



# AEROSPACE MATERIAL SPECIFICATIONS

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc.

485 Lexington Ave., New York, N. Y. 10017

## AMS 4001C

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### ALUMINUM SHEET AND PLATE (1100-0)

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 parts requiring welding.
3. **COMPOSITION:**

	min	max
Aluminum	99.00	--
Iron + Silicon	--	1.0
Copper	--	0.20
Zinc	--	0.10
Manganese	--	0.05
Other Impurities, each	--	0.05
Other Impurities, total	--	0.15

4. **CONDITION:** Annealed.

5. **TECHNICAL REQUIREMENTS:** The product shall conform to the following requirements; tensile properties shall be determined in accordance with the latest issue of AMS 2355.

5.1 **Tensile Properties:**

Nominal Thickness Inches	Tensile Strength, psi		Elongation % in 2 in. or 4D, min
	min	max	
0.006 to 0.019, incl	11,000	15,500	15
Over 0.019 to 0.031, incl	11,000	15,500	20
Over 0.031 to 0.050, incl	11,000	15,500	25
Over 0.050 to 0.249, incl	11,000	15,500	30
Over 0.249 to 3.000, incl	11,000	15,500	28

- 5.2 **Bending:** Material 0.249 in. and under in thickness shall be capable of withstanding, without cracking, bending at room temperature flat on itself with axis of bend parallel to the direction of rolling.

6. **QUALITY:** Material shall be uniform in quality and condition, clean, sound, and free from foreign materials and from internal and external imperfections detrimental to fabrication or to performance of parts.

7. **TOLERANCES:** Unless otherwise specified, tolerances shall conform to all applicable requirements of the latest issue of AMS 2202.

8. **REPORTS:**

- 8.1 Unless otherwise specified, the vendor of the product shall furnish with each shipment three copies of a report stating that the product conforms to the chemical composition and technical requirements of this specification. This report shall include the purchase order number, material specification number, thickness, size, and quantity.