

ECCL/CCC/CCT

Column Caps

Column-to-beam connections often have multiple beams framing on top of a column. L, T, and cross-column caps provide design solutions for this application.

Material: 7 gauge or 3 gauge depending on size

Finish: Simpson Strong-Tie gray paint, also available in HDG

Installation:

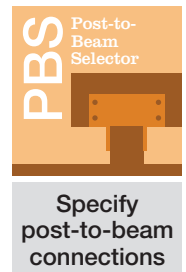
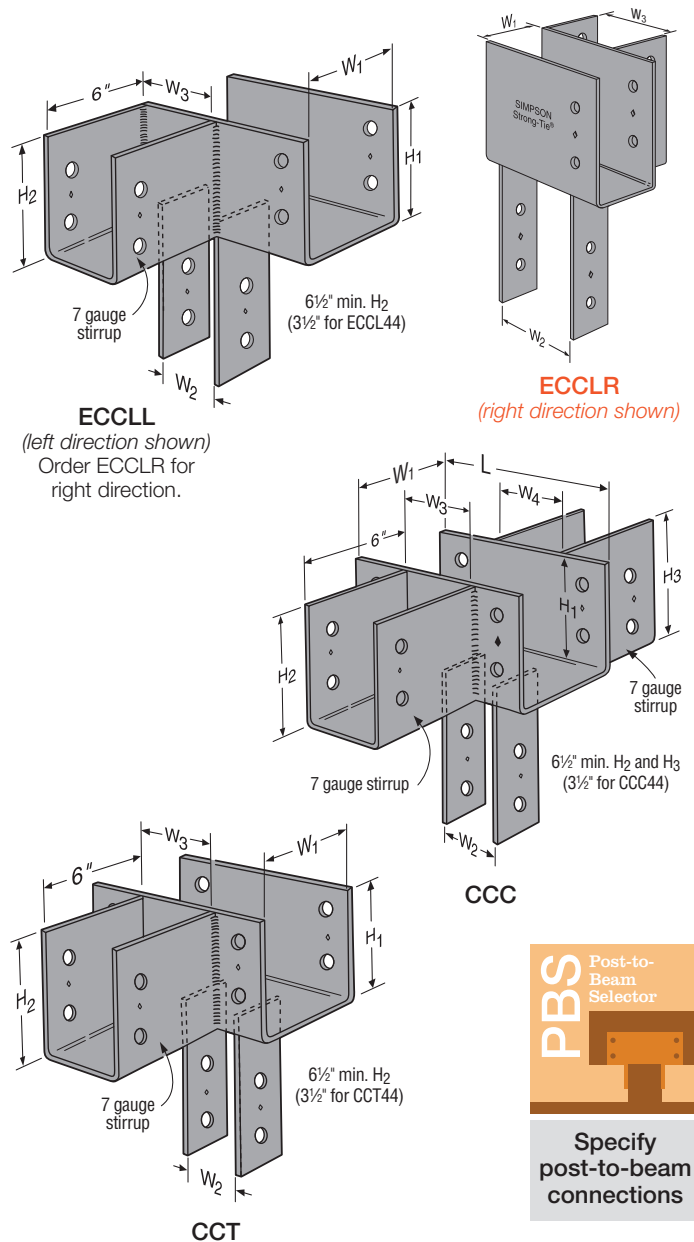
- Use all specified fasteners; see General Notes
- Bolt holes shall be a minimum of $\frac{1}{2}$ " to a maximum of $\frac{1}{16}$ " larger than bolt diameter (per 2015 and 2018 NDS 12.1.3.2)

Options:

