

## USING A MINI SILVER KIT

These instructions tell you how to mirror flat (sheet) glass with a Mini Silver Kit.

Please see the instruction on our website for a Blown Glass Mirroring Kit if you are using this kit to mirror glass containers.

See the instructions for 3-D glass if you are mirroring small items.

This Kit contains enough silver to mirror about 8 square feet of glass. Refill supplies are available.



### YOU WILL NEED TO PROVIDE

1. The glass to be mirrored
2. A tray to contain the silver waste chemicals
3. A rack to support the glass in the tray
4. A gallon of steam distilled water
5. A supply of paper towels for cleaning the glass
6. A supply of new paper "Dixie" cups
7. A clock with a second hand
8. A soft paint brush or disposable foam paint roller

### MIRRORING IS A CHEMICAL PROCESS. THESE PROCEDURES ARE *IMPORTANT*.

- **Cleanliness:** The glass must be absolutely clean, including the edges.
- **Gloves:** Wear gloves to keep your hands and the glass separate.
- **Careful measurements:** Be careful but not fanatical with measurements.
- **Distilled Water:** Always use steam distilled or de-ionized water. The minerals in tap water will ruin the mirror.
- **Timing:** Use a clock with a second hand to time the tinning process in Step 10.
- **Concentration:** Arrange your time, space and tools so you can work without interruption.

### SAFETY:

- **Storage:** Store the chemicals in a cool, dark place away from children and pets.
- **Staining:** The silver creates brown stains. Wear rubber gloves and cover your bench with several layers of newspaper. Silver Remover removes silver stains from skin and clothes.
- **Fumes:** Silver chemicals contain ammonia. We have respirators designed to mitigate ammonia and formaldehyde fumes. Go to Supplies/Safety at [www.angelgilding.com](http://www.angelgilding.com).
- **Disposal:** These chemicals contain heavy metals. You will need a Waste Treatment Kit to keep heavy metals out of the public sewer system.

## STEPS TO MIRROR GLASS WITH A MINI SILVER KIT

- 1) Use a tray or plastic bowl to contain the mirroring chemicals.
- 2) Use a support system to hold the glass in the tray and above the waste water.
- 3) Use the 10 ml measuring cylinder to measure out **2 ml** of Tin for Silver for each square foot of glass to be mirrored.
- 4) Pour the Concentrated Tin into the 16 oz cup.
- 5) Add **1 fluid ounce** of distilled water for each **1 ml** of Concentrated Tin.
- 6) Clean the glass well with our Glass Cleaner and hot tap water. Rinse it well.
- 7) Rinse the glass thoroughly with distilled water. Do not let the glass dry out.
- 8) Tip the rinse water off the glass.
- 9) Pour on the diluted Tin for Silver.
- 10) Let the diluted Tin for Silver sit on the glass for **30 seconds**.
- 11) Rinse off the Tin with distilled water and tip off the rinse water.
- 12) Using one plastic dosage cup for each chemical, measure out **15 ml each** of Silver Solution, Activated Silver and Silver Reducer for each square foot of glass (**45 ml total**).
- 13) Pour the measured chemicals into a new paper cup.
- 14) Pour them into another paper cup to mix them.
- 15) Pour the mixed silver chemicals on the glass.
- 16) Rock the chemicals gently over the glass to get an even distribution.
- 17) Silver takes about **5 minutes** to form on the glass.
- 18) Rock the glass occasionally to maintain an even coating.
- 19) When the silver deposition is complete, pour it off the glass into the tub.
- 20) Rinse the glass well with distilled water.
- 21) Stand the mirror on edge to dry.
- 22) When it is *completely* dry, apply mirror backing paint.
- 23) When the paint is *completely* dry, clean the face of the mirror with Mirror Remover.
- 24) Stand back and admire your handiwork.

