

SSTB® Anchor Bolts

The SSTB anchor bolt is designed for maximum performance as an anchor bolt for holdowns and Simpson Strong-Tie® Strong-Wall® shearwalls. Extensive testing has been done to determine the design load capacity of the SSTB when installed in many common applications.

The Simpson Strong-Tie® SSTB anchor bolts are now code listed by ICC-ES under the 2006 and 2009 IBC® and IRC® to meet the requirements of ICC-ES acceptance criteria – AC 309. ICC-ES ESR-2611 is the industry's first code report issued for proprietary anchor bolts evaluated to the criteria of AC 309.

Special Features:

- Identification on the bolt head showing embedment angle and model
- Offset angle reduces side bursting, and provides more concrete cover
- Rolled thread for higher tensile capacity
- Stamped embedment line aids installation
- Available in HDG for additional corrosion resistance

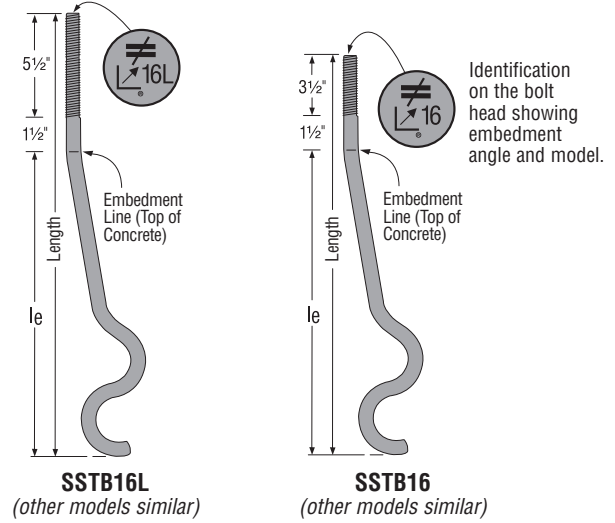
MATERIAL: ASTM F-1554, Grade 36

FINISH: None. May be ordered HDG; contact Simpson Strong-Tie.

INSTALLATION:

- SSTB is suitable for monolithic and two-pour concrete applications.
- Nuts and washers for holddown attachment are not supplied with the SSTB; install standard nuts, couplers and/or washers as required.
- On HDG SSTB anchors, chase the threads to use standard nuts or couplers or use overtapped products in accordance with ASTM A563, for example Simpson Strong-Tie® NUT $\frac{1}{2}$ -OST or NUT $\frac{3}{4}$ -OST.
- Install SSTB before the concrete pour using AnchorMates®. Install the SSTB per the plan view detail.
- Minimum concrete compressive strength is 2500 psi.
- When rebar is required it does not need to be tied to the SSTB.
- Order SSTBL Models (example: SSTB16L) for longer thread length (16L = 5½", 20L = 6½", 24L = 6", 28L = 6½"). SSTB and SSTBL load values are the same. SSTB34 and SSTB36 feature 4½" and 6½" of thread respectively and are not available in "L" versions.

CODES: See page 20 for Code Reference Key Chart.



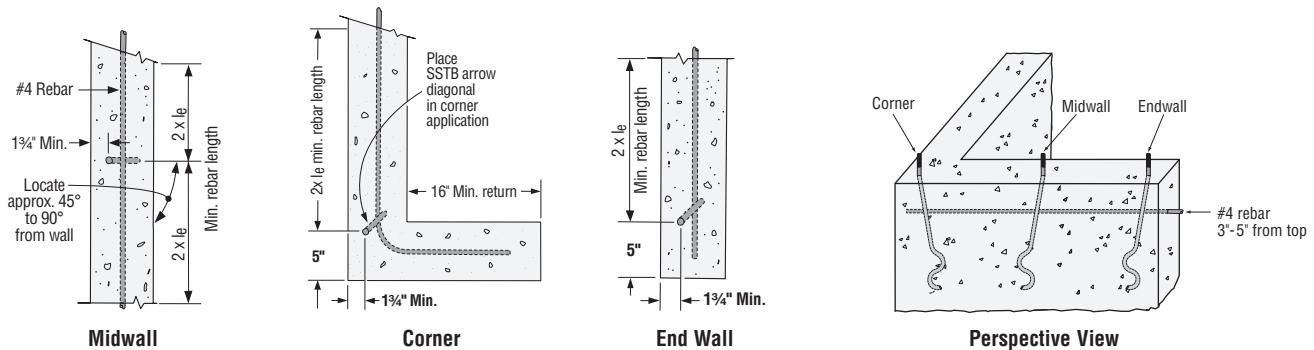
See page 30 for additional installation details.

