

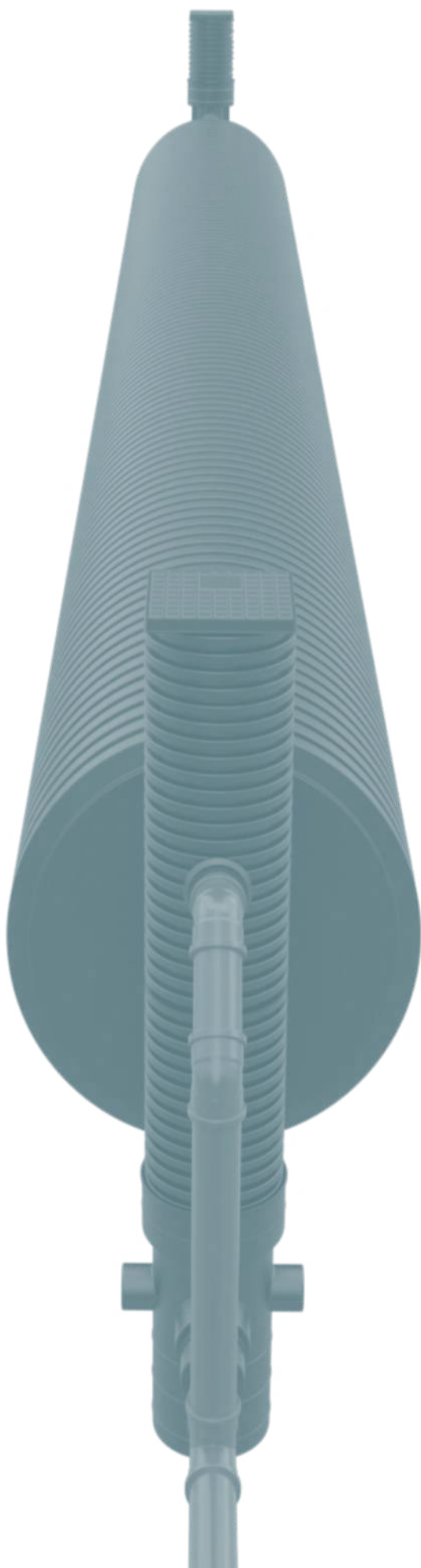


PELICAN
PACKAGED PLOT ATTENUATION SYSTEMS



PRODUCT CATALOGUE

OCT23



Introduction

House builders and Developers are looking for better SuDS design and one of the simplest ways to optimise the sustainability, is to install localised or plot attenuation systems on single dwellings and small developments, rather than installing large, extensive attenuation systems downstream of the development. Most of the attenuation systems currently being installed are crate-cellular type systems and the concern is the long term sustainability of these type of systems.

Pelican Systems have been designed to be fully sustainable, offering a minimum 60 year design life and with very little maintenance required. They are comparatively quicker and simple to install than crate attenuation systems and unlike crate attenuation systems the Pelican System requires no membranes or geotextile wrapping and can be installed in reclaimed material, offering a fully sustainable attenuation solution with both 'piece of mind' and significant savings on overall installation costs, compared to crate/cellular systems.

Specifically designed for single plot and smaller surface area run offs, up to 350 sq m. Typically installed in gardens, landscaped areas and driveways, which require minimum coverage to the storage tank.

Example

As an example, using rainfall and storage calculations for a typical semi detached home in the South East of England, with the following criteria:

- 65 sq m - Main roof area
- 25 sq m - Drive way and hardstanding
- 15 sq m - Garage roof

Based on a 1:100 (+40%) year event and the head of system calculated at 1200mm to the outflow from this property, the storage requirements are detailed below for restricted discharges from 0.5 to 2 litres per second:

- | | |
|--------------------------|---|
| • 0.5 litres per second | Required storage - 4164 litres, with an orifice diameter of 14.5mm. |
| • 1 litres per second: | Required storage - 3108 litres, with an orifice diameter of 20.5mm |
| • 1.5 litres per second: | Required storage - 2587 litres, with an orifice diameter of 24mm |
| • 2 litres per second: | Required storage - 1769 litres, with an orifice diameter of 29mm |

Pelican Systems are available with two flow control options :

- **Orifice plate control device**
- **Flowbrake Mini - Vortex control device**

Maintenance

The Pelican System is designed so that little maintenance is required.

We suggest that the SILTBLOK unit be checked occasionally and removed and cleaned out, removing silt and waste that may have accumulated over time. In most locations, we recommend cleaning at least once a year, if in coastal areas, this may need to be carried out more frequently.

