

Welcome to

Whitecode
Consulting

CPD for Electrical Fit Out
Apartments



WHITECODE
CONSULTING

Apartment Fit Out

- ▶ Bringing services in from communal areas
- ▶ Apartment fit out involves taking an empty box and installing all of the services
- ▶ Fit out is split into three stages – first fix, second fix and final fix
- ▶ First fix is undertaken while the walls and ceilings are still open
- ▶ Second fix commences after walls and ceilings have been closed
- ▶ At final fix stage, accessories are fitted following final decorations



← 1st Fix



← 2nd Fix



← Final Fix

First Fix

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- ▶ First fix includes the installation of all wiring, whether it is power, lighting, TV data, etc.
- ▶ At first fix stage, cables are left in the general position where they are required
- ▶ Dry-lining is cut to allow cables to exit
- ▶ Back boxes are installed and cables pulled through
- ▶ Grommets need to be installed where cables pass through metal cut-outs
- ▶ All cables must be installed in safe zones and run vertically
- ▶ All cables must be neatly cleated and tied



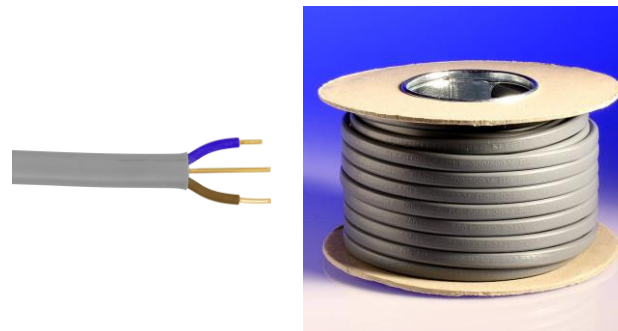
Services Into Apartments (First Fix)

- ▶ As part of the first fix works, the followings services are brought into the apartments from the communal distribution systems:
 - Mains power
 - TV radio feeds
 - BT copper or fibre
 - Hyperoptic (if applicable)
 - Virgin Media (if applicable)

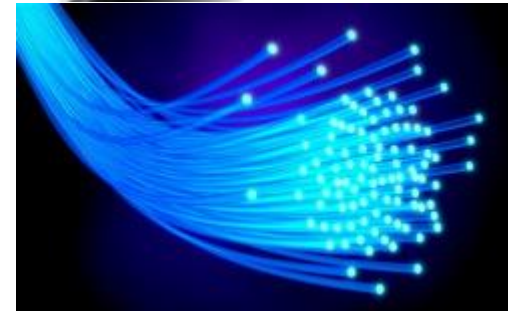
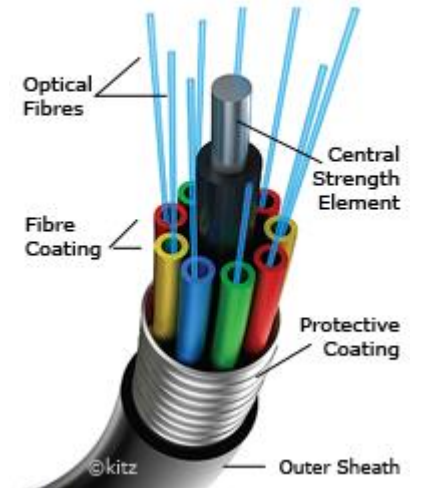
SWA Armoured



Twin & Earth Wiring Cables



Fibre Optic Cable



Services Into Apartments (First Fix) ctd.

