



Saint Philip's IN THE HILLS

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WAYS TO PUT COLOR ON YOUR CLAY

SLIPS AND UNDERGLAZES

- Slips and underglazes are the same thing. “Underglaze” is the term used by commercial companies. The term “slip” generally means you have made it yourself.
- A slip/underglaze is a white liquid clay that has a colorant added to it. For example, cobalt = blue.
- Slips/underglaze are normally placed on the clay when it is in the damp “greenware” (unfired) stage. There are also other ways—see below.
- “EZ Strokes” (a translucent underglaze) and opaque underglazes are generally bisque to cone 04, then clear glazed and fired at cone 06.
- Slips/underglazes are used instead of stains and oxides on low fired ware. Fired at low temps, stains and oxides tend to rub off, whereas slips and underglazes do not.
- Slips/underglazes give a matte surface when fired. For shine and/or more durability, apply a glaze.

GLAZES

- Glazes offer rich saturated color that protects surfaces for food. Highly durable.
- Purchase ONLY low fire cone 06 glazes.
- Glazes are glass with color.
- The color in the bottle is often NOT the color when fired.
- Use only “food safe” glazes for food surfaces and be sure glaze is safe for handling.

“CONCEPTS” (Duncan brand) or “EZ STROKES” (Mayco brand)

- These are products that are applied to bisque ware.
- The advantage is that these products give you saturated color and “stay put”—unlike glazes that tend to run and merge with neighboring glazes.
- A clear glaze is generally applied over these products and then are glaze fired.
- Without a clear glaze, these products can appear only slightly glossy.

“FRENCH DIMENSIONS”

- Use of bisque or greenware.
- Give “dimension” to the applied design.
- Fired to cone 06.
- Tends to be shiny/glossy.

ACRYLIC PAINTS

- Not used for eating surfaces, or surfaces that will be kept wet or outside.
- Not dishwasher safe.
- Though not necessary, it is recommended you apply an acrylic “sealer,” to give paints a longer life. Choose matte, satin or glossy finish. Spray or brush-on types are available.

HOW TO USE SLIPS/UNDERGLAZES

- Slips/underglazes are applied full strength (generally two coats) to unfired, moist clay. This give a solid, saturated color.
- Slips/underglazes can be applied to bisque ware using one or several of the following methods:

*Use full strength over a very textured surface and the sponge off, leaving the underglaze only in the crevices of the texture.

*Dry brush” a contrasting color lightly over the surface.

*Water down the underglaze and apply like a watercolor wash.

CONCEPTS AND STROKE 'N COAT PRODUCTS

- Apply two to three coats to bisque pottery.
- Apply with a soft brush

USING GLAZES

- Glazes are ONLY applied to bisque fired work.
- Glaze can ruin kiln shelves! You may glaze the bottom of your pieces—see instructor. Tiles are not glazed on the bottom.
- Improperly glazed work can NOT be fired.
- Purchase ONLY cone 06 glazes.
- Check for “food safe” on glaze label if you plan to use the work for food consumption.

GLAZE TERMINOLOGY

- **OPAQUE**—can't see through glaze to colors underneath
- **SEMI-OPAQUE**—more opaque than “semi-transparent.” Semi-opaque glazes tend to look spotty when put on a plain un-textured surface.
- **SEMI-TRANSPARENT**—tend to allow colors and textures beneath to show.
- **TRANSPARENT**—See-through glazes that have a blush of color. These allow maximum colors and textures underneath to show.

TO BEGIN USING GLAZES

- Before you begin, be sure glaze in the bottle is not too thick. It should be like Elmer's Glue-like thickness.
- Rinse or dust off your work before you glaze.
- If you do not want to glaze the bottom of your piece, remember that glazes tend to run and drip. Be sure to leave a 1/4” “safety” margin at the bottom of the pot. We cannot fire pieces that have glazes on the bottom or that are within 1/4” of the bottom.
- Most glaze labels suggest you apply two or three smooth, light coats. Use a soft brush and apply glaze coats in opposite directions.
- Ask instructor to check your glaze application and its readiness to be fired.

