



Plaster & Molds

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Water / Plaster Ratios

WATER

PLASTER

1 Pint	1 lb 7 oz	or	652.05 grams
1 Quart	2 lbs 14 oz	or	1304.1 grams
1 ½ Quarts	4 lbs 5 oz	or	1956.15 grams
2 Quarts	5 lbs 12 oz	or	2608.2 grams
2 ½ Quarts	7 lbs 3 oz	or	3260.25 grams
3 Quarts	8 lbs 10 oz	or	3912.3 grams
3 ½ Quarts	10 lbs 1 oz	or	4564.35 grams
1 Gallon	11 lbs 8 oz	or	5216.4 grams

PLASTER MIXING RESOURCES

Mold Making and Slip Casting, Andy Martin
Mold making for Ceramics, Don Frith
www.USG.com

PLASTER MIXING

AERATE	FLUFF PLASTER TO REMOVE LUMPS
WEIGH	PLASTER + SET ASIDE
MEASURE	LUKE WARM WATER INTO VASELINE COATED OR GARBAGE BAG LINED MIXING BUCKET
SLAKE	PLASTER INTO WATER
SOAK	PLASTER 2-3 MINUTES BEFORE MIXING (De-bubble by bouncing the bucket)
MIX	BY HAND OR DRILL (Do not mix air into plaster. Keep drill slow... speed will quicken set) Plaster is ready to pour when it holds slight wake in surface (30 sec to 2 minutes after mix)
POUR	IMMEDIATELY

MIXING TIPS

Coat bucket with Vaseline or line bucket with a garbage bag for easy clean up.

Isopropyl alcohol sprayed on the surface of plaster will help remove bubbles.

Cold water will slow the set.

Warm water will speed the set.

Always wear a respirator when working with dry plaster.

BASIC PLASTER MIXING

1. Aerate plaster before mixing to remove lumps and fluff plaster before working.
2. Place water in work bucket equal to roughly half the volume of total plaster desired. Water temp should be luke warm, not hot and not cold.
3. Sift plaster gently and evenly onto the surface of water.
4. As you sift plaster into water it will sink to the bottom of the bucket eventually rising to the surface of the water. Continue to sift plaster until it rises above the water surface to form a peak or island. Like an iceberg, the majority of the plaster will be underwater with only a 2-3" peak above the surface.
5. Allow mix to sit to ensure that the peaks do not settle below the surface. No reaction (or set) will take place until mixing/agitation begins.
6. Once you are sure that the peaks will not settle you're ready to proceed.
7. Allow plaster to sit undisturbed for 2-3 minutes to ensure that all particles are wet.
8. Mix with hands below the surface, breaking up lumps etc, until a creamy mixture is achieved. Keep hands below surface to ensure that you do not mix air into the plaster.
9. Plaster is ready to pour when it begins to hold a line when a finger is drawn across the surface.
10. Pour immediately.

TIPS

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