DIAMOND PLASTICS®
CORPORATION

PRODUCT CATALOG

WATER

SEWER

IRRIGATION

Proudly Serving
The Construction
And Engineering
Trades For Over

30
YEARS

DIAMOND PLASTICS:

QUALITY PRODUCTS, PEOPLE & LOCATIONS

Diamond Plastics Corporation is one of today's leading PVC pipe producers in North America and one of the largest producers in the world. The Corporation was established in 1982 as a small agricultural irrigation specialist with facilities in Texas and Nebraska. Diamond Plastics has grown to include a nationwide network of professional manufacturing facilities providing pipe solutions for water, sewer and irrigation applications.

We offer the industry's broadest range of PVC pipe sizes, with diameters from 2 inches to 60 inches. No other company makes a higher quality, longer lasting PVC pipe than Diamond Plastics. Our PVC pipe offers an unparalleled combination of toughness,resiliency, corrosion resistance, joint integrity, versatility and ease of handling & installation. It's ideal for the vast majority of underground water and sewer applications.

WHY DO BUSINESS WITH DIAMOND PLASTICS CORPORATION, (DPC)?

There are many reasons, ranging from the flexibility and durability of our PVC pipe to the skill and dedication of the people who make it. Our business philosophy is to produce products of the highest quality and value for the customer, using the latest technology and procedures to maximize efficiency. You can count on Diamond Plastics for long lasting pipe solutions. Our PVC pipe offers an unparalleled combination of toughness, resiliency, corrosion resistance, versatility and ease of handling. And it is available in sizes and wall thicknesses designed for your application.

EXCEPTIONAL SERVICE

The entire Diamond Plastics' team is committed to providing exceptional customer service today, tomorrow and well into the future. We combine our professional sales representative force in agricultural products with a nationwide network of professional manufacturers representatives serving the municipal, engineering and distribution industry. Working together, we deliver the industry's highest level of job site and customer inventory service.

We welcome you to our website, www.dpcpipe.com, and invite you to contact your local Diamond Plastics' sales representative to see our quality difference for yourself. Any access to information contained in this Brochure is deemed to be an acknowledgement, and shall constitute an agreement by the User to be bound by each of the terms and conditions set forth in the Legal Notice and Disclaimer. Please be certain to review each of those terms and conditions.

DIAMOND PLASTICS

C900
PVC PRESSURE PIPE

4"-12" SPECIFICATION DATA

Diamond (C900) PVC Pipe (4" through 12") is made of 12454 compound per ASTM D1784, in accordance with the dimensional chemical, and physical requirements of AWWA C900.

Diamond (C900) PVC Pipe bears the mark of NSF, International (NSF), the listing of Underwriters Laboratory, Inc. (UL), and (DR14 & DR18) bears the listing of Factory Mutual(FM). Some factory locations produce C900 bearing the mark of the Canadian Standards Association (CSA) and NSF14.

Diamond (C900) PVC Pipe utilizes a gasket, per ASTM F477, to seal the integral bell socket to the spigot of the next joint (which conforms to the requirements of ASTM D3139.) Each male end is beveled to facilitate joint assembly, and the spigot is referenced marked to ensure proper insertion depth. Diamond furnished lubricant is to be used in the joining process. Specialty gaskets may be available upon request.

PHYSICAL PROPERTIES OF PVC 12454:

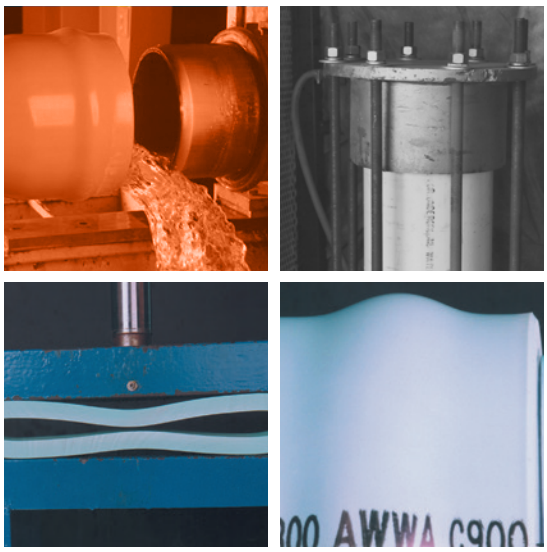
Property	ASTM Test	Minimum
Specific Gravity	D792	1.40
Tensile Strength, psi	D638	7,000
Tensile Modulus, psi	D638	400,000
IZOD Impact Strength	D256	.65ft., lb./in.

SHORT FORM Specification for Diamond C900 PVC Water Pipe
Diamond C900 PVC Water Pipe shall be made of compounds conforming to ASTM D1784 with a cell classification of 12454. Diamond C900 shall meet all the dimensional, chemical, and physical requirements as outlined in AWWA C900 and will be supplied in 20 and 22 foot laying lengths. Joints shall meet the requirements of ASTM D3139 and shall be formed using Rieber Technology. Gaskets shall meet the requirements of ASTM F477.

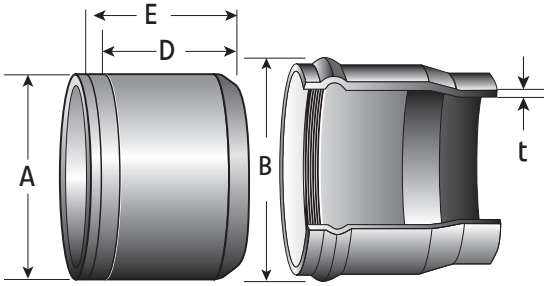
Potable water pipe shall be manufactured from National Sanitation Foundation (NSF) approved compounds.

EXTREME TESTING CONDITIONS

C900 PVC pressure pipe, available in pressure ratings for a wide range of water transfer applications (Available in sizes from 4" through 12")



RIEBER JOINT ILLUSTRATION



C900™

AWWA C900 SPECIFICATION DATA. SUPPLIED IN 20 AND 22 FOOT LAYING LENGTHS.

Nominal Pipe Size in. (mm)	A Outside Dia. Inches	B Bell Dia. Inches	D Assembly Mark 1 Inches *	E Assembly Mark 2 Inches *	t C900 DR-14 305 psi Min Wall Inches	t C900 DR-18 235 psi Min Wall Inches	t C900 DR-25 165 psi Min Wall Inches
4" (100)	4.800	6-1/2"	4-1/4"	5-1/4"	0.343	0.267	0.192
6" (150)	6.900	9-1/4"	4-5/8"	5-5/8"	0.493	0.383	0.276
8" (200)	9.050	11-3/4"	5-1/8"	6-1/8"	0.646	0.503	0.362
10" (250)	11.100	14-1/4"	5-3/4"	6-3/4"	0.793	0.617	0.444
12" (300)	13.200	16-3/4"	6-1/8"	7-1/8"	0.943	0.733	0.528

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Underwriters Laboratories Inc.©

FM APPROVED

C900™

AWWA C900 LOADING CHART

Nominal Pipe Size in. (mm)	Outside Diameter Inches	Joints Per Bundle	Feet Per Bundle	*Feet Per Truckload
DR-25 PRESSURE CLASS 165				
4" (100)	4.800	50	1,000	14,000
6" (150)	6.900	28	560	7,280
8" (200)	9.050	15\18\20\24	300-480	4,400
10" (250)	11.100	8\12	160\240	2,560
12" (300)	13.200	6\8	120\160	1,960
DR-18 PRESSURE CLASS 235				
4" (100)	4.800	50	1,000	14,000
6" (150)	6.900	28	560	7,280
8" (200)	9.050	15\18\20\24	300-480	4,400
10" (250)	11.100	8\12	160\240	2,560
12" (300)	13.200	6\8	120\160	1,960
DR-14 PRESSURE CLASS 305				
4" (100)	4.800	50	1,000	14,000
6" (150)	6.900	28	560	6,720
8" (200)	9.050	10\15	200\300	3,800
10" (250)	11.100	8\12	160\240	2,560
12" (300)	13.200	6\8\9\12	120\160\180\240	1,820

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TRANS-21™
C900 14"-60" SPECIFICATION DATA

AWWA C900 SPECIFICATION DATA

Diamond Trans-21 C900 14"-60" PVC Pipe is made of PVC compound with a cell classification 12454 as defined in ASTM D1784 and is suitable for potable water transmission. Diamond C900 meets the requirements of American Water Works Association (AWWA) Product Standard C900.

Diamond Trans-21 C900 is manufactured in 14", 16", 18", 20", 24", 30", 36", 42", 48", 54" and 60" sizes with an integral gasket bell and spigot "push-on"joint conforming to the requirements of ASTM D3139. Rieber Sealing System Technology is utilized in forming the gasket bell sockets of Diamond C900 PVC Pipe around the steel reinforced elastomeric seal meeting the requirements of ASTM F477.

Diamond Trans-21 C900 is tested in accordance with the physical, dimensional and performance requirements of AWWA C900, and is listed by Underwriters Laboratories. Each piece is hydrostatically proof tested before being shipped.

TRANS-21™
PHYSICAL PROPERTIES OF PVC 12454

Property	ASTM Test	Minimum
Specific Gravity	D792	1.40
Tensile Strength, psi	D638	7,000
Tensile Modulus, psi	D638	400,000
IZOD Impact Strength	D256	.65ft., lb./in.

