



ENVIRO
PROTECTOR



SPECIALIST

ENVIROPROTECTOR

STORMWATER TREATMENT

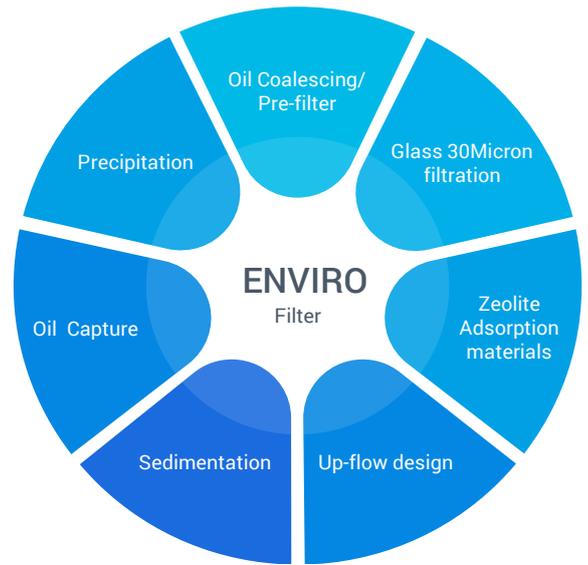
www.protector.com.au

ENVIRO PROTECTOR

The Protector EnviroProtector is a specialist stormwater filter for heavily polluted traffic areas, designed for installation within new or existing chambers. The Fiberglass housing is safe and easy to fit on site. The EnviroProtector operates in an up-flow process resulting in minimal head drop between the inlet and the outlet. The stormwater is treated within the unit by the following processes: sedimentation, filtration, adsorption and precipitation. It is suitable for Heavy Metal, TSS and Nutrient reduction.

At the Heart of the EnviroProtector is the Enviro Filter. The filter is a mix of technologies and proven processes to ensure the highest water quality:

The EnviroFilter incorporates Scottish Engineered Filter Media Stormwater Quality Improvement Device and is employed for heavily polluted traffic areas and has been granted general technical approval (Z-84.2-4) by the German Institute for Structural Engineering (DIBt). Because of its up-flow process it can efficiently work in flat sites requiring only 250 mm fall across the device. Multiple units can be manifolded together to treat higher flows. Each EnviroFilter will provide 8 L/s of treatment flow rate, installed in offline configuration.



Stormwater treatment filter



Light, quick and easy to install



Designed for TSS,TP and TN removal



Underground installation, no loss of site surface area



150-300mm head to drive flow



Filter modules easy to replace



8L/s Treatment Flow rate per Filter

 Council Depots

Car Parks & Shopping Centers 

 Recycling Yards

Airport Aprons & Tarmacs 

 Tunnels

Heavy Vehicle Maintenance 

 Transport Depots & Loading Bays

ENVIROPROTECTOR APPLICATIONS

THE ENVIROPROTECTOR PROCESS

The rainwater from the connected area is fed into the basal section of the filter housing. The angled inlet generates a radial flow pattern.

The hydrodynamic separator converts turbulent waters into a radial laminar flow pattern, generating particle sedimentation, particularly of the sand fraction. This takes place over an inlet to the lower section of the filter shaft. The sediment is retained in a silt trap chamber below the separator. The silt trap can be withdrawn for cleaning and has an integral cleaning port to the side to ease dirt removal.

In the central section of the filter housing is the actual filter and filter Roof. The filter element filters out the fine materials in an up-flow process and dissolved materials are precipitated and adsorbed. The filter is backwashed from above. When exhausted the filter is easily exchanged through the access manway constructed in the roof of the body and the filter element is easily pulled up and removed from the shaft housing.

The cleaned water then passes through the discharge outlet. The system utilizes an oil trap system to ensure a clean water to prevent the movement of any oil that isn't dissolved and retained in the filter elements and is then discharge into water storage, waterway systems or free surface water.

