

PREVENT ELECTRICAL HAZARDS WITH WIREFIT

PRODUCT CATALOGUE

Certified
by



ELECTRICAL RESEARCH AND
DEVELOPMENT ASSOCIATION

WiREFIT[®]
Electrical Conduit Pipes & Fittings



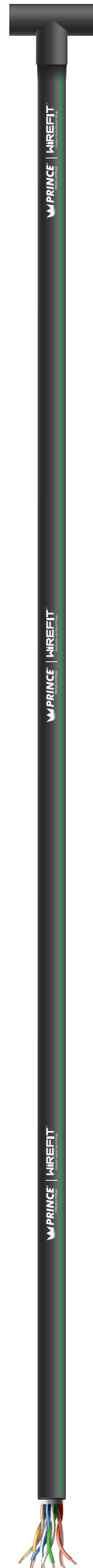
Greener Better Together



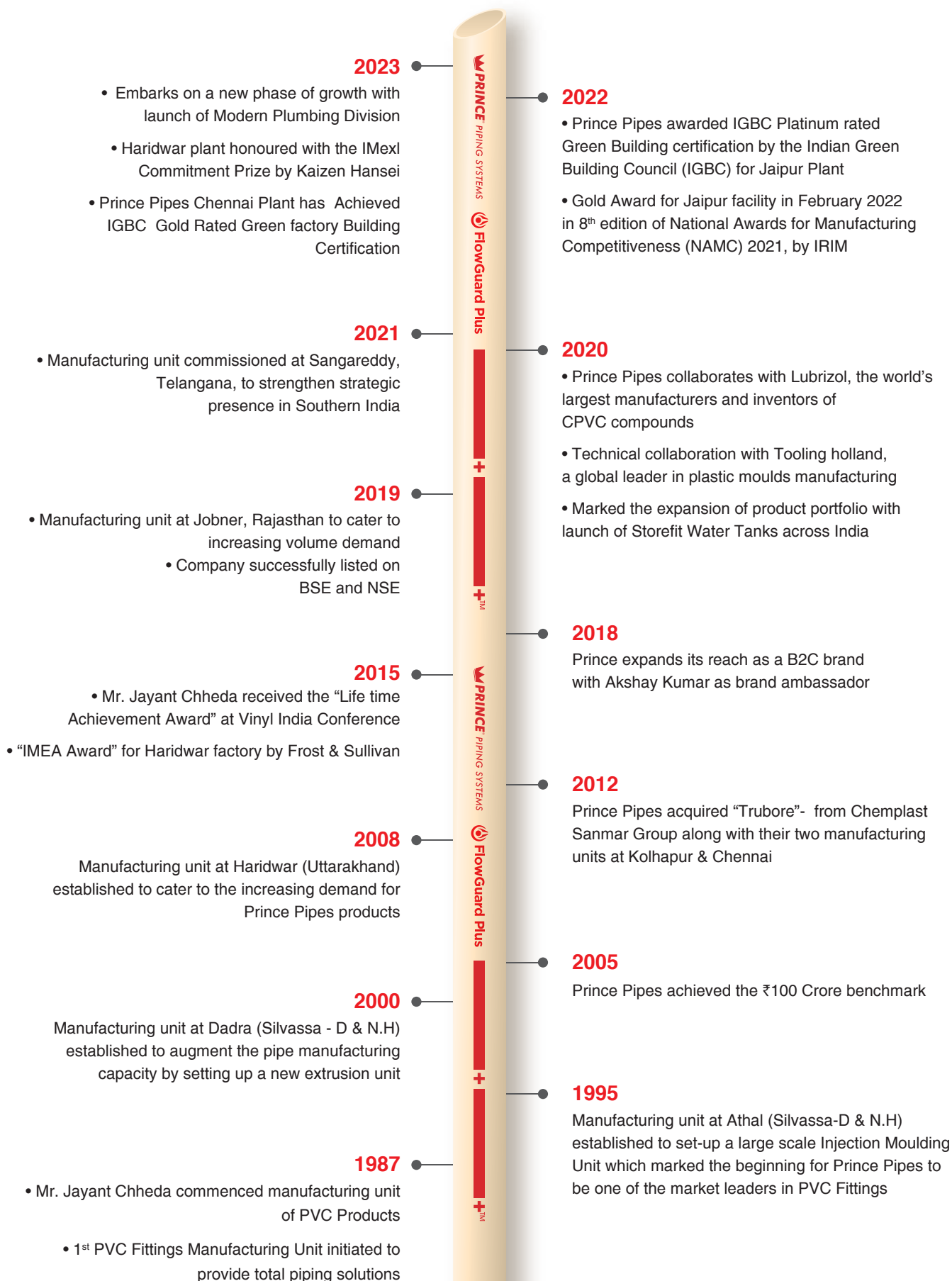
Prince Pipes is not about creating products that are different but providing solutions that make a difference. From our zero defect manufacturing process that involves using recycled plastic to designing and equipping our plants with solar panels and various other energy saving manufacturing techniques, our endeavor has always been to further bring down the emission levels. Our strong belief in the concept of "better lasts longer" has not only helped us deliver premium quality products but also ensure lesser consumption. Together with our channel partners and plumbers, we are sure to leave a strong legacy for the generations to come.

