

## Data Centre & Communications Room FiberGuide®



Introduction.....	4.34
Features and Benefits.....	4.35
FiberGuide® Fibre Management System .....	4.36
Plenum FiberGuide® System.....	4.44

### The Industry's Most Comprehensive Optical Raceway System

ADC KRONE's FiberGuide® Fibre Management System offers the greatest breadth of optical raceway products in the industry. In response to customer requirements, ADC KRONE continues to innovate and improve FiberGuide, adding greater flexibility and driving down installation time to ensure a smooth deployment.

FiberGuide is a raceway system designed to protect and route fibre optic patch cords, multi-fibre cable assemblies and intrafacility fibre cable (IFC) to and from fibre splice enclosures, fibre distribution frames and fibre optic terminal devices. FiberGuide ensures a two-inch minimum bend radius is maintained throughout the system. And new tool-less, SnapFit™ junctions, cover options and Plenum Express Exit™ drops significantly reduce the amount of time required for installation.

The FiberGuide system is a complete set of products designed and manufactured to ensure total off-frame protection and ease of use. Basic components include horizontal and vertical straight sections, horizontal and vertical elbows, downspouts, junctions and numerous support hardware and flex-tube kits.

### System Description

**Straight sections:** U-shaped troughs that provide a protective pathway for optical fibres. Straight sections are usually installed horizontally but may also be installed vertically when a system is mounted on multiple levels. Straight sections are six feet in length, and covers are also available. The covers snap into place but can be easily removed for fibre installation.

**Express Exits™:** Express Exit system allows jumpers to be routed in and out of the system with ease. Express Exits are secured to the sidewall of a FiberGuide straight section where needed.

**Fittings:** Elbows, tees, crosses, trumpet flares and conversions. The fittings are used for changing direction, converting from one size system to another, adding branch segments and routing the fibres in and out of the system. Like the straight sections, snap-on covers are also available for the fittings.

**Junction kits:** Used for aligning and connecting straight sections and fittings. Two components are joined by inserting them into a junction and pushing them together.

**Support kits:** Used to support the FiberGuide system. The short, long, span and diagonal bracket kits are used for supporting straight sections from round or square tubing.

**Flexible tubing:** Used in FiberGuide systems when the exact layout of the equipment drop locations is unknown or when frequent equipment relocations are expected. The flexible tubing is two inches in diameter and attaches to the end of a straight section with an adaptor. When the equipment configuration is known, the flexible tubing is routed to the exact drop location. Other flexible tubing components include splicing couplers, finishing couplers, mounting straps and additional lengths of tubing.

Both patch cords and IFC cables may be installed in the FiberGuide System. The required two inch bend radius for patch cords is maintained at all points within the system. IFC cables require the use of tie-down brackets to maintain the required cable bend radius specified by the cable manufacturer at the various fittings. Available in a variety of sizes:



# Data Centre & Communications Room

## FiberGuide® – Features and Benefits

Available in a variety of sizes:



**2x2** — Ideal for smaller installations or for vertical routing of a maximum of four hundred 2mm fibre optic patch cords. All 2x2 FiberGuide products are shipped with covers.



**2x6** — Designed for height-restricted environments, this robust system provides the same support and system flexibility of the traditional 4-inch high system while saving 2 inches of overhead space. It features a maximum capacity of 1,200, 2mm patch cords.



**4x4** — Features the maximum capacity to support 1,600, 2mm patch cords. It has been engineered to allow straight sections to be self-supporting over a span of up to 6 feet (1.83m).



**4x6** — Features the same benefits of the 4-inch system and a maximum trough capacity of 2,400, 2mm patch cords.



**4x12** — The largest system in the FiberGuide family, this 12-inch wide trough has a maximum capacity to support nearly 5,000, 2mm patch cords. Perfect for runs over fibre frame lineups and perimeter routes.

### Features and Benefits

#### Speed of Installation

FiberGuide® systems feature a variety of products that allow for quick and easy installation. Express Exit™ drops as well as tool-less products including Snap-Fit™ junctions, snap-on covers and new hinged cover options save valuable time for installers.

#### Speed of Deployment

The Express Exit system enables new drops to be added or removed quickly and easily. A drop can be added into a fully loaded raceway in seconds—without cutting.

#### Raceway Flexibility

FiberGuide features 38 support structures, over 75 fittings, multiple drop options and several other components to suit any application you create.

#### Fibre Protection

ADC KRONE's broadband expertise translates into maximum protection for your network. Two inch minimum bend radius is maintained throughout the system regardless of the raceway size.

#### Strength and Durability

### Patch Cord Densities

Recommended capacity takes into consideration random jumper placement into the FiberGuide® system. Maximum density refers to the maximum number of fibre jumpers in a given cross-section of a FiberGuide installation.

