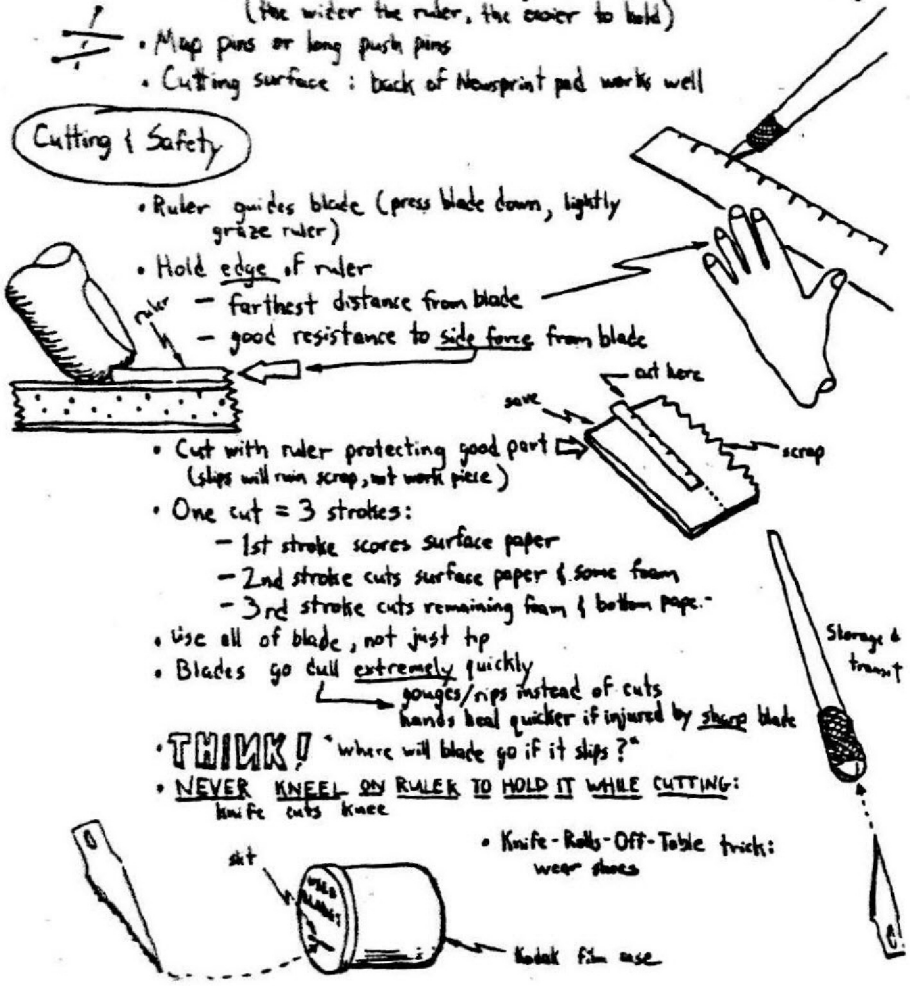
FABULOUS FOAMCORE

Matls

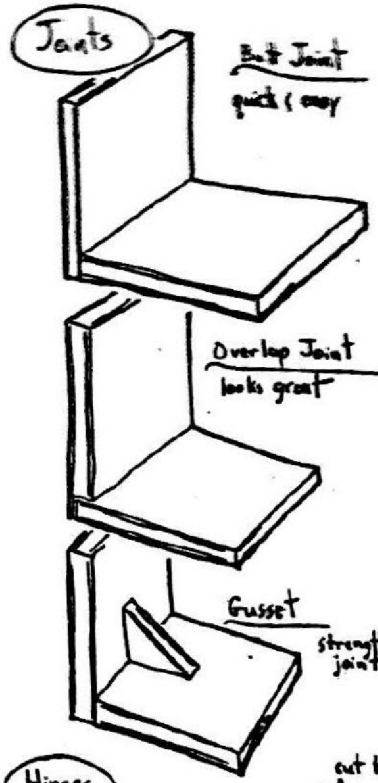
- X-ACTO knife (NOT matt knife) — and extra blades!
- Metal ruler with cork or masking tape on backside (reduces slipping) (the wider the ruler, the easier to hold)
- Map pins or long push pins
- Cutting surface: back of Newsprint pad works well
- Elmer's® Glue
- Hot melt glue & gun (see cons below)

