



Date_____

Product Certification

Mueller Copper Tube products are all manufactured in the USA. All tubing produced in Fulton, MS, and Wynne, AR, is seamless and of UNS C12200 grade of copper and is manufactured to meet the chemical and mechanical properties of the applicable ASTM specifications set forth below. When specified at order placement, Mueller Copper Tube can supply Certified Tube to meet all requirements of the current applicable ASTM specification, at an additional cost.

Streamline Copper Water Tube (Types K,L,M)
ASTM B88 and ANSI/NSF 61

Streamline Copper Refrigeration Service Coils
ASTM B280

Streamline Nitrogenized ACR Hard Drawn
Copper Tube - ASTM B280

Streamline Copper Drainage Tube (DWV)
ASTM B306

- * Please contact Technical Services for certification in Oxygen and Medical service tube. (1.662.862.1700)
Oxygen & Medical Service Tube - To ASTM B819 (Types K & L) Hard Drawn Straight Lengths Only in Accordance To CGA Cleanness Specification; CGA G4.1 (Compressed Gas Association); & NFPA 99 (Health Care Facilities).

NSF 61 Restriction Statement: "Copper Tube (Alloy C12200) is certified by NSF to ANSI/NSF Standard 61 for public water supplies meeting or in the process of meeting the U.S. EPA Lead and Copper Rule (56FR 26460, June 7, 1991). Water supplies with pH less than 6.5 may require corrosion control to limit copper solubility in drinking water."

P. O. BOX 849 ♦ FULTON, MS 38843 ♦ (662) 862-1700 ♦ FAX (662) 862-3002

P. O. BOX 309 ♦ WYNNE, AR 72396 ♦ (870) 238-3201 ♦ FAX (870) 238-8724

COPPER USAGE GUIDE

Type	Sizing	Standard	Application
Type K Type L Type M	Nom.	ASTM B 88 NSF 61	Water Service & Distribution Fire Protection, Solar, Fuel/ Fuel Oil, Compressed Air, Natural Gas, LP Gas, Vacuum
Refrigeration	O.D.	ASTM B 280	Air Conditioning, Refrigeration, Natural Gas, LP Gas, Compressed Air
Utility* Coil	O.D.	N/A	General low pressure water supply for ice makers, humidifiers, water purification systems, dishwashers and other appliances

* Utility grade is for select/utility use only, consult Federal, State and local codes and regulations before use in plumbing, air conditioning or refrigeration applications.

Nominal (Nom) is an internal diameter measurement.
Outside Diameter (O.D.)

Effective October 20, 2009

(Supersedes UR CT0909)

The issuance of this price list is not an offer to sell the goods listed herein at the prices stated.

COPPER TUBE IN HARD STRAIGHT LENGTHS

Type L – Hard Lengths

Size x Length	Part #	Wt.	MC	Price
1/4" x 10'	LH02010	1.26	25	\$18.00
1/4" x 2'	LH02002	0.252	25	\$3.78
1/4" x 1'	LH02001	0.126	25	\$1.94
3/8" x 10'	LH03010	1.98	25	\$27.60
3/8" x 5'	LH03005	0.99	25	\$14.08
3/8" x 2'	LH03002	0.396	25	\$5.80
1/2" x 10'	LH04010	2.85	25	\$30.70
1/2" x 5'	LH04005	1.425	25	\$15.66
1/2" x 4'	LH04004	1.14	25	\$12.71
1/2" x 3'	LH04003	0.855	25	\$9.53
1/2" x 2'	LH04002RT	0.57	25	\$6.45
1/2" x 1'	LH04001	0.285	25	\$3.30
3/4" x 10'	LH06010	4.55	10	\$48.60
3/4" x 5'	LH06005	2.275	10	\$24.79
3/4" x 4'	LH06004	1.82	10	\$20.12
3/4" x 3'	LH06003	1.365	10	\$15.09
3/4" x 2'	LH06002RT	0.91	10	\$10.21
3/4" x 1'	LH06001	0.455	10	\$5.22
1" x 10'	LH10010	6.55	5	\$78.30
1" x 5'	LH10005	3.275	5	\$39.93
1" x 4'	LH10004	2.62	5	\$32.42
1" x 3'	LH10003	1.965	5	\$24.31
1" x 2'	LH10002	1.31	5	\$16.44
1" x 1'	LH10001	0.655	5	\$8.42
1-1/4" x 10'	LH12010	8.84	5	\$109.80
1-1/4" x 5'	LH12005	4.42	5	\$56.00
1-1/2" x 10'	LH14010	11.4	5	\$141.70
1-1/2" x 5'	LH14005	5.7	5	\$72.27
2" x 10'	LH20010	17.5	3	\$221.20
2" x 5'	LH20005	8.75	3	\$112.81

Type L – Soft Lengths

Size x Length	Part #	Wt.	MC	Price
1/4" x 2'	LS02002	0.252	25	\$5.08
1/4" x 1'	LS02001	0.126	25	\$2.60
3/8" x 2'	LS03002	0.396	25	\$7.88
2" x 10'	LS20010	17.5	3	\$285.70

