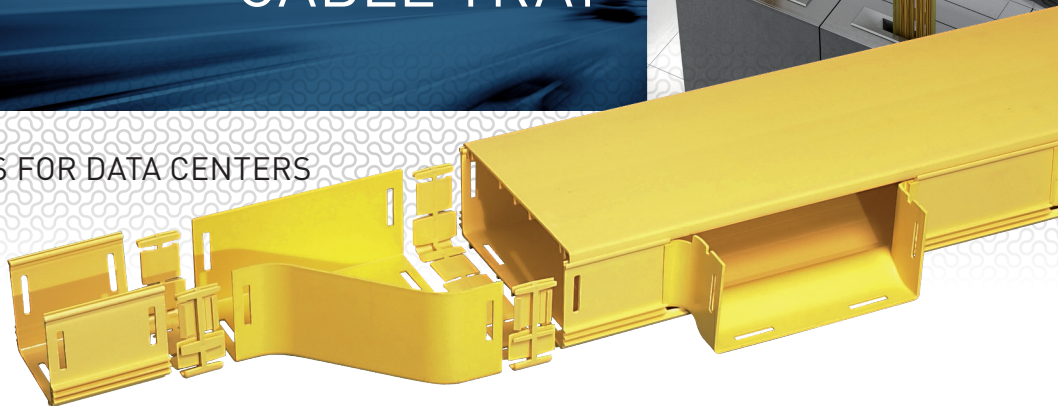


# FIBER RACEWAY CABLE TRAY

INTEGRATED SOLUTIONS FOR DATA CENTERS



THE **GLOBAL SPECIALIST**  
IN ELECTRICAL AND DIGITAL BUILDING INFRASTRUCTURES





# A DEDICATED PATH

## FOR AN EFFICIENT INSTALLATION

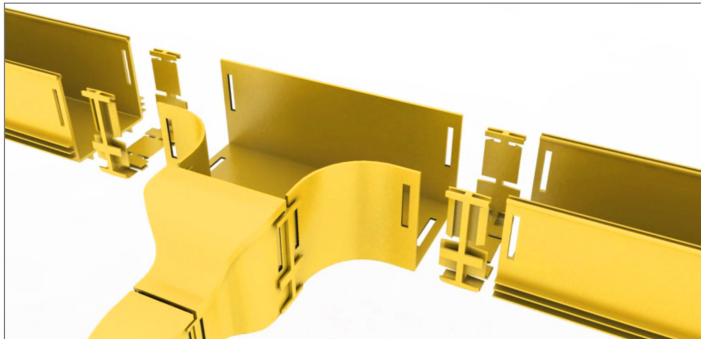
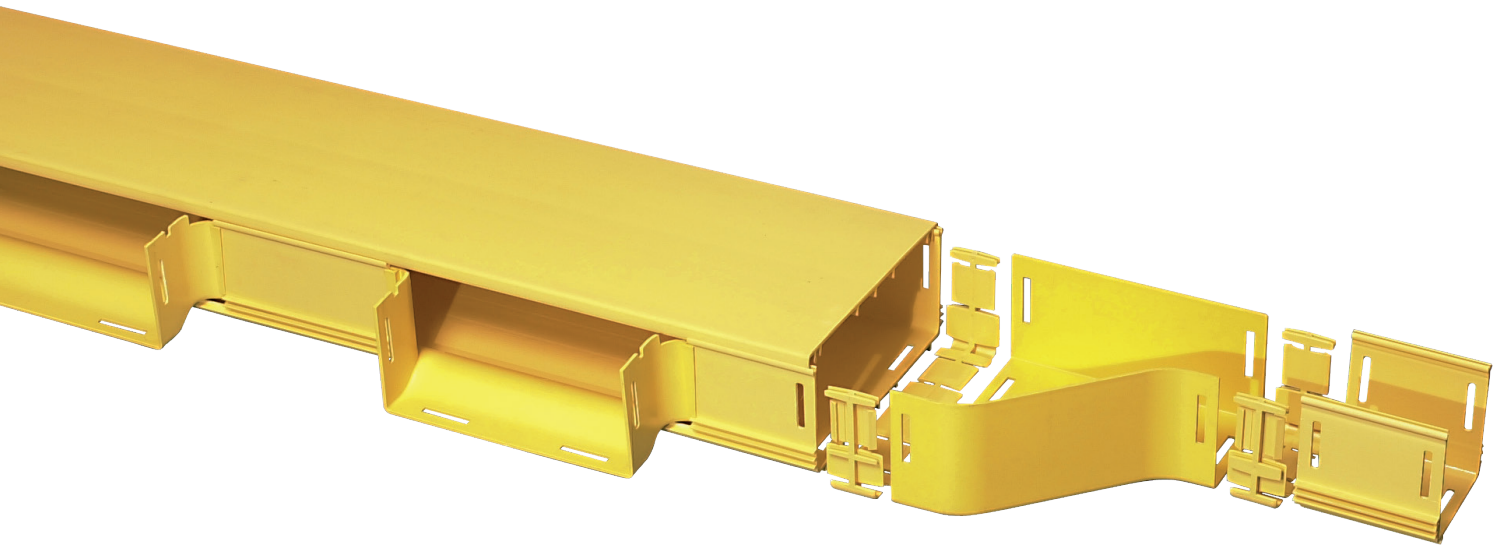


