

Contents

- 01 System Overview
- 02 Components
- 03 Installation Procedure
- 04 Testing

01 System Overview

The Connectix UFO (Unseen Fibre Optics) is a discreet optical fibre cabling system designed for a fast and easy installation within a mixture of FTTX applications. UFO is the ideal solution for MDU retro builds where sites may be listed buildings, have congested, overrun pathways and where space for new containment is not an option. There could also be older buildings where the risk of asbestos could be present and new cabling could cause financial or time delay issues. Additionally, for aesthetically pleasing desired new builds and within SMDU or SDU installations, UFO provides a fibre optic consumer installation that's difficult to see and is unobtrusive to the consumer. Connectix UFO can easily be installed along door frames, floor and ceiling skirtings and along corridors within wall/ceiling joins.

All Connectix end-to-end UFO installations should be installed by a certified UFO accredited engineer to obtain our 25-year manufacturer's warranty.

02 Components

UFO Pebble

The UFO Pebble is the optical fibre dispenser for the consumer area drop, available from stock as a 25-metre 1-fibre, bend insensitive singlemode G.657.B3 1.2mm cable. The UFO Pebble can be supplied as LC/APC and SC/APC for patching to ONT/routing devices. With its slick circular look, the Connectix UFO Pebble suits wall installations in modern or traditional apartment spaces and is customer branded with your service provider logo. The UFO Pebble is quick and easy to install with the Connectix UFO Glue Gun and Midspan boxes, connecting back to the UFO vertical (riser) distribution cabling system.



Ultra Slim Midspan Cable



The Connectix UFO (Unseen Fibre Optics) Ultra Slim Midspan cable is designed to be used inside Multi Dwelling Units (MDU) linking Connectix Midspan Boxes to riser distribution points through corridors. The OD is extremely small at just 2mm/2.5mm, enabling this cable to be discretely installed within wall and ceiling angles with minimum disruption to the developer or consumer interior finishes. Produced with bend insensitive singlemode G.657.B3 ITU-T optical fibre, the cable can be installed around doorways, trunking and floor skirting using the Connectix Cold Cure Glue. Designed to be installed quickly as part of the Connectix UFO FTTH MDU solution, the Ultra Slim Midspan Cable has an excellent reaction to fire with a Euro Class rating of Cca-s1a-d0-a1 and fully complies to BS6701:A1.

UFO Midspan Box

The UFO Midspan Box connects from the UFO vertical (riser) distribution point and enables P2P or GPON cabling connectivity into the consumer apartment. Suitable for installation with the Connectix UFO Ultra Slim Midspan Cable the UFO Midspan Box allows a 2-24 fibre cable to be installed within a corridor or ceiling area and midspan into an apartment. The UFO Midspan Box base plate manages the UFO Midspan Cable with a service management of 2-metre cable slack and can be supplied as a splice or connectorized LC/APC or SC/APC format.



Connectix UFO Midspan Boxes are available in an internal (white) and external (black) format with an interior and exterior rubber seal to protect against the ingress of water and moisture in outdoor environments and are suitable for use with Connectix External Midspan cables.

The UFO Midspan Box is small and unobtrusive and is customer branded with your service provider logo.



03 Installation Procedure

UFO 12 core G657B.3 Cca

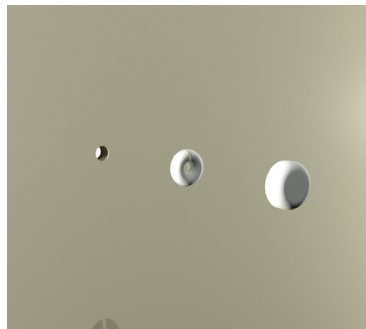
Working from the Riser to the first Unit 1, 2, 3, 4-12



1. Mount all Midspan base plate units in the correct dwelling locations 1-12. Keep 3mm from the ceiling for the Lid. (Care should be taken on where to mount the box for future dwelling entry point).