HOW TO USE ACRYLIC PAINTS

- Acrylics are ONLY applied to bisque ware. It is not fired after you apply the paint.
- Acrylics can ruin clothes. Work only on a plastic covered surface—NOT ON CANVAS!
- Gather ALL materials before you begin: brushes, small cups, sponges, paper towels, large container of water, paints.
- Make “washes” by diluting each of your chosen colors with water to a milk-like consistency.
- Immerse your pottery in water for just a second.
- One area at a time, apply “washes” first. Quickly sponge off excess, allowing the color to “sit” in the texture. If drips occur, use a sponge to immediately and aggressively scrub off. Apply each of your chose colors in the same way. This builds transparent layers that play off one another beautifully.
- If you now want the addition of a metallic sheen, use the “dry brush” method.

*Using a long bristled STIFF brush, dip end in a little metallic paint.

**“Stipple” the brush many times on a hard, flat surface. This works paint in the bristles.

*Wipe the brush on a paper towel. This rids brush of excess paint that may streak your work.

* “Flutter” your brush lightly across the surface of the clay. The object is not to work the metallic paint into the textures but, rather, to impart only a delicate sheen on the “high points” of the surface.

- Apply an acrylic sealer, optional
- PLEASE clean your brushes well. If paint is allowed to dry on a brush, that brush will be ruined. Drying can take only a couple of minutes!

ADDITIONAL INFORMATION ON GLAZING

- To reapply a glaze to an already glaze-fired pot, spray surface with AQUA NET hairspray and heavily “daub” the new glaze with a brush. Apply up to 3 coats. Heating the surface with a hair dryer will help the new glaze to adhere. Dry glaze thoroughly between coats—reheat if necessary.
- Fan brushes work best for glazing.
- Red glazes require heavy application. If not, they tend to turn black/gray.
- Don’t fire red glazes in the same kiln that contain items coated with wax resist.
- When layering Mayco glazes, do not combine “non-toxic” with “toxic” glazes. Chemically, they often don’t mix and can be unappealing. Also, your piece might crack.
- When applying matte or satin glazes, be very careful to avoid brush strokes. They do not “melt” out in the firing process. It is recommended applying a 50/50 mix of glaze and water for the first coat. It is also recommended to “rub” the glaze gently once all coats have been applied and thoroughly dried. Rubbing smoothes out ridges created by brush or sponge application.
- Mayco and Duncan glazes CAN be layered on top of each other.

USING CASCADES:

- There are two kinds of Mayco Cascades: white and clear
- Cascades is a non-toxic finish and must be only used with non-toxic glazes.
- “White Drape” (Mayco) is used for toxic glazes and is the equivalent of a white Cascades.
- For a clear Cascade look on a toxic glaze, it’s recommended to drizzle a clear glaze over the top of the toxic glaze.
- Use a squeeze bottle over wet glaze.

FOOD SAFETY ISSUES:

- Putting a food-safe glaze over a non-food glaze does NOT render the pot suitable for eating. Chemicals in both glazes mix in the firing process, causing toxins to come to the surface.

- Mayco glaze jars will never say “food safe,” they only say “non-toxic.” This indicates glaze is food safe.
- Duncan glaze labels will specify whether or not a glaze is food safe. The label will state either “food safe” or “safe for dinnerware.”

MENDING CRACKS:

- “Aztec Mender” (white in color) can be added to any clay to mend cracks. Fire the mender to cone 04 and then glaze.
- For red clay, use HIGH FIRE “Marx Magic Mender” and add to your red clay. Wet your pottery before applying (even though the label says not to).
- Another mending remedy for bisque pottery: Make a “worm” of the same clay as the pot to be mended. Fire the worm to cone 018. Rub the fired “worm” stick into crack. Re-fire.
- “Apt II” mender. Comes in low and high fire. Choose accordingly to firing temperature. Ask for the pamphlet that comes with the product. For unfired clay, mix with slip, apply to crack.
- Use “Kiln Cement”—mix to a paste and use to mend cracks to bisque ware. To cover the color of the Kiln Cement, apply a light coat of the colored slip your pottery is made from.