The Mid Span Access process

On a FTTH project, the feeder cables (some call them distribution cables) run from an Access Node up to a stone's throw away from the homes. This feeder cable is generally a G652.D, onto which a G657A1/2 drop cable is spliced, which terminates in the customer's home. Feeder cables can be high fibre-count cables and as a result, the Mid Span Access method is employed to eliminate having to splice all the fibres at a distribution / drop off point. So effectively, this allows for one to cut and splice only the final drop fibre at this point, with the not to be used fibres remaining untouched i.e. going straight-through. Thus, minimising splicing costs.

To start with, it is primarily all about the reverse-twists on the tubes, in the cable. In the middle of the length of cable to be opened, there MUST be a reverse-twist on the tubes - with an equal number of reverse-twists on either side. Large splice closures accommodate 5 reverse-twists whereas the small one's will accommodate only 3. Mark the 2 ends using insulation tape.

In the centre of this length of cable (on the reverse-twist), use a cable jacket slitter to remove \pm 200mm of the outer jacket. This is your window to access the ripcord.

Cut the ripcord in middle of this 20mm window. Next, pull the rip cord through the outer jacket, to marking tape 1 and repeat this process all the way up to marking tape 2. Now, this length of outer jacket can be removed.

After removing the outer jacket, use Kevlar scissors to cut and remove the binder threads. Take great care not to damage the tubes in the prosses.

Next, straighten the cable and untwist the tubes so that the fillers are exposed, cut and removed.

Next, cut the central strength member approximately 40mm from base of the exposed cable on both sides.

Always add the water seal to the cable before securing the strength member in the joint closure.



Ensure that all the elements of the watertight seal are in place, before securing the outside seal.

When securing the strength member, take care not to pinch or kink the tubes and allow for a natural curl on the tubes where they extend beyond the now secured strength member.

Coil and pack away the unopened tubes. Note that some customers specify that all the tubes are to be opened.

Place the tube in a suitably sized insertion slot in the midspan access tool. Straighten the tube and then proceed with splitting the tube, by pulling on the midspan tool. Always pull in a straight line, never at an angle or over a curve.

Remove all the fibres from the opened tube. Count the fibres to ensure that you have them all, before cutting and removing the now opened portion of the tube. If specified, install transportation tubing.

Finally, place the exposed fibres in the tray, which are now ready to cut and spliced onto a drop cable.











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