

SSTB® Anchor Bolts

Concrete Connectors

Extensive SSTB testing has been done to determine the factored tensile resistance when embedded in foundation walls.

- SPECIAL FEATURES:**
- Rolled threads for higher tensile capacity.
 - Offset angle reduces side-bursting, provides more concrete cover.
 - Stamped embedment line aids installation.
 - Configuration results in minimum rebar interference.

MATERIAL: ASTM A36

FINISH: None. May be ordered HDG, check with Simpson Strong-Tie.

INSTALLATION:

- SSTB is used for monolithic and two-pour installations.

- Nuts and washers are not supplied with the SSTB; install standard nuts, couplers and/or washers as required.
- Use minimum of ASTM A563 Grade A heavy hex nuts. Hot-dip galvanized nuts shall be overlapped per ASTM A563.

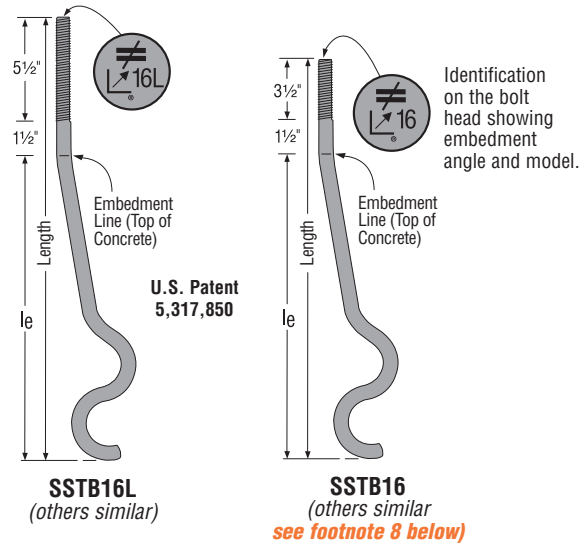
REINFORCED CONCRETE FOUNDATION

- Install SSTB before the concrete pour. Install the SSTB diagonally at approximately 45° from the wall. Install one 15M rebar 3" to 5" (may be foundation rebar not post-tension cable) from the top of the foundation.
- The SSTB does not need to be tied to the rebar.
- Minimum concrete compression strength is 20 MPa. Unless noted otherwise.
- Unless otherwise noted, do NOT install where: (a) a horizontal cold joint exists within the embedment depth between the slab and foundation wall or footing beneath, unless provisions are made to transfer the load, or the slab is designed to resist the load imposed by the anchor; or (b) slabs are poured over concrete block foundation walls.
- Use 87% of the table load for 15 MPa concrete.

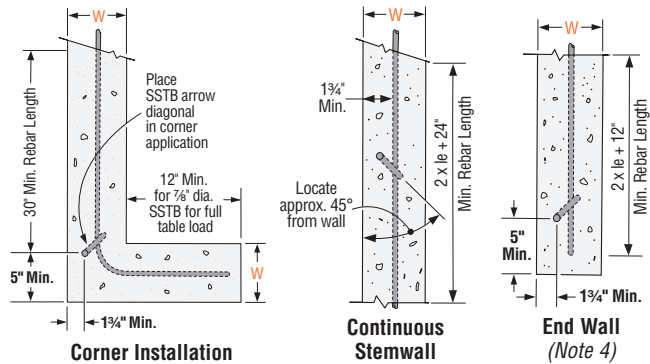
REINFORCED CONCRETE BLOCK

- Before concrete pour, install diagonally at approx. 45° in the cell.
- Horizontal 15M rebar (minimum 56" long centered about the anchor bolt)—approx. one rebar 12" from the top and two rebars approx. 28" from the top. Vertical 15M rebar (minimum 24" long)—install with maximum 24" o.c. spacing.
- Grout all cells with minimum 15 MPa concrete. Vibrate the grout per Code.

OPTIONS: Available in hot-dip galvanized; consult Simpson Strong-Tie.



See page 23 for additional installation details.



