

Victaulic® Long Radius Steel Elbows 3D, 5D and 6D



Product Description

Victaulic® long radius elbows are formed from standard wall steel pipe to ASTM A-53 Grade B. Fittings are painted orange enamel with galvanized optionally available.

Elbows are supplied with standard cut grooves unless otherwise requested. They are also available with plain ends by request.

Job/Owner

System No.	
Location	

Contractor

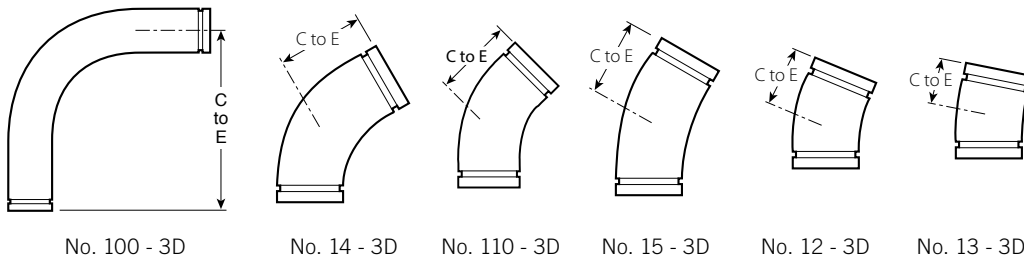
Submitted By	
Date	

Engineer

Spec Section	
Paragraph	
Approved	
Date	

Dimensions

Long Radius Steel Elbows - 3D



Fitting Size		No. 100- 3D 90°		No. 14- 3D 60°		No. 110- 3D 45°		No. 15- 3D 30°		No. 12- 3D 22 1/2°		No. 13- 3D 11 1/4°	
Nominal Outside Diameter	Actual Outside Diameter	C to E	Approx. Weight Each	C to E	Approx. Weight Each	C to E	Approx. Weight Each	C to E	Approx. Weight Each	C to E	Approx. Weight Each	C to E	Approx. Weight Each
inches	mm	inches	lbs.	inches	lbs.	inches	lbs.	inches	lbs.	inches	lbs.	inches	lbs.
mm	mm	mm	kg	mm	kg	mm	kg	mm	kg	mm	kg	mm	kg
2	2.375	10.00	5.3	7.50	4.3	6.50	3.9	5.75	3.4	5.25	3.2	4.50	2.8
50	60.3	254	2.4	191	2.0	165	1.8	146	1.5	133	1.5	114	1.3
2½	2.875	11.50	9.5	8.25	7.7	7.25	6.7	6.00	5.8	5.50	5.3	4.75	4.6
65	73.0	292	4.3	210	3.5	184	3.0	152	2.6	140	2.4	121	2.1
3	3.500	13.00	14.0	9.25	11.0	7.75	9.5	6.50	8.0	5.75	7.3	5.00	6.2
80	88.9	330	6.4	235	5.0	197	4.3	165	3.6	146	3.3	127	2.8
3½	4.000	14.50	18.6	10.00	14.4	8.50	12.3	6.75	10.2	6.00	9.2	5.00	7.6
90	101.6	368	8.4	254	6.5	216	5.6	172	4.6	152	4.2	127	3.4
4	4.500	16.00	24.1	11.00	18.5	9.00	15.7	7.25	12.8	6.50	11.4	5.25	9.3
100	114.3	407	10.9	279	8.4	229	7.1	184	5.8	165	5.2	133	4.2
4½	5.000	18.00	31.6	12.25	24.2	10.00	20.5	8.25	16.8	7.25	14.9	5.75	12.2
120	127.0	457	14.3	311	11.0	254	9.3	210	7.6	184	6.8	146	5.5
5	5.563	20.00	40.9	13.75	31.3	11.25	26.5	9.00	21.8	8.00	19.4	6.50	15.8
125	141.3	508	18.6	349	14.2	286	12.0	229	9.9	203	8.8	165	7.2
6	6.625	24.00	63.7	16.50	48.8	13.50	41.3	10.75	33.9	9.50	30.1	7.75	24.6
150	168.3	610	28.9	419	22.1	343	18.7	273	15.4	241	13.7	197	11.2
