

FOAM CAPITALS AND TECHNIQUES

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MELMAKESSTUFF.NET

- TD for over 10 years
- Co-creator of MAB Technical Theatre Compendium
- Online/Etsy Shop called Mighty With All Trades
- TD for Tal's Summer Theatre Camp at Baylor
- Might have a Youtube Channel or Podcast in the works

Scan for copy of presentation (GS)







BASICS

ALL ABOUT FOAM

- Types of Foam
- Cutting Foam
- Gluing Foam
- Coating Foam
- Painting Foam



TYPES OF FOAM

POLYISOCYANURATE

- typically faced in a metallic material
- yellow and powdery when cut
- you can't paint it, won't glue right, ever
- gross, just don't use it, forget I even mentioned this



(EPS) EXPANDED POLYSTYRENE

- lighter than XPS but less structural
- good for carving when glued in layers
- pill-y, will make a huge mess, static
- does not glue well and easily dissolves with hot glue and chemicals
- not a really good way to cut cleanly, maybe table and miter saws



(XPS) EXTRUDED POLYSTYRENE

- rigid and comes in multiple sizes
- pink foam holds up well to hot glue, blue foam requires more finesse
- great for structural pieces such as headers and bookcases
- can be cut with tables saws and miter saws. Jigsaws and bandsaws tend to be rougher.



SOURCING FOAM

- **Distributors**
 - DeRouchey Foam derofoam.com
 - Home Depot for 2” pink foam
 - Lowe’s for foam under 1.5”
 - Houston Foam Plastics hfpusa.com
 - Search packaging firms and roofing companies in your area
- Tractor Supply - call the store, some are shipping it back to the trailer companies
- Hospitals - liner for cardboard boxes, insulation for medical supplies

CUTTING FOAM

TOOLS OF THE TRADE

- Hot Knife
- Hot Wire
- Utility Blades
- Jig Saws
- Rasps
- Sandpaper

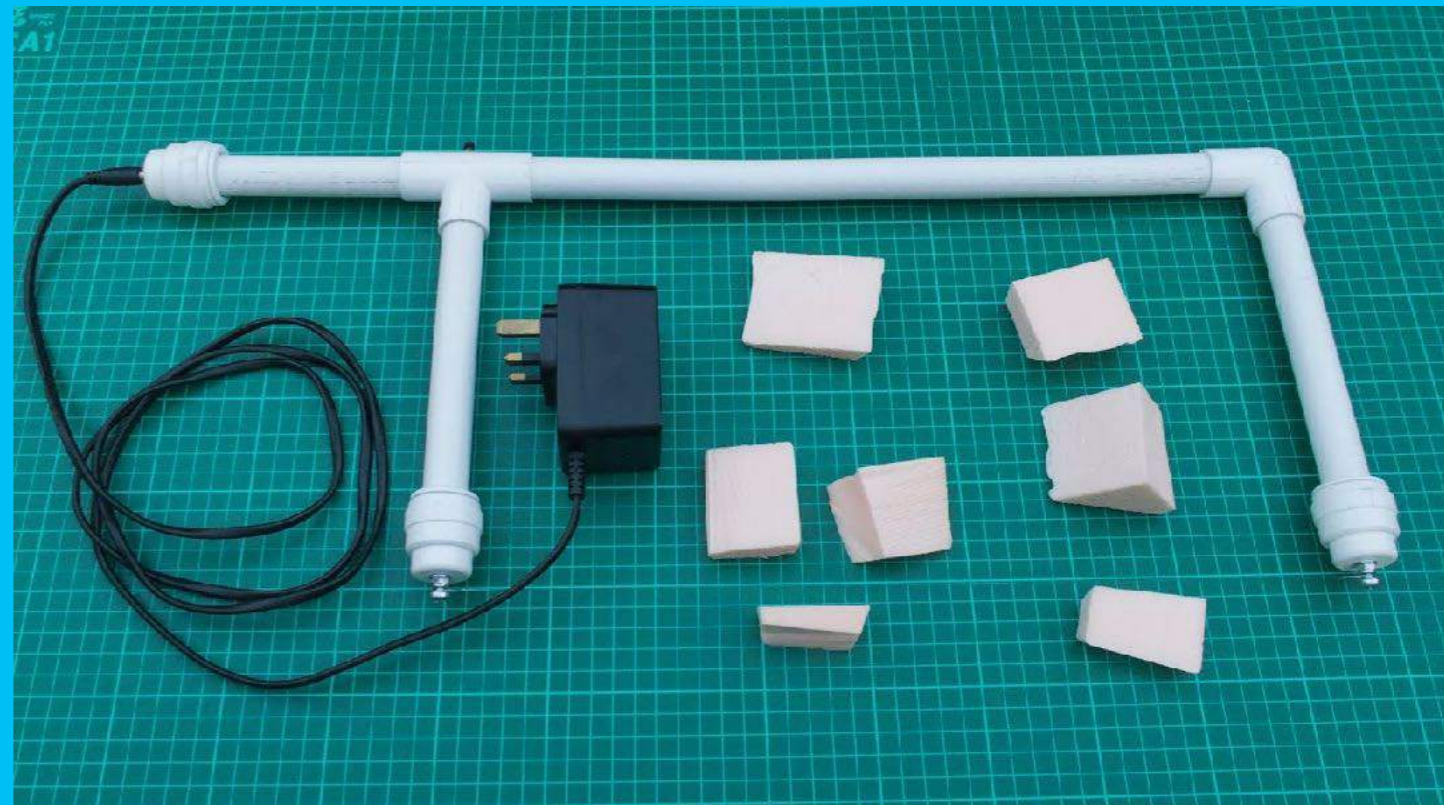
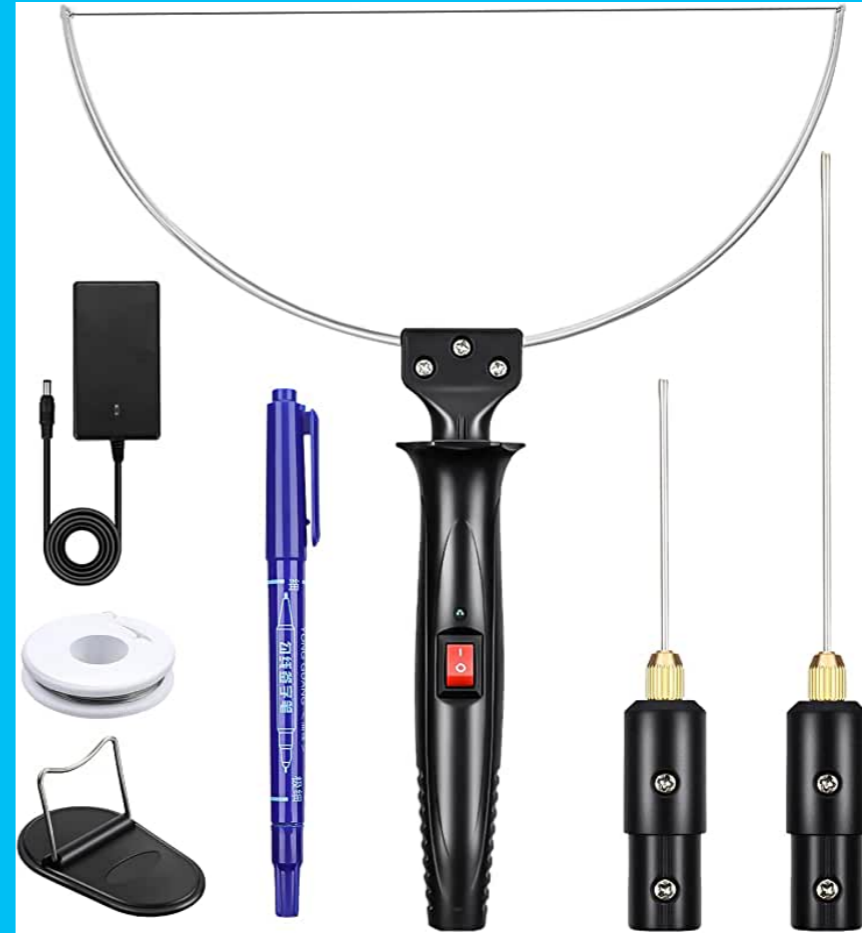
HOT KNIFE