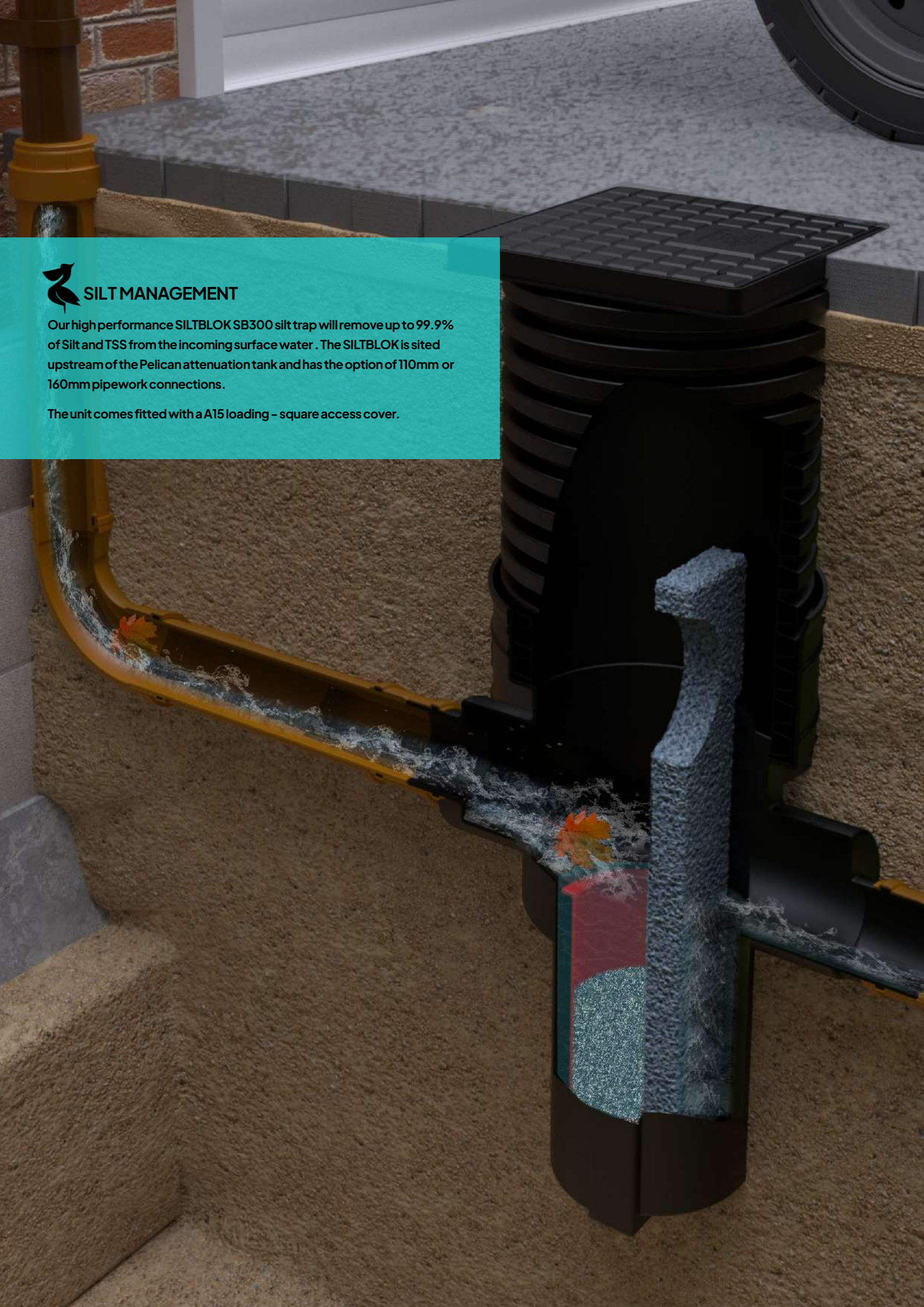
For more information on maintenance, please ask for more details.



SILT MANAGEMENT

Our high performance SILTBLOK SB300 silt trap will remove up to 99.9% of Silt and TSS from the incoming surface water . The SILTBLOK is sited upstream of the Pelican attenuation tank and has the option of 110mm or 160mm pipework connections.

The unit comes fitted with a A15 loading – square access cover.



The Pelican System will consist:

1 Silt Management

Our high performance SILTBLOK 300 Silt Trap - Sited upstream of the tank, for connection of down pipes, ground water gullies or channel. SILTBLOK will remove up to 99.9% of Silt and TSS from the incoming surface run off. The SILTBLOK unit comes with a A15 loading square access cover.