8	8.625	32.00	127.8	22.00	97.9	18.00	82.9	14.50	68.0	12.75	60.5	10.50	49.3
200	219.1	813	58.0	559	44.4	457	37.6	368	30.8	324	27.4	267	22.4
10	10.750	40.00	226.4	27.25	173.4	22.50	146.9	18.00	120.5	16.00	107.2	13.00	87.3
250	273.0	1016	102.7	692	78.7	572	66.6	457	54.7	406	48.6	330	39.6
12	12.750	48.00	332.7	32.75	254.8	27.00	215.9	21.75	177.0	19.25	157.5	15.50	128.3
300	323.9	1219	150.9	832	115.6	686	97.9	553	80.3	489	71.4	394	58.2
14	14.000	56.00	427.3	38.25	327.3	31.50	277.3	25.25	227.3	22.50	202.3	18.25	164.8
350	355.6	1422	193.8	972	148.5	800	125.8	641	103.1	572	91.8	464	74.8
15	15.000	60.00	480.8	41.00	368.3	33.75	312.0	27.00	255.8	24.00	227.6	19.50	185.4
375	381.0	1524	218.1	1041	167.1	857	141.5	656	116.0	610	103.2	495	84.1
16	16.000	64.00	560.1	43.75	429.0	36.00	363.5	29.00	297.9	25.50	265.2	20.75	216.0
400	406.4	1626	254.1	1111	194.6	914	164.9	737	135.1	648	120.3	527	98.0
18	18.000	72.00	710.7	49.25	544.4	40.50	461.3	32.50	378.1	28.75	336.5	23.25	274.1
450	457.2	1829	322.4	1251	246.9	1029	209.2	826	171.5	730	152.6	591	124.3
20	20.000	80.00	879.3	54.75	673.5	45.00	540.7	36.00	467.8	32.00	416.3	26.00	339.2
500	508.0	2032	398.9	1391	305.5	1143	245.3	914	212.2	813	188.8	660	153.9
22	22.000	88.00	1067.7	60.25	817.9	49.25	692.9	39.75	568.0	35.25	505.2	28.50	411.8
550	559.0	2235	484.3	1530	371.0	1251	314.3	1010	257.6	895	229.2	724	186.8
24	24.000	96.00	1270.3	65.50	973.0	53.75	824.4	43.25	675.7	38.25	601.4	31.00	490.0
600	609.6	2438	576.2	1664	441.4	1365	373.9	1099	306.5	972	272.8	787	222.3

General Notes

Long radius elbows (3D, 5D and 6D) in sizes up to and including 4" are provided with 4" integral tangent; remaining sizes provided with integral tangents with lengths equal to nominal pipe size.

Grooved or plain end available. Specify choice on order.

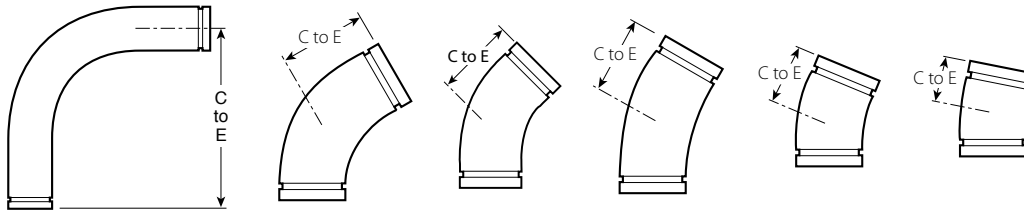
Bends to conform to above radii.

C to E tolerances: 2 - 6" $\pm 1/8$ "; 8 - 15" $\pm 1/4$ "; 16 - 24" $\pm 3/8$ "

All weights are approximate based on calculated weight of pipe.

Material: standard wall steel pipe to ASTM A-53 grade B (other materials available on request).

