How to install DIY panels. Please contact if additional instructions are needed

Considering attaching your storm panels with 3M Dual Lock recloseable plastic fasteners? Don't do it! Click here to find out why. Click here for our thoughts on the use of PLYLOX clips with our product. Want to drill substantially fewer holes? Click here for information on one of the latest Florida-approved panel attachment products. Learn how I recently reduced my own annual homeowners insurance by $800.

In contemplating the installation of storm panels you, as the homeowner, have to first decide if you take any comfort in the testing and approval processes offered by various standards and governmental organizations, and, if so, to what extent you want to mimic the exact methods used during testing and certification. In other words, if you think that there is value (or you believe that someone somewhere down the road will place value on it) in being able to declare that your storm panel installation is compliant with a given referenceable standard then you must carefully follow the manufacturers recommendations (available at their respective web sites) for the installation. Or, you may ultimately decide to make your own determinations and engineering decisions concerning the installation process. In no case is any home really "hurricane proof" and, in my opinion, striking a reasonable balance between "over engineered" (i.e. fasteners every 6") and "I'm double-parked" (i.e. fasteners every 3 feet screwed into fiberboard) is the best cost/benefit compromise. Having said that:

The first step in planning the installation is to measure your openings. The manufacturer suggests indenting the fastener hole no closer than 2" to the edges of the panel. So basically you would determine the center-to-center distance between the framing studs on either side of the window (or top and bottom) and add 4" to each of these dimensions to end up with the overall panel size. If you don't know where the studs are you can either drill small holes (I'd do it on the inside because drywall is a lot easier to patch than siding) until you locate them or you can purchase an electronic stud finder at Home Depot. For asthetic purposes I chose to completely cover the window openings all the way to the outer edge of the trim around my windows (this meant indenting the fastener holes about 2-1/4" from the edge of the panel so it added practically nothing to the overall cost and looks nice). Click here for assorted pictures of panels actually mounted on a home.

Without a doubt, the most frequest question I field has to do with covering a sliding glass door. I have decided to devote a whole page to this topic. Click here to view this information.

Once you've determined the panels sizes, the next step is to try to predetermine how many and what size sheets you will require. Knowing that the sheets are available in a variety of sizes I sat down with pencil and paper and, using a trial and error method, I tried to figure out how I would cut the sheets into the various panel sizes I needed with as little waste as possible. I made little scaled paper cutouts of the panels I needed and some standard sheets and tried several combinations until I was satisfied that the waste wasn't excessive. By the way, the panels can be installed in either a horizontal or vertical orientation (relative to the internal flutes in the panel). It doesn't really matter, but I was able to have all of mine running up and down which I decided looked best to me (see pictures). If you like, you can print out Sheet Cutting Worksheets which should help you with this process.

Special Florida residents information.

As the homeowner, nobody can dictate to you (at least not yet) how to install your storm panels. If you believe that the methods described here are adequate, you are entitled to follow them. However, if you believe that your exposure (or some other reason) compels you to replicate the methods used during certification testing then you must follow the procedures outlined in the testing documentation (available on our Products/Pricing page) precisely.. I chose not to do so for my own installation based on my knowledge of the wind zone I am in, the surrounding structures near my home, my distance from the open ocean and asthetic considerations. I chose to use larger, stainless steel anchors because their pull-out rating is higher and I believe they are more attractive than the zinc-coated PanelMate brand anchors used during the testing. In addition, the bolts I used have a larger head than the wingnuts used during the testing and will have less of a tendency to be pulled through the panel under extreme conditions. Such is the nature of the "Do-it-Yourselfer". But, let me finish this thought by saying that I do not profess to be an expert on the mounting of hurricane panels, nor do I know if there is such a thing. The information provided here is to assist you in making an informed decision on what installation technique might work well for your situation. I accept no responsibility or liability for any aspect of your storm panel installation or future consequences that may arise out of your use of the products or information provided here. The discussion that follows describes my experience attaching Gallina storm panels to my own home..

With that out of the way, there are several ways of effectively attaching storm panels to your home. The method you choose depends on your own evaluation of the difficulty of performing the tasks combined with your economic and asthetic concerns. In any case, in my opinion, the "best" method, with all things considered, involves the installation of permanent anchors around the openings to be protected. My reasoning for this is that they can be covered so as to not detract from the appearance of the home when the panels are not mounted and they make the installation of the panel a breeze when you need them. Put another way, the time you invest (when you are not pressed) installing the anchors is repaid by making it easy to mount the panels when you may be sorely pressed for time.