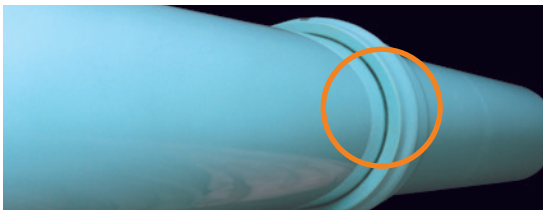
SHORT FORM Specification for Diamond C900 PVC Water Pipe
Diamond C900 PVC Water Pipe shall be made of compounds conforming to ASTM D1784 with a cell classification of 12454. Diamond C900 shall meet all the dimensional, chemical, and physical requirements as outlined in AWWA C900 and will be supplied in 20 and 22 foot foot laying lengths. Joints shall meet the requirements of ASTM D3139 and shall be formed using Rieber Technology. Gaskets shall meet the requirements of ASTM F477.

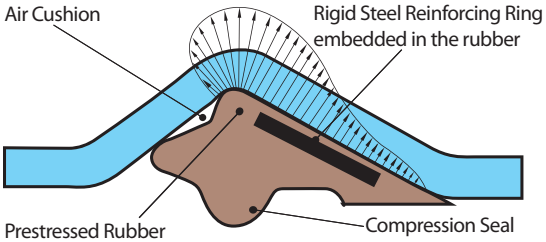
Potable water pipe shall be manufactured from National Sanitation Foundation (NSF) approved compounds.

GASKET DIAGRAM

HOW IT WORKS?

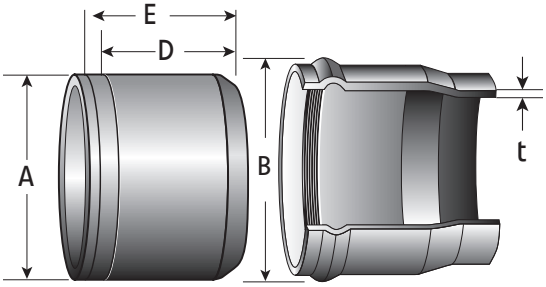
How it works? "Rieber Sealing System Technology" is utilized in forming the gasket bell sockets of Diamond C900 PVC Pipe around the steel reinforced elastomeric seal meeting the requirements of ASTM F477.





(Sealing effect established during the belling process.)

RIEBER JOINT ILLUSTRATION



TRANS-21™
AWWA C900 SPECIFICATION DATA. DIAMOND C900 IS SUPPLIED IN 20 AND 22 FOOT LAYING LENGTHS.

Nominal Pipe Size in. (mm)	A Outside Diameter Inches	B Bell Diameter Inches	D Assembly Mark 1 Inches *	E Assembly Mark 2 Inches *	t Minimum Wall Thickness Inches
DR-81 PRESSURE CLASS 50 PSI					
36" (900)	38.300	42-3/4"	12-7/8"	13-7/8"	0.473
42" (1050)	44.500	50-1/4"	15-3/4"	16-3/4"	0.550
48" (1200)	50.800	56-3/4"	15-7/8"	16-7/8"	0.628
54" (1350)	57.560	64-1/4"	16"	17"	0.711
60" (1500)	61.610	68-1/2"	17-1/2"	18-1/2	0.761

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Nominal Pipe Size in. (mm)	A Outside Diameter Inches	B Bell Diameter Inches	D Assembly Mark 1: Inches *	E Assembly Mark 2: Inches *	t Minimum Wall Thickness: Inches
DR-51 PRESSURE CLASS 80 PSI					
24" (600)	25.800	30"	9-3/4"	10-3/4"	0.506
30" (750)	32.000	37"	12-5/8"	13-5/8"	0.627
36" (900)	38.300	43-1/2"	12-7/8"	13-7/8"	0.751
42" (1050)	44.500	51"	15-3/4"	16-3/4"	0.872
48" (1200)	50.800	57-1/2"	15-7/8"	16-7/8"	0.996
54" (1350)	57.560	65"	16"	17"	1.129
60" (1500)	61.610	69-1/4"	17-1/2"	18-1/2"	1.208
DR-41 PRESSURE CLASS 100 PSI					
20" (500)	21.600	25-3/4"	9"	10"	0.527
24" (600)	25.800	30-1/2"	9-3/4"	10-3/4"	0.629
30" (750)	32.000	37-1/4"	12-5/8"	13-5/8"	0.780
36" (900)	38.300	44"	12-7/8"	13-7/8"	0.934
42" (1050)	44.500	51-1/2"	15-3/4"	16-3/4"	1.085
48" (1200)	50.800	58"	15-7/8"	16-7/8"	1.239
54" (1350)	57.560	65-3/4"	16"	17"	1.404
60" (1500)	61.610	70"	17-1/2"	18-1/2"	1.503
DR-32.5 PRESSURE CLASS 125 PSI					
16" (400)	17.400	21"	7-3/4"	8-3/4"	0.535
18" (450)	19.500	23-1/2"	8-1/4"	9-1/4"	0.600
20" (500)	21.600	26"	9"	10"	0.665
24" (600)	25.800	30-3/4"	9-3/4"	10-3/4"	0.794
30" (750)	32.000	37-3/4"	12-5/8"	13-5/8"	0.985
36" (900)	38.300	44-3/4"	12-7/8"	13-7/8"	1.178
42" (1050)	44.500	52"	15-3/4"	16-3/4"	1.369
48" (1200)	50.800	58-1/2"	15-7/8"	16-7/8"	1.563
54" (1350)	57.560	66-1/2"	16"	17"	1.771
60" (1500)	61.610	70-3/4"	17-1/2"	18-1/2"	1.896
DR-25 PRESSURE CLASS 165 PSI					
14" (350)	15.300	18-3/4"	6-7/8"	7-7/8"	0.612
16" (400)	17.400	21-1/4"	7-3/4"	8-3/4"	0.696
18" (450)	19.500	23-1/4"	8-1/4"	9-1/4"	0.780
20" (500)	21.600	26-1/4"	9"	10"	0.864
24" (600)	25.800	31-1/4"	9-3/4"	10-3/4"	1.032
30" (750)	32.000	38-1/4"	12-5/8"	13-5/8"	1.280
36" (900)	38.300	45"	12-7/8"	13-7/8"	1.532
42" (1050)	44.500	52-1/4"	15-3/4"	16-3/4"	1.780
48" (1200)	50.800	59-1/2"	15-7/8"	16-7/8"	2.032
54" (1350)	57.560	66-3/4"	16"	17"	2.303
60" (1500)	61.610	72"	17-1/2"	18-1/2"	2.465
DR-21 PRESSURE CLASS 200 PSI					
14" (350)	15.300	19"	6-7/8"	7-7/8"	0.729
16" (400)	17.400	21-1/2"	7-3/4"	8-3/4"	0.829
18" (450)	19.500	24"	8-1/4"	9-1/4"	0.929
20" (500)	21.600	26-1/2"	9"	10"	1.029
24" (600)	25.800	31-1/2"	9-3/4"	10-3/4"	1.229
30" (750)	32.000	38-1/2"	12-5/8"	13-5/8"	1.524
36" (900)	38.300	46-1/2"	12-7/8"	13-7/8"	1.823
42" (1050)	44.500	53"	15-3/4"	16-3/4"	2.119

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TRANS-21™
C900 14"-60" SPECIFICATION & LOADING DATA

TRANS-21™
AWWA C900 SPECIFICATION DATA)

Nominal Pipe Size in. (mm)	A Outside Diameter Inches	B Bell Diameter Inches	D Assembly Mark 1 Inches *	E Assembly Mark 2 Inches *	t Minimum Wall Thickness Inches
DR-18 PRESSURE CLASS 235 PSI					
14" (350)	15.300	19-1/4"	6-7/8"	7-7/8"	0.850
16" (400)	17.400	21-3/4"	7-3/4"	8-3/4"	0.967
18" (450)	19.500	24-1/4"	8-1/4"	9-1/4"	1.083
20" (500)	21.600	26-3/4"	9"	10"	1.200
24" (600)	25.800	31-3/4"	9-3/4"	10-3/4"	1.433
30" (750)	32.000	39"	12-5/8"	13-5/8"	1.778
36" (900)	38.300	46-1/2"	12-7/8"	13-7/8"	2.128
42" (1050)	44.500	53-3/4"	15-3/4"	16-3/4"	2.472
DR-14 PRESSURE CLASS 305 PSI					
14" (350)	15.300	19-1/2"	6-7/8"	7-7/8"	1.0929
16" (400)	17.400	22"	7-3/4"	8-3/4"	1.243
18" (450)	19.500	24-1/2"	8-1/4"	9-1/4"	1.393
20" (500)	21.600	27"	9"	10"	1.543
24" (600)	25.800	32"	9-3/4"	10-3/4"	1.843
30"(750)	32.000	40"	12-5/8"	13-5/8"	2.286

