

For all new Fibre Optic Lots Stages 41B to 80

Congratulations on the approval of plans for your new home at Sanctuary Lakes Resort. Security is a key component of your lifestyle here at Sanctuary Lakes and as such we require, under Body Corporate Rule 3.6.4, that all homes install a security system that conforms to our minimum standards and is monitored through our Alarm Monitoring Station.

At Sanctuary Lakes Resort, in the gated stages and in Stages 41B through to stage 80, our commitment is to be at the forefront of technology and as such we provide advanced Fibre Optic communication infrastructure in addition to, or as a replacement for, Telstra's traditional copper network. Because of the uncertainty created by the current status of the National Broadband Network rollout it is essential that the wiring requirements for the Fibre Optic network must be implemented at construction stage, otherwise the resident may not have fast internet services available.

These specifications are of utmost importance – and are not normally included in building contracts. Please discuss these matters with your Builder and if you are not completely confident that your Builder is able to complete these tasks, please contact ClubLINKS Telecommunications on 1300 880 809 to arrange for our Infrastructure Manager to speak to you about using one of our preferred Contractors to do the Home Wiring and Conduit Connection work.

If you, or your Builder, choose to wire the home independently, we recommend that you invite ClubLINKS to inspect the home prior to installation of the plasterboard to advise you of any non-compliance issues.

Wiring Your Home

To be able to connect to the Optical Fibre Network, you <u>must</u> wire your home in accordance with the specifications provided. This specification outlines the use of quality materials and also requires all wiring in your home to terminate in a Wired Services Cabinet (WSC) installed in your garage. Your Builder/Telecommunications Contractor <u>must</u> strictly follow the specifications and not substitute "equivalent" materials unless approved in writing by ClubLINKS Telecommunications. The wiring system specified will future-proof your home for some time to come and is likely to add value to your home *Wiring your home correctly during initial construction will save you considerable expense when compared to the cost of rewiring your home once you have moved in.*

Connecting Your Home to the Sanctuary Lakes network

It is also important during construction of your home that your Builder/Telecommunications Contractor provides the appropriate connections between your home and the street. During discussions with your Builder/Telecommunications Contractor you need to check, prior to construction, whether your Lot has both Telstra and the ClubLINKS Optical Fibre Network. Stages built after the negotiation of the National Broadband Network (NBN) do not have dual Pit and Pipe for Telstra Copper services; they only have Fibre Optic connections available. There will be one or two conduits adjacent to the electrical connect point approx 1 meter inside your property line. Your Builder needs to dig a trench to allow a conduit to be installed to connect your home to the Optical Fibre Network pit for your lot and to Telstra, if Telstra have provided a connect point (see diagram on page 4).

Once the Optical Fibre Network is connected to the WSC in your garage, Telephone, Internet and TV services, including FOXTEL are available from the SLR service provider ClubLINKS Telecommunications Pty Ltd. If a Telstra connect point exists for your property and you require a separate telephone service from Telstra, a second conduit should be installed in the trench to connect the Telstra copper service to your home. Your Builder/Telecommunications Contractor is responsible for providing these conduits (see diagram on page 4).

Contact details for any questions regarding this specification or for assistance with quotations: 1300 880 809

For general enquiries select (Option 3) ClubLINKS Telco or for Quotations for Comms & Security Home Wiring (Option 2) ClubLINKS Security.

HOME WIRING GUIDELINES

This document is the technical specification and is to be provided to your Builder/Telecommunications Contractor. If you are unsure of any of the information contained herein, please do not hesitate to contact ClubLINKS Telecommunications to ensure the correct standards are followed; we are more than happy to provide you with the right advice and support so that you get it right the first time.

HOME WIRING – Star wired from WSC

All cabling must use a star wire topology. All cabling is wired separately and is to run from the Wired Services Cabinet (WSC) in the garage to the outlet plate or device as an individual feed without joints, tap offs or splitting.

All telecommunications cabling must be installed by a licensed contractor to TS009, AS3000, relevant Australian Standards and ACIF guidelines otherwise your home may not be compliant.

