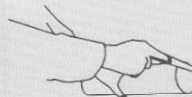


ASTRAL DRAINMASTER® FITTINGS

1. CUT PIPE : Cut pipe square. As joints are sealed at the base of the fitting 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.





UPVC DRAIN WASTE & VENT SYSTEM

uPVC CLICK RING TYPE DRAIN, WASTE & VENT SYSTEM

Astral® is pioneer in introducing new plumbing concepts and new products in Indian market keeping focus on environmental effects, quality and user friendliness of products.

Astral® always emphasize on conceptual selling of new products with best quality to make Indian plumbing well established with global plumbing concepts. With this concept and effort, Astral® is proud to introduce uPVC DRAIN, WASTE & VENT SYSTEM under the brand Name Astral DWV® for non pressure Drainage & Sewerage applications.

The systems comprises of uPVC foamcore pipes and uPVC click ring type fittings. Both the products are new and unique in nature when compared with traditional products available in market.

AVAILABLE SIZE

75 mm, 110 mm, 160 mm with stiffness class SN2, SN4 and SN8



KEY PROPERTIES AND BENEFITS



HIGH FLOW RATES

Extremely smooth bores, precision joints and lack of internal projections ensure unrivaled hydraulic capacity over the total life of the system. Flatter gradients can be possible using Astral DWV® uPVC drainage systems over conventional systems.



NON CONDUCTIVE

uPVC is a non conductor of electricity, and is therefore not subject to galvanic or electrolytic action.



CORROSION RESISTANCE

The inert nature of uPVC drainage system provide complete corrosion resistance and renders wrapping, coating and lining unnecessary. It also ensures that uPVC drain waste and vent pipes have long operational life compare to conventional asbestos or cast iron systems.



ENVIRONMENTAL IMPACT

PVC has a lower feedstock energy especially compared to other polymers and common building materials. It is the least energy intensive of all thermoplastics. In life cycle analyses and independent studies, PVC's environmental impact has been found most favorable, so the more usage of PVC will greatly help to keep our global natural resources intake for longer period of time. It is not polluting air, water or land during manufacturing or service life and can be recycled after prolonged service life.



FLAMMABILITY

uPVC does not support combustion and is inherently difficult to ignite. It also stops burning once the source of heat is removed



LONGER SERVICE LIFE

Astral DWV® system comprises of Foamcore pipes & click ring type fittings. Both the products are weather resistant, corrosion resistant, excellent in cushion effect and ideally suited for sewer & drain applications. These benefits makes Astral DWV® system most favorable in term of service life.



UV STABILIZED

Astral DWV® system is UV stabilized which gives protection to the system while being operational in direct sun light.



CHEMICAL RESISTANCE

The excellent chemical resistance of uPVC pipes to acids, alkalis, oxidising and reducing agents makes it particularly suitable for a wide range of drain applications. uPVC pipes are resistance to all of the chemicals expected to be encountered in drain & waste application.

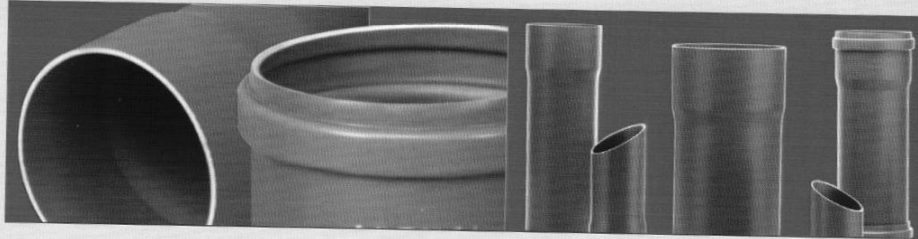


COST SAVINGS

Astral DWV® piping system can greatly speed up the installation work as they are light in weight, easy to handle and convenient in fixing. The spacing of manholes can be increased due to greatly reduced incidence of blockages and increased flow rates possible with Astral DWV® System. Manholes are often the greatest single cost element and reduction in their number makes sound economic sense. All these benefits will lead to very high cost savings when compare to conventional piping system like asbestos or Cast Iron with respect to manpower, material and total time for completion of project work.

