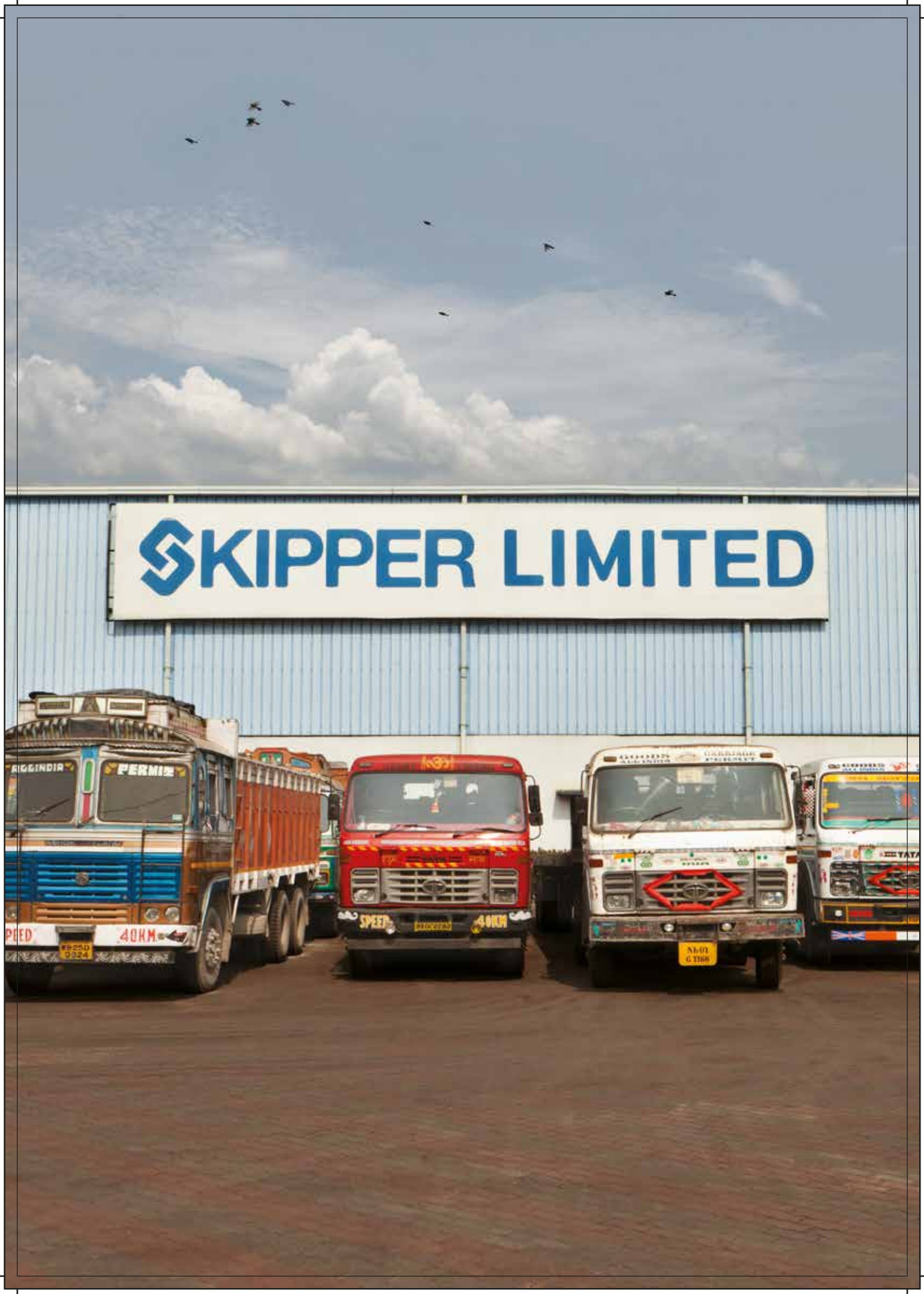
SKIPPER PIPES

PROGRESS IN THE PIPELINE



AN ISO 9001 CERTIFIED COMPANY


SKIPPER LIMITED
PERMIT
40KM
SPEED
40KM

INDEX

Delivering Perfection

The Journey of Perfection - Milestones

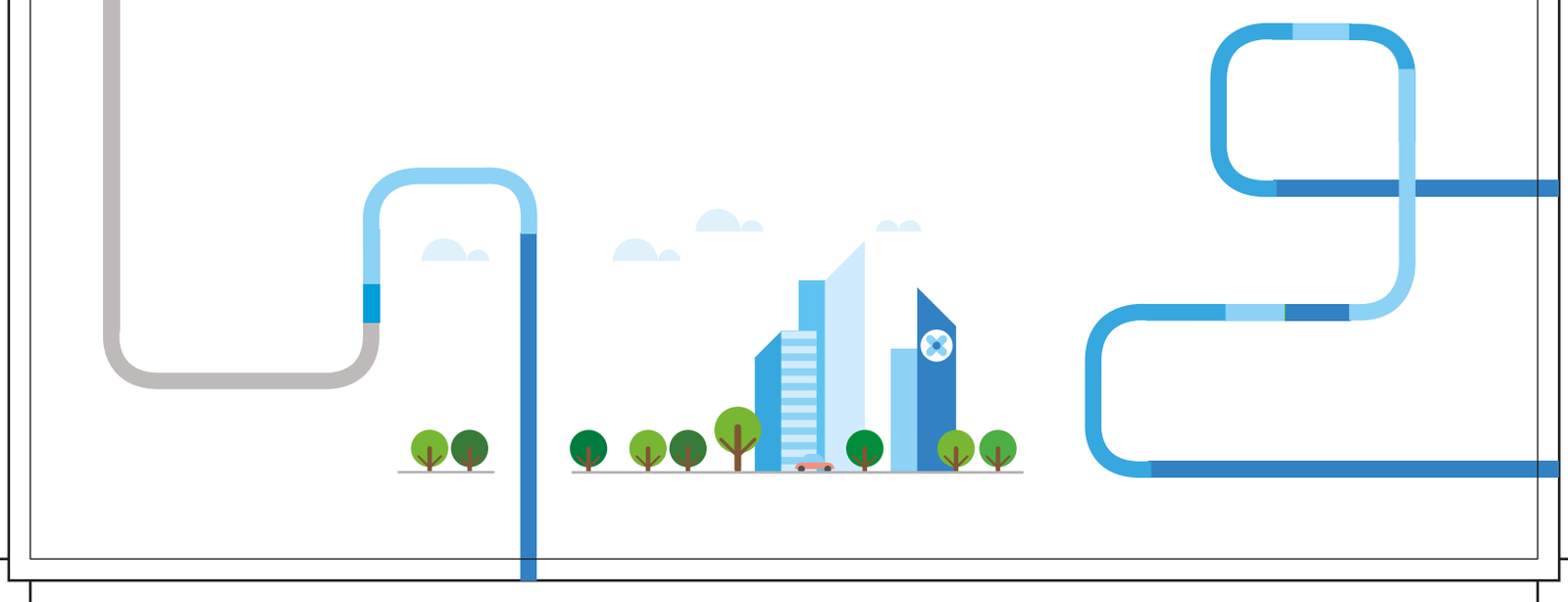
Perfecting with Perfection - Awards & Recognition

Spreading Perfection - CSR Activities

ORR Technology

Our Products

- CPVC Pipes and Fittings
- UPVC Pipes and Fittings
- SWR Pipes and Fittings
- UGD Sewerage Pipes
- Agricultural Pipes and Fittings
- Casing Pipes
- Ribbed Strainer Pipes
- Column Pipes





DELIVERING PERFECTION

For us at Skipper Pipes, perfection is not just a destination but a continuous journey. A journey that requires integrity, dedication and sheer perseverance. Every day we are trying to make the world a better place by introducing perfection into everyone's life.





Established in 1981, Skipper Limited is the largest manufacturer of Transmission & Distribution structures in India and among the top 10 in the world.
It is a national powerhouse in the Polymer Pipes & Fittings business and manufactures premium quality products under the brand name of Skipper Pipes, which serves both, the plumbing and agricultural sectors.

THE LARGEST TOWER MANUFACTURER IN INDIA

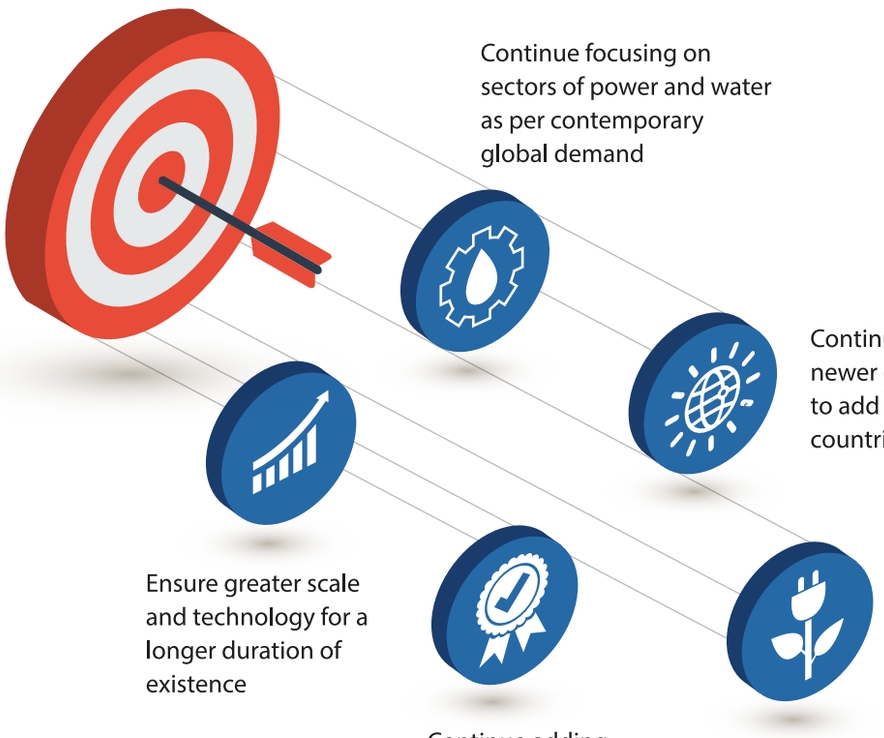
DELIVERING PERFECTION

VISION

To produce world-class quality products, ensuring sturdy national infrastructure development to make India the preferred sourcing hub for Global Infrastructure needs.

MISSION

Our mission is guided by our intent of making a difference and maintaining our respected place in the industry while ensuring perfection with our range of products.



Continue focusing on sectors of power and water as per contemporary global demand

Continue tapping newer geographies to add on to existing countries

Ensure greater scale and technology for a longer duration of existence

Continue adding value added products and services to our portfolio

Reduce carbon footprints and evolve towards reduced consumption of hydrocarbons and use non-conventional and renewable energy sources



PERFECTION THAT SHOWS

At Skipper, our products are crafted with perfection. We adopt the highest standards of manufacturing procedures and perform stringent quality checks, to satisfy our customers and meet their expectations.

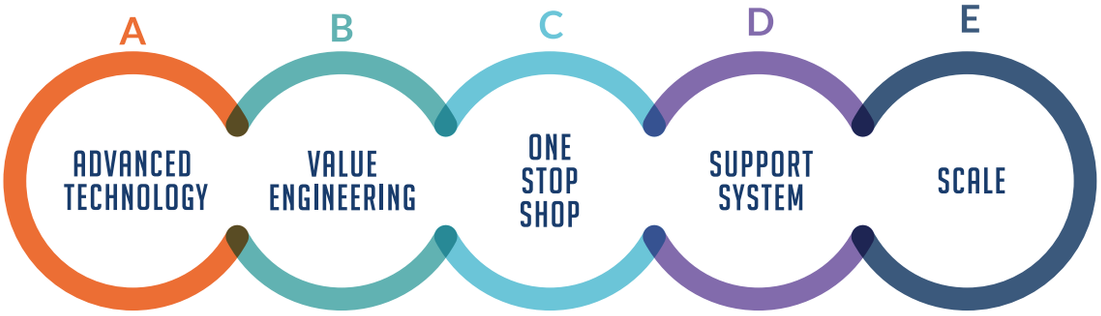
STRUCTURING A PERFECT NATION WITH OUR POLYMER PIPES & FITTINGS

Polymer division helps to bring the most crucial resource closer to where it's needed!

- CPVC Pipes & Fittings
- UPVC Pipes & Fittings
- SWR Pipes & Fittings
- UGD Sewerage Pipes
- PE Pipes
- Borewell Pipes (Casing Pipes, Column Pipes & Ribbed Strainer Pipes)
- Agriculture Pipes & Fittings
- CPVC & UPVC Solvent cement

PERFECT CORE COMPETENCIES





Possesses automated state-of-the-art equipment.

Engineering and design excellence which help to optimize product and process costs.

Produces all plumbing and agricultural pipes and fittings.

Strategic plant locations in pan India which enables us to deliver products on time.

Received various accolades both nationally and internationally.

JOURNEY OF PERFECTION
OUR BIGGEST MILESTONES

1981
Company incorporated and commenced manufacturing of Hamilton poles

1990
Company entered into manufacturing of Telecom Towers & Masts



2001
Set up LPG Cylinder manufacturing unit

2003
Set up first tube mill

2005
Set up first Galvanizing plant

2006
Got PGCIL approval for 400 kV tower unit (highest at that time)

Tie up with Rambol, Denmark the world's largest tower designing company

2007
Entered into value addition of steel tubes as scaffoldings



MILESTONE

WHEN ONE STRIVES FOR PERFECTION, THE RESULTS AREN'T FAR BEHIND.

2008

- Started conversion of tower production process from manual to Automated CNC

2009

- Commissioned 1st PVC unit in Uluberia (WB) and India's first double sided tube GI plant
- Got India's first order for 800kV transmission tower

2010

- 1st major Tower company in India to enter into backward integration by setting up Angle Rolling mills.

2013

- Alliance agreement with South America's largest TSO for exclusive supply to their transmission

2015

- BSE (2014) and NSE listing
- New PVC plants at Gujarat & Assam
- Tying up with Sekisui Chemicals Co. Ltd. of Japan

2016

- Won 'The Best Industry in water Resources sector'
- Commissioned new PVC plant in UP & Telangana

2017

- 2nd Guwahati Plant was launched in Palashbari
- Awarded 'Largest Tower Supplier' by PGCIL for the second time

CERTIFICATES AND APPRECIATIONS, PERFECTING WITH PERFECTION!

Our commitment towards excellence

For us at Skipper, perfection is a way of life. We have always preferred good quality over quantity and we strive to keep up our high standards not only when it comes to our products but also with the people we employ, the customer service we provide and the goals we set for global growth.

Picture-perfect moments

Our awards & quality certifications

- Bureau of Indian Standards (ISI)
- ISO 9001, ISO 14001, ISO 18001



ISO 9001



ISO 14001



ISO 18001

Polymer products conforming to quality certifications

- ASTM D-1785
- ASTM D-2467
- ASTM D-2846,
- ASTM F-493
- NSF (CPVC PIPES)
- IS: 12818
- IS: 13592
- IS: 4985
- IS: 15778
- IS: 14735
- IS: 10124
- IS: 14182



AWARDS & RECOGNITION

- Skipper limited won the 'Largest Supplier - Towers' from one of the world's largest transmission utilities and the third largest Public Sector enterprises in the country - Power Grid Corporation Of India Limited for the third consecutive time
- Skipper limited bagged the most prestigious ET Bengal Corporate Awards, for the Highest Job Creator 2018 in the category of companies over 1000 acres and above.
- Won 3 most important honours in this year's World HRD Congress.

1. Times Ascent. Dream Companies to Work-- Best Manufacturing Company
2. Times Ascent, Dream Companies to Work-- All Sector, All companies--- All India Rank 33
3. ET Now, Rise With India -Dream Companies to work

- Skipper Limited was awarded 'The Most Iconic Brand' by the most read business daily-Economic Times on 29th June, 2018

- Won the most prestigious Global Marketing Excellence award for 'Innovation in Marketing, OOH' from World Marketing Congress for the stunning ensemble of ideation and execution of the Skipper Pipes Bosepukur Durga Puja, 2017
- In the 4th Eastern Region Export Excellence Awards organized by the Federation of Indian Export Organizations (IFIEO). Skipper limited was honoured with 2 Golds: 1. Star Export House - 2 Stars 2. Promising Manufacturer Exporter with Focus on Make In India
- Skipper Limited has been chosen as the 'Star Performer' in the category of 'Group 12 -Other Fabricated Metal Products excl. Machinery Equipment' for the year 2014-15 by EEPC India, Eastern Region.





GLOBAL MARKETING EXCELLENCE
GIVEN BY: **WORLD HRD CONGRESS**

THE BEST POLYMER BRAND
GIVEN BY: **CONSTRUCTION TIMES**





NO. 1 EMERGING BRAND IN POLYMER PIPES & FITTINGS
GIVEN BY: **WCRC**

MOST ETHICAL COMPANY
GIVEN BY: **WORLD CSR DAY**





SPREADING PERFECTION

CSR ACTIVITIES

Skipper limited believes that Corporate Social Responsibility is not merely a compliance mandate but a commitment towards the community at large. Our conscious endeavour is to serve the socio-economically backward, the under-privileged and the marginalized communities.

EDUCATION

The major activities undertaken by the Company this year includes: Running of Ekal Schools (One teacher school) in the tribal belt of Assam. The Company contributed for running 150 such schools and approximately 4000 students were benefitted. The Company has started a project 'Beti Padhao Abhiyaan' which extends help to under-privileged families to continue the education of their girl child. The Company has provided scholarships to 745 under-privileged girls to get proper education. The Company has made contribution towards installation of lift and other renovation work of Burrabazar Library, one of the oldest libraries of Eastern India founded in 1900. It is estimated that approximately 500 professional students will be benefitted each year under this project. Suryakiran- an evening school for the underprivileged functioning under the aegis of 'The Kalyan Bharti Trust' in fulfilment of its deep desire towards the well being of the members of economically backward society.
The Company supports the vision of Suryakiran and is an active contributor to the noble cause. We have made contribution towards vocational computer and tailoring training of 80 and 150 students respectively. The Company has also undertaken the responsibility of educating 19 students of a school in Dumma, Jharkhand. The Company has contributed towards the construction of school building under Sansad Adarsh Gram Yojna, Manipur Vedvidya Peth, Manipur and Unnayani Patha Bhawan. We provide electricity expenses and remuneration of five part time teachers of Mahishrekha Junior High School at Uluberia and four guest teachers of Kulgachia Netaji Balika Viday Mandir at Kulgachia.

Beti Padhao Abhiyaan



Eye Camp





Book Distribution undertaken by Skipper Foundation



Gramin Mela

HEALTH

The major activities undertaken by the Company includes: contribution towards project expansion of Dr. Hedgewar Hospital at Aurangabad, Maharastra, to provide medical services to the poor. The Company helps run free Homeopathy centre at Tollygunge, Kolkata benefitting approximately 11000 patients yearly. We also contribute towards maintenance of Nimtala & Ahiritola Burning Ghat while running medical facilities for poor and under- privileged with the help of Marwari Relief Society and Nagrik Swasthya Sangh.

ENVIRONMENT

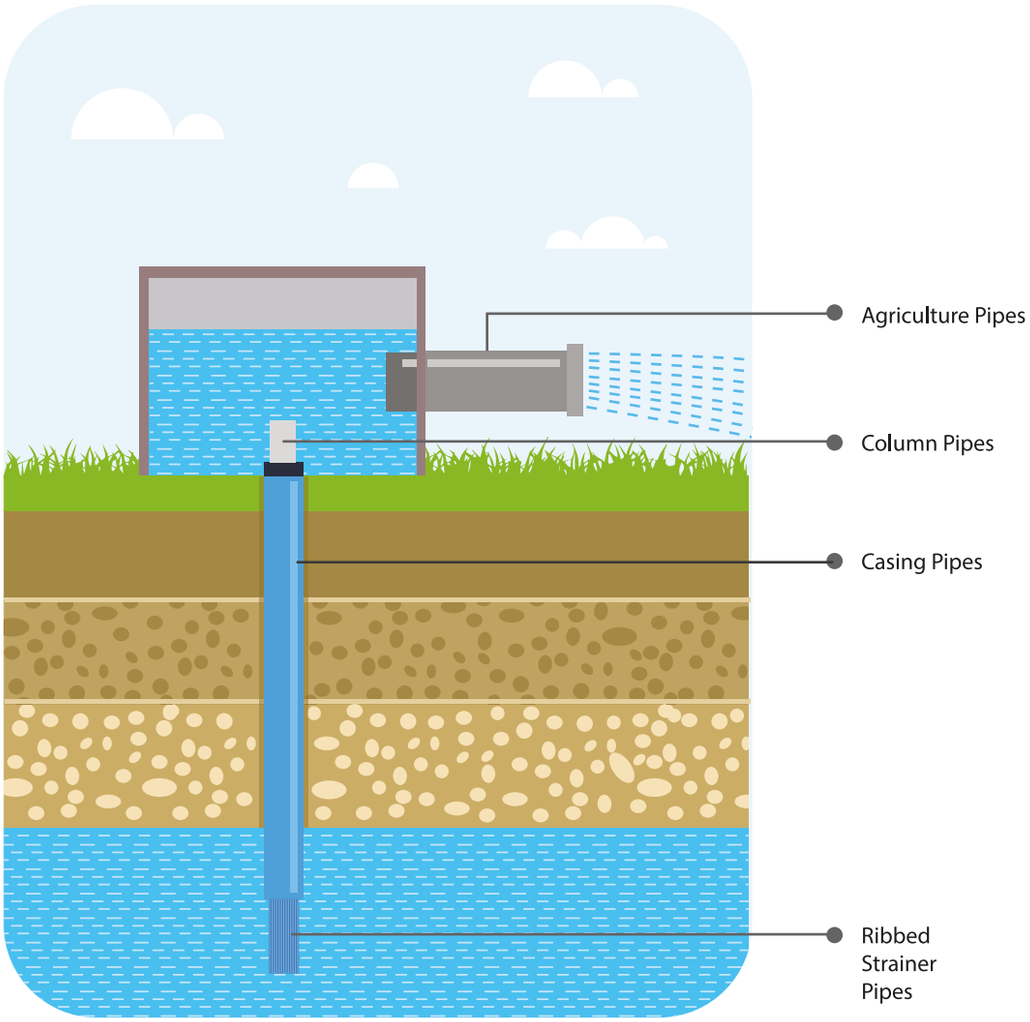
The Company supports a project of installation and maintenance of dustbins at the selected locations of the Kolkata and suburbs. Several tube wells have been installed in villages near our factories. Eye check-up camps at locations near factory areas and village area of Dumma, Jharkhand have been organized. 1400 patients have benefitted and 730 free spectacles have been distributed. Eye operations of 85 patients at Marwari Relief Society hospital at Kolkata was also supported. Animal Welfare with help of Shree Nimbarak Gauseva Trust and Shree Haryana Gaushalla, the Company helps in round the year maintenance of old, sick, deserted cows by providing medical and food facilities.

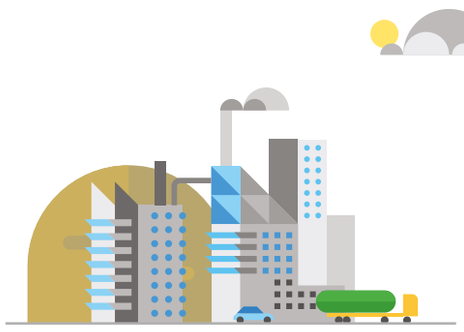
Skill Development in accordance with the MOU signed with Indian Plumbing Skill Council, the Company continues to provide skill development training to plumbers. Our initiative 'Integrated Village Development' in association with Friends of Tribal Society has been launched successfully at Dumma, Deoghar. Under the project around 100 'one teacher schools' will be run in remote villages, organic farming workshops will be organized for farmers to increase their product yield and quality. A computer fitted bus namely 'Ekal on Wheel' will move from village to village spreading computer literacy to students.

ORR TECHNOLOGY

ORR summarises that Skipper uses the perfect quantity and quality of raw materials which make our Pipes & Fittings stronger, sturdier and perfect for plumbing and agricultural use.