TRANS-21™
AWWA C900 LOADING CHART

Nominal Pipe Size in. (mm)	Outside Diameter	Minimum Wall Thickness	Joints Per Bundle	Feet Per Bundle	*Feet Per Truckload
DR-81 PRESSURE CLASS 50 PSI					
36" (900)	38.300	0.473	2	40/44	160/176
42" (1050)	44.500	0.550	2	40/44	160/176
48" (1200)	50.800	0.628	1	20/22	80/88
54" (1350)	57.560	0.711	1	22	44
60" (1500)	61.610	0.760	1	22	44
DR-51 PRESSURE CLASS 80 PSI					
24" (600)	25.800	0.506	3	60	360
30" (750)	32.000	0.627	3	60/66	360/396W/264E
36" (900)	38.300	0.751	2	40/44	160/176
42" (1050)	44.500	0.872	2	40/22	160/176
48" (1200)	50.800	0.996	1	20/22	80/88
54" (1350)	57.560	1.129	1	22	44
60" (1500)	61.610	1.208	1	22	44
DR-41 PRESSURE CLASS 100 PSI					
20" (500)	21.600	0.527	4	80	640
24" (600)	25.800	0.629	3	60	360
30" (750)	32.000	0.78	3	60/66	360/396W/264E
36" (900)	38.300	0.934	2	40/44	160/176
42" (1050)	44.500	1.085	2	40/44	160/176
48" (1200)	50.800	1.239	1	20/22	80/88
54" (1350)	57.560	1.404	1	22	44
60" (1500)	61.610	1.503	1	22	44

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TRANS-21™

AWWA C900 LOADING CHART

Nominal Pipe Size in. (mm)	Outside Diameter	Minimum Wall Thickness	Joints Per Bundle	Feet Per Bundle	*Feet Per Truckload
DR-32.5 PRESSURE CLASS 125 PSI					
16" (400)	17.400	0.535	2\3\4\6	40-120	1,000
20" (500)	21.600	0.665	4	80	640
24" (600)	25.800	0.794	3	60	360
30" (750)	32.000	0.985	3	60/66	360/396W/264E
36" (900)	38.300	1.178	2	40/44	160/176
42" (1050)	44.500	1.369	2	40/44	160/176
48" (1200)	50.800	1.563	1	20/22	80/88
54" (1350)	57.560	1.771	1	22	44
60" (1500)	61.610	1.896	1	22	44
DR-25 PRESSURE CLASS 165 PSI					
14" (350)	15.300	0.612	6	120	1,440
16" (400)	17.400	0.696	2\3\4\6	40-120	1,000
18" (450)	19.500	0.78	4\6	80\120	800
20" (500)	21.600	0.864	4	80	640
24" (600)	25.800	1.032	3	60	360
30" (750)	32.000	1.28	3	60/66	360/396W/264E
36" (900)	38.300	1.523	2	40/44	160/176
42" (1050)	44.500	1.780	2	40/44	160/176
48" (1200)	50.800	2.032	1	20/22	80/88
54" (1350)	57.560	2.303	1	22	44
60" (1500)	61.610	2.465	1	22	44
DR-21 PRESSURE CLASS 200 PSI					
14" (350)	15.300	0.729	6	120	1,440
16" (400)	17.400	0.829	2\3\4\6	40-120	1,000
18" (450)	19.500	0.929	4\6	80\120	800
20" (500)	21.600	1.029	4	80	640
24" (600)	25.800	1.229	3	60	360
30" (750)	32.000	1.524	3	60/66	360/396W/264E
36" (900)	38.300	1.824	2	40/44	160/176
42" (1050)	44.500	2.119	2	40/44	160/176
DR-18 PRESSURE CLASS 235 PSI					
14" (350)	15.300	0.85	6	120	1,440
16" (400)	17.400	0.967	2\3\4\6	40-120	1,000
18" (450)	19.500	1.083	4\6	80\120	800
20" (500)	21.600	1.2	4	80	640
24" (600)	25.800	1.433	3	60	360
30" (750)	32.000	1.778	3	60/66	360/396W/264E
36" (900)	38.300	2.128	2	40/44	160/176
42" (1050)	44.500	2.472	2	40/44	160/176
DR-14 PRESSURE CLASS 305 PSI					
14" (350)	15.300	1.0929	6	120	1,440
16" (400)	17.400	1.243	2\3\4\6	40-120	1,000
18" (450)	19.500	1.393	4\6	80\120	800
20" (500)	21.600	1.543	4	80	640
24" (600)	25.800	1.843	3	60	360
30"	32.000	2.286	3	60/66	360/396W/264E

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LOK-21™
FEATURES & BENEFITS

INTRODUCTION

Diamond Lok-21 restrained joint PVC pressure pipe is manufactured in accordance with AWWA C900 Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings in sizes from 4" thru 24" CIOD (100mm to 600mm). Most sizes are available in DR14 (PC 305) , DR18 (PC 235) , DR21 (PC 200) ,and DR25 (PC 165). Please check with your local Diamond Sales Representative for availability. Cast Iron Outside Diameter (CIOD) sizing insures the availability of fittings, valves and other appurtenances.

Diamond Lok-21 pipe is manufactured from compounds meeting the requirements of ASTM D1784 for a cell classification of 12454 and having a hydrostatic design basis (HDB) of 4000 psi. The pipe compound and gaskets also meet the requirements of NSF Standard 61 for potable drinking water.

Diamond Lok-21®'s restraint system provides uniform circumferential contact thereby eliminating any concerns over point loading. Because it is a simple push together system, it dramatically reduces installation time while reducing complexity which exists for fused or bolted systems.

Diamond Lok-21® restrained joint PVC pipe is well suited for directional drilling operations, for installation through bore casings and most applications which require joint restraint. Because it is PVC, you know you are getting superior long-term performance.

PIPE INTEGRITY

Each piece of Diamond Lok-21 is proof tested to twice its pressure rating. It has a short term safety factor greater than 3 against burst pressure and a long-term safety factory of 2 on its pressure rating. All Diamond Lok-21® products utilize the Rieber sealing system technology which provides tremendous joint integrity under severe construction conditions.

PUSH TOGETHER RESTRAINT

Diamond Lok-21® pushes together like standard gasketed PVC pipe. The restraint mechanism is located in the bell. It does not require couplings or splines; nuts, bolts and torque wrenches; butt fusion equipment; concrete thrust blocking or solvent cement.

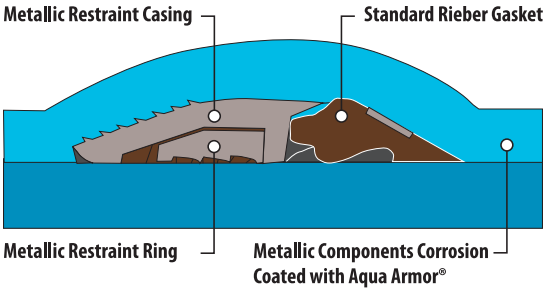
FAST, SIMPLE AND RELIABLE

Installation costs are dramatically reduced with Diamond Lok-21®. It is nearly as fast as standard PVC pipe installation. It is as simple as clean, lubricate, align and insert and as reliable as PVC pipe. No special tools, no special machines, no special parts.

PVC

Diamond Lok-21® is made of PVC, a non-conductor of electricity, therefore immune to electrochemical reactions which cause corrosion. PVC is resistant to a wide range of chemicals which cause corrosion in non-PVC products. The restraint casing and lock ring are coated to resist corrosion and located on the non flow side of the gasket. No nuts and bolts to worry about. Because PVC does not corrode, "Red Water" is not possible in a Diamond Lok-21® system.

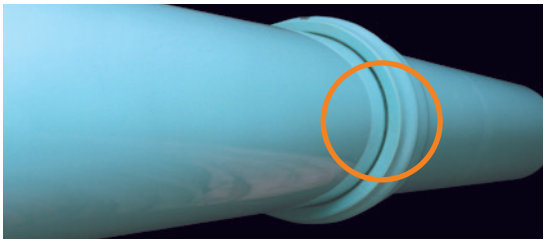
GASKET ILLUSTRATION

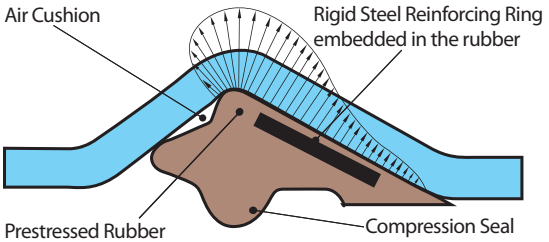


GASKET DIAGRAM

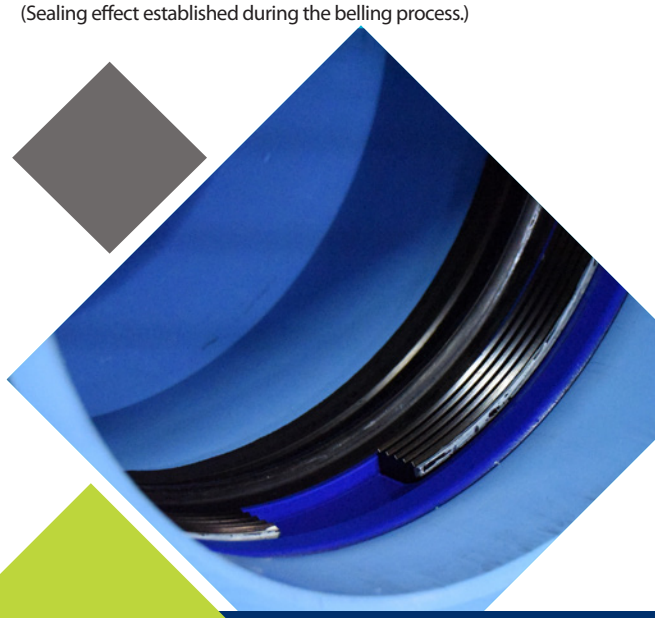
HOW IT WORKS?

