

CORNING



BRING
BROADBAND
HOME

**Optical Tap
Architecture
Guide**



Whether your deployment is centralized split, distributed split, or optical tap, you can count on our fiber-to-the-home expertise. Optical tap architectures are the most fiber lean. Asymmetric/uneven split terminals allow for single-fiber distribution of concatenated terminals. Routes are custom configured to optimize link loss. We've compiled the most commonly used preconnectorized products for optical tap. This document outlines two methods of deploying the distribution portion of the network depending on the level of connectivity used.

Our broad portfolio of products addresses your specific challenges from speed of deployment, labor and cost considerations, performance requirements, future-readiness, and more.

Select your options across these areas of the network:

- (A) Central Office (CO)
- (B) Feeder Cable
- (C) Fiber Distribution Hub (FDH)
- (D & E) Distribution Segment
- (F) Customer Premises

Cost Components Comparison

Labor Effort

Level of connectorization impacts crew & size



Full Splice



Spliced Terminals



Full Preconnectorized



Material Cost

Level of connectorization impacts upfront cost



Full Splice

\$

Spliced Terminals

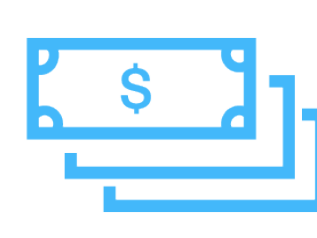
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Full Preconnectorized

\$ \$ \$ \$

Total Cost

Labor effort and material cost drive total cost



Full Splice



Spliced Terminals



Full Preconnectorized



Connectivity for the Win!

We are willing to bet on connectivity for your build. Decades of experience with connectivity have proven a wise investment for network operators around the world.

Your next deployment's fully connectorized design is on us.

Reach out to our subject matter experts to get your consultation started at connect@corning.com.

Optical Tap Option 1

Spliced Terminals

The optical tap option shown on this page highlights a spliced design. Note: Optical tap networks may employ leading splitters that traditionally would be spliced in at a closure.