TECHNICAL DATA



Filter Elements:

Material: Filter Substrate: Traffic

Weight: 25 kg

Housing:

Material: Fiberglass

Telescopic Extension Tube:

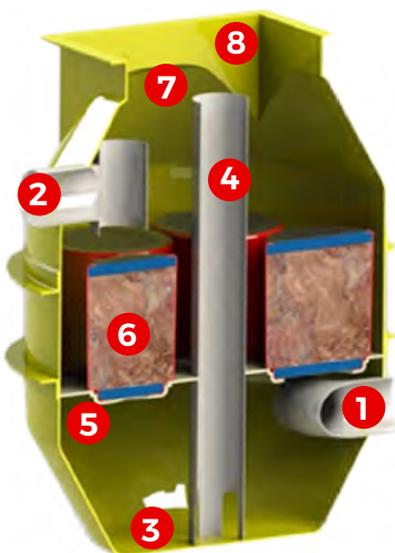
Material: Polyethylene

Weight: 5 kg

Total Weight:

Material: 37 kg (without Telescopic Extension).

PRODUCT STRUCTURE

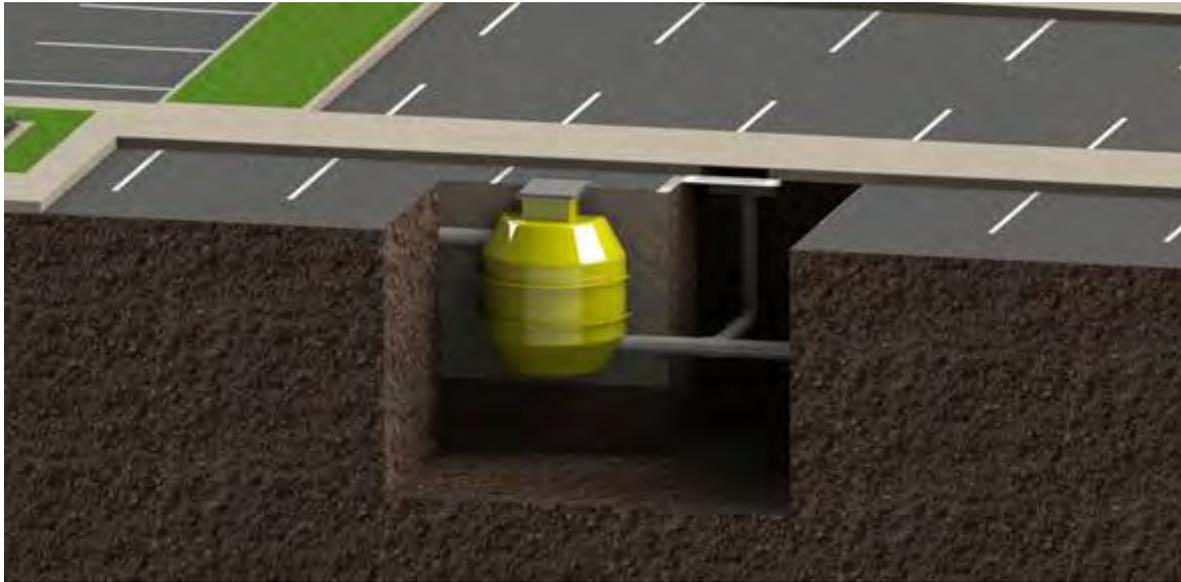


1. Stormwater Inlet
2. Outlet to water storage, water systems or surface waters
3. Silt Trap
4. Overflow pipe
5. Filter floor restrained to EnviroProtector body
6. Filter element
7. Oil Trap
8. Access Manway and Manway cover