### ADC KRONE Recommended Density

	1.7mm Patch Cords	2.0mm Patch Cords	3.0mm Patch Cords
Recommended Patch Cord Density (per inch <sup>2</sup> )	120	90	40

Trough Pileup	2x2 FiberGuide System			2x6 FiberGuide System			4x4 FiberGuide System			4x6 FiberGuide System			4x12 FiberGuide System		
	1.7 mm	2.0 mm	3.0 mm	1.7 mm	2.0 mm	3.0 mm	1.7 mm	2.0 mm	3.0 mm	1.7 mm	2.0 mm	3.0 mm	1.7 mm	2.0 mm	3.0 mm
2-inch	480	360	160	1440	1080	480	960	720	320	1440	1080	480	2880	2160	960
3-inch	-	-	-	-	-	-	1440	1080	480	2160	1620	720	4320	3240	1440
4-inch	-	-	-	-	-	-	1920	1440	640	2880	2160	960	5760	4320	1920

### Maximum Density

	1.7mm Patch Cords	2.0mm Patch Cords	3.0mm Patch Cords
Maximum Patch Cord Density (per inch <sup>2</sup> )	142	102	44

Trough Pileup	2x2 FiberGuide System			2x6 FiberGuide System			4x4 FiberGuide System			4x6 FiberGuide System			4x12 FiberGuide System		
	1.7 mm	2.0 mm	3.0 mm	1.7 mm	2.0 mm	3.0 mm	1.7 mm	2.0 mm	3.0 mm	1.7 mm	2.0 mm	3.0 mm	1.7 mm	2.0 mm	3.0 mm
2-inch	568	408	176	1704	1224	528	1136	816	352	1704	1224	528	3408	2448	1056
3-inch	-	-	-	-	-	-	1704	1224	528	2556	1836	792	5112	3672	1584
4-inch	-	-	-	-	-	-	2272	1632	704	3408	2448	1056	6816	4896	2112

### TracerLight™ Patch Cords—65 Patch Cords per inch<sup>2</sup>

Trough Pileup	2x2 FiberGuide System	2x6 FiberGuide System	4x4 FiberGuide System	4x6 FiberGuide System	4x12 FiberGuide System
2-inch	260	780	520	780	1560
3-inch	-	-	780	1170	2340
4-inch	-	-	1040	1560	3120

Express Exits™ Units (For use with 2x6, 4x4, 4x6 and 4x12 systems)

### Ordering Information

Description	Catalogue Number
2-inch Express Exit Unit	FGS-MEXP-A/B/F
4-inch Express Exit base with base cover	FGS-MEXP-E-A/B/F
4-inch Express Exit rear cover kit	FGS-MEXC-E-A/B/F
Rear cover, 4-inch Express Exit—4x4 system	FGS-MEXC-E-A
Rear cover, 4-inch Express Exit—4x6 system	FGS-MEXC-E-B
Rear cover, 4-inch Express Exit—4x12 system	FGS-MEXC-E-F
Low profile Express Exit	FGS-MEXP-LP-A/B/F



Express Exits



### 2x2 Fittings and Junctions

#### Ordering Information

Description	Catalogue Number
2x2 horizontal cross with cover	FGS-MHXP-C
2x2 horizontal tee with cover	FGS-MHTA-C
2x2 45° horizontal elbow with cover	FGS-MH4A-C
2x2 90° horizontal elbow with cover	FGS-MH9A-C
2x2 to 4-inch straight adaptor with cover	FGS-MDSA-AC
2x2 end cap kit (includes junction)	FGS-HMEC-C
2x2 45° up elbow with cover	FGS-MU4A-C
2x2 45° down elbow with cover	FGS-MD4A-C
2x2 90° up elbow with cover	FGS-MU9A-C
2x2 90° down elbow with cover	FGS-MD9A-C
2x2 junction	FGS-MJWR-C



FGS-MHTA-C

### 2x2 Straight Section

#### Ordering Information

Description	Catalogue Number
6-foot horizontal straight with cover	FGS-MSHA-C



FGS-MSHA-C

### 2x2 Downspout Options

#### Ordering Information

Description	Catalogue Number
2x2 standard downspout with cover	FGS-MSDS-C
2x2 extended downspout with cover	FGS-MDSP-C
2x2 flex tube attachment with 5-foot length 2-inch flex tube and 2x2 junction	FGS-MEX1-C-5F
2x2 extended downspout kit with 2-foot length 2-inch flex tube and cover	FGS-KDH2-C
Dual 7/8-inch flex tube attachment with (2) 5-foot lengths flex tube and 2x2 junction	FGS-KT03-C
Kit of 10 7/8-inch flex tube clamps	FGS-HSHC-10