**The Legrand Group boosts its offer for data centers with its innovative LCS<sup>3</sup> Fiber Raceway system! Dedicated to digital data distribution, the Fiber raceway cable tray is the ideal solution to ensure an optimal optical fiber cabling and a highly efficient network at all times.**

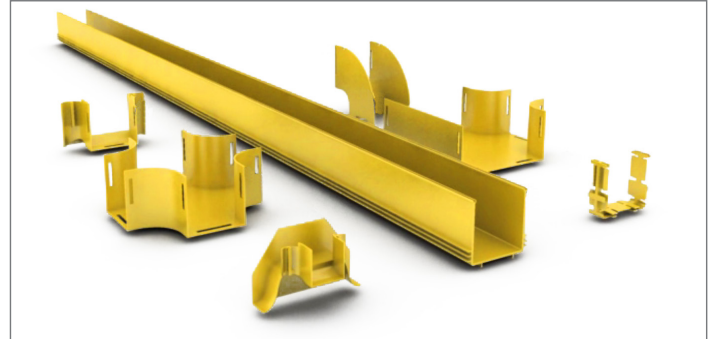
Around half of today's network problems are caused by inadequate cabling infrastructure. With Fiber Raceway, you are sure to benefit from a reliable, durable and scalable infrastructure enabling you to efficiently isolate and protect your fiber optic cables! Besides, Fiber Raceway is a flexible and modular system that allows work to be done quickly on the network with minimal disconnection times.

# FIVE IMPORTANT SALES ARGUMENTS

## AT A GLANCE FOR USING FIBER RACEWAY



EASY INSTALLATION



7 BASIC ELEMENTS

### 1. CABLE MANAGEMENT SYSTEM

With the strong growing demand of fibers, fiber cords need to be segregated from copper services and routed in an enclosed duct raceway system, fulfilling following demands:

- bright distinctive duct color: Yellow
- protection against compression
- protection against bend radius
- available sizes 50 mm, 100 mm, 220 mm, 300 mm and 600 mm

### 2. MEETS IMPORTANT STANDARDS

- Low smoke Zero Halogen, self-extinguishing. Avoiding risk of harming staff and transmission equipment
- UL94-V-0 (50 mm UL94-V-1) rated
- ROHS Compliant
- UL2024A Standard rated

