



**CORR-21 PVC pipe,**  
**Corrugated low pressure irrigation,**  
**storm water and sanitary sewer applications**  
(Available in sizes from 12" through 48")

Diamond gravity sewer pipe 12 inches through 48 inches shall be made of compounds conforming to material requirements of ASTM F949 and ASTM F794 in accordance with ASTM D1 784. 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.

The pipe sizes 12 inches through 48 inches are made with an integral bell "water-tight" joint that meets the requirements of ASTM D321 2 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.



**Physical Properties of ASTM F949 ASTM F794**  
**AASHTO M304-03:**

Property	ASTM	Minimum Test
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 D1 784.

**SHORT FORM Specification for PVC Sewer Pipe**

Corr-21 PVC Gravity Sewer and Drain Pipe Sizes 12" - 48"

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 D1 784 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 D321 2. All sewer pipe shall be installed in accordance with ASTM D2321 and the manufacturer's recommendations.



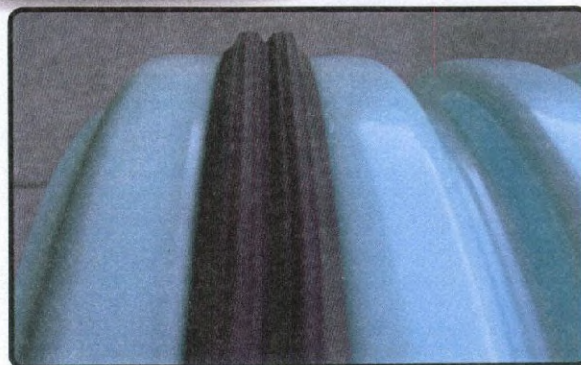


## Joint Performance

Diamond Plastics, CORR-21™ patented gasket provides a symmetrical dual three-point seal. Catch-basin cave-ins and sink holes are virtually eliminated because the CORR-21™ joint will not permit infiltration of fine bedding materials. The joint integrity is assured because it meets ASTM D3212. The manhole adapters supplied with CORR-21™ are equally tight.

## Field Cutting and Joining

Because the ribs are perpendicular to the axis of the pipe, the pipe can be cut between any corrugation. The rubber gasket can then easily be placed between the corrugations and the pipe joined together to form a water-tight seal. Gasket material shall meet the requirements of ASTM F477 Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe.

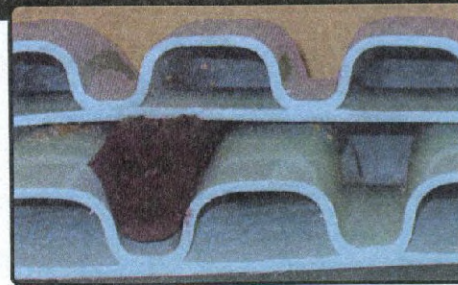
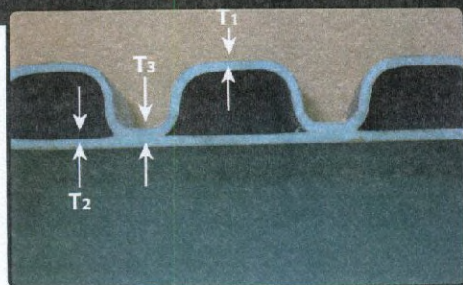


Before assembly, clean and lubricate bell I.D. to third corrugation, along with the gasket.

## CORR-21™ PIPE DIMENSIONS

CORR-21 is supplied in 14 foot laying lengths.

Nominal Pipe Size	Average Outside Diameter	Bell Outside Diameter Inches	Minimum Inside Diameter Inches	Spigot Insert Mark Inches	Minimum Wall Thickness (t)		
					Inner Wall T <sub>2</sub> (in Inches)	Outer Wall T <sub>1</sub> (in Inches)	at Valley T <sub>3</sub> (in Inches)
12	12.795	16-1/2"	11.687	7-1/4"	0.058	0.049	0.072
15	15.658	18-1/2"	14.303	7-1/4"	0.077	0.055	0.092
18	19.152	22-1/2"	17.510	7-1/4"	0.084	0.067	0.103
21	22.630	26-1/2"	20.656	9"	0.095	0.073	0.110
24	25.580	29-1/2"	23.412	10"	0.110	0.085	0.123
27	28.860	33-1/2"	26.371	9"	0.120	0.091	0.137
30	32.150	37	29.388	9-1/2"	0.130	0.105	0.147
36	38.740	44-1/2"	35.370	11"	0.150	0.125	0.171
42	45.800	52-1/2"	41.373	11-1/2"	0.200	0.200	0.300
48	52.800	60-1/2"	47.357	13"	0.200	0.200	0.300



Properly assembled joint.