- Available in standard and air cooled. AC lets you cut longer with out taking breaks.
- Make sure you get extra blades and a bendable blade for carving.
- RoMech has been reliable for me but I'm sure there are better brands
- \$80 - \$110



HOT WIRE

- Can be expensive for what you get but you get the rod attachments.
- Commercial wires are delicate and you are restricted by size.
- Sometimes they are poor quality.
- You can make your own using PVC pipe, wire and a power supply.
- \$26 - \$115



UTILITY KNIVES

- Long blades are best. You can shave off thick foam and cut chunks off 2" foam.
- Box cutters are not very good for foam. The blade is too short
- Always use a fresh blade if you find your cuts are jagged or tearing.
- Use a pulling motion, the lower the angle, the better the slice.



JIG SAW, RASPS, SANDPAPER

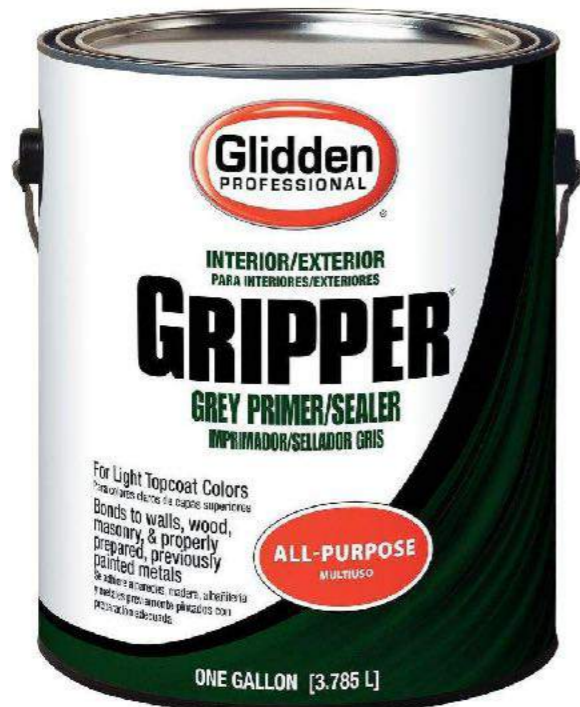
- Jigsaws are good for rough cutting but will not give you clean results.
- Rasps can be used to shape foam. They come in different sizes.
- Sandpaper lets you do fine smoothing but doesn't take enough material off. It will take forever.



GLUING FOAM

TYPES OF GLUE

- Hot Glue
- Super Glue
- Construction Adhesive
- Great Stuff
- Gorilla Glue (Clear vs Brown)
- Glidden Gripper, AKA PPG Gripper



