

# ICC-ES Evaluation Report

ESR-1622

Reissued January 2025

This report also contains:

- [City of LA Supplement](#)

Subject to renewal January 2026

- [FL Supplement w/ HVHZ](#)

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.

Copyright © 2025 ICC Evaluation Service, LLC. All rights reserved.

<p><b>DIVISION: 06 00 00—</b> <b>WOOD, PLASTICS AND COMPOSITES</b></p> <p><b>Section: 06 05 23—</b> <b>Wood, Plastic, and Composite Fastenings</b></p>	<p><b>REPORT HOLDER:</b> <b>SIMPSON STRONG-TIE COMPANY INC</b></p> 	<p><b>EVALUATION SUBJECT:</b> <b>SIMPSON STRONG-TIE® COLUMN AND POST BASE CONNECTORS FOR WOOD CONSTRUCTION</b></p>	
--	--	--	---

## 1.0 EVALUATION SCOPE

**Compliance with the following codes:**

- 2024, 2021, 2018, 2015 and 2012 [International Building Code® \(IBC\)](#)
- 2024, 2021, 2018, 2015 and 2012 [International Residential Code® \(IRC\)](#)

Section number references in this report are for the 2024 IBC and IRC and the standards referenced therein Corresponding section numbers for earlier code editions are shown in [Table A](#).

**Property evaluated:**

- Structural

## 2.0 USES

Simpson Strong-Tie® column and post base connectors described in this report are used as wood framing connectors in accordance with IBC Section [2304.10.4](#) and are used to resist download, lateral and net induced uplift forces at the bottom end of wood posts in accordance with IBC Section [2304.10.8](#) and to prevent lateral displacement at the bottom end of wood posts in accordance with Section [R407.3](#) of the IRC.

The products may also be used in structures regulated under the IRC when an engineered design is submitted in accordance with Section [R301.1.3](#) of the IRC.

## 3.0 DESCRIPTION

### 3.1 General:

The Simpson Strong-Tie column and post base connectors described in this report typically connect wood posts to concrete footings complying with the IBC or IRC, as applicable, by using anchor bolts installed during the concrete pour or after the concrete hardens. For the case of the Retrofit Post Base (RPBZ), post base connection to wood decking is also considered. The MCT connector joins a glulam column to one below. MCB and MCBS connectors connect column bases to supporting concrete. Untreated wood columns may be supported by the post base connectors described in this report because the connectors provide a metal pedestal projecting minimum 1 inch (25.4 mm) above the supporting concrete as required by IBC Section [2304.12.2.2](#) and IRC Section R304.1.

**3.1.1 ABA Adjustable Post Base:** The ABA adjustable post base is a one-piece, die-formed connector that elevates the supported wood post  $1\frac{1}{16}$  inches (27 mm) above a concrete footing. The ABA44Z, ABA44RZ and ABA24-2Z are formed from No. 16 gage galvanized steel and all other ABA models are formed from No. 14 gage galvanized steel. The sides of the ABA post base connector have prepunched holes for 10d or 16d common nails driven into the side grain of the wood post. A Type A narrow washer, conforming to the dimensions shown in ASME B18.22.1 (R 1998), or a standard cut washer and nut must be used to secure the ABA post base connector to the concrete anchor bolt. See [Table 1](#) for overall dimensions, required fasteners, and allowable uplift loads and downloads. See [Figure 1](#) for drawings of an ABA adjustable post base connector and a typical installation.

**3.1.2 ABU Adjustable Post Base:** The ABU44Z, ABU44RZ, ABU46Z, ABU46RZ, ABU5-5Z, ABU5-6Z, ABU65Z, ABU66Z and ABU66RZ adjustable post base connectors consist of three components: a die-formed U-shaped galvanized steel channel having an adjustment slot for the anchor bolt and prepunched holes for installing bolts or nails, but not both, into the side grain of the wood post; a die-formed galvanized steel standoff base that elevates the wood post 1 inch (25.4 mm) above the concrete footing, and a 0.171-inch-thick (4.3 mm) rectangular washer (bearing plate).

The ABU88Z, ABU88RZ, ABU1010Z, ABU1010RZ, ABU1212Z, and ABU1212RZ adjustable post base connectors consist of the following components: a die-formed U-shaped galvanized steel channel having two  $1\frac{1}{16}$ -inch-wide (27 mm) long-slotted holes for anchor bolts and prepunched holes for installing nails into the side grain of the wood post; a die-formed galvanized steel standoff base that elevates the wood post 1 inch (25.4 mm) above the concrete footing, and two nominally  $\frac{1}{4}$ -inch-thick (6.4 mm) square washers (bearing plates).

See [Table 2](#) for the overall dimensions of the U-shaped channel, nominal thickness of the steel channel and standoff base, required fasteners, and allowable uplift loads and downloads. See [Figure 2](#) for drawings of the components of an ABU44Z and ABU88Z adjustable post base connectors and a typical ABU connector installation.

**3.1.3 PBV Post Base:** The PBV post base is a single piece post base connector formed from No. 14 gage steel having a powder-coated paint coating. The PBV connector is circular and has a center channel section and two raised semicircular flat portions that provide a 1-inch (25.4 mm) raised bearing surface for a round post. The connector has prepunched holes for installing SDS screws into the end grain of a round post. See [Table 3](#) for the connector dimensions, required fasteners and allowable downloads.

**3.1.4 CPTZ Concealed Post Tie:** The CPTZ concealed post tie is a three-piece post base connector used to provide a concealed connection between a post and the foundation. The concealed post tie consists of the following components: a No. 10 gage galvanized steel knife plate center section having two prepunched holes for installing anchor bolts and three prepunched holes for installing chamfered steel dowel pins or bolts into the side grain of the wood post; a No. 12 gage galvanized and powder-coated steel standoff base that elevates the wood post 1 inch (25.4 mm) above the concrete footing; and two 0.134-inch-thick (3.4 mm) rectangular washers (bearing plates). See [Table 4](#) for connector dimensions, required fasteners and allowable downloads; and [Figure 4](#) for CPTZ connector and typical installation.

**3.1.5 RPBZ Retrofit Post Base:** The RPBZ column base consists of a single piece of bent, cold-formed, galvanized sheet steel, consisting of two vertical faces bent at 90 degrees and two  $2\frac{1}{4}$ -inch-wide-by- $1\frac{1}{2}$ -inch-long (57 by 38 mm) horizontal flat bases. The part is manufactured from No. 12 gage galvanized steel. The two vertical faces have fastener holes that are used for installing SDS Screws in order to fasten to the wood post. The two horizontal flat base pieces have three fastener holes each: two  $\frac{1}{4}$ -inch-diameter (6.4 mm) holes used for installing concrete screws or SDS Screws and one  $\frac{3}{8}$ -inch (9.5 mm) hex hole used for installing a concrete anchor bolt at the base. See [Table 5](#) for RPBZ dimensions, fastener/anchor information and allowable loads. When used to connect the post to concrete other than in interior, dry locations, a CPS standoff is used to provide a 1 inch (25.4 mm) standoff. See [Figure 5](#) for a graphical depiction and typical installations for the RPBZ.

**3.1.6 ABWZ Adjustable Post Base:** The ABWZ post base consists of three components: a die-formed galvanized steel main body that wraps around all four sides of the post and has prepunched holes for installing the required fasteners and an adjustment slot on the bottom for the anchor bolt, a die-formed galvanized steel standoff base that elevates the wood post 1 inch (25.4 mm) above the concrete footing, and a rectangular bearing plate with a  $\frac{9}{16}$ -inch-diameter (14.3 mm) hole. The ABW44Z and ABW44RZ use the LPB $\frac{1}{2}$  bearing plate which is 2-inches-by-2-inches (51 by 51 mm) and is 0.129 inch (3.28 mm) thick. All other ABWZ bases use the BP $\frac{1}{2}$ EG bearing plate which is 3-inch-by-3-inch (76 by 76 mm) and 0.229 inch (5.82 mm) thick. See [Table 6](#) for ABWZ dimensions, material gauge, fastener/anchor information and allowable loads. See [Figure 6](#) for a graphical depiction and typical installations for the ABWZ.

**3.1.7 MCT Column-to-Column System:** The MCT column-to-column system consists of a round steel tube used with steel dowels or bolts. The tube has an outside diameter of 1.9 inches (48 mm), a wall thickness of 0.145 inch (3.68 mm) and a length of 15 inches (381 mm). The tube has holes at each end that are intended to align with holes in the wood columns, for insertion of dowels or bolts. The tubes also have a hole at each end for lifting of columns. See [Table 7](#) for MCT dimensions, fastener information and allowable loads. See [Figure 7](#) for a graphical depiction and typical installations for the MCT.

