



# Indoor Optical Cable Solution

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FiberHome Telecommunication Technologies Co., Ltd.





# FiberHome Technologies

FiberHome Technologies Group is a leading equipment vendor and a global solution provider in the field of information technology and telecommunications. This high-tech enterprise is directly affiliated to the State-owned Assets Supervision and Administration Commission of the State Council. It is also the largest enterprise located in the Optics Valley, Wuhan, China. FiberHome Technologies Group was established in 1974. After continuous and intensive development for over 50 years, its business has been extended to R&D, manufacturing, marketing & sales, and engineering service in 4 major areas: fiber-optic communications, data networking communications, wireless communication, and intelligent applications. In particular, it has been providing end-to-end solutions integrated with opto-electronic devices, optical preforms, fiber & cables, and optical communication systems to many countries around the world.



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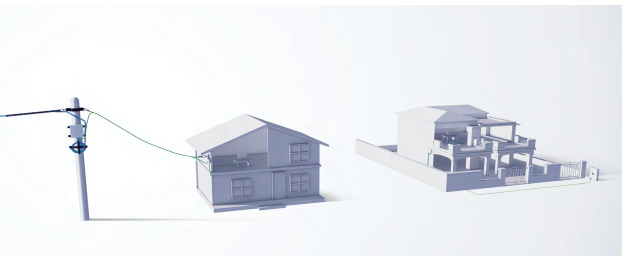
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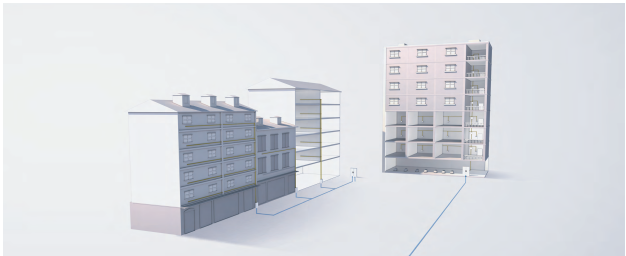
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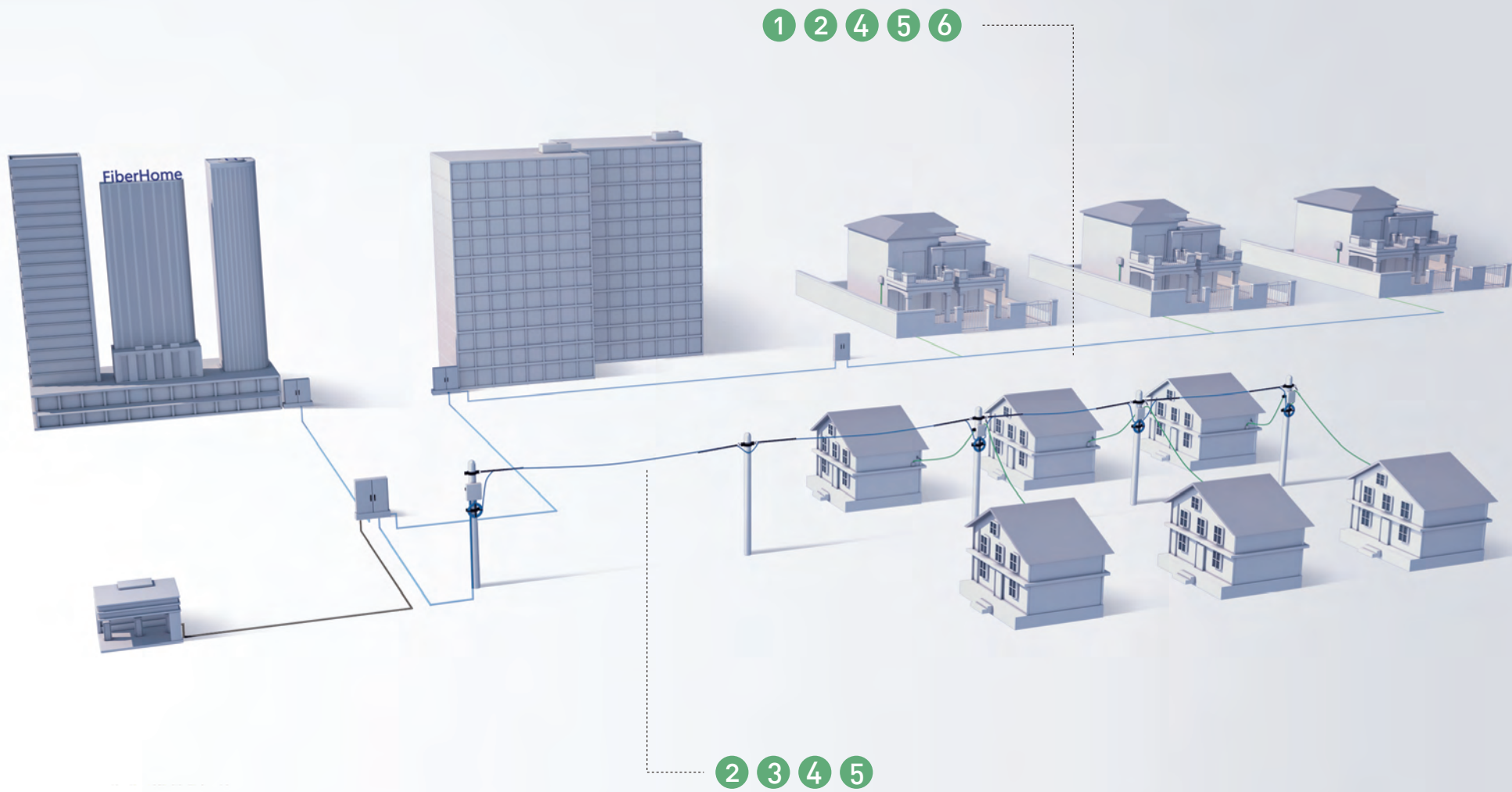
## Application Scenarios of Indoor Optical Cable