COATING FOAM

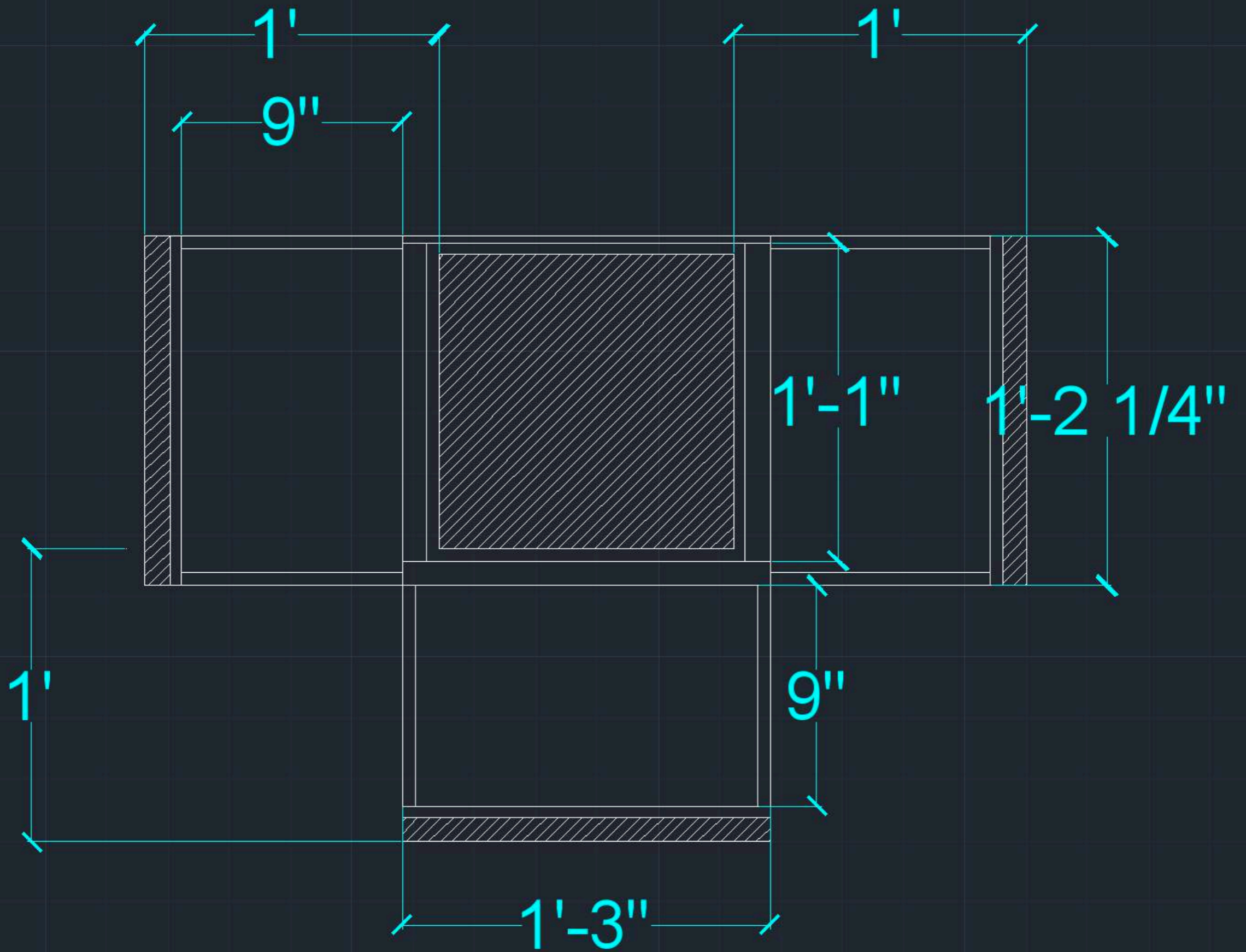
COATING FOAM

- Cheesecloth and glue
- Elastomeric
- Truck Bed Liner
- Foam Coat
- Monster Mud and Fabric
 - 5 gallons of joint compound, 1 gallon of paint
 - 5 parts joint compound and 1 part paint
- Scenic Dope
 - joint compound, glue paint
 - 1 quart of paint, 4 tubes of latex caulk, 2 cups of joint compound
 - 1 gallon of paint, 2 tubes of caulk, 1 cup of joint compound, 1/2 cup of water putty

CAPITALS

GENERAL RULES

- **Make sure you have enough clearance. Map out your materials, add it up to stay within UIL requirements.**
- **Lauan is not always the best material. It has no meat for fasteners to bite into. While it is thin it will not be stable enough for manhandling.**
- **Show measurements in your contest book. Take pictures with your measuring tape. It could save time.**
- **Experiment with different materials. Foam core comes in different thicknesses, fun foam is easy to cut and can be cut into intricate designs, poster board is great for curves**



1' CUT LIST

1" FOAM

- 2 @ 1' 3" wide x 1' long (front/back)
- 2 @ 1' 1" wide x 1' long (left/right)
- 1 @ 1' 1" x 1' 1" square (cap)

FOAM with Lauan backing

- 1 @ 1' 3" wide x 1' long (front)
- 2 @ 1' 1" wide x 1' long (left/right)
- 1 @ 1' 1" x 1' 1" square (cap)
- 1 @ 1' 3" wide x 1' long (back, lauan)