### 3. EASY & TIME SAVING INSTALLATION

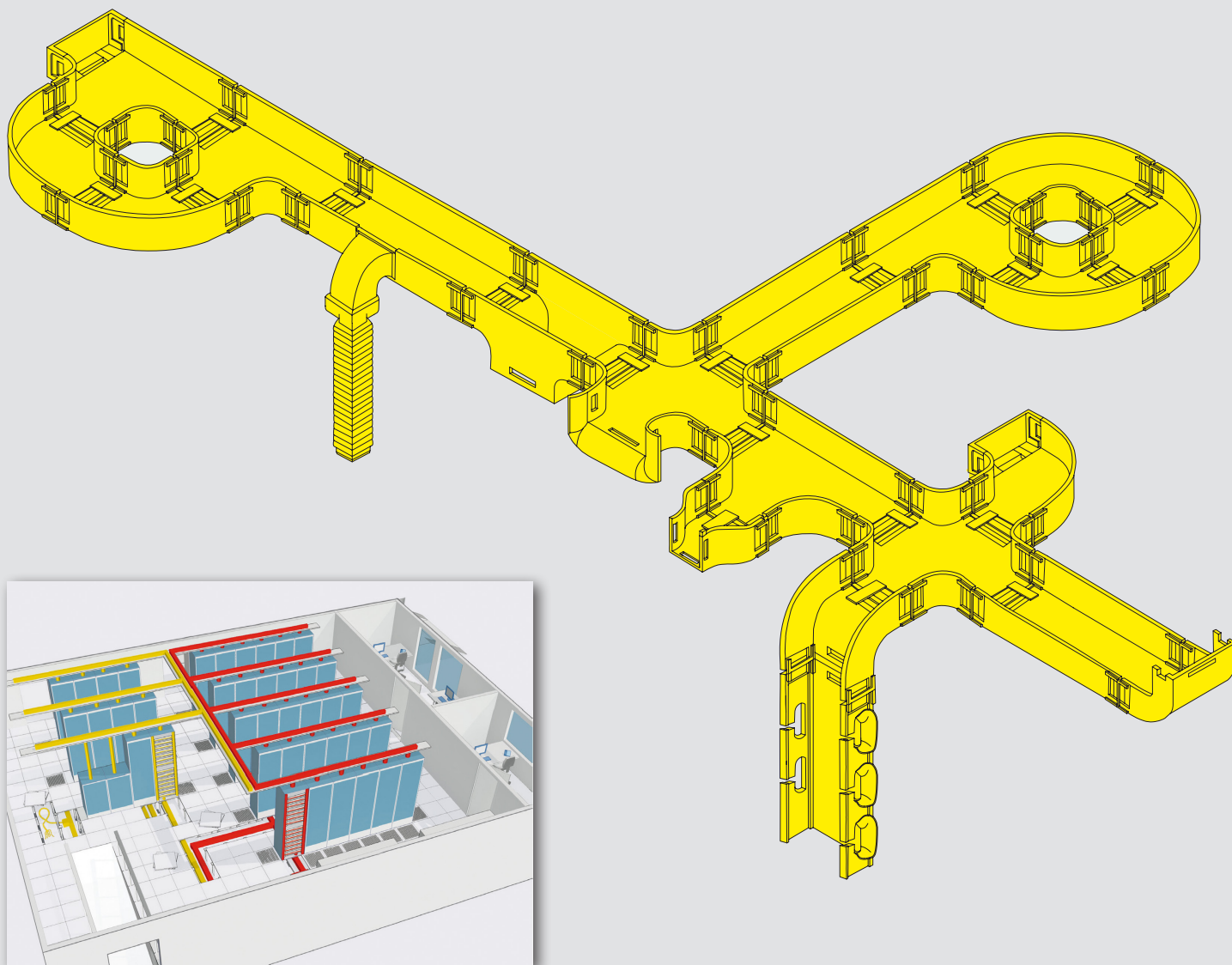
Pre-slotted duct and accessories simply snap together with slotted or slotless joiners, express outlets, break out kits.

### 4. ZERO DOWN TIME

Fiber Raceway can easily be changed or extended without the need to remove the existing fiber or shut down.

### 5. FULLY RECYCLABLE

The granulate Noryl used for Fiber Raceway is fully recyclable (Cradle to cradle). Very important issue for future datacenters.



### Program

Duct size (mm)	50x50			100x100			220x100			300x100			600x100		
Optical cable size (mm)	3	2-2.4	1.6-2	3	2-2.4	1.6-2	3	2-2.4	1.6-2	3	2-2.4	1.6-2	3	2-2.4	1.6-2
Straight duct	120	155	265	500	700	1200	1100	1500	2500	1500	2100	3600	3000	4200	7200
Over-the-top outlet	100	120	200	300	400	700	-	-	-	-	-	-	-	-	-
Duct with ramp-off	-	-	-	300	400	700	720	1000	1700	-	-	-	-	-	-
Vertical tee-straight-through	-	-	-	500	700	1200	300	400	700	-	-	-	-	-	-
Vertical tee-downspout-drop	-	-	-	500	700	1200	500	700	1200	-	-	-	-	-	-
Convolted tubing	Split 200mm Ø			Split 38mm Ø			Split 50mm Ø			50x50 square					
Optical cable size (mm)	3	2-2.4	1.6-2	3	2-2.4	1.6-2	3	2-2.4	1.6-2	3	2-2.4	1.6-2			
Tubing capacity	10	12	20	24	30	50	60	80	135	120	155	265			

### Capacity

The capacity listed above is recommended to ensure no damages will occur to the cords due to crushing. This is not the number of optical fiber cords that Fiber Raceway will accommodate if completely filled.

### Selecting the Ducting - Raceway size

Fiber Raceway is available in five sizes. It is most important to select a size that allows for expansion and future additions to the ducting system.

All too often, cable systems are underspecified in order to reduce installation costs. In this world of the ever increasing need for the storage and processing of data, it is false economy to just specify for existing needs. It is ultimately most cost-effective to provide for the future and over-specify when it comes to capacity.