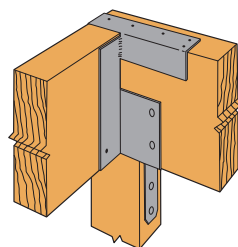
- Many combinations of beam and post sizes can be manufactured. Refer to worksheet T-C-CCLTC-WS at strongtie.com.
- The download shall be determined from the allowable loads for the unmodified product (see p. 91). The side beam can take a maximum of 40% of the download and shall not exceed 10,665 lb. The sum of the loads for the side beam(s) and main beam can not exceed the table load.
- Uplift loads do not apply for ECCL caps. For CCC and CCT, uplift loads from table apply for main beam only.
- The column width in the direction of the main beam width must be the same as the main beam width (W_1).
- Specify the stirrup height from the top of the cap. The minimum side stirrup heights (H_2 or H_3) is $6\frac{1}{2}$ " ($3\frac{1}{2}$ " for 44s).
- The L dimension may vary depending on the width of the side stirrup (W_3 or W_4).
- See p. 91 for other dimensions.
- Column caps may be ordered without the column straps for field welding to a steel column. Specify "No Straps" when ordering. Weld by designer. Full loads apply for the beam and the post cap.

Ordering Examples:

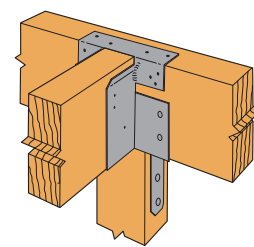
- A CCC66 with $W_3 = 5\frac{1}{2}$ ", H_2 and $H_3 = 6\frac{1}{2}$ " is a CC66 column cap with $5\frac{1}{2}$ " beams on each side with all beam seats flush.
- An ECCLR66 with $W_3 = 3\frac{5}{8}$ ", $H_2 = 7\frac{1}{2}$ " is an ECC66 end column cap with a 4x beam on the right side (specify direction left or right for stirrup) and stirrup seat 1" below the cap seat.



There are cost-effective alternatives for replacing column caps by using a combination of connectors. Designer must specify the options required. For column cap clearance, allow 3" for the hanger flange depth.



ECC and HWP
(top flange offset right)



CC and HWP

Ordering Multiple-Beam Column Caps

Ordering column caps incorporates several key steps that are important to ensure the highest allowable-load solution for your project. For more information, refer to worksheet T-C-CCLTC-WS for bolted connections and worksheet T-C-CCQLTC-WS for Quick Install connections. See p. 2 of these worksheets for model numbers for common post and beam width combinations. These worksheets are available at strongtie.com.

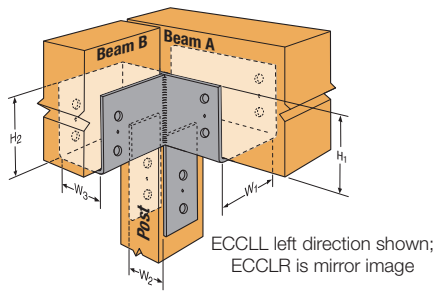
Options for Multiple-Beam, Bolted Column Caps

Instructions for Ordering Multi-Beam Column Caps:

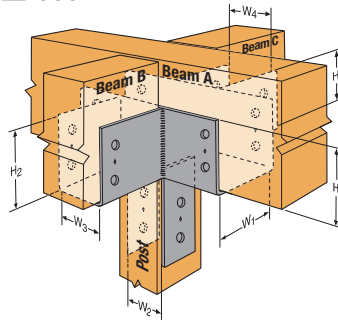
- Choose column cap style.** Look at the configuration of the column caps to determine which style column cap you require. If you don't know which style column cap is required, refer to your plans to determine the correct configuration.
- Determine column cap dimensions.** Fill in the dimensions of the column cap on the worksheet. If you don't know the dimensions of the column cap, go directly to the Beam and Post Dimensions section.
- Provide beam and post dimensions.** The Beam and Post Dimensions section of this worksheet is required. Fill in all applicable dimensions in actual inches, not as nominal dimensions.
- Determine beam orientation.** Refer to your plans or check the configuration of the column cap you selected in order to determine the orientation of the beam. Check the box for the beam orientation that best describes your beam configuration: Beam B flush at bottom of Beam A; Beam B flush at both the top and bottom of Beam A; or Beam B flush at top of Beam A.
- Check the box for the required style and strap orientation.**
- Select finish.** Standard finish is Simpson Strong-Tie® gray paint, available in HDG (specify HDG).
- Place order.** Contact Simpson Strong-Tie for ordering information.

