

ECO-MESH

Low Impact Development (LID)
Stormwater Management and Solution
Green Infrastructure Program (GSI)
Geo Mesh Pipe-Products Series



Geo Mesh Pipe is the Simple & Economical (LID) Solution

Green Infrastructure Facilities

Geo Mesh Pipe

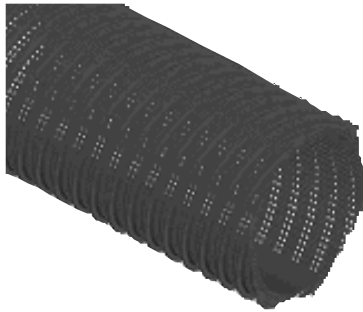


Arched Mesh Pipe

Arched Mesh Pipe adopts arch design. The top arch part is impermeable and the bottom flat part is permeable. The water enters the pipe from the bottom without soil due to the gravity. It doesn't require non-woven fabric or other filter materials to avoid clogging and hinder the permeability and drainage.

The pipe applies the ecological engineering concept.

This underground drainage pipe is the best anti-clog permeable drainage material.



Mesh Drainage Pipe

Mesh Drainage Pipe is integrally extruded by HDPE.

This pipe is not easy to slide or clog and has high pressure resistance.

High density mesh and T-threads are wrapped around the pipe.

The pipe is light, tough, acid and alkali resistant, corrosion resistant, and hard to break with the spiral structure and effective drainage.

The impermeable part is a third or a half of the pipe surface for water permeability and drainage. It is a low-cost, easy-to-install, high-efficient, and high value permeable drainage material.



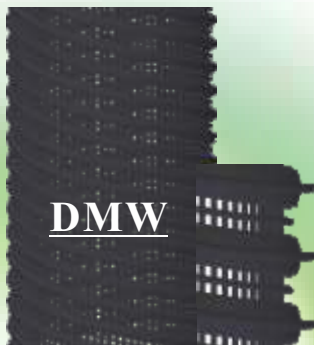
Anti-Clog Mesh Drainage Wells

The pipe adopts T-Type thread design with high compressive resistance.

The sidewall openings are high-density mesh. The anti-clog design minimizes the soil entry without requiring extra filter materials, such as non-woven fabric.

DRWT- Deep Root Watering Tube

Mesh Tube Cap is filled with gravels in order to filter groundwater and avoid debris entering the pipe. The cap allows irrigation water to travel along the sidewall and to penetrate into the soil. This works for deep soil ventilation with low maintenance.



DMW- Drainage Mesh Wells

ASR- Aquifer Recharge Aquifer Storage and Recovery. Reduce surface runoff. Relieve the possibility of flooding caused by heavy rain.

The DMW can also be used to return water to the aquifer:

Drainage Mesh Wells system can usually transport many target rainwater.

This ability to supplement local groundwater supplies can help increase ground water extraction safely by mitigating drought or excessive drought.



RCM-Rainwater Conservation Module

RCM Water Retention System can collect stormwater and accelerate the stormwater infiltration into the ground to recharge the water table and prevent excessive surface runoff. The RCM is a vertical "permeation well". The combination of "Arched Mesh Pipe" and RCM system can collect the runoff that cannot be naturally absorbed into the ground and quickly infiltrate the water into the soil.



Square Mesh Pipe

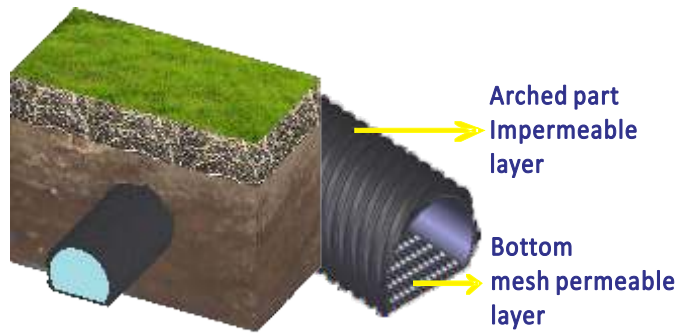
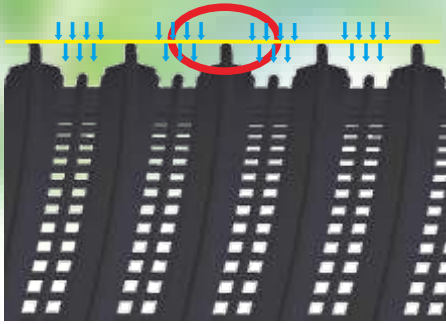
The Square Mesh Pipe is integrally extruded by HDPE with T-Type thread design.

