



**FIBRE
WHOLESALE**

New Developments Handbook

A technical guide to support
our fibre wholesale network build
on your new development site.



Important Information

- Please note all information in this guide is correct as of October 2025.
- Please refer to the Virgin Media Fibre Wholesale New Development team for information specific to your new development project.
- Please contact us prior to digging to establish where we have existing network. Email civils@virginmedia.ie to contact our Plant Protection Officer.



Click before you dig. Contact: civils@virginmedia.ie

Disclaimer: All information within this guide is supplied for information purposes only. This is a living document and if printed then all information should be treated as subject to change. All diagrams contained in this document are presented as a guide. If you are unsure of any aspect of this document then please refer to your Virgin Media Fibre Wholesale site contact in the first instance for support.

New Developments Fibre Wholesale Handbook

A technical guide to support our fibre wholesale network build on your development site.

We have developed this guide to assist you with the integration of Virgin Media Fibre Wholesale infrastructure into your new development sites. The guide is intended to support you on-site in the deployment of minimum requirements for civils infrastructure and wiring required in each premise. All information contained within this guide is supplied for information purposes only and does not constitute a change in terms of your agreed contract with Virgin Media Fibre Wholesale. This is a living document and if printed all information should be treated as subject to change. If you are unsure of any aspect of this document, then please refer to your Virgin Media New Developments Fibre Wholesale team for assistance.



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A close-up photograph of a hand holding a set of keys. The hand is positioned in the upper right corner, with the thumb and index finger gripping the key ring. The keys are silver and hang down towards the center of the frame. The background is a blue, textured surface, possibly a carpet or rug, which is slightly out of focus. The overall lighting is soft and natural.

WORKING TOGETHER

“

Giving your residents the
very best in entertainment
and online experiences

”

1. Our Commitment to You

We understand that the development of new properties requires a high level of planning, attention to detail, coordination and management. We also know that the installation of high-speed broadband services into new developments is a must for residents. We are keen to work with you so your customers can experience first-class services from Ireland's top retail providers over our fibre wholesale XGSPON fibre network.

Our dedicated New Development Fibre Wholesale Team will be there to support your development every step of the way.

Our team is committed to working with and assisting you as you undertake deployment of our network into your site. Queries can be directed to the New Development team and our contract partners who will be liaising with you throughout this process. This guide is intended to support both planning and delivery functions with the provision of technical information on our network build. This handbook serves as a guideline document only. This guide will not contain any information on residential packages or services available from our retail partners. This information can be obtained directly from their websites.

If you have uncertainties regarding any aspect of this document, please refer to your Virgin Media New Development Fibre Wholesale team for support in the first instance.

2. Virgin Media Fibre Wholesale – Key Changes

As we are now a fibre wholesale network, the main difference from before is that now several retail partner operators provide their services over our Virgin Media Fibre Wholesale fibre XGSPON network.

The Virgin Media Fibre Wholesale New Developments team design, plan and build the network for our fibre wholesale team who liaise directly with our retail partners operators. Currently, the retail partner operators available over our fibre wholesale network include Virgin Media, Sky, Vodafone and Digiweb. It is expected that more retail partner operators will be added to the list above. Any details of new retail partners will be advertised in the media and over our communication channels.

It is these retail partner operators that provide a range of services, choice and packages to your residents. Our main aim is to build the network. This handbook outlines the build process and requirements. We want it to be an easy resource for you to enable the installation of our XGSPON Fibre network into your new development site.

2.1 Impact for Developers & Builders

- The telecom infrastructure and how the network is installed remains the same as before.
- Becoming a fibre wholesale network means increased choice for end users.
- The process around making units live and available for service on our database has changed. A regulation around being a fibre wholesale network means that all retailers must be treated equally. As a result, all retail partners get access to newly added addresses at the same time.
- As the uploading of addresses to our database and the subsequent release to our Fibre Wholesale team for distribution to our retail partner operators takes longer than before, please be aware of the additional time required to cable and connect these homes, release to our retail partners, in readiness for your new residents to order service from one of our retail partners. Please also note that build schedules, Eircode's and occupancy dates are critical to ensure we have service to each home before occupancy.

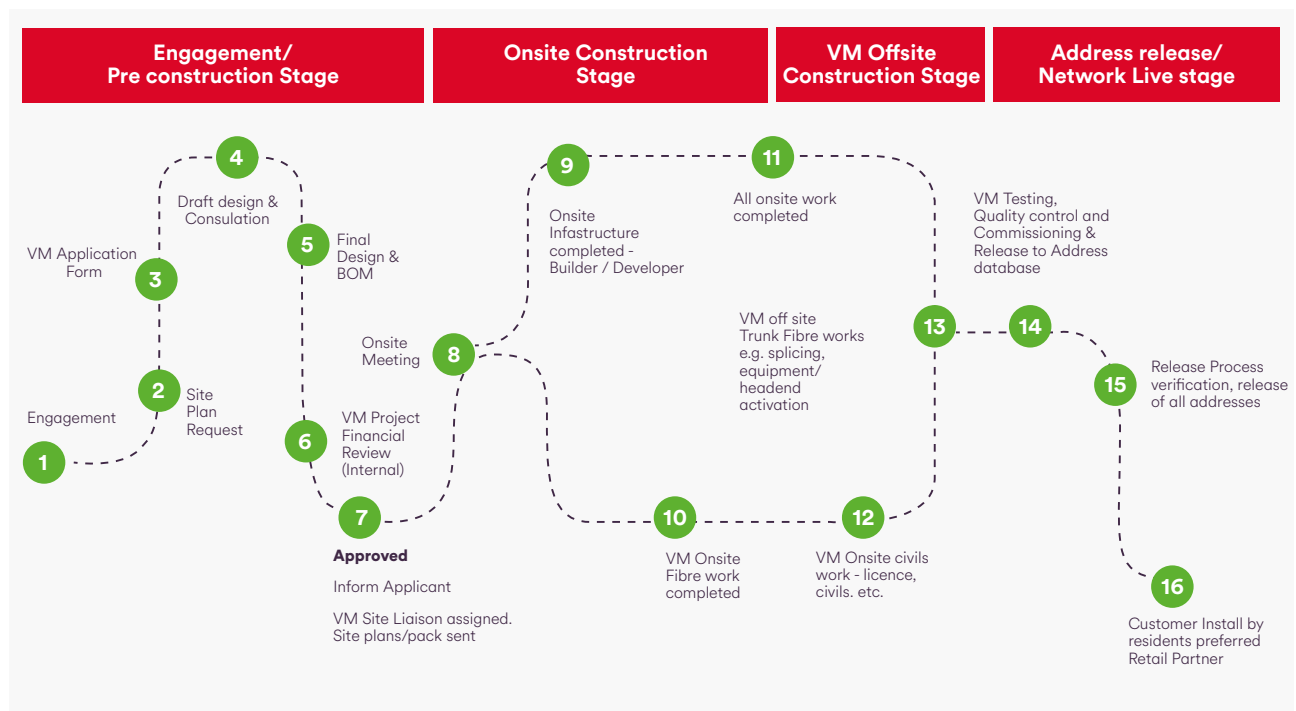
3. Key Abbreviations & Definitions

An explanation of the key abbreviations in this document

- **XGSPON** - 10 Gigabit Symmetrical Passive Optical Network
- **OLT** - Optical Line Terminating Cabinet
- **FTTH** - Fibre to the Home
- **PoP** - Point of Presence (Trunk Fibre Joint / Enclosure)
- **PoC** - Point of Connection (Distribution fibre joint enclosure)
- **POE** - Point of Entry (Internal Splice Enclosure)
- **FWO** - Fibre Wall Outlet
- **ETU** - External Termination Unit – (Demarcation between internal and external network)
- **BOM** - Bill of Materials
- **2W** - 2x 110 mm twin wall green duct
- **1W** - 1x 110 mm twin wall green duct
- **Purple Book** - Guidelines for Managing Openings in Public Road. Guidelines for the opening, backfilling and reinstatement of openings in Public Road. Second Edition (Rev. 1) April 2017. Department of Transport, Tourism and Sport.
- **MDU** - Multi Dwelling Unit
- **SDU** - Single Dwelling Unit

4. Lifecycle of a New Development Project

Although not all new development projects are identical, the diagram below is included to give you an indication of the lifecycle of a typical new development project. It shows the steps required to get a project assigned, designed and ready for service. It has been included to illustrate some of the steps that may not be visible from a Builder/Consultant perspective but is required to get service to your new residents.



GETTING STARTED:

Things we need from you



5. Prior to Starting - What We Need from You

Initially, we need visibility of the plans of the development. We need these in both AutoCAD and pdf. To do so, you can complete our Construction Industry Form on our webpage

[virginmedia.ie/business/construction-industry](https://www.virginmedia.ie/business/construction-industry). You can also send details of your new residential development to **Newbuild@virginmedia.ie**.

When providing information on your new development residential project, please send us the following items:

- Site layout geo referenced in AutoCAD.
- Details of street names, house numbers and Eircode's, when available.
- Phasing information and schedule.
- Site location in pdf format.
- Floor plan in pdf including the number of units per riser per floor (Apartments)
- Details of the developer including contact details.
- Details of the Builder include site manager details.
- Estimate date of when residents are due to occupy first units..

5.1 Virgin Media Fibre Wholesale Application Form

We also need a completed Virgin Media Fibre Wholesale New Development Application Form from you permitting us to provide service to your development. A Virgin Media Fibre Wholesale representative will contact you regarding this form.

Once this permission is received, we can proceed to design your new development and interact with you and your team to create a design specific for your development's plan. Please note that this is critical to enable us to progress the project internally e.g. materials, design etc.

