

## Mixing by the Islands Method and the gauging of plaster

Here it is. Are you ready? Estimate how much water it will take to fill your mold. You actually only need 2/3 of that amount but mold makers always mix a little extra. Plaster is relatively inexpensive and the problems caused by running short are not worth the few cents saved. The first time your mold springs a leak or you realize you figured wrong, you'll be glad you mixed a little extra.

Plaster manufacturers recommend that you always weigh out the materials to achieve what they call the use consistency ratio. That is the best way to get the optimum results from the plaster you're using. After saying that, I'm now going to tell you how to achieve a similar ratio of plaster to water without weighing out the materials. This only works for the types of plaster mentioned at the beginning of this article (Beta Hemi Hydrates).

Other plasters (Alpha Hemi Hydrates) will not achieve the optimum results by the islands method.

If you can work near an exhaust fan that is great. A dust mask can be worn otherwise. Put the amount of water that you have so diligently estimated you need into your mixing bucket. ***Never put the plaster into the bucket first and then dump water on top. Always put the water in the bucket first, then add plaster to the water.***

With your dry hand reach into your big plaster bag and scoop up a hand full of plaster. The plaster should feel smooth and free of hard lumps. Wiggle your fingers and shake your hand to make the plaster fall through your fingers into the water in the bucket below. This process prevents large clumps of plaster from falling into the water.

Keep sifting the dry plaster into the water with your hand. Work quickly and spread the plaster all around the surface, evenly. The process is similar to when Mama used to make a cake. She didn't just turn the flour sack upside down and dump the flour into the bowl. She sifted it in to get a fine, lump-free flour mix.

That's what you are going to be doing, sifting slowly and carefully. Plaster should fall like gentle rain on the water surface, then sink out of sight.

Mama didn't want a lumpy cake.

You don't want a lumpy plaster mix. Let's not make Mama angry!

Do not mix the wet plaster or disturb it in any way while sifting it in or this system of measurement will not work. Keep sprinkling plaster into the undisturbed water. Eventually you will notice little islands of plaster forming above the water surface. When the islands stay at that level and get damp and do not sink below the water, you have the proper amount of plaster in the water for general purposes.

For specialized purposes, you may have to gauge your plaster.

## *The Gauging of Plaster*

**Weak Mix**



**Normal Mix**



**Heavy Mix**



This is an old-time term, but the process is still the same. It is not to be confused with a type of plaster called Gauging Plaster. The gauging of plaster refers to a method of determining whether you will have a hard or soft plaster cast.

When you are sifting your plaster into the water, you will notice that it will begin to settle just below the surface. If you wait a minute, you will see clear water above the plaster. That amount of clear water is your gauge. You can leave 1/4" of clear water over the plaster to make a weak plaster mix, or you can bring the plaster exactly up to the surface level for a thicker mix and harder casting. For a super hard mix, pile up the plaster in little islands and let them become thoroughly damp before mixing.

That's it. You just used the islands method. Try to control your excitement.

Depending on how long you have taken to get the plaster into the water (one minute should do for a small batch), let the mix slake (soak) for one to three minutes before mixing.

## *Mixing your batch of plaster*

You can use your hand or you can use an electric drill with a mixer attachment. If you use your hand you may want to wear a rubber glove. Plaster will dry your skin somewhat. Hand lotion will help keep them in good shape. At times my hands become so extremely dry and cracked its painful just to pick things up. I find Jergens Ultra Healing Cream is about the best thing I've found so far. If you find some other cream that really works, let me know.

When you use your hand to mix, you can feel every lump and judge the smoothness of the mix. Batches over 2 gallons are not practical to mix with your hand. A mixer blade attached to a 3/8" or 1/2" electric drill will be needed for larger batches. Very small batches can be mixed with a cake spatula. (Up to about 2 pints.)

The way to use the hand method is: place your hand flat down in the bottom of the bucket, spread your fingers wide, and shake your hand back and forth to agitate the plaster on the bottom. Every once in awhile, use your hand to move some plaster from other areas to the bottom and continue shaking your hand back and forth. Do not take your hand out of the bucket during the entire mixing process. That would introduce air into the mix. You will notice that the plaster creams after a certain point. It takes on a definite change in texture. It will have more body, feel smoother and creamier. You must mix beyond this stage for the plaster to set properly. Keep mixing for three minutes. Yup, three minutes. Seems like a long time, but that's what it takes to make a creamy, smooth mix.

You can mix longer than that, and you will have a harder, stronger casting. Be careful not to mix so long that your plaster sets up in the bucket. It's a game of chance once you go beyond three minutes. How long can you go? Mixes that you have guaged with 1/4" of water on top can be mixed longer. Ones that you have piled up islands on the surface are more likely to set up before you pour all of the plaster out of the bucket.

So set your egg timer - ready...set...go! Have fun. Get plastered.