**3.1.8 MCB Column Base:** The MCB column base consists of a steel tube welded to a steel base plate. The tube is one half of an MCT connector, with an outside diameter of 1.9 inches (48 mm), a wall thickness of 0.145 inch (3.68 mm) and a length of 7.5 inches (191 mm). The base plate has four holes for anchor bolts. See [Table 8](#) for MCB base plate dimensions and allowable downloads. See [Table 10](#) for allowable uplift and lateral loads and associated fastener and column size requirements. See [Figure 8](#) for a graphical depiction and typical installation for the MCB.

**3.1.9 MCBS Column Base:** The MCBS column base consists of a steel tube, a steel bearing plate, a rectangular HSS and a steel base plate, which are all welded together. The tube is one half of an MCT connector, with an outside diameter of 1.9 inches (48 mm), a wall thickness of 0.145 inch (3.68 mm) and length of 7.5 inches (191 mm). The base plate has four holes for anchor bolts. For smaller models, the base plate has one drain hole at the center. For larger models, the base plate has two drain holes. See [Table 9](#) for MCBS dimensions and allowable downloads. See [Table 10](#) for allowable uplift and lateral loads and associated fastener and column size requirements. See [Figure 9](#) for a graphical depiction and typical installation for the MCBS.

### 3.2 Materials:

**3.2.1 Light-gage Steel Connectors:** Unless noted otherwise, the die-formed connectors described in this report are manufactured from galvanized steel in accordance with [ASTM A653](#), SS designation, Grade 33, with a minimum yield strength,  $F_y$ , of 33,000 psi (227 MPa) and a minimum tensile strength,  $F_u$ , of 45,000 psi (310 MPa). The bearing plates for the ABU88 and larger ABU connectors are [ASTM A36](#) with a minimum yield strength of 36,000 psi (248 MPa) and a minimum tensile strength of 58,000 psi (400 MPa) and have no coating. Base metal thicknesses for the light-gage connectors in this report are as follows:

NOMINAL THICKNESS	MINIMUM BASE METAL THICKNESS (inches)
No. 10 Gage	0.1275
No. 12 Gage	0.0975
No. 14 Gage	0.0685
No. 16 Gage	0.0555
1/4-inch (Bearing Plate)	0.2145

For SI: 1 inch = 25.4 mm.

Connectors with a model number ending with Z have a G185 zinc coating specification in accordance with ASTM A653. Some connectors are also available with a hot-dip galvanization (designated with a model number ending in HDG), also known as “batch” galvanization, in accordance with ASTM A123, with a minimum specified coating weight of 2.0 ounces of zinc per square foot of surface area (610 g/m<sup>2</sup>), total for both sides. Information in this report for the ‘Z’ models also applies to the ‘HDG’ models. The PBV post base has a “PC” suffix indicating a powder-coated paint coating. The lumber treater and the holder of this report (Simpson Strong-Tie Company) should be contacted for recommendations on the appropriate level of corrosion resistance to specify for use of the steel connectors in contact with the specific proprietary preservative treated or fire-retardant-treated lumber.

**3.2.2 MCT, MCB and MCBS Column Base Components:** The MCT connector and the round tube component of the MCB and MCBS products, as well as the rectangular HSS component of the MCBS connectors, are manufactured from round HSS complying with ASTM A500 Grade C, with a minimum yield strength and minimum tensile strength of 50 ksi (345 MPa) and 62 ksi (427 MPa), respectively. The bearing plate used with the MCT connector to increase column end bearing capacity is manufactured from steel complying with ASTM A653 SS Grade 33. The base plate of the MCB and MCBS and the bearing plate for the MCBS comply with ASTM A572 with a minimum yield strength and a minimum tensile strength of 50 ksi (345 MPa) and 65 ksi (448 MPa), respectively. The MCT connector is electrogalvanized; MCB bases are painted or powder coated; and MCBS connectors are hot-dip galvanized, painted or powder coated after assembly. The MCT, MCB and MCBS connectors are not intended to be used in contact with treated lumber.

**3.2.3 Wood:** Wood members with which the connectors are used must be either sawn lumber or engineered lumber having a minimum assigned specific gravity,  $SG_{NDS}$ , of 0.50 in accordance with the ANSI/AWC *National Design Specification for Wood Construction*<sup>®</sup> (NDS) or the latest NDS Supplement (minimum equivalent specific gravity,  $SG_{eq}$ , of 0.50 for engineered lumber as shown in an ICC-ES evaluation report), and having a maximum moisture content of 19 percent (16 percent for engineered lumber), except as noted in [Section 4.1](#). Wood members used with the MCT, MCB and MCBS connectors must be structural glued laminated timber with four or more laminations, stressed primarily in axial tension or compression, complying with Table 5B of the NDS Supplement; applicable wood species are shown in [Tables 7](#) through [10](#) and the glulam must have an assigned specific gravity,  $SG_{NDS}$ , of 0.50 in accordance with Table 5B of the NDS Supplement. For the RPBZ connector, the thickness of the supporting wood member must be equal to or greater than the length of the fasteners specified in the tables in this report, or as required by wood member design, whichever is greater. For installation in engineered wood members, minimum allowable nail spacing and end and edge distances, as specified in the applicable evaluation report for the engineered wood product, must be met. See the footnotes to [Tables 8](#) and [9](#) for minimum adjusted compressive strength,  $F_c^*$ , for the wood columns and posts.

### 3.2.4 Fasteners:

**3.2.4.1 Nails:** Nails used for hangers described in this evaluation report must be bright or hot-dip galvanized carbon steel nails complying with [ASTM F1667](#) as referenced in Section [2303.6](#) of the IBC. Alternatively, nails of other materials or finishes may be used when they are shown in an ICC-ES evaluation report as having bending yield strength ( $F_{yb}$ ) and withdrawal capacity equal to or better than those of a bright carbon steel nail of the same nominal diameter as required by this evaluation report as shown in the following table:

FASTENER	SHANK DIAMETER (inches)	FASTENER LENGTH (inches)	$F_{yb}$ (psi)
10d x 2 <sup>1</sup> / <sub>2</sub>	0.148	2 <sup>1</sup> / <sub>2</sub>	90,000
10d common	0.148	3	90,000
16d common	0.162	3 <sup>1</sup> / <sub>2</sub>	90,000

For SI: 1 inch = 25.4 mm, 1 psi = 6,895 Pa.

**3.2.4.2 Fasteners in Contact with Treated Lumber:** Nails used in contact with preservative treated or fire-retardant-treated lumber must be hot-dip galvanized carbon steel nails. Nails of other materials or finishes may be used when they are addressed in an ICC-ES evaluation report for use in the applicable treated lumber. Bolts used in contact with preservative-treated or fire-retardant-treated lumber must comply with IBC Section 2304.10.6 of the IBC or IRC Section R304.3 of the IBC, as applicable. For use with treated lumber, the lumber treater or this report holder (Simpson Strong-Tie Company), or both, should be contacted for recommendations on the appropriate coating or material to specify for the fasteners as well as the connection capacities of fasteners used with the specific proprietary preservative treated or fire-retardant-treated lumber.

**3.2.4.3 Bolts:** The bolts, at a minimum, must comply with ASTM A36 or A307. The bolts described in [Tables 7](#) and [10](#) must have a diameter of 0.500 inch (12.7 mm) and must comply with SAE J429, with a minimum yield strength,  $F_y = 36$  ksi (248 MPa) and a minimum tensile strength,  $F_u = 60$  ksi (413 MPa).

**3.2.4.4 Dowels:** The dowel pins used with the CPTZ connectors are proprietary pins manufactured in compliance with ASTM A510 wire rod Grade No. 1021, or the Baosteel Company steel specification Q/BQB 517-2009 SWRCH18A.

The dowel pins described in [Tables 7](#) and [10](#) are not supplied with the MCT/MCB/MCBS connectors and must be obtained separately. They must have a diameter of 0.500 inch (12.7 mm) and a minimum length of 4.75 inches (121 mm). The dowels must be manufactured from steel rod having a minimum yield strength,  $F_y = 36$  ksi (248 MPa) and a minimum tensile strength,  $F_u = 60$  ksi (413 MPa).

