

AMS QQA 250/5 2024



ALUMINIUM ALCLAD SHEET

TYPICAL APPLICATIONS

Aerospace Components Defence Components High Technology Applications

PRODUCT DESCRIPTION

A high strength 3.8 to 4.9% Copper alloy rolled sheet, alclad to 1.5% nominal material thickness, solution heattreated, cold worked and naturally aged to achieve a substantially 'T3' condition, made to the American Standard. Also generally available in 'O' annealed condition for more severe bending, forming or spinning operations; further details available on request.

STOCK RANGE

Sheet : 0.008" to 0.249" Thick

AECMA Euronorm - BS EN 2090 (T3)

(0.2 to 6.32mm)

CUT TO SIZE GUILLOTINED BLANKS

Edge deviation over cut length/width \pm 0.2mm per m (maximum thickness 6.35mm)

FORMABILITY

Good

CORROSION RESISTANCE

Resistance to Atmospheric Attack

Very Good

SURFACE TREATMENT

Anodising

Protective - Excellent
Bright - Very Good
Hard - Excellent
Colour - Excellent

<u>Plating</u> Very Good Vitreous Enamelling

Good

WELDABILITY

Please contact our Technical Department.

PRODUCTION TOLERANCES

Manufacturing limits are as stated in the Tables 7.7b to 7.18 of U.S. Aluminium Standards & Data. For further assistance please contact our Sales Dept / Laboratory.

CHEMICAL COMPOSITION (WEIGHT %)											
	Al	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others	
Min	REM			3.80	0.30	1.20				0.05 Each (Max)	
Max	REM	0.50	0.50	4.90	0.90	1.80	0.10	0.25	0.15	0.15 Total	

MECHANICAL PROPERTIES (MINIMA FOR 'T3' CONDITION)											
Size Range	Tensile Strength	0.2% Proof Stress	Elongation on	Elongation on							
(in)	(ksi)	(ksi)	$5.65 \sqrt{S_0}$ (%)	50mm (%)							
0.008 - 0.009	58	39		10							
0.010 - 0.020	59	39	-	12							
0.021 - 0.062	59	39	-	15							
0.063 - 0.128	61	40		15							
0.129 - 0.249	62	40		15							

TECHNICAL SALES ASSISTANCE

Our resident team of qualified metallurgists and engineers will be pleased to assist further on any technical topic.

Smiths High Performance