



Openreach Optical Fibre Cable and ONT Installation

July 2026

Installation of pre-connectorised cable at first-fix

- For single dwelling units single ended internal fibre cable (ezbend) will be available in various lengths and will be delivered in coils that can be ordered via the FBC. Excess lengths (at least 3m externally, 500mm internally) will need to be left coiled internally and externally for Openreach engineers to connect the plot.
- Install a single back box where the ONT is to be located.
- Coil 500mm of the pre-connectorised end of the cable into the empty back box, taking care not to damage the green connector, then fit a blanking plate to help protect the fibre. Ensure the cap on the end of the green connector is kept on during construction to avoid damage to the fibre.
- Feed the bare end of the cable internally to externally through the external wall service hole.
- A minimum of **3m** of cable is required to be coiled externally. The cable can be cut and the end covered with electrical tape if needed to keep the right amount of coiled cable outside the house. Avoid leaving any unnecessary slack cable in the wall cavity of the house.

Providing power for the ONT

- A power socket must be provided at the ONT install point to provide power. Positioning for this socket can be seen on the next page.
- Openreach recommends a double power socket to be installed to allow the homeowner to plug in their communications provider router if required.

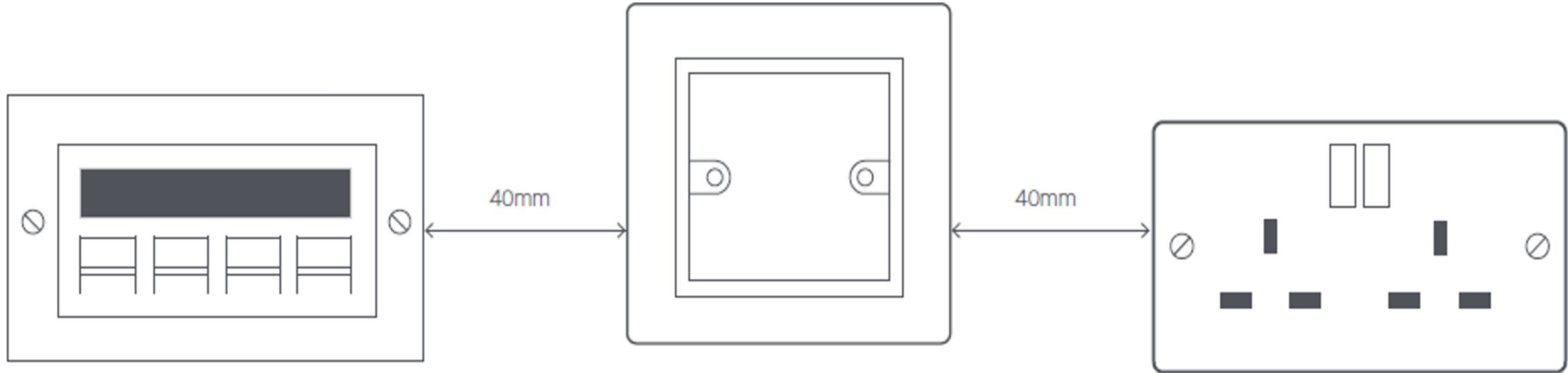


500mm coiled in single back box



Minimum 3m coiled externally

ONT position



Openreach ONT in non-standard position

Wherever possible, the external duct should be positioned on the opposite side of the wall to where the ONT will be installed, removing the need to run internal fibre cables. However, there are cases where the kit will need to be installed away from the external lead in and your FBC will be able to advise.

When the ONT is to be fitted in a non-default position i.e. not directly behind the external entry point, such as in a utility cupboard, the previous guidelines must be followed to provide entry of the cable into the home.

You will have a larger length of cable that will run from the entry point into the building to the Openreach ONT. In this case you have the responsibility of running the single ended internal fibre cable (ezbend) required inside the house in such a way that it is undamaged and complies with building regulations for the installation of telecommunications infrastructure cabling.

The same rules apply to the running of fibre cable internally that are specified in the section on the exterior ducting. Fibre cable should be installed in protective conduit with no bend greater than 90 degrees. Once installed the ONT must be kept powered on.

If this option is followed but the cable is found to be damaged once in situ during construction work inside the property, cables must be replaced before the fibre service can be tested and called off by your Openreach FBC.

