

# Strong-Wall®: Cast-in-Place Anchorage



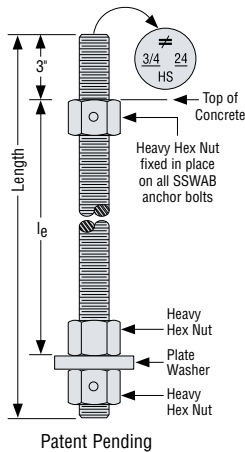
## STEEL STRONG-WALL® – SSWAB ANCHOR BOLTS

SSWAB anchor bolts in 3/4" and 1" diameters offer flexibility to meet specific project demands. Inspection is easy; the head is stamped with a "No Equal" symbol for identification, bolt length, bolt diameter, and optional "HS" for High Strength if specified.

**MATERIAL:** ASTM F1554 Grade 36; High Strength (HS) ASTM A449

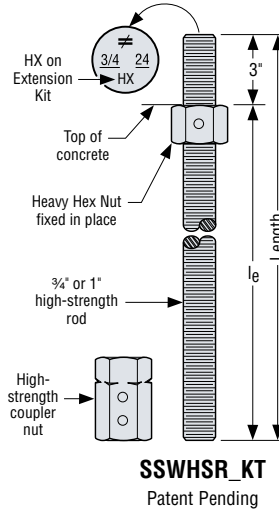
**FINISH:** None. May be ordered hot-dip galvanized; contact Simpson Strong-Tie.

An additional nut for template installation is provided with each SSWAB. It may also be used for SSW installation.

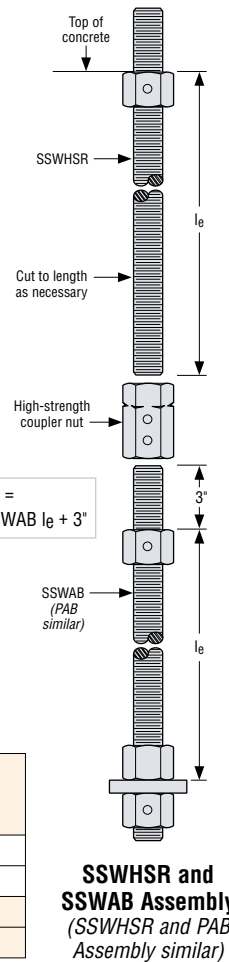


## STEEL STRONG-WALL® – SSWHSR EXTENSION KIT

SSWHSR allows for anchorage in tall stemwall applications where full embedment of an SSWAB into the footing is required. The head is stamped for identification like an SSWAB. Kit includes ASTM A449 high-strength rod with heavy hex nut fixed in place and high strength coupler nut. Do not use in place of SSWAB.



Steel Strong-Wall Width (in)	Model No.	Dia. (in)	Total Length (in)	l <sub>e</sub> (in)
12" Model	SSWHSR3/4x2KT	3/4	24	21
	SSWHSR3/4x3KT	3/4	36	33
15", 18", 21", 24" Models	SSWHSR1x2KT	1	24	21
	SSWHSR1x3KT	1	36	33



Steel Strong-Wall Width (in)	Model No.	Dia. (in)	Total Length (in)	l <sub>e</sub> (in)
12" Model	SSWAB3/4x24	3/4	24	19
	SSWAB3/4x24HS	3/4	24	19
	SSWAB3/4x30	3/4	30	25
	SSWAB3/4x30HS	3/4	30	25
	SSWAB3/4x36HS	3/4	36	31
15", 18", 21", 24" Models	SSWAB1x24	1	24	19
	SSWAB1x24HS	1	24	19
	SSWAB1x30	1	30	25
	SSWAB1x30HS	1	30	25
	SSWAB1x36HS	1	36	31

## STEEL STRONG-WALL® – SB ANCHOR BOLT FOR STEMWALL ANCHORAGE

The geometry of the SB bolt is the latest development in high-capacity anchors. The smooth transition angle of the bolt positions the head of the anchor into an optimum position in the concrete stem wall without creating excessive horizontal forces.