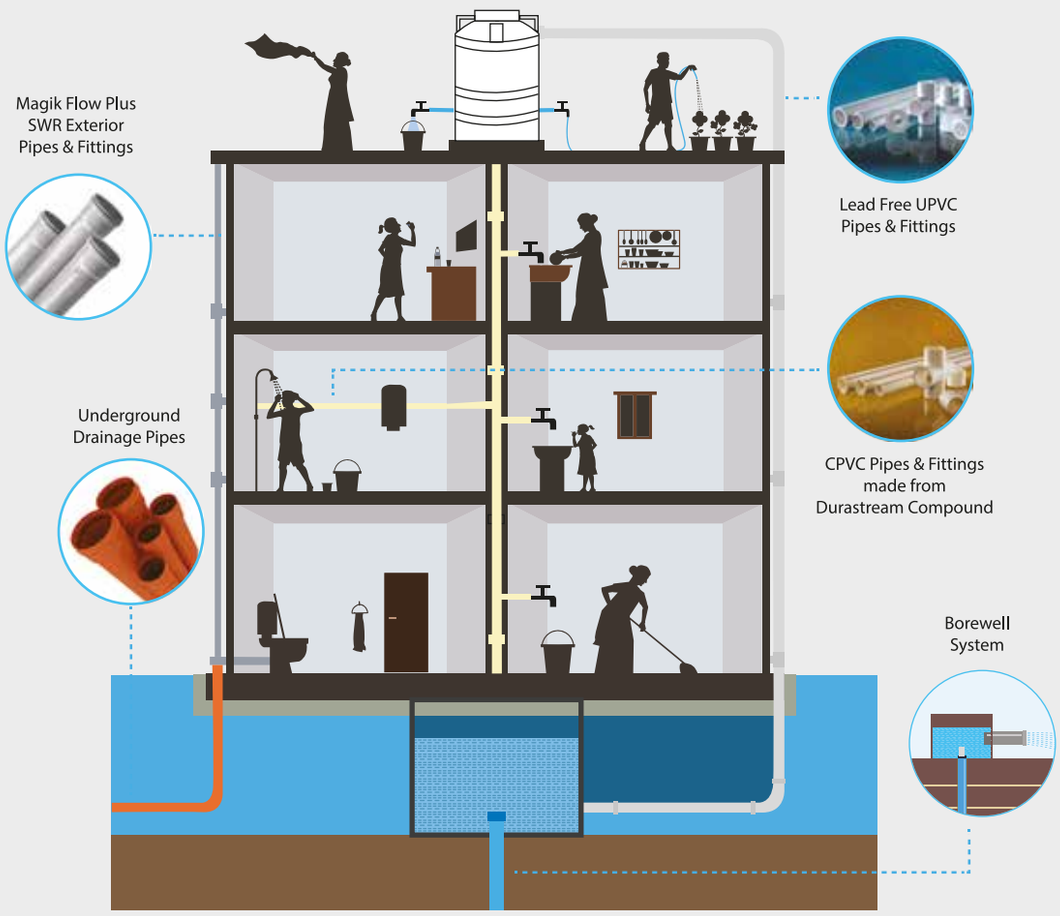


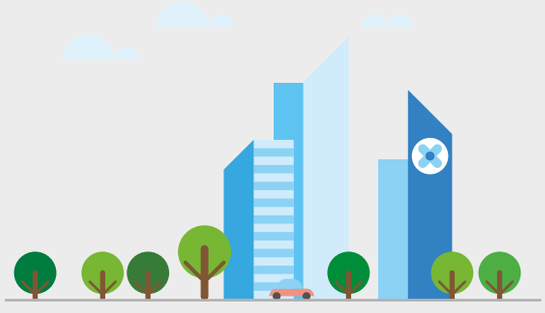

Agriculture Pipes
Column Pipes
Casing Pipes
Ribbed
Strainer
Pipes



SKIPPER
PIPES

Take Water Everywhere





SKIPPER
PIPES

CPVC PIPES & FITTINGS

Durastream™
CPVC COMPOUND



NSF®

THE PERFECTION OF CPVC

Chlorinated Polyvinyl Chloride (CPVC) is a familiar and versatile thermoplastic especially as a piping and fitting material for residential and commercial plumbing applications. Despite being in the same thermoplastic family as PVC.
CPVC exhibits superior resistance to heat and pressure, which enables it to be used for transporting hot & cold water for domestic, commercial, industrial and fire sprinkler applications.

CPVC ADVANTAGE

The salient technical characteristics of Skipper chlorinated polyvinyl chloride (CPVC pipes and fittings) are as follows:

- Retains mechanical strength at a very high temperature (82° C)
- Low thermal expansion
- Reduce heat loss
- No scale build-up due to smooth inner surface
- No effect of corrosions as it is highly resistant to chemicals
- Excellent impact strength
- Very low bacterial growth
- High resistance to fire
- Easy to install and leak free
- Longer life
- Cost effective
- Safe for drinking water

A revolution came in the plumbing sector because of Skipper's tie-up with SEKISUI Chemicals Co. Ltd. from Japan. Skipper pipes uses SEKISUI's universally acclaimed CPVC compound Durastream to manufacture pipes and fittings as per international standards.

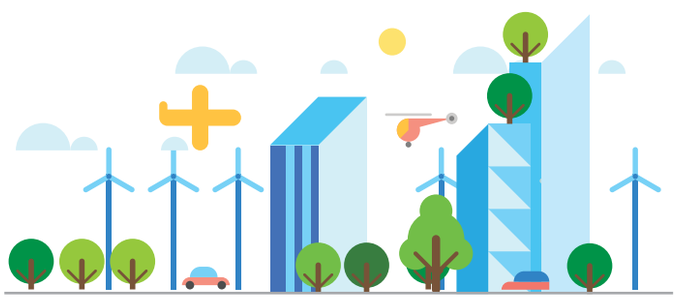
SEKISUI Chemicals Co Ltd. has expertise and experience of over 40 years of manufacturing quality compound with international certification. This partnership ensures development from CPVC coumpound to finished products.



SKIPPER CPVC PIPES & FITTINGS ARE YOUR PERFECT CHOICE

- Skipper Pipes partners with SEKISUI Chemicals Co Ltd. for their universally acclaimed CPVC compound to manufacture pipes and fittings as per International Standard
- CPVC pipes and fittings are manufactured in state-of-the-art manufacturing units strategically located at different parts of India for faster deliveries
- CPVC compound as well Pipes are NSF/ANSI61 & NSF/ANSI14 certified
- State-of-the-art machineries for best in class quality products
- Detailed quality checks are in place to ensure consistent quality of products



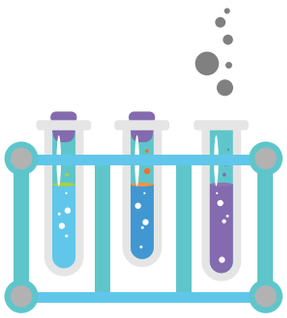


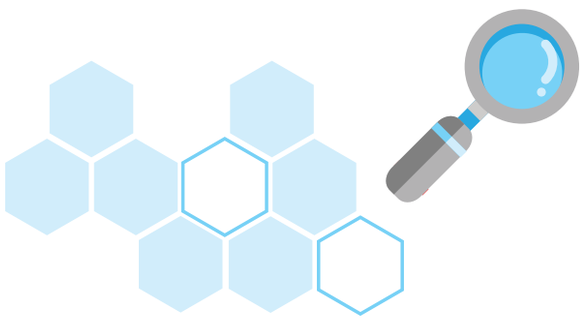
TESTING THE PERFECTION OF CPVC PIPES & FITTINGS

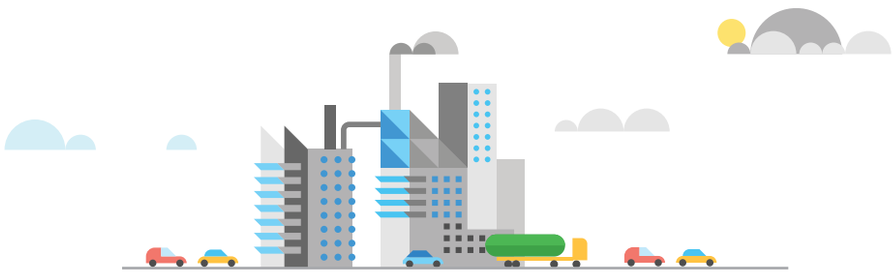
Stringent quality checks and test at various stages from manufacturing to printing and packaging is conducted. Visually and dimensionally passed pipes and fittings are tested in laboratory to ensure finished products of the highest quality.

LABORATORY TESTS

- Flattening test
- Density test
- Hydrostatic sustained pressure test at 82°c
- Resistance to external blows at 0°c
- Reversion test at 150°c
- Vicat softening temperature test
- Opacity test
- Tensile strength test
- Hydrostatic pressure test at 20°c
- Thermal stability by hydrostatic pressure test at 95°c
- Effect on water test
- Malfunction temperature test at 95°c







NSF International is an independent global organisation that certifies products for wood, water, food and consumer goods industries. Compliance with NSF/ANSI standard 14 requirements which indicates higher quality in the plastic industry very few companies in India has NSF/ANSI standard 14 certified products. Skipper is one of them. Let's find out how NSF 14 is better than NSF 61.

TESTS DONE FOR CERTIFICATION	NSF14	NSF61
16,000 HRS PRESSURE TESTING AT 82°C	✓	✗
10,000 HRS PRESSURE TESTING AT 23°C	✓	✗
PHYSICAL PROPERTIES TESTING OF COMPOUND (CELL CLASS)	✓	✗
Dimensions Testing	✓	✗
Workmanship	✓	✗
BURST PRESSURE	✓	✗
IMPACT RESISTANCE	✓	✗
FLATTENING	✓	✗
CRUSH RESISTANCE	✓	✗
STIFFNESS	✓	✗
EXTRUSION QUALITY	✓	✗
TESTS FOR ASTM STANDARD VERIFICATION	✓	✗
HARMFUL CONTAMINANT EXTRACTION TESTING AT 82°C	✓	✓
FREQUENT IN-PLANT QC TESTING	✓	✗
FRNO OF SURPRISE AUDITS/YEAR	3	2



NSF International

789 N. Dixboro Road, Ann Arbor, MI 48105 USA

RECOGNIZES

Skipper Limited

India

AS COMPLYING WITH NSF/ANSI 14 AND ALL APPLICABLE REQUIREMENTS. PRODUCTS APPEARING IN THE NSF OFFICIAL LISTING ARE AUTHORIZED TO BEAR THE NSF MARK.

NSF

ANSI

November 17, 2010

David Purkiss

General Manager, Plumbing



FAQs

IS SKIPPER CPVC COMPOUND UV PROTECTED?

Yes, CPVC compound (supplied by Sekisui Chemical Co. Ltd.) used for manufacturing of pipes and fittings are UV protected. More than 40 years of usage has shown that there are no deterioration in pressure withstanding capacity of CPVC pipes.

HOW TO REPAIR THE PUNCTURES IN THE WALL CHASING/CONCEALED INSTALLATION?

They rarely get ruptured or punctured in concealed installations unless external drilling or chiseling is done. Which should be avoided near the pipelines or the concealed portions. In case of punctures, the cemented portion around the pipe is to be removed and pipe surface to be cleaned and dried. External surface of pipe and internal surface of joining piece is to be scrubbed with emery cloth. Apply solvent cement evenly on both the surfaces. Hold tight for a minute and wipe-out excess cement.

HOW TO PREVENT DAMAGE DUE TO DRILLING OR HAMMERING?

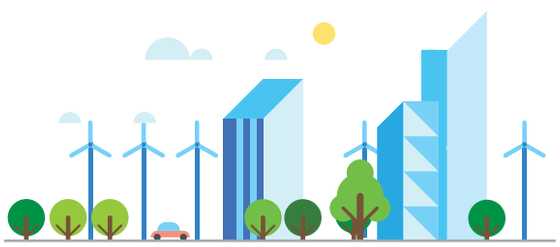
By keeping the basic pipeline laying drawings and by avoiding drilling or chiseling or hammering near the concealed portion.

AT WHAT DISTANCE DO WE NEED TO CLAMP THE PIPES?

1½' to 3' depending on size of pipes.

IS WATER PASSING THROUGH THE ADHESIVE JOINTS SAFE FOR DRINKING?

Yes, CPVC Solvent Cement manufactured as per ASTM-F493 and is intended for use on potable water systems & certified by NSF.



ENSURE FOLLOWING PRECAUTIONS DURING PVC PIPE INSTALLATION

01 Failure to compensate for expansion and contraction caused by temperature change may result in system failure and property damage

02 Do not restrict expansion or contraction. Restraining movement in piping systems is not recommended and may result in joint or fitting failure

03 Use straps or clamps that allow for piping system movement

04 Align all piping system components properly without strain. Do not bend or pull pipe into position after being solvent welded

05 Do not terminate a pipe run against a stationary object (example: wall or floor joints)

06 Do not install fittings under stress



CPVC: SOLVENT CEMENT

Skipper CPVC Solvent Cement is a yellow medium bodied to be used with CPVC PIPES & FITTINGS. It is suitable for CPVC pipes & fittings up to 2" Dia interference fit for hot & cold water up to 82°C (180°F). It is made as per ASTM F- 493 & D- 2846 standard. Approved by NSF & meets the requirements for Low VOC (Volatile organic compound).

DIRECTION FOR USE:

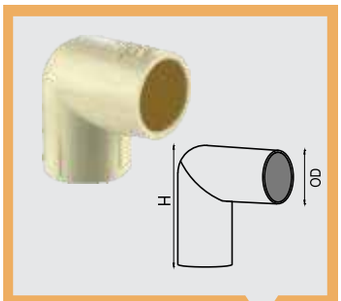
1. Shake can well before use
2. Cut pipe square with hand saw or pipe cutter and remove burrs inside and out. Check dry fit of pipe and fittings
3. Clean pipe ends and inside the fitting area with a dry cloth
4. Pipe should enter in the fitting at least 1/3 of the way without having to apply force. Apply an adequate coat of cement in the fitting socket and at the end of the pipe using brush supplied with the can
5. Immediately insert pipe into the fitting socket with a slight twisting motion until it reaches to the bottom of the fitting socket
6. Hold joint together for 30 seconds, ensuring pipe is not pushed out
7. Wipe off excess cement from joint

SAFETY PRECAUTIONS

- Use only in a well-ventilated area.
- Avoid contact with skin and eyes, in case of eyes and skin contact, splash and wash the area with plenty of water. If irritation persists, get medical assistance.
- Do not use or store near heat, spark and flame
- Use gloves and safety glasses. Store and use at temperature below 40°C
- Keep container closed when not in use

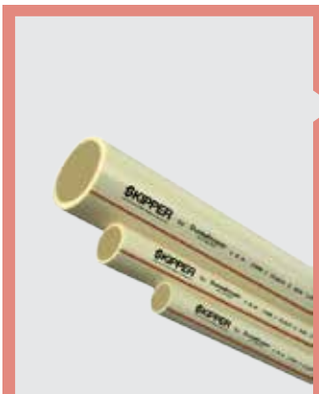


CPVC PIPES & FITTINGS



(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50
2½″	65
3″	80
4″	100

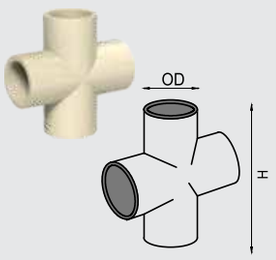
ELBOW 90°



SDR 13.5 & SDR 11

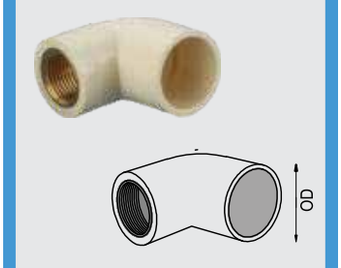
(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

CPVC PIPES



(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

CROSS TEE



(INCH)	(MM)
¾″x½″	20x15
1″x½″	25x15
1″x¾″	25x20
1¼″x½″	32x15
1¼″x¾″	32x20
1¼″x1″	32x25

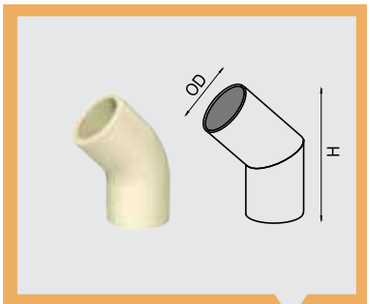
BRASS REDUCER ELBOW 90°

CPVC PIPES & FITTINGS



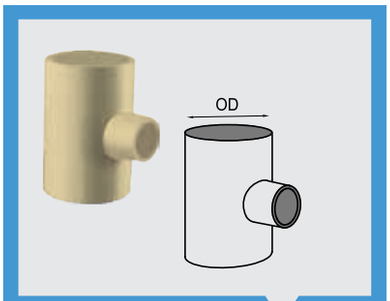
(INCH)	(MM)	
2½″	65	SCH 40
3″	80	SCH 80
4″	100	
6″	150	

CPVC PIPES



(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50
2½″	65
3″	80
4″	100

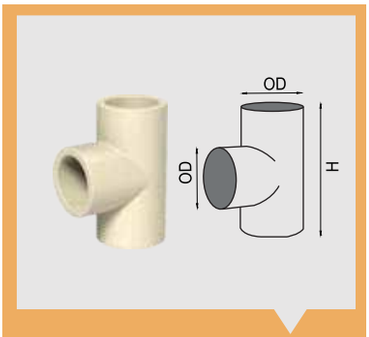
ELBOW 45°



(INCH)	(MM)
½″x½″x¾″	15x15x20
¾″x½″x½″	20x15x15
¾″x½″x¾″	20x15x20
¾″x¾″x½″	20x20x15
1″x1″x½″	25x25x15
1″x1″x¾″	25x25x20
1¼″x1¼″x½″	32x32x15
1¼″x1¼″x¾″	32x32x20
1¼″x1¼″x1″	32x32x25
1½″x1½″x½″	40x40x15
1½″x1½″x¾″	40x40x20
1½″x1½″x1″	40x40x25
1½″x1½″x1¼″	40x40x32
2″x2″x½″	50x50x15
2″x2″x¾″	50x50x20
2″x2″x1″	50x50x25
2″x2″x1¼″	50x50x32
2″x2″x1½″	50x50x40

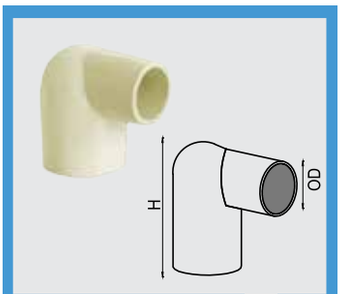
REDUCER TEE

CPVC PIPES & FITTINGS



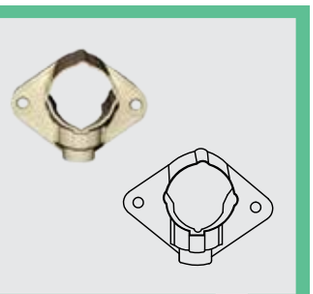
(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50
2½″	65
3″	80
4″	100

TEE



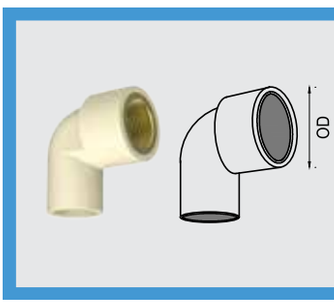
(INCH)	(MM)
¾″x½″	20x15
1″x½″	25x15
1″x¾″	25x20

REDUCER ELBOW 90°



(INCH)	(MM)
½″x½″	15x15
¾″x½″	20x15

ELBOW HOLDER

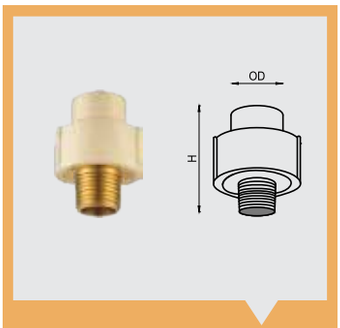


(INCH)	(MM)
½"	15
¾"	20
1"	25

BRASS ELBOW 90°

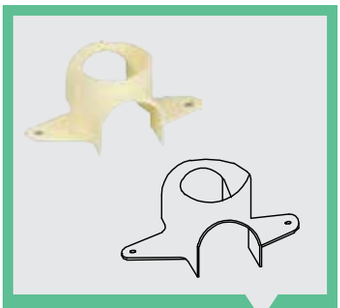


CPVC PIPES & FITTINGS



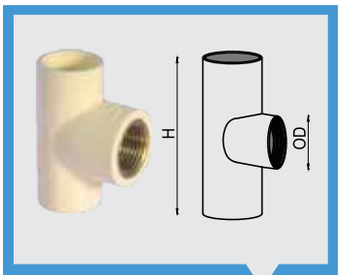
(INCH)	(MM)
¾"x½"	20x15
1"x½"	25x15
1"x¾"	25x20

BRASS REDUCER MALE THREAD ADAPTER (MTA)



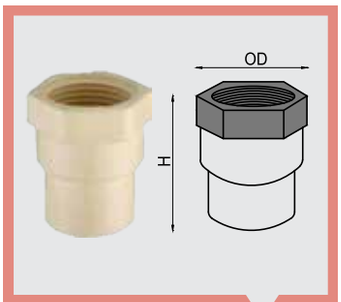
(INCH)	(MM)
½"x½"x½"	15x15x15
¾"x¾"x½"	20x20x15
1"x1"x½"	25x25x15

TEE HOLDER



(INCH)	(MM)
½"	15
¾"	20

BRASS TEE



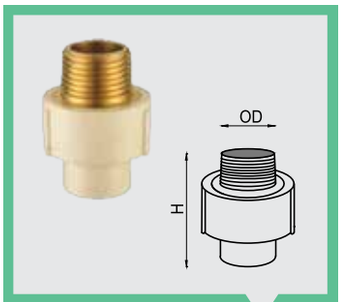
(INCH)	(MM)	
½"	15	SCH 80
¾"	20	
1"	25	
1¼"	32	
1½"	40	
2"	50	
2½"	65	
3"	80	
4"	100	

FEMALE THREAD ADAPTER (FTA)



(INCH)	(MM)
¾"x¾"x½"	20x20x15
1"x1"x½"	25x25x15
1"x1"x¾"	25x25x20
1¼"x1¼"x½"	32x32x15

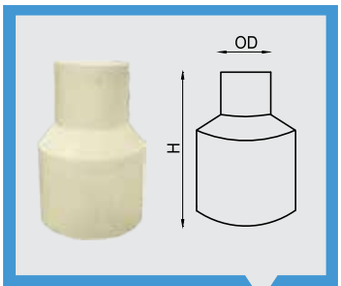
BRASS REDUCER TEE



(INCH)	(MM)
½"	15
¾"	20
1"	25
1¼"	32
1½"	40
2"	50

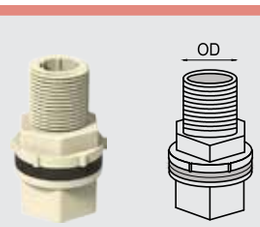
BRASS MALE THREAD ADAPTER (MTA)

CPVC PIPES & FITTINGS



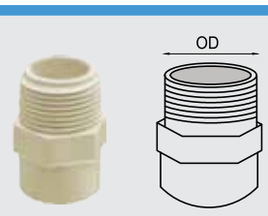
(INCH)	(MM)
¾"x½"	20x15
1"x½"	25x15
1"x¾"	25x20
1¼"x½"	32x15
1¼"x¾"	32x20
1¼"x1"	32x25
1½"x½"	40x15
1½"x¾"	40x20
1½"x1"	40x25
1½"x1¼"	40x32
2"x½"	50x15
2"x¾"	50x20
2"x1"	50x25
2"x1¼"	50x32
2"x1½"	50x40
2½"x1½"	65x40
2½"x2"	65x50
3"x2"	80x50
4"x2½"	100x65
4"x3"	100x80

