

September 08, 2025

Re: Simpson Strong-Tie® SABR® Anchor Bolt as Replacement for SB and SSTB in Slab-on-Grade Applications

To Whom It May Concern:

The information contained in this letter provides the replacement SABR anchor to use when a previously designed SSTB or SB anchor was specified in a footing with the 1.5" concrete pop-out as shown in Figures 1 and 2. With all conditions of the concrete footing remaining the same as the original design that specifies the SB or SSTB in a Slab on Grade application, the SABR noted in the table will act as a 1:1 replacement and achieve the allowable tension loads previously published. The 1.5" concrete pop-out is necessary for this to apply. Please note additional footing depth may be required.

Table 1 - Slab on Grade: Edge

Discontinued Model No.	Dimensions (in.)			SABR Replacement Model No.	Dimensions (in.)			Footing Width (in.)
	Dia.	Length	Min. Embed. (l_e)		Dia.	Length	Min. Embed. (l_e)	
SSTB16	$\frac{5}{8}$	17 $\frac{1}{8}$	12 $\frac{1}{8}$	SABR5/8X24	$\frac{5}{8}$	24	18	12
SSTB20	$\frac{5}{8}$	21 $\frac{1}{8}$	16 $\frac{1}{8}$					
SSTB24	$\frac{5}{8}$	25 $\frac{1}{8}$	20 $\frac{1}{8}$					
SB5/8X24	$\frac{5}{8}$	24	18					
SSTB28	$\frac{7}{8}$	29 $\frac{1}{8}$	24 $\frac{1}{8}$	SABR7/8X28	$\frac{7}{8}$	28	22	12
SSTB34	$\frac{7}{8}$	34 $\frac{1}{8}$	28 $\frac{1}{8}$					
SSTB36	$\frac{7}{8}$	36 $\frac{1}{8}$	28 $\frac{1}{8}$					
SB7/8X24	$\frac{7}{8}$	24	18					
SB1X30	1	30	24	SABR1X30	1	30	24	12

1. Rebar is not required for slab-on-grade edge and garage curb installations.
2. Minimum end distances for SB, SSTB, and SABR anchor bolts are as shown in Figure 1.
3. To obtain LRFD values, multiply ASD seismic load values by 1.43 and wind load values by 1.67.
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. Middle 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 .

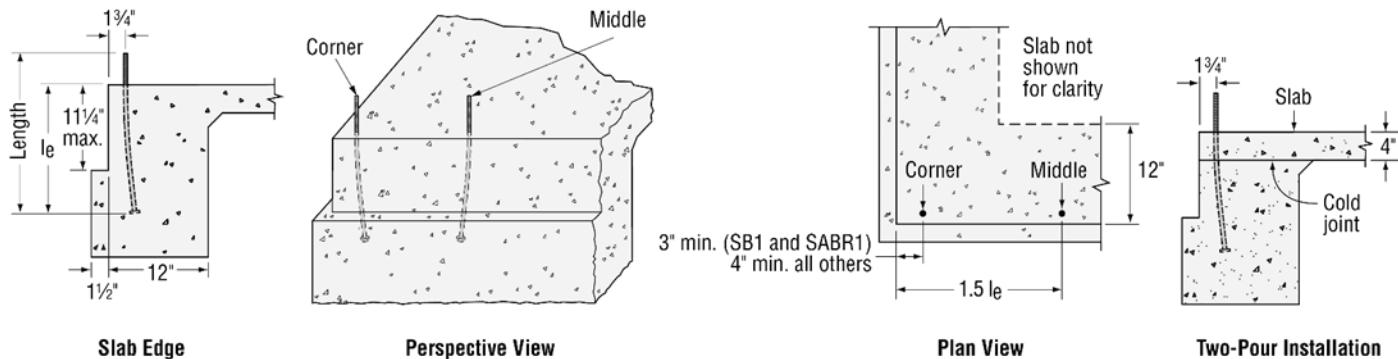
**Figure 1 - Slab on Grade: Edge Details**

Table 2 - Slab on Grade: Garage Curb

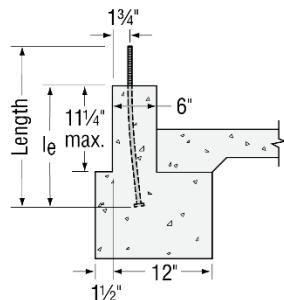
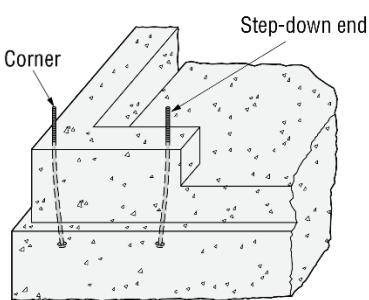
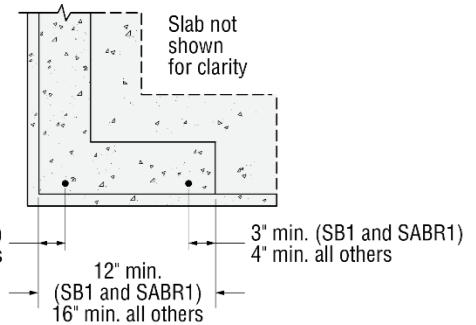
Discontinued Model No.	Dimensions (in.)			SABR Replacement Model No.	Dimensions (in.)			Curb Width (in.)
	Dia.	Length	Min. Embed. (l_e)		Dia.	Length	Min. Embed. (l_e)	
SSTB28	$\frac{7}{8}$	29 $\frac{1}{8}$	24 $\frac{1}{8}$					
SB7/8X24	$\frac{7}{8}$	24	18	SABR7/8X28	$\frac{7}{8}$	28	22	6
SB1X30	1	30	24	SABR1X30	1	30	24	6

1. Rebar is not required for slab-on-grade edge and garage curb installations.

2. Minimum end distances for SB, SSTB, and SABR anchor bolts are as shown in Figure 2.

3. To obtain LRFD values, multiply ASD seismic load values by 1.43 and wind load values by 1.67.

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.


Slab Garage Curb

Perspective View

Plan View
Figure 2 - Slab on Grade: Garage Curb Details

The information in this letter is valid until **12/31/2026** when it will be re-evaluated by Simpson Strong-Tie. Please visit strongtie.com for additional pertinent information. If you have questions or need further assistance regarding this matter, please contact the Simpson Strong-Tie engineering department at 800.999.5099.

Sincerely,

SIMPSON STRONG-TIE COMPANY INC.