



LETTER OF TRANSMITTAL

DATE: 07/15/2025

TO: Manuel Maldonado

ATTENTION: Manuel Maldonado

Architect / Principal
Ordiz-Melby Architects
5500 Ming Ave. Unit 280, Bakersfield CA. 93309

RE: Sewer

JOB NO: 2037

WE ARE SENDING YOU:

- | | | | |
|----------------------------------------------|---------------------------------------|--------------------------------|----------------------------------------------------|
| <input checked="" type="checkbox"/> Attached | <input type="checkbox"/> Mailed | <input type="checkbox"/> Faxed | <input type="checkbox"/> Hand Delivered |
| <input type="checkbox"/> Shop Drawings | <input type="checkbox"/> Prints | <input type="checkbox"/> Plans | <input type="checkbox"/> Samples |
| <input type="checkbox"/> Copy of Letter | <input type="checkbox"/> Change Order | <input type="checkbox"/> Other | <input checked="" type="checkbox"/> Specifications |

COPIES	DATE	NO.	DESCRIPTION
1	7/15/2025	3	Sewer

THESE ARE TRANSMITTED as checked below:

- | | |
|--------------------------------------------------------------|---------------------------------------------------|
| <input checked="" type="checkbox"/> For Approval & Execution | <input type="checkbox"/> Approved as Submitted |
| <input type="checkbox"/> For Your Use | <input type="checkbox"/> Approved as Noted |
| <input type="checkbox"/> As Requested | <input type="checkbox"/> Returned for Corrections |
| <input type="checkbox"/> For Review & Comment | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> FOR BIDS DUE: _____ | |

Afinar
Civil Engineers / Surveyors / Planners / Construction Managers
214 Bernard Street, Bakersfield, CA 93305
Phone (661) 716-7443

- | | |
|---------------------------------------------------------|----------------------------------------------------------|
| No Exceptions Taken <input checked="" type="checkbox"/> | Make Correction Noted <input type="checkbox"/> |
| Rejected <input type="checkbox"/> | Revise and Resubmit <input type="checkbox"/> |
| No Action Required <input type="checkbox"/> | Intermediate Submittal Required <input type="checkbox"/> |

Checking is only for general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Any action shown is subject to requirements of the plans and specifications. Contractor is responsible for dimensions which shall be confirmed and correlated at the jobsite: fabrication, process and techniques of construction: coordination with all other trades and satisfactory performance of their work. See attached Submittal Checklist for comments.

REMARKS: _____

X *BOS* 8-4-25

COPY TO: _____ SIGNED: Jesse Baeza, Project Manager
Your Name, Title

Submittal Documents: Fletcher Elementary School Site Work



Overview

Bid Date: 06-05-2025

Bid Number: 4218739

- ☐ Approved as Submitted
- ☐ Approved as Noted
- ☐ Returned for Corrections
- ☐ Rejected

Customer

SWCONSTRUCTION

5303 WOODMERE DR
BAKERSFIELD CA 93313

Contact

Nicholas

Contact

Sales Representative

Sean McAllister
Sean.McAllister@coreandmain.com
(T): 661-658-6064

Core & Main

4920 Lisa Marie Ct
Bakersfield CA 93313
(T): 6618341162

GravitySewer

NON-PRESSURE-RATED PVC PIPE



ASTM D3034 / F679

CSA B182.2

ASTM D1784 Cell Class 12454/12364

Gaskets: ASTM F477

Joints: ASTM D3212



DELIVERING GOOD WATER TO YOU

MARKETS



Sewer

DESCRIPTION



GRAVITYSEWER

Ring-Tite Joint

- Flexible elastomeric Rieber® locked-in gasket provides a tight seal that protects and compensates for expansion, contraction, vibration or other movements.
- Quick and easy to assemble with a simple push, there's no field mixing or application of cement.
- Meets or exceeds ASTM D3219 for joint tightness, including a 22-inch Hg vacuum and a 25-foot head pressure test.

Nominal Laying Length: 14/20 feet
(Laying length tolerances are in accordance with ASTM and CSA standards)

Color: ■ Green

ASTM D3034 TYPE PSM SIZES:

4", 6", 8", 10", 12", 15"

ASTM F679 SIZES:

18", 21", 24", 27", 30", 36", 42", 48"

Rieber® sealing ring provides tight, flexible seal.

Spigot pipe ends are supplied from the factory with bevels.

The bell is an integral part of the pipe length with the same strength.

CSA B182.2

SDR 35 (PS 46)

ASTM D3034

SDR 35 (PS 46)

SDR 26 (PS 115)

ASTM F679

PS 46

PS 115

BENEFITS

INSTALLATION

Lightweight, great for manual installation.

