CORNING

Carrier Networks

FTTP Network In a Box Kit

Carrier Innovation

**1970**
Invented the first low-loss optical fiber for communication networks

1990
Fiber optic splice closure 2178 created for buried, below-grade, aerial, and pole-mounted deployments

1994
Developed first CATV node assembly

2005
Corning® SLiC® aerial closure released as free-breathing, weather-resistant, single-piece closure for aerial applications

2012
Corning® Crimplok™ connector – First-known, commercially available, field-mounted connector for FTTx indoor and outdoor use with no splice, gel, or adhesives

2014
7 million homes passed with OptiTip® connectors

2016
Corning® Clear Track fiber pathway answers demand for small-footprint, virtually invisible fiber deployment option

2018
Added 3M's high-bandwidth products, expanding the optical solutions for our customers and improving access to broadband connectivity

1978
Developed loose tube fiber optic cable design

1992
First domestic ribbon cable invented

2004
Preterminated OptiTap® connector-enabled products became an industry standard and spurred OptiTip® connector and FlexNAP™ system development facilitating mass FTTH deployments

2005
Corning® ClearCurve® fiber revolutionized fiber installation in the most challenging environments

2013
Centrix™ system was developed to support high-density solutions for central office applications

2015
Launched MiniXtend® cable with FastAccess® technology with industry-leading fiber density

2017
Launched the FlexNAP™ multiuse system, the industry's first solution to offer a combination of multifiber and singlefiber connection points, making it easier to quickly deploy FTTx networks

2020
Introduced Pushlok™ Connector Technology, enabling the smallest form factor preconn solutions available

Contents

Connect with a Network In a Box Kit

For FTTH last-mile providers with projects passing 1,000 homes or less, you may be struggling to complete projects on time or keep crews busy due to current material lead times.

Corning, a world leader in solutions for fiber broadband networks, is proud to offer our FTTH network-in-a-box (NIAB) solution for last-mile broadband deployments. The Corning NIAB solution is designed to leverage Corning's renowned 100% factory tested FlexNAP™ cable solution which eliminates costly and lengthy field splicing requirements, allowing you to complete projects up to 5 times faster and with up to 30% lower total cost than other FTTH solutions. When you design and order your custom FlexNAP cable with Corning, all of the downstream passive components needed to complete your last-mile network are available on shelves nationwide, ready for shipment.

Fiber in Single-Family Units (SFU)
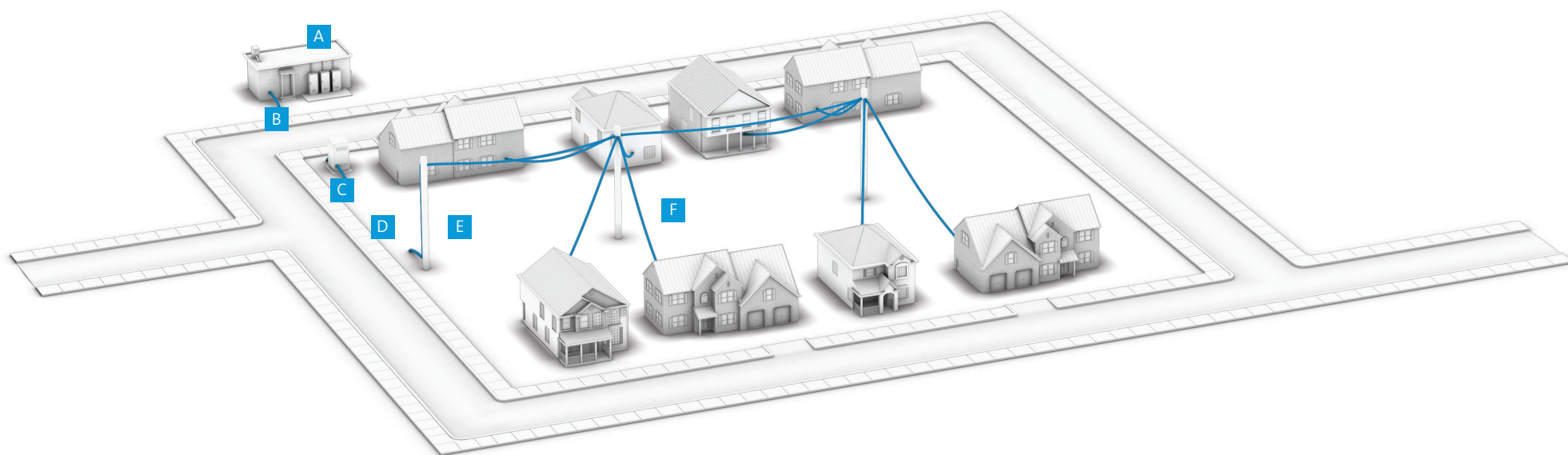
A **Central Office/Headend**
Network electronics combine and disperse signals to a specified serving area.