Long Radius Steel Elbows - 5D



No. 100 - 5D

No. 14 - 5D

No. 110 - 5D

No. 15 - 5D

No. 12 - 5D

No. 13 - 5D

Fitting Size		No. 100- 5D 90°		No. 14- 5D 60°		No. 110- 5D 45°		No. 15- 5D 30°		No. 12- 5D 22 1/2°		No. 13- 5D 11 1/4°	
Nominal Outside Diameter	Actual Outside Diameter	C to E	Approx. Weight Each	C to E	Approx. Weight Each	C to E	Approx. Weight Each	C to E	Approx. Weight Each	C to E	Approx. Weight Each	C to E	Approx. Weight Each
inches mm	inches mm	inches mm	lbs. kg	inches mm	lbs. kg	inches mm	lbs. kg	inches mm	lbs. kg	inches mm	lbs. kg	inches mm	lbs. kg
2 50	2.375 60.3	14.00 356	7.2 3.3	9.75 248	5.6 2.5	8.25 210	4.8 2.2	6.75 172	4.0 1.8	6.00 152	3.6 1.6	5.00 127	3.0 1.4
2 1/2 65	2.875 73.0	16.50 419	13.3 6.0	11.25 286	10.2 4.6	9.25 235	8.6 3.9	7.50 191	7.0 3.2	6.50 165	6.2 2.8	5.25 133	5.0 2.3
3 80	3.500 88.9	19.00 488	19.9 9.0	12.75 324	15.0 6.8	10.25 260	12.5 5.7	8.00 203	10.0 4.5	7.00 178	8.8 4.0	5.50 140	6.9 3.1
3 1/2 90	4.000 101.6	21.50 546	26.9 12.2	14.25 362	20.0 9.1	11.25 286	16.5 7.5	8.75 222	13.0 5.9	7.50 191	11.3 5.1	5.75 146	8.7 3.9
4 100	4.500 114.3	24.00 610	35.4 16.1	15.50 394	26.0 11.8	12.50 318	21.3 9.7	9.50 241	16.6 7.5	8.00 203	14.3 6.5	6.00 152	10.7 4.9
4 1/2 120	5.000 127.0	27.00 686	46.3 21.0	17.50 445	34.0 15.4	13.75 349	27.9 12.7	10.50 267	21.7 9.8	9.00 229	18.6 8.4	6.75 172	14.0 6.4
5 125	5.563 141.3	30.00 762	60.0 27.2	19.50 495	44.1 20.0	15.50 394	36.1 16.4	11.75 299	28.1 12.7	10.00 254	24.1 10.9	7.50 191	18.2 8.3
6 150	6.625 168.3	36.00 914	93.5 42.4	23.25 591	68.6 31.1	18.50 470	56.2 25.5	14.00 356	43.8 19.9	12.00 305	37.6 17.1	9.00 229	28.3 12.8
8 200	8.625 219.1	48.00 1219	187.6 85.1	31.00 787	137.7 62.5	24.50 622	112.8 51.2	18.75 476	87.9 39.9	16.00 406	75.4 34.2	12.00 305	56.8 25.8
10 250	10.750 273.0	60.00 1524	332.4 150.8	39.00 991	244.1 110.7	30.75 781	199.9 90.7	23.50 597	155.8 70.7	20.00 5008	133.7 60.6	15.00 381	100.6 45.6
12 300	12.750 323.9	72.00 1829	488.4 221.5	46.75 1188	358.6 162.7	37.00 940	293.7 133.2	28.00 711	228.9 103.8	24.00 610	196.4 89.1	18.00 457	147.8 67.0
14 350	14.000 355.6	84.00 2134	627.4 284.6	54.50 1384	460.7 209.0	43.00 1092	377.3 171.1	32.75 832	294.0 133.4	28.00 711	252.3 114.4	21.00 533	189.8 86.1
15 375	15.000 381.0	90.00 2286	705.8 320.2	58.25 1498	518.3 235.1	46.00 1168	424.6 192.6	35.25 895	330.8 150.1	30.00 762	283.9 128.8	22.50 572	213.6 96.6
16 400	16.000 406.4	96.00 2438	822.2 372.9	62.25 1581	603.8 273.9	49.25 1251	494.5 224.3	37.50 953	385.3 174.8	32.00 813	330.7 150.0	24.00 610	248.8 112.9
18 450	18.000 457.2	108.00 2743	1043.4 473.3	70.00 1778	766.2 347.5	55.25 1403	627.6 284.7	42.25 1073	489.0 221.8	36.00 914	419.7 190.4	27.00 686	315.7 143.2
20 500	20.000 508.0	120.00 3048	1290.9 585.6	77.75 1975	947.9 430.0	61.50 1562	776.4 352.2	46.75 1188	605.0 274.4	40.00 1016	519.2 235.5	30.00 762	390.6 177.2
22 550	22.000 559.0	132.0 3353	1567.4 711.0	85.50 2172	1150.9 522.0	67.50 1715	942.7 427.6	51.50 1308	734.6 333.2	44.00 1118	630.5 286.0	32.75 832	474.3 215.1
24 600	24.000 609.6	144.00 3658	1864.8 845.9	93.25 2369	1369.3 621.1	73.75 1873	1121.6 508.8	56.25 1429	873.9 396.4	48.00 1219	750.1 340.2	35.75 908	564.3 256.0

