

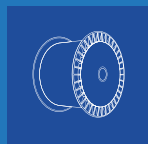


# GRAYBAR ORDERING GUIDE

*OFS Enterprise and MDU Solutions*



**FIBER TO AND IN THE BUILDING SOLUTIONS**



[www.ofsoptics.com](http://www.ofsoptics.com)

# OFS ENTERPRISE AND MDU SOLUTIONS

*Not seeing is believing.*

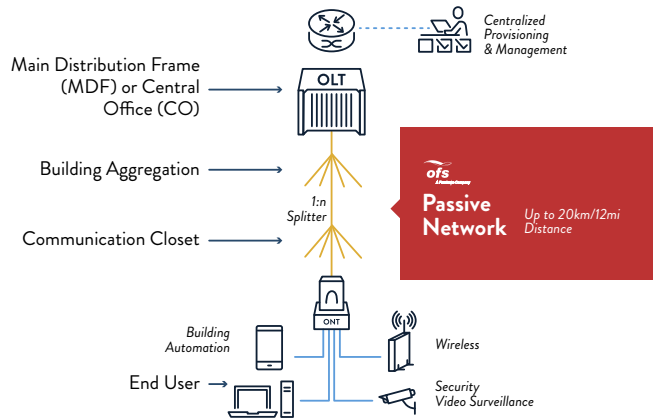
Fiber to the Home and Business deployment is accelerating globally to support increasing internet speeds of up to 1 Gigabit per second, and 10 Gigabit speeds are already available in some regions. Service providers and Enterprise customers are responding by installing optical fiber both to and deep inside buildings to the living unit and office. The Solutions in this guide can help reduce both first cost and life cycle cost of fiber deployments to customers inside homes and buildings.

Solutions for both Greenfield installation during building construction and Brownfield installation to and in existing buildings are included. Scalable and optimized to fit a broad range of building structures, these solutions offer faster, reliable installation through innovative labor saving technologies, using less space than conventional approaches.

Enterprise networks require high capacity and ultrafast networks for bandwidth-hungry applications that now make use of cloud-based technology. Many of these applications are similar to residential applications such as high-quality video conferencing, integration of a wide variety of digital equipment and mobile devices. Passive Optical LAN (POL) is sometimes specified to support Enterprise applications. Fiber to the Residence using Passive Optical Network (PON) technology is the most common fiber architecture deployed for MDUs and homes. Both Enterprise POL, and Residential PON systems use the same basic architecture. OFS solutions in this guide can enable faster, easier, much less visible optical cabling installations for both POL Enterprise, and Residential PON deployments - all in one optical cabling solution!

**FAST INSTALLATIONS**  
**NON-DISRUPTIVE**  
**DISCRETE**  
**BETTER BEND PERFORMANCE**  
**FIBER TO THE X**  
(BUILDING, FLOOR, OFFICE, OR DESK)

## PASSIVE OPTICAL LAN AND FIBER TO THE MDU



### Fiber Specifications Optimized to the Application

Both POL and MDU PON systems require the use of single-mode fiber, but standard SMF such as G.657.D, G.657.A, OS1, or OS2 can suffer severe bending loss when installed in buildings. Installing fiber to and in buildings often requires conforming the fiber around sharp corners. EZ-Bend® Single-Mode Optical Fiber offers outstanding bend performance down to a 2.5 mm radius for the most challenging in-residence and MDU applications. Compatible with the installed base of conventional G.652.D single-mode optical fibers, the fiber meets and exceeds ITU-T G.657.B3 recommendations. EZ-Bend fiber users OFS' patented groundbreaking EZ-Bend Optical Technology to provide three times' lower loss at tight bends than competing G.657.B3 products.



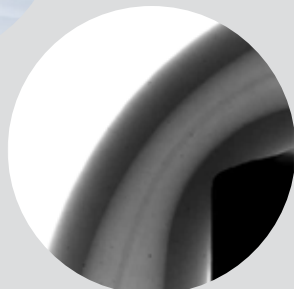
STAPLE



COIL

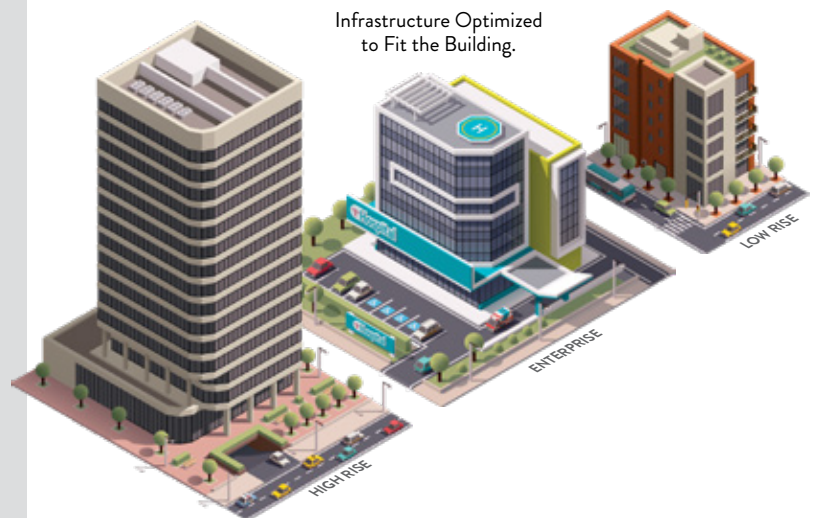


TIE



CORNER

### In Building Architecture: Centralized, Distributed and Distributed Cascaded Splitting



Enterprises and service providers, deploying POL or PON systems, must install single-mode optical fiber both to and inside the building to reach subscribers. This requires optical cables in building risers and ducts, optical fiber in hallways, and fiber deep into the units, connecting to an indoor Optical Network Terminal (ONT). How can providers accomplish this in buildings that can vary widely in design, materials and available pathways?

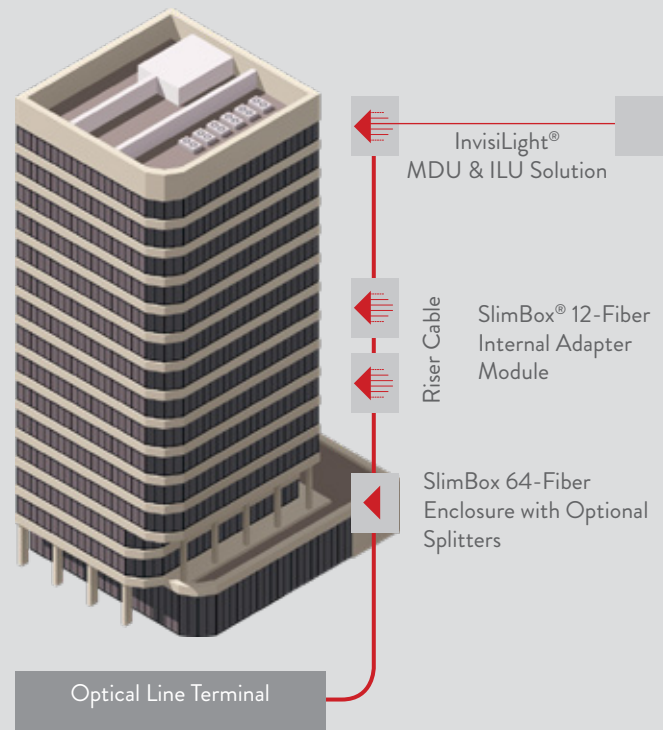
Building architectures can vary from small duplexes to high rise buildings. However, while structures vary, building owners, residents and service providers inevitably have common demands: quick service turn-up and the fast, non-disruptive installation of solutions that blend into the existing decor.

### PON Overview and Splitter Architectures

A typical PON network consists of the Optical Line Terminal (OLT) in a central office, MDF or cabinet, connected by a feeder cable to passive optical splitters, and then to distribution and drop cables downstream in the network that connect to an Optical Network Terminal (ONT). The splitters typically have a single fiber from the OLT that is optically split to produce 4, 8, 16, or 32 output fibers, each connected to an ONT downstream. The bandwidth of the single OLT fiber is shared by the multiple output fibers in a similar fashion as the bandwidth of Ethernet switch users is shared by the uplink from the switch to the network.

PON systems are available supporting up to 10 Gigabits per second (Gbps) today, and systems supporting 25, 50, 100, and 200 Gbps are in development. Current PON systems and those in development use wavelengths that are sensitive to fiber bending. OFS recommends EZ-Bend(r) cables to avoid network downtime resulting from fiber bending that may in building installations

OFS Fiber in the Building Solutions can be configured to support current and future PON systems, using the splitter architecture optimized for each customer's needs.

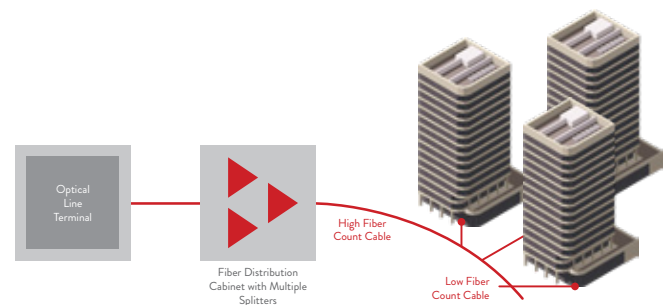


**Example: Cascaded Splitter Architecture**

### Centralized Splitting Architectures

Centralized architectures help lower total costs when relatively low take rates are expected. They can help defer capital cost by allowing for incremental OLT and splitter additions as subscriber counts increase. Centralized architectures co-locate a number of splitters in a central location such as a cabinet, MDF, or CO.

In a centralized architecture, there is typically no splitter inside the small to medium sized buildings. An outdoor or indoor box is used to receive the outside plant cable from the central office or the Fiber Distribution Hub (FDH) which contains the splitters. The basement box is used as a transition point between outdoor and indoor or indoor/outdoor cables. For larger buildings the FDH may be placed inside the building.



#### ADVANTAGES

- Electronics costs scale with take rate due to efficient utilization of OLT ports
- Centralized management of customer connections
- Easier transition to higher speeds with some types of PON systems

#### DISADVANTAGES

- Higher cost in cable and cabling infrastructure
- Larger network elements in the outside plant



**Distributed Splitting**

A distributed splitting architecture is cost optimized when subscription rates are expected to be medium to high, and has the added benefit of eliminating the need to find space for placing cabinets.