REDUCER COUPLER



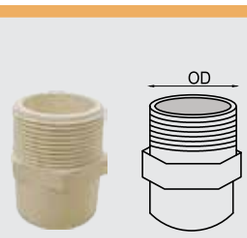
(INCH)	(MM)
¾"	20
1"	25

TANK NIPPLE WITH ONE SIDE FITMENT



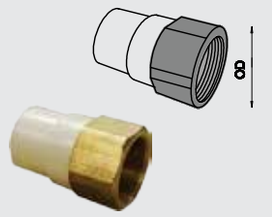
(INCH)	(MM)
¾"x½"	20x15
1"x¾"	25x20

MALE THREAD ADAPTER REDUCER (MTA)



(INCH)	(MM)	
½"	15	SCH 80
¾"	20	
1"	25	
1¼"	32	
1½"	40	
2"	50	
2½"	65	
3"	80	
4"	100	

MALE THREAD ADAPTER (MTA)

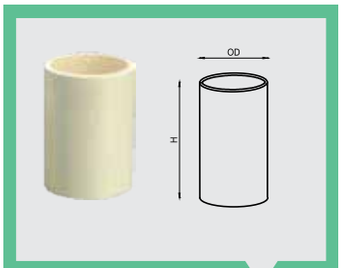


(INCH)	(MM)
½"	15
¾"	20
1"	25
1¼"	32
1½"	40
2"	50

BRASS FEMALE THREAD ADAPTER (FTA)

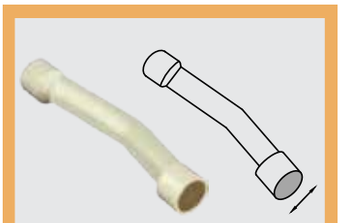


CPVC PIPES & FITTINGS



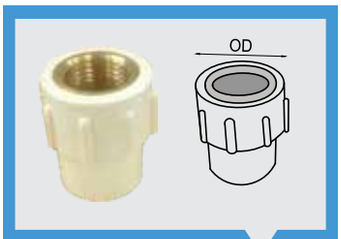
(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

COUPLER



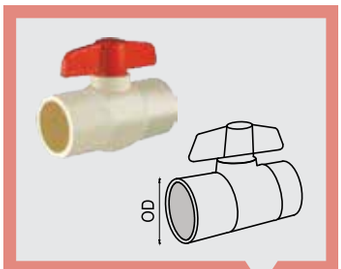
(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

STEP OVER BEND



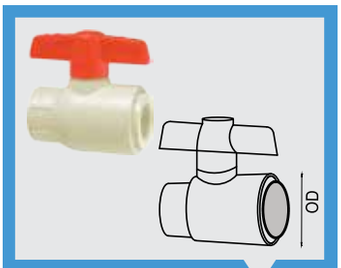
(INCH)	(MM)
¾″x½″	20x15
1″x½″	25x15
1″x¾″	25x20

BRAS REDUCER FEMALE THREAD ADAPTER (FTA)



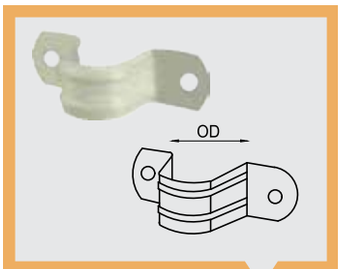
(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

COMPACT BALL VALVE



(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

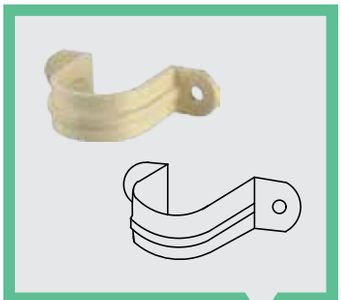
SINGLE UNION BALL VALVE



(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

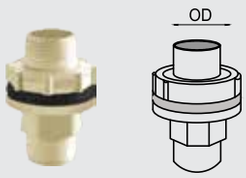
POWDER COATED METAL CLAMP

CPVC PIPES & FITTINGS



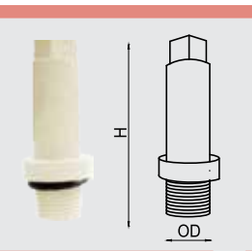
(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

PLASTIC CLAMP



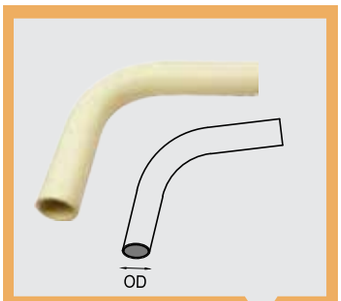
(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

TANK NIPPLE



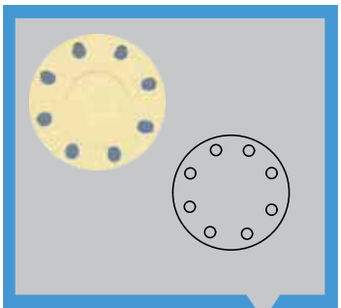
(INCH)	(MM)
½″	15
¾″	20

THREADED END PLUG



(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

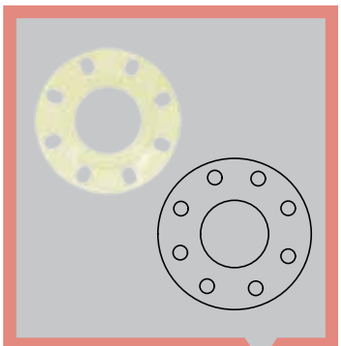
SHORT BEND



(INCH)	(MM)
1″	25
1¼″	32
1½″	40
2″	50

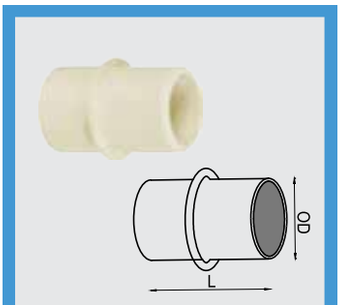
FLANGE END CAP CLOSED

CPVC PIPES & FITTINGS



(INCH)	(MM)
1″	25
1¼″	32
1½″	40
2″	50

FLANGE END CAP OPEN



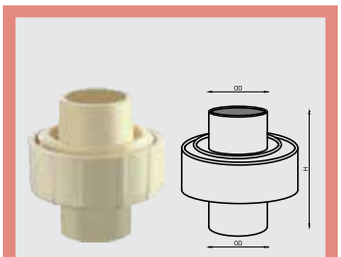
(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

CONVERTER BUSHING (IPS TO CTS)



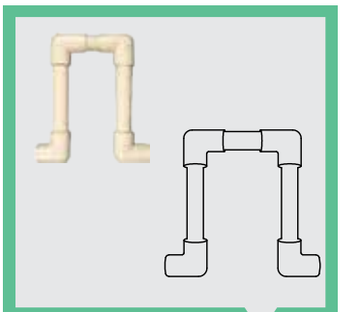
(INCH)	(MM)
1″	25

SWEEP BEND SOCKET AT BOTH SIDES



(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

UNION



(INCH)	
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

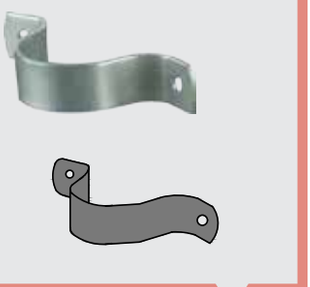
EXPANSION LOOP

CPVC PIPES & FITTINGS



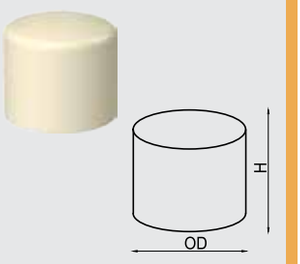
59ml
118ml
237ml
473ml
976ml

SOLVENT CEMENT



(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

SS CLAMP



(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

END CAP



(INCH)	(MM)	
½″	15	SCH 80
¾″	20	
1″	25	
1¼″	32	
1½″	40	
2″	50	
2½″	65	
3″	80	
4″	100	
¾″x½″	20x15	
1″x½″	25x15	
1″x¾″	25x20	
1¼″x½″	32x15	
1¼″x¾″	32x20	
1¼″x1″	32x25	
1½″x½″	40x15	
1½″x¾″	40x20	
1½″x1″	40x25	
1½″x1¼″	40x32	
2″x½″	50x15	
2″x¾″	50x20	
2″x1″	50x25	
2″x1¼″	50x32	
2″x1½″	50x40	
2½″x2″	65x50	
3″x1½″	80x40	
3″x2″	80x50	
3″x2½″	80x65	
4″x2″	100x50	
4″x3″	100x80	

REDUCER BUSHING

PROJECTS WHERE PLUMBING PRODUCTS ARE USED

Skipper Pipes has been a pioneer in supplying the best in class pipes and fittings to the leading companies of India. Starting from the real estate giants to the infrastructural companies, the quality of Skipper Pipes has been well appreciated. Our prestigious clientele includes Larsen & Tubro Metro Rail Project at Hyderabad, Omcon Infrastructure Pvt Ltd, Vijaynirman, Ambuja Neotia, Bengal Srishti, Emami Realty, Dropadi Construction, Lipi Infra Projects, Siddha Developers, Ideal Group... Apart from making homes and offices effectively hospitable, Skipper Pipes is also inclined towards the overall infrastructural development of India.











SKIPPER
PIPES

UPVC PIPES & FITTINGS



THE PERFECTION OF UPVC PIPES & FITTINGS

SKIPPER UPVC (Unplasticized polyvinyl chloride) pipe is one of the world's most sustainable products, making it ideal for long-term use in potable water supply scheme. It requires less energy and fewer resources to manufacture when compared to old-technology material. UPVC production creates virtually no waste.

SKIPPER UPVC PIPES & FITTINGS ARE YOUR PERFECT CHOICE

The salient technical characteristics of SKIPPER UPVC PIPES & FITTINGS are as follows

- Economical and Easy Installation
- Anti-Contamination
- Thermoplastic Material
- Anti-Fungal, Anti-Algae
- Fire Resistance
- Ultimate Endurance and Excellent Replacement to GI pipes
- Completely Recyclable and Maintenance Free
- 100% Lead free Hence Completely Hygienic
- Non Corrosive and No Scaling Or Deposition Due to Smooth Surface
- Excellent Tensile and Impact Strength
- Longer Service Life and Economical
- Leak Proof Joints Welded by Solvent Cement
- UV Stabilized Hence Ideal for Outdoor Application



UPVC PIPES AND FITTINGS SPECIFICATIONS

- SKIPPER UPVC PIPES ARE MANUFACTURED AS PER ASTM D 1785
- THE COMPLETE RANGE OF FITTINGS ARE AVAILABLE IN SCH 80 AND ASTM D-2467
- PIPES ARE OF 3MTR/6MTR LONG AND ARE AVAILABLE IN BOTH SCH 40 AND SCH 80 PRESSURE CLASS

THE PERKS OF SKIPPER UPVC PIPES & FITTINGS

DENSITY

SKIPPER UPVC Pipes & Fittings have a density of approximately 1.4g/cm3. As such it is less than 1/6th the weight of cast iron and steel, making it much cheaper to transport and easier to handle during installation.

MECHANICAL STRENGTH

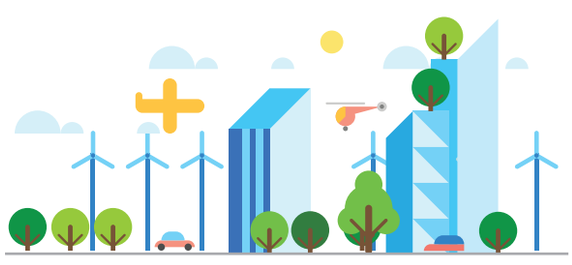
The high inherent mechanical strength of SKIPPER UPVC pipes makes them suitable even in varying conditions with high impact strength. SKIPPER UPVC pipes are hard and rigid with an ultimate tensile stress of approximately 52 MPa at 20°C and is resistant to most chemicals.

ELECTRICAL RESISTANCE

SKIPPER UPVC pipes have a resistance of greater than '10^{14} ohm and has good insulating properties.

LOW THERMAL CONDUCTIVITY

SKIPPER UPVC Pipes & Fittings have a thermal conductivity of 0.13 W / m°c, which is only a fraction of the thermal conductivity of steel. This enables fluids to be transported through SKIPPER UPVC pipes, maintain a uniform fluid temperature. Conductivity factor also ensures that there is no external 'sweating' of the pipes when fluids are at a low temperature or are passing through them.



HYGIENIC

SKIPPER UPVC pipes offer one of the most hygienic means of fluid transportation. They are resistant to attack by fungi and algae and are not subject to contamination. The inside surface, which is extremely smooth, does not support any bacterial growth, encrustation or fuming and no odour or taste is transmitted to the fluid being conveyed. This property is of prime importance for the transportation of potable water to towns and villages.

HYDRAULIC RESISTANCE AND FLOW CHARACTERISTICS

SKIPPER UPVC pipes, due to their smooth inner surface, allow a greater flow of water than an identical size of conventional pipe.

CHEMICAL RESISTANCE

SKIPPER UPVC pipes are unaffected by the most concentrated acids, alkalis, organic chemicals, oils and fats. This resistance to corrosion by most chemicals makes SKIPPER UPVC pipes indispensable for contemporary applications in various industrial and residential sector.

FLEXIBILITY

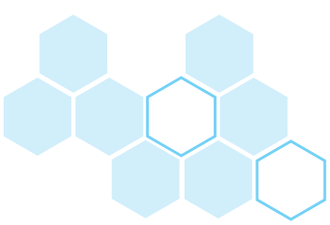
Made of thermoplastic material, SKIPPER UPVC pipes and fittings are better able to withstand deformation in shape due to movements. SKIPPER UPVC pipes, in this respect, are considerably more popular than asbestos cement pipes, which can collapse under stress levels which are well within the limits of SKIPPER UPVC pipes.

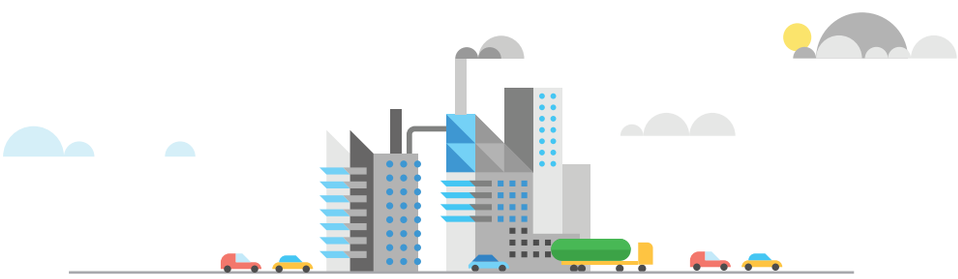
GALVANIC & ELECTROLYTIC IMMUNITY

Unlike metal pipes which need special surface coating to resist electrolytic action, SKIPPER UPVC pipes being a non-conductor of electricity, are totally immune to galvanic and electrolytic attack.

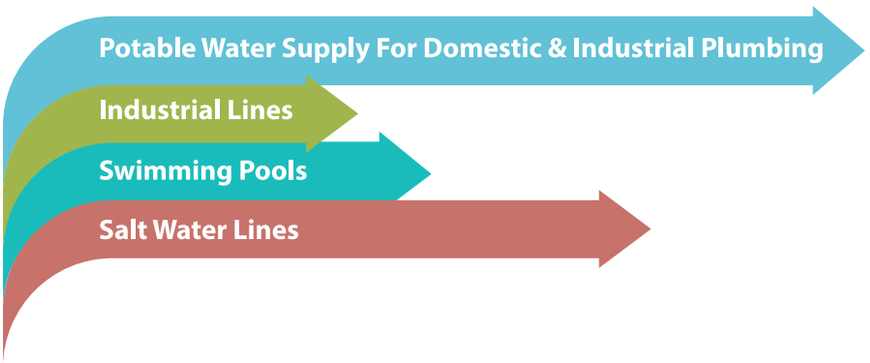
FIRE RESISTANCE

SKIPPER UPVC pipes and fittings have proved time and again that they are self-extinguishing and do not support combustion. They are, therefore, ideally suited for use in buildings and other constructions.



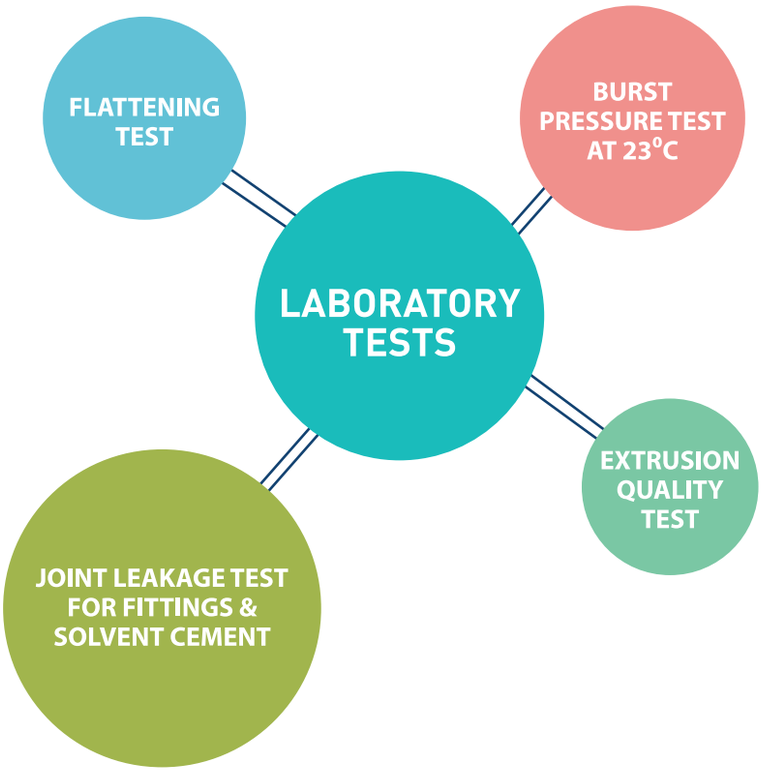


APPLICATION OF SKIPPER UPVC PIPES AND FITTINGS



TESTING THE PERFECTION OF UPVC PIPES AND FITTINGS

Stringent quality inspections at various stages are conducted to ensure quality manufacturing, workmanship, finish, visual appearance, dimensions, printing and packaging. Visually and dimensionally passed pipes are tested in laboratory for all operational conditions.





FAQS

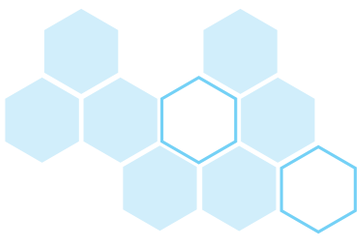
WHAT IS LEAD FREE?

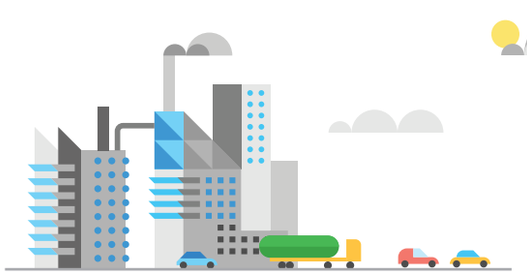
Lead free means the pipes do not contain lead. Lead is a toxic element. Lead free pipes are hence 100% hygienic for transportation of drinking water.

WHY U.V.RESISTANT?

Due to Ultra-Violet Rays from the Sun, pipes decolourises and degrades fast. In order to protect from UV radiation, PVC is compounded with UV resistant chemicals. Hence discolouration & degradation of material is avoided and the pipes remain unaffected in prolonged use in outdoor applications.







UPVC: SOLVENT CEMENT

This solvent cement is approved for use on hot and cold water pressure system.
It can be used without a primer where ever the local code permits. It may also be used for non-pressure applications such as waste, drain, vent gas, sewer conduit etc.

PLEASE FOLLOW THE INSTRUCTIONS ON THE LABEL OF THE CAN

Application temperature: 32˚F to 110˚F

Storage temperature: 45˚F to 110˚F

PHYSICAL PROPERTIES

Colour: Natural/Colourless

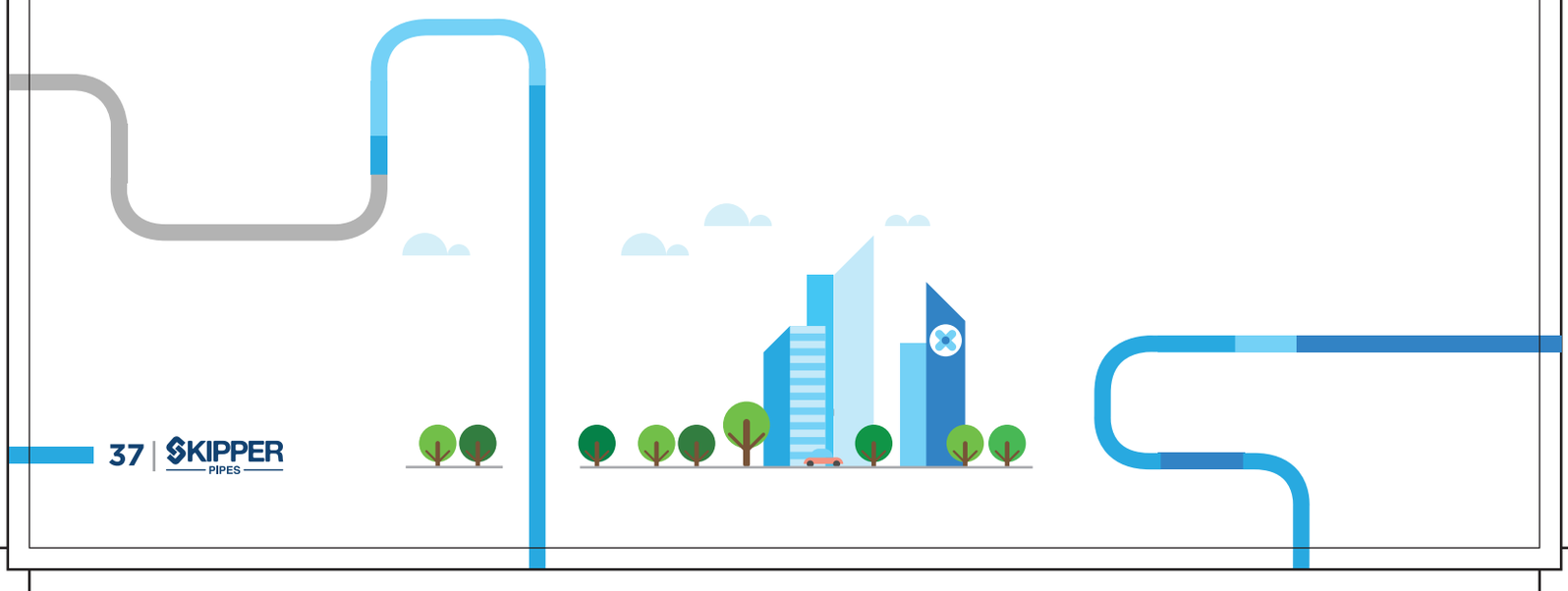
Body: Medium

Set: Fast

Shelf Life: 3 years for unopened can

QUALITY ASSURANCE

Every batch of solvent cement can is carefully checked and monitored to endure high quality standards. Records and samples of each and every batch of solvent cement are kept for at least one year. The tests are performed in accordance with IS 14182
Hydrostatic Burst Strength
400 PSI after 2 hour cure time at 73˚ F PSI
200 PSI after 2 hours cure time at 180˚ F



DIRECTION FOR USE

1. Shake the can well before use
2. Clean the ends of pipe and inside the fitting area with a dry cloth
3. Cut pipe square with hand saw or pipe cutter and remove residue inside and out
4. Check dry fit of pipe and fittings
5. Pipe should enter in the fitting at least 1/3 of the way without having to apply force. Apply an adequate coat of cement in the fitting socket and at the end of the pipe using brush supplied with can
6. Immediately insert pipe into the fitting socket with a slight twisting motion until it reaches to the bottom of the fitting socket
7. Hold joint together for 30 seconds, ensuring pipe is not pushed out
8. Wipe off excess cement from joint