► Satellite Cables



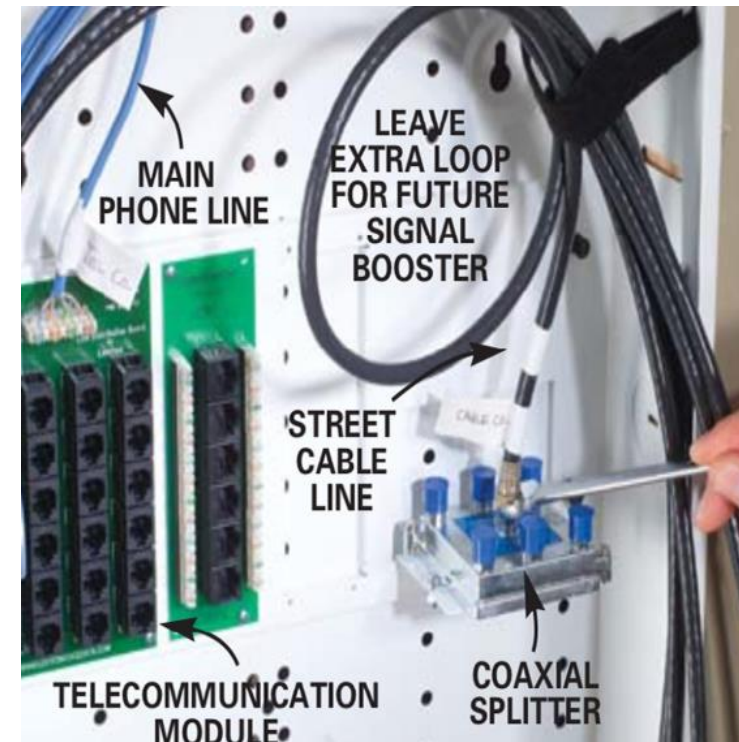
cai[®]
Certified Cable
TYPE 100

► SATV Distribution Amplifiers



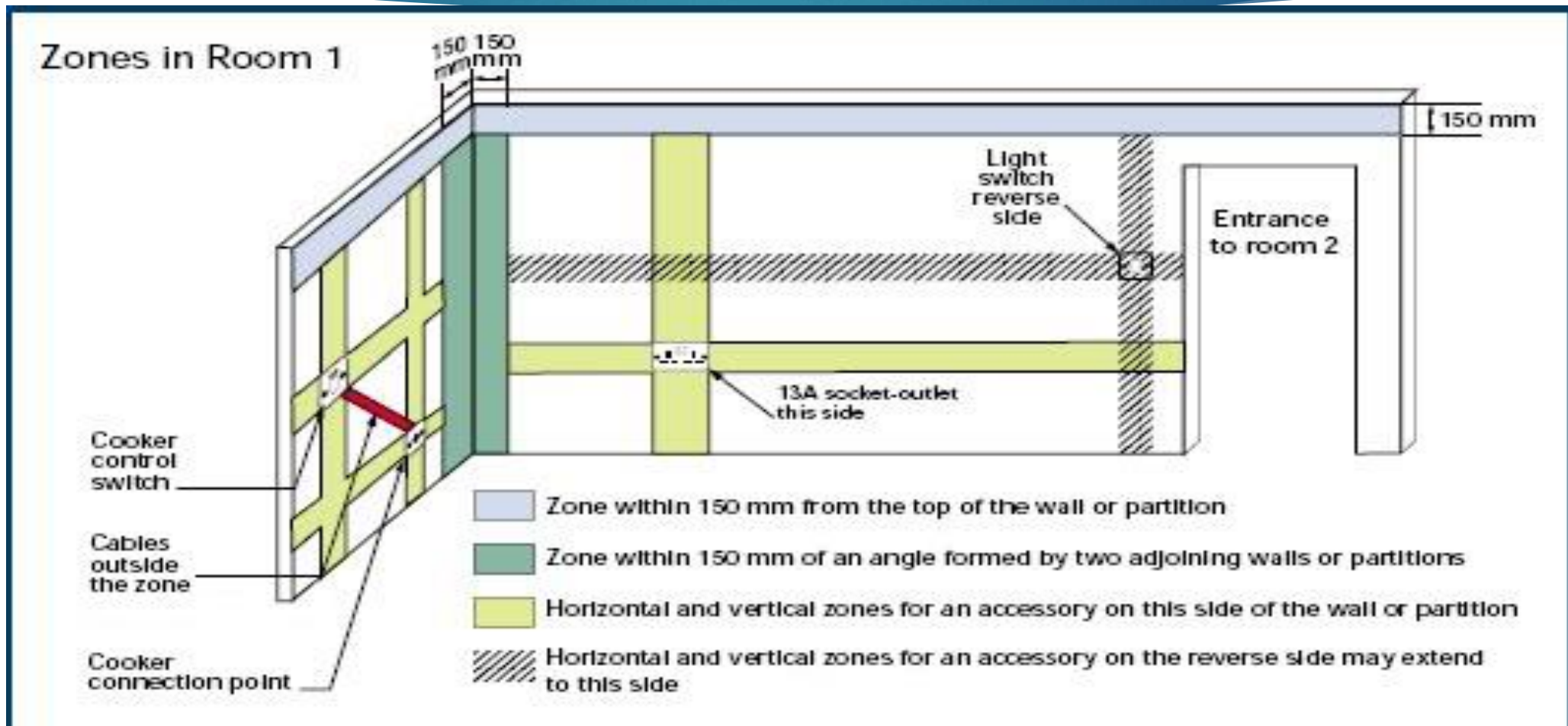
Services Into Apartments (First Fix) ctd.

