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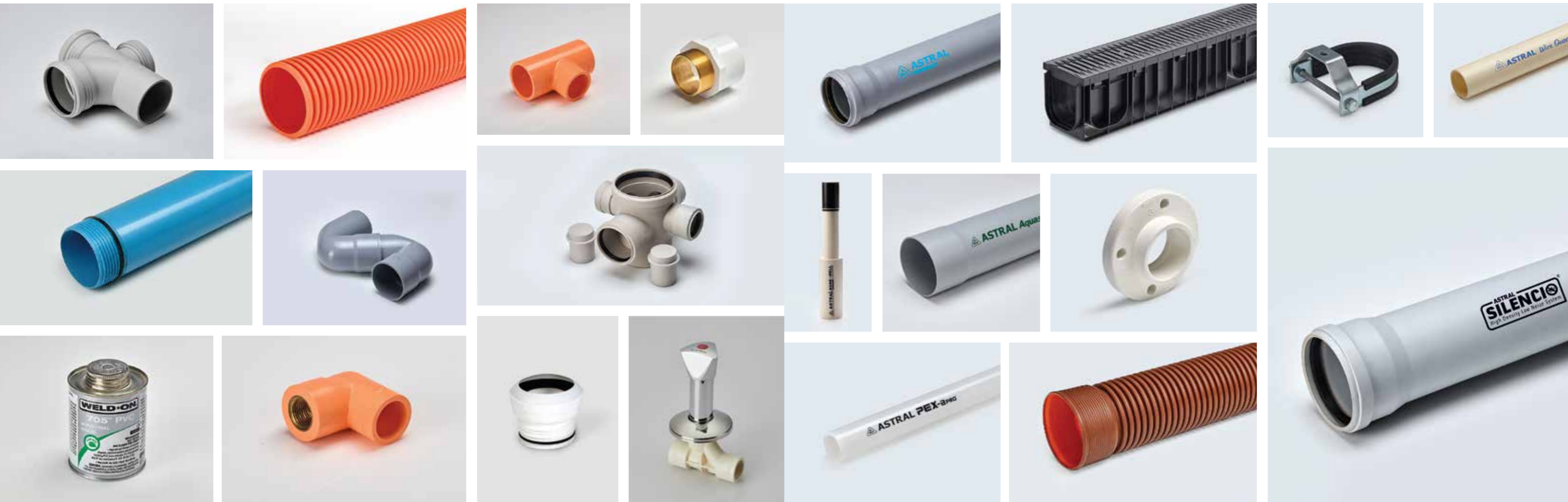
ASTRAL TOLL FREE
1800 233 7957
 Please get in touch with us
 between 10 a.m. to 6 p.m.

ACB/EXB/000 REV. 00/10/19



COMPREHENSIVE RANGE OF PIPING & ANCILLARY PRODUCTS

PLUMBING | SEWERAGE & DRAINAGE | AGRICULTURE | SURFACE DRAINAGE | CABLE PROTECTION
 INDUSTRIAL | FIRE PROTECTION | URBAN INFRASTRUCTURE | INSULATION | ANCILLARY



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ASTRAL, INDIA'S PROGRESSIVE PIPE COMPANY

Established in 1996 with the aim to manufacture best-in-globe plastic piping systems, Astral Pipes fulfils emerging piping needs of millions of houses and adds extra mileage to India's developing real estate fraternity with the hallmark of unbeaten quality and innovative piping solutions. Keeping itself ahead of the technology curve, Astral has always been a front runner in the piping category by bringing innovation and getting rid of old, primitive and ineffective plumbing methods. Bringing CPVC in India, and pioneering in this technology, have set Astral apart and its highest quality enabled it to obtain NSF approval for its CPVC pipes and fittings. Astral went beyond the category codes by launching many industry firsts, like launching India's first lead-free uPVC pipes for plumbing as well as for stream water, just to name a few.

Astral Pipes offers the widest product range across this category when it comes to product applications. Astral Pipes is equipped with production facilities at Santej and Dholka in Gujarat, Hosur in Tamil Nadu, Ghiloth in Rajasthan and Sangli in Maharashtra to manufacture plumbing systems, drainage systems, agriculture systems, fire sprinkler piping systems, industrial piping and electrical conduit pipes with all kinds of necessary fittings.

Astral Pipes' Infrastructure division Rex offers a comprehensive product range including corrugated piping for drainage and cables, polyolefin cable channels, sewage treatment plants, plastic sheathing ducts, suction hoses, and sub-surface drainage systems. This range helps Astral to establish a strong foothold in infrastructure and agriculture sector in the constantly evolving business of piping.

In 2014, Astral forayed into the adhesives category by acquiring UK-based Seal It Services Ltd. and Kanpur based Resinova Chemie Ltd., which manufacture adhesives, sealants and construction chemicals. With five manufacturing facilities now in this business segment, Astral has strengthened its presence in the category and made rapid inroads.

ASTRAL'S WIDEST RANGE OF PRODUCTS

PLUMBING PIPES & FITTINGS

- CPVC PRO
- Pex-a PRO
- Aquarius

SURFACE DRAINAGE SYSTEM

- Hauraton

CABLE PROTECTION

- Wire Guard
- TeleRex

ANCILLARY PRODUCTS

- Clamps & Hangers
- Weldon

SEWERAGE DRAINAGE PIPES & FITTINGS

- Silencio
- DrainMaster
- Foamcore
- DrainHulk
- Underground
- D-Rex
- RexTP

INDUSTRIAL PIPES & FITTINGS

- Chem PRO
- Aquarius Plus

URBAN INFRASTRUCTURE

- Plus+StiRex
- Pre-StiRex

AGRICULTURE PIPES & FITTINGS

- Bore-Well
- Case-Well
- Aquasafe
- AquaRex
- Geo-Rex

FIRE SPRINKLERS PIPES & FITTINGS

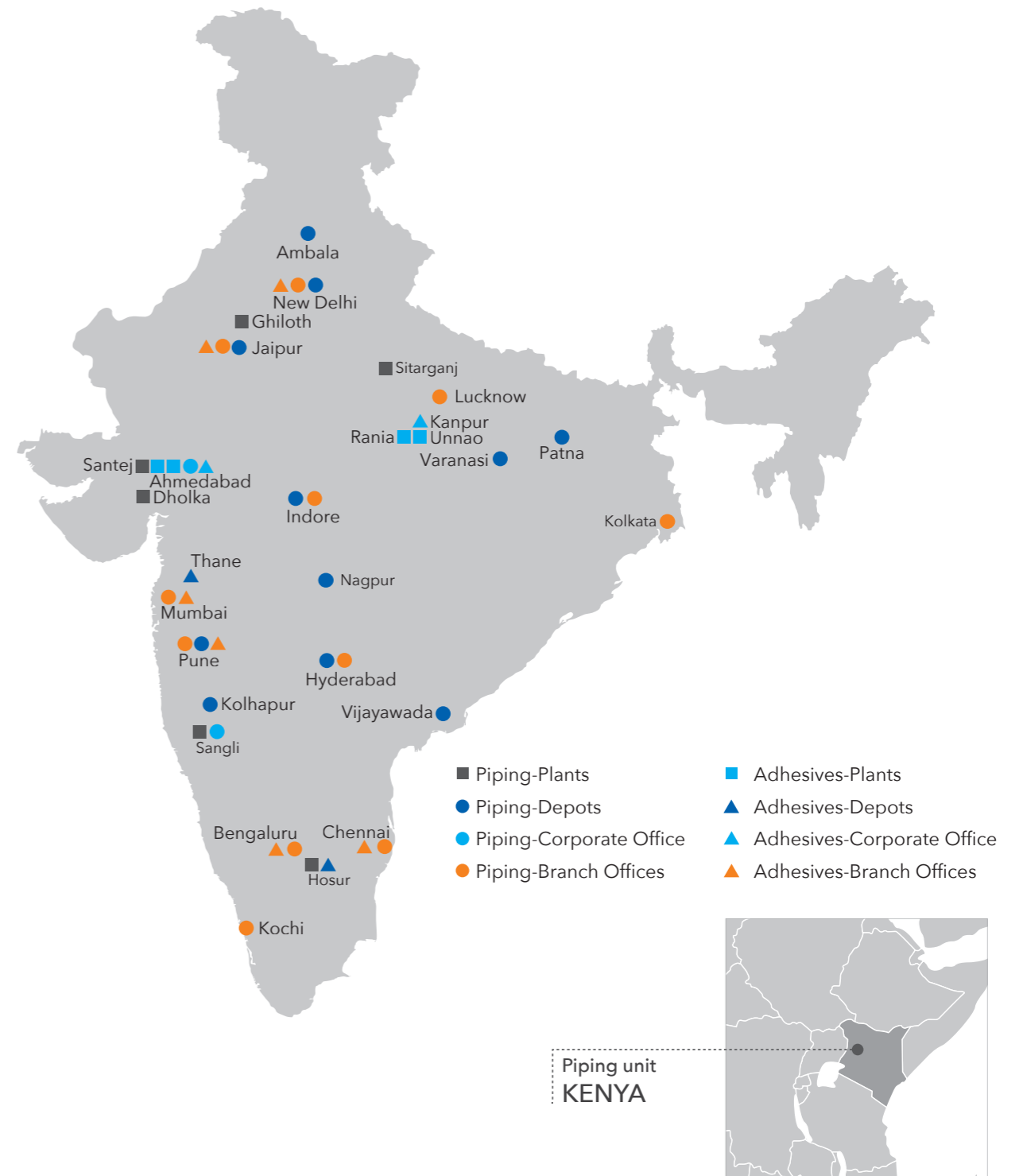
- Fire PRO

INSULATION TUBE

- Insu PRO

MARKETING NETWORK

ASTRAL has a marketing network of more than 800 distributors and 30,000 dealers spread all over India with branch offices at Mumbai, Pune, Delhi, Bengaluru, Chennai, Hyderabad, Jaipur, Lucknow and Kochi. Apart from that ASTRAL has its own warehouses at Bengaluru, Vijaywada, Hyderabad, Delhi, Ghaziabad, Kolhapur, Pune, Nagpur, Indore, Varanasi, Jaipur & Hosur to deliver the material as quick as possible. More than 400 techno marketing professionals and administrative personnel are on the board to coordinate with architects, plumbing contractors and plumbers to utilize the best plumbing techniques and to get the best from the products.



