

## LONG RADIUS 90° ELBOWS (BENDS) 3D, 5D AND 6D

### PRODUCT DESCRIPTION

1. Long radius 90° elbows 3D, 5D, and 6D in sizes up to and including 4" are provided with 4" (102 mm) long tangents, sizes 5" to 10" are provided with 1D long tangents and sizes 12" to 30" are provided with 12" (305 mm) long tangents.
2. End Preparation: Roll-grooved to AWWA C606-04 and or ISO/FDIS 6182-12. For dimensional tolerances of cast fittings, refer to ISO/FDIS 6182-12 Table 3.
  - Plain-end, beveled end or cut-grooved end are also available upon request.
3. Material: standard wall steel pipe to ASTM A53, Grade B. Other materials available on request.
4. C to E tolerances:  
2" through 6" : ±1/8" (3.2 mm); 8" through 16" : ±1/4" (6.4 mm);  
18" through 24" : ±3/8" (9.5 mm) ; 28" : ±1/2" (12.7 mm)
5. All weights are approximate, based on calculated weight of pipe.

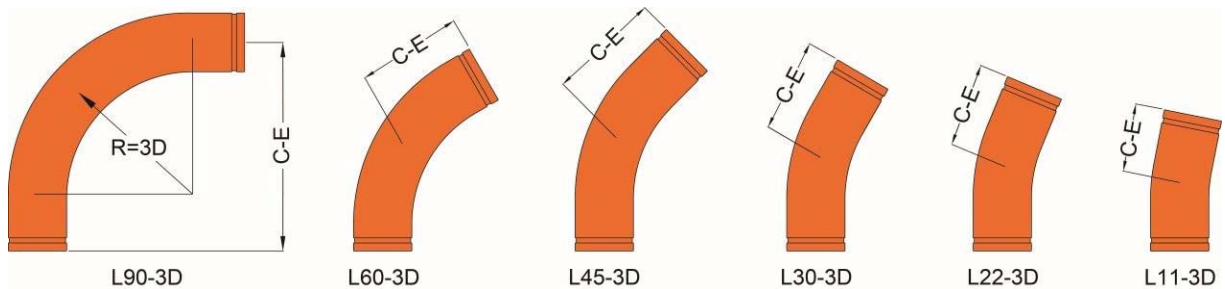


L90-3D 2 1/2"

**MODEL L90-3D WROUGHT 3D 90° ELBOW**  
**L60-3D WROUGHT 3D 60° ELBOW**  
**L45-3D WROUGHT 3D 45° ELBOW**  
**L30-3D WROUGHT 3D 30° ELBOW**  
**L22-3D WROUGHT 3D 22 1/2 ° ELBOW**  
**L11-3D WROUGHT 3D 11 1/4 ° ELBOW**



Full warranty terms can be found on [www.shurjoint.com](http://www.shurjoint.com)