The Square Mesh Pipe has high-density mesh structure that roots can cling and grass can grow densely in the vertical applications.

The Square Mesh Pipe combined with dripping system can provide a low-cost irrigation solution for vertical walls.

Geo Mesh Pipe Unique Characteristics

- 1. High pressure resistance**
The T-Type thread around the pipe creates the high compression resistance.
- 2. Large permeable area, effective water collection, anti-clogging, & long expected service life**
The pipe is coated by the T-Type thread to create double water collection channels. The permeable area is more than 80% of the pipe surface which is 5~10 times larger than other products. The total costs can be decreased by high performance, anti-clog, & long service life pipes.



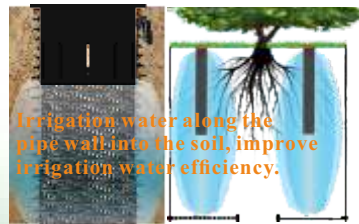
Arched Mesh Pipe-Unique Characteristics

The subsoil drainage pipe is used to removed the excess ground water. "Arched Mesh Pipe" has the top arched impermeable surface and the bottom flat permeable surface. Water travels in the aqueduct without soil particles due to the gravity. Arched Mesh Pipe is clog-free without requiring extra filter materials.

Anti-Clog Drainage Mesh Wells-Unique Characteristics

DRWT-Deep Root Watering Tube

DRWT Mesh Tube sidewall structure can minimize soil entry. The Tube Cap is filled with gravels for ventilation and groundwater filter. The cap is designed for irrigation water to travel into the soil along the inner edge of the tube and improve irrigation water usage efficiency.



- The sidewall has T-type thread design and high compressive resistance.
- The sidewall openings are fine mesh design.
- Mesh Tube sidewall is Anti-Clog and minimizes soil entry without extra filter material, such as non-woven fabric.

DMWS-Drainage Mesh Wells System

ASR-Aquifer Recharge and Aquifer Storage and Recovery
Reduce surface runoff
Mitigation the probability of flooding caused by heavy rain



DMWS - Drainage Mesh Well System
Provide the most economical and simple solution

AMPS-Arched Mesh Pipe Underground Irrigation & drainage System



Square Mesh Pipe-Vertical Vegetation Living Walls



Green Environmental Stormwater Management Facility Reference Manual

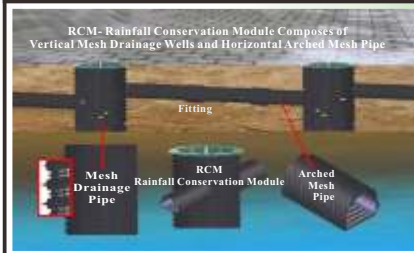
Low Impact Development – Stormwater Management

The main purpose of Green Infrastructure Program:

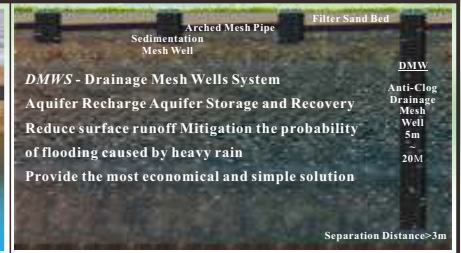
1. Slow down runoff and reduce the incidence of flooding.
2. Promote stormwater infiltration & retention and create the ecological balance of the environment.
3. Natural filtration of stormwater, and pollution reduction of groundwater, rivers, lakes and oceans.
4. Establish green pavement and reduce the heat island effect.
5. Establish underground water saving and irrigation systems.