*FiberHome indoor optical cables are applicable to the link from outdoor-indoor distribution to indoor wiring, such as villas, apartments, office buildings, commercial complex, high density residential quarters, etc.*

*In each application field, FiberHome can provide smart and convenient products to meet different demands of users for diversified application. With the outstanding performance, the products are easy to install and friendly to the environment, which can reduce the construction cost and maintain superior network reliability.*

# Application

Outdoor Distribution Cable



1

Unitube



2

Flat Unitube



3

Figure-8 Unitube



4

ASU Cable



5

Outdoor Micro Tube Cable

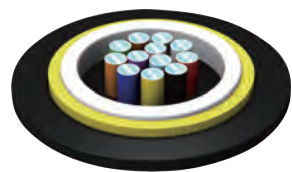


6

Air Blown Micro Cable



## Unitube



### Features

- Max. core: 24
- Small outer diameter, high fiber density
- UV resistant, water blocking
- Superior mechanical and environmental performance
- Flame retardant, low smoke, non-toxic
- Dielectric, anti-electromagnetic interference



### Applications

- Duct installation
- Indoor access



### Installation performance

- Min. bend radius: installation 20D, operation 10D
- Temperature range: storage -40~+70°C, installation: -10~+50°C, operation -20°C~+70°C



Eco-friendly



Flame Retardant



Water Blocking



Anti-lightning Strike



Duct



Last-mile Connection

• Products can be customized, included but not limited to the above

## Flat Unitube



### Features

- Max. core: 24
- Small volume, light weight
- Water blocking, all dielectric, anti-lightning strike, and anti- electromagnetic interference
- Easy strip, convenient construction and maintenance, various installation methods
- Superior mechanical and environmental performance



### Applications

- Aerial installation
- Duct installation
- Indoor access



### Installation performance

- Min. bend radius: installation 50H, operation 25H
- Temperature range: storage -40~+70°C, installation: -20~+60°C, operation -40°C~+70°C