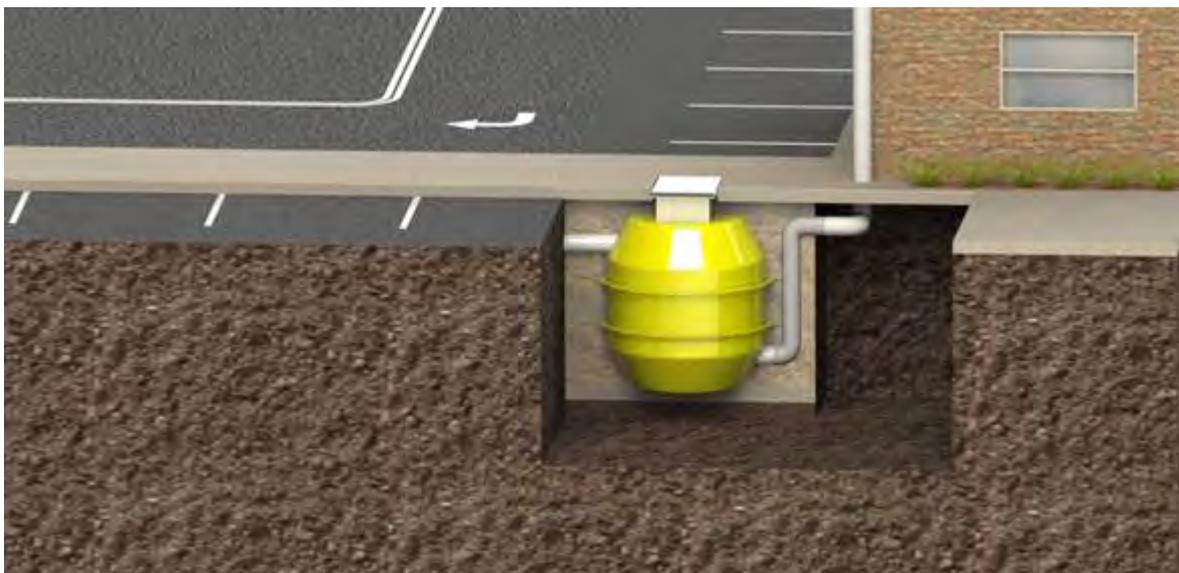
INSTALLATION TYPE

It is available with various filter types, depending on the usage of the connected area.

The Roof type is used for roof areas that do not have a significant proportion of uncoated metals; the Metal type is employed for metal roof areas, and the Traffic type is used for slightly polluted traffic areas. The Heavy Traffic type is employed for heavily polluted traffic areas. The maximum areas that may be drained depend on the nature of the surfaces



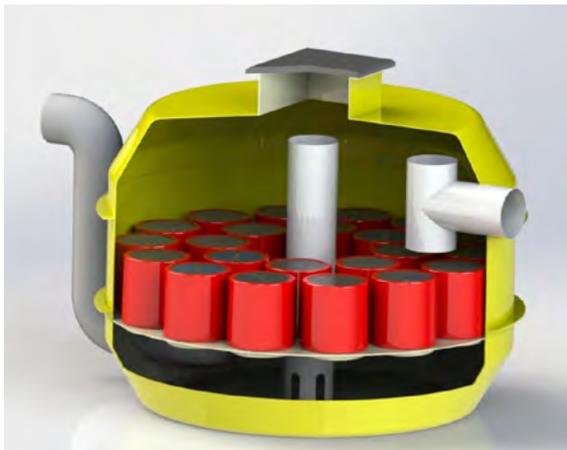
Traffic Type Installation



Roof Type Installation

MODEL RANGE

MODEL	Number of Filters	Treatment Flow LPS	Housing Dia (mm)	Housing Depth	Connection Size
EPS.1000-1	1	8	1000	1500	100
EPS.1200-2	2	16	1200	1500	150
EPS.1500-3	3	24	1500	2000	225
EPS.1500-4	4	32	1500	2000	225
EPS.1500-5	5	40	1500	2000	225
EPS.1850-6	6	48	1850	2000	225
EPS.1850-7	7	56	1850	2000	225
EPS.1850-8	8	64	1850	2000	225
EPS.2200-9	9	72	2200	2200	225
EPS.2200-10	10	80	2200	2200	300
EPS.2500-11	11	88	2200	2200	300
EPS.2500-12	12	96	2200	2200	300
EPS.2500-13	13	104	2200	2200	300
EPS.2500-14	14	112	2500	2200	300
EPS.2500-15	15	120	2500	2200	300
EPS.2500-16	16	128	2500	2200	300
EPS.2500-17	17	136	2500	2200	375
EPS.3000-18	18	144	3000	2200	375
EPS.3000-19	19	152	3000	2200	375
EPS.3000-20	20	160	3000	2200	375
EPS.3000-21	21	168	3000	2200	375
EPS.3000-22	22	176	3000	2200	375
EPS.3000-23	23	184	3000	2200	375