CONDUIT (Optic Fibre Communications)

One minimum 32mm diameter ACA approved telecommunications conduit must be run from the telecommunications pit in the street to the Wired Service Cabinet located in the garage. If any bends are required in the conduit, they must be 90-degree sweep bends (not elbow bends). The conduit must be a single continuous length with a draw string provided to allow the ClubLINKS contractor to pull the fibre through to your WSC. This is in addition to Telstra's requirements. It is the responsibility of your Builder/Telecommunications Contractor to provide these works.

WIRED SERVICES CABINET

The Wired Services Cabinet (WSC) is the central hub of the telecommunications network of the home. Typically it is a steel cabinet installed in the garage with a lock that houses all of the passive and active equipment. All services enter and exit this cabinet. This allows for total flexibility to the home owner in the future. It must be of a minimum size of 380mm wide (to fit between studs) 600 high and 200mm deep and be fitted with a **Mounting Plate on the back of the cabinet or on the door to allow ClubLINKS to mount the Fibre Optic components.** Cabinets may need to be 1000mm in height to cater for the equipment depending on the level of equipment required in the cabinet by the home owner. Typically the bottom of the cabinet is mounted 1200mm above finished floor level and is recessed into the wall with bottom and top ventilation into the cavity wall.

The cabinet needs to be sufficient in size so that it can cater for any active device such as alarm panels, television amplifiers, data switches and 240V ac power outlets and have enough room for cable looms, IDC blocks, splitters and couplers. The cabinet **must also have access space of 300mm wide by 300mm high by 80mm deep for the ClubLINKS Contractor to install the Fibre Optic components and the communications 32mm conduit must be terminated in the WSC.** Your Builder must allow for this space over and above other equipment that your Builder/Telecommunications Contractor may install into the WSC. The optical receiver can be mounted on the inside of the door of the cabinet if required. If this option is chosen, your Builder/Telecommunications Contractor will need to provide a mounting plate on the door as explained in the previous paragraph.

It is a requirement that your WSC is protected with a movement detector installed in the garage.

NB: Two 10 amp double GPOs are required to power the optical receiver and other equipment in the WSC. These power points should be mounted within the WSC.

It is the responsibility of your Builder/Telecommunications Contractor to provide these works.

TELEPHONE SERVICES

A carrier grade telephony service is delivered via the Optical Fibre Network. (You may also have an option to choose a 2nd copper wire service provided by Telstra, as explained earlier in this document not all lots have Telstra copper services.)

Telephone Service via the Optic Fibre – At pre-plaster stage, your Builder/Telecommunications Contractor must provide **Cat5e** cable from each telephone point in the home to meet (star wired) at the WSC. The telephone lines can be terminated in the WSC on a Krone Block or other Telephone Termination Block such as Hills, Clipsal etc. A telephone socket **(RJ12)** socket must also be installed in the WSC configured in a 'mode 3' format for the security monitoring device.

Optional Telephone Service via Telstra – If Telstra has provided a copper service to your lot your Builder will need to provide a Telstra box located on the outside wall of the home where the underground Telstra telephone conduit joins the home. This should be located 500mm above ground level within 1 metre of the **electrical** meter box on your home (see diagram on page 4). From that point the Telstra line will continue directly to the WSC. This wiring will allow the resident to choose at any time to use either a copper wire service from Telstra or the ClubLINKS Service provided through the Fibre Optic infrastructure.

TELEVISION

RG6 Quad Shield cable star wired (not loop or tap and drop) needs to run from each TV outlet location to the WSC. All terminations are to be F type and all splitters/couplers need to be located within the WSC. The presentation to the optical receiver is via one F type connector to be provided by the Builder or Telecommunications Contractor. The typical RF output level is 75dBµV +/- 2 dB.

A high quality amplifier (capable of handling 60+ channels) is required for any multiple installations (more than four active TV outlets in the home). *Many builders/electricians use Clipsal or Hills splitter/amplifiers. These devices do not have the channel capacity to handle the number of channels that we send via the Fibre network and some domestic units do not cover the frequency range required.* If these units are installed you are likely to be unable to receive some of the channels that are transmitted or will receive channels with very poor picture quality. We recommend the use of a commercial quality amplifier such as the IKUSI TAE-208 with an appropriate 4, 6 or 8 way TAP to ensure that an RF output level of 75dBµV +/- 2 dB is delivered to each socket in your home. The correct installation of your TV requires technicians with the appropriate test equipment to ensure that the required levels are delivered.

