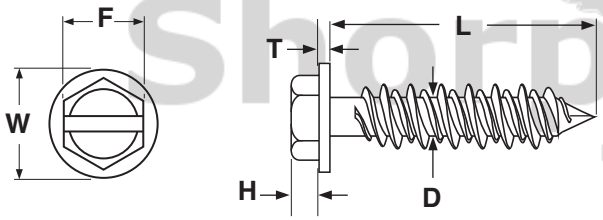


Flat Phillips Concrete Screws

D	Thread Size	Fixture Clearance Hole	H	F	Phillips Driver Bit Size
Nominal Diameter			Head Height	Head Diameter	
			Ref	Ref	
3/16	11-16	1/4	9/64	3/8	2
1/4	1/4-15	5/16	3/16	1/2	3



Slotted Hex Washer Concrete Screws

D	Thread Size	Fixture Clearance Hole	H	F	W	T
Nominal Diameter			Head Height	Width Across the Flats	Washer Diameter	Washer Thickness
			Ref	Ref	Ref	Ref
3/16	11-16	1/4	7/64	1/4	11/32	1/32
1/4	1/4-15	5/16	9/64	5/16	13/32	1/32

Concrete Screws

ITW Buildex*

DxL Screw Size (Diameter x Length)	Drill Bit	Minimum Embedment	Maximum Embedment	Maximum Fixture Thickness	Ultimate Tensile Strength (lbs.) In 4000 psi. Concrete, 1-1/4" embedment	Ultimate Shear Strength (lbs.) In 4000 psi. Concrete, 1-1/4" embedment	Ultimate Tensile Strength (lbs.) In Concrete Block, 1-1/4" embedment	Ultimate Shear Strength (lbs.) In Concrete Block, 1-1/4" embedment
3/16 x 1-1/4	5/32 x 3-1/2	1	1-3/4	0 - 1/4"	1060	1250	760	1020
3/16 x 1-3/4	5/32 x 3-1/2			1/4 - 3/4"				
3/16 x 2-1/4	5/32 x 4-1/2			3/4 - 1-1/4"				
3/16 x 2-3/4	5/32 x 4-1/2			1-1/4 - 1-3/4"				
3/16 x 3-1/4	5/32 x 5-1/2			1-3/4 - 2-1/4"				
3/16 x 3-3/4	5/32 x 5-1/2			2-1/4 - 2-3/4"				
3/16 x 4	5/32 x 5-1/2			2-1/2 - 3"				
1/4 x 1-1/4	3/16 x 3-1/2			0 - 1/4"	1540	2150	880	1270
1/4 x 1-3/4	3/16 x 3-1/2			1/4 - 3/4"				
1/4 x 2-1/4	3/16 x 4-1/2			3/4 - 1-1/4"				
1/4 x 2-3/4	3/16 x 4-1/2			1-1/4 - 1-3/4"				
1/4 x 3-1/4	3/16 x 5-1/2			1-3/4 - 2-1/4"				
1/4 x 3-3/4	3/16 x 5-1/2			2-1/4 - 2-3/4"				
1/4 x 4	3/16 x 5-1/2			2-1/2 - 3"				
1/4 x 5	3/16 x 6-1/2			3-1/4 - 4"				
1/4 x 6	3/16 x 7-1/2			4-1/4 - 5"				

Description	An externally threaded, hardened screw with a double lead, consisting of alternating raised and lowered threads with notches cut into the raised threads, and a diamond-shaped, nail-type point.
Applications/ Advantages	Cuts its own threads and when used in concrete, block or brick. Eliminates the need for an anchor when used in light or medium-duty applications. When used in concrete, it can be removed and re-driven into the same hole. Special carbide bits are recommended for driving concrete screws into masonry. Some applications include anchoring the following to masonry: electrical junction boxes, wooden beams, plywood, exterior insulation, metal flashing, thresholds. The Ruspert finish is a ceramic coating that also allows these fasteners to be used in pressure-treated lumber.
Material	Case hardened AISI 1022 steel
Anchor Spacing	Concrete screws should be installed a minimum of ten anchor diameters between each other. They have an advantage over most other types of masonry anchors in that they can be installed close to the edge of the material in which they are installed.
Depth of Hole	Hole should be of a depth equal to the required embedment plus 1/2"
Tensile and Shear Strength	The suggested safe working load is one-fourth the average proof test loads shown in the above table.
Plating	The most popular coating for concrete screws is a blue Ruspert finish.

*ITW Buildex is the original writer of these concrete screw specifications.