JOINING SYSTEM

1. Cut the pipe



3. Expand the pipe



2. Place the ring over the pipe



4. Insert the fitting in the pipe



AN ERA THAT'S
FUTURISTIC AND
FLEXIBLE



A REVOLUTIONARY PIPING SYSTEM WITH EXPANSION RING TECHNOLOGY

Astral PEX-a Pro, a next generation hot & cold plumbing system is made of cross-linked polyethylene pipes. The cross linking technology is a process where polyethylene molecules form links between the polymeric chain, making it the next generation plumbing system with futuristic capabilities & characteristics.

Astral PEX-a Pro system is based on expansion ring technology. The pipes & fittings are joined with simple applications of expansion using the plastic memory of the PEX-a Pro pipes. This unique joining system provides water tight, compact & recessed system with leak protection, easy renovation & chemical-free installation.

The PEX-a Pro plumbing system can also be installed using manifold hydraulic system, which provides a distribution element in a special wall mount cabinet which supplies all draw-off points which are connected & controlled individually. The manifold combined with pipe-in-pipe system ensures easy repair & maintenance as well as leak protection.

COMPONENTS OF THE PEX-A PRO SYSTEM

PEX-a PIPES: Astral Pipes uses the best high density polyethylene (HDPE) and the most advanced peroxide cross-linking technology in order to offer high performing PEX-a pipes. Astral's modern technology is based on the well-known peroxide cross-linking process (PEX-a), while using the latest high power infrared ray ovens.

PLASTIC RINGS: The use of plastic rings, manufactured by injection moulding using special high-tech polymers enables to offer better dimensional precision in the rings that, together with a pipe stopping system, facilitates the assembly process. The rings are available in three different colours (red, blue and white) so you can make the pipelines easily identifiable.

BRASS / PPSU FITTINGS: The Astral PEX-a Pro system exclusively uses high quality brass (CW617N alloy), which complies with the most demanding EU sanitary standards.

The PEX-a Pro system is also available with PPSU (Poly Phenyl Sulfone) fittings, which are one of the highest quality plastic fittings for hot & cold water plumbing system. By using PPSU fittings, full plastic piping system is possible, without compromising any hydraulic properties.



UNIQUE BENEFITS OF JOINING SYSTEM

WATERTIGHT: The Astral PEX-a Pro joining system guarantees an absolute watertight joint, without the need to perform reviews. The strength and duration of the joint is even greater than the pipe itself.

COMPACT: Astral PEX-a Pro accessories don't protrude from the pipe, making it ideal for use in narrow partitions or pladur type partitions.

RECESSED: The Astral PEX-a Pro system is one of the few systems authorized by the European Union authorities for wall embedment use.

NO WAITING TIME: The Astral PEX-a Pro system eliminates the time of waiting before you can perform the pressure test and put the installation to work immediately.

LEAK PROTECTION: Although a properly installed Astral PEX-a Pro system is secured from leakage, there may be occasions when extra precautions against damage to the construction of a building from leakage are needed. Astral's Pipe-in-Pipe allows the pipe to be withdrawn and replaced, especially in solid floors or walls. Any leakage is retained within the conduit and can be detected.

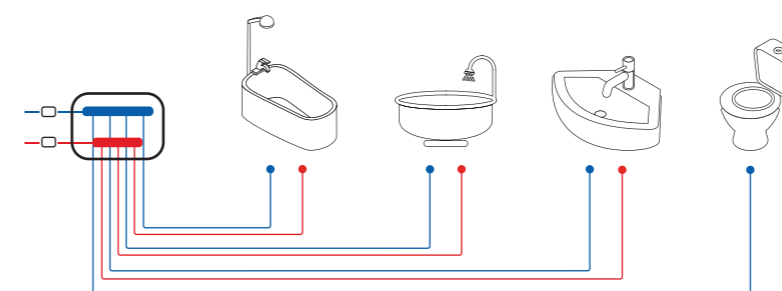
EASY RENOVATION: In addition, in a concealed pipe run without T-joints, an accidentally damaged section of pipe can be withdrawn and replaced, whilst minimising structural damage.

FEATURES AND BENEFITS

- Resistance to high pressure
- Withstands temperature up to 95°C
- Chlorine resistance
- Freezing resistance
- Highest flexibility
- Less number of joints
- High impact resistance
- Non-conductive / Non-corrosive
- Low pressure loss
- Higher flows
- Long life
- Drinking water suitability

TYPES OF INSTALLATION

- Distribution with single connection
- Tee connection
- Pipe in pipe connection
- Ceiling installation



AVAILABLE SIZES

16 mm, 20 mm, 25 mm, 32 mm
(1.6 cm), (2.0 cm), (2.5 cm), (3.2 cm)

ISO:15875-1

Plastic piping systems for hot and cold water installations-Crosslinked Polyethylene (PE-X)-Part 1: General

ISO:15875-2

Plastic piping systems for hot and cold water installations-Crosslinked-Polyethylene (PE-X)-Part 2: Pipes



HIGHEST NUMBER OF CERTIFICATIONS



ONLY THOSE PRODUCTS BEARING THE ABOVE MARKS ARE CERTIFIED



1st TO INTRODUCE CPVC IN INDIA

ASTRAL CPVC PRO pipes and fittings, manufactured by Astral Poly Technik Ltd, are made from the specialty plastic, chemically known as Chlorinated Poly Vinyl Chloride [CPVC]. This CPVC compound shall meet cell class DP 110-2-3-2 as per IS:15778 and a maximum service temperature up to 93°C. This compound is carefully designed in our R & D center and backed by our own expertise of manufacturing CPVC piping system from last 17 years, which gets excellent results in all applications for CPVC piping system. It is unique combination of highest Impact resistance without any loss in pressure bearing capacity / Tensile strength or Vicat softening temperature. This will ensure best trouble free service and also stands notch above the initial installation issues of cracking / damages due to handling, storage and installation.

These Pipes are produced in copper tube size (CTS) from 15 mm (½”) to 50 mm (2”) with two different standard dimensional ratios - SDR-11 and SDR-13.5 (Class 1 & Class 2 respectively as per IS:15778). The fittings are produced as per SDR 11. The Pipes and Fittings in SDR 11 class is also comply to ASTM standard. All Astral CPVC SDR 11 and SDR 13.5 pipes are made from identical CPVC compound material having same physical properties. The CPVC fittings are manufactured from compound material which meets all the requirement as per ASTM standard.

PIPE TEMPERATURE PRESSURE RATING (°C)

Apart from having the same physical properties, SDR 11 and SDR 13.5 which are having different wall thickness and therefore, at any given temperature, they have different pressure ratings. For e.g.

GRADE	UNIT	23°C	82°C
SDR 11	psi	400	100
	kg/cm ²	28.1	7.0
SDR 13.5	psi	320	80
	kg/cm ²	22.5	5.6

Astral also produces CPVC PRO pipes in iron pipe size (IPS), available sizes are 65 mm (2½”) to 100 mm (4”) in SCH 40 and 65 mm (2½”) to 300 mm (12”) in SCH 80 which meets the requirements of ASTM F441. The pressure rating varies with schedule pipe size and temperature. CPVC pipes of Copper Tube Size (CTS) dimensions can also be connected to CPVC (IPS) dimensions by using IPS x CTS fittings.

STANDARDS & SPECIFICATIONS

- IS:15778 - Standard Specification for CPVC pipes for Potable Hot and Cold Water Supplies -Specification
- ASTM D1784 - Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds
- ASTM D2846 - Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Hot & Cold water distribution systems
- ASTM F493 - Standard Specification for Solvent Cements for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe & Fittings
- ASTM F441 - Standard Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe, SCH 40 & 80
- ASTM F438 - Socket- Type Chlorinated Polyvinyl Chloride Plastic Pipe Fittings. Schedule 40
- ASTM F439 - Socket-Type Chlorinated Polyvinyl Chloride Plastic Pipe Fittings. Schedule 80
- ASTM D2774 - Underground installation of Thermoplastic pipes

NSF APPROVED

NSF International, a not-for-profit, non-governmental organization is the world leader in standards development, product certification, education and risk management for public health and safety (www.nsf.org). For 65 years, NSF has been committed to public health, safety and environmental protection. The NSF Mark is recognized for its value in international trade and is respected by regulatory agencies at the local, state, and national levels. Astral is the first Indian company to obtain approval from NSF for its CPVC products.

AVAILABLE SIZES

- SDR 11 & SDR 13.5: 15 mm (1.5cm) (½”) to 50 mm (5.0 cm) (2”) CTS - confirming to IS:15778:2007, as per ASTM D2846
- SCH 40: 65 mm (6.5 cm) (2½”) to 100 mm (10.0 cm) (4”) IPS, as per ASTM F441 & ASTM F438
- SCH 80: 65 mm (6.5 cm) (2½”) to 300 mm (30.0 cm) (12”) IPS, as per ASTM F441 & ASTM F439

FIELDS OF APPLICATIONS

Hot and Cold water applications in homes, apartments, hotels, resorts, hospitals, high and low rise buildings, corporate and commercial houses, academic institutes etc. for pure and hygienic water supply.

