

Quick Guide

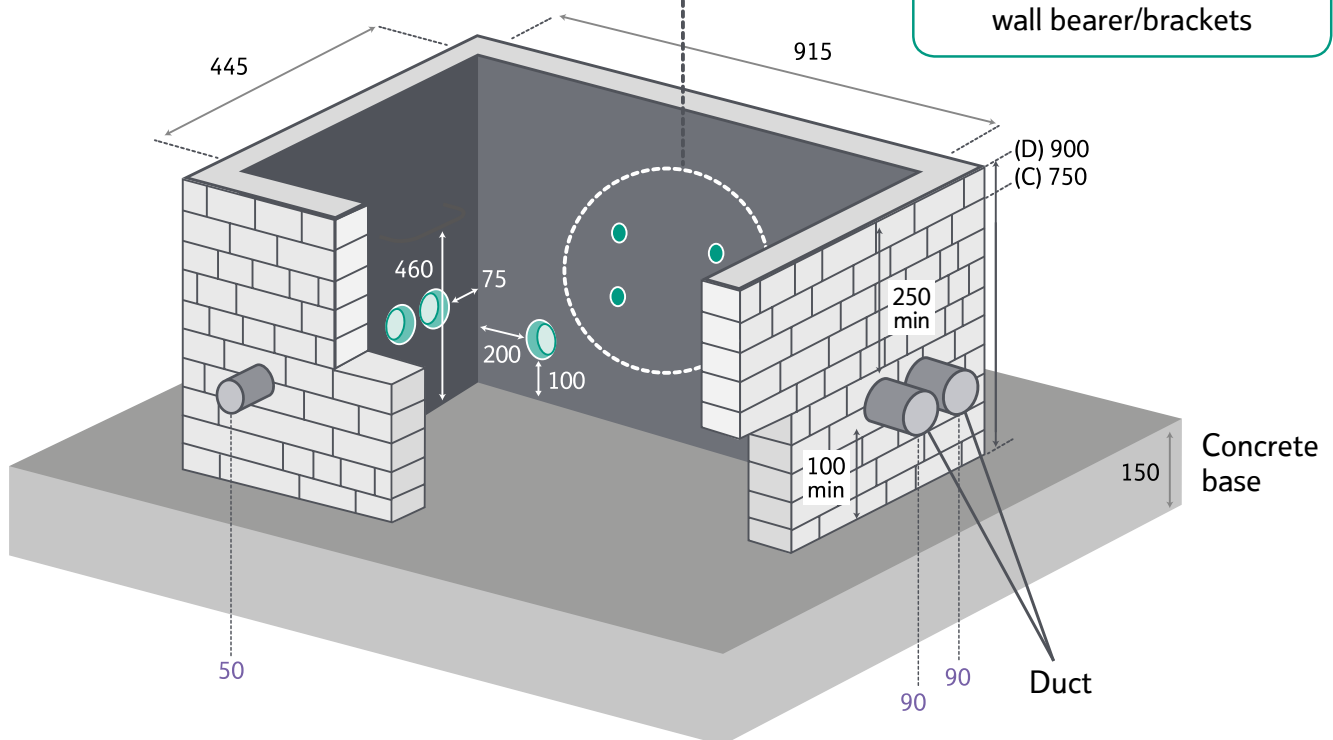
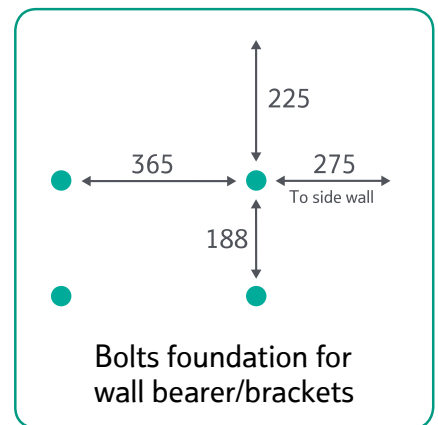
Joint boxes, footways and frames & covers

Please note

At no time must minimum box depth be compromised. Consult your FBC if the minimum depth cannot be achieved.

Joint box footway 104 – the preferred option

Internal dimensions. Brickwork Stretcher Bond.
Dimensions in mm (not to scale).

