BUILDING THE WINDOW

Let us look at building the 2' wide x 3 ' tall window. For simplicity we'll make this one a picture window, divided into four panes or "lites". Although the dimensions can be changed to whatever suits your design, I generally make the outer window frame out of 2" wide by 3/4" thick stock and the mullions and muntons out of 1" (x 3/4" thick) material. Picture windows generally have the same size framing material on all sides. So rip enough ¾" wood strips at 2" wide for your frame and 1" wide for your mullions and muntons. You can use plywood, any of the particulate boards, or solid stock. I prefer solid stock, but any material will pretty much do.

Next rip some 1/4" thick material at 1-3/4". You will need enough of this to go around the outer frame of the window once (for single sided units) or twice (for double sided ones). Again you can use any of the plywoods or particle type boards but as this the part of the window the most exposed to the audience, you'll want have a smooth finish. 1/4" plywood is best for strength.

Rip more of the ¼" thick stock to ½" strips. You will need a little more than twice the length of the mullions and muntons for double-sided windows.

The window is specified 2' wide x 3' tall. Generally when a window is drawn, the dimension of the window frame alone without its jamb is specified.

Your cutting list would be as follows. The horizontal members of the window would be 2 ft. long. The vertical members would be 32 in. long or 2 feet 8 in. in length. To assemble the frame I usually start by clamping the full length framing piece (in this case one of the horizontal ones) to the edge of the sheet of plywood or worktable at the corner. I would than lay a vertical piece along the edge at 90 degrees to the first, using the factory edges of the plywood to square the window. At the other end of the vertical peace placed the other horizontal squaring the joints with a framing square. Apply glue across the two butt joints and along the length of the vertical.

Take a length of the 1-3/4" inch material 3 ft. long and brad nail it to the frame flush to the outside edges. Repeat this process for the other vertical edge. Fill in the horizontal spaces between one and three-quarters inch verticals with more one and three-quarters inch strips. Determine the length of the strips by inspection, that is hold the piece in place markets linked with a pencil.

With your tape measure or ruler, layout the position of the mullions. Cut the mullions to length by inspection. (I usually make the horizontals full-length and then determine the length of the verticals.) The ¼" plywood scab that is holding the outer frame together is ¼" narrower than the ¾" stock, leaving a ¼" "reveal" along the interior edge. Using the ½" ply strips, make scabs by inspection to hold the mullions in place, centering them on the mullion lengthwise and running them from one previously installed scab to the other. Glue and brad them in place.

Flip the window over and repeat the scabbing process if desired. If you wish to "glaze" the window, add the glazing material before you scab the back.

I have used a variety of materials for "glazing" windows for stage. Plexiglas or other acrylic, plastic sheeting like Viskween, and window screen, but never glass. I try to keep as little glass on stage as possible, from hand props, to set props, to framed pictures and mirrors.