

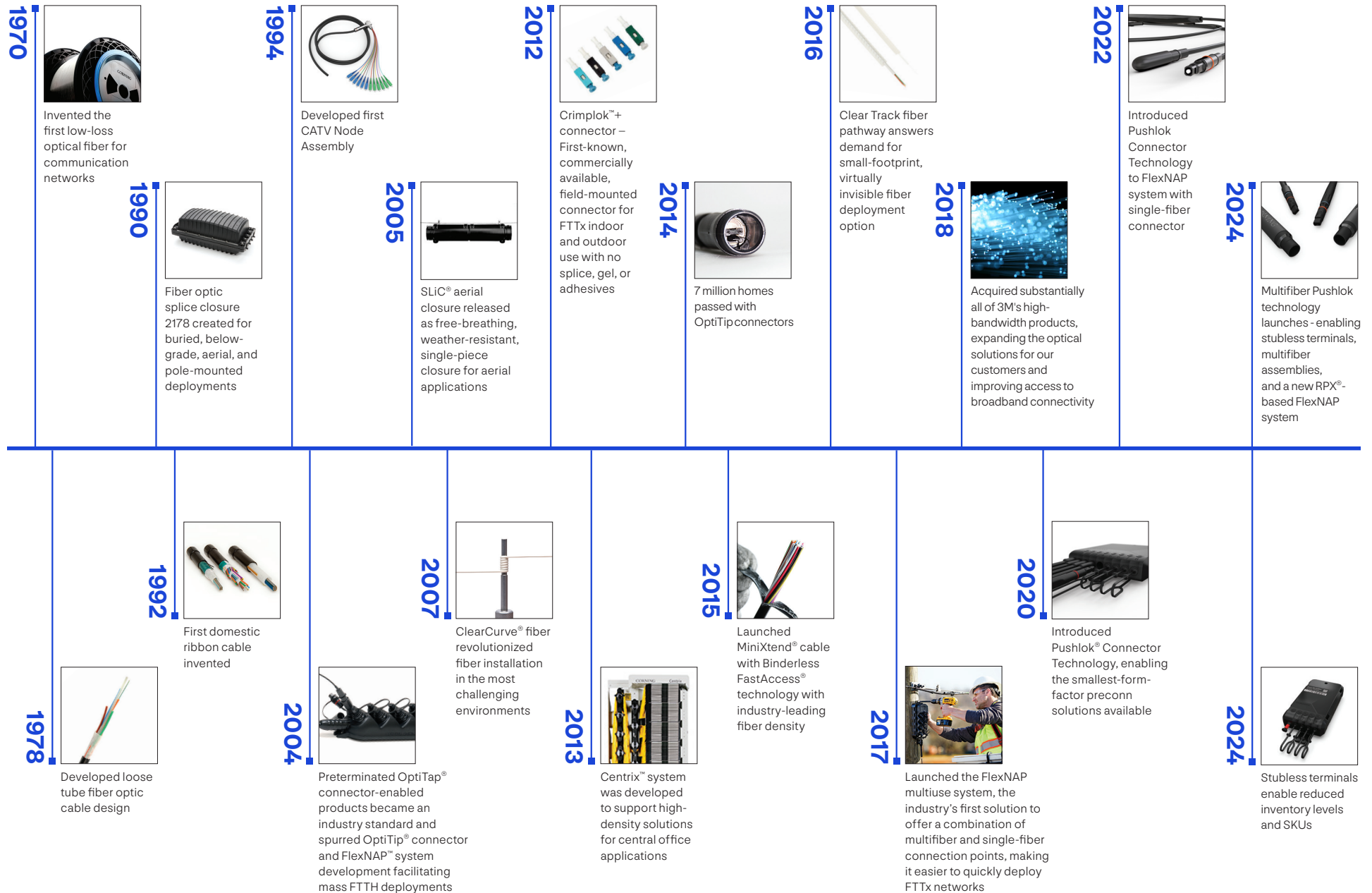
CORNING



# FTTP Selection Guide

Carrier Networks

# Carrier Innovation





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## Connect to the Corning Advantage

Each fiber-to-the-home (FTTH) deployment presents unique challenges – and we can help. With 20 years experience and over 100 million homes passed (over 45 million homes connected with hardened connectors), we’ve set the standard for innovative, field-proven FTTH solutions.

Our portfolio of products and engineering support is designed to address your specific challenges from speed of deployment, labor and cost considerations, performance requirements, future readiness, and more.

To get started, use this quick selection guide to help determine the right architecture, deployment method, and products you need to do the job right the first time.

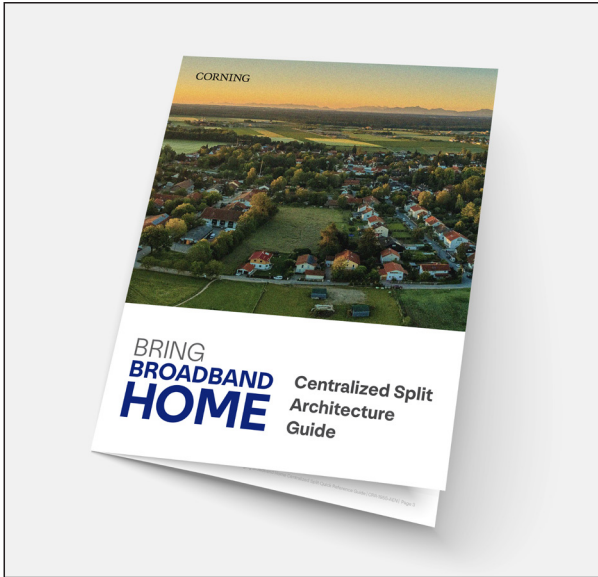
## Together we can connect the unconnected



# FTTH – Network Architectures

Rural communities have a historic opportunity to lay the foundation for a broadband infrastructure that can deliver high-quality broadband to everyone for generations to come. Building the right broadband networks now will have a long-reaching impact on your community. As communities build out broadband infrastructure, choosing the right architecture is key to ensuring seamless connectivity. There are three primary broadband architecture types to consider: distributed split, centralized split, and optical tap.

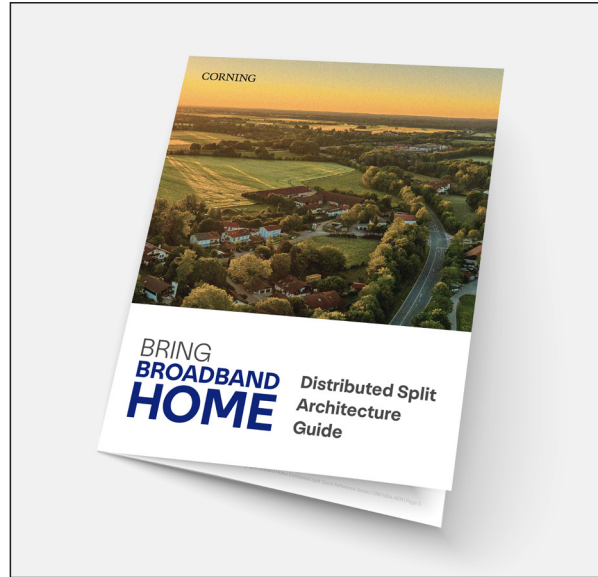
As you make decisions about your community's network, there are a range of fiber network architecture options from which to choose. Leverage the resources below to make the best decision possible.



### Centralized Split

A centralized split architecture is where most of the network equipment is in a central hub, which then distributes the signal to different locations. It is known for its simplicity and ease of maintenance.

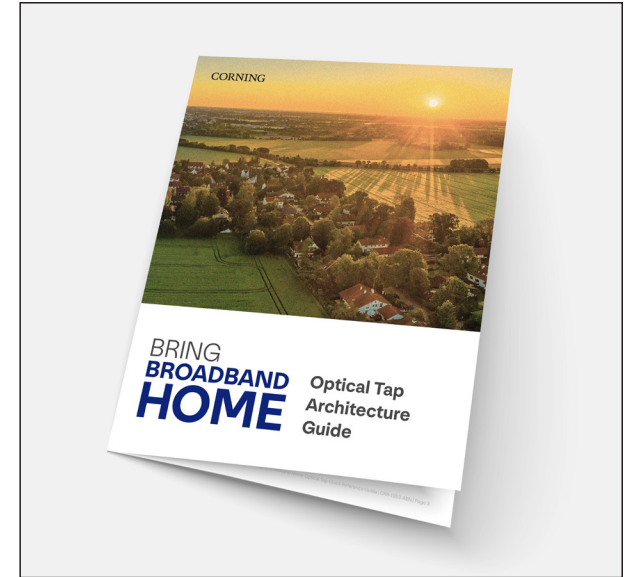
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### Distributed Split

A distributed split architecture involves spreading out the network equipment across various locations, which helps reduce the physical volume of products in the field. It is known for its flexibility and scalability, making it a popular choice for expanding networks in rural areas.

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### Distributed Tap/Optical Tap

An optical tap architecture uses a unique approach through the use of a single fiber. It is designed to split and distribute the signal at the same time, reducing the amount of fiber required. It is an efficient system that minimizes signal loss leading to better performance.

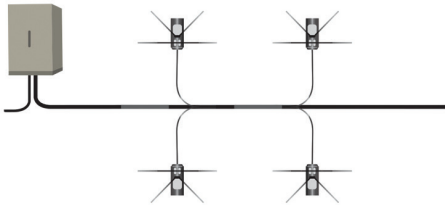
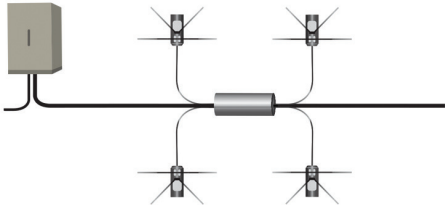
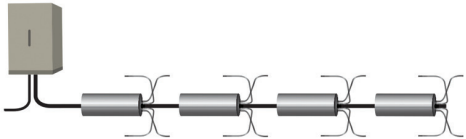
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**Broadband Network Solution Tool:**  
[Click here to find Your Ideal Network Architecture](#)