Stormwater Drainage, Retention, Slow Runoff Facilities



RCM-Rainwater Conservation Module



DMWS-Drainage Mesh Well System



Rain Garden



Trees In Bioswale

Water saving underground irrigation drainage facility



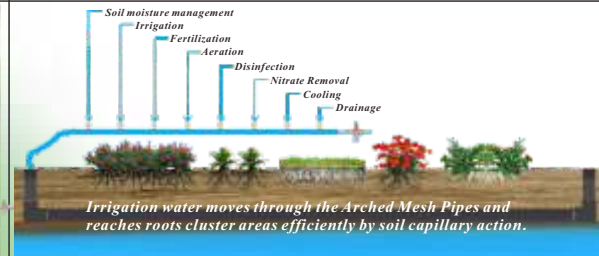
DRWT-Deep Root Watering Tube



AMPS-Arched Mesh Pipe System



WCID-Water Conservation System



Create a comfortable environment for growth of plants

Heat island effect reduction facilities



Vertical Green Wall



Vertical Vegetation Living Walls

Water saving underground irrigation drainage facility application



Rain Garden Irrigation & Drainage



Agriculture Irrigation & Drainage

Drainage, heat island effect reduction facilities



Self-Watering Wicking Bed Green Roof



Sport Field Irrigation & Drainage



Golf Course Irrigation & Drainage



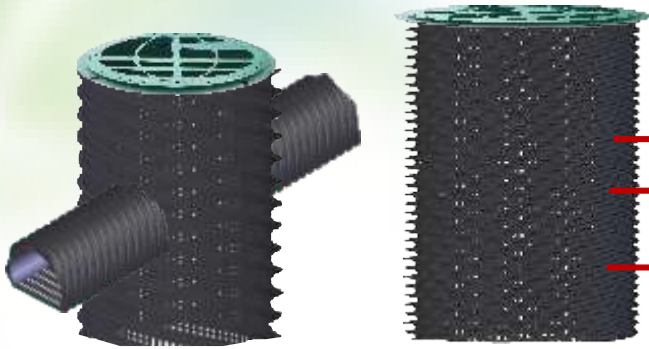
Green Grid Green Paving



Landscaping



Low Impact Development (LID) – Stormwater Management Green Infrastructure (GSI) Program ASR-Aquifer Recharge and Aquifer Storage and Recovery



DMW-Drainage Mesh Wells–Unique Characteristics

- The sidewall openings are fine mesh design.
- The sidewall has T-type thread design and high compressive resistance.
- Mesh Pipe sidewall is Anti-Clog and minimizes soil entry without extra filter material, such as non-woven fabric.

Anti-Clog Mesh Well Applications

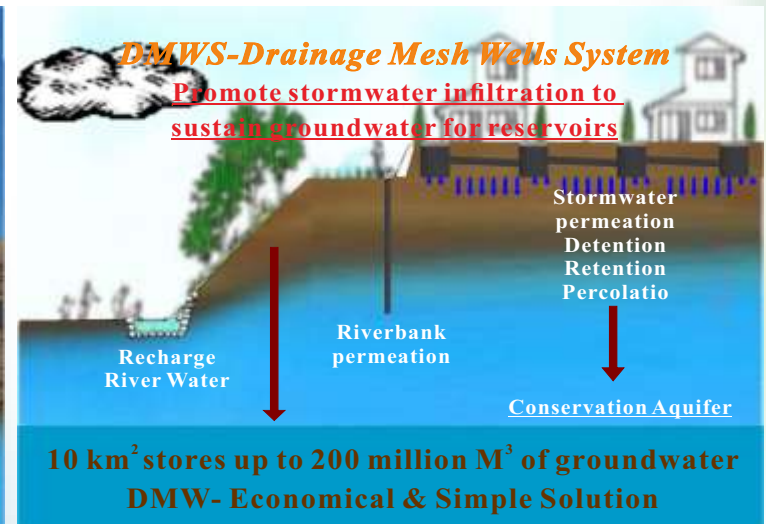
RCM-Rainfall Conservation Module

Stormwater Drainage & Retention



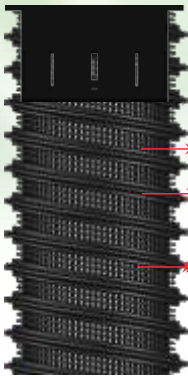
DMWS-Drainage Mesh Well System

ASR-Aquifer Recharge, Storage and Recovery



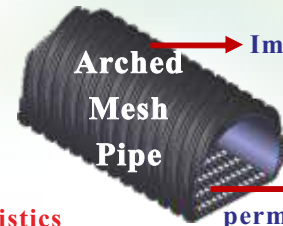


Low Impact Development (LID) – Stormwater Management Green Infrastructure (GSI) Program Water-Saving Irrigation and Drainage



Deep Root Watering Mesh Tube Unique Characteristics

- The sidewall openings are fine mesh design.
- The sidewall has T-type thread design and high compressive resistance.
- Mesh Tube sidewall is Anti-Clog and minimizes soil entry without extra filter material, such as non-woven fabric.



