



AEROSPACE MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
485 LEXINGTON AVENUE, NEW YORK, N. Y. 10017

AMS 4056C

Superseding AMS 4056B

Issued 1-15-60

Revised 5-1-68

ALUMINUM ALLOY SHEET AND PLATE

4.4Mg - 0.65Mn - 0.15Cr (5083-0)

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 parts requiring moderate forming and where welding, moderate strength, and good resistance to corrosion are important. Excessive cold work or prolonged heating in the temperature range of 150 - 300 F (66 - 149 C) may cause susceptibility to stress corrosion.
3. **COMPOSITION:**

	min	max
Magnesium	4.0	4.9
Manganese	0.30	1.0
Chromium	0.05	0.25
Iron	--	0.40
Silicon	--	0.40
Zinc	--	0.25
Titanium	--	0.15
Copper	--	0.10
Other Impurities, each	--	0.05
Other Impurities, total	--	0.15
Aluminum	remainder	

4. **CONDITION:** Annealed and, unless otherwise specified, mill finish.
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		Yield Strength at 0.2% Offset or at Extension Indicated (E = 10,200,000)		Elongation % in 2 in. or 4D, min	
			psi	Extension Under Load in. in 2 in.		
0.050 to 1.500, incl	40,000	51,000	18,000	29,000	0.0075 - 0.0097	16
Over 1.500 to 3.000, incl	39,000	50,000	17,000	29,000	0.0073 - 0.0097	16
Over 3.000 to 4.000, incl	38,000	--	16,000	--	0.0071 --	16
Over 4.000 to 5.000, incl	38,000	--	16,000	--	0.0071 --	14
Over 5.000 to 7.000, incl	37,000	--	15,000	--	0.0069 --	14
Over 7.000 to 8.000, incl	36,000	--	14,000	--	0.0067 --	12

- 5.1.1 If sizes other than those shown are ordered, tensile property requirements shall be as agreed upon by purchaser and vendor.
- 5.1.2 When a dispute occurs between purchaser and vendor over the yield strength values, yield strength determined by the offset method shall apply.

SAE Technical Board rules provide 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."