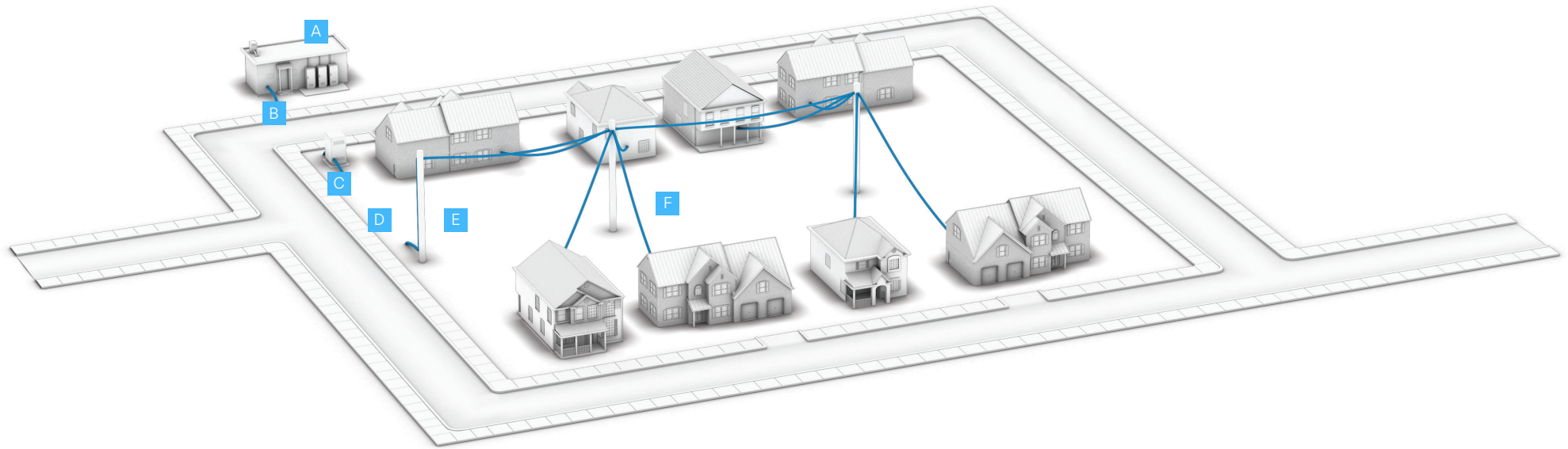


# Deployment Methods

Your successful deployment is a delicate balance of budget, timing, labor, and other variables. An achievable project plan hinges on your ability to carefully choose the deployment method that maximizes your resources. Regardless of your network architecture type, you can deploy a future-ready FTTH network using an end-to-end preconnectorized method, a fully spliced method, or a mix of preconnectorized and spliced segments. Using what you know about the skill level of your labor and what's required of your network, take advantage of the following table to select your preferred deployment method.

CORNING	Full Preconnectorized	Preconnectorized	Full Splice
			
Architecture	Home run, centralized, distributed	Home run, centralized, distributed	Home run, centralized, distributed
Installation Type	Greenfield/brownfield	Greenfield/brownfield	Greenfield/brownfield
Speed of Deployment (HP)	Fast	Moderate	Slow
Subscriber Connection Speed (HC)	Fast	Fast	Slow
Optimal Method of Build	Aerial, duct	Aerial, duct, direct buried	Aerial, duct, direct buried
Optimal Subscriber Density	Medium to high	Low to high	Low to medium
Design Verification/Planning	High	Moderate	Low
Preconnectorized	Yes, for terminals, drops, and lateral cable runs	Yes, for subscriber drops	No
Splices in the Field	Low	Moderate	High
Labor Skill Level	Low	Moderate	High
Installation Risk due to Labor Variability	Low	Moderate	Moderate to high
Scalable for Mass Deployment	Best	Fair	Poor
Deferability	High	Moderate	Low
Quick Facts	<ul style="list-style-type: none"> <li>Preinstalled “plug-and-play” network access points mean simplicity, speed, and profitability for you and the fastest turn-up for your subscribers</li> <li>Splicing is concentrated at splitter cabinets</li> </ul>	<ul style="list-style-type: none"> <li>Enables fast installation of subscriber drops by utilizing hardened connectors at terminals</li> <li>Splicing extends to distribution access points as well as splitter cabinet</li> </ul>	<ul style="list-style-type: none"> <li>Allows for the least amount of pre-engineering up front</li> <li>Requires skilled labor splicing at all access points and subscriber premises</li> </ul>

# Fiber in Single-Family Units (SFU)



**A Central Office/Headend** (page 10) [↗](#)

Network electronics combine and disperse signals to a specified serving area.

**B Optical Feeder Cable** (page 16) [↗](#)

Fiber optic cables feed small distribution-serving areas.

**C Local Convergence Point** (page 20) [↗](#)

In centralized and distributed split architectures, the field splitters are managed in this consolidated splice point.

**D Optical Distribution Cable** (page 17) [↗](#) and (page 41) [↗](#)

Bulk or preterminated cable solutions extend into neighborhoods and along city streets to cover the desired serving area.

**E Network Access Point** (page 26) [↗](#)

Discrete locations along the cable path allow for subscriber access to the distribution cable through closures or terminals.

**F Subscriber Drop** (page 35) [↗](#) and (page 41) [↗](#)

The final piece connects the customer premise electronics to the assigned network access point.

# Fiber in Multidwelling Units (MDU)

## A Outside Demarcation Point (page 20)

Most MDU scenarios feature a demarcation point outside the building. Multiple small MDUs are often fed by distribution cabinets in the outside plant.

## B Inside the Basement (page 32)

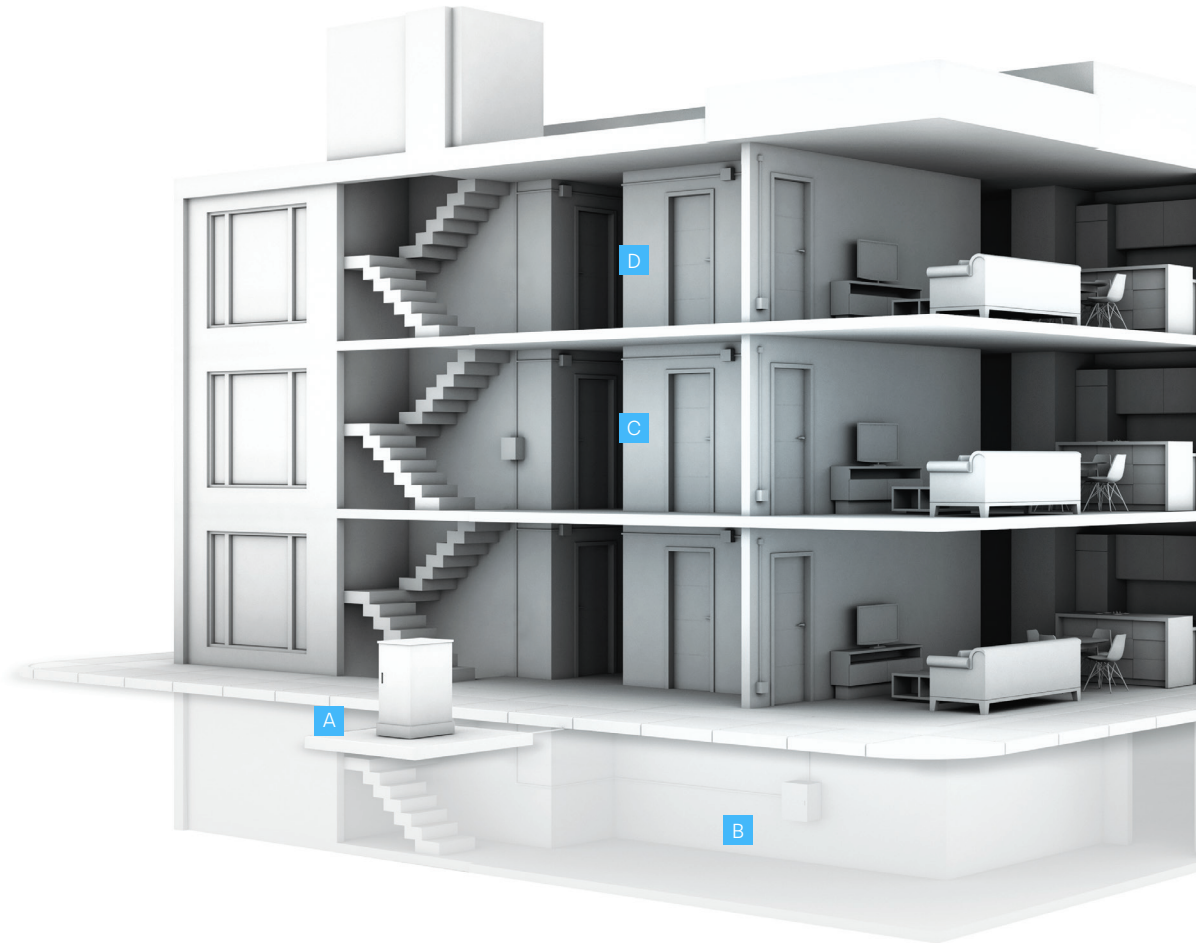
Medium- to large-sized buildings often have a dedicated splitter cabinet supporting anywhere from 32 to 864 living units.

## C At the Floor (page 31)

Riser cables feed terminals on the floor and serve as the transition point from riser to horizontal cabling. Some buildings require a dedicated terminal on each floor, whereas other buildings use one terminal serving several adjacent floors.

## D To the Living Unit (pages 35 through 40)

In medium- and large-sized MDUs, horizontal drop cables run down hallways providing an access point for subscribers to connect. In small MDUs, drop cables home run to the cabinet/splitter terminal.

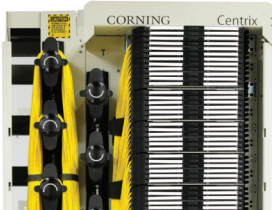


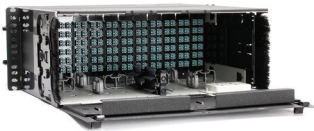




# Central Office/Headend Solutions

The central office/headend (CO/HE) is the foundation needed to support demand for increased connectivity, capacity, and speed. To simplify the design and deployment of your CO/HE, we've developed versatile product families that deliver industry-leading density, enable improved scalability, and provide the lowest total cost of ownership. Whether utilizing splitter technology or xWDM optical devices paired with high-density connectors, we can help you plan and choose the right products to overlay these different PONs effectively. Use the following table to pinpoint the product set within our portfolio that will work best for your network.