CONT

The Journey	02
Company Overview	03
Manufacturing Units	04
Introduction To Wirefit	05
Why Wirefit &	06
Physical Properties of PVC Material	
Why PVC Conduit System	07
Product Specification	08
Fittings Dimension	09
PRODUCT RANGE WITH PRICE LIST	
UPVC Socket End Conduit Pipes	10
UPVC Plain End Conduit Pipes	11
UPVC Conduit Fittings	12
Quality Control & Jointing Methods	15
Installation Guidelines	16
Thermal Expansion & Contraction	17
Handling & Storage & Dos & Don'ts	18
FAQs	19

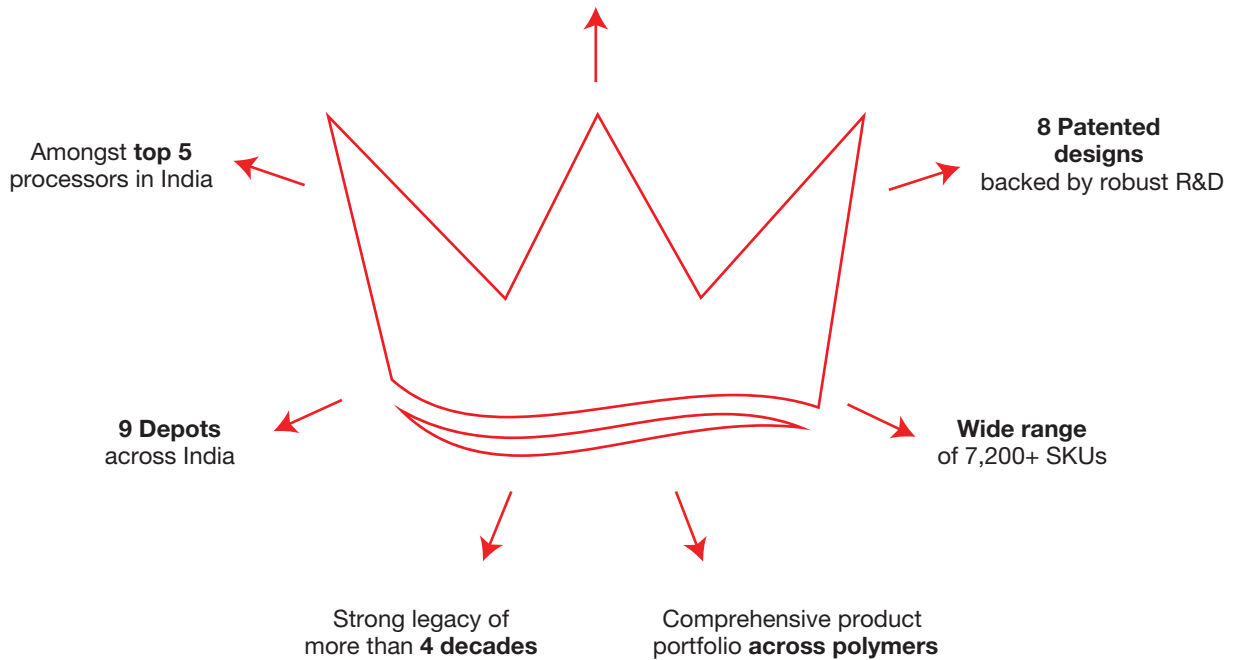


THE JOURNEY



COMPANY OVERVIEW

One of India's largest integrated piping solutions



TECHNICAL COLLABORATION



PRODUCT COLLABORATION



AWARDS & CERTIFICATIONS



Green Building certification by the Indian Green Building Council (IGBC) for Chennai Plant



Green Building certification by the Indian Green Building Council (IGBC) for Jaipur Plant



Gold Award for Jaipur facility in February 2022 in 8th edition of National Awards for Manufacturing Competitiveness (NAMC) 2021, by IRIM



**STATE-OF-THE-ART
MANUFACTURING UNITS**



HYDERABAD EST. 2021



JAIPUR EST. 2019



KOLHAPUR EST. 2012



CHENNAI EST. 2012



HARIDWAR EST. 2008



DADRA EST. 2000



ATHAL EST. 1995

Prince Pipes provides the widest range of piping systems for all underground applications which are technologically advanced and fit for building a cleaner India. All our plants and work force are channelizing their efforts and energy towards achieving this mission making us the **ONE TRUSTED NAME** for all underground piping applications.

WiREFIT[®]

Electrical Conduit Pipes & Fittings

Fire is a major cause of destruction across the world, causing significant loss of life and damage to property around the world every year. Substandard electrical installations are the causes of growing numbers of fire incidents, creating the need for protection of cables and raceways against fire.

