

# AERONAUTICAL MATERIAL SPECIFICATION

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

## AMS 4000 A

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### ALUMINUM SHEET Annealed

1. **ACKNOWLEDGMENT:** A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
2. **COMPOSITION:**  
Aluminum 99.7% min.
3. **CONDITION:** (a) Annealed and unless otherwise specified, mill finish.  
(b) Tensile strength shall not exceed 12,000 psi. Test specimens shall conform to ASTM E-8, except from sheet less than 3/4 inch in width.  
(c) Sheet shall withstand, without cracking, bending at room temperature flat on itself with axis of bend parallel to direction of rolling.
4. **QUALITY:** (a) Sheet shall be uniform in quality and condition, clean, sound, and free from foreign material and from internal and external defects detrimental to fabrication or to the appearance and performance of parts. Sheet revealing defects during fabrication shall be subject to rejection.  
(b) Sheet and parts made therefrom shall be subjected to inspection by any method which will reveal defects.
5. **TOLERANCES:** Unless otherwise specified, tolerances shall conform to the latest revision of AMS 2202 as applicable. Thickness tolerances shall conform to Table I.
6. **REPORTS:** (a) Unless otherwise specified, the vendor of sheet shall furnish three copies of a notarized report stating that the sheet meets all the requirements of this specification. This report shall include the purchase order number, material specification number, size and quantity.  
(b) Unless otherwise specified, the vendor of finished or semi-finished parts shall furnish with each shipment three copies of a notarized report showing the purchase order number, material specification number, contractor or other direct supplier of sheet, part number, and quantity. When sheet for making parts is produced or purchased by the parts vendor, the vendor shall inspect each lot of sheet to determine conformance to the requirements of this specification, and shall include in the above report a certification that the sheet conforms, or shall include copies of the laboratory report showing the results of tests to determine conformance.
7. **IDENTIFICATION:** (a) Unless otherwise specified, each flat sheet shall be marked with the manufacturer's identification, and, in addition, the alloy name or number, or AMS 4000, the thickness in inches, and the temper. The characters shall be not less than 3/8 inch in height and shall be applied in rows of constantly recurring symbols from edge of the sheet to the opposite edge with the rows spaced such that no piece larger than 8 inches square could be cut from the sheet without bearing the alloy identification, or AMS 4000, and the temper. The manufacturer's identification and the thickness of the piece shall appear in rows not more than

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