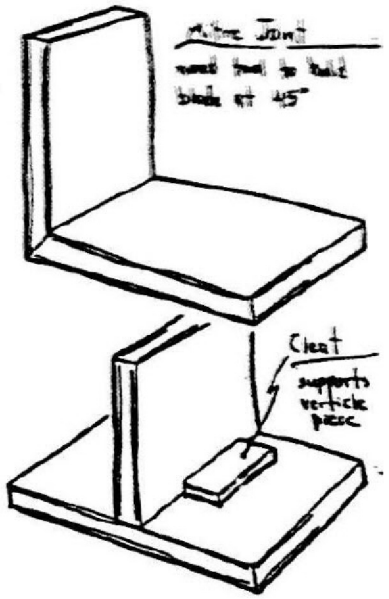
Cutting & Safety

- Ruler guides blade (press blade down, lightly graze ruler)
- Hold edge of ruler
  - farthest distance from blade
  - good resistance to side force from blade
- Cut with ruler protecting good part (slips will ruin scrap, not work piece)
- One cut = 3 strokes:
  - 1st stroke scores surface paper
  - 2nd stroke cuts surface paper & some foam
  - 3rd stroke cuts remaining foam & bottom paper
- Use all of blade, not just tip
- Blades go dull extremely quickly
  - gouges/rips instead of cuts
  - hands heal quicker if injured by sharp blade
- THINK! "where will blade go if it slips?"
- NEVER KNEEL ON RULER TO HOLD IT WHILE CUTTING: knife cuts knee
- Knife-Rolls-Off-Table trick: wear shoes



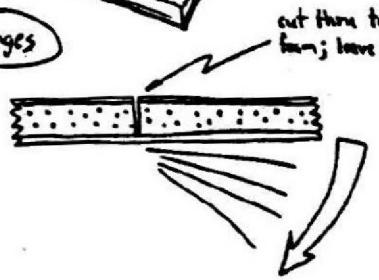
Joints

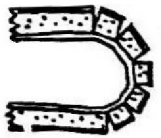




Pins can be used to hold pieces together while glue dries

Hinges

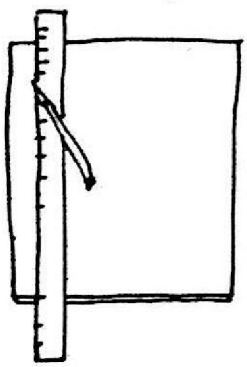




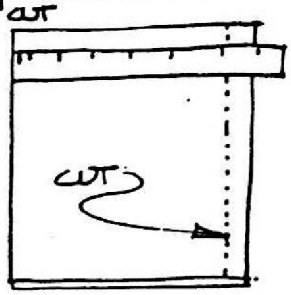
Elmers	vs.	Hot Melt
easy to control		messy (whiskers)
dries in a couple hours		dries in a couple seconds
minimal thickness (thin)		filler (thick)
thermally safe		hot glue burns

▸ START OUT SQUARE !!!!

