

# HOME WIRING ESSENTIALS



## QUICK GUIDE TO SMART WIRING™

2016 EDITION



International Copper  
Association Australia  
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# QUICK GUIDE TO SMART WIRING™

**The following 5 steps will help you understand what sort of technology you may want in your home and give you an idea of the basic cabling and wiring you need to get it.**

You don't need to have all the high-tech options that are possible right now, of course. But putting in the right cabling and outlets when building or renovating means the house is set up for whatever comes along.

Better still, Smart Wiring is National Broadband Network ready and that means your home can easily handle everything fibre has to offer.

## OUR FIVE STEPS ARE:

- Step 1** What Services are Possible & What Cabling is Needed
- Step 2** Select the Services You Want
- Step 3** Mark Out Your House Plans
- Step 4** Review Your Plans
- Step 5** Issue Documents to Get a Quote

***Note:** You, as the home owner, need not be technical - you simply need to know which services you want to have today and in the future and use this guide to get the right cabling in place.*



# STEP 1

## WHAT SERVICES ARE POSSIBLE & WHAT CABLING IS NEEDED?









SYMBOL	SERVICE REQUIRED	SERVICE PLATFORM	MINIMUM REQUIREMENTS
	Communications	Cabling for telephone and internet services in every living area, and a Wireless Access Point.	A minimum of two outlets and associated cabling must be installed in each living area to support telephone and internet services plus one outlet located for the installation of a Wireless Access Point.
	Entertainment	Cabling for free to air and pay TV services in every living area.	A minimum of two outlets and associated cabling must be installed per living area for television (Free to Air and Pay TV).
	Energy management	Cabling for the control of the hot water system, air conditioning and pool pump.	A minimum of one outlet and associated cabling must be installed next to the hot water system, air conditioning units, pool pump and the electricity meter.
	Security & Safety	Cabling for a back to base security system to be installed. It also has smoke detectors installed and functioning and capability to install a CCTV camera in the front door area.	Sufficient movement sensors to detect an intrusion into the home, plus a code pad at the front door. Smoke detectors installed and functioning.
	Digital Home Health	Cabling for medical devices to be connected to the internet in addition to meeting the requirements for communications and security services detailed above.	Data outlets and associated cabling must be installed to allow for the installation of a Wireless Access Point to be configured at a later stage and a power point, if not already installed under communications.
	Age & Assisted Living	Cabling to provide intercom to the front door, assistance/emergency call buttons to be installed and all cabling outlets are located in easily accessible location.	Intercom connection points and associated cabling must be installed from the front door to the main living areas and main rooms. Assistance call button connection points must be installed in bathrooms and main living areas. Power points and light switches installed at a height easily accessible to people with physical disabilities.
	Intelligent Lighting & Power	Lights and power points are able to be managed.	A minimum of one light fitting and one power point is wired to allow for the connection to a management system in each living area.
	Electric Vehicle (EV) Charging	Cabling for charging of an Electric Vehicle (EV)	A minimum of one 32 Amp circuit/outlet with one RJ45 outlet and associated cabling must be installed in the main car-parking area at a location away from pedestrian thoroughfares

Table 1 - Definition of Service and minimum requirements

## MINIMUM REQUIREMENTS

The above chart shows the **minimum cabling requirements** for a consumer to ascertain if their home has the technology infrastructure in place and meets the requirements of the Code of Practice for Home Wiring.

Living area refers to dining room, living room, family room, bedroom, kitchen, study, theatre room, rumpus room, spare room, workshop etc. All cabling provided under the specification will meet the minimum requirements as specified in the Code of Practice for Home Wiring and be installed in accordance with this guide.

The Code of Practice for Home Wiring and the Installer's Handbook for Home Wiring comply with all relevant Australian Standards and have been developed by the industry to set a minimum cabling platform that will deliver the potential of the many technologies available today.



# STEP 2

## SELECTING WHAT SERVICES YOU WANT



SERVICE NAME	TO BE PROVIDED	PERSONAL NOTES:
 Communications	<input checked="" type="checkbox"/>	internet, phone line
 Entertainment	<input checked="" type="checkbox"/>	foxtel outlet, hifi
 Energy management	<input checked="" type="checkbox"/>	Pool timer, Hot water system
 Security & Safety	<input checked="" type="checkbox"/>	Garage Security Cam
 Digital Home Health	<input type="checkbox"/>	
 Age & Assisted Living	<input type="checkbox"/>	
 Intelligent Lighting & Power	<input type="checkbox"/>	
 Electric Vehicle (EV) Charging	<input type="checkbox"/>	

Start of Quote Request Form:  
Selecting which services are required  
- See page 9 of this booklet for full form and details.