To take advantage of any future video on demand services, it is recommended to install a multi-media socket (two RJ45 and two RG6 plugs), with two **Cat5e** cables from each television outlet terminated **RJ45** to the WSC terminated on a high band IDC block and two RG6 Quad Shield star wired to the WSC. This will allow any combination of Digital channels, FOXTEL or video on demand to be delivered to your TV.

ALARM

All cabling must be a minimum 6 core 7/0.20 ACA approved alarm cabling to be installed from WSC to each device. Cabling needs to be provided for any motion detectors, reed switches, duress buttons, smoke detectors, door locks etc. **Cat5** (or alarm panel specific) cable needs to be run for the keypad. The Security Notification Form (Page 8) provides complete details of the security requirements and the alarm models that are approved for installation on the estate.

It is recommended, however not essential, to locate the alarm panel in the WSC. A telephone line with a Mode 3 connection is necessary to connect the alarm panel to the telephone network in the WSC. It is the responsibility of your Builder/Telecommunications Contractor to provide these works.

NB: Your alarm system wherever mounted **must** have a Mode 3 telephone socket mounted alongside for connection to either the Optic Fibre or Telstra telephone network at the WSC and all telephone cabling must be star wired from that outlet plate. If the Telephone Mode 3 socket is not mounted in the WSC a 10 amp GPO is required adjacent to the telephone socket for the alarm.

DATA SERVICES

To allow computers to access the Internet via the ClubLINKS Optical Fibre Network, your Builder/Telecommunications Contractor must provide **Cat5e** or **Cat6** cable from each data point to the WSC. Two methods of cabling are suggested. One method is to locate an Ethernet Router in a study or computer room where tie cables need to be run from the WSC to the study with all outlets star wired from the WSC to the final outlets terminating in a **RJ45** outlet. Or method two is to locate the Ethernet Router in the WSC with star wiring to all outlets terminating in a **RJ45** outlet. In either case all data **Cat5e** or **Cat6** cables must be terminated on a Data Block or patch panel in the WSC with multiple RJ45 Sockets to allow all data points in the house to be active if required.

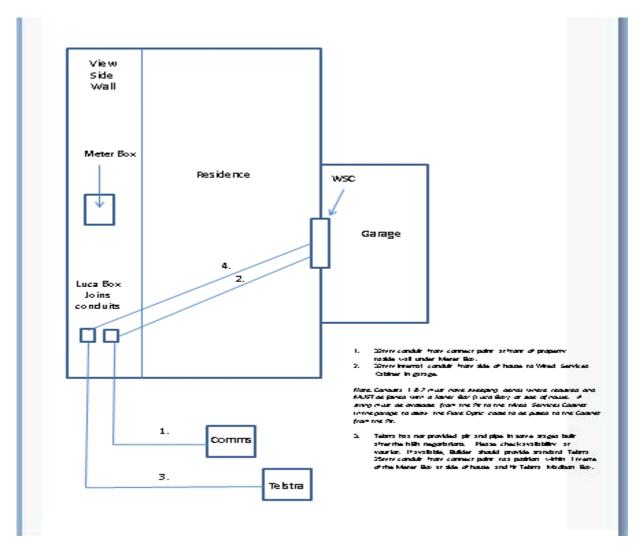
POWER in the WSC: Two 10 amp double GPOs are required to power the optical receiver and other equipment in the WSC.

NOTE: It is your Builder/Telecommunications Contractor's responsibility to provide the space, power and patch leads within the WSC to allow the optical receiver and the telephone adapter to be installed in the WSC by the ClubLINKS Contractor.

