



FOUNDRY Glass

Plaster casting for glass sculptures

GLASS™ is a plaster based investment which has been specially developed for the production of glass sculptures by the Pate de Verre lost wax process method.

GLASS™ offers the following benefits to the glass sculpture foundries:

- GLASS™ contains only the purist closely graded raw materials to give utmost consistency in addition to high green and fired strengths. The product can be adjusted to suit individual customer requirements.
- GLASS™ mixes easily to give a creamy consistency with minimal air entrapment.
- GLASS™ can be used without a flask.
- GLASS™ gives an excellent surface finish and detail definition.
- GLASS™ is designed to work up to 850°C to allow the glass to fully melt.
- GLASS™ is designed to tolerate the expansion and contraction of the glass as it heats up and cools without cracking.
- GLASS™ is easily removed with lower instance of damage to the object.
- GLASS™ can be packed in either 25kg bags or bulk bags up to 1500kg.

Complete quality control tests on setting times, flow and dimensional accuracy ensure trouble free production from batch to batch. A full Certificate of Conformity is supplied with every delivery.

Technical Information - GLASS™

Powder/water ratio	32%
Work time @ 22°C	10 minutes
Initial set time	15/18 minutes
Thermal expansion @ 750°C	0.38%
Setting expansion € 2 hours	0.55%





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MIXING INSTRUCTIONS

Add the powder to the water in the recommended proportions in a mechanical mixer and mix for 5 minutes.

Ideally the resultant slurry should be vacuumed for 1.1/2 minutes before being poured around the patterns, followed by a further vacuum of 1.1/2 minutes after the patterns have been covered with investment to about 10mm above the highest pattern. After vacuuming fill the flasks to the top.

If there is insufficient time for both vacuum cycles omit the first cycle. Gentle vibration will also assist in the removal of air bubbles.

DRYING CYCLE

After a minimum of 3 hours the moulds can be steam dewaxed for about 4 hours, care must be taken not to over steam as this can cause damage to the surface of the mould.

The dewaxed moulds (with glass crystals inside) should be placed into a cold oven and increased to a temperature of 850°C at 50°C per hour. The oven should remain at 850°C for around 30 hours (the time is dependent on mould size) and then reduced at 8°C per hour to ambient temperature.