SAFETY PRECAUTIONS

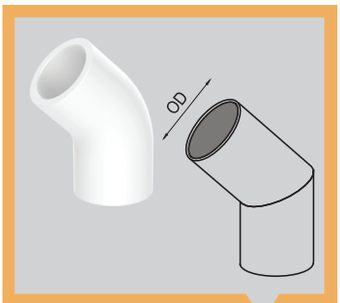
01. Use only in a well-ventilated area
02. Avoid contact with skin and eyes, in case of eyes and skin contact, splash and wash the area with plenty of water. If irritation persists, get medical assistance.
03. Do not use or store near heat, spark and flame
04. Use gloves and safety glasses. Store and use at temperature below 40°C
05. Keep container closed when not in use
06. Do not use the solvent cement if it is stingy or jelly like
07. Read the instructions on the can carefully before using

UPVC PIPES & FITTINGS



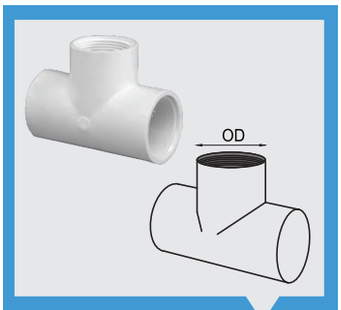
(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50
2½″	65
3″	80
4″	100
6″	150

SCH 40-SCH 80



(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50
2½″	65
3″	80
4″	100
6″	150

ELBOW 45°



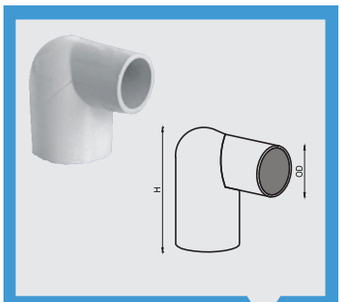
(INCH)	(MM)
½″	15
¾″	20
1″	25

TEE THREADED



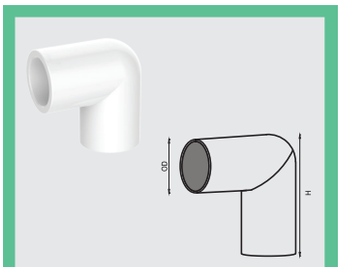
(INCH)	(MM)
½″	15
¾″	20
1″	25

BRASS ELBOW 90° WITH SS RING



(INCH)	(MM)
¾″x½″	20x15
1″x½″	25x15
1″x¾″	25x20

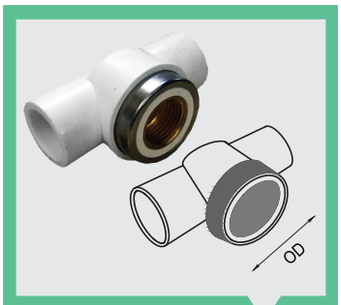
ELBOW 90° REDUCER



(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50
2½″	65
3″	80
4″	100
6″	150

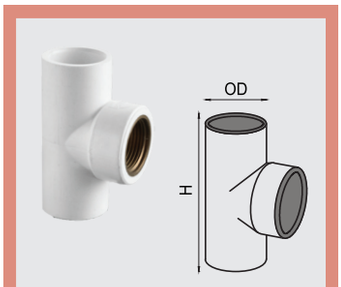
ELBOW 90°

UPVC PIPES & FITTINGS



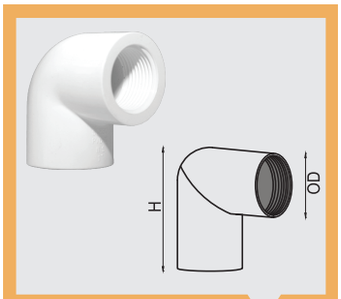
(INCH)	(MM)
½″	15
¾″	20

BRASS TEE WITH SS RING



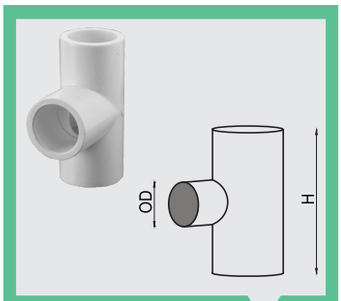
(INCH)	(MM)
½″	15
¾″	20

BRASS TEE



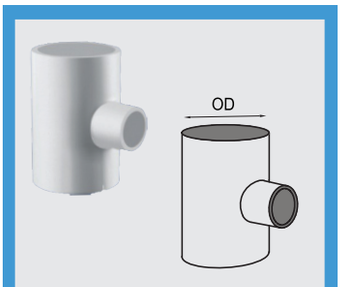
(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

ELBOW 90° THREADED



(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50
2½″	65
3″	80
4″	100
6″	150

TEE



(INCH)	
½″x½″x¾″	15x15x20
¾″x¾″x½″	20x20x15
1″x1″x½″	25x25x15
1″x1″x¾″	25x25x20
1¼″x1¼″x½″	32x32x15
1¼″x1¼″x¾″	32x32x20
1¼″x1¼″x1″	32x32x25
1½″x1½″x½″	40x40x15
1½″x1½″x¾″	40x40x20
1½″x1½″x1″	40x40x25
1½″x1½″x1¼″	40x40x32
2″x2″x½″	50x50x15
2″x2″x¾″	50x50x20
2″x2″x1″	50x50x25
2″x2″x1¼″	50x50x32
2″x2″x1½″	50x50x40
2½″x1½″	65x40
2½″x2″	65x50
3″x2″	80x50
3″x2½″	80x65
4″x2½″	100x65
4″x3″	100x80
6″x3″	150x80
6″x4″	150x100

REDUCER TEE

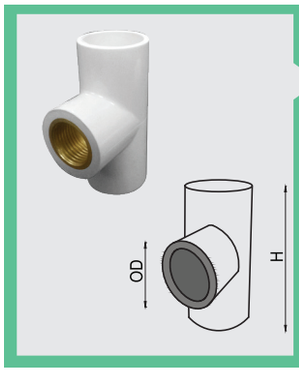


UPVC PIPES & FITTINGS



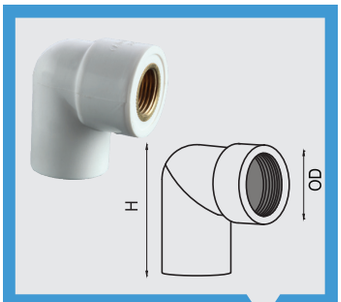
(INCH)	(MM)
¾"x¾"x½"	20x20x15
1"x1"x½"	25x25x15
1"x1"x¾"	25x25x20

BRASS REDUCER TEE WITH SS RING



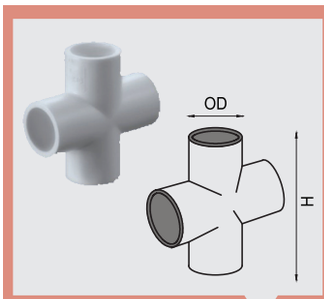
(INCH)	(MM)
¾"x¾"x½"	20x20x15
1"x1"x½"	25x25x15
1"x1"x¾"	25x25x20

BRASS REDUCER TEE



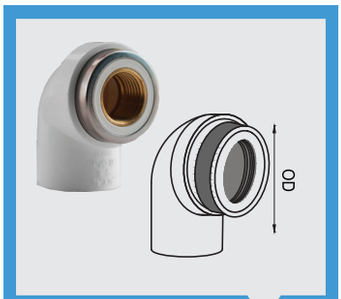
(INCH)	(MM)
½"	15
¾"	20
1"	25

BRASS ELBOW 90°



(INCH)	(MM)
½"	15
¾"	20
1"	25

CROSS TEE



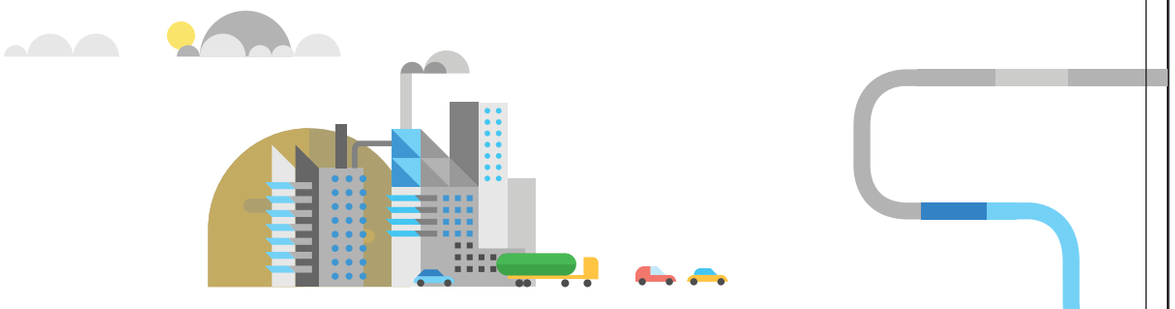
(INCH)	(MM)
¾"x½"	20x15
1"x½"	25x15
1"x¾"	25x20

BRASS REDUCER ELBOW 90° WITH SS RING



(INCH)	(MM)
¾"x½"	20x15
1"x½"	25x15
1"x¾"	25x20

BRASS REDUCER ELBOW 90°



UPVC PIPES & FITTINGS



(INCH)	(MM)
½"	15
¾"	20
1"	25
1¼"	32
1½"	40
2"	50
2½"	65
3"	80
4"	100

MALE THREAD ADAPTER (MTA)



(INCH)	(MM)
½"	15
¾"	20
1"	25
1¼"	32
1½"	40
2"	50
2½"	65
3"	80
4"	100
6"	150

COUPLER



(INCH)	(MM)
¾"x½"	20x15
1"x½"	25x15
1"x¾"	25x20
1¼"x½"	32x15
1¼"x¾"	32x20
1¼"x1"	32x25
1½"x½"	40x15
1½"x¾"	40x20
1½"x1"	40x25
1½"x1¼"	40x32
2"x½"	50x15
2"x¾"	50x20
2"x1"	50x25
2"x1¼"	50x32
2"x1½"	50x40
2½"x1½"	65x40
2½"x2"	65x50
3"x2"	80x50
3"x2½"	80x65
4"x2½"	100x65
4"x3"	100x80
6"x4"	150x100

REDUCER COUPLER



UPVC PIPES & FITTINGS



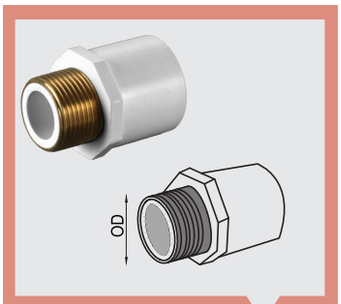
(INCH)	(MM)
¾"x½"	20x15
1"x½"	25x15

BRASS REDUCER FEMALE THREAD ADAPTER (FTA)



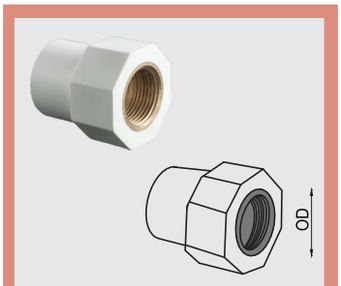
(INCH)	(MM)
¾"x½"	20x15
1"x½"	25x15

BRASS REDUCER FEMALE THREAD ADAPTER (FTA) WITH SS RING



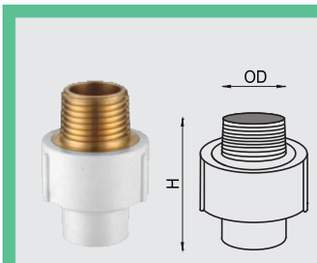
(INCH)	(MM)
¾"x½"	20x15

BRASS REDUCER MALE THREAD ADAPTER (MTA)



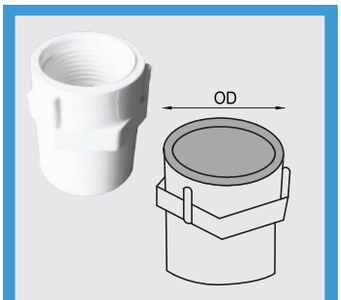
(INCH)	(MM)
½"	15
¾"	20
1"	25
1¼"	32
1½"	40
2"	50

BRASS FEMALE THREAD ADAPTER (FTA)



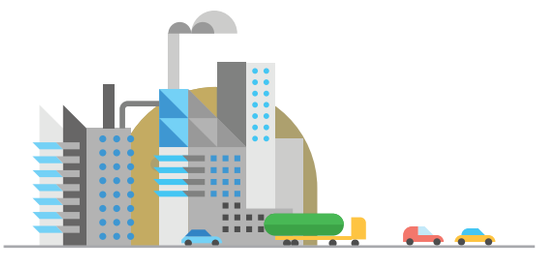
(INCH)	(MM)
½"	15
¾"	20
1"	25
1¼"	32
1½"	40
2"	50

BRASS MALE THREAD ADAPTER (MTA)

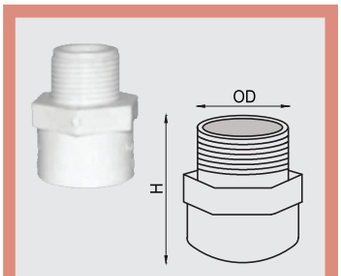


(INCH)	(MM)
½"	15
¾"	20
1"	25
1¼"	32
1½"	40
2"	50
2½"	65
3"	80
4"	100

FEMALE THREAD ADAPTER (FTA)

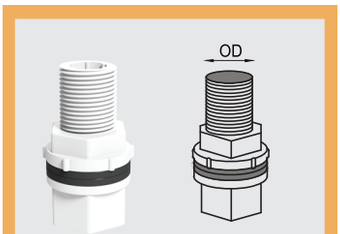


UPVC PIPES & FITTINGS



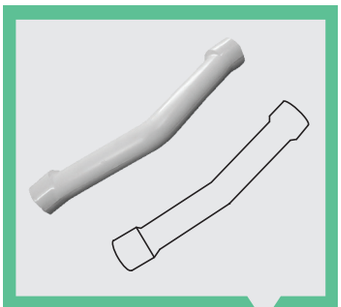
(INCH)	(MM)
¾″	20x15

REDUCER MALE THREAD ADAPTER (MTA)



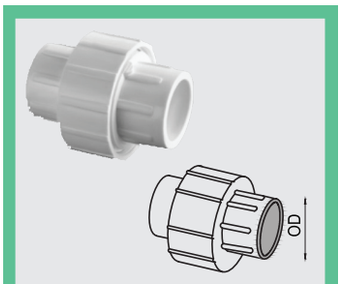
(INCH)	(MM)
¾″	20
1″	25

TANK NIPPLE WITH ONE SIDE FITMENT



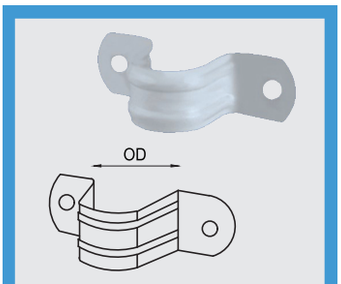
(INCH)	(MM)
½″	15
¾″	20
1″	25

STEP OVER BEND



(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

UNION



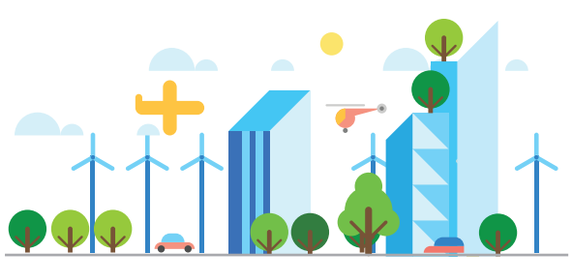
(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

POWDER COATED METAL CLAMP

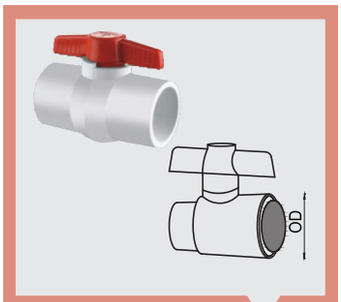


(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

BRASS FEMALE THREAD ADAPTER (FTA) WITH SS RING

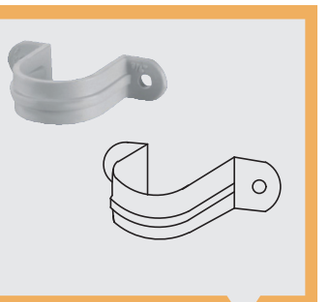


UPVC PIPES & FITTINGS



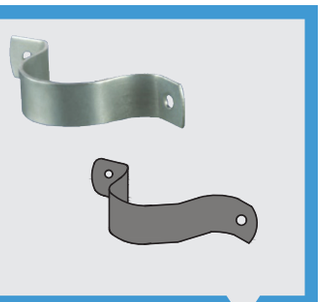
(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

COMPACT BALL VALVE



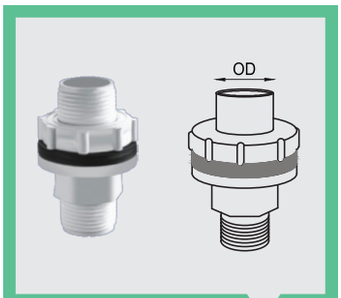
(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

PLASTIC CLAMP



(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

SS CLAMP



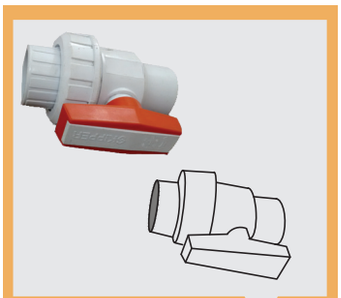
(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

TANK NIPPLE



(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

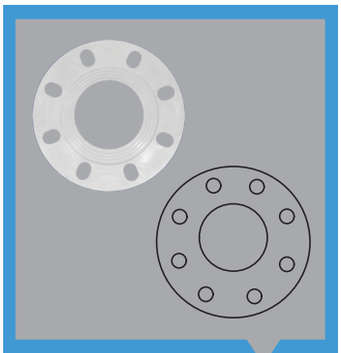
WELDING CLAMP



(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

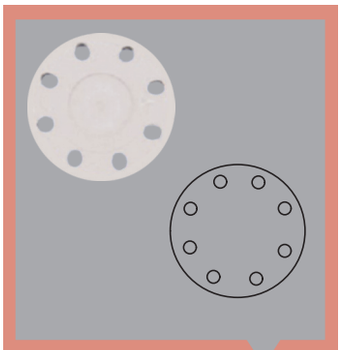
SINGLE UNION BALL VALVE

UPVC PIPES & FITTINGS



(INCH)	(MM)
1″	25
1¼″	32
1½″	40
2″	50

FLANGE END CAP OPEN



(INCH)	(MM)
1″	25
1¼″	32
1½″	40
2″	50

FLANGE END CAP CLOSED

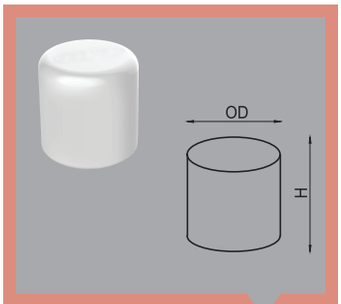


(INCH)	(MM)
¾″x½″	20x15
1″x½″	25x15
1″x¾″	25x20
1¼″x½″	32x15
1¼″x¾″	32x20
1¼″x1″	32x25
1½″x½″	40x15
1½″x¾″	40x20
1½″x1″	40x25
1½″x1¼″	40x32
2″x½″	50x15
2″x¾″	50x20
2″x1″	50x25
2″x1¼″	50x32
2″x1½″	50x40
2½″x2″	65x50
3″x1½″	80x40
3″x2″	80x50
3″x2½″	80x65
4″x2″	100x50
4″x3″	100x80
5″x4″	125x100
6″x3″	150x80
6″x4″	150x100
6″xv5″	150x125

REDUCER BUSHING

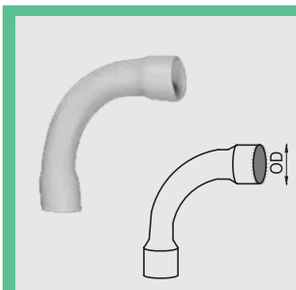


UPVC PIPES & FITTINGS



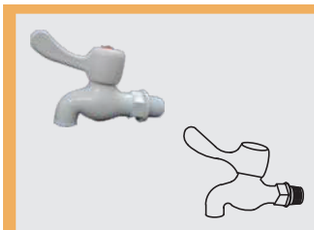
(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50
2½″	65
3″	80
4″	100
6″	150

END CAP



(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50

SHORT BEND



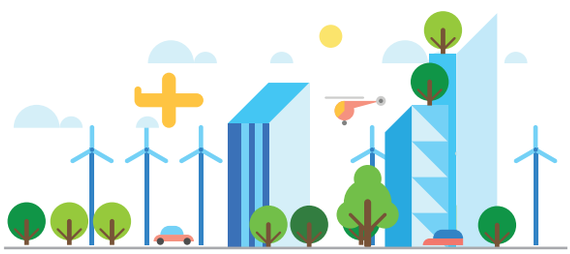
(INCH)	(MM)
½″	15

FAUCET



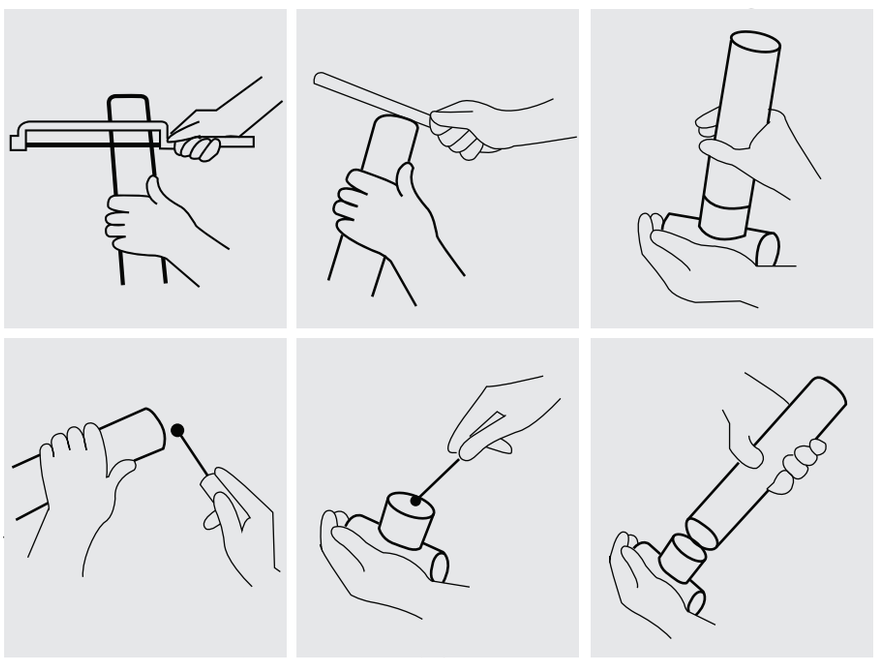
118ml
237ml
473ml
946ml

SOLVENT CEMENT



INSTRUCTIONS FOR INSTALLING SKIPPER UPVC PIPE

Skipper UPVC lead free Pipes and Fittings are light weight, making them easy to use while reducing transportation and installation costs. The jointing if these pipes are fairly simple because it requires no special tools for cutting. A one-stop solvent cement is all that is required to provide a 100% leak proof joint.
If it is necessary to cut the pipe, then it should be done with a fine toothed handsaw.



Easy and 100% leak proof installation



SKIPPER
PIPES

SWR PIPES & FITTINGS



THE PERFECTION OF SWR-PIPES & FITTINGS

Skipper offers complete range of Ring-fit and Push-fit Soil, Waste discharge system including ventilation and Rain Water Systems with a smooth finish that allows free flow ensuring better performance for usage in both inside and outside buildings. Skipper Magik flowplus SWR Pipes and Fittings are highly recommended for residential/ office/ hotel and commercial use. They are also used in drainage systems at public places such as stations, airports, hospitals and theatres.

MAGIK FLOW PLUS PIPES

Skipper brings the perfect economical variety of SWR pipes and fittings which conforms to IS:13592 and fittings IS:14735. It comes with an advanced ring fit technology for better performance which ensures smoother flow. It is manufactured with an advanced moulding technology which prevents leakage and survives high pressure flow. The blue composite rubber ring holds the channel together and thwarts it from slipping out during installation. There is no need of applying solvent cement which makes this the perfect economical option.

