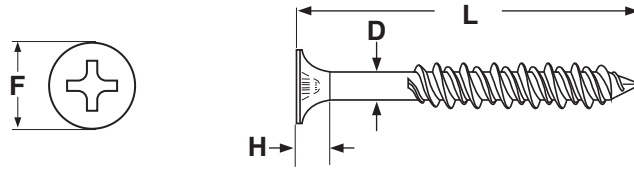
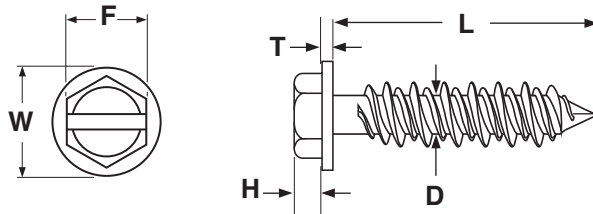


# CONCRETE SCREWS



| 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

| CONCRETE SCREWS                |              |                   |                   |                           |   |                                |                                     | ITW Buildex*                   |  |
|--------------------------------|--------------|-------------------|-------------------|---------------------------|---|--------------------------------|-------------------------------------|--------------------------------|--|
| DxL                            | Drill Bit    | Minimum Embedment | Maximum Embedment | Maximum Fixture Thickness | Ultimate Tensile Strength (lbs.)        | Ultimate Shear Strength (lbs.) | Ultimate Tensile Strength (lbs.)    | Ultimate Shear Strength (lbs.) |  |
| Screw Size (Diameter x Length) |              |                   |                   |                           | 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 | 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"        |                   |                           |   |                                |                                     |                                |  |

|                                   |  |
|-----------------------------------|--|
| <b>Description</b>                | 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.   |
| <b>Applications/ Advantages</b>   | 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. |
| <b>Material</b>                   | Case hardened AISI 1022 steel  |
| <b>Anchor Spacing</b>             | 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.   |
| <b>Depth of Hole</b>              | Hole should be of a depth equal to the required embedment plus 1/2"  |
| <b>Tensile and Shear Strength</b> | The suggested safe working load is one-fourth the average proof test loads shown in the above table.   |
| <b>Plating</b>                    | The most popular coating for concrete screws is a blue Ruspert finish.   |

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