Easy Strip



Hi-crush



Water Blocking



Anti-lightning Strike



Aerial



Duct



Last-mile Connection

• Products can be customized, included but not limited to the above



## Figure-8 Unitube



### Features

- Max. core: 24
- Water blocking, superior mechanical and environmental performance
- Supporting various accessories
- Easy strip, easy maintenance



### Applications

- Aerial installation
- Indoor access



### Installation performance

- Min. bend radius: installation 30W, operation 15W
- Temperature range: storage -40~+70°C, installation: -10~+50°C, operation -20°C~+70°C



Easy Strip



Water Blocking



Aerial



Last-mile Connection

• Products can be customized, included but not limited to the above

## ASU Cable



### Features

- Max. core: 12
- Small volume, light weight, stable structure
- All dielectric, anti-lightning strike, anti-electromagnetic interference
- Superior mechanical and environmental performance



### Applications

- Aerial installation
- Duct installation
- Indoor access



### Installation performance

- Min. bend radius: installation 20D, operation 10D
- Temperature range: storage -40~+70°C, installation: -20~+60°C, operation -40°C~+70°C



Hi-crush



Water Blocking



Anti-lightning Strike



Aerial



Duct



Last-mile Connection

• Products can be customized, included but not limited to the above

## Outdoor Micro Tube Cable



### Features

- Small volume, light weight
- Easy strip, effective mid-span access, efficient construction
- Water blocking, superior bending performance
- Superior mechanical and environmental performance



### Applications

- Aerial installation
- Duct installation
- Indoor access



### Installation performance

- Min. bend radius: installation 20D, operation 10D
- Temperature range: storage -40~+70°C, installation: -10~+50°C, operation -20°C~+70°C



Easy Strip



Hi-crush



Water Blocking



Aerial



Duct



Last-mile Connection

• Products can be customized, included but not limited to the above

## Air Blown Micro Cable



### Features

- Max. core: 24
- Small volume, light weight
- Low friction, high air blowing efficiency
- Easy strip, easy installation, easy upgrading and easy maintenance



### Applications

- Air-blow installation
- Indoor access



### Installation performance

- Min. bend radius: installation 30D, operation 15D
- Temperature range: storage -20~+60°C, installation: -5~+40°C, operation -20°C~+60°C