Please note that once we receive this signed application form, we take this as a commitment that you want Virgin Media Fibre Wholesale service on your new development site. Prior to your site starting, we will commit resources to planning and design work. We will also commence off-site work to ensure we have service available when your residents move in. Please bear this in mind if anything changes on-site for you. For example, if the site is delayed, if ownership changes.

If, at this stage, we encounter problems that prevent us from providing service to your new development site, we will let you know as soon as possible. We don't expect this to occur very often, but should it happen, we will highlight this to you straight away.

On the Virgin Media Fibre Wholesale Application form, we request information from you on when first service is required. We understand this date may be an estimate and that it can change several times on-site, however, we use this First Service Required (FSR) date, provided by you to schedule crews and workstreams. Is it important that you include it on your completed application form.

We also ask about other providers on-site. This section of the application form is used in our business case approval process for the delivery of service. In cases where we are the sole provider, it highlights this to the team as a critical case for delivery.

DESIGN:

Planning your Development



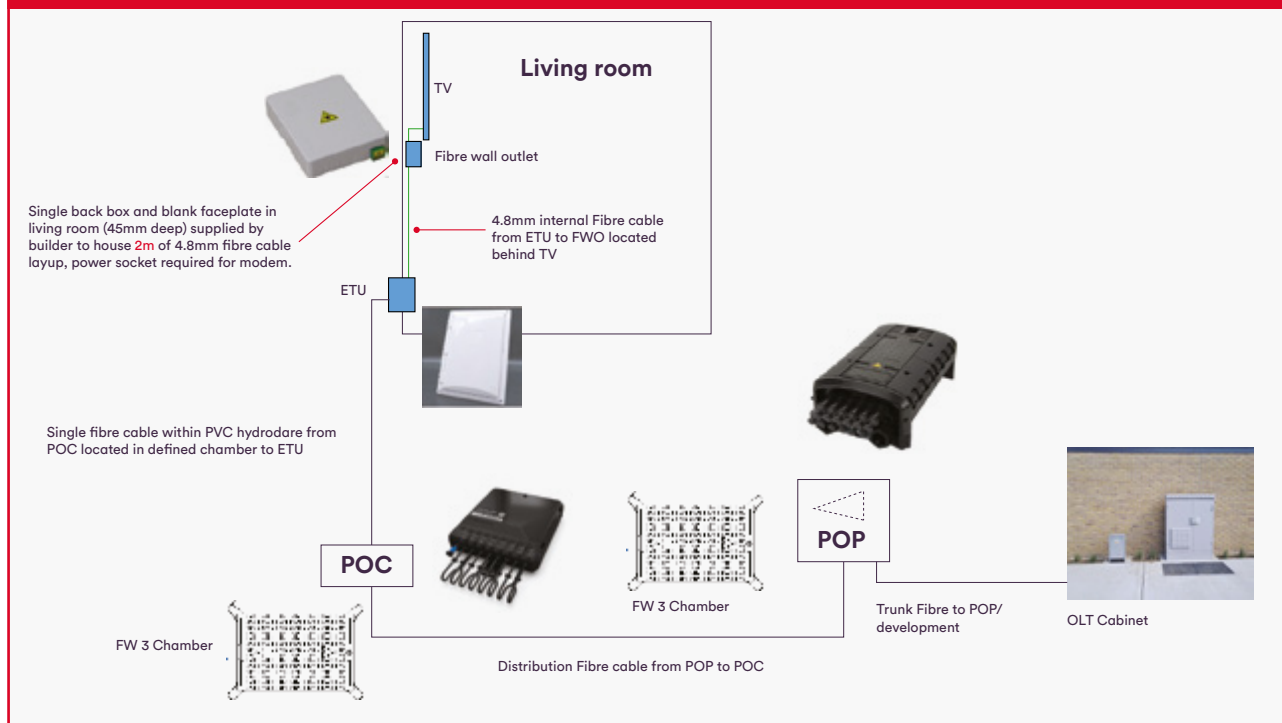
6. Virgin Media Fibre Wholesale Our FTTH Network Architecture

6.1 XGSPON Fibre

Since becoming a fibre wholesale network, Virgin Media Ireland has committed to delivering a full fibre network across Ireland. This involves upgrading our existing network to XGSPON Fibre. For New Development sites, we will continue to install the latest advances in technology and design to ensure your site gets the best service available now and in the future.

6.2 High Level Overview of the XGSPON Network – Single Dwelling Unit

Single Dwelling Unit (SDU) or Duplex In home Network



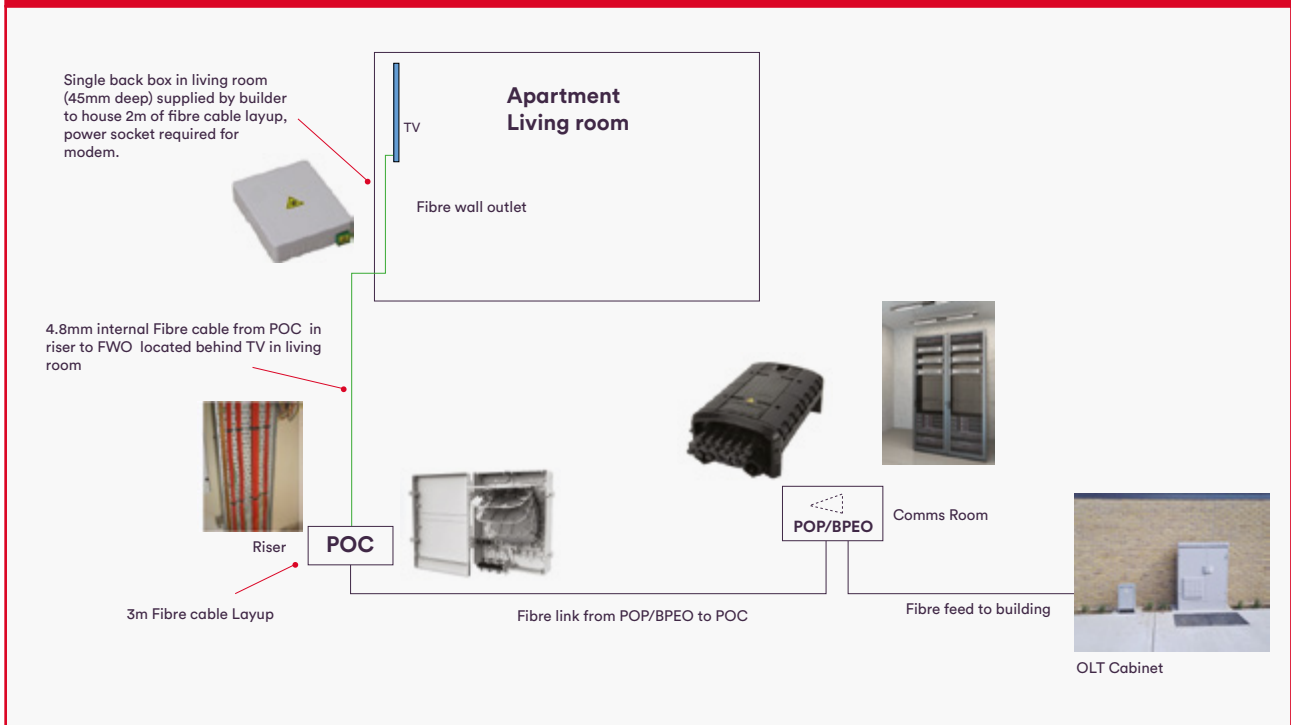
Please note Virgin Media Fibre Wholesale classifies a duplex as a single dwelling unit as it requires its own ETU.

Please note we require the Internal 4.8mm fibre to be installed to the Living Room FWO.

Please note the FWO is the demarcation for the Virgin Media Fibre Wholesale network.