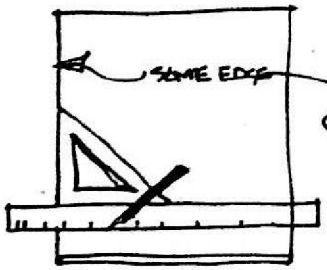
1 CUT ONE EDGE



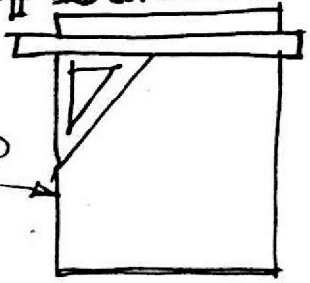
2 MEASURE OVER 2 POINTS AND MAKE A PARALLEL CUT



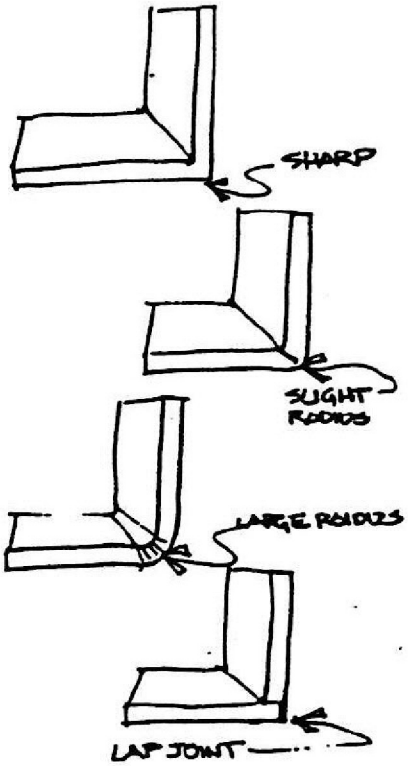
3 PICK TOP BOTTOM EDGE AND CUT 90° TO IT WITH A LARGE TRIANGLE



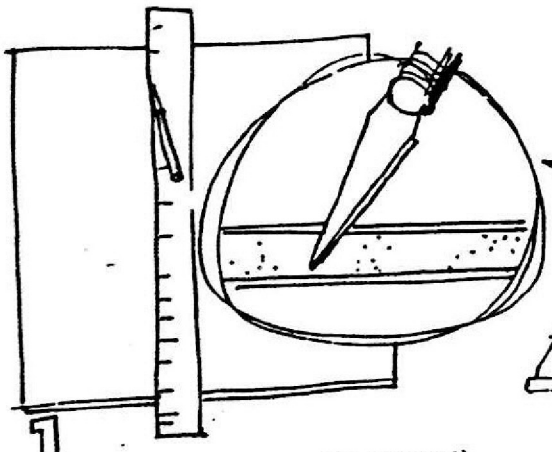
4 USE THE SAME EDGE AND CUT OTHER SIDE



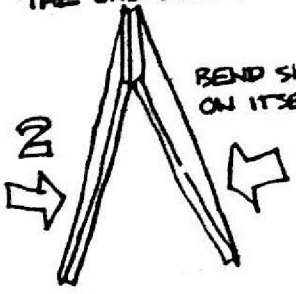
▸ JOINTS



▸ JOINTS: SHARP



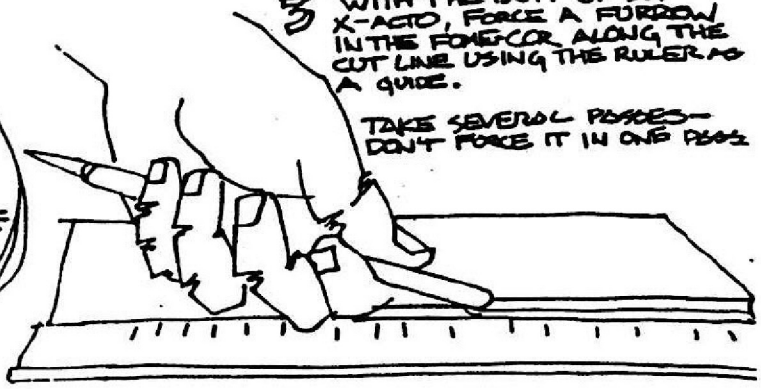
1 CUT DOWN TO, BUT NOT THROUGH THE 2ND SHEET OF PAPER

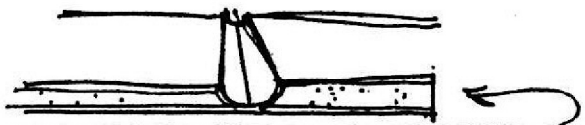


2 BEND SHEET BACK ON ITSELF.

3 WITH THE BUTT OF AN X-ACTO, FORCE A FURROW IN THE FOREDGE ALONG THE CUT LINE USING THE RULER AS A GUIDE.