It is important to select the right cable to achieve the minimum excess slack. Any unavoidable extra slack should be stored in a non drill zone wall cavity, taking great care not to loop the cable tightly as this will cause the cable to fail.

Fig 1. Requirements to enable call off for connection:

Optical fibre cable installed with 500mm cable internally with green end intact and minimum of 3m of cable coiled and taped externally

For installation on plasterboard wall a single back box is required for securing our ONT (Optical Network Terminal) to.

Live double gang 240v power sockets

Data sockets (RJ45) points for relocating router or providing fixed point to point data connections (Optional at developer discretion).

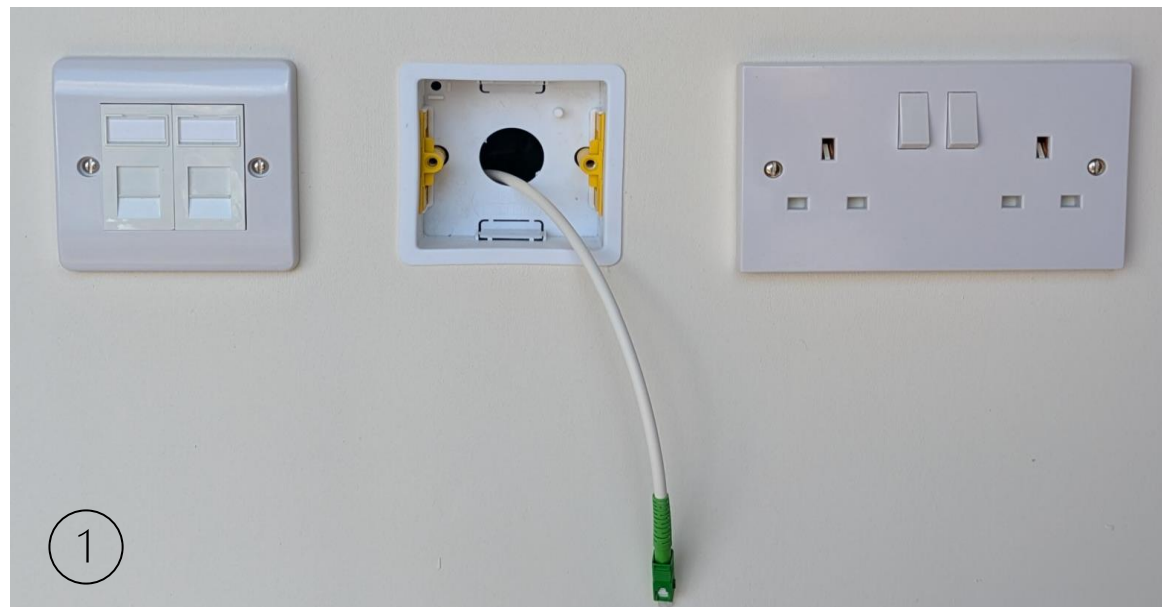


Fig 2. Completed installation:

ONT fitted in a shroud which is secured to the single back box.

Customer's router can be plugged directly into the ONT.