How it works? "Rieber Sealing System Technology" is utilized in forming the gasket bell sockets of Diamond C900 PVC Pipe around the steel reinforced elastomeric seal meeting the requirements of ASTM F477.





(Sealing effect established during the belling process.)



RIEBER GASKETED SEALING SYSTEM

Diamond Lok-21® has deep insertion push together gasketed joints utilizing Rieber sealing system technology. This has virtually eliminated the leaks from rolled or fish-mouthed gaskets.

SMOOTH INTERIOR/GREATER RELATIVE FLOW CAPACITY

Diamond Lok-21® has a very smooth interior which provides a Hazen-Williams C Factor of 150. This ensures superior hydraulics over the long term reducing pumping costs and requiring much less cleaning. The smooth interior reduces unwanted by-product buildup and therefore does a much better job of maintaining initial water quality. Because PVC has much higher tensile HDB strength than HDPE, it has a larger I.D. for similarly pressure rated products and hence greater flow capacity.

SHORT FORM SPECIFICATION FOR WATER TRANSMISSION & SEWER FORCE MAIN PIPE

Self Restrained potable water transmission and sewer force main pipe shall be Diamond Lok-21 PVC pipe. It shall be manufactured with compounds meeting a 12454 designation according to ASTM D1784 and shall have Rieber style joints meeting the requirements of ASTM D3139 with gaskets meeting the requirements of ASTM F477. Pipe for use in potable water systems shall also bear the NSF 61 mark or equivalent.

LOK-21®

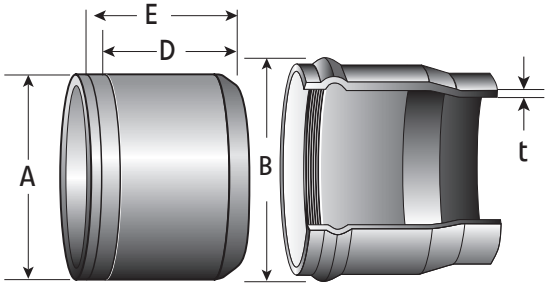
AWWA SPECIFICATION DATA

Diamond Lok-21 self- restrained joint C900 PVC pipe 4" thru 24" (100mm thru 600mm) is made of 12454 compound per ASTM D1784, in accordance with the dimensional, chemical, and physical requirements of the current AWWA C900 Poly Vinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings standard.

Diamond Lok-21® restraint joint C900 products bear the mark of NSF, International.

Diamond Lok-21® restraint joint C900 products utilize the Bulldog Restraint System® with a Rieber gasket per ASTM F477 to seal the integral bell socket to the spigot of the next joint (which conforms to the requirements of ASTM D3139). Each male end is beveled to facilitate joint assembly and the spigot is reference marked to ensure proper insertion depth. Diamond furnished lubricant is to be used in the joining process.

RIEBER JOINT ILLUSTRATION



Nominal Pipe Size Inches(mm)	A Outside Dia. Inches	B Bell Dia. Inches	D Assembly Mark 1 Inches *	E Assembly Mark 2 Inches *	t DR-14 Min. Wall Inches	t DR-18 Min. Wall Inches	t DR-21 Min. Wall Inches	t DR-25 Min. Wall Inches	Max. Pull-In Force, Straight Pull (No Bending) lbs.
DR-14 PRESSURE CLASS 305 PSI, DR-18 PRESSURE CLASS 235 PSI , DR-21 PRESSURE CLASS 200 PSI OR DR-25 PRESSURE CLASS 165 PSI									
4" (100)	4.800	6-1/2"	5-3/4"	6-3/4"	0.343	0.267			15,000
6" (150)	6.900	9-1/4"	6-1/4"	7-1/4"	0.493	0.383			20,000
8" (200)	9.050	11-3/4"	7-1/8"	8-1/8"	0.646	0.503			30,000
10" (250)	11.100	14-1/4"	8"	9"	0.793	0.617			40,000
12" (300)	13.200	16-3/4"	8-5/8"	9-5/8"	0.943	0.733			45,000
14" (350)	15.300	19-1/4"	9-1/2"	10-1/2"	1.093	0.850	0.729	0.612	52,000
16" (400)	17.400	21-3/4"	10-3/4"	11-3/4"	1.243	0.967	0.829	0.696	60,000
18" (450)	19.500	24-1/4"	10-3/4"	11-3/4"	1.393	1.083	0.929	0.780	70,000
20" (500)	21.600	26-3/4"	12"	13"	1.543	1.200	1.029	0.864	80,000
24" (600)	25.800	31-3/4"	13-5/8"	14-5/8"	1.843	1.433	1.229	1.032	100,000

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*Tolerance of +/- 1/4" allowed

LOK-21®
SPECIFICATION DATA

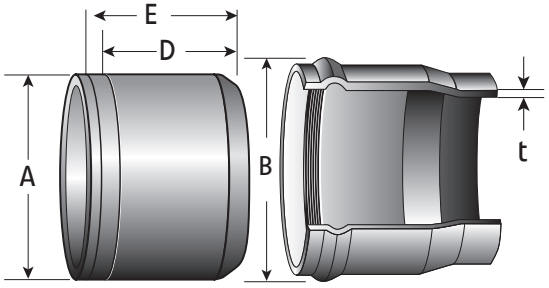
Diamond LOK-21® restraint joint IPS (ASTM D2241) SDR 21 and 26, PVC pipe (3", 4", 6" and 8") is made of 12454 compound per ASTM D1784, in accordance with the dimensional, chemical, and physical requirements of ASTM D2241 for IPS sizes.

Diamond LOK-21® restraint joint IPS pipe bears the mark of NSF-14.

Diamond LOK-21® restraint joint IPS utilizes the Bulldog Restraint System with a Rieber gasket per ASTM F477 to seal the integral bell socket to the spigot of the next joint (which conforms to the requirements of ASTM D3139). Each male end is beveled to facilitate joint assembly, and the spigot is reference marked to ensure proper insertion depth.

Diamond furnished lubricant is to be used in the joining process.

RIEBER JOINT ILLUSTRATION



Nominal Pipe Size Inches(mm)	A Outside Dia. Inches	B Bell Dia. Inches	D Assembly Mark 1 Inches *	E Assembly Mark 2 Inches *	t Minimum Wall(t) Inches
SDR-21 PRESSURE RATED 200 PSI					
3" (.75)	3.500	4-7/16"	5"	6"	0.167
4" (100)	4.500	5-1/2"	5-5/8"	6-5/8"	0.214
6" (150)	6.625	8-1/4"	6-3/4"	7-3/4"	0.316
8" (200)	8.625	10-1/4"	6-7/8"	7-7/8"	0.410
SDR26 PRESSURE RATED 160 PSI					
6" (150)	6.625	8-1/4"	6-3/4"	7-3/4"	0.255
8" (200)	8.625	10-1/4"	6-7/8"	7-7/8"	0.332

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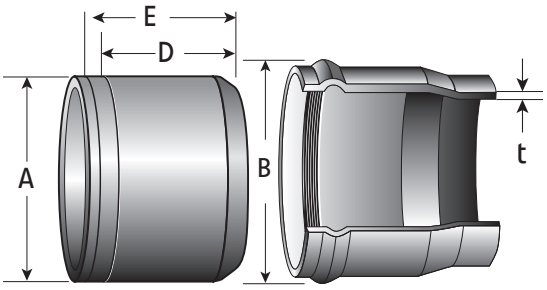
ASTM D2241 IPS SPECIFICATION DATA

Diamond IPS pressure-rated PVC pipe is made of compounds conforming to material requirements of ASTM D2241 in accordance with ASTM D1784. Pipe sizes (1 ½" through 12") are made with an integral bell to utilize the Rieber gasket system for sealing, and meeting specifications defined in ASTM F477 which conforms to the requirements of ASTM D3139.

Diamond IPS pressure-rated PVC pipe meets all the dimensional, chemical, and physical requirements as outlined in ASTM D2241. Potable water pipe carries the mark of NSF, International in accordance with Standard 61. Some factory locations produce IPS pressure pipe bearing the mark of NSF-14.

Each male end shall be beveled to facilitate joining and reference marked to insure proper insertion depth. Diamond furnished lubricant is to be used in the joining process.

RIEBER JOINT ILLUSTRATION



D2241

PHYSICAL PROPERTIES OF PVC 12454:

Property	ASTM Test	Minimum
Specific Gravity	D792	1.40
Tensile Strength, psi	D638	7,000
Tensile Modulus, psi	D638	400,000
IZOD Impact Strength	D256	.65ft., lb./in.

SHORT FORM Specification for Diamond PVC Water Pipe
Diamond PVC Water Pipe shall be made of compounds conforming to ASTM D1784 with a cell classification of 12454. Diamond PVC Water Pipe must meet all the dimensional, chemical, and physical requirements as outlined in ASTM D2241 and will be supplied in 20 and 22 foot laying lengths. Joints shall be formed using Rieber Technology. Potable water pipe shall be manufactured from NSF listed ingredients.

