FABULOUS FOAMCORE

Materials
- X-ACTO knife (NOT wet knife)
- Metal ruler with cork or masking tape on backside (reduces slipping)
- Map pins or long push pins
- Cutting surface: back of Newsprint pad works well

Cutting Safety
- Hold edge of ruler: farthest distance from blade
- Good resistance to side force from blade
- One cut = 3 strokes:
  - 1st stroke scores surface paper
  - 2nd stroke cuts surface paper & foam
  - 3rd stroke cuts remaining foam & bottom paper
- Use all of blade, not just tip
- Blades go dull extremely quickly
- Never kneel on ruler to hold it while cutting:
- Knife can cut knee
- Knives dull off-table太快: wear gloves

Fluxes
- Easy to control:
  - Dries in a couple hours
- Minimal thickness: thin
- Thermally safe

Hot Melt
- Messy (wastage)
- Dries in a couple seconds
- Filler (thick)
- Not glue amber
START OUT SQUARE!!!

1. Cut one edge
2. Measure over 2 points and make a parallel cut
3. Pick top/bottom edge and cut 10° to it with a large triangle
4. Use the same edge and cut other side

JOINTS:

SHARP

1. Cut down to, but not through the 2nd sheet of paper
2. Bend sheet back on itself
3. With the butt of an X-Acto, force a furrow in the fore edge, along the cut line using the ruler as a guide.
4. Take several passes—don’t force it in one pass

The furrow should look like this. Note that the furrow is the depth of the fore edge.

Use the edge of the X-Acto to break furrow edges into 45° angles.
**JOINTS: LAP JOINT**

1. **MARK OFF FOME THICKNESS BY USING FOME-COR SCRAP.**
   - 3/16" THICK FOME SCRAP
   - FIX-ATO MARKS

2. **FLICK OFF 3/16" PIECE OF FOME AND PAPER. A QUICK FLICKING ACTION SHOULD ONLY REMOVE EXCESS FOME AND LEAVE PAPER IN TACK. IF FOME REMAINS, CLEAN OFF.**

3. **RUN FINGER ALONG JOINT TO SET JOINT.**

**JOINTS: LAP JOINT WITH RUBBER CEMENT TAPE**

1. **LAY DOWN RUBBER CEMENT TAPE ALONG JOINT EDGE.**

2. **CUT THROUGH ADHESIVE BUT NOT THROUGH TAPE BACKING. REMOVE BACKING TO LEAVE ADHESIVE ON JOINT.**

3. **RUB DOWN JOINT**

4. **EDGE OVERHANG MAY REQUIRE TRIMMING.**

RUNNING HOT GLUE TIP ALONG FOME EDGE, LOCATE A BEAD OF GLUE IN MIDDLE OF JOINT SURFACE.
**JOINTS: SLIGHT RADIUS**

1. Cut paper to but not through 2nd side of paper. Do not bend sheet back on itself.

2. Score furrow with butt of X-Acto and carefully control the depth of the furrow.

3. The depth of this furrow will determine the character of the radius:
   - Deeper = sharper
   - Shallower = softer

4. Carefully break edges to 45° angles. Make sure you don't force the furrow deeper.
   - If you don't break these edges, the radius will destroy.

5. Run a bead of hot glue in completed furrow.

**JOINTS: LARGER RADIUS**

1. Cut 1/8 inch strips through first layer of paper, and about 1/2 way through paper.

2. Strip off the 1/8 strips of paper, strip by strip.
   - This is harder than it sounds because the paper tends to peel. Make it as peeled off, do the best you can without breaking paper.

3. Bend the sheet going past the interposed angle of the final joint.
   - (this releases stress in the joint)

4. Check radius by viewing on a circle template.
   - It may take several tries to get the right size radius.

5. If stability of the joint is required, or you are going to cut close to the radius, do the following:
   - Notice that after bending the radius, the flattening out the pike has been performed into a V shape groove. By forcing hot glue into these V shapes and folding the sheet you will end up with a strong structural joint.

6. Bend sheet going past the interposed angle of the final joint.
**MEASURING**

IN THEORY, IF YOU HAVE

1. **JOIN/ROD/AVERSE LINE**
   - Bend the joint up to 90°

2. **SCOR OR DRA KER ENCE LINE**
   - Measure distance from outside source and subtract ref distance
   - X - 1" = distance gained

3. **SUBTRAX DISTANCE, GAINED FROM THE DISTANCE YOU WANT THE OUTSIDE SURFACES APART.**

**NOT QUITE!!**

Joints always pick up some dimension when you fold them up. You must experiment and learn to subtract the dimension gained.

**A SIMPLE PANEL**

1. **CUT SIDES SO THEY WILL FORM A PANEL WITH SIDES 2" LONGER THAN REQUIRED**

2. **CUT PANEL DOWN TO SIZE AND VOILA...**

3. **IF YOU CUT PIECES EXACTLY TO SIZE, YOU'LL GO CRAZY!!**
A SIMPLE BOX

A SIMPLE BOX IS CONSTRUCTED USING 3 PARTS

4 SIDED CENTER SECTION
PICK LONGEST JOINT TO BE = FORM COX BEND JOINT

3" NEED 2 END CAPS
3" 6" REMOVE 3/16 ALL AROUND FOR LAP JOINTS

GLUE ONE SIDE AT A TIME ON BOTH END CAPS

LAP JOINT

HOT GLUE ASSEMBLY:

JOIN LAP JOINT TO FORM A TUBE.
ADD LAP JOINT ENDS (WITH RUBBER CEMENT TAPE ON JOINTS)
CHECT BOX FOR SQUARENESS

RUBBER CEMENT ASSEMBLY