ASTRAL

Foamcore™

PVC PIPE

FOR DWV & UNDERGROUND SYSTEMS

FOAMCORE uPVC PIPES

ISO 9001 REGISTERED

ASTRAL®

where INNOVATION flows

ASTRAL Foamcore™ PVC PIPE

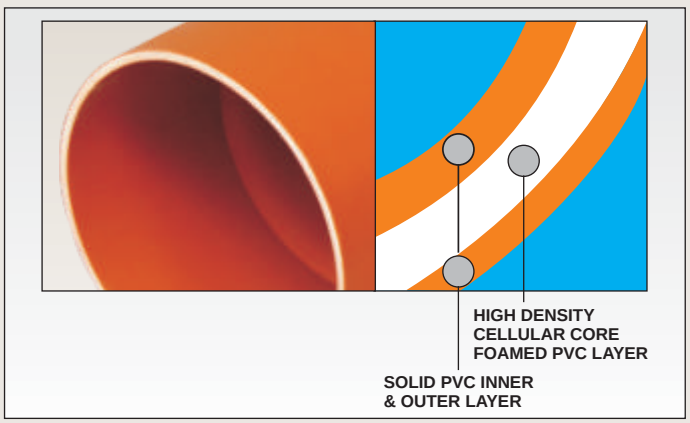
FOR DWV & UNDERGROUND SYSTEMS

Over the years, ASTRAL is committed to introduce innovative plumbing products in Indian market to better serve plumbing industry. ASTRAL's constant efforts and starvness to introduce unique plumbing products in the Indian market, once again came true with its new product named as "Foamcore" uPVC pipes.

"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.

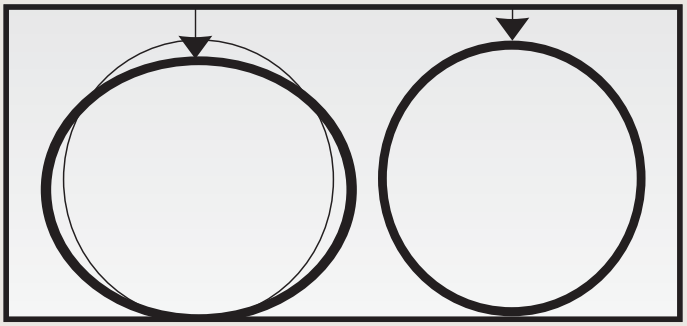
WHAT IS FOAMCORE PIPES ?

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.



WHY FOAMCORE PIPES ?

The pipe on the left is typical of solid wall PVC under load and the type of distortion normally expected. The 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, 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 Foamcore pipes give better life as foamed PVC layer will absorb pressure and make pipes "stress free" in working conditions.



Solid Wall PVC Pipe ***Foamcore PVC Pipe***

UNIQUE FEATURES AND BENEFITS :

- **LIGHT WEIGHT & STRONG :** ASTRAL Foamcore pipes are light in weight compared to solid wall pipes and give more strength compared to solid wall pipes due to their unique multilayer construction.
- **WIDE RANGE & COMPATIBILITY :** ASTRAL Foamcore pipes are available in wide range starting from 110 mm to 315 mm, and most important, they are fully compatible with all drainage and sewerage products available in the Indian market.
- **EASY TO INSTALL :** ASTRAL Foamcore pipes are easy to install. In fact Foamcore pipes do not require any special care or procedure for installation. It can be installed with normal drainage practices observed in the Indian market. The cellular core centre actually makes it easier to cut and reduces splitting or cracking. Pipes can be joined with appropriate solvent weld or ringfit procedures.

- **LONGER SERVICE LIFE :** Due to the load absorbing capacity of middle layer of foamed PVC, ASTRAL Foamcore pipes become "Stress Free" under operational conditions. This lead to longer service life than conventional PVC or Cast Iron pipes.
- **REDUCTION IN NOISE LEVEL :** Due to the middle layer of foamed PVC, ASTRAL Foamcore pipes have very good insulating properties which act to reduce the noise generated by transportation of fluid inside the pipe.
- **COST SAVING :** ASTRAL Foamcore pipes greatly speed up the progress of works as they are light in weight and very convenient in fixing and handling. This will reduce the overall costs in terms of material and man power compared with traditional Cast Iron pipes.

