Access Chamber Solutions

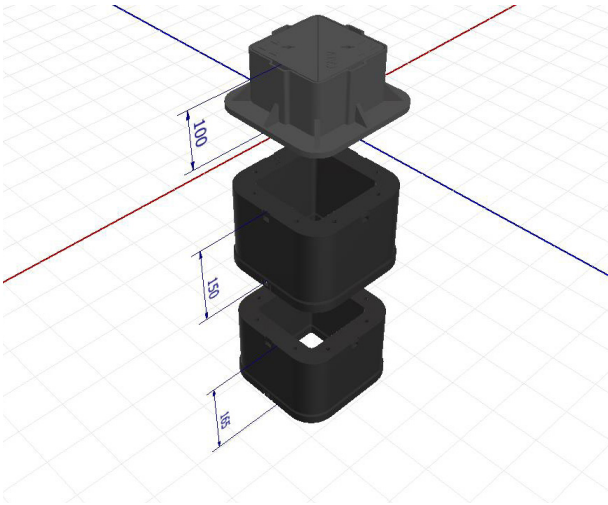
RADIUS CTS

Toby Joint Box - Carriageway
Installation Instructions

Toby Joint Box has been designed for strength and rapid installation in a carriageway environment.
The Toby Joint Box system is made from fixed size stacking sections allowing variable chamber depths.
It is designed to meet the requirements of EN124 D400 top load.

1. Chamber Dimensions

Toby joint box is supplied in one size with a clear opening of 150 × 150mm. It has a standard depth of 150mm and can be stacked in order to achieve the required chamber depth.



2. Duct Entries

Drill any duct entry holes before installing the chamber. This can be achieved with a standard holesaw, drilling at a moderate speed so as not to generate excessive heat.

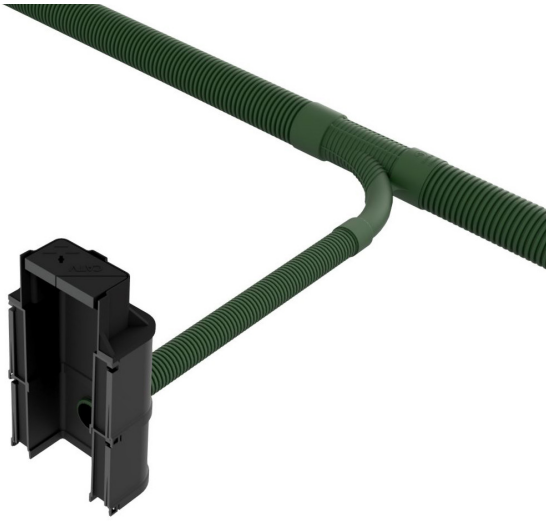
It is possible to drill duct entries in any location compliant with required clearances and separation standards. This includes drilling through the joint between two rings.

3. Excavation

Using a Toby ring as a template, mark an area all around the outside of the chamber with at least 150mm clearance to allow for the required amount of backfill.

Within the marked area, excavate from the lowest point of the surface to the total depth of the chamber. Allow additional depth for the base (150mm), frame and cover and for the mortar bed (minimum 10mm).

Note, the bottom chamber ring will bed into the base by approx 15mm, allow for this in the depth calculations.



4. Chamber Base

After excavation the chamber base should be compacted.

The concrete for the base should be at least C20 (ideally ST4) grade and poured to a minimum of 150mm thick. While the concrete is still wet the bottom Toby ring should be set into it by at least the 15mm of the foot of the chamber ring, this ensures the top load capability of the completed chamber is met.

Once the bottom ring is placed the floor can be finished by floating or using the optional drop in floor.

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5. Installation of rings

With the first Toby Joint Box ring already installed and bedded into the concrete base, install the second ring (and any subsequent rings) by clipping them on-top of the ring section below. Ensure that each layer is clear of debris, fully seated and remains level.

6. Reinstatement

The back-fill must be concrete of at least C20 (ideally ST4) grade and installed in layers of no more than 300mm at a time. The width of surround required is the same 150mm as the excavation.

7. Frame & Cover

The frame can be bed on-top of the Toby Joint Box with a minimum layer of 10mm of bedding mortar. Use of a purpose-specific bedding mortar is necessary, for example Ultracrete Envirobed HA104.

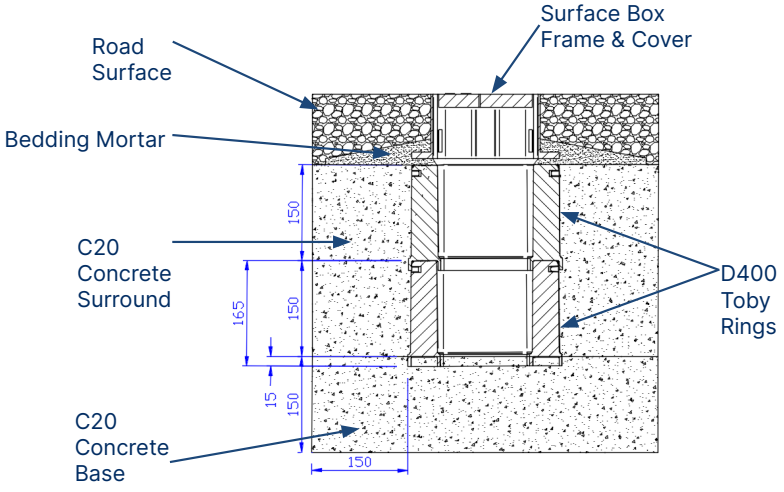
The frame, once placed on the bedding mortar should be tamped down to the required levels.

Any holes in the frame flange should be filled with bedding mortar and the top face of the flange then covered with at least 10mm of further bedding mortar.

If there is any doubt please refer to the cover manufacturer's installation guidance.

Clean any exposed bedding mortar on the inside of the frame by pointing to a smooth finish.

Allow all concrete and bedding mortar to cure before reinstating the road surface surround.



For more information on the access chambers product range, please contact our sales team on:

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