Field-cut with a power saw or handsaw; bevel without complicated machinery.

Does not need lining, wrapping, coating, or cathodic protection to prevent galvanic corrosion.

FEATURES

Unaffected by corrosive elements, sewer gas, sulfuric acid, alkaline, or acidic soils.

Resistance to abrasion, gouging and scouring.

Made in America

GravitySewer

NON-PRESSURE RATED PVC PIPE



DELIVERING GOOD WATER TO YOU

SUBMITTAL AND DATA SHEET

ASTM D3034 TYPE PSM GRAVITY SEWER PIPE

PIPE SIZE (IN)	AVG. O.D. (IN)	NOM. I.D. (IN)	MIN. T. (IN)	AVG. E. (IN)	APX. D ⁹ (IN)	APX. WGT (LBS/FT)
SDR 35						
PIPE STIFFNESS: 46 psi						
4	4.215	3.975	0.120	3.75	4.695	1.05
6	6.275	5.915	0.180	2.37	6.995	2.36
8	8.400	7.920	0.240	5.00	9.360	4.24
10	10.500	9.900	0.300	6.25	11.700	6.64
12	12.500	11.780	0.360	6.50	13.940	9.50
15	15.300	14.426	0.437	7.50	17.048	14.19
SDR 26						
PIPE STIFFNESS: 115 psi						
4	4.215	3.891	0.162	3.75	4.863	1.40
6	6.275	5.793	0.241	2.37	7.239	3.11
8	8.400	7.754	0.323	5.00	9.692	5.63
10	10.500	9.692	0.404	6.25	12.116	8.84
12	12.500	11.538	0.481	6.50	14.424	12.56
15	15.300	14.124	0.588	7.50	17.652	18.90

Product Standard:

ASTM D3034 Type PSM (4"-15")

ASTM F679 (18" - 48")

CSA B182.2 (PS46, 4" - 21")

Pipe Compound: ASTM D1784 Cell Class 12454/12364

Gasket: ASTM F477

Integral Bell Joint: ASTM D3212

Nominal Laying Length: 14/20 feet

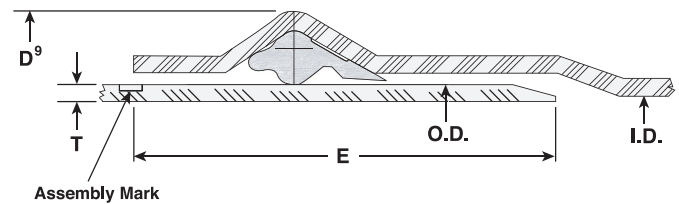
(Laying length tolerances are in accordance with ASTM and/or CSA standards.)

Installation: JM Eagle™ Gravity Sewer Installation Guide.

Manning Coefficient (n) = 0.009

Hazen-Williams Coefficient (c) = 150

*Please call prior to order regarding availability.



I.D.: Inside Diameter

O.D.: Outside Diameter

T.: Minimum Wall Thickness

D⁹: Bell Outside Diameter

E: Distance between Assembly Mark and the end of the spigot.

ASTM F679 GRAVITY SEWER PIPE

PIPE SIZE (IN)	AVG. O.D. (IN)	NOM. I.D. (IN)	MIN. T. (IN)	AVG. E. (IN)	APX. D ⁹ (IN)	APX. WGT (LBS/FT)
PIPE STIFFNESS: 46 psi						
18	18.701	17.564	0.536	7.37	20.845	21.43
21	22.047	20.707	0.632	8.25	24.575	29.88
24	24.803	23.295	0.711	9.12	27.647	38.96
27	27.953	26.254	0.801	10.00	31.157	49.47
30 CIOD	32.000	30.055	0.917	12.75	35.612	64.18
36 CIOD	38.300	35.972	1.098	13.87	42.816	93.00
42 CIOD	44.500	41.794	1.276	15.75	49.604	128.83
48 CIOD	50.800	47.713	1.456	16.62	56.624	168.31
PIPE STIFFNESS: 115 psi						
18	18.701	17.174	0.720	7.37	21.581	28.49
21	22.047	20.247	0.849	8.25	25.443	39.83
24	24.803	22.776	0.956	9.12	28.627	50.74
27	27.953	25.669	1.077	10.00	32.261	64.78
30 CIOD	32.000	29.386	1.233	12.75	36.348	86.55
36 CIOD	38.300	35.173	1.475	13.87	45.438	125.35
42 CIOD	44.500	40.866	1.714	15.75	51.356	171.30
48 CIOD	50.800	46.651	1.957	16.62	58.628	223.92