Cost Components Comparison

Labor Effort

Eliminates splice events downstream of splitter cabinet



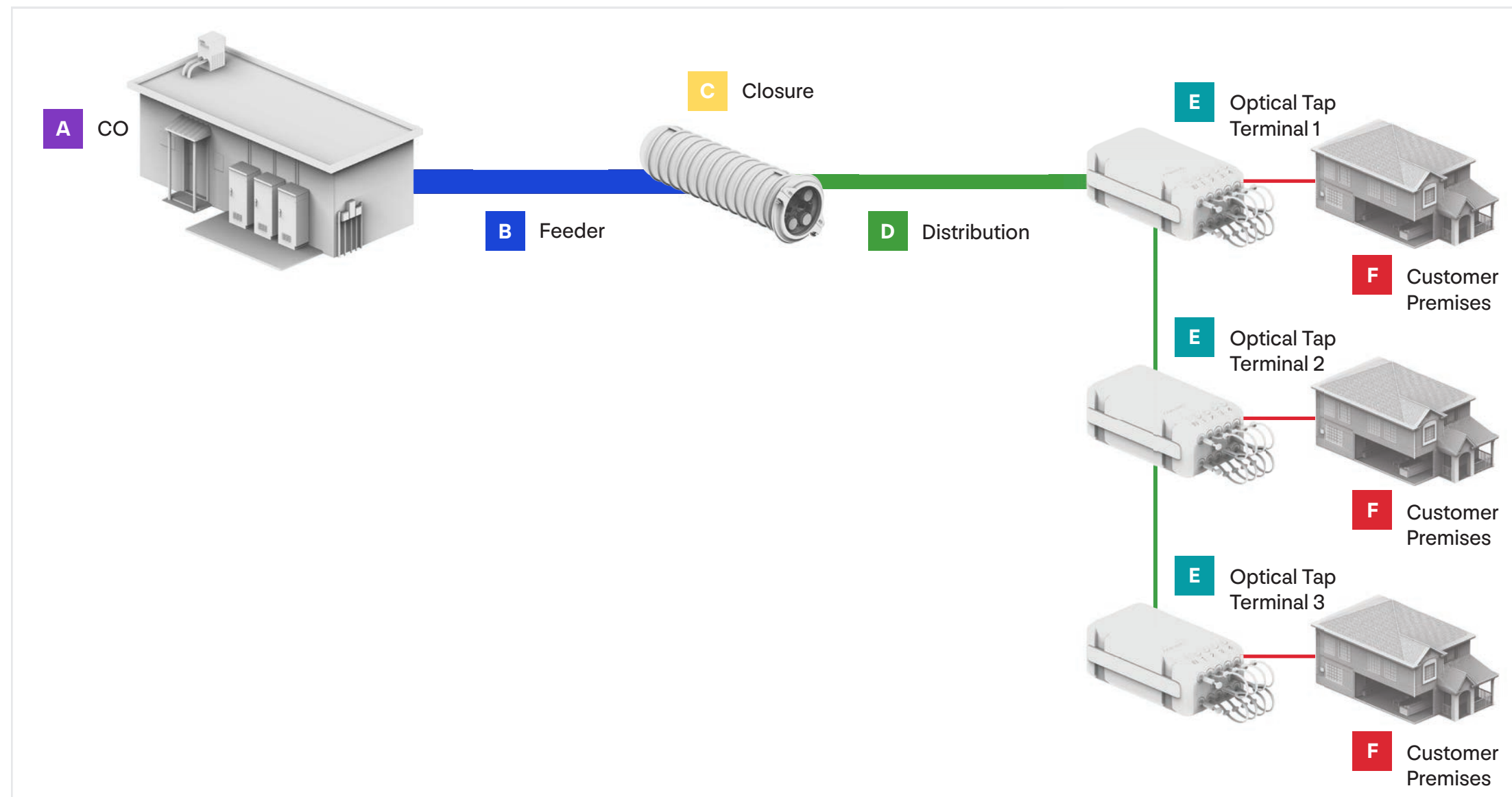
Material Cost

Pre-installed connectors along distribution cable increase material cost



Total Cost

Savings result from reduction of splice events and cable placement labor

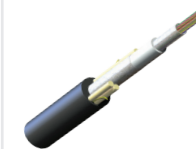


A Central Office (CO)



The Centrix™ hardware system is a pay-as-you-grow solution where you can choose to order fully loaded racks/frames on day one, or simply start with a cassette in a housing. The core of the solution is a single, modular cassette that can be tailored to include a variety of optical devices and can contain up to 36 LC connector adapters.

B Feeder Cable



Whether aerial or buried, we have the fiber count, quality, and reliability your network demands. For higher fiber counts, ribbon cable may be a good option for you! For below-grade applications, consider using an armored cable. If you are looking for a solution to place in congested ducts with microducts, MiniXtend® cable may be the right fit.

C Closure



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. Our preconnectorized terminals are thoughtfully designed to incorporate individual strain-relief, sealing of all cables, and quick-release clamps for easy re-entry.

D Distribution



Depending on your deployment method and architecture type, cable attributes may vary from self-support to armored or even microduct suitable cables. In the distribution, cables chosen may or may not be identical to the feeder depending on the serving area's needs.

E Optical Tap Terminals



By combining two splitters in each terminal, one asymmetric 1x2 and one even 2- 4- or 8-way splitter, the entire optical tap chain becomes plug and play.

F Customer Premises



Corning's drop cable portfolio and associated assemblies allow for full plug-and-play at the subscriber premises and also support field-installable terminations.

Optical Tap Option 2

Full Preconnectorized

The optical tap option shown on this page highlights a full preconnectorized design. Note: Optical tap networks may employ leading splitters that traditionally would be spliced in at a closure.