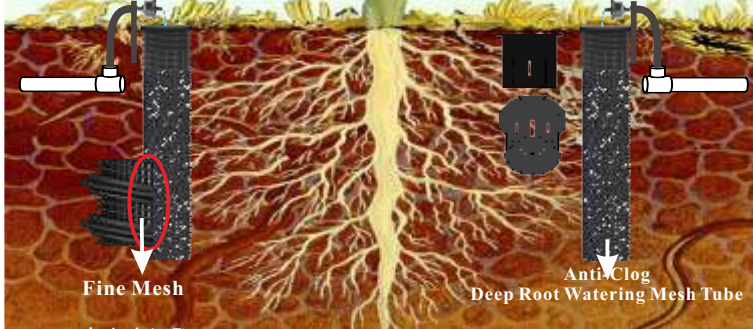
Impermeable layer
Arched Mesh Pipe
Bottom permeable Mesh layer

Arched Mesh Pipe Unique Characteristics

Arched Mesh Pipe does not need to use filter materials to eliminate saturated water in the soil. Mesh pipe does not block, and ecological engineering construction is the best underground drainage material.

DRWT-Deep Root Watering Mesh Tube

Root Aeration Tubes and Deep Root Tree Watering Systems



DRWT - Deep Root Watering Mesh Tube enables vital water, oxygen, and nutrients to bypass compacted soil and directly reach tree and shrub root zones to improve tree and shrub investment protection, watering efficiency and landscape aesthetics through deep root growth and tree development.



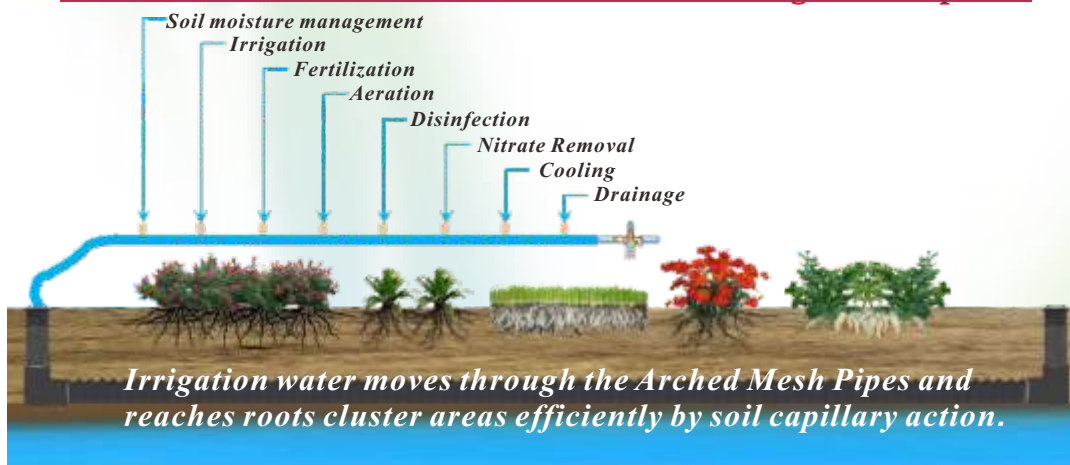
AMPS-Arched Mesh pipe Underground Irrigation & Drainage System



AMPS-Arched Mesh Pipe System-Structure

Water Intake "Irrigation Well" and the Wicking of irrigation pipe " Arched Mesh Pipe " and Outlet " Overflow Well " composed "AMPS-Arched Mesh Pipe system".

