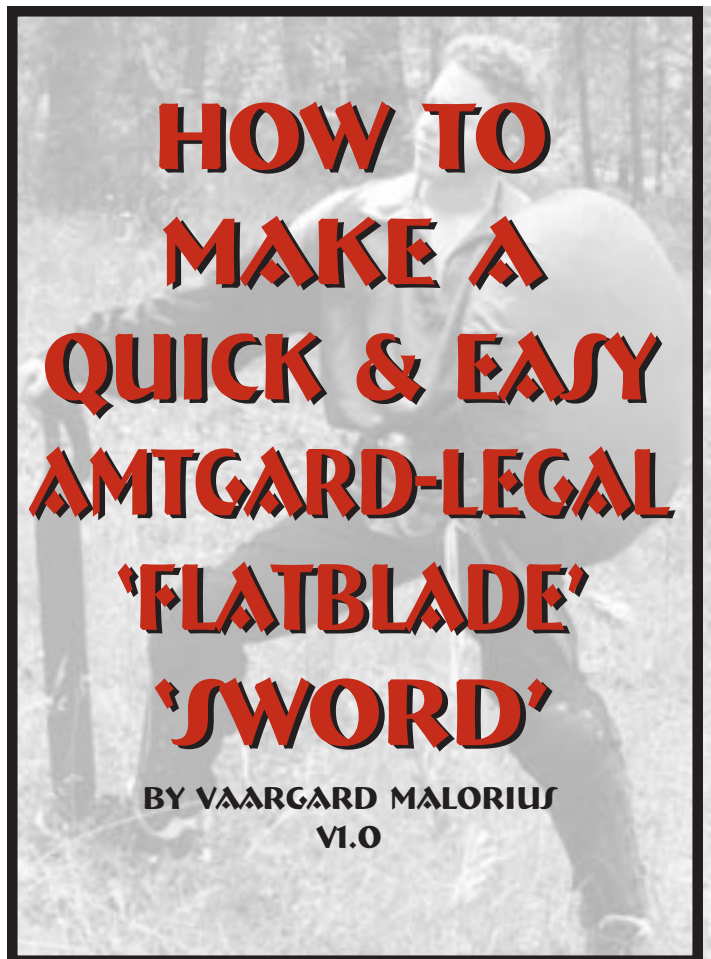


You will need the following supplies to create up to 2 long swords, 3 medium swords, or 10 Daggers and/or short swords:

- 1 roll 1/4" camp mat (most inexpensive, common type is 'blue foam')
- 1 10' x 1/2" CPVC Pipe (PVC is fine)
- 2 1/2" CPVC End Caps per weapon to be made
- 1 Racquetball per weapon to be made
- 1/2 yard fabric of your choice for cover
- All-purpose Quick-drying Hobby Cement (or Contact Cement, Spray Adhesive)
- Craft Knife or Box Cutter (X-Acto™ knife or similar)
- Straightedge (Metal ruler or T-square recommended)
- Hack Saw or PVC cutter
- Electrical Tape and/or Straight Pins (to hold foam in place while glue dries)
- Scissors

Substitutions can be made at your discretion, but for purposes of this 'how-to', we will assume you have the above materials and are making a pair of 3' swords. We will be using a three layered style for our demonstration (Fig. 1, letter C), but there are many different styles of flatblade. Feel free to elaborate, but always remember: SAFETY FIRST! Keep your weapons as short as you are comfortable with. The longer the core, the more 'whippy' and subject to breakage your weapon will be. This design can easily be adapted to produce oddly shaped swords (such as a flamberge or a scimitar) by altering the pattern of the layering. At the end of this document you will find a few ideas for how to customize the shape of your flatblade to suit your own personal taste and style. (Figs. 1, 5 and 7)

It may take a lot more patience to create a nice flatblade, but they tend to have a better finished appearance than conventional round blades. Flat Blades commonly default into the 'orange weapon' category as defined in the [Amtgard Handbook: Rules of Play](#), so before you endeavor to create a flatblade, realize that using flatblades is a completely different fighting style than using 'omnidirectional' conventional 'swords'. Using a flatblade requires a lot more skill and finesse than conventional 'swords' and will give you a more 'traditional' appreciation of the use of edged weapons during Amtgard battlegames.



