

## SUBMITTAL FOR CHARLOTTE PIPE® PVC PR 200 SDR 21 BELL END & GASKETED PIPE

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

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

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

### ► **Scope:**

This specification covers PVC Standard Dimensional Ratio (SDR) pipe for pressure applications. These systems are intended for pressure applications where the operating temperature will not exceed 140° F.

### ► **Specification:**

Pipe and fittings shall be manufactured from virgin rigid PVC (polyvinyl chloride) vinyl compounds with a cell class of 12454 as identified in ASTM D 1784.

PVC SDR pipe shall be Iron Pipe Size (IPS) conforming to ASTM D 2672 for belled-end pipe. Gaskets shall conform to ASTM F 477. All pipe shall be manufactured in the United States. Pipe shall conform to NSF International Standard 61 and the health effects portion of NSF Standard 14.

### ► **Installation:**

Installation shall comply with the latest installation instructions published by Charlotte Pipe and Foundry and shall conform to all applicable plumbing, fire, and building code requirements. Buried pipe shall be installed in accordance with ASTM F 1668 and ASTM D 2774. The system shall be protected from chemical agents, fire-stopping materials, thread sealant, plasticized-vinyl products or other aggressive chemical agents not compatible with PVC compounds. The system shall be hydrostatically tested after installation. **WARNING!** Never test with or transport/store compressed air or gas in PVC pipe or fittings. Doing so can result in explosive failures and cause severe injury or death.

### ► **Referenced Standards:**

- ASTM D 1784: Rigid Vinyl Compounds
- ASTM D 2241: PVC Pressure Rated Pipe (SDR Series)
- ASTM D 2774: Underground Installation of Thermoplastic Pressure Piping
- ASTM D 3139: Standard Specification for Joints Using Flexible Elastomeric Seals
- ASTM F 477: Elastomeric Seals (Gaskets) for Joining Plastic Pipe
- ASTM F 1668: Procedures for Buried Plastic Pipe
- NSF Standard 14: Plastic Piping Components & Related Materials
- NSF Standard 61: Drinking Water System Components – Health Effects



**PVC SDR PIPE 21 (WHITE)**

<b>SDR 21 BELL END SOLVENT WELD</b>			
<b>PIPE SIZE</b>	<b>MINIMUM WALL THICKNESS (B)</b>	<b>AVG. PIPE OD (A)</b>	<b>AVG. BELL DEPTH (C)</b>
3/4" x 20'	0.060	1.050	1.250
1" x 20'	0.063	1.063	1.500
1 1/4" x 20'	0.079	1.660	1.750
1 1/2" x 20'	0.09	1.900	2.000
2" x 20'	0.113	2.375	2.250
2 1/2" x 20'	0.137	2.875	2.500
3" x 20'	0.167	3.500	3.250
4" x 20'	0.214	4.500	4.000
6" x 20'	0.316	6.625	6.000

+/- 1/2" Tolerance For (C) Dimension

<b>SDR 21 GASKETED PIPE</b>					
<b>PIPE SIZE</b>	<b>MINIMUM WALL THICKNESS (B)</b>	<b>AVG. PIPE OD (A)</b>	<b>INSERTION MARK (D)</b>	<b>AVG. BELL DEPTH (C)</b>	<b>APPROXIMATE BELL OD CLEARANCE (E)</b>
2 1/2" x 20'	0.137	2.875	4.250	5.250	4.375
3" x 20'	0.135	3.500	4.500	5.250	4.750
4" x 20'	0.173	4.500	4.500	5.500	5.850
6" x 20'	0.162	6.625	5.000	6.500	8.500
8" x 20'	0.210	8.625	6.000	7.250	10.750
10" x 20'	0.262	10.750	7.000	8.250	12.875
12" x 20'	0.311	12.750	8.000	9.500	15.875

+/- 1/2" Tolerance For (C) And (D) Dimensions

## TERMS AND CONDITIONS OF SALE

Terms and Conditions of Sale can be found at [https://charlottepipe.com/terms\\_and\\_conditions.aspx](https://charlottepipe.com/terms_and_conditions.aspx).

### LIMITED WARRANTY

Charlotte Pipe and Foundry Company® (Charlotte Pipe®) Products are warranted to be free from manufacturing defects and to conform to currently applicable ASTM standards for a period of five (5) years from date of delivery. Buyer's remedy for breach of this warranty is limited to replacement of, or credit for, the defective product. This warranty excludes any expense for removal or reinstallation of any product and any other incidental, consequential, or punitive damages. **This limited warranty is the only warranty made by seller and is expressly in lieu of all other warranties, express and implied, including any warranties of merchantability and fitness for a particular purpose.** No statement, conduct or description by Charlotte Pipe or its representative, in addition to or beyond this Limited Warranty, shall constitute a warranty. This Limited Warranty may only be modified in writing signed by an officer of Charlotte Pipe.