**3.2.4.5 SDS Screws:** Fasteners used with the column bases described in [Table 3](#) and [Table 5](#) must be Simpson Strong-Tie Strong-Drive SDS screws addressed in [ESR-2236](#). SDS screws used in contact with preservative-treated or fire-retardant-treated lumber must, at a minimum, comply with [ESR-2236](#). The lumber treater or Simpson Strong-Tie should be contacted for recommendations on minimum corrosion resistance and connection capacities of fasteners used with the specific proprietary preservative-treated or fire-retardant-treated lumber.

**3.2.4.6 SD Screws:** Fasteners used with the column bases described in [Table 6](#) must be Simpson Strong-Tie Strong-Drive SD screws addressed in [ESR-3046](#). SD screws used in contact with preservative-treated or fire-retardant-treated lumber must, at a minimum, comply with [ESR-3046](#). The lumber treater or Simpson Strong-Tie should be contacted for recommendations on minimum corrosion resistance and connection capacities of fasteners used with the specific proprietary preservative-treated or fire-retardant-treated lumber.

## 4.0 DESIGN AND INSTALLATION

### 4.1 Design:

The tabulated allowable loads shown in the product tables of this report are based on Allowable Stress Design (ASD) and include the load duration factor,  $C_D$ , corresponding with the applicable loads in accordance with the National Design Specification for Wood Construction and its supplement (NDS).

Tabulated allowable loads apply to products connected to wood used under dry conditions and where sustained temperatures are 100°F (37.8°C) or less. When products are installed to wood having a moisture content greater than 19 percent (16 percent for engineered wood products), or where wet service is expected, the allowable loads must be adjusted by the applicable wet service factor,  $C_M$ , specified for lateral loads for dowel-type fasteners in the NDS. When connectors are installed in wood that will experience sustained exposure to temperatures exceeding 100°F (37.8°C), the allowable loads in this report must be adjusted by the applicable temperature factor,  $C_t$ , specified in the NDS. Connected wood members must be analyzed for load-carrying capacity at the connection in accordance with the NDS.

### 4.2 Installation:

The installation of the connectors must be in accordance with this evaluation report and the manufacturer's published installation instructions. Bolts and nails must be installed in accordance with the applicable provisions in the NDS. Installation of SD and SDS screws must be in accordance with [ESR-3046](#) and [ESR-2236](#), respectively. In the event of a conflict between this report and the manufacturer's published installation instructions, this report governs.

Detailing of columns used with the MCT, MCB and MCBS connectors must be in accordance with [Figures 7, 8 and 9](#), as applicable and in accordance with the report holder's published Routing and Installation instructions. When dowels are used, care must be taken to ensure the dowels are located symmetrically within the column. This can be checked by measuring the depth of the hole on either side of the dowel. Leveling grout thickness must be sufficient to ensure a minimum 1-inch (25.4 mm) separation between the concrete and the bottom of the wood column.

## 5.0 CONDITIONS OF USE:

The Simpson Strong-Tie products 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 connectors must be manufactured, identified and installed in accordance with this report and the manufacturer's published installation instructions. A copy of the instructions must be available at the jobsite at all times during installation.
- 5.2 Calculations showing compliance with this report must be submitted to the code official. The calculations must be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.
- 5.3 Adjustment factors noted in Section 4.1 and the applicable codes must be considered, where applicable.
- 5.4 Connected wood members and fasteners must comply, respectively, with Sections 3.2.3 and 3.2.4 of this report.
- 5.5 The MCT, MCB and MCBS connectors are not intended to resist applied moments.
- 5.6 When using the MCT connector, the top of the lower column must be laterally braced.
- 5.7 Use of connectors with preservative treated or fire-retardant-treated lumber must be in accordance with Section 3.2.1 of this report. Use of fasteners with preservative treated or fire-retardant-treated lumber must be in accordance with Section 3.2.4 of this report.
- 5.8 The design of anchor bolts and the concrete supports is outside the scope of this report. Concrete support larger than that required to support the downloads may be necessary to meet anchorage to concrete requirements.
- 5.9 The connectors are manufactured under a quality control program with inspections by ICC-ES.

## 6.0 EVIDENCE SUBMITTED

Data in accordance with the [ICC-ES Acceptance Criteria for Joist Hangers and Similar Devices \(AC13\)](#), dated April 2024.

## 7.0 IDENTIFICATION

- 7.1 The ICC-ES mark of conformity, electronic labeling, or the evaluation report number, (ICC-ES ESR-1622) along with the name registered trademark, or registered logo of the report holder must be included in the product label.

- 7.2 In addition, except for the MCT/MCB/MCBS products, the products described in this report are identified with a die-stamped label or an adhesive label indicating the name of the manufacturer (Simpson Strong-Tie), the model number, and the number of an index evaluation report ([ESR-2523](#)) that is used as an identifier for the products addressed in this report.
- 7.3 The MCT product and packages of the MCT product are both identified with two labels – one with the report holder name and product information and another with the evaluation report number (ESR-1622). MCB and MCBS products are similarly identified with two labels directly on the product.
- 7.4 The report holder’s contact information is the following:

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

**TABLE A—CODE SECTION NUMBER REFERENCE MATRIX**

<b>IBC</b>				
<b>2024 IBC</b>	<b>2021 IBC</b>	<b>2018 IBC</b>	<b>2015 IBC</b>	<b>2012</b>
2303.6	2303.6	2303.6	2303.6	2303.6
2304.10.4	2304.10.4	2304.10.3	2304.10.3	2304.9.3
2304.10.8	2304.10.8	2304.10.7	2304.10.7	2304.9.7
2304.10.6	2304.10.6	2304.10.5	2304.10.5	2304.9.5
2304.12.2.2	2304.12.2.2	2304.12.2.2	2304.12.2.2	2304.11.2.7
<b>IRC</b>				
<b>2024 IRC</b>	<b>2021 IRC</b>	<b>2018 IRC</b>	<b>2015 IRC</b>	<b>2012 IRC</b>
R301.1.3	R301.1.3	R301.1.3	R301.1.3	R301.1.3
R304.1	R317.1	R317.1.4	R317.1.4	R317.1.4
R304.3	R317.3	R317.3	R317.3	R317.3
R407.3	R407.3	R407.3	R407.3	R407.3

TABLE 1—ABA ADJUSTABLE POST BASE CONNECTORS<sup>1,2,3</sup>

MODEL NO.	DIMENSIONS (inches)			FASTENERS		ALLOWABLE LOADS (lbf)	
	W	L	H	Anchor Bolt Diameter (inches)	Nails into Post (Quantity–Type)	Uplift	Downloads
						C <sub>D</sub> =1.6	C <sub>D</sub> =1.0 C <sub>D</sub> =1.15 C <sub>D</sub> =1.25
ABA24-2Z	3 <sup>1</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>8</sub>	1/2	6–10d x 2 <sup>1</sup> / <sub>2</sub>	630	5,925
ABA44Z	3 <sup>9</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>16</sub>	1/2	6–10d common	690	5,925
ABA44RZ	4 <sup>1</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>8</sub>	2 <sup>13</sup> / <sub>16</sub>	1/2	6–10d common	655	7,215
ABA46Z	3 <sup>9</sup> / <sub>16</sub>	5 <sup>3</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>8</sub>	5/8	8–16d common	870	10,500
ABA46RZ	4 <sup>1</sup> / <sub>16</sub>	5 <sup>3</sup> / <sub>16</sub>	2 <sup>7</sup> / <sub>8</sub>	5/8	8–16d common	870	10,695
ABA66Z	5 <sup>1</sup> / <sub>2</sub>	5 <sup>1</sup> / <sub>4</sub>	3 <sup>1</sup> / <sub>8</sub>	5/8	8–16d common	850	10,245
ABA66RZ	6	5 <sup>3</sup> / <sub>16</sub>	2 <sup>7</sup> / <sub>8</sub>	5/8	8–16d common	850	11,500

For SI: 1 inch = 25.4 mm, 1 lbf = 4.45 N.

<sup>1</sup>The uplift loads have been increased for wind or earthquake loading with no further increase allowed. Reduce loads when other load durations govern.

<sup>2</sup>The allowable downloads may not be increased for short term loading.

<sup>3</sup>Anchor bolts and the concrete footings must be capable of resisting all loads and forces transferred from the post base connector.

