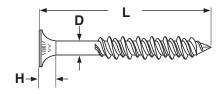
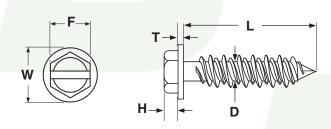
CONCRETE SCREWS - DIMENSIONS





| FLAT PHILLIPS CONCRETE SCREWS | | | | | | |
|-------------------------------|-------------|---------------------------|-------------|---------------|-----------------------------|--|
| D | | | н | | | |
| | Thread Size | Fixture Clearance Hole | Head Height | Head Diameter | Phillips Driver Bit Size | |
| Nominal 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 | |



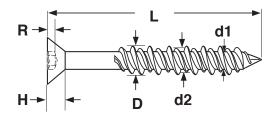
| SLOTTED HEX WASHER CONCRETE SCREWS | | | | | | | |
|------------------------------------|-------------|---------------------------|-------------|---------------------------|-----------------|---------------------|--|
| D | | | н | F | w | Т | |
| Nominal Diameter | Thread Size | Fixture Clearance Hole | Head Height | Width Across the Flats | Washer Diameter | Washer Thickness | |
| Diamotor | | | 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 | |

ANCHORS

CONCRETE SCREWS

Flat Head Six-Lobe





| FLAT SIX-LOBE CONCRETE SCREWS | | | | | | | | | | | |
|--|---------|---|------|---------|--------------------|--------------------------------|--------------------|------|------|------|-----|
| | D d1 | | 1 | d2 | н | F | | М | R | | |
| Nominal Diameter & Threads per Inch | Major D | Diameter Minor Diameter Low Head Height Head Diameter | | iameter | Recess Diameter | Recess Penetration Depth | Driver Bit Size | | | | |
| | Max | Min | Max | Min | Ref | Ref | Max | Min | Ref | Min | |
| 3/16 - 16 | .215 | .198 | .144 | .130 | .168 | .116 | .385 | .340 | .155 | .050 | T20 |
| 1/4 - 14 | .258 | .244 | .183 | .169 | .200 | .153 | .507 | .452 | .221 | .075 | T30 |

ANCHORS

CONCRETE SCREWS - PERFORMANCE DATA

| | CONCRETE SCREWS ITW Builde | | | | | | | |
|--------------------------------------|----------------------------|-----------|-----------|--------------------|--|-----------------------------------|--|-----------------------------------|
| DxL | Drill Bit | Minimum | Maximum | Maximum Fixture | Ultimate Tensile Strength (lbs.) | Ultimate Shear Strength (lbs.) | Ultimate Tensile Strength (Ibs.) | Ultimate Shear Strength (lbs.) |
| Screw Size (Diameter x Length) | | Embedment | Embedment | Thickness | In 4000 psi. Concrete, 1-1/4" embedment | | In Concrete Block, 1-1/4" embedment | |
| 3/16 x 1-1/4 | 5/32 x 3-1/2 | | | 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 | | 1-3/4 | 0 - 1/4" | | 2150 | 880 | 1270 |
| 1/4 x 1-3/4 | 3/16 x 3-1/2 | <u>'</u> | 1-3/4 | 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" | 1540 | | | |
| 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 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. | | | | | |
| 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.