DWV FOAMCORE PIPES

Astral DWV® 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 while 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.



COLOUR & MARKING :

Astral DWV® pipes are manufactured in dark grey colour in a semi gloss finish which is opaque and flawless. All Astral DWV® pipes and fittings are marked with Brand Name / Batch No. / Lot No. which includes the month / year of manufacture.

STANDARDS :

Astral DWV® pipes and fittings are intended for use above and below ground including exposure to direct sunlight and are manufactured as per requirements given in most widely used European & International standards for drainage & sewerage applications. The pipes and fittings are intended for non pressure drain, waste & vent applications and have been independently assessed and recognized as quality products.

AVAILABILITY :

Astral DWV® foamcore pipes are available in 75mm, 110mm and 160mm sizes with different stiffness classes mainly categories as SN2, SN4 and SN8 pipes are recommended for below ground applications depending on the level at which these pipes have to be installed.

PRODUCT DIMENSIONS

NOMINAL DIAMETER	MEAN OUTSIDE DIAMETER		SN 2 WALL THICKNESS		SN 4 WALL THICKNESS		SN 8 WALL THICKNESS	
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
75	75.0	75.3	---	---	1.8	2.3	2.2	2.7
110	110.0	110.4	---	---	2.7	3.2	3.2	3.7
160	160.0	160.5	3.2	3.7	4.0	4.6	4.7	5.4

All dimensions are in mm and are same for Ringfit and Selfit pipes. Only socket geometry is different.

DWV FOAMCORE PIPES ADVANTAGES

LIGHT WEIGHT & STRONG :

Astral DWV® 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.

REDUCTION IN NOISE LEVEL :

Due to the middle layer of foamed PVC, Astral DWV® Foamcore pipes have very good insulating properties which act to reduce the noise generated by transportation of fluid inside the pipe. This will be very much beneficial in large buildings.

HIGH IMPACT STRENGTH :

Due to the middle layer of foamed PVC, Astral DWV®



Foamcore pipes can take very high impact compared to solid wall pipes & can reduce the problems of cracking & breaking of pipes while transportation, handling & Installation.

HIGH TEMPERATURE RANGE :

Astral DWV® Foamcore pipes can be used for high temperatures compare to solid wall pipes as the foamed layer can withstand high temperatures.

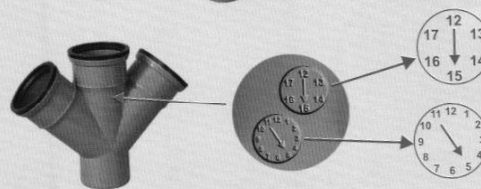
DWV CLICK RING FITTINGS :

ISI marked Click ring fittings are unique in nature having one rubber ring and one additional ring known as "Click ring" which is fitted over the specially designed socket geometry of Astral DWV® sewer & drain fittings. This "Click ring" ensures the locking of rubber ring within the groove of fittings. The rubber rings are also specially designed having unique geometry and PP cord inside which provides the proper locking to rubber ring and also stiffness against the force of Click ring when fitted over the drain fittings.



UNIQUE IDENTIFICATION :

Each fitting is having unique identification known as "Clock". This system ensures 100% traceability to every production lot.



CLICK RING FITTINGS ADVANTAGES



LEAKAGE ELIMINATION :

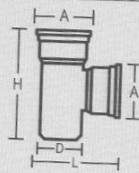
Click ring type fitment assures 100% leak proof systems as the chances of manual mistakes associated with rubber ring fitment fittings will not be encountered. The click ring concept will give user guaranteed performance of system with no leakage.

