**WATER GILDING (BURNISHED GILDING)**

1. Preparing 10% rabbit skin glue size

   An appropriate quantity of glue pellabalea is slowly stirred into the glass container with distilled water so as to evenly distribute grains and to prevent clumping. Allow the solution to sit at room temperature for 3 to 4 hours until the rabbit skin glue has swollen. Due to its organic nature, rabbit skin glue will eventually break down and rot, especially in warm weather so adequate preservation is required. Once set and cooled, it will look like a gelatin-like form.

2. Improperly dried and well cleaned wooden support with 10% size

   Heat the 10% solution of rabbit skin glue in a double boiler at medium temperature until the glue dissolved completely. Stir and do not allow it to boil. Once heated, it should be brushed onto the surface evenly on all sides using a broad brush or horse or pig hair. Allow the size to penetrate the structure and dry before applying the second coat, perpendicular to the previous.

3. Preparing Traditional Gesso Chalk Ground with 8% size

   The support is primed with a variety of wood and create a hard, smooth foundation. A 6% aqueous solution of glue is gently heated in a double boiler until it just dissolves. A mix of Bologna and Champagne chalk is then slowly sieved in 1:1 ratio to the size, to avoid producing air bubbles. When the chalk is absorbed, stir very slowly. The finished product should look like a cream.

   4. Applying Traditional Gesso Chalk Ground

   Chalk ground should be kept warm while applying it to the support. If gesso starts to thicken and warm water but never more glue, thus slightly weakening each layer and so preventing cracking. Apply layers of ground on a slightly wet previous layer in perpendicular direction, distilling gesso with every new layer. 10% coated may be applied in this way until the gesso looks dense and very white.

5. Smoothing the Surface

   The dried ground surface can be sanded with sandpaper, starting with very fine (240 grit size) than extra fine (400-600 grit size) and finishing with superfine (800-1200 grit size) ones. Polish the surface until it has an eggshell-like appearance.

6. Sealing the ground using a 5% Shellac

   Enlarge any and all dust is removed from the surface so it can be sealed using a 5% Shellac to reduce absorption.

7. Preparing the burnishing clay or beeswax

   After sealing the surface, several layers of beeswax are applied. The beeswax supplies a flexible surface that allows polishing of gold and silver with an agate burnisher for a brilliant and very smooth effect. There are many shades of beeswax that may be used, imparts surface tonal affects under the layer of gold and silver leaf.

   Clay beeswax is mixed with warm 4% rabbit skin size in ratio 1:3. Beeswax should reach a consistency of heavy cream. If the beeswax is too thick,弟子 primarily with warm size but add a small amount of warm distilled water to obtain a solution of the right texture. Beeswax is applied with a fine brush in several thin, translucent layers. To intensify the latter of gold usually two coats of yellow bursi are first applied, followed by one layer of transparent red beeswax. Silver is usually tied on back beeswax.

8. Polishing clay beeswax

   When dry, the beeswax is polished with a wide pig hair brush in preparation for gilding.

9. Applying gold and silver leaves

   Interior gold and silver leaves to adhere to the surface it is necessary to deactivate the glue component in beeswax by applying Gilder’s liquid (mixture of ethyl alcohol and water in a 1:1 ratio) using a fine brush. This can be also done using a gum or a pumice propolis. A leaf of gold or silver is transferred from the heel booklet onto the gilder’s pad. It is then cut to appropriate size with a gilder’s knife.

   A gilder’s knife, flat blade or other hard bladed known as a tip is charged with electricity marking it against hair. It is then used to pick up the leaves and lay them quickly but gently on the wet clay. The leaves are drawn around the surface by capillary action of the water. The leaves should overlap by 1 to 2 mm.

10. Burnishing

    This golden or silvered surface can be then be left matte or burnished to a mirror-like sheen. Burnishing is most commonly performed using agate stones and hematite. This should be done within a few hours from gilding, while glue in beeswax is still activated.

11. Sealing

    Because of its chemical reactivity, silver must be coated with a protective sealing layer. It will otherwise tarnish. Genuine gold leaves are chemically inert so it is not necessary to seal them. Aluminum leaves do not need to be sealed either. Composition gold, on the other hand, is primarily composed of brass and will oxidize over time. Therefore it is necessary to apply a barrier coating to prevent oxidation and tarnishing. Transparent varnishes like Zepan sealer or Shellac are applied to preserve gold while the most common protection, and at the same time an outstripping decorative method is the usage of glazes.

12. Decorating and toning

    Oil gilding — gilded surfaces can be decorated using oil paint with damar varnish (19% solvent in terpineal). Airbrush gilding — another interesting method of painting on gilded surface. Airbrush dyes are dissolved in alcohol (denatured), water or oil. Lime and lime water varnish are sometimes used over an entire piece to tone down the brittleness inherent in gilding while also giving it an aged appearance. Resins such as dragon’s blood and gamboge as well as impregnated and pigments and gums may be added to create orange, or may be shells for tincture affects.

13. Applying an antique glaze

    To antique a gilded object a variety of patinas can be used. Bitumen or Asphalt. Liver of sulphur, furthermore, artist oil based paint in tubes or artist acrylic paint tubes can be used to create an antique glaze solution.

**OIL GILDING (MATT GILDING)**

7. Applying oil size

   In order to adhere the metal leaf to the surface, an adhesive size is used. Oil-based sizes are provided with a guideline “time of look” of 3, 12, or 24 hours and “operativo.” Meaning, with “12 hours” an object can be gilded 12 hours after the size is applied, and remains open to gold for 20 hours. However, temperature, humidity, surface and many other factors will affect the opening of size. Water-based sizes are available for oil gilding. These sizes come in two to three weeks to 15 minutes and remain open for at least 36 hours. After sealing, oil sizes are applied by brush and left to dry until the required amount of thickness is achieved. If left too long however, the size will dry and a fresh application over the previous layer will need to be made.

8. Applying gold and silver leaves

   Gilding closer to the size drying out will usually produce a shinier finish. If the gold is applied too early, a matt finish is made. This is important that this is done in a dust free environment as any contaminants in the air will stick to the size and mar the final finish.

9. Burnishing

   An oil gilded surface offers a matt to moderately bright appearance. It is a durable finish but unlike water gilding, it cannot be burnished.

   **GILDING WITH RABBIT SKIN GLUE OR **GILDERS WATER/MORDANT** (SEMI-BURNISHED GILDING)**

7. Applying gold and silver leaves.

   Gilders Mordant is a medium on which gold leaf is to be placed very similar to water gilding. It consists of 3% warm rabbit skin glue to which a very small amount of Isopropyl Alcohol is alternatively added. After sealing, “gilders water/mordant” is applied. This is done using a soft hair brush. Transferring leaves with gilder’s brush, they are then mounted on gilders mordant.

It is possible to burnish outscapes to a semi-burnished shine when gilding with rabbit skin size.