6.3 High Level Overview of XGSPON Network – Multi Dwelling Unit

Multi Dwelling Unit (MDU) In home Network

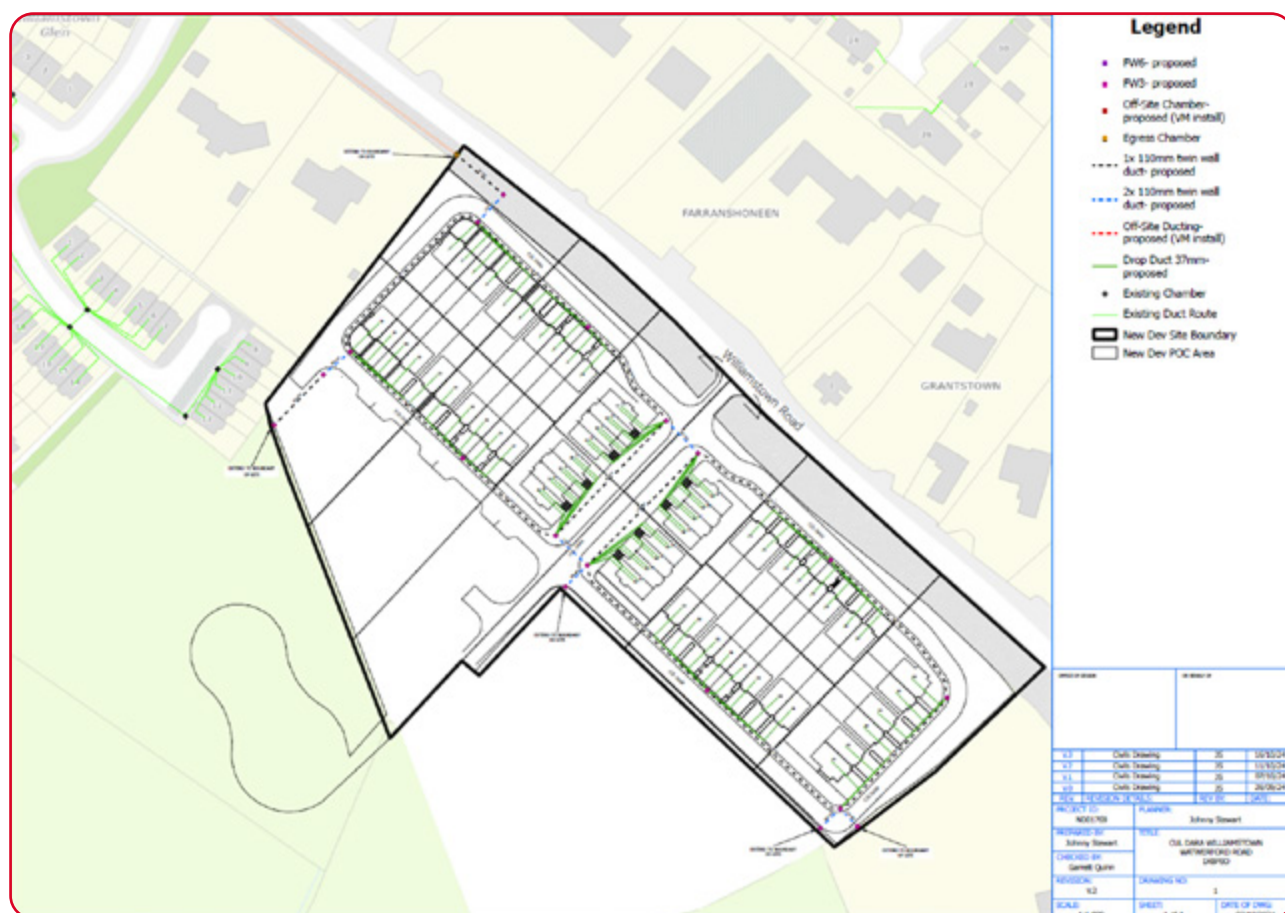


Please note we require the Internal 4.8mm fibre to be installed to the Living Room FWO. Please note the FWO is the demarcation for the Virgin Media Fibre Wholesale network.

6.4 New Developments Site Drawings

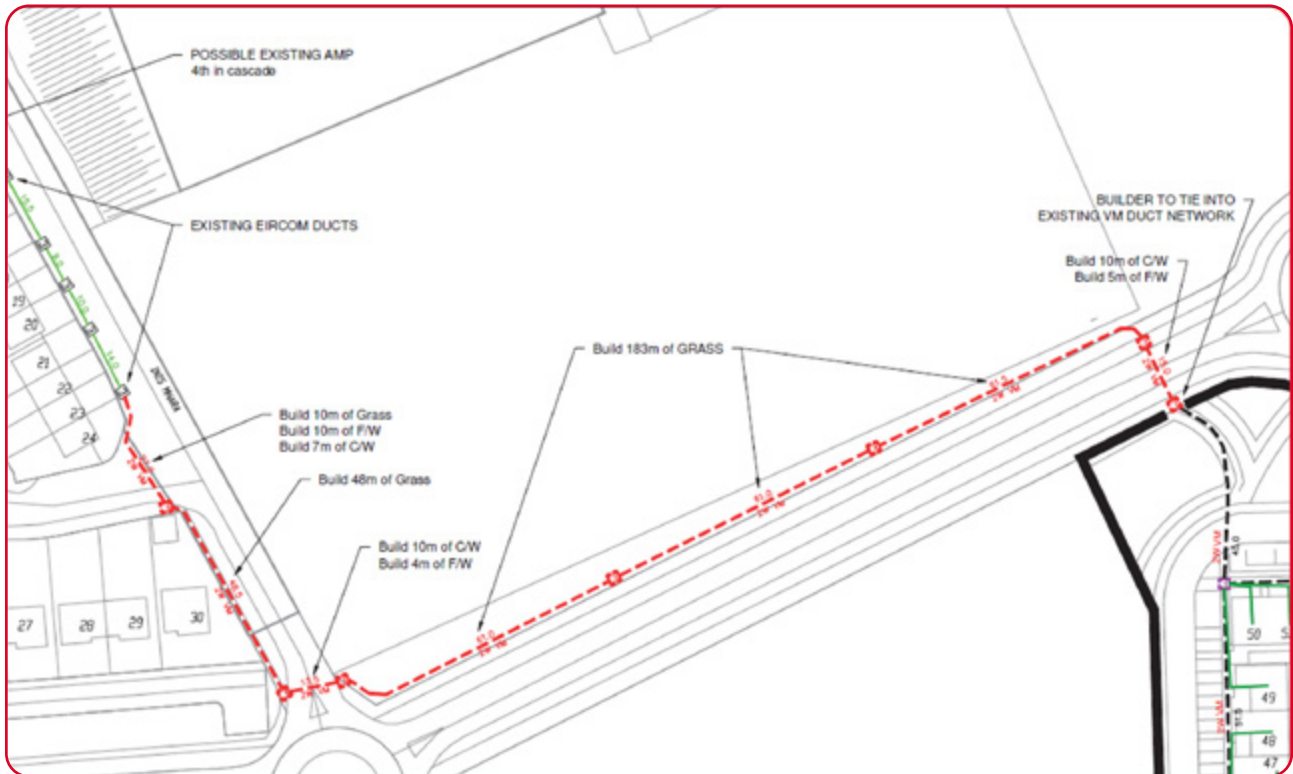
6.4.1 On-Site (Developers) Works

On-Site works to be completed by developer will be highlighted in black to show the variation to Virgin Media Fibre Wholesale works. This includes on-site chamber construction as part of cabinet deployment.



6.4.2 Off-site (Virgin Media Fibre Wholesale) Work

Off-site works to be completed by Virgin Media will be highlighted in red.



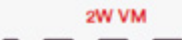
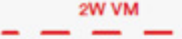
7. Additional Information Required from You

Once we have completed a draft plan for your development, we need to liaise with you about the following items of information:

- Confirmation that the on-site civils plan is acceptable and agreed by both parties to include extent of Developer/Builder civils works.
- Confirmation that the on-site cable plan is acceptable and agreed by both parties.
- Information on approved development name including full details of full postal address including Eircode's. Confirmed details of approved Eircode's is essential for new homeowners to order service from our retail partners.

8. New Development Drawing Symbols

Symbols used on our maps depict the locations of chambers, duct routes etc. These symbols are explained along the side of the map. An example of a typical key is displayed below.

KEY			
	Proposed 110mm Duct		FW6 POC Enclosure
	Proposed 2x110mm Duct		Proposed CW1 Chamber
	Proposed FW3 M/H		PoC Area
	Proposed FW6 M/H		PoC Number
	Proposed 2x110mm Duct (Installed by VM)		#Number of Homes in PoC Area
	Proposed FW3 M/H (Installed by VM)		Hydrodare (18/14mm xxxx)
	BPEO Enclosure		KTA Code

9. Materials Provided by Virgin Media Fibre Wholesale

The list below outlines some of the materials that we free issue to your site and may be applicable for your new development project.

Manufacturing Product Description
110mm green twin wall duct
37mm hydrodare duct
Chamber frames and covers
External Terminating Unit (ETU) (where required)
4.8mm internal ruggedised fibre.
Warning tape

Full details of the materials including quantities to be supplied to your development can be found on your Bill of Materials

CONSTRUCTION

Building out the Network

EXTERNAL WORKS

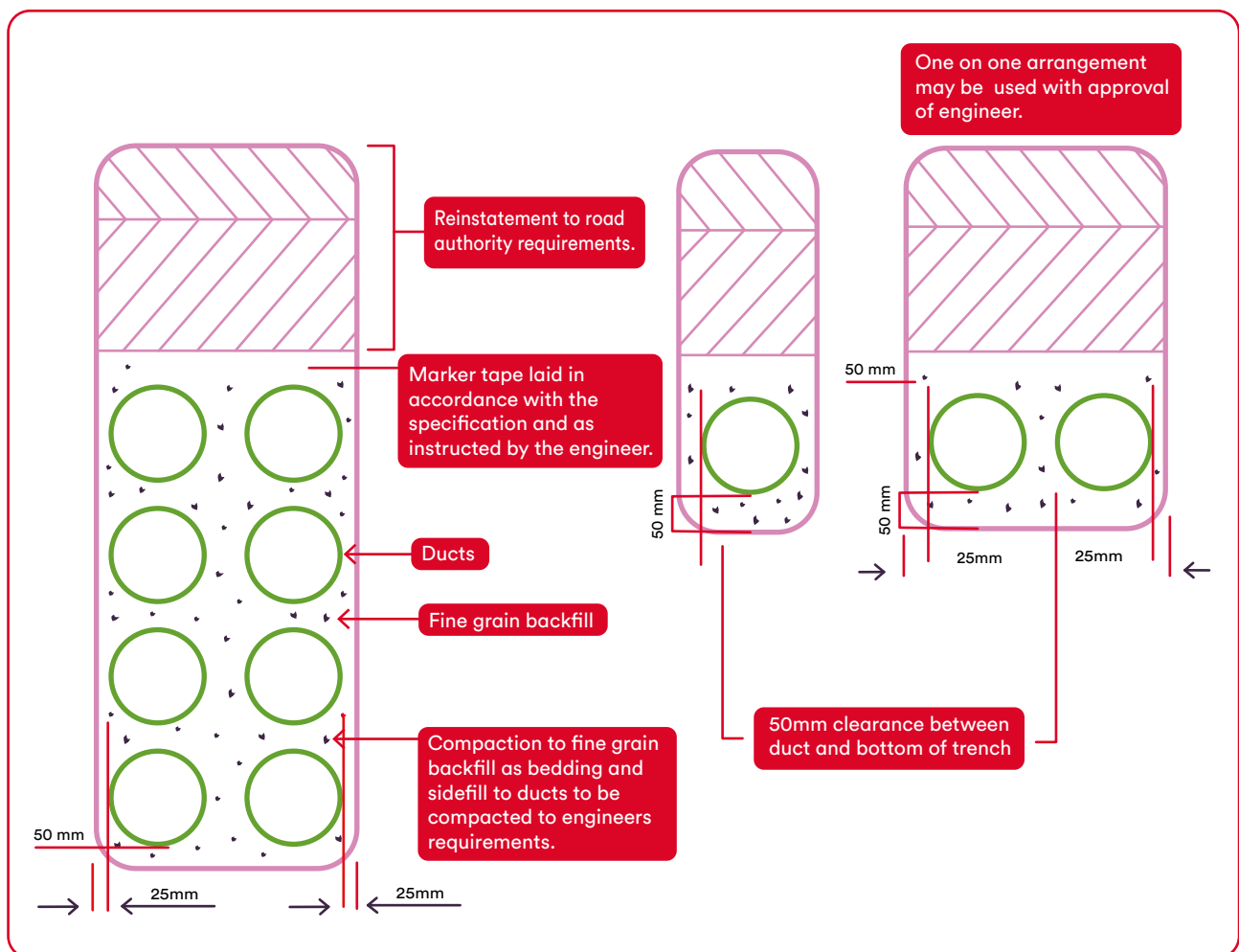
10. Best Practice for the Installation of Duct