Meet Prince WireFIT.

WireFIT is the latest addition to the wide range of piping solutions that have made Prince one of the industry's fastest growing players. The Prince brand brings an assurance of quality, reliability and durability – and WireFIT is no exception. It offers great chemical resistance, good impact strength, and low conductivity – making it a perfect fit for homes and workplaces. Additionally, it's high-heat deflection temperature and ductile behavior at low temperatures ensure safety at all times.

Lightweight and cost-effective, Prince WireFIT comes in various wall thicknesses to serve different purposes. The thin-wall variety can be utilized for embedded use in concrete while the heavier grades work well in direct burial and exposed work. Apart from being moisture-resistant, they are also immune to most corrosive substances. Slip-on solvent welded connections are used for joints to fittings; they stick quickly during assembly and reach their maximum strength in a matter of hours.

WHY WIREFIT?

Most of the fires are of electric origin on account of electrical short circuit. If an electrical supply wire is punctured, but not completely severed, the electric current can move away from its path and result in an incredible amount of heat. This heat can eventually cause a fire, which may quickly spread to surrounding combustible materials, as well as other wiring.

In this modern world no one can live without electricity; to prevent such electrical hazards in your homes, building, shops, factories, offices, and other commercial buildings electricity supply wire must be routed through conduits in every conceivable corner and point of service. These wire protecting conduits may either be installed over the surface of wall/structure or they can run within the wall/structures.

Conduits, apart from purpose of wire protection from external hazard and holding them together. The other purpose of conduits is to maintain the aesthetics of home/building and protect wires from mechanical and thermal stress.

PHYSICAL PROPERTIES OF PVC MATERIAL

Property Description	Test Method	Unit	Value
Max. usable temperature	-----	°C	60
Specific Gravity	ASTM D 792	'gm/cm ³	1.45 +/- 0.02
Water absorption % increase at 24 hrs. & 25°C	ASTM D 570	%	0.05
Rockwell Hardness	ASTM D 785	-----	110-120

Mechanical properties	Test Method	Unit	Value
Tensile strength @ 23°C	ASTM D 638	MPa	49
Tensile modulus of elasticity @ 23°C	ASTM D 638	MPa	2895
Flexural Strength @ 23°C	ASTM D 790	MPa	96.5
Compressive strength @ 23°C	ASTM D 695	MPa	66
Izod impact (notched) @ 23°C	ASTM D 256	Joule/meter	40

Electrical Properties	Test Method	Unit	Value
Volume resistivity	ASTM D 257	Ohm/cm	1.2 x 10 ¹²
Dielectric constant	ASTM D 150	-----	3.2
Dielectric strength	ASTM D 149	Volt/mil	1.250
Electricity conductor	-----	-----	Non-conducting
Insulation resistance	ASTM D 876	-----	>100

Thermal properties	Test Method	Unit	Value
Coefficient of linear thermal expansion	ASTM D 696	mm/m.°C	0.07
Thermal conductivity	ASTM C 177	Watt/m/°K	0.17
Heat deflection temperature	ASTM D 648	°C	77
Specific heat	ASTM D 2766	Joule/°K/gram	80

Fire properties	Test Method	Unit	Value
Flammability rating	UL-94	-----	V.0
Flame spread index	UL-94	-----	< 5.0
Av. Extent of burning	ASTM D 635	mm	<10.0
Av. Time of burning	ASTM D 635	second	<5.0
LOI (Limiting oxygen index	ASTM D 2863	LOI	45
Burning rate	ASTM D 635	'mm/minute	Self-extinguishing

WHY PVC CONDUIT SYSTEM?



FIRE RESISTANT

PVC is a thermoplastic material that inherently resists continuous combustion. PVC is classified as a self-extinguishing material. PVC will not drip when exposed to fire.



NON-CORROSIVE

PVC can't corrode and is not affected by concrete additives, corrosive atmospheres, soil, salts, or excessive humidity. Hence, its service life under these conditions is far superior to that of other conduit materials.



SAFETY

PVC is non-conductive and non-sparking. PVC conduits eliminate the danger of the second point of contact and phase-to-ground faults.



CORROSION RESISTANT

PVC is resistant to external corrosion and pitting and never rusts. This results in lower maintenance costs and longer service life.



STRENGTH

PVC offers high impact and high tensile strength, even in cold temperatures, for conduits and fittings.



CHEMICAL RESISTANT

Wirefit conduits and fittings are resistant to a wide range of chemicals such as acids, alkalis, and salt solutions. Refer to the chemical resistance guide for further details.



LIGHT WEIGHT & EASY TO INSTALL

PVC weighs about 1/6th of steel which implies quick, easy, and faster installation.



EASY WIRE PULL

PVC's exceptionally smooth internal surface greatly eliminates the amount of friction while pulling wires through long runs, even with 90° long bends.



LONG LIFE

PVC retains its properties even after a year of exposure to sunlight, heat, and extreme weather ensuring a long trouble-free life in indoor and outdoor installations.