Splitters are “distributed” throughout the network and placed in closures or pedestals in the field or in buildings. At each splitter location, there will typically be one or at most two splitters.

This type of architecture typically uses lower fiber count cables, requires less splicing, and results in lower plant costs, but higher electronics costs.

This architecture may use splitters in the basement of a building. Customers can be easily connected in the basement box using the customer connection ports.



**ADVANTAGES**

- Less fiber, cables and splicing than the centralized option; no cabinets required
- Quicker to deploy

**DISADVANTAGES**

- Less network flexibility for upgrades
- More challenging to monitor and trouble-shoot the network
- Less efficient OLT port utilization than centralized splitting

**Distributed Cascaded Splitting**

Distributed cascaded splitting, also called double star, is a form of distributed splitting with the splitters “cascaded” in the network. For example, a typical distributed split architecture may use a 1X32 splitter in a closure. The cascaded version may consist of a 1X8 splitter at one location feeding four 1X4 splitters downstream at different locations, to achieve a 1X32 split.

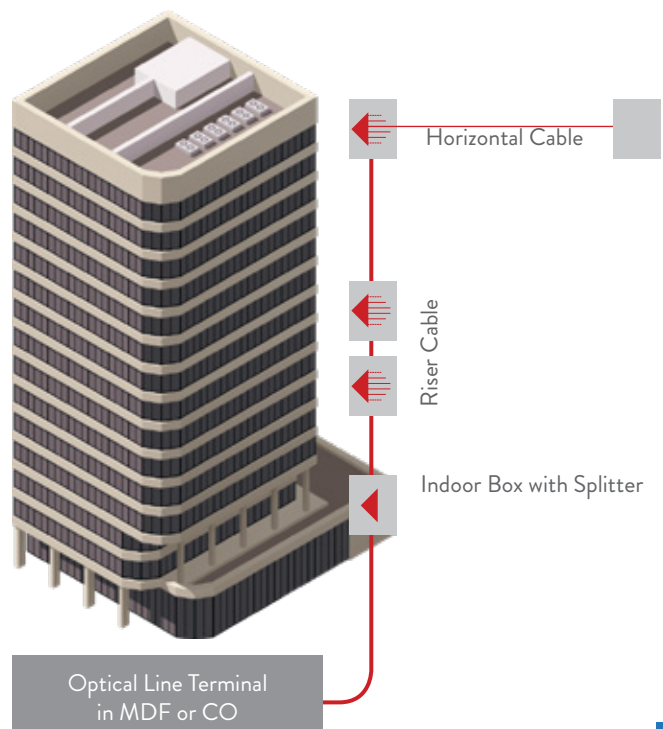
With this architecture the upstream splitter may be located in the building basement and the downstream splitter on each floor.

**ADVANTAGES**

- Reduced cable size, lower fiber counts, and less splicing
- Lowest cost in outside plant vs. Centralized or Distributed

**DISADVANTAGES**

- Difficult to trouble shoot
- Most complex network management
- Higher loss and shorter reach than single stage splitting



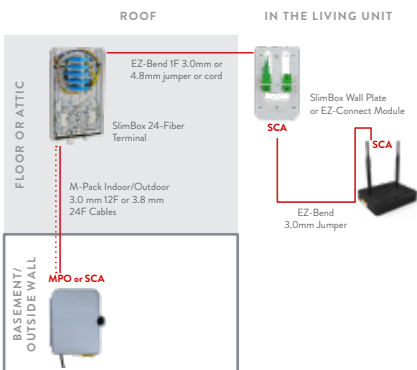
# BROWNFIELD Outdoor Facade Solution

Outdoor Facade Solutions are used when property owners want to preserve the decor of the building exterior when: a) installing cables on the facade and then transitioning to an indoor solution, b) pursuing an all outdoor solution on the façade to connect each living unit when it is not possible to install fiber solutions indoors, or c) using a combination of indoor and outdoor solutions for hallways that are exposed to the outdoor elements (breezeways). Therefore, several solutions are required to address these different approaches.



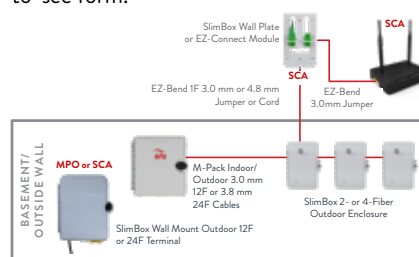
## Facade Cabling Transition to Indoor Cabling Solutions

The compact EZ-Bend Indoor/Outdoor 12F or 24F cable is placed vertically on the exterior wall of the building from an outdoor wall mount box to an indoor SlimBox. The indoor SlimBox 24F can be factory configured with SCA adapters or fanouts for a pre-terminated solution, or for fusion splicing. EZ-Bend 3mm or 4.8mm jumpers are used for the path to each living unit. Pre-terminated EZ-Bend Jumpers are recommended for faster installation, or a mechanical connector may be used for field termination in the SlimBox® Wall Plate. The 80x80 or EZ-Connect InvisiLight modules can be used as a “fiber extension” to any location in the living unit. Alternatively, instead of EZ-Bend jumpers, the InvisiLight MDU solution may be placed in the hallway to the living units (not shown).



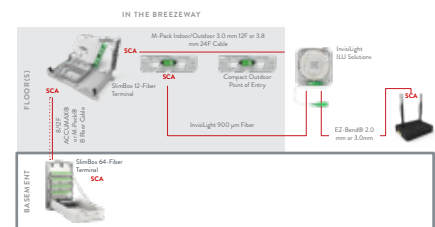
## Facade Cabling Transition to Indoor Living Unit

The compact EZ-Bend Indoor/Outdoor 12F or 24F cable is placed horizontally on the exterior wall of the building from an outdoor wall mount box to an outdoor SlimBox 4F or 8F (higher fiber count terminals are available). EZ-Bend® 3mm or 4.8mm jumpers are used for the path to each living unit. Pre-terminated EZ-Bend Jumpers are recommended for faster installation, or a mechanical connector may be used for field termination in the SlimBox® Wall Plate. The 80x80 or EZ-Connect InvisiLight modules can be used as a “fiber extension” to any location in the living unit. The use of 600 μm fiber can make this solution even more “invisible.” 600 μm EZ-Bend fiber offers the same bending performance and is as easy to install as 900 μm fiber in a smaller, harder-to-see form.



## Outdoor Cabling for Exposed Hallways (Breezeway)

The compact EZ-Bend Indoor/Outdoor 12F or 24F cable is placed horizontally on the interior wall of exposed building hallways (breezeways) using the same installation technique as the indoor InvisiLight MDU Solution. Similarly, the cable slack is stored in an outdoor UV-rated version of the Compact Point of Entry module. The 80x80 or EZ-Connect InvisiLight modules are used as a “fiber extension” to any location in the living unit.



### InvisiLight Facade Solution for Exposed Hallways or Breezeways

Basement Terminal	SlimBox® Indoor/Outdoor 12F, 24F, or SlimBox Indoor 64F
Floor Terminal	SlimBox Indoor/Outdoor 12F or 24F
Hallway	Indoor/Outdoor Compact Outdoor Point of Entry (POE) Module
	EZ-Bend® Indoor/Outdoor 12F or 24F Cable
	900 μm Pigtails for Splicing (Optional)

### InvisiLight Facade Solution for Outdoor Installations

Facade Terminals	SlimBox 24F and 2F or 4F (Outdoor)
Facade Cable	EZ-Bend Indoor/Outdoor 12F or 24F Cable
Drop Cable	EZ-Bend 1F 3.0 mm or 4.8 mm Cable

## TELECOMMUNICATION ROOM

- Compact basement box for a progressive customer activation;
- The basement box (SlimBox® 64F Terminal) allows fusion splices for the outside plant cable;
- Ideal for buildings with low penetration rates: One splitter can be installed and the management of the customers is done through the SCA ports. A parking area permits easy connection of new customers;
- Several boxes can be connected for modular expansion. Connections between multiple SlimBoxes are possible through access openings between them.

## RISER BACKBONE

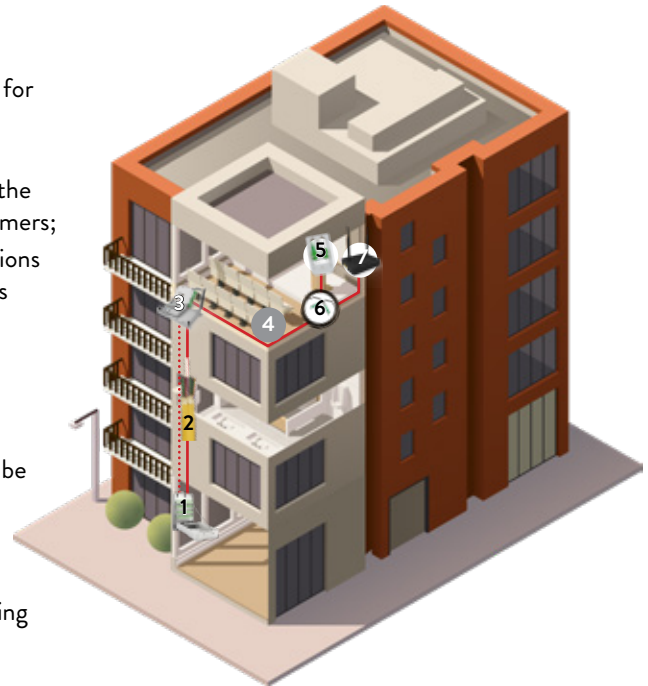
- SCA pre-terminated cables for quick plug and play installation;
- EZ-Bend® patch cords directly from the office or living unit may be used for small buildings.

