

Fossil Vitra

The Fossil Vitra technique is a fun and simple way of creating beautiful imagery in glass. While natural fossils take centuries to form under the pressure and heat of rock, we can create a version in glass in just the length of a kiln firing, using the kiln to create the necessary pressure.

You can take your pick from the organic materials you can find all around you in nature, but you will get the best effects from materials that can be flattened and dried. You can sift glass frit on top of these materials, lay them in the kiln on a piece of fibre paper and place a piece of glass on top.

When it is fired, the organic material burns away leaving an ashy imprint which is embellished by the glass frit. While it can be common to get variable results with this project (as all the materials are different and will burn away slightly differently) the effect that we are hoping for is an intricate pattern left by the material, defined by the powdered frit.

Materials you will need:



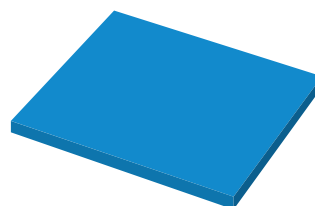
Organic materials



Coloured powdered frit



Sheet glass

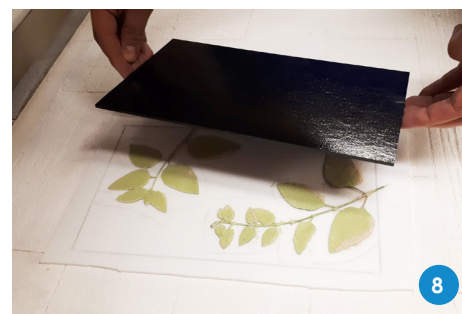
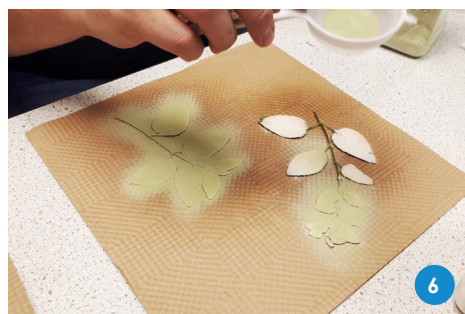


Fibre paper



Hairspray

The process



- 1 **Flatten your organic materials** – if they don't lay flat you should flatten them by placing them underneath something heavy. You may need to break it apart if it won't flatten in its original form.
- 2 **Trace your base glass onto your fibre paper.**
- 3 **Place your organic materials onto the fibre paper and draw around them** – so you know where you will place them.
 - Once the powdered frit is on them, you will need to minimise handling so you don't disturb the frit. By having an outline drawn you can put the plant down in the correct place first time. It doesn't matter if your organic materials spill over the edge, the excess will just burn away on firing.
 - You can use either side of the fibre paper, depending on whether you'd like a smooth or more textured finish to the final piece. For a more textured finish, put the textured side face up.
- 4 **Place the fibre paper in the kiln** – once you've drawn your design you can place the fibre paper in the kiln, as it will be more difficult to move once the organic materials have been placed.
- 5 **Spray the leaves with hairspray** – place one of your leaves (or branches) onto a sheet of paper towel. The plant should lay relatively flat. Spray it with a moderate coating of hairspray. The leaves should look wet, but not be dripping. This will allow the powdered frit to stick.
- 6 **Add the powdered frit** – using a sifter add powdered frit to the still wet leaves and branches in a colour of your choice. For the most realistic results, sift different shades of green onto different areas. Once you've covered the leaves, spray another coating of hairspray. Repeat several times, layering the powders.
 - It is helpful to visualize how the powders you place on the leaves will be layered on the final piece. You can choose after firing which side you prefer as the 'front', but commonly the 'back' is preferred, so imagine the first colours you apply as the top layers. So you are designing in reverse.
 - With this in mind, applying transparent powders on the leaves first and then backing them with opaque colours can be very effective. With practice you'll learn to layer your powders to create a wonderful depth in the colours of the final piece. If this is hard to visualize don't worry, it will make more sense after you complete your first piece.
- 7 **Add a final coating of hairspray** – once the branch and leaves are covered with powders add a final coating of hairspray and let it dry. Lift the plant using the paper underneath it and set to the side. You are now ready to assemble your piece for firing.
 - Lifting the leaf from multiple positions will help to keep it from bending under the weight of the powder. For best results, avoid having to reposition the leaves once you have set them on the fibre paper. The more the pieces are handled the greater the chance that powder will come loose and fall off.
- 8 **Clean the base glass and place it carefully onto the leaves** – lining up with your fibre paper design. This will cause a lot of the powder to come loose from the leaves so you do not want to lift the glass to reposition.

The process

Firing schedule

Segment	Rate celsius/hr	Temp	Hold time (hr:min)
1	148°C/hr	to 482°C	0:60
2	37°C/hr	to 662°C	0:30
3	AFAP* or 9999°C	to 773°C	0:05
4	AFAP* or 9999°C	to 482°C	0:30
5	93°C/hr	to 385°C	0:00
6	204°C/hr	to 37°C	0:00



The one hour hold in segment one is to ensure the plant material, fibre paper binder and hairspray burn off completely before the glass softens. Venting the kiln during this segment is recommended.



A bubble squeeze at 622°C minimises the chances of any trapped air causing bubbles.



The fusing temperature in segment three is 773°C, about 20°C cooler than a generic full fuse temp. This is because we are using a single layer of sheet glass and we want it to keep it's shape and not pull into the centre.

The finished piece



When your piece is fired and cooled to room temperature, remove the glass from the kiln and clean off the fibre paper. It is important to wear a mask to do this to avoid inhaling any airborne ceramic fibre.

The piece may require some scrubbing with a stiff brush and water to remove the fibre. Depending on your kiln and the specific colours you used, the powders may not have fired long or hot enough to have become shiny. If this is the case, you may fire polish the piece, with the powder design up, to get the desired finish.

Note: This data is a guide only, firing programs may need to be adjusted according to size and thickness of glass and the kiln's performance. Ensure that data is entered into the controller accurately, otherwise glass may not fuse correctly or paint will not fire onto the glass as desired. Creative Glass Guild sells all glass, tools and materials on the basis that customers have the knowledge and ability to use them safely and in accordance with all relevant regulations and legislation.