CONCRETE TIGHT JOINTS

Wirefit conduit systems are designed and engineered to be concrete tight joints in all weather conditions.



SUITABLE FOR DIRECT BURIAL

Heavy PVC conduits are suitable for direct burial and no extra protection is required. However, due care has to be taken while backfilling trenches.



ASSEMBLY

PRINCE solvent cement is recommended for joining Wirefit conduits and fittings.



TEMPERATURE

PVC conduits can withstand temperatures ranging from 5.0°C to 60°C.

PRODUCT SPECIFICATION

STANDARDS FOR PIPES AND FITTINGS

PIPES				FITTINGS		
Size (mm)	Standard	Classification	End Connection	Size (mm)	Standard	End Connection
20 to 63	IS 9537 (Part3)	Light mechanical stresses (LMS)	Solvent Cement	20 to 63	IS 3419	Solvent Cement
		Medium mechanical stresses (MMS)				
		Heavy mechanical stresses (HMS)				

COLOUR

Wirefit pipes & fittings will be available in Ivory & Black colour.

MARKING COLOUR CODES FOR CLASS OF PIPE

BLUE	LMS : Light Mechanical Strength
YELLOW	MMS : Medium Mechanical Strength
GREEN	HMS : Heavy Mechanical Strength

CONDUIT PLAIN END DIMENSIONS

Nominal Size (mm)	Outside Diameter	Tolerance on Outside Diameter	Inside Diameter (Min)			Inside Cross sectional area of Conduit (mm ²)		
			Light	Medium	Heavy	Light	Medium	Heavy
20	20	-0.3	17.4	16.9	15.8	238	224	196
25	25	-0.4	22.1	21.4	20.6	384	360	333
32	32	-0.4	28.6	27.8	26.6	643	607	556
40	40	-0.4	35.8	35.4	34.4	1007	984	930
50	50	-0.5	45.1	44.3	43.2	1598	1542	1466
63	63	-0.6	57.0	--	--	2552	--	--

CONDUIT SOCKET END DIMENSIONS

Nominal Size (mm)	Outside Diameter (Max)	Inside Diameter	Length of Socket End (Min)
20	24.5	20.10 (+0.20 / -0.00)	40
25	29.8	25.10 (+0.30 / -0.00)	40
32	37.8	32.10 (+0.30 / -0.00)	50
40	46.1	40.10 (+0.40 / -0.00)	60
50	57.3	50.10 (+0.40 / -0.00)	60
63	69.6	63.10 (+0.50 / -0.50)	60

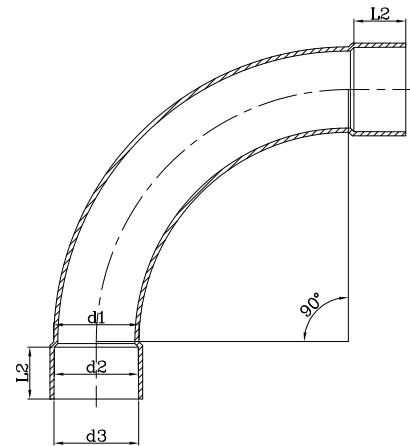
All dimensions in millimeters

FITTINGS DIMENSION

AS PER IS: 3419

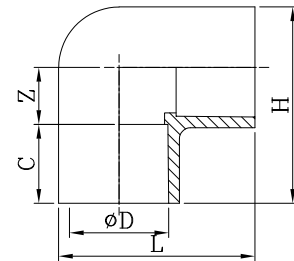
SLIP TYPE COUPLING BEND

Size (mm)	D1	D2	D3	L2
20	19.70	16.90	20.10	35.00
25	24.70	21.30	25.10	35.00
32	31.70	27.90	32.10	45.00
40	39.70	35.50	40.10	45.00
50	49.70	44.70	50.10	55.00



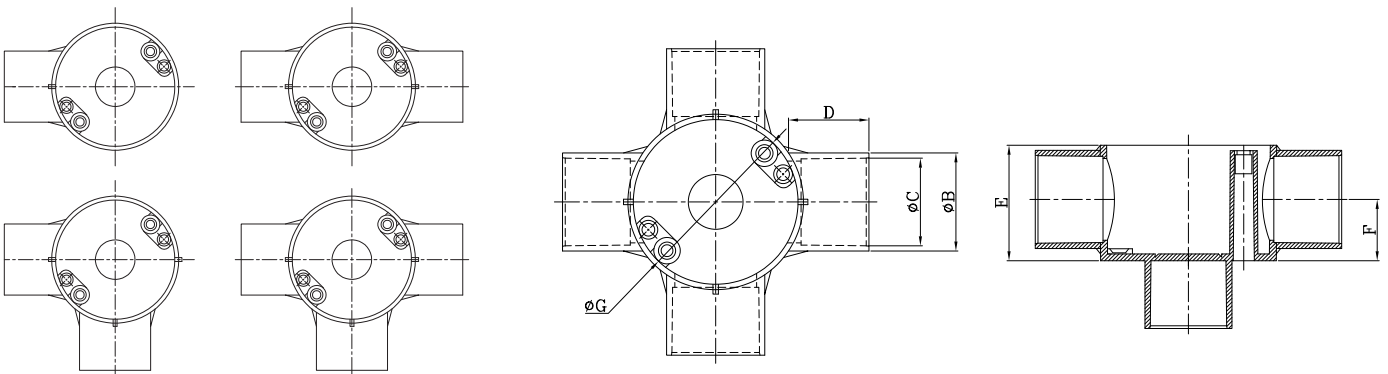
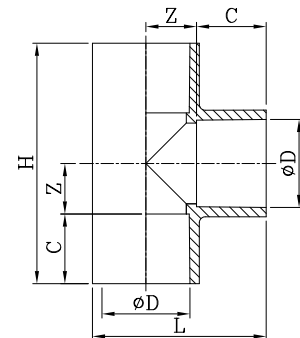
NORMAL TYPE ELBOW