ASTM D2241

SPECIFICATION DATA. DIAMOND IPS PRESSURE-RATED PIPE IS SUPPLIED IN 20 AND 22 FOOT LAYING LENGTHS.

Nominal Pipe Size in. (mm)	B Bell Socket Diameter Inches	D Insert Mark 1 Inches *	E Insert Mark 2 Inches *
2" (50)	3-1/8"	2-3/4"	3-3/4"
2.5" (62.5)	4-3/8"	2"	3"
3" (75)	4-7/16"	3-5/8"	4-5/8"
4" (100)	5-1/2"	4-1/4"	5-1/4"
6" (150)	8-1/4"	4-3/4"	5-3/4"
8" (200)	10-1/4"	4-7/8"	5-7/8"
10" (250)	12-7/8"	5-1/2"	6-1/2"
12" (300)	15-1/8"	5-7/8"	6-7/8"

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ASTM D2241
SPECIFICATION DATA

Nominal Pipe Size in. (mm)	A Outside Diameter Inches	t SDR 13.5 315 psi Inches	t SDR 17 250 psi Inches	t SDR 21 200 psi Inches	t SDR 26 160 psi Inches	t SDR 32.5 125 psi Inches	t SDR 41 100 psi Inches
MINIMUM WALL THICKNESS = (t)							
1.5" (37.5)	1.900	0.141	0.112	0.090			
2" (50)	2.375	0.176	0.140	0.113	0.091		
2.5" (62.5)	2.875	0.213	0.169	0.137	0.110		
3" (75)	3.500	0.259	0.206	0.167	0.135		
4" (100)	4.500	0.333	0.265	0.214	0.173	0.138	0.110
6" (150)	6.625	0.491	0.390	0.316	0.255	0.204	0.162
8" (200)	8.625		0.508	0.410	0.332	0.265	0.210
10" (250)	10.750		0.632	0.511	0.413	0.331	0.262
12" (300)	12.750		0.750	0.606	0.490	0.392	0.311

ASTM D2241
ASTM D2241 LOADING CHART

Nominal Pipe Size in. (mm)	Outside Diameter	Joints Per Bundle	Feet Per Bundle 20' laying lengths	*Feet Per Truckload 20' laying lengths	Feet Per Bundle 22' laying lengths	*Feet Per Truckload 22' laying lengths
SDR-41 PRESSURE RATING 100 PSI						
4" (100)	4.500	63	1,260	20,160	1,386	22,176
6" (150)	6.625	35\40	560/640/700/800	8,400	770\880	9,240
8" (200)	8.625	20\24	300/360/400/480	4,840	440\528	5,324
10" (250)	10.750	12\15	240/300	3,240	264\330	3,564
12" (300)	12.750	9\12	120/160/180/240	1,960	198\264	2,156
SDR-32.5 PRESSURE RATING 125 PSI						
4" (100)	4.500	63	1,260	20,160	1,386	22,176
6" (150)	6.625	35\40	560/640/700/800	8,400	770\880	9,240
8" (200)	8.625	20\24	300/360/400/480	4,840	440\528	5,324
10" (250)	10.750	12\15	240/300	3,240	264\330	3,564
12" (300)	12.750	9\12	120/160/180/240	1,960	198\264	2,156
SDR-26 PRESSURE RATING 160 PSI						
2" (50)	2.375	215			4,730	75,680
2.5" (62.5)	2.875	131			2,882	46,112
3" (75)	3.500	88\95			1,936\2,090	32,208
4" (100)	4.500	63	1,260	20,160	1,386	22,176
6" (150)	6.625	35\40	560/640/700/800	8,400	770\880	9,240
8" (200)	8.625	20\24	300/360/400/480	4,840	440\528	5,324
10" (250)	10.750	12\15	240/300	3,240	264\330	3,564
12" (300)	12.750	9\12	120/160/180/240	1,960	198\264	2,156

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CONTINUED NEXT PAGE

ASTM D2241

LOADING CHART

Nominal Pipe Size in. (mm)	Outside Diameter	Joints Per Bundle	Feet Per Bundle 20' laying lengths	*Feet Per Truckload 20' laying lengths	Feet Per Bundle 22' laying lengths	*Feet Per Truckload 22' laying lengths
SDR-21 PRESSURE RATING 200 PSI						
1-1/2" (37.5)	1.900	215			4,730	75,680
2" (50)	2.375	215			4,730	75,680
2-1/2" (62.5)	2.875	131			2,882	46,112
3" (75)	3.500	88\95			1,936/2,090	32,208
4" (100)	4.500	63	1,260	20,160	1,386	22,176
6" (150)	6.625	35\40	560/640/700/800	8,400	770\880	9,240
8" (200)	8.625	20\24	300/360/400/480	4,840	440\528	5,324
10" (250)	10.750	12\15	240/300	3,240	264\330	3,564
12" (300)	12.750	9\12	120/160/180/240	1,960	198\264	2,156
SDR-17 PRESSURE RATING 250 PSI						
2" (50)	2.375	215			4,730	75,680
2-1/2" (62.5)	2.875	131			2,882	46,112
3" (75)	3.500	88\95			1,936\2,090	32,208
4" (100)	4.500	63	1,260	20,160	1,386	22,176
6" (150)	6.625	35\40	560/640/700/800	8,400	770\880	9,240
8" (200)	8.625	20\24	300/360/400/480	4,840	440\528	5,324
10" (250)	10.750	12\15	240/300	3,240	264\330	3,564
12" (300)	12.750	9\12	120/160/180/240	1,960	198\264	2,156
SDR-13.5 PRESSURE RATING 315 PSI						
2" (50)	2.375	215			4,730	75,680
2-1/2" (62.5)	2.875	131			2,882	46,112
3" (75)	3.500	88\95			1,936\2,090	32,208
4" (100)	4.500	63	1,260	20,160	1,386	22,176
6" (150)	6.625	35\40	560/640/700/800	8,400	770\880	9,240

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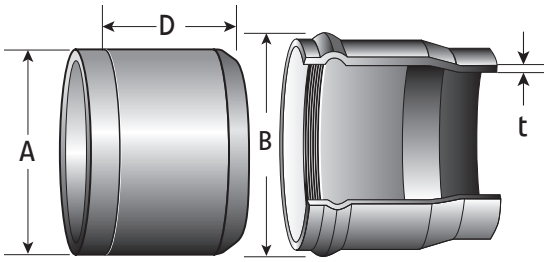
D3034 & F679 SEWER SPECIFICATION DATA

Diamond gravity sewer pipe 4 inches through 60 inches shall be made of compounds conforming to material requirements of ASTM D3034 and ASTM F679 in accordance with ASTM D1784. Diamond PVC Sewer Pipe meets all the dimensional, chemical, and physical requirements as outlined in ASTM D3034 and ASTM F679. A listing to CSA B182.2 is available for most of these sizes. A complete listing by manufacturing plant is available upon request.

The pipe sizes 4 inches through 60 inches are made with an integral bell "water-tight" joint that meets the requirements of ASTM D3212 and that utilizes a Rieber gasket system for sealing that meets the requirements of ASTM F477.

Each male end shall be beveled to facilitate joining and referencing marked for proper insertion depth. Diamond furnished lubricant is to be used in the joining process.

RIEBER JOINT ILLUSTRATION



SANI-21™

PHYSICAL PROPERTIES OF ASTM D3034 & F679

Property	ASTM TEST	Minimum 12454/12364
PIPE MATERIALS: PIPE SHALL BE MADE OF PVC PLASTIC HAVING A MINIMUM CELL CLASSIFICATION OF 12454 OR 12364 AS DEFINED IN SPECIFICATION D1784.		
Specific Gravity	D792	1.40/1.40
Tensile Strength, psi	D638	7,000/6,000
Tensile Modulus, psi	D638	400,000/500,000
IZOD Impact Strength,	D256	.65ft., lb./in.

SHORT FORM Specification for Diamond PVC Solid-Wall Sewer Pipe SDR 26 or SDR 35 or PS 46 or PS 115
All PVC Solid-Wall Sewer Plpe shall be made of compounds conforming to ASTM D1784 manufactured in accordance with the material requirements of ASTM D3034 or ASTM F679. All PVC Sewer Pipe must meet dimensional, chemical, and physical requirements as outlined in ASTM D3034 orASTM F679. Joints shall meet the requirements of ASTM D3212 and shall be formed using Rieber Technology. PVC Sewer Pipe shall be installed according to the requirements of ASTM D2321, Uni-Bell's Uni-Pub 6 and the manufacturer's recommendations.