PRODUCT SELECTION CHART

PIPE PRESSURE RATINGS – XIRTEC140 PVC AND CORZAN CPVC

Sizes		IPEX schedule 40			IPEX Schedule 80		
Diameter	O.D.	Wall Thickness	I.D.	*Max. Pressure 73°F	Wall Thickness	I.D.	*Max. Pressure 73°F
(in.)	(in.)	(in.)	(in.)	(psi)	(in.)	(in.)	(psi)
1/4	.540	–	–	–	.119	.302	1,130
3/8	.675	–	–	–	.126	.423	920
1/2	.840	.109	.602	600	.147	.526	850
3/4	1.050	.113	.804	480	.154	.722	690
1	1.315	.133	1.029	450	.179	.936	630
1-1/4	1.660	.141	1.360	370	.191	1.255	520
1-1/2	1.900	.145	1.590	330	.200	1.476	470
2	2.375	.154	2.047	280	.218	1.913	400
2-1/2	2.875	.203	2.445	300	.276	2.290	420
3	3.500	.216	3.042	260	.300	2.864	370
4	4.500	.237	3.998	220	.337	3.786	320
6	6.625	.280	6.031	180	.432	5.709	280
8	8.625	.322	7.941	160	.500	7.565	250
10	10.750	.365	9.976	140	.593	9.493	230
12	12.750	.406	11.888	130	.687	11.294	230
14	14.000	.438	13.072	130	.750	12.412	220
16	16.000	.500	14.936	130	.843	14.224	220
18	18.000	.562	16.809	130	.937	16.014	220
20	20.000	.593	18.743	120	1.031	17.814	220
24	24.000	.687	22.544	120	1.218	21.418	210

Submittal Data Sheet



Job or Customer: _____

Engineer: _____

Contractor: _____

Submitted by: _____ Date _____

Approved by: _____ Date _____

Order No: _____ Date _____

Specification: _____

< STANDARDS >



ASTM D1784
ASTM D1785
ASTM D2665
ASTM F480
ASTM D2466

ASTM D2467
ASTM D2464
ASTM D2241
ASTM F1970



B137.3



NSF 14
NSF 61

Please see our listing on agency websites for NSF compliant pipe and fittings.

www.nsf.org
www.CSAGroup.org

PVC is the most frequently specified of all thermoplastic piping materials. It has been used successfully for over 60 years. PVC is characterized by distinctive physical properties, and is resistant to corrosion and chemical attack by acids, alkalis, salt solutions and many other chemicals. It is attacked, however, by polar solvents such as ketones and aromatics.

Of the various types and grades of PVC used in plastic piping, Type 1, Grade 1 PVC (Cell Classification 12454) conforming to ASTM D1784, is the most common. The maximum service temperature for PVC is 140°F (60°C), under pressure. PVC for drainage applications is also capable of handling near boiling temperatures for intermittent flow conditions. With a hydrostatic design basis of 4,000psi at 73°F (23°C) and a design stress of 2,000psi at 73°F (23°C), PVC has the highest long-term hydrostatic strength of any other major thermoplastic material used for piping.

Potable Water Sch40 White Solvent Weld



Specification

Pacific Plastics IPS Schedule series of PVC pipe is produced for use in both the pressure and DWV applications in which the maximum operating temperature is 140°F. The compound is PVC 1120 Type 1 Grade 1, with a cell class of 12454B, per ASTM D1784.

Each one of the categories of our Schedule series listed below is produced in strict compliance to ASTM D1785. It is listed with NSF and complies with NSF/ANSI Standard 14 and Standard 61. The Sch40 White pipe is dual marked, so it can be used both for Pressure and DWV applications. The dual marked pipe conforms to ASTM D1785 and ASTM D2665.

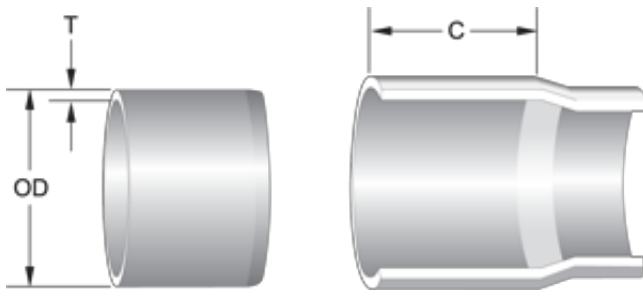
Sch40 pipe is installed per ASTM D2855. The joints should conform to ASTM D2672, the solvent cement to ASTM D2564 and the primer to ASTM F656.