TAKE SEVERAL PASSES— DON'T FORCE IT IN ONE PASS



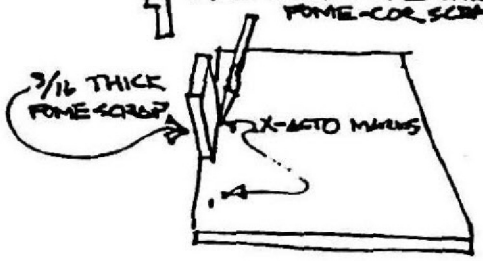


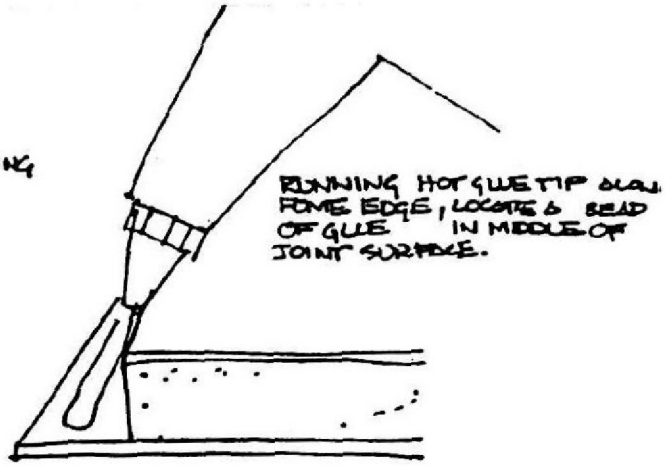
THE FURROW SHOULD LOOK LIKE THIS NOTE THAT THE FURROW IS THE DEPTH OF THE PAPER.

4 USE THE EDGE OF THE X-ACTO TO BREAK FURROW EDGES INTO 45° ANGLES.

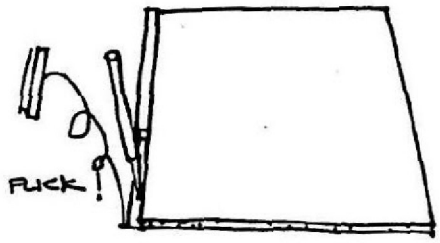
▸ JOINTS : LAP JOINT

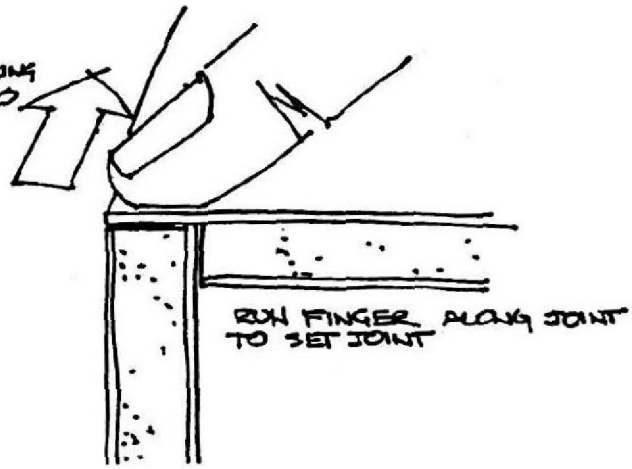
1 MARK OFF FOME THICKNESS BY USING FOME-COR SCRAP.



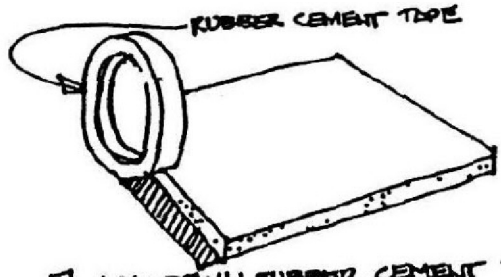


2 FLICK OFF 3/16" PIECE OF FOME AND PAPER. A QUICK FLICKING ACTION SHOULD ONLY REMOVE EXCESS FOME AND LEAVE PAPER IN TACT. IF FOME REMAINS, CLEAN OFF.

