

Lattice Work Inspired

by Margaret Bohls



Two very different clays and forms are united by their sources of inspiration—lattice work and grid patterns and the associations we have between them and flowers in the garden.

Interior volume is a key element in functional forms because it defines the potential for containment. My current body of work combines a strong sense of interior volume with a grid-like surface of textural lines. The lines contain and shape that volume, creating buoyant, full, yet architectural forms with upholstered-like surfaces draped with a series of rich, complex glazes. These porcelain forms are often placed in or on earthenware baskets or trays, resulting in a layer of disparate and complex yet integrated elements.

Textured Slabs

I begin my forms by rolling out clay slabs on carved, plaster blocks, see page 8 on how to make the textured plaster slab (*figure 1*). First roll out and compress two slabs,

one about 14×24 inches and the other slightly smaller. The slabs should be between 1/8- and 1/4-inch thick.

Building the First Tier

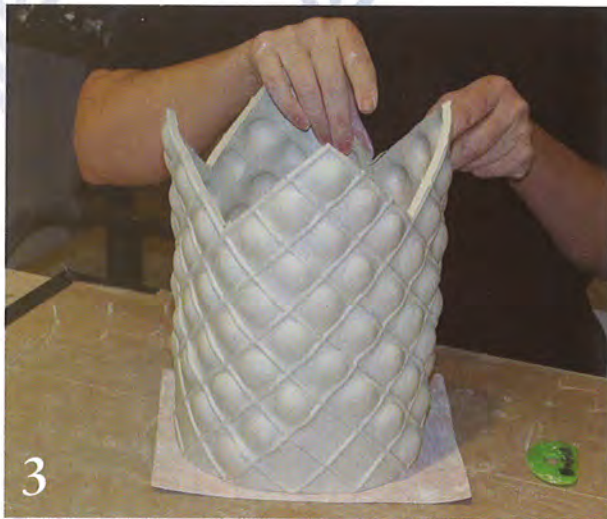
This vase consists of two tiers. The first tier forms the main volume and begins as a cylinder. Using a sharp knife, carefully cut the short sides of the larger slab along the raised lines of the grid pattern. This gives you a “zigzag” edge on these two sides. On one side, bevel this zigzag edge so you remove the raised line. Turn the slab over and bevel the other edge from the back. This leaves the raised line on the opposite surface. Score and slip these beveled edges and join them (*figure 2*). Once they’re joined, the seam is hidden under the grid lines. Smooth and secure the seams with a rubber rib and a sponge.



1 The double tiered vase uses two cut slabs pressed from a carved plaster block.



2 Make a cylinder shape by connecting the slipped and scored zigzagged edges.



3 Cutting four equal darts from the bottom. Fold them in and join them to make a flat bottom.



4 Wrap the body with plastic and keep the bottom exposed to become leather hard.

Create the bottom of the vase by cutting darts in four places along the raised grid lines (*figure 3*). Fold down the flaps to enclose the form. Bevel the edge of these flaps, score and slip, then join the seams.

Wait to clean up the insides of these seams until you're able to turn the pot over. This part of the pot needs to dry to leather hard before the feet are attached, however the rest of the cylinder needs to remain soft, so that the top can be darted and folded. Wrap the form in soft plastic, leaving just the closed part exposed (*figure 4*).

The feet are pulled like handles. To make pulling multiple feet easier and faster, roll a long coil, flatten it with your palm, cut the coil into short lengths, and then pinch each piece to taper one end. Pull a "handle" from each of these lugs and lay them flat on the table until they have dried slightly. Then bevel the large ends of the pulled feet and bend them. Once the feet have stiffened a bit, score and slip them onto the vase (*figure 5*).

Now, re-wrap the pot in plastic leaving only the end with the attached feet exposed. Once the feet are stiff enough to support the weight of the pot, unwrap the pot and turn it over onto a thin piece of foam. Reach into the form and smooth and join the bottom seams. Once the interior is cleaned up, dart the top of the pot as you did the bottom, fold in the flaps, then bevel and join the edges (*figure 6*). To make these top seams easier to join, cut a 1-inch diameter hole in the top to get your fingers inside.

Adding the Second Tier

The upper tier of the vase also begins as a cylinder. Cut and join the edges as you did on the bottom tier. Cut four darts and form the top (*figure 7*). Cut a hole in the top of this piece. Create the opening at the top of the vase. Here, cut just inside the carved grid lines (*figure 8*).

