

Coil Construction Guidelines

Vince Pitelka, 2021

1. Roll coils from soft, plastic clay, and wrap them in plastic. For a vessel to be stretched and expanded with the rib-and-hand method, the diameter of the coils should be at least twice the intended wall thickness.
2. Pat or roll out a flat slab, and place it upon two layers of paper towel or newspaper on a banding wheel or turntable.
3. Mark the intended footprint of the vessel base on the slab.
4. Score and apply slurry for the footprint of the first coil.
5. Press the first coil into place, squeezing as you press downwards.
6. Remove excess slurry inside and out.
7. Gently pinch/squeeze the first coil all the way around, raising it into a low wall.
8. Drape a coil from one hand so that just a few inches of the end of the coil rests atop the first coil on the far side of the form.
9. With your fingers held together, place your hand vertically flat against the outside of the first coil, fingers pointing downwards.
10. With your thumb of the same hand, smear the coil downward on the inside of the wall to join it to the first coil.
11. Keep moving along the wall, smearing downwards, lowering the coil onto the wall a little at a time.
12. Do not lay any length of the coil atop the wall before smearing it in place. Lowering the coil onto the wall just a bit at a time allows you to build upwards without excessive horizontal expansion.
13. Rotate the form on a banding wheel or turntable while working.
14. If you are right-handed, lower the coil onto the far edge in a counterclockwise direction with your left hand and smear the coil into place with your right hand, and just the opposite if you are left-handed.
15. Smear the coils aggressively with your thumb so that each smear covers $\frac{3}{4}$ the height of the coil below.
16. Each smear should slightly overlap the preceding one so that there are no gaps.
17. When you come to the point where you started a coil, keep adding and overlap the end.
18. Don't work your fingers against the outside. Just keep them vertical flat against the far outside to provide backup pressure to counter the smearing force of your thumb on the inside.
19. The number of coils added before stopping to smooth and stretch them depends on how much upwards and outwards stretching and forming you plan to do. For a large vessel where you plan to expand outwards, add three to five coils before proceeding. If you want to work vertically and end up with reasonably thin walls, or if you are reducing the diameter of the form, add only a few coils before forming and stretching. In either case, if you get to a point where you are closing in the upper portion of the form, add only one or two coils before forming and stretching.
20. Once you have added a series of coils as described above, use the rounded end of a completely rigid wood or plastic rib (never rubber) to smear the coils together on the outside, supporting the form with your hand on the inside. Use upward diagonal strokes, with the rib tilted steeply to minimize the amount of clay scraped from the surface. Vertical strokes pull the coils apart, and horizontal strokes conceal the joints without improving the connection. Upward diagonal strokes work best.
21. Be thorough. When done, you shouldn't see any remaining divisions between coils.

22. Smooth the outer surface with a flexible rubber or metal rib if you wish.
23. Smooth the surface on the inside of the form with the broad edge of a rigid wood or plastic rib, supporting the corresponding outside profile with your hand.
24. Depending on how you balance the pressure of the rib on the inside versus the corresponding pressure of the hand on the outside, and the direction of the strokes, you can either stretch the walls upwards while retaining the same shape, or expand the form outwards to achieve a swelling volumetric shape.
25. After you have gone around the circumference of the piece once or twice, switch hands and work on the opposite side of the piece, still with the rib on the inside and the hand on the outside. This helps to further compress the clay and strengthen the internal joints.
26. As soon as you build the walls to a point where you need to let it stiffen, pinch the upper edge of the rim to sharpen it, like an upside down "V" cross section, and set the form aside.
27. If the form is large and the lower portion has already stiffened considerably, wrap that section in plastic.
28. Once the form has stiffened enough to support more coils, score both inside and outside surfaces of the sharpened edge down about ½ inch, and if there is any flat surface on top score that as well.
29. Generously apply a bead of slurry to the upper edge.
30. Lay a single continuous fresh coil in place atop the bead of slurry.
31. Gently paddle the coil straight downwards with your hand or a wood paddle to push it down slightly over the scored leatherhard edge.
32. Pinch the coil along the far side of the form with your thumb on the inside and fingers on the outside and rotate the form to work your way around the circumference. The action of your fingers pinching the coil should also push the clay downwards both inside and out over the scored area, with the bead of slurry advancing in front of the clay.
33. Remove all excess slurry with your fingers or a barely damp sponge.
34. Continue pinching until you have thinned the added coil to the thickness of the wall beneath.
35. Smear downward with a rigid rib inside and out to blend the joint and remove any residual slurry.
36. Resume adding coils by the standard method, lowering them in place and smearing down with your thumb on the inside.
37. Avoid letting the lower portions stiffen beyond soft-to-medium leatherhard. Make sure each successive portion stiffens enough to support the added wall above, but don't allow any part of the form to stiffen more than that until you are done.
38. To narrow the neck or rim, tilt the outer supporting hand inwards as you smear coils in place, which in effect steers the direction of the coils.
39. A coil form can also be closed very effectively with a rib. Support the inside with your fingers under the rim and smear inwards over the top surface of the rim with a rigid rib, rotating the form continuously.
40. Once the form is roughed out and stiffened to soft leatherhard, thin the walls and resolve the shape using the paddle and anvil method.
41. Hold the anvil against the inside wall of the vessel, and in the same spot gently beat the outside with the paddle.
42. Move the anvil and paddle as desired to thin the walls and alter the form. Where there is a depression in the outside of the form, push outwards with the anvil as you are paddling, or place your hand over the depression and gently tap outwards with the anvil. The paddle can also be used by itself on the outside of a form to resolve shape and eliminate high spots.