Easy Strip



Low Friction



Anti-lighting Strike



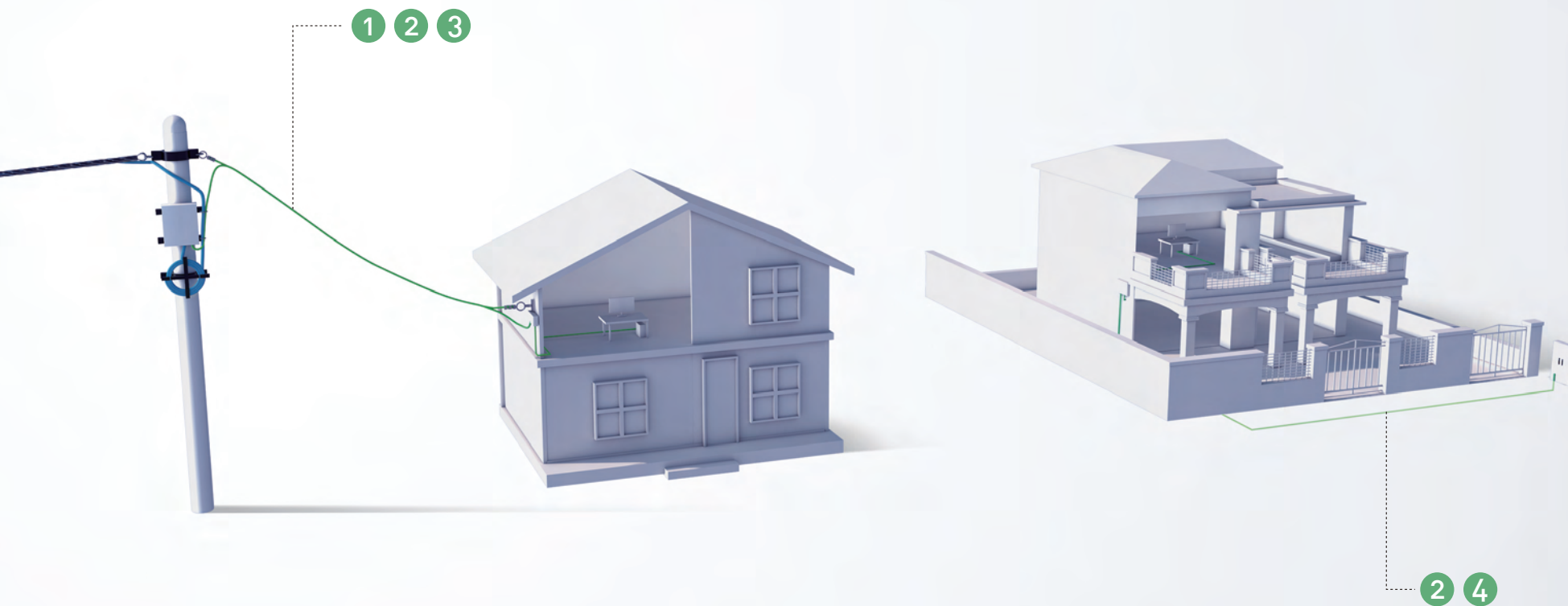
Air Blowing



Last-mile Connection

• Products can be customized, included but not limited to the above

## ▼ Drop Cable



### ① Self-supporting Bow Type Cable



### ② Round Type Drop Cable



### ③ Figure-8 Round Type Cable



### ④ Flexible Armored Cable





## Self-supporting Bow Type Cable



### Features

- Light weight, stable structure
- Superior bending resistance and mechanical performance
- Easy strip, field patch cord compatibility
- Supporting various accessories



### Applications

- Aerial installation
- Indoor access



### Installation performance

- Min. bend radius: installation 30H, operation 15H
- Temperature range: storage -40~+70°C, installation:
- -10~+50°C, operation -40°C~+70°C



Flexible



Easy Strip



Eco-friendly



Flame Retardant



Aerial



Pre-connect



Fast Connector

• Products can be customized, included but not limited to the above

## Round Type Drop Cable



### Features

- Light weight, small diameter
- Field patch cord compatibility
- Bending resistant, pressure resistant, weather ability
- Flame retardant, low smoke, non-toxic
- For regions with harsh environment



### Applications

- Aerial installation
- Duct installation
- Emergency connect



### Installation performance

- Min. bend radius: installation 20D, operation 10D
- Temperature range: storage -20~+60°C, installation:
- -10~+40°C, operation -20°C~+60°C



Flexible



Abrasion Resistance



Hi-crush



Eco-friendly



Flame Retardant



Aerial



Duct



Pre-connect

• Products can be customized, included but not limited to the above

## Figure-8 Round Type Cable



### Features

- Light weight, stable structure
- Superior bending feature and mechanical performance
- Flame retardant, low smoke, non-toxic
- Field patch cord compatibility



### Applications

- Aerial installation
- Indoor access



### Installation performance

- Min. bend radius: installation 30W, operation 15W
- Temperature range: storage -20~+70°C, installation: -10~+50°C, operation -10°C~+70°C



Flexible



Easy Strip



Eco-friendly



Flame Retardant



Aerial



Pre-connect

• Products can be customized, included but not limited to the above

## Flexible Armored Cable



### Features

- Superior pressure resistant and anti-rodent
- Superior bending performance
- Flame retardant, low smoke, non-toxic
- Both outdoor and indoor installation
- Field patch cord compatibility



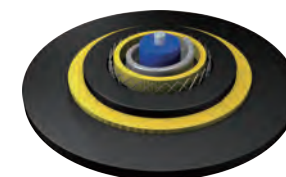
### Applications

- Anti-rodent
- High pressure environment
- Duct installation
- Indoor access



### Installation performance

- Min. bend radius: installation 30W, operation 15W
- Temperature range: storage -20~+70°C, installation: -10~+50°C, operation -10°C~+70°C