SANI-21™

D3034 & F679 SEWER SPECIFICATION DATA

Nominal Pipe Size in. (mm)	A Outside Diameter Inches	B Bell Socket Diameter Inches	D Insert Mark Inches *	t Min. Wall Thickness SDR26/PS115 Inches	t Min. Wall Thickness SDR35/PS46 Inches
D-3034 PIPE DIMENSIONS					
4" (100)	4.215	5-1/4	4"	0.162	0.120
6" (150)	6.275	7-1/2	4-1/8"	0.241	0.180
8" (200)	8.400	9-7/8	4-7/8"	0.323	0.240
10" (250)	10.500	12-3/8	5-1/4"	0.404	0.300
12" (300)	12.500	14-5/8	5-1/2"	0.481	0.360
15" (375)	15.300	18	4-5/8"	0.588	0.437
F-679 PIPE DIMENSIONS					
18" (450)	18.701	21-3/4"	7-3/4"	0.671	0.499
21" (525)	22.047	25-1/2"	8-1/2"	0.791	0.588
24" (600)	24.803	28-3/4"	10"	0.889	0.661
27" (675)	27.953	32-1/2"	11-1/8"	1.002	0.745
30" ciod (750)	32.000	37-1/4"	13-5/8"	1.148	0.853
36" ciod (900)	38.300	43-1/4"	13-7/8"	1.373	1.021
42" ciod (1050)	44.500	53"	16-3/4"	1.596	1.187
48" ciod (1200)	50.800	60"	16-7/8"	1.822	1.355
54" ciod (1350)	57.560	67"	14"	2.064	1.535
60" ciod (1500)	61.610	72"	18"	2.210	1.643

SANI-21™

LOADING ASTM D3034 & F679 LOADING CHART (SDR35 / PS46)

Nominal Pipe Size in. (mm)	Outside Diameter Inches	Bundle Quantity	*Feet Per Truckload	
			14'	20'
SDR35/PS46				
4" (100)	4.215	69	23,184	24,288
6" (150)	6.275	24/32	10,080	11,264
8" (200)	8.400	18/24	5544/6048	5808/6336
10" (250)	10.500	12/15	3402	3564
12" (300)	12.500	16	2688	2816
15" (375)	15.300	6	1512	1584
18" (450)	18.701	2/3/4/6	1050	1100
21" (525)	22.047	4	672	704
24" (600)	24.803	4	504/672	704
27" (675)	27.953	3	378	
30" (750)	32.000	3	378/252	
36" (900)	38.300	2	168	
42" (1050)	44.500	2	168	
48" (1200)	50.800	1	84	
54" (1350)	57.560	1	42	
60" (1500)	61.610	1	42	

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*Tolerance of +/- 1/4" allowed

SANI-21™
PVC SEWER PIPE LOADING DATA

SANI-21™
LOADING ASTM D3034 & F679 LOADING CHART (SDR26 / PS115)

Nominal Pipe Size in. (mm)	Outside Diameter Inches	Min. Wall Inches	Bundle Quantity	*Feet Per Truckload	
				14′	22′
SDR26/PS115					
4″ (100)	4.215	.162	69	23,184	24,288
6″ (150)	6.275	.241	24/32	10,080	11,264
8″ (200)	8.400	.323	18/24	5544/6048	5808/6336
10″ (250)	10.500	.404	12/15	3402	3564
12″ (300)	12.500	.481	16	2688	2816
15″ (375)	15.300	.588	6	1512	1584
18″ (450)	18.701	.671	2/3/4/6	1050	
21″ (525)	22.047	.791	4	672	
24″ (600)	24.803	.889	4	672	
27″ (675)	27.953	1.002	3	378	
30″ (750)	32.000	1.148	3	378/252	
36″ (900)	38.300	1.373	2	168	
42″ (1050)	44.500	1.596	2	168	
48″ (1200)	50.800	1.954	1	84	
54″ (1350)	57.560	2.064	1	42	
60″ (1500)	61.610	2.210	1	42	

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CORR-21 PVC PIPE

Corrugated low pressure irrigation, storm water and sanitary sewer applications. (Available in sizes from 12" through 42")

Diamond gravity sewer pipe 12 inches through 42 inches shall be made of compounds conforming to material requirements of ASTM F949 and ASTM F794 in accordance with ASTM D1784. Diamond PVC Corrugated Sewer Pipe has a minimum pipe stiffness of 50 psi and meets all the dimensional, chemical and physical requirements as outlined in ASTM F949 and ASTM F794 and AASHTO M304.

The pipe sizes 12 inches through 42 inches are manufactured with an integral bell "water-tight" joint that meets the requirements of ASTM D3212 and that utilizes an elastomeric seal that meets the requirements of ASTM F477.

Each male end shall be formed to facilitate joining and shall be reference marked for proper insertion depth. Diamond furnished lubricant is to be used in the joining process.

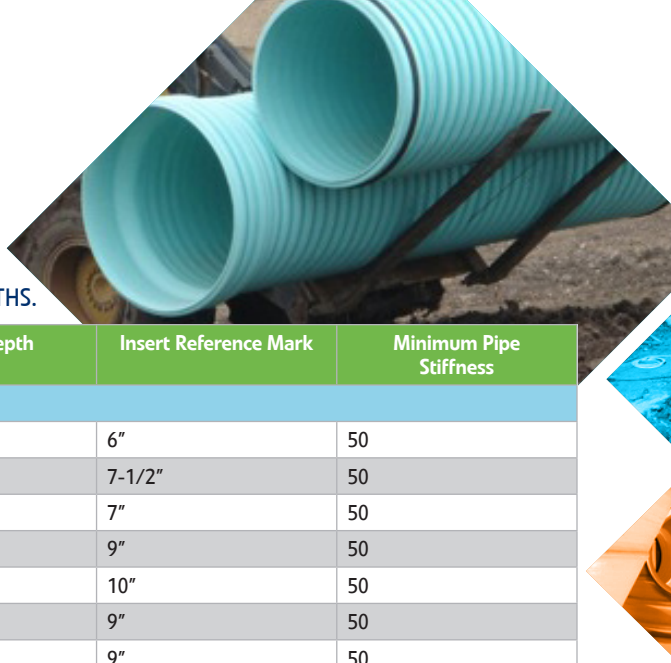
CORR-21™

PHYSICAL PROPERTIES OF ASTM F949, ASTM F794, AASHTO M304-03:

Property	ASTM TEST	Minimum
Specific Gravity	D792	1.42
Tensile Strength, psi	D638	7,000
IZOD Impact Strength	D256	.65ft., lb./in. of notch

Pipe Materials: Pipe shall be made of compounds to the material requirements of ASTM F949 and ASTM F794 in accordance with Specification D1784.

CORR-21™
SPECIFICATION DATA & LOADING CHART



CORR-21™
ASTM F794 & F949 SPECIFICATION DATA CORR-21 IS SUPPLIED IN 14 FOOT LAYING LENGTHS.

Nominal Pipe Size in. (mm)	Average Outside Diameter	Approximate Bell Socket Diameter	Socket Depth	Insert Reference Mark	Minimum Pipe Stiffness
CORR-21™ PIPE DIMESIONS					
12" (300)	12.795	16-1/2"	7-1/2"	6"	50
15" (375)	15.658	18-1/2"	8"	7-1/2"	50
18" (450)	19.152	22-1/2"	8-1/2"	7"	50
21" (525)	22.630	26-1/2"	10-1/2"	9"	50
24" (600)	25.580	29-1/2"	11-1/2"	10"	50
27" (675)	28.860	33-1/2"	11-1/2"	9"	50
30" (750)	32.150	37"	11-1/2"	9"	50
36" (900)	38.740	44-1/2"	11-1/2"	11"	50
42" (1050)	45.800	52-1/2"	10-1/2"	10"	50

SHORT FORM Specification for PVC Sewer Pipe
Corr-21 PVC Gravity Sewer and Drain Pipe Sizes 12" - 42"
All sewer pipe shall be Diamond Corr-21 PVC corrugated sewer pipe with a seamless profile wall made of compounds classified as 12364 or 12454 as defined in ASTM D1784 and manufactured in accordance with ASTM F949 and ASTM F794. It shall have a minimum pipe stiffness of 50 psi. Pipe shall have a smooth interior with a corrugated cross-sectional rib exterior. Exterior corrugations shall be perpendicular to the axis of the pipe to allow placement of the sealing gasket without additional cutting or machining. It shall have a symmetrical dual three point gasketed joint sealing system with an allowable infiltration of 25 gallons per inch of internal diameter per mile per day or less, and meet the requirements of ASTM D3212. All sewer pipe shall be installed in accordance with ASTM D2321 and the manufacturer's recommendations.

CORR-21™
ASTM F794 & F949 LOADING DATA

Nominal Pipe Size in. (mm)	Average Outside Diameter Inches	Pieces Per Bundle	Pieces Per Truckload 14'jts.	*Feet Per Truckload 14'jts.
PIPE DIMENSIONS				
12" (300)	12.795	9, 12, 16	147	2,058
15" (375)	15.658	9	108	1,512
18" (450)	19.152	4, 6	60	840
21" (525)	22.630	4	48	672
24" (600)	25.580	3	27	378
27" (675)	28.860	3	27	378
30" (750)	32.150	3	27	378
36" (900)	38.740	2	12	168
42" (1050)	45.800	2	12	168

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PRO-21™ PVC PIPE

Diamond "PRO-21" closed profile pipe is produced by extruding an "I-beam" type profile that is in turn wrapped onto a circular mandrel providing a continuous tube with a helical heat welded seam. The result is a pipe of solid wall appearance from the inside and outside which has the structural advantages of the "honeycomb or I-beam"construction internal to the pipe wall itself. This results in a product which meets the performance requirements of a solid wall while providing the advantage of lighter weight. Diamond "PRO-21" meets all requirements of ASTM F1803.

