



## Standard Specification for Copper-Zirconium Alloy Sheet and Strip<sup>1</sup>

This standard is issued under the fixed designation B 747; 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 sheet and strip of Copper Alloy UNS C15100.

1.2 Values stated in inch-pound units are the standard. SI values given in parentheses are for information only.

### 2. Referenced Documents

#### 2.1 ASTM Standards:

B 193 Test Method for Resistivity of Electrical Conductor Materials<sup>2</sup>

B 248 Specification for General Requirements for Wrought Copper and Copper-Alloy Plate, Sheet, Strip, and Rolled Bar<sup>3</sup>

B 601 Practice for Temper Designations for Copper and Copper Alloys—Wrought and Cast<sup>3</sup>

B 846 Terminology for Copper and Copper Alloys<sup>3</sup>

E 3 Guide for Preparation of Metallographic Specimens<sup>4</sup>

E 8 Test Methods for Tension Testing of Metallic Materials<sup>4</sup>

E 53 Test Methods for Chemical Analysis of Copper<sup>5</sup>

E 62 Test Methods for Chemical Analysis of Copper and Copper Alloys (Photometric Methods)<sup>5</sup>

E 112 Test Methods for Determining Average Grain Size<sup>4</sup>

E 255 Practice for Sampling of Copper and Copper Alloys for Determination of Chemical Composition<sup>5</sup>

E 478 Test Methods for Chemical Analysis of Copper Alloys<sup>5</sup>

E 527 Practice for Numbering Metals and Alloys (UNS)<sup>6</sup>

### 3. General Requirements

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

3.1.1 Terminology,

3.1.2 Workmanship, Finish, and Appearance,

3.1.3 Sampling,

3.1.4 Number of Tests and Retests,

3.1.5 Specimen Preparation,

3.1.6 Significance of Numerical Limits,

3.1.7 Inspection,

3.1.8 Rejection and Rehearing,

3.1.9 Certification,

3.1.10 Test Reports,

3.1.11 Packaging and Package Marking, and

3.1.12 Supplementary Requirements.

### 4. Terminology

4.1 For definition of terms related to copper and copper alloys, refer to Terminology B 846.

### 5. Ordering Information

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

5.1.1 ASTM designation number and year of issue,

5.1.2 Quantity (of each size),

5.1.3 Copper Alloy UNS No. (see 1.1),

5.1.4 Form of material (sheet or strip),

5.1.5 Temper (see 8.1),

5.1.6 Dimensions (thickness, width, length, if applicable),

5.1.7 How furnished (rolls, specific lengths with or without ends, stock lengths with or without ends),

5.1.8 Type of edge, if required (slit, sheared, sawed, square corners, rounded corners, rounded edges, or full-rounded edges),

5.1.9 Type of width and straightness tolerances, if required (slit metal tolerances, square sheared metal tolerances, sawed metal tolerances, straightened or edge-rolled metal tolerances), and

5.2 In addition, when material is purchased for the U.S. Government, it shall conform to the Supplemental requirements as defined in Specification B 248 when specified in the contract or purchase order.

### 6. Material and Manufacture

#### 6.1 Material:

6.1.1 The material of manufacture shall be a cast bar, slab, cake, billet, etc. of Copper Alloy UNS No. C15100 of such purity and soundness as to be suitable for processing in to the products prescribed herein.

6.1.2 In the event heat identification or traceability is

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<sup>2</sup> *Annual Book of ASTM Standards*, Vol 02.03.

<sup>3</sup> *Annual Book of ASTM Standards*, Vol 02.01.

<sup>4</sup> *Annual Book of ASTM Standards*, Vol 03.01.

<sup>5</sup> *Annual Book of ASTM Standards*, Vol 03.05.

<sup>6</sup> *Annual Book of ASTM Standards*, Vol 01.01.