# Legrand Fiber Raceway

configure your system

SOLID DUCTS, JOINERS AND HORIZONTAL ELBOWS							
			Solid ducts	Solid ducts with cover	Slotted joiners	Slotting tools	
			Length 2000mm	Length 2000mm	Tool required	Hand-operated	Foot-operated
	<b>50x50</b>	●	TC1279-81	TC1279-81XA	TC1279-73	TC1279-118	-
	<b>100x100</b>	●	TC1279-23	TC1279-23ASN	TC1279-27	TC1279-51	TC1279-500KIT
	<b>220x100</b>	●	TC1279-21	TC1279-21ASN	TC1279-25		
	<b>300x100</b>	●	TC1279-275	TC1279-275A	TC1279-320KIT		
	<b>600x100</b>	●	TC1279-406NS	-	-	-	-
<b>Fixing with joiners</b>			1x	1x			

VERTICAL ELBOWS, TEES, CROSSES AND END CAPS								
			Vertical elbows up (with cover)			Vertical elbows down (with cover)		
			30°	45°	90°	30°	45°	90°
	<b>50x50</b>	●	-	TC1279-143-45A	TC1279-143A	TC1279-87-30A	TC1279-87-45A	TC1279-87A
	<b>100x100</b>	●	TC1279-113-30A	TC1279-113-45A	TC1279-113A	TC1279-111-30A	TC1279-111-45A	TC1279-111A
	<b>220x100</b>	●	TC1279-125-30A	TC1279-125-45A	TC1279-125A	TC1279-123-30A	TC1279-123-45A	TC1279-123A
	<b>300x100</b>	●	-	TC1279-283A	TC1279-298KIT	-	TC1279-285A	TC1279-193A
	<b>600x100</b>	●	-	-	-	-	-	-
<b>Fixing with joiners</b>			1x	1x	1x	1x	1x	1x

1 : Vertical 220mm drop-off module in a 300mm horizontal duct

## Ducting joiner options

The Fiber Raceway system has 2 option methods for joining the components together: slotted joiners or slotless joiners.

**Slotted joiners** require the ducting components to have slots on the ends so that it can be properly joined by clicking into place. A slotting tool will be required.

Slotted joiners	Slotting tool		Saw kit
Tool required	Hand-operated	Foot-operated	Mitre box

Note: For straight ducting Fiber Raceway that has been cut to length, new slots need to be made with a suitable size slotting tool.

Slotless joiners		Saw kits	Horizontal elbows (with cover)		
No slotting tool required		Mitre box	30°	45°	90°
-		TC1279-118-07	TC1279-77-30A	TC1279-77-45A	TC1279-77A
TC1279-248A	TC1279-MITRE	-	TC1279-47A	TC1279-31-45A	TC1279-31A
TC1279-250A			TC1279-45A	TC1279-29-45A	TC1279-29A
TC1279-287A			-	TC1279-304A	TC1279-387A
TC1279-410A			-	TC1279-414	TC1279-411A
No slotting tools required		-	1x	1x	1x

Horizontal tees	Vertical tees	Crosses	Transforming crosses	End caps	
With cover	With cover	With cover	With cover	Slotted	Slotless
TC1279-75A	TC1279-145A	TC1279-139A	-	TC1279-127	-
TC1279-03A	TC1279-63A	TC1279-71A	TC1279-65A (100x100 to 220x100)	TC1279-57	TC1279-251
TC1279-01A	TC1279-11A	TC1279-61A	TC1279-331A (220x100 to 300x100)	TC1279-56	TC1279-252
TC1279-279A	TC1279-277A <sup>(1)</sup>	TC1279-300A	TC1279-396A (300x100 to 100x100)	-	TC1279-288
TC1279-412	-	TC1279-416	-	TC1279-435	-
2x	2x	2x	2x  note: different width	1x	

**Slotless joiners** require no additional tool, nor for slots to be made on the side of the duct. They only require a screwdriver for installation to tighten the joiner into place.

Slotless joiners	Saw kit	
No slotting tool required	Mitre box	Screwdriver

# Legrand Fiber Raceway

configure your system (continued)

REDUCERS, SUPPORT BRACKETS AND OUTLETS					
		Reducers with cover	Reducers with cover		Duct end support brackets
			Left hand	Right hand	
	<b>50x50</b> ●	TC1279-91A (50x50 - 100x100)			TC1279-127F
	<b>100x100</b> ●		TC1279-07A (100-220x100)	TC1279-05A (100x100 - 220x100)	TC1279-57D
	<b>220x100</b> ●	-			-
	<b>300x100</b> ●	TC1279-281A (300-220x100)	-	-	-
	<b>600x100</b> ●	TC1279-408 (300-600x100)	-	-	-
<b>Fixing with joiners</b>		1x	1x	1x	-