Our Schedule series of PVC pipe is produced in the following categories:

- White ASTM D1785 & ASTM D2665
- Sch40 for use in pressure and DWV applications
- Sizes 1/2" – 12" are produced in White color, 20 foot lengths and Belled End
- Sizes 1/2", 3/4", 1" are marked for pressure applications
- Sizes 1¼"-12" are dual marked for pressure and DWV applications
- Sizes 1/2" – 2" are also produced in 10 foot lengths Plain / Belled End
- The pipe is Dual marked with ASTM D1785 for use in potable water applications and with ASTM D2665 for use in the DWV applications.

The outside diameter and wall thickness of Sch40 pipe are measured in accordance to ASTM D2122 and are shown in the following tables:

Size	OD	T	C	PSI
1/2	0.840	0.109	1.00	600
3/4	1.050	0.113	1.25	480
1	1.315	0.133	1.50	450
1 ¼	1.660	0.140	1.75	370
1 ½	1.900	0.145	2.00	330
2	2.375	0.154	2.25	280
2 ½	2.875	0.203	2.50	300
3	3.500	0.216	3.25	260
4	4.500	0.237	4.00	220
5	5.563	0.258	4.00	190
6	6.625	0.280	6.00	180
8	8.625	0.322	6.00	160
10	10.750	0.365	7.50	140
12	12.750	0.406	8.50	130



OD – Outside Diameter

T – Wall Thickness

C – Approximate Bell Depth

PSI – Pressure Rating

Certification

This is to certify that, in this category of PVC pipe, all the products manufactured by Pacific Plastics have been inspected, sampled and tested in accordance with the following specifications and have been found to meet or exceed the requirements of those specifications.

Raw Materials

- PVC1120 Type1 Grade1
- Cell Class 12454
- ASTM D1784 Specification for Rigid PVC Compounds
- NSF Listed

PVC Pipe

- Sch40 White (Pressure/DWV)
 - Solvent Weld Belled End
 - 1/2" – 12" IPS
 - 1/2", 3/4", 1" are marked for pressure applications
 - 1 1/4"-12" are dual marked for pressure and DWV applications
 - ASTM D1785 Specification for PVC Pipe
 - ASTM D2665 Specification for DWV Pipe
 - ASTM D2672 Specification for IPS PVC Pipe Joints using solvent cement
 - Complies with NSF / ANSI Standard 14
 - Complies with NSF / ANSI Standard 61
-

Part Numbers

[Click here for Part Numbers](#)

Price List

[Click here for Price List](#)

Loading Chart

[Click here for Loading Chart](#)

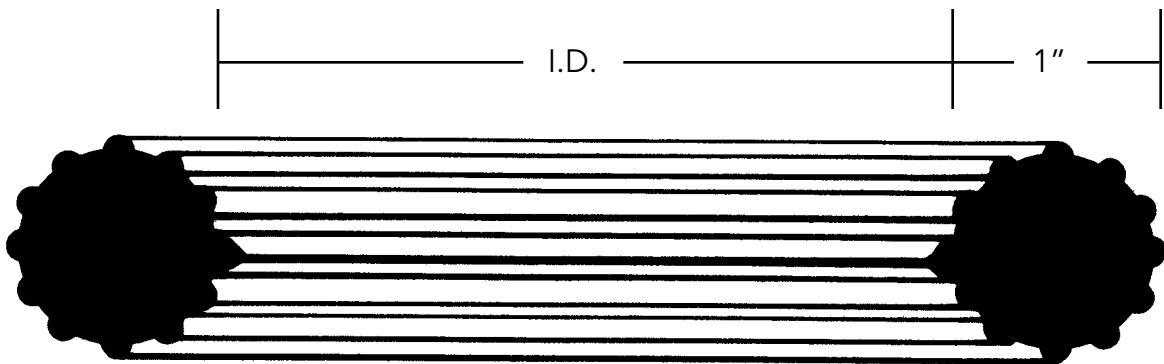
Weights

[Click here for Weights](#)

MANHOLE STOP RINGS

**TO BE USED WITH PVC THAT GOES INTO A MANHOLE
 AND IS CEMENTED IN PLACE.
 OUR MANHOLE STOP RINGS ARE MOLDED, NOT EXTRUDED.**

ILLUSTRATION



SIZE & TYPE	PART NO.	PCS/BOX	I.D.
4" MANHOLE STOP RING	102675	125	4
6" MANHOLE STOP RING	102700	75	5-7/8
8" MANHOLE STOP RING	102725	50	8-3/4
10" MANHOLE STOP RING	102750	25	10-1/4
12" MANHOLE STOP RING	102775	25	12-1/4
14" MANHOLE STOP RING		—	13-3/8
15" MANHOLE STOP RING	102800	25	13-3/8
18" MANHOLE STOP RING	102830	25	16-3/4
20" MANHOLE STOP RING	102832	Spliced	20-5/8
21" MANHOLE STOP RING	102833	25	21
24" MANHOLE STOP RING	102836	20	23-3/4
27" MANHOLE STOP RING	102840	Spliced	26-1/2
30" MANHOLE STOP RING	102844	Spliced	30
36" MANHOLE STOP RING	102846	Spliced	38

Other sizes quoted on request.