## HORIZONTAL DEPLOYMENT

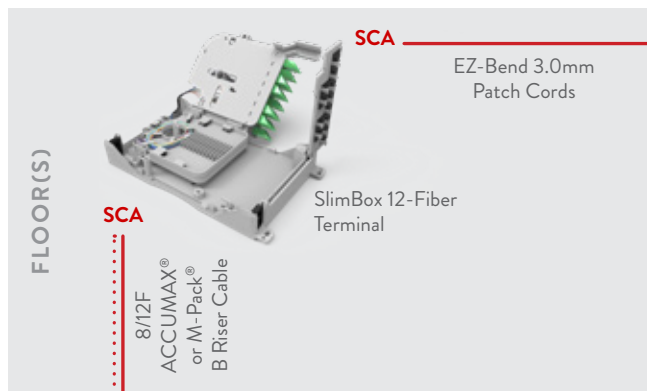
- Direct deployment from the telecommunication closet to the living unit or office;
- Ideal for Greenfield installation
- The EZ-Bend jumper connects the ONT to the SlimBox® Wall Plate;

## INSIDE THE LIVING UNIT OR OFFICE

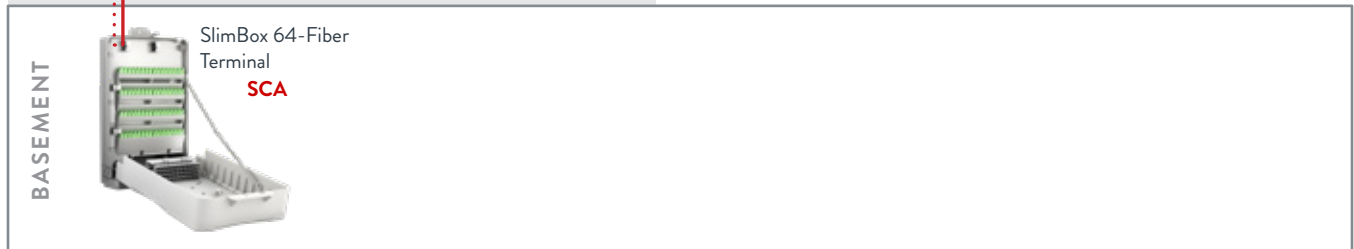
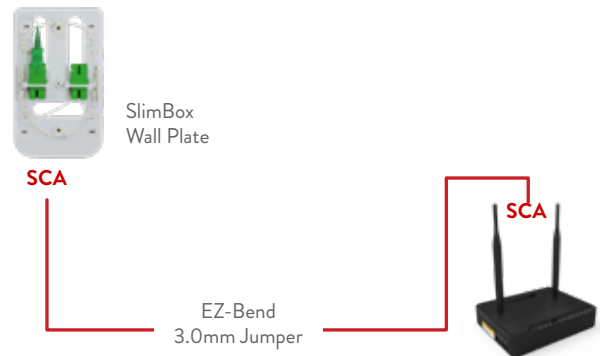
- EZ-Bend Jumper connects the SlimBox Wall Plate to the ONT;



### IN THE HALLWAY



### IN THE LIVING UNIT OR OFFICE



# GREENFIELD

## Fusion Spliced or Field-Terminated Solution

### TELECOMMUNICATION ROOM

- Compact basement box for a progressive customer activation (parking up to 48 connectors in the SlimBox 64 Terminal);
- The basement box (SlimBox® 64F Terminal) allows fusion splices for the outside plant cable and the internal cables (up to 96 fusion splices - 8 splice trays with 12 splices in each one);
- Ideal for buildings with low penetration rate: One splitter can be installed with management of the customers done through the SCA ports. A parking area permits easy connection of new customers;
- Several boxes can be connected for modular expansion. Connections between SlimBoxes are possible through access openings between them.

### RISER BACKBONE

- ACCUMAX® cables may be used for a quick and easy installation;
- SCA pre-terminated pigtails or EZ!Fuse connectors used for fusion splicing inside the basement and floor boxes;

### HORIZONTAL DEPLOYMENT

- Direct deployment from the telecommunication closet to the Apartment unit through EZ-Bend cable (ruggedized 3.0 or 4.8 mm);
- The horizontal cable is fusion spliced or field terminated with an EZ!Fuse connector in the SlimBox 12 Terminal (floor distribution box) and in the SlimBox Wall Plate (inside the living unit);

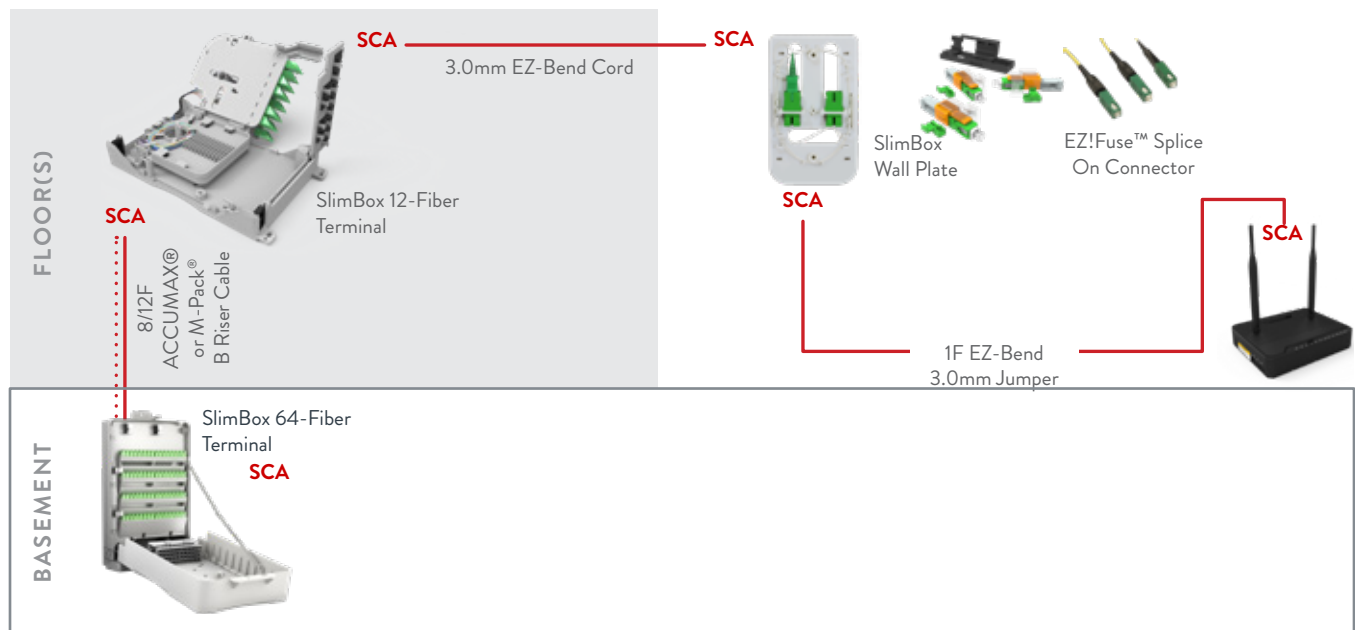
### INSIDE THE LIVING UNIT OR OFFICE

- The EZ!Fuse™ Splice-On Connector can be used to terminate the EZ-Bend Jumper or a pre-terminated EZ-Bend Jumper can be used;



#### IN THE HALLWAY

#### IN THE LIVING UNIT OR OFFICE





## TELECOMMUNICATION ROOM

- Compact basement box for progressive customer activation;
- The basement box (SlimBox® 64F Terminal) allows fusion splices to the outside plant cable;
- Ideal for buildings with low penetration rate: One splitter can be installed with management of the customers done through the SCA ports. A parking area permits easy connection of new customers;
- Boxes can be added for modular expansion.
- Connections between SlimBox units are easy using jumpers through multiple ports designed into the box.

## RISER BACKBONE

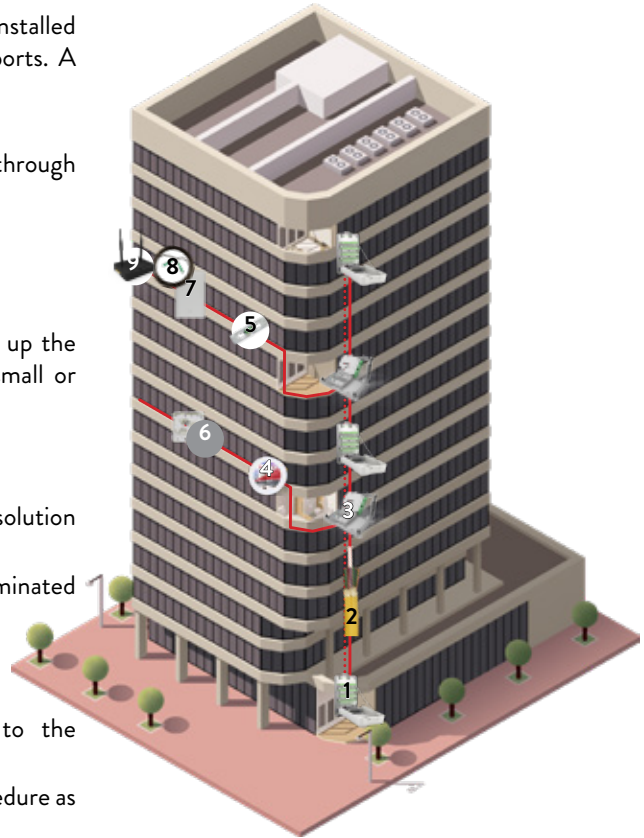
- SCA pre-terminated cables for quick plug and play installation;
- The InvisiLight® 2.0mm 12 fiber multifiber cord can be pulled up the riser directly from the basement box and down hallways in small or garden style buildings.

