

AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS 4006B

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ALUMINUM ALLOY SHEET 1.25Mn (3S-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 spinnings and severely formed parts where good weldability is required.
- 3. COMPOSITION:**

Manganese	1.0 - 1.5
Iron	0.70 max
Silicon	0.60 max
Copper	0.20 max
Zinc	0.10 max
Other Elements, each	0.05 max
Other Elements, 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
0.007 and under	19,000	14
Over 0.007 to 0.012, incl	19,000	18
Over 0.012 to 0.031, incl	19,000	20
Over 0.031 to 0.050, incl	19,000	23
Over 0.050 to 0.249, incl	19,000	25

- 5.2 Bending:** Sheet shall withstand, without cracking, bending at room temperature flat on itself with axes of bends both perpendicular and parallel to the 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 I.

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