

CIVILMART



**STORMWATER FILTRATION
SYSTEM TECHNICAL SPECIFICATIONS**

enviss® Sentinel **TECHNICAL BULLETIN**



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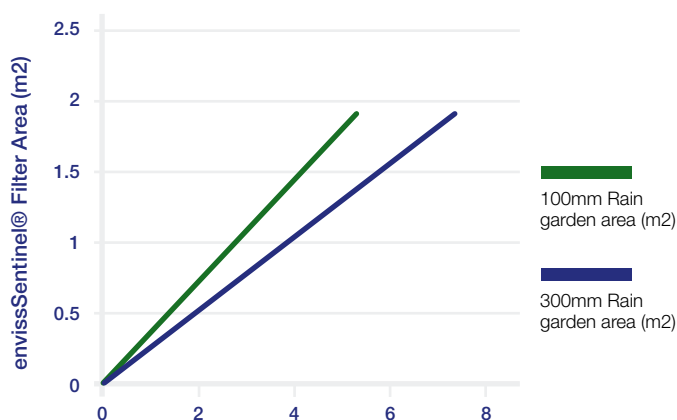
Design

Criteria	Specification
Application	Stormwater source control
Filter Type	Three stages of stormwater filtration: <ul style="list-style-type: none"> • Prevents Gross Pollutants entering pit • Removal of coarse and fine sediment • Removal of dissolved and complex pollutants
(1) Permeable paving	
(2) Sediment trap	
(3) Envis media	
Lid Type:	Steel grate lid with permeable paving infill
Load Rating:	Class B or Class D
Hydraulic Conductivity:	2000 mm/ Hr
Maintenance Period	Replace sediment module and filter media every 2 years
Maintenance Type:	Remove lid and remove and replace all sediment and media.
Lifting requirements:	2 x 1.3t swift and lift anchors

Performance

Pollutant (Group)	% Removal Rate* (MUSIC Nodes)
Gross pollutant removal	100%
Total suspended solids	96%
Hydrocarbons (dissolved organics)	99%
Heavy metals	
• Lead	81%
• Zinc, manganese	94%
• Copper	88%
• Nickel	> 67%
Total nitrogen	79%
Total phosphorus	67%

Figure shows relative equivalencies of the envisSentinel® Media Filter, the Storm Calculator's raingarden estimate.¹



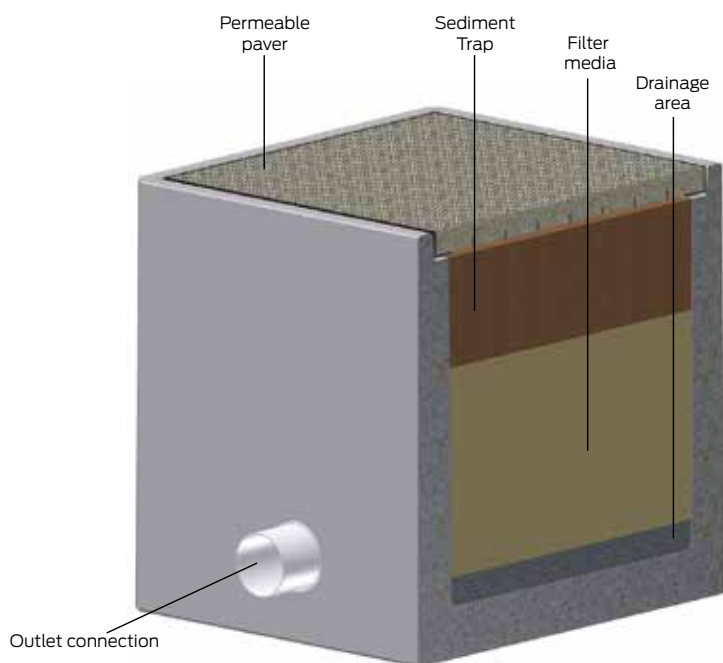
1. Storm Calculator estimate is an application available on Melbourne Water's website.

*Mean pollutant removal performance figures based on laboratory testing at Monash University and verified in field testing at a purpose built stormwater harvesting system in Melbourne 2009 utilising auto-sampling of the stormwater inflows and outflows. The water samples were tested and the results compared against the laboratory results. To further ensure the testing of the filter media has been completed to a high standard, the methods and results of the testing have been scrutinised by peer review and presented at national and international conferences.



Technical

Criteria	Dimensions/Weight	
Load Rating:	Class B (80 kN)	Class D (210 kN)
Nominal Dimensions:	600mm x 600mm x 650mm RKO Pit	600mm x 600mm x 650mm RKO pit plus 150MM surround
Clear Opening:	596mm x 596mm	
External Dimensions:	763mm x 763mm 740 (deep)	763mm x 763mm 890 (deep)
Effective filter area:	0.36 m ²	
enviss® filter media depth:	360mm	
Sediment trap depth:	170mm	
Outlet pipe size:	DN100 PVC socket connection	
Nominal Depth to Invert:	650mm	800mm
Nominal Mass:	900kg	1100kg



enviss® Sentinel Stormwater Filtration Pit Assembly Class B lid (surround not required)



enviss® Sentinel Class D Lid and surround



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QLD

Civilmart Sunshine Coast	07 5493 3044
Civilmart Brisbane	07 3800 7855
Civilmart Gold Coast	07 5597 6966
Civilmart Toowoomba Tanks	07 4634 3860
Civilmart Stapylton	07 3807 4511
Civilmart CM Stapylton	07 3804 6622
Civilmart Rockhampton	07 4923 1500
Civilmart Cairns	07 4042 3400

NSW

Civilmart Sydney	02 9612 5800
Civilmart Central Coast	02 4355 6300
Civilmart Mittagong	02 4889 6000
Civilmart Grafton	02 6640 1800

VIC

Civilmart Melbourne	03 5491 8324
Civilmart Shepparton	03 5821 2810
Civilmart Shepparton Pipe	03 5821 3099
Civilmart Geelong	03 5274 1126
Civilmart Clayton	03 9549 4500
Civilmart Campbellfield	03 9292 0300
Civilmart Wodonga Poles	02 6055 7350
Civilmart Wodonga Precast	02 6055 7300

SA

Civilmart Adelaide	08 8209 3093
Civilmart Rocla Adelaide	08 7285 1900