2' CUT LIST

1" FOAM

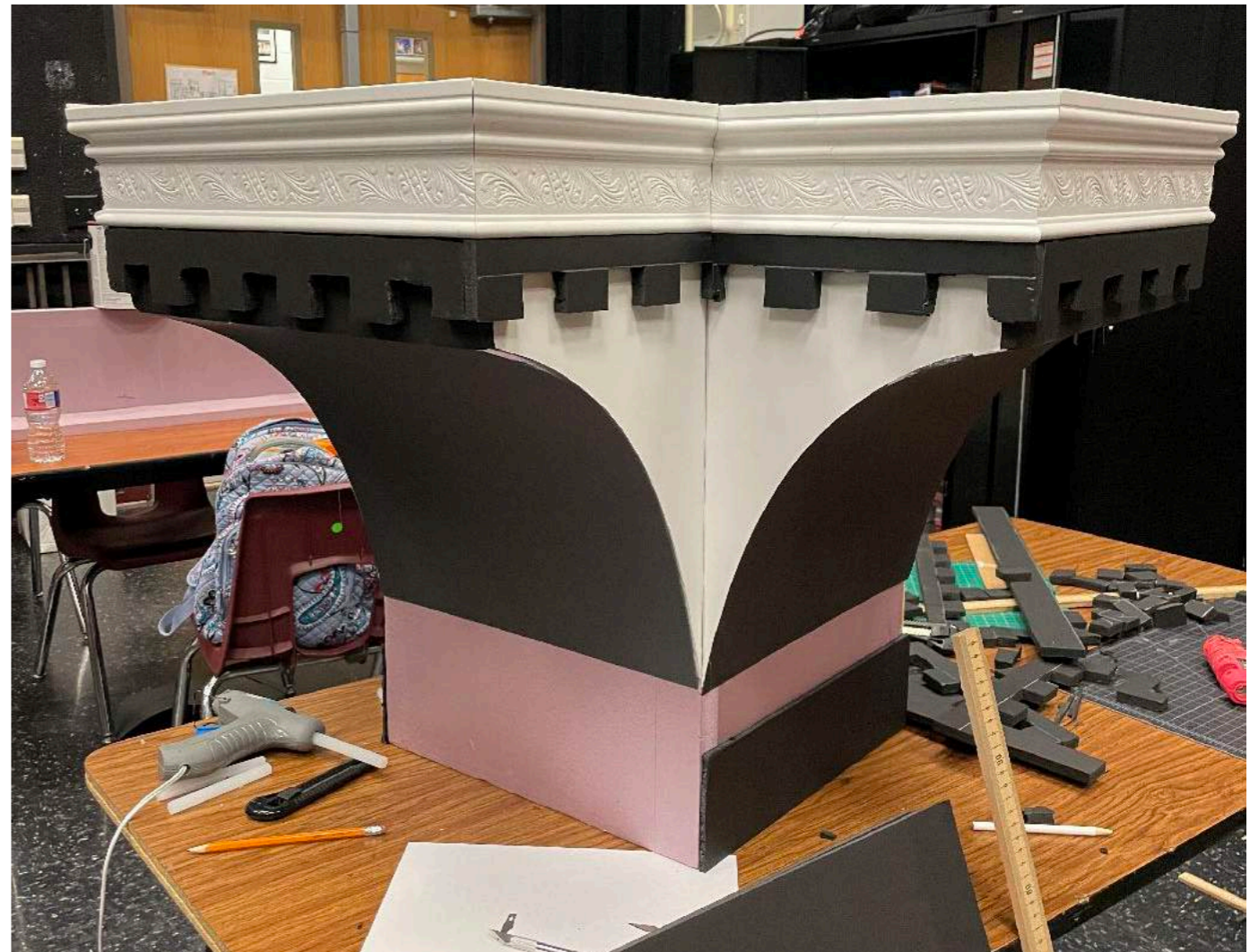
- 2 @ 1' 3" wide x 2' long (front/back)
- 2 @ 1' 1" wide x 2' long (left/right)
- 1 @ 1' 1" x 1' 1" square (stopper)

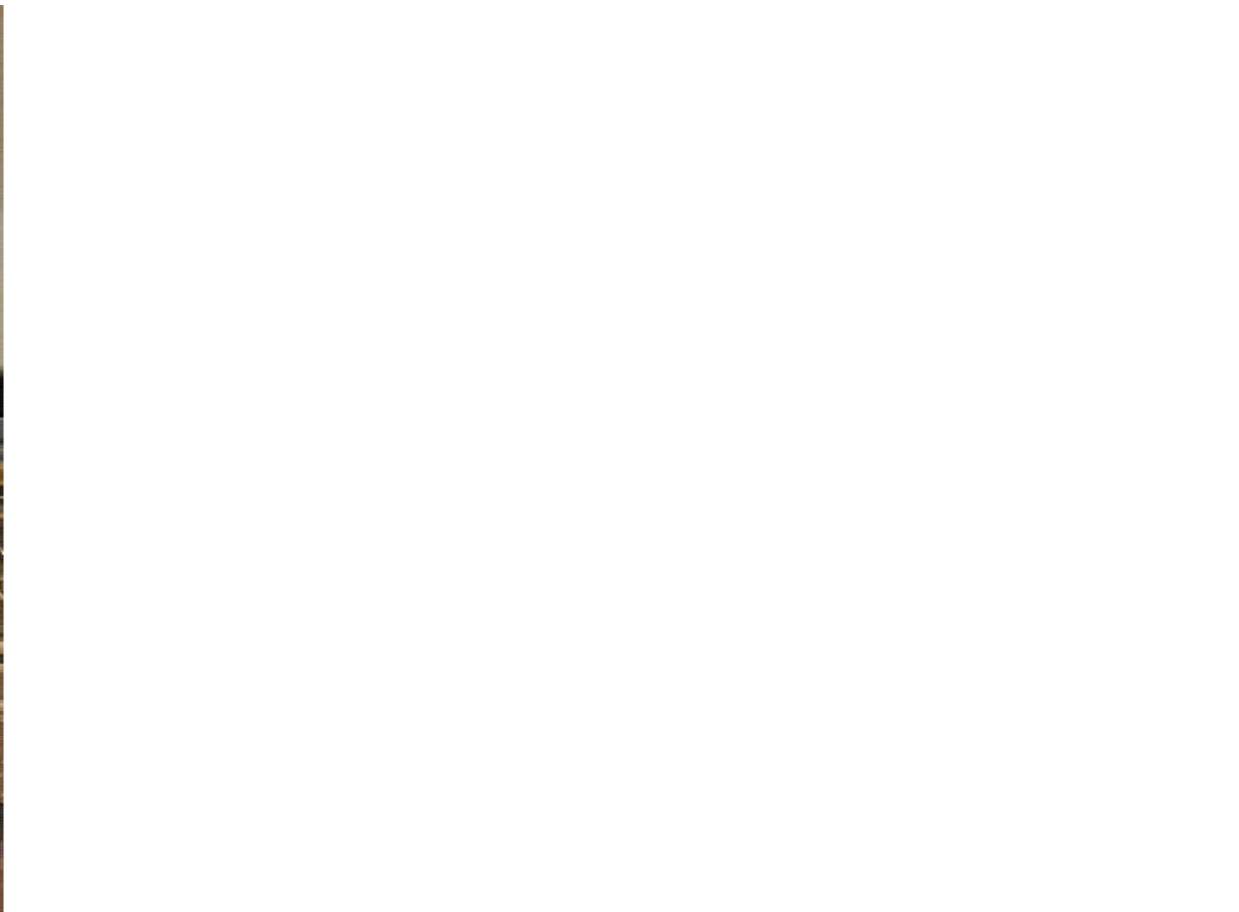
FOAM with Lauan backing

- 1 @ 1' 3" wide x 2' long (front)
- 2 @ 1' 1" wide x 2' long (left/right)
- 1 @ 1' 1" x 1' 1" square (cap)
- 1 @ 1' 3" wide x 2' long (back, lauan)

