

Modern Materials®

Dental Gypsum and Plaster Materials

MIXING INSTRUCTIONS:

All gypsum materials must be mixed carefully if the maximum desired properties are to be attained. We recommend the following mixing technique.

1. Use a clean, flexible rubber or plastic bowl.
2. Use the proper ratio of water to powder. Measure room temperature water into mixing bowl.
3. Add powder to liquid.
4. Use a clean, stiff spatula and spatulate at a rate of 120 RPM for 60 seconds until a smooth and uniform mix is achieved.* Recommended time for mechanical spatulation under vacuum is 15 seconds at low speed.
5. Place a small mass of mixed material in one corner of the impression and place on a vibrator. Tip the impression so the material flows into the recesses. Continue to add stone in small increments until the entire impression is filled.

STORAGE:

Gypsum materials are subject to deterioration when exposed to the atmosphere, particularly high humidity. Store all gypsum powder in a dry place in an airtight container.

FACTORS AFFECTING SET TIME:

1. Water temperature – Within certain limits, water temperature will affect setting time. The colder the water used, the longer is the setting time.
2. Spatulation – The time and speed of spatulation affect the setting time and strength of gypsum materials. Rapid spatulation accelerates the setting time and produces the greatest strength.
3. Water-Powder Ratio – When a high proportion of water is used, setting time is retarded and crushing strength is lowered.

**Hand mix StatStone for 15-20 seconds.*