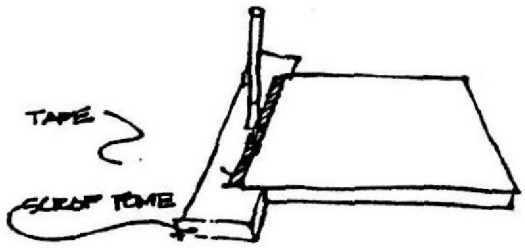




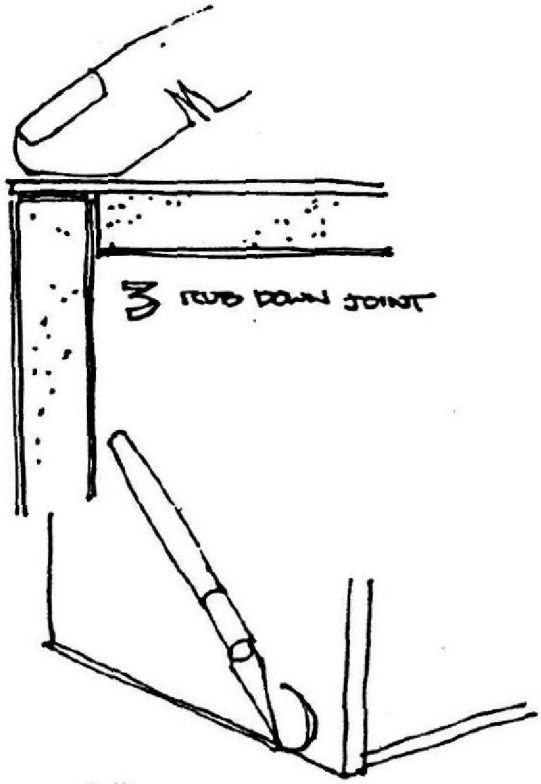
▸ JOINTS : LAP JOINT WITH RUBBER CEMENT TAPE



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.



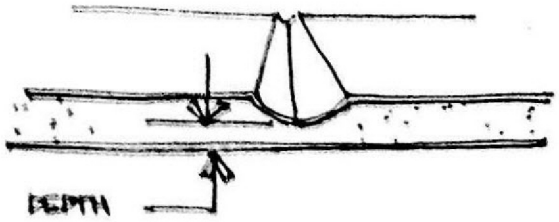
3 RUB DOWN JOINT

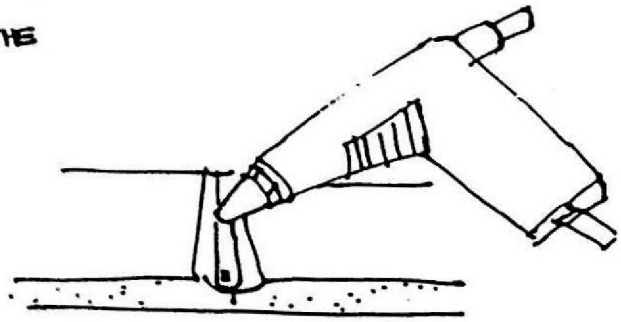
4 EDGE OVERHANG MAY REQUIRE TRIMMING.

▸ JOINTS: SLIGHT RADIUS

1 CUT DOWN TO BUT NOT THROUGH 2ND SIDE OF PAPER. DO NOT BEND SHEET BACK ON ITSELF.

2 SCORE FURROW WITH BUTT OF X-ACTO BUT CAREFULLY CONTROL THE DEPTH OF THE FURROW.





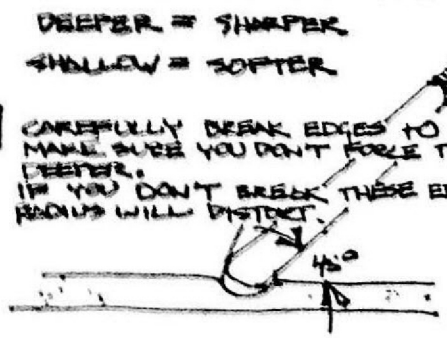
3 RUN A BEAD OF HOT GLUE IN COMPLETED FURROW.

3 THE DEPTH OF THIS FURROW WILL DETERMINE THE CHARACTER OF THE RADIUS

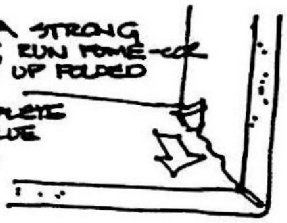
DEEPER = SHARPER

SHALLOW = 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 DISTORT.

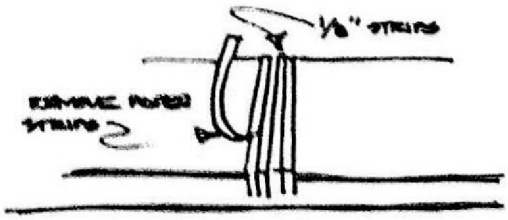


FOR A STRONG JOINT, RUN FOME-CORE SCRAP UP FOLDED SHEET TO COMPLETE A HOT GLUE FILLET.