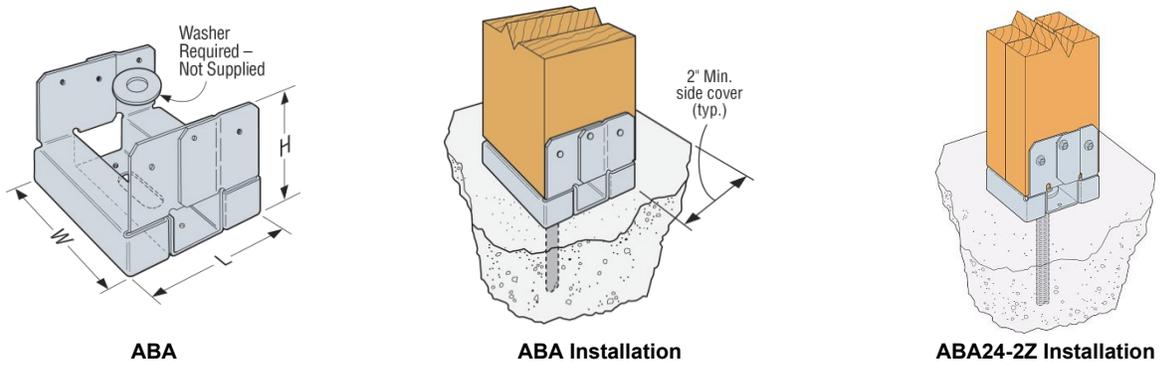


FIGURE 1—ABA ADJUSTABLE POST BASE CONNECTOR

TABLE 2—ABU ADJUSTABLE POST BASE CONNECTORS<sup>1,2,3,4</sup>

MODEL NO.	CONNECTOR DIMENSIONS					FASTENERS (Quantity-Type)			ALLOWABLE LOADS (lbf)		
	U-Channel				Standoff Base	Nails into Post <sup>5</sup>	Bolts through Post	Anchor Bolt Diameter (inches)	Uplift		Download
	W (in.)	L (in.)	H (in.)	Gage No.					Gage No.	Nails	Bolts
					C <sub>D</sub> = 1.6	C <sub>D</sub> = 1.6	C <sub>D</sub> =1.0 C <sub>D</sub> =1.15 C <sub>D</sub> =1.25				
ABU44Z	3 <sup>9</sup> / <sub>16</sub>	3	5 <sup>1</sup> / <sub>2</sub>	12	16	12-16d	2 - 1/2	1 - 5/8	1,900	2,300	7,570
ABU44RZ	4	4	5 <sup>3</sup> / <sub>4</sub>	12	16	12-16d	2 - 1/2	1 - 5/8	1,900	2,300	7,570
ABU46Z	3 <sup>9</sup> / <sub>16</sub>	5	7	12	12	12-16d	2 - 1/2	1 - 5/8	2,405	2,265	12,520
ABU46RZ	4	6	6 <sup>3</sup> / <sub>4</sub>	12	12	12-16d	2 - 1/2	1 - 5/8	2,405	2,265	12,520
ABU5-5Z	5 <sup>1</sup> / <sub>4</sub>	5	6 <sup>1</sup> / <sub>16</sub>	10	12	12-16d	2 - 1/2	1 - 5/8	2,235	2,235	10,570
ABU5-6Z	6 <sup>1</sup> / <sub>8</sub>	5	6 <sup>1</sup> / <sub>16</sub>	10	12	12-16d	2 - 1/2	1 - 5/8	2,235	2,235	10,570
ABU65Z	5 <sup>1</sup> / <sub>2</sub>	5	6 <sup>1</sup> / <sub>16</sub>	10	12	12-16d	2 - 1/2	1 - 5/8	2,475	—	10,960
ABU66Z	5 <sup>1</sup> / <sub>2</sub>	5	6 <sup>1</sup> / <sub>16</sub>	10	12	12-16d	2 - 1/2	1 - 5/8	2,475	2,190	18,205
ABU66RZ	6	6	5 <sup>13</sup> / <sub>16</sub>	10	12	12-16d	2 - 1/2	1 - 5/8	2,475	2,190	18,205
ABU88Z	7 <sup>1</sup> / <sub>2</sub>	7	7	12	14	18-16d	—	2 - 5/8	2,570	—	22,405
ABU88RZ	8	7	7	12	14	18-16d	—	2 - 5/8	2,450	—	19,870
ABU1010Z	9 <sup>1</sup> / <sub>2</sub>	9	7 <sup>1</sup> / <sub>4</sub>	14	14	22-16d	—	2 - 5/8	2,270	—	32,020
ABU1010RZ	10	9	7	14	14	22-16d	—	2 - 5/8	1,830	—	31,650
ABU1212Z	11 <sup>1</sup> / <sub>2</sub>	11	7 <sup>1</sup> / <sub>4</sub>	12	12	22-16d	—	2 - 5/8	3,000	—	34,745
ABU1212RZ	12	11	7	12	12	22-16d	—	2 - 5/8	3,000	—	34,745

For SI: 1 inch = 25.4 mm, 1 lbf = 4.45 N.

<sup>1</sup>The uplift loads have been increased for wind or earthquake loading with no further increase allowed. The allowable loads must be reduced when other load durations govern.

<sup>2</sup>The allowable downloads may not be increased for short term loading.

<sup>3</sup>Anchor bolts and the concrete footings must be capable of resisting all loads and forces transferred from the post base connector.

<sup>4</sup>Allowable uplift loads based on nails and bolts are not cumulative.

<sup>5</sup>The nails must be 16d common.

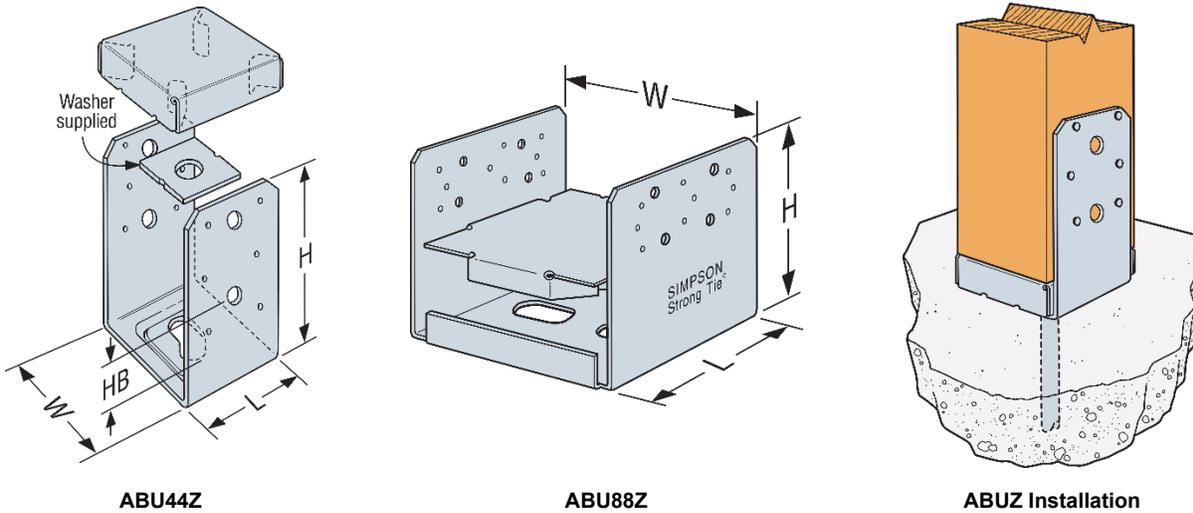


FIGURE 2—ABU ADJUSTABLE POST BASE CONNECTORS

TABLE 3—PBV POST BASE CONNECTORS<sup>1,2,3</sup>

MODEL NO.	DIMENSIONS (inches)		FASTENERS		ALLOWABLE DOWNLOADS (lbf) C <sub>D</sub> =1.0 C <sub>D</sub> =1.15 C <sub>D</sub> =1.25
	L	H	SDS Screws into Post (Quantity–Type)	Anchor Bolt (Quantity– Diameter)	
PBV6	5 <sup>1</sup> / <sub>4</sub>	1	4 –SDS 1/4 x 3	1 – 5/8	8,255
PBV10	9 <sup>3</sup> / <sub>16</sub>	1	4 –SDS 1/4 x 3	1 – 5/8	21,435

For SI: 1 inch = 25.4 mm, 1 lbf = 4.45 N.

<sup>1</sup>The allowable downloads may not be increased for short term loading.

<sup>2</sup>Anchor bolts and the concrete footings must be capable of resisting all loads and forces transferred from the post base connector.

