AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS 4003B

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ALUMINUM SHEET
(2S-H14)

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 and for welding.

3. COMPOSITION:

Aluminum	99.0 min
Iron plus Silicon	1.0 max
Copper	0.20 max
Manganese	0.10 max
Zinc	0.10 max
Other Impurities, each	0.05 max
Other Impurities, total	0.15 max

4. CONDITION: Half hard 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, and shall be cut parallel to the direction of rolling. Elongation requirements apply only to sheet 3/4 in. and over in width.

Nominal Thickness Inch	Tensile Strength psi, min	Elongation % in 2 in., min
0.012 and under	16,000	1
Over 0.012 to 0.019, incl	16,000	2
Over 0.019 to 0.031, incl	16,000	3
Over 0.031 to 0.050, incl	16,000	4
Over 0.050 to 0.113 incl	16,000	5
Over 0.113 to 0.249, incl	16,000	6

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.