Your **nbn**™ connect kit

How to connect your new home to the **nbn**[™] network, Australia's broadband network.





The **nbn**™ network is so much more than fast internet. From education to business and entertainment, the **nbn**™ network gives us all the opportunity to be more productive, more creative, more efficient and more connected for decades to come.



A brighter future

Your family can access knowledge from across the world and learn like never before, offering you and your kids a brighter future.



Entertainment without the wait

With the **nbn**^m network, you can enjoy quick access to the content you need, when you need it - whether you're video streaming, online gaming or watching live news and sport



Bringing loved ones closer

The fast, reliable **nbn**™ network is designed to let you enjoy great quality video calls without the constant dropouts, so you never feel too far away.



Your plan, your choice

You can connect to the **nbn**™ network through a range of providers with a variety of plans, so you're sure to find a plan that works for you.



Everyone online at once

With the **nbn**[™] network, the whole family can enjoy all the benefits of high speed internet, even with lots of devices connected at the same time.



More productive businesses

A fast broadband connection will help you and your employees work smarter, allowing businesses to be more productive and make the most of online opportunities.



Imagine the lifestyle possibilities...

The **nbn**™ network provides many exciting opportunities for Australians to become more productive, creative, efficient and connected.

It's important to plan ahead to ensure you new home is able to support all the benefits that high-speed broadband can bring.





A newly-built home is the ideal opportunity to create a connected environment where the benefits of the **nbn**™ network could enrich your lifestyle.

Imagine your lifestyle both now and in the future

- · Will you want to work from home?
- Are you planning a study room for the kids?
- Where will you place your main TV?
- Does your TV require internet capability?
- Will you or the kids be gaming on a different TV?
- Are you planning any additional phone lines e.g. study or bedrooms?
- Will you want to use the internet for energy management systems?
- Are you looking to install a home security solution?

So, what comes next?

1. Planning your phone and data points

If you don't plan ahead, wiring your home may be more costly – if it needs to be done after construction has started or is complete. Taking the time now to consider your future in-home wiring needs, before construction of your new home begins, means you could take better advantage of the **nbn**[™] network in your new home.

Take a look at the tips below for planning the data and phone points and wiring you would like.

- Mark up a plan drawing or make a list of the rooms where you would like to place a phone or data point.
- ✓ Make a note of the services you may need in each room.
- ✓ Your first choice for voice and data points may still be in the study or home office, but do you think you may need them in the kitchen or lounge room too?
- Mark up where you may want to connect services between rooms.
- ✓ Keep your plans safe and handy, so you're ready to discuss them with your builder.



Once you've selected a developer and are in the process of planning your home, you'll be given a Homeowner and Builder's guide.

This guide will walk you through the decisions you need to make and provide you with comprehensive planning considerations. It will also provide more detail on the three steps of planning the installation and connecting your new home to the nbn* network.

2. Deciding on the location of the **nbn**™ supplied equipment to be installed

If you decide to become a new development homeowner, **nbn** will install an **nbn**" utility box, an **nbn**" connection box and an optional battery backup power supply unit within your home or garage. This equipment enables you to order phone and internet services from multiple service providers.

You'll be able to decide where you would like this equipment to be installed, subject to certain requirements, which we've detailed in the Homeowner and Builder's guide.

What does the standard installation include?

A standard installation of **nbn**[™] supplied equipment is currently free of charge.¹ This includes connecting fibre optic cable from your street to the **nbn**[™] utility box² on an outside wall of your home or business and to an **nbn**[™] connection box³ inside.

For more information on what's included in a standard installation, visit: nbn.com.au/fibreinstallation

3. Connecting your services to the **nbn**™ network

Services like landline telephone and broadband can be provided by a variety of service providers, but not by **nbn** directly. By contacting your preferred service providers now, you can compare available packages and then pre-order your preferred services from them even before you move.

How to find a service provider

Our website has a list of service providers that can deliver products and services over the **nbn**[™] network to your home once it's connected.

Visit: nbn.com.au/serviceproviders

Remember to ask your preferred service provider if they have any other fees.
 Also known as a Premises Connection Device.
 Also known as a Network Termination Device.

It's important to note that **nbn** is a wholesale network provider, which means **nbn** is responsible for building, operating and maintaining the **nbn**" network - the infrastructure over which telecommunication services can be delivered.

Services to your home, such as landline phone and broadband will be provided by retail service providers, not by **nbn** directly.

You can contact your preferred service provider now to pre-order services over the **nbn**[™] network.