### Special Features:

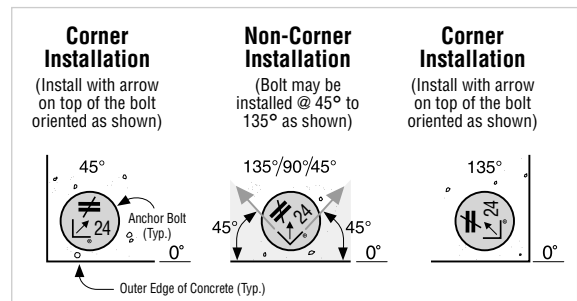
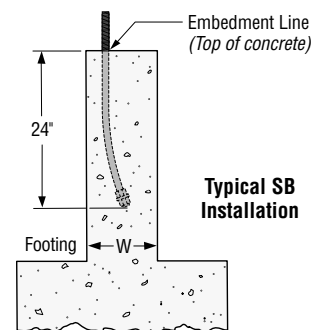
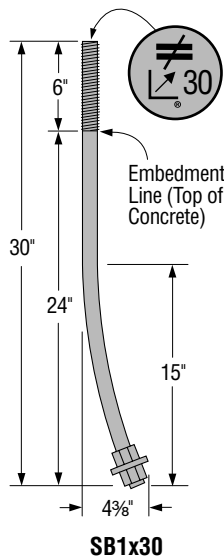
- Identification on the bolt head showing embedment angle and model
- Stamped embedment line
- Rolled thread for higher tensile capacity

**MATERIAL:** ASTM F1554 Grade 36

**FINISH:** None. May be ordered hot-dip galvanized; contact Simpson Strong-Tie.

### INSTALLATION:

- Install the SB per Plan View detail shown on this page.
- Top nuts and washers for holdown attachment are not supplied with the SB; install standard nuts, couplers and/or washers as required.



Plan View of SB Placement in Concrete

# Strong-Wall®: Cast-in-Place Anchorage



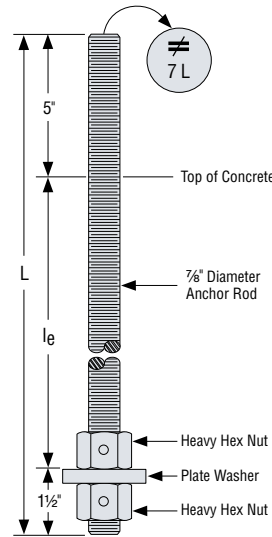
## WOOD STRONG-WALL® – SWAB ANCHOR BOLTS

SWAB $\frac{7}{8}$  anchor bolts were developed to provide anchorage solutions for Wood Strong-Wall® shearwalls in accordance with the provisions of ACI 318-05. This code listed anchor bolt is easy to inspect; the head is stamped with a “No Equal” symbol for identification, bolt length and bolt diameter. Available in four lengths, the SWAB $\frac{7}{8}$  provides a range of embedment options for seismic or wind solutions.

**MATERIAL:** ASTM F1554 Grade 36

**FINISH:** None.

Model No.	L (in)	l <sub>e</sub> (in)
SWAB $\frac{7}{8}$ x18	18	11½
SWAB $\frac{7}{8}$ x24	24	17½
SWAB $\frac{7}{8}$ x30	30	23½
SWAB $\frac{7}{8}$ x36	36	29½



**SWAB $\frac{7}{8}$  Anchor Bolt**

## WOOD AND STEEL STRONG-WALL® – PAB PRE-ASSEMBLED ANCHOR BOLT

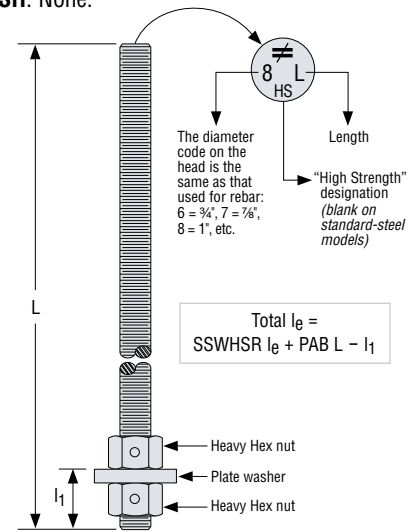
The PAB anchor bolt is a versatile new cast-in-place anchor bolt ideal for high-tension-load applications. It can be used as an alternate to the SSWAB in stemwall applications with SSWHSR\_KT for anchor installation into the footing. It features a plate washer at the embedded end sandwiched between two fixed heavy hex nuts and a head stamp for easy identification after the pour.