To learn more, visit us at [www.corning.com/central-office-design-guide](http://www.corning.com/central-office-design-guide)

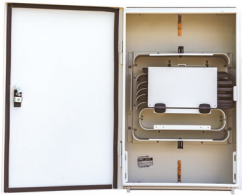


CORNING	High Density		Medium Density	
				
	Centrix™ System	Centrix XL	Eclipse® Hardware	EMF Enhance Management Frame
Application	Central office, Meet me rooms, Remote terminals, optical cross-connect cabinets	Central Office, Meet me rooms, Remote terminals, Point-of-Presence, Optical cross-connect cabinets	MSOs, small Point of Presence (PoP) sites, and Hut sites	Remote terminals
Frame Configuration	Centrix GR-449 Certified frame 19-in or 23-in racks with front and rear access	19-in or 23-in	19-in or 23-in	19-in or 23-in
Capacity in 7-ft Frame	2,880 SC/4,320 LC (3,840 with PON splitters)	5,760 or 4,320	1,440 (864 with PON splitters)	1,440 SC 2,880 with 24-port cassettes LC
Wall-Mountable Option	No	No	Yes	Yes
Cable Type	<b>Loose Tube:</b> outdoor dielectric, indoor/outdoor, riser, plenum, and outdoor micro cables <b>Ribbon:</b> outdoor dielectric, indoor/outdoor, plenum and riser cables <b>Tight-Buffered:</b> riser and plenum cables	<b>Loose Tube:</b> outdoor dielectric, outdoor armored, indoor/outdoor, and riser cables <b>Ribbon:</b> outdoor dielectric, outdoor armored, indoor/outdoor, riser and plenum cables <b>Tight-Buffered:</b> riser and plenum cables	<b>Loose Tube:</b> outdoor dielectric, outdoor armored, indoor/outdoor, and riser cables <b>Ribbon:</b> outdoor dielectric, outdoor armored, indoor/outdoor, riser and plenum cables <b>Tight-Buffered:</b> riser and plenum cables	<b>Loose Tube:</b> outdoor dielectric, indoor/outdoor, and riser cables <b>Ribbon:</b> outdoor dielectric, indoor/outdoor, and riser cables <b>Tight-Buffered:</b> riser and plenum cables
Connector Type	SC, LC, MTP® PRO connectors	SC, LC, MTP PRO connectors	SC, FC, LC, ST® compatible, MTP PRO connectors	SC, LC, FC, ST compatible, MTP PRO connectors
Jumper Size	1.2, 1.6, 2.0 mm	1.2, 1.6, 2.0mm	1.2, 1.6, 2.0 mm	1.2, 1.6, 2.0 mm
Devices xWDM and NG-PON2	Yes	Yes	Yes	No
Accommodate Splitters	Yes	Yes	Yes	Yes
Port Tapping	Yes	Yes	No	No
On-Frame Splicing	Yes	Yes	Yes	Yes
Removable Housing Cover	N/A	Yes	No	Yes
Quick Facts	<ul style="list-style-type: none"> <li>• GR-449 Issue 3 compliant</li> <li>• Scalable in features and function</li> <li>• Industry-leading cable and jumper management</li> <li>• Base-8 and Base-12 fiber applications</li> <li>• Enclosed 4U housing option for 19-in or 23-in racks</li> <li>• Versatile cassettes/modules including staggered LC cassette for improved port access</li> </ul>	Industry-leading cable management and jumpers <ul style="list-style-type: none"> <li>• Superior labeling</li> <li>• Modularity in 1U, 2U, and 4U</li> <li>• 576 LC or 432 SC in 4U</li> <li>• Compatible with LC, SC, MTP, MDC</li> </ul>	<ul style="list-style-type: none"> <li>• Integrated fiber management</li> <li>• Front-to-back jumper access</li> <li>• Splitter compatible with Gen III and LS series</li> </ul>	<ul style="list-style-type: none"> <li>• Variety of field-termination options</li> <li>• Platinum interior color maximizes visibility</li> <li>• Splice cassette for in-frame splicing in an easy-to-manage, compact footprint</li> </ul>



# Optical Splice Enclosures

When transitioning fiber and cable from outdoors to indoors, operators require a rugged enclosure that is optimized for quick re-entry and network expansion. The transition splice occurs in a different location from the optical fiber distribution frames to better manage the fiber and cable. Corning's optical splice enclosure (OSE) portfolio offers varying densities, scalability, and excellent fiber management with routing guide plates which organize and separate stored fiber and fiber entering splice trays. With options offering up to 6,912 ribbon and 5,184 single-fiber splice capacity, we can help support low- to high-density networks.

To learn more, [click here](#).

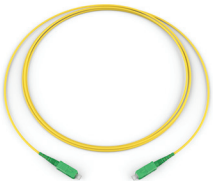

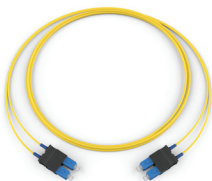
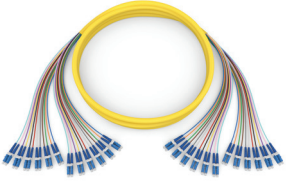
CORNING	Optical Splice Enclosures		
			
	Low Density	High Density	Ultra-High Density
Single-Fiber Splice Capacity	1,296	3,240	5,184
Ribbon Splice Capacity	1,728	4,320	6,912
Dimensions (H x W x D)	81.3 x 55.9 x 25.4 cm (32.0 x 22.0 x 10.0 in)	114.3 x 55.9 x 33.0 cm (45.0 x 22.0 x 13.0 in)	148.1 x 53.9 x 32.3 cm (57 x 22.0 x 13 in)
Splice Tray Capacity	Up to 12	Up to 30	Up to 48
Splice Tray Options	1-in OSE splice tray stacker 0.5-in splice tray stacker 0.2-in splice tray stacker 0.4-in splice tray stacker	1-in OSE splice tray stacker 0.5-in splice tray stacker 0.2-in splice tray tracker or 0.4-in splice tray stacker	0.5-in splice tray stacker
Shipping Weight	75 lbs (34.0 kg)	90 lbs (40.8 kg)	120 lbs (54.4 kg)
Mounting Type	Wall-mountable, rack 23-in	Wall-mountable, rack 23-in	Wall-mountable, rack 23-in
Standard Recommended Procedures (SRPs)	Optical Splice Enclosure: 003-450-AEN Cable Entry Kit: 003-354-AEN	Optical Splice Enclosure: 003-450-AEN Cable Entry Kit: 003-354-AEN	Optical Splice Enclosure: 003-1032-AEN Cable Entry Kit: 003-1036-AEN
T-Slot Mounting Kit	Yes	Yes	No
Workshelf	Yes	Yes	Yes
Locking Option	Yes	Yes	Yes
Application	Equipment rooms, point of presence (POP) sites, utility sub-stations, basement cable vaults, and meet-me-rooms	Equipment rooms, point of presence (POP) sites, utility sub-stations, basement cable vaults, and meet-me-rooms	Equipment rooms, point of presence (POP) sites, utility sub-stations, basement cable vaults, and meet-me-rooms
Quick Facts	<ul style="list-style-type: none"> <li>• 0.090-in 5052-H32 aluminum sheet</li> <li>• Cable entry plates allow various entry options including standard cable entry and mid-span cable access</li> <li>• Provision for 28 cable entry positions, 14 each top &amp; bottom</li> <li>• Horizontal pass-through ports provided near top and bottom of cabinet side</li> </ul>	<ul style="list-style-type: none"> <li>• 0.090-in 5052-H32 aluminum sheet</li> <li>• Cable entry plates allow various entry options including standard cable entry and mid-span cable access</li> <li>• Provision for 46 cable entry positions, 23 each on top &amp; bottom</li> <li>• Horizontal pass-through ports provided near top and bottom of cabinet side</li> </ul>	<ul style="list-style-type: none"> <li>• 0.090-in 5052-H32 aluminum sheet</li> <li>• Cable entry plates allow various entry options including standard cable entry and mid-span cable access</li> <li>• Provision for 48 cable, all fed only from the top</li> <li>• Horizontal pass-through ports provided near top and bottom of cabinet side</li> </ul>



# Cable Assemblies

As the industry's leading supplier of cable assemblies, Corning's state-of-the-art manufacturing process ensures reliable connector performance with products that meet or exceed all industry standards for reflectance and insertion loss. Our ability to scale to meet your deployment needs is what sets us apart, along with the highest-quality fiber and factory-tested connectors. All assemblies undergo rigorous performance testing to ensure optimal quality in every connector.

Our new cable assembly configurator enables users to create part numbers while visually verifying different product attributes. This configurator provides reverse configuration features, realistic visualization, and dynamic specification sheet capabilities. Visit [www.corning.com/configurators/cab](http://www.corning.com/configurators/cab) to configure your next assembly.

CORNING	Assemblies			
				
	Single-Fiber Assemblies	Duplex Assemblies	Duplex Zipcord Assemblies	Multifiber Assemblies
Subunit Size	1.2, 1.6, 2.0 mm	1.6, 2.0 mm	1.2, 1.6, 2.0 mm	1.2, 1.6, 2.0 mm
Fiber Size	250 µm (for the 1.2 mm) 900 µm (for the 1.6 and 2.0 mm)	250 µm (for the 1.2 mm) 900 µm (for the 1.6 and 2.0 mm)	900 µm	250 µm
Assembly Type	Jumpers, pigtails	Jumpers, pigtails	Jumpers, pigtails	Jumpers, pigtails, harnesses, trunks
Cable Design	Round	Round	Flat	Round
Application	Central office, headend, mobile switch center, remote	Central office, headend, mobile switch center	Central office, headend, mobile switch center, LAN	Central office, headend
Solution Compatibility	Centrix™ system, CCH, and Eclipse® hardware	EDGE™ and EDGE8® solutions	Centrix system, CCH, Eclipse hardware, EDGE and EDGE8 solutions	Centrix system, EDGE and EDGE8 solutions
Fiber Count	1	2	2	8, 12, 24, increments up to 144
Fiber Type	<i>Bend-insensitive fibers</i> Single-Mode: Corning® SMF-28® Ultra fiber Corning® ClearCurve® LBL or ClearCurve ZBL fibers	<i>Bend-insensitive fibers</i> Single-Mode: SMF-28 Ultra fiber Multimode: OM3, OM4, and OM5 fiber	<i>Bend-insensitive fibers</i> Single-Mode: SMF-28 Ultra fiber Multimode: OM3, OM4, and OM5 fiber	<i>Bend-insensitive fibers</i> Single-Mode: SMF-28 Ultra fiber Multimode: OM3, OM4, and OM5 fiber
Connector Types	SC APC, SC UPC, LC APC, LC UPC, FC APC, FC UPC, ST® compatible PC connectors	SC APC, SC UPC, LC APC, LC UPC, FC APC, FC UPC, ST compatible PC, uniboot (LC only) standard and lockable connectors	SC APC, SC UPC, LC APC, LC UPC, FC APC, FC UPC, ST compatible PC connectors	SC APC, SC UPC, LC APC, LC UPC
Packaging	Bag, box, or reel Jumper in a box, figure-8 packaging	Bag, box, or reel Jumper in a box, figure-8 packaging	Bag, box, or reel Jumper in a box, figure-8 packaging	Bag, box, or reel
Quick Facts	<ul style="list-style-type: none"> <li>• Single-length management and simplified inventory with</li> <li>• Jumper in a box for Centrix system-compatible assemblies (5 m)</li> </ul>	<ul style="list-style-type: none"> <li>• Quickly switch polarity in the field with LC uniboot connectors</li> <li>• Simplified inventory management with Jumper in a box</li> </ul>	<ul style="list-style-type: none"> <li>• Easily separate connector ends in the field for simplified routing</li> <li>• Simplified inventory management with Jumper in a box</li> </ul>	<ul style="list-style-type: none"> <li>• High-performance and quick connectivity with MTP PRO connector-enabled assemblies</li> <li>• Manage polarity (type A or B) in conjunction with Corning's universal polarity EDGE systems</li> </ul>

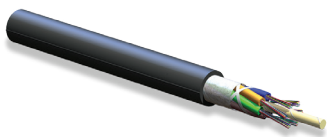
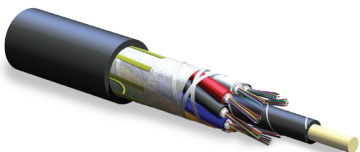
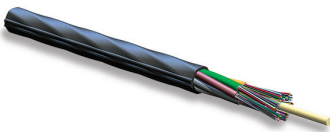
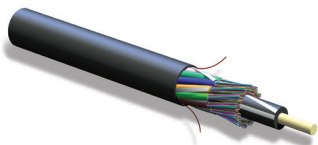
CORNING	Assemblies		
			
