Making Stiff Slab Covered Boxes

Vince Pitelka, 2021

As is the case with soft-slab boxes, stiff slab covered boxes are best made as closed forms and then cut open along the desired lid separation line, adding a gallery strip to index the lid onto the box.

- 1. Roll out a slab and impress with relief pattern if you wish.
- 2. Set the slab aside to stiffen to soft leather hard.
- 3. Select templates for the desired covered box.
- 4. For an arched top, select a template that is the depth of the box front to back, but one inch longer than the width of the top of the box in order to accommodate the curve of the arch.
- 5. For a domed top, select a template one inch larger in both dimensions.
- 6. Once the slab has stiffened to soft leather hard, lay your templates in place and gently score around the edge with a ball-point pen, repeating the templates as necessary to get the sides, top, and bottom.
- 7. For an arched or domed top, rehydrate the top piece by misting with water, shape the piece to the desired arch or dome, and set on a temporary support to hold the shape.
- 8. If you are making a box with a domed or an arched top, the upper edges of the side pieces must be cut with a straight vertical cut, 90-degrees to the flat surface of the slab.
- 9. All other edges will be cut at a 45-degree bevel. A 45-degree angle is halfway between vertical and horizontal. Practice holding your X-Acto knife at that angle, and then make the cuts. It works best to cut pulling towards yourself, and rotate the canvas or board as needed to make all the cuts.
- 10. When two 45-degree beveled edges are held together, the angle between the sides should be 90 degrees. If necessary, adjust the edge angle by trimming with a Surform tool.
- 11. Note that on the pyramid shapes, the base angle will be sharper, and the edges must be trimmed accordingly.
- 12. Score all of the beveled edges.
- 13. Apply slurry to all edges of the base piece, and lay down on a canvas sheet.
- 14. Place the sides of the box one at a time, applying slurry to one contact surface of each joint, and pressing them together firmly to expel all excess slurry.
- 15. Wipe away all excess slurry with a brush, especially along all of the inside joints.
- 16. If a flat top, apply slurry and add the top piece.
- 17. If an arched or domed top, set aside and allow the joints to stiffen up.
- 18. For an arched or domed top, once the joints have stiffened, trim or shave the upper profile to fit the top piece.
- 19. Score and slurry and add the top piece.
- 20. Double-check to make sure that you have pressed all edges together firmly.
- 21. Set aside to allow all joints to stiffen.
- 22. With a ball-point pen affixed in a large lump of clay, mark the line for the lid cut.
- 23. Carefully cut off the lid with your X-Acto knife always a straight cut, 90-degrees to the surface.
- 24. Clean up the inside slurry accumulation left from adding the final side of the box.
- 25. Score and slurry and add strips of clay inside either the box or the lid to create a gallery that will index the lid onto the box
- 26. Add registration seals or keys so that people will know how to place the lid properly.
- 27. Consider adding raised feet, either cut blocks, formed balls, short cylinders, animal feet, or?