TRENCH TOUGH PLUS™

SDR35 Gasketed Sewer Fittings

APPLICATIONS:

- Gravity Sewer Systems
- Stormwater and Drainage

SIZE RANGE:

Molded: 4" – 18" Fabricated: 18" – 60"

FEATURES:

- The widest size range of molded fittings (up to 18" diameter) available in the industry.
- Locked in gaskets on molded fittings.
- Third party certified joints to withstand a minimum of 15 psi hydrostatic pressure and a -10.8 psi vacuum.
- Molded fittings are structurally reinforced to a heavier wall thickness at key areas to ensure maximum durability during installation and for the long term.
- Unsurpassed strength while maintaining flexibility and toughness.
- Proven track record of performance for over 60 years.

STANDARDS:



CSA B182.2: PSM type Polyvinyl Chloride (PVC) sewer pipe and fittings



ASTM F1336: Standard Specification for Polyvinyl Chloride (PVC) Gasketed Sewer Fittings
ASTM D3034: Type PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings



NQ 3624-135: Unplasticized Polyvinyl Chloride (PVC-U) Pipe and Fittings
— Pipes of 200mm to 600mm in Diameter for Underground Sewage and Soil Drainage

Maximum test pressure: 4.3 PSI (29.6KPA)

Maximum operating temperature: 140° F nonconsistent

Fernco Flexible Couplings

The industry standard for sewer, drain, waste & vent piping.

Specially formulated PVC compound positively seals any sewer and drain connection.



Because of their quality and ease of installation, Fernco Flexible Couplings have found wide acceptance among sewer and plumbing contractors and municipalities. Fernco couplings are used for all types of in-house and sewer applications: drain waste, repairs, vent piping, house-to-main, cut-ins, conductor and roof drains and increasers-reducers.

Made of tough elastomeric polyvinyl chloride (PVC), they are strong, resilient and unaffected by soil conditions. They are also resistant to chemicals, ultraviolet rays, fungus growth, and normal sewer gases due to the inert nature and physical properties of the material. And they are leakproof, rootproof and seal against infiltration and exfiltration.

Tested designs backed by over four decades of proven performance.

- Positive seal against infiltration and exfiltration
- Leakproof and resistant to chemicals, ultraviolet rays, fungus growth, and normal sewer gases
- Conforms to ASTM D5926, C1173 and CSA B602
- Connects pipes of same or different sizes and materials quickly and easily
- Stainless steel clamps are corrosion-resistant and rustproof

The dimensional flexibility of Fernco couplings ensures leakproof seals on virtually any pipe material: plastic, cast iron, asbestos cement, clay, concrete, steel, copper and ductile iron. All couplings are clearly marked with part number, size, and pipe materials that the coupling will connect. Fernco makes fast delivery of stock items with no minimum order required. For special applications, our custom design service can supply couplings to individual customer requirements.



G05

CHRISTY®

COVER

Style:	Flush
Material:	Cast Iron
Model:	11" Dia.
Weight:	14 lbs
Options:	Special Markings
Surface:	Skid Resistant & Marked*
Coefficient of Friction:	>0.6 ASTM 1028
Performance:	H20, AASHTO

Cover comes standard with permanent markings for manufacturer, load rating, model size and manufacturing location.

BODY

Material:	Reinforced Concrete with Steel Frame
Model:	14" Dia.
Weight:	58 lbs
Wall Type:	Straight
Mouseholes:	0
Performance:	H20, AASHTO

