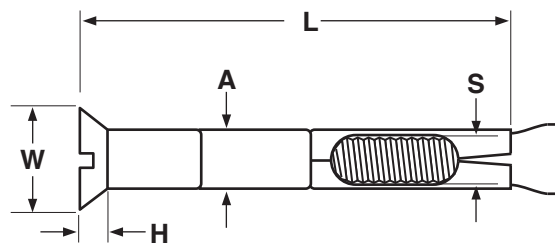


**Flat Head**



**Threshold Flat Head**

SLEEVE ANCHORS, FLAT HEAD										FF-S-325, Group II, Type 3, Class 3	
A x L	H	W	Drill Diameter	Fixture Clearance Hole	Minimum Embedment	S	Required Torque to Set (Ft. Lbs.)		Tensile Strength (psi.)	Shear Strength (psi.)	
Anchor Diam x Length	Head Height	Head Width				Thread Size of Stud	Carbon Steel	Stainless Steel			4000 psi. Concrete Strength
Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
1/4 x 2	5/32	1/2	1/4	5/16	1 1/8	10-24	4	3	1440	1630	
1/4 x 3											
1/4 x 4											
3/8 x 2 3/4	15/64	3/4	3/8	7/16	1 5/8	5/16-18	16	11	2700	3250	
3/8 x 4											
3/8 x 5											
3/8 x 6											

SLEEVE ANCHORS, THRESHOLD FLAT HEAD										FF-S-325, Group II, Type 3, Class 3	
A x L	H	W	Drill Diameter	Fixture Clearance Hole	Minimum Embedment	S	Required Torque to Set (Ft. Lbs.)		Tensile Strength (psi.)	Shear Strength (psi.)	
Anchor Diam x Length	Head Height	Head Width				Thread Size of Stud	Carbon Steel	4000 psi. Concrete Strength			
Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	
1/4 x 2	5/64	23/64	1/4	5/16	1 1/8	10-24	4		1440	1630	

<b>Description</b>	A device for giving stability to one part of a structure by making it fast to another consisting of (A) a threaded stud with a conical end flared outward; (B) a hollow, cylindrical dilating sleeve assembled over the stud and positioned against the minor diameter of the cone; (C) a countersunk flat head at the end opposite the cone.	
<b>Applications/Advantages</b>	The anchor works by expanding against the material in which it is embedded. When the flat head is turned clockwise the conical end is pulled into the dilating sleeve pushing it outward 360° around the anchor into the masonry. They are designed to be used in solid or hollow masonry, including cinder block, brick, marble and concrete. One advantage of the sleeve anchor is that it can be removed after it's been installed. Another is that the length of the sleeve induces less stress on the substrate than does a wedge anchor. It is well-suited for anchoring windows and doorframes.	
<b>Material</b>	<i>Steel</i> Threaded Bolt: AISI 1010 - 1018 steel Sleeve: AISI 1010 - 1020 steel	<i>Stainless</i> Threaded Bolt: 18-8 stainless steel Sleeve: Type 304 stainless steel
<b>Anchor Spacing</b>	Anchors should be installed with a minimum of 10 anchor diameters between each other and a minimum of 5 diameters from the edge.	
<b>Tensile Strength</b>	The suggested safe working load is one-fourth of the average proof test load shown in the above table.	
<b>Shear Strength</b>	The suggested safe working load is one-fourth of the average proof test load shown in the above table.	
<b>Plating</b>	See Appendix-A for plating information.	