## HORIZONTAL DEPLOYMENT

- The InvisiLight MDU Point of Entry Module offers a discrete solution using field termination inside the module;
- Virtually invisible installation using the InvisiLight 12F pre-terminated 2.0mm cord

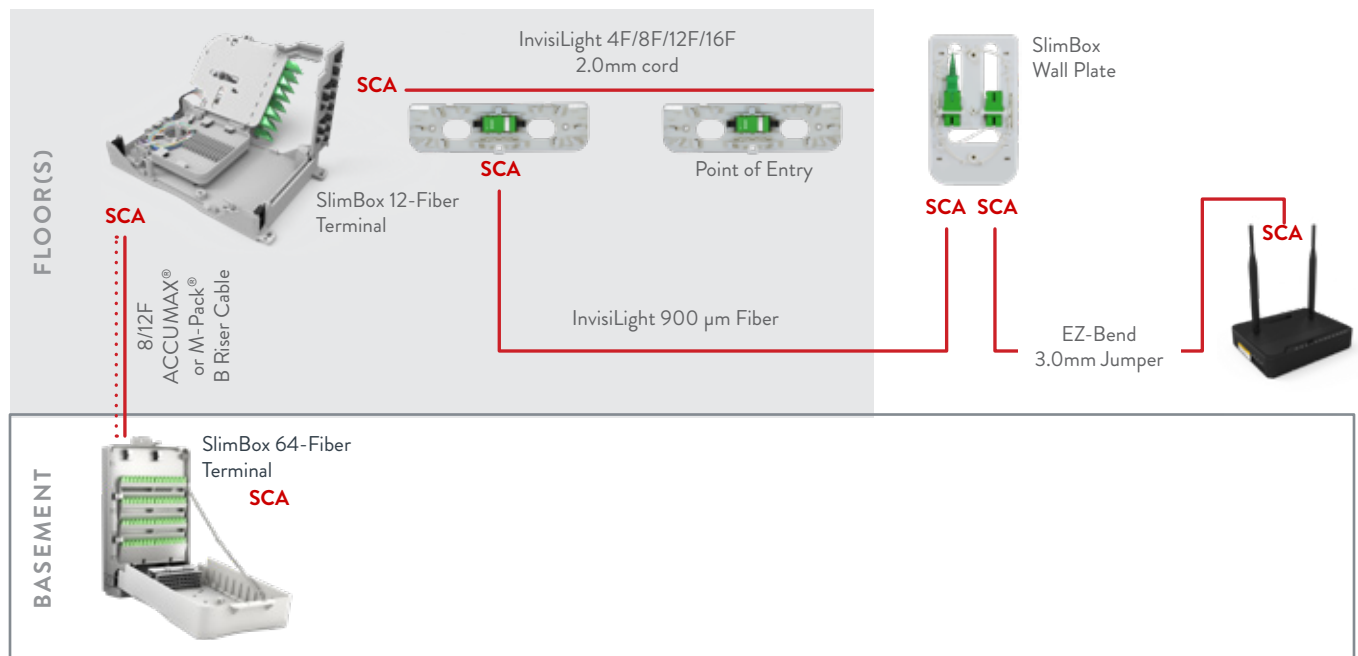
## INSIDE THE LIVING UNIT OR OFFICE

- InvisiLight ILU Solution is complementary and connects to the InvisiLight MDU installation;
- InvisiLight ILU Solution is installed with the same tools and procedure as the InvisiLight MDU Solution



### IN THE HALLWAY

### IN THE LIVING UNIT OR OFFICE



# BROWNFIELD

## Pre-Terminated Solution with Spooled Slack Management

### TELECOMMUNICATION ROOM

- Compact basement box for large scale customer activation
- The basement box (SlimBox® 24F) allows fusion splices for the outside plant cable;
- Ideal for buildings with high penetration rate

### RISER BACKBONE

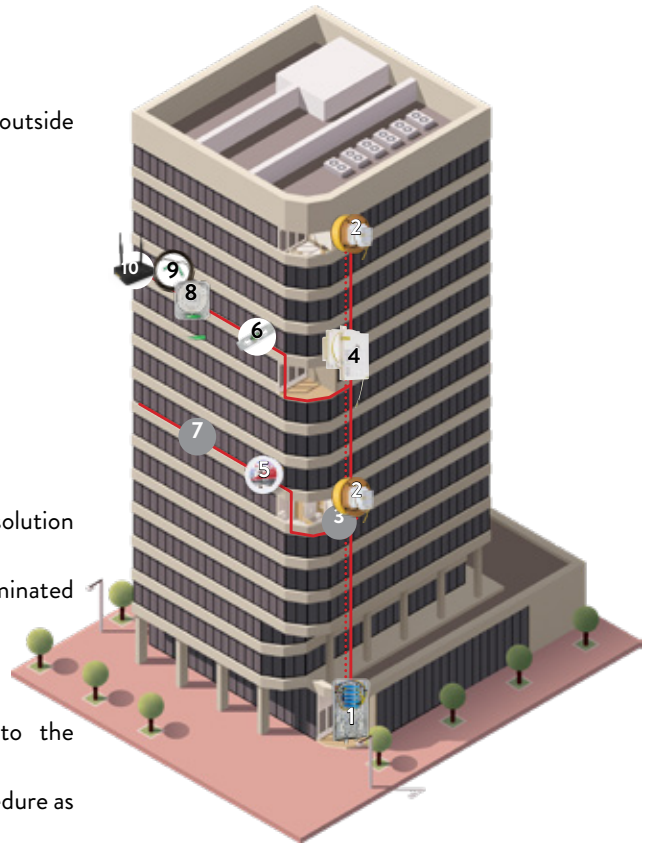
- Built-in slack management with the V-Linx™ solution:
- Reduce inventory and lead time (fewer components);
- Faster installation
- Scalable to multiple building sizes

### HORIZONTAL DEPLOYMENT

- The InvisiLight® MDU Point of Entry Module offers a discrete solution using field termination inside the module;
- Virtually invisible installation using the InvisiLight 12F pre-terminated 2.0mm cord

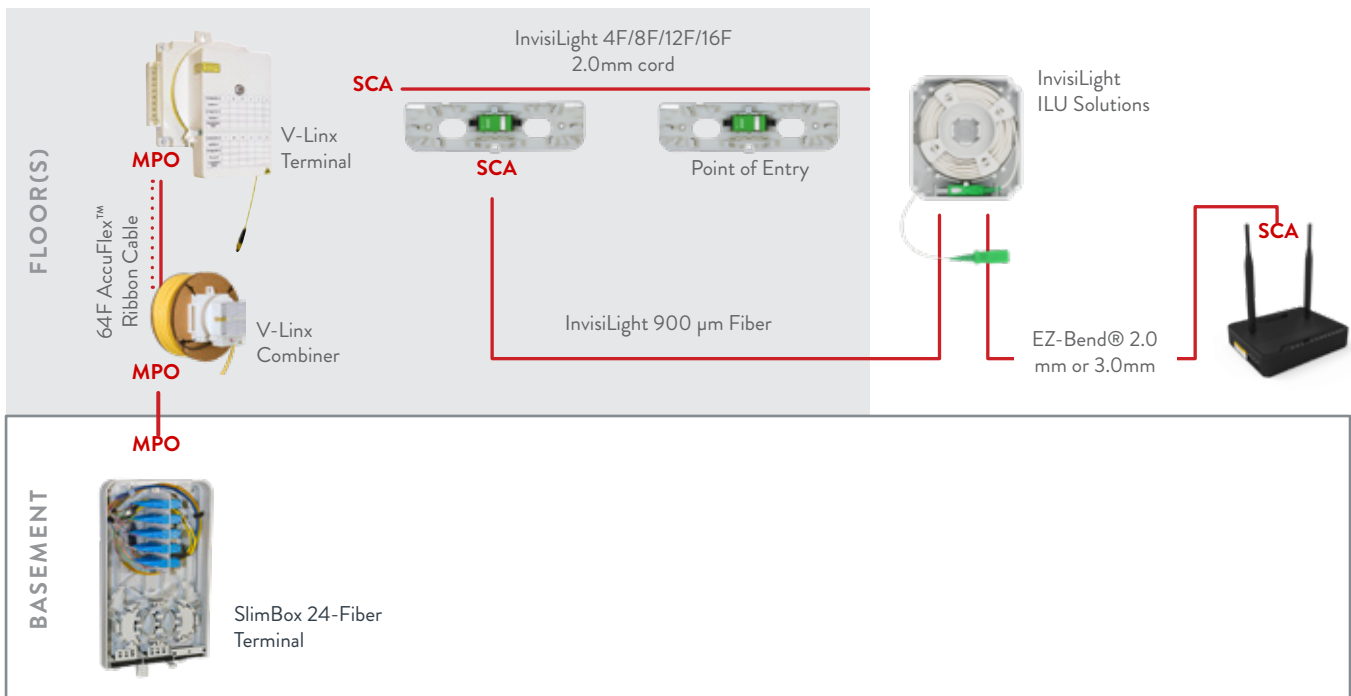
### INSIDE THE LIVING UNIT OR OFFICE

- InvisiLight ILU Solution is complementary and connects to the InvisiLight MDU installation;
- InvisiLight ILU Solution is installed with the same tools and procedure as the InvisiLight MDU Solution



### IN THE HALLWAY

### IN THE LIVING UNIT OR OFFICE



## EZ-Bend® Ruggedized Cables and Cable Assemblies

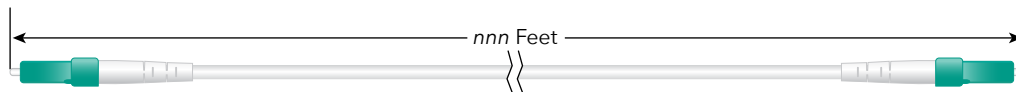
### EZ-Bend Jumpers

EZ-Bend Ruggedized Jumpers utilize best in class EZ-Bend 2.5 mm bend radius rated fiber, in a robust cord that can withstand sharp corners and up to 100 lbs (45 KG) of pulling tension. With factory tuned and tested termination, and no bend loss issues, they help save time and money on installation. Their innovative design can be stapled around sharp corners and moldings, and provides an ideal solution for in-building and in-home applications.



