

GALVANIC COPPERING INSTRUCTIONS

PURPOSE

Coppering the back of a silver mirror prolongs the life of the mirror by protecting the silver. Air-borne sulfur and other corrosive chemicals that make it through the backing paint are attracted to and neutralized by the copper before they can attack the silver.

The copper layer on a finished mirror is hidden by the silver and the paint so it does not need to look perfect. Uneven and blotchy copper will protect the silver so long as all the silver is coppered.

WET OR DRY IRON POWDER?

Some companies mix the iron powder with water before applying it to the glass. We find that you get a more even application if you apply the iron as a dry dust on a wet surface. The fine mesh insert in our sifter jar helps to distribute the dust evenly. If you remember to replace the cap on the jar, your jar of powder should last a very long time.

Many thanks to the late Phil Trast, master silverer, for showing us this simple technique.

SAFETY

- **Storage** - Store the chemicals in a cool, dry place away from children and pets.
- **Distilled Water** - Always use steam distilled or de-ionized water. The minerals in tap water or any other type of bottled water will ruin the mirror.
- **Disposal** - These chemicals contain heavy metals. Follow the instructions in your Waste Treatment Kit to keep heavy metals out of the public sewer system.

STEP 1 - DILUTE THE COPPER CONCENTRATE



1. Pour the entire 250 ml bottle of Galvanic Copper Concentrate into the 1 quart trigger spray bottle included in the kit.
2. Fill the bottle to the top neck ring with distilled water.

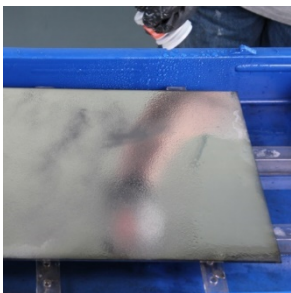
Diluted Galvanic Copper solution has an indefinite shelf life.

STEP 2 - SILVER AND RINSE THE MIRROR



1. Silver the glass according to our kit instructions.
2. When the silver deposit is complete, rinse the silver thoroughly with distilled water.

STEP 3 - SPRINKLE ON DRY IRON POWDER



Sprinkle a light layer of iron powder dust evenly all over the wet silver.

You do not need a heavy layer of powder.

Holding the shaker about a foot above the surface gives a more even coating.

STEP 4 - SPRAY ON GALVANIC COPPER SOLUTION

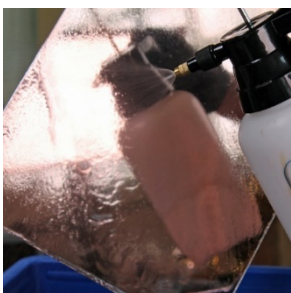


Spray the silver with diluted Galvanic Copper.

The copper layer forms immediately.

If needed, use the force of the spray to move the iron powder around to get a complete layer of copper over the silver.

STEP 5 - RINSE THE COPPER



When the copper layer is complete, stand the glass on edge and rinse off ALL of the iron powder with distilled water.

STEP 6 - DRY THE MIRROR

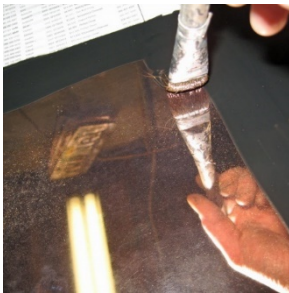


Stand the mirror, copper side out, on edge to dry.

If you let it dry flat, water spots could show up in the finished mirror.

A heated fan or hair drier speeds up the process.

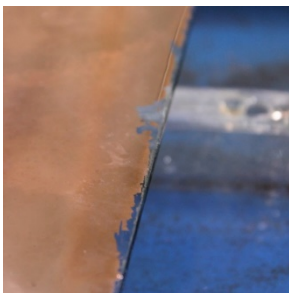
STEP 7 - PAINT THE MIRROR



When the mirror is completely dry, paint it with mirror backing paint.

Your coppered silver mirror will continue to offer a perfect reflection of your skill for decades to come.

TROUBLESHOOTING



Galvanic Copper will peel the silver off the glass if

- The edges of the glass were not perfectly clean when you started.
- You handled the glass with your bare hands after you cleaned it.
- You did not rinse the tin layer well enough.

Peeling silver happens to even the best mirror makers. The only remedy is to strip the glass and start over.

Use Mirror Remover to dissolve both the copper and the silver. Clean the glass carefully before re-silvering and re-coppering it.

A perfectly coppered silver mirror is the pinnacle of our craft.

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