FGS-MSDS-C

### 2x2 Direct Support Kits

#### Ordering Information

Description	Catalogue Number
2x2 ladder rack support kit	FGS-HLR2-C
2x2 bay top short L bracket kit	FGS-BTBS-C
2x2 bay top long L bracket kit	FGS-BTBL-C
2x2 digital cableway support kit	FGS-HDCB-C
2x2 underfloor support kit	FGS-HUFB-C



FGS-HLR2-C

### 2x2 Track Support Kits

#### Ordering Information

Description	Catalogue Number
Aluminium track support (6-feet)	FGS-HASK-C
New threaded rod kit (5/8 -inch)	FGS-HTR2-5/8
New threaded rod kit (1/2 -inch)	FGS-HTR2-1/2
Track connecting bar kit	FGS-HAEJ-C
Ladder rack bracket kit (5/8 -inch)	FGS-HLDR-5/8
Threaded rod 12" long	FGS-HTHR-5/8-12
Dual threaded rod bracket kit	FGS-HTUB-2-AB



FGS-HASK-C

### 2x6 Fittings

#### Ordering Information

Description	Catalogue Number
2x6 to 2x2 downspout	FGS-MDSP-G
2x6 horizontal T	FGS-MHRT-G
2x6 horizontal cross	FGS-MHXP-G
2x6 90° horizontal elbow	FGS-MH9E-G
2x6 90° down elbow	FGS-MD9E-G
2x6 45° horizontal elbow	FGS-MH4E-G
2x6 45° up elbow with cover	FGS-MU4E-G
2x6 45° down elbow	FGS-MD4E-G
2x6 to 4x4 adaptor	FGS-MDSA-GA
2x6 to 4x6 adaptor	FGS-MDSA-GB
2x6 trumpet flare	FGS-MTRM-G
2x6 end cap	FGS-HMEC-G
2x6 Express Exit	FGS-MEXP-LP-G

### 2x6 Straight Section

#### Ordering Information

Description	Catalogue Number
2x6 horizontal straight section (6-feet)	FGS-MSHS-G
2x6 horizontal straight section snap-on cover (6-feet)	FGS-MSSC-B/G
2x6 horizontal straight section hinged cover	FGS-MSNC-B/G



FGS-MSHS-G

### 4x4 Fittings and Junctions

Ordering Information	
Description	Catalogue Number
4x4 downspout	FGS-MDSP-A
4x4 and 4x6 downspout cover	FGS-MCDS-AB
4x4 extended downspout	FGS-MDSP-EX-A
4x4 and 4x6 extended downspout cover	FGS-MCDS-EX-AB
4x4 horizontal T	FGS-MHRT-A
4x4 horizontal T cover	FGS-SHRT-A
4x4 horizontal cross	FGS-MHXP-A
4x4 horizontal cross cover	FGS-SHXP-A
4x4 90° horizontal elbow	FGS-MH9E-A
4x4 90° horizontal elbow cover	FGS-SH9E-A
4x4 45° horizontal elbow	FGS-MH4E-A
4x4 45° horizontal elbow cover	FGS-SH4E-A
4x4 90° up elbow with cover	FGS-MU9E-A
4x4 90° down elbow	FGS-MD9E-A
4x4 90° down elbow cover	FGS-SD9E-A
4x4 45° up elbow with cover	FGS-MU4E-A
4x4 45° down elbow	FGS-MD4E-A
4x4 45° down elbow cover	FGS-SD4E-A
4x4 to 4x6 straight adaptor	FGS-MDSA-AB
4x4 to 4x6 straight adaptor cover	FGS-SDSA-AB
4x4 end cap	FGS-HMEC-A
4x4 snap-fit junction	FGS-MFAW-A
4x4 cut-in T	FGS-MHIS-A
Cut-in T fixture	FGS-MHIS-JIG-A/B/F
4x4 IFC tie bracket	FGS-HIFC-A



FGS-MDSP-A



FGS-MH9E-A



FGS-MFAW-A

### 4x4 Straight Section

Ordering Information	
Description	Catalogue Number
6-foot horizontal straight section	FGS-MSHS-A
6-foot horizontal straight section hinged cover	FGS-MSHC-A
4x4 expandable straight section	FGS-MVAR-A
6-foot horizontal straight section snap-on cover	FGS-MSSC-A



FGS-MSHS-A



### 4x4 and 4x6 Downspout Options

#### Ordering Information

Description	Catalogue Number
4x4 downspout junction kit	FGS-MJWR-A
2x2 flex tube attachment with 5-foot length 2-inch flex tube and 2x2 junction	FGS-MEX1-C-5F
4x4/4x6 downspout insert (adapts to 2x2 system)	FGS-HDSI-AB
4x4 trumpet flare kit	FGS-MTRM-A
4-inch square to 2-inch round adaptor with 5-feet flex tubing	FGS-ASRI-5F
4-inch square to 2-inch round adaptor with 10-feet flex tubing	FGS-ASRI-10F
4-inch square to 2-inch round adaptor with 15-feet flex tubing	FGS-ASRI-15F
4x4 single flex tube attachment with (1) 5-foot length 2-inch flex tubing	FGS-KT03-A1
4x4 dual flex tube attachment with (2) 5-foot lengths 2-inch flex tubing	FGS-KT03-A



