

DESCRIPTION

C3771, Section brass, is a readily extrudable leaded alpha/beta brass with a small aluminium addition, which gives a bright golden colour. The lead gives free cutting properties. C3771 is available as extruded rods and flats which are typically used in builder's hardware.

CHEMICAL COMPOSITION

Elements	Min (%)	Max (%)
Cu	57.00	61.00
Pb	1.00	2.50
Fe+Sn	-	1.00
Zn	Remainder	

MECHANICAL PROPERTIES ACCORDING TO H3250 JIS C3771 (AS PER TEMPER BD)

Range (Inch)	From	To	UTS Min (N/mm ²)	PS Min	Elongation Min (%)	Hardness Min	Hardness Max
Round (Dia)	6.00	75.00	315.00	-	15.00	-	-
Hex (A/F)	6.00	70.00	315.00	-	15.00	-	-
Square (A/F)	6.00	60.00	315.00	-	15.00	-	-
Rectangle (Thickness)	6.00	50.00	315.00	-	15.00	-	-

PHYSICAL PROPERTIES

PHYSICAL PROPERTIES	METRIC	ENGLISH
Density	8.40 g/cc	0.303 lb/in ³
CTE. linear	26.0 $\mu\text{m}/\text{m}^{\circ}\text{C}$	14.4 $\mu\text{in}/\text{in}^{\circ}\text{F}$
Specific Heat Capacity	0.380 J/g $^{\circ}\text{C}$	0.0908 BTU/lb $^{\circ}\text{F}$
Thermal Conductivity	113 W/m-K	784 BTU-in/hr-ft ² - $^{\circ}\text{F}$
Melting Point	880-900 $^{\circ}\text{C}$	1620 – 1650 $^{\circ}\text{F}$
Solidus	880 $^{\circ}\text{C}$	1620 $^{\circ}\text{F}$
Liquidus	900 $^{\circ}\text{C}$	1650 $^{\circ}\text{F}$



FABRICATION PROPERTIES

Technique	Suitability
Machinability (CuZn39Pb3 = 100 %)	95.00%
Capacity for Being Cold Worked	Poor
Capacity for Being Hot Worked	Excellent

TYPICAL USES

- > Architecture
- > Builders Hardware

