Permavoid Rainwater Diffuser Unit

Data Sheet

PRODUCT INFORMATION **P1** **ISSUE 3 - JUNE 2018**

Run-off from building roofs is collected into downpipes and flows into a back inlet gully incorporating an internal filter or catchpit inspection chambers. The back inlet gully or chamber discharges the filtered stormwater into the permeable sub-base via Permavoid Rainwater Diffuser Unit encapsulated in a 2mm mesh fabric. The run-off will then diffuse out of the Permavoid Rainwater Diffuser Unit and into the modified granular sub-base layer. The Permavoid unit is a 150mm deep modular interlocking plastic unit storage system designed for use as a combined drainage component and sub-base replacement system, ideal for shallow infiltration/attenuation.

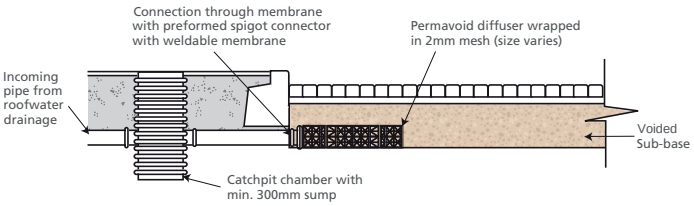
Permavoid Rainwater Diffuser Unit - Configuration Options

Standard sizes and performance criteria are detailed within the Diffuser Specification and Applications brochure.

You can download it here:-
https://selsource.co.uk/pvod-rainwater-diffuser-units

It is recommended all diffuser unit installations have upstream protection, such as a catchpit, to intercept and prevent silts and other detritus causing a blockage and affecting performance.

Typical Layout - Rainwater downpipe drainage into sub-base reservoir



Technical Support

Detailed guidance and assistance is available.
For further information, please contact our Technical Team
on **+44 (0) 1254 589987**
or email **sales@selenvironmental.com**
or visit **www.selsource.co.uk**

ELEMENT	VALUE
PHYSICAL PROPERTIES	
Weight per unit	3kg
Length	708mm
Width	354mm
Depth	150mm
SHORT TERM COMPRESSIVE STRENGTH	
Vertical	715kN/m²
Lateral	156kN/m²
SHORT TERM DEFLECTION	
Vertical	1mm per 126kN/m²
Lateral	1mm per 15kN/m²
TENSILE STRENGTH	
Of a single joint	42.4kN/m²
Of a single joint at (1% secant modulus)	18.8kN/m²
Bending resistance of unit	0.71kN/m
Bending resistance of single joint	0.16kN/m
OTHER PROPERTIES	
Volumetric void ratio	95%
Average effective perforated surface area	52%
Intrinsic permeability (k)	Minimum 1.0 x 10^{-5}
Ancillary	Permavoid Permatie Permavoid Shear Connector
Material	Polypropylene (PP)

HYDRAULIC PERFORMANCE						
3 units wide, 1 unit deep (1.06m x 0.15m)						
FREE DISCHARGE						
Gradient (%)	0	1	2	3	4	5
Flow rate (l/m/s)	8	13	15	17	19	21

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