Multiple Beam Column Caps

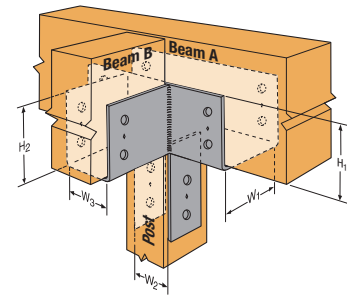
ECCLL ECCLR



CCC



CCT



Beam Dimensions:

Provide dimensions in actual inches (not nominal dimensions).

Beam A: Width _____ Height _____

Beam B: Width _____ Height _____

Beam C: Width _____ Height _____

Post Dimensions:

Post Size _____

If post is not square, specify width of post between the straps _____

Column Cap Dimensions:

$W_1 =$ _____ $H_1 =$ _____

$W_3 =$ _____ (See Wood Construction Connectors catalog for standard H_1 dimension)

$W_4 =$ _____ $H_2 =$ _____

Post Dimensions:

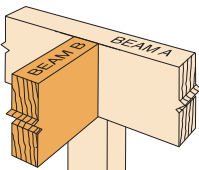
$W_2 =$ _____ $H_3 =$ _____

W_1, W_3 and W_4 will typically be $\frac{1}{8}$ "– $\frac{1}{4}$ " greater than beam widths. W_2 will typically be 0 "– $\frac{3}{8}$ " greater than post width.

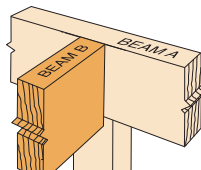
Orientation of Beam Height

Refer to your plans to determine the correct orientation of your beam. Check the box for the orientation that best describes your beam configuration and ensure that the column cap dimensions are as follows:

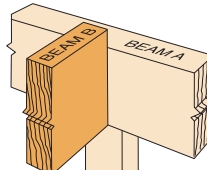
- Side Beam Flush at Top and Bottom Side Beam Flush at Top — Extends Below Main Beam Side Beam Flush at Bottom — Extends Above Main Beam



Column Cap Dimensions: $H_2 = H_1$



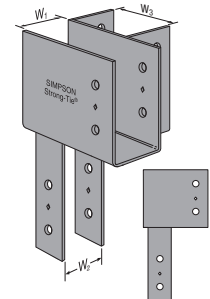
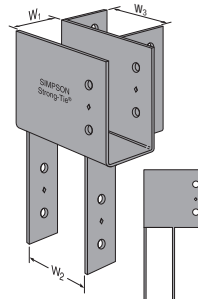
Column Cap Dimensions: $H_2 > H_1$



Column Cap Dimensions: $H_2 = H_1$

Standard Strap Orientation

Straps Rotated*
 No Straps



Column Cap Dimensions: $W_2 \leq W_1$

*Not available for all models of column caps.

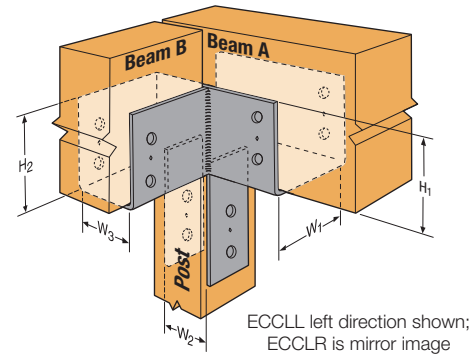
For allowable loads, refer to the current Wood Construction Connectors catalog.



Visit strongtie.com to use our free Post-to-Beam Selector app.

