

Angel Gilding (Gold Mirror) Instructions

Angel Gilding creates a gold mirror by depositing a layer of silver over a layer of gold. Pure gold mirrors are translucent. Silver makes the gold brilliant and opaque. Our Mirroring Kits come with 1” samples of translucent gold and Angel Gilded glass.

The process of mirroring process is the same for all metals. These instructions show you how to make a gold mirror but we assume that you know how to make a silver mirror. All of our instructions are available on our website. The Angel Gilding Checklist outlines all the steps to follow to make an opaque gold mirror on any shape of glass.

Angel Gilding differs from silver mirroring in three ways:

- 1) You need to mix and age the Gold Solution and Gold Activator before you begin.
- 2) Tin the glass with Tin for Gold, not Tin for Silver.
- 3) Deposit a layer of silver on top of the gold layer without re-tinning the glass.

Mix Gold Solution with Gold Activator

- 1) Measure out 15 ml of Gold Solution and 15 ml of Gold Activator for each square foot of glass. Pour the chemicals into a clean container, such as a Mek dispenser bottle. Disconnect the straw in the Mek dispenser during the aging process.
- 2) Let the mix sit in a warm place for at least 30 minutes until it has lost all of its color. The mix has a self life of about two weeks.
- 3) To test if the mix has aged long enough, pour 5 ml of mix into a paper cup and add 2 ½ ml of Gold Reducer. The chemicals should stay clear for about 1 minute and then turn purple slowly. If they turn purple immediately, the mix has not finished aging.

Mix Tin for Gold

- 1) Use the 10 ml cylinder to measure out 3 ml of concentrated Tin for Gold. Pour it into the 16 oz measuring cup and add 16 fluid ounces of steam distilled water. You may have more diluted Tin for Gold than you need, but you will have the right ratio of Tin to water.
- 2) Diluted Tin for Gold has a shelf life of 6 to 8 hours. Mix fresh daily.

Measure Activated Gold and Gold Reducer

- 1) Add 15 ml of Gold Reducer to 30 ml of Activated Gold per square foot of glass.
- 2) Do not mix the Activated Gold with Gold Reducer until you are ready to pour.

Angel Gilding Checklist

- 1) Mix and age the Gold and Gold Activator as directed before you start.
- 2) Set out all the chemicals, cleaning supplies and glass.
- 3) Dilute the Tin for Gold as directed.
- 4) Clean the glass well with glass cleaner and rinse it.
- 5) Polish Sheet Glass and 3-D Glass with hot, wet cerium oxide and glass cleaner.
- 6) Remove the cerium oxide with a sponge, towel or brush.
- 7) Rinse the glass thoroughly with distilled water and tip it all off.
- 8) Pour on **2 fl oz** diluted Tin for Gold for each square foot of glass.
- 9) Let the tin sit on the glass for **30 seconds**.
- 10) Rinse the tin with distilled water and tip off.
- 11) Measure out **30 ml** of Activated Gold and **15 ml** of Gold Reducer for each square foot of glass (45 ml total)
- 12) Pour the gold chemicals into a paper cup.
- 13) Pour them into another paper cup to mix them. Pour back and forth 2 – 3 times.
- 14) Pour the mixed gold on the glass.
- 15) Rock the chemicals gently over the glass to get an even distribution.
- 16) Gold chemicals can take **20 to 40 minutes** to deposit.
- 17) Rock the glass occasionally to maintain an even coating.
- 18) When the gold deposition is complete, pour off the gold.
- 19) Rinse the glass well with distilled water.
- 20) Add a second layer to deepen the gild. Repeat steps 11 – 17.
- 21) Pour off the second layer and rinse it well.
- 22) Mix and pour **15 ml each** of the silver chemicals for each square foot of glass.
- 23) Let the silver deposit for **5 minutes**. Silver over gold is straw colored, not bright.
- 24) Pour off the silver and rinse the glass.
- 25) Stand the mirror on edge to dry.
- 26) When it is completely dry, apply mirror backing paint.
- 27) When the paint is completely dry, clean the face of the mirror.
- 28) Stand back and admire your handiwork.