- ▶ The services on the previous slide will be terminated at second fix stage; cables are only installed as part of first fix



Safe zones

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Second Fix

- ▶ Termination of TV, telecoms, etc.
- ▶ Consumer unit is installed and all cables terminated within it
- ▶ All wiring accessories/light fittings must be level and flush to wall or ceiling
- ▶ After second fix, apartment wiring is inspected and tested; when this is complete, the supply can be energised



Final Fix

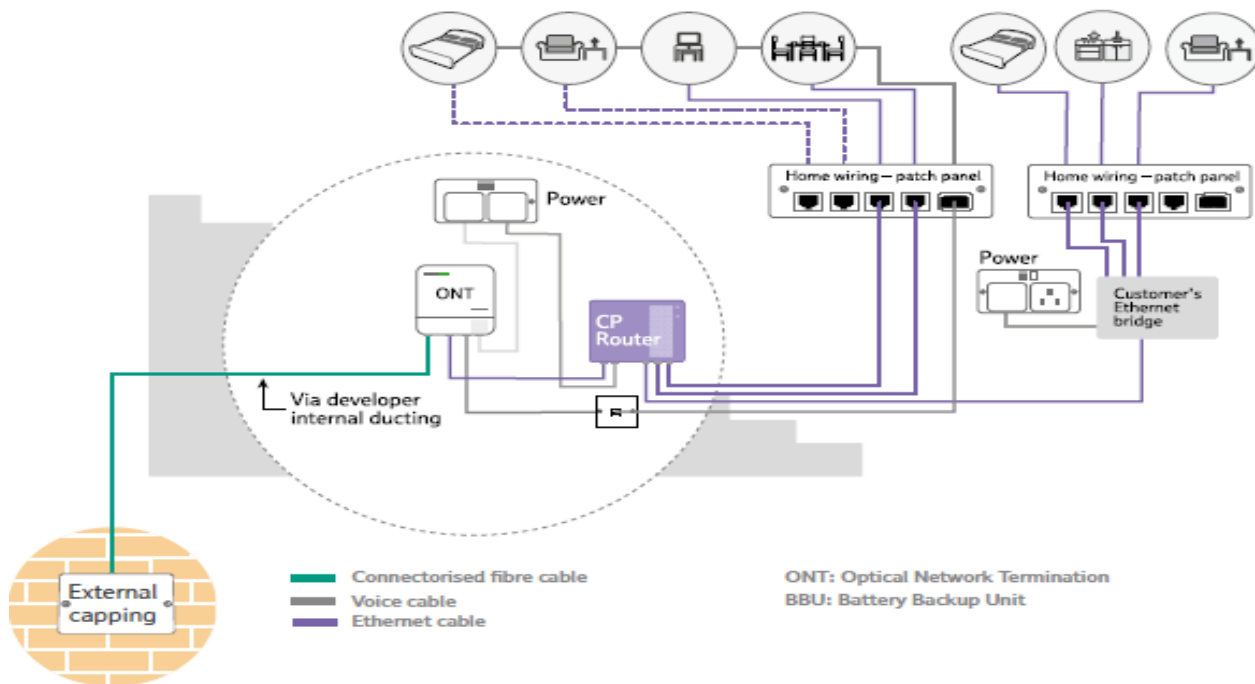
- ▶ Final fix includes installing all lights, sockets, switches, media plates, speakers, data plates and other wiring accessories
- ▶ Connection of kitchen appliances or other hard-wired accessories
- ▶ Lamps installed into light fittings, where necessary



BT ONT (Optical Network Termination) Equipment

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- ▶ BT ONT equipment needs to be fitted in utility cupboards; the space it takes up is large