Warning. Click before you Dig: Before commencing any work on your site, please contact civils@virginmedia.ie.

This allows us to provide information to you on any possible existing network on-site, prior to you commencing excavation work.

10.1 Installation of Duct in Footway



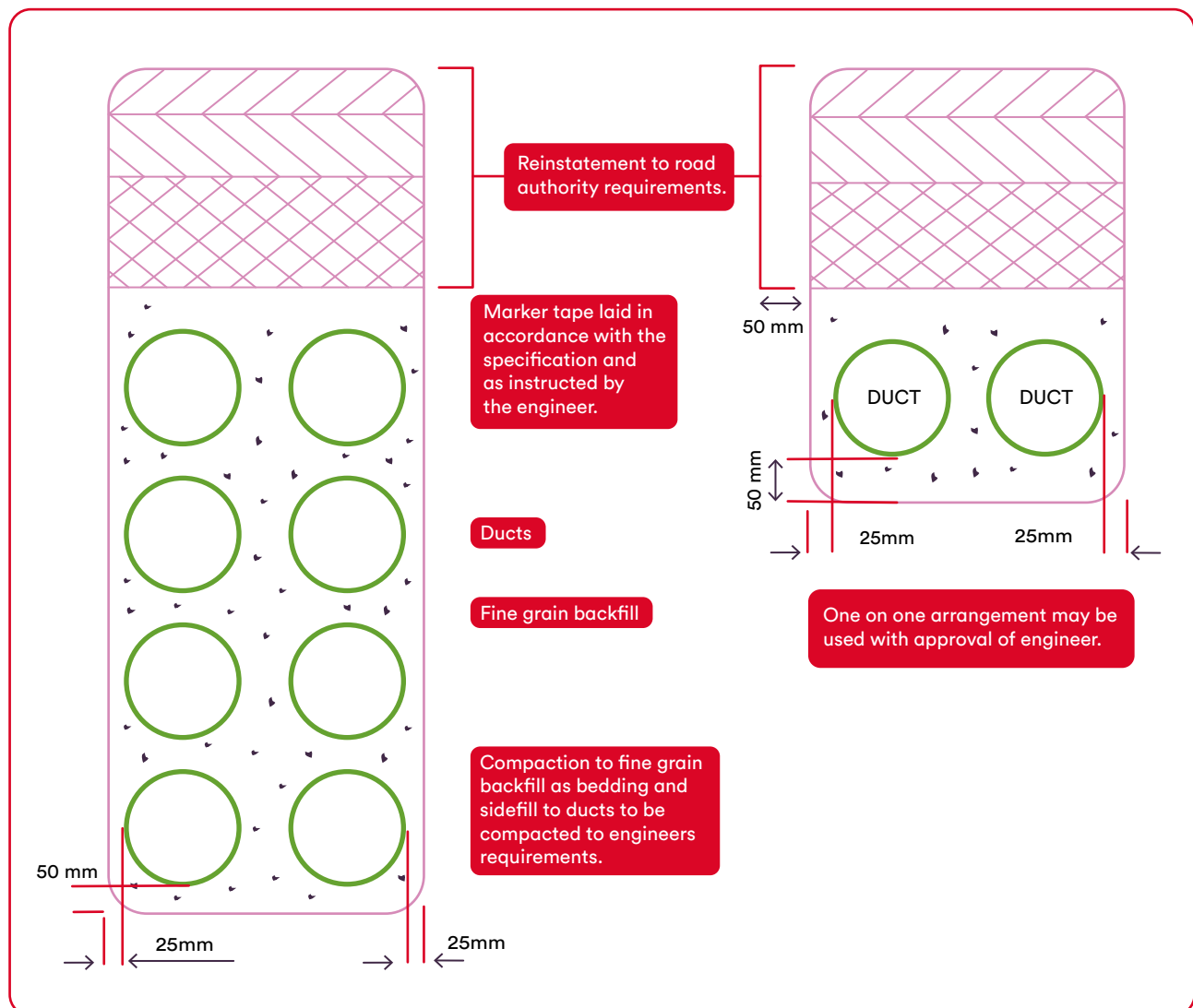
All ducts should be 110mm green twin wall duct as supplied by Virgin Media. Bends should not be used in any duct being installed.

As recommended in *The Guidelines for Managing Openings in Public Roads* (second edition, Rev 1) the following measurements must be adhered to:

- All measurements in millimetres / mm.
- Minimum of 50mm separation between ducts.
- Minimum 150mm separation between edge of trench and side of ducts.
- Fine grain backfill to comply with water industry spec (WIS) No. 4-08-02 with a nominal maximum particle of 6mm.

Minimum standard depth of cover of 450mm.

10.2 Installation of Duct in Carriageway



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As recommended in *The Guidelines for Managing Openings in Public Roads*, (second edition, Rev. 1) the following measurements must be adhered to:

- All measurements in millimetres / mm.
- A minimum of 50mm separation between ducts. The Guidelines for Managing Openings in Public Roads, (second edition, Rev 1) recommends half width of duct which equates to 50mm.
- A Minimum separation of 150mm between edge of trench and the side of ducts.
- Minimum standard depth of cover of 750mm.

11. Chambers

11.1 Details of Types of Chambers Used

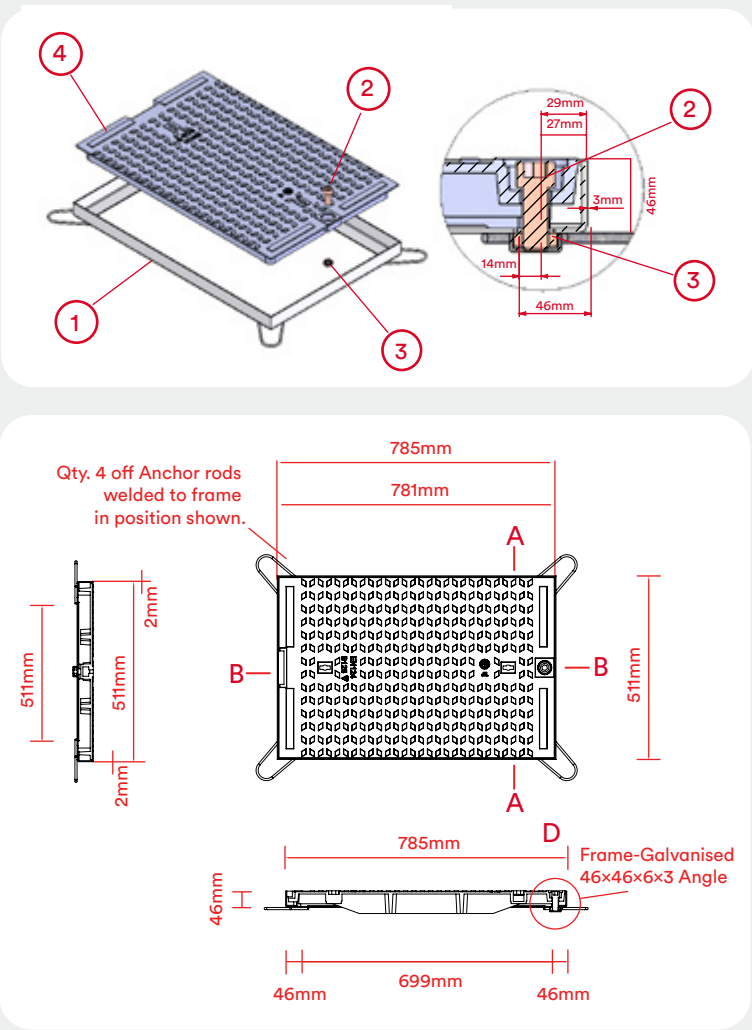
Please note: Virgin Media supply frames and covers only

Table 1: Dimension of the chambers provided by Virgin Media

Chamber Type	Chamber Dimensions	Frame and Cover
FW3	L 725mm x W 445mm Internal L 1025mm x W 745mm External	L 790mm x W 520mm
FW6	L 1310mm x W 615mm Internal L 1610 mm x W 915 mm External	L 1401 mm x W 705mm
CW1	L 600mm x W 600mm Internal L 1000mm x W 1000mm External	L 600mm x W 600mm
FW2	L 550mm x W 310mm Internal L 850mm x W 610mm External	L 670mm x W 430mm

11.2 Footway 3 Chamber (FW3)

FW3 Frame and Cover Specification



DESIGN FEATURES:

Design load - 125kN. Suitable for group 2 areas, ie. footways, pedestrian areas and comparable areas, car parks or car parking decks.