- 1. For television terminate with one F type connection (male) ready to connect from the splitter or amp to the optical receiver.
- 2. For Data terminate with one RJ45 plug ready to be connected to the optical receiver.
- 3. For Telephone terminate with one RJ12 plug ready to be connected to either the telephone adapter or the Telstra lead-in
- 4. If a separate gate phone is chosen as an option *in Gated Communities only*: For separate Gate Intercom terminate with one additional RJ12 plug ready to be connected to the optical receiver

COMMUNICATION NETWORK PIT AND PIPE LEAD-IN DIAGRAMS

For Services delivered by the Optic Fibre Infrastructure or the option of Telephone services from Telstra:



Notes to Builders:

- Mandatory The 32mm conduit from the communications pit to the WSC must be one continuous conduit, clean and strung to allow Comverge to pull through the fibre without damage. All TV and data points should run from the WSC to the location in the room chosen by the resident (see note on TV and data connections on previous page).
- 2. Optional if Resident requires both ClubLINKS Telecommunications and Telstra services to be connected to the property. The Telstra lead-in should be directly connected to the WSC as shown, and then any telephone lines within the home should be from the WSC to the alarm panel location (if not in the WSC) and then star wired to the phone outlets within the rooms of the house. This will allow the resident to choose a copper wire telephone service or the ClubLINKS Telecommunications Pty Ltd Carrier Grade Service delivered via the fibre infrastructure.

GATE INTERCOM (Gated Communities only)

If Residents build a home in a Gated Community using the ClubLINKS Telecommunications Telephony Service, every telephone within the home can be used as a Gate Intercom.

For Gated Communities electing to use Telstra rather than the ClubLINKS Telephony Service, an additional handset must be nominated as the Gate Intercom. This telephone handset must terminate at the WSC to allow communication with the gate. A normal analogue handset located wired with **Cat5e** cable is the typical installation. The presentation to the optical receiver in the WSC is by one **RJ45** plug. It is the responsibility of your Builder/Telecommunications Contractor to provide these works.

PROPERTY OWNERS - MUST DO'S FOR COMMUNICATION NEEDS

Please check these requirements before any concrete work is done at the front or side of your house by the Builder

COMMUNICATIONS CONDUIT REQUIREMENTS

Two types of underground conduit are required: Optical Fibre and separate telephone *(if copper services provided by Telstra).* Do not delay, these **must** be organised at the earliest opportunity so that all conduits are in place before any concrete work is done at the front or sides of the property.

Please check at the side of your home to ensure that you have a connection as pictured below. You should have one or both connections depending on the services provided at your lot. Also check the Wired Services Cabinet in your garage.



Example of ClubLINKS Fibre Optic &	Example of ClubLINKS Fibre Optic only.	Example of Wired Services Cabinet with Door
Telstra Conduits at side of house.		Mounting Plate, it should be on a wall in your garage.
Note: Correct space between conduits and	Note: Conduit at wall, Connect Box covering internal	Note: If the TV splitter was located in line with the
Connection Boxes joining conduits at wall	conduit to WSC	Krone Block the Fibre Components could be mounted
		on the backing Plate, or on the Door backing Plate.
		Where the splitter is in this diagram, the Fibre
		components would need to be mounted on the door.

Home Wiring Quotations

If you wish to obtain a competitive quotation for home wiring and Security installation please call: 1300 880 809 select (Option 2) ClubLINKS Security.

If your Builder does not wish to install the conduits, ClubLINKS Security can do this work for you. Please contact ClubLINKS Security on 1300 880 809/9394 9473.

Contact details for any questions or help regarding this specification:

ClubLINKS Telecommunications Pty Ltd:

1300 880 809 (Option 3)

Current costs for all ClubLINKS telephone and data services are shown on the web page http://telecommunications.clublinks.com.au

Communication Network Notification Form

Please complete the Notification Form and submit to Sanctuary Lakes Resort Architectural Review Committee **prior to the commencing construction of your new home**. Please ensure you have read the Communication Network Specifications information sheet prior to completing the Notification Form. Should you require assistance with Communication Network Specifications please do not hesitate to contact ClubLINKS Telecommunications (tel: 1300 880 809).

OWNER DETAILS

Lot Number:									Date:											
Contact Name:																				
Mailing Address:																				
-	Postcode:																			
Phone (AH):	Phone (BUS):																			
Mobile:	Facsimile:																			
Email:																				
Company Installer: Company Name: Contact Name: Mailing Address:																				
-											Post	tcode	:							
Phone (BUS):	Mobile:																			
Facsimile:																				
Email:																				
ACA or equivalent Lice	nce N	lo.							<u>.</u>											J
Electrical Contractor Lie	cence	No.																		