CLICK FIT JOINING METHOD :

	CUT PIPE : Cut pipe square. As joints are sealed at the base of the fitting socket. An angled cut may result in joint failure
	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
	MARK THE SPIGOT : Mark the spigot with a pencil or marker at a distance equal to the internal depth of the socket. Only use pencil or marker. Do not score or damage the surface for the pipe or fittings.
	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.
	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 10mm to allow thermal expansion.

UPVC DRAIN WASTE & VENT SYSTEM

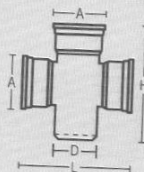
SINGLE TEE



SIZE (D)	PART NO.	WT.	A	H	L
75	M152000107	3.2	98	192	137
110	M152000109	3.2	132	265	195
160	M152000112	4.0	191	338	265

Application : Required to connect branch soil / waste line to main line at an angle of 87.5°.

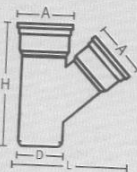
CROSS TEE



SIZE (D)	PART NO.	WT.	A	H	L
75	M152000707	3.2	98	192	200
110	M152000709	3.2	132	265	271

Application : Required to connect two adjacent branch line at an angle of 87.5°/92.5°

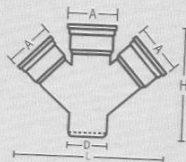
SINGLE 'Y'



SIZE (D)	PART NO.	WT.	A	H	L
75	M152001907	3.2	98	221	190
110	M152001909	3.2	132	302	276
160	M152001912	4.0	191	415	360

Application : Required to connect branch soil/waste pipeline to the main vertical line at an angle of 45°.

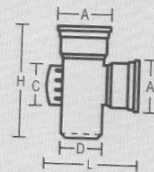
DOUBLE 'Y'



SIZE (D)	PART NO.	WT.	A	H	L
75	M152002307	3.2	98	221	281
110	M152002309	3.2	132	302	393

Application : Required to connect 2 branch soil/waste pipeline to the main vertical line at an angle of 45°.

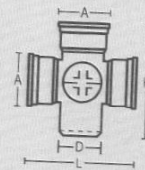
SINGLE TEE WITH DOOR



SIZE (D)	PART NO.	WT.	A	H	L	C
75	M152000207	3.2	98	192	137	79
110	M152000209	3.2	132	265	195	107
160	M152000212	4.0	191	338	265	107

Application : Same as plain Tee with option of door for cleaning purpose.

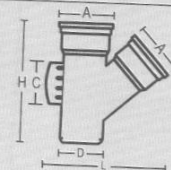
CROSS TEE WITH DOOR



SIZE (D)	PART NO.	WT.	A	H	L	C
75	M152000807	3.2	98	192	200	79
110	M152000809	3.2	132	265	271	107

Application : Same as Cross Tee with option of door for cleaning purpose.

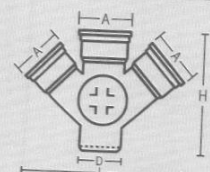
SINGLE 'Y' WITH DOOR



SIZE (D)	PART NO.	WT.	A	H	L	C
75	M152002007	3.2	98	221	211	79
110	M152002009	3.2	132	302	283	107
160	M152002012	4.0	191	415	383	107

Application : Same as plain 'Y' with option of door for cleaning purpose.

DOUBLE 'Y' WITH DOOR

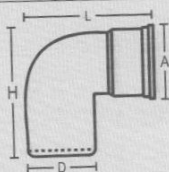


SIZE (D)	PART NO.	WT.	A	H	L	C
75	M152002407	3.2	98	221	281	79
110	M152002409	3.2	132	302	393	107

Application : Same as Double 'Y' with option of door for cleaning purpose.

uPVC DRAIN WASTE & VENT SYSTEM

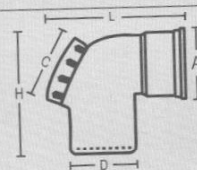
87.5° BEND



SIZE (D)	PART NO.	WT.	A	H	L
75	M152001207	3.2	98	150	145
110	M152001209	3.2	132	200	192
160	M152001212	4.0	191	278	253

Application : Required to connect internal pipeline to main pipeline & also for direction change at an angle of 87.5°.

