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Submitted for recognition as an American National Standard

AEROSPACE MATERIAL SPECIFICATION

AMS 4198

Issued 11-1-70
Revised 1-1-87

ALUMINUM ALLOY SHEET PLATE ALCLAD
4.3Zn - 3.3Mg - 0.6Cu - 0.20Mn - 0.17C (7011 Alclad 7079-0)

This specification has been declared "NONCURRENT" by Aerospace Materials Division, SAE, as of 10-13-86. It is recommended that this specification not be specified for new designs.

This cover sheet should be attached to the subject specification.

This specification is under the jurisdiction of AMS Committee "D".

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AEROSPACE MATERIAL

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1. **ACKNOWLEDGMENT:** A vendor shall mention this specification number in all quotations and when acknowledging purchase orders.
2. **APPLICATION:** Primarily for structural use, including machine tapered parts, where fatigue strength and tensile properties higher than those provided by Alclad 7079-0 are required. Certain design and processing procedures may cause this material to be susceptible to stress corrosion cracking after heat treatment; ARP 823 recommends practices to minimize such conditions.

3. **COMPOSITION:**

Core (7079)		Cladding (7011)	
	min max		min max
Zinc	3.8 - 4.8	Zinc	4.0 - 5.5
Magnesium	2.9 - 3.7	Magnesium	1.0 - 1.6
Copper	0.40 - 0.8	Manganese	0.10 - 0.30
Manganese	0.10 - 0.30	Chromium	0.05 - 0.20
Chromium	0.10 - 0.25	Iron	-- 0.20
Iron	-- 0.40	Silicon	-- 0.15
Silicon	-- 0.30	Copper	-- 0.05
Titanium	-- 0.10	Titanium	-- 0.05
Other Impurities, each	-- 0.05	Other Impurities, each	-- 0.05
Other Impurities, total	-- 0.15	Other Impurities, total	-- 0.15
Aluminum	remainder	Aluminum	remainder

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

Total Thickness of Composite Product Inches	Cladding Thickness Per Side % of Total Thickness	
	min	max
0.015 to 0.062, incl	3.2	--
Over 0.062 to 0.187, incl	2.0	--
Over 0.187 to 0.500, excl	1.2	--
0.500 to 2.000, incl.	1.2	3.0

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