<sup>3</sup>The model number for the SDS 1/4 x 3 inch screw is SDS25300. See also Section 3.2.4.5.

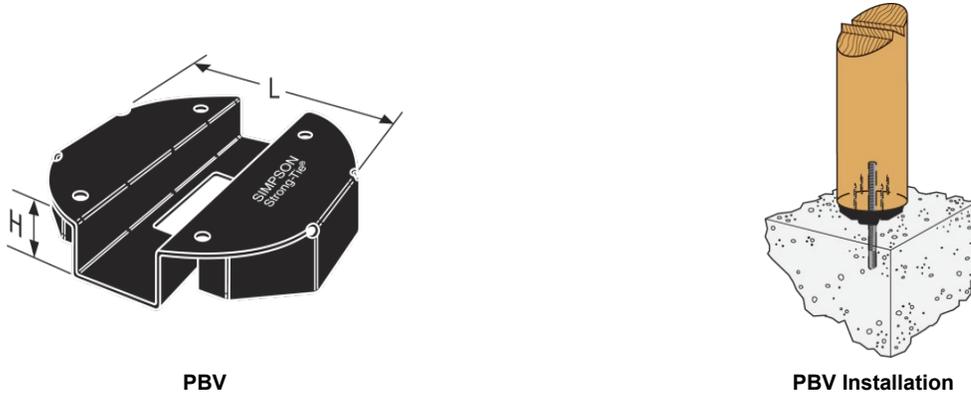


FIGURE 3—PBV POST BASE CONNECTORS

TABLE 4—CPTZ CONCEALED POST TIE CONNECTORS<sup>1,2,3,4</sup>

MODEL NO.	DIMENSIONS		FASTENERS				ALLOWABLE UPLIFT C <sub>D</sub> = 1.60 (lbf)	ALLOWABLE DOWNLOAD C <sub>D</sub> = 1.00 (lbf)	ALLOWABLE F <sub>1</sub> C <sub>D</sub> = 1.60 (lbf)	ALLOWABLE F <sub>2</sub> C <sub>D</sub> = 1.60 (lbf)
	W (in.)	L (in.)	Anchor		Post					
			Qty.	Dia. (in.)	Qty.	Type <sup>3</sup>				
CPT44Z	3 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>2</sub>	2	1/2	2	1/2 x 2 <sup>3</sup> / <sub>4</sub> Dowel	3,035	9,805	600	605
						1/2 MB	3,200			
CPT66Z	5 <sup>3</sup> / <sub>8</sub>	5 <sup>3</sup> / <sub>8</sub>	2	1/2	2	1/2 x 4 <sup>3</sup> / <sub>4</sub> Dowel	3,580	19,840	655	1,025
						1/2 MB	3,565			
CPT88Z	7 <sup>1</sup> / <sub>4</sub>	7 <sup>1</sup> / <sub>4</sub>	2	1/2	2	1/2 x 4 <sup>3</sup> / <sub>4</sub> Dowel	3,625	22,805	740	1,080
						1/2 MB	3,850			

For SI: 1 inch = 25.4 mm, 1 lbf = 4.45 N.

<sup>1</sup>The allowable uplift loads have been increased for wind and earthquake load with no further increase allowed. Reduce where other loads govern.

<sup>2</sup>The allowable downloads may not be increased for short-term loading and must not exceed the post capacity.

<sup>3</sup>Connector packages come with three 1/2-inch-diameter dowel pins. Alternate 1/2-inch-diameter hex or squared head machine bolt (MB) may be used for loads listed. Lags or carriage bolts are not permitted.

<sup>4</sup>Post bases do not provide adequate resistance to prevent members from rotating about the base and therefore are not for non-braced or non-top-supported installations.

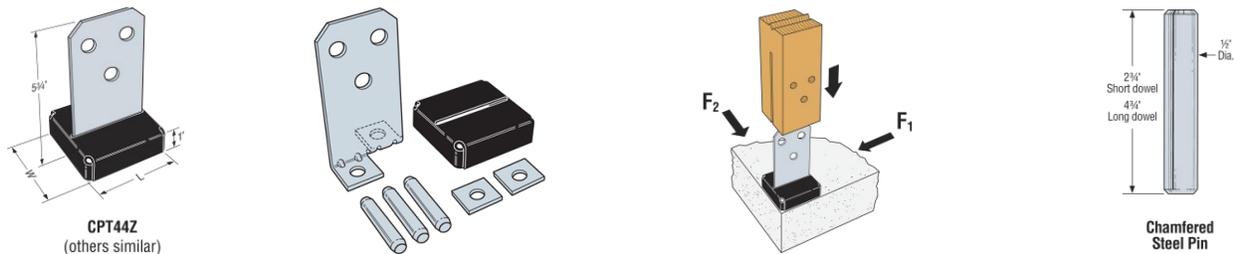


FIGURE 4—CPTZ CONCEALED POST TIE CONNECTOR AND TYPICAL INSTALLATION

TABLE 5—RPBZ RETROFIT POST BASE<sup>1,2,3,4,5,6,7</sup>

Model No.	Qty.	Post Size	Fasteners				Allowable Connector Loads (lbf)		
			Base Connection		Post		Uplift (C <sub>D</sub> = 1.60)	F <sub>2</sub> (C <sub>D</sub> = 1.60)	F <sub>3</sub> (C <sub>D</sub> = 1.60)
			Type	Qty.	Type	Qty.			
<b>Connection To Concrete</b>									
RPBZ	1	4x, 6x	<sup>3</sup> / <sub>8</sub> " Anchor Bolt or <sup>1</sup> / <sub>4</sub> " Titen Screw Anchor	2 Bolts or 4 Screws	SDS <sup>1</sup> / <sub>4</sub> x 1.5"	4	1,500	1,005	480
	2			4 Bolts or 8 Screws		8	2,235	1,115	1,115
<b>Connection To Wood Framing</b>									
RPBZ	1	4x, 6x	SDS <sup>1</sup> / <sub>4</sub> x3"	4	SDS <sup>1</sup> / <sub>4</sub> x 1.5"	4	1,335	1,005	480
	2			8		8	2,235	1,115	1,115
	1		SDS <sup>1</sup> / <sub>4</sub> x1.5"	4		4	845	1,005	480
	2			8		8	1,825	1,115	1,115

For SI: 1 in = 25.4 mm, 1 lbf = 4.45 N.

<sup>1</sup>Allowable loads have been increased for wind or earthquake loading with no further increase allowed. The allowable loads must be reduced when other load durations govern.

<sup>2</sup>Anchor bolts, screw anchors and the concrete footings must be capable of resisting all loads and forces transferred from the post base connector.

<sup>3</sup>Double 2x4's may be used in lieu of 4x4 post.

<sup>4</sup>For installation on 6x members, if four RPBZ's are used, allowable loads may be taken to be 1.5 x the tabulated value.

<sup>5</sup>When the specified SDS screws at Base Connection for Connection to Wood Framing are installed in 5/4" Southern Pine decking, it is acceptable to use the allowable loads shown in the table. Otherwise, SDS screws threads should be fully engaged into a structural wood member.

<sup>6</sup>Post bases do not provide adequate resistance to prevent members from rotating about the base and therefore are not recommended for non top-supported installations (such as fences, unbraced carports or guard rails).

<sup>7</sup>Download shall be limited by the design capacity of the post and the CPS standoff, as applicable. The download capacity of the CPS standoff is outside the scope of this report.

<sup>8</sup>SDS fasteners are screws addressed in Section 3.2.4.5.

