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

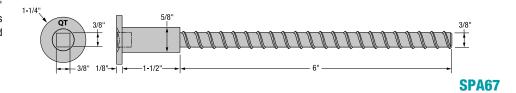
CODE COMPLIANCE:

TER 0910-01, FL 3557











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) ¹⁻⁶		
	Load Direction	Slab/Curb ⁷	
Shear	Parallel to Wood Grain (F ₁)	1,395	
	Perpendicular to Wood Grain (F ₂)	665	
Tension	Uplift (U)	1,155	
	Uplift (U) with Washer8	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.
- 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 (${\rm C}_{\rm D}$). No further increases are permitted.
- 6. Allowable loads use a wet service factor ${\rm C_{M}}=0.7$ (M.C. > 19%). No further reduction required.
- 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.

