

Installation of the Naylor Smart Chamber is straightforward and should follow the procedure below:

Smart Filter[®] Chamber Range

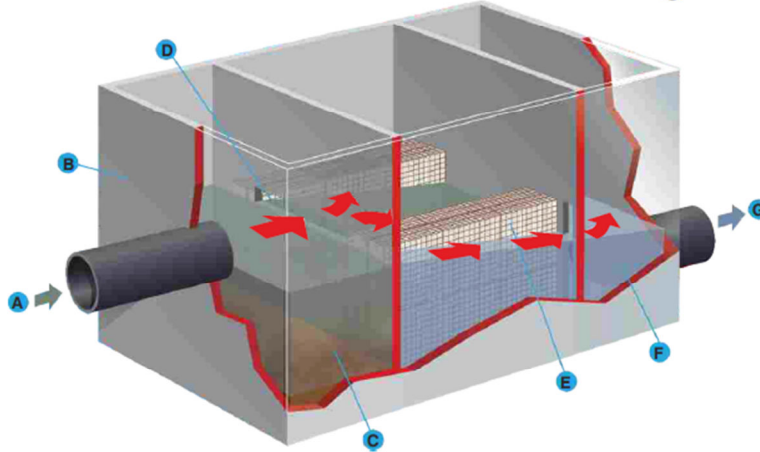


Diagram Key

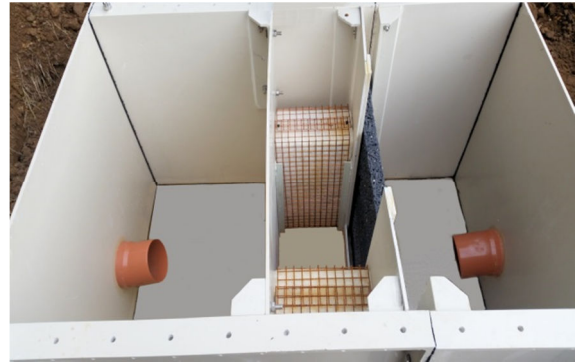
- A. Inflow
- B. Lightweight composite chamber with vehicle loading capability
- C. Chamber with weir to trap sediment
- D. Flow passes through Smart Paks and through side orifices
- E. Smart Paks to absorb hydrocarbons
- F. Collection chamber with outlet to sewer
- G. Outflow

Note: Arrows show direction of water flow

Smart Filters[®] for Highways, Large Catchment Areas etc:

- 1) From the engineering drawings establish both the incoming and outgoing invert levels of the connecting pipes & check that the diameters match the stubs or blanks provided within the supplied chamber.
- 2) Excavate an area sufficient to install the chamber with working room around it and install a minimum 150mm depth concrete bed to install the chamber onto, ensuring inlet and outlet positions match the connecting pipework
- 3) Lift the chamber into position on the concrete bed and position so that connections are lined up correctly and the unit is level in both directions.
- 4) Using a suitable lubricant connect the incoming and outgoing pipes to the stubs provided OR if holes are required, mark these on the outside of the units and drill out accordingly to make the connections using suitable adapters.
- 5) If not pre-assembled slide the Naylor Enviroflow planks down the runners adjacent to the first weir wall to provide a silt barrier to protect the Smart Sponge in chamber two.
- 6) Insert the Smart Paks into the mesh cages and slide the cages down the two runners between the two weir walls ensuring that they are correctly seated.

- 7) The route of the water should be checked as follows: Waste water should enter at the raised inlet and flow through the Enviroflow, retaining silts in the first chamber. Water should then enter the second chamber and turn through 90 degrees and pass through the Smart Paks to remove hydrocarbons. The cleaned water should then pass through to the collection chamber (3) before discharging through the outlet at a low level.



- 8) After checking the operation the chamber can be surrounded in minimum 150mm concrete surround and covered with a suitable weatherproof lid.
- 9) For larger chambers subject to traffic loadings a suitably qualified engineer should advise on the depth of the base and surround to suit the traffic loading and a reinforced concrete cover slab provided with access to the chamber below. Access is provided through the cover slab via normal brickwork and a suitable cover and frame appropriate to the loadings.



Maintenance Procedures:

- 10) Maintenance is simply a matter of silt removal with a standard gully sucker as chamber one fills up – the frequency of this depends on the amount of silt entering the system & will be more frequent during site construction phase. Once the site is complete this will normally be an annual event.
- 11) The Smart Sponge Smart Paks should be checked annually to see if replacement is required. This can be done simply by lifting the cage containing the units and weighing them – when the weight is double that of the installed weight then they should be replaced. Alternatively this can be done by appearance – a blackened unit that has started to turn to a gel indicates that a replacement is required.