

# Quick Guide – Product and Installation

# Range 600 IC

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## Description

600mm diameter polypropylene inspection chamber for adoptable and non-adoptable applications. Compliant with Sewers for Adoption 7th edition [SfA7].

Choice of twelve bases for equal pipe connections.

For use directly with 150mm, 225mm and 300mm UltraRib system.

600mm diameter shaft may be cut to length to achieve required invert down to a maximum of 3 metres.

## Applications

- ⦿ For above ground access and maintenance inspection of buried pipework down to 3 metres deep
- ⦿ For loading applications:
  - B125 (12.5 tonnes) \*
  - D400 (40 tonnes) \*

\* With cover & frame supported by concrete plinth

## Key Dimensions

- ⦿ Invert depth of base:
  - 646mm [for 150mm system]
  - 705mm [for 225mm and 300mm systems]
- ⦿ External shaft diameter: 683mm
- ⦿ Shaft length: 3m
- ⦿ Maximum installation depth: 3m

## Key Features & Benefits

- ⦿ Fast, easy installation: no wet trades
- ⦿ Lightweight: no lifting equipment required
- ⦿ Reinforced base plate to withstand groundwater pressure
- ⦿ Shaft can be cut to required length
- ⦿ All inlets and outlet sockets allow  $\leq 7.5^\circ$  movement in all directions

## Compliance

Range 600 chambers comply with the following standards and regulations

- BS EN 13598-2: 2009 ♡
- SfA7 Typical Chamber Detail – Type 3: (Non-entry. Maximum depth from cover level to soffit of pipe: 3m)
- Building Regulations – Part H1: Shallow and/or Deep



Range 600 Inspection Chamber assembly

This Quick Guide is an extract from brochure (ref OWIC001) Osma + Wavin Inspection Chambers, Product and Installation Manual. The full document is available for download at [www.wavin.co.uk](http://www.wavin.co.uk)



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### Range 600 Chamber and Shaft

*NOTE: The following is a summary of installation procedures following selection of a suitable Range 600 Base for the required number of inlets.*

#### Excavation

- Take precautions against trench collapse: support trench sides deeper than 1.2m

#### Preparation

- Prepare and compact 100mm regulating bed of granular material in trench bottom

#### Positioning/connection

- Position Base on regulating bed. Check outlet is facing in the correct direction: i.e. with side inlets swept to follow water flow
- Ensure all inlets/outlet are free from dirt or grit
- Use standard jointing sequence to connect 150mm, 225mm or 300mm UltraRib pipes to inlets/outlet

For connection of TwinWall pipes in these sizes, use Adaptors 6TW145, 9TW145 or 12TW145.

*NOTE: The main through channel MUST be used. Bends up to 45° may be used on any inlet or outlet.*

#### Backfill

- Using same material as bedding, backfill around Base in 150mm layers up to underside of shaft socket. Ensure inside of Base is free of debris

#### Preparing shaft

- Cut corrugated shaft to approx. Invert depth of Chamber.  
**RECOMMENDATION:** leave extra 300mm depth to allow for possible final site changes
- Locate sealing ring between 2nd and 3rd ribs from shaft bottom. Ensure ring is seated correctly/not twisted
- Clean inside of Base socket and lubricate this entire area
- Position shaft at 45° angle into Base socket. Vertically push home manually or, if required, with mechanical assistance (if so, protect top of shaft)

#### Backfill trench

- Before starting backfill, cover top of shaft to prevent ingress of dirt or grit