### FEATURES AND BENEFITS

- Available in 4.8mm diameter cordage as indoor/outdoor, indoor/outdoor toneable riser, plenum, or low-smoke, zero-halogen construction
- Available in 3.0mm diameter cordage as indoor/outdoor, riser construction
- **Faster, easier installation:** no extra steps to install bend limiters, conduits, or raceways. Class leading 2.5mm bend radius SM fiber.
- **Better bending than competing products:** both the EZ-Bend 4.8mm and 3.0mm cable can be stapled around sharp corners



Ordering Codes		
Graybar Ordering Code	OFS Code	Description
	JR5DK001SCASCA $nnn$ F	EZ-Bend 4.8 mm Riser Indoor/Outdoor Single Fiber SCA to SCA
	JR5DK001SCAUNC $nnn$ F	EZ-Bend 4.8 mm Riser Indoor/Outdoor Single Fiber SCA to Unconnectorized
	JH5DK001SCAUNC $nnn$ F	EZ-Bend 4.8 mm Low Hallogen Black Indoor/Outdoor Black Single Fiber SCA to Unconnectorized
	JR4DW001SCASCA $nnn$ F	EZ-Bend 4.8 mm Riser White Single Fiber SCA to SCA
	JR4DW001SCAUNC $nnn$ F	EZ-Bend 4.8 mm Riser White Single Fiber SCA to Unconnectorized
	JP4DW001SCAUNC $nnn$ F	EZ-Bend 4.8 mm Plenum White Single Fiber SCA to Unconnectorized
	JH4DW001SCAUNC $nnn$ F	EZ-Bend 4.8 mm Low Hallogen White Single Fiber SCA to Unconnectorized
	JRVDW001SCASCA $nnn$ F	EZ-Bend 3.0 mm Ruggedized Riser White Single Fiber SCA to SCA
	JRVDW001SCAUNC $nnn$ F	EZ-Bend 3.0 mm Ruggedized Riser White Single Fiber SCA to Unconnectorized

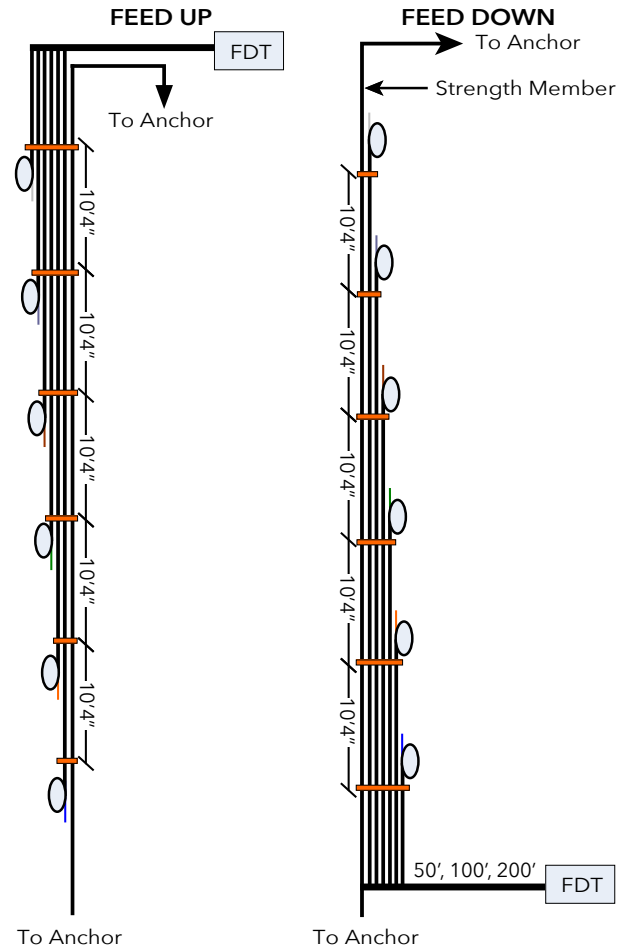
\* NOTES:  $nnn$  = footage (Length in boxes up to 1,500 feet)  
Length of jumper specified in feet (F) or meters (M)

Standard Packaging	
Lengths up to 150'	Coiled in bag
Lengths greater than 150'	Compact spool

## EZ-Bend® Multifiber Drop Bundles

### FEATURES AND BENEFITS

- Same best in class performance and benefits as EZ-Bend Cables and Assemblies
- Additional time savings by pulling 5, 6 or 12 assemblies at one time
- Ruggedized 4.8mm Indoor/Outdoor cable with EZ-Bend Ultra-Bend Insensitive Fiber
- Bundles of up to 12 cables are placed on the outside of the building with coils located at each living unit
- The network end of the bundle is spliced at the Fiber Distribution Terminal (FDT)
- To activate service, the connectorized end is pushed into the living and plugged into the ONT



Ordering Information			
Graybar Ordering	Part Number	Product Code	Material Description
	301016762	Drop Bundle 6 Up Blk 4.8 EZ-Bend I/O 100 ft	EZ-Bend 4.8mm Riser Indoor/Outdoor Cable 06 cables - Feed up method - 100 ft
	301016770	Drop Bundle 6 Up Blk 4.8 EZ-Bend I/O 150 ft	EZ-Bend 4.8mm Riser Indoor/Outdoor Cable 06 cables - Feed up method - 150 ft
	301016804	Drop Bundle 6 Down Blk 4.8 EZ-Bend I/O 100 ft	EZ-Bend 4.8mm Riser Indoor/Outdoor Cable 06 cables - Feed down method - 100 ft
	301016812	Drop Bundle 6 Down Blk 4.8 EZ-Bend I/O 150 ft	EZ-Bend 4.8mm Riser Indoor/Outdoor Cable 06 cables - Feed down method - 150 ft
	301030169	Drop Bundle 12 Up 4.8 Blk 4.8 EZ-Bend I/O 100 ft	EZ-Bend 4.8mm Riser Indoor/Outdoor Cable 12 cables - Feed up method - 100 ft
	301030177	Drop Bundle 12 Up 4.8 Blk EZ-Bend I/O 150 ft	EZ-Bend 4.8mm Riser Indoor/Outdoor Cable 12 cables - Feed up method - 150 ft
	301030201	Drop Bundle 12 Down 4.8 Blk EZ-Bend I/O 100 ft	EZ-Bend 4.8mm Riser Indoor/Outdoor Cable 12 cables - Feed down method - 100 ft
	301030219	Drop Bundle 12 Down 4.8 Blk EZ-Bend I/O 150 ft	EZ-Bend 4.8mm Riser Indoor/Outdoor Cable 12 cables - Feed down method - 150 ft

**EZ-Bend® Cable**  
(Reel-in-a-Box)

**FEATURES AND BENEFITS**

- EZ-Bend cables can be easily pulled out of the box and placed
- Easier to transport and use than standard fiber reel packages
- Helps save time and money on installation, equipment, setup and storage
- Provides greater cable protection
- Design prevents cable from spinning over the reel flange
- Helps eliminate cable twisting and tangling
- Enables fast cable placement and pulling
- Supports multiple simultaneous cable pulls
- Direct cable access through the box top for easy management of excess cable
- Outdoor version for underground applications



**PRODUCT DESCRIPTION**

The OFS Reel-in-a-Box Cabling Solution offers installers lightweight, easy-to-use cable packaging for true “out of the box” disbursement of fiber optic cable. This readily recyclable cable package helps save time and money on set up and installation.

Ordering Information			
Graybar Ordering	Part Number	Product Code	Material Description
	PR1-001-346-0273	IR30-001C-DRK-4-WPVC-RIB-1500FT	EZ-Bend 3.0mm Riser Cable - Black - RIB - 1500FT
	PR1-001-347-0273	IR30-001C-DRW-4-WPVC-RIB-1500FT	EZ-Bend 3.0mm Riser Cable - White - RIB - 1500FT
	PR1-001-229-0273	IR30-001C-DRK-4-WPVC-RIB-4500FT	EZ-Bend 3.0mm Riser Cable - Black - RIB - 4500FT
	PR1-001-579-0273	IR30-001C-DRW-4-WPVC-RIB-4500FT	EZ-Bend 3.0mm Riser Cable - White - RIB - 4500FT
	PR1-001-348-0273	IO48-001D-DRK-4-WPVC-RIB-1500FT	EZ-Bend 4.8mm Riser and Indoor/Outdoor Cable - Black - RIB - 1500FT
	PR1-001-349-0273	IO48-001D-DRW-4-WPVC-RIB-1500FT	EZ-Bend 4.8mm Riser and Indoor/Outdoor Cable - White - RIB - 1500FT
	PR1-001-225-0273	IT48-001A-DRO-4-WPVC-RIB-1300FT	EZ-Bend 4.8mm Toneable Cable - Black - RIB - 1300FT
	PR1-001-227-0273	IT48-001A-DRK-4-WPVC-RIB-1300FT	EZ-Bend 4.8mm Toneable Cable - White - RIB - 1300FT

Fiber-to-the-Home (FTTH) and Fiber-to-the-Business (FTTB) deployment is accelerating globally, offering ultra-high speed Gigabit service to consumers. The OFS InvisiLight Optical Solution, launched in 2012, is a revolutionary system that enables fast, easy-to-install and almost invisible fiber drop connection within the indoor living unit (ILU) or businesses for fiber-to-the-desk (FTTD) services. OFS' EZ-Bend® Optical Fiber enables worry-free bending around the many tight corners typically found inside buildings and rooms. These optical fibers surpass the G.657.B3 technical standard, with a 2.5 mm bend radius, helping to ensure reliable, ultra-high-speed Internet and services.

The InvisiLight Optical Solution is available in a multiple fiber version for multi-dwelling unit (MDU) hallway and riser applications. Leveraging this same proven technology, the InvisiLight MDU Solution helps make optical fiber easily available to each building tenant. InvisiLight solutions can help accelerate the adoption of fiber optic services in residential or business premises by differentiating indoor fiber deployment from traditional methods. In this way, the InvisiLight Solutions can help to significantly improve the consumer experience while lowering costs and speeding installation. These benefits result in higher subscriber acceptance and take rates, higher profitability and faster time-to-revenue for service providers.

