



FIRST ALERT

HURRICANE SHUTTERS & WHOLESALE

Hardware 101

First Alert has compiled a list of tips and suggestions to make your hardware selection accurate while ensuring compliance with good installation practices. A brief description of each type of anchor will start the list.

Male Panelmate – This anchor is our standard offering and comes in five sizes, from 2 1/4” to 7 3/8”. This measurement is the actual embedment length of the anchor that will be in structural materials, which is generally around 2” minimum. The stud that accepts the Panel Clip is a ¼-24 male thread and accepts a wingnut for deployment of your Panels. When Panels are not deployed, the stud is protected by a white plastic cap. This anchor can be used in both wood and masonry applications.

The Male Panelmate requires a 7/32” drill bit for installation and uses a 3/16” female hex head driver.

Female Panelmate – This anchor will be used when you desire a flush application. It also comes in five sizes, from 2 5/8” to 7 3/8”. This anchor has a collar on top which has a ¼-20 female thread. When you are using this anchor, you will receive two sets of Sidewalk bolts. The ½” bolts are used for sealing the anchors when the Panels are in storage and the 1” anchors are used for deploying the Panels. Although this anchor can be used in both wood and masonry, it is most often relegated to wood frame applications.

The Female Panelmate requires a 7/32” drill bit for the screw portion and a 7/16” drill bit to countersink the collar. An optional Combo Bit is available that will drill both holes. This anchor uses a 5/16” male hex head driver.

Flush Concrete Insert – This anchor is the best selection for masonry applications. It comes in two lengths, 1 3/8” and 2 1/8”. The short anchor is used for most applications while the long anchor is used when deeper embedment is desired. A 1 ¼” Sidewalk Bolt is used for both sealing the anchor and deployment of the Panels.

The Concrete flush anchors requires a 7/16" drill bit and use a 5/16" male hex head driver.

Washers – Washers are supplied whenever you are using a Sidewalk Bolts to install your Panels. These washers should be installed on the bolt you are using when the Panels are in storage. They serve the dual purpose of sealing the anchor from debris and eliminating corrosion between dissimilar metals.

It is important to always use the washers as they will eliminate unscrewing the anchor when you remove Sidewalk bolts for future deployment of your Panels.

Installation Tips;

Anchor Installation - When drilling pilot holes in wood construction, drill the hole shorter than the screw dimension to allow the screw to "work" into the framing.

Consider edge distance in concrete applications. Locating an anchor too close to an edge, can often result in stucco or block cracking.

When drilling holes for Concrete Flush anchors, drill the hole slightly deeper than the length of the anchor. It is **imperative** that dust and debris is cleaned out of the holes prior to installing the anchor. The slightly longer depth will accommodate concrete dust that is driven to the bottom of the hole during the anchor driving process.

Use extreme caution when installing anchors in hollow block. Using a rotary SDS drill or the hammer setting on your drill will result in the inner wall of the block "blowing out". This will leave minimal block to grab the anchor.

In rare occasions of a concrete "blowout" or a poorly drilled hole, the anchors may not fit tightly in the hole. In such a case, use a 2 part epoxy that is commonly used for rebar applications and reinstall the anchor. This type of epoxy is readily available in Home Improvement stores in the concrete aisles.

Do not start your hammer drill in the "hammer" position. Use the drilling position to start a countersink then switch to hammer. This will avoid the drill bit "walking".

Avoid driving anchors while in the “hammer” position. For DIY customers and new installers, it is a good idea to drive the anchor to within 1/4” of flush, then finish with the hex driver in a ratchet. This will minimize stucco cracking.

Sidewalk Bolts – All Sidewalk bolts are ¼-20 (¼” diameter, 20 threads per inch). The heads are designed to be driven with a number 3 Phillips head only. Using a smaller Phillips driver will result in stripping the head.

Remember, that it is impossible to strip anchor threads when removing bolts. Stripping is done when inserting bolts. For this reason, if you are not an experienced installer, start all bolts by hand or with a hand screwdriver. Hurricane Fabric cannot warranty or replace stripped anchors.

Do not use a driver over your head as any misalignment can result in a stripped anchor.

Set your chuck clutch on a minimal setting. Since you are using a washer, the sealing bolts should be snug, not tight. When deploying Panels, bolts should be slightly tighter.

If you have a stripped anchor, simply run a ¼-20 tap through it to clean up the threads. Taps are available at any Home Improvement store in the hardware or tool aisle.

Interior Mount Applications – Interior or “trap” mount applications utilize the 90 degree end of the Clip. This will require a ¾” Sidewalk bolt only when using a Female Panelmate anchor. This is due to the ½” threaded depth of the anchor collar and the 5/16” thickness of the Clip. All other anchors will use a 1” or 1 ¼” Sidewalk Bolt.

Egress Applications – Whenever an Egress application is used, you will receive a set of thumbscrews for the interior side of the opening.

Buildout – Various Tracks, Storm Bars and Buildout are available for achieving separation between the Fabric Panel and a glazed surface. Please call our Product Support personnel to assist you with these applications.