

# DUCTILE IRON GROOVED PIPE

## APPLICATION

Most commonly used in rigid pipe systems in well supported above ground pipe installations. Ductile iron grooved pipe is particularly suited for water filtration plants, sewage disposal plants, wastewater treatment plants, pumping and lift stations, and industrial process plant applications.



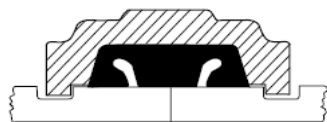
## DUCTILE IRON GROOVED PIPE

- Ductile Iron Grooved Pipe is manufactured in accordance **ANSI/AWWA C606**. See attached TABLE 1 for technical data.
- Ductile iron pipe conforms to **ANSI/AWWA C151/A21.51**. Pipe shall be minimum Class 53. C&B uses ductile iron pipe made in the USA. Pipe Class submitted is noted below.  
 CL 53  CL54  CL55  CL56
- Unless otherwise requested by the customer, grooves are rigid style conforming to TABLE 1. Groove style submitted is noted below.  
 RIGID  FLEX
- C&B wall collars are industry standard and are made of ductile iron (ASTM A536-70:50:05) and are welded continuously both sides of the collar with NI-55 weld rod. The collars are rated for 250 psi thrust load. See DI WALL PIPE submittal for technical data.
- C&B standard lining is double thickness cement mortar and bituminous seal coat in accordance with **ANSI/AWWA C104/A21.4**. C&B offers special linings when required by the project per pipe system. Linings submitted are noted below.  
 CEM  PROTECTO 401  CBGL911 GLASS
- C&B standard exterior coating is bituminous asphalt in accordance with **ANSI/AWWA C151/A21.51**. If the pipe is required to be shop coated for temporary jobsite protection, refer to the included C&B Piping Coating Submittal attached.

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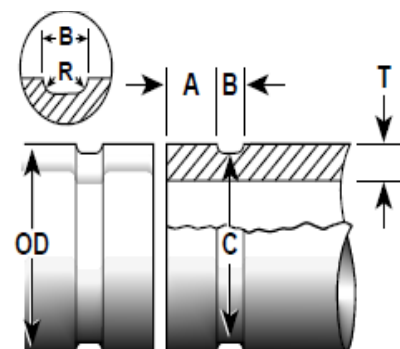
REV 2016

## RIGID RADIUS CUT GROOVED DI PIPE



Rigid Radius Cut Groove

1 (IN.)	2 PIPE OUTSIDE DIA O.D.			3 GASKET SEAT A+ +0.000 -0.020	4 GASKET WIDTH B +0.031 -0.016	5 GROOVE DIA C**		6 RADIUS R	7 MIN ALLOW. WALL THICK. T#
	BASIC (IN.)	TOLERANCE *				BASIC	TOL. +000.0		
		+	-						
03"	3.96	+0.045	-0.045	0.840	0.375	3.723	-0.020	0.120	0.31
04"	4.80	+0.045	-0.045	0.840	0.375	4.563	-0.020	0.120	0.32
06"	6.90	+0.060	-0.060	0.840	0.375	6.656	-0.020	0.120	0.34
08"	9.05	+0.060	-0.060	0.950	0.500	8.781	-0.025	0.145	0.36
10"	11.10	+0.060	-0.060	1.015	0.500	10.813	-0.030	0.145	0.38
12"	13.20	+0.060	-0.060	1.015	0.500	12.906	-0.030	0.145	0.40
14"	15.30	+0.050	-0.080	1.015	0.625	14.969	-0.030	0.165	0.42
16"	17.40	+0.050	-0.080	1.340	0.625	17.063	-0.030	0.165	0.43
18"	19.50	+0.050	-0.080	1.340	0.625	19.125	-0.030	0.185	0.44
20"	21.60	+0.050	-0.080	1.340	0.625	21.219	-0.030	0.185	0.45
24"	25.80	+0.050	-0.080	1.340	0.625	25.406	-0.030	0.185	0.47
30"	32.00	+0.080	-0.060	1.625	0.750	31.550	-0.035	0.215	0.51
36"	38.30	+0.080	-0.060	1.625	0.750	37.850	-0.035	0.215	0.58



- COLUMN 1 *Nominal AWWA Pipe Size*
- COLUMN 2 † *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" for 3", 0.045" for 4"-6", and 0.060" for sizes 8" and larger measured from true square line.*
- COLUMN 3 † *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 † *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". Also coating thickness applied to the gasket seating surface and within the groove on the pipe exterior should not exceed 0.010".*

**TABLE 1**

- \* *Ovality, or out-of-roundness, must lie within specified tolerances*
- \*\* *Groove must be uniform depth for entire pipe circumference. Groove must conform to "C" diameter shown.*
- \*\*\* *Must be smooth and free of deep pits or swells*
- # *Min. standard wall thickness that should be grooved. Tolerances are to conform to CL 53 AWWA C151.*