

1050 Polyethylene Manhole

The 1050 Smart Pit Polyethylene Manhole is a lightweight, welded one piece unit that provides easy access to sewerage and drainage systems.



TECHNICAL GUIDE: **TC1.1**

Applications

Sewer systems
Stormwater drainage systems

Product Attributes

Manufactured to suit all types and sizes of pipe
Does not require concrete encasement

Rotational moulded polyethylene construction

Polyethylene does not suffer from internal or external gas attacks

Eliminates root intrusion and ground-water ingress

Base allows multiple inlets to be attached at any angle between 45 ° and 315 ° from the downstream and at specified grades.

Approvals/Standards

ASTM F1759-97, Standard Practice for Design of Manholes for Subsurface Applications

WSA 137-2013 Maintenance Shafts and Maintenance Chambers for Sewerage

Quality

ISO 9001:2008

As part of the Smartstream family of products, the Smart Pit is an excellent alternative to concrete manholes. They eliminate root intrusion and groundwater ingress, and do not suffer from gas attack.

Product Overview

- Durable and lightweight, the unit reduces transport and handling costs.
- With Smart Pit almost any inlet combination is possible. The spherical base allows multiple inlets to be attached at any angle between 45 ° and 315 ° from the downstream and at specified grades.

Design Specifications

- Extremely sturdy 14 mm wall thickness.
- Spherical base has excellent hydraulic properties.
- 1050Ø Sewer risers available in 300, 600, 900, 1200 and 1500 mm lengths with aluminium ladder. Step rungs are at 300 mm centres.
- Range of fittings available to accommodate most sewer line types including: PVC, PE, Clay and AC.
- In order to manufacture the product to customer requirements, a Drill Order Sheet must be completed and sent to Hygrade Fabrication through your local Hygrade Representative.
- All units are hydro tested prior to dispatch.

Installation

- For installations from 1000 mm to 4 m invert.
- A conversion concrete slab must be installed in order to ensure traffic loads are effectively transmitted to surrounding areas. See table for available options.
- 400Ø riser to be trimmed to finished height.

Drop junctions

- Internal/external drop junctions can be built to customer specification.
- Cover Options
- Hygrade offers a wide variety of cover and frames. Refer to our Streetware catalogue or contact your local Hygrade representative for more details.



FIG. 1 Smart Pit manhole access view, alloy ladder and bench plate

As each Smartstream Smart Pit is made to suit your individual requirements, please contact Hygrade Water with your project details for pricing.

