

# SUBMITTAL FOR CHARLOTTE PIPE® SERVICE CAST IRON SOIL PIPE AND FITTINGS

Date: \_\_\_\_\_

Job Name: \_\_\_\_\_

Location: \_\_\_\_\_


Engineer: \_\_\_\_\_

Contractor: \_\_\_\_\_

**► Scope:**

This specification covers Service Cast Iron pipe, fittings, and compression gaskets used in sanitary drain, waste and vent (DWV), sewer, and storm drainage applications. This system is intended for use in non-pressure applications.

**► Specification:**

Pipe and fittings shall comply with ASTM A 74. Compression gaskets shall comply with ASTM C 564. All pipe and fitting shall be made in the United States, and marked with the collective trademark of the Cast Iron Soil Pipe Institute, . Service cast iron pipe and fittings are listed by NSF® International to the UP Code.

**► Installation:**

Installation shall comply with the latest installation instructions published by Charlotte Pipe and Foundry Company® and shall conform to all applicable plumbing, fire, and building code requirements. The system shall be hydrostatically tested after installation to 10 ft. of head (4.3 psi maximum).

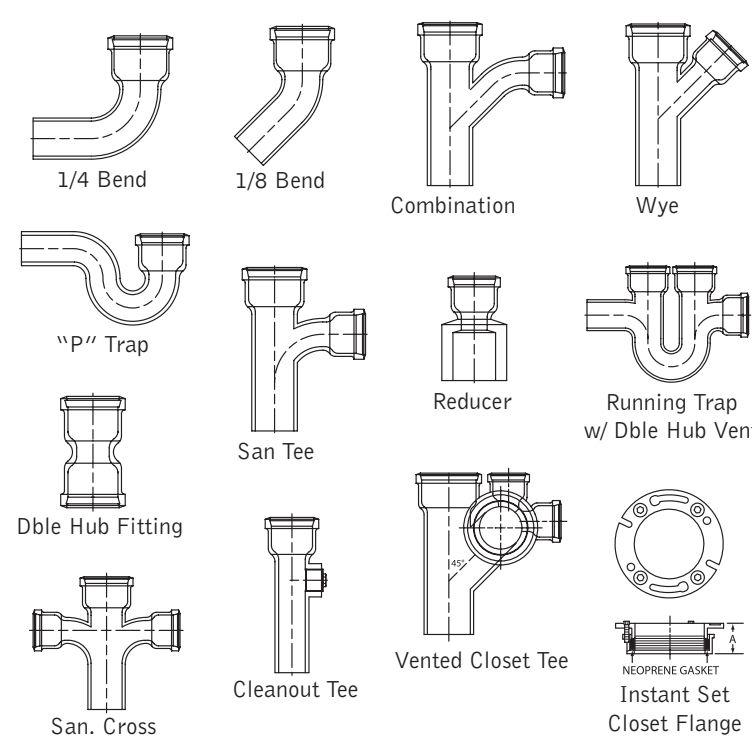
**WARNING!** Never test with or transport/store compressed air or gas in Cast Iron pipe or fittings. Doing so can result in explosive failures and cause severe injury or death.

**► Referenced Standards:**

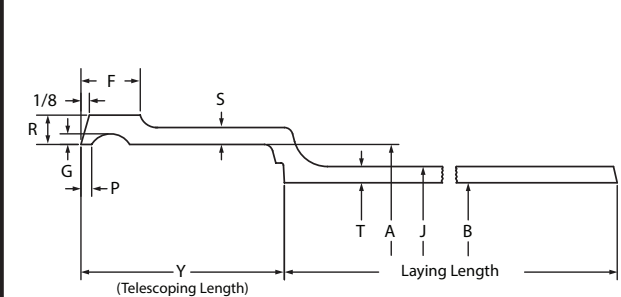
ASTM A 74: Cast Iron Soil Pipe and Fittings

ASTM C 564: Rubber Gaskets for Cast Iron Soil Pipe and Fittings





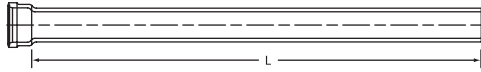
*Not all fitting patterns shown*



Size	PIPE - SERVICE		Barrel		Nominal Thickness
	Telescoping Length Y	Hub I.D. A	O.D. J	I.D. B	
2"	2.50	2.94	2.30	1.96	0.17
3"	2.75	3.94	3.30	2.96	0.17
4"	3.00	4.94	4.30	3.94	0.18
5"	3.00	5.94	5.30	4.94	0.18
6"	3.00	6.94	6.30	5.94	0.18
8"	3.50	9.25	8.38	7.94	0.23
10"	3.50	11.38	10.50	9.94	0.28
12"	4.24	13.50	12.50	11.94	0.28
15"	4.25	16.95	15.88	15.16	0.36

# Extra Heavy Cast Iron

**PART NO. XH 1**

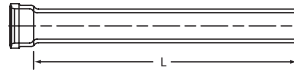


**Pipe, 5' Lengths, Single Hub**

Size	L	Weight
2" x 5'	5'	25.0
3" x 5'	5'	44.4
4" x 5'	5'	59.6
5" x 5'	5'	73.7
6" x 5'	5'	81.4
8" x 5'	5'	141.1
10" x 5'	5'	196.7
12" x 5'	5'	245.2
15" x 5'	5'	350.0

Weights are approximate and are for shipping purposes only.