For more information

1800 687 626 | nbn.com.au | info@nbn.com.au

July 2015



Welcome to the **nbn**™ network, Australia's broadband network. In your newly-built home, both your internet and landline phone services will be delivered over the **nbn**™ network, giving you access to fast and reliable broadband services for decades to come.

Before you start enjoying all the benefits of the **nbn**™ network, there are a few steps you need to take during the construction of your new home.

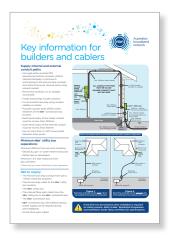
Step 1: Plan your phone and data ports with your builder

High speed broadband brings many exciting possibilities that can transform the way you work, play and stay in touch.

Now is the ideal time to consider how you will wire your new home to prepare for the connected lifestyle you plan to enjoy.

Talk to your builder about your preferences for voice and data ports now so they can mark these up on the building plans and provide a quote for any additional wiring work required.

If you don't have a copy of your new home plans to work on, it's a good idea to draw a quick diagram of your house and port locations. Make sure you keep a copy for your records.



The Key Information guide pictured to the left provides technical guidelines for your builder.

This guide is available for download under 'Key Resources' at: nbn.com.au/develop-orplan-with-the-nbn/ new-developments/ builders-contractors.html

Questions to consider

Data ports

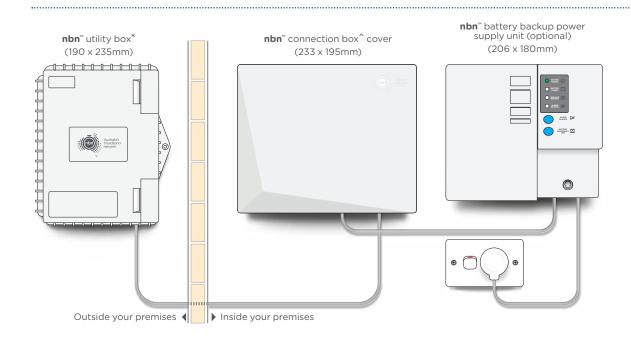
- Where will you use home computers?
- Will you be considering smart kitchen appliances in the future that might require fixed or Wi-Fi internet access?
- Where would be the best place to locate a wireless router for Wi-Fi devices?
- Are you planning to have a security or medical alarm system installed that will need a hard-wired internet connection and/or special wiring (e.g. Mode 3 phone cabling)?
- Where will you want to place TVs to use internet TV services and other internet connected devices like gaming consoles?

Voice ports

- Where will you want to have fixed-line connections?
- Will you need a phone line in your study or home office?
- Do you have a medical alarm service that will need a fixed phone line?
- Will you have a security alarm that will need a fixed phone line and/or special wiring (e.g. Mode 3 phone cabling)?



Step 2: Decide on a location for the **nbn**™ supplied equipment



The nbn and your builder will work together to organise the installation of the relevant equipment inside and outside your new home.

A standard installation of **nbn**[™] supplied equipment is currently free of charge. For more information on what's included, visit **nbnco.com.au/fibreinstallation** or call **1800 687 626**. Don't forget to check with your preferred retail service provider about whether they have any other fees that may apply.

Homeowners should work closely with their builders to determine the optimal location for the **nbn**[™] supplied equipment prior to your scheduled installation date so that your builder can pre-install the conduits required for the **nbn**[™] network installation to take place. When you have chosen a location for these conduits, make sure that both your preferred location for **nbn**[™] supplied equipment and conduits are marked on your house construction plans.

The pre-installation would need to take place at least 20 days before the estimated home completion date.

Choosing the equipment location

There are a number of places for your equipment to be installed. Use this checklist to help you make a good decision about the most suitable place otherwise your ability to connect to the **nbn**[™] network may be affected.

Your checklist for equipment location
Reasonably close to a power point
A cool, dry, ventilated area (nbn ™ supplied equipment cannot be installed in a damp or wet area such as a kitchen, bathroom, laundry or under a window that opens)
Away from busy areas where it may be knocked or damaged
Somewhere easy for you to see and to check the indicator lights
In the same building as the main electric meter box or distribution board (i.e. not in a separate detached garage or outhouse)

^{*}Also known as Premises Connection Device ^Also known as Network Termination Device

Decide whether the optional battery backup power supply unit is required

The battery backup supply unit keeps your **nbn**™ connection box running during a power failure. However, if such a power failure occurs, the battery will only be able to power the **nbn**™ connection box for approximately five hours for a standard corded phone that doesn't require mains power, and only if you have your phone service connected through the UNI-V port on the **nbn**™ connection box.