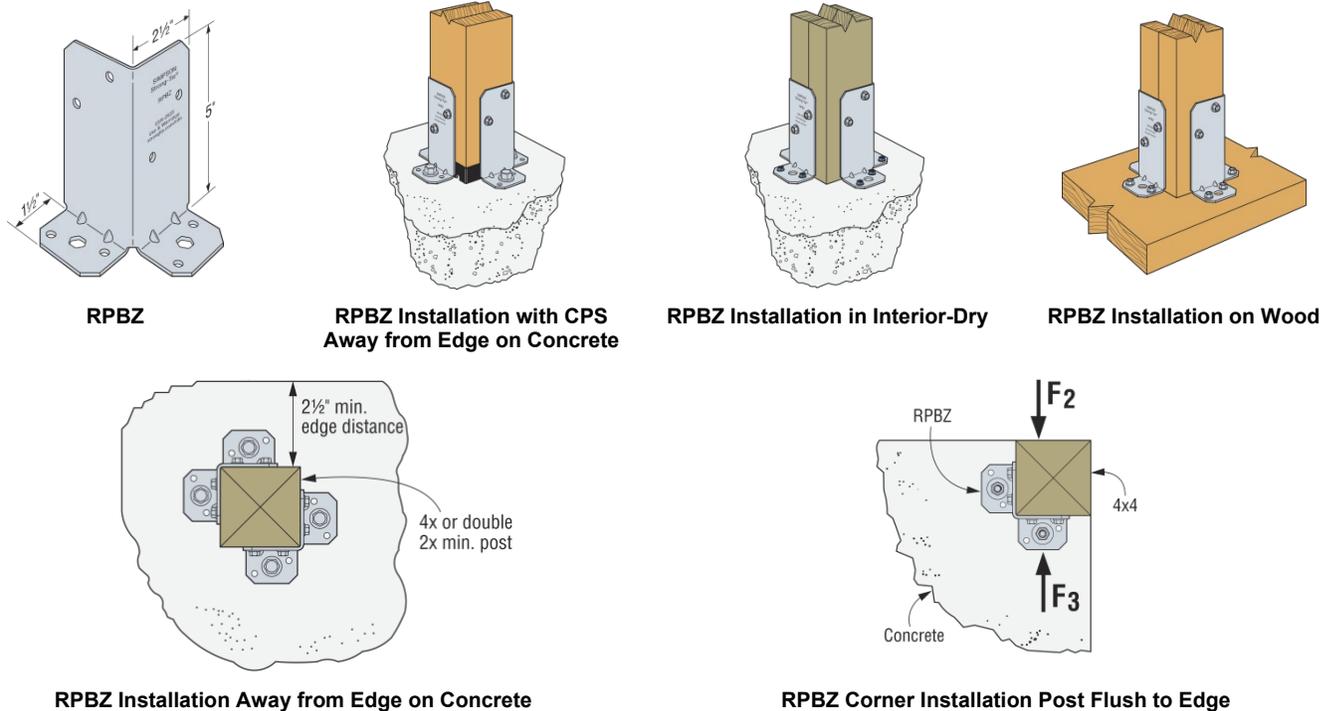


FIGURE 5—RPBZ RETROFIT POST BASE

TABLE 6—ABWZ ADJUSTABLE POST BASE CONNECTORS<sup>1,2,3</sup>

MODEL	NOMINAL POST SIZE	MATERIAL		DIMENSIONS (inches)			FASTENER		ANCHOR DIAMETER (inch)	ALLOWABLE LOAD (DF/SP) (lbf)	
		Base (ga.)	Body (ga.)	W	L	H	Type <sup>4</sup>	Qty.		Uplift	Download
										(C <sub>D</sub> = 1.60)	(C <sub>D</sub> = 1.00)
ABW44Z	4x4	16	16	3 <sup>9</sup> / <sub>16</sub>	3 <sup>9</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>4</sub>	10dC	8	1/2	1,005	7,180
							SD9112			1,105	
ABW44RZ	RGH 4x4	16	16	4	4 <sup>1</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>16</sub>	10dC	8	1/2	835	7,180
							SD9112				
ABW46Z	4x6	12	16	3 <sup>9</sup> / <sub>16</sub>	5 <sup>9</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>32</sub>	10dC	10	1/2	845	4,590
							SD9112			940	
ABW46RZ	RGH 4x6	12	16	6	4	2 <sup>13</sup> / <sub>16</sub>	10dC	10	1/2	780	4,590
							SD9112				
ABW66Z	6x6	12	14	5 <sup>7</sup> / <sub>16</sub>	5 <sup>17</sup> / <sub>32</sub>	3 <sup>1</sup> / <sub>32</sub>	10dC	12	1/2	1,190	12,935
							SD9112			1,225	
ABW66RZ	RGH 6x6	12	14	6	6	2 <sup>13</sup> / <sub>16</sub>	10dC	12	1/2	1,190	12,935
							SD9112				
ABW7-7Z	7 <sup>1</sup> / <sub>8</sub> x7 <sup>1</sup> / <sub>8</sub>	12	14	7 <sup>1</sup> / <sub>8</sub>	7 <sup>5</sup> / <sub>16</sub>	3	10dC	12	1/2	840	14,535

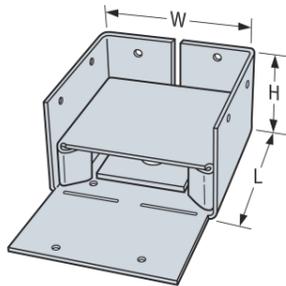
For SI: 1 inch = 25.4 mm, 1 lbf = 4.45 N.

<sup>1</sup>The uplift loads have been increase for wind or earthquake loading with no further increase allowed. Reduce where other load durations govern.

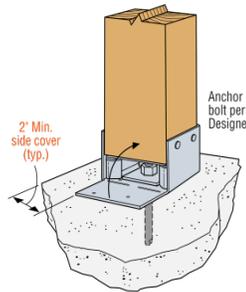
<sup>2</sup>The allowable loads may not be increased for short term loading.

<sup>3</sup>Anchor bolts and the concrete footings must be capable or resisting all loads and forces transferred from the post base connector.

<sup>4</sup>10dC fasteners are 10d common nails. SD9112 fasteners are screws addressed in Section 3.2.4.6.



ABW Adjustable Post Base



Typical ABWZ Installation

FIGURE 6—ABWZ RETROFIT POST BASE

TABLE 7—MCT COLUMN-TO-COLUMN SYSTEM<sup>1</sup>

MODEL NO.	MINIMUM COLUMN WIDTH <sup>2</sup> (in.)	MINIMUM COLUMN DEPTH (in.)	DIMENSIONS (in.)		FASTENERS <sup>4,5</sup>		ALLOWABLE LOADS <sup>6,7,8</sup> (lbf)			
			D	H	Qty. <sup>3</sup>	Type and Size (in.)	Uplift <sup>9</sup> (C <sub>D</sub> = 1.6)	Lateral <sup>10,11</sup>		
								Concurrent axial compression		
								<20 kips		>20 kips <sup>12</sup>
C <sub>D</sub> = 1.0	C <sub>D</sub> = 1.6	C <sub>D</sub> = 1.0 through 1.6								
MCT1.9 x 15	8 <sup>3</sup> / <sub>4</sub>	9	1.9	15	4	1/2 in. x 4 <sup>3</sup> / <sub>4</sub> in. (min.) dowel or 1/2-inch bolt	3,790	1,225	1,500	3,230
	12 <sup>1</sup> / <sub>4</sub>	15						1,712	2,500	5,470

For SI: 1 inch = 25.4 mm, 1 lbf = 4.45 N.

<sup>1</sup>Allowable loads are applicable to Douglas Fir (DF) or Southern Pine (SP) glulam.

<sup>2</sup>For SP glulam with minimum column widths of 8<sup>1</sup>/<sub>2</sub> or 12 inches, use tabulated loads for widths of 8<sup>3</sup>/<sub>4</sub> and 12<sup>1</sup>/<sub>4</sub> inches, respectively.

<sup>3</sup>Half of the tabulated quantity is used in the upper column and the other half is used in the lower column.

<sup>4</sup>See Section 3.2.4.3 for bolt specifications. See Section 3.2.4.4 for dowel specifications.

<sup>5</sup>Holes for the dowels or bolts must be drilled through the glulam. For dowels, the nominal hole diameter must be equal to the dowel diameter with a tolerance of +0 / -<sup>1</sup>/<sub>32</sub> inch. For bolts, the nominal hole diameter must be equal to the bolt diameter with a tolerance of +<sup>1</sup>/<sub>16</sub> inch / -<sup>1</sup>/<sub>32</sub> inch.

<sup>6</sup>The designer is responsible for calculating the allowable download capacity, based on the column size selected, considering both bearing strength and axial compression strength. The bearing area used in calculations must be the area of the column minus 3.14 in<sup>2</sup>.

<sup>7</sup>When the required wood bearing strength, f<sub>c</sub>, is greater than or equal to 0.75F<sub>c</sub>\*, use a minimum 20 gage (0.418 inch) plate between the columns in accordance with NDS Section 3.10.1.3.

<sup>8</sup>For simultaneous uplift and lateral loads, the connector must be evaluated using the following Unity Equation: Design Uplift/Allowable Uplift + Design Lateral/Allowable Lateral < 1.0

<sup>9</sup>Uplift loads have been increased for wind or earthquake loading, with no further increase allowed. Reduce where other loads govern.