Cover material - Ductile Iron

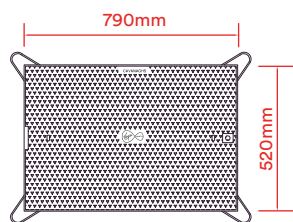
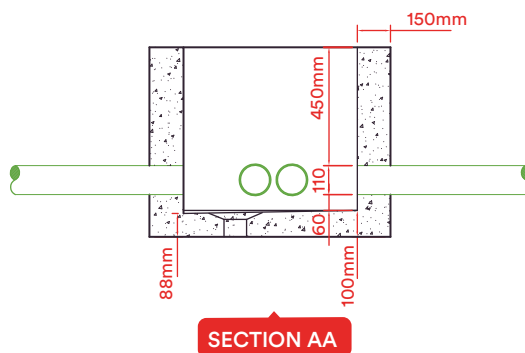
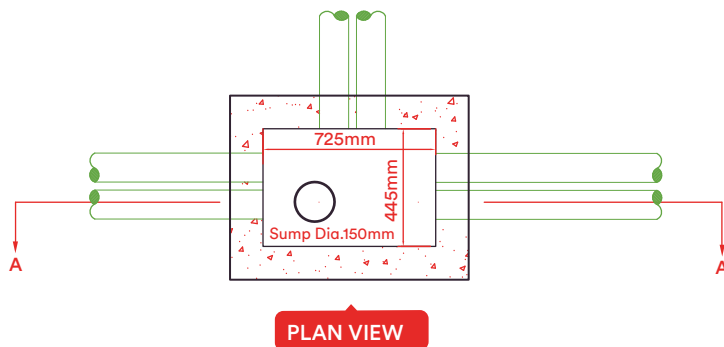
Frame material - Hot rolled section to BS1449 and galvanised to ISO 1461

NO.	PART NO.	DESCRIPTION	QTY
1	710437_0		1
2	7J033	SCHS M16x40	1
3	7J014	M16 Half Nut	1
4	FJ3_COVER-R3	COVER, LOCKED, BLANK, EN124 B125 - 710926	1

How to Build a FW3 - Construction Specification

- All chambers must have a concrete foundation.
- If the chamber is constructed in two stages, the base must be installed first to the full width of the chamber, with the wall installed on top of the base.
- Concrete must be grade 40 newton.
- Block built chambers to be built with block on edge (10Nm).
- Chambers with solid floors to have 300mm deep percolation area/soakaway of hardcore (compacted in 2 × 150mm layers) below the solid floor, a 150mm diameter UPVC sump protected by a 254mm x 254mm galvanised sump grating and a 1:20 slope on the floor to the sump to allow drainage.
- Distance between ducts and depths of ducts in chamber to comply with The Guidelines for Managing Openings in Public Roads, current version (second edition, Rev. 1) which specifies 50mm spacing between ducts. Virgin Media's minimum depth for duct cover is 450mm on footways.
- Ducts should enter the chamber 100mm above floor level.
- The maximum number of duct entries on any single wall is four. Each duct to be in line with the others.
- The wall thickness of the concrete chambers must be a minimum of 150mm in the footway and verge locations.
- Only approved Virgin Media chamber lids to be used. All lids to be marked with Virgin Media logo. Loading class of B125 for FW-3 lid & FW-2 lid.

FW3 Construction Specification



FW3 "Virgin Media" B125



Virgin Media Chamber Specifications FW3

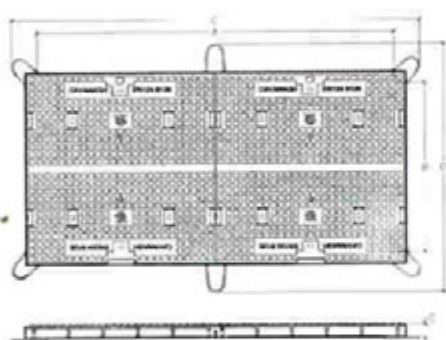
NOTES:

1. Virgin Media shall approve all covers in accordance with company standard nationwide.
2. All chambers shall have a concrete foundation.
3. All concrete chambers to have steel reinforcement cage and the concrete to be grade 40.
4. Actual dimensions may vary within the chamber due to existing conditions, all variations to be approved by Virgin Media.
5. All chambers to have a 150mm Dia. Drainage sump with a floor gradient of 1:100
6. Distance between ducts to be 25mm horizontally and vertically.
7. Minimum of 450/500mm cover on duct in F/W unless otherwise specified by local authority.
8. Block built chambers to be built with block on edge (10Nm).
9. Concrete chambers wall thickness to be min 150mm in F/W and verge locations.

E	Revised	05/20
D	Revised WS	12/14
C	Revised WS	03/10
B	Created	03/09
A	Created	10/05
NO.	REVISION/ISSUE	DATE

11.3 Footway 6 Chamber (FW6)

FW6 Frame and Cover Specification



CATV6. FW6

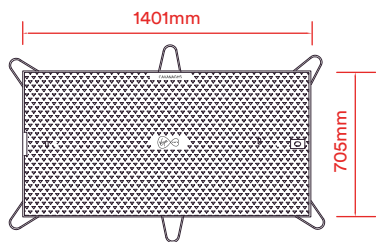
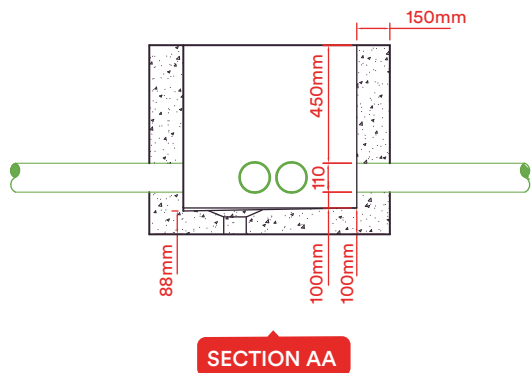
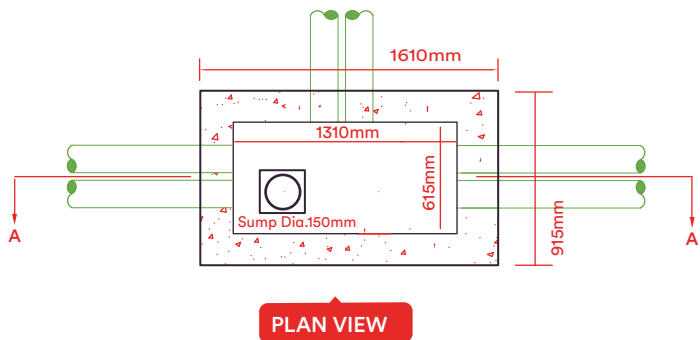
FEATURES:

- Material: ductile iron covers in a steel frame
- Open keyholes
- Two covers with removable trimmer bar
- Covers black coated, frame galvanised
- Patented locking arrangement

How to build an FW6 - Construction Specification

- All chambers must have a concrete foundation.
- If the chamber is constructed in two stages, the base must be installed first to the full width of the chamber, with the wall installed on top of the base.
- All concrete chambers must have a steel reinforcement cage with the concrete to be a minimum of grade 40 newton.
- Block built chambers to be built with block on edge (10Nm).
- Chambers with solid floors must have a 300mm deep percolation area/soakaway of hardcore (compacted in 2 x 150mm layers) below the solid floor, a 150mm diameter UPVC sump protected by a 254mm x 254mm galvanised sump grating, and a 1:20 slope on the floor to the sump to allow drainage.
- The distance between ducts and depths of ducts in chamber must comply with The Guidelines for Managing Openings in Public Roads, current version (second edition, Rev 1) which specifies 50mm spacing between ducts. Virgin Media's minimum depth for duct cover is 450mm on footway.
- Ducts must enter chamber 100mm above floor level.
- Cover on reinforcement to be min of 35mm.
- Lap lengths to be diameter 40mm.
- All reinforcement to be T10 bars cut and bent in accordance with B.S.8666.
- All reinforcement top be high yield ($f_y=460$), deformed type 2.
- Sump can be displaced/moved to suit reinforcement.
- Reinforcement may be displaced to sit between ducts if ducts are cast into the walls.
- All reinforcement to be T10 bars placed at 175mm centres, except T25mm bars for anchor irons.
- Floor to include steel reinforcement mesh, min 100mm square, min 10mm diagonal.
- The maximum number of duct entries on any single wall is eight. Each duct to be in line with the others.
- The thickness of the concrete chambers wall must be min of 150mm in footway and verge locations.
- Only approved Virgin Media chamber lids to be used. All lids to be marked with Virgin Media logo. Loading class of B125 for FW-6 lid.
- Final footway reinstatement slab to be separate from chamber concrete.

