# How To... Single Use Mould Making Kit



Produce your own simple single-use plaster moulds suitable for glass casting.

### In the kit:

Economy Casting Plaster (2kg) Modelling Clay (2kg) Mixing Tub Set of 4 Modelling Tools Instruction Sheet

#### You may also need:

Plastic Tub Spatula Glass Frit Safety Goggles Glass Frit or Billet Glass Kiln

### Tips:

Think about your design. Try to avoid creating deep or thick-walled moulds as this can make it hard for the heat of the kiln to penetrate and fire the glass properly.

Bullseye Glass is 2.5 times heavier than water, so to calculate the volume of frit required, weigh the amount of water it takes to fill the mould, then use 2.5 times that weight in frit.

Try using different coloured glass in the detail of your mould to create accents to your work.

The firing schedule you use depends on the size of the object. We suggest a 2 hour anneal time (Segment 3) for a 12mm thick piece, 4 hours for one 25mm thick and 8 hours for a 50mm thick piece.

*Need more help?* Take a look at the Knowledge Base on our website. www.warm-glass.co.uk



Create your own plaster mould to make truly unique three dimensional designs in glass. Moulds from this kit can be fired once only.

This kit contains everything you need to create your own single-use glass casting mould. Always wear a mask when working with plaster.

## To make a simple casting mould:

**1.** Using the clay, mould your design to the shape you would like your cast glass piece to be. Since the mould will not be reused, you do not need to worry too much about undercuts in your design.

**2.** Fix the moulded clay securely to the bottom of a plastic tub. The clay should be at least 2cm from the edge of the tub.

**3.** Mix the Casting Plaster according to the Instruction Sheet.

**4.** Pour the plaster mix until the clay is covered by 2cm of plaster. Work fast as the plaster sets quickly.

- 5. Allow it to set for a minimum of one hour.
- **6.** Remove the clay from the mould.
- 7. Gently clean the mould with a soft brush and water.
- 8. Dry the mould according to the Instruction Sheet.
- 9. Fill the finished mould with frit or billet and fire using a casting schedule.

When casting with transparent glass: Fine frit gives an opal result, coarse frit gives a semi-transparent result and billet gives a clear result.

### Example Casting Schedule (for pieces up to the size of a small apple):

Segment	Rate (Degrees/hour)	Temperature	Hold
Segment 1	85°C	→ 649°C	60 min
Segment 2	333°C	→ 825°C	90 min
Segment 3	999°C	→ 482°C	2 to 8hrs (see left)
Segment 4	7°C	$\rightarrow$ 427°C	01 min
Segment 5	22°C	→ 371°C	01 min
Segment 6	40°C	$\rightarrow$ 30°C	End