FGS-MDSP-EX-A

### 2x6, 4x4 and 4x6 Support Kits

#### Ordering Information

Description	Catalogue Number
New threaded rod bracket (5/8 -inch)	FGS-HNTR-5/8
New threaded rod bracket (1/2 -inch)	FGS-HNTR-1/2
Modified new threaded rod bracket (5/8 -inch)	FGS-HNTR-5/8-A
Existing threaded rod bracket (5/8 -inch)	FGS-HETR-5/8
Existing threaded rod bracket (1/2 -inch)	FGS-HETR-1/2
Modified existing threaded rod bracket (5/8 -inch)	FGS-HETR-5/8-A
Centre support bracket (5/8 -inch)	FGS-HTUB-5/8
Centre support bracket (1/2 -inch)	FGS-HTUB-1/2
L bay support bracket	FGS-HLBK
Digital cableway bracket kit (12-inch)	FGS-HCBL-12
Digital cableway bracket kit (15-inch)	FGS-HCBL-15
Top support C-bracket	FGS-HNTS-5/8
Top support low profile C-bracket	FGS-HNTS-5/8-LP
Ladder rack centre support bracket kit	FGS-HNLR-AB
Threaded rod, 5/8 -11x12-inch	FGS-HTHR-5/8-12
Threaded rod, 5/8 -11x30-inch	FGS-HTHR-5/8-30
Threaded rod, 5/8 -11x72-inch	FGS-HTHR-5/8-72
Auxiliary framing clip kit 5/8 -11 thread	FGS-HFCK-5/8
Auxiliary framing clip kit 1/2 -11 thread	FGS-HFCK-1/2
Adjacent angle support bracket 5/8 -11/36-inch	FGS-HASB-5/8-36
Adjacent angle support bracket 5/8 -11/48-inch	FGS-HASB-5/8-48
Adjacent angle support bracket 1/2 -13/36-inch	FGS-HASB-1/2-36
Adjacent angle support bracket 1/2 -13/48-inch	FGS-HASB-1/2-48
Ladder rack bracket kit (5/8 -inch)	FGS-HLDR-5/8
Unistrut nut kit (5/8 -inch)	FGS-HDGR



FGS-HNTR-XX



### 4x6 Fittings and Junctions

Ordering Information	
Description	Catalogue Number
4x6 downspout	FGS-MDSP-B
4x4/4x6 downspout cover	FGS-MCDS-AB
4x6 extended downspout	FGS-MDSP-EX-B
4x4/4x6 extended downspout cover	FGS-MCDS-EX-AB**
4x6 horizontal T	FGS-MHRT-B
4x6 horizontal T cover	FGS-SHRT-B
4x6 horizontal cross	FGS-MHXP-B
4x6 horizontal cross cover	FGS-SHXP-B
4x6 90° horizontal elbow	FGS-MH9E-B
4x6 90° horizontal elbow cover	FGS-SH9E-B
4x6 45° horizontal elbow	FGS-MH4E-B
4x6 45° horizontal elbow cover	FGS-SH4E-B
4x6 45° up elbow with cover	FGS-MU4E-B
4x6 45° down elbow	FGS-MD4E-B
4x6 45° down elbow cover	FGS-SD4E-B
4x6 90° down elbow	FGS-MD9E-B
4x6 90° down elbow cover	FGS-SD9E-B
4x6 90° up elbow with cover	FGS-MU9E-B
4x6 cut-in T	FGS-MHIS-B
Cut-in T fixture	FGS-MHIS-JIG-A/B/F
4x6 trumpet flare kit	FGS-MTRM-B
4x6 end cap	FGS-HMEC-B
4x6 snap-fit junction	FGS-MFAW-B
4x6 IFC tie bracket	FGS-HIFC-B

\*\* Dual downspout requires 2 covers



FGS-MDSP-B



FGS-MFAW-B



FGS-MU9E-B

### 4x6 Straight Section

Ordering Information	
Description	Catalogue Number
6-foot horizontal straight section	FGS-MSHS-B
6-foot horizontal straight section hinged cover	FGS-MSHC-B
4x6 expandable straight section	FGS-MVAR-B
6-foot horizontal straight section snap-on cover	FGS-MSSC-B/G