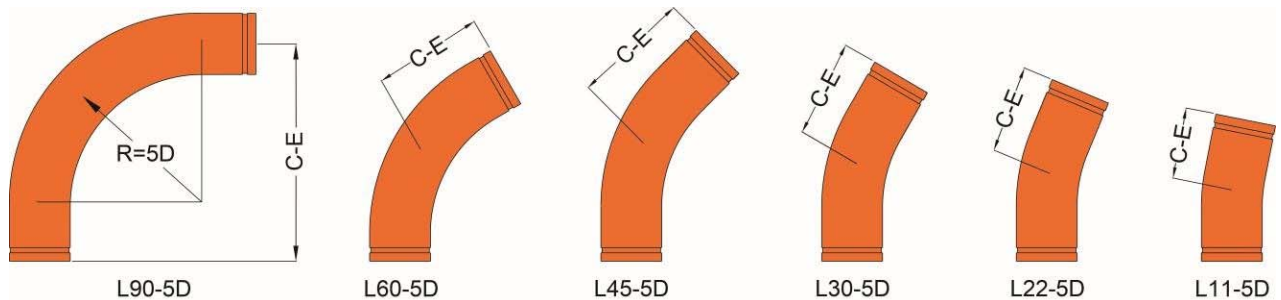


Models L90-3D / L60-3D / L45-3D / L30-3D / L22-3D / L11-3D Wrought Elbows													
Nominal Pipe Size	Pipe O.D.	L90-3D 90° Elbow		L60-3D 60° Elbow		L45-3D 45° Elbow		L30-3D 30° Elbow		L22-3D 22 1/2° Elbow		L11-3D 11 1/4° Elbow	
		C-E	Weight	C-E	Weight	C-E	Weight	C-E	Weight	C-E	Weight	C-E	Weight
in	in	in	Lbs	in	Lbs	in	Lbs	in	Lbs	in	Lbs	in	Lbs
mm	mm	mm	Kgs	mm	Kgs	mm	Kgs	mm	Kgs	mm	Kgs	mm	Kgs
2	2.375	10.0	5.5	7.50	4.3	6.50	3.7	5.75	3.4	5.25	3.2	4.50	2.8
50	60.3	254	2.5	191	2.0	165	1.7	146	1.5	133	1.5	114	1.3
2 1/2	2.875	11.5	9.9	8.25	7.7	7.25	6.7	6.00	5.8	5.50	5.3	4.75	4.6
65	73.0	292	4.5	210	3.5	184	3.0	152	2.6	140	2.4	121	2.1
3	3.500	13.0	14.6	9.25	11.0	7.75	10.1	6.50	8.0	5.75	7.3	5.00	6.2
80	88.9	330	6.6	235	5.0	197	4.6	165	3.6	146	3.3	127	2.8
3 1/2	4.000	14.5	18.6	10.00	14.4	8.50	12.0	6.75	10.2	6.00	9.2	5.00	7.6
90	101.6	368	8.4	254	6.5	216	5.6	171	4.6	152	4.2	127	3.4
4	4.500	16.0	22.4	11.00	18.5	9.00	14.7	7.25	12.8	6.50	11.4	5.25	9.3
100	114.3	406	10.2	279	8.4	229	7.0	184	5.8	165	5.2	133	4.2