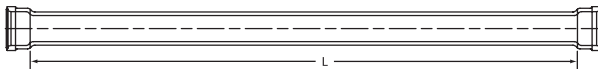
**PART NO. XH 1A**



**Pipe, 30" Lengths, Single Hub**

Size	L	Weight
8" x 30"	30"	75.9
10" x 30"	30"	112.6
12" x 30"	30"	136.0
15" x 30"	30"	197.0

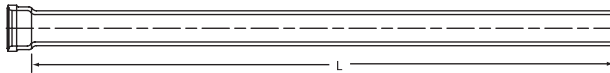
**PART NO. XH 2**



**Pipe, 5' Lengths, Double Hub**

Size	L	Weight
2" x 5'	4' 9 1/2"	26.3
3" x 5'	4' 9 1/4"	44.6
4" x 5'	4' 9"	60.4
5" x 5'	4' 9"	80.3
6" x 5'	4' 9"	85.3

**PART NO. XH 3**



**Pipe, 10' Lengths, Single Hub**

Size	L	Weight
2" x 10'	10'	45.3
3" x 10'	10'	83.9
4" x 10'	10'	104.9
5" x 10'	10'	134.3
6" x 10'	10'	156.6
8" x 10'	10'	246.1
10" x 10'	10'	375.4
12" x 10'	10'	471.0
15" x 10'	10'	676.4

**PART NO. XH 4**



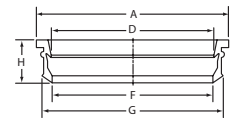
**Pipe, 30" Lengths, Double Hub**

Size	L	Weight
2" x 30"	25"	15.0
3" x 30"	24 1/2"	26.0
4" x 30"	24"	33.0

**PART NO. XH 900**

**Extra Heavy Charlotte Seal Gasket**

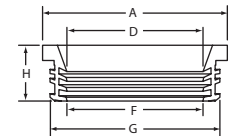
Size	A	D	F	G	H	Weight
2	3 1/2	2 3/8	2 9/32	3 3/16	1 7/8	0.3
3	4 15/16	3 1/2	3 1/2	4 1/2	2 1/4	0.4
4	5 3/4	4 7/32	4 13/32	5 7/16	2 1/4	0.6
5	6 3/4	5 1/2	5 1/2	6 3/16	2 1/2	0.7
6	8	6 1/2	6 1/2	7 3/8	2 1/2	0.9
8	10	8 1/2	8 5/16	9 1/2	3	1.6
10	12 1/2	10 3/4	10 1 1/32	11 1/2	3	2.0
12	14 7/16	12 5/8	12 5/8	14	3	2.8



**PART NO. XH 950**

**Extra Heavy Quick-Tite Gasket**

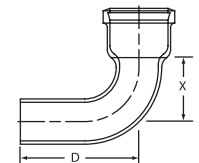
Size	A	D	F	G	H	Weight
4	6 1/8	4 1/4	4 13/32	5 1 1/16	1 13/16	0.6
15	17 3/4	15 13/32	15	16 7/8	3 1/4	5.0



**PART NO. XH 5**

**Quarter Bend**

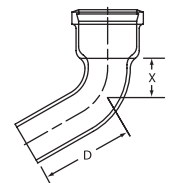
Size	D	X	Weight
2	6	3 1/4	6.3
3	7	4	11.1
4	8	4 1/2	15.5
5	8 1/2	5	18.5
6	9	5 1/2	25.8
8	11 1/2	6 5/8	47.0
10	12 1/2	7 5/8	80.0
12	15	8 3/4	142.0
15	16 1/2	10 1/4	173.9



**PART NO. XH 7**

**Sixth Bend**

Size	D	X	Weight
2	4 3/4	2	6.0
3	5 1/2	2 1/2	7.2
4	6 5/16	2 13/16	14.0
6	6 7/8	3 3/8	21.0



# SUBMITTAL FOR CHARLOTTE® SEAL AND QUIK-TITE COMPRESSION GASKETS

## ▶ Charlotte Seal Gasket

Charlotte Seal Gaskets are used for joining Hub and Spigot Cast Iron pipe and fittings conforming to ASTM A 74.

### Material:

Charlotte Seal Gaskets are a molded one-piece gasket made from Neoprene. Neoprene is one of the few elastomers that is well suited for direct burial because it has the ability to withstand the natural corrosive components of soil as well as sanitary effluent. Neoprene has a maximum operating temperature of 212°F and has a maximum joint deflection of 5 degrees.

### Gasket Specification:

Charlotte Seal Gaskets are produced in conformance with ASTM C 564.

### Features:

The molded bead design locks into the lead bead groove on Charlotte Pipe® Hub and Spigot Cast Iron Pipe and Fittings to provide a secure, leak free seal.

