



Preparing for the nbn™ network

Your guide to nbn™ Fixed
Wireless technology



Thanks for choosing the nbn™ network

You're only a few steps away from enjoying the benefits of a plan powered by nbn™ Fixed Wireless technology.

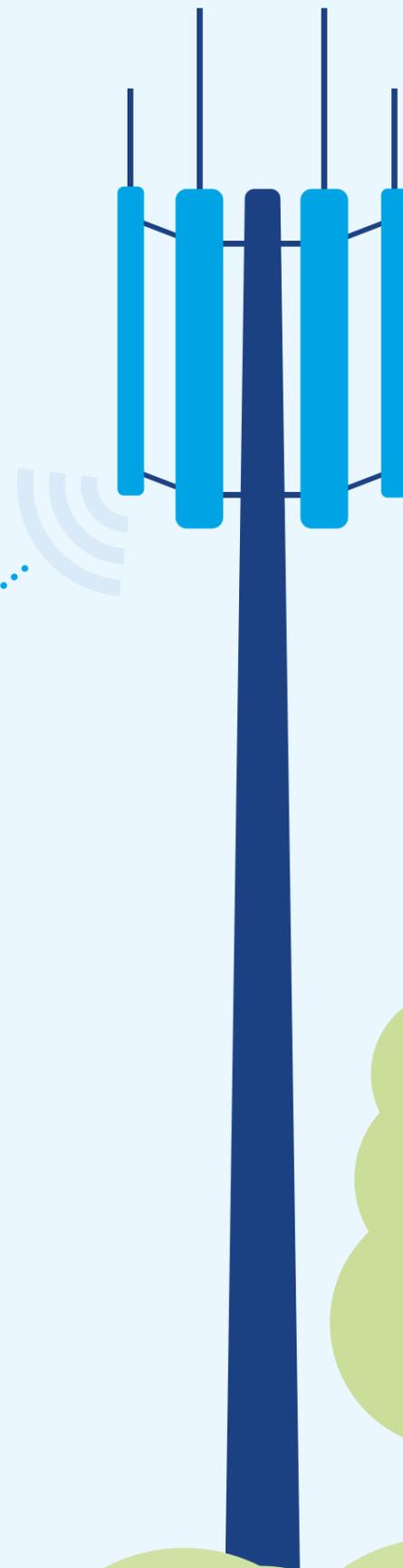
This guide will provide you with useful information on your upcoming installation, and help to answer any questions you may have.



Connecting your home or business with nbn™ Fixed Wireless technology

nbn™ Fixed Wireless is generally used for connecting premises in rural or remote areas. It's also used in places where the fixed line network can't be reached.

This type of connection uses data sent wirelessly from a local transmission tower to an nbn™ outdoor antenna fitted to the exterior of your premises, which is then connected to an nbn™ connection box inside via an Ethernet cable.



i **Important information**

When connecting to nbn™ Fixed Wireless technology, you'll have the option to:

Keep your existing copper phone line

This means equipment currently connected to it, such as medical alarms, fire alarms and lift emergency phones, should continue to work as normal. You should consider keeping your existing copper phone line active if you don't receive good mobile phone coverage at your premises.

OR

Switch to a Voice over Internet Protocol (VoIP) service on your nbn™ powered plan

This means that your phone service will run over the internet, and any equipment connected to it may not work during a power blackout.*

nbn recommends you contact your phone and internet provider to notify them of your decision and, if you wish to use a VoIP service, to confirm that your nbn™ powered plan is capable of supporting a VoIP service.

*The rollout of the nbn™ network will involve new technologies, and some existing devices, including many medical alarms, may not be compatible with these at all times. You should contact your equipment provider to find out if your alarm or other equipment will work when connected to the nbn™ network and what alternative solutions are available. For more information, visit nbn.com.au/compatibility

Things to know before installation day

When you contacted your provider to connect to a service over the **nbn**™ network, they would have arranged for an **nbn**™ approved technician to call you and organise a visit to your premises to connect you.

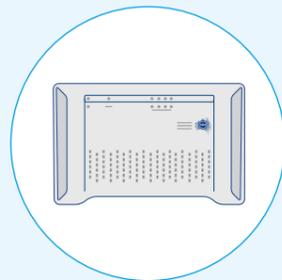
Your technician should call you one business day before the installation to confirm your appointment time and your address details. They will also call you when they're on their way to your premises.

If renting, you'll need to make sure you have your landlord's approval for the installation to go ahead. If you have a heritage-listed premises, you'll need additional approvals too.