<b>Models L90-3D / L60-3D / L45-3D / L30-3D / L22-3D / L11-3D Wrought Elbows</b>														
Nominal Pipe Size	Pipe O.D.	L90-3D 90° Elbow		L60-3D 60° Elbow		L45-3D 45° Elbow		L30-3D 30° Elbow		L22-3D 22½° Elbow		L11-3D 11¼° Elbow		
		C-E	Weight	C-E	Weight	C-E	Weight	C-E	Weight	C-E	Weight	C-E	Weight	
		in mm	in mm	in mm	Lbs Kgs	in mm	Lbs Kgs	in mm	Lbs Kgs	in mm	Lbs Kgs	in mm	Lbs Kgs	in mm
5	5.563	20.0	40.5	13.75	31.3	11.25	26.9	9.00	21.8	8.00	19.4	6.50	15.8	
125	141.3	508	18.4	349	14.2	286	12.2	229	9.9	203	8.8	165	7.2	
6	6.625	24.0	60.7	16.50	48.8	13.50	39.7	10.75	33.9	9.50	30.1	7.75	24.6	
150	168.3	610	27.5	419	22.1	343	18.0	273	15.4	241	13.7	197	11.2	
8	8.625	32.0	132.3	22.00	97.9	18.00	86.0	14.50	68.0	12.75	60.5	10.50	49.3	
200	219.1	813	60.0	559	44.4	457	39.0	368	30.8	324	27.4	267	22.4	
10	10.750	40.0	211.6	27.25	173.4	22.50	136.7	18.00	120.5	16.00	107.2	13.00	87.3	
250	273.0	1016	96.0	692	78.7	572	62.0	457	54.7	406	48.6	330	39.6	
12	12.750	48.0	319.7	32.75	254.8	27.00	205.0	21.75	177.0	19.25	157.5	15.50	128.3	
300	323.9	1219	145.0	832	115.6	686	93.0	552	80.3	489	71.4	394	58.2	
14	14.000	54.0	390.2	38.25	327.3	31.50	227.3	25.25	227.3	22.50	202.3	18.25	164.8	
350	355.6	1372	177.0	972	148.5	800	103.1	641	103.1	572	91.8	464	74.8	
16	16.000	60.0	546.8	43.75	429.0	36.00	350.5	29.00	297.9	25.25	265.2	20.75	216.0	
400	406.4	1524	248.0	1111	194.6	914	159.0	737	135.1	648	120.3	527	98	
18	18.000	66.0	639.2	49.25	544.4	40.25	461.3	32.50	378.1	28.75	336.5	23.35	274.1	
450	457.2	1676	290.6	1251	246.9	1029	209.2	826	171.5	730	152.6	593	124.3	
20	20.000	72.0	778.6	54.75	673.5	45.00	568.8	36.00	467.8	32.00	416.3	26.00	339.2	
500	508.0	1829	353.15	1391	305.5	1143	258.0	914	212.2	813	188.8	660	153.9	
24	24.000	84.0	1442.5	65.50	1297.5	53.75	1099.6	43.25	903.5	38.25	804.5	31.00	655.1	
600	609.6	2134	654.3	1664	588.5	1365	498.8	1099	409.8	972	364.9	787	297.2	
28	28.000	96.0	1897.5	70.00	1714.5	62.00	1486.6	47.00	1150.7	45.00	1109.3	35.00	868.6	
700	711.2	2438	860.7	1778	777.7	1575	674.3	1194	522.0	1143	503.2	889	394.0	
30	30.000	102.0	~2200.0											
750	762.0	2591	~997.9											

\* For 24" - 30": Made by XS (12.7mm) carbon steel pipe to ASTM A53.

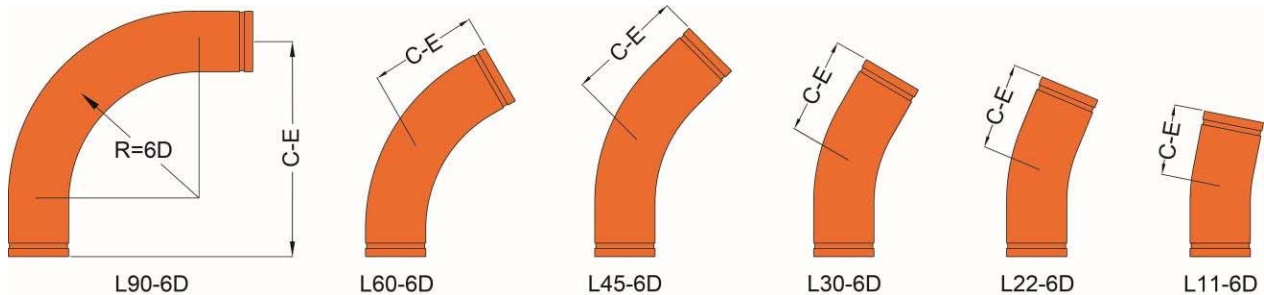
**MODEL L90-5D WROUGHT 5D 90° ELBOW**  
**L60-5D WROUGHT 5D 60° ELBOW**  
**L45-5D WROUGHT 5D 45° ELBOW**  
**L30-5D WROUGHT 5D 30° ELBOW**  
**L22-5D WROUGHT 5D 22½ ° ELBOW**  
**L11-5D WROUGHT 5D 11¼ ° ELBOW**