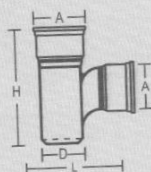
87.5° BEND WITH DOOR



SIZE (D)	PART NO.	WT.	A	H	L	C
75	M152001307	3.2	98	150	165	79
110	M152001309	3.2	132	200	224	107
160	M152001312	4.0	191	278	266	107

Application : Same as Bend with option of door for cleaning purpose.

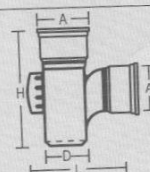
SWEPT TEE



SIZE (D)	PART NO.	WT.	A	H	L
75	M152000907	3.2	98	208	160
110	M152000909	3.2	132	273	212

Application : Same as plain Tee.

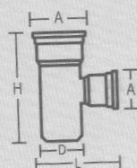
SWEPT TEE WITH DOOR



SIZE (D)	PART NO.	WT.	A	H	L	C
75	M152001007	3.2	98	208	160	79
110	M152001009	3.2	132	273	236	107

Application : Same as plain Tee with option of door for cleaning purpose.

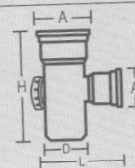
REDUCER TEE



SIZE (D)	PART NO.	WT.	A	H	L
110 x 75	M152000329	3.2	132 x 97	267	190

Application : Required to connect & reduce branch line at 87.5° / 92.5°

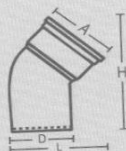
REDUCER TEE WITH DOOR



SIZE (D)	PART NO.	WT.	A	H	L	C
110 x 75	M152000429	3.2	132 x 97	267	207	107

Application : Required to connect & reduce branch line at 87.5° / 92.5°

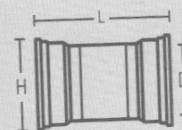
45° BEND



SIZE (D)	PART NO.	WT.	A	H	L
75	M152001107	3.2	98	160	130
110	M152001109	3.2	132	220	178
160	M152001112	4.0	191	272	242

Application : Required as a shoe for drainage line & also for direction change at an angle of 45°.

COUPLER



SIZE (D)	PART NO.	WT.	H	L
75	M152001607	3.2	98	117
110	M152001609	3.2	132	142
160	M152001612	4.0	191	186

Application : Required to connect two length of pipe.

uPVC DRAIN WASTE & VENT SYSTEM

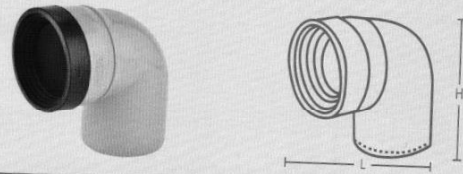
W.C. CONNECTOR (STRAIGHT)



SIZE (D)	PART NO.	L	H
110	F172006009	450	122

Application : To connect W.C. pans to soil pipe.

W.C. CONNECTOR (BEND)



SIZE (D1)	PART NO.	L	H
110	F172005909	192	197

Application : To provide appropriate adaption to W.C. Pans.

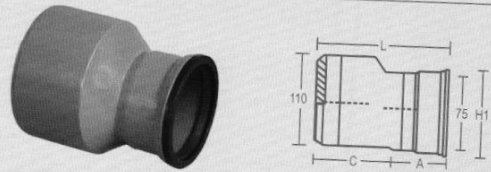
W.C. CONNECTOR (STRAIGHT) (Reducer Type)



SIZE (D)	PART NO.	WT.	A	C	L
125 x 110	M112003834	3.2	125	110	103

Application : 125 x 110 Reducer with W.C. ring can be joint to required length of pipe to take the line out.

