



Standard Specification for Copper-Cobalt-Beryllium Alloy and Copper-Nickel-Beryllium Alloy Strip and Sheet¹

This standard is issued under the fixed designation B 768; 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.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope*

1.1 This specification establishes the requirements for copper-cobalt-beryllium and copper-nickel-beryllium strip and sheet. The following alloys are covered:

Copper Alloy UNS No. ²	Nominal Composition, %		
	Beryllium	Cobalt	Nickel
C17410	0.3	0.5	...
C17450	0.3	...	0.8
C17460	0.3	...	1.2

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

1.3 The following safety hazard caveat pertains only to the test methods described in this specification:

1.3.1 *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 use.*

2. Referenced Documents

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

2.2 *ASTM Standards:*³

B 194 Specification for Copper-Beryllium Alloy Plate, Sheet, Strip and Rolled Bar

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

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.

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

B 601 Classification for Temper Designations for Copper and Copper Alloys—Wrought and Cast
B 846 Terminology for Copper and Copper Alloys
E 8 Test Methods for Tension Testing of Metallic Materials
E 255 Practice for Sampling Copper and Copper Alloys for Determination of Chemical Composition
E 527 Practice for Numbering Metals and Alloys (UNS)

3. Terminology

3.1 For terms related to copper and copper alloys, refer to Terminology B 846.

4. General Requirements

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

- 4.1.1 Terminology.
- 4.1.2 Materials and Manufacture.
- 4.1.3 Workmanship, Finish, and Appearance.
- 4.1.4 Sampling.
- 4.1.5 Number of Tests and Retests.
- 4.1.6 Specimen Preparation.
- 4.1.7 Test Methods.
- 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 Report.
- 4.1.13 Packaging and Marking.
- 4.1.14 Supplementary Requirements.

4.2 In addition, when a section with a title identical to that referenced in 5.1 appears in this specification, it contains additional requirements which supplement those appearing in Specification B 248.

5. Ordering Information

5.1 Orders for material under this specification should include the following information:

- 5.1.1 Quantity,
- 5.1.2 Copper alloy UNS numbers (1.1),
- 5.1.3 Form of material: strip or sheet,
- 5.1.4 Temper (Section 8),
- 5.1.5 Tension test, if required (Section 9),

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