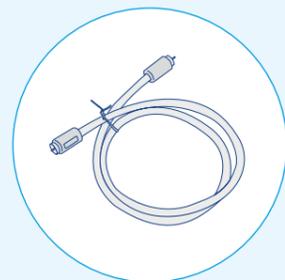
What **nbn**™ supplied equipment will be installed?



nbn™ outdoor antenna



nbn™ connection box



Ethernet cable to connect your **nbn**™ outdoor antenna to your **nbn**™ connection box

IMPORTANT: This equipment is the property of **nbn** and must remain at the home or business where it's installed – it won't work at another premises.



Safety information

The **nbn**™ Fixed Wireless equipment complies with the Australian standard AS/NZS 60950.1:2011 (Electrical safety).

Electrical surges caused by lightning strikes can still occur. While not a requirement, **nbn** recommends that you protect the electrical equipment inside your home from potential surges. This is not the responsibility of **nbn**.

nbn also can't take responsibility for the internal electrical wiring in your premises.

All **nbn**™ installers comply with the wiring standards (ACMA AS/CA S009:2013 Installation Requirements for Customer Cabling) required for an **nbn**™ Fixed Wireless connection.

For further advice on the best way to protect internal equipment or wiring, you should contact your provider or an electrician.

What does the installation involve?

nbn™ supplied equipment will be installed both inside and outside your premises.

The **nbn**™ outdoor antenna will be attached to either the roof or an external wall. If neither of these locations provide direct line-of-sight to the **nbn**™ Fixed Wireless tower, your technician may look for another suitable location.

A cable will be run between the **nbn**™ outdoor antenna and the **nbn**™ connection box inside your premises. Generally, this requires drilling a small hole in your external wall for the cable to pass through.

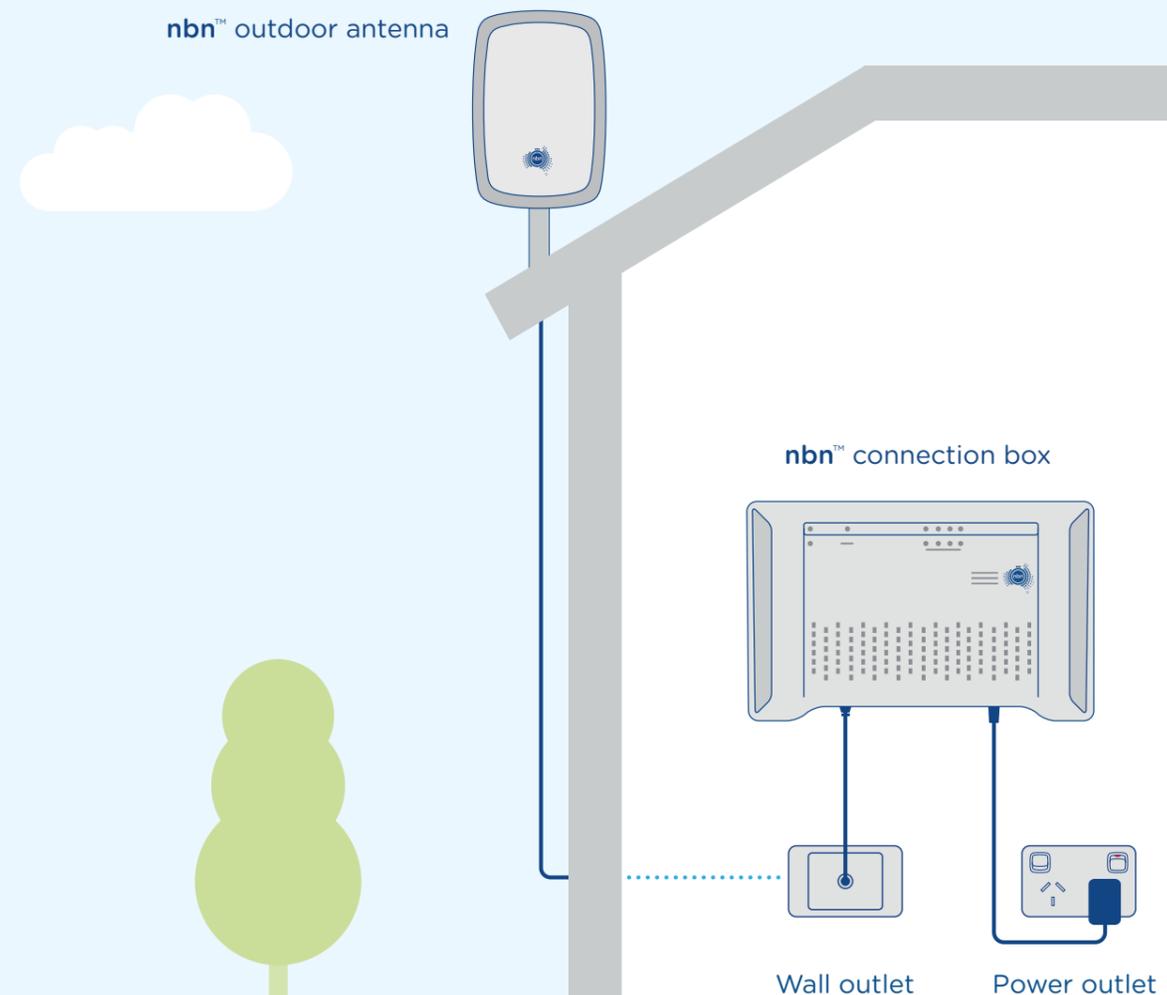
It's important to consider:

