

# Copper Fittings



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CTS fittings for use with Style 606 copper connection couplings or Style 641 Vic-Flange Adapters. Fittings are full flow, standard radius wrought copper supplied roll grooved or bronze castings with "as cast" grooves. Currently available configurations are 90° elbows No. 610, 45° elbows No. 611, straight tees No. 620, grooved reducing tees No. 625, grooved by "cup" reducing tees No. 626 and grooved by "PermaLynx" reducing tees No. 627, grooved concentric reducers No. 650, grooved by "cup" concentric reducers No. 652, grooved by "PermaLynx" concentric reducers No. 653 and No. 660 caps.



## MATERIAL SPECIFICATIONS

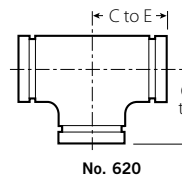
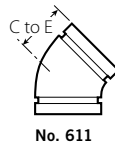
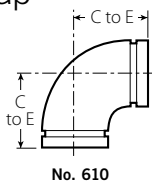
**Copper Fittings:** Wrought copper per ASTM B-75 C12200 or ASTM B-152 C11000\* and ANSI B 16.22, or bronze sand casting conforming to UNS C89836 or C92200.

\*Applies to 6 x 4" No. 650 Reducer only.

## DIMENSIONS

### Elbows, Tee and Cap

- NO. 610 90° Elbow
- NO. 611 45° Elbow
- NO. 620 Tee
- NO. 660 Cap



Size	No. 610 90° Elbow		No. 611 45° Elbow		No. 620 Tee		No. 660 Cap	
	Nominal Size Inches mm	C to E Inches mm	Approx. Wgt. Each Lbs. kg	C to E Inches mm	Approx. Wgt. Each Lbs. kg	C to E Inches mm	Approx. Wgt. Each Lbs. kg	T Inches mm
2 54.0	2.91 74	0.9 0.4	2.19 56	0.8 0.4	2.69 62	1.1 c 0.5	0.96 24	1.2 c 0.5
2½ 66.7	3.31 84	1.3 0.6	2.31 59	1.1 0.5	3.20 81	1.8 c 0.8	0.96 24	1.4 c 0.6
3 79.4	3.81 97	4.1 1.9	2.59 66	1.6 0.7	3.52 89	3.2 c 1.5	0.96 24	1.4 c 0.6
4 104.8	4.75 121	6.7 c 3.0	3.19 81	3.4 1.5	4.25 108	6.1 c 2.8	0.96 24	2.4 c 1.1
5 130.2	5.94 151	15.0 c 6.8	3.25 83	10.0 c 4.5	5.94 151	18.5 c 8.4	0.96 24	3.5 c 1.6
6 155.6	6.94 176	20.0 c 9.1	3.63 92	13.0 c 5.9	6.94 176	25.5 c 11.6	0.96 24	4.2 c 1.9
8 206.4	7.75 197	26.0 c 11.8	4.25 108	15.6 c 7.1	7.75 197	45.0 c 20.4	—	—

c = Bronze casting; all others, drawn copper.