2. Drill 3.5mm holes required for the fire clips along the cable route.

3. Clean and clear cable route with IPA wipe ready for gluing.



4. Drill 15mm hole into the customer's property using the base plate as a guide.

5. Using the Button hole, cover on the customer's side.

NOTE AT THIS POINT, IT IS THE INSTALLERS RESPONSIBILITY TO ADHERE TO THE CURRENT FIRE REGULATIONS. INCLUDING FIRE BLOCKING AND FIRE CLIPS.

6. Drill any holes required to complete the full corridor length to the last unit using the Button covers.



7. Install fire clips both sides of the Midspan enclosure, pushing 50% in (the distance between fixings can be customer/site specific). It is also recommended to fit the 1st fixings 60mm to the left and right of the base plate.



UFO Installation Guidelines

With Hot Glue



8. Slide Midspan enclosure onto the base plate.

9. Pull the cable from the riser enclosure to the last Midspan enclosure (leave a minimum of 2 metres at the riser enclosure), label the cable, and use the clips to hold the cable in place.

10. At the last unit, pull 2 metres of extra cable loop storage from the top centre of the Midspan enclosure and place into the cable gripper letting the 2 metres drop away towards the floor from the centre of the Midspan enclosure.

11. Wrap the 2 metres of loose cable into the enclosure, approximately 5 loops.

12. Then repeat this process to all Midspan units along the corridor back to the first/riser.



13. Once the Glue Gun has heated, glue the cable to the wall from the riser and then to each Midspan unit leaving 10cm before the last fire clip and 10cm after the fire clip each side of the Midspan unit.



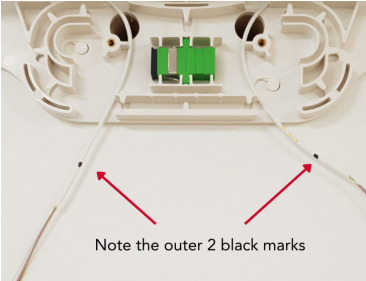
14. Place the enclosure lid on using the x2 screws.



UFO Installation Guidelines

With Hot Glue

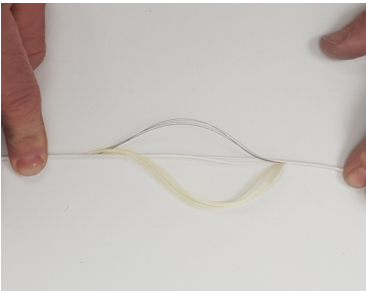
Splicing within the Midspan Unit



1. Remove enclosure lid, carefully unwind the looped fibre (5 loops). We suggest labelling the inside of the Midspan Box 1-12.
2. Remove enclosure from the base plate ready for splicing.
3. Mark the cable at the top of the cable gripper with a marker pen point 1, then measure 120cm down the cable towards the floor at 120cm and mark point 2.



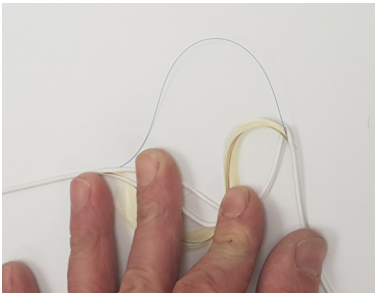
4. Using your Midspan tool, midspan from mark 1 to mark 2 (to within 2cm of mark).



5. Carefully remove and cut away outer jacket and Kevlar exposing all 12 cores at 250µm.

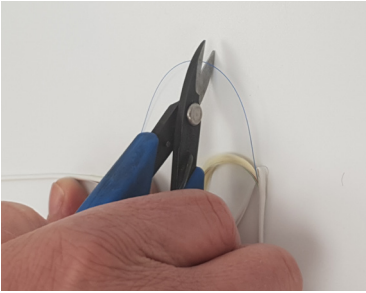
Position #	Colour Code
1	Blue
2	Orange
3	Green
4	Brown
5	Slate
6	White
7	Red
8	Black
9	Yellow
10	Violet
11	Rose
12	Aqua
13 through 24	Repeat colours 1 –12 with black tracer

6. At mark point 1, select the fibre colour needed for that drop (e.g. Blue) at 250µm.



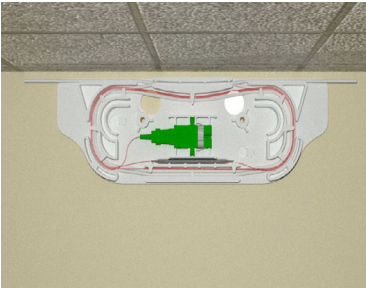
UFO Installation Guidelines

With Hot Glue



7. Carefully, cut the (blue) core 250µm at Mark 2, the furthest point away from the enclosure **TX Fibre side**, let this core then drop away from the other 11 cores still attached.

