

## Metal Clay Ring Sizers Instructions

A Ring Sizer is a special pellet or plug that is placed inside the ring shank during firing to control ring size. The pellet is made from a special material that does not shrink or burn during firing. As the metal clay sinters, it shrinks tightly around the pellet so the ring is the exact diameter of the pellet after firing. After cooling, the ring is put into water to dissolve the pellet.

## How to Create a Ring

Creating a ring properly before using our Ring Sizers is essential. Metal clay shrinks about 2-3% as it dries. If you form a ring directly on a mandrel, it will become stuck when it dries and will probably break as you try to remove it from the mandrel. If not using one of our Silicone Ring Mandrels, wrap a piece of freezer paper (slippery side out) around your mandrel before you start working. Cut the paper so that it overlaps about 1/8" or so. Use a piece of tape to secure it, but do not tape the paper to the mandrel. The paper will be a removable sleeve. Rings cannot be formed directly on Ring Sizers because they would not have any room to shrink and would tear.

Form your ring on the sleeved mandrel. Once the ring is finished and has dried to the point that the clay appears dry on the surface (about 30 minutes to 1 hour depending on humidity), move it down 1 size on the mandrel to finish drying. This is to avoid tearing at the seam, as the ring dries and shrinks in size.

Once your ring is completely dry, remove it from the mandrel by gently sliding the ring and the paper off in one unit. Carefully remove the paper sleeve from the ring by inserting a needle tool between the paper and the ring shank, then collapse and remove the paper. Touch the inside of the ring shank to find out if it's actually dry. If it feels cold and damp, set aside to dry. Never fire metal clay that is not completely bone dry. Any moisture will turn to vapor and cause bubbling on the surface of the clay.

When your ring is bone dry, place a Ring Sizer inside the ring that is the size you wish the finished ring to be (follow the forming table included). Place the ring attached to the pellet into the kiln. Fire using your selected method. When the ring has been fired and is completely cool, immerse into a container of water to dissolve the pellet. Do not immerse the ring in water when it is hot. This will break your stones and cause a potentially dangerous thermal shock to the pellet.

## Clean-Up & Safety

Do not empty the water with the dissolved investment down a drain! The investment will harden into a concrete-like sediment and lead to clogged drains. Pour most of the water out onto the ground and allow the rest to evaporate. When dry, knock the dried investment out of the container into a trash bin.

Ring Forming Table (For metal clays that shrink up to 13%)					
Desired Ring Size	Form at this Size	Use Pellet Size	Desired Ring Size	Form at this Size	Use Pellet Size
4	6.5	4	8.5	11	8.5
4.5	7	4.5	9	11.5	9
5	7	5	9.5	12	9.5
5.5	7.5	5.5	10	12.5	10
6	8	6	10.5	13	10.5
6.5	8.5	6.5	11	13.5	11
7	9.5	7	11.5	14	11.5
7.5	10	7.5	12	14.5	12
8	10.5	8	12.5	15	12.5

Note: Ring Forming Table is a guide. Ring shrinkage may vary depending on shape, design and thickness of ring.