<b>Models L90-5D / L60-5D / L45-5D / L30-5D / L22-5D / L11-5D Wrought Elbows</b>														
Nominal Pipe Size	Pipe O.D.	L90-5D 90° Elbow		L60-5D 60° Elbow		L45-5D 45° Elbow		L30-5D 30° Elbow		L22-5D 22½° Elbow		L11-5D 11¼° Elbow		
		C-E	Weight	C-E	Weight	C-E	Weight	C-E	Weight	C-E	Weight	C-E	Weight	
		in mm	in mm	in mm	Lbs Kgs	in mm	Lbs Kgs	in mm	Lbs Kgs	in mm	Lbs Kgs	in mm	Lbs Kgs	in mm
2	2.375	14.00	7.2	9.75	5.6	8.25	4.8	6.75	4.0	6.00	3.6	5.00	3.0	
50	60.3	356	3.3	248	2.5	210	2.2	171	1.8	152	1.6	127	1.4	
2½	2.875	16.50	13.3	11.25	10.2	9.25	8.6	7.50	7.0	6.50	6.2	5.25	5.0	
65	73.0	419	6.1	286	4.6	235	3.9	191	3.2	165	2.8	133	2.3	
3	3.500	19.00	19.9	12.75	15.0	10.25	12.5	8.00	10.0	7.00	8.8	5.50	6.9	
80	88.9	483	9.0	324	6.8	260	5.7	203	4.5	178	4.0	140	3.1	
3½	4.000	21.50	26.9	12.25	20.0	11.25	16.5	8.75	13.0	7.50	11.3	5.75	8.7	
90	101.6	546	12.2	311	9.1	286	7.5	222	5.9	191	5.1	146	3.9	
4	4.500	24.00	35.4	15.50	26.0	12.50	21.3	9.50	16.6	8.00	14.3	6.00	10.7	
100	114.3	610	16.1	394	11.8	318	9.7	241	7.5	203	6.5	152	4.9	
5	5.563	30.00	59.9	19.50	44.1	15.50	36.1	11.75	28.1	10.00	24.1	7.50	18.2	
125	141.3	762	27.2	495	20.0	394	16.4	298	12.7	254	10.9	191	8.3	
6	6.625	36.00	93.3	23.25	68.6	18.50	56.2	14.00	43.8	12.00	37.6	9.00	28.3	
150	168.3	914	42.4	591	31.1	470	25.5	356	19.9	305	17.1	229	12.8	

Models L90-5D / L60-5D / L45-5D / L30-5D / L22-5D / L11-5D Wrought Elbows													
Nominal Pipe Size	Pipe O.D.	L90-5D 90° Elbow		L60-5D 60° Elbow		L45-5D 45° Elbow		L30-5D 30° Elbow		L22-5D 22½° Elbow		L11-5D 11¼° Elbow	
		C-E	Weight	C-E	Weight	C-E	Weight	C-E	Weight	C-E	Weight	C-E	Weight
in	mm	in	Lbs	in	Lbs	in	Lbs	in	Lbs	in	Lbs	in	Lbs
mm	mm	mm	Kgs	mm	Kgs	mm	Kgs	mm	Kgs	mm	Kgs	mm	Kgs
8	8.625	48.00	187.4	31.00	137.7	24.50	112.8	18.75	87.9	16.00	75.4	12.00	56.8
200	219.1	1219	85.2	787	62.5	622	51.2	476	39.9	406	34.2	305	25.8
10	10.750	60.00	332.0	39.00	244.1	30.75	199.9	23.50	155.8	20.00	133.7	15.00	100.6
250	273.1	1524	150.9	991	110.7	781	90.7	597	70.7	508	60.6	381	45.6
12	12.750	72.00	488.0	46.75	358.6	37.00	293.7	28.00	228.9	24.00	196.4	18.00	147.8
300	323.9	1829	221.8	1187	162.7	940	133.2	711	103.8	610	89.1	457	67.0
14	14.000	82.00	608.5	54.50	460.7	43.00	377.3	32.75	294.0	28.00	252.3	21.00	189.8
350	355.6	2083	276.6	1384	209	1092	171.1	832	133.4	711	114.4	533	86.1
16	16.000	92.00	779.7	62.25	603.8	49.25	494.5	37.50	385.3	32.00	330.7	24.00	248.8
400	406.4	2337	354.4	1581	273.9	1251	224.3	953	174.8	813	150	610	112.9
18	18.000	102.00	971.4	70.00	766.2	55.25	627.6	42.25	489.0	36.00	419.7	27.00	315.7
450	457.2	2591	441.5	1778	347.5	1403	284.7	1073	221.8	914	190.4	686	143.2
20	20.000	112.00	1184.9	77.75	947.9	61.50	776.4	46.75	605.0	40.00	519.2	30.00	390.6
500	508.0	2845	538.6	1975	430.0	1562	352.2	1187	274.4	1016	235.5	762	177.2
24	24.000	132.00	1674.9	93.25	1369.3	73.75	1121.6	56.25	873.9	48.00	750.1	35.75	564.3
600	609.6	3353	761.3	2369	621.1	1873	508.7	1429	396.4	1219	340.2	908	256.0