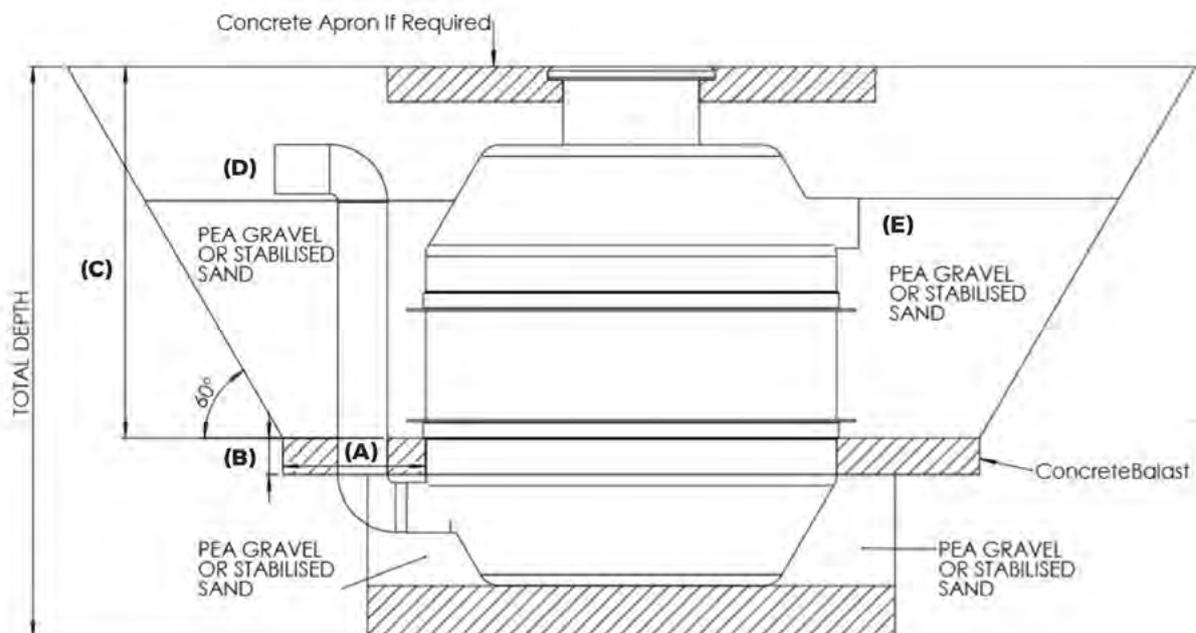


INSTALLATION

The guide provides advice for lifting, OHS measures, handling techniques and other important requirements. Installation is typically:

1. Excavate hole
2. Place station in hole
3. Fill well with water about 20% of total volume
4. Back fill to locking ring
5. Pour ballast
6. Install all connections as per manual*
7. Back fill and pour top slab and install access cover

*All installation requirements are as per installation data manual.



NB: It needs to be noted that the height difference between the inlet point (D) and the outlet (E) must be at least 200mm.

OTHER PRODUCTS

EcoProtector



Hydrodynamic, fill capture, high capacity gross pollutant Trap

StormProtector



Dual chamber, fine particle, sedimentation and organic pollutant removal treatment with large retention and Bypass.