DROP-OFF SOLUTIONS, HIGH CAPACITY DUCT OUTLETS AND TUBES					
		Fiber drop-off solutions		High capacity duct outlets	
		See conduit 50mm	See square conduit	Without convoluted tube	With convoluted tube
	<b>50x50</b> ●	TC1279-41KIT	TC1279-89KIT	-	-
	<b>100x100</b> ●			TC1279-452A	TC1279-452KIT
	<b>220x100</b> ●			TC1279-454A	TC1279-454KIT
	<b>300x100</b> ●			-	-
	<b>600x100</b> ●	-	-	-	-
<b>Fixing with joiners</b>		-	-	1x	-

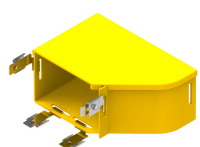

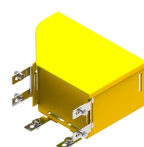
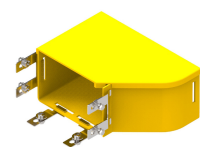
BRAND ADAPTORS					
		ADC/CommScope			
		ADC 4" -100x100	ADC 6" 100-100 LH	ADC 6" 100-100 RH	ADC 6" 220-100 LH
	<b>50x50</b> ●	-	-	-	-
	<b>100x100</b> ●	TC1279-109KIT	TC1279-473KIT	TC1279-472KIT	-
	<b>220x100</b> ●	-	-	-	TC1279-149KIT
	<b>300x100</b> ●	-	-	-	-
	<b>600x100</b> ●	-	-	-	-

1: Fiber Raceway tubing is used for feeding entering or exiting fibers from the ducting raceway into equipment racks. Tubes are convoluted or ribbed to allow adjustment if drops cannot be positioned exactly over or under equipment. Some are available with removable covers, or split for ease of cable installation.



Over-the-top outlets				Trumpet outlets
50x50 down	100x100 down	100x100 horizontal		
				
TC1279-531ASL	TC1279-307ASL	TC1279-290ASL	TC1279-93A	
			TC1279-218A	
			TC1279-330A	
			TC1279-379A	
-	-	-	1x 	

Cut-out jig	Tubing <sup>(1)</sup>		
	Conduit 50mm	Square 50x50 (L: 350mm)	Square openable (L: 350mm)
			
TC1279-483A	TC1279-26Y (1 m) TC1279-53Y (2 m)	TC1279-85YEL	TC1279-85KIT
-	Use with: TC1279-41KIT	Use with: TC1279-89KIT	Use with: TC1279-89KIT











ADC/CommScope		Panduit	
ADC 6" 220-100 RH	ADC 12" 300-100	6" - 220x100 LH	6" - 220x100 RH
			
-	-	-	-
-	-	-	-
TC1279-150KIT	TC1279-327KIT	TC1279-487KIT	TC1279-486KIT
-	-	-	-

# Legrand Fiber Raceway

configure your system (continued)

SUSPENSION BRACKETS							
		Cabinet suspension kits		Ceiling suspension kits		Universal mounting hardware	
		Raised mounting kit	C-clamp	Ladder rack mounting kit	Ceiling suspension bracket	Duct mounting brackets	
	<b>50x50</b>	●	TC1279-129KIT	347279	-	-	CLIP2-50
	<b>100x100</b>	●	TC1279-14A	347280	TC1279-155KIT	TC1279-107KITA	TC1279-16MH
	<b>220x100</b>	●	TC1279-13A	347283	TC1279-155KIT	TC1279-106KITA	TC1279-15MH
	<b>300x100</b>	●	TC1279-297BKIT	347283	TC1279-370KIT	TC1279-297AKIT	TC1279-297MH
	<b>600x100</b>	●	-	-	-	-	TC1279-438KIT

## MOUNTING SOLUTIONS

Ceiling suspension brackets	Raised mounting kits	Ladder rack and Unistrut mounting kits
 <p><b>TC1279-107KITA</b> Consists of: 1 x Duct mounting bracket 100mm 1 x Straight bracket 2 x Threaded rod 12mm x 400mm 8 x Nuts 1 x Bolt 12mm x 13mm 9 x Washers</p>  <p><b>TC1279-106KITA</b> Consists of: 1 x Duct mounting bracket 220mm 1 x Straight bracket 2 x Threaded rod 12mm x 400mm 8 x Nuts 1 x Bolt 12mm x 13mm 9 x Washers</p>  <p><b>TC1279-297AKIT</b> Consists of: 1 x Duct mounting bracket 300mm 2 x 1/2" UNC Threaded rods, 1m long 8 x 1/2" hex. Nuts 8 washers</p>	 <p>This mounting kit is used for supporting 50 mm duct above or below cabinets or iron work</p>  <p><b>TC1279-129KIT</b> Consists of: 1 x Mounting plate 50mm 1x 2 part Hook &amp; Loop adhesive 1 x Treaded rod 12mm x 400mm 4 x Nuts 4 x Washers</p>  <p><b>TC1279-14A</b> Consists of: 1 x Duct mounting bracket 100mm 1 x Threaded rod 12mm x 400mm 3 x Nuts 3 x Washers 1 x Protective tube</p>  <p><b>TC1279-13A</b> Consists of: 1 x Duct mounting bracket 220mm 1 x Threaded rod 12mm x 400mm 3 x Nuts 3 x Washers 1 x Protective tube</p>  <p><b>TC1279-297BKIT</b> Consists of: 1 x Duct mounting bracket 300mm 2 x Straight bracket 2 x Threaded rod 5/8" UNC x 300mm 8 x Nuts 5/8" and 2 x Nuts 1/2" 2 x Bolts 1/2" x 13mm 12 x Washers</p>	 <p><b>TC1279-155KIT</b> Consists of: 1 x Bracket 1 x Clamp bracket 2 x Washers, Nuts &amp; Bolts</p> <p>To be used with 100, 220 and 300mm duct mounting kits</p>  <p><b>TC1279-370KIT</b> Consists of: Large ladder rack mounting kit</p> <p>To be used with 100, 200 and 300mm duct mounting kits</p>