	Core	Professional	Edge
Cable Outer Diameters	900 µm, 1.2 mm, 1.6 mm, 2.0 mm	900 µm, 1.2 mm, 1.6 mm, 2.0 mm, 2.9 mm, 4.8 mm	1.6 mm, 2.0 mm
Single-mode Fiber Choices	Ultra, LBL, ZBL	Ultra, LBL, ZBL	Ultra
Multimode Fiber Choices	OM3, OM4, OM5	OM2, OM3, OM4, OM5	OM3, OM4, OM5
Connector Types	LC, SC, FC, ST®	LC, SC, FC, ST	Uniboot, LC, SC, VSFF
Minimum Order Quantity	1 pc	1 pc	1 pc
BABA Compliant Available?	No	Yes	Yes
Customization	Standard Offerings only	Fully Customizable (Colored cables/connectors, labeling, breakouts)	Fully Customizable (Colored cables/connectors, labeling, breakouts)
Performance Standards	IEC Grade B, TIA 568	GR-326 Compliant, IEC Grade B, TIA 568	IEC Grade B, TIA 568
Flame Rating	Riser, LSZH™	Riser, Plenum	Riser, Plenum
Cable Types	SFC, Zipcord	SFC, Zipcord, Breakout	Joint Jacket DFX (Uniboot only)
Length Options	Meters (up to 200)	Meters and Feet (up to 999)	Meters and Feet (up to 999)

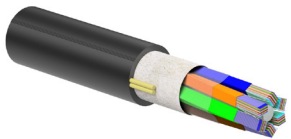


# Optical Cables

We invented the first low-loss optical fiber over 54 years ago, igniting the critical spark that began a communications revolution and forever changed the world. And today, we continue to lead the industry in product quality and innovation. With designs for every environment, our innovative cables solve your unique application challenges, from congested duct space and environmental extremes, to mechanical forces and cable-entry concerns.

Visit us at [www.corning.com/fiber-optic-cable](http://www.corning.com/fiber-optic-cable)

CORNING	Loose Tube Cables		Micro Cables	
				
	ALTOS® Loose Tube Cable	SOLO® All-Dielectric Self-Supporting (ADSS) Cable	MiniXtend® Cable	MiniXtend HD Cable
Fiber Size	250 µm	250 µm	250 µm	190 µm and 200 µm
Splicer Compatibility	Single-fiber splicers	Single-fiber splicers	Single-fiber splicers	Single-fiber splicers
FastAccess® Technology	<ul style="list-style-type: none"> <li>FastAccess technology: Up to 288F in dielectric and armored</li> <li>Binderless FastAccess technology (dielectric only): up to 72F (12F/tube) and 96-288F (24F/tube)</li> </ul>	No	Yes, with binderless FastAccess technology	Yes, with binderless FastAccess technology
Water Blocking Technology	Gel-free	Gel-filled	Gel-filled	Gel-filled
Environment	Aerial lashed, duct, direct-buried (armored recommended for direct-buried and toning)	Aerial self-supporting, best near power lines or for long spans	Microduct	Microduct
Duct Requirements (inner diameter)	Dielectric and Lite armored cable: 1.25-in duct up to 432 fibers	Aerial only	8 mm microduct: 12-96 fibers 10 mm microduct: 144 fibers	6 mm microduct: 12-72 fibers 8 mm microduct: 144F 10 mm microduct: 192, 216, and 288 fibers 12 mm microduct: 288 fibers 14 mm microduct: 432 fibers
Armor Available	Yes	N/A	No, armored and toneable microducts are available from microduct vendors	No, armored and toneable microducts are available from microduct vendors
Flame-Rated Version	Loose Tube Indoor/Outdoor, Riser-LSZH versions available	No	Indoor/Outdoor, Riser-LSZH versions available	No
Fiber Count	12-432	12-288	12-144	12-432
Quick Facts	Most widely deployed cable design globally, ALTOS HD cable options feature 24 fibers per buffer tube to double fiber density with reduced size, weight, and footprint.	<ul style="list-style-type: none"> <li>Ideal when no strand is available to lash to and new strand is cost prohibitive</li> <li>Designed for deploying in the power supply zone</li> </ul>	FastAccess technology enables up to 70% faster cable access and 80% lower installation cost vs. standard cable jackets, reduces risk of damage to buffer tubes and fibers	Higher density, low fiber count options utilize optical fiber with reduced diameter of 190 µm.

CORNING	Ribbon Cables				
					
	SST-Ribbon™ Cable	RPX® and RPX Long Span Gel-Free Ribbon Cable	RocketRibbon® Cable-250	RocketRibbon HD Cable-250	RocketRibbon XD Cable-250
Fiber Size	250 µm	250 µm	250 µm	250 µm	200* or 250 µm
Splicer Compatibility	Mass fusion splicers	Mass fusion splicers	Mass fusion splicers	Mass fusion splicers	Mass fusion splicers
FastAccess® Technology	No	No	Yes	Yes	No
Water Blocking Technology	Gel-free	Gel-free	Gel-free	Gel-free	Gel-free
Environment	Aerial lashed, duct, direct-buried (armored recommended for direct-buried and toning)	Outdoor aerial, duct and direct buried; also typically in distribution segment as part of FlexNAP™ terminal distribution system	Aerial lashed, duct, direct-buried (armored recommended for direct-buried and toning)	Aerial lashed, duct, direct-buried (armored recommended for direct-buried and toning)	Aerial lashed, duct, direct-buried (armored recommended for direct-buried and toning)
Duct Requirements	1.25-in duct: up to 864 fibers	1.0 to 1.25-in duct: up to 144 fibers	1.25-in duct	1.25-in duct	1,728: 1.5-in duct 3,456: 2.0-in duct
Armor Available	Yes	No	Yes	Yes	Yes, for less than or equal to 1,728
Flame-Rated Version	Indoor/Outdoor, riser or plenum versions available	No	Indoor/Outdoor Riser-LSZH versions available	Indoor/Outdoor, Riser-LSZH versions available	Indoor/Outdoor Riser-LSZH™ versions available
Fiber Count	12-864	24-144	24-432	432-864	1,728 and 3,456*
Quick Facts	Ribbon stack comprised of a combination of 12-, 24-, and 36-fiber ribbons helically stranded in a central tube	Utilizes 24-fiber ribbons packaged in a rugged and compact design suitable for short- and long-span ADSS applications and FlexNAP terminal distribution system.  Available in all-dielectric and toneable designs	Utilizes conventional 12- or 24-fiber ribbons in a routable foam sleeve for ease of installation coupled with innovative ribbon protection. FastAccess jacket provides quick and easy access with reduced need for sharp tools.	Compact design with FastAccess jacket for quick and easy access with reduced need for sharp tools to limit overall risk of inadvertent fiber damage. Subunits containing stacks of 144 fibers can be easily routed directly into hardware without furcation.	These cables offer extreme density and are designed with flexible, finger-peelable subunits containing stacks of 288 fibers that can be readily accessed and easily routed into hardware without furcation.



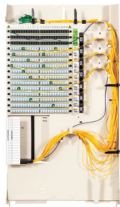
\*200 µm fiber optional

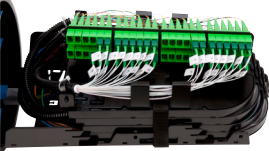






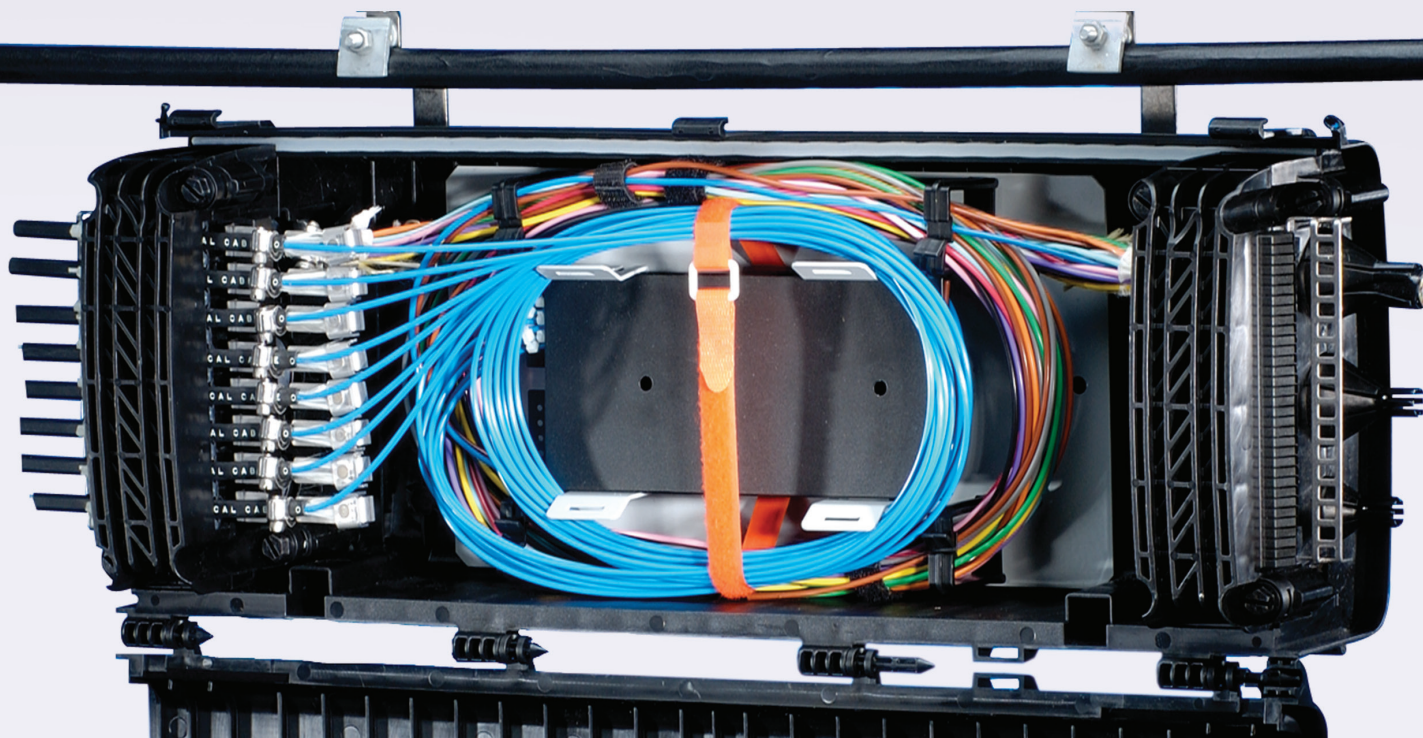
## Local Convergence Point

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 options to find your ideal balance of size, density, and features. All cabinets incorporate our innovative cable routing and splitter storage.

To learn more, [click here](#).