The location of the **nbn™ connection box, which should be:**

- Near an accessible power point
- In a cool, dry, ventilated area
- Away from busy areas where it may be knocked and damaged
- Away from bedrooms, as the connected modem and **nbn**™ connection box can have flashing lights, which may disturb sleep
- Near your existing landline phone or network cabling.

Your preferred in-premises networking

While most services can be run over a Wi-Fi network, you may prefer to have cabled connections for things like internet TV (IPTV) and data outlets. If you'd prefer another networking option, you'll need to speak with your provider to arrange this, as it won't be included in a standard installation.



On the day of installation

When your **nbn**[™] approved technician arrives, check their ID before giving them access to your premises. They'll then discuss with you where the **nbn**[™] supplied equipment will be installed.

A standard installation will normally take up to 4 hours, and you or an authorised representative over 18 will need to be present for the entire installation.

Once your **nbn**[™] supplied equipment has been installed and tested by the technician, your phone and internet provider will be notified to complete the setup of your **nbn**[™] connection.

Steps to install your **nbn**[™] supplied equipment

On the day of installation, your **nbn**[™] approved technician will:

1. Check the wireless signal to make sure it's strong enough to proceed with the installation. Please note: If your premises can't receive a strong wireless signal, the installation won't proceed, and you'll need to contact your provider for alternative solutions.
2. Mount an **nbn**[™] outdoor antenna to either the roof of your premises or an external wall. The position of this antenna will be chosen by the technician based on where you will receive minimal obstruction to the signal from the **nbn**[™] Fixed Wireless tower. Keep in mind that things like trees and hills can block the signal.
3. Set up your internal connection by drilling a small hole through your exterior wall and feeding a connection cable from the **nbn**[™] outdoor antenna to the **nbn**[™] connection box which will be installed on an inside wall.
4. Activate your service once all of the **nbn**[™] Fixed Wireless equipment has been installed and tested. This should take no more than 24 hours.

For instructions on the best way to connect your devices to the internet once your **nbn**[™] Fixed Wireless service has been installed, contact your provider.



Installation failure

In the event that the standard installation procedure fails, you can:

1. Check that the **nbn**[™] approved technician has tried to get a strong enough signal on all areas of the roof.
2. Ask if the technician has tried a 3-metre mount to get a stronger signal.
Note: This type of mount can only be installed on tin roofs with a pitch of less than 30°.
3. Ask the technician if there are any other locations on your property where the signal could be strong enough.
4. Consider a non-standard installation, where available (additional charges apply). In a small number of cases, where options 1-3 don't result in an **nbn**[™] Fixed Wireless signal, you may be eligible for a non-standard installation. Your technician will advise you whether or not this is an option, and if it is, you can discuss next steps with your provider.

For more information on non-standard installations, please visit nbn.com.au/fixedwireless



Connectivity options



Wireless network and Ethernet

With your provider's (or your own) modem, you can create a wireless network in your home or business. If the Wi-Fi signal isn't strong enough to reach other rooms, you can use powerline networking adaptors, which plug into your power points and use existing wiring. Alternatively, you can have Ethernet cables installed between rooms (charges may apply).



Phone

With **nbn**™ Fixed Wireless technology, you can choose to keep your existing copper phone line or ask your provider to switch to a VoIP service. Talk to your provider about your needs, as you may require additional cabling or wall outlets to be installed, which aren't included in a standard installation.



Cable TV or internet

If you have an existing Pay TV or cable internet service that is connected to the same wall outlet as your **nbn**™ connection box, a splitter will be installed by your **nbn**™ approved technician to allow both services to run from one wall outlet.



Smart TV and appliances

If you watch catch-up TV or streaming services (such as Netflix), or use internet-connected appliances (such as automated lighting or a smart kitchen), discuss your needs with your provider.



Security alarm

If you have a security alarm, discuss your needs with your provider, as you may require additional wiring or cabling to be installed (charges may apply).





Get more out of your nbn™ experience[^]

When you connect to a service over the **nbn™** network, consider:



Airflow

To help ensure your **nbn™** connection box works best, ensure there are no objects covering it or limiting airflow.



Modem cabling

Connect to your modem using the yellow sockets at the back of the **nbn™** connection box.