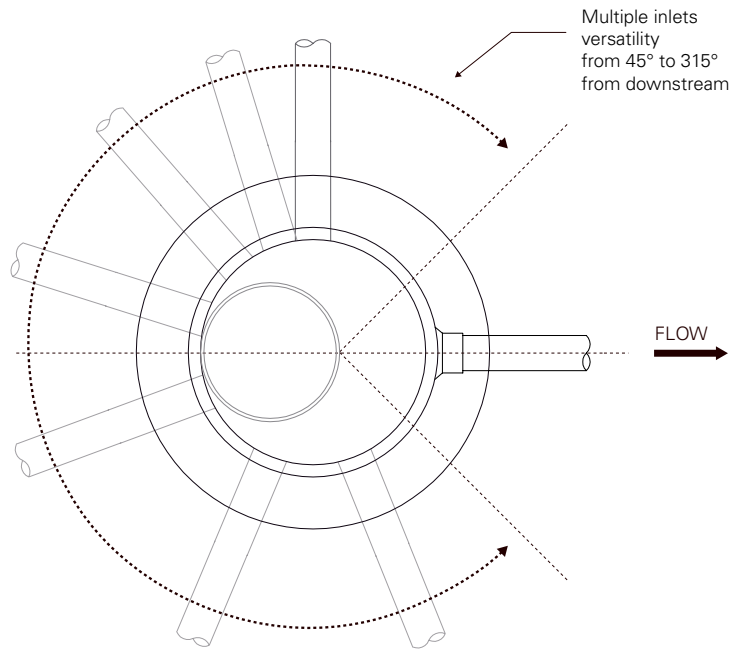


FIG. 2 Plan

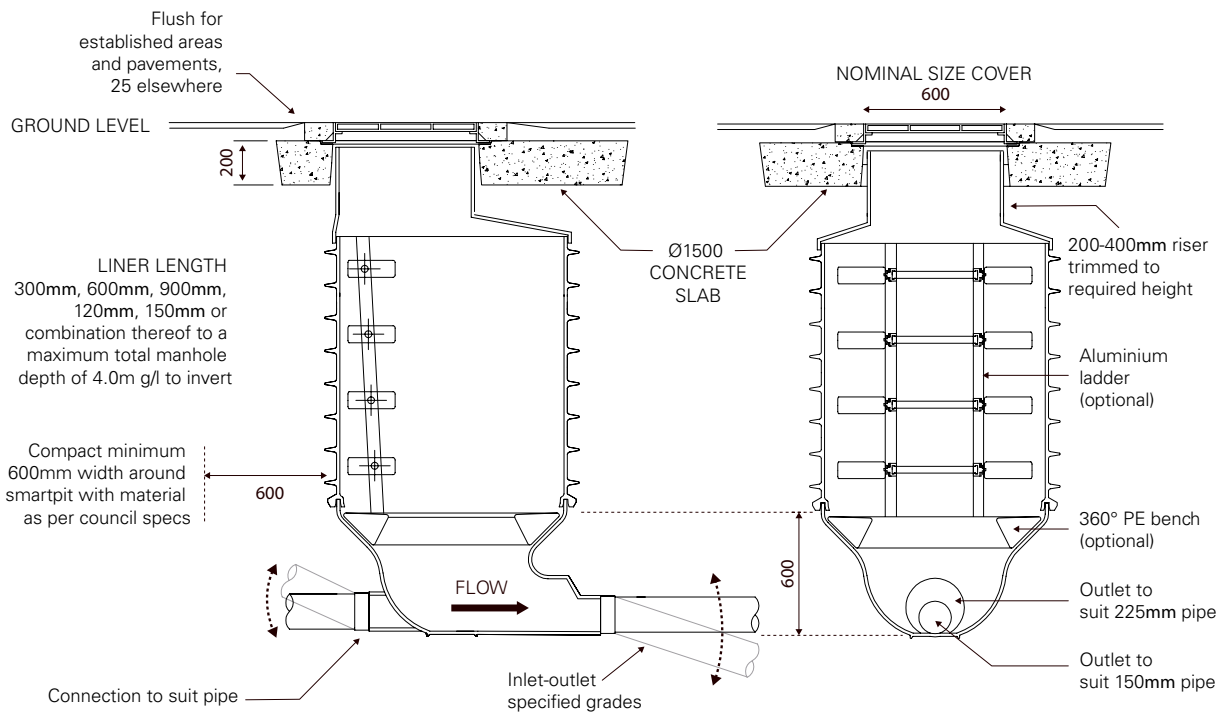
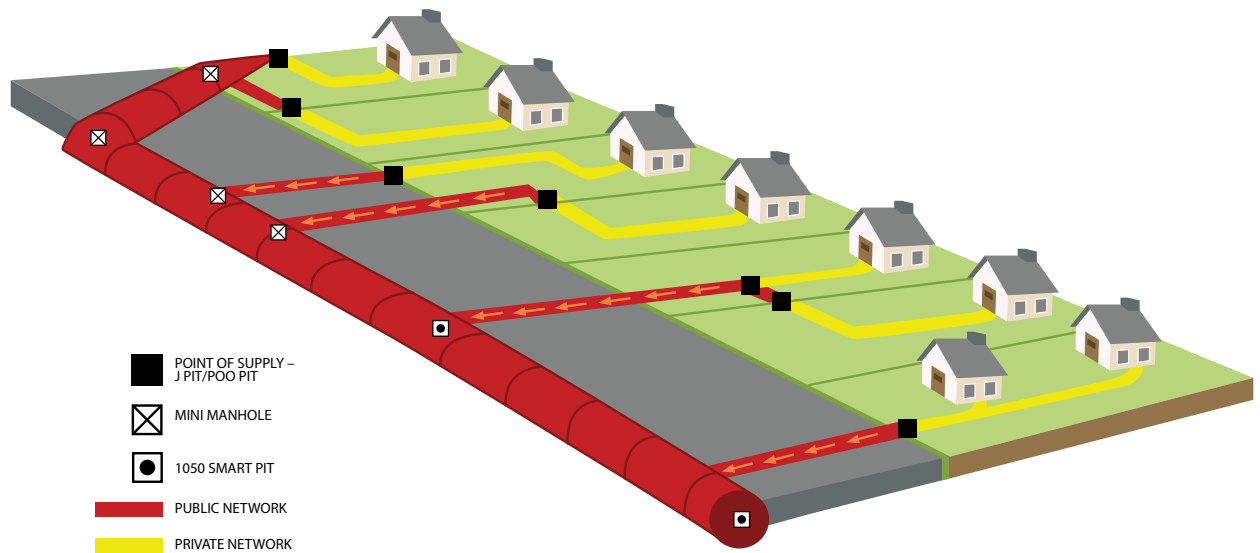


FIG. 3 Side View (Section)

FIG. 4 Front View (Section)

Typical Smartstream Application



Smartstream Family of Products

The Smart Pit is part of the Smartstream family of products, the most complete portfolio of PE solutions for drainage and sewer applications.

J Pit



Poo Pit



Mini Manhole



1050 Smart Pit



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