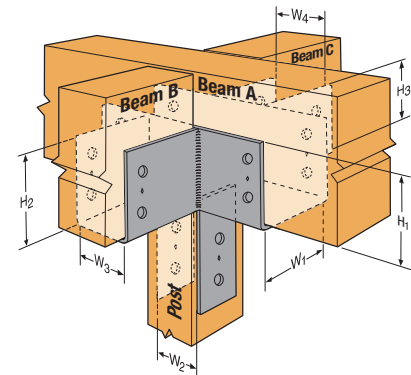
Options for Multiple-Beam, Bolted Column Caps

Model	W ₁ (in.)	W ₂ (in.)	W ₃ (in.)	H ₁ (in.)	H ₂ (in.)	Side Stirrup Direction
ECCL3¼-4	3¼	3⅝	Specify	6½	Specify	Specify Left or Right
ECCL3¼-6	3¼	5½				
ECCL44	3⅝	3⅝	3⅝	4	6½	Left
ECCL444	3⅝	3⅝				
ECCL444TC	3⅝	3⅝				
ECCL444	3⅝	3⅝				
ECCL444TC	3⅝	3⅝	Specify	6½	Specify	Specify Left or Right
ECCL46	3⅝	5½				
ECCL464	3⅝	5½	3⅝	6½	6½	Left
ECCL464	3⅝	5½				
ECCL5¼-4	5¼	3⅝	Specify	8	Specify	Specify Left or Right
ECCL5¼-6	5¼	5½				
ECCL5¼-8	5¼	7½				
ECCL64	5½	3⅝				
ECCL66	5½	5½	5½	6½	6½	Left
ECCL666	5½	5½				
ECCL666	5½	5½	Specify	8	Specify	Specify Left or Right
ECCL68	5½	7½				
ECCL7⅛-4	7⅛	3⅝	Specify	8	Specify	Specify Left or Right
ECCL7⅛-6	7⅛	5½				
ECCL7⅛-7⅛	7⅛	7⅛				
ECCL76	6⅞	5½				
ECCL77	6⅞	6⅞				
ECCL78	6⅞	7½				
ECCL86	7½	5½				
ECCL88	7½	7½				



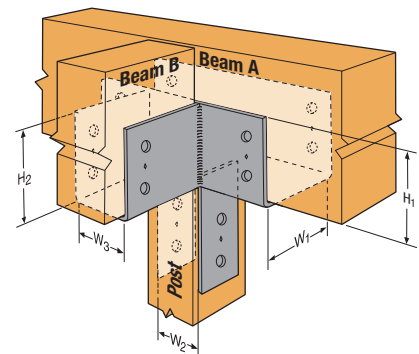
ECCL / ECCLR

Model	W ₁ (in.)	W ₂ (in.)	W ₃ (in.)	W ₄ (in.)	H ₁ (in.)	H ₂ (in.)	H ₃ (in.)
CCC3¼-4	3¼	3⅝	Specify	Specify	6½	Specify	Specify
CCC3¼-6	3¼	5½					
CCC44	3⅝	3⅝					
CCC46	3⅝	5½					
CCC5¼-4	5¼	3⅝					
CCC5¼-6	5¼	5½					
CCC5¼-8	5¼	7½					
CCC64	5½	3⅝					
CCC66	5½	5½					
CCC68	5½	7½					
CCC7⅛-6	7⅛	5½					
CCC7⅛-7⅛	7⅛	7⅛					
CCC76	6⅞	5½					
CCC78	6⅞	7½					
CCC86	7½	5½					
CCC88	7½	7½					



CCC

Model	W ₁ (in.)	W ₂ (in.)	W ₃ (in.)	H ₁ (in.)	H ₂ (in.)
CCT3¼-4	3¼	3⅝	Specify	6½	Specify
CCT3¼-6	3¼	5½			
CCT44	3⅝	3⅝			
CCT46	3⅝	5½			
CCT5¼-4	5¼	3⅝			
CCT5¼-6	5¼	5½			
CCT5¼-8	5¼	7½			
CCT64	5½	3⅝			
CCT66	5½	5½			
CCT68	5½	7½			
CCT7⅛-4	7⅛	3⅝			
CCT7⅛-6	7⅛	5½			
CCT7⅛-7⅛	7⅛	7⅛			
CCT76	6⅞	5½			
CCT77	6⅞	6⅞			
CCT78	6⅞	7½			
CCT86	7½	5½			
CCT88	7½	7½			



CCT

This technical bulletin is effective until December 31, 2023, and reflects information available as of December 1, 2021. This information is updated periodically and should not be relied upon after December 31, 2023. Contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.

