



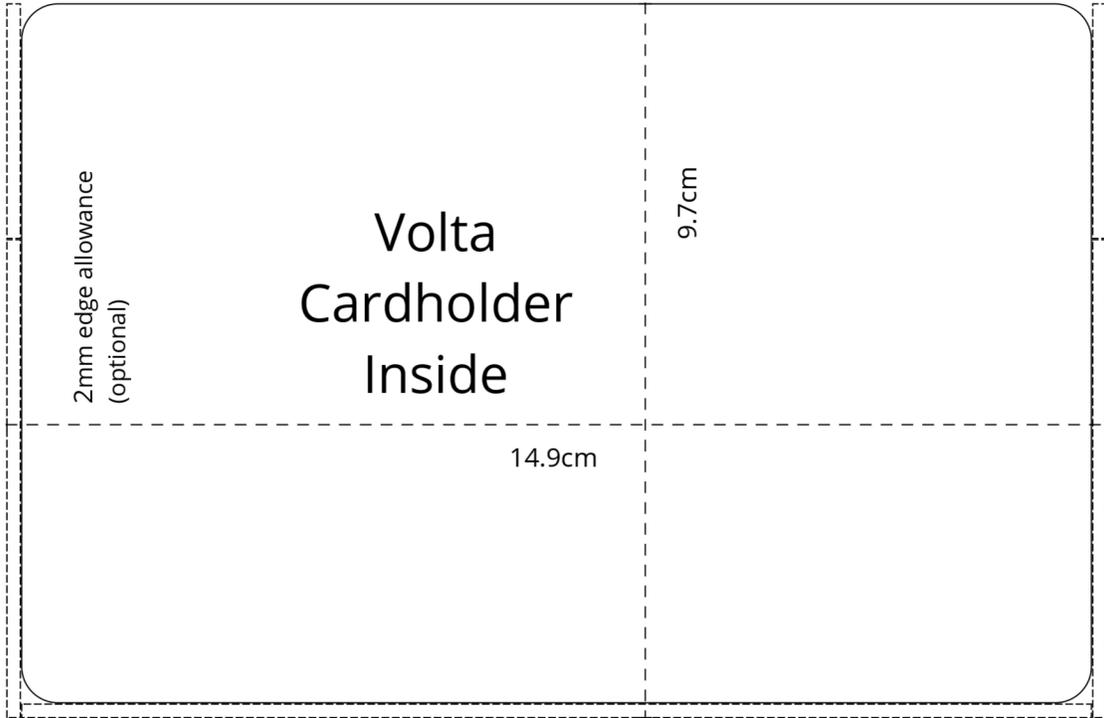
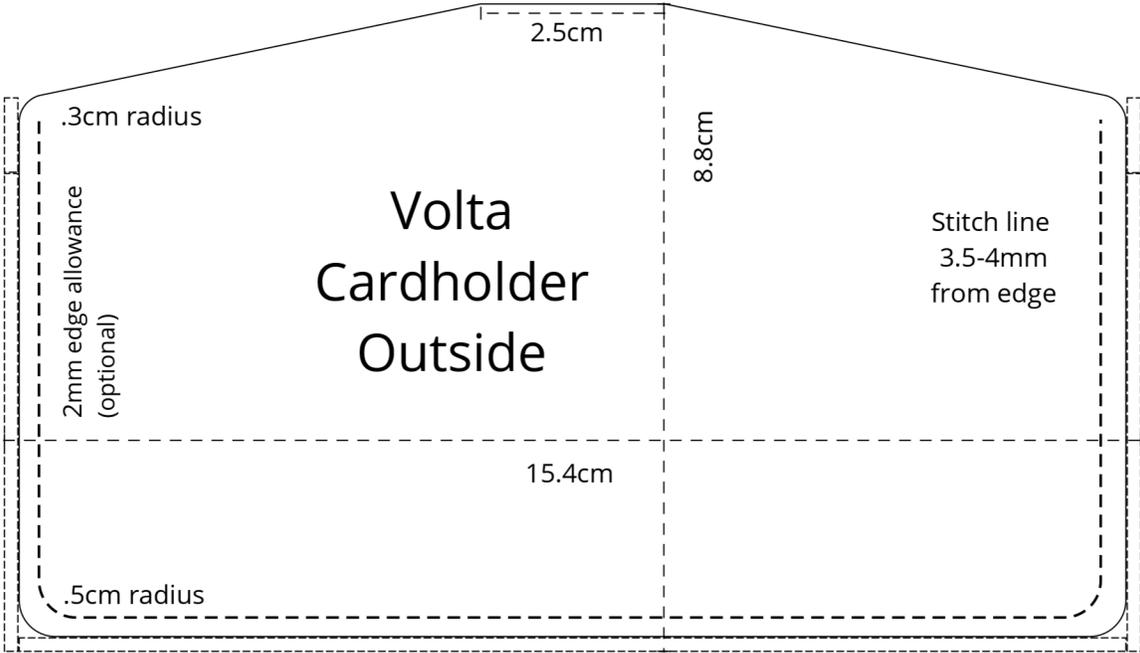
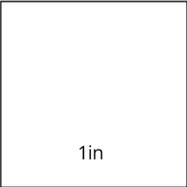
Volta Cardholder Instructions