Flexible



Hi-crush



Flame Retardant



Rodent Protection



Duct



Indoor



Fast Connector



Last-mile Connection

• Products can be customized, included but not limited to the above



▼ Drop Cable



1

Invisible Cable



2

Low-friction Bow Type Cable



## Invisible Cable



### Features

- Small volume, light weight
- Flame retardant, low smoke, non-toxic
- Visually invisible
- Easy strip
- Field patch cord compatibility
- Superior bending performance



### Applications

- Indoor surface wiring along the wall, slot, ceiling, door frame and corners



### Installation performance

- Min. bend radius: installation 30H, operation 15H
- Temperature range: storage -20~+60°C, installation: -5~+40°C, operation -10°C~+60°C



Easy Strip



Water Blocking



Flame Retardant



Fast Connector



Indoor

• Products can be customized, included but not limited to the above

## Low-friction Bow Type Cable



### Features

- Small volume, light weight
- Flame retardant, low smoke, non-toxic
- Low friction
- Field patch cord compatibility



### Applications

- Indoor access



### Installation performance

- Friction coefficient  $\leq 0.25$
- Min. bend radius: installation 30H, operation 15H
- Temperature range: storage -20~+60°C, installation: -5~+40°C, operation -10°C~+60°C



Low Friction



Easy Strip



Eco-friendly



Flame Retardant



Fast Connector



Pre-connect

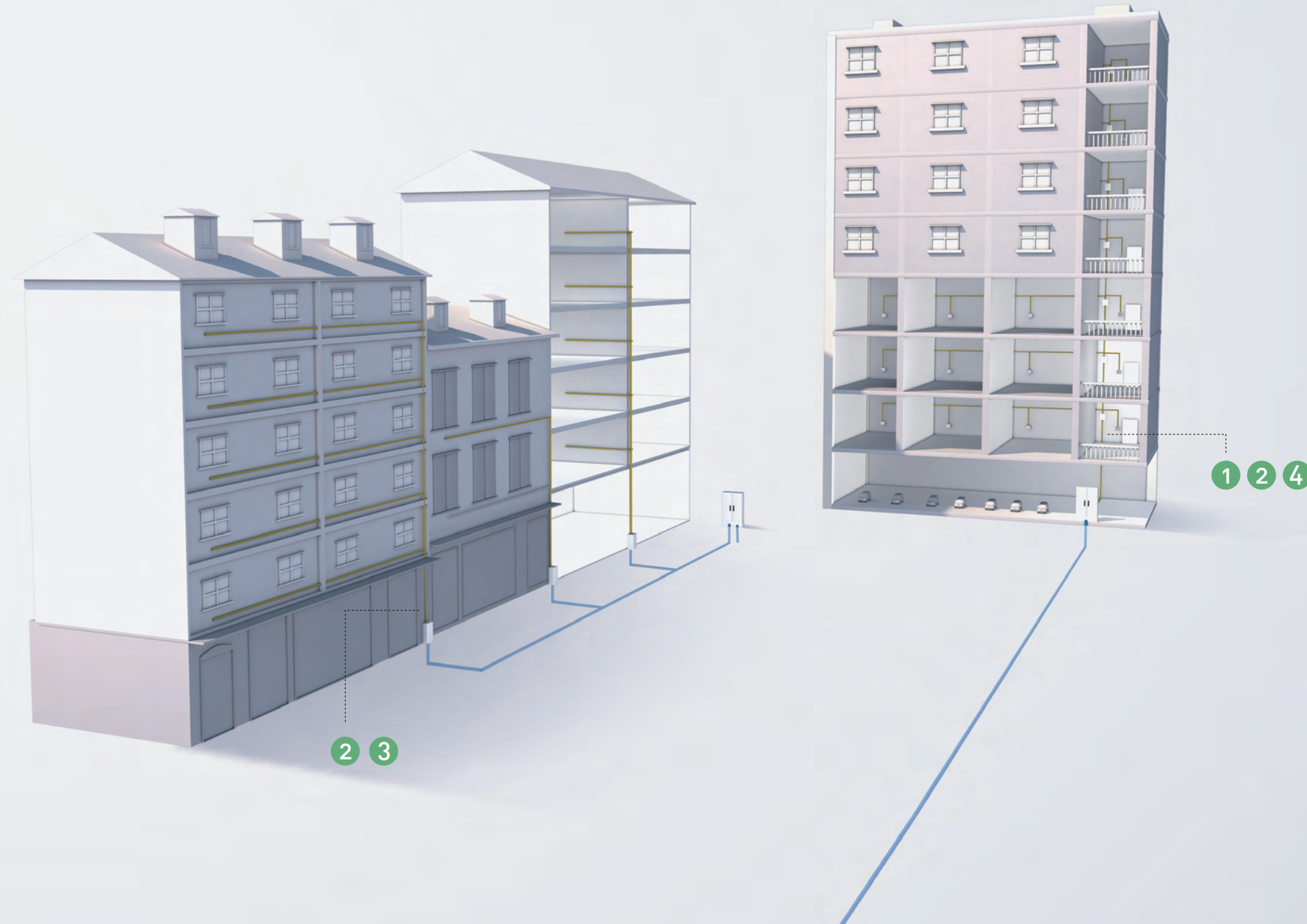


Indoor

• Products can be customized, included but not limited to the above



## ▼ Wiring Cable



### 1 Indoor Micro Tube Cable



### 2 Breakout Cable



### 3 Tight Buffer Distribution Cable



### 4 Mini Simplex Unit Distribution Cable



## Indoor Micro Tube Cable



### Features

- Max. core: 288
- Small volume, light weight, high fiber density
- Thin sheath of module unit, minimum oil filling, easy install
- Tool-free stripping, suitable for terminal connection and mid-span branching
- Flexible, easy coiled in the floor distribution box
- Flame retardant, low smoke, non-toxic
- Suitable for high temperature environment



### Applications

- Indoor installation
