

Arched Mesh Pipe System (AMPS) – Green Solutions

Green parking spaces \ driveway underground irrigation & drainage

AMPS-Underground Irrigation & Drainage

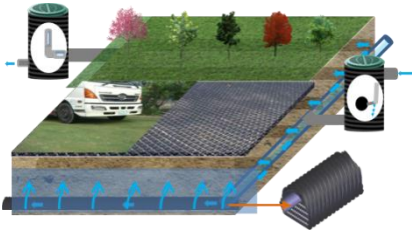
Irrigation water moves through the Arched Mesh Pipes and reaches root cluster areas efficiently by soil capillary action. Irrigation water requirements are reduced by 50% and irrigation manpower by 60%, Plant growth increase are equivalent to a 40% increase in fertilizer.

Arched Mesh Pipe exclude oversaturated soil water and high water table.

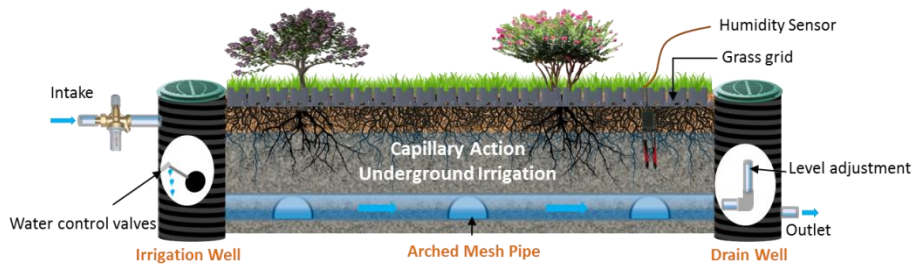
Arched Mesh Pipe install without filter material coating, clog-resistant.

Arched Mesh Pipe high efficiency drainage, the soil is not discharged.

Easy installation, maintenance and management simple, It is the green parking spaces, driveways optimum irrigation and drainage systems.



AMPS-Arched Mesh Pipe underground irrigation and drainage system - construction



AMPS - Arched Mesh Pipe System

Arched Mesh Pipe combines efficient irrigation and drainage systems using non-pressurized, gravity driven, capillary physics of the growing medium via the direct interface of the AMPS subsurface irrigation pipe that remains clog resistant and material free.

Arched Mesh Pipe is the new design, without filter coating and clog-resistant, suitable for underground drainage and irrigation.

	<p>Traditional subsoil drainage pipes are dug holes around the pipe. They must come along with gravel and other non-woven filter material coated to prevent pipe blockage.</p> <p>The "Arched Mesh Pipe" uses arched shape design, High pressure resistance. The arched part is impermeable layer and the flat part is permeable layer. When constructing, the flat part of the mesh lies down. It results in soil particles sinking due to gravity and not going with water into the aqueduct.</p> <p>Therefore Arched Mesh Pipe can solve the problem of underground drainage pipe blocking without filter coating and clog-resistant.</p>
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AMPS-Arched Mesh Pipe underground irrigation and drainage -feature

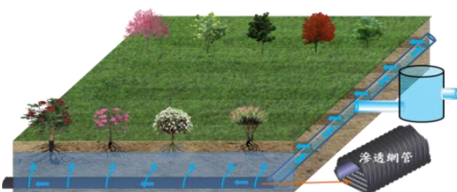
AMPS-underground irrigation is use of capillary action, underground is moist, surface is dry , so it is not easy to grow weeds, less produce pest problems.

Soil strata including irrigation water, prolong watering time 3 to 5 times, save manpower, small evaporation losses, Less of farmland.

Compared with other irrigation systems, it also has low energy consumption, water conservancy and efficiency.

Because of its slow soil irrigation water pressure and with less fertilizer, so this system is not only energy consumption, but also for environmental protection.