Cost Components Comparison

Labor Effort

Eliminates splice events downstream of splitter cabinet



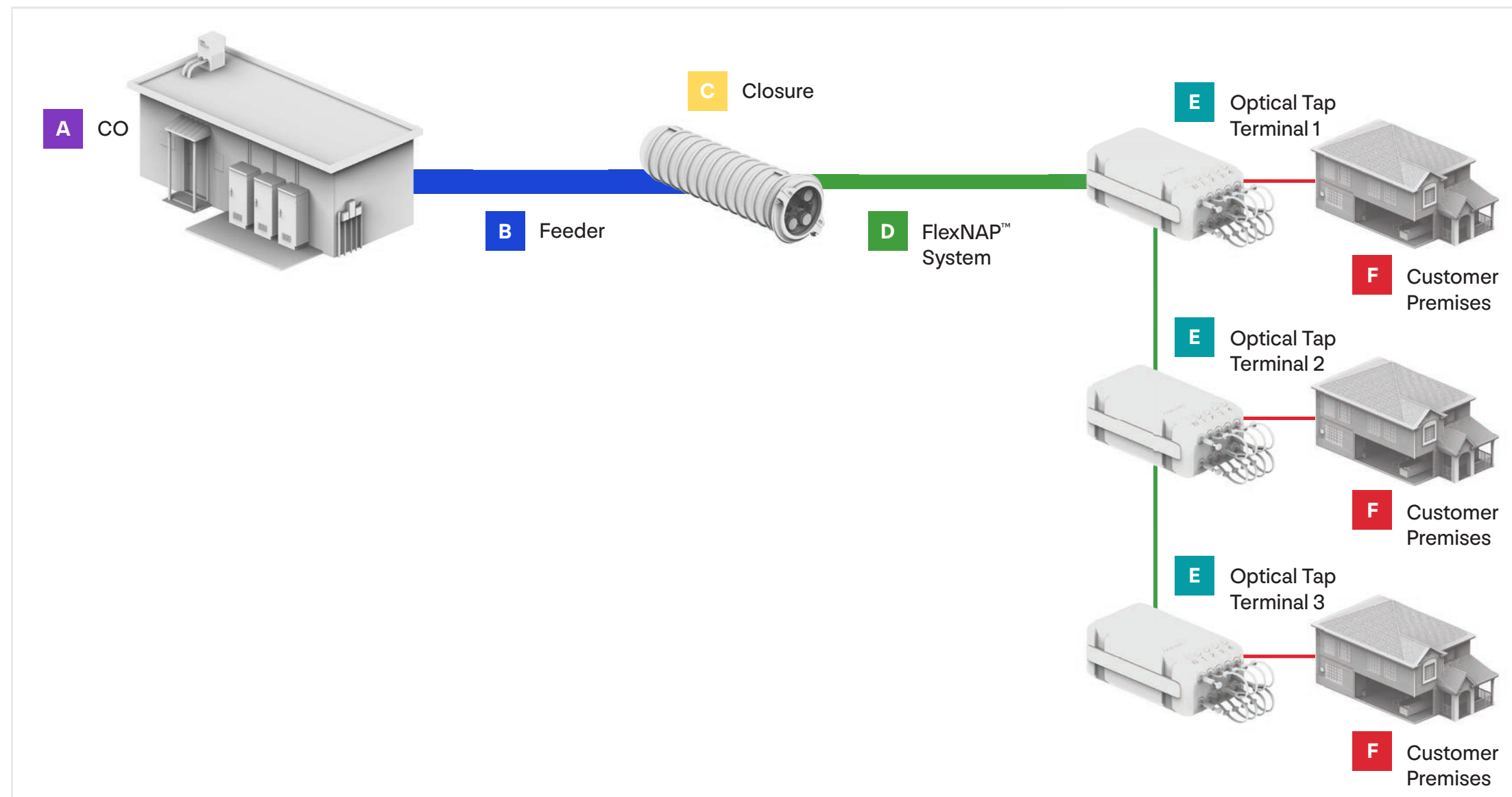
Material Cost

Pre-installed connectors along distribution cable increase material cost



Total Cost

Savings result from reduction of splice events and cable placement labor



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The Centrix™ hardware system is a pay-as-you-grow solution where you can choose to order fully loaded racks/frames on day one, or simply start with a cassette in a housing. The core of the solution is a single, modular cassette that can be tailored to include a variety of optical devices and can contain up to 36 LC connector adapters.

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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. Our preconnectorized terminals are thoughtfully designed to incorporate individual strain-relief, sealing of all cables, and quick-release clamps for easy re-entry.

D FlexNAP System



The FlexNAP system utilizes optical fiber cables upon which network access points are pre-installed at customer-specified locations along the length of the cable. In this design, the FlexNAP system has single-fiber Pushlok™ tethers that begin an optical tap chain of terminals.

E Optical Tap Terminals



By combining two splitters in each terminal, one asymmetric 1x2 and one even 2- 4- or 8-way splitter, the entire optical tap chain becomes plug and play.

F Customer Premises



Corning's drop cable portfolio and associated assemblies allow for full plug-and-play at the subscriber premises and also support field-installable terminations.