These products are available with additional corrosion protection. Additional products on this page may also be available with this option, check with Simpson Strong-Tie for details.

SSTB Bolts at Stemwall

Model No.	Dimensions				Allowable Tension Loads (lbs.)						Code Ref.
	Stemwall Width (in.)	Dia. (in.)	Length (in.)	Min. Embed. (le)	Wind & SDC A&B			SDC C - F			
					Midwall	Corner	End Wall ²	Midwall	Corner	End Wall ²	
SSTB16	6	5/8	17% (16L = 19%)	12%	3610	3610	3610	2550	2550	2550	I23, F30, L20
SSTB20	6	5/8	21% (20L = 24%)	16%	4315	4040	4040	3145	2960	2960	
SSTB24	6	5/8	25% (24L = 28½%)	20%	5025	4470	4470	3740	3325	3325	
SSTB28	8	7/8	29% (28L = 32½%)	24%	9900	8710	7615	8315	7315	6395	
SSTB34	8	7/8	34%	28%	9900	8710	7615	8315	7315	6395	
SSTB36	8	7/8	36%	28%	9900	8710	7615	8315	7315	6395	

1. See page 39 for notes to the Designer.
2. SSTB28, SSTB34 and SSTB36 with 3¾" end distance allowable loads are 6605 lbs. (Wind and SDC A&B) and 5550 lbs (SDC C-F).

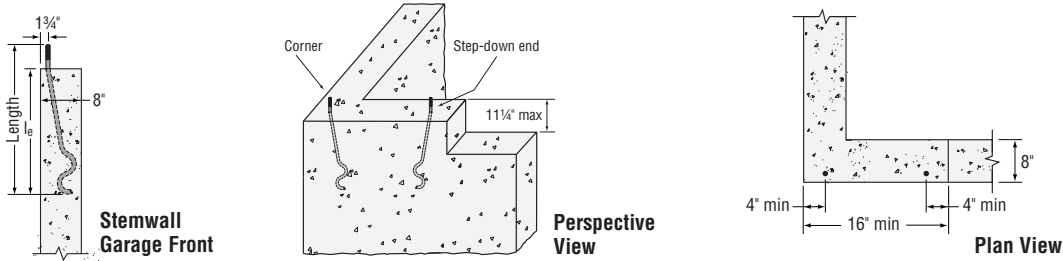


STEMWALL PLAN VIEWS

SSTB[®] Anchor Bolts

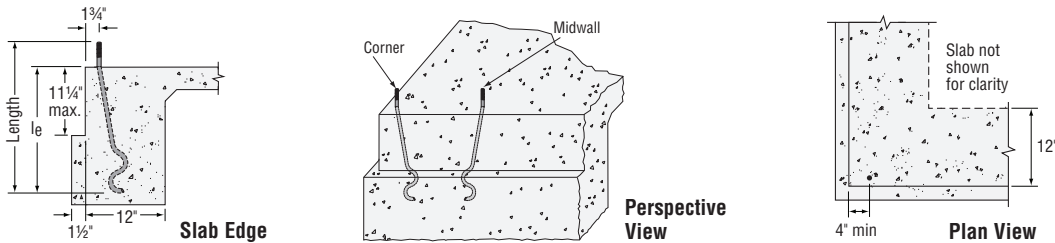
SSTB Bolts at Stemwall: Garage Front

Model No.	Dimensions (in.)				Allowable Tension Loads (lbs.)				Code Ref.
	Stemwall Width	Dia.	Length	Min. Embed. (l _e)	Wind & SDC A&B		SDC C-F		
					Step-Down End	Corner	Step-Down End	Corner	
SSTB28	8	7/8	29 7/8	24 7/8	7,015	7,045	5,895	5,920	160