Type M – Hard Lengths

Size x Length	Part #	Wt.	MC	Price
3/8" x 10'	MH03010	1.45	25	\$21.30
3/8" x 5'	MH03005	0.725	25	\$10.86
3/8" x 2'	MH03002	0.29	25	\$4.47
1/2" x 10'	MH04010	2.04	25	\$21.30
1/2" x 6'	MH04006	1.224	25	\$13.04
1/2" x 5'	MH04005	1.02	25	\$10.86
1/2" x 4'	MH04004	0.816	25	\$8.82
1/2" x 3'	MH04003	0.612	25	\$6.61
1/2" x 2'	MH04002RT	0.408	25	\$4.47
1/2" x 1'	MH04001	0.204	25	\$2.29
3/4" x 10'	MH06010	3.28	10	\$35.20
3/4" x 6'	MH06006	1.968	10	\$21.54
3/4" x 5'	MH06005	1.64	10	\$17.95
3/4" x 4'	MH06004	1.312	10	\$14.57
3/4" x 3'	MH06003	0.984	10	\$10.93
3/4" x 2'	MH06002RT	0.656	10	\$7.39
3/4" x 1'	MH06001	0.328	10	\$3.78
1" x 10'	MH10010	4.64	5	\$60.00
1" x 5'	MH10005	2.32	5	\$30.60
1" x 4'	MH10004	1.856	5	\$24.84
1" x 3'	MH10003	1.392	5	\$18.63
1" x 2'	MH10002	0.928	5	\$12.60
1-1/4" x 10'	MH12010	6.82	5	\$88.10
1-1/4" x 5'	MH12005	3.41	5	\$44.93
1-1/2" x 10'	MH14010	9.4	5	\$121.80
1-1/2" x 5'	MH14005	4.7	5	\$62.12
1-1/2" x 4'	MH14004	3.76	5	\$50.43
2" x 10'	MH20010	14.6	1	\$192.10
2" x 5'	MH20005	7.3	3	\$97.97
2" x 4'	MH20004	5.84	3	\$79.53

Type DWV – Hard Lengths

Size x Length	Part #	Wt.	MC	Price
1-1/4" x 10'	V 12010	6.5	5	\$95.00
1-1/2" x 10'	V 14010	8.09	5	\$119.50
2" x 10'	V 20010	10.6	3	\$158.20
2" x 5'	V 20005	5.3	3	\$80.68

COPPER TUBE IN SOFT COILS

Type K – Soft Coils

Size x Length	Part #	Wt.	MC	Price
1/4" x 60'	KS02060	8.7	1	\$132.60
3/8" x 60'	KS03060	16.14	1	\$238.80
1/2" x 60'	KS04060	20.58	1	\$279.60
3/4" x 60'	KS06060	38.46	1	\$516.00
1" x 60'	KS10060	50.34	1	\$673.20

Type L – Soft Coils

Size x Length	Part #	Wt.	MC	Price
1/4" x 60'	LS02060	7.56	1	\$110.40
1/4" x 30'	LSC2030P	3.78	5	\$55.20
1/4" x 20'	LSC2020P	2.52	5	\$38.64
1/4" x 10'	LSC2010P	1.26	5	\$19.78
1/4" x 5'	LSC2005P	0.63	5	\$10.12
3/8" x 60'	LS03060	11.88	1	\$172.80
3/8" x 20'	LSC3020P	3.96	5	\$60.48
3/8" x 10'	LSC3010P	1.98	5	\$30.96
1/2" x 60'	LS04060	17.1	1	\$230.40
1/2" x 30'	LSC4030PS	8.55	1	\$115.70
1/2" x 20'	LSC4020P	5.7	5	\$80.64
1/2" x 10'	LSC4010P	2.85	5	\$41.28
3/4" x 60'	LS06060	27.3	1	\$369.00
3/4" x 30'	LSC6030PS	13.65	1	\$185.00
1" x 60'	LS10060	39.3	1	\$528.60

Dehydrated / Refrigeration Service Coils (OD dia.)

Size x Length	Part #	Wt.	MC	Price
1/4" x 50'	D 04050P	4.02	10	\$55.74
1/4" x 20'	D 04020P	1.608	5	\$23.08
1/4" x 10'	D 04010P	0.804	5	\$11.98
3/8" x 50'	D 06050P	6.7	1	\$79.43
3/8" x 20'	D 06020P	2.68	5	\$32.88
3/8" x 10'	D 06010P	1.34	5	\$17.08
1/2" x 50'	D 08050P	9.1	1	\$112.14
5/8" x 50'	D 10050P	12.55	1	\$152.10
3/4" x 50'	D 12050P	15.25	1	\$182.95
7/8" x 50'	D 14050P	22.75	1	\$272.96

Utility / General Purpose Coils

Size x Length	Part #	Wt.	MC	Price
1/4" x 50'	UT04050	2.8	5	\$38.82
1/4" x 25'	UT04025	1.4	5	\$19.41
1/4" x 20'	UT04020	1.12	5	\$16.07
1/4" x 15'	UT04015	0.84	5	\$12.05
1/4" x 10'	UT04010	0.56	5	\$8.35
1/4" x 5'	UT04005	0.28	5	\$4.27
1/4" x 2'	UT04002	0.112	5	\$1.79
3/8" x 25'	UT06025	2.13	5	\$25.25
3/8" x 20'	UT06020	1.71	5	\$20.91
3/8" x 15'	UT06015	1.28	5	\$15.68
3/8" x 10'	UT06010	0.85	5	\$10.86
3/8" x 5'	UT06005	0.43	5	\$5.56
1/2" x 25'	UT08025	2.83	5	\$34.87
1/2" x 20'	UT08020	2.26	5	\$28.88
1/2" x 15'	UT08015	1.7	5	\$21.66
1/2" x 10'	UT08010	1.13	5	\$15.00
5/8" x 25'	UT10025	4.55	5	\$55.14
5/8" x 20'	UT10020	3.64	5	\$45.66
5/8" x 10'	UT10010	1.82	5	\$23.71

SENSORMATIC TAGS MAY BE ADDED TO BOXED COILS AT A RATE OF .50/COIL. PLEASE ADD "PS" TO END OF PART NUMBER WHEN ORDERING.