<sup>10</sup>Lateral loads apply to loading parallel or perpendicular to the dowels or bolts.

<sup>11</sup>Lateral loads are assumed to be due to the force needed to laterally brace axially loaded columns. Use for resisting lateral loads due to wind, seismic or other loading conditions where the total load on the column can change direction has not been evaluated. No further increases of the tabulated lateral values are allowed.

<sup>12</sup>The allowable lateral loads are based on a minimum actual sustained compression load of 20 kips. The design must ensure that the actual permanent load on the column will equal or exceed this value.

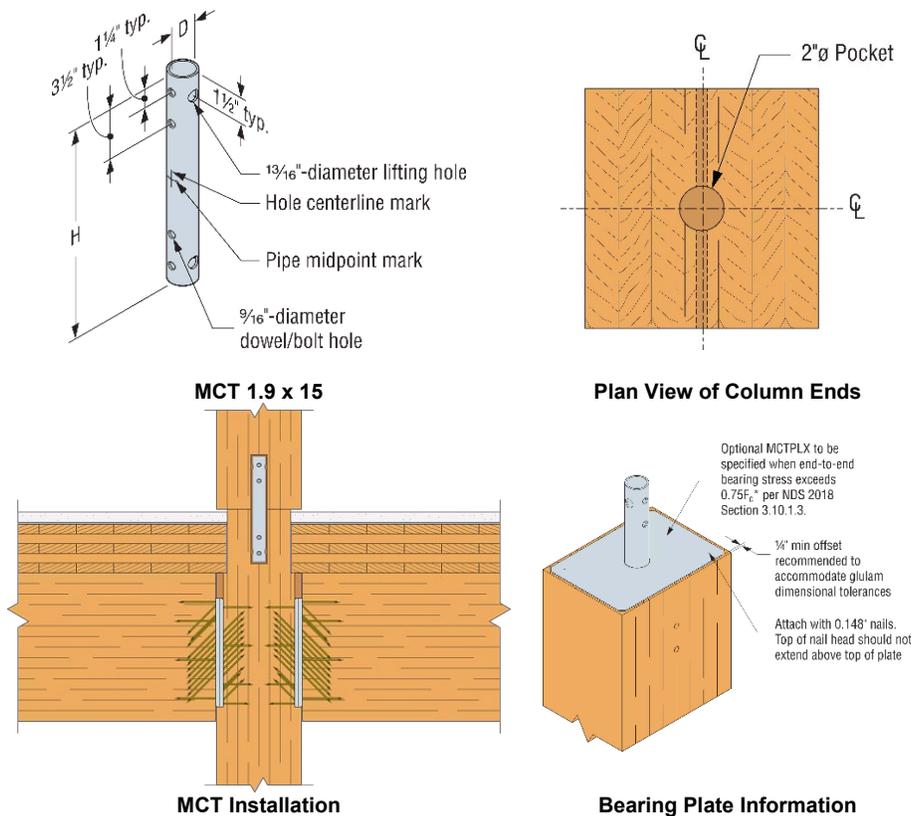


FIGURE 7—MCT COLUMN-TO-COLUMN SYSTEM

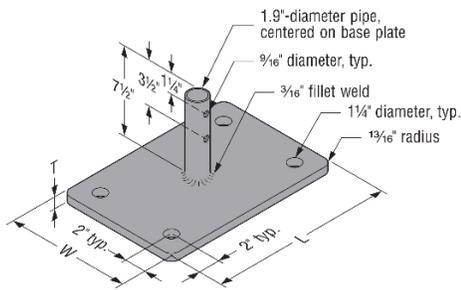
TABLE 8—MCB COLUMN BASE DOWNLOADS<sup>1,2</sup>

MODEL NO.	BASE PLATE SIZE (in.)			ALLOWABLE DOWNLOADS (kips)
	W	L	T	
MCB6x11	6	11	3/4	75.5
MCB8x8	8	8	3/4	71.5
MCB8x14	8	14	3/4	165.5
MCB9.5x9.5	9.5	9.5	3/4	123.0
MCB9.5x15.5	9.5	15.5	3/4	234.0
MCB11.5x11.5	11.5	11.5	3/4	205.0
MCB11.5x17	11.5	17	3/4	328.0
MCB13.5x13.5	13.5	13.5	3/4	302.5
MCB13.5x18.5	13.5	18.5	3/4	434.0
MCB15.5x15.5	15.5	15.5	3/4	415.5

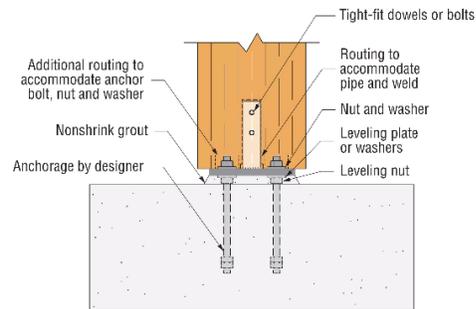
For SI: 1 inch = 25.4 mm, 1 kip = 1,000 lbf = 4.45 kN.

<sup>1</sup>See Column Base General Notes, following Table 9.

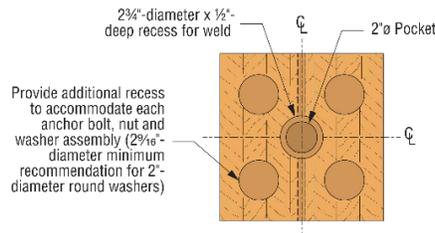
<sup>2</sup>The tabulated values are governed by wood bearing capacity and a bearing area equal to the area of the base plate minus 26.6 in<sup>2</sup> to account for material removed from the end of the column to accommodate the tube component, the tube to plate weld and recesses for anchor bolt ends, nuts, and washers as shown in the routing details in Figure 8. For different routing dimensions, adjust the bearing area and allowable download capacity accordingly.



**MCB Column Base**  
(for MCB6x11 holes are located 1.5 inches from the plate edges)



**Typical Installation**



**Routing Details**

**FIGURE 8—MCB COLUMN BASE**

TABLE 9—MCBS COLUMN BASE DOWNLOADS<sup>1,2</sup>

MODEL NO.	HEIGHT (in.)	BEARING PLATE SIZE (in.)			HSS STANDOFF DIMENSIONS (in.)	BASE PLATE SIZE (in.)			ALLOWABLE DOWNLOADS (kips)
	H	W1	L1	T1		W2	L2	T2	
MCBS6x6	6 to 18 <sup>(3)</sup>	6	6	3/4	4 x 4 x 5/16	8.5	8.5	3/4	57.5
MCBS6x11	6 to 30 <sup>(3)</sup>	6	11	3/4	8 x 4 x 5/16	8.5	12.5	3/4	116.0
MCBS8x8	6 to 18 <sup>(3)</sup>	8	8	3/4	4 x 4 x 5/16	8.5	8.5	3/4	110.0
MCBS8x14	6 to 36	8	14	7/8	10 x 4 x 5/16	8.5	14.5	7/8	205.5
MCBS9.5x9.5	6 to 36	9.5	9.5	3/4	6 x 6 x 5/16	10.5	10.5	3/4	161.0
MCBS9.5x15.5	6 to 36	9.5	15.5	3/4	12 x 6 x 5/16	10.5	16.5	7/8	274.5
MCBS11.5x11.5	6 to 36	11.5	11.5	3/4	8 x 8 x 5/16	12.5	12.5	7/8	245.0
MCBS11.5x17	6 to 36	11.5	17	1	12 x 8 x 3/8	12.5	16.5	1	368.5
MCBS13.5x13.5	6 to 36	13.5	13.5	3/4	10 x 10 x 3/8	14.5	14.5	7/8	342.5
MCBS13.5x18.5	6 to 36	13.5	18.5	1	14 x 10 x 3/8	14.5	18.5	1	458.0
MCBS15.5x15.5	6 to 36	15.5	15.5	3/4	12 x 12 x 3/8	16.5	16.5	1	455.5

For SI: 1 inch = 25.4 mm, 1 kip = 1,000 lbf = 4.45 kN.

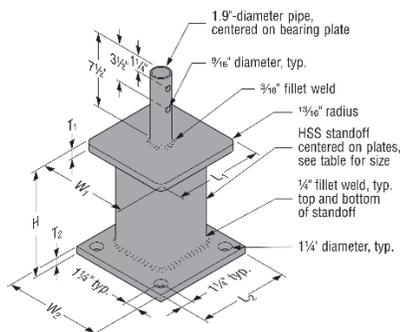
<sup>1</sup>See Column Base General Notes below.

