

PREPARING A NEW OR RENOVATED HOME FOR FIBRE BROADBAND



enable
Fibre Broadband

Fibre broadband is being rolled out across Christchurch, Kaiapoi, Rangiora, Woodend, Rolleston, Lincoln, Templeton and Prebbleton. If you're building or renovating a house in one of these areas, there are a few things you need to know.

WHAT WILL FIBRE BROADBAND MEAN FOR YOU?



Ultra-fast speed

Enjoy the fastest available broadband experience.



Consistent & reliable

Spend less time waiting online, all the time.



More users, more devices

Perfect for busy households. Everyone can connect their devices at the same time without the internet slowing down.



FREE home installation

Enable does not charge for residential installations. Check with your retailer however as they may have a fee for the installation of their equipment.



Greater bang for your buck

Enjoy fibre for around the same price as you currently pay for old copper broadband.



Best service for online entertainment

Enjoy all the exciting new TV, movies, sports and music streaming services over a fast connection. No more waiting for downloads - just hit play and enjoy.

WHAT'S INVOLVED IN GETTING FIBRE BROADBAND AT YOUR HOUSE?

Because fibre services run over an entirely new telecommunications network, there are a few things that need to be done to get connected.

Firstly we need to build our network down every street and to the edge of every property. You'll see our teams building in your area and when they're finished, you'll see a red Enable fibre tube at the edge of your property.

Everything else that needs to be done to connect your home happens on your property – and may cause some disruption.

This is why we recommend doing these things while your home is being built or renovated.

IS FIBRE AVAILABLE IN YOUR STREET YET?

Whether you're building or renovating in a new subdivision or an established suburb, you may already have access to Enable's fibre broadband, it may be just around the corner or a couple of years away.

Visit **enable.net.nz** to find out when fibre is coming to your neighbourhood, or if your subdivision is fibre ready.



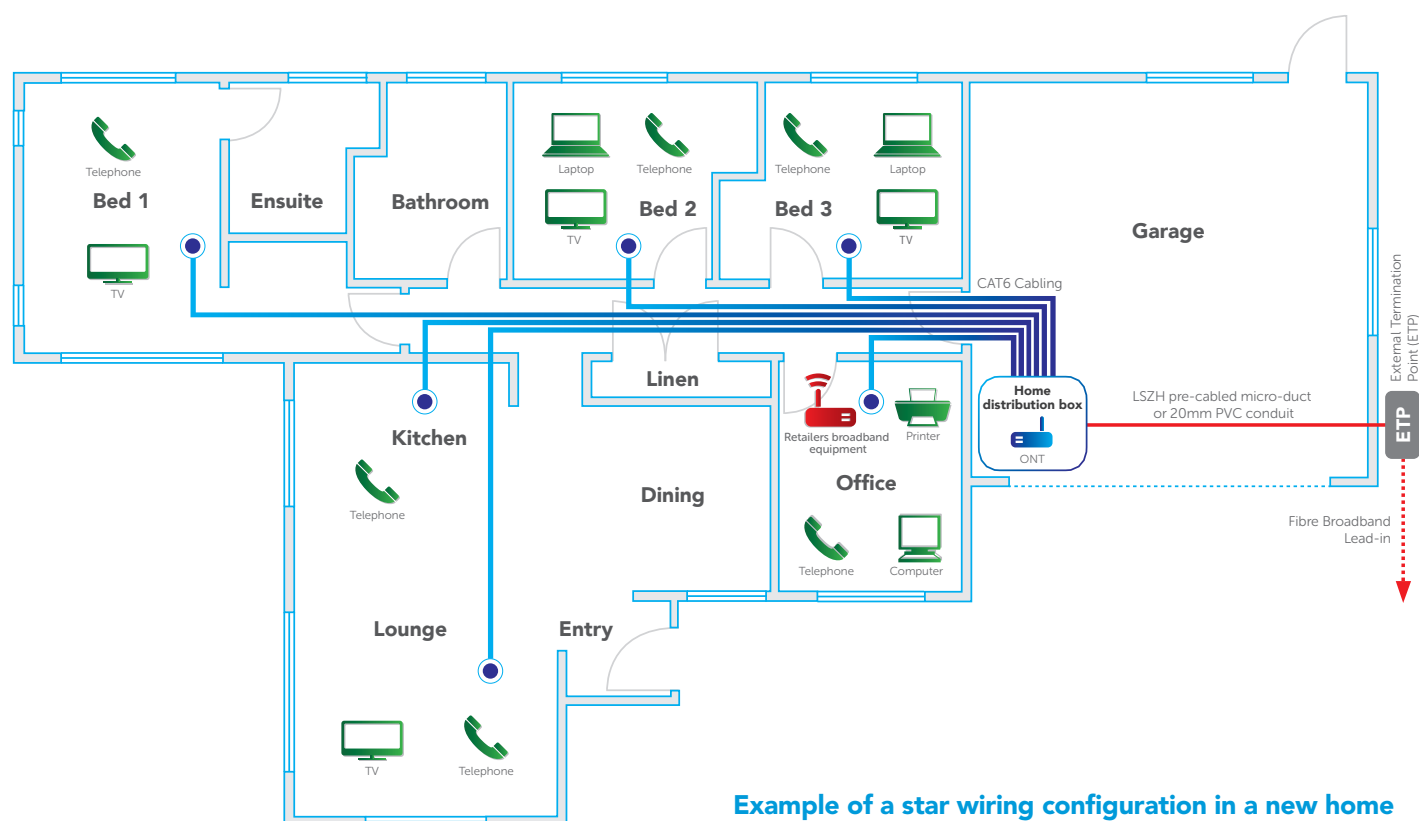
WIRING GUIDE

– FOR NEW OR RENOVATED HOMES

MINIMUM CABLE INSTALLATION REQUIREMENTS

To future proof a home for fibre broadband and ensure home owners can enjoy all the high-bandwidth technology services that fibre broadband enables, the following standards should be followed. Please note, Enable's requirements only relate to cabling for communication services and do not address required cabling for other services such as satellite TV.

