



# AEROSPACE MATERIAL SPECIFICATION

## AMS 4056C

Superseding AMS 4056B

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

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### 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.

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