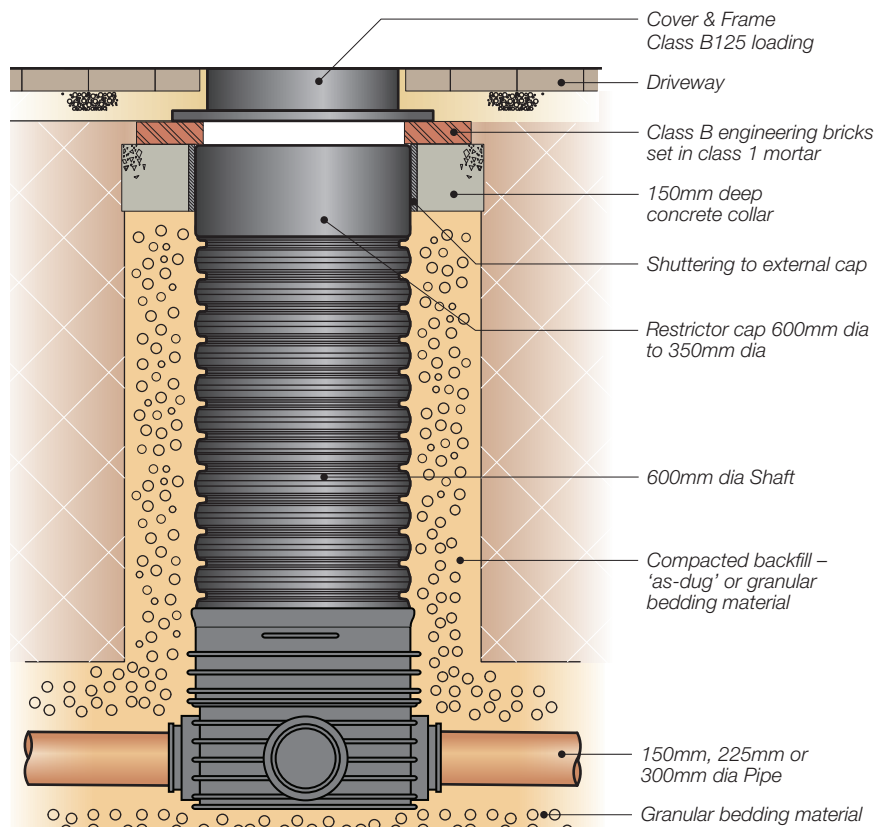
#### Trim shaft/fit restriction access cap

- Trim shaft to required height using finetoothed saw

*NOTE: If finished ground level is not yet known, leave shaft proud of surface and keep open end covered until final completion.*

- When shaft trimmed to final height, locate sealing ring between 2nd and 3rd ribs from shaft top. Ensure ring is seated correctly/not twisted
- Lubricate inside of the 600 to 350mm restrictor cap, position over top of shaft, and push fully home

Figure 22: Typical installation detail: Range 600 Inspection Chamber. Type 3



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### Installation procedures:

For A15 applications in domestic garden areas and/or subject to occasional vehicle loading up to 15kN (1.5 tonnes) (See Figure 23)

EXAMPLE: domestic driveways

- ⦿ Leave top 150mm of shaft clear of backfill
- ⦿ Lay 150mm thick slab of pre-cast or in situ concrete around top of shaft chamber
- ⦿ Prepare A15 Cover and Frame for installation in accordance with manufacturer's instructions
- ⦿ Position the cover and frame socket on top of slab and fix in accordance with manufacturer's instructions

## B125 & D400 Cover and Frame

### Installation procedures:

For B125 – Paved areas with limited traffic load

- ⦿ Trim shaft section at last stage of construction. Ensure unit is at correct height
- ⦿ Protect shaft from traffic loading by shuttering its external ribs (See Figure 24)
- ⦿ Lay 150mm thick slab of pre-cast or in situ concrete around top of shaft chamber with minimum opening 750mm x 750mm – or 750mm diameter – to ensure that any loads are distributed away from the shaft
- ⦿ Position Ductile Iron B125 Cover and Frame on top of slab. (See Figure 24)

### Trafficked application (e.g. roadway)

- ⦿ Follow Highway Specification for installation of a D400 Cover and Frame

Figure 23: Installation detail A15 –domestic gardens and/or areas subject to occasional vehicle loading up to 15kN (1.5 tonnes)

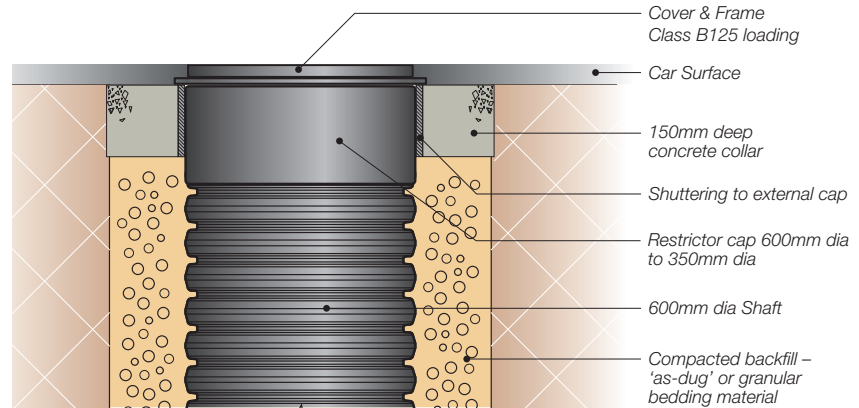


Figure 24: Installation detail for B125 loading: paved areas with limited traffic load