Skipper introduces blue composite ring which has an advanced co-moulding technology which is at par with International Quality Standards. It consists of a plastic reinforced rubber ring which provides 100% leak proof joint and adequate scope for thermal expansion and contraction. It enables the joint to withstand high pressure flow rates. Since the joint does not involve solvent cementing, it can be re-opened to adjust and realign. The coefficient of linear expansion for Skipper Magik flow plus SWR pipes is 0.06mm/m/°C. As a result a 3mm pipe will increase in length by approximately 3.6 mm when subjected to a 20°C temperature variation.

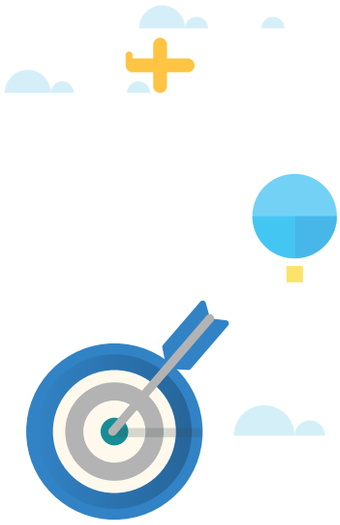
The ring seal joints are installed to accommodate any expansion that may occur due to increase in ambient temperature or during hot water discharges. The blue composite ring enables this movement in the joint and prevents breakages in the long run with utmost ease.

Skipper SWR Pipes are manufactured with two different classes as TYPE-A & TYPE-B. Type A pipes are recommended for usage in ventilation and rain water application while TYPE-B pipes are recommended for soil and waste discharge applications.



MAGIK FLOW PLUS PIPES AND FITTINGS ARE YOUR PERFECT CHOICES

- Co-Moulded Composite Rubber Ring Seal
- High Tensile & Impact Strength
- Anti-Corrosion/Anti-Rusting
- Smooth Internal Surface
- Heat and Flame Resistant
- Maintenance Free
- Longer Life Span
- UV Stabilized and Resistant to Chemical Actions
- Light and Easy To Handle

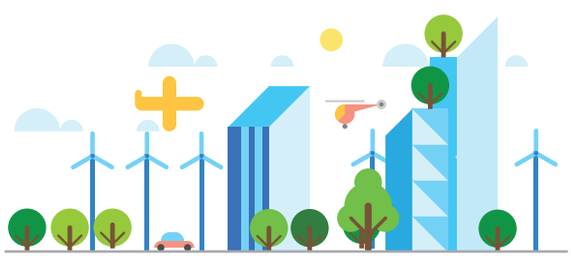


MAGIK FLOW PIPES AND FITTINGS

Skipper brings economical variety of SWR pipes and fittings which conforms to IS:13592 and fittings IS:14735. The pipes are available in different lengths with single socket and double sockets. Magik Flow pipes come with fittings both ring fittings and push fittings. These fittings are manufactured as per IS:14735. They are available in full range starting from 75mm to 160 mm and are fully compatible with Magik flow pipes.

MAGIK FLOW FEATURES AND BENEFITS

1	UV stabilized	6	Stronger, resilient and long lasting
2	High flow rates - no choking	7	High standard and wide range
3	Versatile and elegant	8	Cost effective
4	Quick & easy to install	9	Non conductive
5	High chemical and corrosion resistant	10	Cost effective

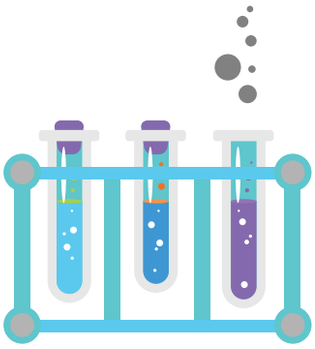


SKIPPER SWR LITE PIPES

It is used for lighter applications as it is resistant to all kinds of harmful chemicals and corrosion. The pipes offer long lasting and durable services. The product is available in the market in both push as well as ring system. Skipper Lite pipes conforms to IS4985

TESTING THE PERFECTION OF SWR PIPES

- Tensile Test
- Strength Test
- Reversion Test
- Stress Relief Test
- VICAT Softening Temperature Test
- Effect of Sun Light
- Resistance to Sulphuric Acid
- Resistance to External Blows
- Resistance to Di-chloro Methane
- Axial Shrinkage for Type-B Types
- Leak Proof Test for Joints



TESTING THE PERFECTION OF SWR FITTINGS

- VICAT Softening Temperature Test
- Drop Impact Test
- Titanium Dioxide Content
- Stress Relief Test



INSTALLATION GUIDE FOR RINGFIT JOINTS

EASY AND 100% LEAK PROOF

STEP 1: CUTTING

Measure and cut pipe to size. Ensure to cut pipes straight and square. Inspect pipe ends thoroughly before cutting, if any crack or split in the ring is noticed cut off a minimum of 25mm beyond the visible crack before proceeding.



STEP 2: CHAMFERING AND DEBURRING

Burrs in and on the pipe can obstruct proper flow or proper contact between the pipe and the socket. It is to be ensured that the fitting during the assembly is removed from both inside and outside the pipe. A 15mm round file or a pen knife or a demurring tool is suitable for this purpose. A slight level on the end of the pipe will ease entry to the pipe into the socket of the fitting area.



STEP 3: FITTING PREPARATION

Use a clean and dry cloth to wipe the dirt, moisture from the fitting and pipe ends.



STEP 4: CHECK FOR BLUE SOCKET SEAL

Check the socket seal for blue composite ring. Ensure that the blue part of the seal is towards the outside of the socket.



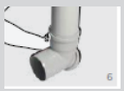
STEP 5: LUBRICANT

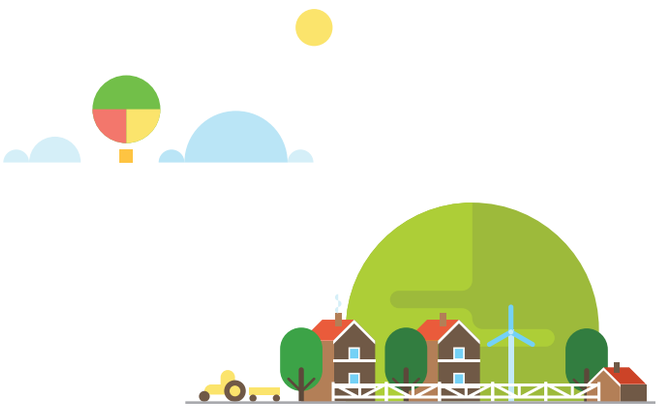
Apply the lubricant on the chamfered end of the pipe.



STEP 6: ASSEMBLY

Immediately insert the pipe into the fitting socket, rotate the pipe slightly while inserting. Withdraw pipe until the mark is 12mm away from socket. This means a 12mm gap exists between the end of the pipe and the socket register. This gap will allow the pipe to expand without distorting the pipe and fitting joint.





INSTALLATION GUIDE FOR PUSHFIT JOINTS

EASY AND 100% LEAK PROOF

STEP 1: CUTTING

Measure the pipe length accurately and make a visible marking using a felt tip pen. Ensure the pipe and fittings are size compatible. You can easily cut with a plywood cutting saw/ ratchet cutter or a wheel cutter. Cutting the pipe as squarely as possible (at 90˚) provides optimum bonding area within a joint. Inspect pipe ends thoroughly prior to making a joint. If a crack or splintering is noticed, cut-off a minimum of 25mm beyond the visible crack before proceeding.



STEP 2: DEBURRING/BEVELING

Burrs in and on the pipe can obstruct proper flow or proper contact between the pipe and the socket. It is to be ensured that the fitting during the assembly is removed from both inside and outside the pipe. A 15mm round file or a pen knife or a demurring tool is suitable for this purpose. A slight level on the end of the pipe will ease entry to the pipe into the socket of the fitting area.



STEP 3: FITTING PREPARATION

Using a clean dry rag, wipe the dirt and moisture from the fitting sockets and pipe end. Dry fit the pipe to ensure total entry into the bottom of the fitting sockets and make a visible marking using a felt tip pen.



STEP 4: SOLVENT CEMENT APPLICATION

Apply an even coat of solvent cement on the pipe on the external surface of the pipe and internal surface of the socket. Do not use thickened or lumpy solvent cement. It should have a light and flowing consistency like that of paint.



STEP 5: ASSEMBLY

Immediately insert the pipe into the fitting socket, rotate the pipe 1/4 to 1/5 turn while inserting. This motion ensures an even distribution of cement within the joint. Hold the assembly for 10 seconds to allow the joint to setup.





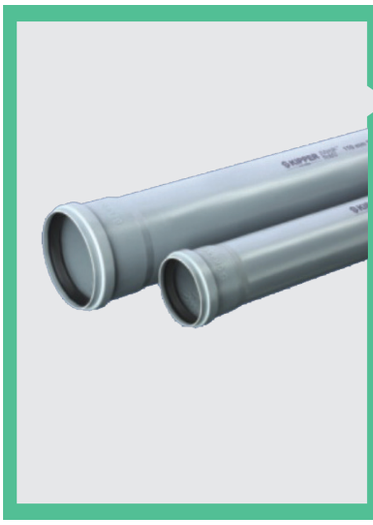
AVAILABLE IN 75MM, 110MM & 160MM DIAMETER
AVAILABLE IN TYPE-A & TYPE-B



SOCKET TYPE	FEET	METER
Single Socket	10	3
Double Socket	10	3
Single Socket	6	2
Double Socket	6	2
Double Socket	4	1
Double Socket	3	1
Double Socket	2	½

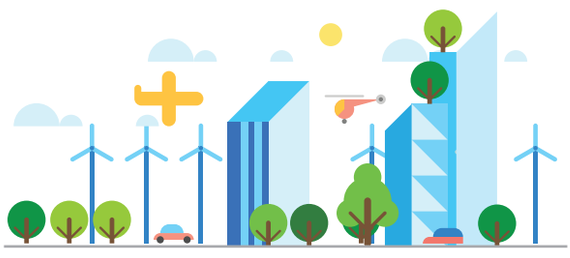
SWR MAGIK FLOW PLUS PIPES (IS 13592)

AVAILABLE IN 75MM, 110MM & 160MM DIAMETER
AVAILABLE IN TYPE-A & TYPE-B

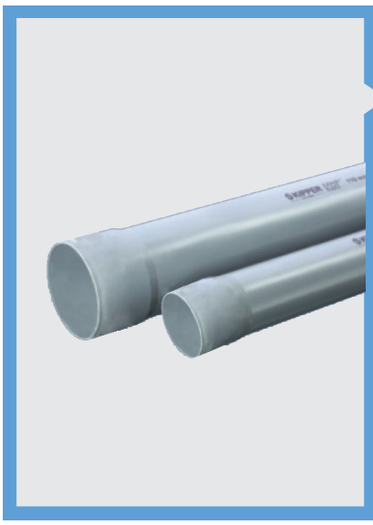


SOCKET TYPE	FEET	METER
Single Socket	10	3
Double Socket	10	3
Single Socket	6	2
Double Socket	6	2
Double Socket	4	1
Double Socket	3	1
Double Socket	2	½

SWR MAGIK FLOW RING FIT PIPES (IS 13592)



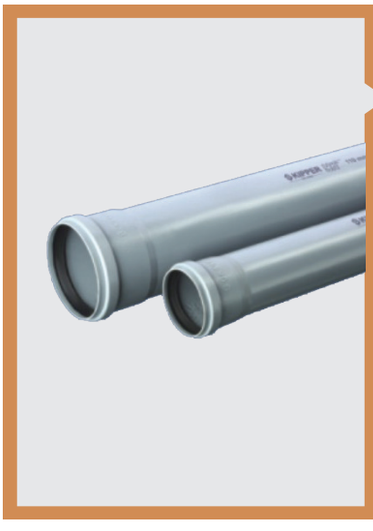
AVAILABLE IN 75MM, 110MM & 160MM DIAMETER
AVAILABLE IN TYPE-A & TYPE-B



SOCKET TYPE	FEET	METER
Single Socket	10	3
Double Socket	10	3
Single Socket	6	2
Double Socket	6	2
Double Socket	4	1
Double Socket	3	1
Double Socket	2	½

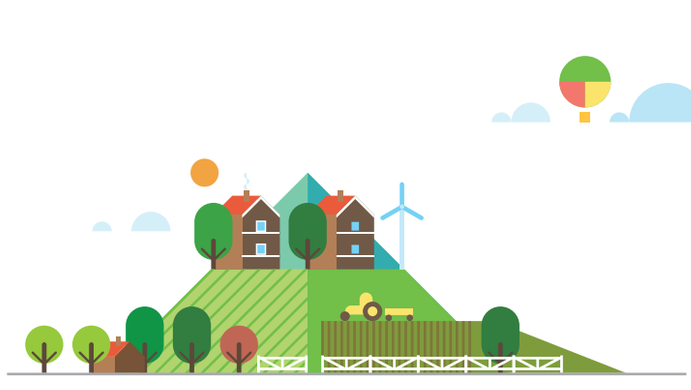
SWR MAGIK FLOW PUSH FIT PIPES (IS 13592)

AVAILABLE IN 75mm, 110MM & 160MM DIAMETER

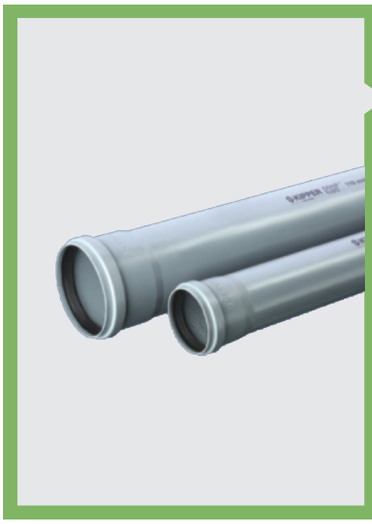


SOCKET TYPE	FEET	METER
Single Socket	10	3
Double Socket	10	3
Single Socket	6	2
Double Socket	6	2
Double Socket	4	1
Double Socket	3	1
Double Socket	2	½

SWR LITE RING FIT PIPES (IS 4985)



AVAILABLE IN 75MM, 110MM & 160MM DIAMETER



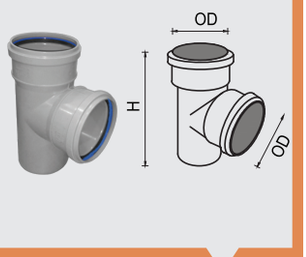
SOCKET TYPE	FEET	METER
Single Socket	10	3
Double Socket	10	3
Single Socket	6	2
Double Socket	6	2
Double Socket	4	1
Double Socket	3	1
Double Socket	2	½

SWR LITE PUSH FIT PIPES (IS 4985)



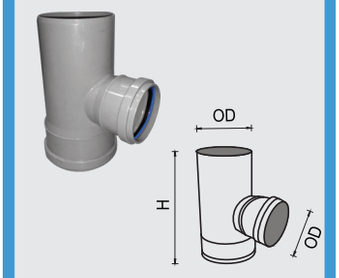


SWR MAGIK FIT PLUS FITTINGS (IS 14735)



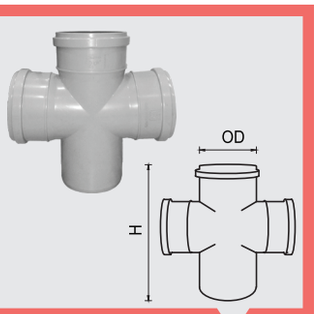
(INCH)	(MM)
4x3	110x75

REDUCING TEE PLAIN



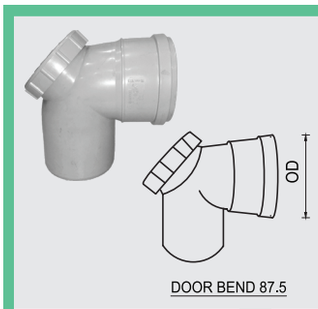
(INCH)	(MM)
2½"	75
4	110

PLAIN TEE



(INCH)	(MM)
2½"	75
4	110

DOUBLE TEE PLAIN



(INCH)	(MM)
2½"	75
4	110

DOOR BEND 87.5



(INCH)	(MM)
2½"	75
4	110

DOOR TEE (RH)



(INCH)	(MM)
2½"	75
4	110

DOOR TEE (LH)

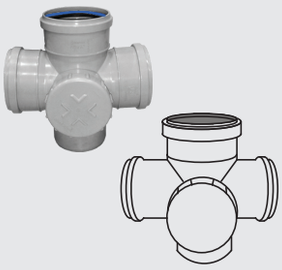


SWR MAGIK FIT PLUS FITTINGS (IS 14735)



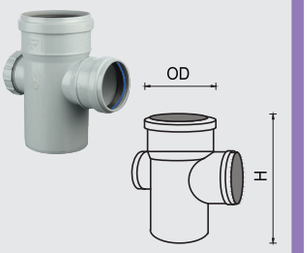
(INCH)	(MM)
2½"	75
4	110

DOOR TEE



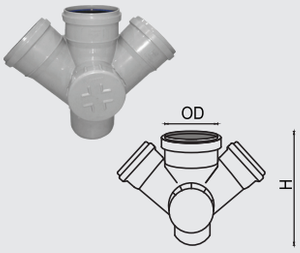
(INCH)	(MM)
2½"	75
4	110

DOUBLE TEE DOOR



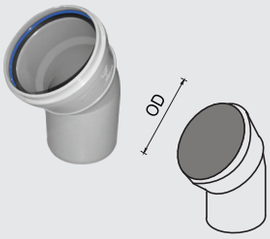
(INCH)	(MM)
4x2½	110x75

REDUCING TEE DOOR



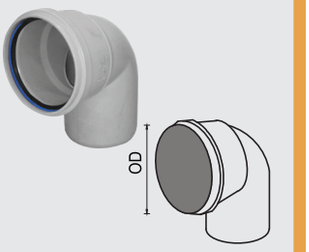
(INCH)	(MM)
2½"	75
4	110

DOUBLE Y WITH DOOR



(INCH)	(MM)
2½"	75
4	110

PLAIN BEND 45°

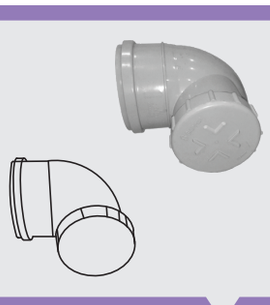


(INCH)	(MM)
2½"	75
4	110

PLAIN BEND 87.5°

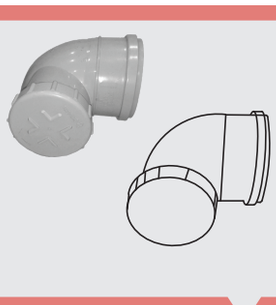


SWR MAGIK FIT PLUS FITTINGS (IS 14735)



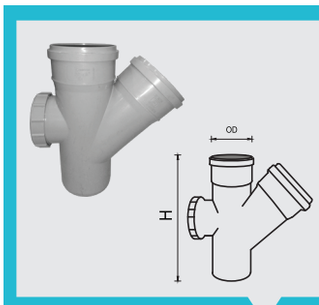
(INCH)	(MM)
2½"	75
4	110

DOOR BEND 87.5° (LH)



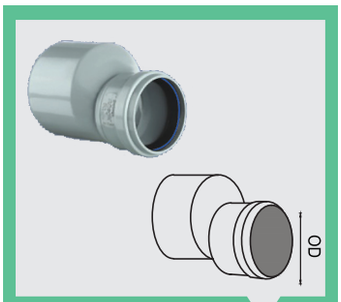
(INCH)	(MM)
2½"	75
4	110

DOOR BEND 87.5° (RH)



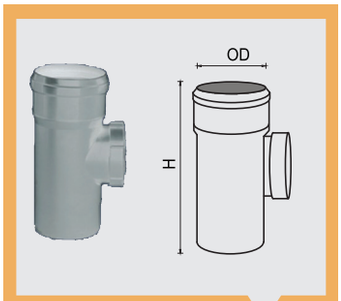
(INCH)	(MM)
2½"	75
4	110

DOOR Y



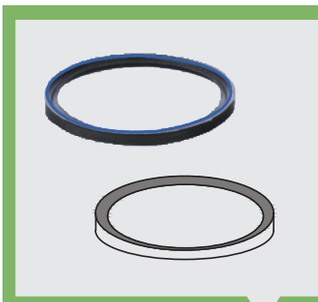
(INCH)	(MM)
4x2½	110x75
6x4	160x110

REDUCER



(INCH)	(MM)
2½"	75
4	110

CLEANING PIPE



(INCH)	(MM)
2½"	75
4	110

RUBBER RING

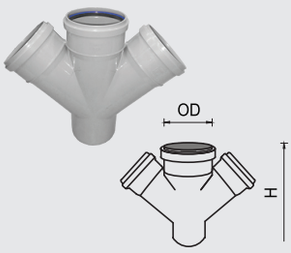


SWR MAGIK FIT PLUS FITTINGS (IS 14735)



(INCH)	(MM)
2½"	75
4	110

PLAIN Y



(INCH)	(MM)
2½"	75
4	110

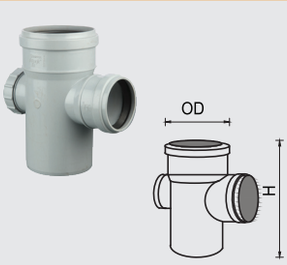
DOUBLE Y PLAIN



(INCH)	(MM)
2½"	75
4	110

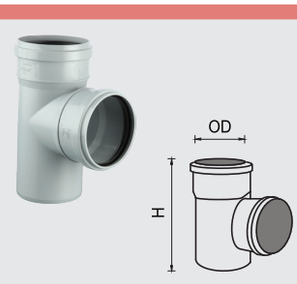
COUPLER

SWR MAGIK FIT FITTINGS (IS 14735)



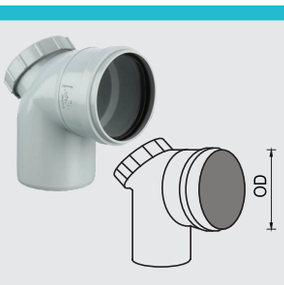
(INCH)	(MM)
2½"	75
4	110
6	160

DOOR TEE



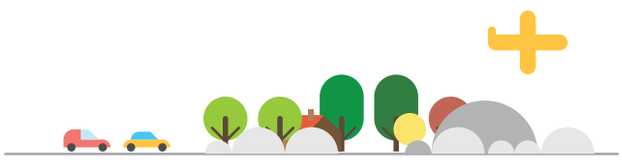
(INCH)	(MM)
2½"	75
4	110
6	160

PLAIN TEE

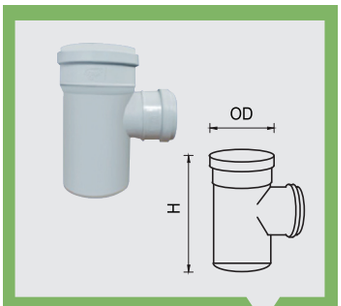


(INCH)	(MM)
2½"	75
4	110
6	160

DOOR BEND 87.5°



SWR MAGIK FIT FITTINGS (IS 14735)



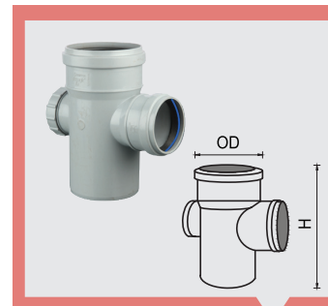
(INCH)	(MM)
4x2½	110x75
6x4	160x110

REDUCING TEE PLAIN



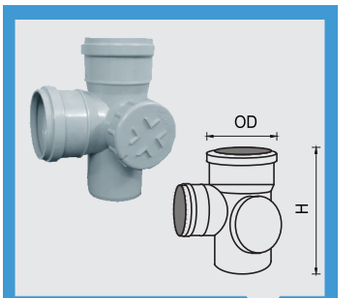
(INCH)	(MM)
2½"	75
4	110

DOUBLE TEE PLAIN



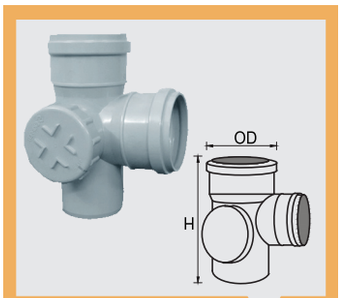
(INCH)	(MM)
4x2½	110x75
6x4	160x110

REDUCING TEE DOOR



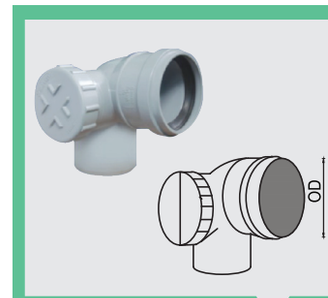
(INCH)	(MM)
2½"	75
4	110

DOOR TEE (LH)