These instructions are provided free of charge by "T.C. Hall Leather" with the attached PDF template. This template is for learning, practice, and personal use under Creative Commons. This pattern may *not* be used for sale of any sort. See tchleather.com for FAQ and more products!

Materials needed:

- .4 ft² vegetable tanned leather (2.5-3oz or 1-1.2mm thick)
- 2 sewing needles (we use John James #004)
- 48" or 122cm thread (we use Ritza Tiger Thread .6mm)
- A ruler or straight edge
- Thread snips/scissors
- X-Acto or leather knife
- Scratch awl (anything small and pointed will work here)
- Wing divider (recommended)
- Edge beveller (recommended)
- Pricking irons or stitching chisels (we use Sinabroks 3.85mm)
- Poly maul or hammer (NOT METAL)
- Lighter or Thread ZAP
- Glue (we use Seiwa leather glue)
- Burnishing agent (we use Seiwa Tokonole)
- Creasing tool (optional)
- Sandpaper (recommended; we use 150 and 220 grit)
- Radius tool, corner punch, or coin (a coin really does work just fine)
- Edge slicker (recommended)
- Canvas cloth (optional)
- Glue spreader
- Stitching pony (recommended)





Volta Cardholder Instructions Pg. 1

1. Print pattern (actual size). Measure the squares in the upper right to check for accuracy.
2. For reusibility, use glue or double-sided tape to fix the paper pattern onto cardstock or cardboard. We find that cereal boxes make quick and cheap backing material.
3. In several passes if necessary, cut out the pattern from the cardboard.
4. Place the two pattern pieces on your .4 ft² of leather and cut around each shape, leaving room for error.
5. Holding the template piece firmly against the leather with one hand, use your scratch awl to trace carefully around the shape. Do this for both pieces.
6. Using a ruler or straight edge, cut your shapes exactly on the scratched line. Always cut towards yourself.
7. With a radius tool, corner punch, or coin, cut the top left and right corners for both pieces. (We will address the bottom corners later).
8. Use 220 grit (more or less) sandpaper to lightly sand the top edge of both pieces. Don't try to remove a huge amount of leather.
9. Optional- Use a candle to heat your creasing tool, adjust the crease to desired width (we use about 1.5mm), and carefully crease the top edge of either piece.
10. Be sure that your edge beveller is sharp. Bevel the top of each piece (front and back), as well as the upper sides, stopping just below the left and right rounded corners.
11. Apply a very small amount of Tokonole or gum tragacanth to the edges that you have just bevelled. Work into edges with finger and clean up any extra.
12. Use edge burnisher or canvas cloth to burnish the edges by rubbing firmly, but not hard, until the edges are smooth to the touch.
13. Flip your "Volta Inside" piece over so that the flesh (fuzzy) side is facing up and adjust your wing divider to about 3.5mm. Use the "Volta Inside" template piece to draw a line on the left and on the right, 3.5mm from the edge according to the "Stitch Line". We are preparing to glue up the innermost piece of the cardholder.
14. Since the flesh size is already rough, we do not need to further prepare it for gluing. Remember, we are gluing **both** the left and right sides, then pressing them together. Using a glue spreader or a piece of scrap leather if necessary, spread a thin but consistent layer of glue from your "Stitch Line" to the edges. Fan the glue with air until it looks tacky but not dry.
15. Fold the "Volta Inside" exactly in half along a vertical axis. Slowly, adjusting grip and position as needed, pinch together the glued areas, keeping the edges as flush as possible. (Continued on next page...)



