

# Copper - C101 HC / CW004A

## Square Bar

## Properties

Stock		Chemical Properties	
Size SQ (in)	Weight/m (Kg)	Element	Chemical composition %
1/4	0.36	Others (Total)	0.0 - 0.10
3/8	0.81	Copper (Cu)	Balance
10mm	0.89		
12mm	1.28		
1/2	1.43		
5/8	2.23		
3/4	3.21		
1	5.73		
1 1/8	6.84		
1 1/4	8.96		
1 1/2	12.90		
2	22.90		
2 1/2	34.10		
3	49.10		
		Mechanical Properties	
		Property	Value
		Proof stress	50 - 340 MPa
		Tensile strength	200 - 400 MPa
		Elongation	5 - 50%
		Hardness Vickers	40 to 120 HV
		Mechanical properties vary widely according to condition (Soft/HH etc)	
		Physical Properties	
		Property	Value
		Density	8.92 g/cm <sup>3</sup>
		Melting point	1083°C
		Thermal expansion	16.9 x 10 <sup>-6</sup> /K
		Modulus of elasticity	117 GPa
		Thermal conductivity	391.1 W/m.K
		Electrical resistivity	100% IACS / 0.0171 x 10 <sup>-6</sup> Ω.m

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