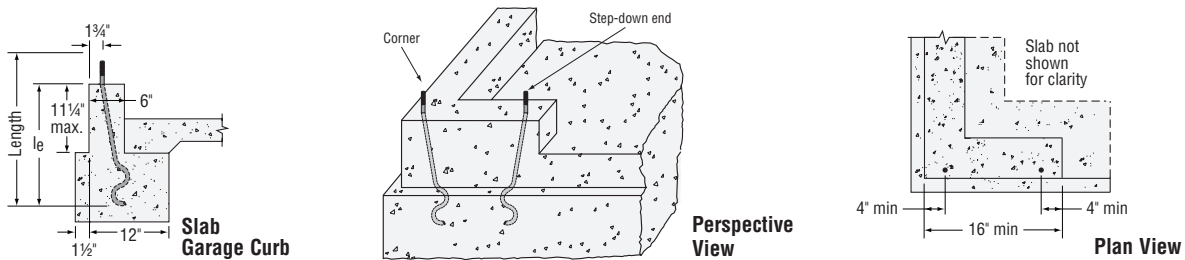
SSTB Bolts at Slab on Grade: Edge

Model No.	Dimensions (in.)				Allowable Tension Loads (lbs.)				Code Ref.
	Footing Width	Dia.	Length	Min. Embed. (l _e)	Wind & SDC A&B		SDC C-F		
					Midwall	Corner	Midwall	Corner	
SSTB16	12	5/8	17 5/8	12 5/8	5,355	5,355	3,780	3,780	160
SSTB20	12	5/8	25 5/8	16 5/8	6,550	6,550	4,785	4,785	
SSTB24	12	5/8	25 5/8	20 5/8	6,675	6,675	5,790	5,790	
SSTB28	12	7/8	29 7/8	24 7/8	13,080	13,080	11,060	11,675	
SSTB34	12	7/8	34 7/8	28 7/8	13,080	13,080	11,060	11,675	
SSTB36	12	7/8	36 7/8	28 7/8	13,080	13,080	11,060	11,675	



SSTB Bolts at Slab on Grade: Garage Curb

Model No.	Dimensions (in.)				Allowable Tension Loads (lbs.)				Code Ref.
	Curb Width	Dia.	Length	Min. Embed. (l _e)	Wind & SDC A&B		SDC C-F		
					Step-Down End	Corner	Step-Down End	Corner	
SSTB28	6	7/8	29 7/8	24 7/8	10,460	12,375	8,785	10,395	160



Notes to the Designer:

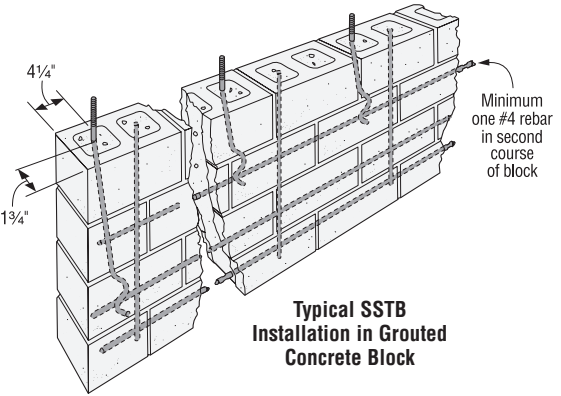
1. Rebar is required at top of stemwall foundations but is not required for Slab-on-Grade Edge and Garage Curb, or Stemwall Garage Front installations.
2. Minimum end distances for SSTB bolts are as shown in graphics.
3. Multiply the tabulated ASD wind or seismic loads by 1.6 or 1.4, respectively, to obtain LRFD capacities.
4. Per Section 1613 of the IBC, detached one- and two-story dwellings in SDC C may use "Wind and SDC A&B" allowable loads.
5. See ESR-2611 for additional information.
6. Midwall loads apply when anchor is 1.5 l_e or greater from the end. For bolts acting in tension simultaneously, the minimum bolt center-to-center spacing is 3 l_e.

SSTB® Anchor Bolts

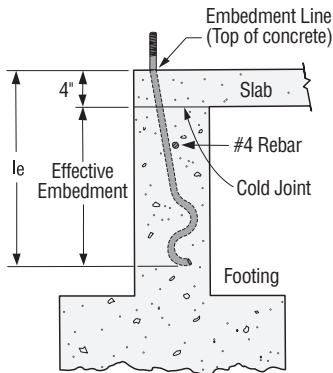
SSTB Bolts in 8" CMU

Model No.	Dia. (in.)	Length (in.)	Min. Embed. (le)	Allowable Tension Load (lbs.)		Code Ref.
				Midwall	Corner/End Wall	
SSTB16	5/8"	17 3/8" (16L = 19%)	12 5/8"	4780	1850	170
SSTB20	5/8"	21 3/8" (20L = 24%)	16 5/8"	4780	1850	
SSTB24	5/8"	25 3/8" (24L = 28%)	20 5/8"	4780	1850	
SSTB28	7/8"	29 3/8" (28L = 32%)	24 7/8"	6385	4815	
SSTB34	7/8"	34 3/8"	28 7/8"	6385	4815	
SSTB36	7/8"	36 7/8"	28 7/8"	6385	4815	