B **Optical Feeder Cable**
Fiber optic cables feed small distribution-serving areas.

C **Local Convergence Point** (page 7)
In centralized and distributed split architectures, the field splitters are managed in this consolidated splice point.

D **Optical Distribution Cable** (page 5)
Bulk or preterminated cable solutions extend into neighborhoods and along city streets to cover the desired serving area.

E **Network Access Point** (pages 9 and 12)
Discrete locations along the cable path allow for subscriber access to the distribution cable through closures or terminals.

F **Customer Premise** (pages 14 and 16)
The final piece connects the customer premise electronics to the assigned network access point.
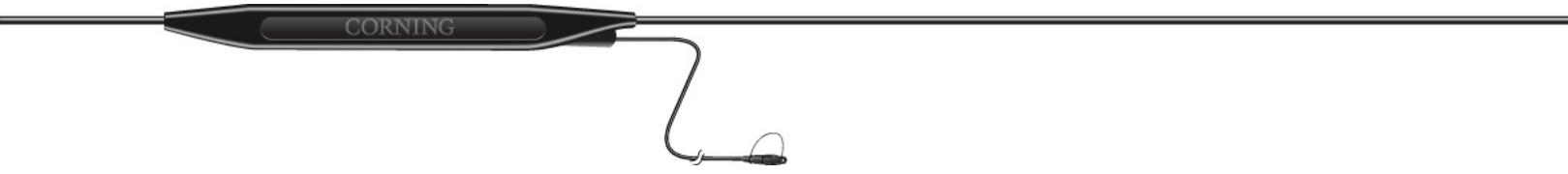
FlexNAP™ System

Save time and money with our FlexNAP™ system, a pre-engineered factory-terminated network access point integrated into fiber optic distribution cables. Designed for FTTH networks, the factory-tested and factory-sealed system deploys up to 50% faster than traditional deployment methods by eliminating costly field splices. The FlexNAP system simplifies installation by using the same methods as bulk cable while leveraging the speed of preconnectivity. Depending on your network architecture, either the FlexNAP standard, single-fiber, or multiuse system will be your choice for this technician-friendly FTTH innovation. Trust in a technology that's helped operators pass more than 20 million premises and counting.

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	FlexNAP™ System
	FlexNAP™ Standard System
Architecture	Centralized, home run
Maximum Fiber Count	**ALTOS® loose tube cable (dielectric, armored, or figure-8):** 432 fibers with 204 terminated remainder expressed **RPX® ribbon cable (dielectric or toneable):** 144 fibers
Aerial Self-Supporting Cable	Yes, with RPX ribbon or ALTOS figure-8 cable
Buried Environment	**Loose tube:** 1.25-in duct up to 72 fibers dielectric, 2-in duct up to 216-fiber dielectric, or 72-fiber armored cable **RPX ribbon cable:** 2-in duct
Maximum Tethers per Tap	2, dual tap dual tether option available to access 48-fibers max per location
Multifiber Connector Tether Options	**Using OptiTip® connectors:** **Loose tube:** 2, 4, 6, 8, or 12 **RPX ribbon cable:** 4, 8, or 12
Single-Fiber Connector Tether Options	N/A
Supports Preterm Laterals	Yes, maximum 48 fiber per lateral
Pretermination Possible at Cabinet	No
Enables Converged Networks	Yes
OSP Terminal Compatibility	Supports Evolv™ terminals
MDU Terminal Compatibility	Supports OptiTip multifiber connector-enabled MDU and LPT terminals

Local Convergence Point

The network you build today will serve your customers for many years, so we've designed our family of cabinets to serve them well. These cabinets, the cornerstone of our FTTH portfolio, enable quick subscriber turn-up and error-free, long-term management of your climbing take rates. See the following table for information related to the splitter module supporting our LS series cabinets.