# Legrand Fiber Raceway

## threaded rod suspensions



348049



343930



345200

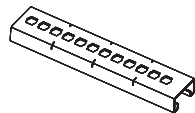
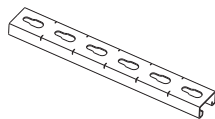


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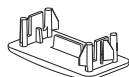
348576

Pack	Cat.Nos	Rails
		Trapeze suspension M10/M12 Perforating distance: 15mm
		<b>R21S 41x21x1,5</b>
		Length
1	348042	200 mm
1	348043	300 mm
1	348044	400 mm
1	348045	500 mm
1	348046	600 mm
1	348047	700 mm
1	348040	1000 mm
1	348041	2000 mm
1	342180	3000 mm
		<b>R21SP 41x21x2</b>
1	348049	3000 mm

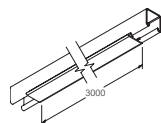


Pack	Cat.Nos	Rail struts
1	343610	Length 3000 mm Profile R41SP 41x41x 1,5
1	343930	Length 3000 mm Profile R41SP 41x41x 2
1	345200	Length 3000 mm Profile R41S 41x41x 2.5
1	345260	Length 6000 mm Profile R41S 41x41x 2.5
1	343770	Length 3000 mm Profile R41DP 41x82x2,5

Pack	Cat.Nos	Protection end caps
1	348576	Profile R21S/R21SP
1	348577	Profile R41S/R41SP



Pack	Cat.Nos	Profile covers
		Length 3000m
1	SC952	For 41mm rail
1	SC953	For 21mm rail



Pack	Cat.Nos	Threaded rods
		Type   Length   Max. load
1	8234206	M6   3000 mm   2000 N
1	8234008	M8   1000 mm   3000 N
1	8234108	M8   2000 mm   3000 N
1	8234208	M8   3000 mm   3000 N
1	8234000	M10   1000 mm   5800 N
1	8234100	M10   2000 mm   5800 N
1	8234200	M10   3000 mm   5800 N



Pack	Cat.Nos	Extension / Rod couplers
		Type   Max. load
1	8234508	M8 x 30   3000 N
1	8234500	M10 x 30   3000 N



Pack	Cat.Nos	Flathead bolts
1	8200100	M6 x 10
1	8713071	M8 x 16



Pack	Cat.Nos	Flange nuts
1	8200200	M6
1	CM801211	M8
1	CM801221	M10



Pack	Cat.Nos	Hexagonal nuts
1	8019908	M6
1	8313060	M8
1	8200300	M10



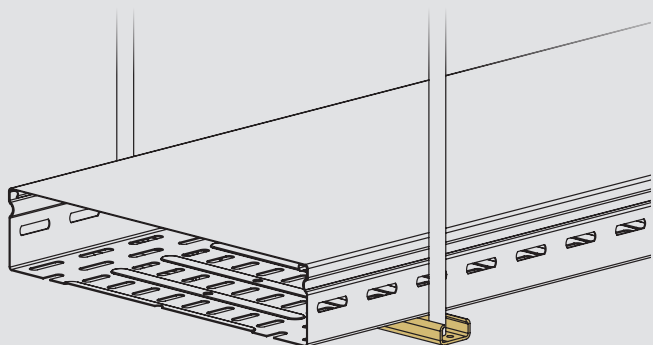
Pack	Cat.Nos	Washers
1	8200800	M6 (6,4 x 18 x 1,6 mm) M6 (6,6 x 22 x 2 mm)
1	8313029	M8 (8,4 x 20 x 1,5 mm)
1	8313030	M8 (8,4 x 25 x 2 mm)
1	8200400	M10 (10,5 x 21 x 2 mm)
1	8313090	M10 (10,5 x 30 x 2,5 mm)
1	8313095	M10 (10,5 x 40 x 2,5 mm)