## JOB/OWNER

System No. \_\_\_\_\_  
Location \_\_\_\_\_

## CONTRACTOR

Submitted By \_\_\_\_\_  
Date \_\_\_\_\_

## ENGINEER

Spec Sect \_\_\_\_\_ Para \_\_\_\_\_  
Approved \_\_\_\_\_  
Date \_\_\_\_\_

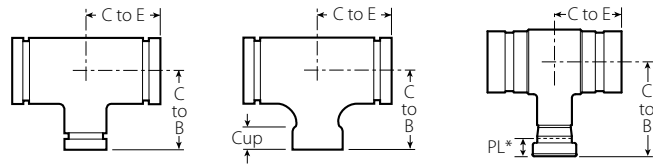
# Copper Fittings

## Reducing Tee

**No. 625** Grv. × Grv. × Grv.

**No. 626** Grv. × Grv. × Cup

**No. 627** Grv. × Grv. × PL\*



Size	No. 625 Grv. × Grv. × Grv.			No. 626 Grv. × Grv. × Cup				No. 627 Grv. × Grv. × PL*				
	Nominal Inches Actual mm	C to E Inches mm	C to B Inches mm	Approx. Wgt. Lbs. kg	C to E Inches mm	C to B Inches mm	Cup Inches mm	Approx. Wgt. Lbs. kg	C to E Inches mm	C to B Inches mm	PL* Inches mm	Approx. Wgt. Lbs. kg
2 54.0 × 2 54.0 × ¾ 22.5	1 28.6	—	—	—	2.20 56	1.98 50	0.75 19	0.75 0.3	2.20 56	2.93 75	0.52 13	0.84 0.4
	1 ¼ 34.9	—	—	—	2.33 59	2.20 56	0.91 23	0.81 0.4	2.33 59	3.27 83	0.56 14	0.96 0.4
	1 ½ 41.3	—	—	—	2.48 63	2.35 60	0.97 25	0.85 0.4	2.48 63	3.46 88	0.68 17	1.04 0.5
	2 54.0	—	—	—	2.55 65	2.28 58	1.09 28	0.87 0.4	2.55 65	3.46 88	0.75 19	1.14 0.5
2½ 66.7 × 2½ 66.7 × ¾ 22.5	1 28.6	—	—	—	2.26 57	2.23 57	0.75 19	1.00 0.5	2.26 57	3.25 83	0.52 13	1.26 0.6
	1 ¼ 34.9	—	—	—	2.40 61	2.40 61	0.91 23	1.17 0.5	2.4 61	3.58 91	0.56 14	1.32 0.6
	1 ½ 41.3	—	—	—	2.52 64	2.57 65	0.97 25	1.23 0.5	2.52 64	3.68 94	0.68 17	1.42 0.6
	2 54.0	3.28 83	3.38 86	1.58 0.7	—	—	—	—	—	—	—	—
3 79.4 × 3 79.4 × ¾ 22.5	1 28.6	—	—	—	2.41 61	2.56 65	0.75 19	1.40 0.6	2.41 61	3.58 91	0.52 13	1.54 0.7
	1 ¼ 34.9	—	—	—	2.54 65	2.79 71	0.91 23	1.45 0.7	2.54 65	3.97 101	0.56 14	1.60 0.7
	1 ½ 41.3	—	—	—	2.63 67	2.89 73	0.97 25	1.74 0.8	2.63 67	4.00 102	0.68 18	1.93 0.9
	2 54.0	3.00 76	3.38 86	2.14 c 1.0	—	—	—	—	—	—	—	—
4 104.8 × 4 104.8 × ¾ 22.5	1 22.5	—	—	—	3.04 77	2.97 75	0.75 19	2.75 1.2	3.04 77	3.99 101	0.52 13	2.95 1.3
	1 ¼ 34.9	—	—	—	3.10 79	3.22 82	0.91 23	2.86 1.3	3.10 79	4.40 112	0.56 14	3.01 1.4
	1 ½ 41.3	—	—	—	3.25 83	3.47 88	0.97 25	3.03 1.4	3.25 83	4.58 116	0.68 18	3.22 1.5
	2 54.0	—	—	—	3.35 85	3.65 93	1.09 28	3.16 1.4	3.35 85	4.83 123	0.75 19	3.43 1.6
	2 ½ 66.7	3.66 93	4.13 105	5.25 c 2.4	—	—	—	—	—	—	—	—
	3 79.4	3.94 100	4.06 103	5.75 c 2.6	—	—	—	—	—	—	—	—
	4 104.8	4.19 106	4.16 106	6.25 c 2.8	—	—	—	—	—	—	—	—

\* PL refers to PermaLynx end and PL dimensions include the tube insertion depth.  
c = Bronze casting; all others, drawn copper.

