

1050 Smart Pit Polyethylene Manhole

Technical Guide D4.5

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



04.20 | DRAINAGE | D4.5 SMARTSTREAM POLYETHYLENE MANHOLE

Applications

Sewer systems
Stormwater drainage systems

Product Attributes

Manufactured to suit all types and sizes of pipe
Rotational moulded polyethylene construction

Polyethylene does not suffer from internal or external gas attacks

Eliminates root intrusion and groundwater ingress

Does not require concrete encasement

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

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

We are the supply partner of choice for New Zealand's civil construction industry, specialising in water and infrastructure based solutions.

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As part of the Smartstream family of products, the Smart Pit is an excellent alternative to concrete manholes.

Use of the Smart Pit eliminates root intrusion and groundwater ingress. The unit does not suffer from gas attack.

Product Overview

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

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 Hynds Fabrication through your local branch.
- All units are hydro tested prior to dispatch

Installation

- For installations from 1000 mm 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

- Hynds offers a wide variety of cover and frames. Refer to our Streetware catalogue or contact your local branch for more details.



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

TABLE 1 Configuration Examples (*)

Product Code	Description
SMT01602403	160 mm OD PE Downstream Welded
SMT01602404	180 mm OD PE Downstream Welded
SMT01602405	250 mm OD PE Downstream Welded
SMT01602406	300 mm OD PE Downstream Welded
SMT01602407	375 mm OD PE Downstream Welded
SMT01602408	400 mm OD PE Downstream Welded
SMT01602409	450 mm OD PE Downstream Welded

TABLE 2 Risers

Product Code	Description
SMT01602411	300 mm Riser Section
SMT01602412	600 mm Riser Section
SMT01602413	900 mm Riser Section
SMT01602414	1200 mm Riser Section
SMT01602415	1500 mm Riser Section

TABLE 3 Concrete Slab Options

Product Code	Description
SMTLD1500200645	Lid Smartpit Ø1500 x 200 mm Thick c/w 645 mm Hole