Product Ordering Information

A Central Office (CO)	
Part Number	Description
Frame	
CTX-SA-FRAME-7	Standard Rear Cable Access Frame, 7 ft
Housings	
CTX-S4U	Centrix™ Housing, 4U, 12 cassette positions, empty
CX4WWP36-B3-2RJ000	432F Centrix 4U Splice Housing, 36F LCA cassettes
CX4U831246C-xx002B	288F Centrix 4U Stubbed Housing, 24F SCA cassettes, 31-m stub, xx cable
Cassettes	
CTXCMA00-6C-SP8102	Centrix Splitter Cassette, 1x2 splitter, SC APC
CTXCMA00-B3-SP1132	Centrix Splitter Cassette, 1x32 splitter, LC APC
CTX360236A9-D9893B	Centrix Stubbed Cassette, 36 LCU to 3 MTP®, 2 m
CTXCPP24-6C-2RH000	Centrix Pigtail Cassette, 24 SC APC
CTXCA36-B3B	Centrix Patch Cassette, 36 LC APC
Jumpers	
444401G3116004M	Jumper, SC APC to SC APC, 4-m long, 1.6-mm OD
585801G3116004M	Jumper, SC UPC to SC UPC, 4-m long, 1.6-mm OD
222201G3116004M	Jumper, LC APC to LC APC, 4-m long, 1.6-mm OD
020201G3116004M	Jumper, LC UPC to LC UPC, 4-m long, 1.6-mm OD

B Feeder Cable	
Part Number	Description
Ribbon Cables	
xxxZC5-14100D53	SST-Ribbon™ Armored Cable (144-864 fibers)
xxxEC4-14100D53	SST-Ribbon All-Dielectric, Non-Armored (012-216 fibers)
xxxEV4-14100D53	SST-UltraRibbon™ All-Dielectric, Non-Armored (288-864 fibers)
xxxEV4-44101D53	RPX® All-Dielectric Self-Supporting Cable (024-144 fibers)
Loose Tube Cables	
xxxZU4-T4F22D20	ALTOS® Loose Tube Cable (012-288 fibers)
xxxZUC-T4F22D20	ALTOS Lite Single-Jacket, Armored (012-288 fibers)
Microduct Cables	
xxxZM4-T4F22A20	MiniXtend Cable (012-144 fibers)
xxxZH4-Y4F40A20	MiniXtend HD Cable (144-288 fibers)
xxxZH4-S4F40A20	MiniXtend HD Cable (288-432 fibers)

C Closures	
Part Number	Description
Splice Closures*	
BPEO-S0-MXT-04T1-D69-4S7	BPEO Splice Closure Size 0, MiniXtend
BPEO-DTP-1-832-43xx-3ZZC1*	BPEO 2-port Optical Tap Tray with SC APC
BPEO-DTP-1-832-45xx-3ZZC1*	BPEO 4-port Optical Tap Tray with SC APC
BPEO-DTP-1-832-49xx-3ZZC1*	BPEO 8-port Optical Tap Tray with SC APC

*xx indicates asymmetric split ratio

D Option 1: Distribution Cable	
Part Number	Description
Ribbon Cables	
xxxZC5-14100D53	SST-Ribbon™ Armored (144-864 fibers)
xxxEC4-14100D53	SST-Ribbon Dielectric, Non-Armored (012-216 fibers)
Loose Tube Cables	
xxxZU4-T4F22D20	ALTOS® Loose Tube Cable (012-288 fibers)
xxxZUC-T4F22D20	ALTOS Lite Armored Loose Tube Cable (012-288 fibers)
Microduct Cables	
xxxZM4-T4F22A20	MiniXtend® Cable (012-144 fibers)
xxxZH4-Y4F40A20	MiniXtend HD Cable (144-288 fibers)

D Option 2: FlexNAP™ System	
Part Number	Description
FlexNAP Trunk Cables	
FNAP-CBL-xxxEU4	FlexNAP Distribution Trunk Cable, ALTOS® loose tube cable, dielectric, xxx fibers (012 -432 fibers)
FNAP-CBL-xxxEUC	FlexNAP Distribution Trunk Cable, ALTOS loose tube cable, armored, xxx fibers (012-432 fibers)
FlexNAP Tether Attachment Points	
FSD4AxxD1TN010F	FlexNAP Tether Attachment Point, ALTOS loose tube cable, dielectric, xx tether count (01 = single tether or 02 = dual tether)
FSDCAxxD1RNO15F	FlexNAP Tether Attachment Point, ALTOS loose tube cable, armored, xx tether count (01 = single tether or 02 = dual tether)

