Telebox ®

Polyethylene access and jointing box for telecoms networks

Concrete and fibre cement manholes are often used as access boxes in fibre optic telecoms networks. These chambers are heavy and require a crane truck to lift them on site. In addition, they are brittle and prone to cracking during handling and installation. An added problem is that the duct entries are often poorly sealed against the ingress of mud and water.

Telebox was designed as a superior alternative. Its ribbed construction means it is strong but light and can be carried by one man. It is manufactured entirely from polyethylene so it is extremely robust with excellent impact strength. No more breakages! In addition the duct entries are mud and watertight.

Telebox should be buried with the lid below ground level to prevent vandalism.


Advantages

- Light (45kg), can be lifted by hand
- No mechanical lifting required
- High impact strength
- Excellent chemical resistance
- Sealed duct entries
- Installed in under 10 minutes
- No skilled labour
- Reduced labour costs
- Easy to cut and drill on site
- Optional venting

Load strength

Telebox is designed to withstand a 2 tonne load when tested according to EN124. This exceeds the load requirements of type A15 in EN124 *"Gully tops and manhole tops for vehicular and pedestrian areas"*, and complies with the Light Duty load tests in accordance with SABS 558-1973 *"Cast iron surface boxes and manhole and inspection covers and frames"*. It is not designed for use in roadways, but in areas of occasional vehicular traffic such as the edge of the road reserve.

Lid

The lid is manufactured from polyethylene and its underside is ribbed to provide exceptional rigidity. The non-skid topside can be badged to the customer's specification. A gasket is provided on the lid lip to seal the joint with the box. The lid is secured to the box by means of two stainless steel M10 cap screws. Security screws are optional. The lid is designed to be buried up to 500mm underground, hidden from the sight of vandals. A passive marker ball is usually buried above the Telebox to enable it to be pinpointed in future using a suitable electronic locating device.
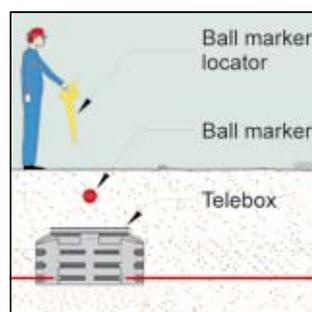
Duct entries

Duct entry positions can be specified at the time of ordering and they will be pre-configured in the factory. Alternatively they can be simply and easily configured on site. All that is required is a hole saw and hand drill. There are small alignment dimples in the faces of the box that ensure that the entry holes are accurately aligned. The box has eight possible entry faces. Two 110mm duct entries or three 32/40/ 50mm duct entries are possible at each entry face.
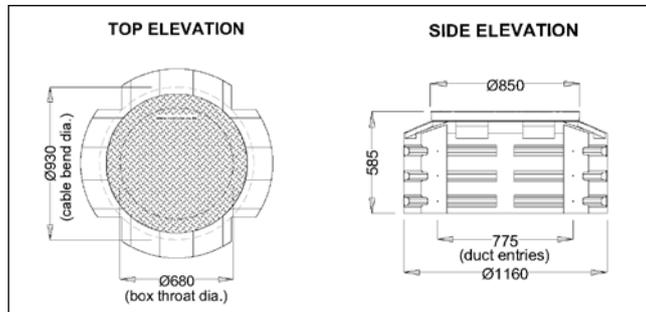
Hole saw required

Duct Ø (mm)	Hole saw Ø (mm)
32	44
40	59
50	59
110	121

Dimensions

The internal diameter of the box is 930mm which allows an ample bending radius for slack fibre optic cable. The throat of the box has a generous opening of 680mm diameter to provide ample working space.

TOP ELEVATION — Ø930 (cable bend dia.), Ø680 (box throat dia.)
SIDE ELEVATION — Ø850, 585, 775 (duct entries), Ø1160

Vents

In areas with a high water table there can be a problem with access boxes floating out of the ground. An optional 100mm diameter vent can be factory fitted in the floor of the box to prevent this. It allows water but not mud to enter the box in a controlled way.

Packaging

Three Teleboxes are stretch-wrapped and strapped onto a wooden pallet with overall dimensions of 1.2 x 1.2 x 1.9m (lxbxh) for transportation and storage. The boxes are UV stabilised and can be stored outdoors for 1 year.

Material Specification

Property	Value	Unit	Test method
Density	0.939	g/m³	ASTM D 1505
Tensile strength at yield	19	MPa	ASTM D 638
Tensile strength at break	24	MPa	ASTM D 638
Elongation at break	830	%	ASTM D 638
Heat distortion point	74	°C	ASTM D 648
Flexural modulus	837	MPa	ASTM D 790