Size (mm)	ØD	C	Z	H	L
20	20.00	17.25	10.80	39.80	39.80
25	25.00	21.50	14.20	49.70	49.70



NORMAL TYPE TEE

Size (mm)	ØD	C	Z	H	L
20	20.00	20.00	11.60	63.20	41.80
25	25.00	21.50	13.65	70.25	49.55



SPOUT TYPE CIRCULAR BOX

Size (mm)	ØB	ØC	D	E	F	G	T
20	23.00	17.00	20.00	25.00	13.50	60.00	1.60
25	29.50	22.75	23.00	28.00	16.50	60.00	1.60

PRODUCT RANGE

UPVC SOCKET END CONDUIT

AS PER IS: 9537 (PART-3)



PIPE - SOCKET END- 3 mtr - LIGHT (LMS)

HSN CODE - 39172390

Size (mm)	Black		Ivory	
	Item code	Std. Pkg	Item code	Std. Pkg
20	IM206468	100	IM206506	100
25	IM206469	50	IM206507	50
32	IM206470	50	IM206508	50
40	IM206471	25	IM206509	25
50	IM206472	25	IM206510	25
63	IM206473	18	IM206511	18



PIPE - SOCKET END - 3 mtr - MEDIUM (MMS)

HSN CODE - 39172390

Size (mm)	Black		Ivory	
	Item code	Std. Pkg	Item code	Std. Pkg
20	IM206482	100	IM206520	100
25	IM206483	50	IM206521	50
32	IM206484	50	IM206522	50
40	IM206485	25	IM206523	25
50	IM206486	25	IM206524	25



PIPE - SOCKET END - 3 mtr - HEAVY (HMS)

HSN CODE - 39172390

Size (mm)	Black		Ivory	
	Item code	Std. Pkg	Item code	Std. Pkg
20	IM206494	100	IM206532	100
25	IM206495	50	IM206533	50
32	IM206496	50	IM206534	50
40	IM206497	25	IM206535	25
50	IM206498	25	IM206536	25

UPVC PLAIN END CONDUIT

AS PER IS: 9537 (PART-3)



PIPE - PLAIN END - 3 mtr - LIGHT (LMS)

HSN CODE - 39172390

Size (mm)	Black		Ivory	
	Item code	Std. Pkg	Item code	Std. Pkg
20	IM206475	100	IM206513	100
25	IM206476	50	IM206514	50
32	IM206477	50	IM206515	50
40	IM206478	25	IM206516	25
50	IM206479	25	IM206517	25
63	IM206480	18	IM206518	18



PIPE - PLAIN END - 3 mtr - MEDIUM (MMS)

HSN CODE - 39172390

Size (mm)	Black		Ivory	
	Item code	Std. Pkg	Item code	Std. Pkg
20	IM206488	100	IM206526	100
25	IM206489	50	IM206527	50
32	IM206490	50	IM206528	50
40	IM206491	25	IM206529	25
50	IM206492	25	IM206530	25



PIPE - PLAIN END - 3 mtr - HEAVY (HMS)

HSN CODE - 39172390

Size (mm)	Black		Ivory	
	Item code	Std. Pkg	Item code	Std. Pkg
20	IM206500	100	IM206538	100
25	IM206501	50	IM206539	50
32	IM206502	50	IM206540	50
40	IM206503	25	IM206541	25
50	IM206504	25	IM206542	25

UPVC CONDUIT FITTINGS



**CIRCULAR BOX -
TERMINAL 1 WAY**

HSN CODE - 39174000

Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
20	20	IT101254	IT101292
25	15	IT101259	IT101297



**CIRCULAR BOX -
ANGLE 2 WAY**

HSN CODE - 39174000

Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
20	20	IT101256	IT101294
25	15	IT101261	IT101299



**CIRCULAR BOX -
THROUGH 2 WAY**

HSN CODE - 39174000

Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
20	20	IT101255	IT101293
25	15	IT101260	IT101298



