

UPVC ASTM Pipes and Fittings

CPVC | SWR | UDS | HSC




Lead & Tin Free


Jain Irrigation Systems Ltd.
*Small Ideas. Big Revolutions.**

ASTM D 1785

For SCH 40, 80 & 120 Pipes

ASTM D 2467

For SCH 80 Fittings

India's largest Polymer processors

Jain Irrigation Systems Limited (JISL), has an unmatched and enviable performance track record as a **Total Solution Provider** for various thermoplastics piping systems such as for Agriculture, Water, Gas, Telecom, Utility, Sewerage, Chemicals, Industrial Effluents, Mining, Slurry, Coal ash, SWR, Sub soil drainage, Ground water tapping, Lift irrigation, Micro irrigation & sprinkler irrigation, Hand pumps, House service Connections etc.

We are the only manufacturer of 1600 mm dia HDPE pipe and its fittings in India . We have with us more than 9000 associates worldwide and revenue of more than 60 billion rupees with manufacturing plants in 28 locations across the globe, having network of more than 3000 Distributors & Dealers worldwide.

JISL from its noble range brings to you JAIN Plumbing UPVC ASTM Pips and Fittings systems for all your domestic and high pressure cold water plumbing requirments.

Jain Plumbing high quality UPVC ASTM Plumbing pipes and fittings are manufactured in line with major international standards and parameters. The range encompasses both Solvent Welded and Threaded piping pertaining to various applications from residential and commercial to industrial plumbing.

uPVC ASTM Pipe Properties

Sr. No	Property	Test Method	Required Value	Unit
1	uPVC Compound Cell Classification	ASTM D 1784	12454	
2	Specific Gravity	ASTM D 792	1.40 – 1.46	
3	Thermal Conductivity (K)	ASTM C177	0.16	W/(m·K)
4	Sustained Pressure Test	ASTM D 1598	No Failure	
5	Dydro static Design Stress at 73.4°F	ASTM D 2837	Should occur 2000	PSI
6	Heat Distortion Temp. At 264 PSI	ASTM D 648	158	°F
7	Tensile Strength Yield at 23 ± 2°	CASTM D 638	7000	PSI
8	Modulus of elasticity in tension	ASTM D 638	400000	PSI
9	Izod Impact Strength	ASTM D 256	> 0.65	Ft.lb/in. of notch
10	Burning Rate	ASTM D635	Self-	
11	Flammability Rating	UL 94	Extinguishing 94 V-0	
12	Coefficient Of Thermal Expansion	ASTM D 696	5.0 X 10-5	mm/mm°C
13	Resistance to Acetone (Extrusion Quality Test)	ASTM D 2152	Shall not flake or disintegrate	
14	Flattening test	ASTM 1785	Shall not split, crack or break.	
15	Hazen Williams Coefficient		150	
16	VST	IS 12235 (Part 2)	78 - 80	°C
17	Impact Strength	IS 12235 (Part 9)	Maximum 10%	TIR
18	transmission Of Visible Light	IS 12235 (Part 3)	< 0.2%	
19	Longitudinal Reversion	IS12235 (Part 5)	+/- 5.0 %	
20	Resistance to Dichloromethane	IS 12235 (Part 11)	Shall not attack	

ASTM pipe wall thickness chart

Sr. No	Nominal Pipe Size	Pipe Outside Diameter (avg)	Pipe Minimum Wall Thickness (MM)		
	(Inch)	(MM)	Sch 40	Sch80	Sch 120
1	1½"	21.34	2.77	3.73	4.32
2	¾"	26.67	2.87	3.91	4.32
3	1"	33.4	3.38	4.55	5.08
4	1 ¼"	42.16	3.56	4.85	5.46
5	1 ½"	48.26	3.68	5.08	5.72
6	2"	60.32	3.91	5.54	6.35
7	2½"	73.02	5.16	7.01	7.62
8	3"	88.90	5.49	7.62	8.89
9	4"	114.30	6.02	8.56	11.10
10	5"	141.30	6.55	9.52	12.70
11	6"	168.28	7.11	10.97	14.27
12	8"	219.08	8.18	12.70	18.24
13	10"	273.05	9.27	15.06	21.41
14	12"	323.85	10.31	17.45	25.40

Salient Features -



For Cold Water



Easy to install



Durable for more than 50 years



Economical



Safe for drinking water



Corrosion Resistant



No Electrical tools required



Lower bacterial growth



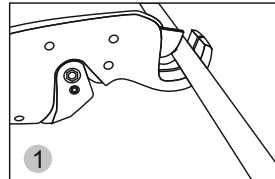
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Jain Plastic Park, P.O. Box 72, Jalgaon-425001. India. Tel: 0257-2258011; E-mail: plumbing@jains.com; Website: www.jains.com

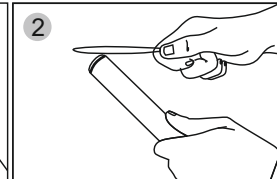
Water pressure rating for ASTM plain pipes at 23°C (ASTM D 1785)

Size	Pressure Rating					
	Sch 40		Sch 80		Sch 120	
Inch	PSI	Kg/cm²	PSI	Kg/cm²	PSI	Kg/cm²
1/2"	600	42.02	850	59.52	1010	70.73
3/4"	480	33.61	690	48.32	770	53.92
1"	450	31.51	630	44.12	720	50.42
1 1/4"	370	25.91	520	36.41	600	42.02
1 1/2"	330	23.11	470	32.91	540	37.82
2"	280	19.61	400	28.01	470	32.91
2 1/2"	300	21.01	420	29.41	470	32.91
3"	260	18.21	370	25.91	440	30.81
4"	220	15.41	320	22.41	430	30.11
5"	190	13.31	290	20.31	400	28.01
6"	180	12.61	280	19.61	370	25.91
8"	160	11.20	250	17.51	380	26.61
10"	140	9.80	230	16.11	370	25.91
12"	130	9.10	230	16.11	340	23.81

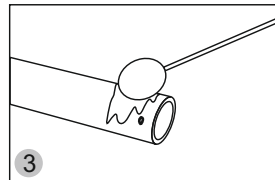
Installation



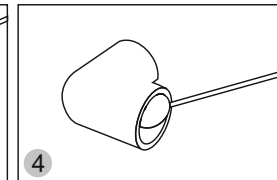
Jain UPVC pipe can be cut easily with plastic pipe cutter,



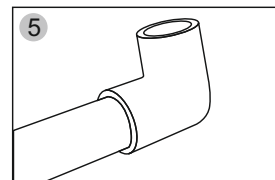
A slight bevel will ease the entry of the pipe into the socket.



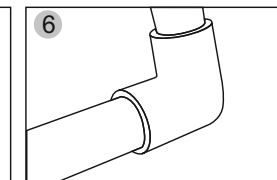
Apply a Heavy, even coat of Perma - Fix solvent cement to the out side of the pipe end..



Apply a medium coat of Perma - Fix solvent cement to the fitting socket.



Immediately insert the pipe into the fitting's socket. Align the fitting in the proper orientation.



The set and cure time for Perma - Fix solvent cement depend's on pipe size and temperature.

Stamp