



Dondlinger
CONSTRUCTION

SUBMITTAL SHEET

Dondlinger Construction

120035- - COW -Cheney Pump Station Ozone Strainer Replacement

Project: 120035-
COW -Cheney Pump Station Ozone Strainer
Replacement

Spec Section Num: 31 11 16
Submittal: 331116-01


Revision: 0
Package: Water Piping
Date: 11/19/2020 UTC

Submittal Title: Backwash Piping: Product Data
Submittal Detail:
Response Due By: 11/30/2020 UTC

Contractor:
Eric Swenson
Dondlinger Construction

Contractor's Stamp	
DONDLINGER AND SONS CONST. CO., INC.	
<input checked="" type="checkbox"/>	Reviewed <u>Eric Swenson</u>
<input type="checkbox"/>	Reviewed as Noted _____
<input type="checkbox"/>	Revise and Resubmit _____
<input checked="" type="checkbox"/>	Date <u>11/19/20</u>
<input checked="" type="checkbox"/>	Submittal No. <u>331116-01</u>
REVIEW OF ITEMS DOES NOT RELIEVE VENDOR FROM COMPLYING WITH REQUIREMENTS OF CONTRACT PLANS AND SPECIFICATIONS, CONTRACT AND CITY, STATE AND LOCAL CODES.	

Architect:
Aidan Gearhart
PEC

SUBMITTAL REVIEW	
<input type="checkbox"/> REVIEWED <input type="checkbox"/> MAKE CORRECTIONS NOTED <small>If checked above, fabrication MAY be undertaken. Review does not authorize changes to Contract Sum unless stated in a Change Order.</small> <small>If checked below, fabrication MAY NOT be undertaken. Resubmit corrected copies for final approval. Correction shall be limited to items marked.</small> <input checked="" type="checkbox"/> REVISE AND RESUBMIT <input type="checkbox"/> REJECTED <small>5/10</small>	<small>Reviewed is only for general conformance with the design concept of the project. Contractor at all times remains solely responsible for compliance with the Contract Documents, including dimensions and safety analyses. Deviations are not approved unless Contractor has in writing called Engineer's attention to such deviation at the time of submission and Engineer has in writing approved the specific deviation. No acceptance by Engineer relieves Contractor from responsibility for errors or omissions in Compliance Submittals.</small>  PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A. BY <u>Nicole Franken</u> DATE <u>11/25/20</u>

Response:
Comment:



ASTM D1785/D2665 Sch. 40 PVC Pressure/DWV Pipe
— ASTM D1785 Sch. 80 PVC Pressure Pipe
SOLVENT WELD

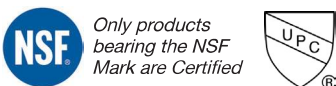
North American Pipe Corporation's ASTM D1785 Solvent Weld PVC Pipe product line is manufactured to meet the needs of residential, commercial, & industrial plumbing systems, and other pressure applications. With top quality raw materials and modern processing technology, our ASTM D1785 pipe meets all industry standards in addition to our own rigorous quality control standards.

For sizes 1¼" and larger, our ASTM D1785 Schedule 40 pipe is also dual rated to ASTM D2665 for DWV applications. This gives the designer, installer, and end user the flexibility of one product for two distinct applications. North American Pipe produces ASTM D1785 Solvent Weld pipe in both solid wall and various perforated styles.



Short Form Specification		
Pipe Standard:	ASTM D1785 & ASTM D2665** Sch. 40	ASTM D1785 Sch. 80
Applications:	Water DWV**	Water
Diameter Std.:	— Iron Pipe Size (IPS)	
Nominal Sizes:	½", ¾", 1", 1¼", 1½", 2", 2½", 3", 4", 5", 6", 8", 10", 12", 14", 16", 18", 20", 24"	
Pressure Ratings:	See Next Page	
Length:	10' or 20'	
Color:	White	Gray
Pipe Compound:	ASTM D1784 Cell Class 12454	
Pipe Joint Std.:	ASTM D2672	
Pipe Options:	— Solid Wall Plain End (M x M) — Solid Wall Bell End (M x F) 2 Hole Perforated Bell End (M x F) 3 Hole Perforated Bell End (M x F)	
Certifications:	NSF 14 & NSF 61 IAPMO Uniform Plumbing Code*	
Installation Std.:	ASTM D2774 & ASTM D2855	

*IAPMO Uniform Plumbing Code listed products must be requested at time of order.
 **Sizes ½", ¾", 1" & 5" are not included in the ASTM D2665 DWV pipe standard.



