

WORKING WITH CORRUGATED CARDBOARD © Jason Schneider

SAFETY:

- Always wear a proper dust mask and safety glasses when machining corrugated cardboard.

PREPARING THE MATERIAL:

- Use a sharp utility knife, band saw or table saw to cut the material to size.
- If you are using recycled cardboard remove all staples and tape.
- When using new cardboard in sheet form do your best to maximize the material by cutting in increments of 12" or 16" (assuming you are starting with a 4' x 8' sheet). Allow a minimum of 1" of waste material around the perimeter of your blank.

GLUE AND APPLICATION:

- Use White Elmers Glue-All to glue the cardboard layers together. I purchase the glue in gallon containers. If you are going to glue large amounts of cardboard, purchase many gallons of glue – it goes fast!
- Thin the glue with approximately 25% warm water to 75% glue. Mix well!
- When gluing small parts/amounts you can use 100% glue (not thinned).
- Apply the glue to each layer with a ¼" – 3/8" nap paint roller and tray. Before applying the glue, it helps to lightly dampen the roller with water.
- You can also apply glue with a glue bottle and notched glue spreader.

THE LAMINATING PROCESS:

- Work on a clean surface – preferably a plastic laminate or waxed surface.
- Wear a dust mask and apron.
- Have your pre-cut cardboard sheets, thinned glue, pre-dampened roller or spreader, scrap plywood or melamine and sandbags or weights ready. Don't forget to put on your favorite glue-up music!
- You can choose to leave all of the flutes oriented in the same direction, or you can modify the arrangement. I often keep the flutes in the same direction, or rotate each layer perpendicular to the previous layer (like plywood).
- Roll an EVEN coat of thinned glue on the first layer of cardboard. Be sure you have good coverage. The first few rolls of glue do not cover as well. Just glue one surface.
- Before placing the next layer on the glued surface, be sure to shake the loose dust off of each sheet to be glued.
- Work fast creating stacks 4" - 5" tall (depending on the overall size of the blank). Make smaller stacks (approximately 2" – 3") if the glue-up surface is larger than 24" x 24".
- Place a scrap piece of plywood or melamine over the laminated stack of cardboard. Be sure that the plywood fits the size of the cardboard sheets.
- Distribute weight evenly to the top of the plywood or melamine. **IT IS VERY IMPORTANT TO DISTRIBUTE THE WEIGHT EVENLY.** The cardboard blank can dry unevenly if the weight is not balanced correctly.
- Set the weighted blank off to the side to dry. If possible, allow the blank to dry for a few days. If that is not possible use a box fan to speed up the drying process.

TAKE IT TO THE MACHINES!

- Now that you have a fresh blank of cardboard to work with you can head into the machine room and begin shaping the blank.
- The machines I use the most are the band saw, wood lathe, grinders and a sander with a vacuum attachment.
- Working with corrugated cardboard is very dusty! Be sure to have good ventilation/dust collection or create a grinding room with plastic or cardboard sheets to contain the dust.