FEATURES AND BENEFITS

Hot and Cold water compatible: Astral CPVC Pro Piping System is compatible with both hot and cold water. It withstands very high temperature compared to any other thermoplastic plumbing systems. Many solar and electric water heaters have CPVC piping system for heat efficiency and lower installation cost.

Corrosion resistance | Lower bacterial growth | Tough, rigid material | No Scale, pit or leach formation | Unaffected by chlorine in the water | Chemical resistance | Low thermal expansion | Easy, cold welding process | Superior insulation | Fire safety | Cost effective



AVAILABLE SIZES

- SCH 40: 15 mm (1.5 cm) (1/2") to 300 mm (30.0 cm) (12") (IPS) As per ASTM D1785, D2466
- SCH 80: 15 mm (1.5 cm) (1/2") to 300 mm (30.0 cm) (12") (IPS) As per ASTM D1785, D2467



LEAD-FREE

CORROSION RESISTANT

UV RESISTANT

ASTRAL Aquarius®
STANDARDS REDEFINED
uPVC PLUMBING SYSTEM FOR OUTER LOOP LINES

INDIA'S FIRST LEAD FREE PIPING SYSTEM

Astral Aquarius pipes are non-toxic and lead free which makes them a safe material for potable water. It is also the world's most researched and thoroughly tested material which meets all international standards for safety and health. Astral Aquarius uPVC pipes being lead free are non-toxic and hence favoured for use in applications such as potable water pipes. Astral Aquarius uPVC plumbing system utilizes NSF approved one-step solvent cement, specifically formulated for the use. Joining is accomplished quickly and efficiently utilizing inexpensive tools thereby greatly reducing labor and installation costs. Astral Aquarius uPVC solvent joint plumbing system makes its pressure bearing capacity twice than that of the threaded pipe. Astral Aquarius uPVC pipes & fittings exhibit the well-known physical characteristics and other benefits of conventional uPVC piping such as good chemical and corrosion resistance, low thermal conductivity, high strength-to-weight ratio, good impact resistance and ease of installation.

Astral always recommends use of IPS Weld-on solvent cement which is specifically manufactured to meet the requirements of ASTM D 2564. All-purpose cements should not be used. Primers manufactured for uPVC pipe is acceptable. Tests performed at respected universities and independent laboratories confirm that Astral Aquarius uPVC plumbing system is superior to metal systems in terms of water quality effects.

Astral Aquarius uPVC system is generally inert to most mineral acids, bases, salts and paraffinic hydrocarbon solutions, hence recommended for industrial application also.

ASTRAL AQUARIUS-SAFE PIPING MATERIAL FOR DRINKING WATER

FIELDS OF APPLICATIONS

- Ring lines / Down take lines
- Swimming pools
- Pipes for hand pumps
- Salt water lines
- Sugar and paper industries
- Industrial process lines
- Aggressive / Corrosive fluid transportation
- Coal washing and ash handling

FEATURES & BENEFITS

- Strong and light weight
- Durable
- Simple and leak-proof joints
- Maximum flow rate
- Good insulator
- Chemical resistance

UV STABILIZED

Astral Aquarius Lead Free Plumbing System can be used in sunlight exposed conditions. However, Astral recommends a standard grade of exterior latex paint (water based) which will protect the system adequately.

EASY TO INSTALL

Astral Aquarius Lead Free pipes can be cut, shaped, welded and jointed easily by one step solvent cement. PVC uses a simple, solvent cement jointing method. Tools required are very simple and inexpensive (chamfering tool and pipe cutter only) and avoid the need for an electrical source. For higher diameter (2" and above pipes) use primer before applying solvent cement.



FIELDS OF APPLICATIONS

Drain and sewer systems in residences, commercial complexes, resorts, hospitals, academic institutes, industries etc.

ADVANTAGES

- Outstanding noise-insulation values
- Easy installation
- High impact resistance
- As strong as metal
- Chemical resistance
- No special clamps / Hangers required
- Extremely tough
- Resistance to hot water
- Smooth inner surface



THE COMPLETE LOW NOISE SYSTEM

Silence is an important essential of human living. Only seldom we experience true silence in our surroundings. It is precisely this pleasant quietness which distinguishes the Astral Silencio low noise discharge system from others.

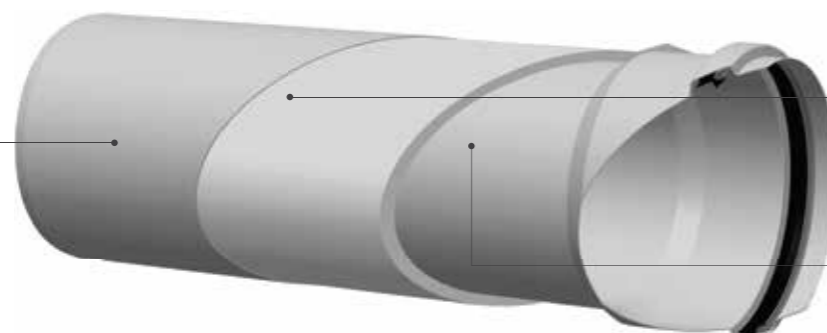
The Complete Low Noise System - Just trust what you hear

Our unique Astral Silencio low noise system is an innovative product made of mineral-reinforced polypropylene. This base material provides excellent mechanical and acoustic properties of Astral Silencio. Made with a high molecular structure, which enables absorption of airborne sound and structure borne sound. Sound energy does not spread over the pipe wall.

PIPE STRUCTURE

EXTERNAL LAYER - POLYPROPYLENE

- Extremely Tough
- Sturdy
- Impact Resistant



MIDDLE LAYER - MINERAL REINFORCED POLYPROPYLENE

- Very High Ring Stiffness
- Excellent Acoustic Properties

INTERNAL LAYER - POLYPROPYLENE

- Superior Flow Performance
- Resistant against high water temperatures and chemicals

THE OUTSTANDING FEATURE OF ASTRAL SILENCIO IS OUR 3 LAYER CONSTRUCTION AND SPECIAL SOCKET JOINT

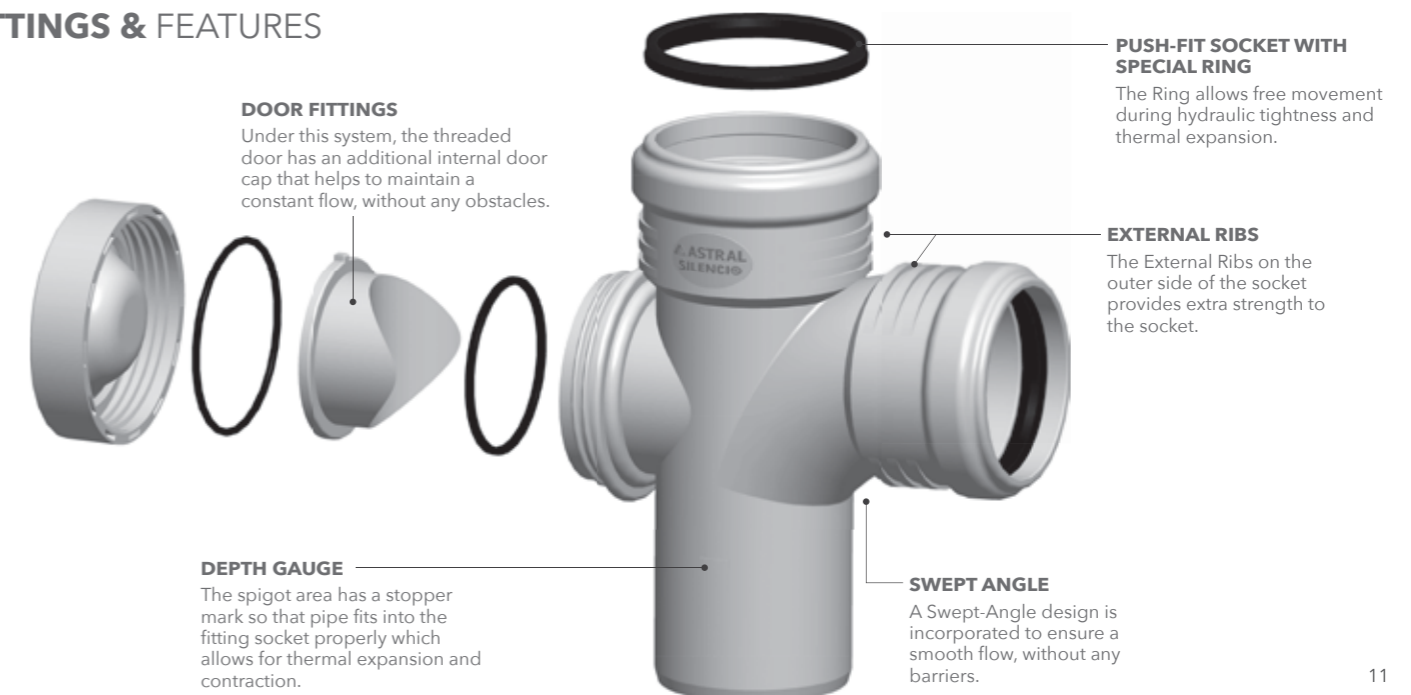
- **EXTERNAL LAYER - PP**
The tough protective shell of the pipe. Sturdy and highly impact resistant.
- **MIDDLE LAYER - MINERAL REINFORCED PP**
Mineral-reinforced plastic, provides very high stability and establishes the superior noise insulating effect.
- **INTERNAL LAYER - PP**
Provides a superior flow performance with its smooth structure. It is resistant against high water temperatures.

ASTRAL SILENCIO - A COMPLETE SYSTEM WITH PIPE SIZES FROM DN 40 TO 200 AND COMPLEMENTED BY A FULL RANGE OF FITTINGS

The comprehensive system offers flexibility of an extensive choice, excellent quality and reliability.