DESCRIPTION	YES	NO
I the owner have read and understood Sanctuary Lakes Resort information sheet Communication Network Specifications.		
I have given my Builder and/or Telecommunications Contractor a copy of the Sanctuary Lakes Resort information sheet Communication Network Specifications to ensure compliance.		
I have discussed with my Builder and/or Telecommunications Contractor my requirements for security and communications within my home.		
I have arranged for the following requirements to be installed in my home as part of the Communication Network.		
CONDUIT (Optic Fibre Communications)		
One continuous length of 32mm Diameter ACA approved conduit installed from the telecommunications pit to the Wired Services Cabinet installed.		
WIRED SERVICES CABINET (WSC)		
Installed minimum 380mm wide, 1,000mm high & 200mm deep WSC in garage (larger if required)		
240Vac power installed inside cabinet.		
TELEPHONE SERVICES	1	1
Telephone installation arranged		
First telephone point installed in WSC		
Install other outlets as required (Mode 3 Alarm Socket to other outlets as specified).		
GATE INTERCOM (Gated Communities ONLY)		
Intercom cabling installed from WSC to required outlets (star wired).		
Cabling is terminated as per Communications Network Specifications information sheet.		
TELEVISION		
Wired in a star configuration back to the WSC, combined and an amplifier installed if required.		
Ensure cabling is terminated as per Communications Network Specifications information sheet.		
ALARM		
Read and understood Security System Requirements information sheet and installed to Sanctuary Lakes Resort's minimum requirements.		
Please note: It is a requirement that your Alarm Cabinet be protected with a movement detector.		
DATA SERVICES		
Cat5e Data cabling installed as required and terminated as per the Communications Network Specifications information sheet.		
POWER	r	·
Two 10 amp double GPOs to power the optical receiver and other equipment in the WSC. GPO adjacent to alarm if installed outside WSC		
NOTE It is your Builder's/Telecommunications Contractor's responsibility to provide the space, power and patch leads to the optical receiver.		1
For television terminate with one F type connection (male) into the optical receiver. For Sanctuary Lakes intercom terminate with one RJ45 plug into the optical receiver.		
For Data terminate with one RJ45 plug into the optical receiver.		
OPTICAL RECEIVER INSTALLATION		
To arrange installation please contact Comverge on 8706 0000.	1	1
I / We the owner(s) of lot number at Sanctuary Lakes Resort agree that we have adhered to the requirements as set out in the Communication Specification information sheet.	on Networ	k
Applicant's Signature: Date:		

OFFICE USE ONLY

Notification Form Received

Forwarded to ClubLINKS

SECURITY NOTIFICATION FORM:

Please complete the Notification Form and submit to Sanctuary Lakes Resort Architectural Review Committee prior to the commencing construction of your new home. Please ensure you have read the Security System information sheet IS-10 prior to completing the Notification Form.

SECTION 1 - OWNER DI Lot Number:	etail	S																		
Contact Name:																				-
Mailing Address:																				_
											Pos	stcode	e:							
Phone (AH):										F	hone	(BUS):							
Mobile:	Facsimile:												-							
Email:																				
]
SECTION 2 -SECURIT	Y INS	STAL	LER	DETA	ILS															
Company Installer:	-																			
Company Name: Contact:																				
Mailing Address:																				
											Pos	stcode): 							
Phone (BUS):											I	Nobile	e:							
Facsimile:																				
Email:																				
ACA or equivalent Licenc	e No.				1			1		l										
Electrical Contractor Lice	nce Ni	umbei	r:																	
Private Security Registrat	tion Nu	umber	S																	
Individual Registration Nu	umber:																			
Business Registration Nu	mber:																			
SECTION 3 - SECURITY	MON	ITORI	ING S	YSTE	M COM	ITRO	L PAI	NEL												
Please indicate with a tick	k in the	e appr	opriat	e box	your c	hosen	secu	rity mo	onitorir	ng syst	tem co	ontrol	panel.							
Bosch Solution 16+ 0r 6	34		Crow	POV	verwa	ve _ 1	6		demo	o Vist	a - 49	2	וח	rect /	larm	Syste	ms –	NX16		

Section 4 - SECURITY MONITORING SYSTEM MINIMUM REQUIREMENTS

Below is a list of the minimum requirements your security system MUST have.