2 Storage

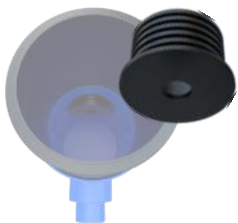
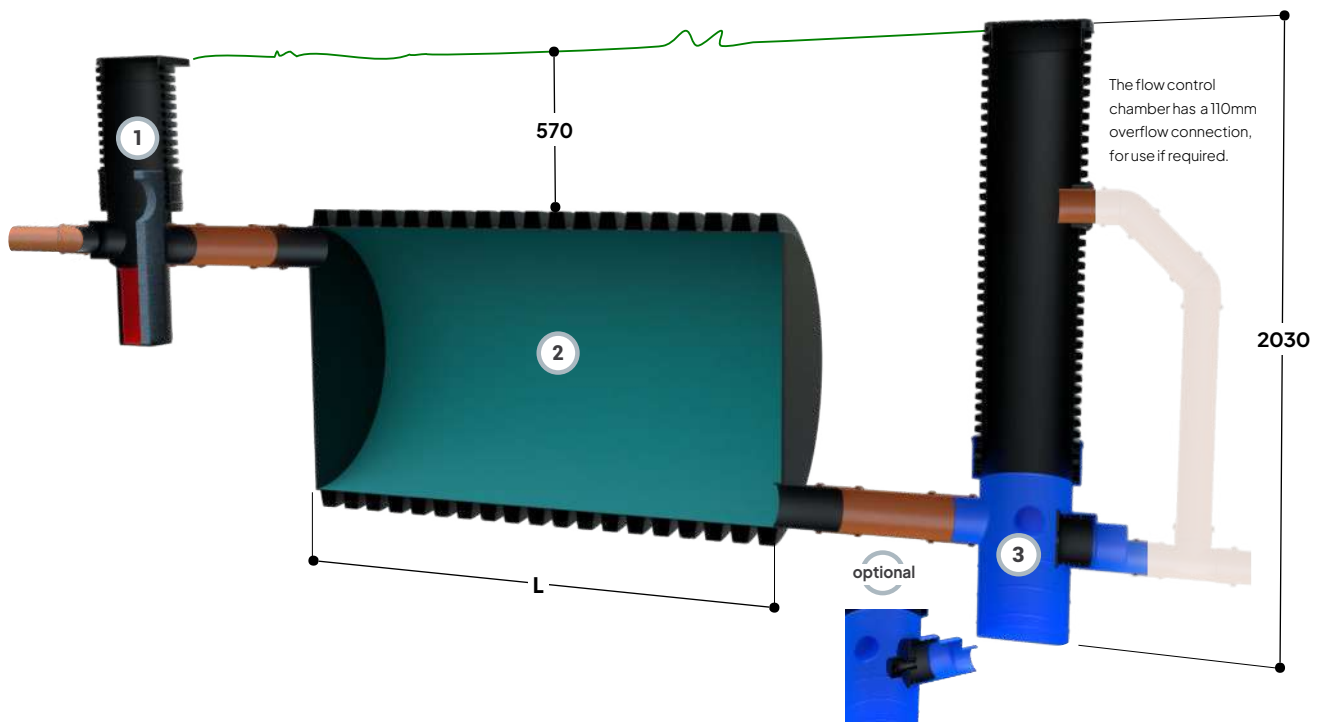
High Strength Pelican Storage/Attenuation Tank (Self cleansing design). With storage volumes of 2000 litres up to 12000 litres.

3 Flow Control

The system will have one of our Oriflo - Orifice plate flow control chambers, as standard. The chamber comes complete with orifice plate manufactured to your specific design and an A15 loading square access cover fitted.

optional

Optionally the system can be supplied with a Vortiflo 300 - Mini Vortex Control chamber, which will come fully fitted with Flow brake Vortex flow control fitted.



This system has our SILTBLOK 300 silt trap, upstream of the Pelican Attenuation Tank. Downstream of the tank is an Oriflo - Orifice plate flow control chamber. Both chambers come with A15 Load access covers. The flow control chamber has a 110mm overflow connection, for use if required.

Please note:: Interconnecting pipework is not supplied



This system has our SILTBLOK 300 silt trap, upstream of the Pelican Attenuation Tank. Downstream of the tank is a Vortiflo 300 - Vortex flow control chamber. Both chambers come with A15 Load access covers. The flow control chamber has a overflow connection, for use if required.

Please note:: Interconnecting pipework is not supplied

Product Code	System Storage Maximum Attenuation Volume litres	Pipework Options Ø mm	Minimum Cover (Garden) mm	Minimum Cover (Driveway) mm	Tank Length L mm
PASO10502000	2000	110-160	300	500	1980
PASO10503000	2950	110-160	300	500	3000
PASO10504000	3800	110-160	300	500	3975
PASO10505500	5500	110-160	300	500	6000
PASO10509000	9000	110-160	300	500	10000
PASO105012000	12000	110-160	300	500	13500
PASV10502000	2000	110-160	300	500	1980
PASV10503000	2950	110-160	300	500	3000
PASV10504000	3800	110-160	300	500	3975
PASV10505500	5500	110-160	300	500	6000
PASV10509000	9000	110-160	300	500	10000
PASV105012000	12000	110-160	300	500	13500



FLOW CONTROL

The system will have one of our Oriflo – Orifice plate flow control chambers, as standard. The chamber comes complete with orifice plate manufactured to your specific design and an A15 loading square access cover fitted.

Optionally (as shown in the image on this page) the system can be supplied with a Vortiflo 300 – Mini Vortex Control chamber, which will come fully fitted with Flowbrake Vortex flow control fitted.



