

How to Get Rid of Air Bubbles in Clay

by Lisa Pavelka

Have you ever had air bubbles show up in your clay? You might have seen them in clay during the uncured state or they sneakily made their presence known only after your piece has been baked, which is even worse.

The best way to deal with a problem is to prevent it from occurring in the first place. Short of that, let's discover methods for repairing them after the fact.

Proper clay conditioning is the key to preventing most bubbles. You may have cut into a new block of clay and seen open pockets. If you don't condition properly, you can trap this air in the clay.

Start by cutting clay into 3 or 4 thin slices before you roll through the largest setting of the pasta machine. Make sure you continue conditioning by repeatedly rolling, inserting the folded end first, against the rollers. Inserting the folded side of clay at the top can cause air to be trapped in your clay.

Air bubbles most often occur when scraps of clay are reconstituted back into a larger mass of clay. I often see people grab these scraps into a tight ball, much, as they would when wadding up a sheet of paper before throwing it away. This is where the problem usually begins. This will trap air and each squeeze while kneading will create more and more tiny pockets.

When working with scraps - especially those cut from very thin sheets of clay - gather them into a loose mass and feed them into the largest setting of the pasta machine. Allow the rollers of the machine to force air out. Fold the scrappy sheet in half and repeat until you have formed a solid sheet.

For reconstituting thinner sheets without introducing air into them, try folding the clay in half and roll through the next largest setting of the pasta machine to make a slightly thicker sheet. Repeat this until the clay has gone through the largest setting of the machine

When you become aware of air pockets in clay before you bake, these can simply be pierced with a craft knife or needle tool, and smoothing out the air. If there are dozens of tiny air bubbles trapped in your clay, this can be very time consuming. Try this instead:

Roll the clay out on a medium thickness of your pasta machine and gently stretch the sheet. You'll notice the clay begin to appear lighter in the spots where air was trapped and the stretching causes the bubble to burst. Repeat doing this over

and over (folding clay in half each time and reinserting into the machine – fold down), until all the air appears to be gone.

Another common cause of air bubbles being formed in clay is when embossed clay is reconstituted into a blank sheet. If you've stamped clay with a texture or stamp and need to re-roll it, or have scraps after cutting out a portion of it, always fold the clay with the impressions on the outside. Folding texture to the inside is often the cause of trapped air.

Okay, so you've baked your clay only to find that air has become trapped in your clay and now appears in your finished work. One option is to sand these down. You should start with 400 or 600 grit, automotive grade sandpaper. Wet sand until you have sanded down through the bubbles. This should reveal indentations where the bubbles once were. When these are nearly flat, follow with increasingly finer grits of sand paper (such as 800 grit). From there, you can hand buff to a matte finish, or continue using higher grits (1000, 1500, 2000) and then buff with a muslin wheel or piece of denim for a shine that ranges from satiny to glass-like shine.

If the clay isn't thick enough to take down the layer below the bubbles, consider adding new, air-free clay over the old one and re-baking the piece.

Two other alternatives would be to re-texture the surface with a diamond bit and hand piece. The new texture can be left as is, or you can antique the new surface with acrylic paint, Rub 'n Buff, Gilder's Paste, or Christi Friesen's Swellegant! Apply the finish of your choice and wipe away the excess or finish according to the product directions for a unique surface effect.

Lastly, it can be an opportunity for embellishment with another clay focal element or the attachment of a found object. If you keep an open mind when your work doesn't come out as you originally envisioned. You might find that you actually like the results better when you don't regard it as a mistake.