CORNING	Outdoor LCPs		
			
	Splitter Cabinet, PAC Series	Strand-Mount Local Convergence Point (SLCP)	Retrofit Fiber Panel for Copper Cabinet
Architecture	Centralized	Centralized Split	Centralized
Capacity	72, 144, 288, 432, 576, 864 fibers	72, 96, 144 fibers	144, 288, 432, 576, 864 fibers
Prestubbed Feeder	ALTOS® gel-free cable, SST-Ribbon™ gel-free cable	Yes, available in both Ribbon and Loose Tube with Dielectric or Armored Cable	ALTOS gel-free cable, SST-Ribbon gel-free cable
Distribution Stub(s)	Yes	Yes, available in both Ribbon and Loose Tube with Dielectric or Armored Cable	Ribbon dielectric or armored
Mounting Options	Pad or pole	Aerial, Strand Mount (Standard), Pole Mount Kit also Available	Inside various industry copper cabinets
Splitter	Dual 1x4, dual 1x8, dual 1x16, 1x32 or 1x64	1x32	Dual 1x4, dual 1x8, dual 1x16, 1x32, or 1x64
xWDM Capability	Yes	No	Yes
Splice	No	No	No
Splitter Compatibility	LS or RM series splitters	RM Series Splitter	LS or FOS
Pass-Through Capability	Yes	Yes	Yes




CORNING	Outdoor LCPs		Indoor LCPs		
					
	Fiber Dome Splitter Terminal	Local Convergence Point Enclosure (LCPE)	Local Convergence Cabinet, Indoor Gen III Series	Local Convergence Cabinet, Indoor LS Series	Local Convergence Cabinet, Indoor CE Series
Architecture	Centralized	Centralized, distributed	Centralized, distributed	Centralized, distributed	Centralized, distributed
Capacity	32 fibers	72, 96, 144 fibers (SC APC); 144 and 288 fibers (LC APC)	144, 288, 432 fibers	144, 288, 432, 576, 864 fibers	72, 96, 144, 288, 432, 576, 864 fibers
Prestubbed Feeder	Prestubbed LT to ALTOS® cable; four 12-fiber tails or one 48-fiber tail	ALTOS cable, SST-Ribbon™ cable	SST-Ribbon cable, FREEDM® ribbon riser cable, ALTOS riser cable	FREEDM ribbon riser cable, FREEDM loose tube cable	FREEDM ribbon riser cable, FREEDM loose tube cable
Distribution Stub(s)	Yes	Yes	Yes	Yes	Accomplished with RPDpass® riser assemblies or direct drops
Mounting Options	Aerial strand and pole-mount, pedestal, handhole, manhole	Aerial strand and pole-mount, pedestal, handhole, manhole	Wall- or rack-mount	Wall- or rack-mount	Wall- or rack-mount
Splitter	1x32	Dual 1x4, dual 1x8, dual 1x16, or 1x32	Dual 1x4, dual 1x8, dual 1x16, or 1x32	Dual 1x8, dual 1x16, 1x32, or 1x64	Dual 1x4, dual 1x8, dual 1x16, 1x32, or 1x64
xWDM Capability	Yes	Yes	Yes	Yes	Yes
Splice	No	Yes, splice option available	Yes	Yes	Yes
Splitter Compatibility	Splitter is factory installed	SC APC use LCPE series LC APC use RM series WDM LCPE Splitters	Gen III series splitters	LS series splitters	LS/Gen III series splitters
Pass-Through Capability	Yes	No	No	Yes	Yes




# Closures and Terminals

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.

To learn more, visit us at [www.corning.com/fiber-optic-closures](http://www.corning.com/fiber-optic-closures)

CORNING	Below-Grade Closures		
			
	2178 Series Closures	SCF Series Closures	FDC Fiber Dome Closure
<b>Best Fit Cable Type*</b>	Ribbon/Single fiber	Ribbon/Single fiber	Loose tube/Ribbon
<b>Installation Environment</b>	Vault (FR), handhole, strand, pole	Handhole, strand, pole	Strand, handhole, pole
<b>Single-Fiber Splices – Loose Tube</b>	XSB: 48, XLB 96 S: 96, L: 288, XL: 576	SCF4: 72, SCF6C22: 192 SCF6C28: 384, SCF8: 576	FDC08M-96, FDC08S-192 FDC10S-576, FDC12S-720
<b>Mass Fusion Splices – Ribbon</b>	XSB: 166, XLB 288 S: 288, L: 864, XL: 1,728 or 3,456	SCF4: 144, SCF6C22: 288 SCF6C28: 576, SCF8: 864	FDC08M-288, FDC08S-576 FDC10S-864, FDC12S-2880
<b>Sealing Type</b>	Mechanical	Mechanical	Mechanical
<b>Doubles as Terminal</b>	Yes, small sizes support spliced drops	Yes, spliced	Yes, spliced or via ports
<b>Pre-term Compatibility</b>	None, splice only	Spliced only	Non-hardened, SC and LC Hardened OptiTip® or OptiTap® connectors
<b>Number of Distribution/ Drop Cables</b>	Expandable kits available; port counts vary	3, 4, 6	Based on type of base and grommet in the ECAM
<b>Maximum Number of Cable Ports</b>	XS: 3 Butt only, S: 2 per side L: 2 per side, XL: 4 per side	5, 6, 8	Based on the base type 8(8M-A), 3(8S-B), 5(8S-C), 8(8S-C) 7(10S), 5(12S)
<b>Cable Entry Style</b>	In-line, butt	Butt	Butt
<b>Slack</b>	Yes	Yes	Yes
<b>Accommodates Splitters and xWDM</b>	Yes	Yes	Yes
<b>IEC/GR or Specific Attribute</b>	GR-771	GR-771	GR-771

\*All closures are compatible with multiple cable designs. Visit <https://www.corning.com/optical-communications/worldwide/en/home/products/fiber-closures.html>.


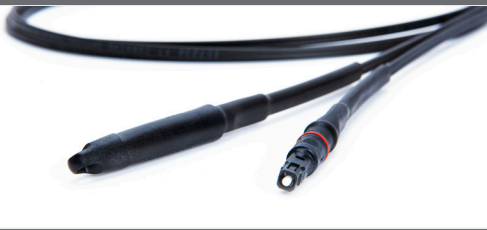

CORNING	Closures		
			
	BPEO Series Closures	SCA Series Closures	SLiC® Fiber Aerial Closures
Installation Environment	Handhole, pole, façade	Strand	Strand
Single-Fiber Splices – Loose Tube	BPEO Size 0: 48 Single Fiber BPEO Size 1: (84/144 Single Fiber) BPEO Size 1.5: 144 Single Fiber BPEO Size 2: 336 Single Fiber BPEO Size 3: 576 Single Fiber	SC-9T24: 72 SC-9T34: 144	Model 533-72 fibers Model 547-72 fibers Model 733-144 fibers
Mass Fusion Splices – Ribbon	N/A	SC-9T24: 144 SC-9T34: 216	Model 533-432 fibers Model 547-432 fibers Model 733-864 fibers
Sealing Type	Mechanical	Gel	Free-breathing
Doubles as Terminal	Yes	Yes	Yes, with OptiTap®, ECAM, or direct splice
Connector Type	None or non-hardened SC, or OptiTap Pushlok®	Splice, SC, (Patch Panel) and OptiTap	Splice, SC, or OptiTap connectors
Number of Distribution/ Drop Cables	Up to 25, 4 OptiTap, 12 Pushlok	16 Drop Ports and 12 OptiTaps	24
Maximum Number of Cable Ports	Up to 29	22	28
Cable Entry Style	Butt	In-line, butt	In-line, butt
Slack	Yes	Yes	Yes
Accommodates Splitters, xWDM and Other Optical Devices	Yes, including distributed tap splitters	Yes	Yes
Industry Ratings	IEC 61753	Telcordia TR TSY-000949 and GR-771 requirements	GR-771 (aerial)



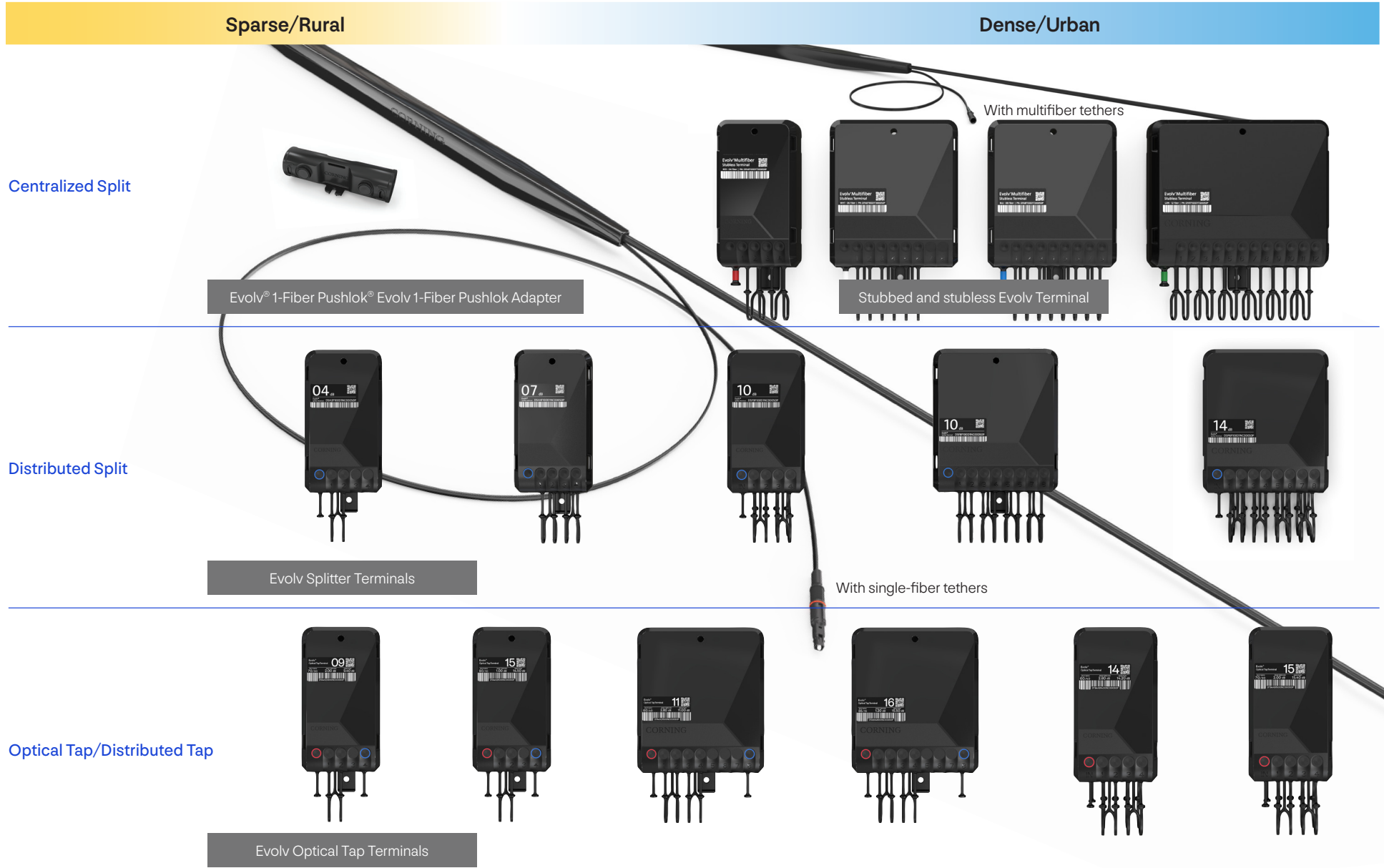
# FlexNAP™ System

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 45 million premises and counting.

