

ANGEL GILDING (GOLD MIRROR) INSTRUCTIONS

Pure gold mirrors are translucent. Angel Gilding creates an opaque gold mirror by adding a layer of silver over the gold. A translucent gold mirror rubs off easily. Adding silver makes it more durable. Protect a translucent gold mirror with clear spray lacquer to avoid rubbing the gold.

These instructions assume that you know how to make a silver mirror. The Angel Gilding Checklist outlines the steps to follow to make an opaque gold mirror. For a translucent gold mirror, skip Steps 22, 23 and 24.



ANGEL GILDING DIFFERS FROM A SILVER MIRRORS IN TWO WAYS

1. You need to mix and age the Gold Solution and Gold Activator before you begin.
2. You need to tin the glass with Tin for Gold, not Tin for Silver.

ACTIVATING THE GOLD CHEMICALS

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. Disconnect the straw in the Mek dispenser during the aging process.
2. Place the Mek dispenser with the Gold Solution and Gold Activator in a pan of very warm (not steaming) water for at least 30 minutes until it is almost colorless.
3. To test if the mix has aged long enough, pour a few drops of the mix into a paper cup and add a few drops of Gold Reducer. The chemicals should stay clear for about 1 minute and then slowly turn purple. 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 THE ACTIVATED GOLD AND GOLD REDUCER

1. Use **15 ml** of Gold Reducer and **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 hot tap water. Rinse it well.
- 5) Polish flat glass and 3-D Glass with a thin hot slurry of cerium oxide.
- 6) Remove the cerium oxide with a sponge, paper towel or brush.
- 7) Rinse the glass thoroughly with distilled water. Tip it all off.
- 8) Pour on about **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) Thoroughly rinse off the Tin with distilled water and tip off the rinsewater.
- 11) Measure **30 ml** of Activated Gold and **15 ml** of Gold Reducer per 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.
- 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) To deepen the gild, add a second layer of gold. Repeat steps 11 – 19.
- 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.