(INCH)	(MM)
2½"	75
4	110

DOOR TEE (RH)

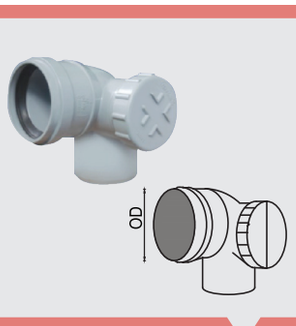


(INCH)	(MM)
2½"	75
4	110

DOOR BEND 87.5° (RH)



SWR MAGIK FIT FITTINGS (IS 14735)



(INCH)	(MM)
2½"	75
4	110

DOOR BEND 87.5° (LH)



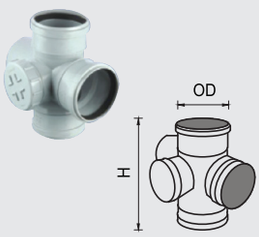
(INCH)	(MM)
2½"	75
4	110

DOOR Y



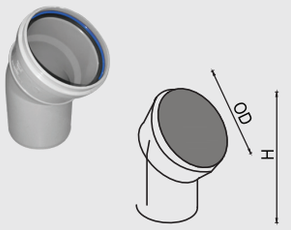
(INCH)	(MM)
2½"	75
4	110
6	160

DOOR BEND 87.5°



(INCH)	(MM)
2½"	75
4	110

DOUBLE TEE DOOR



(INCH)	(MM)
2½"	75
4	110
6	160

PLAIN BEND 45°

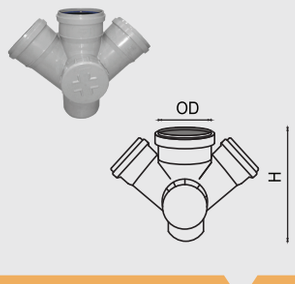


(INCH)	(MM)
2½"	75
4	110
6	160

PLAIN Y

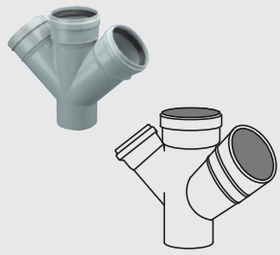


SWR MAGIK FIT FITTINGS (IS 14735)



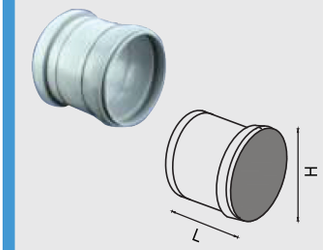
(INCH)	(MM)
2½"	75
4	110

DOUBLE Y WITH DOOR



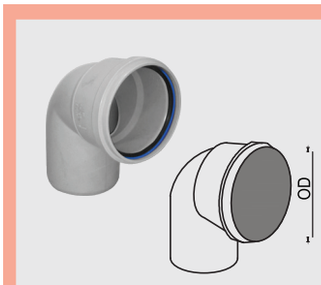
(INCH)	(MM)
2½"	75
4	110

DOUBLE Y PLAIN



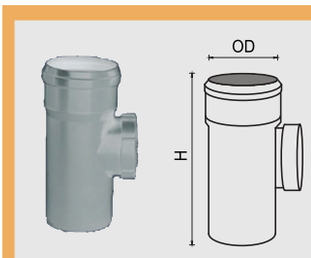
(INCH)	(MM)
2½"	75
4	110
6	160

COUPLER



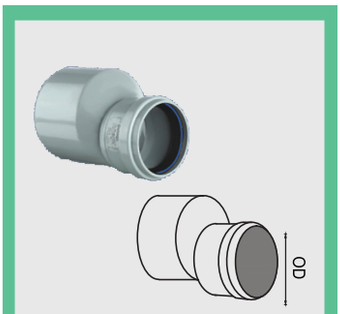
(INCH)	(MM)
2½"	75
4	110
6	160

PLAIN BEND 87.5°



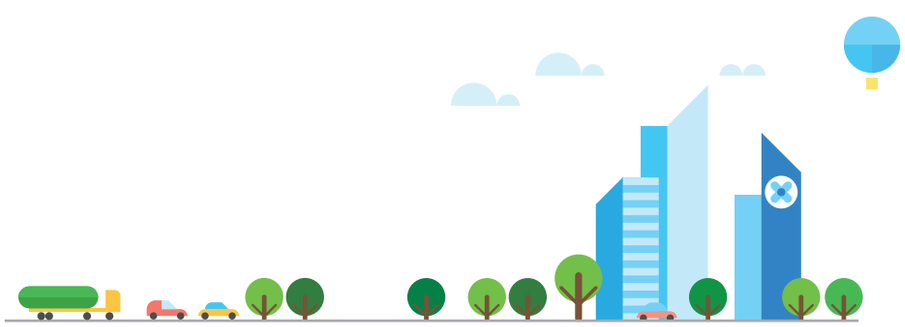
(INCH)	(MM)
2½"	75
4	110
6	160

CLEANING PIPE



(INCH)	(MM)
4x2½	110x75
6x4	160x110

REDUCER

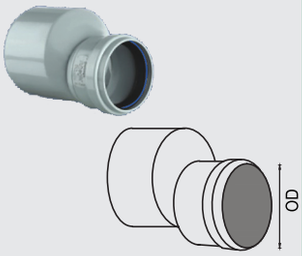


SWR MAGIK FIT PUSH FITTINGS (IS 14735)



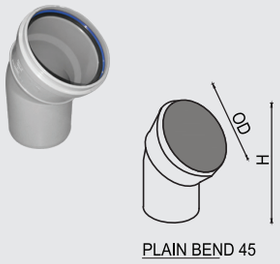
(INCH)	(MM)
2½"	75
4	110

DOUBLE Y PLAIN



(INCH)	(MM)
4x2½	110x75
6x4	160x110

REDUCER



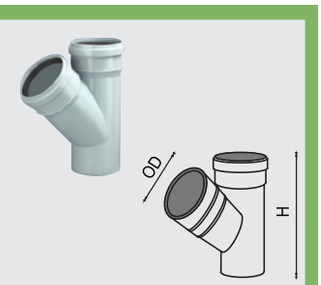
(INCH)	(MM)
2½"	75
4	110
6	160

PLAIN BEND 45



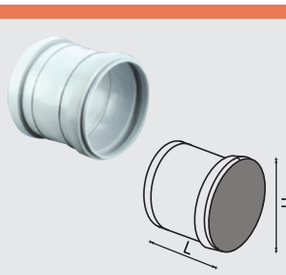
(INCH)	(MM)
2½"	75
4	110
6	160

PLAIN BEND 87.5°



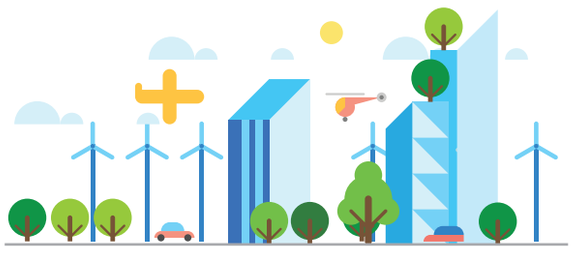
(INCH)	(MM)
2½"	75
4	110
6	160

PLAIN Y

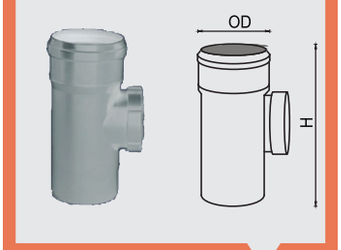


(INCH)	(MM)
2½"	75
4	110
6	160

COUPLER

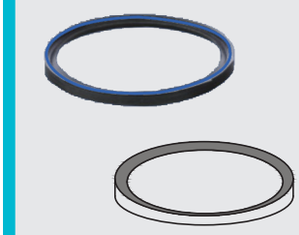


SWR MAGIK FIT PUSH FITTINGS (IS 14735)



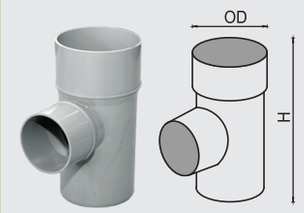
(INCH)	(MM)
2½"	75
4	110
6	160

CLEANING PIPE



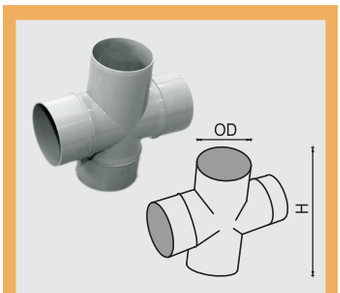
(INCH)	(MM)
2½"	75
4	110
6	160

RUBBER RING



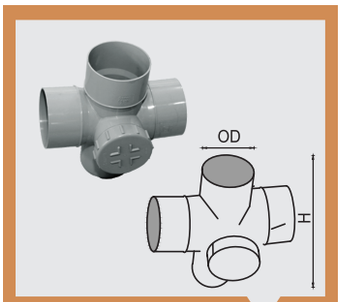
(INCH)	(MM)
4x2½	110x75
6x4	160x110

REDUCING TEE PLAIN



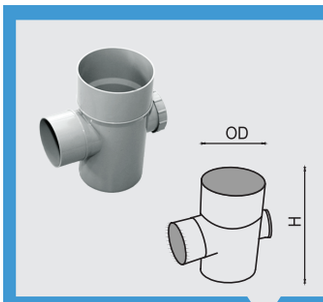
(INCH)	(MM)
2½"	75
4	110

DOUBLE TEE PLAIN



(INCH)	(MM)
2½"	75
4	110

DOUBLE TEE DOOR

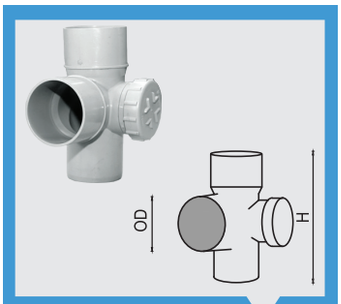


(INCH)	(MM)
4x2½	110x75
6x4	160x110

REDUCING TEE DOOR

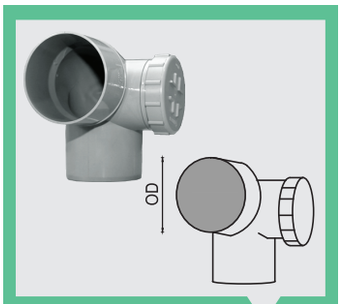


SWR MAGIK FIT PUSH FITTINGS (IS 14735)



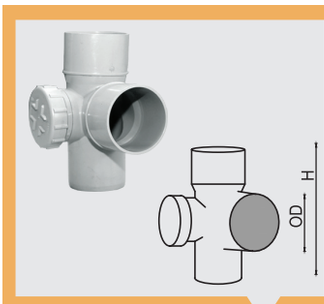
(INCH)	(MM)
2½"	75
4	110

DOOR TEE (LH)



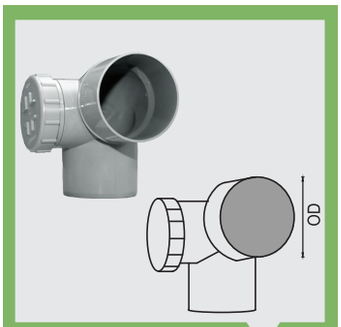
(INCH)	(MM)
2½"	75
4	110

DOOR BEND 87.5° (LH)



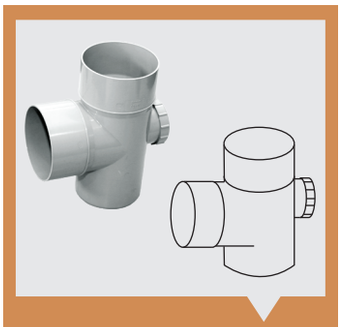
(INCH)	(MM)
2½"	75
4	110

DOOR TEE (RH)



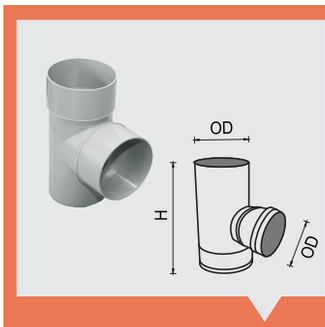
(INCH)	(MM)
2½"	75
4	110

DOOR BEND 87.5° (RH)



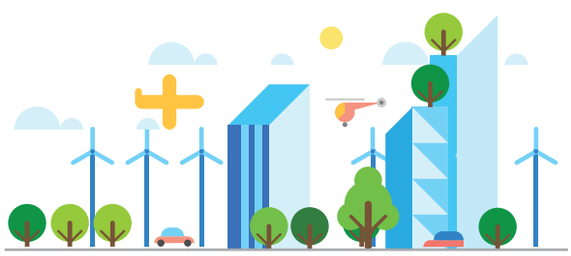
(INCH)	(MM)
2½"	75
4	110
6	160

DOOR TEE

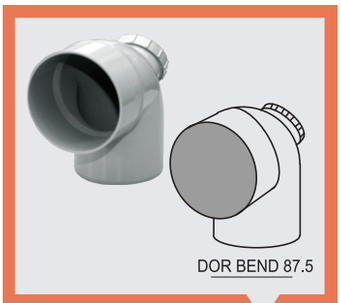


(INCH)	(MM)
2½"	75
4	110
6	160

PLAIN TEE

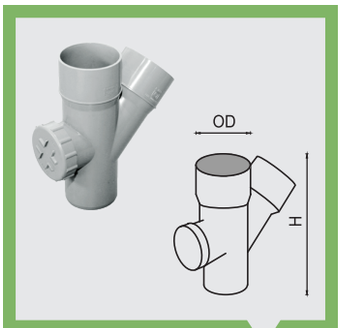


SWR MAGIK FIT PUSH FITTINGS (IS 14735)



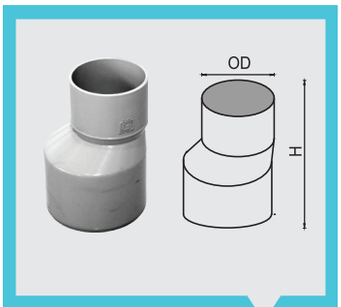
(INCH)	(MM)
2½"	75
4	110
6	160

DOOR BEND 87.5°



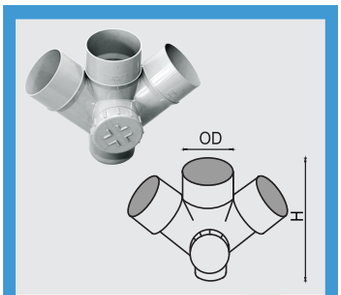
(INCH)	(MM)
2½"	75
4	110

DOOR Y



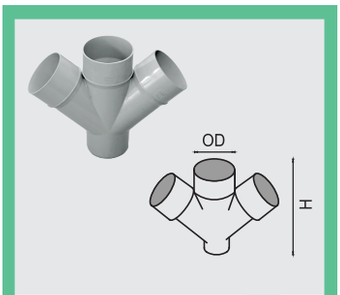
(INCH)	(MM)
4x2½	110x75
6x4	160x110

REDUCER



(INCH)	(MM)
2½"	75
4	110

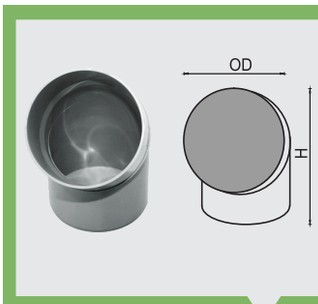
DOUBLE Y WITH DOOR



(INCH)	(MM)
2½"	75
4	110

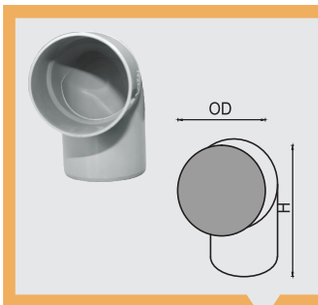
DOUBLE Y PLAIN

SWR MAGIK FIT PUSH FITTINGS (IS 14735)



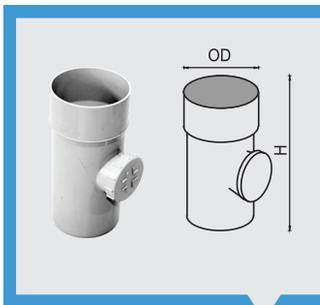
(INCH)	(MM)
2½"	75
4	110
6	160

PLAIN BEND 45°



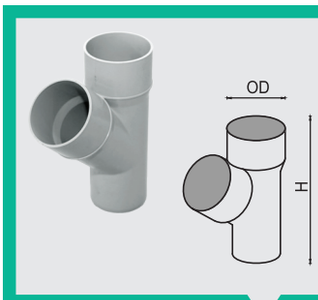
(INCH)	(MM)
2½"	75
4	110
6	160

PLAIN BEND 87.5°



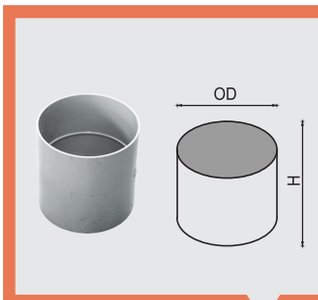
(INCH)	(MM)
2½"	75
4	110
6	160

CLEANING PIPE



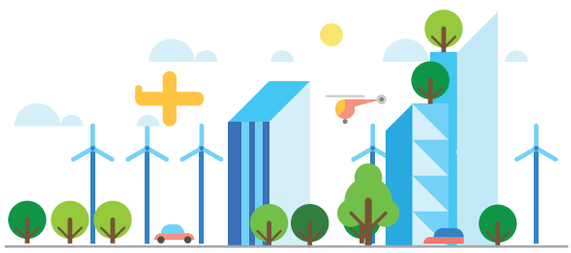
(INCH)	(MM)
2½"	75
4	110
6	160

PLAIN Y

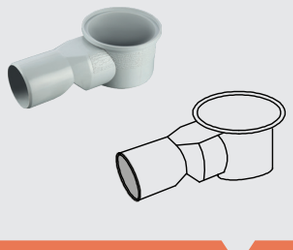


(INCH)	(MM)
2½"	75
4	110
6	160

COUPLER

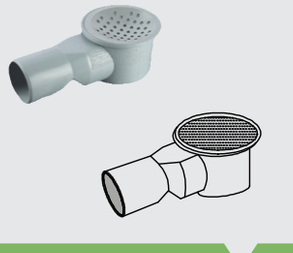


OTHER SWR FITTINGS (IS 14735)



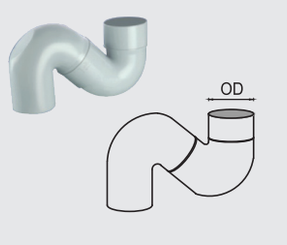
(INCH)	(MM)
2½"	75

NAHANI TRAP (WITHOUT JALI)



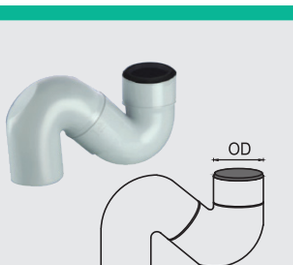
(INCH)	(MM)
2½"	75

NAHANI TRAP (WITH JALI)



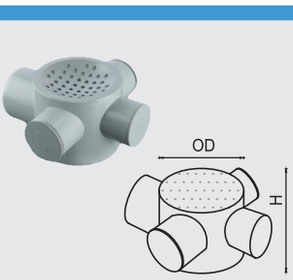
(INCH)	(MM)
4x4	110x110

S. TRAP



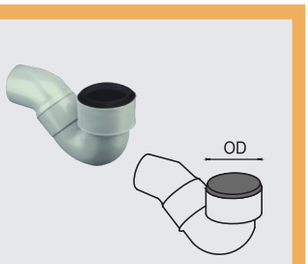
(INCH)	(MM)
5x4	125x110

S. TRAP WITH W.C. RING



(INCH)	(MM)
2½"	75

MULTI FLOOR TRAP

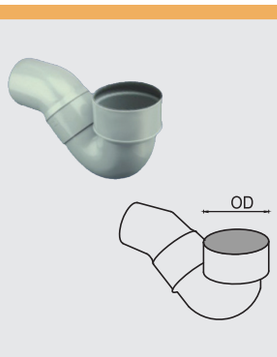


(INCH)	(MM)
5x4	125x110

P. TRAP WITH W.C. RING

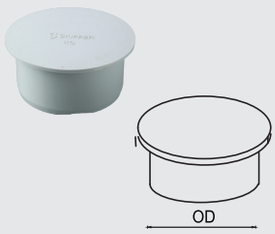


OTHER SWR FITTINGS (IS 14735)



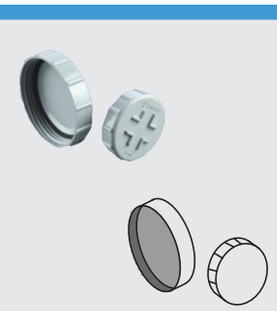
(INCH)	(MM)
4x4	110x110

P. TRAP



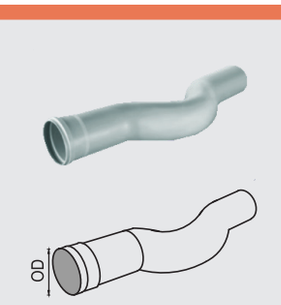
(INCH)	(MM)
2½"	75
4	110

SOCKET PLUG



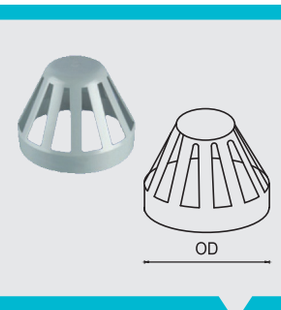
(INCH)	(MM)
2½"	75
4	110

DOOR CAP



(INCH)	(MM)
2½"	75
4	110

PASS OVER



(INCH)	(MM)
2½"	75
4	110
6	160

VENT COWL

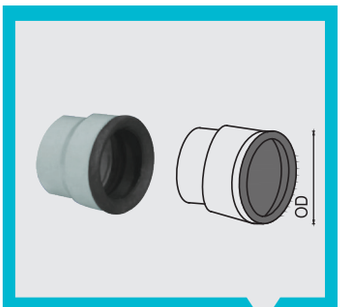


OTHER SWR FITTINGS (IS 14735)



(INCH)	(MM)
2½"	75
4	110
6	160

PIPE CLIP



(INCH)	(MM)
4	110
5x4	125x110
5x4	125x110
5x4	125x110

W.C. CONNECTOR WITH W.C.RING



SKIPPER
PIPES

UGD PIPES



THE PERFECTION OF UGD PIPES

Skipper's un-plasticized polyvinyl chloride (PVC-U) pipes are used for underground (buried) non-pressure gravity drain and sewer applications which conform to IS 15328. Skipper underground drainage pipes are available in numerous self-socketed type joints which are joined with the help of solvent cement (cold welding) and Elastomeric sealing ring type joints which are designed in a way which makes it impossible for the ring from getting dislodged.

TYPES FOR UGD

SELFIT/PUSHFIT

Selfit pipe sockets are locked using automatic socketing machine with self-socket length (without groove). These pipes are then joined using solvent cement. One end of the pipe is plain and the other end is self-socketed on these high-tech automatic machines for high degree of accurate diameter. The pipes when joined using solvent cement form a permanent water tight joint.

RINGFIT

Ringfit pipes are locked using automatic online socketing machine with a high degree of accuracy. The socket possesses a groove inside for the rubber ring . One end of the pipe is plain and other end is self-socketed with an integral groove to hold the rubber gasket. When joined with a rubber ring, the joint formed is a trouble free, water tight one, ready to take care of thermal expansion and contraction.