1. Loads are based on a minimum CMU compressive strength, f_m , of 1500 psi.
2. Minimum end distance required to achieve midwall table loads is 1.5 l_e .
3. Minimum end distance for corner/end wall loads is 4 1/4".
4. Loads may not be increased for duration of load.



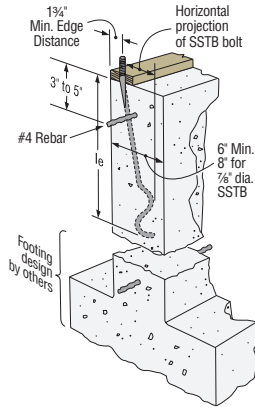
Typical SSTB Installation in Grouted Concrete Block



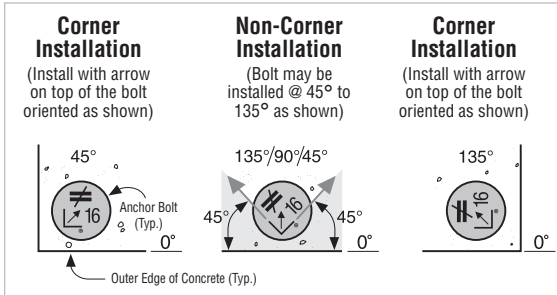
Two Pour Installation (SSTB20, 24, 34 and 36)

For two-pour (4" slab) installation loads:

- When using the SSTB20, use the equivalent loads of the SSTB16.
- When using the SSTB24, use the equivalent loads of the SSTB20.
- When using the SSTB34 or 36, use the equivalent loads of the SSTB28.



Typical SSTB Installation in Concrete Foundation
Maintain minimum rebar cover, per ACI-318 concrete code requirements



Plan View of SSTB Placement in Concrete

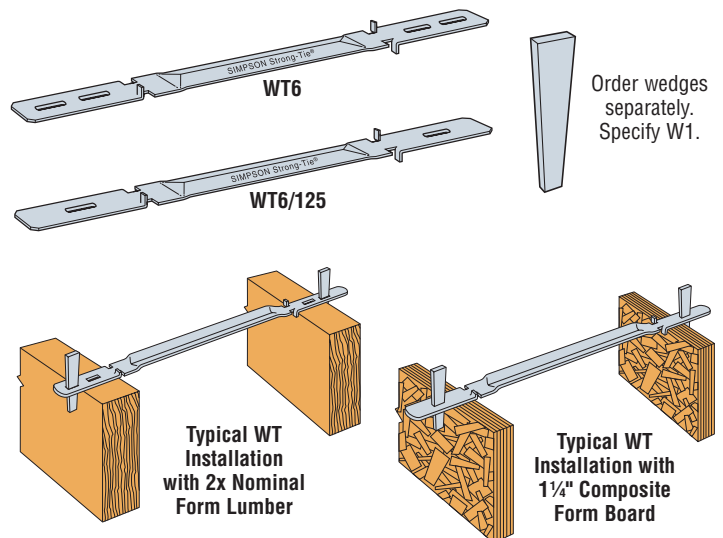
WT Wedge Form Ties

Designed for low foundation wall applications. 5/8" wide formed "V" design for rigidity allows accurate form spacing and support. Sizes now available for composite form board.

MATERIAL: Wedges—14 gauge, WT—18 gauge **FINISH:** Galvanized
INSTALLATION:

- Use two 3 1/2" long wedges for each tie.
- Not recommended for wall pours greater than 4' high.
- Wall thickness from 6" to 12".
- Refer to technical bulletin T-WT for recommended spacing (see page 215 for details).

Model No.	Form Board	Wall Thickness
WT6	2x Solid Sawn	6
WT8		8
WT10		10
WT12		12
WT6/125	1 1/4" Composite	6
WT8/125		8
WT10/125		10
WT12/125		12



Typical WT Installation with 2x Nominal Form Lumber

Typical WT Installation with 1 1/4" Composite Form Board