<sup>2</sup>The tabulated values are governed by wood bearing capacity and a bearing area equal to the area of the bearing plate minus 6.0 in<sup>2</sup> to account for material removed from the end of the column to accommodate the tube component and the tube to plate weld as shown in the routing detail in Figure 8. For different routing dimensions, adjust the bearing area and allowable download capacity accordingly.

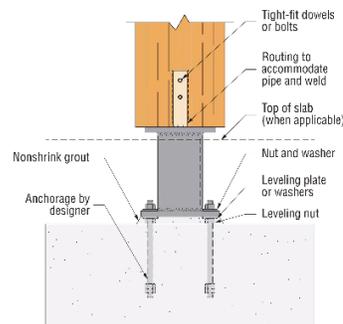
<sup>3</sup>When the HSS standoff is fully confined by concrete, the maximum height may be increased to 36 inches. Requirements for this concrete confinement are outside the scope of this evaluation.

**Column Base General Notes**

1. Tabulated allowable downloads are based on conditions at the end of the column and may need to be reduced so as not to exceed the capacity of the column.
2. To achieve the tabulated allowable downloads, the column width and depth must be greater than or equal to the MCB base plate or MCBS bearing plate width and depth. Larger column dimensions may be needed to resist the uplift and lateral loads shown in Table 10.
3. Allowable loads are based on minimum adjusted compression strength parallel to grain,  $F_c^*$ , of 1,950 psi. For lower  $F_c^*$  values, reduce allowable loads proportionally.
4. The designer is responsible for concrete design and design of anchorage to concrete. The base plates have four 1 1/4 inch holes to accommodate 3/4 inch anchor bolts. Concrete support area (A2) shall be 4 times the base plate area (A1). See AISC Design Guide 1.
5. Concrete must have a minimum compressive strength,  $f'_c$ , of 3,000 psi. The grout must have a minimum compressive strength of 2 times the concrete compressive strength.
6. Allowable uplift and lateral loads based on the interaction of the tube and fasteners with the wood are less than the steel capacities of the connectors. See Table 10 for allowable uplift and lateral loads.



MCBS Column Base



Typical Installation

FIGURE 9—MCBS COLUMN BASE

TABLE 10—MCB AND MCBS COLUMN-BASE UPLIFT AND LATERAL LOADS (WOOD TO STEEL)<sup>1,2</sup>

MODEL NO.	MINIMUM COLUMN WIDTH <sup>3</sup> (in.)	MINIMUM COLUMN DEPTH (in.)	FASTENERS <sup>4,5</sup>		ALLOWABLE LOADS <sup>6,7</sup> (lbf)			
			Qty.	Type and Size (in.)	Uplift <sup>8</sup> (C <sub>D</sub> = 1.6)	Lateral <sup>9,10</sup>		
						Concurrent axial compression		
						<20 kips		>20 kips <sup>11</sup>
		C <sub>d</sub> = 1.0	C <sub>d</sub> = 1.6	C <sub>d</sub> = 1.0 through 1.6				
MCB/MCBS	8 <sup>3</sup> / <sub>4</sub>	9	2	1/2 in. x 4 <sup>3</sup> / <sub>4</sub> in. (min.) dowel or 1/2-inch bolt	3,790	1,500	1,500	3,230
	12 <sup>1</sup> / <sub>4</sub>	15				2,500	2,500	5,470

For SI: 1 inch = 25.4 mm, 1 lbf = 4.45 N.

<sup>1</sup>See Column Base General Notes below [Table 9](#).

<sup>2</sup>Allowable loads are applicable to Douglas Fir or Southern Pine glulam.

<sup>3</sup>For SP glulam with minimum column widths of 8<sup>1</sup>/<sub>2</sub> or 12 inches, use tabulated loads for widths of 8<sup>3</sup>/<sub>4</sub> and 12<sup>1</sup>/<sub>4</sub> inches, respectively.

<sup>4</sup>See Section 3.2.4.3 for bolt specifications. See Section 3.2.4.4 for dowel specifications.

<sup>5</sup>Holes for the dowels or bolts must be drilled through the glulam. For dowels, the nominal hole diameter must be equal to the dowel diameter with a tolerance of +0 / -<sup>1</sup>/<sub>32</sub> inch. For bolts, the nominal hole diameter must be equal to the bolt diameter with a tolerance of +<sup>1</sup>/<sub>16</sub> inch / -<sup>1</sup>/<sub>32</sub> inch.

<sup>6</sup>See [Table 9](#) for allowable downloads.

<sup>7</sup>For simultaneous uplift and lateral loads, the connector must be evaluated using the following Unity Equation: Design Uplift/Allowable Uplift + Design Lateral/Allowable Lateral < 1.0

<sup>8</sup>Uplift loads have been increased for wind or earthquake loading, with no further increase allowed. Reduce where other loads govern.

<sup>9</sup>Lateral loads apply to loading parallel or perpendicular to the dowels or bolts.

<sup>10</sup>Lateral loads are assumed to be due to the force needed to laterally brace axially loaded columns. Use for resisting lateral loads due to wind, seismic or other loading conditions where the total load on the column can change direction has not been evaluated. No further increases of the tabulated lateral values are allowed.

<sup>11</sup>The allowable lateral loads are based on a minimum actual sustained compression load of 20 kips. The design must ensure that the actual permanent load on the column will equal or exceed this value.

**DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES**  
**Section: 06 05 23—Wood, Plastic, and Composite Fastenings**

**REPORT HOLDER:**

**SIMPSON STRONG-TIE COMPANY INC.**

**EVALUATION SUBJECT:**

**SIMPSON STRONG-TIE® COLUMN AND POST BASE CONNECTORS FOR WOOD CONSTRUCTION**

**1.0 REPORT PURPOSE AND SCOPE****Purpose:**

The purpose of this evaluation report supplement is to indicate that Simpson Strong-Tie column and post base connectors for wood construction, described in ICC-ES evaluation report [ESR-1622](#), have 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* ([LARC](#))
- 2023 *City of Los Angeles Residential Code* ([LARC](#))

**2.0 CONCLUSIONS**

The Simpson Strong-Tie column and post base connectors for wood construction, described in Sections 2.0 through 7.0 of the evaluation report [ESR-1622](#), comply with the LABC Chapter 23, and the LARC, and are subjected to the conditions of use described in this supplement.

**3.0 CONDITIONS OF USE**

The Simpson Strong-Tie column and post base connectors for wood construction, described in this evaluation report supplement must comply with all of the following conditions:

- All applicable sections in the evaluation report [ESR-1622](#).
- The design, installation, conditions of use and labeling are in accordance with the 2021 *International Building Code*® (IBC) and 2021 *International Residential Code*® (IRC) provisions, as applicable, noted in the evaluation report [ESR-1622](#).
- The design, installation and inspection are in accordance with additional requirements of LABC Chapter 23.
- The connections have not been evaluated to resist uplift forces from wood shear walls.
- Under the LARC, an engineered design in accordance with LARC Section R301.1.3 must be submitted
- The seismic design provisions for hillside buildings referenced in LABC Section 2301.1 have not been considered and are outside of the scope of this supplement.

This supplement expires concurrently with the evaluation report, reissued January 2025.

**DIVISION: 06 00 00—WOOD, PLASTICS, AND COMPOSITES**  
**Section: 06 05 23—Wood, Plastic, and Composite Fastenings**

**REPORT HOLDER:**

**SIMPSON STRONG-TIE COMPANY INC.**

**EVALUATION SUBJECT:**

**SIMPSON STRONG-TIE® COLUMN AND POST BASE CONNECTORS FOR WOOD CONSTRUCTION**

**1.0 REPORT PURPOSE AND SCOPE****Purpose:**

The purpose of this evaluation report supplement is to indicate that the Simpson Strong-Tie® column and post base connectors for wood construction, described in ICC-ES evaluation report ESR-1622, have 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 Simpson Strong-Tie® column and post base connectors for wood construction, described in Sections 2.0 through 7.0 of ICC-ES evaluation report ESR-1622, comply with the *Florida Building Code—Building*, and the *Florida Building Code—Residential*. The design requirements must be 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-1622 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 Simpson Strong-Tie® post base connectors for wood construction has also been found to be in compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code—Building*, and the *Florida Building Code—Residential* with the following condition:

- a. For connections subject to uplift, the connection must be designed for no less than 700 pounds (3114 N).

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 January 2025.