Other sizes and types are available upon request. Contact your sales representative or customer service for details.

REFERENCE INFORMATION

COPPER TUBE

STANDARD* LENGTH		Type K		Type L / ACR		Type M		DWV	
		HARD 20' Lengths COILS 60' thru 1-1/2 100' thru 1-1/4 40' and 60' - 2" only		HARD 20' Lengths COILS 60' thru 1-1/2 100' thru 1-1/4 40' - 2" only		HARD 20' Lengths COILS Consult		HARD 20' Lengths	
NOM	O.D.	WALL	WGT/FT	WALL	WGT/FT	WALL	WGT/FT	WALL	WGT/FT
1/4"	3/8"	0.035	0.145	0.030	0.126	0.025	0.106	—	—
3/8"	1/2"	0.049	0.269	0.035	0.198	0.025	0.145	—	—
1/2"	5/8"	0.049	0.344	0.040	0.285	0.028	0.204	—	—
5/8"	3/4"	0.049	0.418	0.042	0.362	0.030	0.263	—	—
3/4"	7/8"	0.065	0.641	0.045	0.455	0.032	0.328	—	—
1"	1-1/8"	0.065	0.839	0.050	0.655	0.035	0.465	—	—
1-1/4"	1-3/8"	0.065	1.04	0.055	0.884	0.042	0.682	0.040	0.650
1-1/2"	1-5/8"	0.072	1.36	0.060	1.14	0.049	0.940	0.042	0.809
2"	2-1/8"	0.083	2.06	0.070	1.75	0.058	1.46	0.042	1.07

* FOR SPECIAL LENGTHS OR TEMPERS CONSULT FOR PRICE AND AVAILABILITY.

REFRIGERATION SERVICE TUBE

O.D.	WALL THICKNESS	WEIGHT PER FOOT	WEIGHT PER COIL*	COIL DIAMETER	COILS PER MASTER	WEIGHT PER MASTER
1/8"	0.030	0.0347	1.74	14-3/4"	10	17.4
3/16"	0.030	0.0575	2.88	14-3/4"	10	28.80
1/4"	0.030	0.0804	4.02	14-3/4"	10	40.20
5/16"	0.032	0.109	5.45	14-3/4"	10	54.50
3/8"	0.032	0.134	6.70	16-1/2"	10	67.00
1/2"	0.032	0.182	9.10	20"	5	45.50
5/8"	0.035	0.251	12.55	22"	5	62.75
3/4"	0.035	0.305	15.25	25"	3	45.75
7/8"	0.045	0.455	22.75	27-1/2"	3	22.75

* STANDARD 50' COIL - 100' COILS ALSO AVAILABLE AS STANDARD STOCK ITEM.



LEVEL WOUND COPPER TUBE

UW LWCT1009

Effective October 20, 2009

Supersedes UW LWCT0909

The issuance of this price list is not an offer to sell the goods listed herein at the prices stated.

Light Annealed

OD	Wall	Temper	Sizes (lbs)	Coil Width	# of Coils per Skid	Approx Feet/Coil	Bulk Part #	Bulk Price Per Coil	Spool Part #	Spool Price per Coil
0.250	0.028	050	180	7"	6	2377	LV025028A	1943	LV025028AS	1963
0.250	0.030	050	180	7"	6	2239	LV025030A	1943	LV025030AS	1963
0.313	0.032	050	180	7"	6	1643	LV031332A	1909	LV031332AS	1929
0.375	0.028	050	180	7"	6	1521	LV037528A	1879	LV037528AS	1899
0.375	0.030	050	180	7"	6	1428	LV037530A	1879	LV037530AS	1899
0.375	0.035	050	180	7"	6	1242	LV037535A	1879	LV037535AS	1899
0.500	0.028	050	180	7"	6	1118	LV050028A	1846	LV050028AS	1866
0.500	0.032	050	180	7"	6	987	LV050032A	1846	LV050032AS	1866
0.500	0.035	050	180	7"	6	908	LV050035A	1846	LV050035AS	1866
0.625	0.032	050	180	9"	5	779	LV062532A	1846	LV062532AS	1866
0.625	0.035	050	180	9"	5	716	LV062535A	1846	LV062535AS	1866
0.625	0.040	050	180	9"	5	632	LV062540A	1846	LV062540AS	1866
0.750	0.035	050	180	9"	5	591	LV075035A	1846	LV075035AS	1866
0.875	0.038	050	180	9"	5	465	LV087538A	1846	LV087538AS	1866
0.875	0.045	050	180	9"	5	396	LV087545A	1846	LV087545AS	1866
1.125	0.050	050	180	9"	5	275	LV112550A	1846	LV112550AS	1866

