

UPVC HIGH PRESSURE PIPES & FITTINGS

KaranFlo™



AN ISO 9001 : 2008 COMPANY

www.karanpolymers.com

COMPANY PROFILE

We at Karan Polymers Pvt. Ltd., are dedicated to help people to transfer water, oil or fluids etc. from one point to other at most economical way. Our wide range of pipes and fittings is the basic way to achieve our goal.

In addition to threaded plumbing pipes which we are already manufacturing for last two decades we now proudly introduce to you the lead free UPVC high pressure pipe and fittings with solvent cement jointing. This method is too fast, cost effective more over user and plumber friendly. This is one of the main reasons for giving top priority to UPVC plumbing system.

The bonding between pipes and fittings is everlasting and above all supposed to be the most sophisticated unique method both for new installations and replacements.

PROPERTIES OF UPVC PIPES & FITTINGS

Density : 1.43g/cm³ (approx.)

Mechanical Strength : 550 Kg/cm²

Tensile Strength : 45 Mpa

Compressive Strength : 66 Mpa

Shear Strength : 39 Mpa

Hardness (shore) : 85 (ASTM D2240)

Elongation at break : 50-80%

Electrical Resistance : > 10¹⁴ Ohm.cm

Thermal Conductivity: 0.13W/m/°C

Max. continuous service temp : 60°C

Coeff. of Thermal Expansion :

6.4 X 10⁻⁵ mm/mm/°C

Hygienic : UPVC are resistant to attack by fungi and are not subjected to contamination.

Hydraulic Resistance & : The Hazen William Flow Characteristics Constant for flow in UPVC pipes is around 150-165

Chemical Resistance : UPVC is unaffected by most concentrations of acids, alkalis, organic chemicals, fat & oils.

Flexibility : Being a thermoplastic material UPVC is better able to withstand deformation in shape due to earth movements.

Galvanic and Electrolytic immunity : UPVC being non-conductor of electricity, is totally immune to galvanic and electrolytic attack.

Fire Resistance : Self-extinguishing in nature and do not support combustion.

UPVC PIPE DIMENSIONS PRESSURE RATING AT 23°C AS PER ASTM D 1785

SIZE	OUTER DIAMETER	SCHEDULE 40			SCHEDULE 80			THREAD PER INCH.	THREAD LENGTH
		WALL THICKNESS	WORKING PRESSURE	BURST PRESSURE	WALL THICKNESS	WORKING PRESSURE	BURST PRESSURE		
INCH.	(MM.)	(MM.)	(MPa)	(MPa)	(MM.)	(MPa)	(MPa)	(Nos.)	(±2 MM.)
1/2	21.34	2.77 + 0.51	4.14	13.17	3.73 + 0.51	5.86	18.76	14	15.00
3/4	26.67	2.87 + 0.51	3.31	10.62	3.91 + 0.51	4.76	15.17	14	16.50
1	33.40	3.38 + 0.51	3.10	9.93	4.55 + 0.53	4.34	13.93	11	19.00
1 1/4	42.16	3.56 + 0.51	2.55	8.14	4.85 + 0.58	3.59	11.45	11	22.00
1 1/2	48.26	3.68 + 0.51	2.28	7.31	5.08 + 0.61	3.24	10.41	11	22.00
2	60.32	3.91 + 0.51	1.93	6.14	5.54 + 0.66	2.76	8.89	11	30.00
2 1/2	73.02	5.16 + 0.61	2.07	6.69	7.01 + 0.84	2.90	9.38	11	32.00
3	88.90	5.49 + 0.66	1.79	5.79	7.62 + 0.91	2.55	8.27	11	35.00
4	114.30	6.02 + 0.71	1.52	4.90	8.56 + 1.02	2.21	7.17	11	42.00

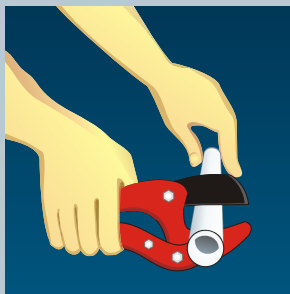
It is also available in threaded form for G.I. Fittings