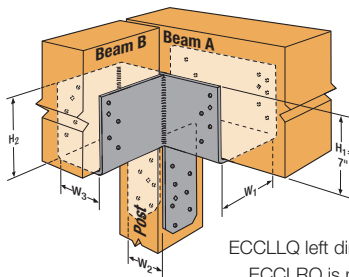
Options for Multiple-Beam Column Caps

Instructions for Ordering Multi-Beam Column Caps:

- Choose column cap style.** Look at the configuration of the column caps to determine which style column cap you require. If you don't know which style column cap is required, refer to your plans to determine the correct configuration.
- Determine column cap dimensions.** Fill in the dimensions of the column cap on the worksheet. If you don't know the dimensions of the column cap, go directly to the Beam and Post Dimensions section.
- Provide beam and post dimensions.** The Beam and Post Dimensions section of this worksheet is required. Fill in all applicable dimensions in actual inches, not as nominal dimensions.
- Determine beam orientation.** Refer to your plans or check the configuration of the column cap you selected in order to determine the orientation of the beam. Check the box for the beam orientation that best describes your beam configuration: Beam B flush at bottom of Beam A; Beam B flush at both the top and bottom of Beam A; or Beam B flush at top of Beam A.
- Check the box for the required style and strap orientation.**
- Select finish.** Standard finish is Simpson Strong-Tie® gray paint, available in HDG (specify HDG).
- Place order.** Contact Simpson Strong-Tie for ordering information.

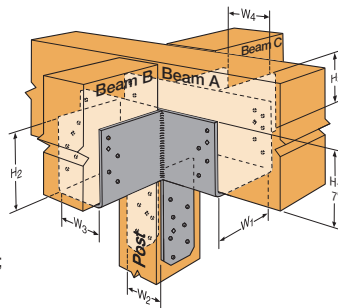
Multiple Beam Column Caps

ECLLQ ECCLRQ

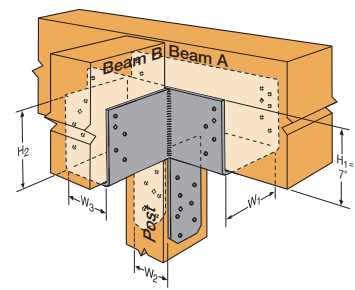


ECLLQ left direction shown; ECCLRQ is mirror image

CCCQ



CCTQ



Beam Dimensions:

Provide dimensions in actual inches (not nominal dimensions).

Beam A: Width _____ Height _____

Beam B: Width _____ Height _____

Beam C: Width _____ Height _____

Post Dimensions:

Post Size _____

If post is not square, specify width of post between the straps _____

Column Cap Dimensions:

$W_1 =$ _____ $H_1 = 7"$

$W_3 =$ _____ $H_2 =$ _____

$W_4 =$ _____ $H_3 =$ _____

Post Dimensions:

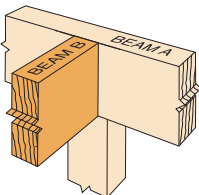
$W_2 =$ _____

W_1 , W_3 and W_4 will typically be $\frac{1}{8}"$ – $\frac{1}{4}"$ greater than beam widths. W_2 will typically be $0"$ – $\frac{1}{8}"$ greater than post width.

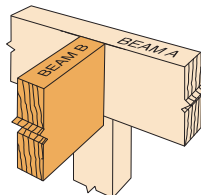
Orientation of Beam Height

Refer to your plans to determine the correct orientation of your beam. Check the box for the orientation that best describes your beam configuration and ensure that the column cap dimensions are as follows:

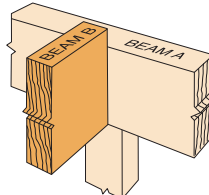
- Side Beam Flush at Top and Bottom Side Beam Flush at Top — Extends Below Main Beam Side Beam Flush at Bottom — Extends Above Main Beam