- 1) Cut 2 30" lengths off of the PVC. This will leave you with about 5 feet for later projects and/or additional weapons.
- 2) Coat the ends (about 1/2" of each) in PVC cement or contact cement. Press end caps onto pipe with a 1/2 twist to insure good adhesive coverage.
- 3) Cut 4 strips about 1/2" wide along the **long** edge from your 1/4" foam mat. They should be a minimum of 50" long.
- 4) Cut 2 strips about 1" wide along the **long** edge from your 1/4" foam mat. They should be a minimum of 50" long.
- 5) Cut 2 strips about 1 1/2" wide along the **long** edge from your 1/4" foam mat. Cut these 2 in half. This will result in 4 shorter pieces about 25" long.
- 6) Round one end of each of the 4 pieces from step 5. When finished, they should resemble elongated foam fudgesicles; squared off on one end and rounded on the other.
- 7) Cut a 3/8"-1/2" hole in the Racquetball. Use scissors and BE CAREFUL. This can be harder to do than it sounds. You may find it easier to use an X-acto® Knife.

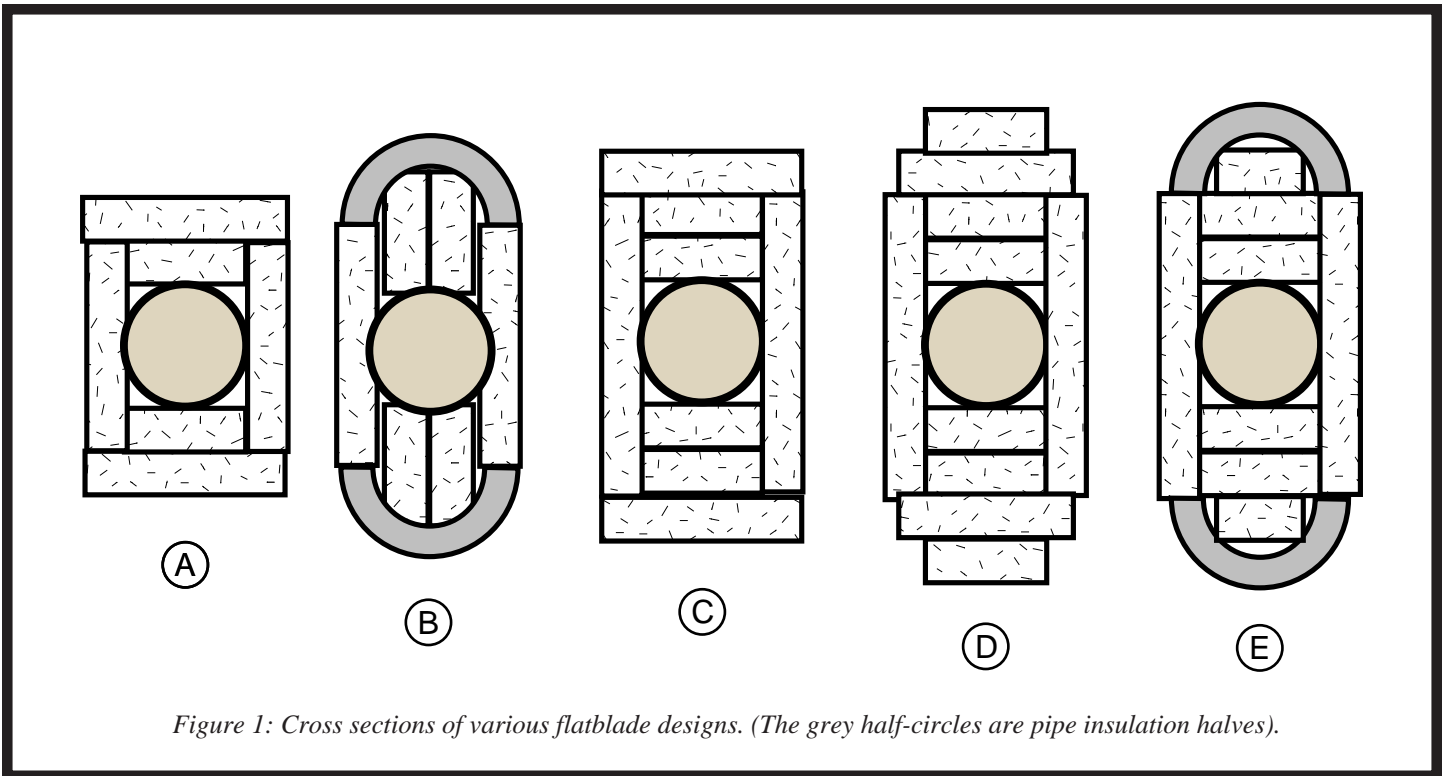


Figure 1: Cross sections of various flatblade designs. (The grey half-circles are pipe insulation halves).

8) Apply cement to 1/2 of the total length of one of the 1/2" wide foam strips from step 3. Apply adhesive evenly. Apply the glue in a straight line down the center of the foam.

***A NOTE ON GLUE: Glue tends to dry faster and bond stronger if you use a thin layer of glue rather than thick, gloppy blobs. Try to spread glue thinly and evenly on any bonding surfaces for best results. It is often helpful to use a spare piece of cardboard or foam to spread glue.*

9) Lay the core a little under half way atop one of the foam strip. Leave about 8" showing for the grip and pommel. ***You might find it helpful to use a small piece of tape to hold the foam in place while the glue dries.*

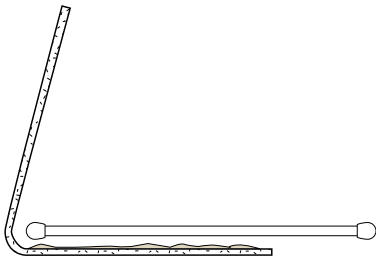


Figure 2: Gluing core to first foam strip.

10) LET THE GLUE DRY. (I don't like to wait either, but if you don't wait for the glue to dry during construction, the flatblade tends to be more

prone to self destruction at the most inopportune moments).

11) Repeat steps 8-10 with a second strip of 1/2" wide foam. Keep the two layers as close to *exactly* atop one another as possible.

12) After the glue has dried, (you DID let the glue dry, didn't you? -=smirk=-) Put a bead of glue down the rest of the first foam strip from step 8. Press into place along the other side of the core. Keep the three layers as close to *exactly* atop one another as possible. ***For the rest of this how-to, it is easier to leave the 'sword' lying on its side and taped or pinned into place until the glue is dry.* (Fig. 3)