Apart from above mentioned unique features and benefits, ASTRAL Foamcore pipes have conventional benefits of PVC pipes like chemical and corrosion resistance, non-toxicity, non conductor, non flammable and environmental friendliness.

PRODUCT AVAILABILITY :

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.

PRODUCT STANDARDS :

ASTRAL Foamcore pipes are manufactured as per European and 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.

GOLDEN BROWN COLOURED PIPE

AVAILABLE SIZES :

- 110 mm with stiffness class SN8
- 160 mm, 200 mm, 250 mm & 315 mm with stiffness class SN2, SN4 & SN8

PRODUCT DIMENSIONS :

NOMINAL RING STIFFNESS SN (KN/M^2)	2	4	8
DIMENSION RATIO (SDR)	51	41	34
NOMINAL DIAMETER DN (mm)	Wall Thickness (mm)		
110	-	-	3.2 + 0.5
160	3.2 + 0.5	4.0 + 0.6	4.7 + 0.7
200	3.9 + 0.6	4.9 + 0.7	5.9 + 0.8
250	4.9 + 0.7	6.2 + 0.8	-
315	6.2 + 0.8	7.7 + 1.0	-

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FOAMCORE uPVC PIPES

RINGFIT PIPES

Ringfit pipes are socketed on automatic online socketing machine with very high degree of accuracy. 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.

AVAILABLE SIZES : 110 mm & 160 mm

RINGFIT JOINING METHOD :

1. **CUT PIPE :** Cut pipe square. As joints are sealed at the base of the sliding socket. An angled cut may result in joint failure.
2. **REMOVE BURR AND BEVEL :** Remove all burr from inside and outside of pipe with a knife-edge, file, or deburring tool. Chamfer (bevel) the end of the pipe 10° -15°

   CLEAN : Remove surface dirt, grease, or moisture with a clean dry cloth.
3. **INSERT PIPE :** Insert the pipe in to the socket without the seal ring and mark along the pipe, when it is fully inserted.
4. **FIX RUBBER RING :** Fix the rubber ring in the groove without twisting it.
5. **APPLY LUBRICANT :** Apply jointing lubricant to the chamfered end of the pipe & on rubber ring up to the mark made on spigot or to the socket end of fitting.
6. **JOIN PIPE AND FITTINGS :** Push the pipe firmly into the socket till the gap between the mark on the spigot and the socket is about 10 mm to allow thermal expansion.

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 on sophisticated automatic machines for high degree of accurate diameters. The pipes when joined using solvent cement, form a permanent water tight joint.

AVAILABLE SIZES :
110 mm, 160 mm, 200 mm, 250 mm & 315 mm

SOLVENT WELD JOINING METHOD :

1. **CUT PIPE :** Cut pipe square. As joints are sealed at the base of the sliding socket. An angled cut may result in joint failure.
2. **REMOVE BURR AND BEVEL :** Remove all burr from inside and outside of pipe with a knife-edge file, or deburring tool. Chamfer (bevel) the end of the pipe 10° -15°

   CLEAN : Remove surface dirt, grease, or moisture with a clean dry cloth.
3. **DRY FIT :** With light pressure, pipe should go one third to one half of the way into the sliding socket. Pipes and Sockets that are too tight or too loose should not be used.
4. **CEMENT :** Apply a full even layer of cement to the outside of a pipe and medium layer of cement to the inside of a socket.
5. **JOIN PIPE AND FITTINGS :** Assemble pipe and socket till it contacts socket bottom. Hold pipe and socket together until the pipe does not back out. Remove excessive cement from the exterior. A properly made joint will show a continuous bead of cement around the perimeter.

Authorised Distributor :

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