

## ALUMINIUM EXTRUSION ROD, BAR, SHAPES, TUBE, WIRE

### TYPICAL APPLICATIONS

Aerospace Components  
 Defence Components  
 High Technology Applications

### PRODUCT DESCRIPTION

A high strength 5.1 to 6.1% Zinc alloy. Solution treated, artificially aged and controlled stretched to achieve the T6511 condition, in extruded bar and profile form.

General Engineering Euronorm - EN 573 / 755  
 AECMA Euronorm - BS Pr EN 2394, 2631

### STOCK RANGE

**Round Bar** : 9/16" to 9" Diameter  
 (14.28 to 228.6mm)  
**Flat & Squares** : 1 1/2" Square to 8" X 6"  
 (38.1mm Square to 203.2 X 152.4mm)

### CUT TO SIZE SAWN BLANKS

Cut to Length + 1.0mm - NIL

### MACHINABILITY

Very Good

### CHEMICAL COMPOSITION (WEIGHT %)

	Al	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others
Min	REM			1.20		2.10	0.18	5.10		0.05 Each (Max)
Max	REM	0.40	0.50	2.00	0.30	2.90	0.28	6.10	0.20	0.15 Total

### MECHANICAL PROPERTIES (MINIMA)

Size Range (in)	Tensile Strength (ksi)	0.2% Proof Stress (ksi)	Elongation on 5.65 √ S <sub>0</sub> (%)	Elongation on 50mm (%)
Up to 0.249	78	70	-	7
0.250 - 0.499	81	73	-	7
0.500 - 1.499	81	72	-	7
1.500 - 2.999	81	72	-	7
3.000 - 4.499 Up to 20 sq. in	81	71	-	7
3.000 - 4.499 20 - 32 sq. in	78	70	-	6
4.500 - 5.000	78	68	-	6

### 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  
 Fair

### SURFACE TREATMENT

#### Anodising

Protective - Fair  
 Bright - Variable  
 Hard - Fair  
 Colour - Fair

#### Plating

N/A

#### Vitreous Enamelling

N/A

### WELDABILITY

Brazing & Soldering - Not Recommended  
 Oxygen - Not Recommended  
 Inert Gas - Not Recommended  
 Resistance, Spot, Beam - Very Good

### PRODUCTION TOLERANCES

Manufacturing limits are as stated in the Tables 11.2 to 11.14 of U.S. Aluminium Standards & Data. For further assistance please contact our Sales Dept / Laboratory.

### Thames Stockholders

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