



AEROSPACE MATERIAL SPECIFICATION

AMS4206™

REV. C

Issued	1999-01
Revised	2017-10

Superseding AMS4206B

Aluminum Alloy, Plate (7055-T7751)
8.0Zn - 2.3Cu - 2.0Mg - 0.16Zr
Solution Heat Treated, Stress Relieved, and Overaged
(Composition similar to UNS A97055)

RATIONALE

AMS4206C revises Properties (3.4), Tables 3 and 4, Sampling and Testing (4.3), Reports (4.4), Identification (5.1.1), and is a Five-Year Review and update of this specification.

1. SCOPE

1.1 Form

This specification covers an aluminum alloy in the form of plate 0.500 to 1.500 inches (12.70 to 38.10 mm) inclusive, in thickness (see 8.4).

1.2 Application

This product has been used typically for parts requiring a high level of mechanical properties and moderate exfoliation corrosion resistance, but usage is not limited to such applications.

2. APPLICABLE DOCUMENTS

The issue of the following documents in effect on the date of the purchase order forms a part of this specification to the extent specified herein. The supplier may work to a subsequent revision of a document unless a specific document issue is specified. When the referenced document has been cancelled and no superseding document has been specified, the last published issue of that document shall apply.

2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

AMS2355 Quality Assurance, Sampling and Testing Aluminum Alloys and Magnesium Alloy Wrought Products (Except Forging Stock), and Rolled, Forged, or Flash Welded Rings

ARP1917 Clarification of Terms Used in Aerospace Metals Specifications

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2.2 ANSI Accredited Publications

Copies of these documents are available online at <http://webstore.ansi.org/>.

ANSI H35.2 Dimensional Tolerances for Aluminum Mill Products

ANSI H35.2M Dimensional Tolerances for Aluminum Mill Products (Metric)

2.3 ASTM Publications

Available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, Tel: 610-832-9585, www.astm.org.

ASTM B594 Ultrasonic Inspection of Aluminum-Alloy Wrought Products

ASTM B645 Linear-Elastic Plane Strain Fracture Toughness Testing of Aluminum Alloys

ASTM B666/B666M Identification Marking of Aluminum and Magnesium Products

ASTM E399 Linear-Elastic Plane-Strain Fracture Toughness K_{Ic} of Metallic Materials

ASTM E561 K-R Curve Determination

ASTM G34 Exfoliation Corrosion Susceptibility in 2XXX and 7XXX Series Aluminum Alloys (EXCO Test)

3. TECHNICAL REQUIREMENTS

3.1 Composition

Shall conform to the percentages by weight shown in Table 1, determined in accordance with AMS2355.

Table 1 - Composition

Element	Min	Max
Silicon	--	0.10
Iron	--	0.15
Copper	2.0	2.6
Manganese	--	0.05
Magnesium	1.8	2.3
Chromium	--	0.04
Zinc	7.6	8.4
Titanium	--	0.06
Zirconium	0.08	0.25
Other Elements, each	--	0.05
Other Elements, total	--	0.15
Aluminum	remainder	