A group of adventurers equipped with flatblades seek their destiny

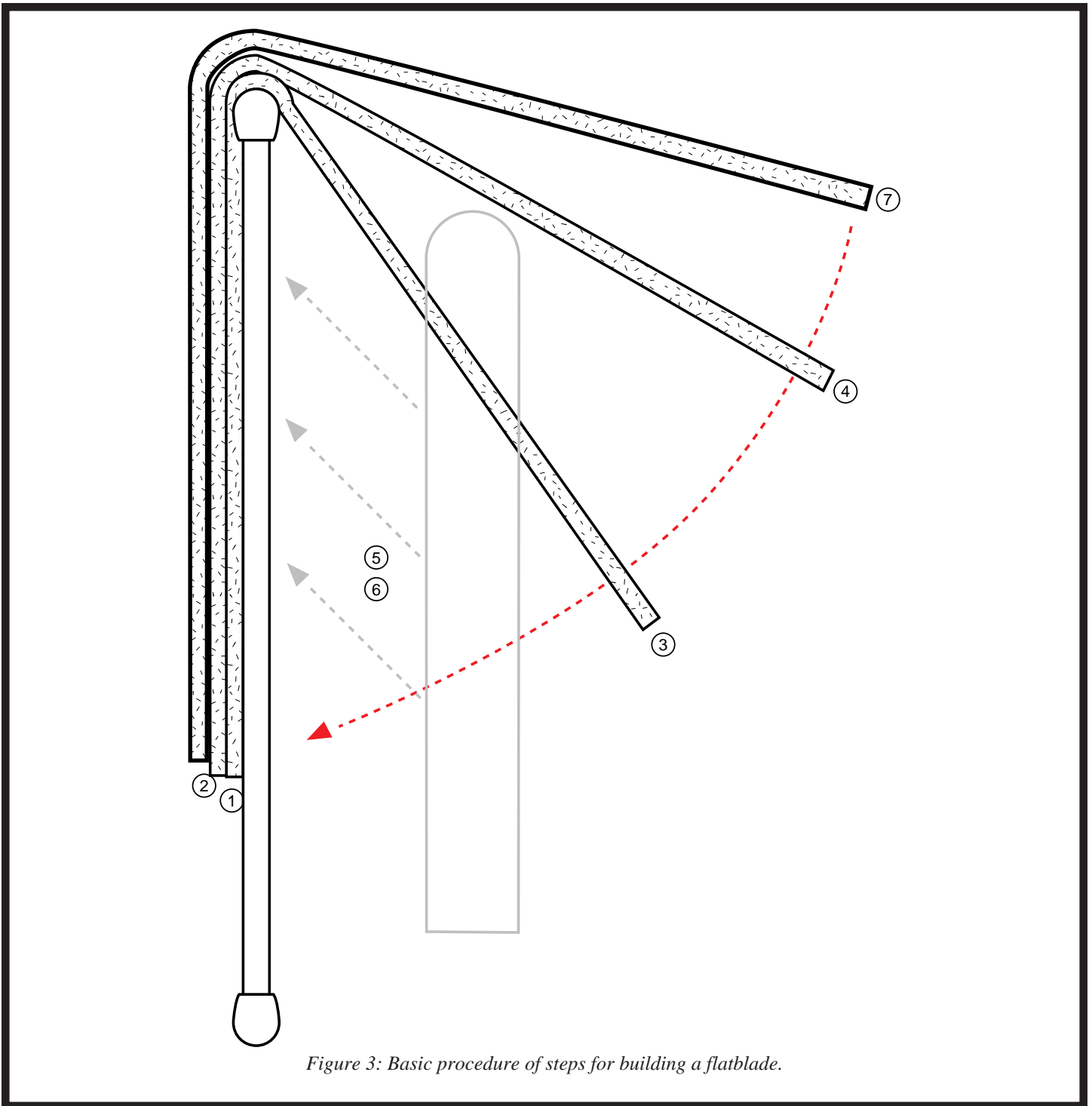


Figure 3: Basic procedure of steps for building a flatblade.

13) LET THE GLUE DRY.

14) Glue the remainder of the second foam strip to the first. When you have completed this step, and the glue is dry, you should have what looks like an elongated fudgesicle of foam & PVC. (Fig. 4)

15) LET THE GLUE DRY.

16) Trim bottom edges of foam strips so that they are even with each other.

17) Take one of the rounded pieces from steps 5 and 6. Apply glue along the entire surface of one side of the 'sword'. Pin or tape foam into place while the glue dries.

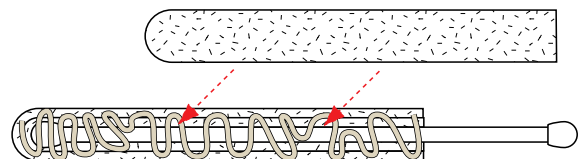


Figure 4: Gluing sides into place.