# STEP 3

## MARK OUT YOUR HOUSE PLANS

All you need to do is mark where you want the communications, entertainment and power points and light fittings and indicate where the main appliances are. Your installer will do the rest for you.

### SAMPLE MARKED HOUSE PLAN:

This sample below shows the communications, entertainment and main appliances locations.

SERVICE REQUIRED	SYMBOL
<b>1. Communications</b> (Where you want your Communication Outlets)	COM
<b>2. Entertainment</b> (Where you want your Entertainment Outlets)	ENT
<b>3. Energy Management</b> (Main appliances - if not already marked)	HWS AIR PO
<b>4. Power &amp; Lighting</b> (Power points and light fittings and switches - typically done by the architect or builder)	PP LF LS

Table 2 - Symbols to use on the plans

If you require Security & Safety, Digital Home Health, Age & Assisted Living, Intelligent Lighting & Power and Electric Vehicle Charging your installer will do this in accordance with the Code of Practice for Home Wiring and Installer Handbook for Home Wiring which are available for you to download from [www.smartwiredhouse.com.au/trade](http://www.smartwiredhouse.com.au/trade)

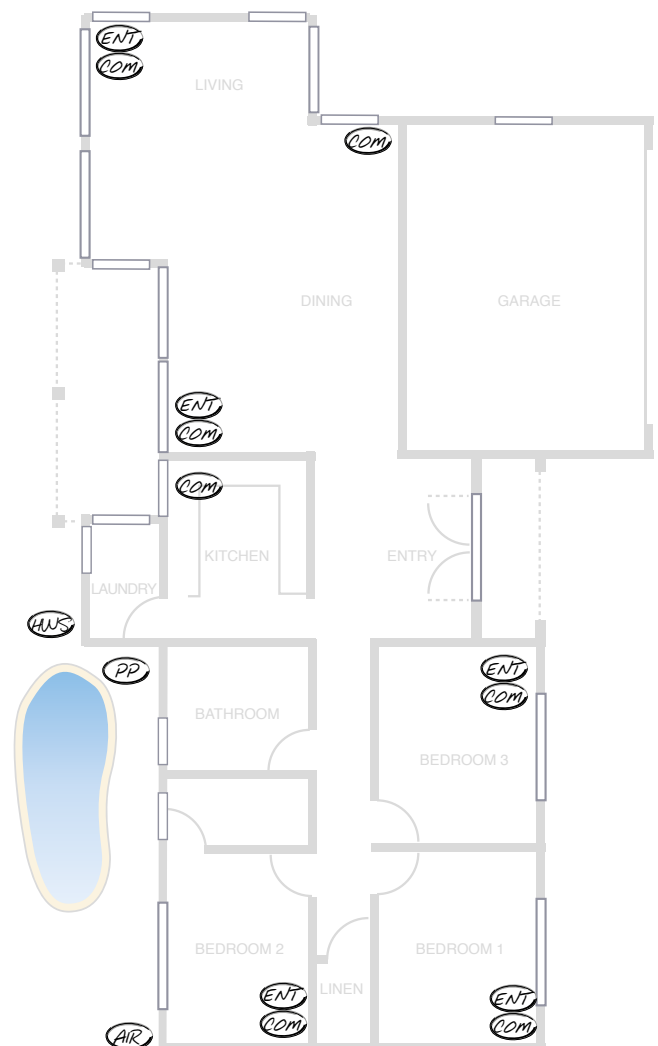


Figure 1 - Sample marked up house plans

# STEP 4

**REVIEW STEP 2 AND 3 AND MAKE  
SURE IT ALLOWS FOR YOUR NEEDS**

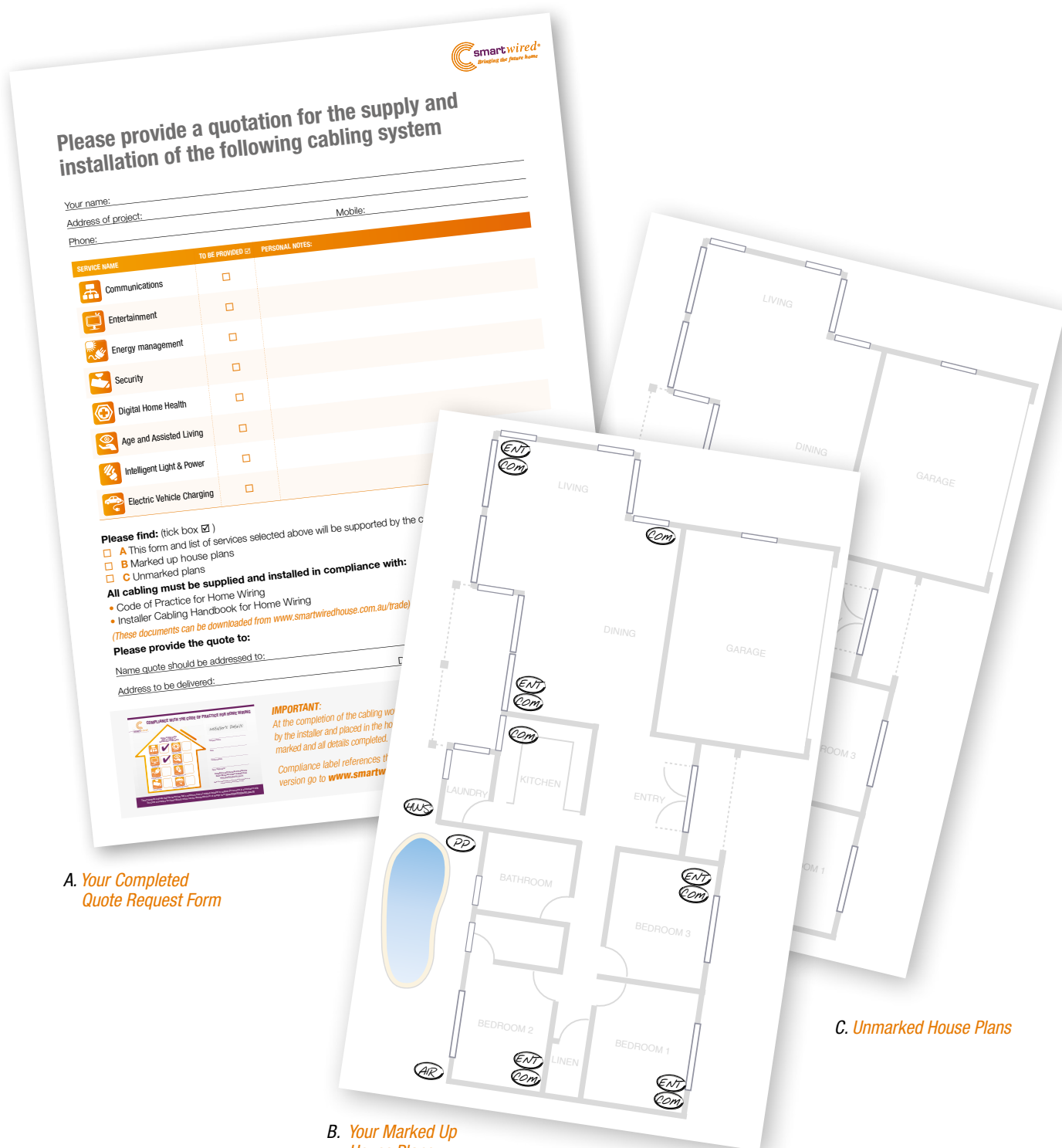




# STEP 5

## ISSUE DOCUMENTS TO GET A QUOTE

Preparing the documentation is easy. Simply print out the Quote Request form on the next page, fill out your personal details and your list of required services. Attach your marked up house plans and a set of unmarked house plans and give to your builder to obtain a quote.