**MODEL L90-6D WROUGHT 6D 90° ELBOW**  
**L60-6D WROUGHT 6D 60° ELBOW**  
**L45-6D WROUGHT 6D 45° ELBOW**  
**L30-6D WROUGHT 6D 30° ELBOW**  
**L22-6D WROUGHT 6D 22½ ° ELBOW**  
**L11-6D WROUGHT 6D 11¼ ° ELBOW**



Models L90-6D / L60-6D / L45-6D / L30-6D / L22-6D / L11-6D Wrought Elbows													
Nominal Pipe Size	Pipe O.D.	L90-6D 90° Elbow		L60-6D 60° Elbow		L45-6D 45° Elbow		L30-6D 30° Elbow		L22-6D 22½° Elbow		L11-6D 11¼° Elbow	
		C-E	Weight	C-E	Weight	C-E	Weight	C-E	Weight	C-E	Weight	C-E	Weight
in	mm	in	Lbs	in	Lbs	in	Lbs	in	Lbs	in	Lbs	in	Lbs
mm	mm	mm	Kgs	mm	Kgs	mm	Kgs	mm	Kgs	mm	Kgs	mm	Kgs
2	2.375	16.00	8.2	11.00	6.3	9.00	5.3	7.25	4.3	6.50	3.9	5.25	3.2
50	60.3	406	3.7	279	2.9	229	2.4	184	2.0	165	1.8	133	1.5
2½	2.875	19.00	15.2	12.75	11.4	10.25	9.5	8.00	7.7	7.00	6.7	5.50	5.3
65	73.0	483	6.9	324	5.2	260	4.3	203	3.5	178	3.0	140	2.4
3	3.500	22.00	22.9	14.50	17.0	11.50	14	8.75	11.0	7.50	9.5	5.75	7.3
80	88.9	559	10.4	368	7.7	292	6.4	222	5.0	191	4.3	146	3.3
3½	4.000	25.00	31.1	16.25	22.8	12.75	18.6	9.75	14.4	8.25	12.3	6.00	9.2
90	101.6	635	14.1	413	10.3	324	8.4	248	6.5	210	5.6	152	4.2
4	4.500	28.00	41.0	18.00	29.8	14.00	24.1	10.50	18.5	8.75	15.7	6.50	11.4
100	114.3	711	18.6	457	13.5	356	10.9	267	8.4	222	7.1	165	5.2
5	5.563	35.00	69.5	22.25	50.5	17.50	40.9	13.00	31.3	11.00	26.5	8.00	19.4
125	141.3	889	31.6	565	22.9	445	18.6	330	14.2	279	12.0	203	8.8
6	6.625	42.00	108.2	26.75	78.6	21.00	63.7	15.75	48.8	13.25	41.3	9.50	30.1
150	168.3	1067	49.2	679	35.7	533	28.9	400	22.1	337	18.7	241	13.7
8	8.625	56.00	217.2	35.75	157.7	28.00	127.8	21.00	97.9	17.50	82.9	12.75	60.5
200	219.1	1422	98.7	908	71.5	711	58.0	533	44.4	445	37.6	324	27.4
10	10.750	70.00	384.9	44.75	279.4	35.00	226.4	26.00	173.4	22.00	146.9	16.00	107.2
250	273.1	1778	174.9	1137	126.7	889	102.7	660	78.7	559	66.6	406	48.6