- 18) LET THE GLUE DRY.
- 19) Repeat steps 15 and 16 with the opposite side of the sword.
- 20) LET THE GLUE DRY. (Annoyingly repetitive, isn't it?)
- 21) Trim edges of sides so that they are flush with the rest of the edges of the 'edge' foam.
- 22) Take one of the 1 1/2" strips and glue around the entire edge. This step completes the 'blade' of the 'sword'.
- 23) LET THE GLUE DRY.
- 23) Tape the Racquetball (or sufficient padding) to the pommel. (Bottom of 'sword'). (Fig. 6)
- 24) If you are adding a cover to your weapon, (*highly* recommended) Fold your fabric in half long-ways. (Fig. 6)

- 25) Sew down the long edge and round off at the top. (Fig. 6)
- 26) Test the fit of the cover. If it is too loose, re sew the edge closer to the fold and trim off excess. Repeat until the cover fits to your satisfaction.
- 27) Turn the cover inside out and slide over the 'blade'. Tape into place at the grip.
- 28) IF you desire, repeat steps 24-27 for the pommel (bottom) of the 'sword'.
- 29) Wrap grip to taste.
- 30) Repeat steps 7-29 on the second core.
- 30) Most foam weapons tend to deteriorate quickest at the tip, so be sure to have tape, glue, and some spare foam on hand when you use your sword for any necessary quick repairs. Take your new sword out to the park and find some unsuspecting Amtgarder to try your new weapons out on!