GRADE RING

Material:	Cast Iron
Grade Options:	1" Height 1-1/2" Height 2" Height

LOAD RATING / NOTES



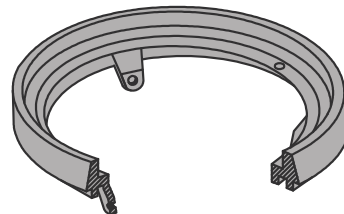
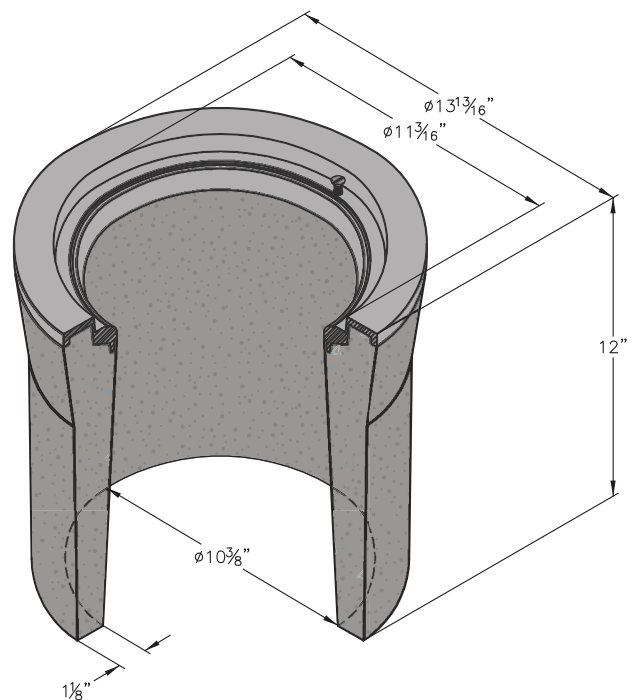
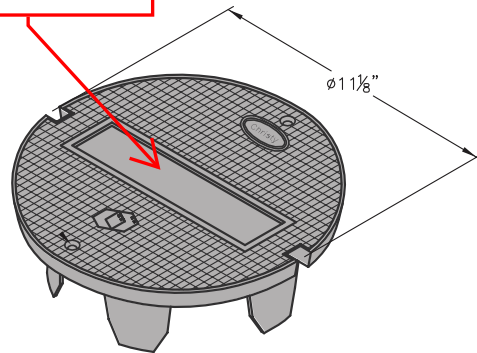
TRAFFIC RATED
AASHTO H20

Actual load rating is determined by the box and cover combination.

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

All information contained on this sheet is current at the time of publication.
Oldcastle reserves the right to discontinue or update product information without notice.

Marked 'Sewer'





Submittal Information for Spears® Manufacturing Company

PVC Schedule 40 Solid Wall Pipe & Fitting System

GSPVC40-0718

Date: _____

Job Name: _____ Location: _____

Engineer: _____ Contractor: _____

Scope:

This submittal covers Spears® PVC Schedule 40 solid wall pipe and PVC 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 40 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 D1784. All injection molded PVC Schedule 40 white fittings shall be certified for potable water service by NSF International and manufactured in strict compliance to ASTM D2466. All fabricated schedule 40 fittings shall be produced in accordance with ASTM F1866 and Spears® General Specifications for Fabricated Fittings. Spears® PVC schedule 40 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 Spears® PVC Schedule 40 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 Schedule 40 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 U.S.A. and immediately wrapped for protection. The pipe shall be provided with plain ends in 20 foot cut lengths. All Spears® Schedule 40 pipe shall be certified by NSF International for potable water applications and marked accordingly.

Product Marking

All pipes shall be dual marked PVC schedule 40 and DWV and shall be marked with NSF® Listing, applicable ASTM Standard and applicable pressure @ 73° F. (23°C). PVC Schedule 40 Fittings shall be engraved with markings required by ASTM Standard and bear an NSF® Listing for potable water.

Installation:

Installation for Spears® PVC Schedule 40 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 D2466 – PVC Schedule 40 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

Approvals:

NSF® – NSF International Standard 14/61 – Potable Water

Features:

Lightweight
Corrosion Resistant
Long Service Life





Submittal Information for Spears® Manufacturing Company

PVC Schedule 40 Solid Wall Pipe & Fitting System

GSPVC40-0718

Date: _____

Job Name: _____ Location: _____

Engineer: _____ Contractor: _____

Scope:

This submittal covers Spears® PVC Schedule 40 solid wall pipe and PVC 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 40 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 D1784. All injection molded PVC Schedule 40 white fittings shall be certified for potable water service by NSF International and manufactured in strict compliance to ASTM D2466. All fabricated schedule 40 fittings shall be produced in accordance with ASTM F1866 and Spears® General Specifications for Fabricated Fittings. Spears® PVC schedule 40 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 Spears® PVC Schedule 40 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 Schedule 40 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 U.S.A. and immediately wrapped for protection. The pipe shall be provided with plain ends in 20 foot cut lengths. All Spears® Schedule 40 pipe shall be certified by NSF International for potable water applications and marked accordingly.

Product Marking

All pipes shall be dual marked PVC schedule 40 and DWV and shall be marked with NSF® Listing, applicable ASTM Standard and applicable pressure @ 73° F. (23°C). PVC Schedule 40 Fittings shall be engraved with markings required by ASTM Standard and bear an NSF® Listing for potable water.

