



Wiring Requirements & Specifications

Wiring requirements and specifications for Architects, Electricians and Builders to ensure that network reticulation infrastructure (Cabling and conduits) is correctly implemented to accommodate industry standard Network/VOIP services.

In order for the home to stay aesthetically pleasing as designed and to accommodate the Clear Access services such as broadband internet access, VoIP lines and other IP services. Home owners should pay careful attention to the suggested requirements for the home network infrastructure.

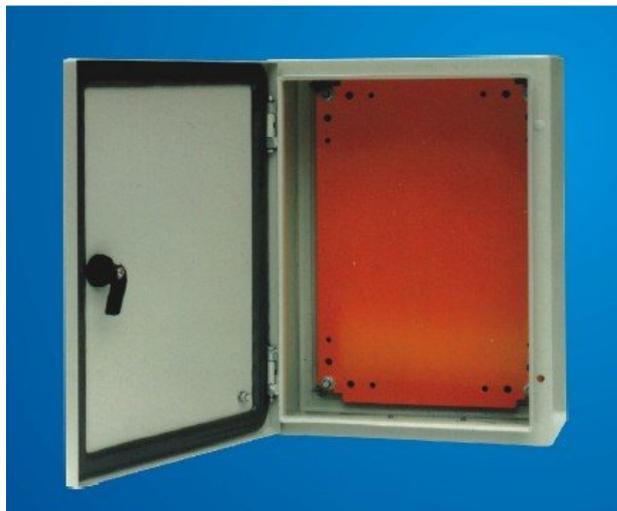
By following these requirements and specifications, you will ensure that your home will be 'connected', giving you access to Internet/VOIP services without the need to surface mount any conduit/trunking.

Technical Requirements

Please read this section carefully and make sure that it is understood by your Architect, Builder, Electrician and Project Manager. Clear Access is available to assist in any queries that might arise.

1. Central Distribution Enclosure

The Central Distribution Enclosure (CDE) including the cover is to be provided by the homeowner. This must be located in an easy accessible location i.e. Garage, study or any unobstructed location. Recommended enclosure size: **800mm x 600mm x 150mm**



A double plug socket (4' x 4') with a power supply of 220V (16 Amp) is required (preferably inside) and should be adequately earthed. CDE would be determined by the amount/type of equipment that is required to satisfy the needs of homeowner.

2. Conduit Layout Specifications

All internal conduits should be at least 25mm, fitted with a draw wire and lead to the CDE. Dedicated conduit per wall box, no daisy chaining. Any bends in the conduit should be '*slow bends*' and 90° bends should be avoided.

Note: all conduit-ends need to be accessible after all fittings and fixtures are installed, particularly raised ceilings, bulkheads and mezzanine levels.

3. External

As per the standard building requirements of the estate, a 32mm (min) conduit with draw wire from the curb to the CDE should be installed. Recommended to install this before paving and landscaping as this sleeve will serve as the fibre entry point to the property, it is of the utmost importance that the following specifications be taken into account with installations:

The conduit/sleeve should be laid in a straight as possible line between the CDE and curb side fibre break out point. It is of vital importance that the bending radius does not exceed 100mm at any point. Ensure that the conduit is sealed at the curb side to prevent any debris or water from entering. A draw wire should also be left in this conduit to accommodate the fibre cable.

4. Internal Wiring

All internal cabling, including IP phones- wireless access- local area network points are to be wired with CAT-5e or CAT-6 cable. Clear Access could quote to install the data cables or you could use your preferred supplier. It is highly recommended that conduits be installed to each room and to all TV points.

Number of network points per allocated wall box are limited: maximum 4 points for a 4'x4' wall box & 2 points for a 2'x4' wall box.



Options for cover plates are up to the client.

5. Infrastructure Layout & Design

With every homeowner having different needs and requirements for connectivity. The Technical Team at Clear Access are available to guide the homeowners and their preferred architect to what is possible with regards to scalable Network Layout/Design. We will assist/advice with the required infrastructure from the initial design and planning stage of your new home up to final 'connection'.

Below is some of the available accessories, Clear Access would advise and assist with required equipment to customize your network.

Available Accessories/Devices:

Cordless IP Phone



Desktop IP Phone



Small Form Factor Wireless Access Point



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