The two tiers are now spliced together. Cut along the textured lines at the bottom of the top tier, leaving a zig-



5 Pull handle-like forms and attach the feet to the bottom of the main volume.



6 Dart, fold in, and join the top of the main volume. Cut a small circle in the top for stems to fit through.



7 Form a thinner, taller cylinder for the top tier and cut darts to form the top.



8 Cut a square from the top following the grid lines and clean and smooth the edges.

zag edge. This edge is spread out to meet the bottom tier (*figure 9*). Gently set the top tier onto the bottom tier and lightly trace a line along the zigzag edge. The two edges will overlap about $\frac{3}{16}$ of an inch, so cut inside the traced line, leaving a zigzag edge. Open this edge out to meet the bottom edge of the top tier (*figure 10*).

Bevel the edges of each part, score, and slip, and join the seams together. Use a dampened sponge-on-a-stick to clean up the interior seam.

Lattice and Handles

When the entire form is leather hard, cut holes in the vase for the flowers, and add a small lattice on the top of the vase, also to hold flower stems. Cut the holes using a sharp knife. Once they have been cut out, trim the interior edge of each hole and smooth the edges.

To make the lattice for the top, begin with a thin coil and flatten it with a pastry roller. Now create a triangular

cross section by rolling each side of the coil at an angle. This triangular cross section makes the coil stronger and less likely to warp in the firing. To make the strip smooth and consistent, tack one end of it to the table with a little water, and run a damp sponge and/or two fingers along the length of it (*figure 11*).

This strip acts as a lip around the edge of the top opening of the vase. It also criss-crosses the opening to form a lattice. To attach the lip, bevel the edge of the opening, cutting off the raised grid line, and score both the beveled edge and the back of the strip. Cut four pieces of the strip to lay along each side of the opening, being careful to overlap and join the corners well (this is where cracks sometimes happen). Then attach two more pieces of the strip in an “X” across the opening (*figure 12*).

Tip: Add decorative handles if desired. Pull, bevel, shape, and attach them exactly like the feet. Add decorative sprigs for a final touch. Create sprig molds using



9 Open up the bottom edge and gently fold back the flaps to match up with the mail volume.



10 Attach the two tiers by matching the grid lines and scoring and slipping.



11 Roll out and flatten thin coils for the lattice and handle decorations.



12 Attach the lattice to the top edge opening then make a criss-cross pattern.

either plaster or bisque ware. To attach the sprig to the leather-hard vase, brush the back of the sprig with a very thin slip with a little added vinegar. The surface of the leather-hard pot is also brushed with slip and the sprig is gently pressed onto the pot. Gently press the sprig with a damp sponge to be sure that the edges are completely adhered to the pot.

The Stand

My vases are displayed on an openwork stand or trivet. The stand is made of earthenware rather than porcelain because the same form made out of porcelain would slump and warp when fired up to high temperatures. Roll out an earthenware slab, about ¼-inch thick and allow it to reach leather hard, make two thicknesses of earthenware coils. The smaller coils should be about ¼-inch thick and the larger coils should be about ½-inch thick. These coils should be wrapped and kept wet.

Cut the leather-hard slab to a size and shape that seems suitable for your vase. To make a lip for this slab, roll one of the thicker coils with a pastry roller to flatten it slightly. Now cut down the length of the coil on the diagonal. Score and slip this beveled surface and the edge of your leather hard slab. Attach the beveled coil to the edge of the slab, beveling and overlapping the ends in the middle of one side (*figure 13*).

This slab is supported by a piece of foam during the construction of the lattice work. The foam keeps the piece from sagging or warping until the coils have dried enough to support the weight. Cut your piece of foam rubber to the same size and shape as your slab. The thickness of this foam rubber will determine the height of your stand. Set the slab, right side up, on the foam rubber and place them on a bat. Use a pencil held at an angle to trace around the edge of your slab, creating a shape that is about ¾ inch larger on all sides than your

The Stand



13
Score and slip the beveled coil to the edge of the slab.



14
Place the foam inside the middle of the coil and place the top slab on top of the foam.



15
Attach lengths of evenly rolled coils on the diagonal in both directions.



16
Attach feet and decorative handles on both sides. Be sure they are firm before flipping.

slab. Remove the slab and foam and lay another of the thick coils along the traced line. You may flatten this coil also, or leave it round. Bevel, overlap, and connect the ends. Now set the slab on the foam back onto the bat, in the center of this coil (*figure 14*).

Using the thinner coils, now make a lattice that joins the slab to the bottom coil. Start by scoring and slipping small, evenly spaced spots around the outside of the lip of the slab. Also score and slip spots on the coil, directly below those on the lip of the slab. The thinner coils will extend diagonally from the lip to the coil. Measure the distance and cut the thinner coils into lengths. Start by sticking coils on in one direction, around the entire stand (*figure 15*). Now brush slip on the ends of the coils that are already attached (no need to score since you are using wet clay) and attach coils in the other direction.