USE OF PVC PIPE IN EXHAUST SYSTEMS

WARNING: Failure to follow these instructions exactly could result in serious injury, death, or property damage.

WARNING: Flue gas temperature should not exceed 140° Fahrenheit. PVC pipe exposed to temperatures higher than 140° Fahrenheit may melt or change shape, resulting in leakage of exhaust fumes and property damage.

WARNING CARBON MONOXIDE POISONING HAZARD: Vent pipe must be properly installed in accordance with all local and national plumbing and HVAC installation standards and codes.

North American Pipe Corporation assumes no responsibility for equipment installed in violation of any code or regulation.

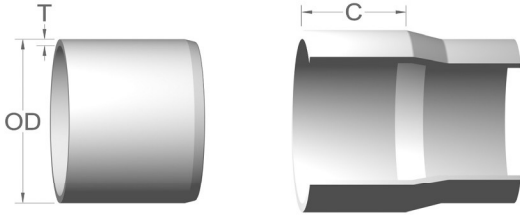
NorthAmericanPipe.com

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make the connection™



**ASTM D1785/D2665 Sch. 40 PVC Pressure/DWV Pipe
ASTM D1785 Sch. 80 PVC Pressure Pipe
SOLVENT WELD**



Notes:

1. These dimensions are for estimating purposes only. All dimensions are in inches unless otherwise specified.
2. ASTM Pressure Rating @ 73°F and includes 2:1 safety factor.
3. Internal diameter calculated using nominal outside diameter and minimum wall thickness.

D1785 PIPE DIMENSIONS & PERFORMANCE

Nominal Size	Outside Diameter (OD)	Class	Pressure Rating (psi)	Min. Wall Thickness (T1)	Internal Diameter (ID)	Bell Depth (C)
½"	0.840	Sch. 40	600	0.109	0.622	1.750
		Sch. 80	850	0.147	0.546	
¾"	1.050	Sch. 40	480	0.113	0.824	2.500
		Sch. 80	690	0.154	0.742	
1"	1.315	Sch. 40	450	0.133	1.049	2.500
		Sch. 80	630	0.179	0.957	
1¼"	1.660	Sch. 40	370	0.140	1.380	2.500
		Sch. 80	520	0.191	1.278	
1½"	1.900	Sch. 40	330	0.145	1.610	2.500
		Sch. 80	470	0.200	1.500	
2"	2.375	Sch. 40	280	0.154	2.067	3.250
		Sch. 80	400	0.218	1.939	
2½"	2.875	Sch. 40	300	0.203	2.469	3.500
		Sch. 80	420	0.276	2.323	
3"	3.500	Sch. 40	260	0.216	3.068	4.250
		Sch. 80	370	0.300	2.900	
4"	4.500	Sch. 40	220	0.237	4.026	5.500
		Sch. 80	320	0.337	3.826	
5"	5.563	Sch. 40	190	0.258	5.047	6.000
		Sch. 80	290	0.375	4.813	
6"	6.625	Sch. 40	180	0.280	6.065	7.000
		Sch. 80	280	0.432	5.761	
8"	8.625	Sch. 40	160	0.322	7.981	7.500
		Sch. 80	250	0.500	7.625	
10"	10.750	Sch. 40	140	0.365	10.020	8.500
		Sch. 80	230	0.593	9.564	
12"	12.750	Sch. 40	130	0.406	11.938	10.000
		Sch. 80	230	0.687	11.376	
14"	14.000	Sch. 40	130	0.437	13.126	10.000
16"	16.000	Sch. 40	130	0.500	15.000	10.000
18"	18.000	Sch. 40	130	0.562	16.876	12.000
20"	20.000	Sch. 40	120	0.593	18.814	12.000
24"	24.000	Sch. 40	120	0.687	22.626	12.000