FGS-MSHS-B

### 4x12 Fittings

#### Ordering Information

Description	Catalogue Number
4x12 horizontal T	FGS-MHRT-F
4x12 to 4x6 horizontal T	FGS-MHRT-F/B
4x12 horizontal cross	FGS-MHXP-F
4x12 to 4x6 horizontal cross	FGS-MHXP-B/F
4x12 to 4x6 adaptor	FGS-MDSA-FB
4x12 90° horizontal elbow	FGS-MH9E-F
4x12 45° horizontal elbow	FGS-MH4E-F
4x12 end cap	FGS-HMEC-F
4x12 cut-in T	FGS-MHIS-F
Cut-in T fixture	FGS-MHIS-JIG-A/B/F
4x12 45° up elbow with cover	FGS-MU4E-F
4x12 45° down elbow	FGS-MD4E-F
4x12 90° down elbow	FGS-MD9E-F
4x12 trumpet flare kit	FGS-MTRM-F
4x12 downspout with 4x6 exit	FGS-MDSP-F
4x12 downspout with rear T	FGS-MDRT-F
4x12 to dual 4x6 adaptor	FGS-MDSA-F2B
4x12 IFC tie bracket	FGS-HIFC-F



FGS-MH9E-F

Covers are available for 4x12 fittings. Please contact ADC KRONE or visit [www.adckrone.com](http://www.adckrone.com)

### 4x12 Straight Section

#### Ordering Information

Description	Catalogue Number
6-foot horizontal straight section	FGS-MSHS-F
4x12 expandable straight section	FGS-MVAR-F
6-foot snap-on cover	FGS-MSSC-F



FGS-MSHS-F

### 4x12 Junction

#### Ordering Information

Description	Catalogue Number
4x12 snap-fit junction	FGS-MFAW-F



FGS-MFAW-F

### 4x12 System Support Kits

#### Ordering Information

Description	Catalogue Number
New threaded rod bracket (5/8 -inch)	FGS-HNTR-F-5/8
Existing threaded rod bracket (5/8 -inch)	FGS-HETR-F-5/8
Top support threaded rod bracket kit	FGS-HNTS-F-5/8
Top support low profile threaded rod bracket kit	FGS-HNTS-F-5/8-LP
Trapeze bracket kit	FGS-HNTP-F-5/8
Ladder rack centre support bracket kit	FGS-HNLR-F

### Vertical Duct Systems

#### Ordering Information

Description	Catalogue Number
2x2 vertical slotted duct kit, 6-feet	FGS-KTW1-C
2x2 vertical 1.5-inch slotted duct kit, 6-feet	FGS-KTW1-CA
2x2 vertical solid duct	FGS-KTW4-C
1x2 vertical duct kit	FGS-KTW1-E
1x2 solid vertical duct kit	FGS-KTW4-E
2x2 vertical to 1x2 vertical adaptor bracket	FGS-ACC063
2x2 vertical slotted duct, 6-feet	FGS-MSHS-C
2x2 vertical 1.5-inch slotted duct, 6-feet	FGS-MSHS-CA
Cover for 2x2 vertical duct, 6-feet	FGS-MSHC-C
2x2 vertical duct mounting bracket	FGS-HWMB-D
4x4 vertical duct kit	FGS-KTW2-D
4x4 vertical adaptor junction kit	FGS-MJWR-D
4x4 vertical slotted duct, 6-feet	FGS-MSHS-D
Cover for 4x4 vertical duct, 6-feet	FGS-MSHC-D
4x4 vertical duct mounting bracket	FGS-HWMB-D



FGS-KTW2-D

### Accessories

#### Ordering Information

Description	Catalogue Number
<b>Flex Tubing</b>	
2-inch outer diameter slotted flex tube, 5-feet	FGS-MIDY-5F
2-inch outer diameter slotted flex tube, 10-feet	FGS-MIDY-10F
2-inch outer diameter slotted flex tube, 15-feet	FGS-MIDY-15F
1-inch outer diameter slotted flex tube, 100-feet	FGS-MLDY-100F
1-inch outer diameter slotted flex tube, 150-feet	FGS-MLDY-150F
1-inch outer diameter slotted flex tube, 200-feet	FGS-MLDY-200F
1-inch outer diameter slotted flex tube, 250-feet	FGS-MLDY-250F
7/8-inch outer diameter slotted flex tube, 5-feet	FGS-MFTY-5F
7/8-inch outer diameter slotted flex tube, 10-feet	FGS-MFTY-10F
7/8-inch outer diameter slotted flex tube, 15-feet	FGS-MFTY-15F
7/8-inch outer diameter slotted flex tube, 200-feet	FGS-MFTY-200F
<b>Accessories</b>	
Hinge kit for 4x4 and 4x6 covers (kit of 1)	FGS-HHGK
Self-closing hinge (kit of 3)	FGS-HVHG
Retainer rings (kit of 10)	FGS-HFRR-10
Trough cover clip kit	FGS-KTO9
Mitre box and saw	FGS-MKIT-ABF
Quick knobs (10)	FGS-KQKB
Quick knobs (100)	FGS-HQKK
Flex tube clamps (kit of 10)	FGS-HHEC-10



