

## Specifications

### Architectural Guide Specifications

Revere FreedomGray™ is cut, bent, formed and installed using the same tools and techniques as with mill-finished copper. Complete details and specifications for the installation of architectural sheet copper are contained in the Revere manual Copper & Common Sense.

### Materials:

#### Sheet Copper

All sheet copper shall be standard, ounce-weight copper conforming to ASTM specification B370.

Where FreedomGray coated copper is specified or noted on the drawings, copper shall be coated both sides with zinc/tin alloy approximately 0.5 mils thick. Composition of the alloy shall be approximately 50-percent zinc and 50-percent tin with trace elements controlled for durability, corrosion resistance and color.

The Z-T Alloy shall be applied by the hot-dip process. All Z-T Alloy coated copper shall have temporary, degradable pre-weathered coating to minimize water-stains during transit and storage and provide initial weathered appearance.

#### Solder

Where used on Z-T Alloy coated copper, solder shall conform to ASTM specification B32 and shall be pure tin OR lead-free, high-tin.

### Workmanship:

#### Handling & Storage

Store FreedomGray coated copper sheets, coils and formed shapes off the ground, in an enclosed structure. Do NOT store in a manner or location so that the water or moisture may remain between sheets or shapes prior to installation. Do NOT store on bare ground under a tarp or in other manner that may cause condensation to form on or between sheets or shapes.

Handle sheets and shapes in a manner to reduce scratches, dents, etc.

### COMMENTARY

**In the absence of oxygen, standing water may cause water-stains. Water-stains and surface scratches should not affect the life or durability of FreedomGray; however, they can be aesthetically unattractive.**

#### Soldering

Before soldering Z-T Alloy coated copper, the pre-weathered coating must be removed and surfaces to receive soldering chemically and/or mechanically cleaned to produce clean, bright alloy.

### COMMENTARY

**To ease soldering, a tin-bearing flux may be applied to all surfaces to receive solder.**

#### Installation

Except as noted elsewhere, form and install FreedomGray as noted on the drawings and in the same manner as described for plain copper in Revere's sheet copper design manual Copper & Common Sense, latest edition.

#### Protection

FreedomGray shall be protected during installation and cleaning of masonry with tarps, polyethylene sheeting, or similar impervious materials. To prevent water stains due to condensation trapped on metal's surface, protection must be removed at the end of each workday.

#### Cleaning

Remove excessive dirt and construction debris by washing thoroughly with clear water. Grease, oils, etc., may be removed by washing with alkaline commercial cleaning agent in hot water. Do not otherwise chemically or mechanically clean FreedomGray.

### Available Forms:

**Types** Sheets and coils

**Weights** 16-oz.; 0.0216" thick  
20-oz.; 0.027" thick

**Temper** H00- cold rolled

**Stock sizes** 36"x120"x16oz. sheets  
36"x120"x20oz. sheets  
250 lin. ft. coils of 20"  
and 24" wide, 16oz.

*Note: Other sizes and corresponding lead times available on request*

### Ordering Information:

#### Price

FreedomGray is priced at a premium above Revere's **Classic Copper** finish. Contact your local Revere distributor for prices and lead times.

#### Minimum order quantity

One standard case or coil.

#### Availability

Through Revere sheet copper distributors throughout the United States, Canada and South America.

### FreedomGray Warranty

Revere warrants that, for a period of 25 years after delivery, FreedomGray will comply with the written specifications accepted by Revere and will be free of defects in workmanship and materials. Call Revere for complete warranty details.

### Technical Guidance

If you have questions or concerns about the use of FreedomGray on a particular project, please call (800) 448-1776, ext. 2474 or ext. 2707.

### Do NOT use FreedomGray

- 1) Below plain or pre-patinated copper.
- 2) In areas subject to impingement (e.g., in areas where water falls off a higher roof onto FreedomGray)
- 3) In areas of concentrated or abrasive flow (such as in valleys on slate or tile roofs)
- 4) Below or next to fire retardant treated (FRT) lumber, including FRT cedar shingles and siding.

### Cautionary Uses:

- 1) Interior applications where the pre-weather Paint may be objectionable and/or will not Break down and allow natural weathering of the Tin/zinc alloy.
- 2) Soffits and similar "protected" applications where weathering will be extremely slow (if at all)

### Copper & Common Sense

Since 1945, Revere has published **Copper & Common Sense**, which is now the industry's most widely referenced sheet copper design manual. To learn how to obtain the latest edition, call, fax, or e-mail Revere at the address below.



### Revere Copper Products, Inc.

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reverecopper.com

FreedomGray is a trademark of Revere Copper Products, Inc. Z-T Alloy is the registered trade name for Follansbee Steel's patented zinc/tin alloy and the method of applying it to architectural copper.