General Notes

Long radius elbows (3D, 5D and 6D) in sizes up to and including 4" are provided with 4" integral tangent; remaining sizes provided with integral tangents with lengths equal to nominal pipe size.

Grooved or plain end available. Specify choice on order.

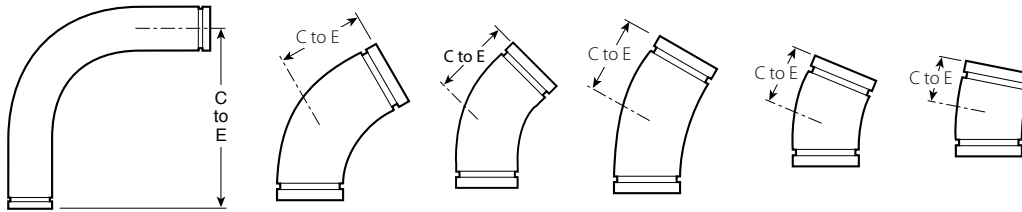
Bends to conform to above radii.

C to E tolerances: 2 - 6" $\pm 1/8$ "; 8 - 15" $\pm 1/4$ "; 16 - 24" $\pm 3/8$ "

All weights are approximate based on calculated weight of pipe.

Material: standard wall steel pipe to ASTM A-53 grade B (other materials available on request).