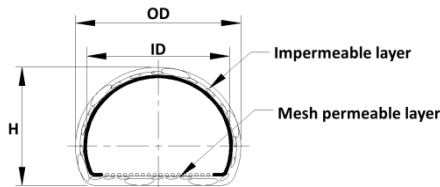
The system does not cause damage to the soil structure and Pollution of groundwater resources.



Arched Mesh Pipe manufacturing principles

Arched Mesh Pipe made by high density polyethylene (HDPE), thread surround into a mesh structure, continuous extrusion into the arch structure, high compressive strength, the arch part is impermeable layer, the plane part is mesh permeable layer, without the use of filter material coating, excluding water the saturated of soil, Mesh pipe is not blocked, ecological installation, lightweight, tough, Non-corrosive, not easy to break, etc. Superior characteristics, Is a low cost, easy installation, high efficiency, underground irrigation and drainage materials of high economic value.

Arched Mesh Pipe Specifications



Pipe Size		ID*OD*H ±3.0%mm	Gap ±3.0%mm	L m
Diameter	Code			
2"	HPT-50A	50*62*54	11.5mm	5m
2½"	HPT-65A	63*76*70	12.5mm	5m
3"	HPT-75A	79*92*82	12.5mm	5m
4"	HPT-100A	96*114*94	12.5mm	5m
6"	HPT-150A	149*167*136	14.0mm	5m
8"	HPT-200A	193*216*170	14.5mm	5m
10"	HPT-250A	239*267*197	15.0mm	5m
12"	HPT-300A	290*318*223	15.5mm	5m

Irrigation Well & Drainage Well Specifications

Irrigation Well Specifications

 Irrigation Well	Size	Fitting	H	H1
	12" Well	3" or 4"	40cm	30cm
	12" Well	3" or 4"	50cm	40cm
	12" Well	3" or 4"	60cm	50cm
	12" Well	3" or 4"	75cm	65cm
	12" Well	3" or 4"	90cm	80cm

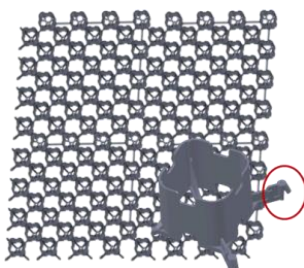
Overflow Well Specifications

 Overflow Well	Size	Fitting	H	H1	H2
	12" Well	3" or 4"	40cm	30cm	30cm
	12" Well	3" or 4"	50cm	40cm	40cm
	12" Well	3" or 4"	60cm	50cm	50cm
	12" Well	3" or 4"	75cm	65cm	65cm
	12" Well	3" or 4"	90cm	80cm	80cm

AMPS-Arched Mesh Pipe underground irrigation and drainage system Chains Grass Grid characteristics