#### ADVANTAGES

- Easy, quick install
- Simple and flexible versus traditional methods
- Paintable and blends into decor
- EZ-Bend fiber enables virtually unlimited number of bends
- No nails, staples or sawing
- Attaches to typical indoor surfaces
- Reliable and protected by its proximity
- Easy to reposition or remove



InvisiLight® Products Continued

Product Specifications	InvisiLight ILU Solution	InvisiLight MDU Solution
<b>Size</b>	<ul style="list-style-type: none"> <li>One 900 or 600 µm EZ-Bend Optical Fiber</li> <li>10X smaller than 2.9 mm cordage</li> <li>5 to 20X smaller than tape-based cables</li> </ul>	<ul style="list-style-type: none"> <li>Twelve 250 µm EZ-Bend Optical Fibers in a 2 mm cord</li> <li>15X smaller than tape-based cables</li> </ul>
<b>Application</b>	Indoor living unit (home or flat)	Building/MDU hallways or risers if in OFNR (or equivalent national standard) duct
<b>Install Process</b>	Quick, simple and low-cost installation process to adhere fiber to wall or ceiling surfaces	
<b>Install Tools</b>	Adhesive applicator tool for quick installation; through-wall application tool; and optical extender tool to apply adhesive without a ladder	
<b>Install Materials</b>	<ul style="list-style-type: none"> <li>adhesive (in tubes) with precision pre-cut tip (fits in applicator tool)</li> <li>Inside and outside corner protectors, wall plugs and caps</li> <li>Indoor unit surface-mounted wall module</li> </ul>	<ul style="list-style-type: none"> <li>adhesive (in tubes) with precision pre-cut tip (fits in applicator tool)</li> <li>Inside and outside corner protectors, wall plugs and caps</li> <li>Mechanical connector or pigtail</li> <li>POE wall module outside tenant unit</li> </ul>
<b>Connectors</b>	<ul style="list-style-type: none"> <li>Plug-and-play, factory-terminated connectors</li> </ul>	<ul style="list-style-type: none"> <li>Factory-terminated connectors for closet</li> <li>Mechanical connectors or splice pigtails for point-of-entry</li> </ul>
<b>Surface Mounting</b>	Adheres to most common types of painted and unpainted indoor wall, molding and ceiling surfaces	
<b>Aesthetics</b>	<ul style="list-style-type: none"> <li>Minimal disruption to owners or tenants</li> <li>Virtually invisible and blends into the decor</li> <li>Can be caulked and painted with latex and oil-based indoor paint</li> <li>Can be repositioned or removed and reapplied if required without damage</li> <li>Easily installed around corners, obstacles and on textured surfaces</li> <li>Safe and naturally protected in crevices</li> </ul>	
<b>Corners</b>	Supports maximum 30 outside corners and 30 inside corners*	Supports maximum 40 outside corners and no limit on inside corners*
<b>Spool Lengths</b>	Available in various spool lengths	
<b>Slack Management</b>	Built-in auto-slack manager	POE module has storage space for slack
<b>Install Conditions</b>	<ul style="list-style-type: none"> <li>Temperature ≥ 50 °F (≥10 °C) for adhesive installation</li> <li>No humidity restriction or preconditioning required</li> </ul>	
<b>Operating Conditions</b>	14 °F to 140 °F (-10 °C to 60 °C)	
<b>Safety</b>	Does not require entry into single-family home attics	Does not require entry into MDU attics
<b>Standards</b>	UL-1651 compliant fiber and adhesive	InvisiLight Multifiber Cord: OFNR/FT4 For in-between floors, in risers or through fire walls, it may be placed inside OFNR-rated conduits or ducts
<b>Environmental</b>	Environmentally friendly, free of heavy metals, RoHS compliant and not hazardous to human touch. Minimal scrap/waste remains after installation process is complete.	

\* See InvisiLight Optical Solutions Data Sheet for further guidance

# INVISILIGHT® ILU SOLUTION COMPLETE KIT

**The InvisiLight ILU Solution is offered as a complete kit consisting of:**

A wall-mounted interconnection module;

A spool that spins EZ-Bend® Optical Fiber (terminated with SC-APC connectors)  
out of the module to the exact length needed and manages slack;

6 corner protectors, 4 wall plugs and caps and one through-wall placement tool

Adhesive (in tubes)



80x80 Module

**CHECK OUT OUR INSTALLATION VIDEO**

[https://youtu.be/bwdfNYm\\_sPw](https://youtu.be/bwdfNYm_sPw)



Plugs and Caps



Corner Protectors



Adhesive Dispensing Tool and Adhesive  
(in tube)





600 μm Version

## InvisiLight® ILU Solutions

### InvisiLight 80x80 Wall Module

#### PRODUCT DESCRIPTION

The InvisiLight 80x80 Wall Module is provided with an SC APC external shuttered adapter. There are two ports of entry at the bottom of the module. The InvisiLight Fiber exits on the left-hand side and the patch cord is attached to the shuttered adapter on the right-hand side of the module. The SC APC shuttered simplex adapter snaps into the designated adapter port with the shutter on the outside and the hinged shutter to the top of the adapter port. The shutter provides dust protection when the patch cord is not engaged. The removable flanges allow longer lengths on the spool but must be removed prior to inserting the spool into the module.

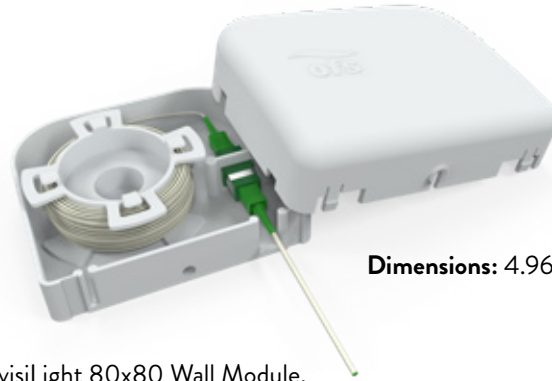
**Dimensions:** 3.15" W x 3.15" H x .807" D

#### FEATURES AND BENEFITS

- Houses the compact InvisiLight spool which holds 900 or 600 μm EZ-Bend InvisiLight fiber with SCA connectors factory terminated and tested
- Disposable flanges allows up to 40 m to be dispensed while storing <10 m of fiber
- Standardized spool drum design enhances compatibility with other or larger wall mount modules
- Color-coded adapters provide easy fiber identification: SCA is simplex SC APC (green)
- Patented design in compact package
- RoHS-compliant, free from heavy metals and environmentally friendly
- IEC 60529 IP20, RoHS

Ordering Information			
Graybar #	Part No.	Product Code	Material Description
	301147609	NVSLGHTC-D-SASSAS-80X80 KIT-600UM-20M-EA	InvisiLight 600 μm fiber 80 X 80 20 meter spool, module with SC APC short boot connectors on both ends and an SC APC adapter.
	301153250	NVSLGHTC-D-SASSAS-80X80 KIT-600UM-25M-EA	InvisiLight 600 μm fiber 80 X 80 25 meter, module with SC APC short boot connectors on both ends and an SC APC adapter
	301147617	NVSLGHTC-D-SASSAS-80X80 KIT-600UM-30M-EA	InvisiLight 600 μm fiber 80 X 80 30 meter spool, module with SC APC short boot connectors on both ends and an SC APC adapter.
	301147625	NVSLGHTC-D-SASSAS-80X80 KIT-600UM-40M-EA	InvisiLight 600 μm fiber 80 X 80 40 meter spool, module with SC APC short boot connectors on both ends and an SC APC adapter.
	301117271	NVSLGHTC-D-SCASCA-80x80 KIT-20M-EA	Connectorized 20-meter spool, six (6) inside and outside corner protectors, module e/w adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions
	301117289	NVSLGHTC-D-SCASCA-80x80 KIT-30M-EA	Connectorized 30-meter spool, six (6) inside and outside corner protectors, module e/w adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions
	301117297	NVSLGHTC-D-SCASCA-80x80 KIT-40M-EA	Connectorized 40-meter spool, six (6) inside and outside corner protectors, module e/w adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions
Other InvisiLight Accessories			
	301079117	NVSLGHTC-TUBE, 30ML ADHESIVE 025/PK	25-pack of adhesive (in tubes) and application tips
	301079125	NVSLGHTC-TUBE, 30ML ADHESIVE 050/PK	50-pack of adhesive (in tubes) and application tips
	301079133	NVSLGHTC-TUBE, 30ML ADHESIVE 100/PK	100-pack of adhesive (in tubes) and application tips
	301079109	NVSLGHTC-MINI DISPENSING TOOL	Dispensing tool for adhesive application
	301143202	NVSLGHTC-CORDGUIDE TOOL W/EXTENDER 2 FT	InvisiLight pole extension tool

## InvisiLight® Wall Module



**Dimensions:** 4.96" W x 4.53" H x 1.41" D

Same **Features and Benefits** as the InvisiLight 80x80 Wall Module.

Ordering Information			
Graybar	Part No.	Product Code	Material Description
	301099115	NVSLGHTC-D-SCASCA-MODULE KIT-20M-EA	Connectorized 20-meter spool, six (6) inside and outside corner protectors, module e/w adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions
	301099123	NVSLGHTC-D-SCASCA-MODULE KIT-30M-EA	Connectorized 30-meter spool, six (6) inside and outside corner protectors, module e/w adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions
	301099131	NVSLGHTC-D-SCASCA-MODULE KIT-40M-EA	Connectorized 40-meter spool, six (6) inside and outside corner protectors, module e/w adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions
	301106654	NVSLGHTC-D-LCULCU-MODULE KIT-30M-EA	Connectorized 30-meter spool, six (6) inside and outside corner protectors, module e/w LC adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions
	301106662	NVSLGHTC-D-LCULCU-MODULE KIT-40M-EA	Connectorized 40-meter spool, six (6) inside and outside corner protectors, module e/w LC adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions
	301135752	NVSLGHTC-D-LA1LCA-02-MODULE KIT-20M	2-fiber connectorized 20-meter spool, LCAPC, six inside and outside corner protectors, module e/w adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions
	301135745	NVSLGHTC-D-LA1LCA-02-MODULE KIT-30M	2-fiber connectorized 30-meter spool, LCAPC, six inside and outside corner protectors, module e/w adapter, four (4) wall plugs and caps, one (1) through-wall tool and instructions
Other InvisiLight Accessories (Same as Page 33)			
	301079117	NVSLGHTC-TUBE, 30ML ADHESIVE 025/PK	25-pack of adhesive (in tubes) and application tips
	301079125	NVSLGHTC-TUBE, 30ML ADHESIVE 050/PK	50-pack of adhesive (in tubes) and application tips
	301079133	NVSLGHTC-TUBE, 30ML ADHESIVE 100/PK	100-pack of adhesive (in tubes) and application tips
	301079109	NVSLGHTC-MINI DISPENSING TOOL	Dispensing tool for adhesive application
	301115671	NVSLGHTC-POLE EXTENSION TOOL	InvisiLight pole extension tool

