

ALUMINIUM SHEET

TYPICAL APPLICATIONS

Aerospace Components, Eg: Shelves, Trays, Filters.
 Defence Components
 High Technology Applications

PRODUCT DESCRIPTION

A medium strength rolled sheet, solution heat-treated and artificially aged to achieve 'T6' condition. Also available in 'O'(annealed) and 'T4'(solution heat-treated only) conditions, to accommodate various degrees of forming, drawing or spinning operations.

General Engineering Equivalent - 6082T6
 General Engineering Euronorm - EN 485/515/573
 Old BS - HS30TF (BS1470)
 AECMA Euronorm - None

STOCK RANGE

0.0236" to 0.118" (0.6mm To 3mm) Thick in 'O', 'T4' and 'T6' Conditions.

CUT TO SIZE GUILLOTINED BLANKS

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

FORMABILITY

Good.

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 (%)
Over	Up to & Including				
0.2	3.0	295	255	-	8
3.0	6.0	295	240	-	8

NB: Figures shown above are for 'T6' condition.

TECHNICAL SALES ASSISTANCE

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

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 9 of BS 4L100 – Tables 15 (F2, 4, 5, 6 & 7). For further assistance please contact our Sales Dept / Laboratory.

Smiths High Performance

Unit O, Stratton Business Park, London Road, Biggleswade, Bedfordshire SG18 8QB United Kingdom

Tel: +44 (0) 1767 604 708 Fax: +44 (0) 01767 312 885 Email: sales@smithshp.com Website: www.smithshp.com

All information in this data sheet is based on approximate testing and is stated to the best of our knowledge and belief. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of trading. © Smiths Metal Centres Ltd 2007