



Designation: B 96/B 96M – 99

Standard Specification for Copper-Silicon Alloy Plate, Sheet, Strip, and Rolled Bar for General Purposes and Pressure Vessels¹

This standard is issued under the fixed designation B 96/B 96M; 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 copper-silicon alloy plate, sheet, strip, and rolled bar for drawing, forming, stamping, bending, and general engineering applications, and for pressure vessel applications. The alloys involved are copper alloys UNS Nos. C65100, C65400, and C65500.

1.2 When product is ordered for ASME Boiler and Pressure Vessel Code applications, consult the Code² for applicable alloys.

1.3 The values stated in inch-pound or SI units are to be regarded separately as standard. Within the text, SI units are shown in brackets. The values in each system are not exactly equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in nonconformance with the specification.

1.4 The following safety hazard caveat pertains only to the test methods described in Section 11 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 and health practices and determine the applicability of regulatory limitations prior to its use.*

2. Referenced Documents

2.1 ASTM Standards:

B 248 Specification for General Requirements for Wrought Copper and Copper-Alloy Plate, Sheet, Strip, and Rolled Bar³

B 248M Specification for General Requirements for Wrought Copper and Copper-Alloy Plate, Sheet, Strip, and Rolled Bar [Metric]³

B 601 Practice for Temper Designations for Copper and Copper Alloys—Wrought and Cast³

B 846 Terminology for Copper and Copper Alloys³

E 54 Test Methods for Chemical Analysis of Special

Brasses and Bronzes⁴

E 62 Test Methods for Chemical Analysis of Copper and Copper Alloys (Photometric Method)⁴

E 118 Test Methods for Chemical Analysis of Copper-Chromium Alloys⁴

E 478 Test Methods for Chemical Analysis of Copper Alloys⁵

3. Ordering Information

3.1 Orders for products under this specification shall include the following information:

3.1.1 ASTM designation and year of issue,

3.1.2 Copper Alloy UNS No. (Section 1),

3.1.3 Temper (Section 6),

3.1.4 Dimensions: Thickness, Width, and Length (Section 9),

3.1.5 Finish (Section 10),

3.1.6 Type of edge, if required: slit, sheared, sawed, square corners, rounded corners, rounded edges or full rounded edges (9.6),

3.1.7 How furnished (straight lengths or coils),

3.1.8 Weight (9.7),

3.2 The following options are available, and when required, are to be specified in the contract or purchase order at the time of placing of the order:

3.2.1 Mill test (Specifications B 248 or B 248M),

3.2.2 Certification (Specifications B 248 or B 248M),

3.2.3 Product identification (Specifications B 248 or B 248M),

3.2.4 Pressure vessel use, if applicable² (1.2, 9.1, 9.2.1, and 9.7.1),

3.2.5 Whether 0.2 % yield strength is required, and

3.2.6 When product is purchased for agencies of the U.S. Government (Section 8).

4. General Requirements

4.1 The following sections of either Specification B 248 or B 248M constitute a part of this specification:

4.1.1 Terminology,

4.1.2 Materials and Manufacture,

4.1.3 Dimensions, Mass, and Permissible Variations,

¹ This specification is under the jurisdiction of ASTM Committee B-5 on Copper and Copper Alloys and is the direct responsibility of Subcommittee B05.01 on Plate, Sheet, and Strip.

Current edition approved June 10, 1999. Published August 1999. Originally published as B 96 – 34 T. Last previous edition B 96 – 93.

² For ASME Boiler and Pressure Vessel Code applications see related Specification SB-96 in Section 11 of that Code.

³ Annual Book of ASTM Standards, Vol 02.01.

⁴ Annual Book of ASTM Standards, Vol 03.05.

⁵ Annual Book of ASTM Standards, Vol 03.06.

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