ltem No.	Minimum Requirement	Product Description	Quality Specified
1	1	Approved Control Panel (minimum 16 zones)	
2	1	Customised English Language Keypad	
3	1	16.5 Volt AC Power Supply	
4	1	12 Volt, 7 amp back up battery	
5	1	Weather resistant Plastic Siren Cover	
6	1	Electronic External Siren	
7	1	Blue Strobe Light	
8	1	Siren Tamper Switch	
9	1	Flush mount Internal Piezo Siren	
10	3	Flush Mount Reed Switches (entry door mandatory)	
11	4	Movement Detectors (including one to protect alarm panel)	
12	2	Hardwired Emergency Duress Buttons	
13	2	Photo Electric Smoke Detectors with independent battery backup (1 per level)	
14	1	Compliance Module (independent back up battery for Smoke Detectors which is separate to the back up battery for the alarm system)	

I have provided a copy of floor plans indicating the location of alarm equipment.

Please note: It is a requirement that your alarm panel be protected with a movement detector.

SECTION 5 - ACKNOWLEDGEMENT

I / We the owner(s) of lot number _____ at Sanctuary Lakes Resort agree that the security system that is being installed into our home meets the minimum requirements as set out by Sanctuary Lakes Resort.

Applicant Signature:_

Date:

COMMISSIONING OF ALARM SYSTEM

- Once the security system is installed to Sanctuary Lakes Resort requirements, and a live phone line is connected to your house, the commissioning of the system is then undertaken by a Sanctuary Lakes Resort representative. Please call 8320 5338 to arrange Alarm Commissioning
- The commissioning fee for the standard alarm panel is \$249 incl GST. For alarm panels with more than 16 zones a price will be quoted prior to delivery of the service. The commissioning fee is payable to ClubLINKS Security prior to your commissioning appointment. Please note that the commissioning of the alarm panel cannot take place unless the alarm panel and a telephone line has been installed and is active. Please allow sufficient time when booking your telephone line installation. Should the phone line not be active at the time of commissioning, or the alarm panel is not functioning to local alarm status, additional charges shall apply.

It is the Lot Owner's responsibility (not the Builder's) to contact ClubLINKS Security on 8320 5338 to arrange commissioning.

OFFICE USE ONLY	
Notification Form Received	Forwarded to COMVERGE Connect

Attachment A

BUILDER INFORMATION SHEET

From ClubLINKS Security Pty Ltd

Phone:

1300 880 809 (Option 2)

Dear Builder,

Your client has decided to build a quality residence with you at Sanctuary Lakes Resort and part of the requirements of the Sanctuary Lakes Resort Code (body corporate rules) is the installation of a monitored home security system approved in writing by the Sanctuary Lakes Architectural Review Committee.

This information sheet is designed to assist you and Sanctuary Lakes Resort Services in providing our joint client with an organised and timely home security system installation.

The following points are crucial in allowing us both to provide a high standard of customer service and quality workmanship throughout the building process.

It is a requirement of the Sanctuary Lakes Architectural Review Committee guidelines that you:

1. Provide the Security System Installer with the details of any amendments to the approved construction plans, including smoke detector locations, windows and doors to the residence, including direct consultation at planning stage with SLR Facilities Manager on 9394 9473 should the premises be of full brick, foam or pre-cast concrete construction.

2.Ensure that:

✓ 1 x Single 240 Volt General Purpose Outlet (GPO) is made available for exclusive use by the Security System.

and if you are completing the telephone services:

- ✓ 1 x Telstra Mode 3 connection is made available that is to be the Network Boundary and positioned adjacent to the 240 Volt GPO.
- 3. That the provision of a minimum (2) MONITORED AS3786 Smoke Detectors are required to be installed as part of the approved base system (1 per level in a two storey home),
- 4.Allow the Security System Installer <u>14 Days Notice</u> PRIOR to commencement of plastering so that completion of system pre-wiring can be scheduled.
- 5. Inform the plastering contractors that **all security system cabling is to be left exposed from mounting locations ready for fit out.** Rectification works resulting from failure to comply with the above instructions will incur costs being levied for such works.
- 6.Allow the Security System Installer <u>14 days notice</u> for the final installation and PRIOR to the Certificate of Occupancy inspection so that installation of the Smoke Detectors as part of the Alarm System installation can be scheduled.