



Plastream[®]
In-ground Storage
& Detention Systems



WATER QUALITY

Plastream® in-ground storage and detention systems



Plastream® storage systems combine the durability, abrasion and chemical resistance of HDPE with the strength of steel, to achieve a high strength-to-weight ratio. The result is one of the lightest structural detention tank systems currently available.

Plastream® lightweight storage tanks have the installed strength and durability to perform under heavy loads. The system offers design flexibility and unlimited storage capacity.



- High installed strength
- Economical system
- Durable
- Trafficable
- Easy to install
- Reduced risk
- Out of sight
- Watertight
- Design flexibility

Tank diameters from 900mm to 2250mm
Easy installation as per AS/NZS2566



Design flexibility, light weight, integrity

Installed strength

- Steel-reinforced plastic provides a structurally sound system
- Can be installed under heavy loads, including trafficable areas



Economical and easy to install

- Long lengths, large diameters and light weight means fast installation and safe handling
- The lightweight tank segments are easily moved with lighter lifting equipment than conventional precast concrete systems
- Fewer joints and easier assembly than most plastic systems
- Nesting of different size tank segments provides substantial transport savings
- Can be transported as individual components for easy installation on site



Durable

- Manufactured from high density polyethylene for long-lasting performance
- High corrosion, abrasion and chemical resistance
- Suitable for reactive, corrosive and saline soil conditions
- In-ground tanks are not subject to UV degradation



Watertight

- Fully welded joints provide security for the life of the system (end plates and fittings are factory welded)
- Can be tested in factory or in situ

Reduced risk

- No contamination of stored water because of inertness of HDPE
- In-ground tanks are not subject to fire hazards
- In-ground tanks free the surface area for other uses
- In-ground tanks are not subject to UV degradation and therefore prolong life