E Optical Tap Terminals	
Part Number	Description
2-port Terminals	
DTA4X21500NC00SOP	Evolv® Optical Tap Terminal, 2-port, 90/10 power split, unstubbed
DTA4X21300NC00SOP	Evolv Optical Tap Terminal, 2-port, 85/15 power split, unstubbed
DTA4X21100NC00SOP	Evolv Optical Tap Terminal, 2-port, 80/20 power split, unstubbed
DTA4X20900NC00SOP	Evolv Optical Tap Terminal, 2-port, 70/30 power split, unstubbed
DTA4X20800NC00SOP	Evolv Optical Tap Terminal, 2-port, 60/40 power split, unstubbed
DTA4X20400NC00SOP	Evolv Optical Tap Terminal, 2-port, 00/00 power split, unstubbed
4-port Terminals	
DTA8X41700NC00SOP	Evolv Optical Tap Terminal, 4-port, 90/10 power split, unstubbed
DTA8X41600NC00SOP	Evolv Optical Tap Terminal, 4-port, 85/15 power split, unstubbed
DTA8X41500NC00SOP	Evolv Optical Tap Terminal, 4-port, 80/20 power split, unstubbed
DTA8X41200NC00SOP	Evolv Optical Tap Terminal, 4-port, 70/30 power split, unstubbed
DTA8X41100NC00SOP	Evolv Optical Tap Terminal, 4-port, 60/40 power split, unstubbed
DTA8X40700NC00SOP	Evolv Optical Tap Terminal, 4-port, 00/00 power split, unstubbed
8-port Terminals	
DTB4X82000NC00SOP	Evolv Optical Tap Terminal, 8-port, 90/10 power split, unstubbed
DTB4X81800NC00SOP	Evolv Optical Tap Terminal, 8-port, 85/15 power split, unstubbed
DTB4X81700NC00SOP	Evolv Optical Tap Terminal, 8-port, 80/20 power split, unstubbed
DTB4X81500NC00SOP	Evolv Optical Tap Terminal, 8-port, 70/30 power split, unstubbed
DTB4X81400NC00SOP	Evolv Optical Tap Terminal, 8-port, 60/40 power split, unstubbed
DTB4X81000NC00SOP	Evolv Optical Tap Terminal, 8-port, 00/00 power split, unstubbed
Terminal Jumpers	
D1D101EB49RxxxF-P	ROC™ Drop Cable, Pushlok™ Jumper, dielectric, xxx feet
D1D101EB19RxxxF-P	ROC Drop Cable, Pushlok Jumper, toneable, xxx feet

F Customer Premises	
Part Number	Description
Drops	
O0D101EB49RxxxF-P	ROC Drop Cable, Pushlok to Pigtail, dielectric, xxx feet
O0D101EB19RxxxF-P	ROC Drop Cable, Pushlok to Pigtail, toneable, xxx feet
D14401EB4R3xxxF-P	ROC Drop Cable, Pushlok to SC, dielectric, xxx feet
D14401EB1R3xxxF-P	ROC Drop Cable, Pushlok to SC, toneable, xxx feet
O0D101UB4JRxxxF-P	Round ROC Drop Cable, below-grade jetting/duct, Pushlok to pigtail, xxx feet
Field-Installable Connectors	
OSNP-SCA-900-Z	OptiSnap® Field Installable Connector, SC APC, Qty 25
TKT-OPTISNAP-CF	OptiSnap Connector Installation Toolkit with flat cleaver (FBC-009), fiber prep and cleaning supplies, gray case
NPCP-SCA-48	NPC+ (No Polish Connector), field-installable SC APC, compatible with 250 μm and 900 μm fiber, no toolkit required, package of 48 connectors
TKT-NPCP-FBC007	FBC-007 precision cleaver plus accessories for NPC+
Fiber Transition Housing	
FTH-602-A1100	Fiber Transition Housing, 1 SC APC simplex adapter, ground post for toning, hex security screw, 3-m slack storage
FTH-602-A0100	Fiber Transition Housing, 1 SC APC simplex adapter, hex security screw, 3-m slack storage

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To meet your requirements, we've nurtured long-term relationships with authorized distributors who stock our products and further support your needs including training, customer needs assessment, logistics, and equipment. Whether you are an end user, contractor, or installer, connect with our authorized distributors to purchase your Corning solution today.



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