FGS-MIDY

### System Description

ADC KRONE's Plenum FiberGuide® System is a fibre cable raceway system that protects optical fibres, routed beneath raised computer room floors and above suspended ceilings. These physical areas, used to transport environment air, are typically categorised as plenum air spaces by local or national electrical regulations. In general, materials used in these spaces must be non-flammable and must not emit appreciable amounts of smoke or toxic gases when exposed to heat or flame.

Made from sturdy aluminium, ADC KRONE's Plenum FiberGuide System protects optical fibres by physically separating them from copper communications cable, power cable, ground cables, heating/ventilating ducts, water pipes and many other obstructions commonly encountered in plenum air spaces.

New Plenum FiberGuide Express Exits™ allow jumpers to be permanently or temporarily routed to the fibre optic terminal (FOT) equipment or fibre frames. No cutting is required because knockout sections can be punched out as necessary.

As seen in **Figure 1**, the Plenum FiberGuide System can be used above a dropped ceiling as well as below a raised computer floor.

**Figure 2** details a layout below a computer floor. This illustration shows a plenum FiberGuide System featuring new Express Exits.

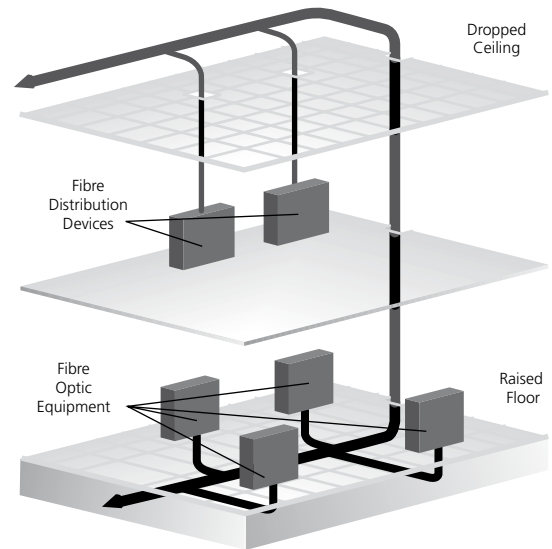


Figure 1



Figure 2

All plenum components, including mounting hardware for mounting the FiberGuide to the raised floor struts, are available in the Plenum FiberGuide product line.

### System Description

**Straight sections:** U-shaped troughs that provide a protective pathway for optical fibres. Straight sections are usually installed horizontally but may also be installed vertically when a system is mounted on multiple levels. Straight sections are six feet in length, and covers are also available. The covers snap into place but can be easily removed for fibre installation.

**New Express Exits™:** The Plenum FiberGuide® Express Exit system allows jumpers to be routed in and out of the system with ease. Express Exits are secured to the sidewall of a FiberGuide straight section where needed. No cutting is required because knockout sections allow for quick and easy deployment.

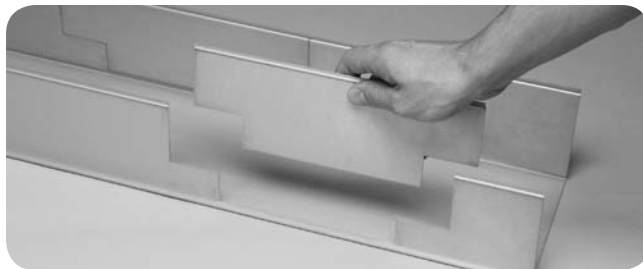
**Fittings:** Elbows, tees, crosses, trumpet flares and conversions. The fittings are used for changing direction, converting from one size system to another, adding branch segments and routing the fibres in and out of the system. Like the straight sections, snap-on covers are also available for the fittings.

**Junction kits:** Used for aligning and connecting straight sections and fittings. Two components are joined by inserting them into a junction and pushing them together.

**Support kits:** Used to support the FiberGuide system. The short, long, span and diagonal bracket kits are used for supporting straight sections from round or square tubing.

**Flexible tubing:** Used in Plenum FiberGuide systems when the exact layout of the equipment drop locations is unknown or when frequent equipment relocations are expected. The flexible tubing is two inches in diameter and attaches to the end of a straight section with an adaptor. When the equipment configuration is known, the flexible tubing is routed to the exact drop location. Other flexible tubing components include splicing couplers, finishing couplers, mounting straps and additional lengths of tubing.

