



CELEBRATING  
**25** YEARS  
OF TRUST &  
INNOVATION



# PowerDrain

## ADVANCED SUB SURFACE DEWATERING SYSTEM



# ABOUT POWERDRAIN

PowerDrain has been brilliantly designed to use capillary forces and syphonic action to drain water from soils far more effectively than simply relying on gravity. PowerDrain is a unique flat belt made up of special thermoplast PVC compound with a collection of tubes placed underneath the belt. When laid on the soil, the capillary action in the soil helps to move the water towards the omega-shaped tubes found underneath the belt. The unique design of PowerDrain helps to hold the water within the grooves due to the forces of adhesion, cohesion and surface tension. The collected water is then guided to GeoRex pipe, our subsoil drainage specialist, with the help of a coupler which is designed to insert the PowerDrain belt into the GeoRex Pipe. The GeoRex pipe is installed at a lower level than PowerDrain to create a siphonic movement, making it an active drainage system. The perforated surface of the GeoRex pipes in combination with PowerDrain creates a double action drainage system. Not only does it help to drain excess water from the soil, but also helps in directing the water towards storage.

## BENEFITS



Increases the life of building and waterproofing



Virtually crush proof



Does not choke even after long working cycles



Draining continues for a longer period of time



Root growth is altogether avoided due to flat top profile



Installation process extremely simple and user friendly

## PRODUCT RANGE

**Length:** Roll of 50 metres | **Width:** 100/200 mm  $\pm$  5% | **Thickness:** 2mm  $\pm$  5% | **Standard Color:** Green

## WORKING PRINCIPLE

When placed in soil, water moves into grooves by Capillary Action is carried to the pipe by Siphon Action.

**Capillary Action:** It is the tendency of fluid to raise in narrow tube due to the interaction between cohesive & adhesive forces of the fluid and surface.

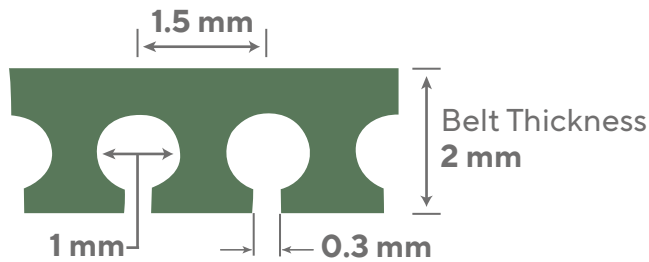
**Siphonage Action:** It is the process where fluid flow from its highest point to lower point via channel under the influence of gravity.



# PHYSICAL CHARECTERISTICS

Sr. No.	Property	Unit	Value
01	Width	cm	10 or 20 ± 5%
02	Thickness	mm	2.00 ± 5%
03	Roll Length	m	50
04	Effective Water Inlet Opening Ratio	%	>20
05	Acid Resistance	-	Excellent
06	Alkali Resistance	-	Excellent
07	Root Invasion Resistance	-	Excellent
08	Algal/Fungal Resistance	-	Excellent
09	Standard Colour	-	Green
10	Flow Rate (Gradient 0.5,Stress 10)	litre/min	3 ± 10%
	Flow Rate (Gradient 1.0,Stress 10)		5 ± 10%
	Flow Rate (Gradient 0.5,Stress 300)		2 ± 10%
	Flow Rate (Gradient 1.0,Stress 300)		3 ± 10%

## CROSS SECTION



## AREAS OF APPLICATIONS

- Building foundation drainage - To increase the life of building and waterproofing
- Repairs of existing leaking basements - To have dry basements without seepage issues
- Beneath podium gardens and landscape gardens - For puddle free, lush and consistent greenery
- Sports field and golf course drainage - For minimizing stoppage of play time
- Retaining walls - To Avoid leakages
- Agriculture - To reduce soil salinity and avoid water-logging thereby enhancing crop yield



