



Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate¹

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.

1. Scope*

1.1 This specification² 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.

NOTE 3—See Specification B 928/B 928M for marine sheet and plate. Due to additional corrosion testing required, it is not intended that Specification B 209 be used for marine sheet and 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—Specification 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 form a part of this specification to the extent referenced herein:

2.2 *ASTM Standards*:³

B 548 Method for Ultrasonic Inspection of Aluminum-

Alloy Plate for Pressure Vessels

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

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

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

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

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

B 881 Terminology Relating to Aluminum- and Magnesium-Alloy Products

B 918 Practice for Heat Treatment of Wrought Aluminum Alloys

B 928/B 928M Specification for High Magnesium Aluminum-Alloy Sheet and Plate for Marine Service

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

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

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

E 290 Test Methods for Bend Testing of Material for Ductility

E 527 Practice for Numbering Metals and Alloys (UNS)

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

E 716 Practices for Sampling Aluminum and Aluminum Alloys for Spectrochemical Analysis

E 1004 Practice for Determining Electrical Conductivity Using the Electromagnetic (Eddy-Current) Method

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

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.

Current edition approved March 1, 2004. Published March 2004. Originally approved in 1946. Last previous edition approved in 2002 as B 209 – 02a.

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

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.