

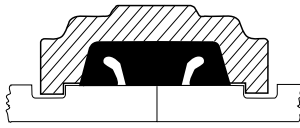
Radius Cut Groove Specifications

Victaulic groove specifications for cast pipe (gray and ductile) conform to requirements of ANSI/AWWA standard C-606.

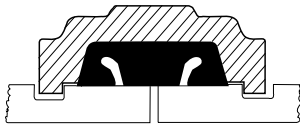
For cast pipe, the groove is cut with a radius ("R" dimension) at the corners of the groove base to reduce stress concentration. Grooving dimensions are the same for any one pipe O.D. regardless of pipe class and pressure.

Standard preparation is with a rigid radius groove. Flexible radius groove dimensions may be used to provide expansion/contraction or angular movement allowance at the joint.

The outside surface of the pipe between the groove and pipe end must be smooth and free from deep pits or swells to provide a leak-tight seat for the Victaulic gasket. All rust, loose scale, oil, grease and dirt shall be removed. Peened surfaces may require corrective action to provide leak-tight gasket seal (refer to ANSI/AWWA C-606).

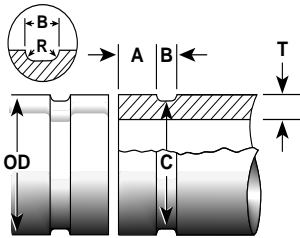


Rigid Radius Cut Groove



Flexible Radius Cut Groove

Exaggerated for clarity.



Rigid Radius Cut Groove Specifications – Ductile Iron Pipe

1 Nom. Size Inches mm	2 Pipe Outside Dia. O.D. Inches/mm			3 Gasket Seat A+ +0.000 -0.020	4 Groove Width B +0.031 -0.016	5 Groove Dia. C **		6 Radius R	7 Min. Allow. Wall Thick. T#	
	Basic	Tolerance*				Basic	Tol. +0.000		Cast Iron	Ductile Iron
		+	-							
3 80	3.96 100.6	+0.045 +1.14	-0.045 -1.14	0.840 21.34	0.375 9.53	3.723 94.56	-0.020 -0.51	0.120 3.05	0.32 8.1	0.31 7.9
4 100	4.80 121.9	+0.045 +1.14	-0.045 -1.14	0.840 21.34	0.375 9.53	4.563 115.90	-0.020 -0.51	0.120 3.05	0.35 8.9	0.32 8.1
6 150	6.90 175.3	+0.060 +1.52	-0.060 -1.52	0.840 21.34	0.375 9.53	6.656 169.06	-0.020 -0.51	0.120 3.05	0.38 9.7	0.34 8.6
8 200	9.05 229.9	+0.060 +1.52	-0.060 -1.52	0.950 24.13	0.500 12.70	8.781 223.04	-0.025 -0.64	0.145 3.68	0.41 10.4	0.36 9.1
10 250	11.10 281.9	+0.060 +1.52	-0.060 -1.52	1.015 25.78	0.500 12.70	10.813 274.65	-0.025 -0.64	0.145 3.68	0.44 11.2	0.38 9.7
12 300	13.20 335.3	+0.060 +1.52	-0.060 -1.52	1.015 25.78	0.500 12.70	12.906 327.81	-0.030 -0.76	0.145 3.68	0.48 12.2	0.40 10.2
14 350	15.30 388.6	+0.050 +1.27	-0.080 -2.03	1.015 25.78	0.625 15.88	14.969 380.21	-0.030 -0.76	0.165 4.19	0.55 14.0	0.42 10.7
16 400	17.40 442.0	+0.050 +1.27	-0.080 -2.03	1.340 34.04	0.625 15.88	17.063 433.40	-0.030 -0.76	0.165 4.19	0.58 14.7	0.43 10.9
18 450	19.50 495.3	+0.050 +1.27	-0.080 -2.03	1.340 34.04	0.625 15.88	19.125 485.78	-0.030 -0.76	0.185 4.70	0.63 16.0	0.44 11.2
20 500	21.60 548.6	+0.050 +1.27	-0.080 -2.03	1.340 34.04	0.625 15.88	21.219 538.96	-0.030 -0.76	0.185 4.70	0.67 17.0	0.45 11.4
24 600	25.80 655.3	+0.050 +1.27	-0.080 -2.03	1.340 34.04	0.625 15.88	25.406 645.31	-0.030 -0.76	0.185 4.70	0.73 18.5	0.47 11.9
30 750	32.00 812.8	+0.080 +2.03	-0.060 -1.52	1.625 41.28	0.750 19.05	31.550 801.37	-0.035 -0.89	0.215 5.46	0.92 23.4	0.51 13.0
36 900	38.30 972.8	+0.080 +2.03	-0.060 -1.52	1.625 41.28	0.750 19.05	37.850 961.39	-0.035 -0.89	0.215 5.46	1.02 25.9	0.58 14.7

NOTES:

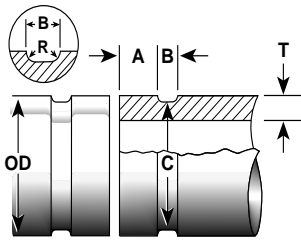
- COLUMN 1 –Nominal AWWA Pipe Size
- COLUMN 2 ¹ – AWWA outside diameter: The outside diameter shall not vary more than the tolerance listed. The maximum allowable tolerance from square cut ends is 0.030" (0.8 mm) for 3" - 80 mm); 0.045" (1.1 mm) for 4 - 6" (100 - 150 mm) and 0.060" (1.524 mm) for sizes 8" O.D. and above measured from true square line.
- COLUMN 3 ¹ –Gasket seat: The pipe surface shall be free from indentations and projections from the end of the pipe to the groove, to provide a leak-tight seat for the gasket.
- COLUMN 4 –Groove width.
- COLUMN 5 ¹ –Groove outside diameter: The groove must be uniform depth for the entire circumference. Groove must be maintained within the "C" diameter tolerance listed.
- COLUMN 6 –Groove depth: For reference only. Groove must conform to the groove diameter "C" listed.
- COLUMN 7 –Minimum allowable wall thickness. This is the minimum wall thickness which may be cut grooved.

[†] Coatings applied to the interior surfaces, including bolt pad mating surfaces, of our bolted grooved and bolted plain end couplings should not exceed 0.010" (0.25 mm). Also, the coating thickness applied to the gasket seating surface and within the groove on the pipe exterior should not exceed 0.010" (0.25 mm).

+ Must be smooth and free of deep pits or swells.
 ** Groove must be of uniform depth for entire pipe circumference. Groove must conform to "C" diameter shown.
 # Ovality, or out-of-roundness, must lie within specified tolerances.
 # Min. standard wall thickness that should be grooved. Tolerances are to conform to Class 53 ANSI/AWWA C151/A21.51. For 18 - 36" (450 - 950 mm) ductile iron Class 53 pipe may be used. Contact Victaulic for details.

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Victaulic Company of America Phone: 1-800-PICK-VIC (1-800-742-5842) Fax: 610-250-8817 e-mail: pickvic@victaulic.com	Victaulic Company of Canada Phone: 416-675-5575 Fax: 416-675-5565 e-mail: viccanada@victaulic.com	Victaulic Europe Phone: 32-9-381-1500 Fax: 32-9-380-4438 e-mail: viceuro@victaulic.be	Victaulic America Latina Phone: 610-559-3300 Fax: 610-559-3608 e-mail: vical@victaulic.com	Victaulic Asia Pacific Phone: 65-6235-3035 Fax: 65-6235-0535 e-mail: vicap@victaulic.com
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This product shall be manufactured by Victaulic Company. 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.