Column Cap Dimensions: $H_2 = H_1$



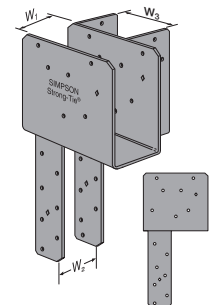
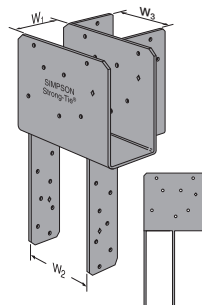
Column Cap Dimensions: $H_2 > H_1$



Column Cap Dimensions: $H_2 = H_1$

Standard Strap Orientation

Straps Rotated*
 No Straps



Column Cap Dimensions: $W_2 \leq W_1$

*Not available for all models of column caps.

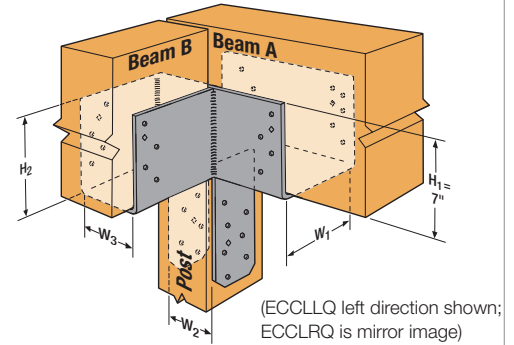
For allowable loads, refer to the current Wood Construction Connectors catalog.



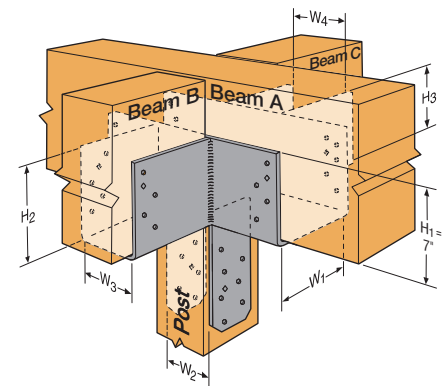
Visit strongtie.com to use our free Post-to-Beam Selector app.

Options for Multiple-Beam Column Caps

Model	W ₁ (in.)	W ₂ (in.)	W ₃ (in.)	H ₁ (in.)	H ₂ (in.)	Side StIRRup Direction
ECCLQ3-4SDS	3 1/4	3 5/8	Specify	7	Specify	Specify Left or Right
ECCLQ3-6SDS	3 1/4	5 1/2				
ECCLQ44SDS	3 5/8	3 5/8	3 5/8	7	Specify	Left
ECCLLQ444SDS	3 5/8	3 5/8				Right
ECCLRQ444SDS	3 5/8	3 5/8	Specify	7	Specify Left or Right	Left
ECCLQ46SDS	3 5/8	5 1/2				Right
ECCLLQ464SDS	3 5/8	5 1/2	3 5/8	7	Specify	Left
ECCLRQ464SDS	3 5/8	5 1/2				Right
ECCLQ48SDS	3 5/8	7 1/2	Specify	7	Specify	Specify Left or Right
ECCLQ5-4SDS	5 1/4	3 5/8				
ECCLQ5-6SDS	5 1/4	5 1/2	5 1/2	7	Specify	Specify Left or Right
ECCLQ5-8SDS	5 1/4	7 1/2				
ECCLQ64SDS	5 1/2	3 5/8	Specify	7	Specify	Specify Left or Right
ECCLQ66SDS	5 1/2	5 1/2				
ECCLLQ666SDS	5 1/2	5 1/2	5 1/2	7	Specify	Left
ECCLRQ666SDS	5 1/2	5 1/2				Right
ECCLQ7.1-4SDS	7 1/8	3 5/8	Specify	7	Specify	Specify Left or Right
ECCLQ7.1-6SDS	7 1/8	5 1/2				
ECCLQ7.1-7.1SDS	7 1/8	7 1/8	Specify	7	Specify	Specify Left or Right
ECCLQ74SDS	6 7/8	3 5/8				
ECCLQ76SDS	6 7/8	5 1/2	Specify	7	Specify	Specify Left or Right
ECCLQ77SDS	6 7/8	6 7/8				
ECCLQ78SDS	6 7/8	7 1/2	Specify	7	Specify	Specify Left or Right
ECCLQ86SDS	7 1/2	5 1/2				
ECCLQ88SDS	7 1/2	7 1/2				



