Designation: B 209 – 02$^{\epsilon 1}$

# Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate[1]

This standard is issued under the fixed designation B 209; 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.*

ϵ[1] NOTE—The Summary of Changes was updated editorially September 2002.

## 1. Scope *

1.1 This specification[2] covers aluminum and aluminum-alloy flat sheet, coiled sheet, and plate, in the alloys (Note 1) and tempers shown in Tables 2 and 3, and in the following finishes:

1.1.1 Plate in all alloys and sheet in heat-treatable alloys: mill finish.

1.1.2 Sheet in nonheat-treatable alloys: mill finish, one-side bright mill finish, standard one-side bright finish, and standard two-sides bright finish.

NOTE 1—Throughout this specification use of the term *alloy* in the general sense includes aluminum as well as aluminum alloy.

NOTE 2—See Specification B 632/B 632M for Tread Plate.

1.2 Alloy and temper designations are in accordance with ANSI H35.1. The equivalent Unified Numbering System alloy designations are those of Table 1 preceded by A9, for example, A91100 for aluminum 1100 in accordance with Practice E 527.

1.3 A complete metric companion to Specification B 209 has been developed—B 209M; therefore, no metric equivalents are presented in this specification.

1.4 For acceptance criteria for inclusion of new aluminum and aluminum alloys in this specification, see Annex A2.

## 2. Referenced Documents

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

2.2 *ASTM Standards:*

B 548 Method for Ultrasonic Inspection of Aluminum-Alloy Plate for Pressure Vessels[3]

B 557 Test Methods of Tension Testing Wrought and Cast Aluminum- and Magnesium-Alloy Products[3]

B 594 Practice for Ultrasonic Inspection of Aluminum-Alloy Wrought Products for Aerospace Applications[3]

B 632/B 632M Specification for Aluminum-Alloy Rolled Tread Plate[4]

B 660 Practices for Packaging/Packing of Aluminum and Magnesium Products[3]

B 666/B 666M Practice for Identification Marking of Aluminum and Magnesium Products[3]

B 918 Practice for Heat Treatment of Wrought Aluminum Alloys[3]

E 3 Methods of Preparation of Metallographic Specimens[4]

E 29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications[5]

E 34 Test Methods for Chemical Analysis of Aluminum and Aluminum-Base Alloys[6]

E 55 Practice for Sampling Wrought Nonferrous Metals and Alloys for Determination of Chemical Composition[6]

E 290 Test Method for Semi-Guided Bend Test for Ductility of Metallic Materials[4]

E 407 Test Methods for Microetching Metals and Alloys[4]

E 527 Practice for Numbering Metals and Alloys (UNS)[7]

E 607 Test Method for Optical Emission Spectrometric Analysis of Aluminum and Aluminum Alloys by the Point-to-Plane Technique, Nitrogen Atmosphere[8]

E 716 Practices for Sampling Aluminum and Aluminum Alloys for Spectrochemical Analysis[8]

E 1004 Test Method for Electromagnetic (Eddy-Current) Measurements of Electrical Conductivity[9]

E 1251 Test Method for Optical Emission Spectrometric Analysis of Aluminum and Aluminum Alloys by the Argon Atmosphere, Point-to-Plane, Unipolar Self-Initiating Capacitor Discharge[8]

G 34 Test Method for Exfoliation Corrosion Susceptibility

[1] This specification is under the jurisdiction of ASTM Committee B07 on Light Metals and Alloys and is the direct responsibility of Subcommittee B07.03 on Aluminum Alloy Wrought Products.

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[2] For ASME Boiler and Pressure Vessel Code applications see related Specification SB-209 in Section II of that Code.

[3] *Annual Book of ASTM Standards*, Vol 02.02.

[4] *Annual Book of ASTM Standards*, Vol 03.01.

[5] *Annual Book of ASTM Standards*, Vol 14.02.

[6] *Annual Book of ASTM Standards*, Vol 03.05.

[7] *Annual Book of ASTM Standards*, Vol 01.01.

[8] *Annual Book of ASTM Standards*, Vol 03.06.

[9] *Annual Book of ASTM Standards*, Vol 03.03.

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

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