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LS Series Outdoor Cabinet Splitter Module

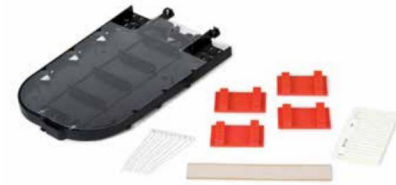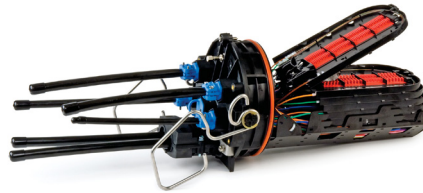| Part Number	Description	Specification Sheet
LS Series Splitter Module		
WMR4CC6CA6C11132	LS Series Cabinet Splitter Module, 1x32	🔗 0208_NAFTA_AEN
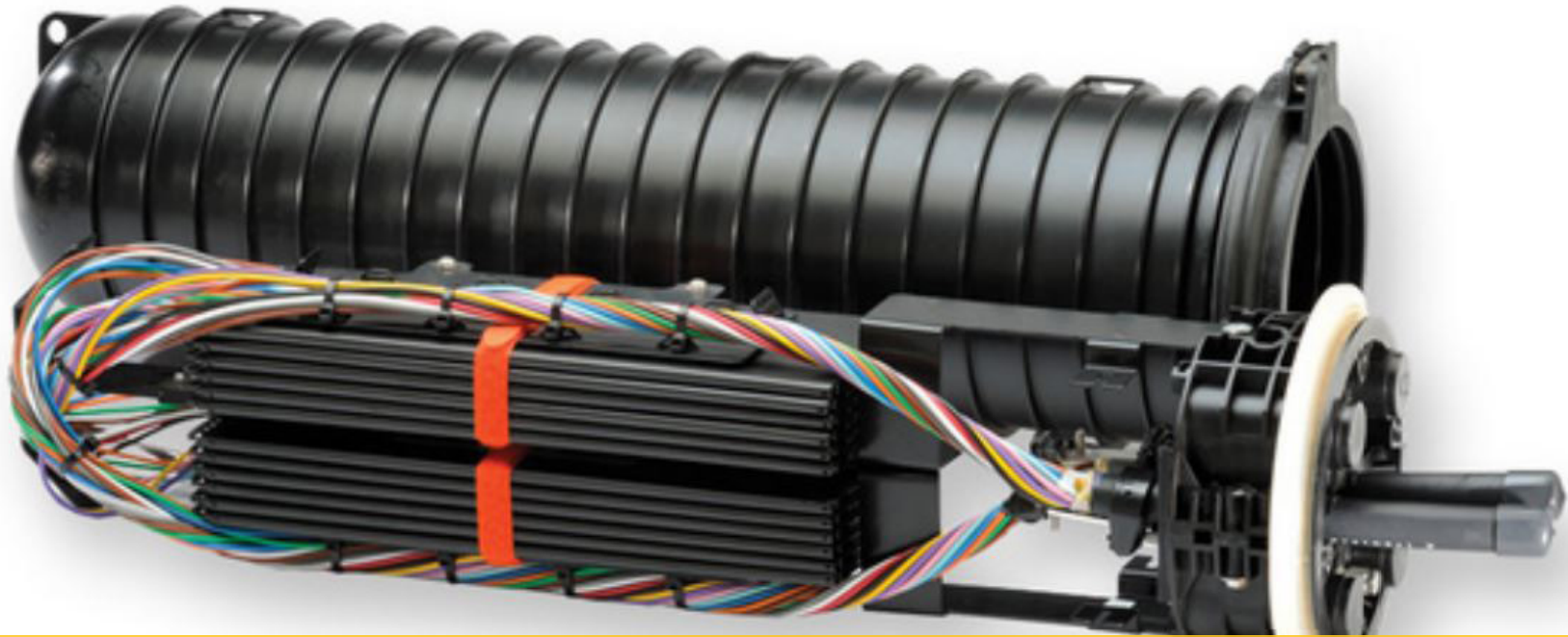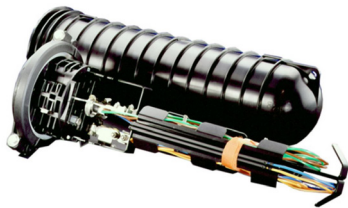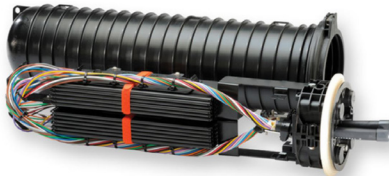
Closures

