

# Concrete and Masonry Anchors

## SPArtan® SILL PLATE ANCHOR (U.S. PATENT NO. 11,236,775)

### PRODUCT FEATURES:

SPArtan® Sill Plate Anchors are post-installed anchors used to attach the sill plate of a wood framed wall to a concrete foundation/curb and rim boards to concrete/CMU walls. SPArtan® anchors are made from carbon steel wire and have a smooth shank shoulder (5/8" diameter x 1-1/2" long) at the top for sill plate and rim board attachments. This transitions into a threaded shank (3/8" diameter x 6" long) for concrete foundation/curb and concrete/CMU wall attachments. The head is comprised of a 1-1/4" diameter flange and a 3/8" square recess for easy anchor installation. SPArtan® anchors are designed to resist shear and tension loads due to wind and seismic forces in cracked and uncracked concrete.

### MATERIAL:

Hardened Carbon steel

### COATING:

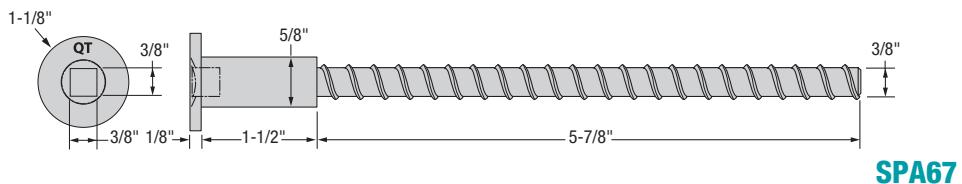
GEOMET®, Superior to HDG

### INSTALLATION:

See below

### CODE COMPLIANCE:

TER 0910-01, FL 3557



SP67



DBMSPA67

| PART NO.    | CARTON QTY.                        |
|-------------|------------------------------------|
| SPA67-100DB | 100 SPArtan®, 1 SPArtan® Drill Bit |
| SPA67-100   | 100 SPArtan®                       |
| SPA67-50    | 50 SPArtan®                        |
| DBMSPA67    | 1 SPArtan® Drill Bit               |

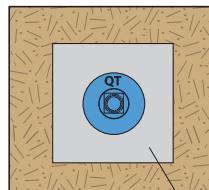
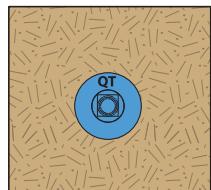
**CAUTION:** Use of the SPArtan® Drill Bit is recommended. Oversizing of holes drilled in either the wood sill plate or concrete will reduce the load capacity of the anchor. The SPArtan® Drill bit is a proprietary, carbide-tipped step bit, custom designed for the installation of the SPArtan® anchors.

## SPArtan® ANCHOR ALLOWABLE SHEAR VALUES (ASD)

| Applied Load | Allowable Loads (LB) <sup>1-6</sup>           |                        |
|--------------|---|------------------------|
|              | Load Direction                                | Slab/Curb <sup>7</sup> |
| Shear        | Parallel to Wood Grain (F <sub>1</sub> )      | 1,395                  |
|              | Perpendicular to Wood Grain (F <sub>2</sub> ) | 665                    |
| Tension      | Uplift (U)                                    | 1,155                  |
|              | Uplift (U) with Washer <sup>8</sup>           | 1,705                  |

### NOTES:

1. Tabulated values are applicable to uncracked concrete and pressure treated Southern Pine #2 lumber.
2. Allowable load values are determined using a conversion factor (ASD) of 1.6. The conversion factor is based on the controlling load case:  $(0.9D + W) / (0.6D + 0.6W)$ , where Dead Load (D) = 30% and Wind Load (W) = 70%. Adjustments shall be made where other load combinations control.
3. Anchor design conforms to ACI 318 with no supplementary reinforcement considered.
4. Anchor bending yield strength,  $F_{yb}$  = 100,000 psi and concrete dowel bearing strength,  $F_e$  = 7,500 psi.
5. Allowable loads are provided for a 1.6 load duration ( $C_D$ ). No further increases are permitted.
6. Allowable loads use a wet service factor  $C_M$  = 0.7 (M.C. > 19%). No further reduction required.
7. Minimum Requirements: Edge distance = 2.25 inches, End distance = 6 inches, Spacing = 6.75 inches, Embedment depth = 6 inches, Curb width = 6 inches, Slab/Curb depth = 9 inches and Concrete compressive strength = 2,500 psi.
8. Washer size is 2 inch x 2 inch x 1/8 inch.



2" x 2" x 1/8" Washer