For my own home, I chose to install 2-1/2" stainless steel female flush-mounted anchors. There are cheaper anchors out there, but these won't rust, they look decent when the panel isn't mounted and even include a nylon decorative screw to cover the hole. They are also suitable for use in masonry. The 2-1/2" length will suffice for almost all types of exterior trim - the exception being stucco applied over wood. In that case a 3-1/2" anchor would be needed. The other type of anchor is a "male" anchor that has a threaded rod that protrudes about 1-1/2" from the trim and can be covered by a white rubber cap when the panels are not mounted. I don't particularly like the look of these so I went with what I perceived to be the more elegant solution.

The process of installing the anchors is a simple enough exercise and involves only the use of an electric drill and other standard handyman tools. In deciding just where to place the anchors I tried to strike a balance between the spacing that the manufacturer used during their official testing (14") and a "reasonable" amount for the particular panel involved. I first considered the longest panel edge and placed my corner anchors no more that 5" from the panel corners. Then I divided the remaining space between the corner anchors into whatever equal spacing was roughly 14" apart. Sometimes it worked out that the spacing needed to be 12" and other times it worked out that 15" worked well. For the short edge, I often ended up going 10" in from the corner and then splitting the remainder. It just seemed to me that having two anchors installed real close to each other at the corners was "overkill". After deciding on the spacing for the anchors, my technique was to mark the anchor locations on the panel (on the protective peel-off film applied at the factory) with a magic marker. Then, I put the panel up temporarily using a couple of long screws at the upper corners. Once the panel was held in place I drilled small (1/8") "locator" holes through the panel and into the house through each of the magic marker marks. Then I'd take the panel down, drill the anchor holes with the combo drill bit, squirt a little caulk in the hole, screw the anchor in and wipe off the excess caulk that squeezed out of the hole. When it comes to placing the final holes in the panel I've always found that trying to drill a large hole in thin material in an exact location was difficult because the drill bit tends to "grab" and "walk" suddenly. In order to ensure that the holes in the panels lined up properly with the anchor locations, I enlarged the "locator" holes with a rotary tool (i.e. Dremel or RotoZip) with a tapered grinding bit and made them a little bigger than the 1/4" anchor bolt threads.

When it comes to these anchors - it is not a test. Just as there is no "perfectly right" answer, there is no "wrong" answer, but the closer you keep to the 14" standard, the more assurance you'll have that you're doing it the way the manufacturer would have. At first glance that spacing may seem excessively close, but it is important to understand that a hurricane isn't just a straight-line wind. It includes swirling and gusting winds that push and pull on the panels. (Consider what holds up a 200 ton airplane to understand the force of these pressure gradients). It is absolutely essential that proper thought be given to this pulling force and, that whatever anchors you choose, they are anchored solidly into the framing studs of your home. Ultimately, it's up to you to decide what is "reasonable" for each of your windows.

At any rate, my approach was to install these anchors on two windows a day (which typically took 2-3 hours) and I finished the project in an unhurried fashion in under 2 weeks. Once the anchors are installed, the task of actually mounting the panel(s) in anticipation of a storm is very easy. My largest panel has 20 anchors (I may have overdone this one a little - it was the second window I attacked) and I timed myself actually mounting the panel - it took 4 minutes. A battery-powered electric drill (set to its lowest torque setting) with a phillips bit makes this a breeze.

I suppose it would also be possible to mount these panels the same way someone waiting until the last minute would install plywood storm panels. This technique would involve the use of long wood screws (again hopefully screwed into the framing studs that surround every window). If I were going to do it this way, I'd strongly recommend the use of at least a 1" washer on the exterior of the panel to prevent the pulling forces from tearing the panel off of the screw. Ultimately, this may the best way to handle protecting windows on a home with vinyl siding. Installing permanent anchors on a home with vinyl siding involves considering two other issues. One, vinyl siding is just hung on the home with nails that are loosely hammered in so that the siding can expand and contract as the sun hits it. If permanent anchors were installed on opposite ends of the same piece of siding it could cause the siding to buckle unattractively when heated by the sun, so caution would have to be exercised when deciding where to place the anchors on windows that are close together. Secondly, drilling a hole through the vinyl siding might create an opportunity for rain water to get behind the siding, potentially eventually saturating the sheathing behind the siding. Serious consideration would have to be given as to how to seal the holes in the siding. This could be made easier by utilizing "male" anchors (because of the smaller diameter hole needed).. Whether it be polycarbonate or plywood, these same issues exist for homeowners with vinyl siding - perhaps the better way would be to utilize aluminum "h" channels on the edges as a method of minimizing the number of holes that would need to be drilled into the home. Again, I don't claim to be an expert and there may be other solutions to these problems. In the final analysis, it is probably a good idea to contact a siding manufacturer to get their thoughts on this issue. (Siding installers might have some ideas as well, but I'd still consult with a manufacturer, like Norandex).

If you have any questions on installation issues please either e-mail me at mailto:sales@lowcountrystormpanels.com or call 843-247-9463 and I'll be happy to give you my though