Foundation Drainage /  
Basement Repair



Podium Garden /  
Landscape Garden



Sports Field /  
Golf Course



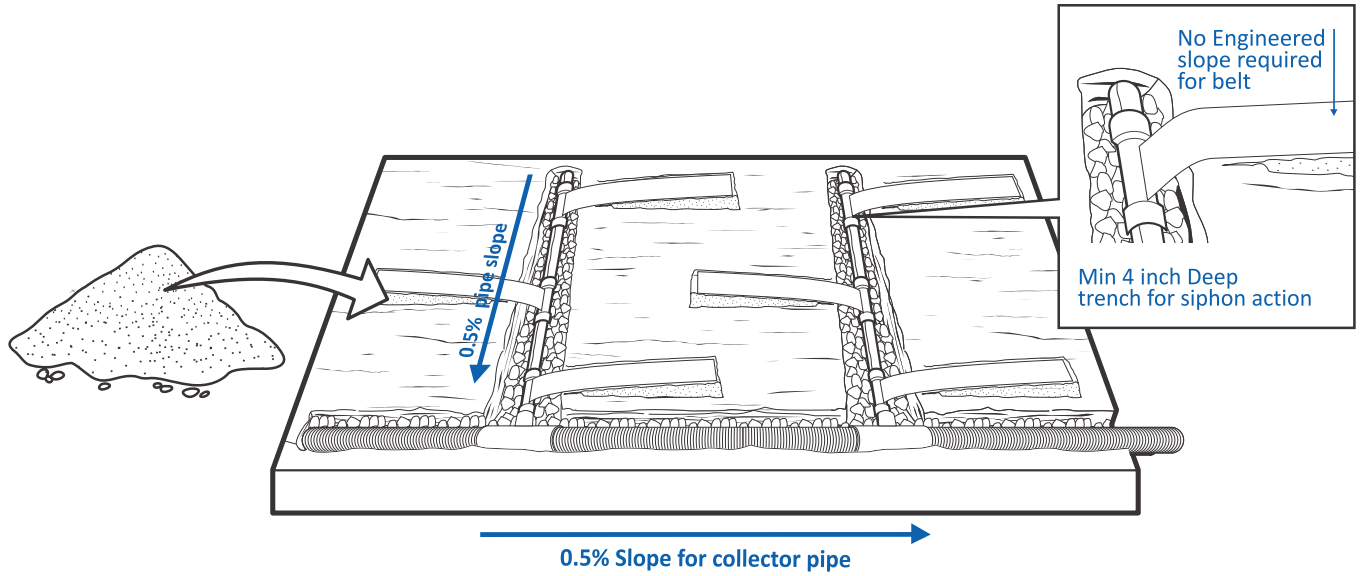
Retaining  
Wall





# INSTALLATION OF POWERDRAIN SYSTEM

- Insert and secure the belt into the pipe and seal with silicone sealant along the smooth side only and at the edges if there are any gaps
- Place PowerDrain with grooves side facing down
- Ensure the other end of the belt which is not inserted in pipe is sealed with waterproof duct tape



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EXPLORE ENTIRE RANGE OF  
ASTRAL POWERDRAIN



A consumer validated  
Superbrand in piping  
category for  
consecutive 4 years



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Pipe Brand based on  
TRA's Brand Trust  
Report for the 5<sup>th</sup> time

Power of Desire



India's Most Desired  
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Astral Limited

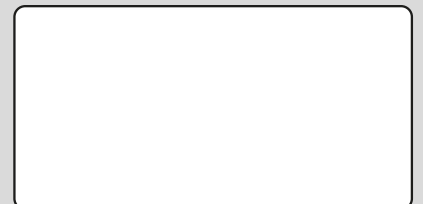
CIN: L25200GJ1996PLC029134

Registered & Corporate Office:

207/1, 'Astral House', B/h Rajpath Club, off S. G. Highway,  
Ahmedabad - 380059, Gujarat, India. P: +91 79 6621 2000

F: +91 79 6621 2121 | W: astralltd.com

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