

SOLID COPPER CONDENSED SPECIFICATIONS

MECHANICAL PROPERTIES:

<u>Copper</u>	<u>Tensile</u>	<u>Min.</u>	<u>+Approx.</u>
	<u>*(KSI)</u>	<u>Yield</u>	<u>Rockwell F</u>
Flat Sheet			
H00 Cold Roll 1/8 Hard	32-40	20	54-82
Gutter & Downspout Coil			
H03 Cold Roll 3/4 Hard	42-50	32	82-91

*1 KSI = 1000 psi

+Rockwell F hardness applies to metal .020" or thicker

PHYSICAL PROPERTIES

of Cold Rolled Copper:

Specific Gravity	8.89 - 8.99
Density	0.322 Lb/Cu in @ 68 deg F
Thermal Conductivity	226 BTU/sq. ft @ 68 deg F
Coefficient of Expansion	0.0000098/deg F from 68 deg F to 572 deg F
Modulus of Elasticity (tension)	17,000,000 psi
Shear Strength	25,000 psi

GALVANIC CORROSION:

When dissimilar metals are in contact with another in the presence of an electrolyte (such as rainwater running from one surface to another) galvanic action may occur. This will result in the deterioration of the metal with the lower galvanic number.

Copper has the highest galvanic number of the active metals and will not be harmed by contact with them. It will cause corrosion of the metals if in direct contact with them. The principal metals for concern are zinc (galvanized steel) and aluminum. In most cases, it is not necessary to isolate copper from lead, tin or stainless steel.

Galvanic Scale (Nobility) of Common Metals

1. Aluminum
2. Zinc
3. Steel
4. Iron
5. Stainless Steel (Active)
6. Tin
7. Lead
8. Copper
9. Stainless Steel (Passive)

TENSION LEVELED:

All sheet and coil are tension leveled to assure uniform flatness.