

ALUMINUM ALLOY SHEET AND PLATE, ALCLAD
5.6Zn - 2.5Mg - 1.6Cu - 0.26Cr (7011 Alclad 7075-0)

This specification has been declared "NONCURRENT" by the Aerospace Materials Division, SAE, as of October 1986. It is recommended that this specification not be specified for new designs.

This cover sheet should be attached to the original issue of the subject specification.

Some time ago the aluminum industry standardized on 7008 in lieu of 7011 for strong cladding on 7XXX alloys. Chemistry is somewhat different but properties are essentially the same.

Nonconcurrent refers to those materials which have previously been widely used and which may be required on some existing designs in the future. The Aerospace Materials Division, however, does not recommend these as standard materials for future use in new designs. Each of these "Noncurrent" specifications is available on request from SAE.

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

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AEROSPACE MATERIAL

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SPECIFICATION

AMS 4196

Issued 11-1-70
Revised

ALUMINUM ALLOY SHEET AND PLATE, ALCLAD 5.6Zn - 2.5Mg - 1.6Cu - 0.26Cr (7011 Alclad 7075-0)

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 AMS 4048 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 (7075)		Cladding (7011)	
	min max		min max
Zinc	5.1 - 6.1	Zinc	4.0 - 5.5
Magnesium	2.1 - 2.9	Magnesium	1.0 - 1.6
Copper	1.2 - 2.0	Manganese	0.10 - 0.30
Chromium	0.18 - 0.35	Chromium	0.05 - 0.20
Iron	-- 0.50	Iron	-- 0.20
Silicon	-- 0.40	Silicon	-- 0.15
Manganese	-- 0.30	Copper	-- 0.05
Titanium	-- 0.20	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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