- Data center



### Installation performance

- Min. bend radius: installation 20D, operation 10D
- Temperature range: storage -20~+60°C, installation: -5~+40°C, operation -10°C~+60°C



Flexible



Easy Strip



Eco-friendly



Flame Retardant



Water Blocking



Anti-lightning Strike



Indoor

• Products can be customized, included but not limited to the above

## Breakout Cable



### Features

- Max. core: 48
- Compact and stable structure
- Flame retardant, low smoke, non-toxic
- All dielectric, anti-lightning strike, and anti-electromagnetic interference
- Superior mechanical and environmental performance
- Easy install, easy mid-span access, sub-cable separate independent



### Applications

- Indoor installation



### Installation performance

- Min. bend radius: installation 20D, operation 10D
- Temperature range: storage -20~+60°C, installation: -5~+40°C, operation -10°C~+60°C



Eco-friendly



Flame Retardant



Anti-lightning Strike



Pre-connect



Indoor

• Products can be customized, included but not limited to the above



## Tight Buffer Distribution Cable



### Features

- Max. core: 144
- Small volume, compact structure
- Flame retardant, low smoke, non-toxic
- All dielectric, anti-lightning strike, and anti- electromagnetic interference
- Superior mechanical and environmental performance
- Suitable for restricted area installation
- Easy install



### Applications

- Indoor installation
- Data center



### Installation performance

- Min. bend radius: installation 20D, operation 10D
- Temperature range: storage -20~+60°C, installation: -5~+40°C, operation -10°C~+60°C



Eco-friendly



Flame Retardant



Anti-lightning Strike



Pre-connect



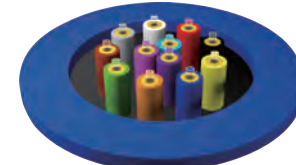
Indoor



Data Center

• Products can be customized, included but not limited to the above

## Mini Simplex Unit Distribution Cable



### Features

- Small volume, light weight
- Flame-resistant, low smoke, non-toxic
- Easy install, easy mid-span access, sub-unit separate independent
- Flexible, easy coiled in the floor distribution box



