SAE The Engineering Resource For Advancing Mobility

400 COMMONWEALTH DRIVE WARRENDALE PA 15096

AEROSPACE MATERIAL SPECIFICATION

AMS 4047B

Issued 2-15-53
Revised 10-1-81

ALUMINUM ALLOY SHEET AND PLATE, ALUMINUM ALLOY CLAD, ROLL TAPERED 5.6Zn - 2.5Mg - 1.6Cu - 0.25Cr (Alcald 7075-T6)

This specification was declared "NONCURRENT" by the Aerospace Materials Division, SAE, as of 9-13-63. It is recommended that this specification not be specified for new designs.

This cover sheet should be attached to the "B" revision of the subject specification.

This specification has been declared "CANCELLED" by the Aerospace Materials Division, SAE, as of 10-1-81. By this action, subject specification number and title will be deleted from the active specification index of Aerospace Material Specifications.

AERONAUTICAL
MATERIAL SPECIFICATIONS
SOCIETY OF AUTOMOTIVE ENGINEERS, Inc. 485 Lexington Ave., New York 17, N.Y.

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Revised 1-15-57

ALUMINUM ALLOY SHEET AND PLATE, ALUMINUM ALLOY CLAD, ROLL TAPERED
5.6Zn - 2.5Mg - 1.6Cu - 0.25Cr (Alc 7075-T6)

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 making tapered skins for airfoil surfaces.

3. COMPOSITION:

Core		Cladding	
Zinc	5.1 - 6.1	Zinc	0.8 - 1.3
Magnesium	2.1 - 2.9	Silicon + Iron	0.7 max
Copper	1.2 - 2.0	Magnesium	0.10 max
Chromium	0.18 - 0.40	Copper	0.10 max
Iron	0.7 max	Manganese	0.10 max
Ø Silicon	0.50 max	Other Impurities, each	0.05 max
Manganese	0.30 max	Other Impurities, total	0.15 max
Titanium	0.20 max	Aluminum	remainder
Other Impurities, each	0.05 max		
Other Impurities, total	0.15 max		
Aluminum	remainder		

4. CONDITION: Solution and precipitation heat treated.

5. TECHNICAL REQUIREMENTS:

5.1 Cladding Thickness: After rolling, the average cladding thickness shall be as shown. Routine measurements are not required.

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Total Thickness of Composite Product at Thin End Inches	Cladding Thickness Per Side % of Total Thickness min	max
0.187 and under	3.2	--
Over 0.187 to 0.499, incl	1.2	--
Over 0.499	1.2	3.0

5.2 Tensile Properties: Test specimens shall conform to ASTM E8-54T except from material less than 3/4 in. wide, and shall be cut across the direction of rolling except from material less than 9 in. wide. Elongation requirements apply only to material 3/4 in. and over in width.