NOTE : 1 MPa = 10.2Kgf/cm², 1 Kgf/cm² = 14.20 psi

UPVC FITTINGS AS PER ASTM D 2467 SCH 80

COUPLER		ELBOW 90°		REDUCING ELBOW		EQUAL TEE	
	SIZE 1/2" 3/4" 1" 1 1/4" 1 1/2" 2		SIZE 1/2" 3/4" 1" 1 1/4" 1 1/2" 2 3/4" X 1/2" 1" X 3/4" 1 1/4" X 3/4"		SIZE 3/4" X 1/2" 1" X 1/2" 1" X 3/4"		SIZE 1/2" 3/4" 1" 1 1/4" 1 1/2" 2
REDUCING TEE		REDUCER		REDUCING BUSH		UNION	
	SIZE 3/4" X 1/2" 1" X 3/4" 1" X 1/2" 1 1/4" X 1" 1 1/2" X 1" 1 1/2" X 1 1/4" 2" X 1" 2" X 1 1/2"		SIZE 3/4" X 1/2" 1" X 1/2" 1" X 3/4" 1 1/4" X 1" 1 1/2" X 1" 1 1/2" X 1 1/4" 2" X 1" 2" X 1 1/4" 2" X 1 1/2"		SIZE 3/4" X 1/2" 1" X 1/2" 1" X 3/4" 1 1/4" X 1" 1 1/2" X 3/4" 1 1/2" X 1 1/4" 1 1/2" X 1" 2" X 1 1/4" 2" X 1 1/2"		SIZE 1/2" 3/4" 1" 1 1/4" 1 1/2" 2
END CAP		FTA (PLASTIC)		MTA (PLASTIC)		FEMALE THREADED ELBOW (BRASS)	
	SIZE 1/2" 3/4" 1" 1 1/4" 1 1/2" 2"		SIZE 1/2" 3/4" 1" 1 1/4" 1 1/2" 2"		SIZE 1/2" 3/4" 1" 1 1/4" 1 1/2" 2"		SIZE 1/2" 3/4" 3/4" X 1/2" 1" X 1/2"
FEMALE THREADED TEE (BRASS)		FTA (BRASS)		MTA (BRASS)		BALL VALVE	
	SIZE 1/2" 3/4" 3/4" X 1/2" 1" X 1/2"		SIZE 1/2" 3/4" 1" 1 1/4" 1 1/2" 1" X 3/4" 2 3/4" X 1/2" 1" X 1/2"		SIZE 1/2" 3/4" 1" 1 1/4" 1 1/2" 1" X 3/4" 2 3/4" X 1/2" 1" X 1/2"		SIZE 1/2" 3/4" 1" 1 1/4" 1 1/2" 2
BYPASS BEND		TANK CONNECTOR		PIPE CLIP		SOLVENT CEMENT (HEAVY DUTY)	
	SIZE 1/2" 3/4" 1" 1 1/4" 1 1/2" 2		SIZE 1/2" 3/4" 1" 1 1/4" 1 1/2" 2"		SIZE 1/2" 3/4" 1" 1 1/4" 1 1/2" 2		SIZE 32 OZ / 0.946 ML TINS 16 OZ / 0.473 ML TINS 08 OZ / 0.237 ML TINS 04 OZ / 0.118 ML TINS

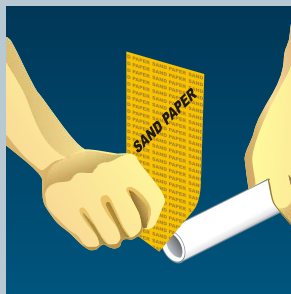
JOINING INSTRUCTION



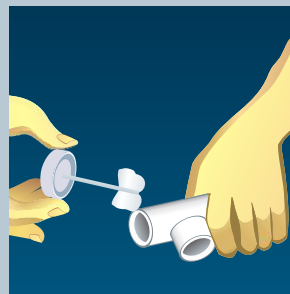
CUTTING



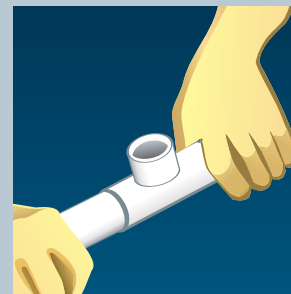
DEBURRING



ROUGHENING



SOLVENT CEMENTING



JOINING

ADVANTAGES

ECONOMICAL TO CONVENTION : Apart from superiority over conventional pipes, KARAN PVC pipes are light in weight and hence they offer total economy in handling, transportation and installation.

DURABLE : As these pipes are free from weakness caused by scale formation, rusting, weathering and chemical action, it lasts for a life time.

HIGH STRENGTH : Pipes offer excellent resistance to acids, oxidizing agents, alkalis, oils and domestic effluents.

LEAK FREE : KARAN UPVC pipes and fittings are produced on modern machines and threaded on advanced CNC machine KARAN UPVC piping system is leak free.

CORROSION FREE : Being immune to chemical, electrolytic and galvanic action, these pipes are free from corrosion.

CONVENIENT INSTALLATION : KARAN PVC pipes are light in weight and hence easy to install.

MODERN : Having various advantages KARAN UPVC pipes & fitting is a modern generation plumbing system.

LIGHT WEIGHT :



ECONOMICAL



CHEMICALLY INERT

Con. H₂SO₄



CONVENIENT INSTALLATION

APPLICATIONS

- UPVC pipes are applicable for cold water in Building and Housing Sectors.
- Industrial Process lines.
- Swimming pools.
- Salt water lines.
- Aggressive / corrosive fluid transportation.
- Dye plant, chrome, zinc plating, tanning industry and textile process houses.
- Sugar, paper and distillery industries.
- Coal washing and ash handling.

APPLICATION TO BE AVOIDED

NOT TO BE USED IN COMPRESSED AIR OR GAS PIPELINES.

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