



Buried Cables

Customer guide to fibre exceptions

An explanation and guide to the process when a property is identified as requiring additional work to be able to install a fibre broadband service

manx telecom

Fibre broadband is being rolled out to over 41,000 properties on the Island.

The telecoms infrastructure supplying properties varies around the Island depending on several factors, including when properties were built and the location of the property. Where additional work is required to supply fibre broadband to a property, we will highlight the work required either beforehand, if known, or at the survey stage before installation. The term exception is used to explain where additional work is required. A number of different exceptions can apply depending on the type of property and the work required.

Exceptions include:

- Buried cable (B)
- Business premises (Bus)
- Multi-dwelling unit (MDU, MDU1, MDU2 or MDU3)
 - apartments and flats
- Survey required (S)

These required standards have been produced to help you if your property is identified as having an exception, or a potential exception. You can refer to the relevant section and follow the steps to help get fibre broadband installed as quickly as possible.

Buried Cables

If your property has been flagged with a 'buried cable' exception, it has been identified that there is no existing duct work to the property. In this instance, the existing copper service is buried directly into the ground, which was common practice many years ago, and there is no way of feeding the new fibre cable to the property without additional works.

There are 2 methods available to resolve a buried cable situation.

- **Drop Tubing**
 - Self installation
 - Third-party contractors via a quoting process
- **Standard Ducting**
 - Self installation
 - Third-party contractors via a quoting process

The differences between the 2 are detailed below, including which situation is best for either option.

Drop Tubing

Drop Tubing is a new solution that is available where a property has been identified as having buried cables. Unlike previous 'ducting' solutions, Drop Tubing does not necessarily require burying, making it easier to install. Drop Tubing is a narrow, reinforced 7mm diameter tube that can be surface mounted to provide a direct route for the fibre cables to connect from the main fibre network to the property.

Drop Tubing may not be suitable for a property with a hard finished surface type which extends the full width of the property frontage and has no alternative way to attach the fibre such as a wall, fence, or kerb.

The best route will be determined when the survey is undertaken.

Self Installation Guidelines

As the Property Owner you can install the Drop Tubing yourself. Once you have placed your order with your preferred Fibre Supplier, a convenient time to meet a Planner at the property will be organised. Clear guidance will be provided detailing where the Drop Tubing needs to meet the curtilage of the property, how it should appear at the property and how must be laid and secured to avoid any blockages.

All required equipment will then be ready for collection. Details of how to install the Drop Tubing are shown below. Property Owners need to be aware that any damage to Drop Tubing is their responsibility.

Below ground

Install the cable conduit at a depth of 200mm, which is the typical depth of a garden spade.

See image 1, right.



Above ground

Attach the cable conduit to a structurally sound garden wall or fence. The cable conduit should be cleated at 300mm centres.

See image 2, right.



There can be no more than five bends, each at a minimum bending radius of 120mm (the typical radius of a dinner plate) i.e. DO NOT create any 90-degree bends as this exceeds the angle that the fibre cable, that we need to later pass through the conduit, can tolerate.

See image 3, right.



Standard Ducting

Standard ducting can be used at any property, however, tends to be more expensive and more intrusive to install as it is required to be buried at a greater depth and cannot be surface mounted like Drop Tubing.

Self Installation Guidelines

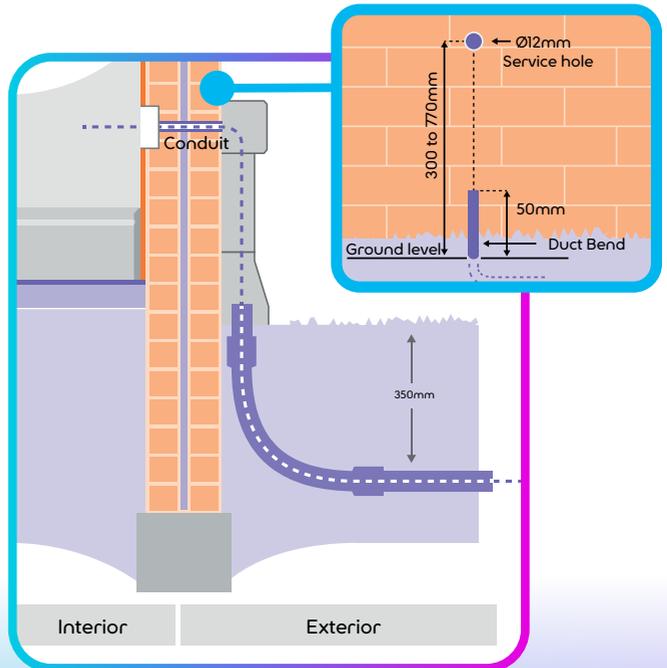
If the Property Owner chooses to complete groundworks themselves, arrangements will be made with the Property Owner for an experienced Planner to attend the property at a convenient time and discuss options.

In addition, all required ducting will be made available for the Property Owner to collect and is supplied free of charge. The planner will identify where the ducting needs to meet the curtilage of the property, how it should appear at the property, at what depth it needs to be laid and how to cover the ends to avoid the duct becoming blocked.

Please note, tenants will need to ensure they have their landlord's permission before any work should be undertaken.

As a guide:

- Ducts should be buried to a depth of 350mm beneath the proposed external ground level.
- The Manx Telecom duct (supplied) should be no greater than 15mm from the finished wall surface.
- The duct should protrude no more 50mm from the finished ground level.
- The duct opening must be covered, preventing the ingress of debris, using the supplied plug.



Once the Property Owner has completed installing the Duct, they need to inform their Licensed Operator who will update the Fibre Network team. The Fibre Network team will complete any works required in the carriageway to connect the Property Owners ducting to the fibre network. Once completed, the Fibre Network team will arrange for an appointment to be arranged by the relevant License Operator.

Example, right, of a trench dug for a new duct to a depth of 350mm.



Third-Party contractor via a quoting service

If the Third-Party Contractor is preferred, then arrangements will be made for a Third-Party Contractor to visit the property and meet with the Property Owner. The Contractor will assess the work required and provide a quote to the Property Owner and arrange to complete the required works.

In addition, they will arrange and complete any works required in the carriageway at the same time. The cost for the carriageway work is met by Manx Telecom.

The Property Owner is responsible for paying the Contractor on completion of the works. The Contractor will then arrange for installation to be completed by updating the order status as ready to proceed and the Licensed Operator will be informed to organise an appointment date with the Property Owner.

As a guide, Standard Ducting is around £350 - £500 but is based on distance and the route agreed upon.