FW6 Construction Specification



FW6 "Virgin Media" B125



Virgin Media
Chamber Specifications
FW6

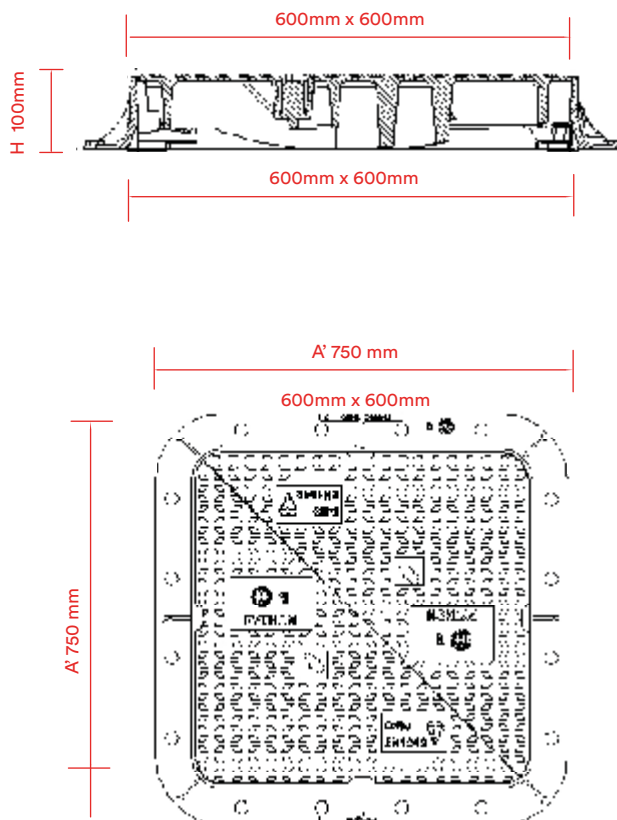
NOTES:

1. Virgin Media shall approve all covers in accordance with company standard nationwide.
2. All chambers shall have a concrete foundation, 30N.
3. Actual dimensions may vary within the chamber due to existing conditions, all variations to be approved by Virgin Media.
4. All chambers to have a 150mm Dia. Drainage sump with a floor gradient of 1:100
5. Distance between ducts to be 25mm horizontally and vertically.
6. Minimum of 450/500mm cover on duct in F/W unless otherwise specified by local authority.
7. Concrete chambers wall thickness to be min 150mm in F/W and verge locations.
8. Floor to include steel reinforcement mesh min 10mm Dia/min 100mm square.
9. Block built chambers to be built with block on edge (10Nm).
10. Final F/W reinstatement slab to be seperate from chamber concrete.

B	Revised	05/20
A	Created	10/05
C	Revised WS	03/10
NO.	REVISION/ISSUE	DATE

11.4 Carriageway 1 Chamber (CW1)

CW1 Frame and Cover Specification



DESIGN FEATURES:

- Material(s): SG Iron 500-7
ISO 1083/EN1563
- Design load:
400 kN to EN 124. Group 4 installation
area: carriageway of roads (including
pedestrian streets), hard shoulders and
parking areas, for all types of roads
vehicles (and lower groups).
- Coating: Non toxic waterbased black
paint.
- Product Certification: KITEMARK

SPECIAL FEATURES:

- Mass: Each triangular cover: 24 kg
Product total: 71.27 kg.
- Surface finish: Anti-slip Solid Top cover.
- Securing of cover/grating within frame:
with sufficient mass per unit area.
- Frame bearing pressure: $p \geq 7.5 \text{ N/mm}^2$.
- Cover type: Double triangular design.
Non rigid coupling of the cover by H bolt
M16.
- Frame type: square monoblock frame as
cast. Depth: 100 mm

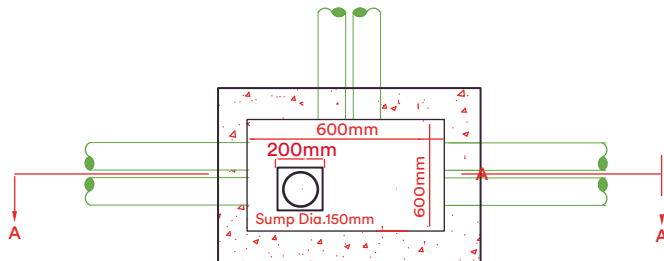
HANDLING:

Closed BS keyway.
Handle with BA1 heavy duty lifting
key. (item code: 710059)

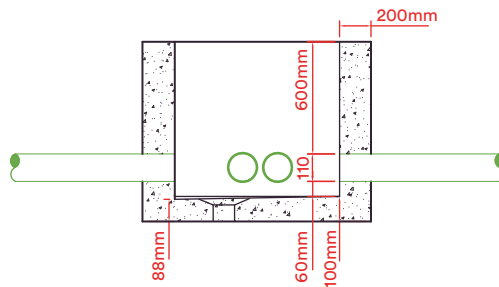
How to Build a Chamber CW1 - Construction Specification

- All chambers to have a concrete foundation.
- All concrete chambers to have steel reinforcement cage, the concrete to be grade 40 newton.
- If the chamber is constructed in two stages, the base must be installed first to the full width of the chamber, with the wall installed on top of the base.
- Chambers with solid floors to have 300mm deep percolation area/soakaway of hardcore (compacted in 2 x 150mm layers) below the solid floor, a 150mm diameter UPVC sump protected by a 254mm x 254mm galvanised sump grating, and a 1:20 slope on the floor to the sump to allow drainage.
- Distance between ducts and depths of ducts in chamber to comply with The Guidelines for Managing Openings in Public Roads, current version (second edition, Rev 1) current version (second edition, Rev 1) which specifies a 50mm spacing between ducts, Virgin Media's minimum depth for duct cover is 750mm on carriageway.
- Ducts must enter the chamber 100mm above floor level.
- The minimum cover of reinforcement is 400mm.
- Cover on reinforcement to be min of 35mm.
- Lap lengths to be diameter 40mm.
- All reinforcement T10 bars at 175mm centres except for T25 anchor bars.
- All reinforcement to be high yield ($f_y=460$) - deformed type 2.
- All reinforcement T10 bars cut and bent in accordance with standard BS8666.
- Sump is to be displaced locally if fitted to suit reinforcement.
- Reinforcement may be displaced to sit between ducts if ducts are cast into the walls.
- T12 bars to be placed on each face at 175mm centers.
- Maximum number of duct entries on any single wall is four. Each duct to be in line with the others.
- Approved Virgin Media chamber lids to be used only. All lids to be marked with Virgin Media logo. Loading class of D400 for CW-1 lid and frame.

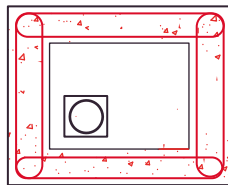
CW1 Construction Specification



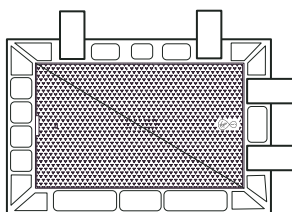
PLAN VIEW



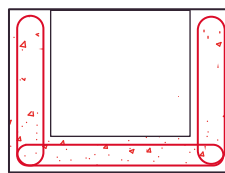
SECTION AA



PLAN VIEW OF REINFORCEMENT CAGE



CW1 (B0819) - 600x600 -
"CATV" - D400



PLAN VIEW OF
REINFORCEMENT CAGE



Virgin Media Chamber Specifications CW1

NOTES:

1. Virgin Media shall approve all covers in accordance with company standard nationwide.
2. All chambers shall have a concrete foundation.
3. All chambers to have a steel reinforcement cage and the concrete to be grade 40.
4. Actual dimensions may vary within the chamber due to existing conditions.
5. All Chambers to have a 150mm diameter drainage sump with a floor gradient of 1:100
6. Distance between ducts to be 25mm horizontally & vertically.
7. Minimum of 600/750mm cover on duct in C/W unless otherwise specified by local authority.
8. Reinforcement bars to be 12mm diameter with 200mm spacing.
9. Minimum cover on reinforcement is 400mm.

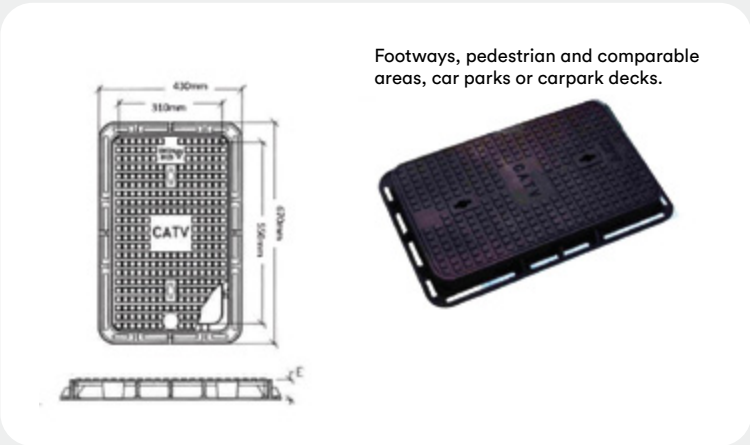
B	Revised	05/20
A	Created	10/05
NO.	REVISION/ISSUE	DATE



For health and safety reasons, the lid of all chambers must be placed in a way that ensures that the leaves face towards the person opening the lid.

11.5 FW2 Frame and Cover Product Specification

FW2 Frame and Cover Product Specification



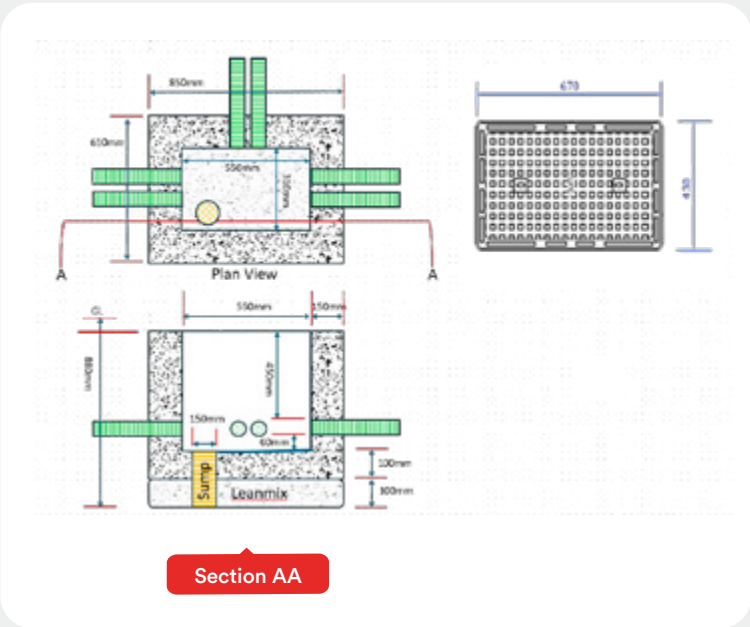
Footways, pedestrian and comparable areas, car parks or carpark decks.