# Legrand Fiber Raceway

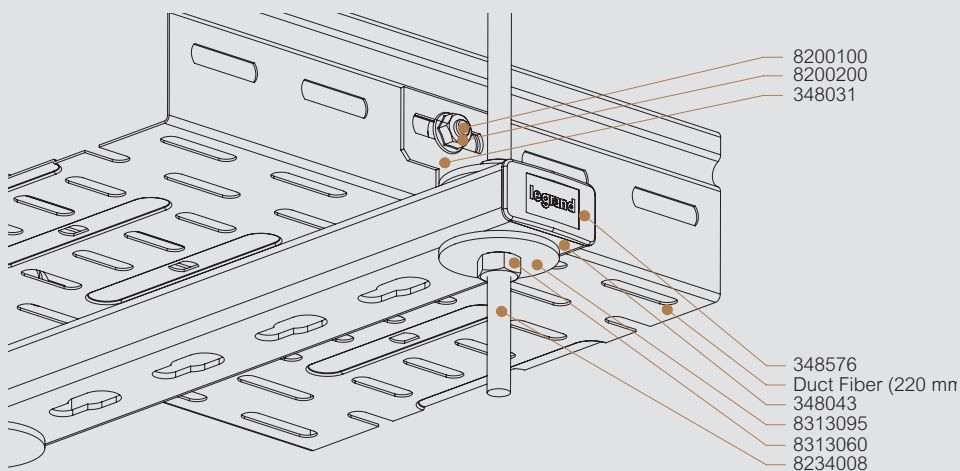
installation example and mounting instructions

■ Installation example with rail R21S / R21SP

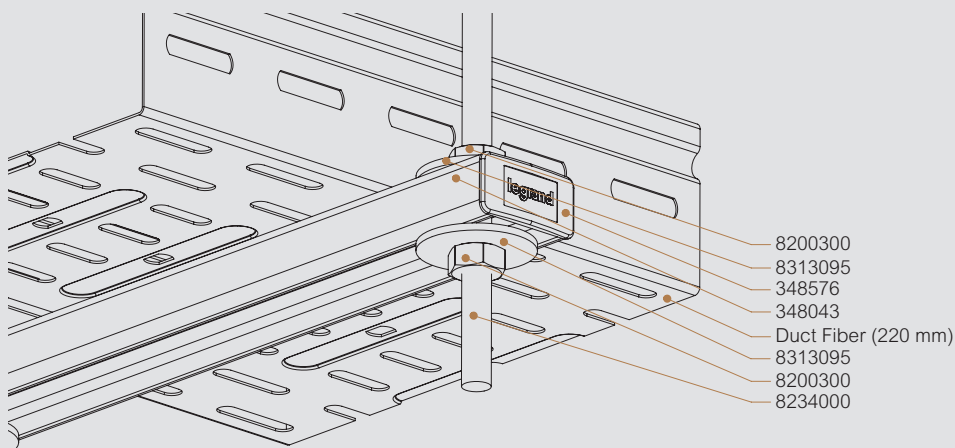


■ Mounting instructions on rail R21S

Option 1: Profile top □

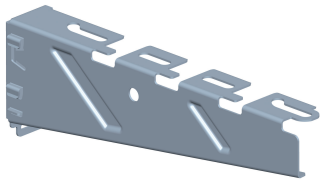


Option 2: Profile down ▭



# Legrand Fiber Raceway

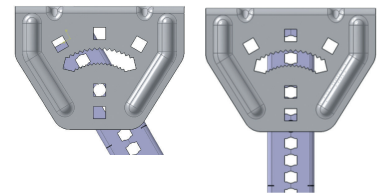
## threaded rod suspensions (continued)



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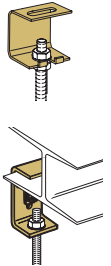
801951



348030

Pack	Cat.Nos	<b>C-bracket / ceiling supports 600N</b>
		Height 156mm Fiber Raceway outside width = Width + 2cm
		Width
1	347279	75 mm
1	347280	100 mm
1	347281	150 mm (for Fiber Raceway 100mm)
1	347282	200 mm
1	347283	300 mm (for Fiber Raceway 220mm)
1	347284	400 mm for Fiber Raceway 300mm)
		<b>CB consoles 800-2000N</b>
		Height 72-137mm In combination with R21S/R41S(P), use 1x M8*16mm flathead bolt, nut and washer
		Width
1	350800	50 mm
1	350810	100 mm
1	350820	150 mm
1	350830	200 mm
1	350840	300 mm
1	350850	400 mm
1	350860	500 mm
1	350870	600 mm
		<b>Channel nuts E41</b>
		To be used for mounting on R21 and R41 C-Profiles
1	801941	M6
1	801951	M8
1	801961	M10
1	801971	M12