HYDRAPROTECTOR

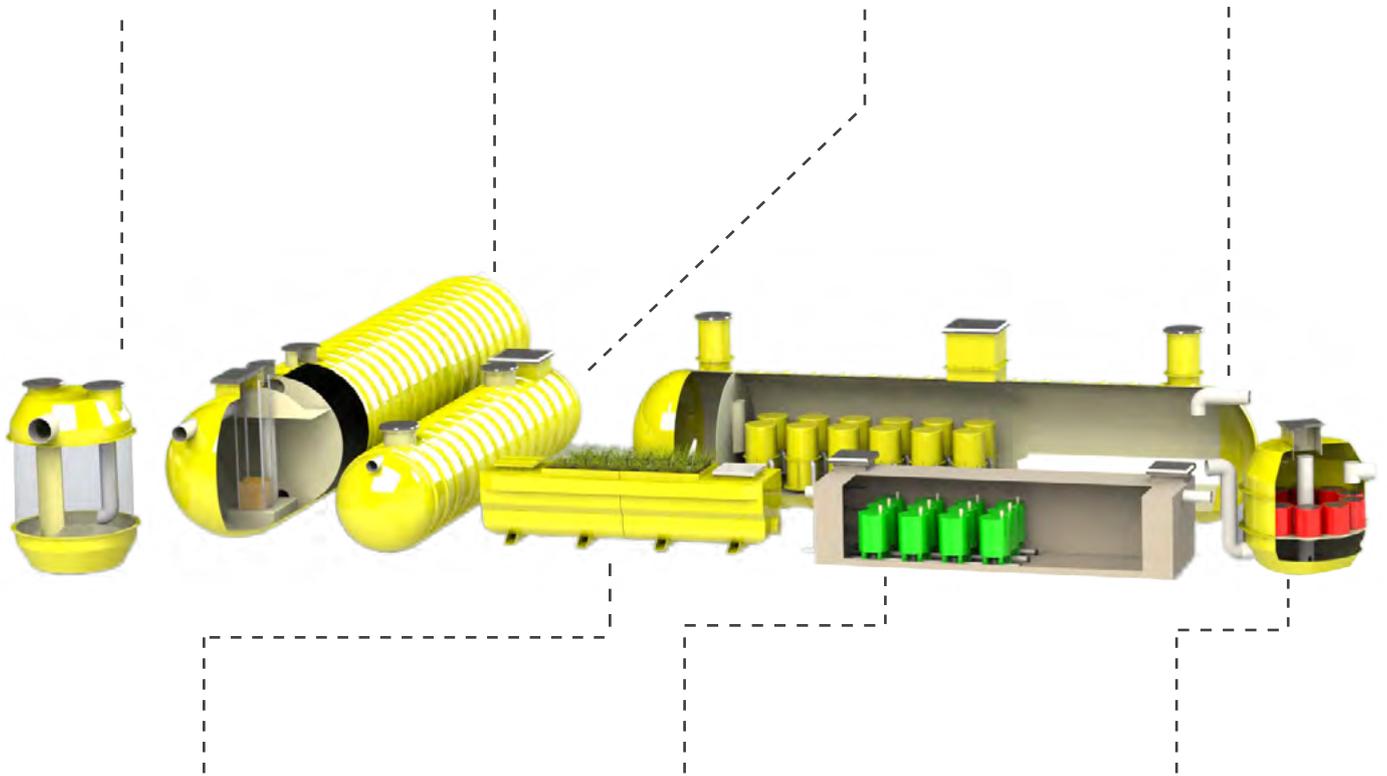


Highly efficient, full retention separator to treat first flush, fine particulates, nutrients, heavy metals and hydrocarbon filtration system.

MaxiProtector



Dual chamber, fine particle, sedimentation and organic pollutant removal treatment with large retention and Bypass.



BIOPROTECTOR



Hydrodynamic, fill capture, high capacity gross pollutant Trap

XTREAMPROTECTOR



Upflow filtration process designed to remove fine sediments, nutrients, heavy metals, phosphorus and hydrocarbons using our exclusive filter stack design.

EnviroProtector



Specialist stormwater filter for heavily polluted areas able to removing heavy metals, TSS, nutrients, hydrocarbons, designed to your requirements.



PROTECTOR

Treatment Stages	Product Requirement		Our Products
 <p>1. Primary Treatment Remove gross pollutants</p>	First flush with oil capture	Gross Pollutant Trap	
 <p>2. Secondary Treatment Remove fine particles, sedimentation & attached pollutants</p>	95% Hydrocarbon capture	Class 1 By-pass Separators	
		Class 1 Full Retention Separators	
 <p>3. Tertiary Treatment Removes very fine/colloidal nutrients & heavy metals</p>	Nutrient reduction and full sediment	90% TSS, 54% TP and 36% TN	
		Heavy Metal, TSS and Nutrient reduction	
		Heavy Metal, TSS and Nutrient	
		TSS, Sediments, nutrients, phosphorus and heavy metal removal	

KEEP IN TOUCH!



1 Ropes Crossing Blvd,
Ropes Crossing, NSW, 2760



sales@protector.com.au



(02) 80062627



www.protector.com.au



Scan me