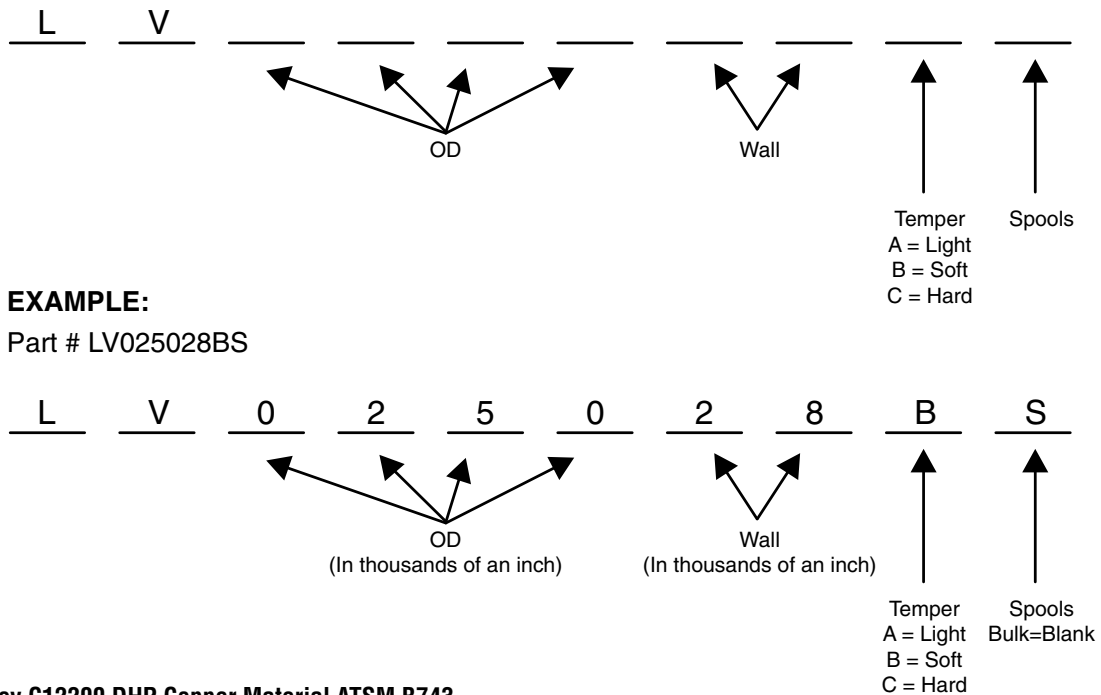
Soft Annealed

OD	Wall	Temper	Sizes (lbs)	Coil Width	# of Coils per Skid	Approx Feet/Coil	Bulk Part #	Bulk Price Per Coil	Spool Part #	Spool Price per Coil
0.250	0.028	060	180	7"	6	2377	LV025028B	1943	LV025028BS	1963
0.250	0.030	060	180	7"	6	2239	LV025030B	1943	LV025030BS	1963
0.313	0.032	060	180	7"	6	1643	LV031332B	1909	LV031332BS	1929
0.375	0.028	060	180	7"	6	1521	LV037528B	1879	LV037528BS	1899
0.375	0.030	060	180	7"	6	1428	LV037530B	1879	LV037530BS	1899
0.375	0.035	060	180	7"	6	1242	LV037535B	1879	LV037535BS	1899
0.500	0.028	060	180	7"	6	1118	LV050028B	1846	LV050028BS	1866
0.500	0.032	060	180	7"	6	987	LV050032B	1846	LV050032BS	1866
0.500	0.035	060	180	7"	6	908	LV050035B	1846	LV050035BS	1866
0.625	0.032	060	180	9"	5	779	LV062532B	1846	LV062532BS	1866
0.625	0.035	060	180	9"	5	716	LV062535B	1846	LV062535BS	1866
0.625	0.040	060	180	9"	5	632	LV062540B	1846	LV062540BS	1866
0.750	0.035	060	180	9"	5	591	LV075035B	1846	LV075035BS	1866
0.875	0.038	060	180	9"	5	465	LV087538B	1846	LV087538BS	1866
0.875	0.045	060	180	9"	5	396	LV087545B	1846	LV087545BS	1866
1.125	0.050	060	180	9"	5	275	LV112550B	1846	LV112550BS	1866

Hard Temper

OD	Wall	Temper	Sizes (lbs)	Coil Width	# of Coils per Skid	Approx Feet/Coil	Bulk Part #	Bulk Price Per Coil	Spool Part #	Spool Price per Coil
0.250	0.028	H58	180	7"	6	2377	LV025208C	1943	LV025028CS	1963
0.250	0.030	H58	180	7"	6	2239	LV025030C	1943	LV025030CS	1963
0.313	0.032	H58	180	7"	6	1643	LV031332C	1909	LV031332CS	1929
0.375	0.028	H58	180	7"	6	1521	LV037528C	1879	LV037528CS	1899
0.375	0.030	H58	180	7"	6	1428	LV037530C	1879	LV037530CS	1899
0.375	0.035	H58	180	7"	6	1242	LV037535C	1879	LV037535CS	1899
0.500	0.028	H58	180	7"	6	1118	LV050028C	1846	LV050028CS	1866
0.500	0.032	H58	180	7"	6	987	LV050032C	1846	LV050032CS	1866
0.500	0.035	H58	180	7"	6	908	LV050035C	1846	LV050035CS	1866
0.625	0.032	H58	180	9"	5	779	LV062532C	1846	LV062532CS	1866
0.625	0.035	H58	180	9"	5	716	LV062535C	1846	LV062535CS	1866
0.625	0.040	H58	180	9"	5	632	LV062540C	1846	LV062540CS	1866
0.750	0.035	H58	180	9"	5	591	LV075035C	1846	LV075035CS	1866
0.875	0.038	H58	180	9"	5	465	LV087538C	1846	LV087538CS	1866
0.875	0.045	H58	180	9"	5	396	LV087545C	1846	LV087545CS	1866
1.125	0.050	H58	180	9"	5	275	LV112550C	1846	LV112550CS	1866

Level Wound Part Number Coding



Seamless Tube Alloy C12200 DHP Copper Material ATSM B743

Custom O.D. Wall and or Tempers can be quoted as required

Temper

O50=Light Annealed
O60=Soft Annealed
H58=Hard

Bulk Packaging Information

Skids (43" X 43")
Coil ID =26"
Stacked in with cardboard disk as separators
Plastic stretch wrapped on to a skid
Coils per skid are dependent on coil width

Spool Packaging Information

Skids (43" X 43")
Spools Diameter 42"OD and Hub Hole 5.25 ID"
Stacked with cardboard reels and hubs mounted
Plastic stretch wrapped on to a skid
Coils per skid are dependent on coil width

All part numbers are stocked and shipped from Wynne, Arkansas.