- Cabling should be a 'star configuration' and include a home distribution box. See Installing a Home Distribution Box for details.
- Cables to be a minimum specification of Cat6.
- Run four Cat6 cables (with RJ45 jack points) from the home distribution box to the main entertainment hub and at least two Cat6 cables to all other outlet positions.
- Leave at least 300mm of cable slack at each outlet once the cable is terminated.
- At the star wiring point the Cat6 cables should ideally be terminated on RJ45 type modular sockets mounted in a patch panel.
- Run Low Smoke Zero Halogen (LSZH) pre-fibre cable micro duct or 20mm PVC conduit from the home distribution box to the point of external entry for the fibre cable. This is where a small external termination point (ETP) box will be installed. See Installing Internal Fibre Feeder Conduit for specific details.
- Make sure all clearances between communication cables and power cables are maintained. See the NZ Telecommunications Forum Premises Wiring Code of Practice for more detail on the segregation of services.
- All installed cabling should be thoroughly tested and verified by the installer as being able to perform at the speed it is rated for.



Example of a star wiring configuration in a new home

Detailed cabling standards are available at enable.net.nz/cabling

ORGANISE AN ENABLE FIBRE LEAD-IN DURING A HOUSE BUILD OR RENOVATION

Call 0800 4 FIBRE (0800 434 273) and request Enable to install a free fibre lead-in.

Enable uses specialist red micro-tubing for its fibre installations – and joins this to our network at the time of installation. We cannot use green or white duct in our connections – particularly if it is branded by another network provider.

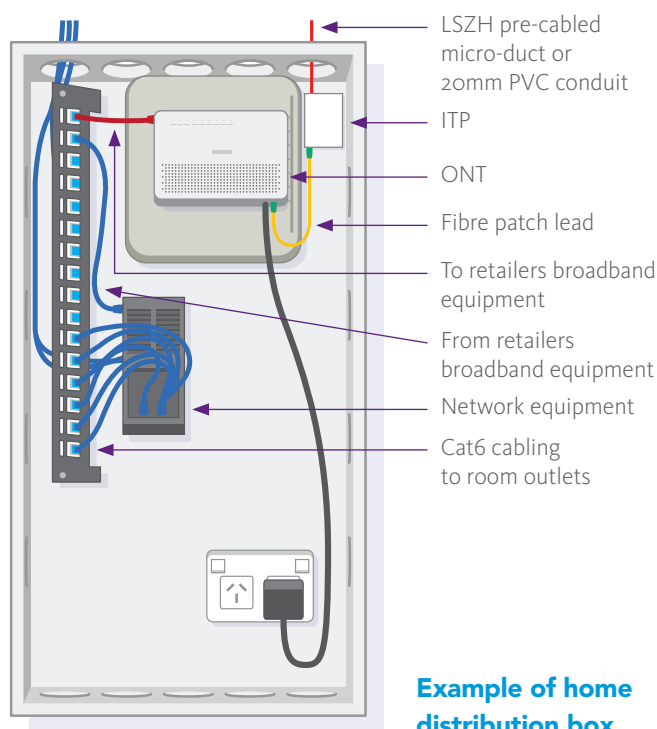
In order to provide a lead-in, Enable requires an open service trench with a minimum depth of 200mm or 100mm under a hard surface (such as concrete or asphalt). Allowances for industry required clearances from other underground services should be accounted for. Please see our Installation of Enable's Underground Fibre Duct sheet for more information.

INSTALLING A HOME DISTRIBUTION BOX

The home distribution box must be situated in an accessible place inside the home (usually at eye-level in a garage or utility room) and should be where the fibre feeder terminates.

It should be made of plastic ideally for effective WiFi transmission from within (if needed) and must be large enough (at least 700mm by 350mm) to contain:

- A minimum of two power outlets to power the ONT plus any other services such as alarms or back up power devices.



- A patch panel with RJ45 type modular mounted sockets.
- An Optical Network Termination (ONT) provided by Enable at the time of connection to integrate with the internal wiring.
- A back-up power device (if the home owner purchases one) that will allow the ONT to operate for a period of time in the event of a power cut.
- Any other network equipment that the retail service provider supplies – if this is deemed the most appropriate place to house it.

INSTALLING INTERNAL FIBRE FEEDER

An internal fibre feeder conduit should be installed in the wall cavity during a new home build or major renovation.

In a new home build (particularly in new subdivisions) an internal fibre feeder should be installed through the external wall directly above the power/telecommunications services trench. In a renovation the feeder should begin through the external wall close to the front of the property. In both cases, the building entry point should be between 300-1500mm above ground.

The other end of the feeder should terminate where the home distribution box will be located.

The feeder should be:

- Low Smoke Halogen (LSZH) pre-fibre cabled micro-duct or 20mm PVC conduit with a draw wire.
- Installers need to be careful to protect the integrity of the microduct or conduit and ensure all bends are sweeping so that the product will be suitable for a fibre broadband installation.

