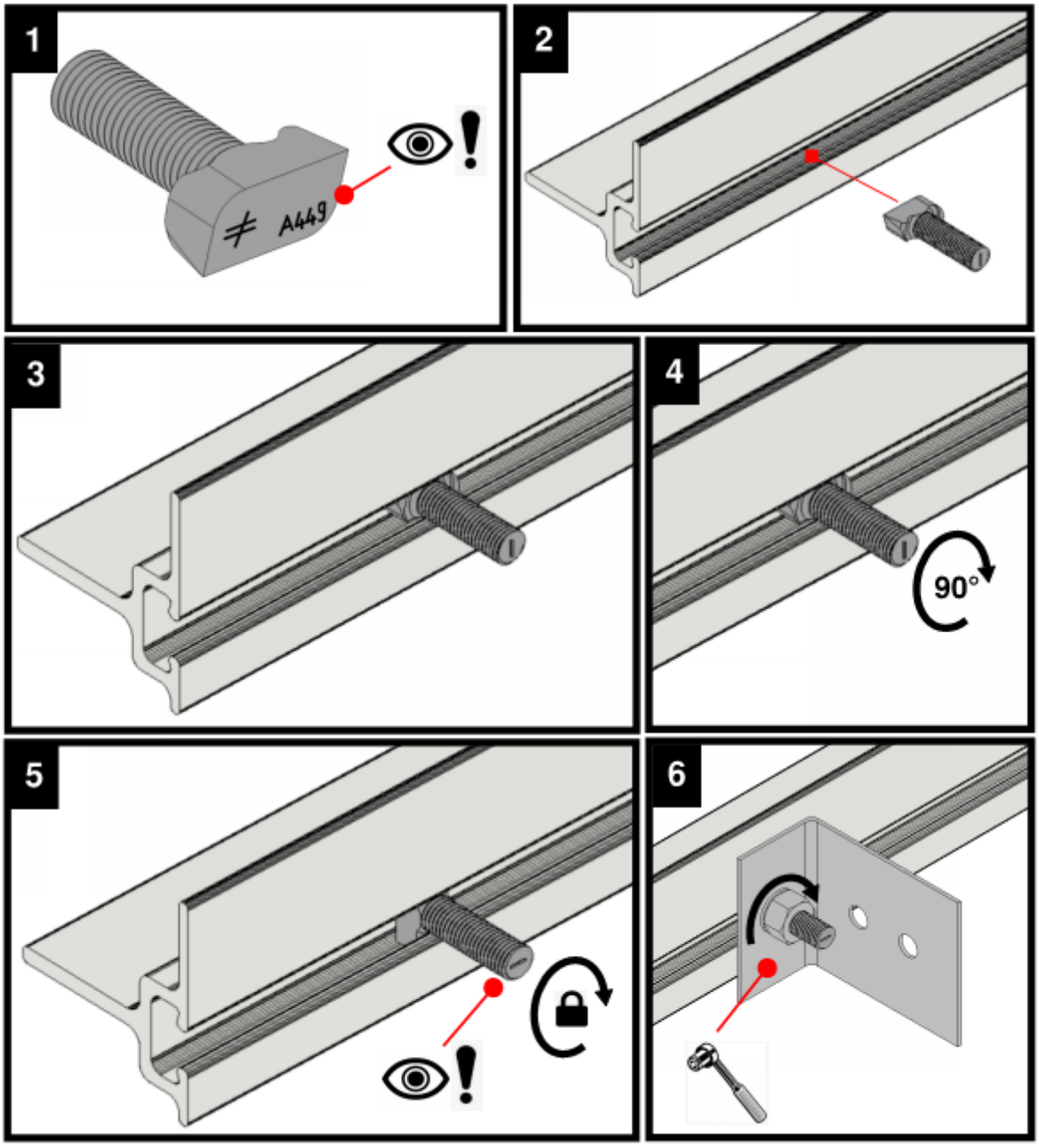


FIGURE 4-3 —MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII) FOR EDGE-TIE SYSTEM