The issuance of this price list is not an offer to sell the goods listed herein at the prices stated.

WATER TUBE / PRICE PER FOOT

Diameter		Type K			Type L			Type M	DWV	Nitrogenized [®] ACR / MED	
NOM	O.D.	Hard Lengths	Soft Coils	Soft Lengths	Hard Lengths	Soft Coils	Soft Lengths	Hard Lengths	Hard Lengths	Type K	Type L
1/4"	3/8"	2.18	2.21	2.72	1.80	1.84	2.42	—	—	2.48	2.14
3/8"	1/2"	3.73	3.98	4.90	2.76	2.88	3.75	2.13	—	4.25	3.27
1/2"	5/8"	4.47	4.66	5.70	3.07	3.84	4.61	2.13	—	4.83	3.98
5/8"	3/4"	5.57	6.01	7.36	4.86	5.27	6.48	3.52	—	6.19	5.64
3/4"	7/8"	8.30	8.60	10.25	4.86	6.15	7.05	3.52	—	8.81	6.25
1"	1-1/8"	10.86	11.22	13.45	7.83	8.81	10.03	6.00	—	11.67	9.05
1-1/4"	1-3/8"	13.45	14.27	16.53	10.98	12.61	14.06	8.81	9.50	14.24	12.14
1-1/2"	1-5/8"	17.60	18.71	22.17	14.17	16.13	18.16	12.18	11.95	19.12	15.55
2"	2-1/8"	27.09	30.14	34.42	22.12	26.07	28.57	19.21	15.82	29.58	24.47
2-1/2"	2-5/8"	39.91	—	51.19	32.88	—	40.99	28.10	—	44.25	36.45
3"	3-1/8"	55.47	—	71.54	44.11	—	55.05	37.18	26.19	60.34	49.04
3-1/2"	3-5/8"	71.73	—	—	57.45	—	—	50.31	—	78.41	64.12
4"	4-1/8"	91.69	—	—	72.88	—	—	65.34	44.77	100.22	81.55
5"	5-1/8"	202.51	—	—	152.51	—	—	152.51	132.92	234.86	210.36
6"	6-1/8"	290.56	—	—	204.07	—	—	204.07	184.31	337.11	256.66
8"	8-1/8"	544.11	—	—	386.73	—	—	386.73	—	631.03	474.36

^{*}(Nitrogenized thru 3-1/8" Only)

REFRIGERATION SERVICE TUBE / PRICE PER COIL

O.D. Sizes	1/8"	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	7/8"	1-1/8"	1-3/8"	1-5/8"
50 Foot Coil	41.48	48.53	55.74	74.89	79.43	112.14	152.10	182.95	272.96	392.90	615.37	781.19
100 Foot Coil	86.56	101.06	119.33	155.58	172.27	232.71	315.56	380.50	565.12	824.26	1230.75	1562.41

TEMPERATURE CONTROL TUBE / PRICE PER FOOT

NOT RECOMMENDED FOR BENDING OR FORMING PURPOSES. ORDER QUANTITY IS IN 2000 FEET PER BOX INCREMENTS.

HARD			SOFT			HARD			SOFT		
O.D.	Wall	Price/Ft	O.D.	Wall	Price/Ft	O.D.	Wall	Price/Ft	O.D.	Wall	Price/Ft
1/4	0.025	2.14	1/4	0.025	2.79	1/4	0.032	2.52	1/4	0.032	3.33

PLASTIC COATED WATER TUBE / PRICE PER FOOT

DIAMETER		Type K		Type L		Coated ACR Tube	
NOM	O.D.	Lengths	Coils	Lengths	Coils	Type K	Type L
1/4"	3/8"	—	2.44	—	2.07	—	—
3/8"	1/2"	—	4.38	—	3.25	—	—
1/2"	5/8"	5.07	5.26	3.65	4.42	5.43	4.56
5/8"	3/4"	6.38	6.82	5.65	6.06	7.00	6.43
3/4"	7/8"	9.43	9.73	5.92	7.21	9.94	7.31
1"	1-1/8"	12.60	12.96	9.50	10.48	13.41	10.72
1-1/4"	1-3/8"	15.92	16.74	13.39	15.02	16.71	14.55
1-1/2"	1-5/8"	20.99	—	17.48	—	22.51	18.86
2"	2-1/8"	32.73	—	27.64	—	35.22	29.99

^{*} HARD LENGTHS AVAILABLE IN 20' AND COILS AVAILABLE IN 60' AND 100' WHERE APPLICABLE.

PlumbShield[®] available in blue for cold, red for hot and purple for reclaimed water applications

GasShield[®] available in yellow for natural and LP gas applications

OilShield[®] available in orange for fuel oil applications

Coated ACR available in white for refrigeration applications

O.D. Sizes	3/8"	1/2"	5/8"	3/4"	7/8"	1-1/8"
50 Foot Coil	90.83	130.37	180.53	221.29	325.97	476.36
100 Foot Coil	195.07	269.18	372.42	457.19	671.14	991.19
250 Foot Coil	487.68	672.95	931.04	—	—	—

The issuance of this price list is not an offer to sell the goods listed herein at the prices stated. ORIGINATORS OF THE SOLDER-TYPE FITTING.