A. Your Completed  
Quote Request Form

B. Your Marked Up  
House Plans

C. Unmarked House Plans











# PLEASE PROVIDE A QUOTATION FOR THE SUPPLY AND INSTALLATION OF THE FOLLOWING CABLING SYSTEM

Your name: \_\_\_\_\_

Address of project: \_\_\_\_\_

Phone: \_\_\_\_\_ Mobile: \_\_\_\_\_

SERVICE NAME	TO BE PROVIDED <input checked="" type="checkbox"/>	PERSONAL NOTES:
 Communications	<input type="checkbox"/>	
 Entertainment	<input type="checkbox"/>	
 Energy Management	<input type="checkbox"/>	
 Security & Safety	<input type="checkbox"/>	
 Digital Home Health	<input type="checkbox"/>	
 Age & Assisted Living	<input type="checkbox"/>	
 Intelligent Lighting & Power	<input type="checkbox"/>	
 Electric Vehicle Charging	<input type="checkbox"/>	

**Please find:** (tick box ☒)

- ☐ **A** This form and list of services selected above which need to be supported by the cabling being specified.
- ☐ **B** Marked up house plans
- ☐ **C** Unmarked plans

**All cabling must be supplied and installed in compliance with:**

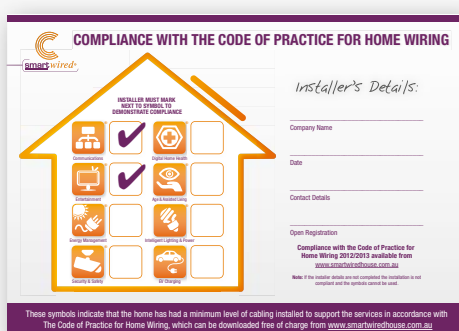
- Code of Practice for Home Wiring
- Installer Cabling Handbook for Home Wiring

*(These documents can be downloaded from [www.smartwiredhouse.com.au/trade](http://www.smartwiredhouse.com.au/trade))*

**Please provide the quote to:**

Name quote should be addressed to: \_\_\_\_\_

Address to be delivered: \_\_\_\_\_ Date when required: \_\_\_\_/\_\_\_\_/\_\_\_\_



**COMPLIANCE WITH THE CODE OF PRACTICE FOR HOME WIRING**

INSTALLER MUST HAVE  
NEXT TO SYMBOLS TO  
DOWNGRADE COMPLIANCE

Installer's Details:

Company Name \_\_\_\_\_

Date \_\_\_\_\_

Contact Details \_\_\_\_\_

Open Registration \_\_\_\_\_

Compliance with the Code of Practice for  
Home Wiring 2012 (2012) available from  
[www.smartwiredhouse.com.au](http://www.smartwiredhouse.com.au)

Note: If the installer does not complete the compliance to not  
complete and the symbols cannot be used.

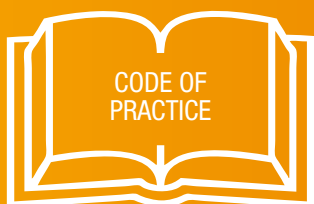
These symbols indicate that the home has had a minimum level of cabling installed to support the services in accordance with  
The Code of Practice for Home Wiring, which can be downloaded free of charge from [www.smartwiredhouse.com.au](http://www.smartwiredhouse.com.au)

## IMPORTANT:

*At the completion of the cabling work the compliance label should be completed by the installer and placed in the home distributor with the applicable services marked and all details completed.*

*Compliance label references the Code of Practice version. For the latest version go to [www.smartwiredhouse.com.au](http://www.smartwiredhouse.com.au)*

## HOME WIRING ESSENTIALS COMPRISES OF THREE DOCUMENTS



This document sets out the building cabling platform standards to be complied with.



This document is designed for the consumer to easily communicate to the installer what services they want without the need to have detailed knowledge of each technology area.



This document provides details to the installer of the cabling required to meet the consumer expectations and comply with the standards and the Code of Practice for Home Wiring.

Your installer can download the documents from the Australian Registered Cabler's website by following this link: <http://registeredcables.com.au/industry/smart-wired/>

## CONTRIBUTORS

The handbook was developed with the support of the following organisations:



## NOTES/ HOUSE PLAN





This document lays out the minimum levels of cabling for your home to meet the Smart Wiring™ standard. It prepares your house for Communications, Entertainment, Energy Management, Security, Digital Home Health, Age & Assisted Living and Intelligent Lighting & Power. If you want to go beyond the minimum you can find an Accredited Smart Wired™ Designer by going to [www.smartwiredhouse.com.au](http://www.smartwiredhouse.com.au).

**For further information email us at [ICA.Australia@copperalliance.asia](mailto:ICA.Australia@copperalliance.asia) or call us direct on 1800 075 060.**



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