Nominal Outside Diameter DN		Mean Outside Diameter (mm)		Wall Thickness (mm)
mm (in.)	cm	Min	Max	
40 (1 1/4)	4.0	40.0	40.3	2.2
50 (1 1/2)	5.0	50.0	50.3	4.0
63 (2)	6.3	63.0	63.3	4.0
75 (2 1/2)	7.5	75.0	75.3	4.2
110 (4)	11.0	110.0	110.4	5.3
125 (5)	12.5	125.0	125.4	5.3
160 (6)	16.0	160.0 <td 160.5	5.3	
200 (8)	20.0	200.0	200.6	6.2

FITTINGS & FEATURES



FIELDS OF APPLICATIONS

Drain & sewer systems in residences, commercial complexes, resorts, hospitals, academic institutes, industries etc.



ONLY THOSE PRODUCTS BEARING THE ABOVE MARKS ARE CERTIFIED



ASTRAL DRAINMASTER® SUPERIOR SWR DRAINAGE SYSTEM

SUPERIOR SWR DRAINAGE SYSTEM FOR LEAK PROOF JOINTS

Astral DrainMaster is a uPVC conventional drainage system for soil, waste and rain water. This system enables fast and efficient removal of waste without blockage and leakage. Its high impact strength, chemical and corrosion resistance. Long life and virtually zero maintenance have made Astral DrainMaster a preferred drainage and rain water system among architects, builders and plumbing contractors. The state of the art equipments and virgin raw material are used to produced Astral DrainMaster SWR system.

Astral Drain Master pipes and fittings are manufactured as per internationally accepted quality standards and specifications. They are tested for correct thickness and dimensional accuracy, randomly and batch wise in our most modern quality assurance laboratory.

AREA OF APPLICATIONS

Astral DrainMaster Type A pipes are recommended for use in ventilation and rain water applications. While Type B pipes are recommended for soil and discharge applications.

EASY TO INSTALL

Astral DrainMaster pipes can be cut, shaped and jointed easily in one step using rubber lubricant. uPVC uses a simple, rubber lubricant jointing method. Tools required are very simple and inexpensive (chamfering tool and pipe cutter only) and does not require an electrical source.

FEATURES & BENEFITS

- Saves labour and time
- 100% leak-proof
- Dimensional accuracy
- High flow rates, no choking
- UV protected

AREAS OF APPLICATIONS

Astral DrainMaster Type A pipes are recommended for use in ventilation and rain water applications while, Type B pipes are recommended for soil and discharge applications.

AVAILABLE SIZES

RINGFIT:

Type A - 75 mm (7.5 cm), 90 mm (9.0 cm), 110 mm (11.0 cm) & 160 mm (16.0 cm)

Type B - 75 mm (7.5 cm), 90 mm (9.0 cm), 110 mm (11.0 cm) & 160 mm (16.0 cm)

SELFIT:

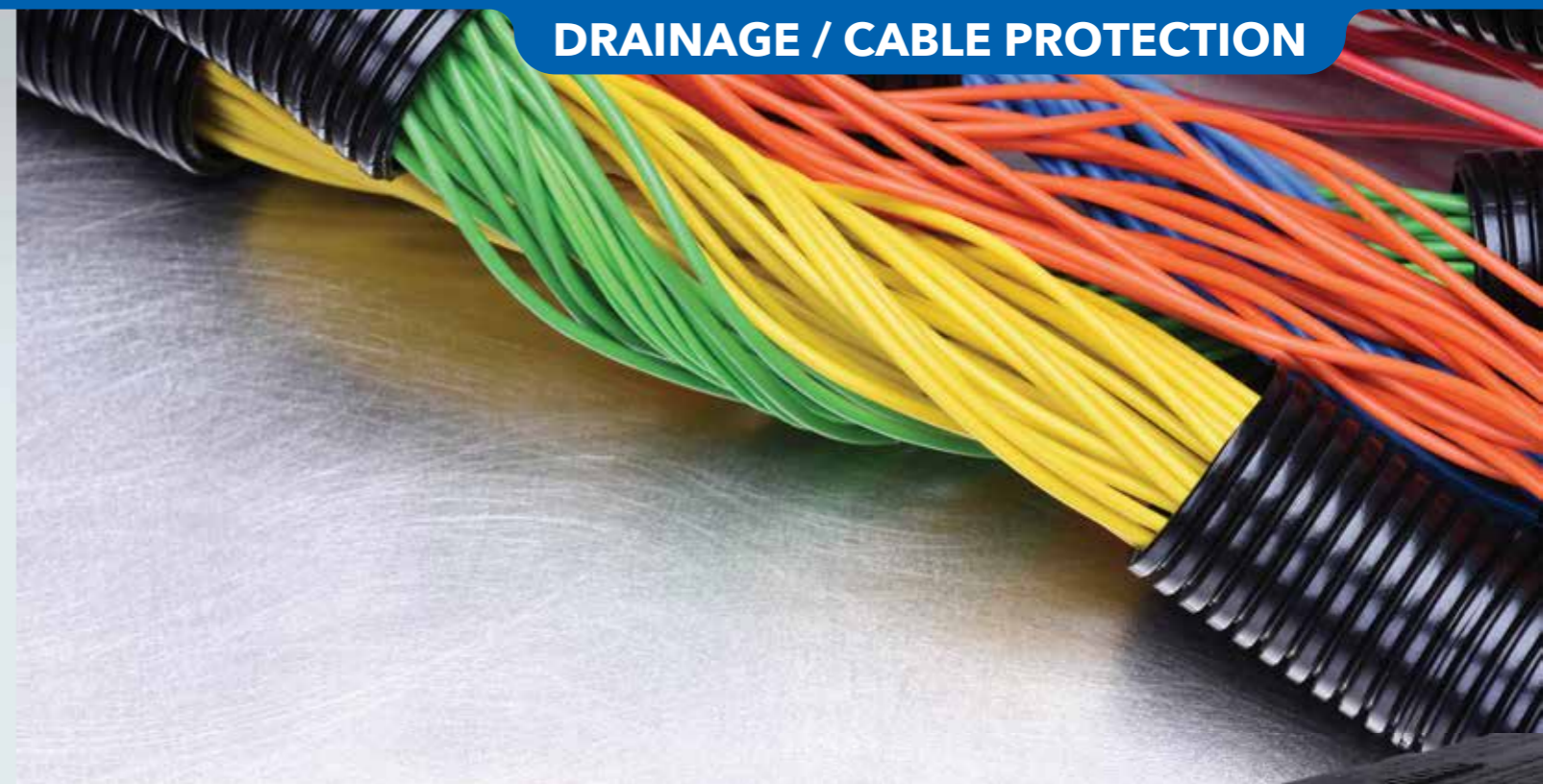
Type A - 75 mm (7.5 cm), 90 mm (9.0 cm), 110 mm (11.0 cm) & 160 mm (16.0 cm)

Type B - 75 mm (7.5 cm), 90 mm (9.0 cm), 110 mm (11.0 cm), 160 mm (16.0 cm), 200 mm (20.0 cm), 250 mm (25.0 cm) & 315 mm (31.5 cm)

PIPES ARE SUBJECT TO TESTS LIKE

- Tensile strength • Reversion
- Vicat softening temp. test • Water tightness of joint
- Impact strength • Stress relief test
- Exposure to sunlight





Rex Polyextrusion Pvt. Ltd. has been making its presence felt in the piping industry for the past three decades. The company has played a key role in introduction of a variety of new products in the Indian Piping Industry with the sole motive of encouraging the application of superior user friendly and economic solutions. The manufacturing systems installed at Rex are extremely advanced and are based on state-of-the-art German equipment and extrusion process technology. The specific emphasis on quality production in combination with technical advancements, Rex offers a formidable range of products suitable for the Indian piping needs

PRODUCT RANGE

- PVC Suction and Discharge Hoses.
- Single Wall Corrugated Pipes for Sub-Surface Drainage.
- Double Walled Corrugated Piping Systems for buried underground Communication / Power Cable Management.
- Plastic Sheathing Ducts for Post Tensioning for Flyovers and Bridges.
- Double Walled Corrugated Structured Wall Non-Pressured Underground Sewerage Drainage Applications.

AVAILABLE DIAMETER RANGE

75 mm (7.5 cm), 100 mm (10.0 cm) , 135 mm (13.5 cm), 150 mm (15.0 cm), 170 mm (17.0 cm), 200 mm (20.0cm), 250 mm (25.0 cm), 300 mm (30.0 cm), 400 mm (40.0 cm) , 500 mm (50.0cm) , 600 mm, (60.0cm), 800 mm (80.0cm)

DOUBLE WALLED CORRUGATED PIPES

- Polyolefin cable Channels for underground laying of Signal and Communication Lines on railway routes and in power plants and industrial installation.
- Package Sewage Treatment Plants for effective management of sewage generated from communities.
- Flat Belt type sub-surface drainage systems for agricultural, road drainage, foundation drainage and tunnel drainage application.

