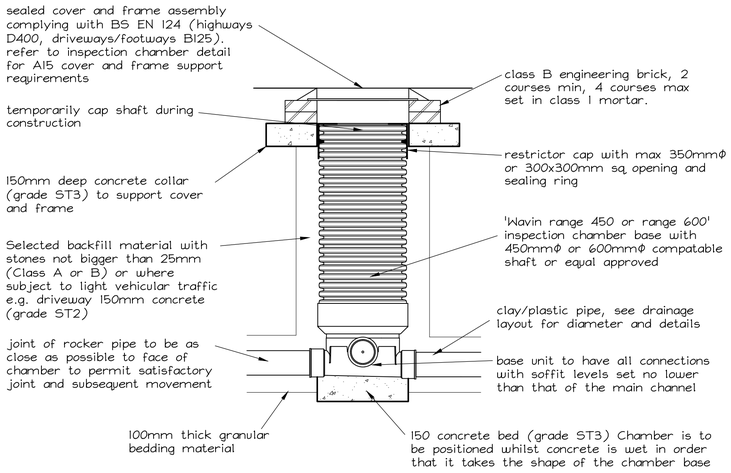

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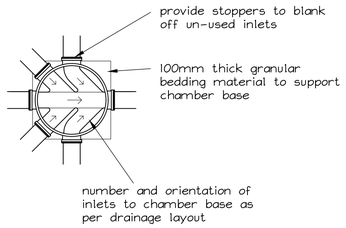
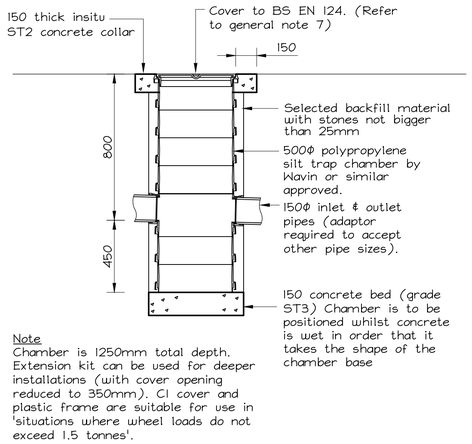


Plan

Deep Non-Entry Inspection Chamber Detail (Polypropylene)

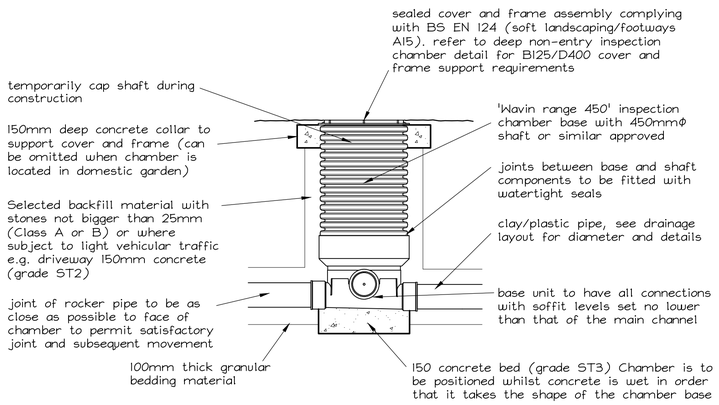
(Suitable for depths ranging from 1.2m-5m deep)



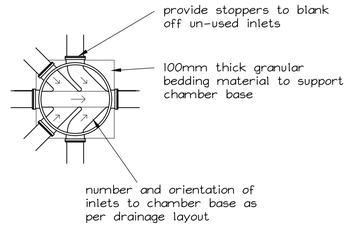
Note
Chamber is 1250mm total depth. Extension kit can be used for deeper installations (with cover opening reduced to 350mm). CI cover and plastic frame are suitable for use in 'situations where wheel loads do not exceed 1.5 tonnes'.

Polpropylene Catchpit/Silt Trap Detail

Where subject to light traffic, chambers to have 150mm min. concrete surround and B125 grade cover.
Standard chamber has 2No. preformed holes (to accept 100 or 150Φ pipe) at 180 separation. Any additional inlets/outlets to be formed on site with appropriate fixings obtained from manufacturer.



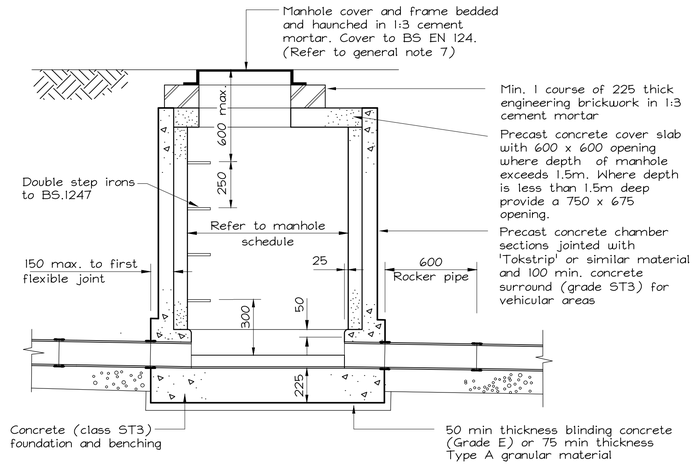
Section



Plan

Inspection Chamber Detail (Polypropylene)

(for depths up to 1.2m)



Typical Concrete Inspection Chamber

For construction details of flow control chambers refer to specialist design for sump and mounting block requirements

Pipe Bedding & Sidefill Materials.