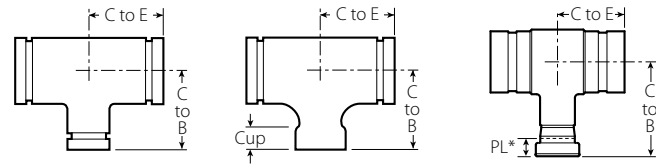
# Copper Fittings

## Reducing Tee

**No. 625** Grv. × Grv. × Grv.

**No. 626** Grv. × Grv. × Cup

**No. 627** Grv. × Grv. × PL\*



Size			No. 625 Grv. × Grv. × Grv.			No. 626 Grv. × Grv. × Cup				No. 627 Grv. × Grv. × PL*			
Nominal Inches	Inches	Actual mm	C to E Inches mm	C to B Inches mm	Approx. Wgt. Lbs. kg	C to E Inches mm	C to B Inches mm	Cup Inches mm	Approx. Wgt. Lbs. kg	C to E Inches mm	C to B Inches mm	PL* Inches mm	Approx. Wgt. Lbs. kg
5	×	5	×	3	3.75	4.63	5.41	c	—	—	—	—	—
					79.4	118	2.5						
				4	4.25	4.56	8.75	c	—	—	—	—	—
					104.8	116	4.0						
6	×	6	×	2½	3.63	5.13	6.66	c	—	—	—	—	—
				66.7	92	130	3.0						
				3	3.69	5.19	8.12	c					
				79.4	94	132	3.7						
				4	4.19	5.13	9.75	c					
104.8	106	130	4.4										
				5	4.69	5.19	11.25	c	—	—	—	—	
				130.2	119	132	5.1						

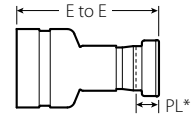
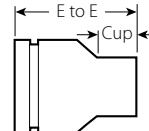
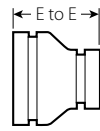
\* PL refers to PermaLynx end and PL dimensions include the tube insertion depth.

c = Bronze casting; all others, drawn copper.

# Copper Fittings

## Concentric Reducer

**No. 650** Grv. × Grv.  
**No. 652** Grv. × Cup  
**No. 653** Grv. × PL\*



Size		No. 650 Grv. × Grv.		No. 652 Grv. × Cup			No. 653 Grv. × PL*		
Nominal Inches	Actual mm	E to E Inches	Approx. Wgt. Each Lbs. kg	E to E Inches	Cup Inches	Approx. Wgt. Each Lbs. kg	E to E Inches	PL* Inches	Approx. Wgt. Each Lbs. kg
2 54.0	× 1 28.6	—	—	2.70 69	0.91 23	0.50 0.2	3.89 99	0.56 14	0.65 0.3
		—	—	3.00 76	0.97 25	0.45 0.2	4.14 106	0.68 17	0.64 0.3
		—	—	2.94 75	1.09 28	0.45 0.2	4.11 104	0.75 19	0.72 0.3
2½ 66.7	× 1 28.6	—	—	3.25 83	0.91 23	0.78 0.4	4.43 113	0.56 14	0.93 0.4
		—	—	3.52 89	0.97 25	0.60 0.3	4.63 118	0.68 17	0.79 0.4
		—	—	3.45 88	1.09 28	0.65 0.3	4.62 117	0.75 19	0.92 0.4
		3.29 83	1.00 0.5	3.30 84	1.34 34	0.65 0.3	—	—	—
3 79.4	× 1½ 41.3	—	—	3.68 93	1.09 28	1.06 0.5	4.85 123	0.75 19	0.92 0.4
		2.50 64	0.95 c 0.4	4.10 104	1.34 34	0.99 0.5	—	—	—
		3.38 86	0.92 0.4	—	—	—	—	—	—
4 104.8	× 2 54.0	4.75 121	1.65 c 0.8	4.75 121	1.34 34	1.95 0.9	—	—	—
		3.00 76	1.95 c 0.9	—	—	—	—	—	—
		3.00 76	2.02 0.9	—	—	—	—	—	—
5 130.2	× 3 79.4	3.88 99	6.30 c 2.9	—	—	—	—	—	—
		3.38 86	6.30 c 2.9	—	—	—	—	—	—
6 155.6	× 3 79.4	4.38 111	6.40 c 2.9	—	—	—	—	—	—
		3.88 99	6.50 c 2.9	—	—	—	—	—	—
		3.38 86	6.70 c 3.0	—	—	—	—	—	—
8 206.4	× 6 155.6	5.00 127	10.0 c 4.5	—	—	—	—	—	—

\* PL refers to PermaLynx end and PL dimensions include the tube insertion depth.  
 c = Bronze casting; all others, drawn copper.

## Copper Fittings

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**INSTALLATION**

Reference should always be made to the I-600 Victaulic Field Installation Handbook for Copper Connection Products. Handbooks are included with each shipment of Victaulic products for complete installation and assembly data, and are available in PDF format on our website at [www.victaulic.com](http://www.victaulic.com).

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**WARRANTY**

Refer to the Warranty section of the current Price List or contact Victaulic for details.

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**NOTE**

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations. This includes the substitution of wrought for cast or cast or wrought constructed fittings that provide the same fit and function.

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For complete contact information, visit [www.victaulic.com](http://www.victaulic.com)

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