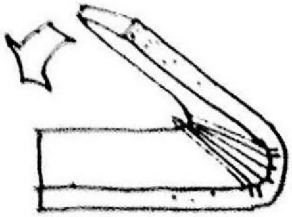
▸ JOINTS: LARGER RADIUS

1 CUT 1/8 INCH STRIPS THROUGH FIRST LAYER OF PAPER AND ABOUT 1/2 WAY THROUGH FOME.

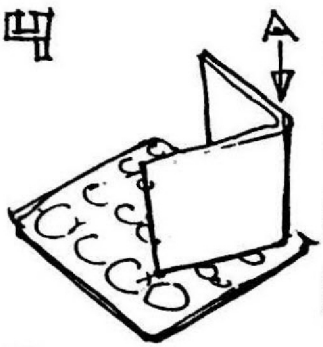


2 STRIP OFF THE 1/8" STRIPS OF PAPER, STRIP BY STRIP.
THIS IS HARDER THAN IT SOUNDS BECAUSE THE PAPER TENDS TO DE-LAMINATE AS IT IS STRIPED OFF. DO THE BEST YOU CAN WITHOUT DAMAGING FOME.

3 BEND THE SHEET GOING PAST THE INTENDED ANGLE OF THE FINAL JOINT. (THIS RELEASES STRESS ON THE JOINT)



4



CHECK RADIUS BY EYEING ON A CIRCLE TEMPLATE.

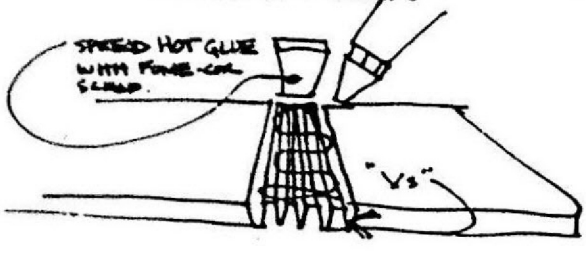
IT MAY TAKE SEVERAL TRIES TO GET THE RIGHT SIZE RADIUS.

ADJUST SIZE BY MAKING MORE OR LESS 1/8 SLITS.

WRITE DOWN FINAL NUMBER OF STRIPS FOR REFERENCE.

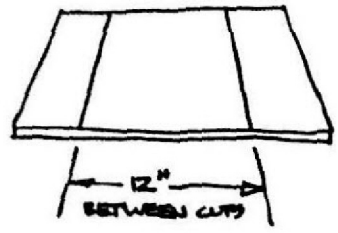
5 IF STABILITY OF THE JOINT IS REQUIRED OR YOU ARE GOING TO CUT CLOSE TO THE RADIUS DO THE FOLLOWING.

NOTICE THAT AFTER BENDING THE RADIUS THE FLATTENING OUT THE FOME HAS BEEN DEFORMED INTO "V" SHAPE GROVES. BY FORCING HOT GLUE INTO THESE "V's" AND FOLDING THE SHEET YOU WILL END UP WITH A STRONG, STRUCTURAL JOINT.

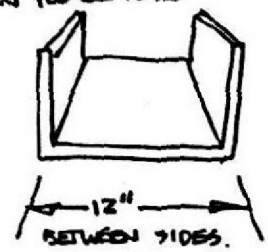


▸ MEASURING

IN THEORY, IF YOU HAVE

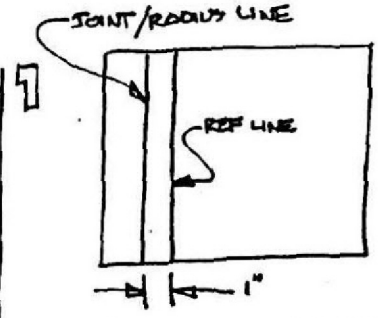


THEN YOU'LL HAVE

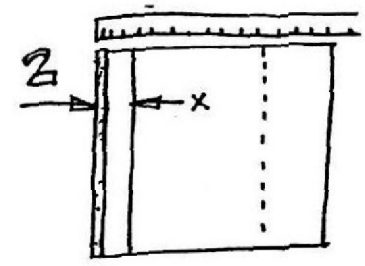


NOT QUITE!!!

JOINTS ALWAYS PICK UP SOME DIMENSION WHEN YOU FOLD THEM UP.
YOU MUST EXPERIMENT AND LEARN TO SUBTRACT THIS DIMENSION GAINED.