REFERENCE INFORMATION

COPPER TUBE

STANDARD* LENGTHS		Type K		Type L / ACR		Type M		DWV	
		HARD COILS 20' Lengths 60' thru 1-1/2 100' thru 1-1/4 40' and 60' - 2" only		HARD COILS 20' Lengths 60' thru 1-1/2 100' thru 1-1/4 40' - 2" only		HARD COILS 20' Lengths Consult		HARD 20' Lengths	
NOM	O.D.	WALL	WGT/FT	WALL	WGT/FT	WALL	WGT/FT	WALL	WGT/FT
1/4"	3/8"	0.035	0.145	0.030	0.126	0.025	0.106	—	—
3/8"	1/2"	0.049	0.269	0.035	0.198	0.025	0.145	—	—
1/2"	5/8"	0.049	0.344	0.040	0.285	0.028	0.204	—	—
5/8"	3/4"	0.049	0.418	0.042	0.362	0.030	0.263	—	—
3/4"	7/8"	0.065	0.641	0.045	0.455	0.032	0.328	—	—
1"	1-1/8"	0.065	0.839	0.050	0.655	0.035	0.465	—	—
1-1/4"	1-3/8"	0.065	1.04	0.055	0.884	0.042	0.682	0.040	0.650
1-1/2"	1-5/8"	0.072	1.36	0.060	1.14	0.049	0.940	0.042	0.809
2"	2-1/8"	0.083	2.06	0.070	1.75	0.058	1.46	0.042	1.07
2-1/2"	2-5/8"	0.095	2.93	0.080	2.48	0.065	2.03	—	—
3"	3-1/8"	0.109	4.00	0.090	3.33	0.072	2.68	0.045	1.69
3-1/2"	3-5/8"	0.120	5.12	0.100	4.29	0.083	3.58	—	—
4"	4-1/8"	0.134	6.51	0.110	5.38	0.095	4.66	0.058	2.87
5"	5-1/8"	0.160	9.67	0.125	7.61	0.109	6.66	0.072	4.43
6"	6-1/8"	0.192	13.90	0.140	10.20	0.122	8.92	0.083	6.10
8"	8-1/8"	0.271	25.90	0.200	19.30	0.170	16.46	—	—

* FOR SPECIAL LENGTHS OR TEMPERS CONSULT FOR PRICE AND AVAILABILITY.

REFRIGERATION SERVICE TUBE

O.D.	WALL THICKNESS	WEIGHT PER FOOT	WEIGHT PER COIL*	COIL DIAMETER	COILS PER MASTER	WEIGHT PER MASTER
1/8"	0.030	0.0347	1.74	14-3/4"	10	17.4
3/16"	0.030	0.0575	2.88	14-3/4"	10	28.80
1/4"	0.030	0.0804	4.02	14-3/4"	10	40.20
5/16"	0.032	0.109	5.45	14-3/4"	10	54.50
3/8"	0.032	0.134	6.70	16-1/2"	10	67.00
1/2"	0.032	0.182	9.10	20"	5	45.50
5/8"	0.035	0.251	12.55	22"	5	62.75
3/4"	0.035	0.305	15.25	25"	3	45.75
7/8"	0.045	0.455	22.75	27-1/2"	3	22.75
1-1/8"	0.050	0.655	32.75	34-1/2"	—	32.75
1-3/8"	0.055	0.884	44.20	39-1/2"	—	44.20
1-5/8"	0.060	1.14	57.00	42"	—	57.00

* STANDARD 50' COIL - 100' COILS ALSO AVAILABLE AS STANDARD STOCK ITEM.

TEMPERATURE CONTROL TUBE

PACKED 2000' PER BOX

O.D.	WALL	WGT/FT	O.D.	WALL	WGT/FT
1/4"	0.025	0.0685	1/4"	0.032	0.0849

PLASTIC COATED COPPER TUBE

Polyethylene coating made from low density LDPE resin and is extruded at 0.025" minimum wall.

Quality

COMMITMENT TO QUALITY

Cambridge-Lee LLC implements strict testing methods and controls to ensure that the highest quality tube reaches our customers. From the selection of raw materials to final packaging, our tube is continually tested and inspected at all stages in the manufacturing process to ensure problems and defects are detected and solved at their source. Standard plumbing, drainage, air-conditioning, refrigeration, and medical gas tubing produced by Cambridge-Lee meets the chemical, mechanical, cleanliness, and eddy current testing requirements specified in the latest edition of the applicable ASTM Standard. In addition, all water tube sizes from ¼" OD and larger are [NSF Certified to ANSI/NSF Standard 61, *Drinking Water System Components – Health Effects*](#). The following restriction statement applies:

“Copper tube (Alloy C12200) is certified by NSF to ANSI/NSF Standard 61 for public water supplies meeting, or in the process of meeting the U.S. EPA Lead and Copper Rule (56FR 26460, June 7, 1991). Water supplies with pH less than 6.5 may require corrosion control to limit copper solubility in drinking water.” All standard tubing is guaranteed to perform satisfactorily in conventional applications. When requested, Cambridge-Lee will produce non-standard dimensional tube at an additional cost. [Click here](#) to view the details of our 50-year warranty on plumbing tube.

