



Designation: B 592 – 98

Standard Specification for Copper-Zinc-Aluminum-Cobalt Plate, Sheet, Strip, and Rolled Bar¹

This standard is issued under the fixed designation B 592; 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 covers the requirements for plate, sheet, strip, and rolled bar in alloy C68800.²

NOTE 1—Since this alloy is frequently used in a variety of applications where yield strength and stress-corrosion resistance may be critical, it is recommended that drawings or samples of the part to be fabricated and details of application be submitted for use in establishing temper and treatment of material.

1.2 Values stated in inch-pound units are to be regarded as the standard. Values given in parentheses are for information only.

2. Referenced Documents

2.1 The following documents of the issue in effect on the date of material purchase form a part of this specification to the extent referenced herein:

2.2 ASTM Standards:

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

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

B 846 Terminology for Copper and Copper Alloys³

E 8 Test Methods of Tension Testing of Metallic Materials⁴

E 18 Test Methods for Rockwell Hardness and Rockwell Superficial Hardness of Metallic Materials⁴

E 75 Test Methods for Chemical Analysis of Copper-Nickel and Copper-Nickel-Zinc Alloys⁵

E 76 Test Methods for Chemical Analysis of Nickel-Copper Alloys

E 112 Test Methods for Determining Average Grain Size⁴

E 255 Practice for Sampling Copper and Copper Alloys for the Determination of Chemical Composition⁵

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 March 10, 1998. Published January 1999. Originally published as B 592 – 73. Last previous edition B 592 – 93.

² The UNS system for copper and copper alloys (see Practice E 527) is a simple expansion of the former standard designation system accomplished by the addition of a prefix “C” and a suffix “00.” The suffix can be used to accommodate composition variations of the base alloy.

³ Annual Book of ASTM Standards, Vol 02.01.

⁴ Annual Book of ASTM Standards, Vol 03.01.

⁵ Annual Book of ASTM Standards, Vol 03.05.

E 478 Test Methods for Chemical Analysis of Copper Alloys⁶

E 527 Practice for Numbering Metals and Alloys (UNS)

3. Terminology

3.1 *Definitions*—For definitions of terms used in this specification, refer to Terminology B 846.

3.2 *Definition of Term Specific to This Standard:*

3.2.1 *capable of*—having the properties necessary for conformance to specification requirements when subjected to a referenced test method.

4. General Requirements

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

4.1.1 Terminology—Definitions,

4.1.2 Materials and Manufacturing,

4.1.3 Workmanship, Finish, and Appearance,

4.1.4 Sampling, except for chemical analysis,

4.1.5 Number of Tests and Retests,

4.1.6 Specimen Preparation,

4.1.7 Test Methods, except for chemical analysis,

4.1.8 Significance of Numerical Limits,

4.1.9 Inspection,

4.1.10 Rejection and Rehearing,

4.1.11 Certification,

4.1.12 Test Reports (Mill),

4.1.13 Packaging and Package Marking, and

4.1.14 Supplementary Requirements.

4.2 In addition, when a section with a title identical to that referenced in 4.1, above, appears in this specification, it contains additional requirements which supplement those appearing in Specification B 248.

5. Ordering Information

5.1 Contracts or purchase orders for product under this specification should include the following information:

5.1.1 ASTM designation and year of issue (for example, B 592 - XX),

5.1.2 Copper Alloy UNS No. designation (for example, C68800),

5.1.3 Temper (see Section 8),

⁶ Annual Book of ASTM Standards, Vol 03.06.

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