SCORE OR DRAW A REFERENCE LINE
BEND THE JOINT UP TO 90°

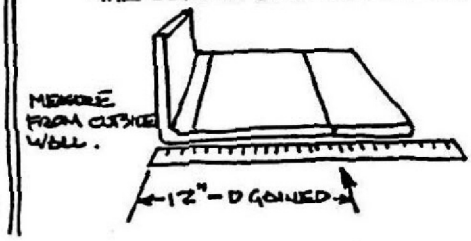


MEASURE DISTANCE FROM OUTSIDE SURFACE AND SUBTRACT REF DISTANCE

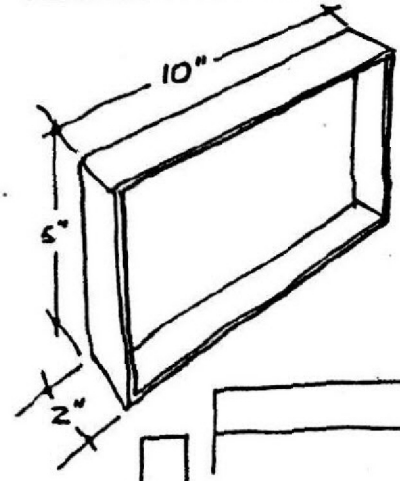
X − 1" = DISTANCE GAINED

THE LARGER THE RADIUS THE LARGER DISTANCE GAINED

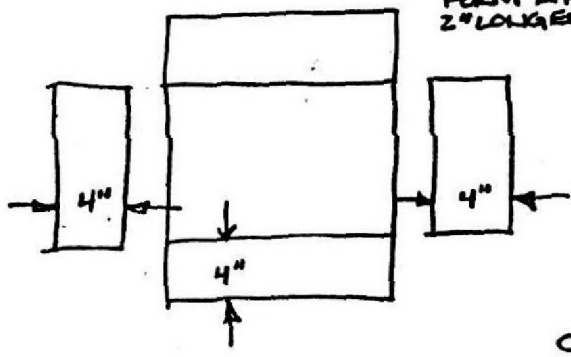
3 SUBTRACT DISTANCE GAINED FROM THE DISTANCE YOU WANT THE OUTSIDE SURFACES APART.