Installation:

Installation for Spears® PVC Schedule 40 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 D2466 – PVC Schedule 40 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

Approvals:

NSF® – NSF International Standard 14/61 – Potable Water

Features:

Lightweight
Corrosion Resistant
Long Service Life





Submittal Information for Spears® Manufacturing Company

PVC Schedule 40 Solid Wall Pipe & Fitting System

GSPVC40-0718

Date: _____

Job Name: _____ Location: _____

Engineer: _____ Contractor: _____

Scope:

This submittal covers Spears® PVC Schedule 40 solid wall pipe and PVC 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 40 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 D1784. All injection molded PVC Schedule 40 white fittings shall be certified for potable water service by NSF International and manufactured in strict compliance to ASTM D2466. All fabricated schedule 40 fittings shall be produced in accordance with ASTM F1866 and Spears® General Specifications for Fabricated Fittings. Spears® PVC schedule 40 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 Spears® PVC Schedule 40 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 Schedule 40 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 U.S.A. and immediately wrapped for protection. The pipe shall be provided with plain ends in 20 foot cut lengths. All Spears® Schedule 40 pipe shall be certified by NSF International for potable water applications and marked accordingly.

Product Marking

All pipes shall be dual marked PVC schedule 40 and DWV and shall be marked with NSF® Listing, applicable ASTM Standard and applicable pressure @ 73° F. (23°C). PVC Schedule 40 Fittings shall be engraved with markings required by ASTM Standard and bear an NSF® Listing for potable water.

Installation:

Installation for Spears® PVC Schedule 40 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.

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Features:

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Corrosion Resistant
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Approvals:

NSF® – NSF International Standard 14/61 – Potable Water

Features:

Lightweight
Corrosion Resistant
Long Service Life



G05

CHRISTY®

COVER

Style:	Flush
Material:	Cast Iron
Model:	11" Dia.
Weight:	14 lbs
Options:	Special Markings
Surface:	Skid Resistant & Marked*
Coefficient of Friction:	>0.6 ASTM 1028
Performance:	H20, AASHTO

Cover comes standard with permanent markings for manufacturer, load rating, model size and manufacturing location.

BODY

Material:	Reinforced Concrete with Steel Frame
Model:	14" Dia.
Weight:	58 lbs
Wall Type:	Straight
Mouseholes:	0
Performance:	H20, AASHTO

GRADE RING

Material:	Cast Iron
Grade Options:	1" Height 1-1/2" Height 2" Height

LOAD RATING / NOTES



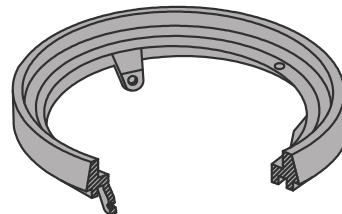
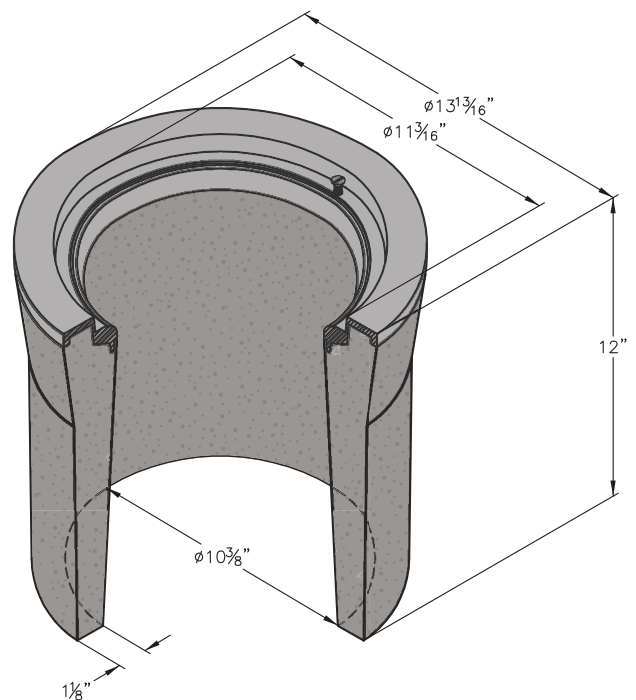
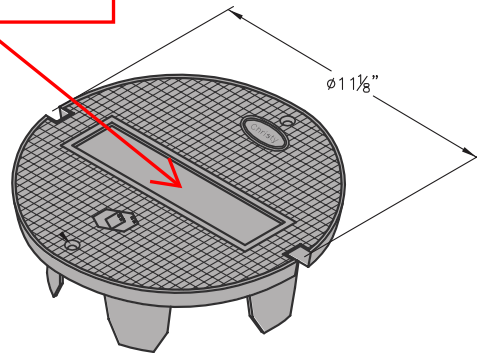
TRAFFIC RATED
AASHTO H20

Actual load rating is determined by the box and cover combination.