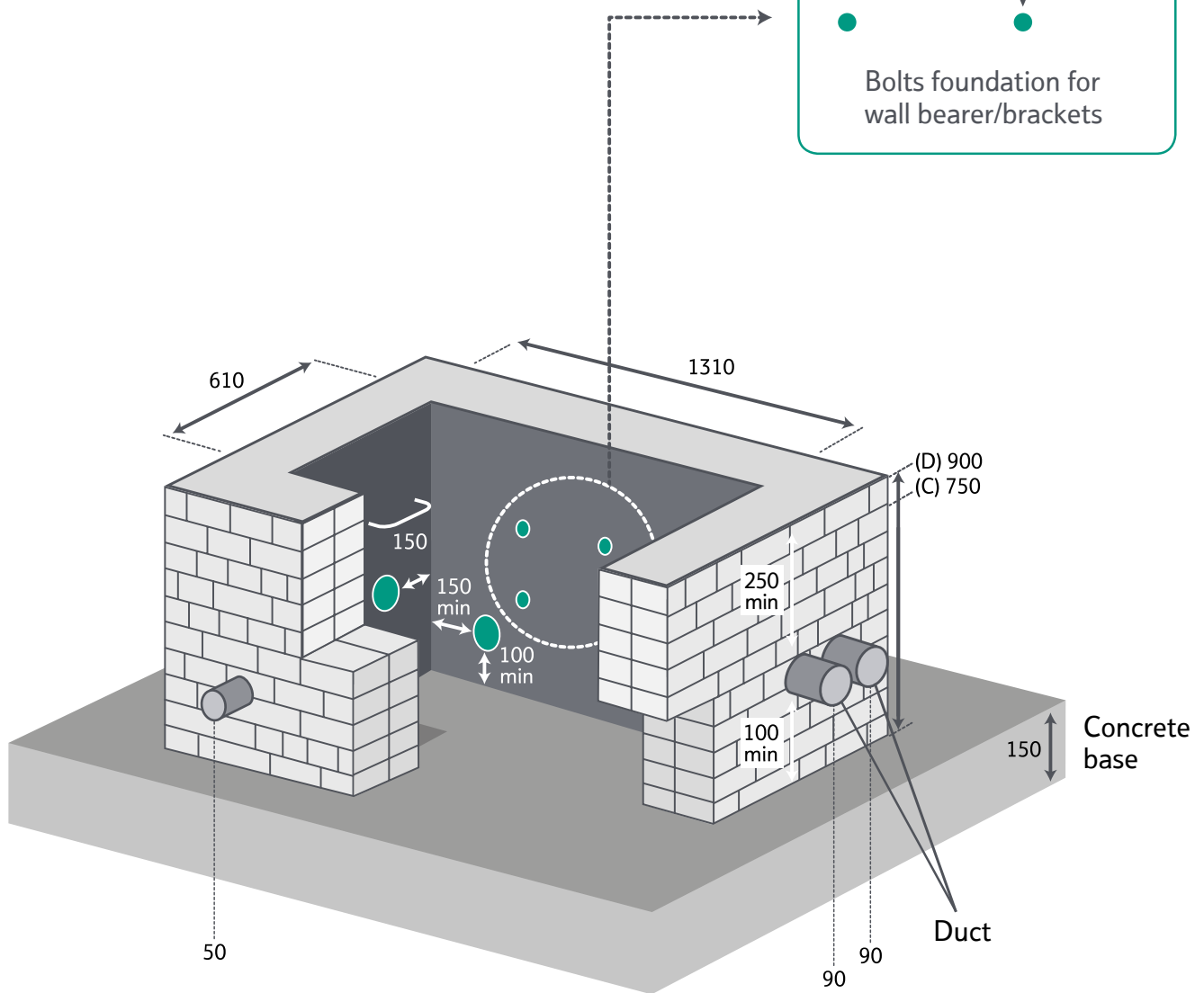
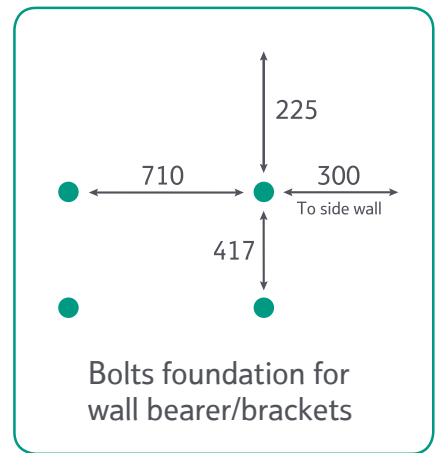


Joint box footway 106

Internal dimensions. Brickwork Stretcher Bond.