**DEEP CIRCULAR BOX -
TERMINAL 1 WAY**

HSN CODE - 39174000

Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
20	10	IT101265	IT101303
25	10	IT101270	IT101308



**CIRCULAR BOX -
TEE 3 WAY**

HSN CODE - 39174000

Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
20	20	IT101257	IT101295
25	15	IT101262	IT101300



**DEEP CIRCULAR BOX -
THROUGH 2 WAY**

HSN CODE - 39174000

Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
20	10	IT101266	IT101304
25	10	IT101271	IT101309



**CIRCULAR BOX -
INTERSECTION 4 WAY**

HSN CODE - 39174000

Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
20	20	IT101258	IT101296
25	15	IT101263	IT101301



**DEEP CIRCULAR BOX -
TEE 3 WAY**

HSN CODE - 39174000

Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
20	10	IT101268	IT101306
25	10	IT101273	IT101311
32	10	IT101340	IT101356

UPVC CONDUIT FITTINGS



**DEEP CIRC BOX -
INTERSECTION 4 WAY**

HSN CODE - 39174000

Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
20	10	IT101269	IT101307
25	10	IT101274	IT101312
32	10	IT101341	IT101357



ELBOW

HSN CODE - 39174000

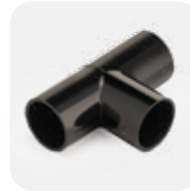
Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
20	125	IT101280	IT101318
25	75	IT101281	IT101319



**DEEP CIRCULAR BOX -
ANGLE 2 WAY**

HSN CODE - 39174000

Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
20	10	IT101267	IT101305
25	10	IT101272	IT101310



TEE

HSN CODE - 39174000

Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
20	50	IT101282	IT101320
25	50	IT101283	IT101321



COUPLER

HSN CODE - 39174000

Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
20	200	IT101275	IT101313
25	125	IT101276	IT101314
32	60	IT101277	IT101315
40	30	IT101278	IT101316
50	20	IT101279	IT101317



FEMALE BUSH ADAPTER

HSN CODE - 39174000

Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
20	200	IT101284	IT101322
25	100	IT101285	IT101323
32	75	IT101331	IT101347
40	50	IT101332	IT101348
50	25	IT101333	IT101349

UPVC CONDUIT FITTINGS



BRANCH 2 WAY (U)

HSN CODE - 39174000

Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
20	20	IT101334	IT101350
25	20	IT101337	IT101353



SLIP TYPE BEND

HSN CODE - 39174000

Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
19	50	IT101286	IT101324
20	50	IT101287	IT101325
25	25	IT101288	IT101326
32	15	IT101289	IT101327
40	6	IT101290	IT101328
50	4	IT101291	IT101329



BRANCH 3 WAY (Y)

HSN CODE - 39174000

Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
20	20	IT101335	IT101351
25	20	IT101338	IT101354



CIRCULAR LID

HSN CODE - 39174000

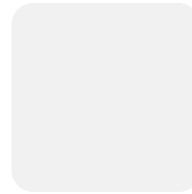
Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
65	150	IT101264	IT101302



BRANCH 4 WAY (H)

HSN CODE - 39174000

Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
20	15	IT101336	IT101352
25	20	IT101339	IT101355



CIRCULAR PRESS FIT LID

HSN CODE - 39174000

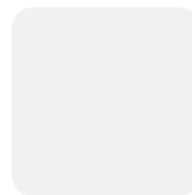
Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
85	150	IT101330	IT101346



INSPECTION TEE WITH LID

HSN CODE - 39174000

Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
20	50	IT101342	IT101358
25	25	IT101343	IT101359



SMALL FAN BOX

HSN CODE - 39174000

Size (mm)	Std. Pkg	Black	Ivory
		Item code	Item code
20	18	IT101344	IT101360
25	18	IT101345	IT101361

QUALITY CONTROL

PRINCE WIREFIT UPVC products are subjected to stringent quality checks at each stage of their creation in order to ensure consistent quality in the end products. The company has established a laboratory with modern testing equipments that are handled by highly skilled technicians.

The Testing Processes Our Pipes Go Through

- Inspection of Dimensions
- Bending Test
- Compression Test
- Collapse Test
- Heat Resistance Test
- Electrical Characteristics
- Impact Test
- Burning Resistance

Testing Methods for Fittings are:

- Inspection for Dimension
- Oil Resistant
- Copper Test
- Visual, Construction & Marking
- Fire Resistance
- Chemical Resistance
- Impact Resistance
- Moisture Absorption Test
- Electrical Characteristics
- Resistant to Chemical Action

JOINTING METHODS

TOOLS FOR WIREFIT CONDUIT SYSTEM

1. Conduit cutter
2. Deburring tool
3. Solvent cement

JOINTING PROCEDURE

- **CUTTING**
Cut the pipe square to its axis. Cross-cutting the pipe may cause obstruction during the wire pull exercise.
- **CHAMFERING**
Remove the burr & chamfer from the pipe's end.
- **APPLICATION OF SOLVENT CEMENT**
Apply a thin layer of solvent cement on the spigot and socket of parts that need a solvent joint. Do not apply an excess quantity of solvent to the parts that need solvent jointing.
- **JOINTING**
After applying solvent on male-female parts quickly to assemble the joint. Hold the solvent joint for a few seconds to form a homogeneous joint. Repeat the procedure for the next joint.

