

Embossing Glass using Plaster Castings

Creating embossed patterns in glass by draping it over a plaster casting is a quick and easy way to create uniquely detailed textured imbedded designs.

Prepare the casting

Trim off any excess plaster with a utility knife, Xacto, or stencil knife. Don't be overly fussy. The glass won't melt to fit perfectly tight along the bottom edges but will remain slightly rounded.

Prefuse the covering glass

You can emboss with single layer 3mm thick glass but the lighter weight will prevent it from picking up as much detail as double layer 6mm thick glass. If the plaster casting is more than 1/2 inch thick, it's even better to use triple layer 9mm thick glass to avoid having the glass stretch apart as it drapes over the casting. Firing to just tack fuse will produce a 9mm thick fuse without the glass spreading to thin out to 6mm. You can fire to full fuse when you fire the glass onto the casting.

Position in the kiln

Place the plaster casting on a kiln shelf and balance the glass on top. The better you balance the glass, the more likely it will stay in place and produce the embossed design where you want it.

Fire to full fuse

Apply a long hold to pick up the casting detail. The following schedule is suggested for COE 96 glass (*add 25°F to all top temperatures for COE 90*).

1. 400 dph to 1000F hold 20 minutes (*equalize temperature*)
2. 100 dph to 1460F hold 20 minutes (*complete embossing*)
3. FAP to 960F hold 60 minutes (*anneal*)
4. 400 dph to 300F OFF

The unusually slow ramp in Segment 2 from 1000 to 1460 encourages the glass to pick up more detail than it would at a faster ramp.

Removing the casting

Depending on the shape of the plaster casting, it may or may not easily pop out of the mold. If it doesn't, just chip out whatever comes out easily and leave the glass with plaster in it to soak in a bowl or bucket of water for a few hours. The water will soften the plaster and make it easy to remove.