

ONE SIDED FORMING - OFF CONCRETE

B5S STRESS GRADIENT PIGTAIL® ANCHORS

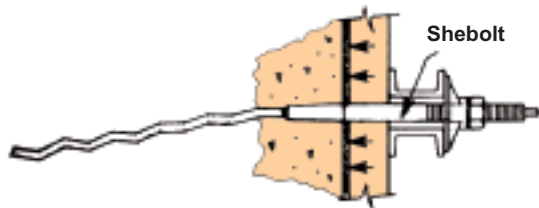


THE COMPLETE CONCRETE ANCHOR

WILLIAMS patented "Stress Gradient" PIGTAIL anchor has a unique design, which gradually increases the depth of each crimp to develop a full length PIGTAIL anchor. The lesser crimps in front allow the PIGTAIL to elongate through the concrete thereby transferring stress over its entire length. The stress gradient anchor is a positive "non-slip" anchor, which may be placed within 6" of the top of the pour even in low compression strength concrete.

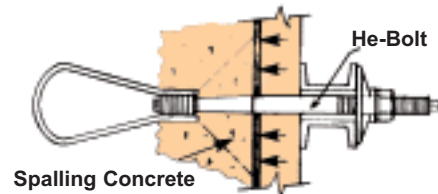
WILLIAMS combines the extra strength of stress gradient PIGTAIL anchors with high tensile steel for more strength per pound than mild steel. A 1/2" high tensile rod will do the work of a 5/8" mild steel rod. Always remember the anchors should be set during pour and no later than one hour after completion of pour. Work concrete well around PIGTAIL when placing.

Pigtail / Shebolt System vs. Coil Loop / He-Bolt System



Pigtail - Shebolt System

When re-attaching for subsequent pours, the shebolt nut is tightened until the pigtail anchor is pre-stressed to the desired load of the next pour. Since the PIGTAIL diameter is smaller than the shebolt diameter there is no concrete in front of the PIGTAIL. Therefore the PIGTAIL can be pre-stressed without damaging the concrete.



Coil Loop - He-Bolt System

When the he-bolt is re-attached to a coil loop, a section of concrete is trapped between the larger diameter coil loop insert and the outside edge of the concrete. As the he-bolt nut is tightened to pre-stress the coil loop, this section of concrete is placed under compression prohibiting the anchor from being properly pre-stressed and creating a probable cause for concrete spalling as the forms are loaded.

B5S STRESS GRADIENT PIGTAIL® ANCHORS

Standard Lengths		Radius Lengths			Safe Working Load 2 to 1 S.F. Lbs./kN	Average Ultimate Strength lbs./kN	Shebolt or Template Bolt Dia.
Diameter	D Total Length	A	B	C Total Length			
1/2" (12mm)	18"	4"	10"	24"	9,000/ 40.0	18,000/ 80.1	7/8"
5/8" (16mm)	24"	6"	12"	30"	11,250/ 50.0	22,500/100.0	1"
3/4" (20mm)	24"	6"	12"	30"	19,000/ 84.5	38,000/ 169.0	1-1/4"
7/8" (22mm)	30"	8"	14"	36"	29,000/ 129.0	58,000/ 258.0	1-3/8"
1" (25mm)	36"	8"	14"	42"	37,500/ 166.8	75,000/ 333.6	1-1/2"
1-1/8" (30mm)	36"	-	-	-	45,000/ 200.0	90,000/ 400.4	1-3/4"
1-1/4" (32mm)	42"	-	-	-	120,000/ 533.8	120,000/ 533.8	2"

Pigtail lengths shown are recommended for 500 PSI concrete or better. 1-1/8" diameter available in coil thread only.