Both patch cords and IFC cables may be installed in the Plenum FiberGuide System. The required two inch bend radius for patch cords is maintained at all points within the system. IFC cables require the use of tie-down brackets to maintain the required cable bend radius specified by the cable manufacturer at the various fittings.



4x6 Horizontal Straight Section with Express Exit Cutouts



2x2, 4x6, and 4x12 Junction Kits



2x2 Horizontal Straight Section



4x6 Horizontal Straight Section



4x12 Horizontal Straight Section

### Patch Cord Densities

Recommended capacity takes into consideration random jumper placement into the FiberGuide® system. Trough capacity refers to the maximum number of fibre jumpers in a given cross-section of a FiberGuide installation.

### Recommended Density

	Single Patch Cords		
	1.7mm	2.0mm	3.0mm
<b>Recommended Patch Cord Density (per inch<sup>2</sup>)</b>	120	90	40

Trough Pile-up	2x2 FiberGuide System			4x6 FiberGuide System			4x12 FiberGuide System		
	1.7mm	2.0mm	3.0mm	1.7mm	2.0mm	3.0mm	1.7mm	2.0mm	3.0mm
<b>2-inch</b>	480	360	160	1440	1080	480	2880	2160	960
<b>3-inch</b>	-	-	-	-	1620	720	4320	3240	1440
<b>4-inch</b>	-	-	-	-	2160	960	5760	4320	1920

Using Lab Manual Set-ups  
Pile-up beyond 2 inches is not recommended

### Maximum Density

	1.7mm Patch Cords	2.0mm Patch Cords	3.0mm Patch Cords
<b>Maximum Patch Cord Density (per inch<sup>2</sup>)</b>	142	102	44

Trough Pile-up	2x2 FiberGuide System			4x6 FiberGuide System			4x12 FiberGuide System		
	1.7mm	2.0mm	3.0mm	1.7mm	2.0mm	3.0mm	1.7mm	2.0mm	3.0mm
<b>2-inch</b>	568	408	176	1704	1224	528	3408	2448	1056
<b>3-inch</b>	-	-	-	2556	1836	792	5112	3672	1584
<b>4-inch</b>	-	-	-	3408	2448	1056	6862	4896	2112

Using GR-449-CORE Bellcore Formula

# Data Centre & Communications Room

## Plenum FiberGuide® System

### 2x2 System (2" H x 2" W)

The 2x2 Plenum FiberGuide® system interfaces with ADC KRONE's standard 2x2 FiberGuide System and requires no special conversion piece.

#### Ordering Information

Description	Catalogue Number		
	Fitting	Snap-on Cover	Number of Junctions
<b>Straight section</b> 2x2 straight section—length: 6'	PFGF-PSHS-C	PFGC-PSHS-C	—
<b>Fittings</b> 2x2 horizontal T 2x2 horizontal cross 2x2 90° horizontal elbow 2x2 45° horizontal elbow 2x2 90° up elbow 2x2 90° down elbow 2x2 45° up elbow 2x2 45° down elbow	PFGF-PHRT-C PFGF-PHXP-C PFGF-PH9E-C PFGF-PH4E-C PFGF-PUPE-C PFGF-PDNE-C PFGF-PU4E-C PFGF-PD4E-C	PFGC-PHRT-C PFGC-PHXP-C PFGC-PH9E-C PFGC-PH4E-C PFGC-PUPE-C PFGC-PDNE-C PFGC-PU4E-C PFGC-PD4E-C	3 4 2 2 2 2 2 2
<b>Trumpet flares</b> 2x2 trumpet flare—3 sided 2x2 trumpet flare—4 sided	PFGF-PTRM-C PFGF-PFPT-C	— —	— —
<b>Conversions</b> 2x2 Plenum to 4x6 Plenum conversion 2x2 Plenum to 4x12 Plenum conversion	PFGF-PDSA-C/B PFGF-PDSA-C/F	PFGC-PDSA-C/B PFGC-PDSA-C/F	(1) 2x2 (1) 4x6 (1) 2x2 (1) 4x12
<b>Junctions</b> 2x2 junction 2x2 end cap—Includes 2x2 junction	PFGF-PJWR-C PFGF-PMEC-C	— —	— —



4x6 System (4" H x 6" W)