Before attaching feet to the bottom of the stand, it needs to sit until it is leather hard and can be flipped. Once it

is leather hard, lay a second bat on top of the stand, and flip it over. You can remove the foam rubber. The feet are made of the thicker coils. Simply bend short lengths of coil and press the ends onto the table, then score and slip them onto the bottom edge of the stand. Now the stand can be flipped again, sandwiched between the two bats. If desired, decorative handles can now be added to the top of the stand (*figure 16*). These are made in the same way as the feet but using thinner coils. ■

Margaret Bohls is a studio potter and educator living and working in Minneapolis, Minnesota. She has been teaching ceramics at the University of Minnesota since 1998, during which time she has also been visiting faculty at Ohio University, Penn State University, and NSCAD University in Halifax. Bohls has also taught many community classes and workshops at art centers and universities across the country. In her studio, Margaret makes hand-built porcelain pottery, which she shows and sells both locally and nationally. See more of her work on her website www.margaretbohls.com.

tools of the trade

Texture Molds

by Margaret Bohls

I make my vessel forms using textured clay slabs pressed onto plaster molds. A textured pattern is carved into the plaster surface using a long, straight edge and the same loop tools used for carving clay. I make my molds large enough to be at least as long and as wide as the largest slab needed for any given project. My mold is about 1½ inches thick and measures about 15×30 inches.

Pouring a Plaster Slab

To make your own plaster slab you'll need a large, smooth, impermeable surface to pour on, such as glass, Plexiglas, or Formica. Make sure the work surface is level. With a Sharpie marker and a ruler, draw a rectangle on the work surface the size you want the mold to be. Either set up cottle boards on your rectangle and

clamp them together to create walls to contain the plaster (*figure 1*) or use waster clay to build a thick, sturdy wall around your drawn rectangle. The wall should be about 2 inches high. For clay walls, reinforce the outside of the wall with a fat coil of clay to be sure it won't collapse under the weight of the liquid plaster. Use a flat sided rib with a right angle to smooth the interior clay wall's surface. Be sure either the clay walls or the cottle boards are sealed at the joints with coils of clay so the plaster won't leak out. Determine the volume of

Mixing Plaster

For a mold measuring 1½×15×30 in., slowly sift 25 lbs of plaster into 18 lbs of cold water (9 quarts).



1 Build a form for your plaster mold using cottles and clamps.



2 Create the texture grid using a loop tool and a straight edge.



3 Use your hands, a rolling pin, and a rib, to work the clay into the slab's texture.



4 The trimmed slab showing the raised line formed from the carved plaster mold.

your mold and mix up an appropriate amount of plaster.

Use #1 Pottery Plaster for casting or pressing clay. Once the plaster is mixed, pour it slowly into one spot between your clay walls, making sure not to splash or make bubbles. Jog the table several times to be sure the top of the plaster levels out. Allow it to set up thoroughly then remove the clay wall or cottle boards and lift or slide the plaster off the casting surface. Use a Surform tool to shave off any sharp edges and then sand the back of the mold (the side that was up during the casting process) using first a green kitchen scrubbie pad and #400 wet-or-dry sandpaper. Sand the mold under water. Until the plaster cures completely, it will be fairly fragile so handle it carefully. Sanding the back side of the mold allows you to carve texture into both sides should you want different textures or grids.

Carving the Plaster

Lay the plaster slab onto a smooth, level surface. I use a ruler, a square, and a pencil to draw a diagonal grid onto the plaster surface, but of course almost any drawing can be made into a carved texture. To carve long, straight lines, use a hardened-steel loop tool with a narrow loop (about $\frac{1}{8}$ inch). Lay a straight edge along the drawn line and pull the loop tool along the edge of the ruler (figure 2). It takes two or three passes to get a sufficiently deep line. Once all of the lines are carved in one direction, turn the mold and carve lines in the other direction to make a grid.

Clean the mold by rinsing it under water. You may now carve the reverse side of the mold with a different pattern or grid if you choose. The size of the squares in the grid is up to you. I have several molds with different sized grids between 1 and 2 inches.

Caution: Remember that clay and plaster do not mix. Set up a mold making area someplace other than

your day-to-day clay working area. Mix, pour, clean, and carve your plaster in an area where clay will not come in contact with even the smallest plaster bits.

Texturing Clay Slabs

To texture clay, first roll out and compress a clay slab. Drop the slab onto the mold and then slap it down into the texture using your hand. Run a rolling pin over it, and finally

go over it with the plastic rib to completely smooth the back of the slab and make sure clay has filled in all the texture carved into the mold (figure 3).

Gently, lift each slab off of the mold, flip it over, and cut it to the appropriate size needed (figure 4). ■

For information and ideas on using textured plaster slabs to create handbuilt forms, see the feature "Lattice Work" on page 35.

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