Xirtec® PVC

Find us in MasterSpec® a product of The American Institute of Architects

Our products are specified in BSD SpecLink www.bsdspeclink.com

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.

ipexna.com
Toll Free: 800 463-9572

IPEX by aliaxis

Material properties

Properties	PVC	Standards
Specific gravity	1.42	ASTM D792
Tensile strength, psi at 73°F	7,000	ASTM D638
Modulus of elasticity tensile, psi at 73°F	400,000	ASTM D638
Flexural strength, psi	14,500	ASTM D790
Izod impact, ft.lbs./in. at 73°F, notched	0.65	ASTM D256
Compressive strength, psi	9,000	ASTM D695
Poisson's ratio	0.38	
Working stress, psi at 73°F	2,000	
Coefficient of thermal expansion in./in./°F (x 10^{-5})	3	ASTM D696
Linear expansion, in./10°F per 100' of pipe	0.36	
Maximum operating temperature under pressure	140°F (60°C)	
Deflection temperature under load, °F at 66 psi	173	ASTM D648
Deflection temperature under load, °F at 264 psi	160	ASTM D648
Thermal conductivity, BTU.in./hr.ft^2.°F	1.2	ASTM C177
Burning rate	Self extinguish	ASTM D635
Burning class	V-0	UL-94
Flash ignition, °F	730	
Limited oxygen index (%)	43	ASTM D2863-70
Water absorption, %, (24 hrs. at 73°F)	0.05	ASTM D570

Pipe availability

Pipe Size		
Schedule 40 White	Schedule 40 Grey	Schedule 80 Grey
1/2" - 24"	2" - 16"	1/4" - 24"

Molded fittings availability

Fittings	Size (inches)	
	Schedule 40	Schedule 80
Tee (Soc)	1/2 - 12	1/4 - 12
Reducing Tee (Soc)	1/2 - 8 x 1/2 - 8 x 1/2 - 6	3/4 - 8 x 3/4 - 8 x 1/2 - 6
Tee (Soc x Soc x Fpt)	1/2 - 4	1/2 - 1
Reducing Tee (Soc x Soc x Fpt)	1/2 - 8 x 1/2 - 8 x 1/2 - 4	N/A
Tee (Fpt)	1/2 - 2	1/4 - 4
90° Elbow (Soc)	1/2 - 12	1/4 - 12
90° Elbow (Soc x Fpt)	1/2 - 4	1/2 - 2
90° Elbow (Fpt)	1/2 - 2	1/4 - 4
90° Elbow Reducing (Soc)	3/4 - 2 x 1/2 - 1-1/2	N/A
90° Elbow Reducing (Soc x Fpt)	1/2 - 2 x 1/2 - 1-1/2	N/A
90° Elbow (Mpt x Soc)	1/2 - 2	N/A
90° Elbow (Spig x Soc)	1/2 - 2	N/A
90° Elbow (Mpt x Fpt)	1/2 - 2	N/A
90° Street Elbow (Spig x Soc)	1/2 - 2	N/A
90° Street Elbow (Mpt x Fpt)	1/2 - 2	N/A
Side Outlet Elbow (Soc)	1/2	N/A
Side Outlet Elbow (Soc x Soc x Fpt)	1/2 - 1 x 1/2 -1 x 1/2 - 3/4	N/A
45° Elbow (Soc)	1/2 - 12	1/4 - 12
45° Elbow (Fpt)	N/A	1/4 - 4
22-1/2° Elbow (Soc)	N/A	2 - 4
30° Elbow (Soc)	N/A	6
Hose Adapter (Insert x Soc)	1/2 - 4	N/A
Hose Adapter (Insert x Mpt)	1/2 - 4	N/A
Cross (Soc)	1/2 - 4	1/2 - 4
Coupling (Fpt)	1/2 - 1	1/4 - 4
Coupling (Soc)	3/8 - 8	1/4 - 12
Reducer Coupling (Soc)	3/4 - 6 x 1/2 - 4	3/4 - 8 x 1/2 - 6
Reducer Coupling (Fpt)	N/A	1/2 - 2 x 1/4 - 1-1/2
Female Adapter (Soc x Fpt)	1/2 - 8	1/4 - 4
Female Adapter Reducer (Soc x Fpt)	1/2 - 1 x 1/4 - 1	N/A
Female Adapter (Spig x Fpt)	1/2 - 4	1/2 - 4
Male Adapter (Soc x Mpt)	3/8 - 8	1/2 - 4
Male Adapter Reducing (Soc x Mpt)	1/2 - 4 x 1/2 - 3	N/A
IPS to PIP Adapter (Spig x Soc)	6 - 8	N/A
Riser Extension (Fpt x Mpt)	1/2 - 1	N/A
Reducer Bushing (Spig x Soc)	1/2 - 8 x 1/4 - 6	3/8 - 8 x 3/8 - 6
Reducer Bushing (Spig x Fpt)	1/2 - 6 x 3/8 - 5	3/8 - 6 x 3/8 - 4
Reducer Bushing (Mpt x Fpt)	3/8 - 3 x 3/8 - 2-1/2	3/8 - 4 x 3/8 - 3
Cap (Soc)	3/8 - 8	1/4 - 8
Cap (Fpt)	3/8"- 6	1/4 - 4
Plug (Spig)	3/8 - 4	2
Plug (Mpt)	3/8 - 6	1/4 - 6
Wye (Soc)	1-1/2 - 6	1-1/2 - 6
Saddles (Soc)	2-1/2 - 10 x 3/4 - 4	N/A
Saddles (Fpt)	2-1/2 - 10 x 3/4 - 4	N/A