Diamond's Closed Profile Pipe is made with PVC compounds that meet the requirements for cell class 12364 as described in ASTM D1784. Integral bell sockets meet the requirements of ASTM D3212. Pipe gaskets meet the requirements of ASTM F477.

PRO-21™

SPECIFICATION DATA FOR PS46 PRO-21 IS SUPPLIED IN 14 FOOT LAYING LENGTHS

Nominal Pipe Size in. (mm)	Average Outside Diameter Inches	Bell Outside Diameter Inches	Mininum Inside Diameter Inches
PIPE DIMENSIONS PRO -21 ASSEMBLY MARKS ARE AT 7" MINIMUM (ASSEMBLY MARK 1) AND 9" MAXIMUM (ASSEMBLY MARK 2)			
30" (750)	31.606	35"	29.410
33" (825)	35.036	38-1/2"	32.405
36" (900)	38.036	41-3/4"	35.395
42" (1050)	44.200	48-1/2"	41.375
48" (1200)	50.570	55"	47.360
54" (1350)	57.100	61-1/2"	53.350
60" (1500)	63.932	69-1/2"	59.340

SHORT FORM Specification for PVC Sewer Pipe. Pro-21 PVC Gravity Sewer and Drain Pipe Sizes 30" - 60"

All sanitary sewer and storm drain pipe shall be Diamond Plastics Pro-21 PVC profile wall sewer pipe made of compounds meeting the minimum cell classification of 12364 as defined in ASTM D1784 and manufactured in accordance with ASTM F 1803. It shall have a smooth interior and exterior. It shall have a gasket with four sealing fins and a resilient wedge bevel. The joint shall meet all the requirements of ASTM D3212. The joint shall meet an allowable infiltration of 25 gallons per inch of internal diameter per mile per day or less. All PVC sewer pipe shall be installed in accordance with ASTM D2321, Uni-Bell's Uni-Pub 6 and the manufacturer's recommendations.

PRO-21™

F1803 LOADING CHART

Nominal Pipe Size in. (mm)	Average Outside Diameter	Pieces Per Bundle	14' Length Pieces Per Truckload	*Feet Per Truckload
30" (750)	31.606	3	27	378
33" (825)	35.036	2	12	168
36" (900)	38.036	2	12	168
42" (1050)	44.200	2	12	168
48" (1200)	50.570	1	12	168
54" (1350)	57.100	1	6	84
60" (1500)	63.932	1	3	42

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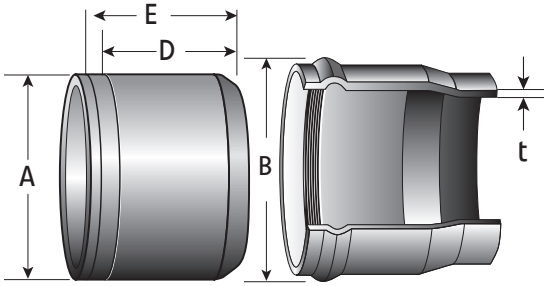
PIP™ LOW HEAD
SPECIFICATION DATA & LOADING CHART

RIEBER JOINT ILLUSTRATION



PIP SPECIFICATION DATA

Diamond Low-Head PIP is made of compounds conforming to material requirements of SCS 430. The Pipe sizes (6" through 15") 50 psi are made with an integral bell to utilize a gasket for sealing, meeting requirements as defined in ASTM F477 and ASTM D3139. 100 ft. head is made with an integral bell for solvent cement joint assembly.

Diamond Low-Head PIP PVC pipe meets all the requirements as outlined in SCS 430.

Each male end shall be beveled, swagged or deburred to facilitate joining and gasketed joints shall be marked to reference proper insertion depth. Only Diamond furnished lubricant is to be used in the joining process.

It is recommended that Low-Head PIP PVC piping systems be designed and installed in accordance with SCS 430.

PIP™ LOW HEAD

ASTM D2241 ANNEX SPECIFICATION DATA. STANDARD LENGTH IS EITHER 22 FOOT OR 44 FOOT, DEPENDING UPON DIAMETER.

Nominal Pipe Size in. (mm)	A Outside Diameter Inches	B Bell Socket Diameter Inches	D Insert Mark Inches	E Insert Mark Inches	t SDR 81 50 PSI Inches
6" x 44' (150)	6.140	7-1/2"	3-1/2"	4-1/2"	0.076
8" x 44' (200)	8.160	10"	3-1/2"	4-1/2"	0.101
10" x 44' (250)	10.200	12"	4-1/2"	5-1/2"	0.126
12" x 44' (300)	12.240	14"	4-1/2"	5-1/2"	0.151
15" x 22' (375)	15.300	17-1/2"	5"	6"	0.212

PIP™ LOW HEAD

ASTM D2241 ANNEX LOW HEAD 50 PSI CHART

Nominal Pipe Size in. (mm)	Average Outside Diameter	Approx. Inside Diameter	Minimum Wall Thickness	Pieces Per Bundle	Feet Per Bundle	*Feet Per Truckload
SDR-81 50 PSI						
6" (150)	6.140	5.988	.076	28/32	1,232/1,408	10,560
8" (200)	8.160	7.958	.101	18	792	6,336
10" (250)	10.200	9.948	.126	8/10	352/440	3,960
12" (300)	12.240	11.938	.151	8	352	2,465
15" (375)	15.300	14.922	.189	6	132	1,584

This product is manufactured in Lubbock, TX. Shipping distance may impact availability.
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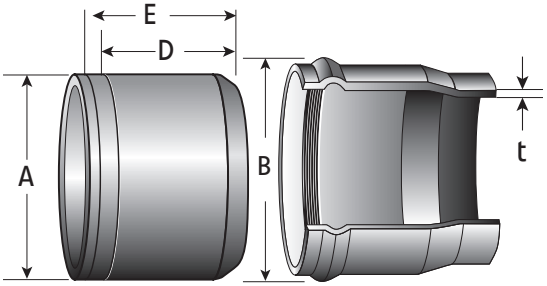
RIEBER JOINT ILLUSTRATION



PRESSURE RATED PIP PIPE

Diamond PIP pressure-rated pipe (6" through 27") is made of compounds conforming to material requirements of SCS 430. The pipe sizes (6" through 27") are made with an integral bell to utilize a gasket for sealing, meeting requirements as defined in ASTM F477 and ASTM 3139.

Diamond PIP pressure-rated PVC pipe meets all the dimensional, chemical and physical requirements as outlined in SCS 430. Diamond PIP pressure-rated pipe (15" through 27") meets all the dimensional, chemical and physical requirements as defined in ASTM DD2241 ANNEX.

Each male end shall be beveled, swagged or deburred to facilitate joining and shall be marked to reference proper insertion depth. Only Diamond furnished lubricant is to be used in the joining process.

It is recommended that PIP Pressure-Rated PVC Piping systems be designed and installed in accordance with SCS 430.

PRESSURE RATED PIP

ASTM D2241 ANNEX SPECIFICATION DATA. DIAMOND PIP PRESSURE-RATED PVC PIPE IS SUPPLIED IN 22-FOOT LAYING LENGTHS.

Nominal Pipe Size in. (mm)	A Outside Diameter Inches	B Bell Socket Diameter Inches	D Insert Mark Inches	E Insert Mark Inches	SDR-51 80 PSI	SDR-41 100 PSI	SDR-32.5 125 PSI	SDR-26 160 PSI	SDR-21 200 PSI
					(t) Minimum Wall Inches				
6" (150)	6.140	7-1/2"	3-1/2"	4-1/2"	0.120	0.150	0.189		
8" (200)	8.160	10"	3-3/8"	4-3/8"	0.160	0.199	0.251		
10" (250)	10.200	12"	4-3/8"	5-3/8"	0.200	0.249	0.314		
12" (300)	12.240	14"	4-1/4"	5-1/4"	0.240	0.299	0.377		
15" (375)	15.300	17-1/2"	4-3/4"	5-3/4"	0.300	0.373	0.471	0.588	0.728
18" (450)	18.701	21-1/2"	7"	8"	0.367	0.456	0.575	0.719	
21" (525)	22.047	25-1/4"	7-1/4"	8-1/4"	0.432	0.538	0.678		
24" (600)	24.803	28"	8-1/2"	9-1/2"	0.486	0.605	0.763		
27" (675)	27.953	32-1/2"	8-3/4"	9-3/4"	0.548	0.682	0.860		

Socket & Minimum Wall Dimensions, all dimensions are in inches.