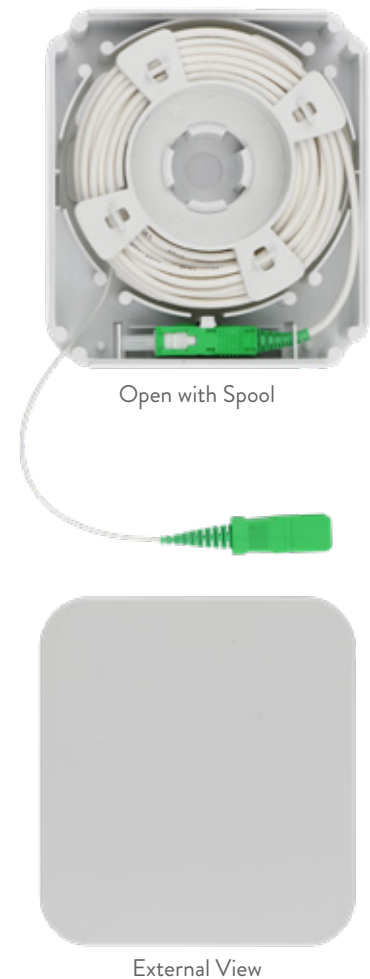
## InvisiLight® EZ-Connect Module

### PRODUCT DESCRIPTION

The InvisiLight EZ-Connect Module is provided with an integrated jumper to connect to the ONT, eliminating the need for a second jumper. This jumper is available in two versions: 2 mm or 3 mm Outside Diameter with 2.5 and 1.5 meter lengths respectively. The InvisiLight tight buffer optical fiber exits on one of the four module corners. The module has an internal parking space for the inside SC connector end. The internal spool allows slack management of the tight buffer and jumper and may be locked in order to spool out by hand the desired length of jumper. The bottom layer of the spool supports up to 40 meters of InvisiLight tight buffer optical fiber.

### FEATURES AND BENEFITS

- Handles 900 µm InvisiLight Optical Fiber and the slack management for tight buffer optical fiber and the ONT jumper
- Wall mounted compact module
- Allows up to 40 meters to be dispensed on the bottom layer and up to 2.5 meters of 2 mm cord on the top spool layer (up to 1.5 meters considering a 3 mm cord)
- Spool locking system to facilitate the jumper spooling out
- RoHS-compliant; free from heavy metals and environmentally friendly



Ordering Information for InvisiLight EZ-Connect Module			
Graybar Ordering	Part No.	Product Code	Material Description
	301141818	NVSLGHTD-D-SCASCA-1-NAM-KIT 900-5.0M/40M	EZ-Connect module with 5.0 meters of 900 µm fiber on the top layer and 40 meters of 900 µm fiber on the bottom layer; pre-connectorized both ends with SCA connectors
	301141826	NVSLGHTD-D-SCASCA-1-NAM-KIT 2MM-2.5M/40M	EZ-Connect module with 2.5 meters of 2.0 mm fiber on the top layer and 40 meters of 900 µm fiber on the bottom layer; pre-connectorized both ends with SCA connectors
	301141834	NVSLGHTD-D-SCASCA-1-NAM-KIT 3MM-1.5M/40M	EZ-Connect module with 1.5 meters of 3.0 mm fiber on the top layer and 40 meters of 900 µm fiber on the bottom layer; pre-connectorized both ends with SCA connectors
	30115092	NVSLGHTD-D-LCSLCS-2-NAM-1.0M/20M	EZ-Connect module with 1.0 meter of 2.0 mm fiber on the top layer and 20 meters of 900 µm fiber on the bottom layer; preconnectorized both ends with LCU connectors



### InvisiLight® MDU Solutions

InvisiLight Compact Point-of-Entry (POE) Module



#### PRODUCT DESCRIPTION

The Compact Point-of-Entry (POE) Module serves as the transition point between the building hallway and the office or living unit. Following an installation survey, the installer mounts this module on the exterior wall of each living unit or office. A fusion-spliced pigtail or mechanical connector connects the InvisiLight Multifiber Cord to the plug-and-play InvisiLight Indoor Living Unit (ILU) Solution. The Compact POE Module is part of the InvisiLight Multiple Dwelling Unit (MDU) Solution.

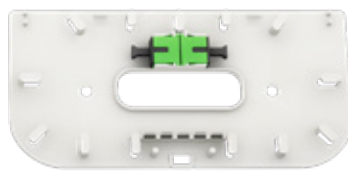
**Dimensions:** 6.0" W x 1.6" H x 0.625" D

#### FEATURES AND BENEFITS

- Allows termination of fiber in the InvisiLight Multifiber Cord through direct connectorization or splicing (fusion or mechanical) to optical extensions (pigtails) of two optical fibers
- Accommodates one internal SC-A optical adapter
- Access points in each side allows cable access from the top of the module
- InvisiLight ILU or jumper output occurs from the base of the module through two access points
- The multi-position adapter support allows the adapter to be housed in three different positions

Ordering Information for Compact POE Module			
Graybar Ordering	Part No.	Product Code	Material Description
	301123998	NVSLGHTHI-COMPACT-MODULE W/LCA ADAPTER	Module, with LC APC adapter for use with the InvisiLight Multifiber Cord
	301124004	NVSLGHTHI-COMPACT-MODULE W/SCA ADAPTER	Module, with SC APC adapter for use with the InvisiLight Multifiber Cord
Compact POE Module (UV-Rated for Breezeway Applications)			
	301145751	NVSLGHTHO-CMODULE-GRAY-W/ SCA ADAPTER	Compact Point-of-Entry (POE) Module, Indoor/outdoor, gray, SCA
	301152880	NVSLGHTHO-CMODULE-GRAY-W/ LCA ADAPTER	Compact Point-of-Entry (POE) Module, Indoor/outdoor, gray, LCA

### InvisiLight Standard Point-of-Entry (POE) Module



**Dimensions:** 5.25" W x 2.5" H x 0.77" D

Ordering Information for Standard POE Module			
	301107447	NVSLGHTH-MODULE E/W LCA ADAPTER	Additional point-of-entry (POE) module with LC-APC adapter
	301107454	NVSLGHTH-MODULE E/W SCA ADAPTER	Additional point-of-entry (POE) module with SC-APC adapter
	301107462	NVSLGHTH-MODULE E/W SPLICE TRAY	Additional point-of-entry (POE) module with splice tray



## InvisiLight® MDU Solutions

### InvisiLight 4/8/12/16-Fiber

The InvisiLight MDU Solution can be surface mounted in hallways and is virtually invisible. A compact cord housing up to sixteen 250 µm EZ-Bend® optical fibers is installed with the same process and tools used for the field-proven InvisiLight ILU Solution. This helps to ensure necessary bend radius performance needed for the many corners that can exist in MDU hallways, eases installer training, and simplifies inventory management of common tools.

### PRODUCT DESCRIPTION

- Four fiber count cords are available:
  - Four (4), eight (8), and twelve (12) color-coded optical fibers, within a 2 mm outer diameter (OD) sheath
  - Sixteen (16) color-coded optical fibers, within a 2.3 mm outer diameter (OD) sheath
- EZ-Bend® Optical Fiber, compliant with G.657.B3; fully splice compatible with outstanding macrobending performance (1 turn at 1550 nm):
  - <0.1 dB loss at 5 mm bend radius
  - <0.2 dB loss at 2.5 mm bend radius
- Capable of supporting 40 outside corners with no limit on inside corners
- Available factory terminated on the network end with SC-APC or MPO connectors on the network facing end. Field termination required at the living unit (EZ!-Fuse Connector or EZ-Bend pigtail splice).
- Must be installed in riser-rated conduit in risers, in-between floors, through firewalls or when not adhered to a supporting surface

### FEATURES AND BENEFITS

- Compact OFNR/FT4 rated cord can be installed in riser spaces between floors and in hallways
- Pre-connectorized with MTP, SCA or LCA connectors
- Same installation tool, adhesive, and process as InvisiLight ILU Solution
- Supports fusion splicing or mechanical connector in the Point-of-Entry Module

### STANDARDS AND TESTING

- Meets Telcordia GR-326 and GR-1435 standards
- The InvisiLight Multifiber cord is OFNG-FT4, OFNR-LS, and UL 1666 OFSNR-LS
- RoHS compliant; free from heavy metals and environmentally friendly; nonhazardous to human touch and creates negligible waste
- Fully tested for compatibility with most wall and ceiling materials; easily painted with both latex and oil-based paints

### INVISILIGHT ADHESIVE

- White color during application; turns clear after approximately 1 hour
- **Set Time:** 15 minutes  
**Tack-Free Time:** 45 minutes  
**Full Cure Time:** 24 hours depending on temperature, humidity, and thickness of adhesive
- Long term storage is best at room temperature. Keep the adhesive tubes from freezing and below at +38 °C  
**Operating Temperature Cured:** -40 °C to 60+ °C  
**Installation Temperature:** ≥ +10 °C

#### Ordering Information for InvisiLight 4/8/12/16-Fiber

Graybar Ordering	Part Number	Product Code	Description
InvisiLight MDU Solution Kits (4-Fiber)			
	301140612	NVSLGHTHI-D-UNCUNC-C MODUL KIT-04-100M EA	Unconnectorized 4-fiber InvisiLight Multifiber Unit, 100 meters, 4 compact point-of-entry (POE) modules and components
	301140620	NVSLGHTHI-D-UNCUNC-C MODUL KIT-04-300M EA	Unconnectorized 4-fiber InvisiLight Multifiber Unit, 300 meters, 4 compact point-of-entry (POE) modules and components
	301140562	NVSLGHTHI-D-SASUNC-C MODUL KIT-04-100M EA	SC-APC connectorized (one end) 4-fiber InvisiLight Multifiber Unit, 100 meters, 4 compact point-of-entry (POE) modules and components
	301140554	NVSLGHTHI-D-SASUNC- CMODUL KIT-04-300M EA	SC-APC connectorized (one end) 4-fiber InvisiLight Multifiber Unit, 300 meters, 4 compact point-of-entry (POE) modules and components

