



Designation: B882 – 24

Standard Specification for Pre-Patinated Copper for Architectural Applications¹

This standard is issued under the fixed designation B882; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope*

1.1 This specification establishes the requirements for mill-produced pre-patinated (artificially aged) copper sheet and strip in ounce-weight or other standard mill-defined thicknesses supplied in flat lengths for roofing, flashing, and other architectural applications.

1.2 The pre-patinated surface is the result of chemical reaction with the copper and shall be applied on one side of the product.

1.2.1 The pre-patinated surface formed is comparable in color and ability to be bent or formed to the surface formed in naturally occurring patinated copper.

1.3 The pre-patinated surface is not the result of industrially applied artificial coatings, similar to paint or any other finishes that prevent interaction between the copper and the climate.

1.4 Materials made to this specification are not intended to be used for electrical applications.

1.5 *Units*—The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units, which are provided for information only and are not considered standard.

NOTE 1—A companion specification for copper sheet and strip for building construction is Specification B370.

1.6 The following safety hazard caveat pertains only to the test method portion, Section 12, of this specification: *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.7 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

¹ This specification is under the jurisdiction of ASTM Committee B05 on Copper and Copper Alloys and is the direct responsibility of Subcommittee B05.01 on Plate, Sheet, and Strip.

Current edition approved July 1, 2024. Published July 2024. Originally approved in 1997. Last previous edition approved in 2018 as B882 – 10 (2018). DOI: 10.1520/B0882-24.

2. Referenced Documents

2.1 ASTM Standards:²

B248 Specification for General Requirements for Wrought Copper and Copper-Alloy Plate, Sheet, Strip, and Rolled Bar

B370 Specification for Copper Sheet and Strip for Building Construction

B571 Practice for Qualitative Adhesion Testing of Metallic Coatings

B601 Classification for Temper Designations for Copper and Copper Alloys—Wrought and Cast

B846 Terminology for Copper and Copper Alloys

E8/E8M Test Methods for Tension Testing of Metallic Materials

E478 Test Methods for Chemical Analysis of Copper Alloys

G152 Practice for Operating Open Flame Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials

G153 Practice for Operating Enclosed Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials

3. Terminology

3.1 Definitions:

3.1.1 For definitions of terms related to copper and copper alloys, refer to Terminology B846.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *pre-patinated copper, n*—copper that has been artificially aged at a mill, that is climate controlled and monitored to produce a protective surface that is within the typical range of colors spanning from brown, through green and blue tones.

4. General Requirements

4.1 The following sections of Specification B248 constitute a part of this specification:

4.1.1 Sampling,

4.1.2 Number of Tests and Retests,

4.1.3 Specimen Preparation,

4.1.4 Test Methods,

4.1.5 Significance of Numerical Limits,

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at www.astm.org/contact. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

*A Summary of Changes section appears at the end of this standard