

DATA SHEET

Custom-Tailored Construction Copper SPECIFICATIONS:

ASTM B370: Copper Sheet and Strip for Building Construction.

ASTM B101: Lead-Coated Copper Sheet and Strip for Building Construction.

USES:

Hussey construction copper is used in general building applications such as standing seams, batten seams and flat seam roofs; flashings, soffits, fascias, gravel stops, mansards, copings, cleats, curtain walls, skylights, solar collector panels, wall panels, windows, awnings, down-spout and gutters, radio frequency shielding.

SIZES:

PACKING STANDARDS

Weight per Square Foot	Size in Inches	Plain Number of Sheets	Plain Est. Lbs. per Case
12 oz. .0162	36 x 96	60	1085
	36 x 120	48	1085
16 oz. .0216	24 x 96	67	1078
	24 x 120	54	1085
	30 x 96	54	1085
	30 x 120	43	1080
	36 x 96	45	1085
20 oz. .0270	36 x 120	36	1085
	24 x 96	54	1085
	24 x 120	43	1080
	30 x 96	43	1080
	30 x 120	35	1100
24 oz. .0323	36 x 96	36	1085
	36 x 120	29	1095
	24 x 96	45	1082
	24 x 120	36	1082
	30 x 96	36	1082
32 oz. .0431	30 x 120	29	1092
	36 x 96	30	1082
	36 x 120	24	1082
	24 x 90	34	1090
	24 x 120	27	1082
.0431	30 x 96	27	1082
	30 x 120	22	1102
	36 x 96	23	1106
	36 x 120	18	1082

STANDARD COLD ROLLED COIL:

6,000 pound/tension leveled, slit edge coils are available in widths of 24, 30, and 36 inches.

PAN FORMING COIL:

Coils suitable for roll-forming into roofing pans are "Tailor Made" in weights of 500 pounds or more and in widths specified by the customer.

TENSION LEVELED:

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

COLD ROLLED SHEET

WT. PER SQ. FT.	AVERAGE THICKNESS			TYPICAL WT. PER SHEET - POUNDS			
	Inches	MM	B & S Gauge Number Approx.	24 x 96	24 x 120	36 x 96	36 x 120
* 12 oz.	.0162	.411	26	12	15	18	22.5
16 oz.	.0216	.549	23	16	20	24	30
20 oz.	.0270	.686	21	20	25	30	37.5
24 oz.	.0323	.820	20	24	30	36	45
32 oz.	.0431	1.09	17	32	40	48	60

NOTE: Other widths and lengths are available upon request
*12 oz. copper is supplied as cold rolled, high yield (HO1)

STANDARD SOFT COIL:

16 oz. soft temper roofing rolls are available in widths of 6 inch through 24 inch:

APPROXIMATE LENGTH PER 100 LB. ROLL

WIDTH	LENGTH
6 in.	200 ft.
7 in.	170 ft.
8 in.	150 ft.
10 in.	110 ft.
12 in.	100 ft.
14 in.	85 ft.
16 in.	75 ft.
18 in.	66 ft.
20 in.	60 ft.
24 in.	50 ft.

MECHANICAL PROPERTIES:

Temper		Tensile *(KSI)	Min. Yield	+Approx. Rockwell F
060	Soft	30-38	-	up to 65
H00	Cold Roll 1/8 Hard	32-40	20	54-82
H01	Cold Roll, Hi Yield 1/4 Hard	34-42	28	60-84
H02	Cold Roll, Half Hard	37-46	30	77-89
H03	Cold Roll, 3/4 Hard	42-50	32	82-91

*1 KSI = 1000 psi

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

In general, cold roll 1/8 hard (H00) is recommended for most roofing and flashing installations. Copper with higher temper is used for specific engineering applications and is occasionally specified when roll-forming is used to make the pans.

Soft copper is used when extreme forming is required.

It should be noted that cold rolled copper provides more resistance to stresses induced by expansion and contraction than soft temper does.

12-Ounce copper is supplied as cold rolled high yield (H02). For some applications, this may allow the use of 12 ounce copper where 16 ounce cold roll 1/8 hard (H00) normally might have been used.

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

LEAD COATED SHEET AND COIL:

Lead coated copper sheet and coil is produced to comply to ASTM B101 having a total coating weight of 12 to 15 pounds per 100 square feet.

Lead coated copper may be used for a wide range of roofing and flashing installations. The hot dip process for coating copper with lead may remove some of the temper of the cold-rolled copper sheet.

Lead coated copper should be installed with the top side up. When boxed, it must be stored in a dry environment prior to installation.

COPPER AND LEAD WARNING

It has been reported that, under certain environmental and atmospheric conditions, the **STORMWATER RUNOFF** from building products made from lead coated copper sheet and strip **MAY CONTAIN COPPER AND LEAD** which may be deposited on the building or in surrounding areas. Before lead coated copper is selected for use as a building material, a design professional should determine that lead coated copper is appropriate for the environmental and atmospheric conditions in the area where it will be used.

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

AVAILABILITY:

Standard sizes readily available from stock.
Custom sizes also available.

LIMITED WARRANTY:

COPPER SHEET AND STRIP FOR BUILDING CONSTRUCTION

We hereby certify that the Hussey Copper COPPER SHEET(S) AND STRIP(S) (uncoated) are manufactured in compliance with ASTM B-370.

We hereby certify that the Hussey Copper LEAD COATED COPPER SHEET(S) AND STRIP(S) are manufactured in accordance with ASTM B101.

All copper products must be stored in a dry environment prior to installation.

We guarantee that this material, as shipped, will not leak due to defects in our workmanship for fifty (50) years from the installation date. This warranty is limited to our product only, and does not cover construction, installation and other property.

Complete limited warranty available upon request

WEATHERING OF COPPER

This weathering cycle represents a copper roof at a 45° angle with a southern exposure in a typical northeastern industrial city.



UNEXPOSED

1 YEAR

5 YEARS

15 YEARS