Long Radius Steel Elbows - 6D



No. 100 - 6D

No. 14 - 6D

No. 110 - 6D

No. 15 - 6D

No. 12 - 6D

No. 13 - 6D

Fitting Size		No. 100- 6D 90°		No. 14- 6D 60°		No. 110- 6D 45°		No. 15- 6D 30°		No. 12- 6D 22 1/2°		No. 13- 6D 11 1/4°	
Nominal Outside Diameter	Actual Outside Diameter	C to E	Approx. Weight Each	C to E	Approx. Weight Each	C to E	Approx. Weight Each	C to E	Approx. Weight Each	C to E	Approx. Weight Each	C to E	Approx. Weight Each
inches mm	inches mm	inches mm	lbs. kg	inches mm	lbs. kg	inches mm	lbs. kg	inches mm	lbs. kg	inches mm	lbs. kg	inches mm	lbs. kg
2 50	2.375 60.3	16.00 406	8.2 3.7	11.00 279	6.3 2.9	9.00 229	5.3 2.4	7.25 184	4.3 2.0	6.50 165	3.9 1.8	5.25 133	3.2 1.5
2½ 65	2.875 73.0	19.00 483	15.2 6.9	12.75 324	11.4 5.2	10.25 260	9.5 4.3	8.00 203	7.7 3.5	7.00 178	6.7 3.0	5.50 140	5.3 2.4
3 80	3.500 88.9	22.00 559	22.9 10.4	14.50 368	17.0 7.7	11.50 292	14.0 6.4	8.75 222	11.0 5.0	7.50 191	9.5 4.3	5.75 146	7.3 3.3
3½ 90	4.000 101.6	25.00 635	31.1 14.1	16.25 413	22.8 10.3	12.75 324	18.6 8.4	9.75 248	14.4 6.5	8.25 210	12.3 5.6	6.00 152	9.2 4.2
4 100	4.500 114.3	28.00 711	41.1 18.6	18.00 457	29.8 13.5	14.00 356	24.1 10.9	10.50 267	18.5 8.4	8.75 222	15.7 7.1	6.50 165	11.4 5.2
4½ 120	5.000 127.0	31.50 800	53.7 24.4	20.00 508	39.0 17.7	15.75 400	31.6 14.3	11.75 299	24.2 11.0	10.00 254	20.5 9.3	7.25 184	14.9 6.8
5 125	5.563 141.3	35.00 889	69.6 31.6	22.25 565	50.5 22.9	17.50 445	40.9 18.6	13.00 330	31.3 14.2	11.00 279	26.5 12.0	8.00 203	19.4 8.8
6 150	6.625 168.3	42.00 1067	108.4 49.2	26.75 680	78.6 35.7	21.00 533	63.7 28.9	15.75 400	48.8 22.1	13.25 337	41.3 18.7	9.50 241	30.1 13.7
8 200	8.625 219.1	56.00 1422	217.5 98.7	35.75 908	157.7 71.5	28.00 711	127.8 58.0	21.00 533	97.9 44.4	17.50 445	82.9 37.6	12.75 324	60.5 27.4
10 250	10.750 273.0	70.00 1778	385.4 174.8	44.75 1137	279.4 126.7	35.00 889	226.4 102.7	26.00 660	173.4 78.7	22.00 559	146.9 66.6	16.00 406	107.2 48.6
12 300	12.750 323.9	84.00 2134	566.2 256.8	53.50 1359	410.5 186.2	41.75 1061	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	98.00 2489	727.4 329.9	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
15 375	15.000 381.0	105.00 2667	818.4 371.2	67.00 1702	593.3 269.1	52.25 1327	480.2 217.8	39.25 997	386.3 167.1	33.00 838	312.0 141.5	24.00 609	227.6 103.2
16 400	16.000 406.4	112.00 2845	953.3 432.4	71.50 1816	691.1 313.5	55.75 1416	560.1 254.1	41.75 1061	429.0 194.6	35.25 895	363.5 164.9	25.50 648	265.2 120.3
18 450	18.000 457.2	126.00 3200	1209.7 548.7	80.50 2045	877.1 397.9	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	140.00 3556	1496.6 678.9	89.25 2267	1085.1 492.2	69.75 1772	879.3 398.9	52.25 1327	673.5 305.5	44.00 1118	570.7 258.9	31.75 807	416.3 188.8
22 550	22.000 559.0	154.00 3912	1817.3 824.3	98.25 2496	1317.5 597.6	76.75 1950	1067.7 484.3	57.50 1461	817.9 371.0	48.25 1256	693.0 314.3	35.00 889	505.5 229.3
24 600	24.000 609.6	168.00 4267	2162.8 980.7	107.25 2724	1567.5 711.0	83.75 2127	1270.3 576.2	62.50 1588	973.0 441.4	52.75 1340	824.4 373.9	38.25 972	601.4 272.8

General Notes

Long radius elbows (3D, 5D and 6D) in sizes up to and including 4" are provided with 4" integral tangent; remaining sizes provided with integral tangents with lengths equal to nominal pipe size.

Grooved or plain end available. Specify choice on order.

Bends to conform to above radii.

C to E tolerances: 2 - 6" $\pm 1/8$ "; 8 - 15" $\pm 1/4$ "; 16 - 24" $\pm 3/8$ "

All weights are approximate based on calculated weight of pipe.

Material: standard wall steel pipe to ASTM A-53 grade B (other materials available on request).

Installation

Reference should always be made to the [I-100 Victaulic Field Installation Handbook](#) for the product you are installing. 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.

Warranty

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

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.

Trademarks

Victaulic® is a registered trademark of Victaulic Company.