

Pattern Drafting Workshop

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www.vickilynnwilson.net: you can see examples in my work (I've used flat patterning technique in some fabricated aluminum public sculptures on the website as well as in installations). The CLASSES tab has a printable set of basic shape templates for you.

WHAT?

Pattern drafting is a method of using flat shapes to construct 3-d objects. Drafted flat patterns are how all of your clothes, purses, shoes, the seats of your car and stuffed animals are made. It's how welded planar sculptures are conceived and it's a great way to use flat clay slabs to hand build interesting shapes.



HOW?

Step 1: Masking Tape: Cover the entire object (or $\frac{1}{2}$ if the object is perfectly symmetrical). Make sure to overlap the tape in different directions so that the layer is built up to about 3 layers. Burnish the tape down with a tool or your fingers so that the layers are bonded to each other. Other tapes may not stick well or stick too well for this process. Masking tape works best.

Step 2: Markings: This is the crucial step. Find the high point of each curve on the object. Objects that are comprised of distinct planes are the easiest to mark because the line where the planes meet is always a safe place for a mark. Make small marks (notches) across the lines that will enable you to match the pattern back together accurately.

Step 3: Cut and Remove Tape: Use an Xacto or razor blade to cut the tape lines. Be sure to cut through all of the layers and peel the tape slowly to ensure you are lifting all of the tape layers.

Step 4: Tracing and cutting: Each pattern piece should be able to lay flat on another sheet of paper. The tape will stick so I recommend placing the pattern pieces efficiently as if you were cutting from limited material. If you choose to blow the pattern up, it will already be in an efficient arrangement to not waste space. You can cut the pattern out, trace it onto a heavy material (roofing felt is excellent to make a sturdy clay pattern). As you trace and cut, smooth out any rough areas in your lines but be careful not to change the shape of the pattern piece. Tip: For a quick, one off pattern, rub baby powder on the back of the masking tape pattern to reduce the stickiness. Skip extra tracing and cutting steps by using the masking tape pattern directly to cut your material.

Step 5: Transfer pattern to clay slabs for building: Be sure that the pattern does not move while you are cutting it out of the clay, Using pattern weights (or metal washers) or straight pins directly through the pattern and into the clay will help. Tip: A beveled edge on all areas to be slipped and scored will produce the most accurate results.

How to enlarge a pattern on a photo copier:

What you want divided by what you have. For instance. My pattern is 2 inches and I want to make it 10 inches. 10 divided by 2 is 5 or 500% enlargement.

To reduce a pattern size, reverse the equation (what you have divided by what you want).

Recommended Viewing: "The Sketches of Frank Gehry" (Amazon Prime has it)