



Designation: B 455 – 01

Standard Specification for Copper-Zinc-Lead Alloy (Leaded-Brass) Extruded Shapes¹

This standard is issued under the fixed designation B 455; 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 approval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope *

1.1 This specification establishes the requirements for extruded leaded-brass angles, channels, and other architectural shapes of solid cross section produced in Copper Alloy UNS Nos. C38000 and C38500.

1.1.1 Pipe, tube, or other hollow section products are not included in this specification.

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

2. Referenced Documents

2.1 *ASTM Standards*:

B 249/249M Specification for General Requirements for Wrought Copper and Copper Alloy Rod, Bar, Shapes, and Forgings²

B 601 Classification for Temper Designations for Copper and Copper Alloys—Wrought and Cast²

B 846 Terminology for Copper and Copper Alloys²

E 8 Test Methods for Tension Testing of Metallic Materials³

E 54 Test Methods for Chemical Analysis of Special Brasses and Bronzes⁴

E 255 Practice for Sampling Copper and Copper Alloys for the Determination of Chemical Composition⁴

E 478 Test Methods for Chemical Analysis for Copper Alloys⁵

3. General Requirements

3.1 The following sections of Specification B 249/249M constitute a part of this specification:

3.1.1 Terminology,

- 3.1.2 Materials and Manufacture,
- 3.1.3 Workmanship, Finish, and Appearance,
- 3.1.4 Sampling,
- 3.1.5 Number of Tests and Retests,
- 3.1.6 Specimen Preparation,
- 3.1.7 Test Methods,
- 3.1.8 Significance of Numerical Limits,
- 3.1.9 Inspection,
- 3.1.10 Rejection and Rehearing,
- 3.1.11 Certification,
- 3.1.12 Test Report, and
- 3.1.13 Packaging and Package Marking.

3.2 In addition, when a section with a title identical to that referenced in 3.1 appears in this specification, it contains additional information which supplements that appearing in Specification B 249/249M. In case of conflict this specification shall prevail.

4. Terminology

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

5. Ordering Information

5.1 When placing orders for products under this specification include the following information:

5.1.1 ASTM designation and year of issue (for example, B 455 – 01),

5.1.2 Copper alloy UNS No. designation (for example, C38000),

5.1.3 Temper (Section 7),

5.1.4 Form, dimensions, and tolerances (Section 9), and

5.1.5 Quantity; total weight or number of pieces for each form, temper, size, and copper alloy.

5.2 The following options are available in this specification and shall be included in the contract or purchase order when required:

5.2.1 Intended end use or application,

5.2.2 Heat identification or traceability details (Specification B 249/249M),

5.2.3 Certification (Specification B 249/249M), and

5.2.4 Mill test report (Specification B 249/249M).

¹ This specification is under the jurisdiction of ASTM Committee B05 on Copper and Copper Alloys and is the direct responsibility of Subcommittee B05.02 on Rod, Bar, Wire, Shapes, and Forgings.

Current edition approved Oct. 10, 2001. Published December 2001. Originally published as B 455 – 67. Last previous edition B 455 – 96.

² *Annual Book of ASTM Standards*, Vol 02.01.

³ *Annual Book of ASTM Standards*, Vol 03.01.

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.