L115

DATA SHEET

ALUMINIUM PLATE

TYPICAL APPLICATIONS

Aerospace Components
Defence Components
High Technology Applications

PRODUCT DESCRIPTION

A medium strength rolled plate, solution heat-treated, artificially aged and stress relieved arriving at the 'T651' condition. Officially, the scope of the specification covers only thicknesses between 6 and 25mm. Of these, only 12 to 25mm thick are ultrasonically tested. However, ultrasonically tested metal up to at least 127mm thick is commonly made to chemical composition only, although mechanical properties are usually achieved as well.

General Engineering Equivalent - 6082T651
General Engineering Euronorm - EN 573 / 754
Old BS - HP30TF (BS1470) Controlled Stretched
AECMA Euronorm - BE EN 4202

STOCK RANGE

1/4" to 5" Thick
(6.35 to 127mm)

CUT TO SIZE SAWN BLANKS

Cut To Length and Width + / - 1.6mm

MACHINABILITY

Very Good.

CORROSION RESISTANCE

Resistance to Atmospheric Attack

Good

SURFACE TREATMENT

Anodising

Protective - Good
Bright - Fair
Hard - Good / Very Good
Colour - Good

Plating

Special pre-treatment necessary to achieve successful results

Vitreous Enamelling

As Plating.

WELDABILITY

Brazing & Soldering - Good
Oxygen - Fair
Inert Gas - Very Good
Resistance, Spot, Beam - Very Good

PRODUCTION TOLERANCES

Manufacturing limits are as stated in the Section 14 of BS 4L100 – Tables 29 (F1, 2, 5, 7 & 8). For further assistance please contact our Sales Dept / Laboratory.

CHEMICAL COMPOSITION (WEIGHT %)

	Al	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Pb	Sn
Min	REM	0.7			0.4	0.5						
Max	REM	1.3	0.5	0.1	1.0	1.2	0.25	0.1	0.2	0.2	0.05	0.05

MECHANICAL PROPERTIES (MINIMA)

Size Range (mm)	Tensile Strength (MPa)	0.2% Proof Stress (MPa)	Elongation on $5.65\sqrt{S_0}$ (%)	Elongation on 50mm (%)
Up to 25mm	295	240	8	8

TECHNICAL SALES ASSISTANCE

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

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