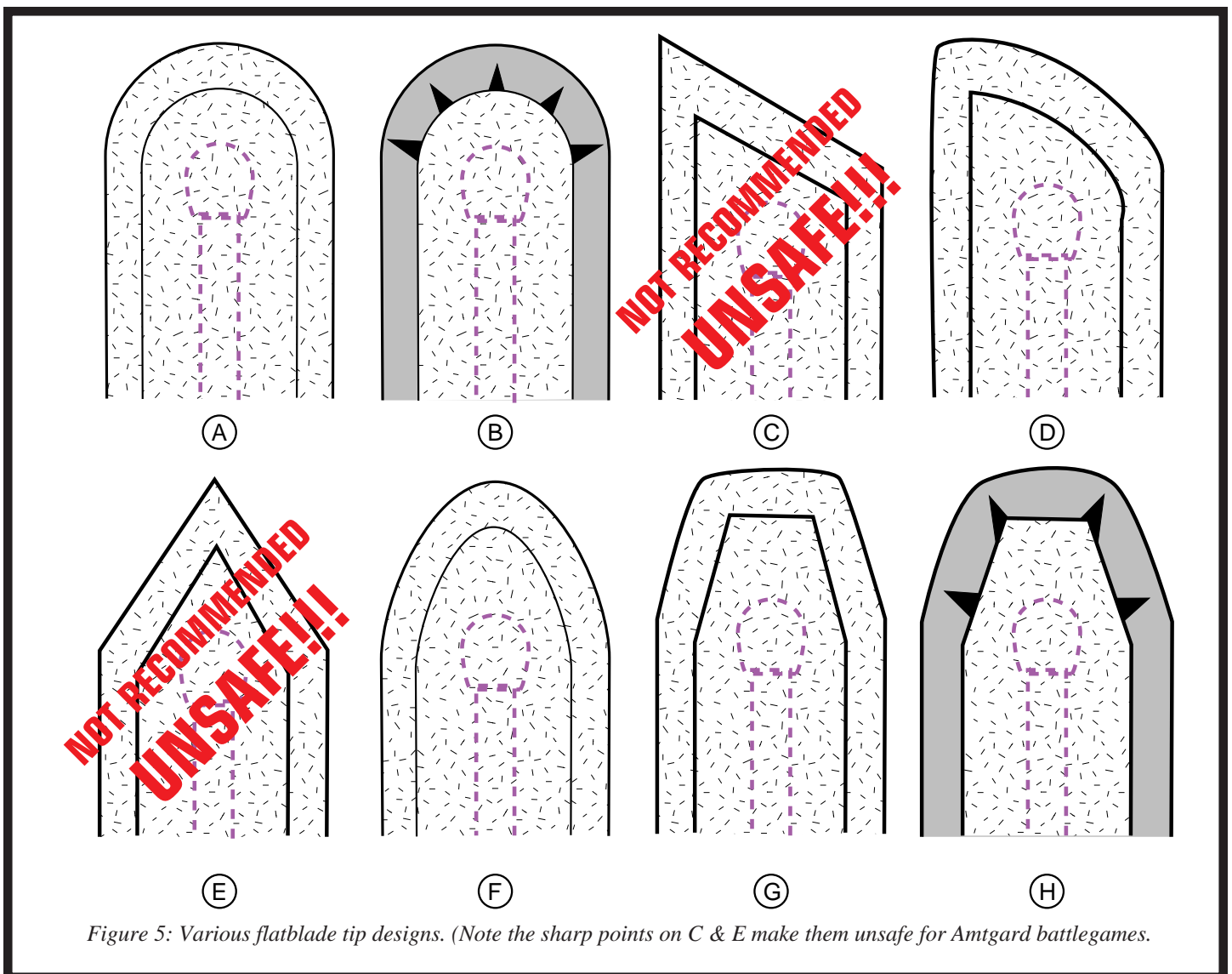
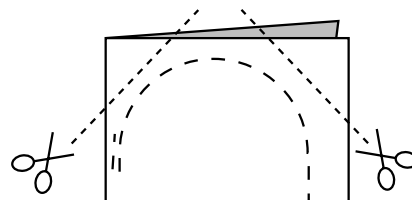
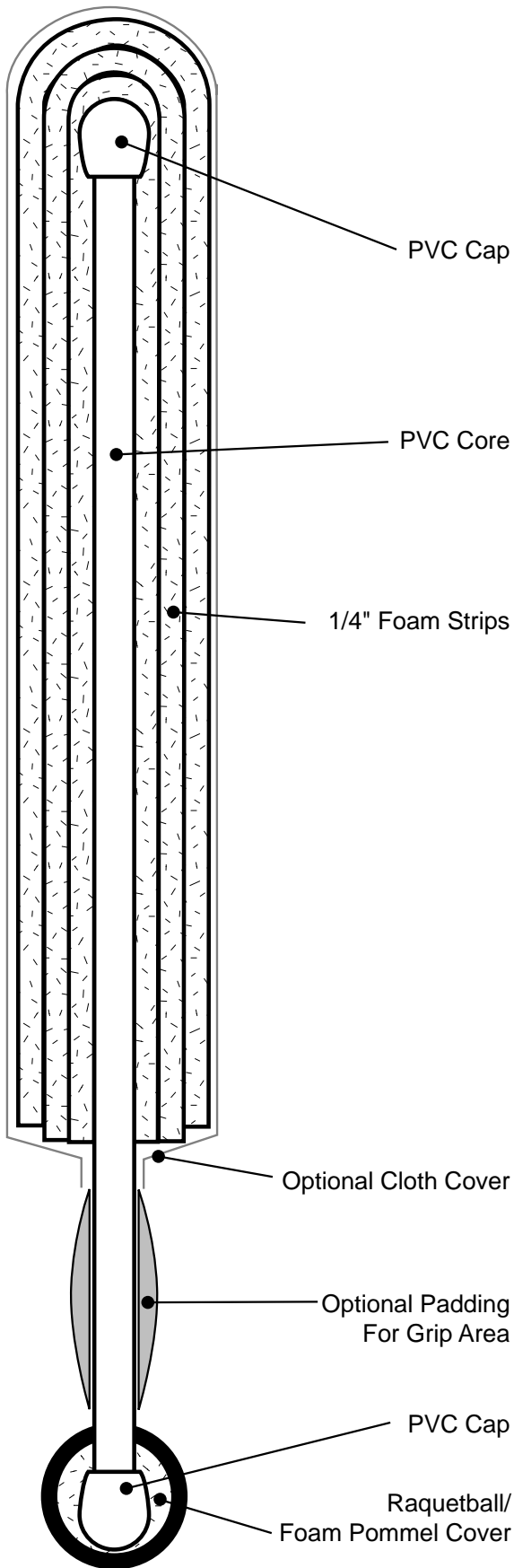


Figure 5: Various flatblade tip designs. (Note the sharp points on C & E make them unsafe for Amtgard battles.)



Stitch approx.
 3/4" to 1" from
 OPEN edge
 of fold.

11" x 29"+/- Piece of Cloth
 (5 1/2" x 29" folded)

Figure 6: Cross section of finished flatblade and cover diagram.

