## Hurricane Protection Garage Door Bracing

By Bob Miller

First the disclaimer. I am not a structural engineer. I'm providing this info as just another homeowner in the Jungle Terrace Neighborhood. My homeowners insurance has gone through the roof as I'm sure your's has. I spoke to my insurance company and there are several things you can do to receive a discount. If you have replaced all you windows with hurricane rated windows you can get a discount. I replaced all my windows except three. Woops, no discount for me. You can get a discount for approved window protection. I have plywood for my windows. Woops, plywood is not approved. Do you see a pattern here?

I decided to raise my hurricane deductible to 10% to lower the cost and then do what I can to "harden" my home to protect it during storms.

You may recall that I wrote an article about making and installing plywood covering for your windows. You can see that article on our web page at

http://www.jungle-terrace.org/Data\_Files/Plywood\_Installation.pdf You can also find it on our home page at www.jungle-terrace.org

A condensed version was in the August 2006 newsletter, also available on our web site.

I found some very good information about protection homes from storm damage at the **FLASH** "Federal Alliance For Safe Homes" web site. **Blueprint for Safety** can be viewed at

http://www.blueprintforsafety.org . I discovered that a major weakness at many homes is the garage door. My garage door is a double wide (16') door and although I though it was hurricane rated, it isn't. The giveaway is that only one brace spans the top panel of my door. When I tried to find a source for the manufactures hurricane bracing I discovered it would be easier to replace the door so I looked for another solution. I think I found one.

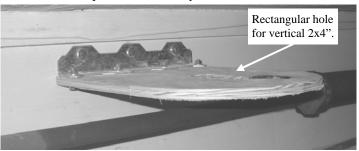
The first thing I did was put 16 foot 2x4's on each of four

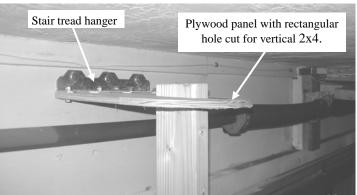


horizontal panels. The biggest problem here was getting them home. A rug on top of my truck and some twine to tie the ends to my bumpers solved that problem. I used clamps to hold the 2x4"s on the door panels (pg 4) so I could drill holes and install the bolts. I used stainless ½" x 2 ½ " bolts with nut and flat washers.

This braced the panels horizontally but I saw a need for vertical bracing also. I decided to use four 8 foot 2x4's for this. I went to one of our local home improvement stores and did some looking around (I love doing that) for some ideas. My solution had to be simple, easy and fast to install.

I found some stair tread hangers. They are normally used to attach to a wall or board etc. and provides a place to support stair tread. I attached them to the wall above my garage door and made wood panels to attach my vertical 2x4"s to.





The rectangular hole was cut with a Jigsaw.



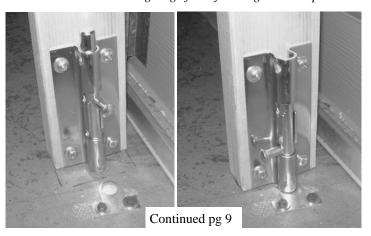
Position the stair tread hanger and board so they don't interfere with the garage door opening and closing.

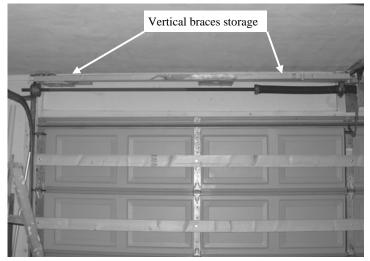


I decided that I needed four vertical 2x4's. When installed I used clamps to hold them to the horizontal 2x4's.



To keep things simple and fast I used heavy duty gate catches on the ends of the vertical 2x4's. You will need a hammer drill to make the hole in the garage floor for the gate catch pin.





I store the vertical 2x4's on top of the brace holders above the door. Two on the left side and two on the right.

Although this probably wouldn't qualify for discount from my homeowners insurance company it certainly give me some peace of mind. I know it's stronger than it was. All together I have less then \$150 invested. OK it took some time to think it through and install it but I enjoyed that too. If you decide to do this don't forget to disable (unplug) your garage opener when the vertical braces are installed. If you would like to have a closer look at this please call me, Bob Miller, at 727-343-4436. I'd be happy to show it to you. \*\*\*