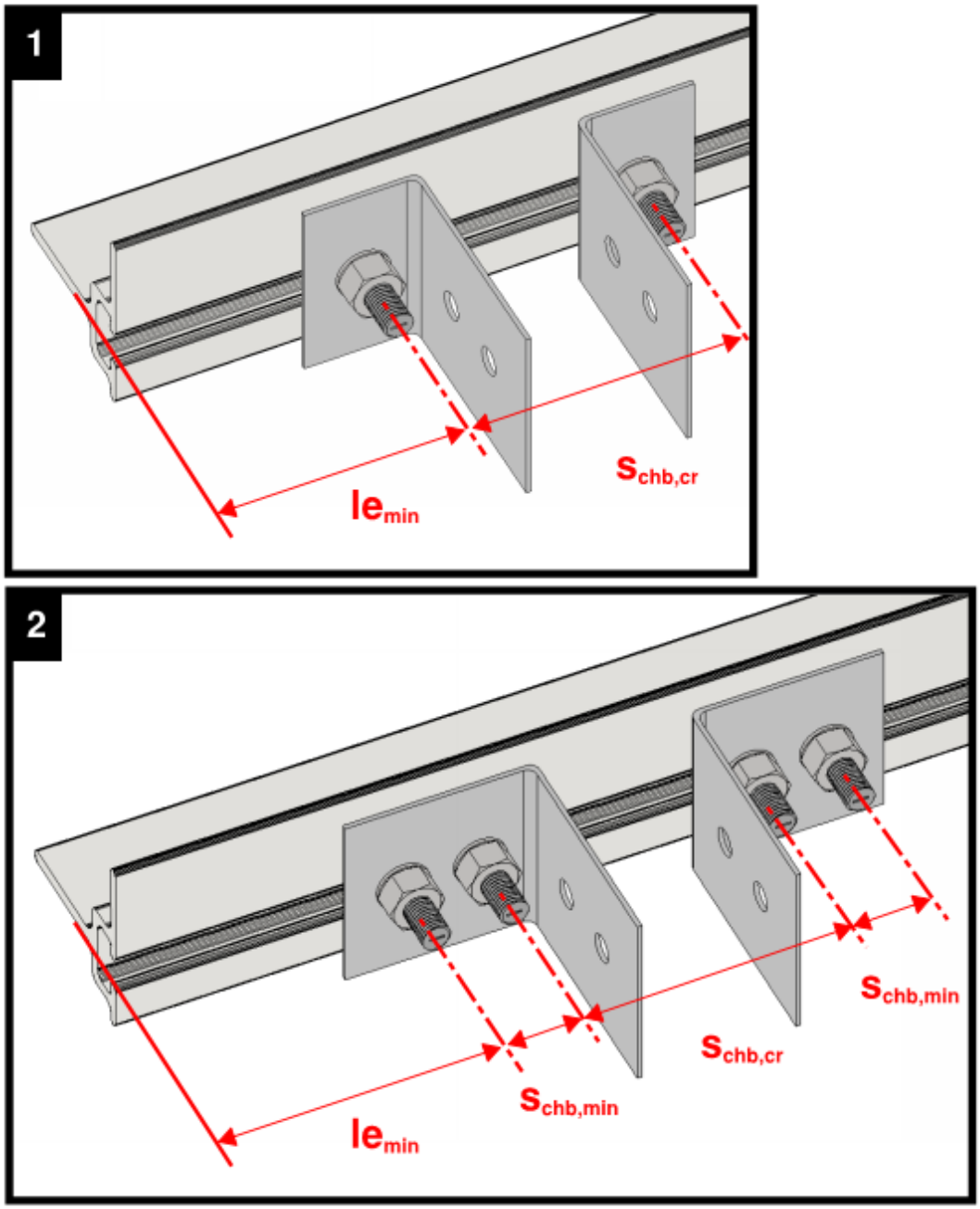


FIGURE 4-4 — MINIMUM END DISTANCE AND BOLT SPACING REQUIREMENTS FOR EDGE-TIE SYSTEM

DIVISION: 05 00 00 – METALS
Section: 05 12 00 – Structural Steel Framing
Section: 05 59 00 – Metal Specialties

REPORT HOLDER:

SIMPSON STRONG-TIE COMPANY INC.

EVALUATION SUBJECT:

EDGE-TIE SYSTEM

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Edge-Tie System, described in ICC-ES evaluation report ESR-5100, has also been evaluated for compliance with the codes noted below as adopted by the Los Angeles Department of Building and Safety (LADBS).

Applicable code editions:

- 2023 *City of Los Angeles Building Code* (LABC)
- 2023 *City of Los Angeles Residential Code* (LARC)

2.0 CONCLUSIONS

The Edge-Tie System, described in Sections 2.0 through 7.0 of the evaluation report ESR-5100, complies with the LABC Chapter 22, and the LARC, and is subject to the conditions of use described in this supplement.

3.0 CONDITIONS OF USE

The Edge-Tie System described in this evaluation report supplement must comply with all of the following conditions:

- All applicable sections in the evaluation report ESR-5100.
- The design, installation, conditions of use and identification of the Edge-Tie System are in accordance with the 2021 *International Building Code®* (IBC) provisions noted in the evaluation report ESR-5100.
- The design, installation and inspection are in accordance with additional requirements of LABC Chapters 16 and 17, as applicable.
- Under the LARC, an engineered design in accordance with LARC Section R301.1.3 must be submitted.

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

DIVISION: 05 00 00 – METALS
Section: 05 12 00 – Structural Steel Framing
Section: 05 59 00 – Metal Specialties

REPORT HOLDER:

SIMPSON STRONG-TIE COMPANY INC.

EVALUATION SUBJECT:

EDGE-TIE SYSTEM

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Purpose:

The purpose of this evaluation report supplement is to indicate that Edge-Tie System, described in ICC-ES evaluation report ESR-5100, has also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2023 *Florida Building Code—Building*
- 2023 *Florida Building Code—Residential*

2.0 CONCLUSIONS

The Edge-Tie System, described in Sections 2.0 through 7.0 of ICC-ES evaluation report ESR-5100, complies with the *Florida Building Code—Building* and the *Florida Building Code—Residential*, provided the design requirements are determined in accordance with the *Florida Building Code—Building* or the *Florida Building Code—Residential,* as applicable. The installation requirements noted in ICC-ES evaluation report ESR-5100 for the 2021 *International Building Code®* meet the requirements of the *Florida Building Code—Building* or the *Florida Building Code—Residential,* as applicable.

Use of the Edge-Tie System has also been found to be in compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code-Building* or the *Florida Building Code-Residential.*

For products falling under Florida Rule 61G20-3, verification that the report holder's quality assurance program is audited by a quality assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official when the report holder does not possess an approval by the Commission).

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