Whether your FTTH network design has closures in a buried or aerial environment, one thing remains the same: you need assured environmental protection and quick, incremental subscriber drops. From our experience in the field, we know that not all closures are the same. Our preconnectorized terminals are thoughtfully designed to incorporate individual strain-relief, sealing of all cables, and quick-release clamps for easy re-entry. With our expanded solution portfolio, we can help you choose the one that's best for your deployment from the following tables.

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	Splice Closure Fiber (SCF) Series	

Part Number	Description	Specification Sheet
SCF Closure Options		
SCF-4C18-01	SCF Series, 72 single-fiber splice capacity, 4-in diameter, 18-in dome length, 3 drop ports, no splice trays	🔗 SCF-4C18-01
SCF-6C22-02	SCF Series, 144 single-fiber splice capacity, 6-in diameter, 22-in dome length, 4 drop ports, no splice trays	🔗 SCF-6C22-02
SCF-8C28-01-F	SCF Series, 288 single-fiber splice capacity, 8-in diameter, 28-in dome length, 6 drop ports, 0.4-in tray height stacker	🔗 SCF-8C28-01-F
SCF Splice Tray Options		
SCF-ST-126	SCF Series Splice Tray, 24 heat-shrink single-fiber splice capacity or 4 mass fusion splice capacity, 0.4-in tray height	🔗 SCF-ST-126
SCF-ST-077	SCF Series Splice Tray, 48 heat-shrink single-fiber splice capacity or 6 mass fusion splice capacity, 0.4-in tray height	🔗 SCF-ST-077
Accessories		
2806031-01	Heat-Shrink Fusion Splice Protectors, single-fiber, package of 50, 60-mm long	🔗 2806031-01

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Part Number	Description	Specification Sheet
FDC Closure Options		
80611380272	FDC Series, FDC 08S-B, 96 single-fiber splice capacity or 288-fiber mass fusion splice capacity, one 20-mm oval port, two 18-mm round ports, one 12-mm round port, 3 grounds, 2538 splice tray	🔗 CRR-1379-AEN
80611329568	FDC Series, FDC 10S-D, 288 single-fiber splice capacity or 432-fiber mass fusion splice capacity, one 20-mm oval port, five 18-mm round ports, 3 grounds, 2541 splice tray	🔗 CRR-1379-AEN
80611332216	FDC Series, FDC 12S-F, 576 single-fiber splice capacity or 432-fiber mass fusion splice capacity, one 27-mm oval port, five 27-mm round ports, 3 grounds, 2542 splice tray	🔗 CRR-1379-AEN
FDC Splice Tray Options		
80611317142	2538 FDC splice tray, 2538-24-SF or 2538-72-MF, 24 single-fiber splice capacity or 72 mass fusion splice capacity	🔗 CRR-1379-AEN
80611329543	2541 FDC splice tray, 2541-48-SF-3.0MM, 48 single-fiber 3.0-mm fusion splices, only for FDC 10 closures	🔗 CRR-1379-AEN
80611332257	2542 FDC splice tray, 2542-72-SF-3.0MM, 72 single-fiber splice 3.0-mm fusion splices, only for FDC 12 closures	🔗 CRR-1379-AEN
FDC Cable Entry Kits		
80611316961	External Cable Assembly Module (ECAM) Cable Entry Kit, ECAM-12MM, 12-mm cable diameter, for FDC 08S-B	🔗 CRR-1379-AEN
80611329501	External Cable Assembly Module (ECAM) Cable Entry Kit, ECAM-18MM-S, 18-mm cable diameter,for FDC 10	🔗 CRR-1379-AEN
80611329493	External Cable Assembly Module (ECAM) Cable Entry Kit, ECAM-27MM-S, 27-mm cable diameter, for FDC 12	🔗 CRR-1379-AEN
Accessories		
2806031-01	Heat-Shrink Fusion Splice Protectors, single-fiber, package of 50, 60-mm long	🔗 2806031-01