ALWAYS ADD 1/2" GAP ALL THE WAY AROUND YOUR CAPITAL





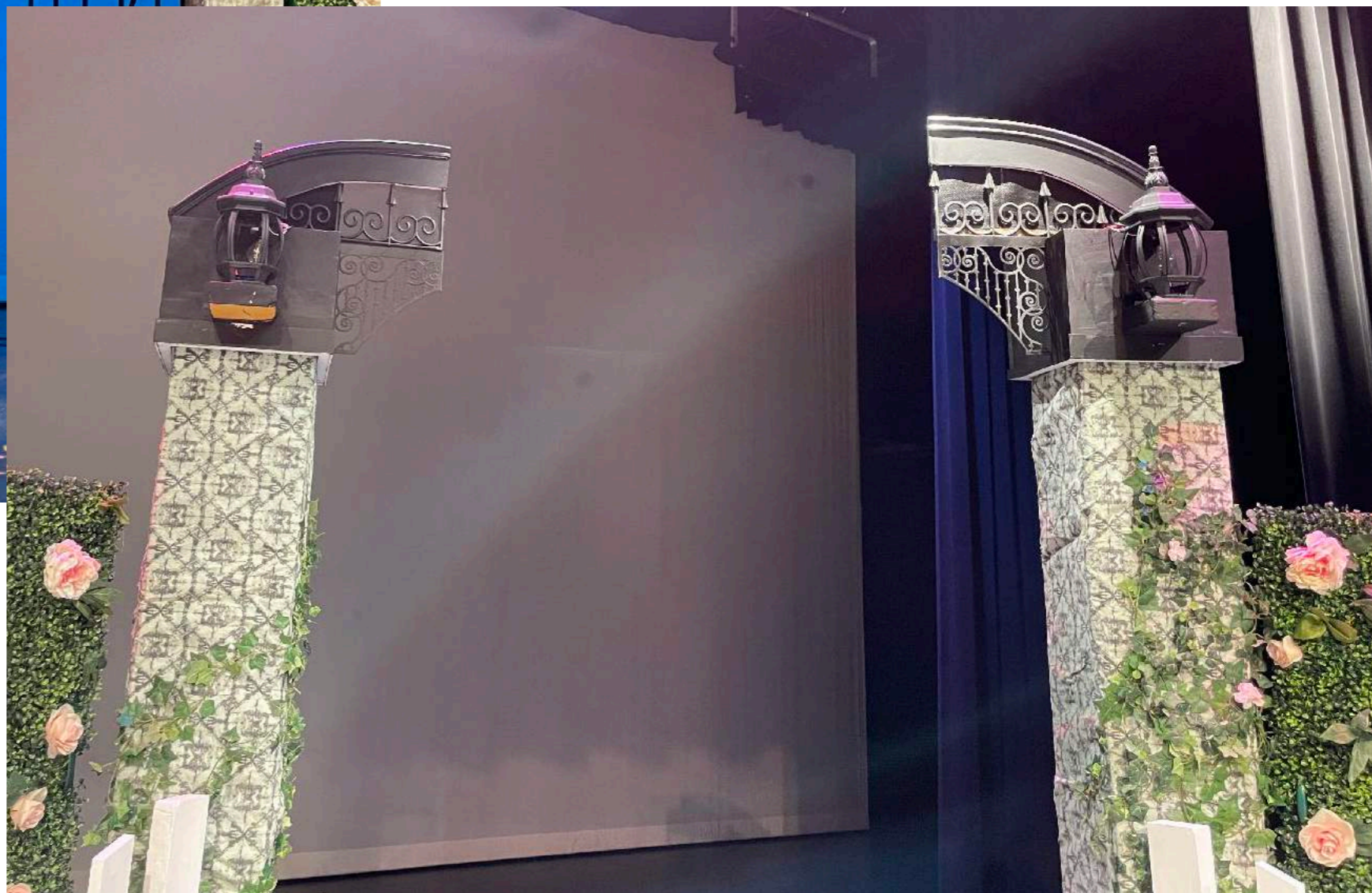