8. Set up the splicing machine so it can easily reach the end of the (Blue) Cut Core at 250µm.



9. Cut the pigtail down to 60cm, splice to pigtail and dress into enclosure (firstly into inner management), marking splice holder point (60cm is to the end of the tip of the connector).

10. Once spliced, dress the cable slack into the enclosure.



11. Once installed, use the fire clip tool to make sure all cable is placed into the clips gently, not putting pressure on the cable. **The fire clips are designed to be fitted at 150mm spacing, clips should not exceed 300mm spacing.**

12. Test the fibre links back to the riser enclosure or if it is an active system use a power meter for loss levels.



13. Record loss level through UFO enclosure back to the riser.

14. Once the whole floor is installed, use the fire clip tool to make sure all cable is placed into the clips gently.

15. Secure all lids back onto the Midspan enclosures.

Note for a standard install:

- 5 Loops within the Midspan Box
- 120cm distance between marks 1 and 2
- 116cm drop (start 2cm in from each end)
- Workable height of splicer 1.2m
- Add 32cm of cable for each additional loop of cable should the height be greater



UFO Installation Guidelines

With Hot Glue

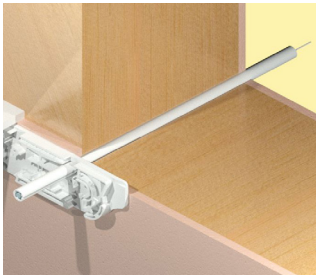
Internal Customer Drop Cable Pebble System



1. Screw the Pebble base plate unit in the correct dwelling location next to active kit with a working power socket (make a note of where the cable exit needs to be).
2. Clear and clean cable route with IPA wipe ready for gluing.
3. Drill 15mm exit hole from the customer's property using the Pebble base plate as a guide.



4. Unwind the single fibre from the Pebble cartridge along the cable route from the property exit hole to base plate.



5. Using the "wall tool" push the SC/LC through the wall to the external enclosure making sure you have extra fibre slack/loop storage.

6. Connect the SC/LC into the external enclosure dressing the loop storage into this enclosure.

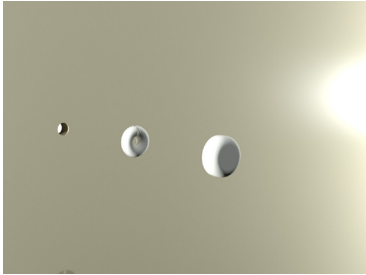


7. Turn on the Hot Glue Gun (red light setting).
8. Place the Pebble cartridge next to the wall mounted base plate.



UFO Installation Guidelines

With Hot Glue



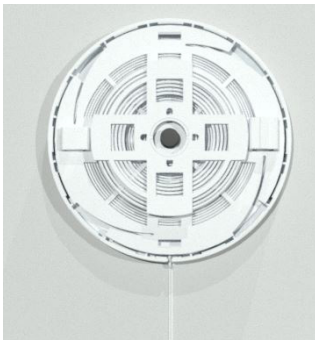
9. Starting from the property exit hole, carefully place the Button and cover into the exit hole.



10. Using the Hot Glue Gun from the exit hole, glue back to the Pebble cartridge.



11. Wrap fibre slack onto the cartridge, click the cartridge onto the Pebble base plate. Glue fibre up to the Pebble unit.



12. Unwind the Internal fibre SC/LC and Plug into the Active kit (ONT).





20. Finally, place the lid onto the Pebble unit carefully lining the fibre exit slots to the required angle needed: 45, 90 or 180 degrees.

04 Testing

1. Light source the fibre from Riser enclosure to end customer.
2. Power source and power meter the fibre links end-to-end to show loss levels through the system.
3. OTDR to fault find this system, locate high loss points along each link.