UGD PIPES ARE YOUR PERFECT CHOICE

- Adheres to International specifications and conforms to IS: 15328
- Rodent resistant
- Smooth finish and aesthetic appeal
- Available in a complete range from 63 mm to 315 mm
- High stiffness strength
- High impact resistance strength
- Leak-proof and odour-proof joints
- Cost-effective and durable



AVAILABLE SIZES

					Wall Thickness					
Nominal Size	Mean Outside Diameter		Outside Diameter at any point		SN-2/SDR-51/S-25		SN-4/SDR-41/S-20		SN-8/SDR-34/S-16.5	
	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.
63MM	63.0	63.3	62.2	63.8	***	***	***	***	2.7	3.1
75MM	75.0	75.3	75.3	75.9	***	***	***	***	2.8	3.3
90MM	90.0	90.3	88.9	91.2	***	***	***	***	2.9	3.4
110MM	110.0	110.4	108.6	111.4	***	***	***	***	3.2	3.7
125MM	125.0	125.4	123.5	126.5	***	***	3.2	3.7	3.7	4.4
160MM	160.0	160.5	158.0	162.0	3.2	3.7	4	4.6	4.7	5.4
200MM	200.0	200.6	197.6	202.4	3.9	4.5	4.9	5.6	5.9	6.7
250MM	250.0	250.8	247.0	253.0	4.9	5.6	6.2	7	7.3	8.3
315MM	315.0	316.0	311.2	318.8	6.2	7	7.7	8.7	9.2	10.4

APPLICATION

Skipper UGD Sewerage pipes are specially designed for underground non-pressure applications like gravity drainage & sewer flow for transportation of soil and waste discharge of domestic origin, surface water (storm water) and industrial effluent.





UGD PIPES



(INCH)	(MM)
2″	63
2½″	75
3″	90
4″	110
4½	125
6″	160
8″	200
10″	250
12″	315

Selfit/Pushfit Underground Drainage Pipes



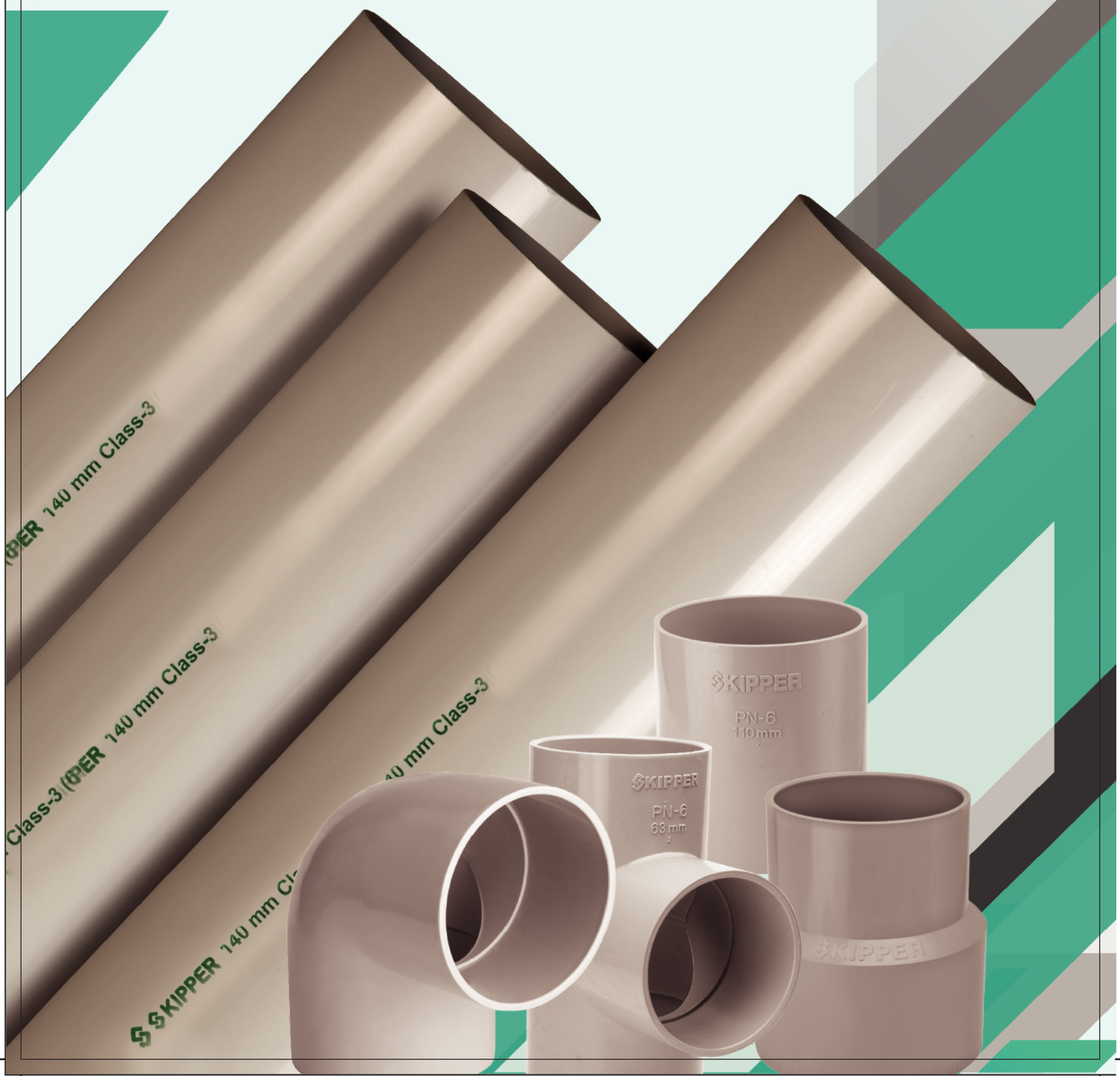
(INCH)	(MM)
2″	63
2½″	75
3″	90
4″	110
4½	125
6″	160
8″	200
10″	250
12″	315

Elastomeric Rubber Ring Underground Drainage Pipes



SKIPPER
PIPES

AGRICULTURE PIPES & FITTINGS



THE PERFECTION OF SKIPPER AGRICULTURE PIPES AND FITTINGS

The PVC pipes are one of the most significant developments that enabled the basic needs of clean and hygienic water. Skipper offers a complete range of agriculture pipes and fittings which are crafted for perfection and conforms to IS4985. Skipper offers both plain pipes and socket ended pipes for elastromeric celing ring jointing and solvent cement jointing pipes, which are used extensively for water supply, distribution and irrigation.

Socketed pipes for solvent cement jointing. Skipper manufacture pipes in the range of 20mm to 315mm. Skipper Agriculture pipes are made from highest quality resin. Self socketed pipes have one end self-socketed and the other end plain, which fit snugly, doing away with the need for couplers. They are manufactured by the latest state-of-the-art extrusion machines. The sophisticated quality control system ensures end product for quality surpassing the BIS and ISO requirements.

Socketed pipes for elastomeric celing ring jointing pipes are manufactured in the range of 50mm to 200mm diameters for potable water supply as per IS: 4985:2000 standard. These pipes consist of one socket end for sealing the ring and other end plain with 15° chamfer. These pipes are manufactured and supplied in standard length of 6mtrs exclusive of socket portion, however we have the flexibility to supply the same in different lengths as per the customer requirements.

FEATURES OF ELASTOMERIC JOINT SEALING RINGS

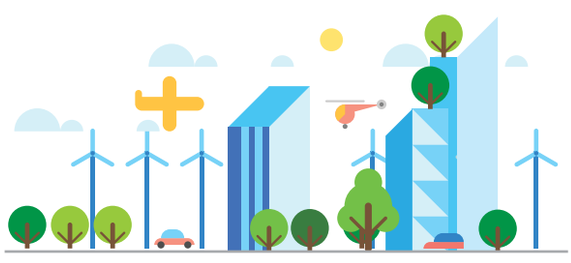
- Elastomeric joint sealing ring is taken to encompass rings that are flat with convex face, finned type and circular or 'D' shaped in cross section.
- Sealing rings are capable of withstanding internal and external differential water pressures at joints.
- Glues or adhesives are not required for joints.
- Elastomeric sealing rings are manufactured from ethylene propylene rubber (EPDM or EPM) or Treated Natural Rubber treated to immune from microbiologically induced corrosion.
- The design of the pipe joint assembly is such that, the sealing ring shall be located within a groove or otherwise restrained against 'blowing-out' or 'blowing-in' due to differential water pressures.
- All sealing rings physical and chemical properties, including hardness are tested as per international standards and compatible with the pipe material.



SKIPPER AGRICULTURE PIPES AND FITTINGS ARE YOUR PERFECT CHOICE

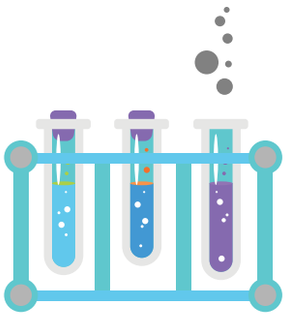


- Seal remains intact even in extreme temperature variations
- Easy and convenient installation with detachable joints
- Leak proof - The unique ring prevents any kind of leakage
- Negligible algae formation due to low opacity and tight elastomeric sealing joint
- Deflection of pipes possible up to 20 per joint
- Corrosion resistant: Immune to galvanic or electrolytic erosion.
- Resistant to acids, oxidizing agents, alkalis, oils and domestic effluents. Fit for high purity water application.
- Easy installation: Pipes of diameter less than 110mm can be joined by hand pressure while for those of a larger diameter, a pipe jack is adequate.
- Lower cost of installation: Light weight, therefore they are easy to transport and carry to the site
- Immediate Use: Pressure can be applied immediately after completion of joint or installation. There is no need to wait for the joints to dry
- Prolonged shelf life: Has a long life span
- Saves time, cost and manpower as installation requires no glue or solvent for elastomeric celing rings
- Joints accommodate expansion and contraction



APPLICATIONS

- Irrigation scheme.
- Rainwater drainage.
- Main line for sprinklers/ drip pipeline.
- Gobar gas pipe line.
- Underground or open pipeline.
- Tube well.
- Telecommunication and cable ducting.
- Installation for brewery pipelines.
- Horticultural and green house technology.
- Installation in chemical plants.
- Surface water drainage.



JOINTING PROCEDURE FOR RING FIT PVC PIPES

1	Clean the inside of socket. Remove all traces of mud, dirt, grave and clean elastomeric sealing ring.
2	Reduce the diameter of the rubber ring gasket by folding in the form of a heart shape and insert into the socket ring groove.
3	Apply a thin layer of lubricant to the inside surface of the rubber ring gasket.
4	Apply a thin layer onto the outside surface of the spigot, especially the chamfer, as far as the witness mark.
5	Re-align the pipe and enter the spigot carefully into the socket until it makes contact with the gasket. Using appropriate means of providing mechanical assistance and maintaining a straight line, push the spigot into the socket until the witness mark remains just visible on the spigot end.



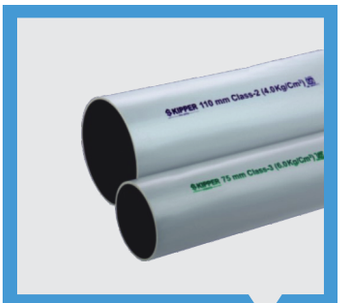
DIMENSIONS (IN MM) : AS PER IS: 4985-2000

					Wall thickness-e														
Normal Outside Dia	Mean Outside Dia		Outside diameter at any point		Class-1 O.25 MPa		Class-2 O.40 MPa		Class-3 O.60 MPa		Class-4 O.80 MPa		Class-5 1.00 MPa		Class-6 1.25 MPa		Socket inner diameter		Minimum depth of engagement
dn	Dem		de		(2.5 kg/cm2)		(4.0 kg/cm2)		(6.0 kg/cm2)		(8.0 kg/cm2)		(10.0 kg/cm2)		(12.5 kg/cm2)		dim		M
	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	
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	63.6	64.3	64
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	75.6	76.3	67
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	90.7	91.5	70
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	110.8	111.7	75
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	125.9	126.9	78
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	140.9	141.9	81
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	161.0	162.1	86
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	181.1	182.2	90
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	201.2	202.3	94
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	226.4	227.5	100
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	251.5	252.6	105
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	281.6	283.0	112
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	316.8	318.3	118
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	357.0	358.7	124
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	402.2	404.1	130

The above pipes are recommended for water temperatures ranging from +1 to +45°C. The recommended maximum safe working stress for these pipes is 8.6 MPa at 27°C. At 45 °C, the strength of the pipe reduces and the working pressure shall be modified accordingly. Occasional rise in temperature as in summer season with concurrent corresponding reduction in temperature during nights has no deleterious effect on the life/ working pressure of the pipes considering the total life of pipes.



AGRICULTURE PIPES AS PER IS7834



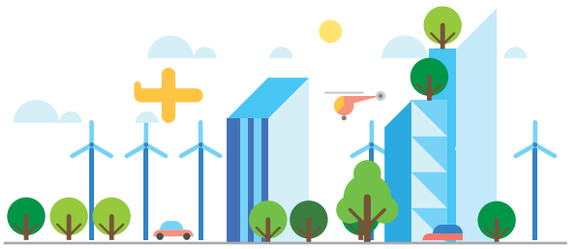
(INCH)	(MM)
½″	20
¾″	25
1″	32
1¼″	40
1½″	50
2″	63
2½″	75
3″	90
4″	110
4½″	125
5″	140
6″	160
7″	180
8″	200
9″	225
10″	250
11″	280
12″	315

SELFIT/PUSHFIT RIGID PVC (IS 4985/2000)

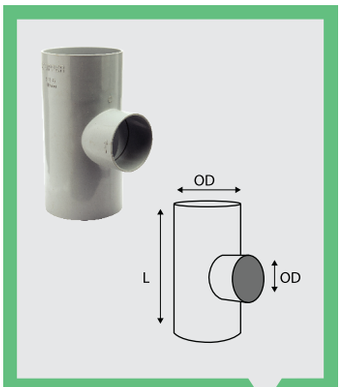


(INCH)	(MM)
½″	50
2	63
3	90
4	110
5	140
6	160
7	180
8	200

RING FIT RIGID PVC PIPES (IS 4985)

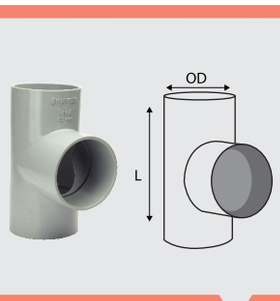


AGRICULTURE FITTINGS



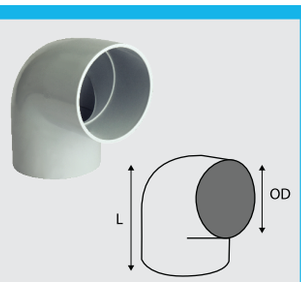
(INCH)	(MM)
6″x4″	160x110
4″x3″	110x90
4″x2½″	110x75
4″x2″	110x63
3″x2½″	90x75
3″x2″	90x63

REDUCER TEE



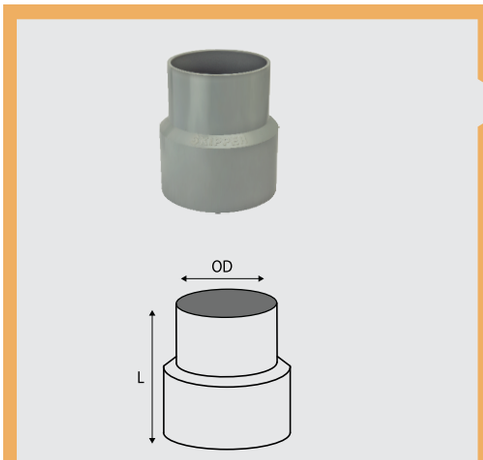
(INCH)	(MM)
1¼″	40
1½″	50
2″	63
2½″	75
3″	90
4″	110
5″	140
6″	160

TEE 90°



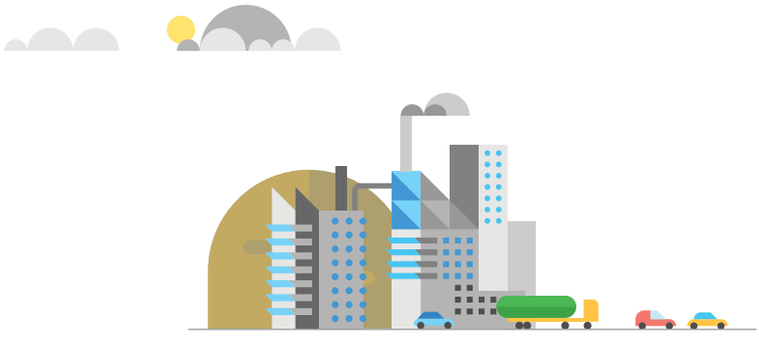
(INCH)	(MM)
1¼″	40
1½″	50
2″	63
2½″	75
3″	90
4″	110
5″	140
6″	160

ELBOW 90°

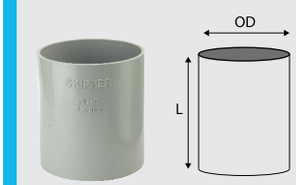


(INCH)	(MM)
6″x4″	160x110
4″x3″	110x90
4″x2½″	110x75
4″x2″	110x63
3″x2½″	90x75
3″x2″	90x63

REDUCER

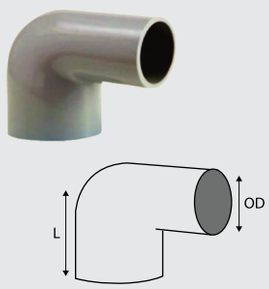


AGRICULTURE FITTINGS



(INCH)	(MM)
1¼"	40
1½"	50
2"	63
2½"	75
3"	90
4"	110
5"	140
6"	160

COUPLER



(INCH)	(MM)
6"x4"	160x110
4"x3"	110x90
4"x2½"	110x75

REDUCER ELBOW



59ml
75ml
150ml
250ml
500ml
1Lt
5Lt

SOLVENT CEMENT



SKIPPER
PIPES

CASING PIPES



THE PERFECTION OF CASING PIPES

Various issues which are associated with conventional metal pipes used for borewell application which are totally eliminated when it comes to our perfect Skipper casing pipes. Specifically developed with PVC compound which offer superior performance at an economical cost which makes it the perfect choice for customers.
Skipper offers varieties of pipes which cater to every need of bore well sector which includes - Shallow Casing (CS), Medium Casing (CM), Deep Casing (CD) as per IS 12818. Successful and encouraging results have made the Skipper casing pipes well accepted and popular amongst civil engineers, drilling contractors and government/ semi–government departments.

AVAILABLE PIPE RANGE

- 150mm(6") to 300mm(12") for Shallow Well Casing Pipes (CS)
- 40mm (1½") to 300mm (12") for Medium Well Casing Pipes(CM)
- 100mm (4") to 300mm (12") for Deep Well Casing Pipes(CD)
- 40mm (1½") to 300mm (12") for Medium Well Screen Pipes with Ribs (RMS)
- 100mm (4") to 300mm (12") for Deep Well Screen Pipes with Ribs (RDS)

FIELDS OF APPLICATION

Screen & Casing Pipes are used for bore-well/ tube-well applications



CASING PIPES ARE YOUR PERFECT CHOICE

1. **Wide Varieties:** Skipper offers varieties of casing pipes to suit different application requirement in borewell sector.
2. **Excellent corrosion resistance:** Unlike steel pipes, skipper casing pipes are totally immune to corrosion and offer good resistance to aggressive elements in the soil and normal chemical action which cause encrustation of well screens.
3. **Light in weight:** These pipes are light weight and hence transportation and installation becomes much easier.
4. **Quick and convenient installation:** They are equipped with good quality threaded joints which makes Skipper casing pipes and screens easy to assemble and install.
5. **Excellent stiffness:** These pipes have excellent stiffness and hydrostatic collapse pressure. They meet all the mechanical properties as per the IS 12818 specification.
6. **Non - toxic:** The material of the pipes are non-toxic hence do not impart any taste, odour or colour. It does not release any harmful substances in water from bore-well which could pose health problem.
7. **Non – conductive:** Skipper casing pipes are non-conductor of electricity, which eliminates any electro–chemical reaction with ground water which could cause encrustation of screens.
8. **Longer lasting:** Being resistant to rusting, weathering and chemical reactions and due to excellent mechanical properties, Skipper casing pipes last for a lifetime.
9. **Economical:** Skipper casing pipes and screens provide the best cost benefit ratio when compared to other materials or even alternative UPVC casing pipes available in the market.

Skipper Borewell Casing Pipes perform well in great depths and are non-reactive to corrosion, bacteria and fungal build-up. Additionally, it is impervious to fire. Skipper Borewell Casing Pipes are recommended by experts at the highest level for its strength and longer lifespan.
Skipper Casing Pipes offer various advantages as they are cost-effective, light and easy to install.



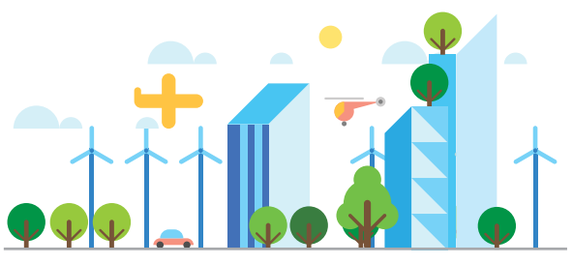
3 TYPES OF CASING PIPES AS PER IS: 12818:2010

1. **Casing Shallow (CS)** - Shallow well casing pipes are suitable for wells with depths up to 80m
2. **Casing Medium (CM)** - Medium well casing pipes are suitable for wells with depths above 80m and upto 250m
3. **Casing Deep (CD)** - Deep well casing pipes are suitable for wells with depths above 250m

DIMENSIONS OF DEEP WELL CASING(CD) PIPES

All Dimensions in millimeters

NOMINAL SIZE MM	MEAN OUTER DIAMETER		WALL THICKNESS	
	MIN.	MAX.	MIN.	MAX.
100	113.0	113.3	7.0	7.9
115	125.0	125.3	7.5	8.5
125	140.0	140.4	8.0	9.0
150	165.0	165.4	9.5	10.7
175	200.0	200.5	11.8	13.6
200	225.0	225.5	13.0	14.8
250	280.0	280.5	16.0	17.6
300	330.0	330.6	19.0	21.0



DIMENSIONS OF MEDIUM WELL CASING(CM) PIPES

All Dimensions in millimeters

NOMINAL SIZE	MEAN OUTER DIAMETER		WALL THICKNESS	
	MIN.	MAX.	MIN.	MAX.
40	48.0	48.2	3.5	4.0
50	60.0	60.2	4.0	4.6
80	88.0	88.3	4.0	4.6
100	113.0	113.3	5.0	5.7
115	125.0	125.3	5.0	5.7
125	140.0	140.4	6.5	7.3
150	165.0	165.4	7.5	8.5
175	200.0	200.5	8.8	9.8
200	225.0	225.5	10.0	11.2
250	280.0	280.5	12.5	14.0
300	330.0	330.6	14.5	16.2

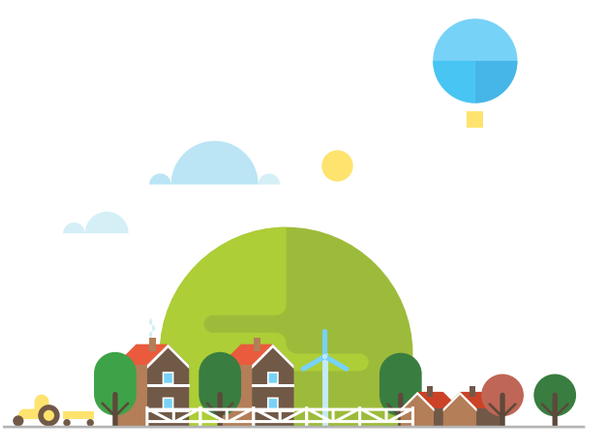
DIMENSIONS OF SHALLOW WELL CASING(CS) PIPES

All Dimensions in millimeters

NOMINAL SIZE	MEAN OUTER DIAMETER		WALL THICKNESS	
	MIN.	MAX.	MIN.	MAX.
150	165.0	165.4	5.7	6.5
175	200.0	200.5	7.0	7.8
200	225.0	225.5	7.6	8.8
250	280.0	280.5	9.6	11.0
300	330.0	330.6	11.2	13.3
125	140.0	140.4	6.5	7.3
150	165.0	165.4	7.5	8.5
175	200.0	200.5	8.8	9.8
200	225.0	225.5	10.0	11.2
250	280.0	280.5	12.5	14.0
300	330.0	330.6	14.5	16.2

ENSURING BOREWELL SUITABILITY

1	Pump should not be installed in water which is over 40°C.
2	Direction of rotation of pump must be checked prior to installing the bore. Pump should run anti-clockwise when looked down on the pump. Should direction be wrong, change any 2 leads at termination box. Motor should be protected with the recommended thermal overloads.
3	Use correct size of cable.
4	The bore must be developed or rehabilitated and be producing clean water prior to installation.
5	If the pump is being used as a pressure system, use the recommended pressure tanks and do not allow pump to short cycle.
6	Do not run pump dry.
7	Pump is not suitable for use in some types of corrosive water. (If unsure, have water tested and seek advice).
8	If the pump is throttled back to less than 0.5lps, then an Auto Control Box with water level monitoring probes must be used instead of standard switch.
9	Pump should be installed using a suitable support cable.
10	Starting voltage and frequency settings of the pump must be correct.