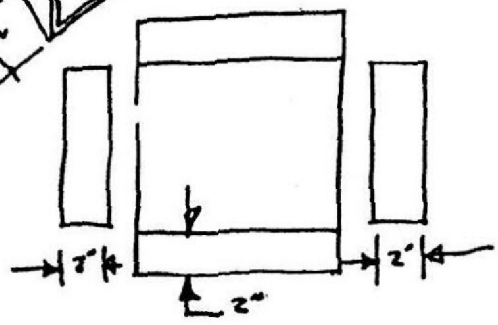


▸ A SIMPLE PANEL



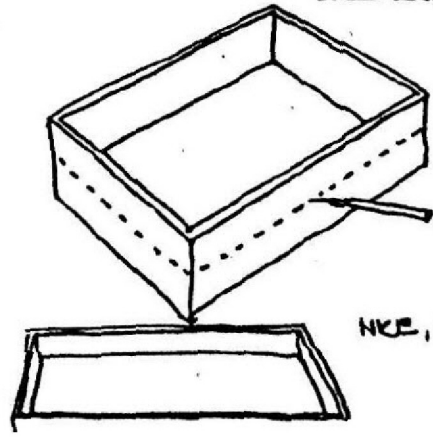
CUT SIDES SO THEY WILL FORM A PANEL WITH SIDES 2" LONGER THAN REQUIRED





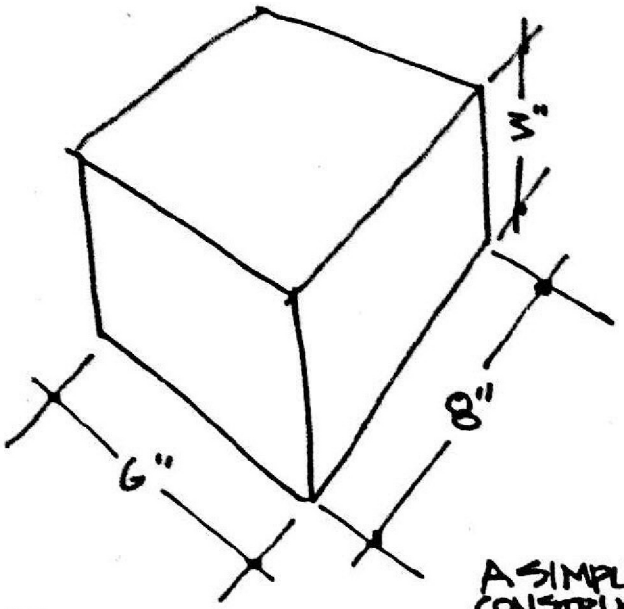
IF YOU CUT PIECES EXACTLY TO SIZE, YOU'LL GO CRAZY!!

CUT PANEL DOWN TO SIZE AND VOILA..



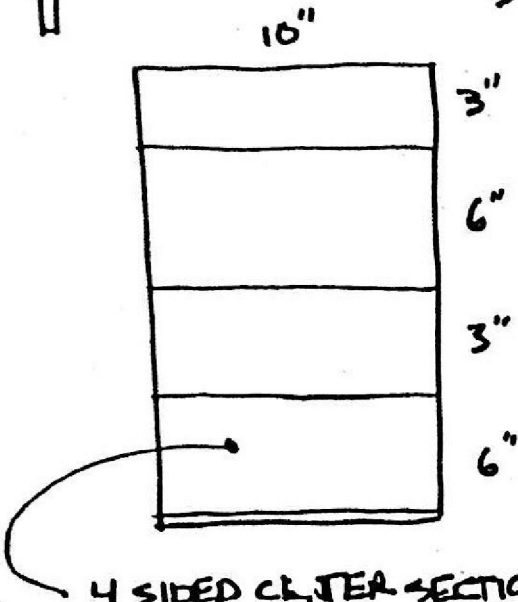
NICE, FLAT PANEL.

A SIMPLE BOX



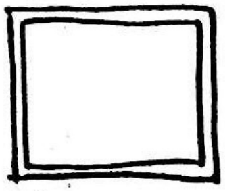
A SIMPLE BOX IS CONSTRUCTED USING 3 PARTS

1



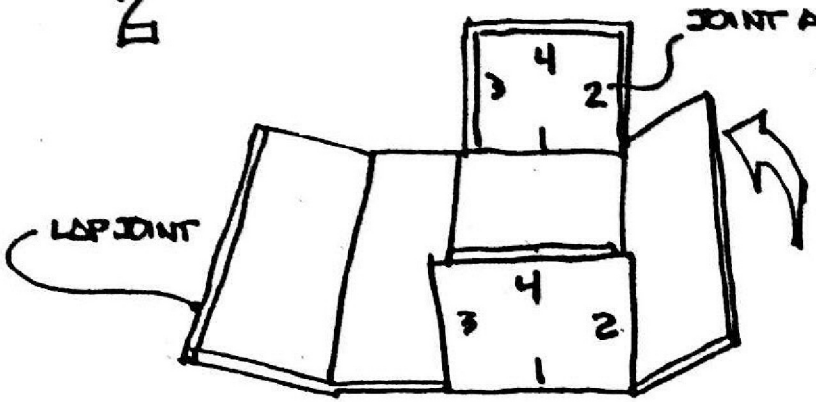
4 SIDED CENTER SECTION PICK LONGEST JOINT TO BE A FOME-COR BEND JONT

NEED 2 END CAPS



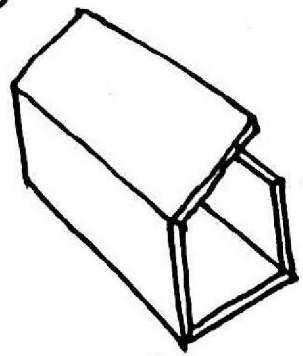
REMOVE 3/16 ALL AROUND FOR LAP JOINTS

2 HOT GLUE ASSEMBLY:



GLUE ONE SIDE AT A TIME, ON BOTH END CAPS

3 RUBBER CEMENT ASSEMBLY



JOIN LAP JOINT TO FORM A TUBE.

ADD LAP JOINT ENDS (WITH RUBBER CEMENT TAPE ON JOINTS)

CHECK BOX FOR SQUARENESS