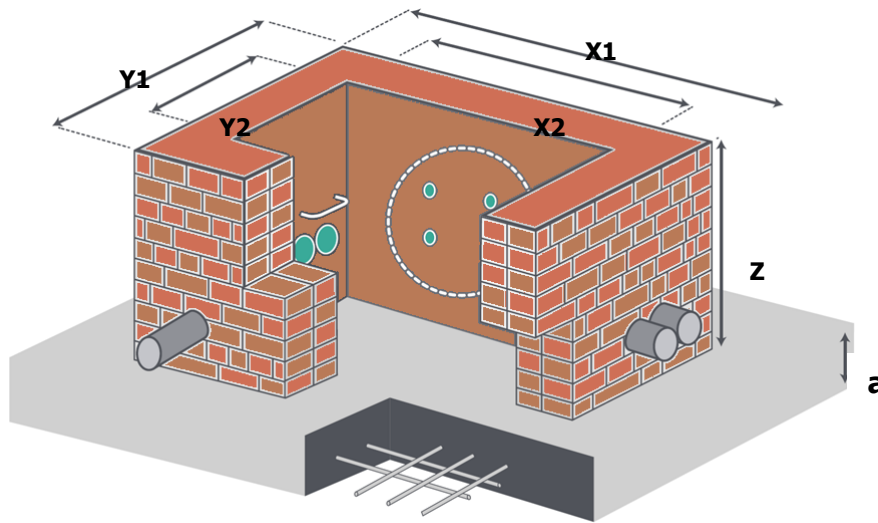
Dimensions in mm (not to scale).

- Minimum depth for road crossing 450mm
- Sump to be fitted in boxes deeper than 700mm



Carriageway boxes

Full technical drawings and specifications for all carriageway boxes can be found at <https://www.openreach.com/fibre-broadband/fibre-for-developers/guides-and-handbooks>



Box Type	Box Dimensions (mm)					
	Excavation Size		Box Opening Size		Z	a
	X1	Y1	X2	Y2		
JBC2(N)	1650	1110	1220	680	Min Depth 635 Max Depth 900	225
JBC3(N)	1040	1040	610	610		150
JBC4(N)	875	1345	445	915		200

Materials

- **Bricks:** Minimum Class B Engineering Bricks, BS EN1996
- **Cement:** BS12:1996 - Specification for Portland cement
- **Concrete:** C35/45, BS EN206
- **Mortar:** Class (iii), 1:5 CEMENT:SAND ratio (max) or 1:1:5 CEMENT:LIME:SAND

Base

- **Cement:** BS12:1996 - Specification for Portland cement
- **Concrete:** 1 layer of A393 mesh to top face of base slab. Minimum 55mm cover to any face. B500B or B500C, BS4483

Brickwork

- English garden wall bond, flush pointed

Frame and cover

- Frame cover to be installed to DMRB CD534 installation practices

Lifting keys

- Key Joint Box Lifter should be used to lift the cover and can be purchased from TW Engineering Co Ltd at www.twtools.co.uk (tel: 0115 932 3223) or similar supplier of your choosing.

Ducting

- Duct should be cut flush to the internal wall box
- Duct must not enter through corners and be no less than 75mm from the side wall.
- Duct to enter wall no less than 450mm from the top of the frame

The optional approved pre-formed chamber system Quadbox™ can be used to speed up the installation process and bring significant productivity benefits as there is no need for specialist box building teams and concrete backfill to be used.

The Quadbox™ is not a free stores item from Openreach, but can be purchased directly from our approved supplier, Cubis Industries: www.stakkabox-quad.com

Joint box modular footways 104 and 106 are the Openreach approved versions (BT specification LN712).

Box furniture items slot into moulded pockets within the chamber, eliminating the need to cast-in fixings or drill on site. Duct entries are also easy to achieve, using a standard hole saw mounted on a cordless drill.

The lightweight high-strength system is supplied as 150mm deep twin wall high-density polyethylene (HDPE) rings to provide maximum flexibility and strength which are simply stacked on a prepared base and backfilled with suitable as-dug or Type 1 material.

See the suppliers Installation Guide Which comes with your box.

If purchasing a pre-formed chamber you are required to purchase the associated furniture.



Furniture

Cable brackets and steps (where required) are supplied in a bagged kit and easily slot into purpose designed pockets in the chamber. The brackets and steps drop into preformed slots.



Available Size Range

Product Code	Clear opening	Depth Per Section
JMF104	915X445mm	150mm
JMF106	1310X610mm	150mm

At least 5 sections are needed to meet the minimum box depth of 750mm

Duct entries

Duct entries can be cut as and where required using a hole saw mounted on a cordless drill.

The chambers incorporate guides which identify drilling points to ensure correct duct spacing.

A maximum of 4 duct entries can be made into a single wall of the Quadbox™.



Quadbox points of note

As with brick built chambers, care should be taken to make sure:

- The box is set at the correct depth and the base/ plinth is installed correctly.
- The side wall is not damaged/misshapen due to over compaction.
- The frame is level with the surface and a core drill is used for cutting duct entries.
- The developer is required to purchase the required wall bearers.

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