Outside Plant Terminals

Specifically designed for outside plant (OSP) fiber access networks, our multiport family delivers fully sealed environmental protection and fast, easy incremental connection for increased deployment velocity. For the greatest deployment acceleration, you can pair connector-enabled terminals with our FlexNAP™ system. Another best practice is to consolidate cable access points by routing several terminal stubs to a single-splice location, increasing workforce efficiency and reducing the total connection time for subscribers.

Through our extensive FTTH experience, we've designed these OSP terminals with flexible form factors and integrated splitters to adapt to your individual network. Look at the following table to see which combination of features is right for you.

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	Evolv™ Terminals with Pushlok™ Technology, Stubbed	
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Part Number	Description	Specification Sheet
Stubbed Terminals, Toneable Cable		
DFA4F1TDD1M1100F0P	Evolv™ Terminal with Pushlok™ Technology, 4 port, preconnectorized OptiTip® stub, SST toneable, 100 ft	🔗 CRR-1482-AEN
DFA4F1TDD1M1300F0P	Evolv Terminal with Pushlok Technology, 4 port, preconnectorized OptiTip stub, SST toneable, 300 ft	🔗 CRR-1482-AEN
DFA6F1TDD1M1100F0P	Evolv Terminal with Pushlok Technology, 6 port, preconnectorized OptiTip stub, SST toneable, 100 ft	🔗 CRR-1482-AEN
DFA6F1TDD1M1300F0P	Evolv Terminal with Pushlok Technology, 6 port, preconnectorized OptiTip stub, SST toneable, 300 ft	🔗 CRR-1482-AEN
DFA8F1TDD1M1100F0P	Evolv Terminal with Pushlok Technology, 8 port, preconnectorized OptiTip stub, SST toneable, 100 ft	🔗 CRR-1482-AEN
DFA8F1TDD1M1300F0P	Evolv Terminal with Pushlok Technology, 8 port, preconnectorized OptiTip stub, SST toneable, 300 ft	🔗 CRR-1482-AEN
Stubbed Terminals, Dielectric Cable		
DFA4F1FDD1M1020F0P	Evolv Terminal with Pushlok Technology, 4 port, preconnectorized OptiTip stub, SST dielectric, 20 ft	🔗 CRR-1482-AEN
DFA4F1FDD1M1100F0P	Evolv Terminal with Pushlok Technology, 4 port, preconnectorized OptiTip stub, SST dielectric, 100 ft	🔗 CRR-1482-AEN
DFA4F1FDD1M1300F0P	Evolv Terminal with Pushlok Technology, 4 port, preconnectorized OptiTip stub, SST dielectric, 300 ft	🔗 CRR-1482-AEN
DFA6F1FDD1M1020F0P	Evolv Terminal with Pushlok Technology, 6 port, preconnectorized OptiTip stub, SST dielectric, 20 ft	🔗 CRR-1482-AEN
DFA6F1FDD1M1100F0P	Evolv Terminal with Pushlok Technology, 6 port, preconnectorized OptiTip stub, SST dielectric, 100 ft	🔗 CRR-1482-AEN
DFA6F1FDD1M1300F0P	Evolv Terminal with Pushlok Technology, 6 port, preconnectorized OptiTip stub, SST dielectric, 300 ft	🔗 CRR-1482-AEN
DFA8F1FDD1M1020F0P	Evolv Terminal with Pushlok Technology, 8 port, preconnectorized OptiTip stub, SST dielectric, 20 ft	🔗 CRR-1482-AEN
DFA8F1FDD1M1100F0P	Evolv Terminal with Pushlok Technology, 8 port, preconnectorized OptiTip stub, SST dielectric, 100 ft	🔗 CRR-1482-AEN
DFA8F1FDD1M1300F0P	Evolv Terminal with Pushlok Technology, 8 port, preconnectorized OptiTip stub, SST dielectric, 300 ft	🔗 CRR-1482-AEN

Drop Assemblies

To reduce the cost and time of deploying drop cables in your optical access network, we factory terminate our drops with either SC APC or environmentally sealed hardened connectors. These innovative single-fiber drop cable assemblies enable quick, highly reliable customer connections – without field splicing. Available on a wide variety of cables, you can choose a design that's right for your application. Determine which product best fits your needs using the provided table.