Design flexibility

- Large range of diameters
- Standard lengths or made-to-order up to 14 metres

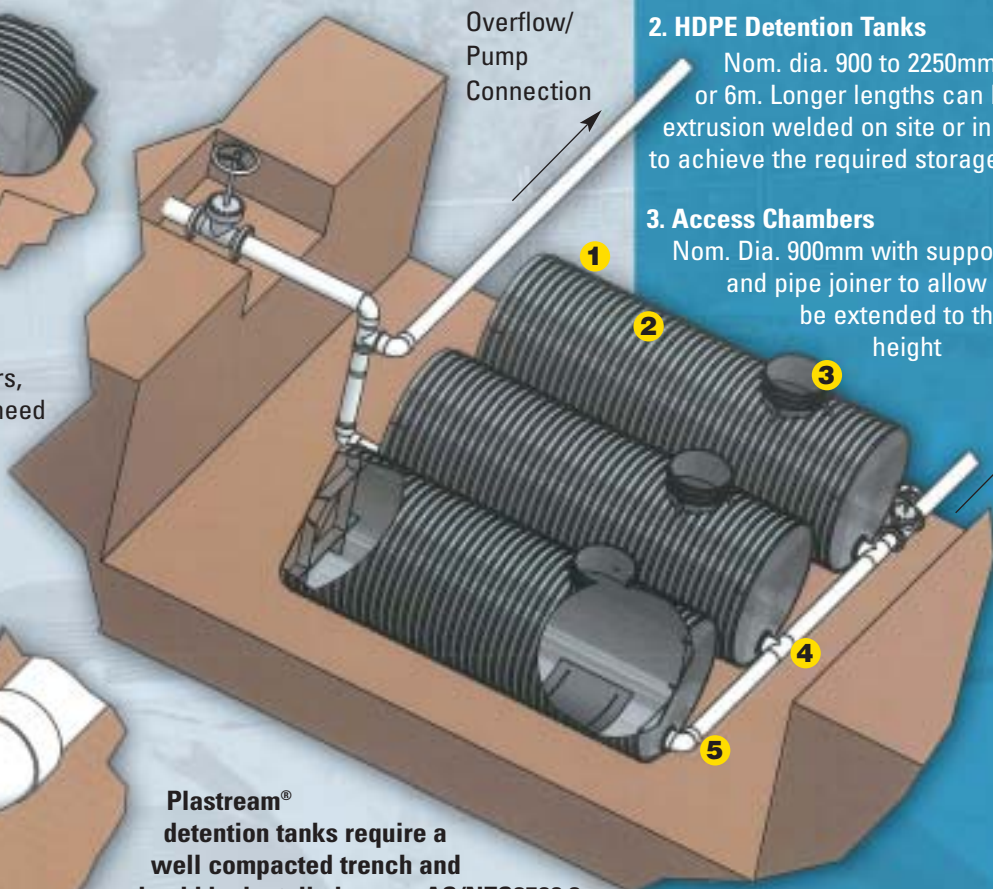
Plastream® Storage Systems - Overview



End blanks are reinforced with internal stiffeners, eliminating the need for concrete headwalls



Plastream® detention tanks require a well compacted trench and should be installed as per AS/NZS2566.2 and Rocla guidelines. Contact Rocla for details of handling and storing product on site. It is recommended that all fittings be encased with a soil/cement mix



1. Approximate storage of illustrated system 3 x 14,304 litres (nom. dia. 2250mm, length 4m)

2. HDPE Detention Tanks

Nom. dia. 900 to 2250mm, length 4m or 6m. Longer lengths can be extrusion welded on site or in the factory to achieve the required storage capacity

3. Access Chambers

Nom. Dia. 900mm with support struts and pipe joiner to allow access to be extended to the required height

4. Pipe Connections

Individual tank cells can be interconnected via PVC/PE pipes and fittings to increase storage capacity and allow for site conditions

5. Standard PVC

flange connections
Nom dia. 100mm to 280mm

Plastream® Standard Systems – Holding Capacity (per metre of tank)

Barrel Nom. Dia.	1500mm		1800mm		1950mm		2250mm	
	Holding Capacity (L/m)	Minimum Trench (mm)	Holding Capacity (L/m)	Minimum Trench (mm)	Holding Capacity (L/m)	Minimum Trench (mm)	Holding Capacity (L/m)	Minimum Trench (mm)
Single Barrel	1589	2200	2289	2700	2686	2930	3577	3380
Double Barrel	3178	4050	4578	4950	5372	5370	7153	6195
Triple Barrel	4767	5900	6867	7200	8058	7810	10730	9010
Four Barrel	6356	7750	9156	9450	10744	10250	14306	11925

Notes 1. The holding capacity is taken as 90% of the volume of the tank, by default. This could vary depending on the positioning of the inlet/outlet connections.
2. A minimum cover height of half the diameter of the pipe is recommended to avoid floatation when tanks are laid in areas with groundwater.

System design

Plastream® in-ground storage and detention systems are available in a standard range of configurations or can be individually designed by Rocla Water Quality to suit your project requirements.

We will work with you to design the most cost effective system that meets your needs.

Internal stiffeners in end caps



Lightweight tanks, high installed strength for heavy-duty applications

Rocla Plastream® in-ground storage and detention systems are used as OSDS (on-site stormwater detention systems) and SOS (sewage overflow systems). Systems used as SOS comply with a very high level of quality control and design engineering.

- Stormwater overload systems
- Stormwater or rainwater harvesting systems
- Sewage overflow systems
- Domestic stormwater detention and grey water retention
- Special application systems

Access Entry (mm)

- 1050 x 400

X = Distance from end blank to centre of access entry
1200mm (standard pipe)

Inlet Diameter (mm)*

- 280
- 225
- 150
- 100

Outlet Diameter (mm)*

- 280
- 225
- 150
- 100

Tank Internal Diameter (mm)

- 2250
- 1950
- 1800
- 1500
- 1200
- 900

* Connections to existing PVC pipe work use a lapped joint flange design. For PE connections a HDPE pressure pipe spigot is welded to the end blank of tank (up to 630mm diameter).

Durable, watertight underground stormwater storage solutions



Water Quality

Plastream[®] In-ground Storage & Detention Systems

For further information on Rocla Plastream[®] storage and detention systems or other stormwater storage, treatment and reuse products from Rocla Water Quality

Call Rocla on
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E-mail your inquiry
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Or visit our website
www.waterquality.rocla.com.au

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