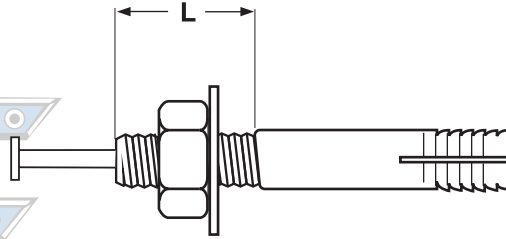


Expansion Pin



FASTENERS & COMPONENTS



| 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>Sleeve: Carbon steel Pin: Hardened steel Nut: Carbon steel Washer: 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. |