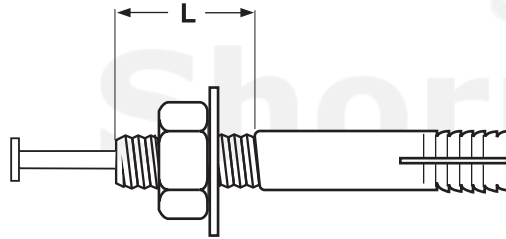


ANCHORS

EXPANSION PIN



EXPANSION PIN ANCHORS									
Diameter x Length	L Thread Length	Maximum Thickness Fastened	Drill Size	Pull-Out & Shear Tests in 2000 PSI Concrete					
				Tensile				Shear	
				Minimum Embedment	Tensile Strength (psi.)	Maximum Embedment	Tensile Strength (psi.)	Minimum Embedment	Shear Strength
1/4 x 1 3/4"	5/8	3/8	1/4	1"	900	1 1/2"	1000	1"	1600
1/4 x 2 3/8"	3/4	1	1/4						
5/16 x 2"	1 1/8	1/2	5/16	1 1/4"	1400	1 7/8"	1500	1 1/4"	3000
5/16 x 2 3/4"	1 1/8	1 1/4	5/16						
5/16 x 4"	1 1/8	2 1/2	5/16						
3/8 x 2 3/8"	7/8	3/4	3/8	1 1/2"	2200	2 1/4"	2800	1 1/2"	3400
3/8 x 3 1/2"	1 1/8	1 7/8	3/8						
3/8 x 5"	1 1/8	3 3/8	3/8						
1/2 x 2 3/4"	7/8	3/4	1/2	2"	3600	3"	4200	2"	7200
1/2 x 3 1/2"	1	1 1/2	1/2						
1/2 x 4 3/4"	1 3/4	2 3/4	1/2						
1/2 x 6"	1 7/8	4	1/2						
5/8 x 4"	1 1/4	1 5/8	5/8	2 1/2"	5400	3 3/4"	6600	2 1/2"	9200
5/8 x 4 3/4"	1 1/4	2 3/8	5/8						
5/8 x 6"	1 1/4	3 5/8	5/8						
3/4 x 5"	1 3/4	2 1/4	3/4	3"	7500	4 1/2"	9900	3"	13,500
3/4 x 6"	1 3/4	3 1/4	3/4						

Description	An anchoring device consisting of (A) a metal sleeve that is slit at one end and has a male thread at the opposite end; (B) a headed metal expander pin that enters the sleeve at the threaded end, and is used to set the anchor in place; (C) a washer and hex nut assembled to the threaded end of the sleeve.
Applications/ Advantages	This is an impact-expansion type of anchor works by expanding against the concrete in which it is embedded. When the pin is struck with a hammer so the pin head meets the threaded section, the opposite end expands and the anchor is set. This style of anchor is popular because it is easy to install; has relatively high pull-out and shear strength; and can be visually inspected even after it is set in place.
Material	<p><i>Sleeve:</i> Carbon steel <i>Pin:</i> Hardened steel <i>Nut:</i> Carbon steel <i>Washer:</i> Cold rolled steel</p>
Anchor Spacing	Anchors should be installed with a minimum of 10 anchor diameters between each other and a minimum of 5 diameters from the edge.
Tensile Strength	The suggested safe working load is one-fourth of the average proof test load shown in the above table.
Shear Strength	The suggested safe working load is one-fourth of the average proof test load shown in the above table.
Plating	Expansion Pin anchors are usually supplied plated zinc yellow.