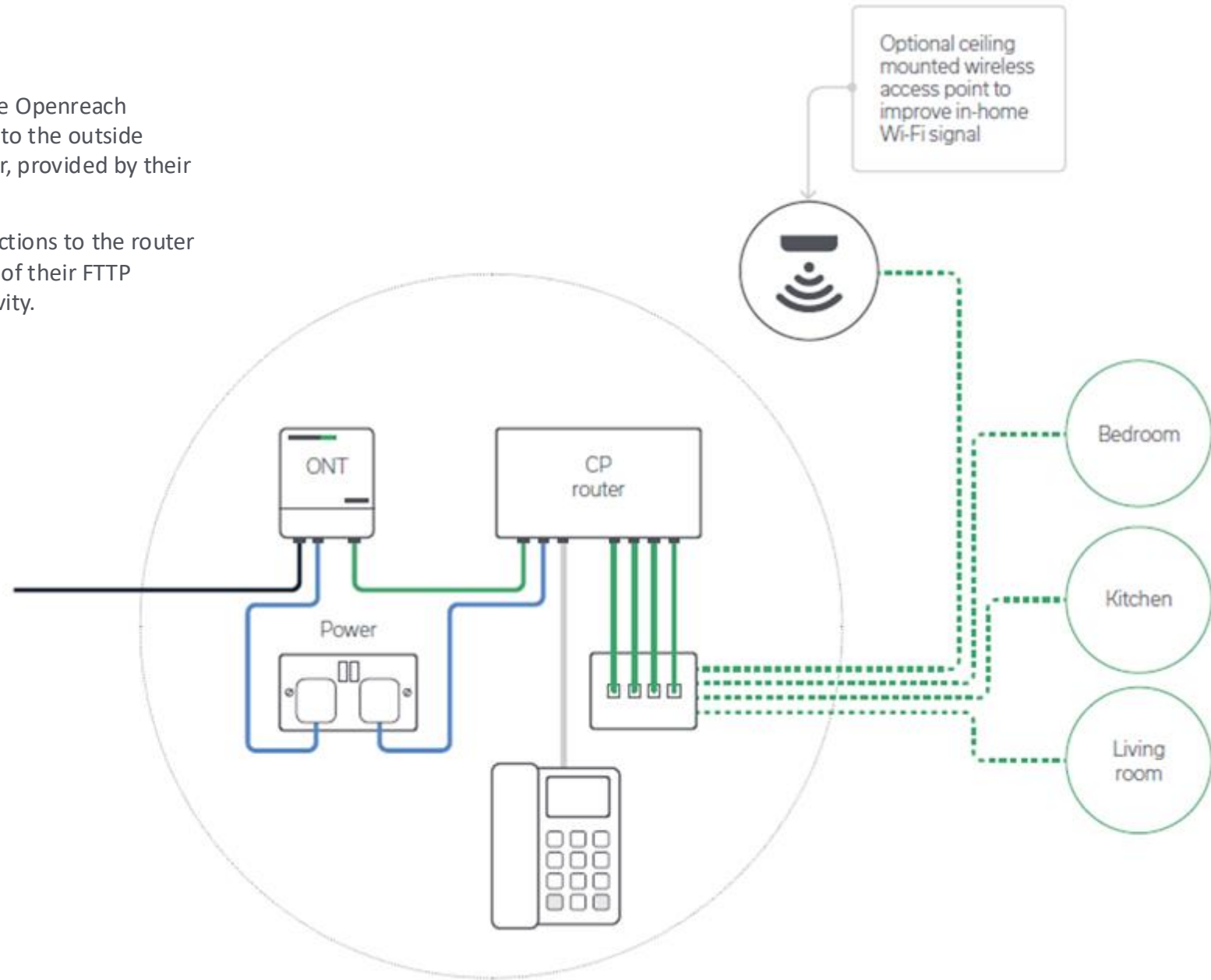
Positioning the ONT and customer router in an open living space will provide the best Wi-Fi connectivity possible and also fixed connectivity to devices such as Smart TV's, games consoles etc.



Option 1 – The simple install

The simplest installation involves the provision of the Openreach equipment (i.e. the ONT will be positioned adjacent to the outside wall) to which the customer then attaches the router, provided by their communications provider CP).

This installation limits the number of physical connections to the router and means the homeowner may not make the most of their FTTP connection due to the reliance on wireless connectivity.