## ▶ Quik-Tite Gasket

Quik-Tite Gaskets are used for joining Hub and Spigot Cast Iron pipe and fittings conforming to ASTM A 74.

### Material:

Quik-Tite Gaskets are a molded one-piece gasket made from Neoprene. Neoprene is one of the few elastomers that is well suited for direct burial because it has the ability to withstand the natural corrosive components of soil as well as sanitary effluent. Neoprene has a maximum operating temperature of 212°F and has a maximum joint deflection of 5 degrees.

### Gasket Specification:

Quik-Tite Gaskets are produced in conformance with ASTM C 564.



Molded Bead

## Charlotte Seal Gasket

Available for 2"-10" Service and 2"-15"  
Extra Heavy Cast Iron Systems



Quik-Tite Gasket

Available for 2"-12" Service and 4"-15"  
Extra Heavy Cast Iron Systems



For more information, call us at 1-800-438-6091 or log on to [www.charlottepipe.com](http://www.charlottepipe.com).

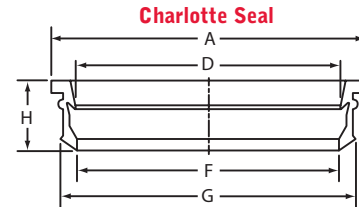
# SUBMITTAL FOR CHARLOTTE® SEAL AND QUIK-TITE COMPRESSION GASKETS

## Installation

1. Clean the hub and spigot so they are free of all dirt, mud, sand, gravel, and other foreign materials.
2. Remove sharp edges by filing or tapping with a ball-peen hammer. Insert the gasket into the hub.
3. The gasket must be completely inserted into the hub. Only the gasket's flange that shows identification information should remain exposed outside the hub.
4. Lubricate the gasket following the pipe joint lubrication manufacturer's recommendations. For small-diameter pipe and fittings (2" - 4"), coat the inside of the gasket with lubricant using a paint brush or rag, and then coat the outside of the spigot. For large-diameter pipe and fittings (5" - 15"), we recommend that an adhesive lubricant be used to ensure a water-tight seal. Adhesive lubricants should be applied to the inside of the gasket, the outside of the spigot and the inside of the hub.
5. Align the pipe so that it is straight, then push or pull the spigot through all the sealing rings of the gasket. Charlotte plain-end pipe is manufactured with beveled ends to make insertion easy. As the spigot barrel is forced into the gasket, the gasket is compressed and completely seals the joint in both displacement and compression. When seated correctly, you will feel the spigot end of the pipe "bottom" in the hub.



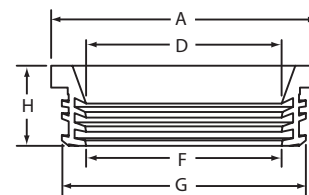
## Dimensional Diagrams



Service								
	2"	3"	4"	5"	6"	8"	10"	
A	3½	4½	5½	6½	7½	9¼	12⅞	
D	2⅞	3⅞	4⅞	5⅞	6⅞	8⅞	10½	
F	2⅞	3⅞	4⅞	5⅞	6⅞	8⅞	10⅞	
G	3⅞	4⅞	5¼	6¼	7¼	9⅝	11⅞	
H	1⅜	2⅞	2⅞	2⅞	2¼	3	2¾	

Extra Heavy								
	2"	3"	4"	5"	6"	8"	10"	12"
A	3½	4⅞	5¾	6¾	8	10	12½	14⅞
D	2⅞	3½	4⅞	5½	6½	8½	10¼	12⅞
F	2⅞	3½	4⅞	5½	6½	8⅞	10⅞	12⅞
G	3⅞	4½	5⅞	6⅞	7⅞	9½	11½	14
H	1⅞	2¼	2¼	2½	2½	3	3	3

## Quik-Tite



Service								
	2"	3"	4"	5"	6"	8"	10"	12"
A	3½	4⅞	5¾	6¾	8	10	12¼	14⅞
D	2⅞	3⅞	4	5	6⅞	8⅞	10¼	12¼
F	2	3⅞	4	5	6⅞	8⅞	10	12
G	3¼	4⅞	5⅞	6	7⅞	8½	11½	14
H	1⅞	1¼	1¼	2⅞	2⅞	2½	2½	2⅞

Extra Heavy		
	4" XH	15" XH
A	6⅞	17¾
D	4¼	15⅞
F	4⅞	15
G	5⅞	16⅞
H	1⅞	3¼

## NOTICE

Charlotte Pipe and Foundry Company strongly recommends that its cast iron hub and spigot pipe and fittings be joined with compression gaskets sold by our Company. Our hub and spigot pipe and fittings are manufactured to very specific manufacturing tolerances which conform to ASTM A 74. Our gaskets, produced in conformance with ASTM C 564, are especially designed to work with our pipe and fitting tolerances.

## NOTICE

Service Weight gaskets should only be used with Service Weight pipe and fittings, where Extra Heavy gaskets should be used with Extra Heavy pipe and fittings. Due to dimensional variances between systems, the two are not interchangeable.

For more information, call us at 1-800-438-6091 or log on to [www.charlottepipe.com](http://www.charlottepipe.com).