This Limited Warranty will not apply if:

- 1) The Products are used for purposes other than their intended purpose as defined by local plumbing and building codes, and the applicable ASTM standard.
- 2) The Products are not installed in good and workmanlike manner consistent with normal industry standards; installed in compliance with the latest instructions published by Charlotte Pipe and good plumbing practices; and installed in conformance with all applicable plumbing, fire and building code requirements.
- 3) This limited warranty does not apply when the products of Charlotte Pipe are used with the products of other manufacturers that do not meet the applicable ASTM or CISPI standards or that are not marked in a manner to indicate the entity that manufactured them.
- 4) In hubless cast iron installations, this warranty will not apply if products are joined with unshielded hubless couplings. Charlotte Pipe requires that its hubless cast iron pipe and fittings be joined only with shielded hubless couplings manufactured in accordance with CISPI 310, ASTM C 1277 and certified by NSF® International or with Heavy Duty Couplings meeting ASTM C 1540.
- 5) The Products fail due to defects or deficiencies in design, engineering, or installation of the piping system of which they are a part.
- 6) The Products have been the subject of modification; misuse; misapplication; improper maintenance or repair; damage caused by the fault or negligence of anyone other than Charlotte Pipe; or any other act or event beyond the control of Charlotte Pipe.
- 7) The Products fail due to the freezing of water in the Products.
- 8) The Products fail due to contact with chemical agents, fire stopping materials, thread sealant, plasticized vinyl products, or other aggressive chemical agents that are not compatible.
- 9) Pipe outlets, sound attenuation systems or other devices are permanently attached to the surface of Charlotte® PVC, ABS or CPVC products with solvent cement or adhesive glue.

Charlotte Pipe products are manufactured to the applicable ASTM or CISPI standard. Charlotte Pipe and Foundry **cannot** accept responsibility for the performance, dimensional accuracy, or compatibility of pipe, fittings, gaskets, or couplings not manufactured or sold by Charlotte Pipe and Foundry.

This Limited Warranty will not apply unless written notice of a claim is mailed to Charlotte Pipe at the address below within 30 days of discovery of the allegedly defective product.

Any Charlotte Pipe products alleged to be defective **must** be made available to Charlotte Pipe at the following address for verification, inspection and determination of cause:

Charlotte Pipe and Foundry Company  
Attention: Technical Services  
2109 Randolph Road  
Charlotte, North Carolina 28207

**Purchaser must obtain a return materials authorization** and instructions for return shipment to Charlotte Pipe of any product claimed defective or shipped in error.

Any Charlotte Pipe product **proved** to be defective in manufacture will be replaced F.O.B. point of original delivery, or credit will be issued, at the discretion of Charlotte Pipe.

5/19/23

# CHARLOTTE

**PIPE AND FOUNDRY COMPANY®**

PO BOX 35430

CHARLOTTE

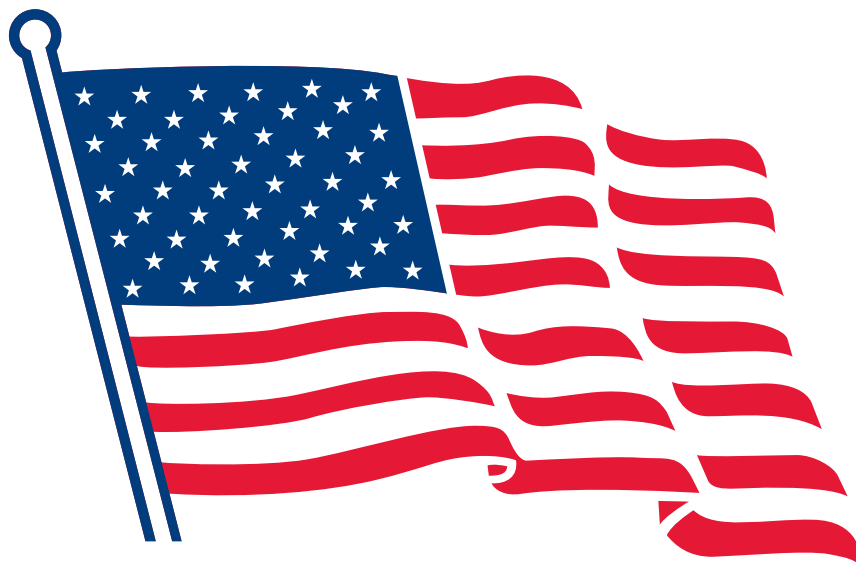
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[WWW.CHARLOTTEPIPE.COM](http://WWW.CHARLOTTEPIPE.COM)



All products manufactured by  
Charlotte Pipe and Foundry Company  
are proudly made in the U.S.A.