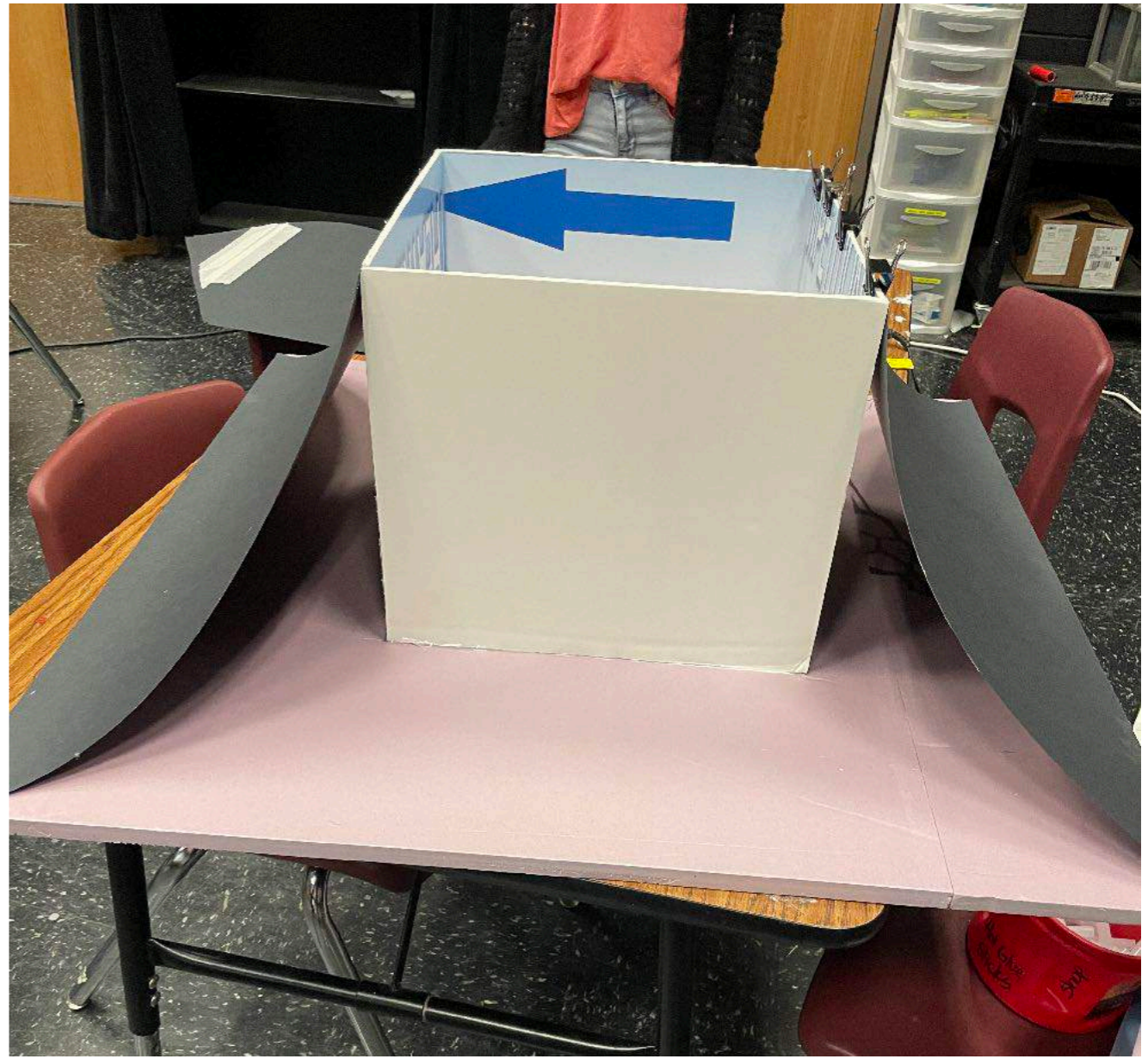
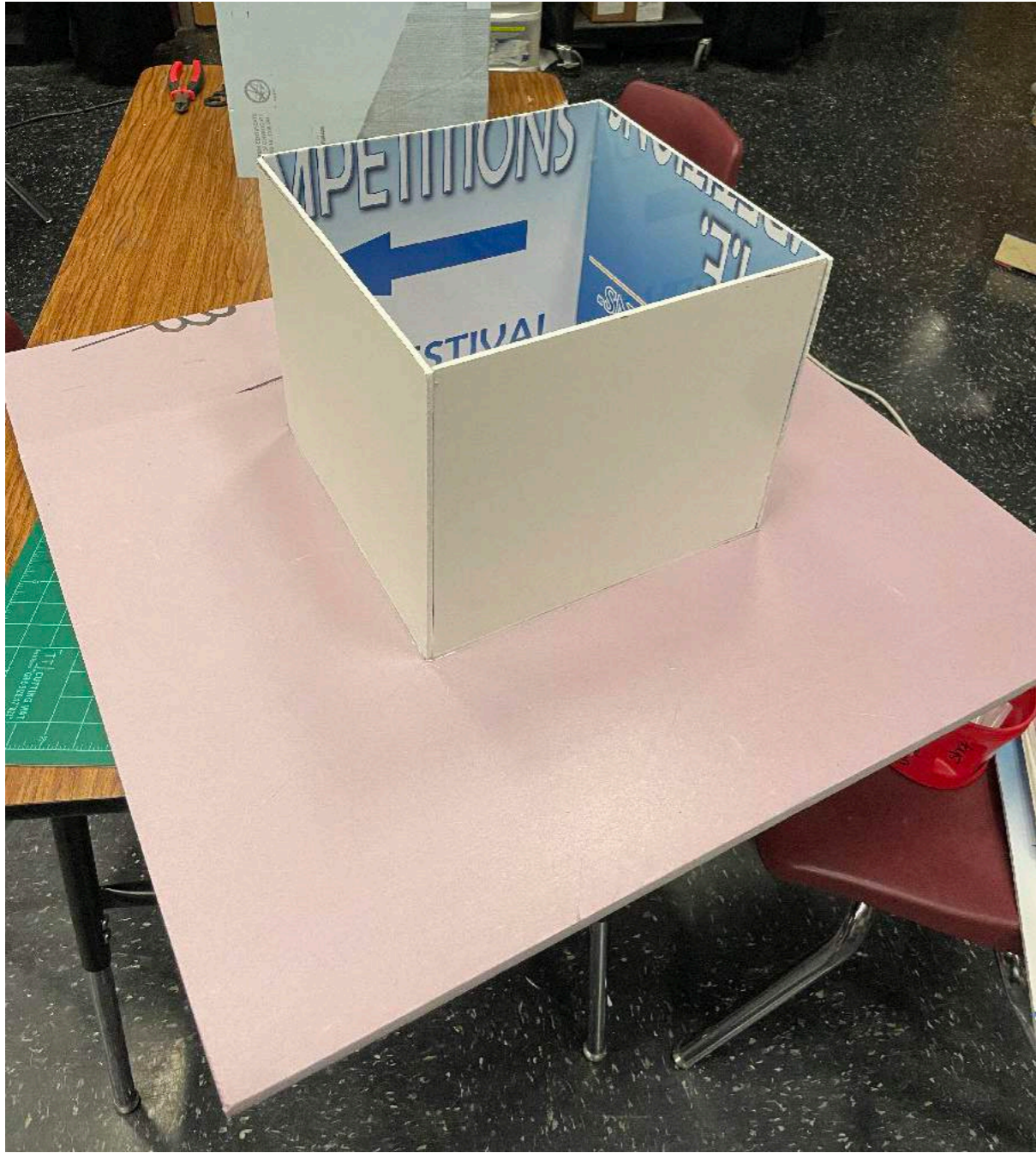


