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SHINING WAVE METALS

# Crinkle Silver Bi-Metal Sheet for Reticulating (103-150)

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## Technical Bulletin

### Nominal Composition:

82% Fine Silver, 18% 80-20 Reticulation Silver.

### Description:

A bi-metal composed of a layer of reticulation silver about 1/6 of the total thickness on a heavy back of fine silver. Crinkle Metal has the unique property of being able to be reticulated on the alloy side with no surface preparation. Available in thicknesses from .125" to .016" with 24ga (.5mm) and 18ga (1mm) stock sizes.

### Uses:

Jewelry, flatware and other decorative metalwork. Some individuals may color or have a skin reaction with continuous contact with the reticulated side. Long-term acidic food contact with the reticulated side is not recommended.

### Melting Point:

Starts to melt at the silver/copper eutectic temperature, 779.4°C (1435°F).

### Nominal Density:

5.45 troz/cuin or 10.34 gr/cc. This figure is for estimation purposes only.

### Quality Mark:

The overall copper content is about 3.33%, therefore it should be able to be quality marked with sterling, stg. or .925.

# Working the Material

**Hot working this bi-metal is not recommended and will void the warranty.**

This bi-metal is easily formed by raising, cold forming, die striking and sawing. Anneal after a 40% to 50% reduction has been achieved. This metal is very soft in the annealed state. Use a solder that flows at a temperature lower than the melting point. Easy and medium silver solder are recommended. Soldering is best done after reticulation.

## Annealing:

Recommended annealing temperature is 675° C (1250°F). This material may be torch or kiln annealed. Soaking at the annealing temperature is not necessary. Do not protect from oxygen by coating with flux or using a reducing atmosphere unless soldering. Pickle only long enough to remove flux. Do not soak in the pickle as this may attack the pre-reticulated surface.

## To Reticulate:

Heat the face of the metal with the reticulation silver side up. Use a small oxidizing flame on the torch, heating with the inner cone. Keep the flame in motion. The surface will crinkle with slow waves appearing at first, getting progressively rougher with continued heating. Overheating will melt the surface and erase the reticulation crinkles, but this can be an interesting effect. The fine silver back will not be affected.

## Finishing:

After reticulation, the metal should be pickled or lightly etched and carefully brushed if a bright surface is desired. The sheet may be stiffened by hammering between a soft mallet and wooden stake after reticulating or soldering

## Patina:

Liver of Sulfur will darken both sides of the Crinkle Metal.

**Note:** Be sure to take proper safety precautions when using any chemicals or tools. This information represents the best knowledge and experience regarding the use of Shining Wave Metals products by their manufacturer, however it is not guaranteed to produce an expected result and is no substitute for experimentation by the user of Shining Wave Metals products.