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PRESSURE RATED PIP
LOADING CHART

PVC PRESSURE PIPE

PRESSURE RATED PIP ASTM D2241 ANNEX SPECIFICATIONS

Nominal Pipe Size in. (mm)	Outside Diameter A Inches	Pieces Per Bundle	Feet Per Bundle	*Feet Per Truckload
SDR-51, 80 PSI				
6" (150)	6.140	28/32	616/704	11,264
8" (200)	8.160	15/18	330/396	6,336
10" (250)	10.200	8/10	176/220	3,960
12" (300)	12.240	6/8	132/176	2,816
15" (375)	15.300	6	132	1,584
18" (450)	18.701	2/3/4/6	44///132	1,100
21" (525)	22.047	4	88	704
24" (600)	24.803	4	88	704
27" (675)	27.953	3	66	396
SDR-41, 100 PSI				
6" (150)	6.140	28/32	616/704	11,264
8" (200)	8.160	15/18	330/396	6,336
10" (250)	10.200	8/10	176/220	3,960
12" (300)	12.240	6/8	132/176	2,816
15" (375)	15.300	6	132	1,584
18" (450)	18.701	2/3/4/6	44///132	1,100
21" (525)	22.047	4	88	704
24" (600)	24.803	4	88	704
27" (675)	27.953	3	66	396
SDR-32.5, 125 PSI				
6" (150)	6.140	28/32	616/704	11,264
8" (200)	8.160	15/18	330/396	6,336
10" (250)	10.200	8/10	176/220	3,960
12" (300)	12.240	6/8	132/176	2,816
15" (375)	15.300	6	132	1,584
18" (450)	18.701	2/3/4/6	44///132	1,100
21" (525)	22.047	4	88	704
24" (600)	24.803	4	88	704
27" (675)	27.953	3	66	396
SDR-26, 160 PSI				
15" (375)	15.300	6	132	1,584
18" (450)	18.701	2/3/4/6	44///132	1,100
21" (525)	22.047	4	88	704

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PVC-GATED™

Operating Pressure:
Diamond gated pipe (with gates installed) is pressure-rated at 22 psi.

Gate Hole Size:
Standard rectangle 1.25 x 2.625
Large "Hi-capacity" 1.25 x 3.325

Benefits of Diamond Plastic's PVC pipe include:
- Pipes won't rust or corrode
- Less friction loss
- Resiliency and dent resistance
- Non-conductor (no electrolysis)
- Built with a Sunlight (UV) resistant compounding

WaterGate™ meets or exceeds SCS 430HH

PVC-GATED™
AREA OF GATE OPENING SPECIFICATION DATA

Setting	Standard	Large "High Capacity"
1/4	0.57 Sq. In.	0.85 Sq. In.
1/2	1.25 Sq. In.	1.57 Sq. In.
3/4	1.90 Sq. In.	2.38 Sq. In.
Full Open	2.39 Sq. In.	3.21 Sq. In.
Hole w/o Gate	3.28 Sq. In.	4.15 Sq. In.
Hole Size	1.25 x 2.625	1.25 x 3.325

PVC-GATED™
STANDARD HOLE & LARGE (HIGH CAPACITY) HOLE (GALLONS PER MINUTE).
PVC-GATED™ IS SUPPLIED IN 30-FOOT LAYING LENGTHS.

ALL DATA IN GALLONS PER MINUTE								
Head Pressure Inches water	FULL OPEN		3/4 OPEN		1/2 OPEN		1/4 OPEN	
	Standard	Large	Standard	Large	Standard	Large	Standard	Large
3"	38.4	48.0	28.6	34.3	19.0	22.8	8.6	11.3
6"	45.1	56.6	33.0	39.6	21.7	26.0	9.7	12.8
9"	50.3	62.8	37.0	44.4	24.7	29.6	11.0	14.5
12"	55.8	69.7	43.3	51.9	26.9	32.2	12.2	16.1
18"	64.6	80.7	48.2	57.8	31.7	38.0	14.0	18.4
24"	73.0	91.2	53.6	64.3	35.6	42.7	15.8	20.8
30"	76.4	95.5	57.6	69.0	38.3	45.9	17.2	22.7
36"	82.6	103.2	62.5	75.0	41.4	49.6	18.6	24.5
48"	95.0	118.7	75.6	90.7	47.4	56.8	21.0	27.7
60"	101.9	127.3	82.2	96.6	50.0	60.0	23.4	30.8

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PVC-GATED™ SURFACE
LOADING CHART

WATERGATE™
LOADING CHART

Outside Diameter in. (mm)	Joint Laying Length	Minimum Wall Thickness	Pieces Per Bundle	Feet Per Bundle	Bundles Per Load	Pieces Per Load	*Feet Per Truckload
WATERGATE PLAIN PIPE = FLOW LINE							
6" (150)	30'	.120	32	960	8	256	7,680
8" (200)	30'	.120	18	540	8	144	4,320
10" (250)	30'	.120	8/10	240/300	10	90	2,700
12" (300)	30'	.120	8	240	8	64	1,920

DIAMOND-LITE™
GATED LOADING CHART

Outside Diameter in. (mm)	Joint Laying Length	Minimum Wall Thickness	Pieces Per Bundle	Feet Per Bundle	Bundles Per Load	Pieces Per Load	*Feet Per Truckload
DIAMOND-LITE PLAIN PIPE = FLOW LINE							
6" (150)	20'	.090	32	640	16	512	10,240
6" (150)	30'	.090	32	960	8	256	7,680
8" (200)	20'	.100	18	360	16	288	8,640
8" (200)	30'	.100	18	540	8	144	4,320
10" (250)	30'	.110	10	300	10	100	3,000

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LIMITED WARRANTY AND LIABILITY

Diamond Plastics Corporation, 1212 Johnstown Road, P. O. Box 1608, Grand Island, NE 68802, does hereby warrant, subject to the limitations hereinafter stated, its PVC Pipe to be free from defects in material and workmanship under normal use and service for a period of twelve (12) months from the date of invoice. This limited warranty extends only to the original purchaser for use, and will be void if the product is used under conditions other than those for which it was designed or if it is not used in compliance with all instructions contained in any operating manual or specification sheets provided for such product.

Alteration or modification of the PVC Pipe in any manner, (other than as may be specifically authorized by Diamond Plastics Corporation or permitted in accordance with the installation guide provided by Diamond Plastics Corporation for such product), will void this limited warranty.

The sole obligation of Diamond Plastics Corporation, under this limited warranty, and the exclusive remedy of the purchaser under this limited warranty is the repair or replacement, without charge, F.O.B. shipping point, of such products or parts of products only, specifically excluding any labor or installation thereof, which Diamond Plastics Corporation, after inspection, determines to be defective.

Purchaser must notify Diamond Plastics Corporation, in writing at its address shown above within ten (10) days from the date of discovery of any claimed defect specifically stating the details of such defect, and, if requested by Diamond Plastics Corporation, return the defective product, freight prepaid, to Diamond Plastics Corporation, F.O.B. shipping point as shown on Diamond Plastics Corporation's order acknowledgment.

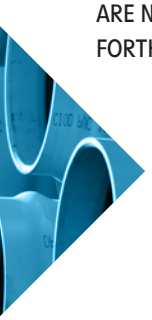
Diamond Plastics Corporation shall not be liable for any other damages, whether direct or consequential. Specifically, but without limitation, Diamond Plastics Corporation shall not be liable for any crop damage or any other incidental or consequential damages resulting from any breach of warranty, express or implied, or from any defects in its products.

No statement, remark, agreement, representation, promise or understanding, oral or written, made by Diamond Plastics Corporation, or any agent, representative or employee thereof, which is not contained herein, will be recognized by, or be enforceable or binding upon Diamond Plastics Corporation.

There are no understandings or undertakings of any kind with respect to the products or any part thereof which are not expressly set forth and contained herein, and all sales are made without any representation or warranty by Diamond Plastics Corporation that the goods are suitable for any particular purpose. In the event any provision of this LIMITED WARRANTY AND LIMITATION OF LIABILITY is held to be illegal or unenforceable by any court of competent jurisdiction, the remaining provisions shall remain in full force and effect.

STATUTE OF LIMITATION: Any action for breach of this LIMITED WARRANTY AND LIMITATION OF LIABILITY must be commenced within one (1) year after the cause of action has accrued.

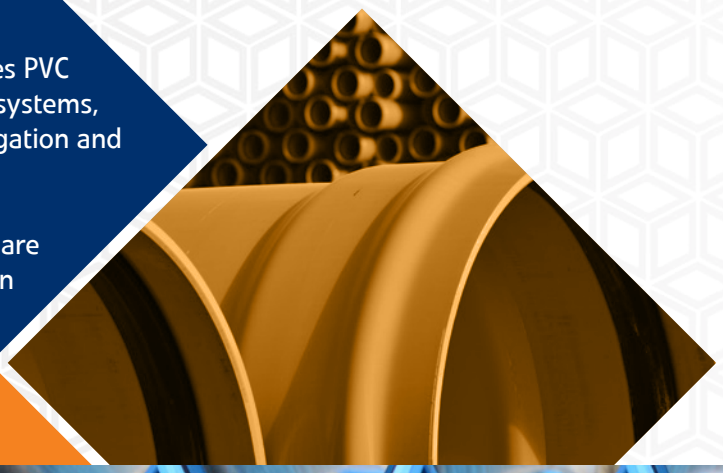
THERE ARE NO EXPRESS OR IMPLIED WARRANTIES BY Diamond Plastics CORPORATION, OTHER THAN THOSE SPECIFICALLY SET OUT ABOVE. THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE IN CONNECTION WITH ANY SALE EXCEPT AS SET FORTH ABOVE.



QUALITY
YOU CAN DEPEND ON

Diamond Plastics Corporation manufactures PVC pipe products for potable water distribution systems, for wastewater collection systems, and for irrigation and agricultural applications.

Our staff of sales and service personnel are ready to assist you in product selection and to answer your questions of delivery or order status.



DIAMOND PLASTICS® CORPORATION

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PVCPIPE association

02/17