



A threaded, perforated or slotted pipe with multi-layered filter screen to provide a hydraulically efficient low head-loss embankment drainage system.

TerraFilter™ can be used for ballast drainage in on-track drainage systems and pressure relief wells in off-track systems.

TerraFilter™ incorporates a specially constructed water conducting sleeve, which allows water from all areas of the screen into the slotted or perforated apertures of the base pipe. The uninhibited flow of filtered water towards the apertures makes TerraFilter™ an extremely hydraulically efficient low head loss system.

High open areas (up to 10%) ensure that large flows can be achieved, thus providing maximum pressure relief. TerraFilter™ can be easily installed in standard or HDD drill casings vertically, inclined or horizontally.

Manufactured from non-metallic PE80 or PE100 based polymers, it has flush threaded joints making installation fast and secure.

Applications

Relief wells for:

- Ballast drainage
- Embankment & cuttings
- Cliff face stabilisation
- Tunnel roofs & side walls

Features

- Hydraulically efficient
- High open area
- Flush threaded
- Quick & easy to install
- High crush resistance
- Can be back-flushed
- Visual monitoring
- UV resistant
- Compatible with standard metric PE pipe systems

Material				
Property	Standard	Unit	Value PE80	Value PE100
Density	ISO 1183	g/cm	0.94	0.95
Melt Flow Index (190/5)	ISO 1133	g/10min	0.9	0.3
Tensile stress at yield	ISO 527	MPa	20	25
Elongation at yield	ISO 527	%	10	9
Elongation at break	ISO 527	%	>600	>600
Impact strength (notched)	ISO 179	kJ/m ²	12	16
Modulus of elasticity	ISO 527	MPa	750	1100

Dimensions				
Nominal Diameter mm	Outside Diameter mm	Inside Diameter mm	Outside Diameter over Mesh mm	Weight per metre Kg
50	63	51	67	1.05
70	90	74	95	2.0
90	110	90	117	2.7

Filter Size		
Filter Type	Equivalent Slot Size	Nominal Open Area
Filter 600	600 microns	23%
Filter 475	475 microns	23%
Filter 375	375 microns	23%
Filter 250	250 microns	20%
Filter 150	150 microns	12.5%
Filter 100	100 microns	7.5%

Pipe Lengths Threaded Ends				
Overall Length mm	1000	1500	2000	3000
Outside Diameter mm	Effective Length mm			
63	950	1450	1950	2950
90-125	925	1425	1925	2925