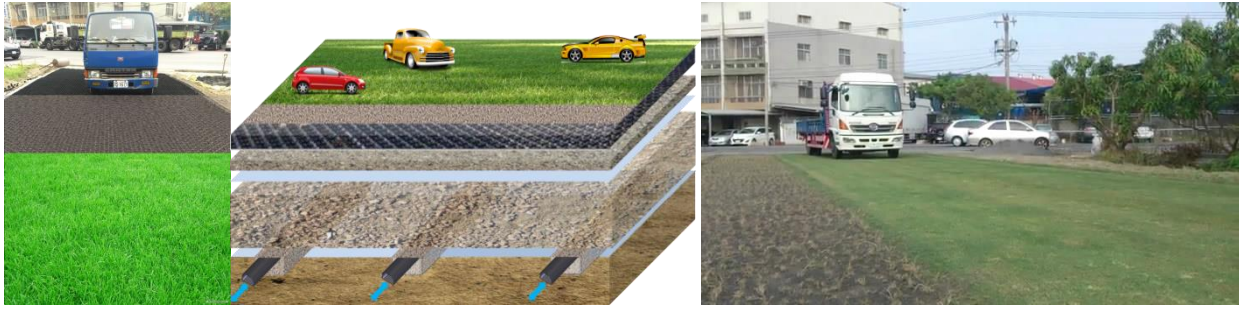
1. Underground Irrigation: irrigation water penetration into the soil, using soil capillary action, water supply to the root cluster area, can save 50% of irrigation water, fertilizer effect increase by 40%, reduction irrigation manpower 60%.
2. Excellent drainage: Chains grass grid bearing layer provides a good rain infiltration function to facilitate the penetration of excess precipitation is discharged from the Arched Mesh Pipe.
3. Chain grass grid more than 95% of grass area, complete greening effect, you can cool down, sound-absorbing, vacuuming, significantly improved the quality of the environment.
4. Unique and stable chain grass grid latch lap the entire paved surface together into overall plane, to avoid local depressions, the construction is extremely convenient.
5. High strength, long life: chain grass grid compression capability up to 150 tons / square meter or more.
6. Protection of lawn: grass grid chain bearing layer provides a pace for grass roots growth, Arched Mesh Pipe provides capillary action of underground irrigation, chain grass grid load-bearing layer of turf growth, root scan grow into the gravel graded layer.
7. Green: Chain grass grid security and stability, recyclable, absolutely pollution-free, comprehensive care of the lawn.
8. Light: Chains grass grid 4 kilograms per square meter, extremely lightweight, quick installation, saving labor, shorten the construction period.

Chains grass grid specification :

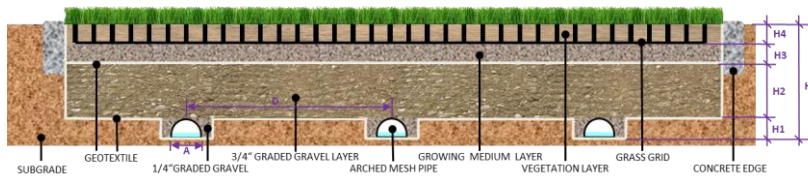


Chains grass grid Material: High-density polyethylene (HDPE)
 Chains grass grid size: 500mm (length) * 500mm (width) * 50mm (height) ± 3%
 Square tube diameter: 60mm * 60mm * 50mm (height) ± 3%
 Weight: 4.0KG / M² or more
 Compressions square tube count: 128 / M²
 Square tube wall thickness: 2.5mm ± 3%
 Chains grass grid combination: latch lap

Green parking space › driveway underground irrigation & drainage



Parking space installation with chain grass grid :



- A :** Arched Mesh Pipe Diameter+5cm
- D :** 2.5m
- H1 :** Arched Mesh Pipe Diameter
- H2 :** 15cm
- H3 :** 5cm
- H4 :** 5cm
- H :** H1+H2+H3+H4

1. Foundation soil layer rolling reinforce the degree should reach more than 90%; belong soft geology, it is recommended to fill stone throwing and rolling to dense.
2. Trenching: Depth to pipe height, width plus 5cm of pipe diameter.
3. Original soil laid non-woven fabric.
4. Trench laying pipe, filled with finely graded gravel.
5. 15cm graded gravel layer. Practices: 10% coarse sand, 60% gravel particle size of 20 to 40mm, 30% clay soil mixing, rolling to reinforce the degree of over 90%.
6. Gravel grading layer laying non-woven fabric.
7. Set 5cm thick of fertile soil grading gravel layer. Fertile soil layer on raising practices: 25% particle size of 10-30mm gravel, medium-coarse river sand 15%, farming land soil 60% and Adding an appropriate amount of organic fertilizer, the three turned mix evenly, laid non-woven layer, rolling compacting, as chain grass grid basic level.
8. Sprinkle a little organic fertilizer, artificial laying chain grass grid.
9. Fill with crushing stone grading fertile soil, In the recess of grass grid, soil lower than 5-10mm chain grass grid as a reference plane.
10. Laying turf or spill grass seed on grass grid. When laying sod turf need to be on the planting soil compaction, water conservation, after the grass survive, car parking.