CASING PIPES



(INCH)	(MM)
3″	80
4″	100
4½″	115
5″	125
6″	150
7″	175

SLOTIED BLUE RIGID CM/CS



(INCH)	(MM)
1½″	40
2″	50
3″	80
4″	100
4½″	115
5″	125
6″	150
7″	175
8″	200
10″	250
12″	300

CASING PIPES (IS 12818:2010) CM/CS



(INCH)	(MM)
½″	15
¾″	20
1″	25
1¼″	32
1½″	40
2″	50
1½″	65
3″	80
4″	100
5″	125
6″	150
8″	200
10″	250
12″	300

THREADED PIPES (ASTM D-1785) SCH 40-SCH 80



CASING PIPES



(INCH)	(MM)
1½″	40
2″	50
2½″	63
3″	75
3½″	90
4″	110
5″	125
5½″	140
6″	160
6½″	180
8″	200
9″	225
10″	250
11″	280
12″	315

SOCKET COUPLER IS 10124



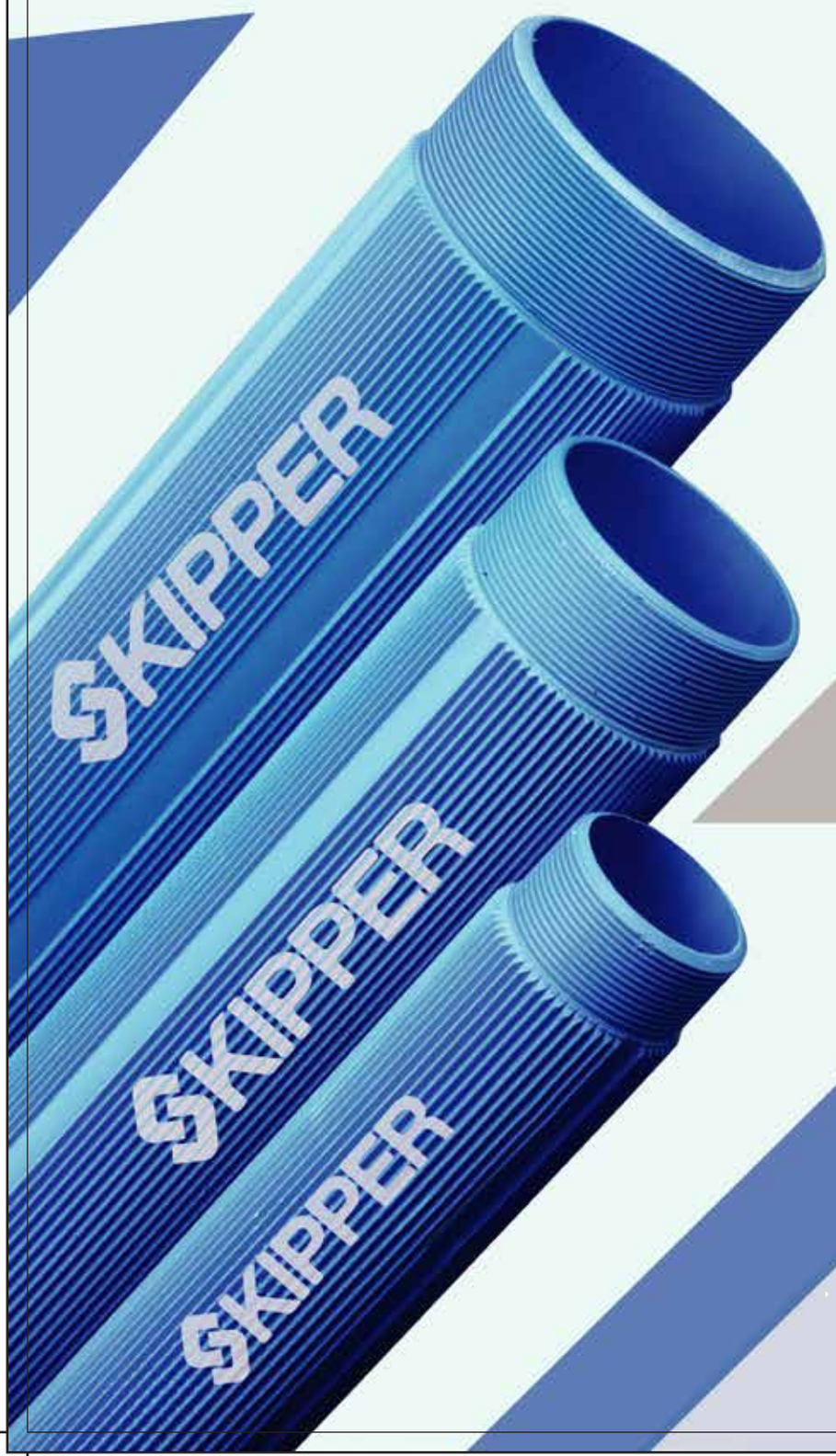
(INCH)	(MM)
1½″	50
2″	63
3″	90
4″	110
5″	140
7″	180
8″	200

MALE THREAD ADAPTER (MTA)
FEMALE THREAD ADAPTER (FTA)



SKIPPER
PIPES

RIBBED STRAINER PIPES



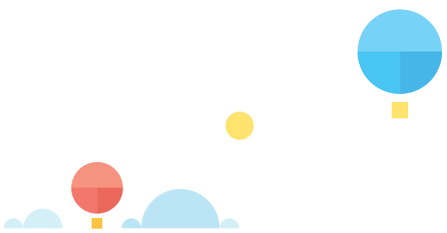
SKIPPER
PIPES
RIBBED
STRAINER
PIPES

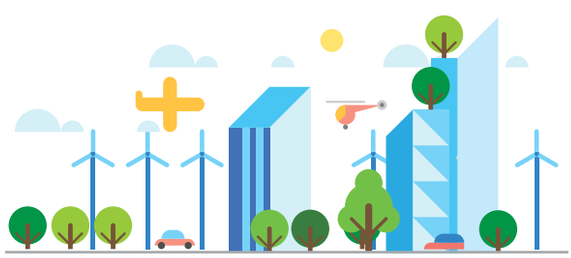
THE PERFECTION OF STRAINER SCREEN PIPES

Skipper Filter Pipes are manufactured as per IS 12818:2010 for the purpose of construction of the tubewells and borewells which are then used for lowering the pumps inside the same for drawing water from the underground waterbed. These borewells or tubewells are one of the major sources of potable ground water in India especially for the rural areas.

In a typical borewell system screens, the pipes are positioned at the water bearing levels usually at the bottom to filter sand particles from water followed by casing pipes on top. In general cases, same size of strainer and casing pipes is used for the entire system. However in specific cases to accommodate the pump set and to get higher yield at the upper levels, higher size of casing pipes is also used which is attached to lower system using reducers.

Strainer screen being more resilient, non-corrosive and economical, have successfully and effectively replaced the conventional metal piping materials.





DIMENSIONS OF MEDIUM WELL SCREEN(RMS) PIPES WITH RIBS

All Dimensions in millimeters

NOMINAL SIZE	MEAN OUTER DIAMETER		WALL THICKNESS	
	MIN.	MAX.	MIN.	MAX.
40	52.0	52.2	3.5	4.0
50	64.0	64.2	4.0	4.6
80	92.0	92.3	4.0	4.6
100	117.0	117.3	5.0	5.7
115	129.0	129.3	5.0	5.7
125	144.0	144.4	6.5	7.3
150	169.0	169.4	7.5	8.5
175	204.0	204.5	8.8	9.8
200	229.0	229.5	10.0	11.2
250	284.0	284.5	12.5	14.0

DIMENSIONS OF DEEP WELL SCREEN(RDS) PIPES WITH RIBS

All Dimensions in millimeters

NOMINAL SIZE	MEAN OUTER DIAMETER		WALL THICKNESS	
	MIN.	MAX.	MIN.	MAX.
100	117.0	117.3	7.0	7.9
115	129.0	129.3	7.5	8.5
125	144.0	144.4	8.0	9.0
150	169.0	169.4	9.5	10.7
175	204.0	204.5	11.8	13.6
200	229.0	229.5	13.0	14.8
250	280.0	280.5	16.0	17.6



SKIPPER STRAINER PIPES IS YOUR PERFECT CHOICE

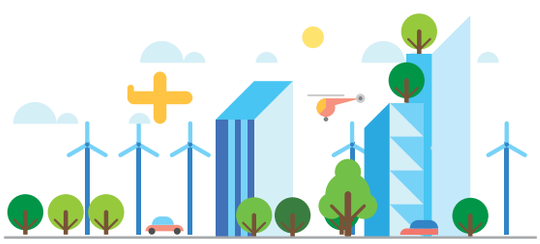
1. **Complements the well casing system:** Skipper strainer pipes facilitate optimum performance and safety by keeping the gravel pack and other foreign substances out of the well

2. **Supplements better yields:** Skipper (plain and ribbed) screen pipes have horizontal slots which enable smooth flow in to the well ensuring higher permeability and reducing well entrance losses, thus saving pumping energy and higher yields.



(INCH)	(MM)	Outside Diameter(m)	Wall Thickness(mm)
1½″	40	52	3.5
2″	50	64	4.0
3″	80	92	4.0
4″	100	117	5.0
5″	125	144	6.5
6″	150	169	7.5
7″	175	204	8.8
8″	200	229	10.0

RIBBED STRAINER (IS 12818.2010)

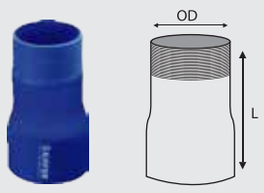


PVC FITTINGS



(MM)
63 x 40
200 x 140
200 x 160
200 x 180
180 x 140
180 x 110
160 x 110
140 x 90
140 x 110
110 x 90

BLUE REDUCING SOCKET BOTH SIDE PUSH



(INCH)	(MM)
1¼"	32
1½"	40
2"	50
3	80
4	100
5	125
6	150
7	175
8	200

SOCKET



PVC FITTINGS



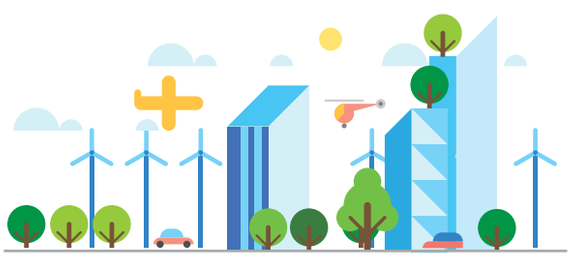
(MM)
63 x 40
90 x 40
90 x 50
110 x 40
110 x 50
110 x 80
110 x 200
140 x 80
140 x 100
140 x 150
140 x 175
160 x 100
180 x 100
180 x 125
200 x 100
200 x 125
200 x 150

BLUE REDUCING SOCKET BOTH SIDE PUSH ONE SIDE THREADED



(INCH)	(MM)
2″ x 1½″	50 x 40
3″ x 1½″	80 x 40
3″ x 2″	80 x 50
4″ x 1½″	100 x 40
4″ x 2″	100 x 50
4″ x 3″	100 x 80
5″ x 2″	125 x 50
5″ x 3″	125 x 80
5″ x 4″	125 x 100
6″ x 4″	150 x 100
6″ x 5″	150 x 125
7″ x 4″	175 x 100
7″ x 5″	175 x 125
7″ x 6″	175 x 150
8″ x 5″	200 x 125
8″ x 6″	200 x 150
10″ x 8″	250 x 200
12″ x 10″	300 x 125

BLUE REDUCING SOCKET BOTH SIDE THREADED



KIPPER
PIPES

COLUMN PIPES



THE PERFECTION OF SKIPPER COLUMN PIPES

Skipper Column Pipes have been specially designed and manufactured under stringent quality standards. They are relentlessly tested to withstand system load comprising pump, water and pipe weight. These pipes are fitted to the pumps and lowered to the level of pump sets depending on the amount of water and the capacity of the pump to lift water.
As the motor starts, water underneath rushes to the pump, which with the help of impellers fitted in the bowls along with centrifugal force, pumps the water upwards through the column pipes above the ground level.

Due to its unique design of square threads, they are capable of withstanding considerable amount of jerks and load during operation. These pipes are supplied with separate couplers which are integrally locked with the pipes. Skipper column pipes for submersible pumps offer many advantages and have emerged as the perfect option for conventional metal pipes.
The following pipes are available in 3 meter length and are provided with rubber sealing ring on squared threaded male end. Skipper Column Pipes are manufactured in the range of 25mm to 100mm diameter with different pressure ratings. These pipes are used for rise or drop submersible pumps up to a depth of 1000 feet.

SKIPPER COLUMN PIPES ARE YOUR PERFECT CHOICE



LIGHT WEIGHT Skipper column pipes are light weight hence transportation and installation becomes much easier.

HYGIENIC As UPVC is immune to galvanic and electrolytic erosion, both pipe and water remains unaffected.

HIGH FLOW RATE Mirror smooth inside surface of pipes and corrosion resistance property prevent scale formation which ensures high flow rate resulting in substantial power saving.

LONGER LIFE Skipper pipes are manufactured with latest technology under stringent quality control. Specially imported additives are used for higher strength and long trouble free service life.

HIGH TENSILE LOAD CAPACITY Specially designed square threads (male and female) are manufactured on high accurate CNC to provide smooth fitment/ refitment. The design of threads along with the pipe material makes it strong enough to take high tensile loads.

LEAK PROOF JOINTS The sealing rings are made from best quality rubber which ensures long service life, absorption of pump vibration and water tightness.

OVERALL ECONOMY In addition to the above benefits skipper column pipes for submersible pumps are much economical to GS pipes.

TESTING THE PERFECTION OF COLUMN PIPES

1 TENSILE TEST

2 DENSITY TEST

3 FLATTENING TEST

APPLICATIONS

Domestic and industrial applications for water rising by submersible pumps.

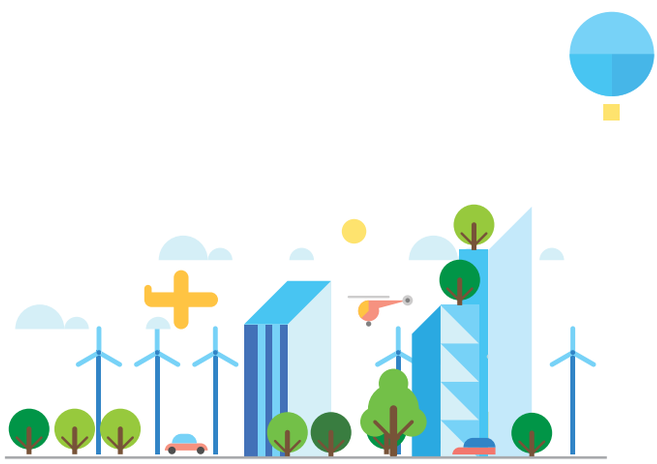
Ideal for fresh water, salty water and chemically aggressive water.

TECHNICAL DATA SHEET OF COLUMN PIPE

SR. NO	SIZE	PIPE SIZE	MOD		MOUTH W.T		MIDDLE W.T		LENGTH IN MM	JOINTING TYPE	PRESSURE RATING (Kg/Cm2)	SAFE PUMP DELIVERY HEAD IN MTRS
			Min.	Max.	Min.	Max.	Min.	Max.				
1	25 MM	1"(25MM GOLD)	33.270	33.530	3.900	4.000	2.900	3.000	3000.000	Socket Type	29	290
2		1"(25MM SILVER)	33.270	33.530	3.700	3.800	2.750	2.850	3000.000	Socket Type	21	210
3		1"(25MM DIAMOND)	33.270	33.530	3.700	3.800	2.750	2.850	3000.000	Socket Type	21	210
4		1" S-15	33.270	33.530	3.75	3.95	2	2.1	3000.000	Socket Type	15	150
5		1" S-15	33.270	33.530	3.75	3.95	2	2.1	3050.000	Bell Type	15	150
6		1" S-12.5	33.270	33.530	3.7	3.9	1.7	1.8	3000.000	Socket Type	12.5	125
7		1" S-12.5	33.270	33.530	3.7	3.9	1.7	1.8	3050.000	Bell Type	12.5	125
8	32 MM	1 1/4"(32MM GOLD)	42.030	42.290	5.000	5.500	3.100	3.200	3000.000	Socket Type	25	250
9		1 1/4"(32MM SILVER)	42.030	42.290	4.350	4.500	2.900	3.000	3000.000	Socket Type	21	210
10		1 1/4"(32MM DIAMOND)	42.030	42.290	5.250	5.350	4.300	4.400	3000.000	Socket Type	36	360
11		32MM S-15	42.030	42.290	4.2	4.35	2.450	2.550	3000.000	Socket Type	15	150
12		32MM S-15	42.030	42.290	4.2	4.35	2.450	2.550	3050.000	Bell Type	15	150
13		32MM S-12.5	42.030	42.290	4.25	4.35	2.100	2.200	3000.000	Socket Type	12.5	125
14		32MM S-12.5	42.030	42.290	4.25	4.35	2.100	2.200	3000.000	Bell Type	12.5	125
15		32MM SPL. HEAVY	42.030	42.290	7.75	8.15	5.250	5.550	3000.000	Socket Type	45	450
16	40 MM	1 1/2"(40MM GOLD)	48.110	48.410	5.000	5.500	3.200	3.300	3000.000	Socket Type	23	230
17		1 1/2"(40MM SILVER)	48.110	48.410	4.350	4.500	2.900	3.000	3000.000	Socket Type	19	190
18		1 1/2"(40MM DIAMOND)	48.110	48.410	5.500	5.600	4.500	4.600	3000.000	Socket Type	33	330
20		40MM S-12.5	48.110	48.410	4.800	5.000	2.300	2.400	3000.000	Socket Type	12.5	125
21		40MM PLATINUM	48.110	48.410	6.000	6.500	3.920	4.220	3000.000	Socket Type	25.2	252

TECHNICAL DATA SHEET OF COLUMN PIPE

SR. NO	SIZE	PIPE SIZE	MOD		MOUTH W.T		MIDDLE W.T		LENGTH IN MM	JOINTING TYPE	PRESSURE RATING (Kg/Cm2)	SAFE PUMP DELIVERY HEAD IN MTRS
			Min.	Max.	Min.	Max.	Min.	Max.				
22	40 MM	40MM HEAVY DUTY	48.110	48.410	7.250	7.750	5.000	5.400	3000.000	Socket Type	34.5	345
23		40MM SPL. HEAVY	48.110	48.410	8.400	8.900	5.900	6.270	3000.000	Socket Type	40	400
24	50 MM	2"(50MM GOLD)	60.000	60.200	5.100	5.300	3.450	3.500	3000.000	Socket Type	19	190
25		2"(50MM DIAMOND)	60.000	60.200	6.500	6.600	5.000	5.550	3000.000	Socket Type	26	260
26		50MM S-13	60.000	60.200	5.000	5.300	2.700	2.900	3000.000	Socket Type	13	130
27		50MM BRONZE	60.000	60.200	4.500	5.000	2.200	2.700	3000.000	Socket Type	8	80
28		50MM BRONZE	60.000	60.200	4.200	4.700	2.200	2.700	3050.000	Bell Type	8	80
29		50MM SPL. HEAVY	60.000	60.200	9.000	9.500	6.500	7.000	3000.000	Socket Type	35	350
30	65 MM	2 1/2"(65MM GOLD)	75.000	75.300	6.450	6.650	4.450	4.650	3000.000	Socket Type	18	180
31		2 1/2"(65MM SP. HEAVY)	75.000	75.300	8.600	8.800	6.800	7.000	3000.000	Socket Type	35	350
32		2 1/2"(65MM DIAMOND)	75.000	75.300	6.950	7.150	5.250	5.480	3000.000	Socket Type	22	220
33		65MM S-10	75.000	75.300	5.650	5.800	2.950	3.150	3000.000	Socket Type	10	100
34	80 MM	3"(80MM GOLD)	88.000	88.300	6.400	6.500	4.800	5.000	3000.000	Socket Type	17	170
35		3"(80MM SP. HEAVY)	88.000	88.300	9.600	9.800	8.000	8.200	3000.000	Socket Type	35	350
36		3"(80MM DIAMOND)	88.000	88.300	7.400	7.600	5.600	6.100	3000.000	Socket Type	22	220
37		80MM S-11	88.000	88.300	5.800	6.000	3.300	3.500	3000.000	Socket Type	11	110
38	100 MM	4"(100MM GOLD)	113.000	113.300	7.500	7.600	5.800	6.100	3000.000	Socket Type	16	160
39		4"(100MM SP. HEAVY)	113.000	113.300	12.000	12.200	10.200	10.400	3000.000	Socket Type	35	350
40		4"(100MM SP. DIAMOND)	113.000	113.300	8.500	8.600	6.650	7.060	3000.000	Socket Type	18	180
41		100MM S-10	113.000	113.300	6.25	6.4	3.9	4.1	3000.000	Socket Type	10	100



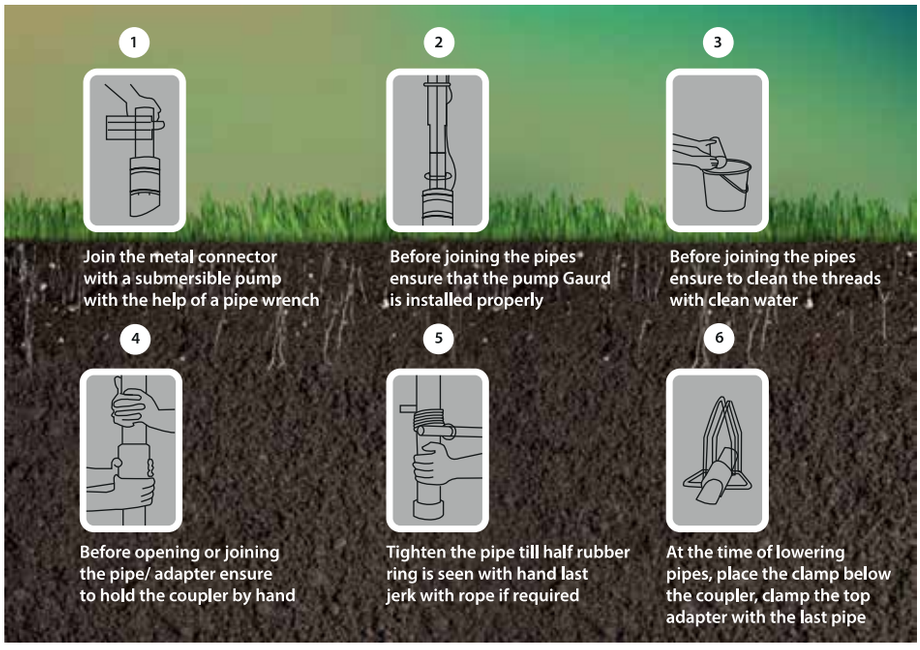
SKIPPER COLUMN PIPES



(INCH)	(MM)
1″	25
1¼″	32
1½″	40
2″	50
2½″	65
3″	80
4″	100

COLUMN PIPES

INSTALLATION GUIDE



SKIPPER
PIPES

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