



MAKING ETHAFOAM® DISK MANNEQUINS

Ethafoam disk mannequins are an inexpensive method of building custom archival costume mounts. They have the advantage of allowing for efficient reproduction of the same form when mounting a number of garments worn by a single person. The following tips are helpful when following Polly Willman's instructions for making Ethafoam disk mannequins.

- In order to make an accurate mannequin, the costume must already be properly mounted on a dress form because measurements have to be taken from this form. Take the time to fit the costume well. Remove the costume before continuing.
- You need to measure the shape of the form in two-inch intervals, corresponding to the two-inch thick Ethafoam from which the disks will be cut. To do this, mark cloth strips or twill tape at 2-inch intervals with a sharpie marker. Place a large rubber band or tie twill tape around the waist of the form. Next slip each of the four marked tapes under this band. Pin one end into the top of the form and adjust until the rubber band or twill tape at the waist sits over a dot. This insures that your measurements are parallel.
- Rather than a large sheet of craft paper, use 2 sheets of letter paper taped together. This taped seam will provide a valuable guide line later on.
- Choose the dot that corresponds to the point of the neck where you want your mannequin to begin. The neck can be short or long as needed. Beginning at the neck, mold the flex curve to one side of the form. Unless the form is asymmetrical, use the right side as a guide.
- Place the zero (not the end of the flex curve) at the center-front dot. Form the flex curve to shape of right side of the dress form, pressing gently. Note where the center-back dot falls on the flex curve. Place the flex curve on the paper with the zero on a center seam. Line the center seam up with the correct point on the flex curve. Trace the inside of the flex curve with a pen. You can either flip the flex curve over and trace the mirror image, or fold the paper over and trace your drawn line.
- Mark inside each tracing with a number, beginning at one. Place an F at the front of the center seam and a B at the back. Repeat this procedure moving down the form until you are past the hip line. Cut all tracings out, leaving the drawn lines on the paper.
- Beginning with tracing number 1, lay the paper on the Ethafoam. Trace around the paper with a ball-point pen (sharpie marker will smudge) Write the number of the tracing and the F and B inside the shape, making sure to note the front and back location of the center seam accurately.
- Important: place the next paper tracing over your previous drawing on the Ethafoam. Line up the center seam marks. Now trace the next shape over the previous one. You will need both of these tracings because the top of each disk must correspond to the first shape but the bottom of the disk must correspond to the next shape below. Repeat this for each disk.

- Carefully carve the first shape out of the Ethafoam, leaving the drawn line visible. Sometimes the top shape will be the smaller one and sometimes the bottom one will be. Repeat until each disk is cut out. Stack in order for a sneak peek of the mannequin.
- Beginning with disk 1, taper the edges with the knife so that the top side corresponds to the first shape and the bottom side corresponds to the next shape. So for example the first neck disk will be thinner at the top and broader and more rectangular at the bottom. Once you are below the bust line, the underside of the disk will be narrower than the top, so pay attention. This is just the first level of fine-tuning so you don't need to be exact.
- Once each disk has been shaped, hot glue them together starting with disk 1. Avoid too much glue at the outer edge because you may do further carving there. Use the F and B, as well as marks of where the center fold lines were, to register each disk accurately.
- When all of the disks are glued together, carve the rough edges away. Test fit your costume. You will probably find that the mannequin is still too large for the costume at this point because you need to do more carving. When you are done carving, you will probably see none of your ball-point pen marks.
- Cover the finished form with cotton stockinet or a t-shirt or pantyhose before dressing it. Any additional padding can be slipped between the Ethafoam and the cover fabric.



Cut disks stacked up before gluing and shaping



Disks glued together and shaped