

AERONAUTICAL MATERIAL SPECIFICATION

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

AMS 4001B

Issued 10-1-43

Revised 10-1-51

ALUMINUM SHEET (2S-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 severely 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:** 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	15,500	15
Over 0.019 to 0.031, incl	15,500	20
Over 0.031 to 0.050, incl	15,500	25
Over 0.050 to 0.249, incl	15,500	30

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.

Section 7C of the SAE Technical Board rules provides that: "All technical reports, including standards approved and practices recommended, are advisory only. Their use by anyone engaged in industry or trade is entirely voluntary. There is no agreement to adhere to any SAE standard or recommended practice, and no commitment to conform to or be guided by any technical report. In formulating and approving technical reports, the Board and its Committees will not investigate or consider patents which may apply to the subject matter. Prospective users of the report are responsible for protecting themselves against liability for infringement of patents."