D - REX | DOUBLE WALLED CORRUGATED UNDERGROUND DRAINAGE AND SEWERAGE SYSTEM

FEATURES & BENEFITS

- Sewerage & drainage
- Surface drainage
- Sub-surface drainage (Farm drainage and sports field drainage)
- Culverts & highways drainage
- Construction site waste water drainage
- Rain water harvesting
- Storm water drainage

MULTIREX POLYOLEFIN CABLE CHANNELS PROTECTION

- Excellent strength
- Easy to inspect
- Low Smoke Zero Halogen (LSZH) flame retardant



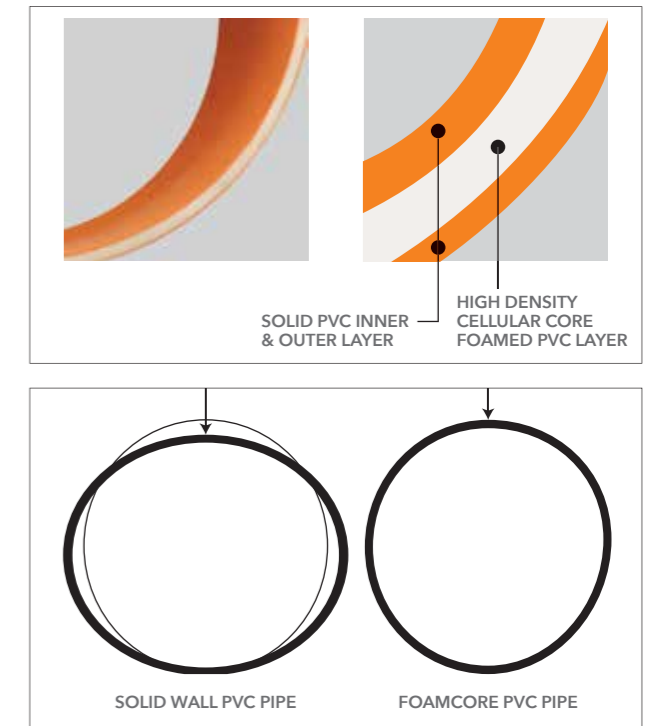
TELEREX DOUBLE WALLED CORRUGATED 6 METER HDPE PIPES FOR PROTECTION OF UNDERGROUND CABLING SYSTEMS

- Laying in single layer or multi layers (with spacing) possible
- Excellent diametrical stiffness
- Inner wall designed to facilitate cable insertion
- Available in coils and 6 meter lengths
- By use of blow insertion method, shows excellent compatibility for optical fiber insertion
- High ring stiffness and crush resistance capacity

AVAILABLE DIAMETER RANGE

40 mm (4.0 cm), 50 mm (5.0 cm), 63 mm (6.3 cm), 77 mm (7.7 cm), 90 mm (9.0 cm), 110 mm (11.0 cm), 120 mm (12.0 cm), 125 mm (12.5cm), 145 mm (14.5 cm), 160 mm (16.0 cm), 175 mm (17.5 cm), 180 mm (18.0cm), 200 mm (20.0 cm), 250 mm (25.0cm), 315 mm (31.5 cm)





STRONG AND LIGHT WEIGHT DRAINAGE SYSTEM

Astral Foamcore pipes are basically multilayer pipes having outer and inner layers of conventional PVC and middle layer of foamed PVC. Outer and inner layers are designed to take the load and middle layer of foamed PVC gives rigidity and maintains the shape of the pipe under load. It reduces total weight of pipe and makes it light when compared to solid wall PVC pipes.

The pipe is typical of solid wall PVC under load and the type of distortion is normally expected. The Astral Foamcore pipe on the right, under equal load, distributes the load more evenly and does not show the same amount of distortion, as it has unique "I-Beam" structure. Due to its ability of absorbing the load, Astral Foamcore pipes are most suitable for underground drainage systems, where soil exerts a lot of pressure on pipe surfaces. In solid wall pipes this soil pressure will rupture the pipe after some time where Astral Foamcore pipes give better life as foamed PVC layer will absorb pressure and make pipes "stress free" in working conditions.

PRODUCT STANDARDS

Astral Foamcore pipes are manufactured as per Indian and equivalent to international standards published under structure wall pipes for drainage and sewerage and are mainly based on stiffness classes. These specifications are very well adopted at global levels and are in used for more than 25 years.

UNIQUE FEATURES AND BENEFITS

Astral Foamcore uPVC pipes are suitable for residential and commercial drain, waste & vent piping systems for both underground and above ground applications with top quality raw materials and state-of-the art processing technology, Astral Foamcore pipes meet all industrial standards in addition to our own rigorous quality control standards.

FOAMCORE uPVC PIPES

RINGFIT PIPES

The socket has groove inside for rubber ring. The rubber ring ensures trouble free water tight joint with allowance to thermal expansion /contraction. 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 / contraction.

SELFIT PIPES

Selfit pipes are socketed on automatic socketing machine with self-socket length (without groove). Such pipes are to be joined with solvent cement. One end of the pipe is plain and the other end is self-socketed. The pipes when joined using solvent cement, form a permanent water tight joint.

FEATURES & BENEFITS

- Light weight & strong
- Wide range & compatibility
- Easy to install
- Maximum flow rate
- Longer service life
- Cost saving
- Chemical and corrosion resistance
- Non-toxicity, Non-conductor

IS : 16098 : (PART-1)



ONLY THOSE PRODUCTS BEARING THE ABOVE MARKS ARE CERTIFIED

AVAILABLE SIZE

Astral Foamcore pipes are available in 110 mm to 315 mm with different stiffness classes mainly categorised as SN2, SN4 & SN8. SN2 pipes are recommended for above ground applications while SN4 & SN8 pipes are recommended for below ground applications depending on the level at which these pipes have to be installed.

- 110 mm (11.0 cm) with stiffness class SN4 & SN8
- 160 mm (16.0 cm), 200 mm (20.0 cm), 250 mm (25.0 cm) & 315 mm (31.5 cm) with stiffness class SN2, SN4 & SN8

FIELDS OF APPLICATIONS

Drain and sewer systems in residences, commercial complexes, resorts, hospitals, academic institutes, industries etc.





INSPECTION CHAMBERS

Astral's innovative design for 315 mm, 355 mm & 450 mm bring unmatched flexibility to the underground drainage market. The joints & seals are designed such that they can accommodate the movement of connecting piece up to 3° in any direction. Astral also introduces the Drain Hulk with 500 mm, 600 mm inspection chambers & 800 mm, 1000 mm manhole for public sewer line.

GULLIES & SURFACE CHANNEL GULLIES

A gully holds water, like a trap, to stop foul air escaping from the foul drainage system. Its purpose is to collect waste water from ground floor bathrooms, kitchens and utility rooms or rainwater from paved areas or roofs.



ULTRA MODERN DRAINAGE SYSTEM

Over the years Astral is committed to introduce innovative plumbing products in Indian market to better serve plumbing industry. Astral provides next generation integrated drainage solution using latest manufacturing technology. For many years, drainage engineers and contractors have been forced to make traditional methods to make drainage system of a building. Astral offers underground drainage system with strength and durability, installation speed, long term performance, cost effectiveness and superior quality of a complete drainage system.

Astral Underground Drainage products are manufactured using state-of-the-art production technology which provides comprehensive range of robust, light weight and extremely durable drainage products with unparalleled long term performance.

SPECIALLY DEVELOPED FITTINGS ADJUSTABLE BEND

Adjustable Bends are specially designed by Astral to suit with installation of inspection chambers. As the chamber inlet and outlets have fixed angle & position, adjustable bends can be changed depending on site requirements. These bends are available in two different patterns one with 02 pcs (suitable for 5° to 37.5° movement) & 03 pcs (suitable for 0° to 87.5° movement). These bends eliminate use of extra fittings and pipes to get the angle with pipeline and hence very cost effective.

ACCESS AND RODDING POINTS

Access is very important on all installations for testing, inspection, and removal of any blockage or debris. Rodding in both directions can be achieved by using a 315 mm to 450 mm Large Inspection Chamber in conjunction with access fittings. Rodding points are normally used in storm water drainage systems where the rodding point is located at the head of the drain run connection to a chamber and being no further than 22 meters away from the chamber. The rodding point should be enclosed in a concrete surround to provide support and to ensure that it does not become mislaid at ground level.

AVAILABLE SIZE

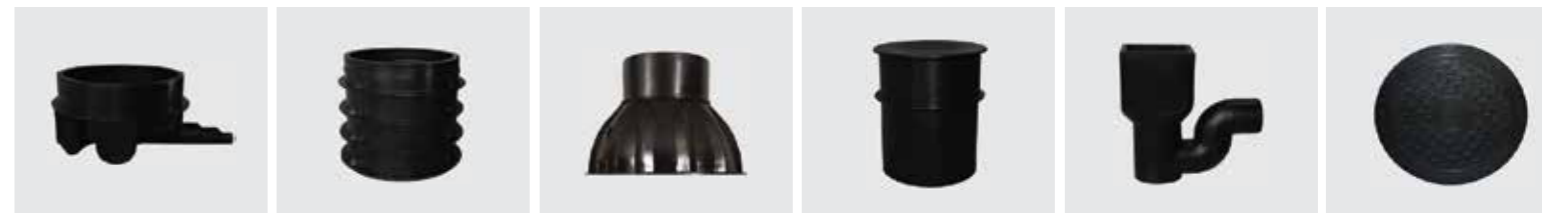
Astral offers surface channel made from polyethylene / polypropylene and they are free from above problems caused by traditional surface channel. 110 mm x 1 mtr Long End. LH & RH both end caps are available.

FEATURES & BENEFITS

- Great flexibility
- Great strength
- Hygienic and safe
- Minimal maintenance
- Perfect hydraulic properties
- Water tight system
- Minimum excavation cost
- Longer life and overall economy

PRODUCT RANGE

315 mm (31.5 cm), 355 mm (35.5 cm) & 450 mm (45.0 cm) with 8 different type of chamber base and with riser and top cover 500 mm (50.0 cm), 600 mm (60.0 cm), 800 mm (80.0 cm) & 1000 mm (100.0 cm) Chambers/Manholes are available in 5 Inlets base & 3 Inlets base options.



INSPECTION CHAMBERS & MANHOLE AVAILABLE SIZES

Sizes (mm)	Inlet's (mm)	Outlet (mm)	Cover (mm)	Person entry
315	110	110	315	No
355	110-160	110-160	315	No
450	110-160	110-160	450	No
500	110-160	110-160	500	No
600	110-250	110-250	600	No
800	110-250	110-250	600	Yes
1000	110-315	110-315	600	Yes

FIELDS OF APPLICATIONS

Astral Underground Drainage System is ideal to use in single house application to multi floors buildings, hotels, hospitals, shopping malls, academic institutes upto the main lines.