### Applications

- Indoor installation



### Installation performance

- Min. bend radius: installation 20D, operation 10D
- Temperature range: storage -20~+60°C, installation: -5~+40°C, operation -10°C~+60°C



Flexible



Easy Strip



Eco-friendly



Flame Retardant



Pre-connect



Indoor

• Products can be customized, included but not limited to the above

▼ Type Application

Outdoor Distribution Cable

Products

- Unitube
- Flat Unitube
- Figure-8 Unitube
- ASU Cable
- Outdoor Micro Tube Cable
- Air Blown Micro Cable

Countries

- Germany, Netherlands, Egypt, Saudi Arabia, Colombia, Oman
- Canada, Colombia, Vietnam, Saudi Arabia, Argentina
- Philippines, Brazil, Mexico, Indonesia, Brunei, Vietnam, Georgia, Peru
- Jordan, Russia, Indonesia, Colombia
- Belarus, France, Kenya, Colombia
- Netherlands, Egypt, Kenya, France, Thailand



Drop Cable

Products

- Self-supporting Bow Type Cable
- Round Type Drop Cable
- Figure-8 Round Type Cable
- Flexible Armored Cable
- Invisible Cable
- Low-friction Bow Type Cable

Countries

- Philippines, Bolivia, Thailand, Iraq, Uruguay, Vietnam
- Colombia, Uruguay, Brazil, Kenya, Argentina
- Thailand, Mexico, Ecuador, Argentina, Philippines, Paraguay
- Ecuador, Indonesia, Kenya, Colombia, Philippines, Thailand
- Thailand, Indonesia, Philippines, Malaysia, Colombia, China, Peru
- Vietnam, Argentina, Kenya, Colombia, Malaysia, Peru





Type Application

Symbols

Wiring Cable

Products

- Indoor Micro Tube Cable
- Breakout Cable
- Tight Buffer Distribution Cable
- Mini Simplex Unit Distribution Cable

Countries

- Argentina, Spain, France, Peru, Singapore, Uzbekistan
- Indonesia, Philippines, Turkey
- Philippines, Colombia, Poland, Turkey, Gambia, Panama, Sri Lanka, Hungary
- India, Malaysia, Vietnam, Colombia



Cable Cross Section



Application



Indoor



Data Center



Last-mile Connection

Installation



Duct



Aerial



Air Blowing



Pre-connect



Fast Connector

Features



Flexible



Easy Strip



Abrasion Resistance



Hi-crush



Low Friction



Eco-friendly



Flame Retardant



Water Blocking



Anti-lighting Strike



Rodent Protection

▼ Reference Standards

GR-409-CORE	Generic Requirements for Indoor Fiber Optic Cable
ANSI/ICEA S-83-596 (ICEA 596)	Standard for Indoor Optical Fiber Cable
ANSI/ICEA S-104-696 (ICEA 696)	Standard for Indoor-outdoor Optical Fiber Cable
ANSI/ICEA S-110-717 (ICEA 717)	Standard for Optical Fiber Drop Cable
ANSI/ICEA S-115-730 (ICEA 730)	Standard for Multi-dwelling Unit (MDU) Optical Fiber Cable
IEC 60794-2-21	Optical Fiber Cables - Part 2-21: Indoor Optical Fiber Cables- Detailed Specification for Multi-fiber Optical Distribution Cables for Use in Premises Cabling
IEC 60794-2-22	Optical Fiber Cables - Part 2-22: Indoor Cables- Detail Specification for Multi-simplex Breakout Optical Cables to be Terminated with Connectors
UL 1581	Reference Standard for Electrical Wires, Cables, and Flexible Cords
IEC 60332	Tests on Electric and Optical Fiber Cables under Fire Conditions
IEC 60754	Tests on Gases Evolved during Combustion of Materials from Cables
IEC 60695	Fire Hazard Testing
IEC 61034	Measurement of Smoke Density of Cables Burning under Defined Conditions

▼ Clients