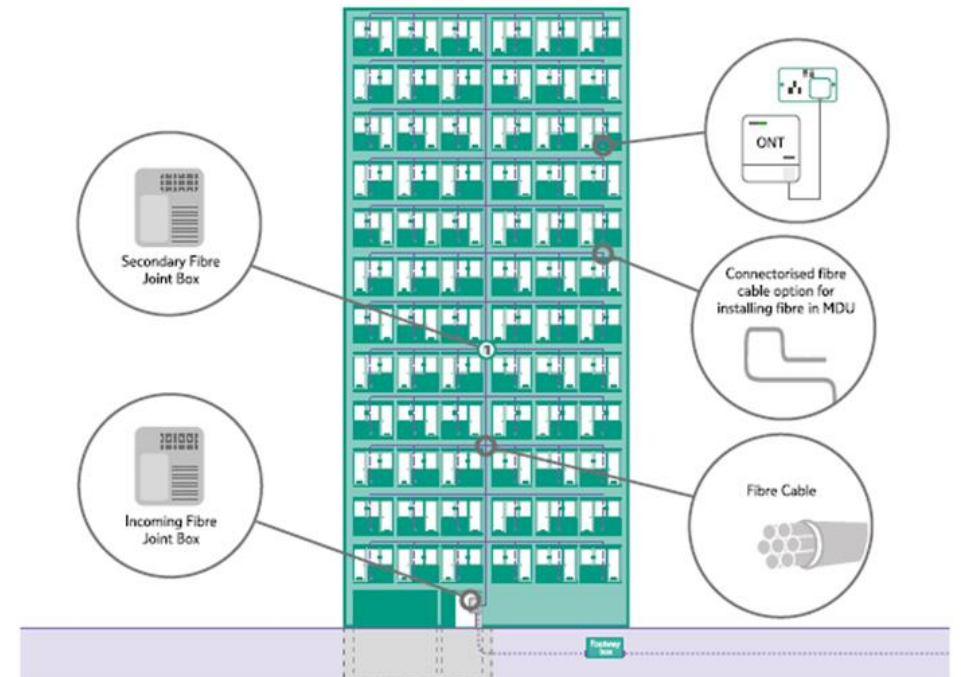
BT ONT (Optical Network Termination) Equipment

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- ▶ BT Fibre extends through the building in pre-terminated cables



Large MDUs (more than 12 units)



For larger MDUs there may be a requirement to install multiple fibre boxes/splitters.

These boxes/splitters will be connected with Duct 54 and fibre cable commonly housed within the riser space.

Developer Checklists

- ▶ Developers should have a series of checklists for apartment first fix, apartment second fix and apartment final fix
- ▶ These checklists are the minimum requirements that need checking and the installation, as a whole, needs to be checked against the design and relevant standards
- ▶ Contractors are to provide their own checklists and ITP's for testing and commissioning

ELECTRICAL – 1ST FIX

Project :		Sheet No.	
Unit No :		Date :	
Subcontractor :		Manager :	

CHECK LIST

No. Item to be Checked	S/C Initial	Date	Developer	Date
1 Check verticality of cables and in correct zones				
2 Installation neat, clipped, tied correctly				
3 Grommets and back boxes installed correctly				
4 All power, light, speaker, switch, controller, media, data positions correct				
5 Floor boxes in correct position				
6 Any damage to other trades work				
7 Fire stopping to back boxes on party walls				
8 Surplus material removed				
9 Unit left clear and tidy				

ELECTRICAL – 2nd FIX

Project :		Sheet No.	
Unit No :		Date :	
Subcontractor :		Manager :	

CHECK LIST

No. Item to be Checked	S/C Initial	Date	Developer	Date
1 Distribution board complete and protected				
2 Net Hub box complete and protected				
3 Manifold controller complete				
4 Trunking complete				
5 All sockets, switches and connection plates complete (not floor or kitchen plates), and level				
6 Multi-media plates complete, level and protected				
7 Ceiling light fittings fitted and in line				
8 Surplus material removed				
9 Unit left clear and tidy				

ELECTRICAL – Final

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Project :		Sheet No.	
Unit No :		Date :	
Subcontractor :		Manager :	

CHECK LIST

No.	Item to be Checked	S/C Initial	Date	Developer	Date
1	Whole installation tested and NICEIC labelled				
2	Video Entry panel installed				
3	Door bell fitted				
4	Fire detectors fitted				
5	Floor and kitchen sockets and plates fitted				
6	Shaver socket fitted				
7	Lamps and light fittings fitted				
8	Speakers fitted				
9	Wardrobe light connection made				
10	All electrical accessories level				
11	Surplus materials removed				
12	Unit left clear and tidy				

Thank you for listening

Any Questions?