AVAILABLE SIZE

Astral Drain Hulk 500 mm (50.0 cm), 600 mm (60.0 cm), 800 mm (80.0 cm) & 1000 mm (100.0 cm) manhole are available in 5 inlet base & 3 inlet base options.



SURFACE DRAINAGE SYSTEM

ASTRAL HAURATON - SURFACE DRAINAGE SYSTEM

A modern drainage system that is efficient, sustainable, highly stable and 100% corrosion free. The Channels available are made of 100% recycled Polypropylene (PP) and the Gratings available are Ductile iron mesh grating and Fibretec slotted grating which prove to be stable, strong, resistant, long-lasting and environmentally friendly. RECYFIX® - a high quality recycled composite provides a complete range of robust, elastic and unbreakable drainage System. These drainage channels withstand great weather influences like frost, heat, and humidity. Innovative drainage products make sure that water flows away in proper courses and that buildings remain safe.

Astral Hauraton - A complete drainage System with product range of 100 mm, 150 mm, 200 mm, 300 mm and 400 mm in RECYFIX® Standard, RECYFIX® PRO, RECYFIX® NC and Slotted Channel as well as RECYFIX® MONOTEC - single product with inbuilt grating available in 100 mm and 200 mm.

PRODUCT RANGE

LANDSCAPING: RECYFIX®PRO • RECYFIX®PLUS • RECYFIX®STANDARD • SLOTTED CHANNELS • RECYFIX®POINT • RECYFIX®GREEN • LINEFIX • TOP X

CIVIL: RECYFIX®PLUS X • RECYFIX®NC • RECYFIX®MONOTEC • RECYFIX®HICAP®F • RECYFIX®TRAFFIC • SERVICE CHANNEL

AQUA: AQUAFIX®

SPORT: SPORTFIX®CHANNELS • SPORTFIX®PRO • SPORTFIX®STANDARD • SPORTFIX®CHANNELS FOR ARTIFICIAL TURF • SPORTFIX®KERB • SPORTFIX®SAND TRAPS • SPORTFIX®DISTRIBUTION SHAFTS • SPORTFIX®WATERJUMP • SERVICE CHANNEL

FEATURES

BENEFITS

- High stability
- Durability
- Low weight & easy handling on site
- High security
- Chemical resistance
- 100% UV- resistant
- Ecological and sustainable material

FIELD OF APPLICATION

- Airports
- Stadiums
- Ports
- Resorts
- Domestic driveways
- Garden and green areas
- Public parks and communal areas
- Commercial and multi-storey parking areas
- Railway platforms
- Roadsides and carriageway locations (Non-traffic locations)
- Service yards and logistics areas
- Small commercial and industrial premises
- Shopping centers and precincts

UNIQUE FEATURES

1. Gratings are available in different designs and colors made of different materials. Few of them are:
 - GUGI - Grating made of PA- GF (Mesh Width 15 x 25 mm)
 - FIBRETEC Slotted grating made of PA_GF (Slot Width: 9 mm)
 - Ductile iron slotted gratings (Slot Width: 18 mm)
2. Astral surface drainage systems are U - Shaped cross section channels that have up to 30% increased drainage capacity.
3. In this drainage system the water has a larger contact area with the soiling. That's why this channel cleans itself more efficiently.
4. It has optimized hydraulics and don't require slope.
5. Innovative grating fixing system of 2 locking bars and bolts per meter and 8 bolts per meter ensures lock ability.

AVAILABLE SIZE

- Depth 45 mm to 100 mm • Width 115 mm to 400 mm

Product Category	Load Class (inKN)	ID Width (mm)	Height (mm)
RECYFIX® PRO	A15, B125, C 250, and D 400	100 - 300 mm	75 - 362 mm
RECYFIX® PLUS	A15, B125, C 250, D 400 and trafficable	100 - 300 mm	60 - 291 mm
RECYFIX® STANDARD	A15, B125, and C 250	100 - 300 mm	60 - 381 mm
SLOTTED CHANNELS	A 15, C 250 and D 400	100 and 150 mm	130 - 188 mm
RECYFIX® PLUS X	D 400	100 - 300 mm	138 - 294 mm
RECYFIX® NC	D 400 and E 600	100 - 400 mm	72 - 500 mm
RECYFIX® MONOTEC	D 400	100 and 200 mm	230 - 450 mm
RECYFIX® HICAP®F	D 400, E 600 and F 900	Slot 6 - 28 mm	465 - 1170 mm
SPORTFIX®PRO AND SPORTFIX STANDARD	B 125 and C 250	100 mm	150 - 185 mm
FAÇADE DRAINAGE (DACHFIX® STEEL)	Walkable	115 - 255 mm	45 - 150 mm (adjustable Height up to 199 mm)

ELECTRICAL CONDUIT



ASTRAL[®] Wire Guard[®]

Conduit Pipes & Fittings

CONDUIT PIPES FOR PROTECTION OF WIRES AND CABLES

Fire is one of the major hazards to life and property and electrical installations are perhaps one of the primary sources for generation and propagation of fire. Protection of cables and raceways against fire is therefore an important and primary consideration in the design and industry standards.

Astral Wire Guard conduit pipes and fittings have good impact strength, low conductivity and chemical resistance. They have high heat deflection temperature and ductile behaviour even at low temperatures.

Astral Wire Guard conduit is the lightest in weight compared to other materials and highly reasonable in terms of cost. Astral Wire Guard conduit is available in three different wall thicknesses with the thin wall variety being suitable for embedded use in concrete and heavier grades suitable for direct burial and exposed work.

Astral Wire Guard conduit pipes and fittings resist moisture and most corrosive substances. Joints to fittings are made with slip-on solvent welded connections, which stick on rapidly on assembling and attain full strength in about few hours.

ASTRAL WIRE GUARD CONDUIT PIPES & FITTINGS

PRODUCT SPECIFICATION

Astral Rigid uPVC Wire Guard conduit pipes are manufactured in accordance with Bureau of Indian Standards specifications IS: 9537 (Part3) in the range of 20 mm to 63 mm with light, medium and heavy range. Thicknesses with the thin-wall variety only suitable for embedded use in concrete.

QUALITY CONTROL

Astral is equipped with state of art laboratory which specializes in high quality testing as per the Indian standards for testing of all uPVC electrical conduit & accessories. The high quality performance is attained and ensured throughout the plant in all the processes through experienced and well-qualified staff and skilled workers.

Each batch of Astral Wire Guard pipes & fittings is rigorously tested as per Bureau of Indian Standards relevant scheme of testing and inspection.

FEATURES & BENEFITS

- High corrosion resistance
- Fire resistance
- Non-conductor of electricity
- Light weight
- Easy wiring
- Easy installation
- High mechanical strength
- No maintenance
- Durability

BATCH WISE TESTING BEFORE DISPATCHING

- Checking of dimensions
- Compression test
- Collapse test
- Resistance to burning
- Bending test
- Impact test
- Resistance to heat
- Electrical characteristics
- Moisture absorption test
- Resistance to chemical action test
- Resistance to oil test
- Copper test

AVAILABLE SIZE

20 mm (2.0 cm), 25 mm (2.5 cm), 32 mm (3.2 cm), 40 mm (4.0 cm), 50 mm (5.0 cm) and 63 mm (6.3 cm)

COLOUR

Astral Wire Guard electrical conduits are available in Black & Ivory colours. Other colours are available on request.

MARKING COLOUR CODES

BLUE: Light Mechanical Strength (LMS)

YELLOW: Medium Mechanical Strength (MMS)

WHITE: Heavy Mechanical Strength (HMS)

FIELDS OF APPLICATIONS

- Apartments
- High rise building
- Hotels
- Hospitals
- Shopping malls
- Parking
- Factories

AVAILABLE SIZE

PIPES:

20 mm (¾") to 80 mm (3") SDR 13.5 IPS as per ASTM F442 & IS:16088

FITTINGS:

20 mm (¾") to 80 mm (3") schedule 80 IPS as per ASTM F439



ONLY THOSE PRODUCTS BEARING THE ABOVE MARKS ARE CERTIFIED

1st
in
India



PIPES THAT FIGHT FIRE

Astral Fire Pro pipes and fittings are designed specifically for fire sprinkler system. They are made from a specialty thermoplastic known chemically as Chlorinated Polyvinyl Chloride (CPVC). Astral Fire Pro pipes and fittings provide unique advantages in sprinkler installations including superior hydraulics, ease of joining, increased hanger spacing in comparison to other thermoplastics and ease of assembly. Astral Fire Pro is the new industry standard in automatic fire sprinkler piping system. Astral Fire Pro CPVC pipes and fittings are fully approved for use in all light and ordinary hazardous rooms or otherwise light hazardous applications as per NFPA 13, in both new and retrofit construction, such as:

- High-rise buildings (including apartments and hotels)
- Schools and Institutions
- One and two family dwellings

SYSTEM BENEFITS

- No pre-cutting and expensive fabrication required
- Easily connected to other sprinkler piping system
- Flexibility in the piping for greater ease of installation
- Resistant to rust, scale and foreign contaminant build up / Inexpensive tools required for installation
- Easily repairing or modification on site
- Designed to a 50 years life expectancy



EXCELLENT FIRE RETARDANT PROPERTIES

- Flammability
- Heat of combustion
- Flame spread / Smoke generation

FEATURES & BENEFITS

- Ignition resistance
- Burning resistance
- Low friction loss
- Temperature / Pressure rating



FIELDS OF APPLICATIONS

Water rising for submersibles and jet pumps for irrigation, domestic and industrial applications. Ideally suitable for long term use in salty, sandy and chemically aggressive water.

