



Designation: B455/B455M – 20

# Standard Specification for Copper-Zinc-Lead Alloy (Leaded-Brass) Extruded Shapes<sup>1</sup>

This standard is issued under the fixed designation B455/B455M; 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 ( $\epsilon$ ) 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 either inch-pound units or SI units are to be regarded separately as standard. Within the text, SI units are shown in brackets. The values stated in each system are not necessarily exact equivalents; therefore, to ensure conformance with the standard, each system shall be used independently of the other, and values from the two systems shall not be combined.

1.3 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

## 2. Referenced Documents

2.1 *ASTM Standards:*<sup>2</sup>

[B249/B249M Specification for General Requirements for Wrought Copper and Copper-Alloy Rod, Bar, Shapes and Forgings](#)

[B601 Classification for Temper Designations for Copper and Copper Alloys—Wrought and Cast](#)

[B846 Terminology for Copper and Copper Alloys](#)

[E8/E8M Test Methods for Tension Testing of Metallic Materials](#)

[E54 Test Methods for Chemical Analysis of Special Brasses](#)

<sup>1</sup> 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 April 1, 2020. Published April 2020. Originally approved in 1967. Last previous edition approved in 2017 as B455–10 (2017). DOI: 10.1520/B0455\_B0455M–20.

<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

[and Bronzes \(Withdrawn 2002\)](#)<sup>3</sup>

[E255 Practice for Sampling Copper and Copper Alloys for the Determination of Chemical Composition](#)

[E478 Test Methods for Chemical Analysis of Copper Alloys](#)

## 3. General Requirements

3.1 The following sections of Specification [B249/B249M](#) 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 Mill Test Report

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 [B249/B249M](#). 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 [B846](#).

## 5. Ordering Information

5.1 Include the following information when placing orders for product under this specification, as applicable:

5.1.1 ASTM designation and year of issue (for example, B455 – 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

<sup>3</sup> The last approved version of this historical standard is referenced on [www.astm.org](http://www.astm.org).

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