

# AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.  
29 West 39th Street  
New York City

## AMS 4015c

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### ALUMINUM ALLOY SHEET 2.5Mg - 0.25Cr (52S-0)

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
2. APPLICATION: Primarily for formed parts where welding, moderate strength, and good resistance to corrosion are required.
3. COMPOSITION:

Magnesium	2.2 - 2.8
Chromium	0.15 - 0.35
Iron + Silicon	0.45 max
Manganese	0.10 max
Copper	0.10 max
Zinc	0.10 max
Other Impurities, each	0.05 max
Other Impurities, total	0.15 max
Aluminum	remainder

4. CONDITION: Annealed and, unless otherwise specified, mill finish.
5. TECHNICAL REQUIREMENTS:

- 5.1 Tensile Properties: Sheet shall conform to the following requirements. Test specimens shall conform to ASTM E8, except from sheet less than 3/4 in. wide. Elongation requirements apply only to sheet 3/4 in. and over in width.

Nominal Thickness Inch	Tensile Strength psi, max	Elongation % in 2 in., min
0.019 and under	31,000	15
Over 0.019 - 0.031, incl	31,000	18
Over 0.031 - 0.249, incl	31,000	20

- 5.2 Bending: Sheet shall withstand, without cracking, bending at room temperature flat on itself with axis of bend parallel to direction of rolling.
6. QUALITY: Material shall be uniform in quality and condition, clean, sound, smooth, and free from foreign materials and from internal and external defects detrimental to fabrication or to performance of parts.
7. TOLERANCES: Unless otherwise specified, tolerances shall conform to the latest issue of AMS 2202 as applicable. Thickness tolerances shall conform to Table II.

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