To learn more, visit us at [www.corning.com/flexnap](http://www.corning.com/flexnap)

CORNING	FlexNAP™ System		
			
	FlexNAP™ Standard System	FlexNAP Single-Fiber System	FlexNAP Multiuse System
Architecture	Centralized, home run	Distributed	Combined home run, centralized, distributed
Maximum Fiber Count	<b>ALTOS® loose tube cable (dielectric, armored, or figure-8):</b> 432 fibers with 204 terminated remainder expressed <b>RPX® ribbon cable (dielectric or toneable):</b> 144 fibers	<b>ALTOS loose tube cable (dielectric or armored):</b> 432 fibers with 204 terminated remainder expressed <b>RPX ribbon cable (dielectric or toneable):</b> 144 fibers <b>SST-Drop™ cable (dielectric):</b> 12 fibers	<b>ALTOS loose tube cable (dielectric or armored):</b> 432 fibers with 204 terminated remainder expressed <b>RPX ribbon cable (dielectric or toneable):</b> 144 fibers
Aerial Self-Supporting Cable	Yes, with RPX ribbon or ALTOS figure-8 cable	Yes, with RPX ribbon cable or SST-Drop cable	Yes, with RPX ribbon cable
Buried Environment	<b>Loose tube:</b> 1.25-in duct up to 72 fibers dielectric, 2-in duct up to 216-fiber dielectric, or 72-fiber armored cable <b>RPX ribbon cable:</b> 1.25-in duct up to 144F	<b>Loose tube:</b> 1.25-in duct up to 72 fibers dielectric, 2-in duct up to 216-fiber dielectric, or 72-fiber armored cable <b>RPX ribbon cable:</b> 2-in duct <b>SST-Drop cable (dielectric):</b> 1.25-in duct	<b>RPX ribbon cable:</b> 2-in duct
Maximum Tethers per Tap	2, dual tap dual tether option available to access 48-fibers max per location	2	
Multifiber Connector Tether Options	<b>Loose tube:</b> 2, 4, 6, 8, or 12 <b>RPX ribbon cable:</b> 4, 8, or 12	N/A	<b>Loose tube:</b> 2, 4, 6, 8, or 12 <b>RPX ribbon cable:</b> 4, 8, or 12
Single-Fiber Connector Tether Options	N/A	<b>Loose tube:</b> 1 <b>SST-Drop cable:</b> 1 <b>RPX ribbon:</b> 2 or 4 Tethers with more than 1 fiber have secondary furcation point	<b>Loose tube:</b> 1, 2, or 4 <b>RPX ribbon:</b> 2 or 4 Tethers with more than 1 fiber have secondary furcation point
Supports Preterm Laterals	Yes, maximum 72 fiber per lateral	Yes, maximum 72 fiber per lateral	Yes, maximum 72 fiber per lateral
OSP Terminal Compatibility	Supports Evolv® terminals	Supports 1:4, 1:8 and 1:16 splitter Evolv terminals and optical tap Evolv terminals or direct connect to drops	Supports Evolv terminals
MDU Terminal Compatibility	Supports multifiber connector-enabled MDU and LPT terminals	Supports single-fiber connector-enabled splitter MDU and LPT terminals	Supports connector-enabled MDU and LPT terminals

# FlexNAP™ systems support all architectures












# 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.

To learn more, visit us at [www.corning.com/go](http://www.corning.com/go)

CORNING	Subscriber Terminals				
					
	Evolv® Terminal (DM)	Evolv Stubless/Stubbed Terminal (DF)	MultiPort (MOB)	Multiport Flex stubbed and Stubless (MOF/MPF)	MultiPort (MTB)
Architecture	Centralized	Centralized	Centralized	Centralized	Centralized
Drop Capacity	2, 4, 6, 8, 12, 16 ports	2, 4, 6, 8, 12 ports	2, 4, 6, 8, 12 ports	4, 8, 12 ports	2, 4, 6, 8, 12 ports
Input Cable	SST-Drop cable or (toneable or dielectric) MiniXtend Cable or Long-Span SST-Drop	None (stubless); SST-Drop cable or (toneable or dielectric) MiniXtend Cable or Long-Span SST-Drop	SST-Drop™ cable (toneable or dielectric) MiniXtend® cable	4.8 mm round drop (legs) (MOF & MPF); SST-Drop cable, (toneable or dielectric) (MOF)	RPX® ribbon cable < 18 ft (toneable or dielectric) 4.8 mm round drop (legs) or SST-Drop cable > 18 ft (toneable or dielectric)
Input Connector	Pushlok or OptiTip multifiber hardened connector (DF)	No	None (stubbed)	None, stubbed (MOF); OptiTip multifiber hardened connector (MPF)	OptiTip® multifiber hardened connector
Splitter	No	Yes	No	No	No
Low Profile	Yes	Yes	No	Yes	No
FlexNAP™ System Compatible	No	No	No	No (MOF); Yes (MPF)	Yes
Expansion Port	No	Pushlok® single-fiber adapter	No	No	No
Port Type	Pushlok single-fiber adapter	OptiTap adapter	OptiTap® adapter	OptiTap adapter	OptiTap adapter


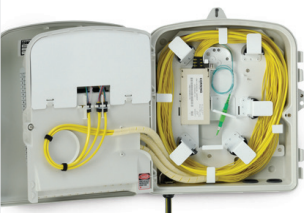


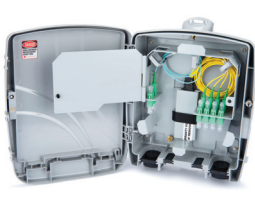
CORNING	Splitter Terminals					
						
	Evolv® Splitter Terminal (DS)	Evolv Distributed TAP (DT)	MultiPort Splitter (MOS/MTS)	MultiPort Splitter Stubless (MTS)	MultiPort Flex Splitter (MSF)	MultiPort Distributed TAP (MDT)
Architecture	Distributed	Distributed TAP	Distributed	Distributed	Distributed	Distributed TAP
Drop Capacity	2, 4, 8, 16 ports	2, 4, 8 ports	4, 8 ports	4, 8 ports	4, 8 ports	2, 4, 8 ports
Input Cable	None; Pushlok® drop assembly serves as input cable	None; Pushlok drop assembly serves as input cable	SST-Drop™ cable (toneable or dielectric)	None; OptiTap® drop assembly serves as input cable	4.8 mm round drop	None
Input Connector	Pushlok single-fiber	Pushlok single-fiber	None; (stubbed) or OptiTap connector (male) or OptiTip® multifiber hardened connector (with expansion port only)	OptiTap single-fiber hardened connector (female)	OptiTap single-fiber hardened connector (female)	OptiTap single-fiber hardened connector (female)
Splitter	1x2, 1x4, 1x8, or 1x16	One uneven 1x2 (90/10 to 60/40 available) with one standard 1x2, 1x4 or 1x8	1x4 or 1x8	1x4 or 1x8	1x2, 1x4, or 1x8	One uneven 1x2 (90/10 to 60/40 available) with one standard 1x2, 1x4 or 1x8
Low Profile	Yes	Yes	No	No	Yes	No
FlexNAP™ System Compatible	No	No	No	Yes	Yes	Yes, FlexNAP single-fiber system as feeder trunk
Expansion Port	No	Yes	Configurable	No	No	Yes
Port Type	Pushlok single-fiber	Pushlok single-fiber	OptiTap adapter	OptiTap adapter	OptiTap adapter	OptiTap adapter



# Multidwelling (MDU) Terminals and 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 pages are a range of solutions that address 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.

To learn more, visit us at [www.corning.com/mdu](http://www.corning.com/mdu)





CORNING	Multidwelling Unit Terminals				
					
	MDU Terminal	MDU Splitter Terminal	Fiber Distribution Hub Terminal (FDHT)	Low-Profile Terminal (LPT)	Low-Profile Terminal (LPT) with Splitters
Architecture	Centralized, home run	Centralized, distributed	Centralized	Centralized, home run	Distributed
Environment	Indoor/outdoor	Indoor/outdoor	Indoor/outdoor	Indoor/outdoor	Indoor/outdoor
Capacity	6, 12, 24, 36, 48 fibers	4, 8, 16, or 32 fibers	Change to: 32, 43, 64, 86 or 96 fibers	4, 6, 8, 12 fibers	4, 8, or 16 fibers
Prestubbed Feeder	Pushlok or OptiTip® stub, MTP® PRO connector, ALTOS®, SST-Ribbon™, and FREEDM® loose tube indoor/outdoor cables	FREEDM loose tube indoor/outdoor cable, 4 or 12 fibers	SST, Ribbon, Loose Tube & FREEDM indoor/outdoor cables	FREEDM or SST with optional OptiTip or Pushlok Connector or MTP adapter input	No; OptiTap® or SC APC options
Compatible Solutions	FlexNAP™ system with OptiTip/ Pushlok stubs or adapter input ports with RPDpass® riser assemblies	No	No	FlexNAP system with OptiTip or Pushlok stub or RPDpass riser assemblies	FlexNAP system with OptiTap connector
Drop	Ultra bend-insensitive single-mode drop cable (2.9 to 4.8 mm)	Ultra bend-insensitive single-mode drop cable (2.9 to 4.8 mm)	Ultra bend-insensitive single-mode drop cable (2.9 to 4.8 mm)	Ultra bend-insensitive single-mode drop cable (2.9 to 4.8 mm)	Ultra bend-insensitive single-mode drop cable (2.9 to 4.8 mm)
Splitter	No	1x32 or dual 1x4, dual 1x8, dual 1x16	1x32 or 1 x64	No	Cross out and change to: 1x4, dual 1x4, 1x8, dual 1x8, or 1x16
Slack	Yes, optional rear metal housing or plastic skirt for additional storage	Yes, optional rear metal housing or plastic skirt for additional storage	Yes, optional rear metal housing or plastic skirt for additional storage	Yes, optional rear plastic housing or plastic skirt for additional storage	Yes, optional rear plastic housing or plastic skirt for additional storage
Splice	Yes	Yes	Yes (feeder only)	Yes	Yes