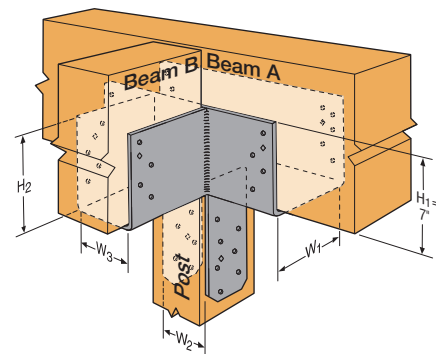
ECCLLQ, ECCLRQ



CCCQ

Model	W ₁ (in.)	W ₂ (in.)	W ₃ (in.)	W ₄ (in.)	H ₁ (in.)	H ₂ (in.)	H ₃ (in.)
CCCQ3-6SDS	3 1/4	5 1/2	Specify	Specify	7	Specify	Specify
CCCQ44SDS	3 5/8	3 5/8					
CCCQ46SDS	3 5/8	5 1/2	Specify	Specify	7	Specify	Specify
CCCQ5-4SDS	5 1/4	3 5/8					
CCCQ5-6SDS	5 1/4	5 1/2	Specify	Specify	7	Specify	Specify
CCCQ5-8SDS	5 1/4	7 1/2					
CCCQ64SDS	5 1/2	3 5/8	Specify	Specify	7	Specify	Specify
CCCQ66SDS	5 1/2	5 1/2					
CCCQ68SDS	5 1/2	7 1/2	Specify	Specify	7	Specify	Specify
CCCQ7.1-4SDS	7 1/8	3 5/8					
CCCQ7.1-6SDS	7 1/8	5 1/2	Specify	Specify	7	Specify	Specify
CCCQ76SDS	6 7/8	5 1/2					
CCCQ77SDS	6 7/8	6 7/8	Specify	Specify	7	Specify	Specify
CCCQ78SDS	6 7/8	7 1/2					
CCCQ86SDS	7 1/2	5 1/2	Specify	Specify	7	Specify	Specify
CCCQ88SDS	7 1/2	7 1/2					

Model	W ₁ (in.)	W ₂ (in.)	W ₃ (in.)	H ₁ (in.)	H ₂ (in.)
CCTQ3-4SDS	3 1/4	3 5/8	Specify	7	Specify
CCTQ3-6SDS	3 1/4	5 1/2			
CCTQ44SDS	3 5/8	3 5/8	Specify	7	Specify
CCTQ46SDS	3 5/8	5 1/2			
CCTQ5-4SDS	5 1/4	3 5/8	Specify	7	Specify
CCTQ5-6SDS	5 1/4	5 1/2			
CCTQ5-8SDS	5 1/4	7 1/2	Specify	7	Specify
CCTQ64SDS	5 1/2	3 5/8			
CCTQ66SDS	5 1/2	5 1/2	Specify	7	Specify
CCTQ68SDS	5 1/2	7 1/2			
CCTQ7.1-4SDS	7 1/8	3 5/8	Specify	7	Specify
CCTQ7.1-6SDS	7 1/8	5 1/2			
CCTQ7.1-7.1SDS	7 1/8	7 1/8	Specify	7	Specify
CCTQ76SDS	6 7/8	5 1/2			
CCTQ77SDS	6 7/8	6 7/8	Specify	7	Specify
CCTQ78SDS	6 7/8	7 1/2			
CCTQ86SDS	7 1/2	5 1/2	Specify	7	Specify
CCTQ88SDS	7 1/2	7 1/2			



CCTQ

This technical bulletin is effective until December 31, 2023, and reflects information available as of December 1, 2021. This information is updated periodically and should not be relied upon after December 31, 2023. Contact Simpson Strong-Tie for current information and limited warranty or see strongtie.com.