Volta Cardholder Instructions Pg. 2

16. Wait for the glue to dry completely before continuing. Now, on the **grain** (smooth) side of the "Volta Interior", draw with your wing divider along the same Stitch Line, 3.5mm from the edge. Reference the diagram to see where this line begins and ends.
 17. Now, since the grain (smooth) side of the leather is not textured like the flesh side, we will need to prepare the area for gluing. With your scratch awl or X-Acto knife, rough up the space between your stitch line and the edge of the piece, on both left and right.
 18. Turn the "Volta Cardholder Outside" piece over so that the flesh (rough) side is facing up. Using your wing divider, draw along the "Stitch Line", 3.5mm from the edge.
 19. You are ready to glue the "Outside" to the "Inside", but do not try to glue both left and right sides first. This makes it difficult to match up edges while the glue is rapidly setting. Instead, we will glue the left or right side first. Apply a thin but even layer of glue to the roughed up "Volta Inside" stitch line, smoothing glue to the edge. Working with some speed, apply an identical layer to the flesh side of the "Volta Outside", spreading glue from the "Stitch Line" to the edge.
 20. Press the "Outside" piece to the "Inside" piece while keeping the edges even. Less overlap and inconsistency now means less edge work later. Continue to press the pieces together until dry. Your edges will look a little rough, but that's ok for right now.
 21. Using the same method as step 19, glue and wrap the remaining side around, pressing firmly to secure the "Outside" to the "Inside". Once the glue has dried, you have successfully assembled your cardholder! With a sharp knife and on a level surface, cut the lower right corner to your chosen radius.
 22. One last time, use your wing divider to mark the "Stitch Line" on the **front** of the "Outside" piece. 3.5mm from the edge. Only mark the front, not the back.
 23. Using your stitching irons or punches and a poly (NOT METAL) maul, piece all the way through your project while keeping your irons as perfectly vertical as possible. Always punch through onto a rubber pad or thick leather, **never** on hard surfaces. Align your punches to the center of your stitch line and work your way **towards** yourself, looking down the line and checking straightness. Align your irons using the last punched hole.
 24. When you come to the corner (there is only one!) you can either use a single pronged punch at an angle, or a two pronged punch straddling the radius of the curve. Be sure to stop punching at the end of the Stitch Line, as this is where our glue ends and our fold begins. Finally, pound the holes slightly closed using a flat hammer.
- (Continued on final page...)



Volta Cardholder Instructions Pg. 3

25. In this step, we will stitch our cardholder. (If you are unfamiliar with saddle stitching, there are some wonderful tutorials by Chartermade, Hahns Atelier, and Claridge Leather on YouTube. I highly suggest viewing as many as possible before proceeding.) Start by clamping your piece in a stitching pony if you have access to one. Continue by piecing each end of your thread with a needle and locking it in. Then, thread one needle through the first hole (furthest away from you) and checking for identical thread length on either side.

26. For the sake of brevity, I won't go into detail about stitching here. Work your way towards yourself until you reach the corner of the piece, at which point you will rotate the cardholder in the stitching pony to maintain the same angle of stitching.

27. At the end of your stitching line, backstitch twice, then cut both ends of the thread, quite close to the leather, using snips or scissors.

28. With a lighter (careful not to burn the leather with this) or a Thread ZAP, cauterize each end of the thread and press the melted ends into their holes. This works best with thread that has been waxed. Pound down the stitches on both sides with a flat hammer.

29. Using 150 grit sandpaper or comparable, sand the edges until they are as uniform as possible. Try to avoid any trimming of excess this late in the process, as there can be unforeseen consequences. However, if you are somewhat advanced and are using trim allowance, by all means.

30. Optional- warm your creasing tool and run it along the cardholder, front and back, between the stitch line and the sanded edge.

31. Run your beveller along the edges, rounding them off.

32. Apply a small amount of Tokonole or gum tragacanth, working it into the sanded edges. Clean off any excess, then use an edge slicker or canvas cloth to burnish the edges until smooth. When the edges are completely dry of Tokonole, sand with 150 or 220 grit sandpaper and burnish again. You can repeat this process as many times as desired for smoother or shiner edges, but remember to move **up** in grit each time, not down.

33. Slide either a bone folder or a pen into each of the 3 pockets, working loose any rogue glue and opening the areas for use.

Buff your cardholder with a canvas cloth, and your project is complete. I sincerely hope that you have enjoyed this pattern and that you will receive much happiness from your handmade leather good. Take care. -T.C. Hall