TECHNOLOGICAL EXCELLENCE ENSURES HIGH QUALITY

Making copper tubing has come a long way since copper was the metal of choice for the Pharaohs 5,000 years ago. Cambridge-Lee is committed to its ongoing, significant investment in quality control through the use of technology, including computer analyses, voice recognition, barcoding, RF, and more. In the past several years, we have invested in state-of-the-art manufacturing equipment and sophisticated control systems using specialized computer software. Automatic on-line inspection systems providing 100% testing through the use of lasers, ultrasonics, etc. are continually being incorporated to provide the ultimate in reliability. The data collected by these systems is instantly available to Quality and Production personnel to ensure any problems are quickly identified and corrected.

Cambridge-Lee is continually striving to improve all aspects of its operation. By controlling, monitoring and analyzing each step of the process, better methods are being developed to improve efficiency and quality in order to serve our customers better.-

For More Information Contact:

Cambridge-Lee Ind. LLC
86 Tube Drive, Reading, Pa.. 19605
Tel: (610) 926-4141
FAX: (610) 926-7317
Internet: sales@camlee.com

Last modified: 06/11/08



CAMBRIDGE-LEE INDUSTRIES, LLC.

Reading Tube Division

P.O. Box 14026, Reading, PA 19612 - 4026

Phone 610 - 926 4141 Fax 610 - 926 7317

Distributor:	Customer:
Address:	Address:
Order No.:	P.O. No.:
Product:	

Standard Tube Certificate of Conformance

Tube Type	Specification No. *	Specification Title
Type K, L & M	ASTM B 88 NSF 61	Standard Specification for Seamless Copper Water Tube ANSI/NSF Standard 61 Drinking Water System Components Health Effects ¹
Coils and Straight Lengths Marked as ACR	ASTM B 280	Standard Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service
Type DWV Drainage	ASTM B 306	Standard Specification for Copper Drainage Tube (DWV)
Type K & L Straight Lengths Marked as OXY/MED	ASTM B 819	Standard Specification for Seamless Copper Tube for Medical Gas Systems

Cambridge-Lee Industries, LLC, located in Reading, PA, USA, manufactures seamless copper tubing in the United States of America and is fully compliant with the "Buy American" requirements of Public Law 111-5, the American Recovery and Investment Act of 2009.

Cambridge-Lee Industries, LLC, manufactures seamless copper tubing with recycled scrap. Our production meets the LEED, Leadership in Energy and Environmental Design qualifications. The process of scrap recycling entails the purchase of #1 grade scrap and converting it in a finished cast form, which meets specification; alloy C12200, for standard product production. Currently, operations purchases about 65% of #1 scrap. The remaining capacity is cathode copper and run around.

Cambridge-Lee Industries, LLC certifies that the copper tube manufactured is grade UNS C12200 and meets the chemical, mechanical, cleanliness and eddy current testing requirements of the current specification(s) indicated below.

*Although CLI – RTD strives to meet all requirements specified in ASTM, Standard Tube² may not fully meet ASTM dimensional requirements. When specified at order placement and for an additional cost, CLI – RTD can produce Certified Tube to meet all requirements of the current ASTM standard, including dimensions.

Copper tube manufactured by Cambridge-Lee Industries does not contain mercury or come in contact with mercury, mercury compounds or mercury containing devices at any stage in manufacturing, inspection, packaging or shipping. All of the specifications require a minimum copper plus silver content of 99.9% and a phosphorus content between .015 - .040%. As indicated by the compositional requirements, the copper tube is essentially lead free.

¹ Seamless Copper Tube (Alloy C12200) is certified by NSF to NSF/ANSI Standard 61 for public water supplies meeting, or in process of meeting the U.S. EPA Lead and Copper Rule (56FR 26460, June 7, 1991). Water Supplies with pH less than 6.5 may require corrosion control to limit copper solubility in drinking water.

² Standard Tube will be provided unless Certified Tube is clearly defined on Purchase Order.



Technical Bulletin

Recycled Content of Metal Roofing and Siding Panels

4700 W. Lake Avenue • Glenview, IL 60025 • (847) 375-4718 • Fax (877) 665-2234 • www.metalconstruction.org

Metal roofing and siding panels are made with the highest recycled content from the most recyclable materials on earth, making them a great choice not only for your use, but also for future generations' use. Your old car, soup can or washing machine may become part of your new roof! Some states are mandating energy-saving requirements for buildings or giving tax breaks for energy-efficient and energy-saving construction products. Because recycling saves much of the energy required to produce metal products, recycled content is also being recognized and rewarded. So, recycling is done for economic and environmental reasons.

New York, Pennsylvania and California are leading the way in energy-saving initiatives, using the LEED® rating system to certify "green" buildings under the system created and promulgated by the U.S. Green Building Council. LEED stands for "Leadership in Energy and Environmental Design."

Among numerous design considerations, such as landscaping that saves water or highly reflective metal roofs that reduce air conditioning load to save energy, this rating system considers the "postconsumer" and "postindustrial" recycled content of building materials. Although recyclability is not a part of the LEED rating system, it is still good to know that metal panels may be recycled when their useful life ends many years from now and contribute again to future products' recycled content.

Steel recycling

Steel is the world's, as well as North America's, most recycled material. In the United States alone, nearly 70 million tons of steel were recycled in 2002. Every ton of steel that is recycled saves 2,500 pounds of iron ore, 1,400 pounds of coal, and 120 pounds of limestone. New steel made with recycled material uses as little as 26% of the amount of energy that would be required to make steel from raw materials extracted from nature.