TYPICAL PLAN VIEWS OF REBAR INSTALLATION

SELECTION GUIDE
(Per Anchor Bolt Diameter)

Model No.	2x, 3x, 2-2x Sill Plates	
	Mono Pour	Two Pour
HDU2, PHD2 ¹ , HD2A, LTT20B, LTTI31	SSTB16	SSTB20
HTT16, HD5A	SSTB16	SSTB20
MTT28B	SSTB20	SSTB24
HTT22, HDC5/22, HDC5/4, PHD5 ¹ , HDU5	SSTB24	—
HDU8, PHD6 ¹ , HD6A, HD8A, HD10A, HDQ8 ¹ , HDC10/22 ⁴ , HDC10/4 ⁴	SSTB28	SSTB34

1. SSTBL models are recommended for PHD and HDQ8 holdowns on 2-2x and 3x sill plates.
2. No cold joint within embedment depth unless provisions are made to transfer the load.
3. The design engineer may specify an alternate anchorage system, provided the anchor diameter is the same.
4. Increase the embedment depth 2 1/2" to accommodate the HDC standoff block.

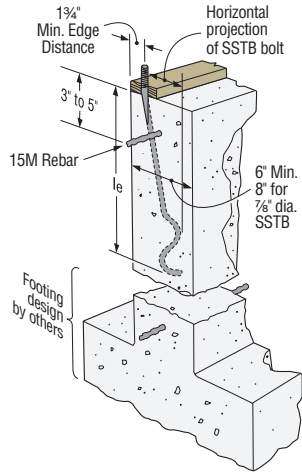
These products are available with additional corrosion protection. Additional products on this page may also be available with this option, check with Simpson Strong-Tie for details.

Model No.	Stemwall Width W (in)	Dia. (in)	Length (in)	Min. Embed. le (in)	Avg. Ult. Concrete	Factored Tensile Resistance		
						Concrete (20 MPa)	Concrete Block	Concrete Block End
						lbs	lbs	lbs
SSTB16	6	5/8	17 3/4	12 3/4	13640	6625	6940	2675
					60.76	29.51	30.91	11.92
SSTB20	6	5/8	21 3/4	16 3/4	14745	6900	6940	2675
					65.68	30.73	30.91	11.92
SSTB24	6	5/8	25 3/4	20 3/4	16439	7535	6940	2675
					73.22	33.56	30.91	11.92
SSTB28	8	7/8	29 3/4	24 3/4	32700	14385	9230	6965
					145.66	64.08	41.11	31.02
SSTB34	8	7/8	34 3/4	28 3/4	32700	14385	9230	6965
					145.66	64.08	41.11	31.02
SSTB36	8	7/8	36 3/4	28 3/4	32700	14385	9230	6965
					145.66	64.08	41.11	31.02

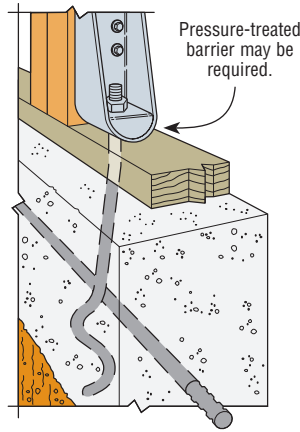
1. Factored resistances may not be increased for short term load durations. Factored resistances apply to earthquake and wind loading.
2. Minimum anchor centre to centre spacing is 2le for anchors acting in tension at the same time for full factored resistance.
3. The SSTB was tested in a stem wall with a minimum amount of concrete cover.
4. The maximum factored resistance is 11533 lbs (51.37 kN) for SSTB28, 34 and 36 used 5" from the end of a concrete foundation wall. Use the full table factored resistance when

- installed 24" from the end or installed in a corner condition (see illustration).
5. Connection is limited by the lowest of the bolt or holdown capacity.
6. PHD and HTT minimum end distance is 4 3/8"
7. Order the SSTBL models for longer threads lengths (5 1/2"). SSTBL and SSTB resistances are the same. Not available on SSTB14
8. SSTB34 has 4 1/2" of thread and SSTB36 has 6 1/2". These two models are not available in SSTBL versions.