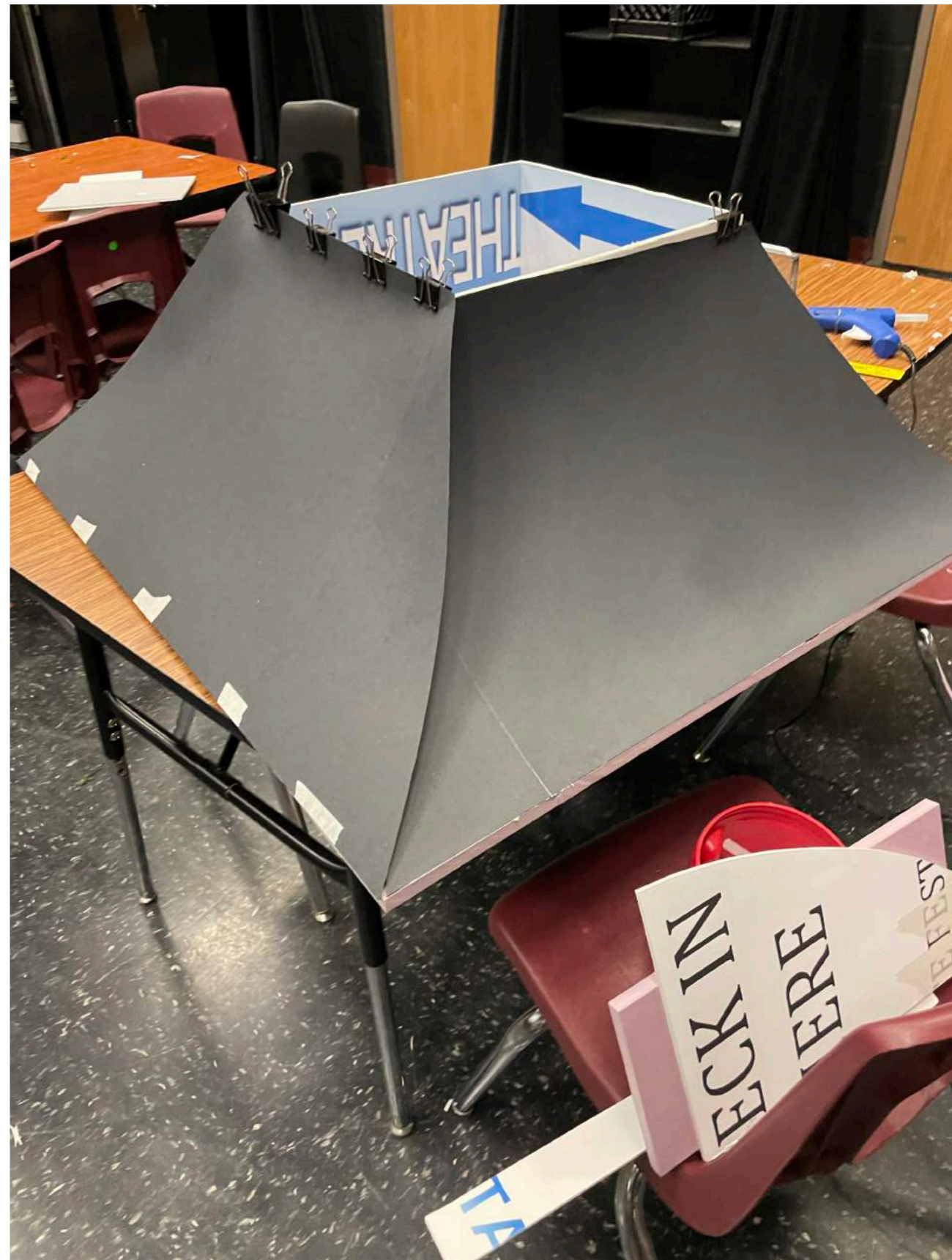
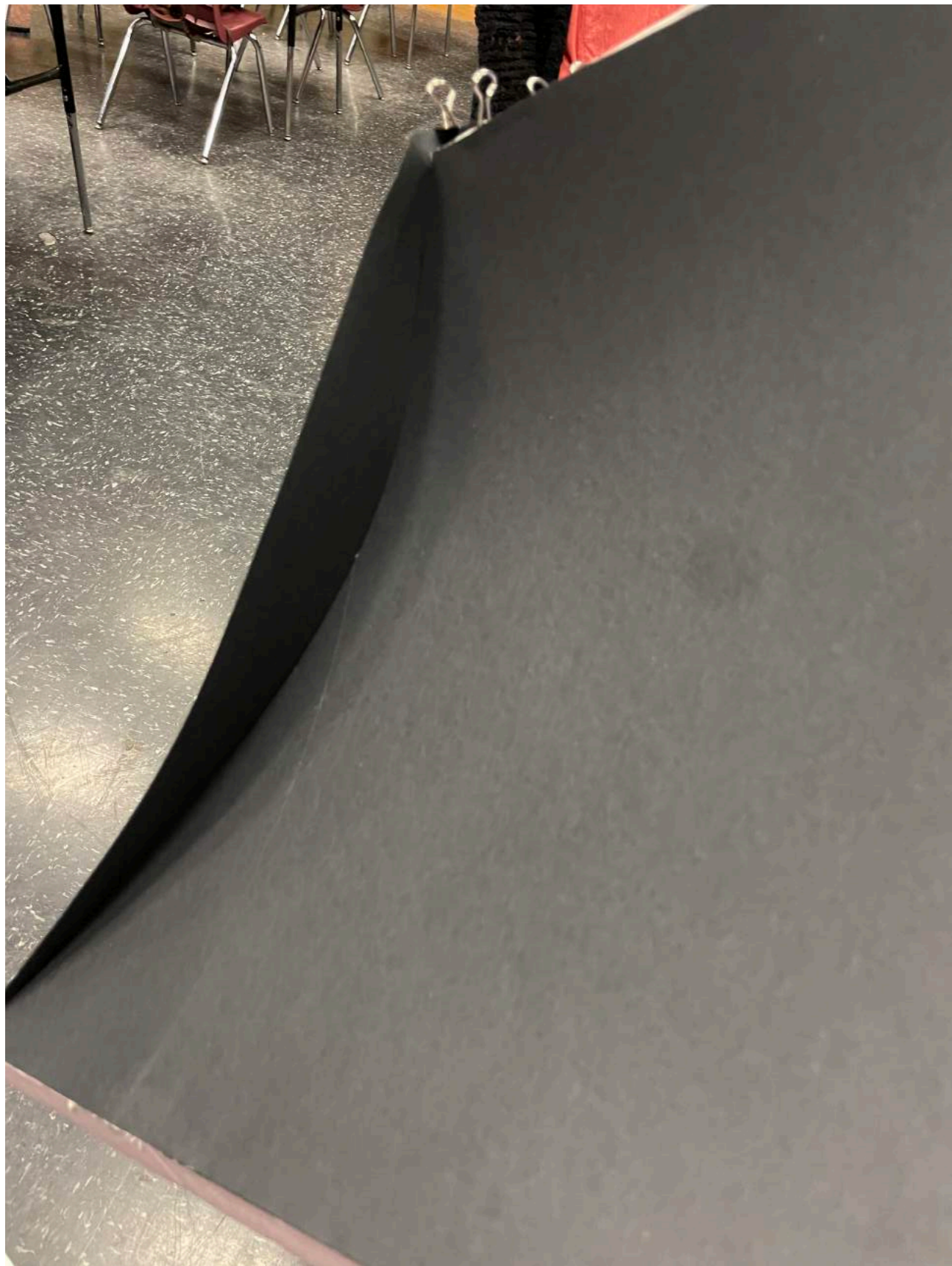
Flexible Moulding and Urethane Millwork