### Ordering Information

Description	Catalogue Number		
	Fitting	Snap-on Cover	Number of Junctions
<b>Straight section</b> 4x6 straight section—6' long	PFGF-PSHS-B	PFGC-PSHS-B	—
<b>Fittings</b> 4x6 horizontal T 4x6 horizontal cross 4x6 90° horizontal elbow 4x6 45° horizontal elbow 4x6 90° up elbow 4x6 90° down elbow 4x6 45° up elbow 4x6 45° down elbow	PFGF-PHRT-B PFGF-PHXP-B PFGF-PH9E-B PFGF-PH4E-B PFGF-PUPE-B PFGF-PDNE-B PFGF-PU4E-B PFGF-PD4E-B	PFGC-PHRT-B PFGC-PHXP-B PFGC-PH9E-B PFGC-PH4E-B PFGC-PUPE-B PFGC-PDNE-B PFGC-PU4E-B PFGC-PD4E-B	3 4 2 2 2 2 2 2
<b>Trumpet flares</b> 4x6 trumpet flare—3 sided 4x6 trumpet flare—4 sided	PFGF-PTRM-B PFGF-PFPT-B	— —	— —
<b>Conversions</b> 4x6 Plenum to 4x6 standard conversion <i>* One 4x6 <b>Plenum</b> junction kit required; 4x6 standard junction is not required</i> 4x6 Plenum to 12" Plenum conversion	PFGF-PPSC-B PFGF-PDSA-B/F	— PFGC-PDSA-B/F	1* (1) 4x6, (1) 4x12
<b>Junctions</b> 4x6 junction 4x6 end cap—includes 4x6 junction	PFGF-PJWR-B PFGF-PMEC-B	— —	— —

TrueNet® Structured Cabling

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### 4x12 System (4"H x 12"W)

Ordering Information			
Description	Catalogue Number		
	Fitting	Snap-on Cover	Number of Junctions
<b>Straight section</b> 4x12 straight section—6' long	PFGF-PSHS-F	PFGC-PSHS-F	—
<b>Fittings</b> 4x12 horizontal T 4x12 horizontal cross 4x12/4x6 horizontal T 4x12 90° horizontal elbow 4x12 45° horizontal elbow 4x12 90° up elbow 4x12 90° down elbow 4x12 45° up elbow 4x12 45° down elbow	PFGF-PHRT-F PFGF-PHXP-F PFGF-PHRT-F/B PFGF-PH9E-F PFGF-PH4E-F PFGF-PUPE-F PFGF-PDNE-F PFGF-PU4E-F PFGF-PD4E-F	PFGC-PHRT-F PFGC-PHXP-F PFGC-PHRT-F/B PFGC-PH9E-F PFGC-PH4E-F PFGC-PUPE-F PFGC-PDNE-F PFGC-PU4E-F PFGC-PD4E-F	3 4 (2) 4x12, (1) 4x6 2 2 2 2 2 2
<b>Trumpet flares</b> 4x12 trumpet flare—3 sided 4x12 trumpet flare—4 sided	PFGF-PTRM-F PFGF-PFPT-F	— —	— —
<b>Junctions</b> 4x12 junction 4x12 end cap—includes 4x12 junction	PFGF-PJWR-F PFGF-PMEC-F	— —	— —

### Accessories (Support Bracket Kits)

Ordering Information	
Description	Catalogue Number
<b>Short bracket kit</b> for use with 2x2 and 4x6 sizes; 8.21" overall length	PFGF-SSPT-C/B
<b>Short bracket kit with square U-bolt</b> for easy access mounting	PFGF-EASSPT-C/B
<b>Long bracket kit</b> for use with 2x2, 4x6, and 4x12 sizes; 18.84" overall length	PFGF-LSPT-C/B/F
<b>Long bracket kit with square U-bolt</b> for easy access mounting	PFGF-EALSPT-C/B/F
<b>Span bracket kit</b> for use with 2x2, 4x6, and 4x12 sizes; spans 24" centre to centre floor struts	PFGF-ESPT-C/B/F
<b>Span bracket kit with square U-bolt</b> for easy access mounting	PFGF-EAESPT-C/B/F
<b>Diagonal span bracket kit</b> for use with 2x2, 4x6, and 4x12 sizes; spans diagonally up to 34" between struts	PFGF-DSPT-C/B/F
<b>Diagonal span bracket kit with square U-bolt</b> for easy access mounting	PFGF-EADSPT-C/B/F

All support bracket kits fit round support pedestals sizes 0.5" to 1.125".

### Accessories (Flexible Tubing)

#### Ordering Information

Description	Catalogue Number
<b>One hose adaptor</b> , with 5' (1.53m) hoses and finishing couplers	PFGF-KT03-C
<b>Two hose adaptor</b> , with 5' (1.53m) hoses and finishing couplers	PFGF-KT03-B
<b>Extension tube</b> , 5' (1.53m) long with splice coupler	PFGF-HEXT
<b>Finishing coupler</b>	PFGF-HFIN
<b>Mounting strap</b>	PFGF-HMST
<b>Splicing coupler</b>	PFGF-HSPL
<b>Flexible tubing</b> , 2" (5.08cm) inner diameter (X = length in feet: 5, 15, 35, 75, 110, 150)	PFGF-MIDY-XFI
<b>Tie down bracket for intrafacility cable (IFC)</b>	PFGF-PIFC