Ordering Information for InvisiLight 4/8/12/16-Fiber <i>Continued</i>			
Graybar Ordering	Part Number	Product Code	Description
InvisiLight MDU Solution Kits (8-Fiber)			
	301140638	NVSLGHTHI-D-UNCUNC-CMODUL KIT-08-100M EA	Unconnectorized 8-fiber InvisiLight Multifiber Unit, 100 meters, 8 compact point-of-entry (POE) modules and components
	301140646	NVSLGHTHI-D-UNCUNC-CMODUL KIT-08-300M EA	Unconnectorized 8-fiber InvisiLight Multifiber Unit, 300 meters, 8 compact point-of-entry (POE) modules and components
	301140570	NVSLGHTHI-D-SASUNC-CMODUL KIT-08-100M EA	SC-APC connectorized (one end) 8-fiber InvisiLight Multifiber Unit, 100 meters, 8 compact point-of-entry (POE) modules and components
	301140588	NVSLGHTHI-D-SASUNC-CMODUL KIT-08-300M EA	SC-APC connectorized (one end) 8-fiber InvisiLight Multifiber Unit, 300 meters, 8 compact point-of-entry (POE) modules and components
InvisiLight MDU Solution Kits (12-Fiber)			
	301117149	NVSLGHTHI-D-SCAUNC-Module Kit-12-100M-EA	SC-APC connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 100 meters, 12 point-of-entry (POE) modules and components
	301139408	NVSLGHTHI-D-SCAUNC-MODULE KIT-12-200M-EA	SC-APC connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 200 meters, 12 point-of-entry (Large POE) modules and components
	301117156	NVSLGHTHI-D-SCAUNC-Module Kit-12-300M-EA	SC-APC connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 300 meters, includes 12 point-of-entry (POE) modules and components
	301117180	NVSLGHTHI-D-MTFUNC-Module Kit-12-100M-EA	MPO (Ribbon) connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 100 meters, includes 12 point-of-entry (POE) modules and components
	301117198	NVSLGHTHI-D-MTFUNC-Module Kit-12-300M-EA	MPO (Ribbon) connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 300 meters, includes 12 point-of-entry (POE) modules and components
	301117164	NVSLGHTHI-D-LCAUNC-Module Kit-12-100M-EA	LC-APC connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 100 meters, includes 12 point-of-entry (POE) modules and components
	301117172	NVSLGHTHI-D-LCAUNC-Module Kit-12-300M-EA	LC-APC connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 300 meters, includes 12 point-of-entry (POE) modules and components
	301117123	NVSLGHTHI-D-UNCUNC-Module Kit-12-100M-EA	Unconnectorized 12-fiber InvisiLight Multifiber Unit, 100 meters, includes 12 point-of-entry (POE) modules and components
	301117131	NVSLGHTHI-D-UNCUNC-Module Kit-12-300M-EA	Unconnectorized 12-fiber InvisiLight Multifiber Unit, 300 meters, includes 12 point of entry (POE) modules and components
	301127007	NVSLGHTHI-D-SCAUNC-CMODUL KIT-12-100M-EA	SC-APC connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 100 meters, 12 compact point-of-entry (POE) modules and components
	301126942	NVSLGHTHI-D-SCAUNC-CMODUL KIT-12-200M-EA	SC-APC connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 200 meters, 12 compact point-of-entry (POE) modules and components
	301133617	NVSLGHTHI-D-SCAUNC-CMODUL KIT-12-300M-EA	SC-APC connectorized (one end) 12-fiber InvisiLight Multifiber Unit, 300 meters, 12 compact point-of-entry (POE) modules and components
InvisiLight MDU Solution Kits (16-Fiber)			
	301140653	NVSLGHTHI-D-UNCUNC-CMODUL KIT-16-100M EA	Unconnectorized 16-fiber InvisiLight Multifiber Unit, 100 meters, 16 compact point-of-entry (POE) modules and components
	301140661	NVSLGHTHI-D-UNCUNC-CMODUL KIT-16-300M EA	Unconnectorized 16-fiber InvisiLight Multifiber Unit, 300 meters, 16 compact point-of-entry (POE) modules and components
	301140596	NVSLGHTHI-D-SASUNC-CMODUL KIT-16-100M EA	SC-APC connectorized (one end) 16-fiber InvisiLight Multifiber Unit, 100 meters, 16 compact point-of-entry (POE) modules and components
	301140604	NVSLGHTHI-D-SASUNC-CMODUL KIT-16-300M EA	SC-APC connectorized (one end) 16-fiber InvisiLight Multifiber Unit, 300 meters, 16 compact point-of-entry (POE) modules and components
Additional Products			
	PR1-001-506-0273	MPHW-012A-DRW-4-2.0MM-RIB-2000FT	EZ-Bend 2.0mm 12 Fiber Cord White - RIB - 2000FT

### SlimBox® Solutions SlimBox Wall Plate



Ordering Information			
Graybar	Part No.	Product Code	Description
	301122826	SLIMBOX-V, INDOOR WALL PLATE-SC	SlimBox Wall Plate SC
	301122834	SLIMBOX-V, INDOOR WALL PLATE-1F-SM-SCA	SlimBox Wall Plate with one SC APC Adapter
	301122842	SLIMBOX-V, INDOOR WALL PLATE-2F-SM-SCA	SlimBox Wall Plate with two SC APC Adapters
	301134672	SLIMBOX-V, INDOOR WALL PLATE-2F-SM-LCA	SlimBox Wall Plate with one LC APC duplex adapter

#### PRODUCT DESCRIPTION

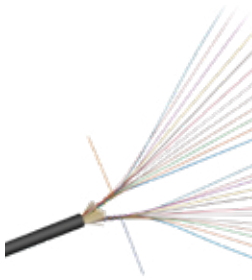
The SlimBox Wall Plate serves as a termination point or a demarcation point for optical fiber in an indoor environment. An EZ-Bend® jumper would connect the SlimBox Wall Plate to a desktop ONT and the InvisiLight® ILU Solution or an EZ-Bend cable may be used to reach the wall plate.

#### FEATURES AND BENEFITS

- Supports factory terminated assemblies, field installed mechanical connectors, or fusion spliced pigtails
- Accommodates up to two internal optical adapters (SC footprint)
- Flexible deployment with two access ports on the top, two on the bottom and three through the back of the module
- Compatible with electrical boxes
- Compact dimensions
- Discreet appearance
- Hidden cover screw for fast and secure cover attachment to the base
- Internal fiber guides for easy installation
- Can be installed on any vertical planar surface
- Plastic construction provides high mechanical protection and efficient design
- Accommodates two splice protectors (40 mm)

### EZ-Bend® Indoor/Outdoor Multifiber Cable

Enhanced for Fiber-to-the-Subscriber (FTTx) and Multiple Dwelling Unit (MDU) Applications



Ordering Information			
Graybar	Part No.	Product Code	Material Description
	PR1-001-575-0273	MO30-012B-DPW-4-RIB-2000FT	EZ-Bend Indoor/Outdoor Plenum 3.0mm 12-Fiber Cord White - RIB - 2000FT
	PR1-001-582-0273	MO30-012B-DPK-4-RIB-2000FT	EZ-Bend Indoor/Outdoor Plenum 3.0mm 12-Fiber Cord Black - RIB - 2000FT
	PR1-001-576-0273	MO38-024B-DPW-4-RIB-2000FT	EZ-Bend Indoor/Outdoor Plenum 3.8mm 24-Fiber Cord White - RIB - 2000FT
	PR1-001-583-0273	MO38-024B-DPK-4-RIB-2000FT	EZ-Bend Indoor/Outdoor Plenum 3.8mm 24-Fiber Cord Black - RIB - 2000FT

#### FEATURES

- EZ-Bend® Ultra-Bend Insensitive Fiber for tight bend routing without concern for attenuation loss
- Compact and lightweight with 12 fibers in a 3.0mm cable or 24 fibers in a 3.8mm cable
- Meets the Indoor/Outdoor requirements of MDU FTTx Application (ICEA-S-730 TPR-9424)
- Plenum rated for MDU spaces; rated for indoor/outdoor use

#### BENEFITS

- Small outer diameter for more efficient duct utilization
- Allows direct routing from building exterior into living areas
- Easy deployment and termination
- “Staple-ready” cable for easier routing and high compressive load resistance
- Versatile cable design for a wide range of applications



**SlimBox 64-Fiber Wall Mount Module Ordering Information**

Graybar	Part No.	Product Code	Material Description
	301112967	SLIMBOX-V, INDOOR MDU-64 FIBER-INSIDE ADP	SlimBox 64 without adapters and with 8 splice trays
	301121554	WSC1S-064-SM61-GRY-SCAUNC-X	SlimBox 64 with 64 SCA adapters and 8 splice trays
	301133633	WSC1W-064-SM61-GRY-SCAUNC-F-PT	SlimBox 64 with 64 SCA adapters, 8 splice trays and 64 pigtails



**SlimBox 12-Fiber Adapter Indoor/Outdoor Enclosure Ordering Information**

Graybar	Part No.	Product Code	Material Description
	301139788	SLIMBOX-V, OUTDOORS-VI-12FIBER-INSIDEADP	SlimBox Indoor/Outdoor Wall Mount Unit for 12 Internal SC Adapters (No Adapters)
	301139796	WSE1S-012-SV11-GRY-SCAUNC-F	SlimBox Indoor/Outdoor Wall Mount Unit with 12 Internal SCA Adapters
	301139804	WSE1W-012-SV11-GRY-SCAUNC-F-PT	SlimBox Indoor/Outdoor Wall Mount Unit with 12 Internal SCA Adapters and 12 SM Pigtails
	301139812	WSE1S-012-SV11-GRY-SCUUNC-F	SlimBox Indoor/Outdoor Wall Mount Unit with 12 Internal SCU Adapters
	301139820	WSE1W-012-SV11-GRY-SCUUNC-F-PT	SlimBox Indoor/Outdoor Wall Mount Unit with 12 Internal SCU Adapters and 12 SM Pigtails
	301135885	WSE4S-024-SV21-GRY-LCUUNC-F	SlimBox Indoor/Outdoor Wall Mount Unit with 12 Internal LC duplex adapters