Modem location

Place your modem in a raised, central area. Keep it clear of solid or brick walls and furniture like the TV, and don't store it in a cupboard.



Devices

Where possible, connect devices that require large amounts of data (such as gaming consoles or streaming devices) directly via an Ethernet cable.



Phone location

If you choose to connect with a VoIP-compatible phone, consider where you place your modem, as your phone will need to connect directly to it.

For more tips to help improve your home internet setup, visit nbn.com.au/optimisation

[^]Your experience, including the speeds actually achieved over the **nbn™** network, depends on the **nbn™** technology and configuration over which services are delivered to your premises, whether you are using the internet during the busy period, and some factors outside of **nbn's** control (like your equipment quality, software, chosen broadband plan, signal reception, or how your provider designs its network). Speeds may also be impacted by the number of concurrent users on the **nbn™** Fixed Wireless network, including during busy periods.

Common questions

What if I can't attend my installation appointment?

You can either reschedule the appointment with your phone and internet provider (charges may apply) or ask someone you trust who is over 18 to attend it for you. Remember, they'll need to provide access to all areas of your premises and make decisions about the installation on your behalf, including where the **nbn**™ outdoor antenna and **nbn**™ connection box will go. If you decide to change the location of this equipment at a later date, charges may apply.

How long will installation take?

Installation of **nbn**™ supplied equipment normally takes 2-4 hours. If you'd like your installation done in a particular way, please discuss this with your **nbn**™ approved technician, as it may take longer and could have costs associated. It may take up to 24 hours for your service to be activated.

How much will the installation cost?

nbn does not currently charge for a standard installation. Wiring and cabling changes, or the installation of additional wall outlets, may incur a fee. Ask your provider what fees and charges will apply to you.

Some installations may not be standard – for example, if your technician needs to take special measures to protect heritage items or your property requires use of specialised mounting equipment. In such cases, **nbn** may quote your provider a charge for the non-standard installation, which may be passed on to you.

Can the weather affect my installation?

Yes. Bad weather conditions may make installation unsafe for the technician. If weather prevents them from safely installing your **nbn**™ supplied equipment, we'll arrange to reschedule your installation for another day.

What if the technician damages my property?

Your technician should take before and after photos of your premises and ask you to sign a form giving your approval of how the installation will be done. This will ensure that the installation is done to your satisfaction, and that your premises is returned to the way you'd like it. In the unlikely event any damage is caused, visit nbn.com.au/reportdamage to submit a damage report.

Do I need a separate supplier to install additional cabling?

Your technician will install all **nbn**™ supplied cables and equipment in your premises. However, you'll be responsible for connecting any cables from the **nbn**™ connection box to your own devices, including computers and Wi-Fi routers.

Can I run everything over a Wi-Fi network?

It's possible to run most services over a Wi-Fi network, but if for any reason you find Wi-Fi limiting, there are other options available. Talk to your technician, provider, or a registered cabler about the best way to connect other services inside your premises.

For more information on **nbn**™ Fixed Wireless, contact your provider





Your installation day checklist

- Installation approval**
I have my landlord's approval for installation (if needed) and have approval for installation at my heritage-listed premises (if applicable).

- Installation date**
My provider has informed me of my installation date and I understand that I (or an authorised representative over 18) will need to be there for the whole appointment, which may take up to 4 hours.

- Equipment location**
I have considered locations for the **nbn**[™] supplied equipment.

- Activation time**
I understand that it may take up to 24 hours for my setup to complete and that there may be an interruption to my internet connection during this time.

- Existing copper phone lines**
I have talked to my provider about keeping my existing copper landline.

- Safety-critical equipment***
I've checked with my equipment provider/s and phone and internet provider that any equipment I rely on, such as medical and security alarms, will work over the **nbn**[™] network, should I choose not to keep my existing copper phone line active.

For help and support

Contact your phone and internet provider

.....

*The rollout of the **nbn**[™] network will involve new technologies, and some existing devices, including many medical alarms, may not be compatible with these at all times. You should contact your equipment provider to find out if your alarm or other equipment will work when connected to the **nbn**[™] network and what alternative solutions are available. For more information, visit nbn.com.au/compatibility

Copyright: This document is subject to copyright and must not be used except as permitted below or under the Copyright Act 1968 (CTH). You must not reproduce or publish this document in whole or in part for commercial gain without prior written consent of **nbn** co limited. You must not reproduce or publish this document in whole or in part for educational or non-commercial purposes.

Disclaimer: This document provides general information about the technical requirements for connecting to the **nbn**[™] network and is correct as at October 2020. Technical connection requirements may change due to factors such as legislative and regulatory requirements as well as advances in technologies. For any queries about your particular circumstances or requirements, please consult your phone and internet provider or other supplier.