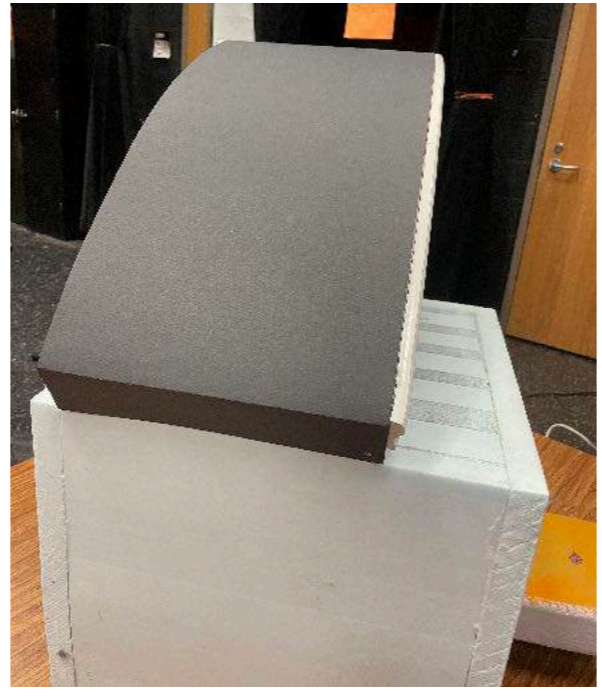
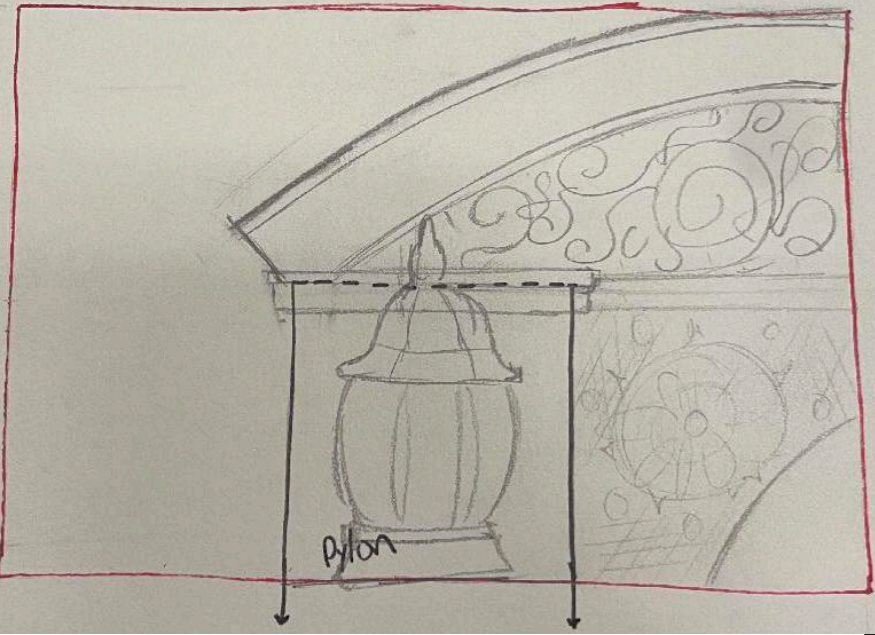
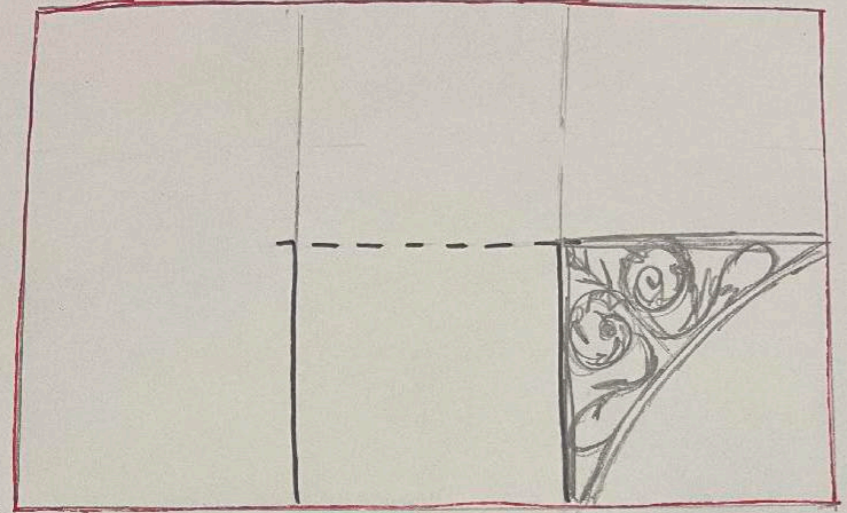








- latern, 1/18



The Government Inspector







Clue Fridge



Picasso/Earnest