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

All information contained on this sheet is current at the time of publication.
Oldcastle reserves the right to discontinue or update product information without notice.

Marked 'Sewer'





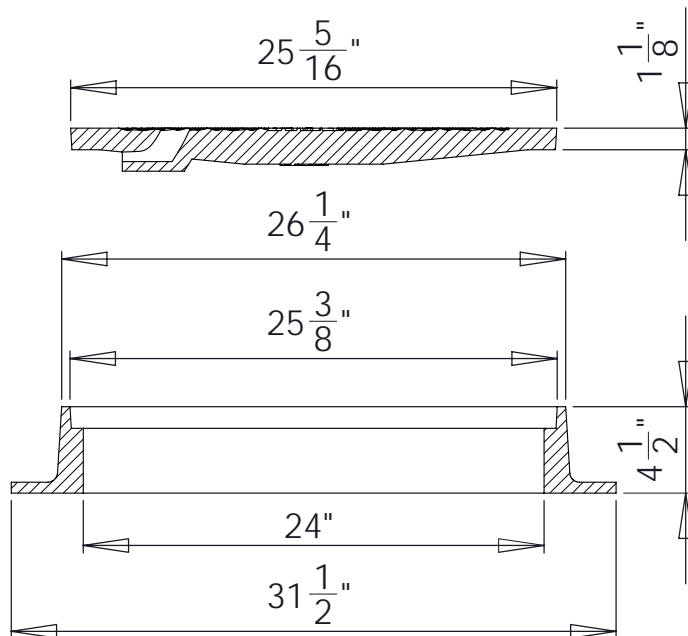
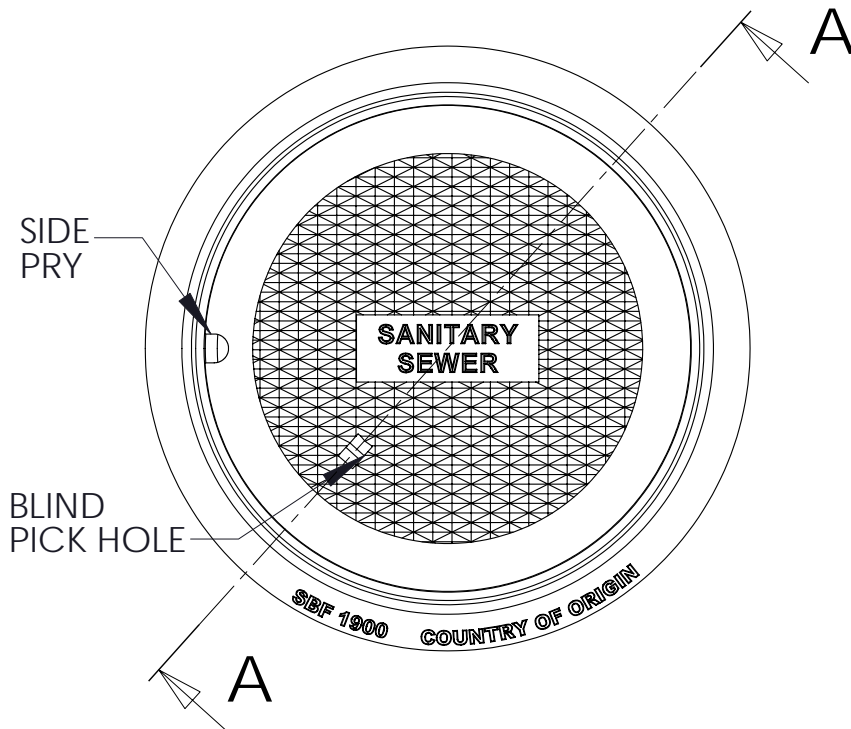
South Bay Foundry

WWW.SOUTHBAYFOUNDRY.COM

PHONE: (619) 956-2780 FAX: (619) 956-2788

SBF 1900 BPH

24" MANHOLE
FRAME AND COVER
SANITARY SEWER



SECTION A-A

SET WEIGHT

FRAME	140 LB
COVER	130 LB
TOTAL	270 LB

GENERAL INFORMATION

- *MATERIALS CONFORM TO ASTM A-48, CLASS 35B
- *FRAME AND COVER BEARING SURFACES MACHINED FOR CLOSE, QUIET FIT
- *CASTINGS ARE DIPPED IN BLACK BITUMINOUS PAINT
- *FRAME AND COVER EXCEEDS H-20 WHEEL LOADING

APPROVED

BY:

TITLE:

AGENCY:

DATE: