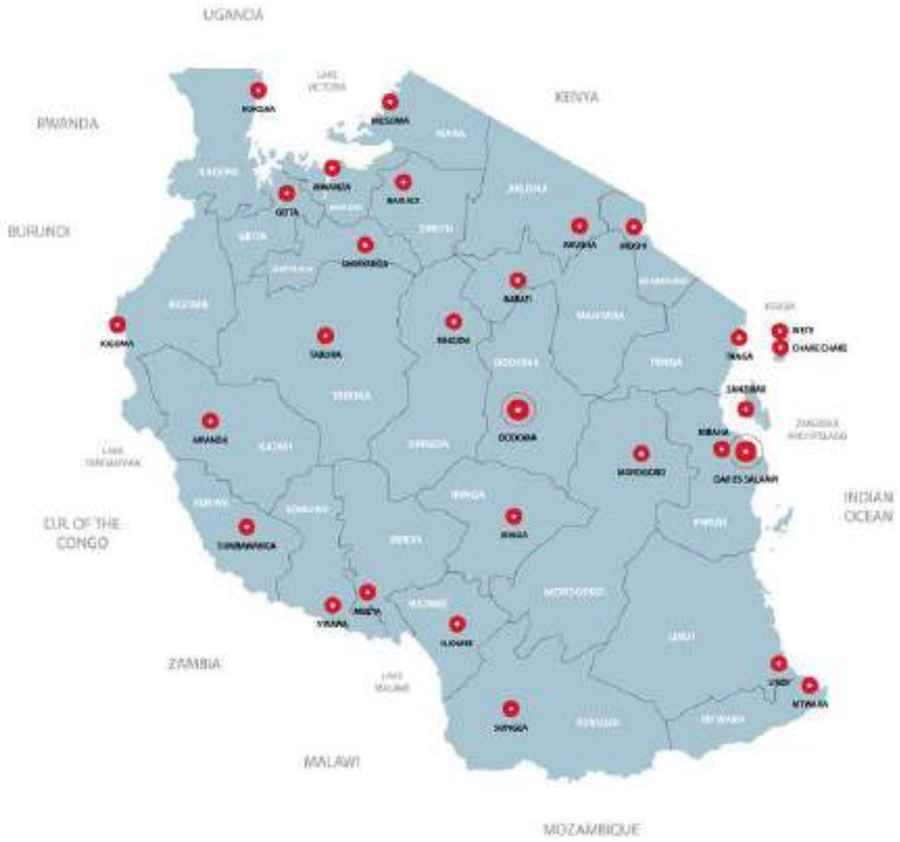
MAP OF

TANZANIA



ARGENTINA PLAS CO.LIMITED

MANUFACTURE & EXPORTERS OF UPVC, PPR & PPH PIPES, FITTINGS.
P.O.BOX 20386 TANZANIA , DAR ES SALAAM,MBAGALA ,INDUSTRIAL AREA |
+255 745 869 999 | +255 747 187 707 | +255 717 222 197 |
info@argentinaplaslimited.com ,sales@argentinaplaslimited.com|
www.argentinaplaslimited.com

ARGENTINA PLAS CO.,LIMITED

Your Best Choice For Quality

UPVC - PPR- PPH PLASTIC PIPES AND FITTINGS

ARGENTINA PLAS CO.LIMITED

YOUR BEST CHOICE FOR QUALITY

VISION & MISSION

COMPANY OVERVIEW

we made our concentrate into piping system nearly two decades ago. With the benefit of our experience, we have also embraced modern techniques to become one of the leading organizations in the industry. Our experience in manufacturing pipes and fittings for industrial domestic applications are known for their high quality and special features, our slogan “ Your best choice for quality “ has driven us to become pioneers in agriculture and industrial water systems . A strong dealer network enables us to service customers in all cities, towns and villages of Tanzania. Always our commitment is towards never losing our values and brand promises.

VISION

To be the acknowledged leader in the Tanzania plastic piping industry by exceeding customers’expectations and maximizing bottomline for all our stake holders.

MISSION

our mission is to provide high quality plastic piping innovating solutions and systems which would create a profitable growth and benefit to our customers & the society at large.

HIGH QUALITY
PIPING SOLUTION

PLUMBING

Plumbing today has become a sector that needs cutting edge and high quality products to fulfill the needs of millions of citizens and organizations. Argentina Plas pipes and fittings are using their innovative zeal and determination to make world class products that will deliver the same.

THREADED SYSTEM®

PP-H Plumbing Systems

DRAINAGE SYSTEM®

UPVC Plumbing Systems

GREEN SYSTEM®

PP-R Plumbing Systems

HIGH QUALITY PPR PIPING SYSTEM,
HIGH PRESSURE FOR HOT AND
COLD WATER

PP-R

GREEN SYSTEM®

PP R Plumbing Systems

PP-R HIGH PRESSURE PIPING SYSTEM USED FOR RESIDENTIAL AND INDUSTRIAL USES.

GREEN SYSTEM®

PP R Plumbing Systems

HIGH QUALITY PPR PIPING SYSTEM

PRODUCT RANGE:

Polypropylene Random Co-Polymer makes Greenfit temperature - resistant, weather-resistant & long-lasting pipes:

- 20mm to 160mm
- Single layer (green colour) pipes for indoor installations
- Triple layer (green, white & off-white colour) pipes for outdoor installations
- Thermex triple layer pipes that are insulated with glass for handling for extreme climatic (-30°C to -40°C) conditions

Fittings:

- 20mm to 160mm

STANDARDS:

- Pipes: IS 15801 - Polypropylene - Random Co-polymer Pipes for hot & cold water application
- Fittings: DIN 16962 - For pipe joint assemblies & fittings
- Pipes & Fittings: IS 10500 - Used for foodstuff, pharmaceuticals & drinking water

APPLICATIONS:

- Indoor & outdoor installations of hot & cold water piping systems in residential, commercial & industrial buildings
- Heating system inside buildings including floor, wall & radiator heating
- Drinking water & liquid food transportation
- Air conditioning system & compressed air supply system
- Pharmaceuticals
- Piping systems for transportation of aggressive fluids in industries
- Solar water heating systems

Specifications: (Pressure & Temperature)

- Pressure rating of Pipes: 20, 16 & 10kg/cm2
- Pressure rating of Fittings: 20 & 25kg/cm2
- Operating temperature: -20°C upto 95°C

JOINTING METHOD:

Fusion Welding

MAJOR ADVANTAGES:

1. No scaling, can withstand higher 'pH' values.
2. UV resistant 3-layered pipes are suitable for outdoor installations exposed to direct sunlight.
3. Good chemical resistance, suitable for most industrial liquids.
4. Heat fusion jointing results in a homogenous plastic system ensuring leak proof joints.
5. Very less coefficient of friction, low-pressure drop.
6. Extreme high flow properties reduce pumping cost.
7. Less frictional resistance allows higher flow velocity of fluid upto 5 m/sec.
8. Very smooth bore allows higher flow velocity of fluid upto 5m/sec.
9. Low maintenance cost.
10. Promotes hygiene by restricting bacterial growth.

Extensively used in:


COMMERCIAL BUILDINGS


SOLAR WATER SYSTEM


CHEMICAL PLANTS


AIR CONDITIONING SYSTEM


RESIDENTIAL

A PIPING SYSTEM BUILT TO HANDLE ALL KINDS OF PRESSURE

GREEN SYSTEM®

PP R Plumbing Systems

PP-R PRESSURE PIPES & FITTINGS

Argentina Plas Co.ltd Provides a wide range of PP-R pipes and fittings from 20mm to 63mm diameter with high working pressure of pn20(16kg/cm2) and Pn16(10kg/cm2) . Argentina pipes and fittings are available through a wide spread network of around 250 dealers across the country.

Elbow

20, 25, 32, 40, 50, 63

Socket

20, 25, 32, 40, 50, 63

Tee

20, 25, 32, 40, 50, 63

Elbow 45 Degree

20, 25, 32,

Female Elbow

20*½", 25*½", 25*¾", 32*1"
40*1¼", 50*1½", 63*2"

Female Socket

20*½", 25*½", 25*¾", 32*1", 32*
40*1¼", 50*1½", 63*2"

Seated Elbow

20*½", 25*½", 25*¾"

Male Elbow

20*½", 25*½", 25*¾", 32*1"

Male Socket

20*½", 25*½", 25*¾", 32*1",
40*1¼", 50*1½", 63*2"

Double Seated Elbow

25*½"

Male Tee

20*½", 25*½", 25*¾", 32*1"

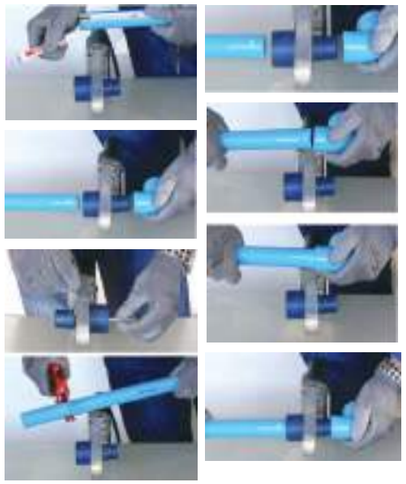
Female Tee

20*½", 25*½", 25*¾", 32*1"

GREEN SYSTEM®

PP R Plumbing Systems

WELDING PROCESS



• Assemble the die pairs on the cold plate and connect the welder to the power network.
• Wait for the sound signal (see the table below) that informs that the required temperature has
• Cut the pipe perpendicularly to its axis using the suitable pipe cutter.
• Mark the insertion length on the pipe
• Mark a longitudinal sign as a reference on the external
• surfaces of the pipe and fitting to avoid turning the components to be welded while performing the welding procedure (do not cut the surface of the pipe and fitting).
• Place the ends to be welded close to each other to be able to begin the heating process of the material simultaneously.
• After checking the surface temperature of the die pairs,
• Insert the pipe inside the female die pair without rotating it and the fitting into the male die pair up to the sign previously marked for the heating time t1 as shown in table below
• After the heating time, quickly remove the elements from the die pairs and insert them one inside the other, within time t2, until you reach the insertion depth previously marked. Be careful not to rotate the pipe into the fitting and carefully align the reference longitudinal signs.

WEALDING TABLE

ø	Heating sec (1)	Assembly sec (t2)	Test After min	Pipe insertion mm	Welding Procedure (Standard DVS 2207 - Sec .1-6.1)
16	5	4	2	13	
20	5	4	2	14	* Manual (welder - item code 00NSBEP)
25	7	4	3	15	
32	8	6	4	17	
40	12	6	4	18	* With suitable equipment (Welding
50	18	6	4	20	machine - item code 00STL)
63	24	8	6	26	
75	30	8	6	29	
90	40	8	6	32	* With suitable equipment (Welding
110	50	10	8	35	machine - item code 00STL)
125	60	10	8	40	
160 200 250	Butt futon welding or electric socket welding				* With suitable equipment
315 355 400 450 500 560 630	Butt futon welding				* With suitable equipment

SPECIFICATION TABLE

D	Pipe Series (S)															
	20		6		12.5		3.3		5		3.2		2.5		2	
	Stander Dimension Ratio (SDR)															
	Pressure Bar 2.5 SDR 44		Pressure Bar 3.5 SDR 33		Pressure Bar4 SDR 26		Pressure Bar 6 SDR 17.6		Pressure Bar 10 SDR 11		Pressure Bar 16 SDR 74		Pressure Bar 20 SDR 6		Pressure Bar 25 SDR 5	
	S	Mass IN Kg/m	S	Mass IN Kg/m	S	Mass IN Kg/m	S	Mass IN Kg/m	S	Mass IN Kg/m	S	Mass IN Kg/m	S	Mass IN Kg/m	S	Mass IN Kg/m
10													1.8	0.046	2	0.05
12											1.8	0.057	2	0.062	2.4	0.071
16											2.2	0.095	2.7	0.11	3.3	0.128
20									1.9	0.107	2.8	0.148	3.4	0.172	4.1	0.189
25									2.3	0.167	3.5	0.23	4.2	0.266	5.1	0.307
32							1.8	0.172	2.9	0.261	4.4	0.37	5.4	0.434	6.5	0.498
40					1.8	0.217	2.3	0.273	3.7	0.412	5.5	0.575	6.7	0.671	8.1	0.775
50			1.8	0.274	2	0.301	2.9	0.422	4.6	0.638	6.9	0.896	8.3	1.04	10.1	1.21
63	1.8	0.349	2	0.382	2.5	0.474	3.6	0.659	3.6	1.01	8.9	1.41	10.5	1.65	12.7	1.91
75	1.9	0.738	2.4	0.285	2.9	0.647	4.3	0.935	6.8	1.41	10.3	1.01	12.5	2.34	15.1	2.7
90	2.2	0.616	2.8	0.758	3.5	0.936	5.1	1.33	8.7	2.03	12.3	2.87	15	3.36	18.1	3.88
110	2.7	0.903	3.4	1.12	4.2	1.37	6.3	1.99	10	3.01	15.1	4.3	18.3	5.01	22.1	5.78

THREADED PIPING SYSTEM FOR HOT AND COLD RUNNING AND DRINKING WATER

PP-H

THREADED SYSTEM®

PP-H Plumbing Systems

PP-H HIGH PRESSURE PIPING SYSTEM USED FOR RESIDENTIAL AND INDUSTRIAL USES.

THREADED SYSTEM®

PP-H Plumbing Systems

HIGH QUALITY PPR PIPING SYSTEM

PRODUCT RANGE:

PPH Pure material Makes brown System temperature – resistant, weather-resistant & lasting pipes.

- 20mm to 63mm
- Four layers (brown colour,white,red,white) pipes for indoor installations
- Four layers (brown colour,white,red,white) pipes also can be used for outdoor installations
- PPH pipes Argentina standard used for hot and cold drinking water

Fittings:

- 20mm to 63mm

STANDARDS:

- Pipes: – PPH pipes for hot and cold drinking water.
- Fittings: DN 16962 – for pipe joint assemblies & fittings.
- Pipes & fittings: used for foodstuff & pharmaceuticals and drinking water.

APPLICATIONS:

- Indoor and outdoor installations of hot and cold water piping systems in residential and commercial & industrial buildings.
- Heating system inside building including floor, wall & radiator heating.
- Drinking water & liquid food transportation
- Air conditioning system & compressed air supply system
- Pharmaceuticals
- Piping systems for transportation of aggressive fluids in industries
- Solar system heating

Specification: (pressure & temperature)

- Pressure rating of pipes : PN 20,16 & 10kg/cm2
- Pressure rating of fittings : PN 20,25 & 10kg/cm2
- Operation temperature : 20ºC up to 95ºC

JOINTING METHOD:

Threading Machine

MAJOR ADVANTAGES:

- Lead-free material ensures safe drinking water.
- Exceptional corrosion resistance ensures constant flow over lifetime.
- Light weight but strong
- Self-extinguishing does not support combustion
- High impact resistance , ensures high quality performance at lower temperatures.
- Fast and easy installation saves labor
- Long life

Extensively used in:


COMMERCIAL BUILDINGS


SOLAR WATER SYSTEM


CHEMICAL PLANTS

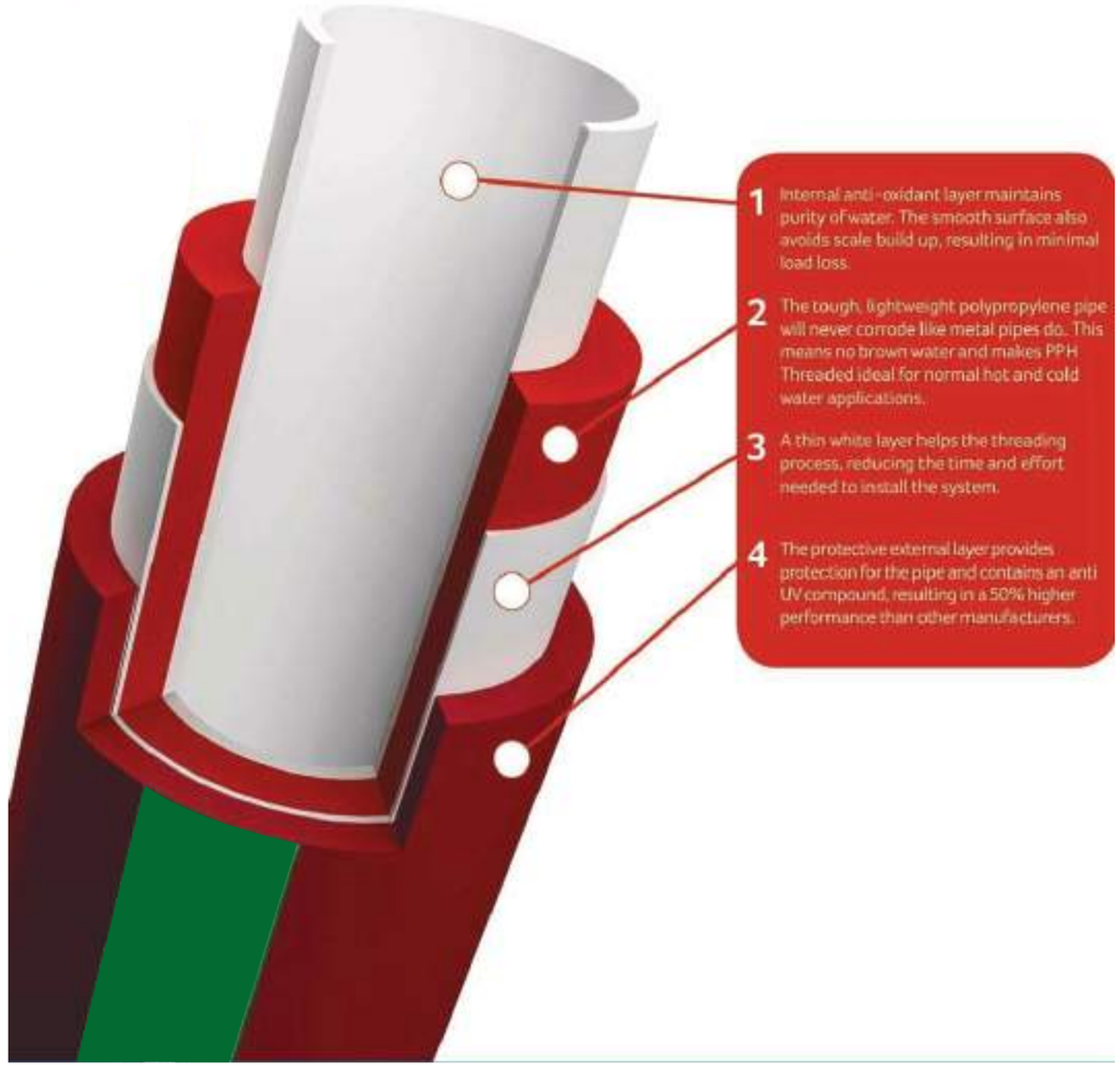

AIR CONDITIONING SYSTEM


RESIDENTIAL

A PIPING SYSTEM BUILT TO HANDLE ALL KINDS OF PRESSURE

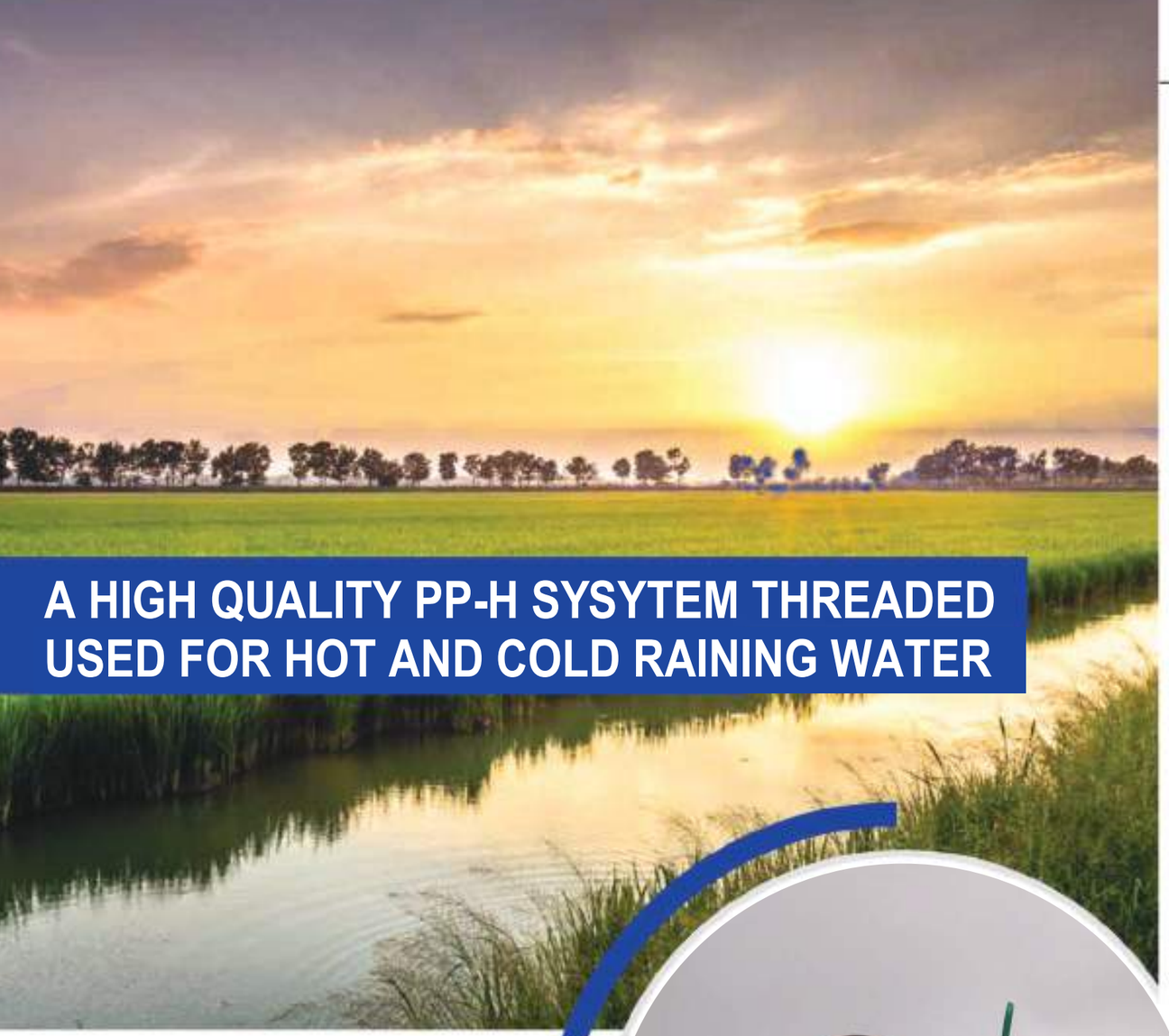
PP-H PRESSURE PIPES & FITTINGS

Argentina Plas Co.ltd Provides a wide range of PP-H pipes and fittings from 20mm to 63mm diameter with high working pressure of (16kg/cm2) and Pn16(10kg/cm2) . Argentina pipes and fittings are available through a wide spread network of around 250 dealers across the country.



THREADED SYSTEM®

PP-H Plumbing Systems



A HIGH QUALITY PP-H SYSYTEM THREADED USED FOR HOT AND COLD RAINING WATER

THREADED SYSTEM®

PP-H Plumbing Systems

PP-H PRESSURE PIPES & FITTINGS

Argentina Plas Co.ltd Provides a wide range of PP-H pipes and fittings from 20mm to 63mm diameter with high working pressure of (16kg/cm2) and Pn16(10kg/cm2) . Argentina pipes and fittings are available through a wide spread network of around 250 dealers across the country.

INSTALLATION PROCESS

• Cut: Cut the pipe at a 90° angle (Straight and perpendicular). Use a pipe cutter for up to 1 diameters; for bigger sizes, a hacksaw is recommended.

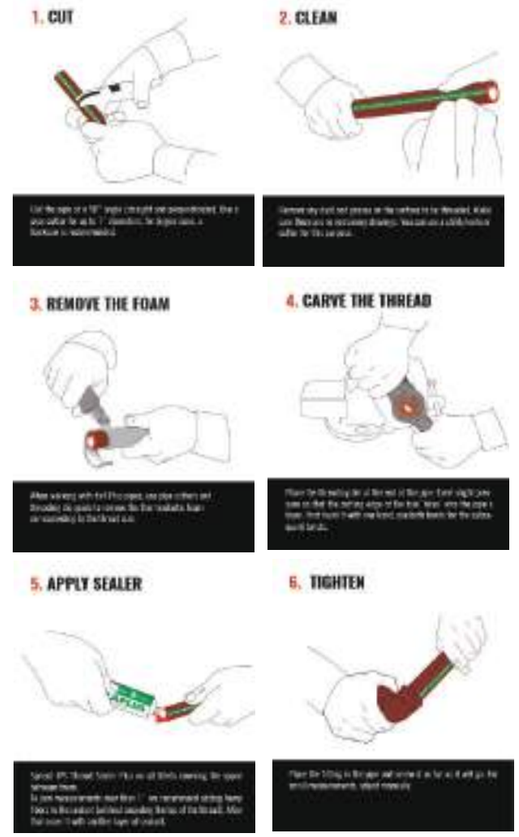
• Clean: clean any dust and grease on the surface to be threaded. Make sure there are no remaining shavings. You can use a utility knife or cutter for this purpose.

• Remove The Foam: when working with 4x4 layers pipes, use pipe cutter and threading die guide to remove the thermoplastic foam corresponding to the thread size.

• Carve The Thread: Place the threading die at the end of the pipe, exert slight pres-sure so that the cutting edge of the tool “bites” into the pipe’s layer. First twist it with on the hand. Use both hands for the subsequent twists.

• Apply Sealer: Spread Sealer on all fillets covering the space between them. To join measurements over than 1” we recommend adding hemp fibers to the sealant . After that cover it with another layer of sealant.

• Tighten: Place the fittings in the pipe and screw it as far as it will go. For small measurements adjust manually.



SPECIFICATION TABLE

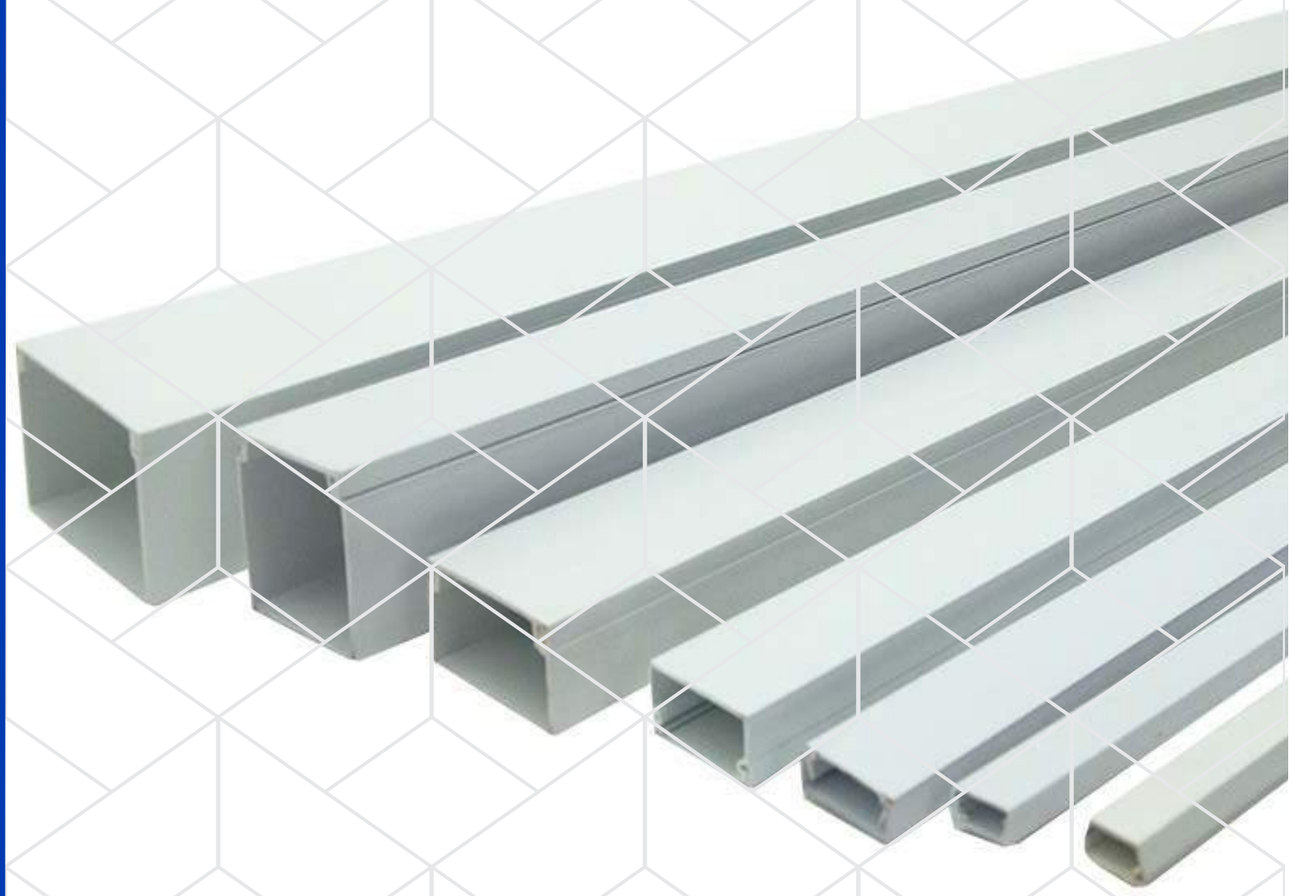
PIPES	Ø MM	EXT (MM)	INT (MM)
PPH 4X4	1/2"	21.3	14.5
	3/4"	26.9	19.1
	1"	33.7	23.9
	1 1/2"	48.3	35.7
	2"	60.3	45.3
	2 1/2"	76.1	58.1
	3"	88.9	68.3
	4"	114.3	88.9
PPH 4X4 PLUS			
	1/2"	21.3	19.1
	3/4"	26.9	23.9
	1"	33.7	30.8

UPVC TRUNKING SYSTEM FOR
SMARTER CONNECTION

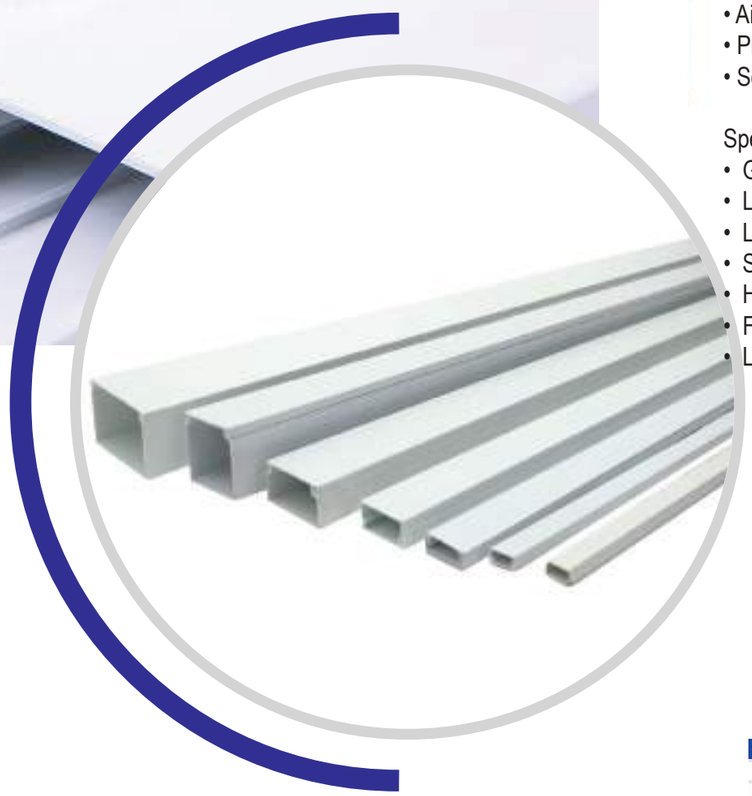
UPVC TRUNKING

ELECTRICITY SYSTEM®

UPVC Trunking System



HIGH QUALITY TRUNIKNG SYSTEM USED FOR RESIDENTIAL AND INDUSTRIAL USES.



ELECTRICITY SYSTEM®

UPVC Trunking System

HIGH QUALITY TRUNKING SYSTEM

PRODUCT RANGE:

UPVC Makes Trunking System– resistant, weather-resistant & lasting conduite.

- 16mm to 100mm
- Single layer (white colour) trunk for indoor installations
- Two layer (white colour) trunk also can be used for outdoor installations
- UPVC Trunking German standard used for saving all kinds of cables

Fittings:

- Standard Fittings

Extensively used in:

STANDARDS:

- UPVC trunking using for saving all kinds of electricity cables
- Fittings: standard joint assemblies & fittings.
- Trunk & fittings: used for all electricity uses.

APPLICATIONS:

- Indoor and outdoor installations for electricity purpose in residential and commercial & industrial buildings.
- Heating system inside building including floor, wall & radiator heating.
- Air conditioning system & compressed air supply system
- Pharmaceuticals
- Solar system heating

Specification: (pressure & temperature)

- German Standard
- Lead-free material ensures safe connection.
- Light weight but strong
- Self-extinguishing does not support combustion
- High impact resistance , ensures high quality performance at lower temperatures.
- Fast and easy installation saves labor
- Long life

Conduit Factors

Conduit Diameter (mm)	Capacity Factor
16	290
20	460
25	800
32	1400

Standard Trunking Capacity Factors

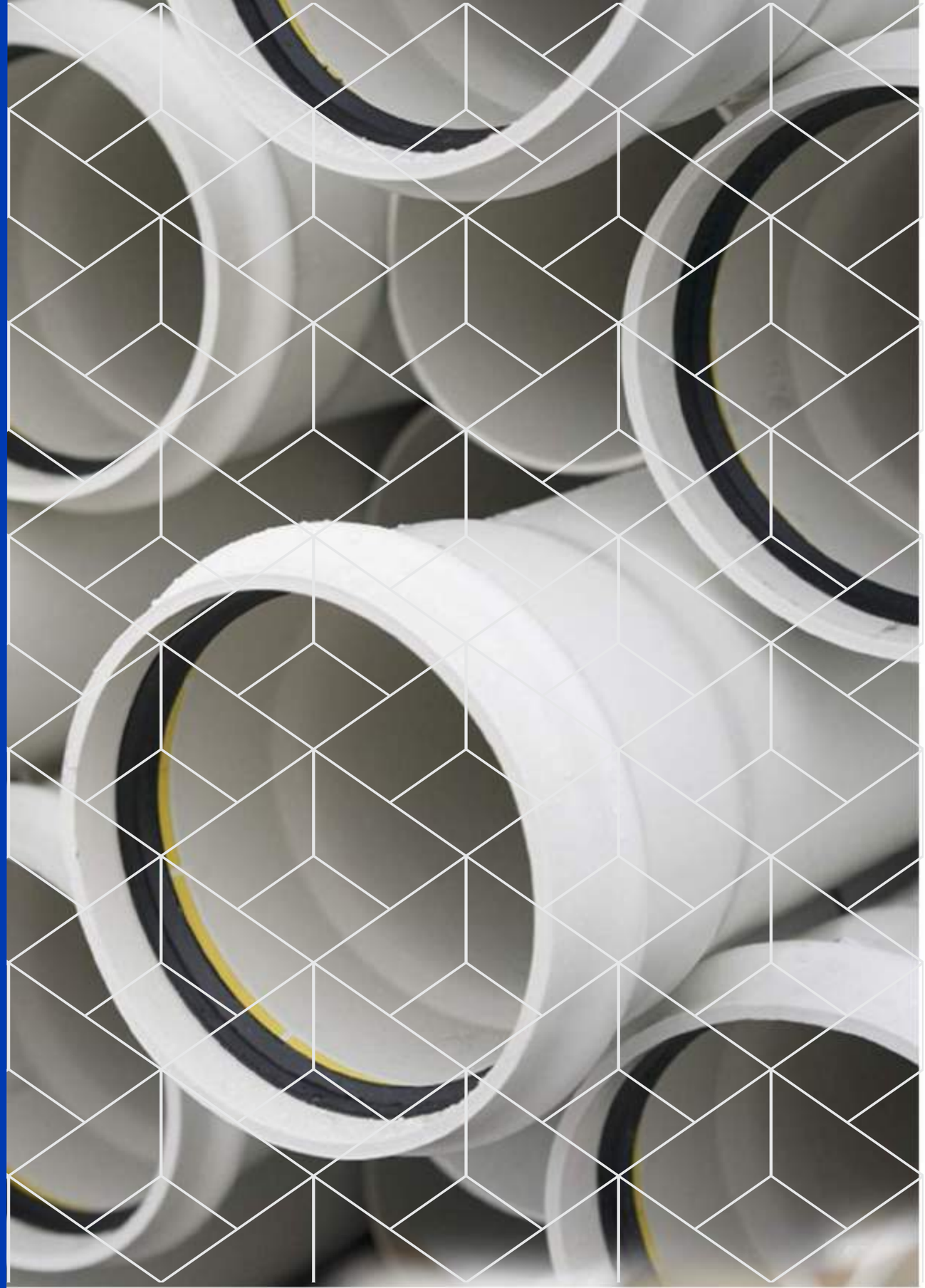
Trunk Size	Capacity Factor	Trunk Size2	Capacity Factor3
50mm x 50mm	1,037	150mm x 75mm	4,743
75mm x 50mm	1,555	150mm x 100mm	6,394
75mm x 75mm	2,371	150mm x 150mm	9,697
100mm x 50mm	2,091	200mm x 100mm	8,572
100mm x 75mm	3,189	225mm x 150mm	14,652
100mm x 100mm	4,252	300mm x 150mm	19,607

UPVC DRAINAGE SYSTEM FOR
A CLEANER TANZANIA

UPVC

DRAINAGE SYSTEM ®

UPVC Plumbing Systems



HOT OR COLD, THESE PIPES ARE PERFECT FOR THE HOUSEHOLD

DRAINAGE SYSTEM ®

UPVC Plumbing Systems

PRODUCT RANGE:

½" to 10" for Pipes & ½" to 4" for Fittings

STANDARDS:

Pipes : IS 15778 (SDR 11 & 13.5)
: ASTM F 441 (Sch 40 & Sch 80)
Fittings : ASTM D 2846 (SDR 11)
: ASTM F 439 (Sch 80)

FITTINGS:

- Indoor and outdoor use for hot & cold water application (From 0°C to 93°C only)
- Residential & commercial buildings
- Public utilities, swimming pools & industrial applications
- RO and DM water plants
- For concealed, down take & terrace looping

JOINTING METHOD:

Solvent Joint & Threaded Joint

MAJOR ADVANTAGES:

1. Proven hot & cold water performance from 0°C to 93°C.
2. Manufactured from environment friendly virgin CPVC compounds.
3. Safe for drinking water.
4. Long life.
5. Self-extinguishing. Does not support combustion.
6. UV resistance ensures pressure & temperature bearing capability to remain unaffected even after regular exposure to sun.
7. High impact resistance ensures high quality performance at lower temperatures.
8. Fast and easy installation. Saves labour.
   Lower thermal conductivity.
   Io bacterial growth compared to other piping material.

PIPES SIZE (mm)	Nominal Outside Diameter (mm)	Mean Outside Diameter (mm)		Wall Thickness (mm)					
				Type "A"		Type "B"		Type "C"	
		Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
40	40.0	40.0	40.30	1.1	1.3	1.6	1.7	1.8	1.9
50	50.0	50.0	50.30	1.1	1.3	1.6	1.8	2.3	2.4
63	63.0	63.0	63.30	1.1	1.3	1.7	1.8	3.0	3.2
75	75.0	75.0	75.30	1.1	1.3	1.8	2.0	3.4	3.6
80	80.0	80.0	80.30	1.1	1.3	1.6	1.8	3.5	3.7
90	90.0	90.0	90.30	1.1	1.3	2.5	2.7	4.1	4.3
110	110.0	110.0	110.30	1.1	1.3	3.0	3.2	5.0	5.2
160	160.0	160.0	160.30	3.00	3.20	4.5	4.7	5.8	6.0

Nominal Outside Diameter (mm)	Socket Depth (mm)	Class I Bar 2		Class II Bar 4		Class III Bar 6		Class IV Bar 10		Class V Bar 16	
		No Thickness of wall mm	No Weight Kg/m	No Thickness of wall mm	No Weight Kg/m	No Thickness of wall mm	No Weight Kg/m	No Thickness of wall mm	No Weight Kg/m	No Thickness of wall mm	No Weight Kg/m
16										1.2	0.09
20										1.5	0.137
25								1.5	0.174	1.9	0.212
32								1.8	0.264	2.4	0.342
40						1.8	0.334	1.9	0.350	3.0	0.525
50	75					1.8	0.422	2.4	0.552	3.7	0.809
63	100					1.9	0.562	3.0	0.854	4.7	1.289
75	110			1.8	0.642	2.2	0.782	3.6	1.22	5.6	1.82
80	110			1.8	0.67	2.3	0.795	3.7	1.33	5.8	1.92
90	110			1.8	0.774	2.7	1.13	4.3	1.75	6.7	2.61
110	115	1.8	0.950	2.2	1.16	3.2	1.64	5.3	2.61	8.2	3.90
125	120	1.8	1.08	2.5	1.48	3.7	2.13	5.0	3.34	9.3	5.01
140	125	1.8	1.21	2.8	1.84	4.1	2.65	6.7	4.18	10.4	6.27
160	132	1.8	1.39	3.2	2.241	4.7	3.44	7.7	5.47	11.9	8.17
180	145	1.8	1.57	3.6	3.02	5.3	4.37	8.6	6.88	13.4	10.4
200	145	1.8	1.74	4.0	3.7	5.9	5.37	9.6	8.51	14.9	12.8
225	152	1.8	1.96	4.5	4.7	6.6	6.76	10.8	10.8	16.7	16.1
250	160	2.0	2.4	4.9	5.65	7.1	8.31	11.9	13.2	18.6	19.9
280	170	2.3	3.11	5.5	7.11	8.2	10.4	13.4	16.6	20.8	24.9
315	180	2.5	3.78	6.2	9.02	9.2	13.2	15.0	20.9	23.4	31.5
355	180	2.9	4.87	7.0	11.4	10.4	16.7	16.9	26.5	26.3	39.9
400	200	3.2	6.1	7.9	14.5	11.7	21.1	19.1	33.7	29.7	50.8

SOLUTIONS FOR THE NEXT
GREEN REVOLUTION

AGRICULTURE

THESE PIPES WITH ZERO DEFECT WORK WELL AT GREAT DEPTHS

*Zero defect manufacturing process

Designed to be used in borewell applications, this piping system is made from high quality PVC compound that ensures they have high tensile strength, can withstand high impact and have minimum water friction.

Dimensions of Medium Well Screen (RMS) &
Deep Well Screen (RDS) pipes with Ribs / Ribbed Screen Pipes

Nominal Diameter (DN)		Mean Outer Diameter of pipe (d) (mm.)		Medium Well Screen (RMS) Mean Outer Diameter over Connection, (d_V)	Medium Well Screen (RMS) Wall Thickness (e) (under ribs) (mm)		Deep Well Screen (RDS) Mean Outer Diameter over Connection, (d_V)	Deep Well Screen (RDS) Wall Thickness, e_V (mm)	
Inches	mm	Min	Max	Max	Min	Max	Max	Min	Max
1 1/2	40.0	52.00	52.20	56.00	3.50	4.00	--	--	--
2	50.0	64.00	64.20	69.00	4.00	4.60	--	--	--
3	80.0	92.00	92.30	98.00	4.00	4.60	--	--	--
4	100.0	117.00	117.30	124.00	5.00	5.70	129.00	7.00	7.90
4 1/2	115.0	129.00	129.30	--	--	--	141.00	7.50	8.50
5	125.0	144.00	144.40	154.00	6.50	7.30	156.00	8.00	9.00
6	150.0	169.00	169.40	182.00	7.50	8.50	184.00	9.50	10.70
7	175.0	204.00	204.50	219.00	8.80	9.80	221.00	11.80	13.60
8	200.0	229.00	229.50	247.00	10.00	11.20	251.00	13.00	14.80
10	250.0	284.00	284.50	302.00	12.50	14.00	309.00	16.00	17.60
12	300.0	334.00	334.60	356.00	14.50	16.20	363.00	19.00	21.00
14	350.0	404.00	404.70	432.00	17.50	19.50	437.00	21.50	23.90
16	400.0	454.00	454.80	483.00	19.50	21.70	494.00	23.50	26.10

Dimensions of Plain Medium Well Screen (PMS) & Plain Deep Well Screen (PDS) Pipes

Nominal Diameter (DN)		Mean Outer Diameter of pipe (d) (mm.)		Plain Medium Well Screen (PMS) Mean Outer Diameter over Connection, (d_V)	Plain Medium Well Screen (PMS) Wall Thickness (e) (mm)		Plain Deep Well Screen (PDS) Outer Diameter at any point d_V (mm)		Plain Deep Well Screen (PDS) Mean Outer Diameter over Connection, d_V	Plain Deep Well Screen (PDS) Wall Thickness, e_V (mm)	
Inches	mm	Min	Max	Max	Min	Max	Min	Max	Max	Min	Max
8	200.0	225.00	225.50	243.00	10.00	11.20	224.50	225.80	247.00	13.00	14.80
10	250.0	280.00	280.50	298.00	12.50	14.00	279.40	280.80	304.00	16.00	17.60
12	300.0	330.00	330.60	352.00	14.50	16.20	329.30	331.00	359.00	19.00	21.00
14	350.0	400.00	400.70	428.00	17.50	19.50	399.20	401.20	433.00	21.50	23.90
16	400.0	450.00	450.80	479.00	19.50	21.70	449.10	451.30	490.00	23.50	26.10

Dimensions of Medium Well Casing (CM) & Shallow Well Casing (CS) Pipes

Nominal Diameter (DN)		Mean Outer Diameter of pipe (d) (mm.)		Medium Well Casing (CM) Pipes Mean Outer Diameter over Connection, (d_V)	Medium Well Casing (CM) Pipes Wall Thickness e (mm)		Shallow Well Casing (CS) Pipes Mean Outer Diameter over Connection, (d_V)	Shallow Well Casing (CS) Pipes Wall Thickness, e_V (mm)	
Inches	mm	Min	Max	Max	Min	Max	Max	Min	Max
1 1/2	40.0	48.00	48.20	52.00	3.50	4.00	--	--	--
2	50.0	60.00	60.20	65.00	4.00	4.60	--	--	--
3	80.0	88.00	88.30	94.00	4.00	4.60	--	--	--
4	100.0	113.00	113.30	120.00	5.00	5.70	--	--	--
5	125.0	140.00	140.40	150.00	6.50	7.30	--	--	--
6	150.0	165.00	165.40	178.00	7.50	8.50	174.00	5.70	6.50
7	175.0	200.00	200.50	215.00	8.80	9.80	211.00	7.00	7.80
8	200.0	225.00	225.50	243.00	10.00	11.20	238.00	7.60	8.80
10	250.0	280.00	280.50	298.00	12.50	14.00	292.00	9.60	11.00
12	300.0	330.00	330.60	352.00	14.50	16.20	--	--	--

Note:- 32mm (1 ¼") Nominal Diameter pipes are available on special request.

PRODUCT RANGE:

20mm to 400mm for Pipes & 20mm to 250mm for Fittings

STANDARDS:

IS 4985 for Pipes and IS 7834 for Fittings

APPLICATIONS:

In agriculture
- Water supply and distribution schemes
- Irrigation

Others
- Drinking water supply and distribution
- Cable ducting
- Ventilation pipe line
- Slurry lines

Extensively used in:

JOINTING METHOD:

Solvent Joint
- Cut the pipes of required length and clean the end
- Chamfer the edge of the pipe for easy entry
- Mark the depth of insertion on pipe end
- Roughen the pipe insertion surface (externally) & socket of the fitting (internally) by using emery paper
- Apply a thin coat of Prince PVC solvent cement on the roughened surface with brush. Avoid excess solvent cement
- Insert the pipe end inside socket fitting fully and turn through 90° for even spreading of solvent cement. Hold the joint for about 1 minute
- Cure the joint for 24 hrs for a proper and permanent leak-proof joint

Threaded Joint
- Clean the male and female threads
- Apply teflon tape on male threads in the direction of the thread tightening
- Tighten the threads firmly with hands
- Tighten the joint slightly more using pipe wrench. Do not over-tighten
- Use rubber packing while applying wrench to avoid scratches on the pipe

Note: 1) Pressure rating of UPVC Pipes & Fittings is temperature related. Derating factor shall be applied during designing & operation for higher temperature applications. (For detailed data refer IS-4985 or contact us).
2) Installation of UPVC pipeline shall be done in accordance with IS-7634 (Part-3).

MAJOR ADVANTAGES:

1. Light weight, easy to transport, store, handle and install. Saves labour.
2. Smooth bore ensures higher flow compared to G.I pipes and fittings of the same size. No clogging. Saves operational cost.
3. Solvent cement joint therefore quick installation.
4. Corrosion resistance, UPVC is rustproof material therefore bore diameter remains constant, ensuring constant flow over a lifetime.
5. Long working life (if operated under normal/recommended working conditions).
6. Cost effective. Added value for your money.

Pressure & Non-Pressure Pipes are manufactured in accordance with IS:4985 covering a complete range from 20 mm to 400 mm. They are available in pressure rating 2.5 kg/cm², 4 kg/cm², 6 kg/cm², 8Kg/cm², 10 kg/cm², 12.5 kg/cm² & 16 kg/cm² as defined in IS:4985. The pipes are provided with plain socket and suitable for solvent cement jointing.

Their main application is in agriculture for water supply, drip irrigation & sprinkler lines etc. as well as for drinking water distribution. However, these can also be used in cable ducting, ventilation pipe lines & slurry lines etc.

They are available in light grey colour and nominal length of 6 mtrs.

Dimensions for Aquafit Pipes as per IS: 4985-2000

(All dimensions are in mm)

Nominal Outside Diameter (Nominal Size)	Mean Outside Diameter		Outside Diameter at any point		Wall Thickness class 1 0.25 MPa 2.5 Kg/cm2		class 2 0.40 MPa 4.5 Kg/cm2		class 3 0.60 MPa 6.0 Kg/cm2		class 4 0.80 MPa 8.0 Kg/cm2		class 5 1.00 MPa 10.0 Kg/cm2		class 6 1.25 MPa 12.5 Kg/cm2		Mean Socket Internal Diameter of Mid Point of Socket Length	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
20	20.0	20.3	19.5	20.5	-	-	-	-	-	-	-	-	1.1	1.5	1.4	1.8	20.1	20.3
25	25.0	25.0	24.5	25.5	-	-	-	-	-	-	1.2	1.6	1.4	1.8	1.7	2.1	25.1	25.3
32	32.0	32.3	31.5	32.5	-	-	-	-	-	-	1.5	1.9	1.8	2.2	2.2	2.7	32.1	32.3
40	40.0	40.3	39.5	40.5	-	-	-	-	1.4	1.8	1.8	2.2	2.2	2.7	2.8	3.3	40.1	40.3
50	50.0	50.3	49.4	50.6	-	-	-	-	1.7	2.1	2.3	2.8	2.8	3.3	3.4	4.0	50.1	50.3
63	63.0	63.3	62.2	63.8	-	-	1.5	1.9	2.2	2.7	2.8	3.3	3.5	4.1	4.3	5.0	63.1	63.3
75	75.0	75.3	74.1	75.9	-	-	1.8	2.2	2.6	3.1	3.4	4.0	4.2	4.9	5.1	5.9	75.1	75.3
90	90.0	90.3	88.9	91.1	1.3	1.7	2.1	2.6	3.1	3.7	4.0	4.6	5.0	5.7	6.1	7.1	90.1	90.3
110	110.0	110.4	108.6	111.4	1.6	2.0	2.5	3.0	3.7	4.3	4.9	5.6	6.1	7.1	7.5	8.7	110.1	110.4
125	125.0	125.4	123.5	126.5	1.8	2.2	2.9	3.4	4.3	5.0	5.6	6.4	6.9	8.0	8.5	9.8	125.1	125.4
140	140.0	140.5	138.3	141.7	2.0	2.4	3.2	3.8	4.8	5.5	6.3	7.3	7.7	8.9	9.5	11.0	140.2	140.5
160	160.0	160.5	158.0	162.0	2.3	2.8	3.7	4.3	5.4	6.2	7.2	8.3	8.8	10.2	10.9	12.6	160.2	160.5
180	180.0	180.6	177.8	182.2	2.6	3.1	4.2	4.9	6.1	7.1	8.0	9.2	9.9	11.4	12.2	14.1	180.2	180.5
200	200.0	200.6	197.6	202.4	2.9	3.4	4.6	5.3	6.8	7.9	8.9	10.3	11.0	12.7	13.6	15.7	200.3	200.6
225	225.0	225.7	222.3	227.7	3.3	3.9	5.2	6.0	7.6	8.8	10.0	11.5	12.4	14.3	15.3	17.6	225.3	225.7
250	250.0	250.8	247.0	253.0	3.6	4.2	5.7	6.5	8.5	9.8	11.2	12.9	13.8	15.9	17.0	19.6	250.4	250.8
280	280.0	280.9	276.6	283.4	4.1	4.8	6.4	7.4	9.5	11.0	12.5	14.4	15.4	17.8	19.0	21.9	280.4	280.9
315	315.0	316.0	311.2	318.8	4.6	5.3	7.2	8.3	10.7	12.4	14.0	16.1	17.3	19.9	21.4	24.7	315.4	316.0
355	355.0	356.1	350.7	359.3	5.1	5.9	8.1	9.4	12.0	13.8	15.8	18.2	19.6	22.6	24.1	27.8	355.4	356.0
400	400.0	401.2	395.2	404.8	5.8	6.7	9.1	10.5	13.5	15.6	17.8	20.5	22.0	25.3	27.2	31.3	400.4	401.0

Note: Pipes available with ISI mark except 400mm.

Properties of uPVC Pipes

Mechanical	
Tensile Strength	: 415 - 525 kg/cm²
Compression Strength	: 550 - 910 kg/cm²
Flexural Strength	: 680 - 1100 kg/cm²
Izod Impact Strength	: 4 - 5 kg/cm²
Shore Hardness	: D 65 - 85
Thermal	
Coefficient of Linear Expansion	: 0.08 mm/M°C
Vicat Softening Temperature	: >78°C
Max. Operating Temperature	: 60°C
Physical	
Specific Gravity	: 1.40 - 1.46
Water Absorption	: <4mg/cm³

Standards, Quality Control & Testing

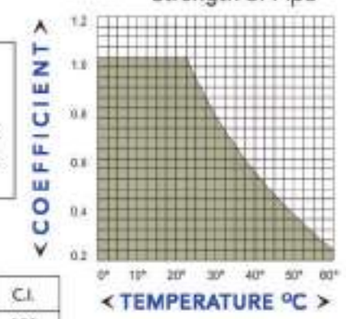
The manufacturing and testing is done for Pipes in accordance with IS: 4985 - 2000

All the above pipes, except non-pressure pipes are tested for potable water supplies in accordance with their relevant standards and as per the test methods given in IS: 12235.

Hazen - William's Flow Co-efficient Comparison

Pipe Material	PVC	A.C.	G.I.	C.I.
Flow Coefficient	150	130	110	100

Temperature V/s. Strength of Pipe



Dimensions of Deep Well Casing (CDI Pipes

Nominal Diameter (DN)		Mean Outer Diameter of pipe d_{vm} (mm.)		Outer Diameter at any point d_v (mm.)		Mean outer Diameter over Connection, (d_v)	Wall thickness, v (mm.)	
Inches	mm	Min	Max	Min	Max	Max	Min	Max
4	100.0	113.00	113.30	112.80	113.40	125.00	7.00	7.90
4 1/2	115.0	125.00	125.30	124.90	125.40	137.00	7.50	8.50
5	125.0	140.00	140.40	139.70	140.50	152.00	8.00	9.00
6	150.0	165.00	165.40	164.60	165.60	180.00	9.50	10.70
7	175.0	200.00	200.50	199.60	200.60	217.00	11.80	13.60
8	200.0	225.00	225.50	224.50	225.80	247.00	13.00	14.80
10	250.0	280.00	280.50	279.40	280.80	304.00	16.00	17.60
12	300.0	330.00	330.60	329.30	331.00	359.00	19.00	21.00
14	350.0	400.00	400.70	399.20	401.20	433.00	21.50	23.90
16	400.0	450.00	450.80	449.10	451.30	490.00	23.50	26.10

PRODUCT RANGE:

- Screen Pipes - 1 1/2" to 16"
- Casing Pipes - 1 1/2" to 16"
- Submersible delivery pipes -
  a. V4 - Pipes: 1" to 1 ½"
  b. Medium duty pipes: 1" to 4"
  c. Standard duty pipes: 1" to 4"
  d. Heavy duty pipes: 1 1/4" to 4"

STANDARDS:

IS 12818:2010

QUALITY TEST:

- Tensile test
- Impact test
- Vicat softening temperature test
- Effect on water test
- Hydraulic pressure test

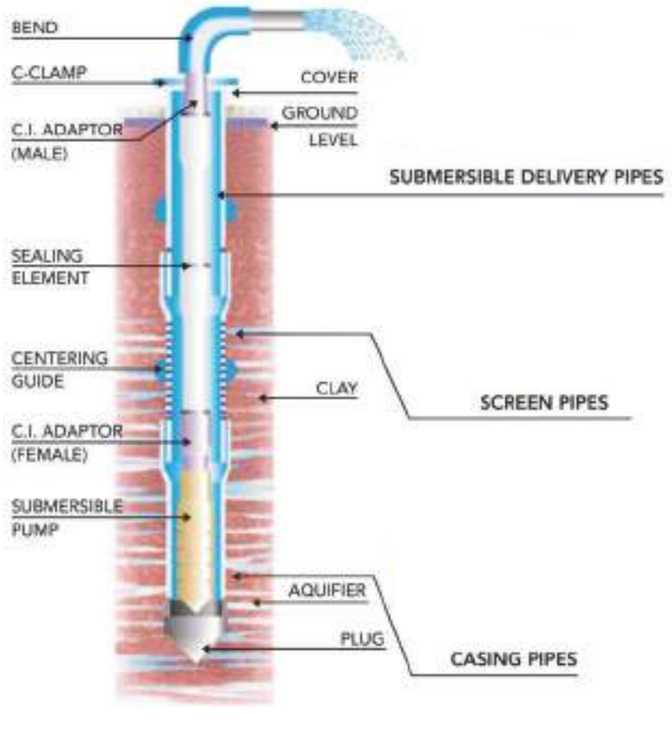
APPLICATIONS:

- To extract ground water for farms & fields
- For connections to residential & commercial building, public places etc.

JOINTING METHOD:

Threaded Joint

FOR BOREWELL & TUBE WELL APPLICATIONS



MAJOR ADVANTAGES:

1. Easy to transport, store, handle and install.
2. Saves labour & installation cost.
3. Smooth bore ensures higher flow compared to G.I. pipeline of he same size. No clogging.
4. Bore diameter remains constant, ensuring constant flow over lifetime.
5. Superior resistance to most of the chemicals, no scaling, makes the system almost maintenance free.
6. Long Life.

Specifications

Specifications	Screen Pipes			Casing Pipes			Submersible Delivery Pipes/Rising Main Pipes
	Ribbed	Plain	Medium	CM	CS	CD	
Colour	Blue	Blue	Blue	Blue	Blue	Blue	Ivory
Standard Length	3 mtr.	3 mtr.	3 mtr.	3 mtr.	3 mtr.	3 mtr.	3 mtr.
Standards	IS - 12818-2010 / Marked items will bear ISI marks						
	11 TPI V threads upto 80mm, 100mm (CS) Casing pipes as per IS-554-1999 & Trapezoidal threads form 100mm as per IS-12818-2010 with rubber sealing rings.						Square
Notes:							
			Above 80 mtr. 262 ft. upto 250 mtr. 820 ft.	upto 80 mtr. / 262 ft.			
B) Threads	Pipes will have internal threads at one & external threads at other end with thread protection cover.						
C) Specification required	Slot width 0.75, 1.00, 1.50, 2.00 & 3.00 mm						