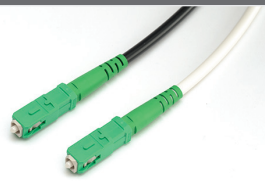

CORNING	MDU Terminals		Network Interface Devices (NIDs)			
	Fiber Distribution Terminal (PBOC Series)	Riser Distribution Terminal (RTW or RTC)	Integrated Fiber NID	Fiber Transition Housing (FTH-602)	Transition Housing (FTH-76S)	Fiber Transition Housing (FTH-NG1)
Architecture	Distributed or home run	Centralized, home run	Centralized, home run	All	All	All
Environment	Outdoor	Indoor	Outdoor	Indoor/outdoor	Indoor/outdoor	Indoor/outdoor
Capacity	2-12 fibers	12, 24 fibers (by adding 12-F SC modules) or up to 36-F using MTP® adapter panel	1 or 2 fibers	1-6 fibers	1-6 fibers (spliced) 1-2 fibers (connectorized)	1-24 fibers (connectorized)
Prestubbed Feeder	N/A	MTP-enabled	N/A	SC UPC/APC LC UPC/APC	SC APC OptiTap® adapter (1 fiber only)	SC UPC/APC LC UPC/APC
Compatible Solutions	No	RPDpass® and Clear Track solutions	No	Field-installable connectors	Field-installable connectors	Field-installable connectors
Drop	Ultra bend-insensitive single-mode drop cable, SST-Drop™ or ROC™ drop cables	2.9 mm compact, 4.8 mm rugged, Corning® Clear Track Hallway, RPDpass horizontal	Up to 4.8 mm drop cables	Up to 4.8 mm drop cables	Up to 4.8 mm drop cables	Up to 4.8 mm drop cables
Splitter	1X2, 1x4 or 1x8	No	No	No	No	No
Slack	No	Yes	Yes, up to 35 ft of 4.8 mm	3 m	10 m	Repair loop only
Splice	Yes, to pigtails for preconnectorized drops or full splice directly to drops	No	Yes, to pigtails for preconnectorized drops or full splice directly to drops	Mechanical, fusion	Fusion	No splicing


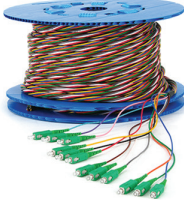




# Drop Assemblies

To reduce the cost and time of deploying drop cables in your optical access network, we factory terminate our drop cables with either SCA/SCU or environmentally sealed Pushlok® OptiTap® 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 following tables.

CORNING	Drop Cable Assemblies			
				
	ROC™ Drop 900 Drop Cable Assembly	SST-Drop™ Cable Assembly	SST-Drop Indoor/Outdoor Assembly	Evolv® Long-Span ROC Drop Cable Assembly with Pushlok® Technology
Connectorized	Pushlok to SC APC assembly, Pushlok single-fiber pigtail, OptiTap® to SC APC assembly, OptiTap pigtail, or SC APC jumper	OptiTap to SC APC assembly, OptiTap pigtail or SC APC to SC APC jumper	Pushlok single-fiber to SC APC or Pushlok single-fiber pigtail available on 2 and 4 fibers only. OptiTap to SC APC assembly available only on 1 fiber. OptiTap pigtail available on 1 and 2 fibers	Pushlok single-fiber to SC APC or Pushlok single-fiber pigtail
Toneable/Dielectric	Both	Both	Both	Dielectric
Buried/Aerial	Both	Both	Both	Aerial
Fiber Subunit	900 µm	250 µm	900 µm	900 µm
FastAccess® Technology	Yes	No	No	No
Flat/Round Cable	Flat	Flat	Flat	Flat
Indoor/Outdoor	Outdoor	Outdoor	Indoor/outdoor	Outdoor
Fiber Count	1	1	1-2-4	1
Fiber Type	Single-mode fiber	Single-mode fiber	Bend-insensitive single-mode fiber	Single-mode
Pulling Grip	Available	Available	Available	Available
Quick Facts	Compact outdoor drop allows for more slack to be managed at subscriber premise	Robust flat drop cable for self-supporting or direct-buried applications	Suited for applications where two services (e.g., business and residential) exist at the same subscriber location	Allows pole-to-pole span lengths ranging from 400 ft to 650 ft under NESC® wind loading conditions. There is no support or messenger wire required, allowing installation to be achieved in a single pass.

CORNING	Drop Cable Assemblies				
					
	Evolv® Round ROC™ Drop Cable Assembly with Pushlok® Technology	DualDrop™ Cable Assembly	Clear Fiber Drop	Corning® ClearCurve® Rugged Drop Cable Assembly	ClearCurve Compact Drop Cable Assembly
Connectorized	Pushlok single-fiber to Pushlok single-fiber and Pushlok single-fiber pigtail	OptiTap pigtail only	Unterminated: SC APC or SC APC patch cord to SC APC single-fiber pigtail	SC APC or SC UPC (jumper or pigtail)	SC APC or SC UPC (jumper or pigtail)
Toneable/Dielectric	Dielectric	Dielectric	Dielectric	Dielectric	Dielectric
Buried/Aerial	Aerial	Both	No	Both	Both
Fiber Subunit	900 µm	900 µm	900 µm	900 µm	900 µm
FastAccess® Technology	No	Yes	Yes	No	No
Flat/Round Cable	Round	Round	Round	Round	Round
Indoor/Outdoor	Indoor/outdoor	Indoor/outdoor	Indoor/outdoor	Indoor/outdoor	Indoor/outdoor
Fiber Count	1	1	1	1	1
Fiber Type	Bend-insensitive Single-mode fiber	Bend-insensitive single-mode fiber	Ultra bend-insensitive single-mode fiber	Ultra bend-insensitive or bend-insensitive fiber	Ultra bend-insensitive or bend-insensitive fiber
Pulling Grip	No	No	Available	Available	No
Quick Facts	Ideal for pull and/or jet installs	Eliminate transition housing by removing outdoor jacket and route directly to subscriber ONT indoors	Less visible, resulting in an aesthetically pleasing look for both homeowners and property owners	Self-bend-limiting jacket allows for widest variation of installation methods including stapling	Optimized for running inconspicuously under carpet and along door frames or molding. Also suitable for raceway and microduct installations

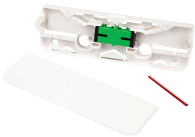






CORNING	Indoor Drops			In-Living Unit (ILU)
				
	RPDpass® Riser Cable Assembly	RPDpass Drop Cable Assembly	Corning® Clear Track Micro-Module	SC APC Shuttered Jumper
Connectorized	MTP® PRO connector jumper	SC APC pigtail or MTP PRO pigtail	SC APC pigtail or MTP PRO pigtail	SC APC shuttered
Outer Dimensions	Cable: 3 mm Grip: 18 mm (0.72 in)	6-fiber: 4.8 mm 8-fiber: 5.2 mm 12-fiber: 6.5 mm	1.8 mm	3.0 mm
Fiber Size	250 µm	900 µm	900 µm	900 µm
Cable Design	Micro-Module	1.65 mm subunits bundled (no outer jacket)	Micro-Module	Round
Installation	Conduit	Conduit	Wall/trim or conduit	N/A
Indoor/Outdoor	Indoor only	Indoor only	Indoor only	Indoor only
Fiber Count	12 or 24	6, 8, or 12	12	1
Fiber Type	Ultra bend-insensitive fiber	Ultra bend-insensitive fiber	Ultra bend-insensitive fiber	Ultra bend-insensitive fiber
Packaging	Collapsible plastic reel	Corrugated plastic reel	Reel	Bag
Pulling Grip	Standard	Standard	Available	No
Quick Facts	Suited for larger MDUs where riser conduit space may be limited	Binderless bundled construction allows for quick access to individual subscriber subunits for termination	Can be easily laid and captured within the Clear Track Hallway Fiber Pathway with the Clear Track Hallway Fiber Installation Tool	Ideal connection from low-profile wall space with visual connection reference



# Residential Hardware

Whether you're taking fiber to the living unit or fiber all the way into a living unit, Corning's variety of small transition boxes and outlets provide the optimal transition point for a variety of applications. With a number of different connector styles and mounting options, each solution offers a custom fit for your fiber deployment. All products are easy to deploy and can be used in both single-family and multifamily unit installations. As fiber progresses closer to subscribers, these transition points will become increasingly important in your network.



To learn more, visit us at [www.corning.com/cleartrack](http://www.corning.com/cleartrack)


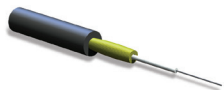



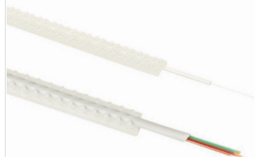
CORNING	Distribution		In-Living Unit (ILU)				
							
	Small Point-of-Entry (POE) Box	Micro POE Box	Low-Profile Wall Plate	Wall Outlet (WLL)	Wall Outlet OTO-10080	Shuttered Wall Box (SWB)	Fiber Point-of-Entry Sliding Wall Cover
Environment	Hallway	Hallway	In-living unit	In-living unit	In-living unit	In-living unit	In-living unit
Installation	N/A	N/A	Wall-mountable or over existing outlet	Outlet (flush)	Wall-mountable	Wall-mountable or outlet (cover)	Wall-mountable
Capacity	1 SC adapter inside	Pass-through	1-2 ports	2 keystone ports	1-4 ports SC 1-8 ports LC	2 keystone ports	2 ports
Connectivity Type	SC	N/A	SC Simplex, LC Duplex	Shuttered SC compatible with alternative keystone ports (LC, CAT x)	SC, LC	Shuttered SC compatible with alternative keystone ports (LC, CAT x)	SC
Cable Compatibility	1.8/2.0 Micro Module and 900 $\mu$ m Clear Fiber	900 $\mu$ m	900 $\mu$ m	All indoor drops	All indoor drops	All indoor drops	All indoor drops up to 4.8 mm
Slack	3 ft of both fiber types above (6 ft in total)	N/A	6 ft of 900 $\mu$ m	N/A	1-3 ft, depending on cable size	1-3 ft, depending on cable size	3 ft of 2.9 mm
Quick Facts	Supports mid-span access to separate and terminate individual subscriber fiber, allowing remaining fibers to pass through	Conceals the hole from hallway into subscriber living unit while protecting subscriber drop	Integrated shuttered SC APC port with visual indicator ensures safe subscriber connections with SC APC shuttered jumper	Suitable for greenfield construction and compatible with standard wall junction boxes	Surface-mount configurable terminal to support up to 4 SC or 8 LC ports, flexible for business and residential environments	Surface-mount subscriber demarcation leveraging shuttered adapters	Surface-mount subscriber demarcation compatible with rugged drops up to 4.9 mm



# Bulk Drop Cables

Engineered to withstand demanding conditions, from environmental extremes to mechanical forces, our drop cables can be strung aerially along telephone poles, installed inside underground ducts, or buried directly below ground. We protect the integrity of our optical fibers with rugged constructions and resistance to ultraviolet light and temperature fluctuations. However you plan to deploy your subscriber drops, we've included a cable design for you on the next page.