It can also power your internet service, but only on the **nbn**™ connection box itself – any other device connected to the **nbn**™ connection box (such as a Wi-Fi router) will need its own battery backup to keep working during a power outage.

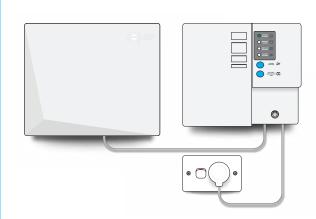
However, if you choose not to elect battery backup you will not be able to make voice calls (including emergency 000 calls) using your landline phone or use the internet during a power outage.

If you're going to have a priority assistance service on your phone line (due to an ongoing medical condition), it will be mandatory to have the battery backup unit installed.

If you're not currently planning to have a fixed-line phone, you may not feel there are enough benefits to having the battery backup equipment installed in your home at this stage.

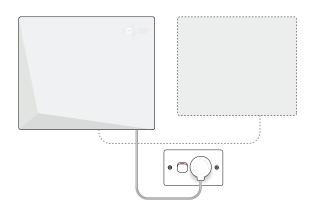
Here are some factors to consider which may help you make a decision:

nbn™ supplied equipment with battery backup



- The battery backup will only power devices that do not require mains power (for example, a standard analogue corded phone connected to an activated UNI-V port on the nbn™ connection box).
- The Power Supply with Battery Backup unit will run for a limited period of approximately 5 hours including the extra manually activated emergency battery reserve time.
- Smoke alarm style alarms will sound when the battery is wearing out and needs to be replaced.
 Discuss with your service provider whether they will supply replacement batteries or whether you should buy them.

nbn™ supplied equipment without battery backup



- Not available if you are a priority assistance customer.
- Smaller, neater equipment installation on your wall.
- No battery alarms or replacement battery costs.
- Your landline telephone and internet services will not work during a power outage.
- You will need alternative means of making an emergency call during a power outage (e.g. a mobile phone).
- If you need the battery backup service down the track you can have it installed, currently free of charge.
- Fewer batteries produced means less waste in the environment.

Your service provider will run through the full decision-making process with you, and record your consent for your decision.



Step 3: Connecting your services to the **nbn**™ network

Even before you move in, you can begin contacting your preferred service provider to compare packages and establish your service requirements.

For a full list of the service providers that can deliver services over the **nbn**™ network visit: **nbn.com.au/serviceproviders**

If your address has not yet been registered with your local government authority, you may need to provide your Lot and DP number to your Service Provider when you order your services. (A Deposited Plan (DP) is the plan number given to a subdivision by state or local government.)

To find out an estimated date when the **nbn**™ network will be switched on in your area, call **1800 687 626**.

It's important to note that **nbn** is a wholesale network provider, which means **nbn** is responsible for building, operating and maintaining the **nbn**™ network - the infrastructure over which telecommunication services can be delivered.

Services to your home, such as landline phone and broadband will be provided by retail service providers, not by **nbn** directly.

You can contact your preferred service provider now to pre-order services over the ${\bf nbn}^{\rm m}$ network.

Connecting to the **nbn**[™] network is as simple as...

Explore

Contact your preferred telephone or internet service provider to find out about services over the nbn[™] network. These can be found at: nbn.com.au/serviceproviders

Select

Compare the packages available and select the right option for you.

Connect

Your service provider will co-ordinate a time for the nbn™ supplied equipment to be installed (if not done already) and your service activated.

For more information

1800 687 626 | **nbn.com.au** | **info@nbn.com.au** July 2015





Key information for builders and cablers



Supply internal and external conduit paths:

- Use rigid white nominal P20 telecommunications conduits (23mm Internal Diameter) in the trench (connecting to the service drop conduit) and within the house. Glue all joints using solvent cement
- Ensure the conduits run as straight as possible
- · Install drawstrings in both conduits
- Fix all conduits securely using conduit saddles or similar
- Provide a power point (GPO)
 within 1500mm of the nbn™ connection
 box location
- Each bend radius of the street conduit must be no less than 300mm
- Each bend radius of the internal conduit must be no less than 100mm
- Use no more than 3 x 90° (max) bends between draw points

Minimum **nbn**[™] utility box separations:

Minimum 250mm from services including:

