



AEROSPACE MATERIAL SPECIFICATIONS

SOCIETY OF AUTOMOTIVE ENGINEERS, Inc.

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

AMS 4003D

Superseding AMS 4003C

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ALUMINUM SHEET AND PLATE (1100-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 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:** Strain hardened (half-hard).
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 Inch	Tensile Strength, psi		Elongation % in 2 in. or 4D, min
	min	max	
0.009 to 0.012, incl	16,000	21,000	1
Over 0.012 to 0.019, incl	16,000	21,000	2
Over 0.019 to 0.031, incl	16,000	21,000	3
Over 0.031 to 0.050, incl	16,000	21,000	4
Over 0.050 to 0.113, incl	16,000	21,000	5
Over 0.113 to 0.499, incl	16,000	21,000	6
Over 0.499 to 1.000, incl	16,000	21,000	10

- 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.