

Olde Window Restorers

Restoration and Repair of Vintage and Historic wood windows

How to Build Interior Storms or Energy Panels

Interior storm windows also called energy panels, are made from lightweight wood frames and covered with shrink film to provide additional draft elimination and retain more heat in your home. The storms can be made more permanent by using acrylic instead of shrink film. You can stain or paint the frames to match you windows and woodwork prior to applying film.

Materials:

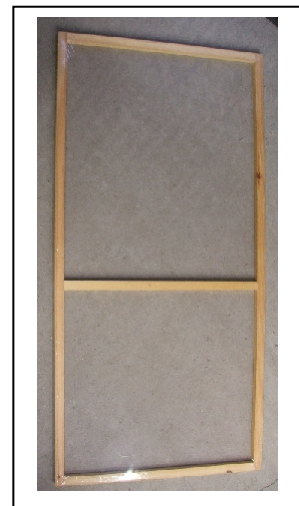
- $\frac{3}{4}$ " Pine or similar straight grained wood cut 1-1/2" wide
- Shrink film to fit frame
- $\frac{1}{2}$ " double stick tape designed for the purpose. 3M has proven the best performing.
- 2 – 2 1/2 " drywall screws to assemble frame or if you have a pocket frame jig and screws you can use that as well.

Note: the double stick tape adheres best to wood that has been coated with polyurethane, or similar finish.

Instructions:

1. Measure your window frames height and width. Take width measurements at top, middle and bottom as windows can be out of square.
2. Cut frame material to make completed size 1/8" less than the opening in height and width. For large windows install a cross bar at the same location as the window meeting rail.
3. Check the frame in the opening to be sure it fits before applying shrink film.
4. You can use a number of types of weather stripping to create a seal between the storm and the window frame. One of the simplest and cheapest is to roll some 4 mil plastic and staple to the edges. It is slick enough to slide easily and firm enough to provide a good seal. Plastic V seal can be applied to the sides and will work as well.
5. Apply whatever weather stripping you choose to the sides and, test fit in the window frame one more time.
6. Apply the double sided tape to the frame then carefully apply the shrink film.
7. Using heat gun or hair dryer, (~200 °) shrink the film until just taut and wrinkle free.

You are now ready to install your storm(s).



8. Install by driving small finishing nails at an angle about 2 to 4" from the top and bottom on each side. Depending on your preference, you can also use small wood screws instead of nails.

Below is another method to create interior storms. Depending on how permanent, or how fancy you want them to be, both methods yield storms that are easy to build, inexpensive and functional. The materials are readily available through local hardware and building stores.

This method is to build a frame like the others but with slots to receive cast [acrylic sheeting](#) about 1/8" thick. The frame can be stained or painted and, the interior edges molded to give a more finished look. This yields a more permanent solution and can easily be taken down and stored year to year. An average window is about \$25..

Sample of interior storm in my home with acrylic panel. ---->>

Frame shown is 1" x 3/4" thick with mitered corners. I recommend a slightly larger frame dimension such as 1 1/2" x 3/4" to provide better strength and stability.

The frame of the storm is the lighter colored wood. This window had a 1/2" raised trim on the jamb and header which made an excellent backer to mount the storm against. I use a couple of brad nails driven at an angle to hold it firm against the frame. I used a thin foam insulation at the bottom to make an airtight fit