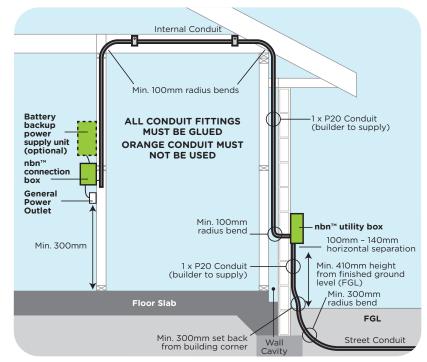
- Electricity, gas* or water meter enclosures
- Water taps or downpipes

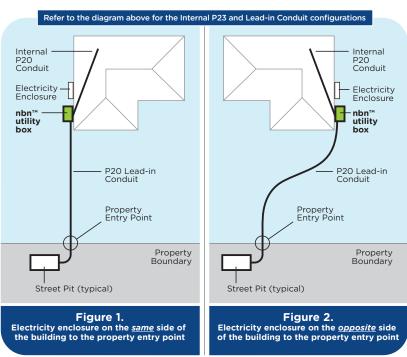
Minimum 1.5m side clearance from gas cylinders*

*Check with your local Authorities for their separations

nbn to supply:

- The P20 service drop conduit from pit to 1 meter inside the property
- The service drop cable to the **nbn**[™] utility box location
- The **nbn**™ utility box
- The internal fibre optic cable from the nbn" utility box to the nbn" connection box
- The nbn[™] connection box
- nbn[™] connection box with battery backup power supply unit (if required during pre-installation)
- · All the fibre optic cables

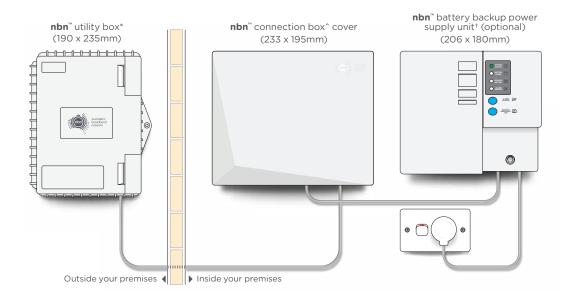






If the NTD is to be enclosed, then ventilation is required for safety reasons. Refer to nbn™ Residential Preparation and Installation Guide: SDUs and MDUs for specifications.

nbn™ supplied equipment installed within the home - wall space reservations



Layout example only.
For other configurations refer to the nbn™
Residential Preparation and Installation Guide:
SDUs and MDUs.

- † For indoor installation only. nbn" supplied equipment should not be installed in prohibited locations, such as bathrooms, laundry etc. as per nbn-NO-GDE-0011 Guides
- † Builders should always provision space and environment for PS/B. It may be pre-installed or requested by the end user during the life of the building.

*Also known as Premises Connection Device ^Also known as Network Termination Device

Preparing new developments for the nbn™ network

It's important that builders and cablers talk to new homeowners about the telecommunications services they may want to access in their homes and provide guidance on where **nbn**[™] supplied equipment, phone and data outlets should be located.

Both fixed line internet and telephone services will be delivered over the **nbn**™ network. **nbn**™ supplied equipment should be located in a safe location, where it is convenient to connect the telephone as well as computers and internet TV.

It's important to remember that if customers want to utilise applications like IPTV via Smart TVs in their living room and telework via HD video conferencing in their office they should consider fixed cabling in the home to connect these devices.

Requesting equipment pre-installation

To enable a smooth and efficient connection to the **nbn**[™] network, builders/developers may request a pre-installation of the supplied equipment supporting **nbn**[™] network on behalf of all owners/occupiers of the premises.

Pre-installation of the **nbn**™ network supplied equipment should be arranged to take place at least 20 days ahead of the estimated home completion date.

To request a pre-installation of **nbn**™ supplied equipment, visit: **nbn.com.au/preinstallrequest**

The following information will be required when submitting a request:

- Confirmation that you have authority of all owners and occupiers to make this request
- Confirmation that you have the agreement of all owners and occupiers to waive their right to be given notice by the nbn™ of the pre-installation under Schedule 3 of the Telecommunications Act 1997

- Premises address or addresses
- Developer estate name and stage number
- Confirmation that power is available
- Date by which the premises will be at secure 'lock up' stage
- Estimated completion or handover date
- An onsite contact and confirmation that you have their permission to submit their contact details
- Confirmation that an Internal and Lead-in Conduit has been installed in accordance with nbn™ guidelines
- Confirmation whether Power Supply with Battery Backup will or will not be required
- Preferred installation date

For more information

1800 687 626 newdevelopments@nbn.cc

newdevelopments@nbn.com.au nbn.com.au/newdevelopments

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