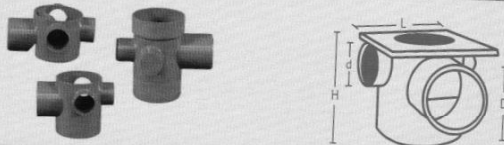
REDUCER



SIZE (Dxd)	PART NO.	WT.	A	H1	L	C
110 x 75	M152001829	3.2	63	98	155	92
160 x 110	M152001831	4.0	75	132	192	117

Application : Required to reduce 110mm dia. pipe to 75 mm dia. pipe.

4", 5", 7" FLOOR TRAP



SIZE	PART NO.	D	d	A	L	H
4"	M142003208	75	50	117	206	100
5"	M142003209	90 x 75	50	117	195	142
7"	M142003210	75	40	117	208	178
4" (Red)	M142003236	75 x 63	50	117	206	100

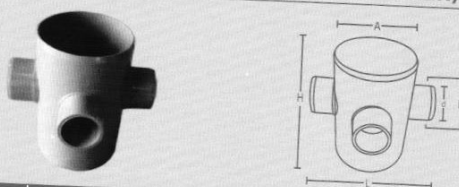
Application : For multiple draining i.e. Bathroom/ Washbasin/ Washing machine / Bathtub etc. Provided with 3 additional inlets that can be opened as an when required.

PLAIN FLOOR TRAP



SIZE	PART NO.	D	d	A	L	H
4"	M142003208	75	63	117	155	101
5"	M142003209	75	63	117	155	140

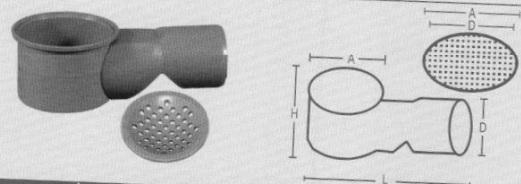
MULTI FLOOR TRAP ADAPTOR (HEIGHT RISER)



SIZE	PART NO.	WT.	A	D	d	L	H
110 x 50/40	M112003344	2.75	110	50	40	180	158

Application : Required to raise the height of floor traps.

NAHANI TRAP & JALI



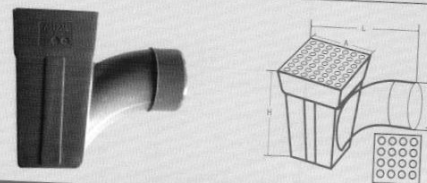
SIZE (D)	PART NO.	H	L	A
63	M142003106	67	215	120
75	M142003107	85	256	128
90	M142003108	91	260	128
110	M142003109	100	270	128

NAHANI TRAP (SINGLE PIECE)

SIZE (D)	PART NO.	H	L	A
63 (with Jali)	M142007006	67	215	120
63 (without Jali)	M142007106	67	215	120
JALI	PART NO.	SIZE (D)	WT.	A
	M142008509	110	3.4	119

Application : For draining waste from bathroom / wash basin out to the main line.

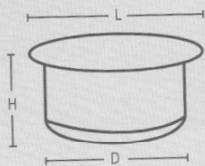
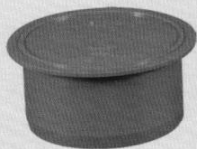
GULLY TRAP (SQUARE TYPE) WITH JALI



SIZE (D)	PART NO.	WT.	A	H	L
110	M142003409	3.2	139	239	290

uPVC DRAIN WASTE & VENT SYSTEM

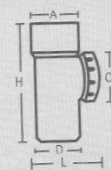
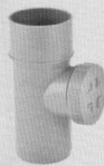
SOCKET PLUG



SIZE (D)	PART NO.	WT.	L	H
75	M112002907	3.2	95	48
110	M112002909	3.2	130	60

Application : Used as a blind plug to terminate the pipeline.

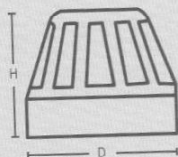
CLEANSING PIPE



SIZE (D)	PART NO.	WT.	A	H	L	C
75	M152002607	3.2	98	192	118	79
110	M152002609	3.2	132	266	143	107

Application : Used in between a vertical line to facilitate cleaning.