Technical Data

Frame Opening (mm) AxB	Frame Overall (mm) CxD	Frame Height (mm) E	Total Kg	Cavanagh Reference
550 x 310	670 x 430	60	27	A0496

FW2 Poured Concrete Chamber



NOTES:

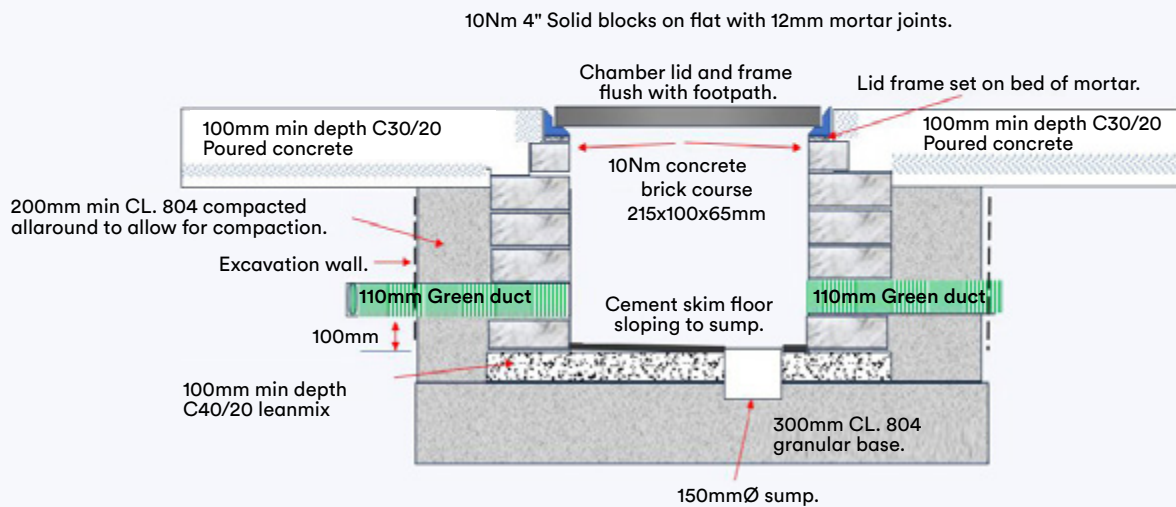
1. Virgin Media shall approve all chambers in accordance with company standards nationwide.
2. All chambers shall have a concrete Foundation.
3. Actual dimensions may vary within the chamber due to existing conditions. All variation to be approved by Virgin Media.
4. All Chambers to have a 150mm Diameter drainage sump.
5. Walls and floor to be smooth finish free of debris.
6. Separation distance between ducts to be 25mm horizontally and vertically.
7. Minimum of 450mm cover on duct in FW/GV unless otherwise specified by Local Authority.

How to Build a Chamber FW2 - Construction Specification

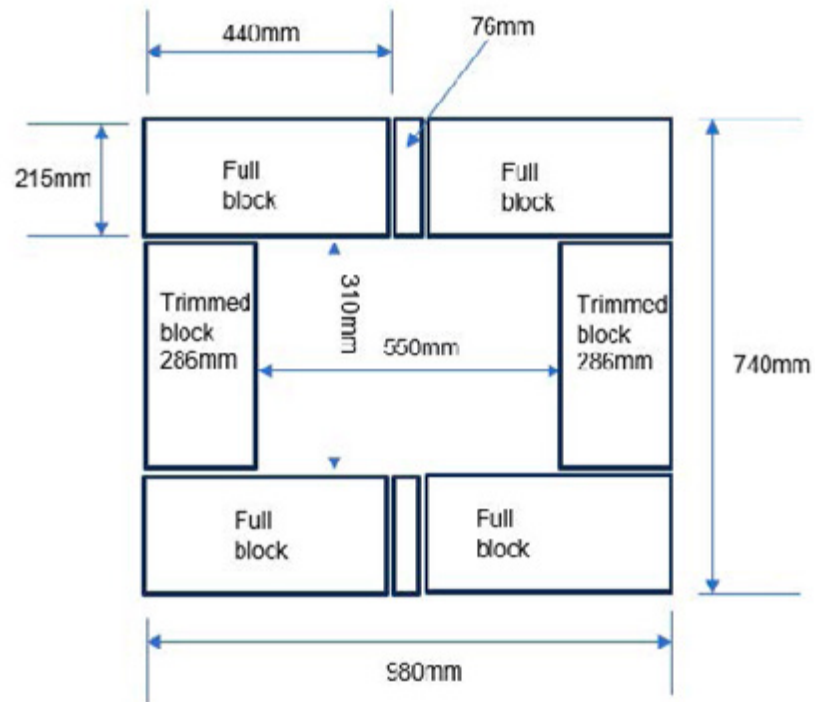
- Chambers to be orientated lengthways with Network where possible.
- Poured concrete chamber excavation to be 850mmx610mmx880mm (LxBxD). Formwork, 550x310mm (outside dimension) to be placed inside this excavation leaving 150mm walls all round.
- All chambers must have a 100mm Leanmix concrete foundation.
- If the chamber is constructed in two stages, the base must be installed first to the full width of the chamber, with the walls installed on top of the base.
- Block built chambers to be built with blocks on flat. (10Nm)(Only by approval)
- Formwork to be parallel to existing walls and footways.
- The wall thickness of the concrete FW2 chambers must be a minimum of 150mm in the footway and verge locations.
- Concrete must be grade 40 newtons and must be vibrated into position.
- FW2 to have a 300mm deep percolation area/soakaway below the solid floor.
- A 150mm diameter UPVC sump protected by a 254mm x 254mm galvanised sump grating and a 1:20 slope on the floor to the sump to allow drainage.
- Floor to have concrete screed finish.
- Distance between ducts and depths of ducts in chamber to comply with The Guidelines for Managing Openings in Public Roads, current version (second edition, Rev. 1)
- Virgin Media's minimum depth for duct cover is 450mm on footways and verge.
- Ducts should enter the chamber 60mm above floor level.
- Ducts must enter minimum 50mm from corners.
- The maximum number of duct entries on any single wall is four. Each duct to be in line with the others.
- Ducts to be cut flush to walls and rendered with cement sand mix. Duct mouths to be clean and free of cement overflow.
- Only approved Virgin Media chamber lids to be used. All lids to be marked with Virgin Media logo.
- Frame should sit on 10mm bed of mortar and be flush with surrounding Ground levels.
- All chambers in GV to have a 200x100mm concrete plinth surrounding chamber.
- Lid must be set level and must not rock in frame.
- Lid and frame must be kept clean and free of cement residue.

FW2 Block Built (only by approval) Concrete Footpath

- FW2 - Internal - 550 x 310 x 660mm deep,
- Excavation - 1380mm x 1140mm x 1060mm. (LxBxD)
(includes 300mm soakaway under sump compacted in 150mm layers).
- 12mm mortar joints pointed inside chamber.
- Footpath to be reinstated as per Purple book.
- Top course to be



Block Layout Plan View



INTERNAL WORKS

12. Instructions for Internal Cabling

Internal Coax cable is no longer used or required by Virgin Media Fibre Wholesale. It has been replaced by a 4.8mm internal ruggedised fibre cable. Details on the installation requirements of this fibre cable are outlined below.

12.1 Requirements for Virgin Media Fibre Wholesale New Development Houses

- Virgin Media Fibre Wholesale New Developments require the installation of 15m x 4.8mm fibre cable to be installed by the on-site electrician for installation in each unit from the External Termination Unit (ETU) to a single gang back box in living / sitting room.
(Note: Living/sitting room is the optimum location for Virgin Media Fibre Wholesale network)
- On-site Electrician to leave at least 2m of 4.8mm fibre coiled, taped, and secured in-situ.



Warning The 2m coil / slack is critical to the successful installation / splicing of the Virgin Media Fibre Wholesale network.

- On-site Electrician to install a double power socket beside Virgin Media Fibre Wholesale outlet box in living / sitting room.
- On-site Electrician to leave at least 3m of 4.8mm fibre coiled, taped, and secured in ETU.



Warning The 3m coil / slack is critical to the successful installation / splicing of the Virgin Media Fibre Wholesale network.

- On completion of all on-site internal cable works by on-site Electrician, Virgin Media Fibre Wholesale build team will splice the 4.8mm fibre to the incoming drop fibre in the ETU, as well as prep, splice, and fit Virgin Media Fibre Wholesale fibre wall outlet box in living / sitting room.

12.2 Requirements for Virgin Media Fibre Wholesale New Development Apartments

- Virgin Media Fibre Wholesale New Developments require the installation of 35m x 4.8mm ruggedised fibre cable to be installed by the on-site electrician for installation in each unit from a single gang back box in living / sitting room to the agreed termination point in the riser. (Note: Living / sitting room is the optimum location for Virgin Media Fibre Wholesale network)
- On-site Electrician to leave at least 2m of 4.8mm fibre coiled, taped, and secured in-situ in living / sitting room.



Warning The 2m coil / slack is critical to the successful installation / splicing of the Virgin Media Fibre Wholesale network.

- On-site Electrician to install a double power socket beside Virgin Media Fibre Wholesale outlet box in living / sitting room.
- On-site Electrician to leave at least 3m of 4.8mm fibre labelled, coiled, taped, and secured in riser.

