

## C280 (CuZn40) - Muntz Metal

### Composition

Cu* (%)	Fe (%)	Pb (%)	Zn (%)
59.0-63.0	0.07 max	0.30 max	rem

\*) Cu + sum of named elements min 99.7 %

### Physical Properties

Temper	Melting point (liquidus)	Density	Specific heat cap. at 68 F (20 °C)	Electrical cond. Nom in black	Thermal cond. at 68 F (20 °C)	Mod. of elasticity	Coef. of therm.exp at 68 F (20 °C)
	°F °C						
All	1660	0.303	0.09	28	71	15	11.6
	904						

### Mechanical Properties

At max 0.040"  
(1 mm)

Temper	R <sub>p0.2</sub> Yield strength ksi N/mm <sup>2</sup>	R <sub>m</sub> Tensile strength ksi N/mm <sup>2</sup>	A <sub>50</sub> Elongation 2" %	Hardness for reference HR30T HV	Min bend ratio 90°		Min bend ratio 180°	
					GW	BW	GW	BW
H01 (1/4H)		52-60 360-420						

Other tempers are available upon request.

Data for information only and not for use as purchase specification.

Yield strength, Elongation and Hardness are typical values for each temper.

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### Alloy attributes

Muntz Metal, C280 has a nominal composition of 60 % Cu and 40 % Zn. The alloy is mainly used for decorative purposes due to the deep bronze color. Muntz metal is a two phase alloy with a mixture of alpha and beta phase. The alloy is therefore easy to form at high temperatures but has limited cold working formability.

**Good formability during hot working**  
**Deep bronze color**  
**Suitable for soldering and brazing**

### Typical applications

Large Sheets, Architectural Panels, Large Architectural Trim, Sheet, Structural, Heavy Plate, Door Frames, Decoration, Hardware

### Design limitations

Cold worked 280 alloy shapes may be susceptible to stress - corrosion cracking in certain media as ammonia or its compounds, mercury or its compounds. A stress-relief anneal can be utilized to minimize this susceptibility. Exposure to acidic media may result in dezincification

### Applicable specifications

ASTM B36