(*) Inlet and angle configuration is custom made to provide complete versatility

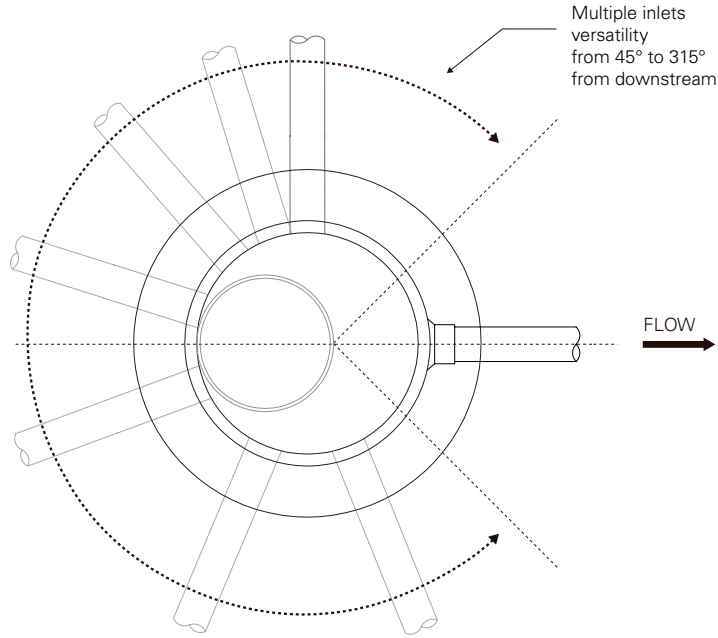


FIG. 2 Plan

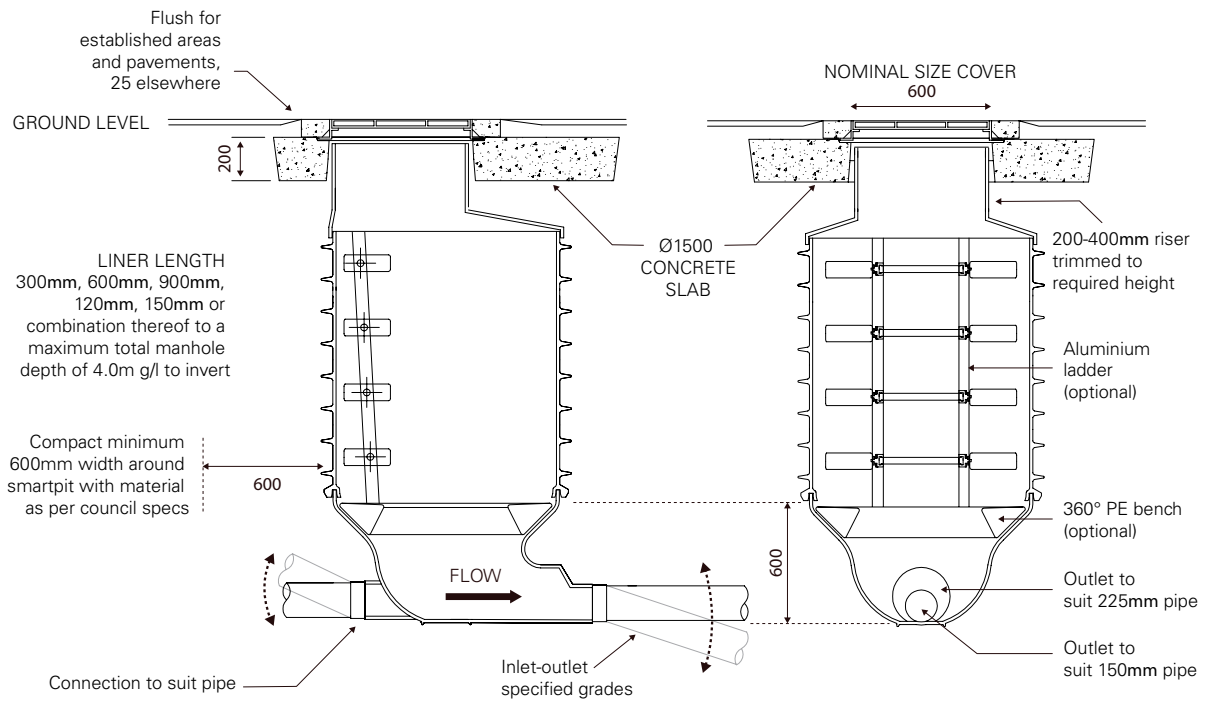
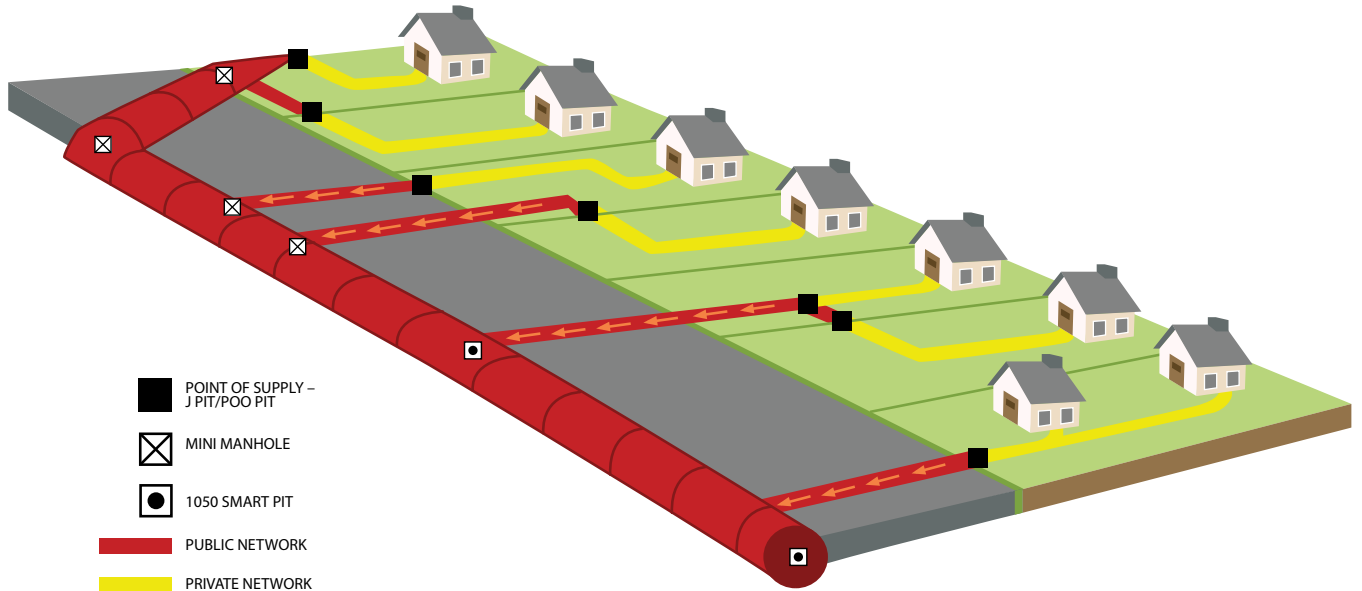


FIG. 3 Side View (Section)

FIG. 4 Front View (Section)

Typical Smartstream Application



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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.



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Disclaimer: While every effort has been made to ensure that the information in this document is correct and accurate, users of Hynds product or information within this document must make their own assessment of suitability for their particular application. Product dimensions are nominal only, and should be verified if critical to a particular installation. No warranty is either expressed, implied, or statutory made by Hynds unless expressly stated in any sale and purchase agreement entered into between Hynds and the user.

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