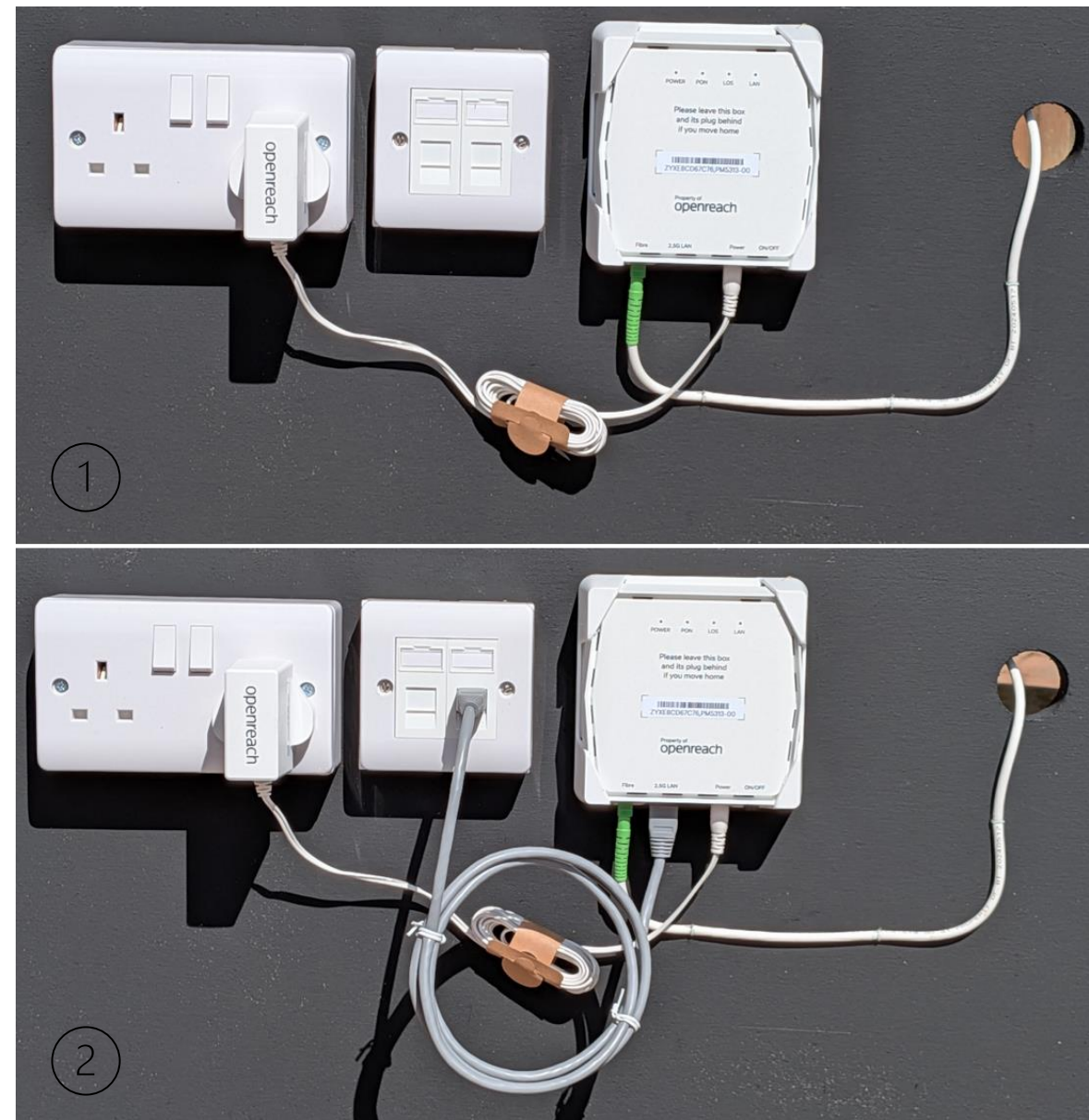


Requirements to enable call off for connection where installation is in the meter cupboard:

1. Optical fibre cable installed with 500mm cable internally with green end intact and minimum of 3m of cable coiled and taped externally
2. For installation on MDF/chipboard etc. a space of 115mm x 115mm is required to accommodate the ONT
3. Live double gang 240v power sockets. If sockets positioned above the fuse box there must be a minimum 100mm clearance to allow ONT plug to be plugged in without risking damage to the cable.
4. Data sockets (RJ45 points) for relocating router or providing fixed point to point data connections. This is strongly recommended in this scenario as positioning a router in the meter cupboard can reduced the performance of the Wi-Fi signal meaning poor connectivity for Wi-Fi enabled devices.

Fig 1: Recommended set up with ONT installed and power available. If the router is placed in the meter cupboard the data points can be used to provide point to point connectivity to fixed points.

Fig 2: Example with a CAT6 data cable connected between the ONT and a data point. This setup allows the customer to position their router in a more suitable location to provide better Wi-Fi connectivity.



Option 2 – Relocating the router via internal network cabling

Relocating the communications provider (CP) router provides a better quality wireless connection, as well as the ability to connect static devices such as TVs or games consoles physically. This allows these devices to take full advantage of the high speeds and bandwidth of a Full Fibre connection.

Additional Cat6* cable is required for this option from the ONT to the chosen relocation area. This connection should terminate in an RJ45 socket. A power socket should be provided for the CP router next to this socket.