AMPS-Create a comfortable environment for the growth of plants



Geo Mesh Pipe Specifications

Drainage Mesh Pipe Specifications



Drainage Mesh Pipe		ID*OD ±3.0% mm	Pitch ±3.0% mm	Length m
Size	Code			
1½"	NSO-40A	37*48	11.0mm	4m
	NSD-40A			
2"	NSO-50A	48.5*61	11.5mm	4m
	NSD-50A			
	NSH-50A			
2½"	NSO-65A	62*76	12.5mm	4m
	NSD-65A			
3"	NSO-75A	77*89	12.5mm	4m
	NSD-75A			
	NSH-75A			
4"	NSO-100A	98*114	12.5mm	4m
	NSD-100A			
	NSH-100A			
5"	NSO-125A	123*140	14.0mm	5m
	NSD-125A			
6"	NSO-150A	148*165	14.0mm	5m
	NSD-150A			
	NSH-150A			
8"	NSO-200A	195*216	14.5mm	5m
	NSD-200A			
	NSH-200A			
10"	NSO-250A	239*267	14.5mm	5m
	NSD-250A			
	NSH-250A			
12"	NSO-300A	290*318	15.0mm	5m
	NSD-300A			
16"	NSO-400A	390*420	15.5mm	5m

Drainage Mesh Pipe straight connector specifications

Connector		ID*OD ±3.0% mm	Pitch ±3.0% mm	Length cm
Size	Code			
1½"F	NSF-40A	48.5*61.0	11.5mm	12cm
2"F	NSF-50A	62.0*76.0	12.5mm	12cm
2½"F	NSF-65A	77.0*89.0	12.5mm	12cm
3"F	NSF-75A	90.0*105.0	12.5mm	15cm
4"F	NSF-100A	115.0x130.0	12.5mm	20cm
5"F	NSF-125A	141.0x160.0	14.0mm	20cm
6"F	NSF-150A	166.0x183.0	14.5mm	25cm
8"F	NSF-200A	217.0*240.0	14.5mm	30cm
10"F	NSF-250A	268.0*290.0	14.5mm	35cm
12"F	NSF-300A	320.0*342.0	15.0mm	40cm
16"F	NSF-400A	422.0*452.0	15.5mm	45cm

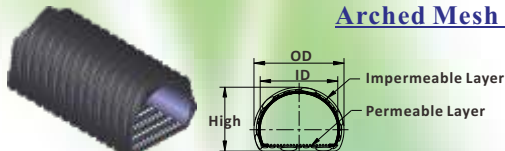
DRWT- Deep Root Watering Mesh Tube (MSO)-Specifications

Size	DRWT		ID*OD ±3.0%mm	Gap ±3.0%mm	Length m	Cut Length cm
	Code					
2"	MSO-50A		48.5*61	11.5mm	5m	25cm, 36cm, 46cm, 60cm
3"	MSO-75A		77*89	12.5mm	5m	36cm, 46cm, 60cm, 90cm, 120cm
4"	MSO-100A		98*114	12.5mm	5m	46cm, 60cm, 90cm, 120cm

DMW-Drainage Mesh Wells (WSO)-Specifications

Mesh Well		ID*OD ±3.0%mm	Pitch ±3.0%mm	Length m	Connector		ID*OD ±3.0%mm	Pitch ±3.0%mm	Length cm
Size	Code				Size	Code			
6"	WSO-150A	148*165	14.0mm	5m	6"F	WSF-150A	166.0x183.0	14.5mm	35cm
8"	WSO-200A	195*216	14.5mm	5m	8"F	WSF-200A	217.0*240.0	14.5mm	40cm
10"	WSO-250A	239*267	14.5mm	5m	10"F	WSF-250A	268.0*290.0	14.5mm	45cm
12"	WSO-300A	290*318	15.0mm	5m	12"F	WSF-300A	320.0*342.0	15.0mm	50cm
16"	WSO-400A	390*420	15.5mm	5m	16"F	WSF-400A	422.0*452.0	15.5mm	55cm

Arched Mesh Pipe Specifications

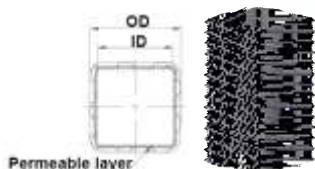


Arched Mesh Pipe		ID*OD*H ±3.0%mm	Pitch ±3.0%mm	Length m
Size	Code			
2"	HPT-50A	50*62*54	11.5mm	5m
2½"	HPT-65A	63*76*70	12.5mm	5m
3"	HPT-75A	79*92*82	12.5mm	5m
4"	HPT-100A	96*114*94	12.5mm	5m
6"	HPT-150A	149*167*136	14.0mm	5m
8"	HPT-200A	193*216*170	14.5mm	5m
10"	HPT-250A	239*267*197	15.0mm	5m
12"	HPT-300A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

