



TECH TALK

SLEEVE ANCHORS AND WEDGE ANCHORS

Knowing When to Use One Over the Other

Sleeve Anchors and Wedge Anchors are two of the most popular and important concrete and masonry fasteners in the marketplace. While they can be used for the same purpose in some applications, they both have strengths and limitations that must be observed for safe and proper use.



The three very important distinctions between Sleeve Anchors and Wedge Anchors are:

- Wedge Anchors have a much higher load rating for a given size
- Wedge Anchors can only be used in concrete, whereas sleeve anchors can be used in concrete and masonry
- Wedge Anchors require the same hole size as the anchor size, which is the same as the thread size, whereas Sleeve Anchors require the same hole size as the anchor size, but the thread size is one size smaller than the anchor size.
 - For example, a 5/16" Wedge Anchors needs a 5/16" hole, while a 5/16" Sleeve Anchor needs a 3/8" hole.

Both anchors use an expanding sleeve or collar to achieve a secure grip, but the wedge anchor

concentrates the load in a small area with a short collar at the base of the anchor, while the sleeve anchor spreads the load along the length of the embedment.

Dottie manufactures Sleeve Anchors with a variety of nut types, including acorn and hex, while Wedge Anchors only come with a hex nut. Both anchors are manufactured in zinc plated steel but can be ordered in 18-8 Stainless Steel or 316 Stainless Steel. The Zinc plated anchors are intended for indoor and dry locations and the stainless steel for outdoor or wet locations.

Installation Tips!

- Be careful not confuse the ultimate load rating with the safe load rating. The safe load rating is only 25% of the ultimate load rating.
- Do not space the anchors too closely together or too close to the edge of the work. Failure to follow installation instructions could cause the concrete or masonry to crack.
- Holes size, depth and cleanliness are very important to a successful installation. Follow the instructions carefully.
- Wedge Anchors and Sleeve Anchors are generally not removable and must be cut off if removal is required