PRODUCT SPECIFICATION



Submittal Information for Spears® Manufacturing Company PVC Schedule 80 Solid Wall Pipe & Fitting System

Date: 09/10/2020

GSPVC80-0718

Job Name: _____ Location: Wichita, KS

Engineer: _____ Contractor: Dondlinger

Scope:

This submittal covers Spears® PVC Schedule 80 solid wall pipe and fittings intended for use in pressure applications where the application operating temperature does not exceed 140° F (63°C).

Product Specification:

All Spears® PVC Schedule 80 fittings shall be manufactured in the U.S.A by Spears® Manufacturing Company from PVC Type I, with a minimum cell classification 12454 in accordance with ASTM Standard D1784. All injection molded PVC Schedule 80 fittings shall be certified for potable water service by NSF International manufactured in strict compliance to ASTM D2467. All fabricated fittings shall be produced in accordance with Spears® General Specifications for Fabricated Fittings (FAB-7). Spears® PVC Schedule 80 pipe and fittings shall be capable of withstanding a vacuum of twenty-six inches of mercury (Hg) at 73° F (23° C) when subjected to a one hour test with a leak factor of not more than one inch of Hg. All PVC flanges shall be designed and manufactured to meet CL150 bolt pattern per ANSI Standard B16.5 and rated for a maximum internal pressure of 150 psi, non-shock at 73°F unless otherwise noted.

All Spears® PVC Schedule 80 pipe shall be manufactured in the U.S.A by Spears® Manufacturing Company from a Type I, Grade I Polyvinyl Chloride (PVC) compound with a minimum cell classification of 12454 in accordance with ASTM D1784. The pipe shall be manufactured in strict compliance to ASTM D1785 consistently meeting and/or exceeding the quality assurance test requirements of these standards. All Spears® EverTUFF® pipe shall be manufactured in the USA and immediately wrapped for protection. The pipe shall be provided with plain ends in 20 foot cut lengths. All Spears® EverTUFF® pipe shall be certified by NSF International for potable water applications and marked accordingly.

Product Marking

All Spears® pipe shall be marked PVC schedule 80 and shall be marked with NSF® Listing, ASTM Standard and applicable

pressure @ 73° F. (23°C). Spears® PVC Schedule 80 Fittings shall be engraved with markings required by ASTM Standard and bear an NSF® listing mark for potable water use.

Installation:

Installation for Spears® PVC Schedule 80 systems shall comply with current installation instructions published by Spears® Manufacturing Company, established industry practices and all applicable code requirements. Buried pipe shall be in accordance with ASTM 2774 and ASTM F1668. The piping system shall be joined using a two-step solvent cement joining process with primer conforming to ASTM F656 and solvent cement conforming to ASTM D2564. The system shall be protected from ultra violet (UV) light exposure from the sun or other source and protected from any chemicals that are not compatible with the PVC materials including but not limited to fire stopping materials, plasticizers, incompatible thread sealants etc.

NOTE: PVC piping systems are suitable for oil-free air handling to 25 psi, not for distribution of compressed air or gas.

Referenced Standards:

- ASTM D1784 – Rigid Vinyl Compounds
- ASTM D1785 – PVC Schedule 40, 80 & 120 Pipe
- ASTM D2467 – PVC Schedule 80 Fittings
- ASTM D2564 – Solvent Cements for PVC Pipe & Fittings
- ASTM D2774 – Procedure for Buried Pressure Pipe
- ASTM F656 – Primers for PVC Pipe & Fittings
- ASTM F1668 – Procedures for Buried Plastic Pipe
- ASTM F1866 – Fabricated PVC DWV Fittings
- NSF International – Standard 14/61 Potable Water
- ANSI B16.5 - Pipe Flange Dimensions

Approvals:

NSF® – NSF International Standard 14/61 Potable Water

Features:

- Lightweight
- Corrosion Resistant
- Long Service Life