- Available in diameters for both Wood and Steel Strong-Wall® shearwalls and in lengths from 6" to 36" (in 6" increments)
- Intermediate lengths available contact Simpson Strong-Tie
- Available in standard and high-strength steel
- Head stamp contains the No Equal sign, diameter designation and an “HS” on high-strength rods

**MATERIAL:** Standard Steel – F<sub>U</sub> = 58 ksi

High-Strength Steel (up to 1" dia.) – F<sub>U</sub> = 120 ksi

**FINISH:** None.



**PAB**

## PAB Anchor Bolt – Standard Steel

Dia. (in.)	Plate Washer Size (in.)	l <sub>1</sub> (in.)	Root Model No.	Use With	Length Range
¾	¾ x 2 x 2	1¾	PAB6-XX	SSW12	6" to 36" (in 6" increments)
7/8	¾ x 2¼ x 2¼	1½	PAB7-XX	SW all models	
1	¾ x 2½ x 2½	1¾	PAB8-XX	SSW15 and wider	

### How to specify and order:

When calling out PAB anchor bolts, substitute the desired length for the “XX” in the Root Model Number.

For a 1"x20" anchor bolt, the model number would be PAB8-20 (or PAB8H-20 for high strength).

## PAB Anchor Bolt – High-Strength Steel

Dia. (in.)	Plate Washer Size (in.)	l <sub>1</sub> (in.)	Root Model No.	Use With	Length Range
¾	¾ x 2 x 2	1¾	PAB6H-XX	SSW12	6" to 36" (in 6" increments)
1	¾ x 2½ x 2½	1¾	PAB8H-XX	SSW15 and wider	

1. Plate washers are designed to develop the capacity of the bolt.

## WOOD STRONG-WALL® – SSTB ANCHOR BOLT

The SSTB is designed for maximum performance as an anchor bolt for Wood Strong-Wall® shearwalls. Extensive SSTB testing has been done to determine the design load capacity at a common application, the garage stem wall.

### SPECIAL FEATURES:

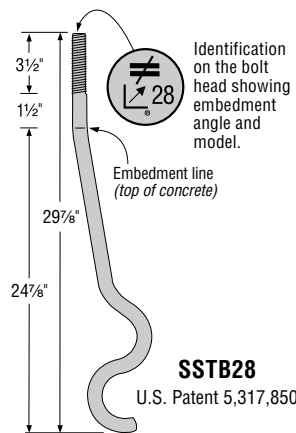
- Rolled threads for higher tensile capacity.
- Offset angle reduces side-bursting, provides more concrete cover.
- Stamped embedment line aids installation.
- Configuration results in minimum rebar interference.

**MATERIAL:** ASTM F1554 Grade 36

**FINISH:** None. May be ordered hot-dip galvanized; contact Simpson Strong-Tie.

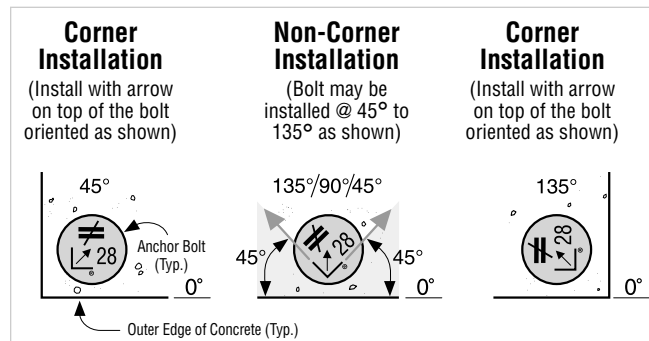
### INSTALLATION:

- Install the SSTB per plan view detail shown on this page.
- 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.
- Nuts and washers 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 (Simpson NUT $\frac{7}{8}$ -OST or CNW $\frac{7}{8}$ -OST).



**SSTB28**

U.S. Patent 5,317,850



**Plan View of SSTB Placement in Concrete**