Models L90-6D / L60-6D / L45-6D / L30-6D / L22-6D / L11-6D Wrought Elbows													
Nominal Pipe Size	Pipe O.D.	L90-6D 90° Elbow		L60-6D 60° Elbow		L45-6D 45° Elbow		L30-6D 30° Elbow		L22-6D 22½° Elbow		L11-6D 11¼° Elbow	
		C-E	Weight	C-E	Weight	C-E	Weight	C-E	Weight	C-E	Weight	C-E	Weight
in mm	in mm	in mm	Lbs Kgs	in mm	Lbs Kgs	in mm	Lbs Kgs	in mm	Lbs Kgs	in mm	Lbs Kgs	in mm	Lbs Kgs
12 300	12.750 323.9	84.00 2134	565.8 257.2	53.50 1359	410.5 186.2	41.75 1060	332.7 150.9	31.25 794	254.8 115.6	26.25 667	215.9 97.9	19.00 483	157.5 71.4
14 350	14.000 355.6	96.00 2438	708.4 322.0	62.50 1588	527.3 239.2	48.75 1238	427.3 193.8	36.50 927	327.3 148.5	30.75 781	277.3 125.8	22.25 565	202.3 91.8
16 400	16.000 406.4	108.00 2743	910.6 413.9	71.50 1816	691.1 313.5	55.75 1416	560.1 254.1	41.75 1060	429.0 194.6	35.25 895	363.5 164.9	25.50 648	265.2 120.3
18 450	18.000 457.2	120.00 3048	1137.4 517.0	80.50 2045	877.1 397.8	62.75 1594	710.7 322.4	47.00 1194	544.4 246.9	39.50 1003	461.3 209.2	28.75 730	336.5 152.6
20 500	20.000 508.0	132.00 3353	1390.4 632.0	89.25 2267	1085.1 492.2	69.75 1772	879.3 398.8	52.25 1327	673.5 305.5	44.00 1118	570.7 258.9	31.75 806	416.3 188.8
24 600	24.000 609.6	156.00 3962	1972.1 896.4	107.25 2724	1567.5 711	83.75 2127	1270.3 576.2	62.50 1588	973.0 441.3	52.34 1329	824.4 373.9	38.25 972	601.4 272.8

## MATERIAL SPECIFICATIONS

- **Fitting body:**  
Carbon steel pipe, standard wall, to ASTM A53.
- **Surface Finish:**  
Orange color painted or red RAL3000 color painted.
  - Hot dip galvanized (Option).
  - Epoxy coated in red RAL3000 or other colors (Option).

General Notes:

- **Pressure Ratings** for fittings conform to the working pressure of the coupling used to join the system.
- **Field Joint Test:** For one time only the system may be tested hydrostatically at 1½ times the maximum working pressure listed (AWWA C606 5.2.3).
- **Warning:** Piping systems must always be depressurized and drained before attempting disassembly and or removal of any components.
- **The 10 Year Limited Warranty** applies to manufacturing defects only and does not cover severe service/temperature applications or wear parts.
- **Shurjoint** reserves the right to change specifications, designs and or standard without notice and without incurring any obligations.

*Shurjoint product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Shurjoint Technical Service. Shurjoint reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligations to make such changes and modifications on Shurjoint products previously subsequently sold.*