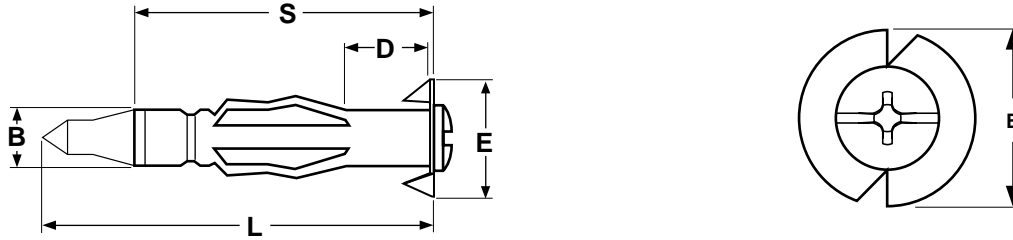


**SCREW EXPANSION SHIELD HOLLOW WALL ANCHORS, STEEL**

B notes Diam.	Screw Size	Hole Size	E	D	S	Grip Range		Performance in Plywood			Performance in Drywall		
			Collar Diam.	Sleeve Length	Overall Shell Length	Max	Min	Material Thick-ness	Pullout	Shear	Material Thick-ness	Pullout	Shear
			Ref	Ref	Ref			Inches	Lbs.	Lbs.	Inches	Lbs.	Lbs.
1/8 Extra Short	6-32 x 1"	5/16	1/2	3/16	25/32	1/4	1/16	1/8	110	100	-	-	-
								1/4	125	450			
1/8 Short	6-32 x 1 1/2"	5/16	1/2	3/8	1 1/4	1/2	1/8	1/4	65	350	1/4	25	190
								1/2	300	425	1/2	90	165
1/8 Long	6-32 x 2"	5/16	1/2	3/4	1 11/16	7/8	5/8	5/8	430	450	5/8	130	205
								7/8	450	450	7/8	145	275
1/8 Extra Long	6-32 x 2-1/2"	5/16	1/2	1 3/8	2 1/4	1 1/2	1 1/4	1 1/4	500	450	1 1/4	260	320
3/16 Short	10-24 x 2-1/4"	3/8	5/8	3/8	2 1/16	5/8	1/8	1/4	65	550	1/4	25	230
								5/8	475	635	5/8	135	300
3/16 Long	10-24 x 2-3/4"	3/8	5/8	7/8	2 9/16	1 3/16	5/8	5/8	500	640	5/8	135	305
								1 1/8	605	730	1 1/8	260	485
3/16 Extra Long	10-24 x 3-1/2"	3/8	5/8	1 1/2	3 3/16	1 3/4	1 1/4	1 1/4	660	765	1 1/4	300	490
1/4 Short	1/4-20 x 2 1/4"	1/2	11/16	3/8	2 1/16	5/8	1/8	1/4	65	600	1/4	25	240
								5/8	500	850	5/8	140	300
1/4 Long	1/4-20 x 2 3/4"	1/2	11/16	7/8	2 9/16	1 3/16	5/8	5/8	560	900	5/8	155	330
								1 1/8	720	1000	1 1/8	165	550
1/4 Extra Long	1/4-20 x 3-1/2"	1/2	11/16	1 1/2	3 3/16	1 3/4	1 1/4	1 1/4	765	1220	1 1/4	200	575

<b>Description</b>	A three-piece fastener consisting of (1) a cylindrical expander shell with longitudinal sections of its shank removed--this design allows the shell to be pulled toward the head and form anchoring legs on the blind side of the assembly. The shell has a threaded opening at one end and a flanged collar at the opposite end with an opening sufficiently large enough to allow a screw to pass to the threaded opening. The flange of the collar has prongs which dig into the bearing surface at the front end of the assembly; (2) a combo-drive pan head screw; (3) either a fiber or steel flat washer.
<b>Applications/ Advantages</b>	Steel hollow wall anchors are considered to be light-duty anchors. They require a pre-drilled hole and may be used in drywall, sheetrock, plaster or paneling. When properly installed, they will not crack or crumble the wall material and resist vibration. The machine screw may be removed and inserted multiple times to accommodate an exchange of fixtures.
<b>Material</b>	<b>Shell:</b> AISI C1008 - 1010 or equivalent cold-rolled steel <b>Screw:</b> Carbon steel with a minimum tensile strength of 60,000 psi.
<b>Pullout Values</b>	Expansion sleeve hollow wall anchors shall not be removable or show evidence of failure when subjected to axially applied proof loads as specified in the above table. The safe working load is one-fourth the average pullout values listed above.
<b>Shear Strength</b>	The safe working load is one-fourth the average shear values listed above.
<b>Plating</b>	See Appendix-A for plating information.



DRIVE STYLE EXPANSION SHIELD HOLLOW WALL ANCHORS--STEEL													
B notes Diam.	Screw Size	Hole Size	E	D	S	Grip Range		Performance in Plywood			Performance in Drywall		
Anchor Size			Collar Diam.	Sleeve Length	Overall Shell Length	Max	Min	Material Thick-ness	Pullout	Shear	Material Thick-ness	Pullout	Shear
	Diam x L		Ref	Ref	Ref			Inches	Lbs.	Lbs.	Inches	Lbs.	Lbs.
1/8 Extra Short	6-32 x 1-11/32"	5/16	1/2	3/16	25/32	1/4	1/16	1/8	110	100	-	-	-
								1/4	125	450			
1/8 Short	6-32 x 1-25/32"	5/16	1/2	3/8	1 1/4	1/2	1/8	-	-	-	3/8	25	90
1/8 Long	6-32 x 2-11/32"	5/16	1/2	3/4	1 11/16	7/8	5/8	5/8	430	450	5/8	130	205
								7/8	450	450			
1/8 Extra Long**	6-32 x 2-11/32"	5/16	1/2	3/8	1 13/16	13/16	1/8	-	-	-	5/8	85	175

<b>Description</b>	A fastener consisting of (1) a cylindrical expander shell with longitudinal sections of its shank removed--this design allows the shell to be pulled toward the head and form anchoring legs on the blind side of the assembly. The shell has a tapered, sharp point at one end and a flanged collar at the opposite end with an opening sufficiently large enough to allow a screw to pass to the threaded opening. The flange of the collar has prongs which dig into the bearing surface at the front end of the assembly; (2) a combo-drive pan head screw; (3) either a fiber or steel flat washer.
<b>Applications/ Advantages</b>	Drive style hollow wall anchors are considered to be light-duty anchors but do not require a pre-drilled hole since they can penetrate drywall or sheetrock. When properly installed, they will not crack or crumble the wall material and resist vibration. The machine screw may be removed and inserted multiple times to accommodate an exchange of fixtures.
<b>Material</b>	<b>Shell:</b> AISI C1008 - 1010 or equivalent cold-rolled steel <b>Screw:</b> Carbon steel with a minimum tensile strength of 60,000 psi.
<b>Pullout Values</b>	Expansion sleeve hollow wall anchors shall not be removable or show evidence of failure when subjected to axially applied proof loads as specified in the above table. The safe working load is one-fourth the average pullout values listed above.
<b>Shear Strength</b>	The safe working load is one-fourth the average shear values listed above.
<b>Plating</b>	See Appendix-A for plating information.