FEATURES & BENEFITS

- Better flow for optimum yields
- Leak-proof jointing
- High strength and durability
- Manufactured from quality raw material
- Easy handling, transportation & installation
- Chemical resistance
- Non conductive
- Longevity of life cycle
- Ease of use



CORROSION RESISTANT



SAFE FOR DRINKING WATER



CHEMICAL RESISTANT



COST EFFECTIVE



ASTRAL BORE-WELL®
LEAD FREE UPVC COLUMN PIPES

HEAVY METAL & LEAD FREE COLUMN PIPES FOR SUBMERSIBLE PUMP

Astral Bore-Well Column pipes have added advantage of unique features and benefits compared to conventional column pipes available today. It undergoes stringent testing under critical field conditions to meet or exceed the actual field requirements of products available for similar applications.

DOUBLE SS STUD PIN LOCK SYSTEM (DESIGN PATENT PENDING)

Every pipe is fitted with coupler having 'Double SS Stud Pin Lock System' a unique system developed by Astral, which ensures that during installation, application or removal of system, the coupler will never dethread from the pipe.

SPECIAL COMPOUND

Astral Bore-Well Column Pipes are manufactured from 'HEAVY METAL FREE' uPVC compound which is especially developed by using 'JAPANESE TECHNOLOGY' to sustain best Column loads, pressure and also to withstand the high impact during handling, storage and installation. Due to this special compound, the TENSILE property of pipe increases which is tested rigorously using modern testing equipment.

100% HYGIENIC / SAFE FOR DRINKING WATER

Supply of drinking water is 100% hygienic and safe as being pumped through ASTRAL uPVC Bore-Well Column Pipes manufactured from special HEAVY METAL FREE compound right from the origin of water source beneath under the earth at maximum depth.

EPDM RING & SQUARE THREADS

EPDM RING: Specially designed 'O' rings provided on the threads makes the joints watertight and absorb pump vibrations. These rings are made from EPDM rubber which is most suitable for drinking water option.

SQUARE THREADS: Unique square threads made on CNC machines provide sufficient grip and additional strength against tensile load. Thus the joint becomes fairly strong with sufficient factor of safety to take care of load of entire assembly with pump weight. These specially designed threads also make it suitable for easy fitment.

THICK & THIN PROCESS: The pipe ends are specially given the effect of additional wall thickness by using Thick & Thin process to compensate the strength and load bearing capacity caused due to threading of pipes. The effect of Thick & Thin is given to all sizes considering the working conditions & load factor.

ANNEALING ON PIPES: Every pipe is annealed during manufacturing which is a very special technique developed by Astral. This will really enhance the mechanical properties of pipes which make sure that the pipes will perform best during application.

AVAILABLE SIZE

- 2.5 cm (1") : V4 Bell End, Medium Bell End, V4, Medium, Crystal, Standard
- 3.2 cm (1¼") : V4 Bell End, V4, Medium Bell End, Medium, Crystal, Standard, Heavy, Super Heavy
- 4.0 cm (1½") : V4 Bell End, V4, Medium, Crystal, Standard, Heavy, Super Heavy
- 5.0 cm (2") : Eco Medium, Eco Medium Plus, Medium, Crystal, Standard, Heavy, Super Heavy
- 5.0+ cm (2¼") : Super Heavy
- 6.5 cm (2½") : Medium, Standard, Standard Plus, Heavy, Super Heavy
- 8.0 cm (3") : Medium, Standard, Standard Plus, Heavy, Super Heavy
- 9.5 cm (3½") : Double Heavy
- 10.0 cm (4") : Medium, Standard, Standard Plus, Heavy, Super Heavy
- 12.5 cm (5") : Standard, Heavy, Super Heavy
- SHORTLY INTRODUCING : 15.0 cm (6") - Heavy





AVAILABLE SIZE

uPVC Casing Pipe - CM Confirming to IS:12818 - 4.0 cm (1.5") to 25.0 cm (10") (Suitable for Bore well / Tube well for depth up to 250 meter)

uPVC Casing Pipe - CS Confirming to IS:12818 - 11.5 cm (4.5") to 25.0 cm (10") (Suitable for Bore well / Tube well for depth up to 80 meter)



CM/L - 7200062904

ONLY THOSE PRODUCTS BEARING THE ABOVE MARKS ARE CERTIFIED

- Plain & Strainer / Filter / Slotted type
- 16.5 cm (6.5") in Super Heavy Plus



EXTRA CARE FOR BORE-WELL

Through our innovative approach, we are offering an extensive array of durable uPVC Casing Pipes that are used for various underground applications. Developed using qualitative PVC compound, our leak proof Casing Pipes are known for their easy installation, anti-corrosiveness and precise dimensional tolerance. We manufacture these pipes in different sizes and dimensions in accordance with the standard norms.

Astral Case-well uPVC casing Pipes are light in weight and are easy to handle & install. It gives excellent resistance even under the harshest of water conditions. So, there are no purity worries from corrosion of metal pipe.

Astral Case-well pipes are durable and free from weakness caused by rusting, weathering and chemical action and hence last for life time. uPVC casing pipes are easy to install. Tools required are very simple and inexpensive and do not require any electrical source.

SCREEN/SLOTTED PIPES

Screen or Slotted pipes are used for casing in ground water percolation to allow water to enter inside the well. These pipes can also be used to recharge the ground water level through the rain water harvesting pit.

SPECIAL FEATURES

- Horizontal slots to get maximum water yield. Special male female square thread to ensure better strength
- Very high impact strength to resist external pressure

BENEFITS OF SCREEN/SLOTTED PIPES

- Very effective way to recharge the ground water
- Improve ground water levels and availability
- Conserve the surface water runoff during monsoon
- Main sewer can be protected from flooding during monsoon by reduced volume of discharge of rain water

FEATURES & BENEFITS

- Easy to handle & light weight
- Corrosion resistance
- Durable, Non-toxic & maintenance free
- Quick installation

APPLICATION

- Case-well casing pipes are used in irrigation, domestic, industrial & mining field.





AVAILABLE SIZE

PIPES:

- Class 1 (2.5 kgf/cm²): 90 mm (9.0 cm) to 400 mm (40.0 cm)
- Class 2 (4 kgf/cm²): 63 mm (6.3 cm) to 400 mm (40.0 cm)
- Class 3 (6 kgf/cm²): 40 mm (4.0 cm) to 400 mm (40.0 cm)
- Class 4 (8kgf/cm²): 25 mm (2.5 cm) to 400 mm (40.0 cm)
- Class 5 (10kgf/cm²): 20 mm (2.0 cm) to 400 mm (40.0 cm)
- Class 6 (12.5 kgf/cm²): 20 mm (2.0 cm) to 400 mm (40.0 cm)
- Plumbing (16 kgf/cm²): 20 mm (2.0 cm) to 50 mm (5.0 cm)

IS : 4985



IS : 7834



ONLY THOSE PRODUCTS BEARING THE ABOVE MARKS ARE CERTIFIED



CORROSION RESISTANT



UV RESISTANT



COST EFFECTIVE



uPVC PIPE FOR AGRICULTURE & WATER TRANSPORT SYSTEM

Astral Aquasafe system offers wide range of uPVC pressure pipes and fittings. Pressure pipes are manufactured confirming to IS:4985 and are available in 20 to 400 mm sizes in different pressure classes. Astral Aquasafe pipes and fittings can be joined together by Astral uPVC solvent cement. Astral Aquasafe fittings are manufactured as per IS:7834 and as well as company's standards. Astral Aquasafe pipes are manufactured from PVC raw material and hence they are corrosion proof forever.

Wide range of applications in potable water transportation for agriculture farms, tube-wells and bore-wells. They are also applied as drain pipes in residential, commercial and industrial buildings. They have a life cycle of up to 50 years with saves on replacement cost.

- Astral Aquasafe uPVC pressure pipes with selfit jointing system ensure leak-proof jointing system for optimum results.
- Astral Aquasafe uPVC pressure pipes are manufactured on most sophisticated state of the art machines to ensure a superior product at every time.
- Astral Aquasafe uPVC pressure pipes offer high strength and durability.
- Astral Aquasafe uPVC pressure pipes are non-reactive with acidic and alkali substances in water. They are ideal for drain water discharge as well as most of the chemicals.

- Astral Aquasafe uPVC pressure pipes are UV stabilized and hence suitable for outdoor applications.
- Astral Aquasafe uPVC pressure pipes are manufactured under highest quality standards which ensure reliability of the product.

