

Stackable, modular, polyethylene, cable access boxes

Building cable access chambers out of bricks and mortar has always been a big hassle for electrical and telecommunication contractors, especially on remote sites. It requires specialist non-electrical skills and non-electrical materials such as water, sand, and bricks.

Introducing **Stakbox**, a pre-fabricated, stackable, access chamber system. The boxes are quick and easy to install requiring no specialist skills. They are manufactured from polyethylene so are extremely robust, will not corrode, and are chemically resistant.

Sizes

The boxes are manufactured in 300mm high modules. A chamber constructed with 3 stacked box modules will provide 750mm of ground cover over the conduit, which is required at road crossings. A chamber constructed with 2 stacked box

modules will provide 450mm of cover over the conduit and is suitable for walkways. The boxes are available in 5 sizes from 300 x 300mm to 600 x 600mm, and are robust, light and rigid.

Free draining base

The base of the chamber is made up of a dry mix of stone and cement that forms a hard but porous surface. The access chamber is therefore free draining if any water enters the system. This is preferable to so called sealed chamber systems, where despite the best attempts, water always enters the system and collects in the bottom of the chamber.

Conduit knock-out points

Each box module is provided with multiple knock-outs to accommodate either 50mm or 110mm diameter cable conduits. There is no need to use a hole saw. A light tap with a hammer and screw driver will remove the required knock-out.



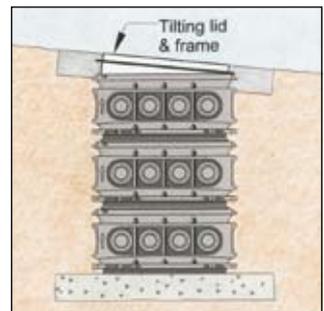
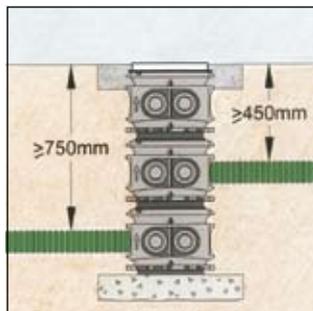
Nominal Size (mm)	Knock-out configuration	Min. internal frame dimension (mm)	Max. external box dimension (mm)
300 x 300	2 x 2 way	290 x 290	420 x 420
300 x 450	2 x 3 way	270 x 435	410 x 575
450 x 450	3 x 3 way	425 x 425	565 x 565
450 x 600	3 x 4 way	430 x 565	575 x 715
600 x 600	4 x 4 way	565 x 565	715 x 715

Specifications are subject to manufacturing tolerances and change without notice

Lids and frames

The boxes are provided with lids and frames, which are height and tilt adjustable so that they easily tie in with the finished ground level. The lids are rated "light duty" in accordance with SABS 558, and are suitable for walkways or light occasional

vehicular traffic. They are not suited to installation in a road. There are two types of lid, galvanised steel, and where metal theft is a problem, polymer concrete. The polymer concrete lids require a lifting tool to remove the lid.



Installation:

Follow these simple step by step instructions for a trouble free installation.

Excavation

Decide whether to use a 2 or 3 box system. 2 boxes for walkways, 3 boxes for roadways. Excavate a hole 100mm deeper than the Stakbox to allow for the stone/cement porous base. The width of the excavation must allow a minimum of 150mm of free space around the box to allow for a surround of soil and cement mix.

Base

1

Place a base in the excavation consisting of a dry cement and stone mix with a ratio of 1:10 and of minimum thickness of 100mm. The stone size should be between 13mm and 19mm. The base is porous to allow infiltration water to drain into the surrounding soil.

Knock outs

2

Using a hammer and screwdriver remove the required knock-out points on the Stakbox module. Either 110mm or 50mm diameter conduits can be accommodated.

Bedding

3, 4

Bed the Stakbox module on the prepared base, and then interlock the remaining modules ensuring that they are placed vertically. The boxes are marked with an arrow and the word "TOP" to ensure correct orientation.

Insert frame

5, 6

Insert the metal frame in the top box module, and ensure the top of the frame is aligned with your chosen final ground level. The frame ensures that the box is not distorted during the backfilling process.

Fit conduits

7

Fit the conduits into the knocked-out apertures in the boxes, and if necessary trim the conduits so that they protrude about 50mm into the boxes.

Backfill

8, 9

Backfill around the boxes with selected soil well mixed with 10% dry cement. Compact in layers not exceeding 150mm thick using a suitable tamping tool.

Concrete apron

10, 11

Place a concrete apron at least 100mm thick around the metal frame. Ensure the apron beds on compacted soil. Wooden planks can be used to create formwork for the concrete apron.