VENT COWL



SIZE (D)	PART NO.	WT.	H
# 50	M112002705	3.2	56
# 63	M112002706	3.2	67
75	M112002707	3.2	67
# 90	M112002708	3.2	80
110	M112002709	3.2	90

Application : Used as a cap on the top of the vertical line. Also helps in release of foul gases.

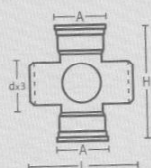
PIPE CLIP



SIZE (D)	PART NO.	WT.	H	L
40	M112002804	3.2	75	76
50	M112002805	3.2	84	86
63	M112002806	3.2	98	103
75	M112002807	3.2	110	112
90	M112002808	3.2	122	140
110	M112002809	3.2	143	140
160	M112002812	4.0	210	180

Application : To fix / secure the pipeline to the wall or flat surface.

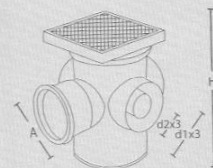
BOSS ADAPTOR



SIZE (D)	PART NO.	A	d x 3	H	L
110 x 63	M152004232	132	63	200	180

Application : required to connect multiple draining. Provided with 3 additional inlets that can be opened as an when required.

BOTTLE GULLY TRAP



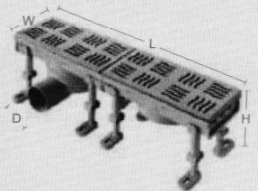
SIZE (D)	PART NO.	A	d1 x 3	d2 x 3	H
160 x 110	M192014131	132	100	50	300

Application : used to remove surface water from paved pedestrian areas. Side and back boss inlets accept waste water from ground floor domestic applications and / or rainwater from roofs. Accepts waste or rainwater pipework from 32 mm up to 110 mm sizes

GULLY TRAPS

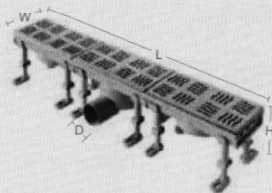
NEW ARRIVALS

PRB4010 ABS MODULAR CHANNEL



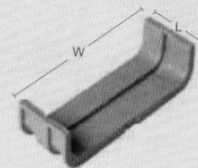
L	W	D	H
400	100	50	105-137

PRB6010 ABS MODULAR CHANNEL



L	W	D	H
600	100	50	105-137

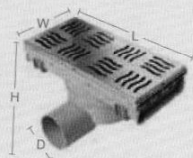
PRBG2010 JOINT TO GLUE FOR PRATIKO BAGNO



L	W
35	100

CHABS2010IN

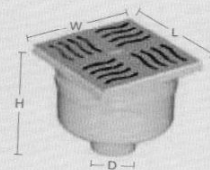
GULLY TRAP ABS



L	W	D	H
200	100	50	105

CHABSV1050IN

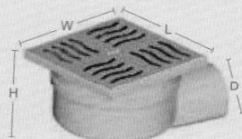
ABS GULLY TRAP



L	W	D	H
100	100	50	82-74

CHABS1050IN

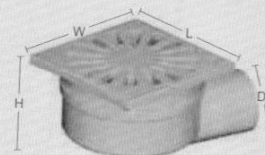
ABS GULLY TRAP



L	W	D	H
100	100	50	82-74

CHABS1050G

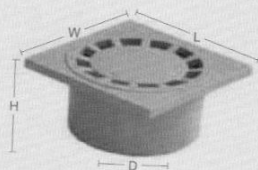
ABS GULLY TRAP



L	W	D	H
100	100	50	82-72

CHPVC10G

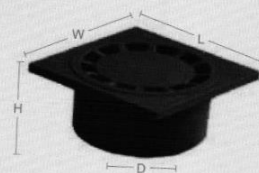
PVC GULLY TRAP (GREY)



L	W	D	H
100	100	32-40-82	50

CHPVC10N

PVC GULLY TRAP (BLACK)



L	W	D	H
100	100	32-40-82	50