INSTALLATION GUIDELINES

A. ON WALL SURFACE

1. Choose an adequate size conduit depending upon the number of wires to be drawn.
2. Conduit shall be erected on the surface according to the planned route of the approved layout.
3. Conduit shall be firmly fixed on the surface using spacers and saddles.
4. Spacers shall be fixed to the surface at an equidistant distance of 600–750 mm.
5. Conduit to be fixed on spacers with the help of saddles.
6. The distance between spacers shall not be more than 600–750 mm, irrespective of the conduit size.
7. Use a flat head screw of 35 x 8 mm to fix spacers and a 12 x 5 mm round head screw for fixing saddles.
8. In case of more than single-phase wiring, use separate conduits.
9. Use separate conduits for Internet, TV, & telephone wires and cables.

B. CONCEALING ON WALLS

1. Choose an adequate-sized conduit depending on the number of wires to be drawn.
2. Chases shall be made in walls of adequate width and depth with the help of a cutter and chisel.
3. Conduit with appropriate accessories shall be placed in the chase. Use a female bush adopter to connect the conduit with modules.
4. Use U nails or GI clamps to firm the conduit in the chase at 900 mm. Use a screw to firm up the modules in the wall.
5. After firm placing of conduit and accessories, refinish the surface of chases with mortar.

C. CONCEALING IN FLOORING

1. Choose an adequate-sized conduit depending on the number of wires to be drawn.
2. Chases must be made in or on PCC flooring of sufficient width and depth using a cutter and chisel.
3. Conduits with inspection boxes shall be placed in chases or on PCC flooring. Use a female bush adaptor to connect the conduit to inspection boxes or metal modules.
4. Use U nails or a GI clamp to firm the conduit in the chases. Use a screw to firm the inspection boxes in the flooring.
5. Ensure conduit work in flooring shall not disturb RCC work.

D. CONCEALING IN RCC STRUCTURE

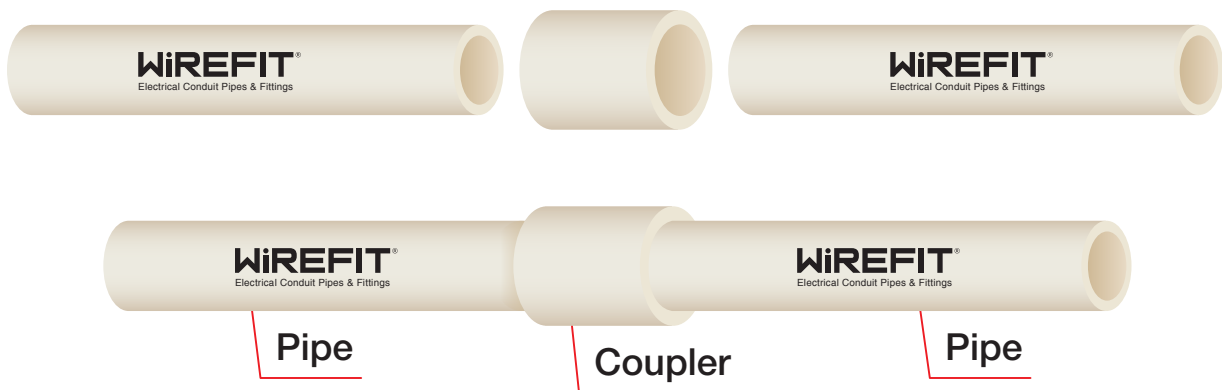
1. Concealing work of the conduit system on RCC structures such as slabs, beams, and columns shall be done with the coordination of civil work.
2. Choose an adequate-sized conduit depending on the number of wires to be drawn.
3. Firm up the conduit and accessories on the reinforcement steel with the help of a binding wire.
4. Fixing with binding on reinforcement steel in such a way that conduit system shall remain firm on position during casting of structure with RCC.
5. Deep junction boxes and draw-in modules or boxes shall be mounted such that their open ends and centering material doesn't have a gap in between. This step prevents the concrete from entering inside even after fixing the covers to steel reinforcement and being filled with dry sand.
6. Open-end conduits are to be concealed in walls and shall be provided with couplers or sockets at the end to be flushed with the beam bottom.
7. Bunching and grouping of conduits shall be avoided in RCC structure which may lead to strength of RCC structure.
8. Lastly, insert suitable steel fish wire shall be drawn through in the conduits for drawing the wires later on.

