

FlexNAP™ System

An OptiSheath® Terminal Distribution Solution



Corning Cable Systems FlexNAP™ System provides a cost-effective method of deploying optical fiber in outside plant distribution networks at speeds several times faster than traditional field installations. The FlexNAP System utilizes standard optical fiber cables upon which network access points are pre-installed at customer-specified locations along the length of the cable. The cable and network access points are tested and shipped as a complete distribution cable/terminal system.

FlexNAP System cables are compatible with the following outside plant distribution applications:

- Overlash (aerial)
- Dedicated Messenger (aerial)
- Self-Support (aerial)
- Below ground
- 1.25-in Duct (below ground)



Why FlexNAP™ System?

The traditional installation of fiber terminals and closures in an outside plant environment is a time-consuming task that requires trained technicians. Job setup, cable access, splicing, terminal placement and job breakdown traditionally require three to four hours to complete for each terminal installation. Corning Cable Systems FlexNAP System can reduce this time by 50 percent or more per network access point. While a typical* access distribution cable with terminals may require up to three full days of manpower to deploy and install, up

to 10 equivalent FlexNAP System distribution cables can be installed in the same timeframe. The increased speed of cable deployment, along with the reliability of factory testing, offers significant value to the end user in the following key areas: deployment velocity, risk avoidance, workforce efficiency and capital deferment.

Capital Deferment

With a solution that is more reliable and faster to install, the amount of labor that would normally be required to deploy an outside plant access network using traditional field methods is reduced dramatically.



**Typical access distribution cable with terminals consists of 1,500 ft of optical fiber cable with six network access points.*



Deploying FlexNAP System via Stationary Reel Method | Photo NS271



Installation of an OptiSheath Terminal | Photo ACC215

Deployment Velocity

Increased deployment velocity allows carriers to pass, and connect, more subscribers in a shorter amount of time. The speed and deployment increases the revenue earning potential of an access network.

Risk Avoidance

The reliability of a factory-installed, factory-tested solution greatly reduces the number of field reworks required as a result of broken fibers and/or bad splices during the cable access and terminal installation process.

Workforce Efficiency

Increased network deployment speeds provide the carrier with the ability to utilize their workforce more efficiently. Skilled workers can be deployed to areas of the network where their skills are better utilized and more valuable.

The FlexNAP™ System Advantage

Corning Cable Systems has developed a flexible, preterminated splice closure that allows the complete cable system to conform to the drum size of most standard cable reels and prevents outside plant installers from having to deviate from standard aerial and below-ground cable placement procedures including drive-off and stationary reel methods.

FlexNAP System products are compatible with standard outside plant installation equipment. The flexibility of standard fiber optic cables allows them to pass easily through blocks and rollers that are often considered standard equipment by outside plant installers. It is critical for the network access points associated with a terminal distribution cable



to maintain that flexibility to ensure that the complete system is compatible with standard outside plant installation equipment.



FlexNAP™ System Network Access Point

A key component of the FlexNAP System is the network access point. It is comprised of an environmentally hardened OptiTip® MT Connector tethered to the pre-installed flexible closure on the FlexNAP System distribution cable. The OptiTip MT Cable Assembly is available in a 2-, 4-, 6-, 8- or 12-fiber configuration. The fibers terminated at a FlexNAP System network access point can qualify as homes passed in an FTTx network.

FlexNAP System Terminals

When a customer subscribes to available FTTx services, a Corning Cable Systems OptiSheath® MultiPort Terminal is connected to the OptiTip MT Cable Assembly tether, enabling connection to the premises with an OptiTap® single-fiber drop cable assembly. The multiport terminals are suitable for both aerial and below-ground applications and may be configured with four, six, eight or 12 drop ports.

Engineering Services

Corning Cable Systems provides engineering services and rental capabilities to plan, design, order and supervise the installation of a FlexNAP System.

Corning Cable Systems Web-Based FlexNAP System Configurator

Ordering a FlexNAP System - Three-Step Process

1. Design and Measure:

Design the distribution cable build-plan and measure distances between poles, handholes or pedestals to fit your specific application.

2. Create and Submit Build-Plan Online:

Contact a local Sales Representative or Corning Cable Systems at 800-743-2675 to gain access to the online configurator.

3. Place Order:

Place order by submitting the single, unique part number generated by the online configurator.

Final BOM - To Be Used For Ordering		
FlexNAP™ System Build BOM Listing		
1.25" duct test w/Harness pull through		
Project ID: Harness Test Street: Green Acres Location: Winston-Salem North Carolina United States	Build Item ID: BLD-CCS000DF21	Company: Corning Cable Systems Contact:
Cable ID: Dielectric Loose Tube (12f to 216f) Location Count: 5 Environment: Outdoor Flame-Retardant: None Tap Type: Uni-Directional	Fiber Count: 72 Access Points: 1 Installation: Buried-Duct Duct Size: 1.25 Fiber Mode Type: Single-mode	UOM: Feet Cable Length: 755 Feet Fibers Assigned: 12 Access Points: 1 Armor: None Pre Termination: None
Ordering Part Number: BLD-CCS000DF21		
Build Components:		
Cable Sub-Component(s)	Customer Item ID	Quantity
FNAP-CBL-072EW4		755 Feet
Tether Sub-Component(s)		
FSW4C12M2RN015F		1
12 Fiber OptiTip MT - with Cable Access - 1.25" Overmold		
<small>Don't forget to order Terminals & Drops. Terminal & Drop Assemblies need to be ordered separately. Please contact CCS Customer Service @ 1-800-743-2671 for part numbers and pricing.</small>		

- Cable type: W4 = ALTOS® All-Dielectric, WA = Figure-8, WF = Riser, V4 = RPX® Gel-Free Flat Ribbon, WC = ALTOS Armored
- Span lengths: distance between poles in the cable run – pole alignment marker (PAM)
- Sag %: added to the span distances to match PAM
- Slack: available to add at any location

- Fiber count at TAPS: 2, 4, 6, 8 or 12
- Tether type: OptiTip MT Connector, multiport or spliced
- Distribution fiber count: 12, 24, 36, 48, 60, 72, 96, 144 or 216
- Pole ID: at which PAM location the tap point will be installed

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Solutions

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