Type A bedding material shall be aggregates comforming to BS 882, or BS EN 12620, nominal single-size or graded complying with the recommendations of WIs No. 4-08-01 as follows :-
TABLE 1 :

Pipe dia. (minimum)	Single-size.	Graded.
Over 100 to 150	10mm nominal single-size.	
Over 150 to 500	10 or 14mm nominal single-sized.	14mm to 5mm graded
Over 500	10,14 or 20mm nominal single-sized.	14 or 5mm graded or 20mm to 5mm graded.

Type B material shall be selected excavated or imported material consisting of uniform, readily compactible material, free from vegetable matter, building rubbish and frozen material, or materials susceptible to spontaneous combustion, and excluding clay of liquid limit greater than 80 and/or plastic limit greater than 55 and materials of excessive high moisture content. Clay lumps and stones retained on 75mm and 37.5mm sieves respectively shall be excluded from the fill material.

Pipes Laid with a Concrete Bedding Surround

Class A concrete surround to be minimum cube strength at 28 days of 20N/mm² for non-aggressive soils. For aggressive soil conditions the concrete mix shall be in accordance with the requirements of BRE Digest 250, or BRE paper CP23/77 as appropriate.
The backfill, other than the first 150mm of cover, should not be placed before the compressive strength of the site concrete has reached 14N/mm² . The concrete mix should be so designed that this is reached without unnecessary delay.
A compressible filler shall be placed throughout the concrete surround at all pipe joints.
This shall consist of bitumen impregnated insulating board to B.S EN 322, or other equally compressible material. The thickness of compressible filler shall be as follows :-

Nominal diameter of pipe (mm)	Thickness of Compressible filler (mm)
Less than 450	18
450 - 1200	36
Exceeding 1200	54

Compressible packing for use between pipes and precast concrete setting blocks shall consist of bitumen damp proof sheeting complying with B.S 743.

Dimension 'a'

In machine dug uniform soils :-
a = For sleeve jointed pipes, a minimum of 50mm or 1/6Bc, whichever is the greater, For socketted pipes a minimum of 100mm or 1/6Bc, whichever is the greater under barrels but not less than 50mm under sockets.

In rock or mixed soils containing rock bands, boulders, large flints or stones or other irregular hard spots these values will need to increase accordingly.

General Notes

1. All concrete used in drainage works shall comply with BRE Special Digest 5DI for the following aggressive conditions in the ground:

   Design sulphate class DS-1
   Aggressive chemical environment class AC-2z
   Design concrete class DC-1 (TBC)
   No additional protective measures (APMs).

   The strength criteria for the specified standard mixes (ST4 etc) should also be observed. Concrete mixes should meet the most onerous design criteria between strength and resistance to chemical attack.

2. Pipes and channels to be either:

   Concrete to BS EN 1916 & BS 5911
   Extra Strength Vitrified Clay to BS EN 295
   Unplasticised PVC to BS EN 1452

3. All flexible pipes in trafficked areas with less than 900mm cover to have concrete surround.

4. All flexible pipes in gardens and planted areas with less than 600mm cover to have concrete surround.

5. Backfill material to pipe trenches beneath trafficked areas to be selected and compacted in accordance with the Highway Authorities & Utilities Committee Specification for the Reinstatement of Openings in Highways-June 1992.
   Acceptable materials (HAUC Specification Appendix A1)
   Class A - Graded granular
   Class B - Granular
   Class C - Cohesive/granular.
   Compaction to be in accordance with HAUC Specification Appendix A8).

6. Beneath non-trafficked areas backfill shall be Type B

7. Manhole covers and frames are to be in accordance with BS EN124:

   Class D400 for carriageways
   Class B125 for footways, pedestrian areas & car parks
   Class A15 for areas only subject to pedestrians.

8. The minimum size of any manhole serving a sewer (i.e any drain serving more than one property) should be 1200mm x 675mm rectangular or 1200mm diameter.

9. Where drainage passes within 300mm of the underside of the floor slab, concrete protection is required. Greater than 300mm, granular bed and surround 100mm thick is to be used.

Rev	Description	By	Date
A	First Issue.	JT	24.09.25

KRYSTAL ENGINEERING LTD
1 STATION ROAD SOUTH,
MERSTHAM,
SURREY
RH1 3EF
01737 333139

Project
LAND AT:
GREENSLEEVES, TILTWOOD, HOPHURST LANE, CRAWLEY DOWN. RH10 4LL.

Drawing Title
DRAINAGE DETAILS
SHEET 1

Drawing No. 7684-250
Revision A

Scale 1:20 @ A1
Date SEPT 2025

Drawing Status PRELIMINARY

Drawn By JT
Checked By KH

Client
TILTWOOD HOMES