Polymer clay millefiori was originally inspired by Venetian glass. Transparent clay will never be quite as clear as glass. Still, a frosted glass or agate appearance is beautiful in it’s own right.

Very thin translucent clay can look quite clear. As the translucent clay gets thicker, it gets more and more cloudy until you can’t see through it any more. I wanted to suspend patterns in the clay, but this makes the clay too thick (at least for most brands) to be able to see the patterns.

I discovered that when these patterns are suspended in clay and then squished flat, they maintain their illusion of depth, and yet they are also thin enough to see through. There will always be a bit of a choice between depth and clarity. This is something you have to experiment with according to your brand of clay. The effect will change after baking, so even if the pattern is only slightly visible before you bake the clay, it should be more visible after baking. Sanding and buffing the clay will also add to it’s clarity.

Start with a cylinder of white translucent clay. Cut it in half. Insert a sheet of solid color. If you want you can insert a sheet that has a different color on each side. Reduce the cylinder down to a log. Twist the log so that the color in the middle makes a spiral (almost like DNA). If you gently reduce and twist the log to a point (like a carrot shape), the spiral will change size as it goes.
Take this log and run it through the pasta machine. I usually start with one of the thickest settings, then run it through on one of the middle settings. This keeps it from the cracking along the side that can happen if you try to force clay though the pasta machine when it's too thick.

Now you have a strip of clay that can be placed on glass, solid clay, or anything else that you want to cover. Different backgrounds will result in different effects. Sand a buff the final project.
Variations

Here is a rainbow swirl on a black ball of clay and then on a white ball of clay. Again, you would never believe how thin this clay actually is.

This picture has different colors, but it shows how more components can be added.

Add extra translucent as a little strip on either side to isolate the pattern.
For this pattern, start with a log of translucent. Place tiny logs of clay around it. Roll it into a smooth log making sure to keep the lines parallel. Twist the log so that the stripes spiral around it. Flatten the log in the pasta machine.
Butterfly Canes

Watch “How to Reduce an Butterfly Cane” on the Meg Newberg channel on Youtube.

Premo: black, ultramarine, green, wasabi, white

Step 1: Make a Skinner blend.

Step 2:
Stack the Skinner blend.
For only half of the stack insert logs in between the layers.

If this part is confusing, I have more picture of the blue wing later.
Step 3: Cut off a little piece to save for later. Cut off the part of the blend without dots and add it to the bottom of the blend with dots.

Step 4: Form this combination into a tear drop shape. Do this by pinching the dark part on the bottom together.

Sep 5: Reduce this cane and cut it in half. These are the bottom and top wings.
Step 6:
Slice four lines into the wing like this.

Step 7:
Insert very thin sheets of black clay. When you put the sections back together, stagger them so that the highlight (the lightest part of the blend) doesn’t match up anymore. This makes the top uneven. Squish the wing together and round it out again. Wrap the whole wing in a sheet of thin black clay.

Step 8:
Form the tear drop shape into a rounded right triangle.
Step 9:
Slice four sections and insert very thin sheets of black clay. 
When you put them back together, stagger them as shown for the bottom wing. 
Notice the angle of the highlight to the slices.

Step 10:
Because the sections are now uneven, cut off the extruding part of the middle one and use it as an extra section at the tip of the wing.

Step 11:
Wrap the extra bit of blend in a thick sheet of clay. Wrap some of the color of the spots in a thick sheet also. Add extra black pieces to even out the outline of the wing.

Step 12:
Wrap the whole wing with black. If you can, make the sheet thick around the outer edge and make it taper to a thinner line as it goes into the center.
Variation on bottom wing
Here are some pictures from the blue bottom wing. This is how you insert spots.
These aren’t complicated wings, but I have added them to show how beautiful translucent wings can be.

Make a blend with a solid color and translucent. When you stack the blend add at least one extra layer of translucent to make sure a good part of the wing is clear.

Draw lines on the wings and then carve out the sections one at a time with the end of a tissue blade.

Insert sheets of clay that are as thin as possible for the black lines.