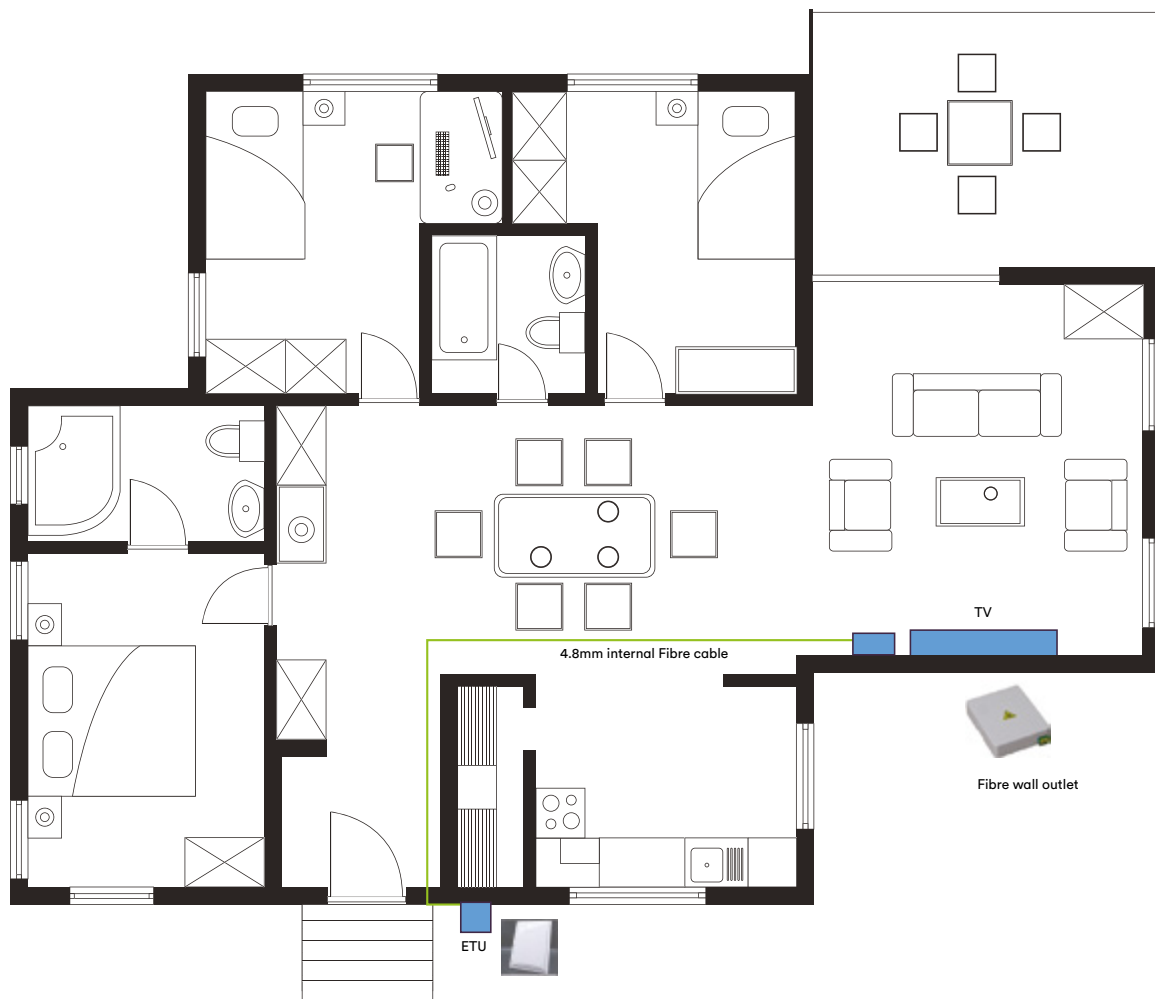


Warning The 3m coil / slack and labelling in riser is critical to the successful installation / splicing of the Virgin Media Fibre Wholesale network.

Warning: On completion of all on-site internal cable works by on-site Electrician, Virgin Media Fibre Wholesale New Developments build team will splice the 4.8mm fibre in the riser as well as prep, splice, and fit Virgin Media Fibre Wholesale outlet box in living / sitting room.

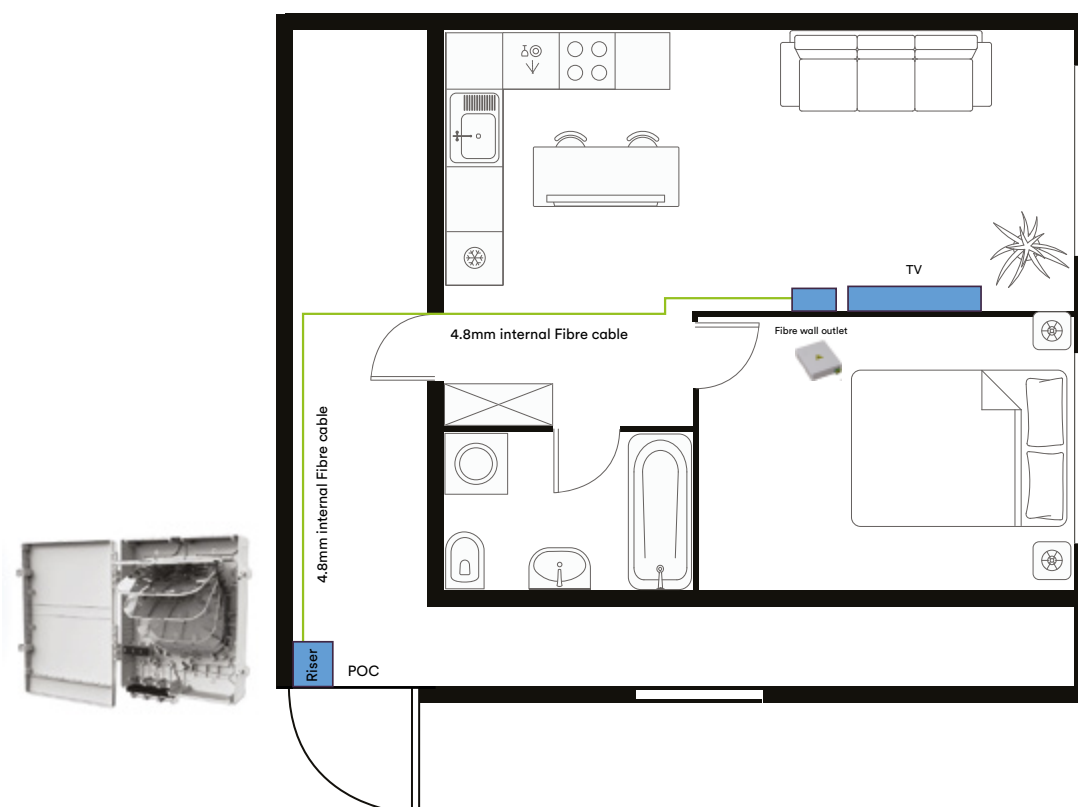
13. Single Dwelling Unit (SDU) or Duplex In home Network

Single Dwelling Unit (SDU) Or Duplex In Home Network



14. Multi Dwelling Unit (MDU) In home Network

Multi Dwelling Unit (MDU) In home Network



15. Large Multi Dwelling Pre-Wire

Large Multi Dwelling Pre-Wire

All cable supplied by Virgin Media Wholesale

- All cabling must be labelled to highlight its destination.
- All sockets must be installed within 1m of a power outlet.
- Individual cable lengths should not exceed 35m from a distribution point, please seek advice before wiring if this is not possible.

4. Single Fibre Ruggedised
Cable 4.8mm fibre cable

3. POC enclosure
utilised for larger MDUs and spaced every 2-3 floors depending on capacity and cable lengths.
(FTTH individual drop cable lengths should not exceed 35m).

This should be taken into consideration when planning for our cable deployment in your building)



1. POP enclosure
compact enclosure either for terminating incoming external cabling or used as a primary connection point for the entire building.

2. Single Fibre Ruggedised Cable
4.8mm 1 fibre ruggedised cable packaged in discrete recyclable cardboard box.

16. MDU Wall Mounted Fibre Enclosures

16.1 MDU Wall Mounted Fibre Enclosure Types and Dimensions

Below are the details of the different types of Fibre Enclosures that we use in MDU projects.

Enclosure Type	Dimensions
POE (Point of Entry)	H 52mm x W 145mm x D 18mm
POP/BPEO Splice Enclosure Size 1.5	H 385 mm x W 204mm x D 120 mm
PoC Universal Fibre Solution (UFS)	H 385mm x W 204 mm X D 120 mm
POC Universal Building Box (UBB)	H 232.3mm X W 215.4mm X D 64.8mm

POP / BPEO Splice Enclosure



POC Universal Fibre Solution (UFS)



POC Universal Building Box (UBB)



Point of Entry (POE)



17. Release Process

Since becoming a fibre wholesale network, our process around the release of units has changed. Please see *Lifecycle of a New Development Project* diagram for detailed information. To ensure units are released and ready for your residents to order service, we need all on-site work completed by the Builder/Developer and the off-site work completed by our contractors before they can be released. At present, we have two release cycles a month. On our application form we ask you about the estimated occupancy dates for all units as we use that date to work back and schedule accordingly. We normally allow 6 weeks for new development units to get through the release process i.e. from when all work is done on-site and off-site to when the units are available on our retailer's website for your residents.



Please note once the units are released, your residents will order service directly via their chosen provider. Any queries about install dates, portfolio of service etc should be directly with them.

18. Queries around the Network Build

Queries around design, on-site work, materials etc will still be managed by the New Developments Team. Please contact a member of the team or email newbuild@virginmedia.ie.



**FIBRE
WHOLESALE**