CORNING	Flat Drop Cables				
					
	SST-Drop™ Cables	ROC™ Drop 900 Cables	SST-Drop Indoor/Outdoor Cables	Long-Span Drop Cables	Clear Drop Cables
Toneable/Dielectric	Both	Both	Both	Dielectric	Dielectric
Cable Size	8.1 x 4.5 mm	6.6 x 3.0 mm	8.1 x 4.5 mm	12.7 x 4.4 mm	2.5 x 4 mm
Fiber Size	250 µm	900 µm	900 µm	250 µm	900 µm
FastAccess® Technology	Yes	Yes	Yes	No	Yes
Installation	Aerial/buried (toneable recommended for buried)	Aerial/buried (toneable recommended for buried)	Aerial/buried (toneable recommended for buried)	Aerial (designed specifically for long-span aerial applications in NESC medium-to-heavy conditions)	Aerial/buried (can be adhered to home using staples or clips. Jacket is removed before indoor installation)
Indoor/Outdoor	Outdoor	Outdoor	Indoor/outdoor	Outdoor	Indoor/outdoor
Fiber Count	1-24	1	1-2	1-12	1
Fiber Type	Single-mode fiber	Single-mode fiber, bend-insensitive single-mode fibers	Bend-insensitive single-mode or ultra bend-insensitive single-mode fiber	Bend-improved single-mode fiber	Bend-insensitive or ultra bend-insensitive single-mode fiber
Option to Preconnectorize	Yes, one or both ends with OptiTap® or SC APC connectors	Yes, one or both ends with OptiTap or SC APC connectors	Yes, one or both ends with OptiTap or SC APC connectors	No	Yes, one or both ends with SC APC connectors
Packaging	Reel in a box	Reel in a box	Bulk or reel in a box	32-in or 42-in reel	Bulk, reel in a box, or bag
Quick Facts	Offers exceptional crush resistance in an easy-access, single-tube design	Reduced OD increases flexibility and improves slack storage as compared to standard flat drop cables	Eliminates indoor ONT transitions with a flame-rated indoor subunit with OptiTap or SC APC connectors	<ul style="list-style-type: none"> <li>Enables span lengths up to 500 ft with no support or messenger wire required</li> <li>Compatible with OptiSnap® and OptiTap field-installable connectors</li> </ul>	Clear Drop eliminates the need for termination hardware to transition from the outdoor environment to an indoor terminal, with a clear internal subunit for nearly invisible routing in living units

CORNING	Round Drop Cables			Corning® Clear Track Fiber		
						
	Jetted Round Drop Cables	Corning® ClearCurve® Rugged Drop Cables	ClearCurve Compact Drop Cables	Corning® Clear Track 900 µm Clear Fiber	Clear Track Quad with Four 900 µm Clear Fibers	Clear Track Hallway with 12-Fiber Micro-Module
Toneable/Dielectric	Dielectric	Dielectric	Dielectric	N/A	N/A	N/A
Fiber Size	900 µm	900 µm	900 µm	900 µm	900 µm	1.8 mm (diameter size for 8- and 12-fiber counts), 2 mm (diameter size for 16-fiber counts)
FastAccess® Technology	Yes	No	No	No	No	No
Installation	Aerial/buried	Wall/trim	Wall/trim or conduit	Wall with Clear Track ILU fiber pathway	Wall with Clear Track Quad fiber pathway	Wall with Clear Track Hallway fiber pathway
Indoor/Outdoor	Indoor/outdoor	Indoor/outdoor riser, indoor riser, indoor plenum	Indoor/outdoor	Indoor only	Indoor only	Indoor only
Fiber Count	1	1-2	1	1	1-4	8, 12 and 16
Fiber Type	Ultra bend-insensitive single-mode fiber	Ultra bend-insensitive or single-mode fiber	Ultra bend-insensitive or single-mode fiber	Ultra bend-insensitive fiber	Ultra bend-insensitive fiber	Ultra bend-insensitive fiber
Option to Preconnectorize	Yes	Yes	Yes	No	No	Yes
Packaging	Bulk	Bulk or reel in a box	Bulk or reel in a box	Spool in a box	Spool in a box	Spool in a box
Quick Facts	<ul style="list-style-type: none"> <li>Enhanced jetting, push-and-pull performance</li> <li>Eliminates indoor ONT transitions with a flame-rated indoor subunit</li> </ul>	<ul style="list-style-type: none"> <li>Self-bend-limiting jacket allows for widest variation of installation methods including stapling</li> <li>Large color selection</li> </ul>	<ul style="list-style-type: none"> <li>Optimized for running inconspicuously under carpet and along door frames or molding</li> <li>Suitable for raceway and microduct installations</li> <li>Large color selection</li> </ul>	<ul style="list-style-type: none"> <li>Adhesive tape on the back of the pathway enables fast-and-easy installation on practically any surface</li> <li>Optional cover provides additional durability with virtual invisibility</li> </ul>	<ul style="list-style-type: none"> <li>Use with Clear Track Micro Point-of-Entry (POE) wall cover for home run drops or for use with Hallway Small POE</li> <li>Optional cover provides additional durability with virtual invisibility</li> </ul>	<ul style="list-style-type: none"> <li>Use with the Clear Track Hallway small POE box to terminate a field-mounted mechanical connector and test access point or splice to the living unit</li> <li>Optional cover provides additional durability with virtual invisibility</li> </ul>



# Field-Installable Connectors







Field connectorization is fast and convenient whether you're looking for a fusion or mechanical splice. Corning offers both indoor and outdoor solutions in a variety of connector types and toolkits to support your application of choice. With high-optical performance of factory-polished connectors and immediate feedback on the quality of the connector installation, you can be assured of reliable connections. Evaluate the connectorization option that best suits your deployment and take advantage of the craft-friendly products throughout this section.

CORNING	Mechanical Connectors and Splices				Other		
							
	OptiSnap® Connectors	OptiTap® Field-Installable Connectors	No Polish Connector + (NPC+)	No Polish Connector (NPC)	Corning® Fibrlok® Optical Fiber Splice 2529	FuseLite II Splice On Connector	Corning® Crimplok™+ Connector
Fiber Compatibility	Single-mode/ multimode	Single-mode	Single-mode	Single-mode/ multimode	Single-mode/ multimode	Single-mode/ multimode	Single-mode/ multimode
Cable Compatibility	250, 900 µm fibers 1.6, 2.0, 2.9 mm cables	ROC™ drop 900 cable	250, 900 µm fibers	250, 900 µm fibers 1.6, 2.0, 3.0 mm cables	250, 900 µm fibers 1.6, 2.0, 3.0, or 4.8 mm cables	250, 900 µm fibers 1.6, 2.0, 2.9 mm cables	250, 900 µm fibers
Fiber Subunit Compatibility	900, 250 µm	900 µm	900, 250 µm	900, 250 µm	900, 250 µm	900, 250 µm	900, 250 µm
Environment	Indoor/outdoor in appropriate hardware or enclosures	Outdoor	Indoor/outdoor in appropriate hardware and enclosures	Indoor/outdoor in appropriate hardware or enclosures	Indoor/outdoor in appropriate hardware or enclosures	Indoor/outdoor in appropriate hardware or enclosures	Indoor/outdoor in appropriate hardware or enclosures
Connector Style	SC APC, SC UPC, LC APC, LC UPC, ST® compatible connectors	SC APC	SC UPC, SC APC	SC APC, SC UPC, LC APC, LC UPC, ST compatible connectors	N/A	SC APC, SC UPC, LC APC, LC UPC, ST compatible, MTP® PRO connec- tors	SC APC, SC UPC
Toolkit Required	TKT-OPTISNAP-CF	TKT-FIPL	TKT-NPCP-FBC007	80611323793	80610581870	Compatible fusion splicer with appropriate handler	80611622145 (APC Installation Kit) 80611622459 (UPC Installation Kit)
Packaging	Individual connectors or convenience pack of 25	Available in packs of 5 pieces or packs of 25 pieces	Convenience pack of 48 pieces in 6 piece sub-packs	Convenience pack of 60	Convenience pack of 60	Convenience pack of 6 or 25 connectors	Convenience pack of 60
Quick Facts	Designed for rapid terminations at the home in FTTH applications or in the central office/ headend	Ideal for drops of odd lengths, inventory reduction, or emergency repairs	No installation tool required, designed for all skill levels, excellent optical and mechanical performance for FTTx applications	Low cost of tooling, ideal for all FTTx installations	High-quality field splice without the need for a fusion splicer	Suited for adds/ moves/changes or large-volume termination projects in the central office	Excellent back reflection performance in outdoor environments



# Wireless Convergence

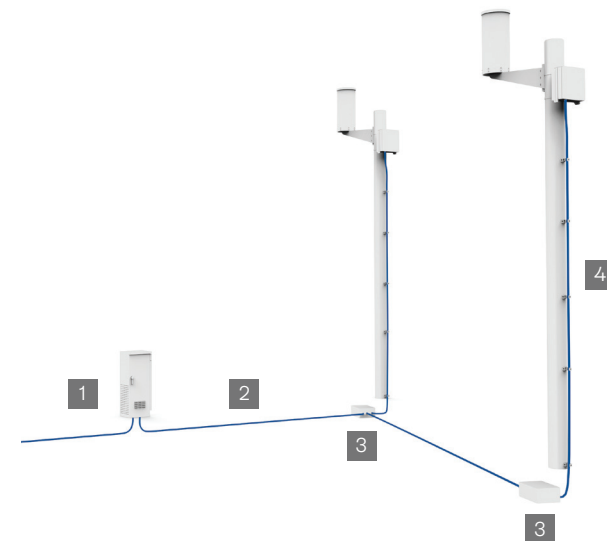
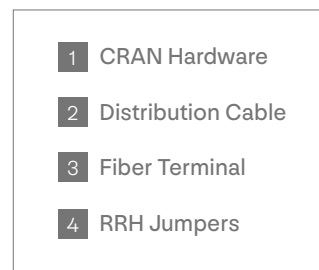
As 5G wireless services proliferate, operators are choosing a variety of methods to accomplish these deployments. By leveraging shorter distance and longer reach wavelengths, radio heads and antennas are popping up in a myriad of locations from rooftops to street lamps and water towers, too. One thing is for certain, these systems will require fiber to backhaul the traffic generated. If you're looking to support a combination of services on your network over time, we've got the experience and solutions to help you build one network to manage it all.

CORNING	xWDM Components			LC UPC Connectors		
						
	LGX WDM	CRAN Centrix™ Cassette	DWDM Multiport Terminal	LC Simplex Assembly	LC Duplex Assembly	LC Multifiber Assembly
Environment	Mobile switch center, CRAN hut or outside plant			Radio head or consolidation point		
Purpose	Combines multiple wavelength signals to optimize fiber utilization			Provides optical connectivity to macro and small cell devices		
Type	Available in CWDM or DWDM configurations as requested			<ul style="list-style-type: none"> <li>• Simplex or Duplex</li> <li>• Various protective shrouds for compatibility with active electronics providers</li> </ul>		
Quick Facts	Even in dedicated CPRI send/receive duplex systems, overlaying FTTH with wireless signals require coexistence xWDM devices			Although there are many options, most radios utilize standard LCs as the key component for connectivity		

xWDM devices and LC connectors are key enabling components that allow for convergence of an existing FTTP network with wireless capability. The fundamental infrastructure components otherwise remain the same and can be found elsewhere in this guide.

In particular, look for solutions that help in congested areas, such as:

- **MiniXtend® cables** for microduct applications
- **Evolv® terminals** for discrete placement
- **FlexNAP™ Systems** to create plug and play access points





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