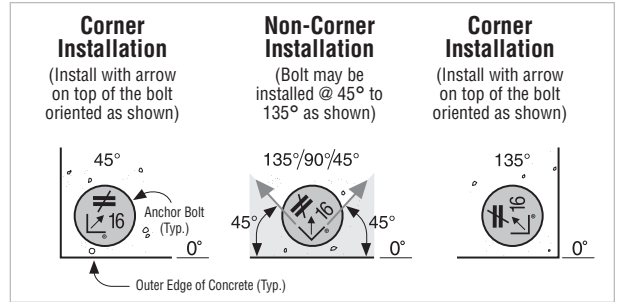
SSTB® Anchor Bolts



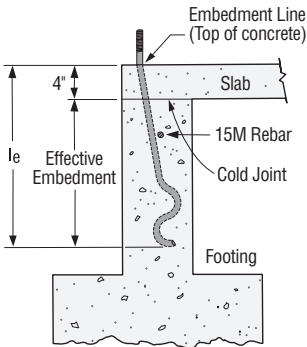
Typical SSTB Installation in Concrete Foundation
Maintain minimum rebar cover, per CSA A23.3-04 requirements



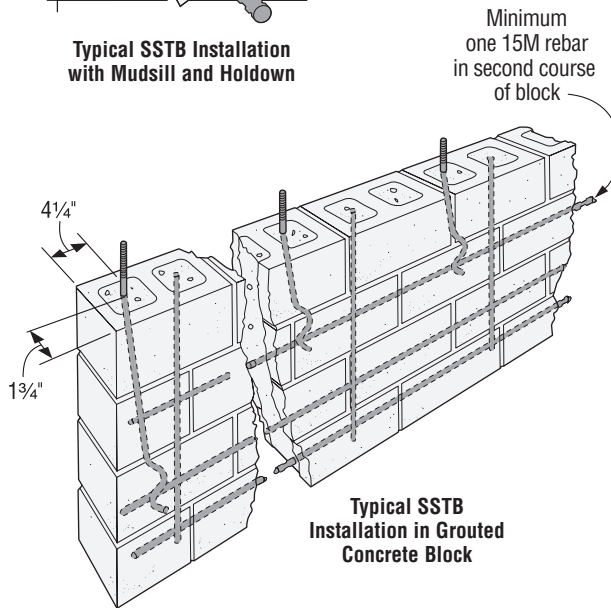
Typical SSTB Installation with Mudsill and Holdown



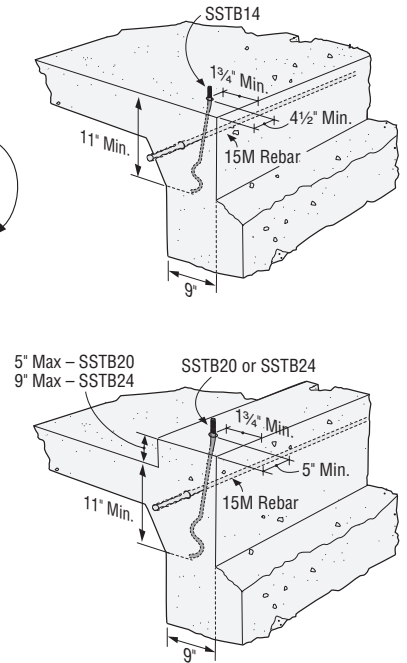
Plan View of SSTB Placement in Concrete



Two Pour Installation (SSTB20, 24 and 34)



Typical SSTB Installation in Grouted Concrete Block



RFB Retrofit Bolts

RFBs are clean, oil free, pre-cut threaded rod, supplied with nut and washer. Offers a complete engineered anchoring system when used with Simpson adhesive. Inspection is easy; the head is stamped with rod length and "No Equal" symbol for identification after installation.

MATERIAL: A307 Grade C

FINISH: Zinc Plated (*unless otherwise noted*), available in HDG (per ASTM A153); **Stainless Steel (RFB#5x8SS only).**

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

Model No.	Length L (in)	Bolt Diameter (in)
RFB#4X4	4	1/2
RFB#4X5	5	1/2
RFB#4X6	6	1/2
RFB#4X7	7	1/2
RFB#4X10	10	1/2
RFB#4x8HDG-R	8	1/2
RFB#5X5	5	5/8
RFB#5X8	8	5/8
RFB#5X10	10	5/8
RFB#5X12HDG-R	12	5/8
RFB#5X16	16	5/8
RFB#6X10.5	10 1/2	3/4

- RFB#4x8HDG-R and RFB#5x12HDG-R are only available with a hot dip galvanized coating. They are retail packaged and are sold 10 per carton.
- Washer provided on all RFB (except RFB#5x8SS).