Arched Mesh Pipe straight connector specifications

Connector		ID*OD*H ±3.0%mm	Pitch ±3.0%mm	Length cm
Size	Code			
2"F	HPF-50A	63*76*70	11.5mm	12cm
2½"F	HPF-65A	79*92*82	12.5mm	15cm
3"F	HPF-75A	96*114*94	12.5mm	15cm
4"F	HPF-100A	112*128*112	12.5mm	20cm
6"F	HPF-150A	168*188*158	14.0mm	25cm
8"F	HPF-200A	217*240*193	14.5mm	30cm
10"F	HPF-250A	268*290*220	15.0mm	35cm
12"F	HPF-300A	320*344*245	15.5mm	40cm

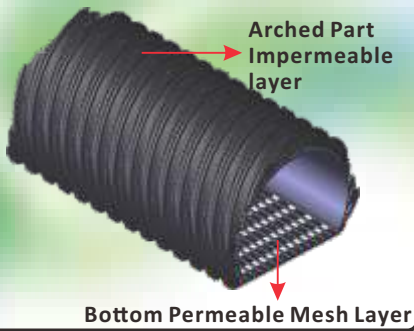
Square Mesh Pipe Specifications



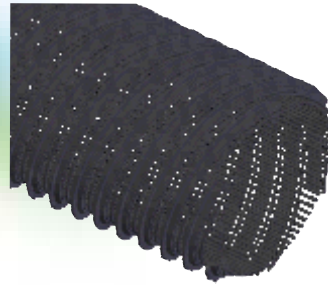
Size		ID*OD ±3.0%mm	Pitch ±3.0%mm	Length m
mm	Code			
115*115	SQO-115S SQH-115S	98*115	18.0mm	5m
200*200	SQO-200S	180*200	22.0mm	5m

Geo Mesh Pipe - Structure

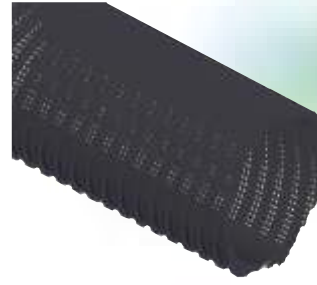
Arched Mesh Pipe



Drainage Mesh Pipe



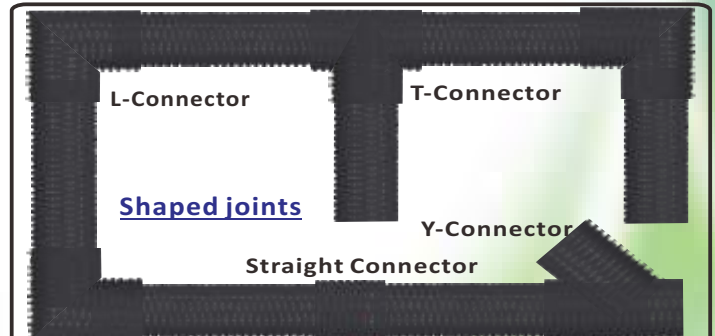
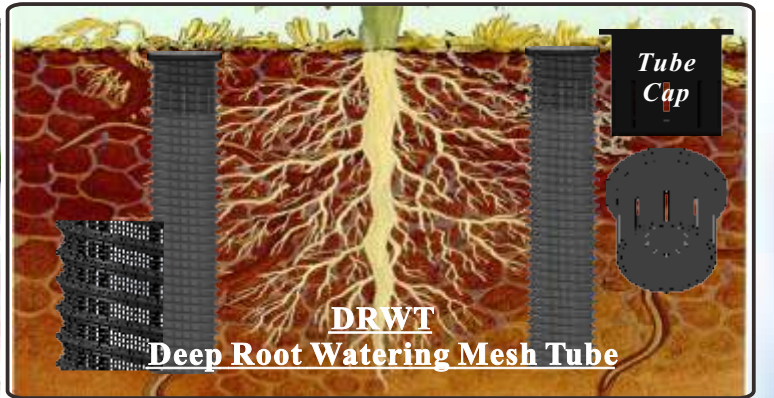
NSO
Full permeable



NSD
2/3 permeable



NSH
1/2 permeable



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