AERONAUTICAL MATERIAL SPECIFICATION

Society of Automotive Engineers, Inc.
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AMS 4001

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ALUMINUM SHEET AND STRIP
(2S-0)

1. ACKNOWLEDGMENT: A vendor must mention this specification number in all quotations and when acknowledging purchase orders.

2. COMPOSITION:

Aluminum	99.0 min
Iron + Silicon	1.0 max
Copper	0.2 max
Manganese	0.10 max
Zinc	0.10 max
Other Impurities, each	0.05 max
Other Impurities, total	0.15 max

3. CONDITION: (a) Soft, conforming to the following physical properties when test specimens are cut across the direction of rolling, except from strips less than 9 inches wide which may be cut lengthwise:

Thickness inch	Tensile Strength lb per sq in., max	Elongation % in 2 in., min
0.006 - 0.019	15,500	15
0.020 - 0.031	15,500	20
0.032 - 0.050	15,500	25
0.051 - 0.249	15,500	30

(b) The material shall not crack when cold bent flat on itself with the axis of the bend parallel to the direction of rolling.

4. QUALITY: The material shall be uniform in quality and temper, commercially flat, clean, sound, smooth, and free from buckles, seams, cracks, laminations, blisters, and other injurious defects within the limits of best commercial manufacturing practices. Material revealing defects during fabrication is subject to rejection.

5. TOLERANCES: The following variations in standard thicknesses are permissible for the widths shown:

	Tolerance in % of nominal thickness (%T) or in inches, plus or minus				
*Standard Thickness inches	Widths up to 36" incl.	Widths over 36" to 54" incl.	Widths over 54" to 72" incl.	Widths over 72" to 90" incl.	Widths over 90" to 102" incl.
0.249, 0.204) 0.188, 0.156)	4%T	5%T	6%T	7%T	8%T
0.125, 0.102	0.0045	0.005	0.007	0.009	0.010
0.091, 0.081	0.003	0.004	0.006	0.008	
0.064, 0.051	0.003	0.004	0.005	0.007	
0.040	0.0025	0.003	0.004		
0.032, 0.025) 0.020, 0.018)	0.002	0.0025			
0.016, 0.014) 0.012)	0.0015	0.0025			
0.010, 0.009) 0.008)	0.0015				
0.007, 0.006	0.001				

*Intermediate thicknesses take the tolerance of the next heavier standard thickness.