Fabricated fittings availability

Fittings	Size (inches)	
	Schedule 40	Schedule 80
Fabricated Tee (Soc)	10 - 24	10 - 16
Fabricated Reducing Tee (Soc)	10 - 24 x 10 - 24 x 4 - 20	8 - 16 x 8 - 16 x 4 - 14
Fabricated 45° Elbow (Soc)	10 - 18	10 - 16
Fabricated 22-1/2° Elbow (Soc)	N/A	6 - 10
Fabricated Cross (Soc)	6 - 16	N/A
Fabricated Reducing Cross (Soc)	8 - 16 x 4 - 14	N/A
Fabricated Coupling (Soc)	10 - 24	10 - 16
Fabricated Concentric Reducing Coupling (Soc)	N/A	8 - 16 x 4 - 14
Fabricated Eccentric Reducing Coupling (Soc)	8 - 12 x 4 - 10	N/A
Fabricated Reducer Bushing (Spig x Soc)	10 - 12 x 4 - 10	10 - 16 x 4 - 14
Fabricated Cap (Soc)	10 - 24	10 - 16
Fabricated Wye (Soc)	8 - 16	8 - 14
One Piece Fabricated Flange (Soc)	N/A	10 - 16
Fabricated Blind Flange	N/A	10 - 16
Fabricated Vanstone Flange (Soc)	N/A	18 - 24
Nipples	N/A	1/4 - 4
Expansion Joints	N/A	1/2 - 4
Heavy Duty Vanstone Flange (Soc)	N/A	14 - 16

ASTM F1970 fittings availability

Fittings	Size (inches)
Union (Soc)	1/4 - 4
Union (Fpt)	1/4 - 4
One Piece Flange (Soc)	1/2 - 8
One Piece Flange (Fpt)	1/2 - 6
Blind Flange	1/2 - 8
Heavy Duty Vanstone Flange (Spig)	3 - 8
Vanstone Flange (Spig)	1/2 - 12
Heavy Duty Vanstone Flange (Soc)	1-1/2 - 12
Vanstone Flange (Soc)	1/2 - 12
Vanstone Flange (Fpt)	1/2 - 4
Wye	1 1/2 - 6