

MOULD MAKING TECHNIQUES USING ACC GELFLEX

Heat-meltable PVC Gelflex can be used to replicate masters from many different base materials. Available in two grades: Hard grade – blue, 13°A and Soft grade – Beige, 8°A.

Before replicating any design, it is important that one is not infringing a Copyright or Registered Design.

There are two important points to remember when using Gelflex:

- 1 Efficient sealing of porous masters, eg. Those made from plaster or cement
- 2 heating and pouring of Gelflex at the specified temperatures, exceeding them will cause shrinkage of the mould and the number of possible re-melts will be significantly reduced.

SEALING THE MOULD

If originals are porous it will be necessary to ensure that the surface is adequately sealed to prevent the formation of bubbles on the surface of the Gelflex mould.

Two sealing materials are available. PS8 and G4 sealer - see table below for recommended pre-treatments.

N.B. Care must be taken with valuable masters as discolouration can occur with both sealants.

Application	Sealing Method
Plaster	Dry or damp plaster use PS8. Wet plaster use G4.
Old Painted Plaster	Paint removed. Whitewash and emulsion is removed cautiously soaking in cold water. Varnish is removed by hot water. A paint stripper is required in extreme circumstances. Seal with G4.
Modelling Clay	Do not seal if clay moist. If clay old and dry moisten or soak in water and seal with G4
Cement or Stone	Water is the best sealer, immerse in water or spray with water until saturated. Can also seal with G4
Metal	Coat with release agent except for Aluminium. Warm model to prevent chilling of Gelflex.
G.R.P.	If not completely cured heat to 40°C to complete volatilisation. Pour Gelflex when cooled.
Class or China	Do not use valuables. Pre-heat slowly to 100°C and pour Gelflex when hot.
Wood	Air, water, vapour and volatized resins are released when hot Gelflex is poured. Sealing is possible with G4.

It is essential to allow the G4 sealer to fully cure overnight before pouring Gelflex.

POURING THE MOULD

Heat the Gelflex in a thermostatically controlled tank to 150-165 °C. **DO NOT EXCEED THESE TEMPERATURES.** It must be allowed to cool to 140-150°C to allow any air bubbles present to rise and disperse before pouring your mould.

Any enclosures should be sealed to the base board with clay or silicone sealant.. The base board should be varnished.

If the master is light then it should be fixed to the base board in order to prevent it moving or floating when the GELFLEX is poured, Silicone sealant is ideal for this.

Pour it continuously into the enclosure, not directly onto the master. Leave for several hours until completely cool.

There are various moulding techniques which can be encompassed using GELFLEX, including 1 part

DE- MOULDING

Allow Gelflex to solidify and cool. Easier de-moulding can be achieved whilst the Gelflex is still very slightly warm.

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