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Part Number	Description	Specification Sheet
ROC™ Drop, Toneable Cable		
00D101EB19R100F-P	Evolv ROC Drop with Pushlok Technology, 1 fiber, toneable, pigtail, 100 ft, individual packaging	🔗 CRR-1482-AEN
00D101EB19R150F-P	Evolv ROC Drop with Pushlok Technology, 1 fiber, toneable, pigtail, 150 ft, individual packaging	🔗 CRR-1482-AEN
00D101EB19R200F-P	Evolv ROC Drop with Pushlok Technology, 1 fiber, toneable, pigtail, 200 ft, individual packaging	🔗 CRR-1482-AEN
00D101EB19R250F-P	Evolv ROC Drop with Pushlok Technology, 1 fiber, toneable, pigtail, 250 ft, individual packaging	🔗 CRR-1482-AEN
00D101EB19R300F-P	Evolv ROC Drop with Pushlok Technology, 1 fiber, toneable, pigtail, 300 ft, individual packaging	🔗 CRR-1482-AEN
ROC Drop, Dielectric Cable		
00D101EB49R100F-P	Evolv ROC Drop with Pushlok Technology, 1 fiber, dielectric, pigtail, 100 ft, individual packaging	🔗 CRR-1482-AEN
00D101EB49R150F-P	Evolv ROC Drop with Pushlok Technology, 1 fiber, dielectric, pigtail, 150 ft, individual packaging	🔗 CRR-1482-AEN
00D101EB49R200F-P	Evolv ROC Drop with Pushlok Technology, 1 fiber, dielectric, pigtail, 200 ft, individual packaging	🔗 CRR-1482-AEN
00D101EB49R250F-P	Evolv ROC Drop with Pushlok Technology, 1 fiber, dielectric, pigtail, 250 ft, individual packaging	🔗 CRR-1482-AEN
00D101EB49R300F-P	Evolv ROC Drop with Pushlok Technology, 1 fiber, dielectric, pigtail, 300 ft, individual packaging	🔗 CRR-1482-AEN
Accessories		
KT-PL-SHROUD-SC	SC APC Shroud to convert Pushlok connector	🔗 CRR-1482-AEN
KT-PL-OPT-CONV	OptiTap® housing & retaining clip to convert Pushlok connector	🔗 CRR-1482-AEN
CLEANER-PUSHLOK	Evolv Port Cleaner with Pushlok technology, compatible with Pushlok connectors and Evolv terminals	🔗 CRR-1482-AEN

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NIDs

Whether you're servicing a business or a residence, there's no one-size-fits-all answer for your multidwelling or multitenant needs. You need a customized solution and a collaborator with the expertise to simplify your challenges, so you can focus on delivering the services and applications that your subscribers expect. Other variables like aesthetics, labor skill level, and rights-of-way access will factor into your architecture and product selection. Choose a supplier that knows your environment and has manufacturing expertise that can help you choose flexible, simplified product sets. What you will find on the following page is a solution that addresses the wide variety of environments you may encounter in the field, backed by the expertise we've gained in more than 15 years of global deployments.

NIDs

Part Number	Description	Specification Sheet
Fiber Transition Housing		
FTH-602-A1100	Fiber Transition Housing, 1 SC APC simplex adapter, ground post, hex security screw, 3-m slack storage	🔗 FTH-602-A1100

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LETS **CONNECT!**

Corning Representative: _____

Phone Number: _____

Email: _____

Distribution Representative: _____

Phone Number: _____

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CO/HE Solutions
corning.com/isp

Hybrid Fiber Coax Solutions
corning.com/mso

Community Broadband Solutions
corning.com/community-broadband

FTTH Solutions
corning.com/ftth