FIELDS OF APPLICATIONS

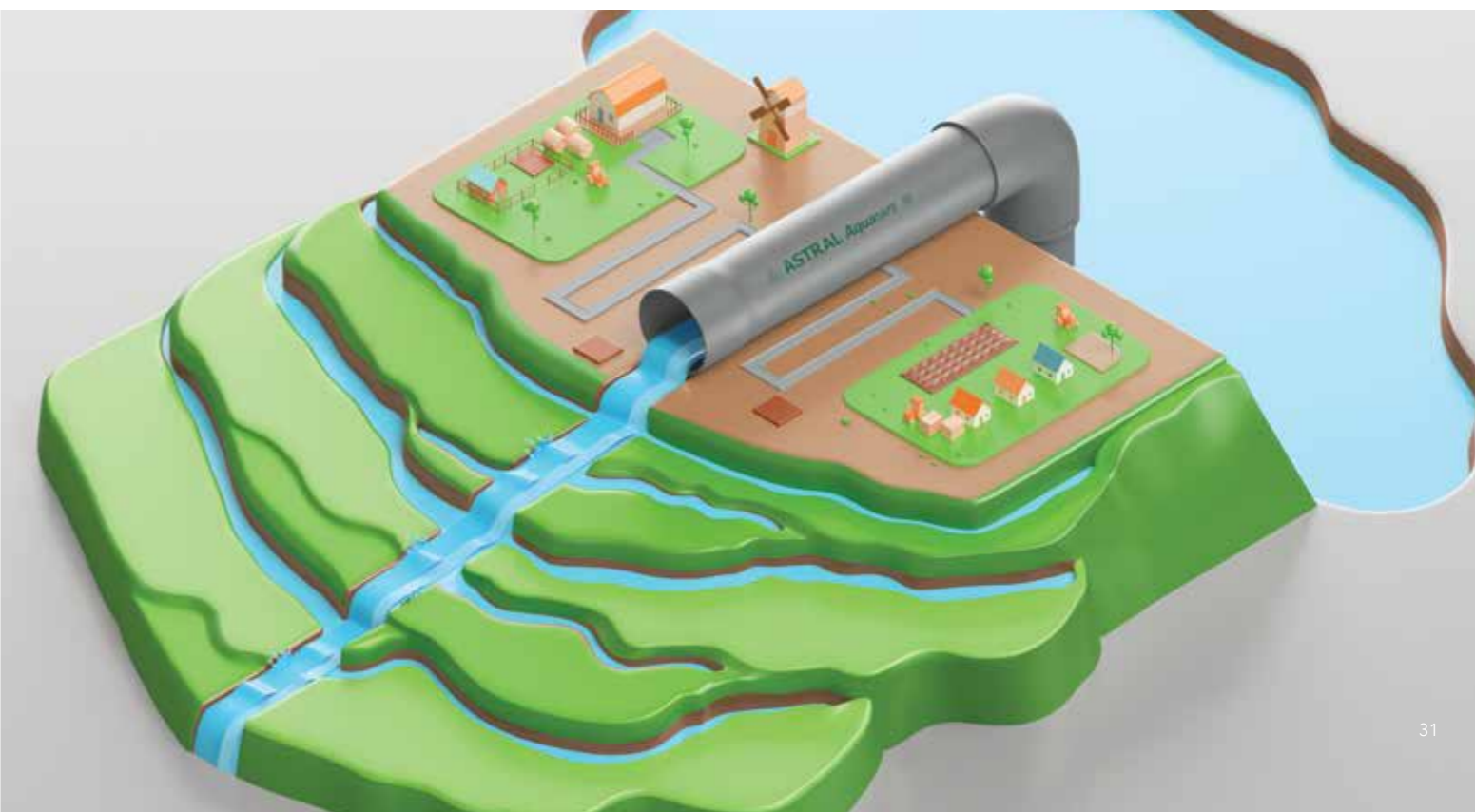
These pipes and fittings are used for variety of applications like agriculture, irrigation, water supply, industrial process lines, swimming pools and firefighting mains etc. These pipes are superior to CI, GI or R.C.C. pipes and offers multiple advantages like light weight, easy and fast installation, excellent corrosion and chemical resistance, high flow rates, long life and economy.

FEATURES & BENEFITS

- Manufactured from quality raw material
- Easy handling, transportation & installation
- Excellent chemical resistance
- High strength and durability
- UV stabilized
- Non-conductive
- Longevity of life cycle
- Ease of use
- Better flow for optimum yields
- Leak-proof jointing

JOINING METHOD

- Selfit jointing
- Ringfit jointing





AVAILABLE SIZE

PIPES:

SCH 40 & 80: 15 mm (1.5 cm) (½") to 300 mm (30.0 cm) (12")
IPS as per ASTM F441

FITTINGS:

SCH 80: 15 mm (1.5 cm) (½") to 300 mm (30.0 cm) (12")
IPS as per ASTM F439

VALVES:

½" to 12" True Union Ball Valves, Butterfly Valves, Diaphragm Valves,
NRV as per ASTM F1970



THE TRANSPORTER OF CORROSIVE CHEMICALS

ASTRAL CHEM PRO is proven CPVC piping system meeting all challenging application requirement of industrial piping system. It gives trouble free service to the industry for years together. ASTRAL CHEM PRO industrial piping system can be used upto 93°C temperature & pressure based on the pipe sizes. ASTRAL CHEM PRO CPVC industrial piping system is suitable for many industrial requirements like metal treating, pulp & paper, food & beverages, Industrial waste water, Chemical processing etc. ASTRAL POLY TECHNIK LIMITED is manufacturing industrial grade Chlorinated Polyvinyl Chloride (CPVC) Pipes of schedule 40 & 80 and fittings of schedule 80 confirm to ASTM Standards ranging from ½" (15 mm) to 12" (300 mm). All ASTRAL CHEM PRO CPVC industrial pipes are produced from compound conforming to ASTM D1784.

WHY ASTRAL CHEM PRO?

- ASTRAL is pioneer in CPVC piping industry having more than 20 years of expertise in CPVC piping system in India.
- The Compound meets or exceeds the requirement of cell class 24448 against the standard cell class 23447
- Complete product range from ½" (15 mm) to 12" (300 mm) with wide range of fittings.
- Provides special non-metallic valves like Ball valve, Butterfly valve, Diaphragm valve, Non return valve. Available both in manual & actuated operational.
- Astral imparts complete knowledge of CPVC piping system including training, installation & after sales service support.

FIELDS OF APPLICATIONS

- Metal treating
- Pulp and paper
- Food and beverage industry
- Industrial waste treatment
- Chemical processing
- Power sector
- Sugar industries
- Water treatment plants
- Fertilizer
- Shipping industries
- Mining
- Pharmaceutical
- Cement industries
- Steel industries

ADVANTAGES

- High temperature resistance
- Easy installation and low installation cost
- External corrosion resistance
- Immunity to galvanic or electrolytic attack
- Freedom from toxicity, odours, tastes
- Low thermal conductivity
- Chemical resistance
- Corrosion free
- Low friction loss
- Maintenance free





XLPE INSULATION FOR PIPING

ASTRAL XLPE INSUPRO insulation tubes are specially designed for plastic & metal piping system for applications in building construction and various other industries for plumbing, HVAC, chilling thermal insulation etc.

ASTRAL XLPE INSUPRO is produced using advanced manufacturing machineries & equipment setup which is capable of manufacturing the product in line with the international norms. Highest quality raw materials, standard manufacturing practices and quality management systems ensure ASTRAL XLPE to be the best quality end-product.

FEATURES & BENEFITS

- Negligible water / moisture absorption (>90 % closed cell)
- Wide operating temperature range : -40°C to +115°C
- Excellent thermal insulation
- Resistance to fungi & bacteria
- Chemically unreactive
- Stable K value
- Maintenance free
- Fibre free & dust free
- Flexible & easy to install

TECHNICAL INFORMATION

PARAMETER	ASTRAL XLPE SPECIFICATION		
Material (ASTM C 1427)	Chemically Cross Linked Closed Cell Polyethylene Foam Insulation		
Temperature Range	(-)40° C to +115°C		
Nominal Density	3 kg/m ³		
Thermal Conductivity	Mean Temperature (°C)	W/m °K	Kcal/hr m (°C)
	0	0.0318	0.0273
	23	0.0329	0.0283
	26	0.0382	0.0328

APPLICATION AREAS

- Plastic & metal piping system
- Building construction and various other industries
- For plumbing, HVAC, chilling thermal insulation

AVAILABLE SIZE

For 15 mm (1.5 cm) to 50 mm (5.0 cm) Pipes
 Insulation thickness
 6 mm (0.6 cm), 9 mm (0.9 cm) & 13 mm (1.3 cm)
 Recommended for Copper, CPVC, uPVC, MS & GI pipes





**SOLVENT CEMENT FOR
LEAKAGE FREE
PLUMBING**

Our Low VOC Solvent Cements are used by Plumbers and Building contractors for leak free joints of CPVC / PVC / SWR Pipes and fittings. Our quality products are recognised as the best products for fast reliable and cost effective alternative to the present solvent cements available in the market.



Only those products bearing the NSF mark are certified

BENEFITS

- High quality performance with excellent installation properties.
- User friendly: Reduced fumes and odor for the comfort and well-being of plumbers /installers
- NSF listed, meets ASTM standards*

* Check individual product for NSF and ASTM standards.

** ASTRAL uPVC solvent cement and rubber lubricants are not under license of IPS Corporation.

ANCILLARY



SUPPORT SYSTEM FOR PIPES AND FITTINGS

**FOR PROVIDING
PROPER SUPPORT TO
PIPES AND CABLES**

Astral Clamps & Hangers have universal applications where the support to pipes and cables are required. These clamps and hangers can be used in building and infrastructure segments starting from residential, commercial and industrial applications including plumbing, electrical and firefighting.

These clamps are available in both - with EPDM rubber and without EPDM rubber. These clamps and hangers are zinc coated and stainless steel finished.

FIELDS OF APPLICATIONS

RESIDENTIAL: • Apartments • High Rise Buildings • Villas & Bungalows

INDUSTRIAL: • Petroleum • Fire Fighting • Tele-communication
• Plastics & Rubber • Solar Plants & Many More

COMMERCIAL: • Hotels • Shopping Malls • HVAC • Hospitals
• Parking

AVAILABLE SIZE

Astral Clamps & Hangers are available in sizes from 15 mm (1.5 cm) (½") to 150 mm (15.0 cm) (6")

ASTRAL CLAMPS, HANGERS AND ELECTRICAL FLUSH BOXES

ACCESSORIES

Comprehensive range of products for pipe support, hangers and Concealed wiring boxes.

- Split clamps
- Slotted base & slotted strips
- Clevis hanger
- Electric junction flush boxes
- Heavy duty saddles
- Light duty saddles
- Slotted 'C' channels & base clamps
- Sprinkler hangers
- U-Bolts
- Safety clip
- Base clamps
- Threaded rod, jointer nuts and washers

FEATURES & BENEFITS

- Quick and easy installation
- Higher strength
- Versatile and elegant
- EPDM rubber lining
- Corrosion resistant
- Greater safety
- Maintenance free
- Electro galvanized zinc coating