Two different processes, the basic oxygen furnace (BOF) and the electric arc furnace (EAF), produce steel. Both processes consume recycled scrap steel to produce new steel. Scrap steel may result from almost any end-of-life product.

According to the Steel Recycling Institute (www.recycle-steel.org) the total recycled content from BOF production of 50,114,300 tons of steel in North America during 2002 was 16,054,800 tons or 32.0% total recycled content. The post consumer recycled content was 22.6% and the postindustrial recycled content was 8.4%.

The total recycled content from EAF production of 49,156,000 tons of steel in North America during 2002 was 47,159,800 tons or 95.9% total recycled content. The post consumer recycled content is 59.0% and the postindustrial recycled content is 31.9%. As you can see, the EAF process uses almost all scrap steel.

One should not make inappropriate environmental comparisons between steel made by the BOF and EAF, because both are part of a complementary, steel-making system.¹

Aluminum recycling

Aluminum is also recycled extensively from both post-consumer and post-industrial sources and provides the most valuable component for most municipal recycling efforts. A survey in late 2003 indicated that the recycled content of domestically produced, flat-rolled products for the building and construction market was approximately 80–85%. In addition, at the end of their long, useful life, aluminum roofing and siding panels can be repeatedly recycled back into similar products with no loss of quality.

Producing aluminum from recycled material requires only 5% of the energy required to produce aluminum from bauxite ore, and every ton of recycled aluminum saves four tons of bauxite. Additionally, using recycled aluminum instead of raw materials reduces air pollution generation such as CO₂, SO_x, and NO_x by 95% and water pollution by 97%.²

Copper recycling

Copper also is a routinely recycled metal with the highest scrap value of any building metal. Copper's high cost makes it a favored product for collection and sale to nonferrous-scrap recycling companies. The scrap is melted down and reformed into a new, appropriate product. This remelting takes only about 15% of the total energy consumed in mining, milling, smelting, and refining copper from ore. The average recycled content of all copper products is 44.6%. Copper wire is the biggest consumer of copper and that copper must be pure. As a result, copper wire production uses little copper scrap. The remaining copper market, including copper roofing, contains 75% scrap. Almost 50% of this is post consumer scrap.³

Zinc recycling

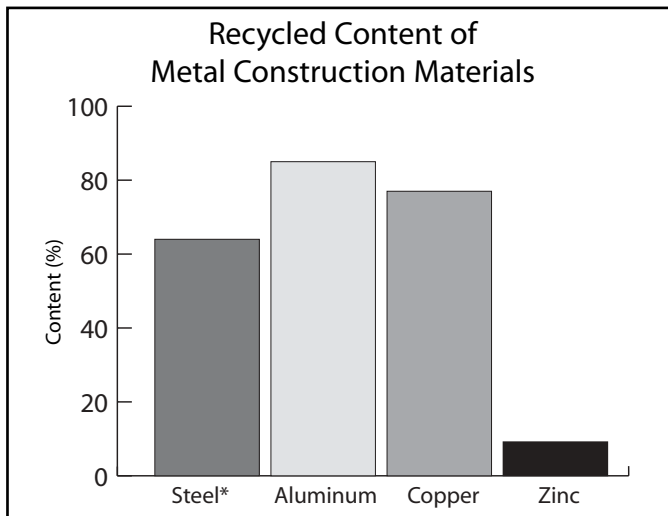
Over 30% of zinc used in all applications worldwide comes from recycling. That percentage is expected to increase to 39% before the end of 2004.^{4,5} In building applications, especially in Europe, more than 90% of old, rolled zinc products are recovered and generally recycled into other types of zinc products. At the end of its life, rolled zinc products used in building applications have an attractive residual value of up to 75% of the price for new zinc. The average recycled content of zinc in building products is estimated to be less than 9%.⁶

The amount of energy used to produce zinc from ore is the lowest of all non-ferrous metals on the market. Energy consumption is even lower when zinc is produced from recycled material: between 0.49% and 19.7% of the amount of energy used to produce zinc from ore.⁷

Recycled Content of Metal Roofing and Siding Panels

Conclusions

The high recycled content and recyclability of steel, aluminum, copper, zinc, and other metals allow for metal construction products to be routinely included on listings for “green” or sustainable building materials.



*The steel value is an average of the 2002 recycled content data from EAF and BOF steel as reported on page one of this bulletin.

The LEED program recognizes the importance of the weighted total recycled content of a building project’s materials. Use of recycled metal can contribute greatly toward a building acquiring LEED certification points.

REFERENCES

- (1) Steel Recycling Institute (www.recycle-steel.org)
- (2) The Aluminum Association (www.aluminum.org)
- (3) Copper Development Association (www.copper.org)
- (4) International Zinc Association (www.zincworld.org)
- (5) “UM Recycling Workshop,” Report of proceedings, Brussels, June 10, 1999.
- (6) “Environment and Safety Report of UMICORE Group” 2002
- (7) “Le recyclage des métaux non ferreux” (Recycling non-ferrous metals), M.E.Henstock, Publication of the Conseil International des Métaux et de l’Environnement, May 1996

Founded in 1983, the *Metal Construction Association* brings together the diverse metal construction industry for the purpose of expanding the use of all metals used in construction.

MCA promotes the benefits of metal in construction through

- Technical guidance
- Product certification
- Educational and awareness programs
- Advocating for the interests of our industry
- Recognition of industry-achievement awards
- Monitoring of industry issues, such as codes and standards
- Research to develop improved metal construction products
- Promotional and marketing support for the metal construction industry
- Publications to promote use of metal wall and roof products in construction.

For more information, please visit the MCA Web site at www.metalconstruction.org.