Maximum no of Single core 1.1KV wire can be drawn in rigid non-metallic conduits

Size of cable in mm ²	No of conductor / Dia of each conductor	Size of Conduit				
		20	25	32	40	50
1.0	1/1.12	7	13	20	--	--
1.5	1/1.14	6	10	14	--	--
2.5	1/1.8, 3/1.06	5	10	14	--	--
4.0	1/2.24, 7/0.85	3	6	10	--	--
6.0	1/2.8, 7/1.06	2	5	9	--	--
10.0	7/1.4	--	4	7	9	--
16.0	7/1.7	--	2	4	5	12
25.0	7/2.24	--	--	2	2	6
35.0	7/2.5	--	--	--	2	5
50.0	19/1.8	--	--	--	2	3

THERMAL EXPANSION & CONTRACTION

Thermal expansion and contraction are common phenomena in thermoplastic conduits/ piping system. The longer the conduit runs, the more the effect of expansion and contraction. Wirefit conduit material thermal expansion coefficient is 0.07mm/m/°C. If the conduit system is installed on the surface, the thermal effect needs to be compensated. To accommodate the effect of expansion-contraction-expansion the usage of 'expansion coupler' is necessary, if the conduit run is more than 6 meters and the conduit system is installed on the exterior part of the building.



1. Expansion coupler needs to be installed between two conduits.
2. One end of the conduit needs to be welded with a solvent to the expansion coupler.
3. On the other side of the coupler, silicon grease is to be applied internally and on the external surface of the conduit wall.
4. Insert conduit in the expansion coupler up to half of the total socket length. The remaining half will take care of the expansion and contraction of the 6.0-meter-long conduit system.
5. If the conduit length is more than 6.0 meters, accordingly, the expansion coupler number needs to be increased.

Alternatively, flexible conduits can be used at expansion joints to compensate for the thermal effect of expansion and contraction.

HANDLING & STORAGE

1. PVC conduits are useful for electrical wiring since these conduits are not strong enough, hence they require proper handling and storage. PVC conduits while unloading shall be lowered slowly and properly & should not drop to the ground.
2. During the storage higher diameter conduit should be kept at the bottom and a smaller diameter conduit be kept on top.
3. During storage PVC Conduits should be given proper supports at the base at an interval of 750mm. In short, the 3-meter PVC conduit shall be supported with at least 4 wooden blocks. Or PVC conduits shall be stacked on a flat surface.
4. At all times, conduits should be stored under a roof to protect them from sunlight.
5. The conduit storage area must be free from water.
6. Fittings should be securely stored in a carton box to avoid de-shaping.
7. Conduit fitting cartons and conduits bundle should not be stored more than 4feet.

DOs & DON'Ts

DOs

1. For a separate electrical phase supply, use a conduit.
2. Use a long bend in the conduit piping system wherever there is a change in direction.
3. Use a separate conduit for communication and power cables.
4. Make the level markings before starting the wall surface conduit work. Keep the height above FFL (finished floor level).
5. Make sure that all the horizontal conduit runs are straight at the box or module level.
6. Run the conduit above the false ceiling with proper support.
7. Thermal movement requires that the conduit be free in saddles.
8. Use good-quality U nails and clamps for clamping conduit in chases.
9. A bush shall be used at the pipe opening to protect the wire insulation from getting damaged due to the sharp edges of the conduit.
10. Surface wall conduit system shall be supported at 600 – 750 mm distance.
11. Use a spring to change the direction of the conduit.
12. Installed conduits and conduit fittings shall be protected from foreign material on site.

DON'Ts

1. Do not run a power conduit line close to the communication line.
2. Do not rest conduits on the false ceiling in any case.
3. Don't cluster the pull and junction boxes in one place.

FAQs

What is PVC electrical conduit?

Polyvinylchloride also known as PVC is a polymer resin. It is widely used to protect power supply cables and wires. Commonly known as a white rigid PVC tube, a PVC electrical conduit is used to protect wires from corrosion and electrical leakage.

The most basic of home improvements is the installation of a wire layout. A PVC electrical conduit is used to protect the wire while designing the home. Since the wire thickness is different, PVC electrical conduit is also divided into different size specifications to adapt to the arrangement.

PVC electrical conduit prevents burning and electrical leaks. It resists corrosion, moisture, and sunlight, so, it is especially suitable for indoor and outdoor applications.

What is the difference between PVC pipe and PVC conduit?

PVC pipe and PVC conduit are both made from the same plastic, yet they serve different purposes. They are not interchangeable. While PVC pipes are generally used for plumbing applications, PVC conduits are utilised for electrical applications. PVC pipes have thicker walls compared to PVC conduits, where the added thickness ensures that the pipe is strong enough to resist bending and that it will remain undamaged and intact. As PVC conduit is not required to withstand pressure, its walls are not thick.

What size does PVC conduit come in?

The main dimension of PVC conduit is its wall thickness. Since different wall thicknesses serve different purposes, PVC conduits are available in 20, 25, 32, 40, 50 & 63mm diameters and 3 different classes i.e. Light mechanical stress (LHS), Medium mechanical stress (MMS) & Heavy mechanical stress (HMS).

Can PVC be recycled?

Yes, PVC can be recycled, but the cost of recycling is very high.



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