Pack	Cat.Nos	<b>Universal ceiling support</b>
1	8232000	1500N
		<b>Ceiling support straight</b>
1	8232100	2500N
		<b>Flange clamps 1500N</b>
1	8232400	Flange thickness 3-7mm
1	8232500	Flange thickness 7-13mm
1	8232600	Flange thickness 13-20mm
		<b>Adjustable headplate for R21S</b>
1	348030	6000N Not suitable for R21SP rails



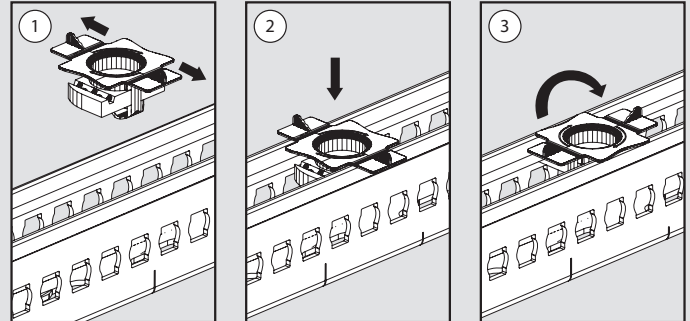
# Legrand Fiber Raceway

## technical characteristics

### Adjustable headplate for rails R21S (not suitable for R21SP)

Profile	Installation on sloping ceiling Adjustable from -30° to +30°	Installation on straight ceiling
R21S	✓	✓
R21SP	-	-
R41S	✓	✓
U60	✓	✓

### Channel nut E41



For our full range, please see main catalogues of our cable management offer

<b>PFR41S</b>
CM595380
<b>PFN41S</b>
CM595360

Single channel gusseted bracket
SB702(S)

Beam clamp: mounting principles		
CM559023/SC853S	FL2	SC855(S)

# Legrand Fiber Raceway

## tooling components

### ■ Foot-operated slotter - TC1279-500

The foot-operated duct slotting tool is a means of making duct end slots easily, accurately and quickly in less than 1 minute to slot one end of a duct. By using a foot-operated system, a small effort is required to exert the large force necessary to make a slot. Both hands are free to hold the duct.

The jaws are made of hardened carbon steel, for a long service life.

To operate, place duct side or end within the tools cutting guides, hold duct down flush with top face of tool, and press foot-operated lever until a slot is made. Release the slotting punch, using the foot-operated release pedal.

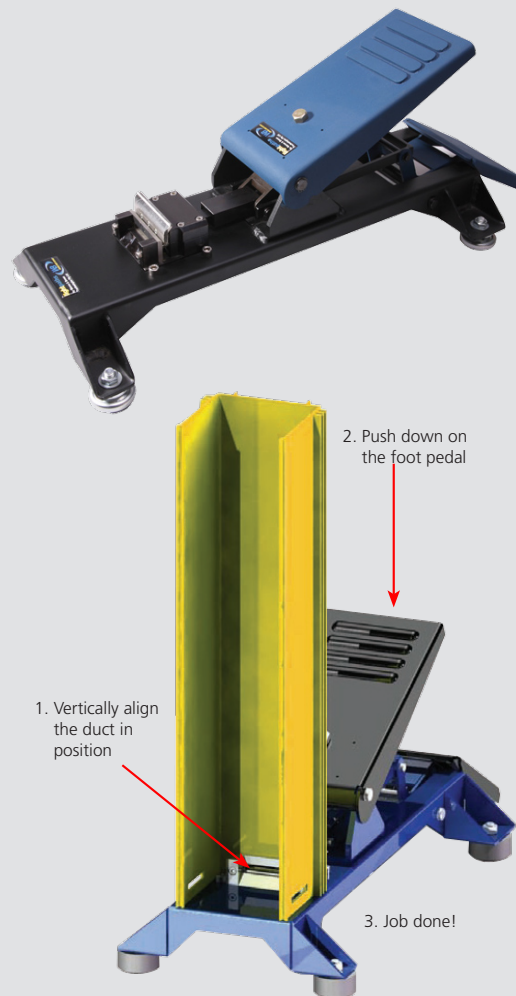
Remove and reposition duct for next slot. The slotting tool cuts a slot in the duct end to suit a standard joiner (Cat.Nos TC1279-25, TC1279-27 and TC1279-320KIT): available separately. The kit includes one foot-operated slotting tool and a metal tool box, for storage and transport, c/w a foam insert.

#### Features:

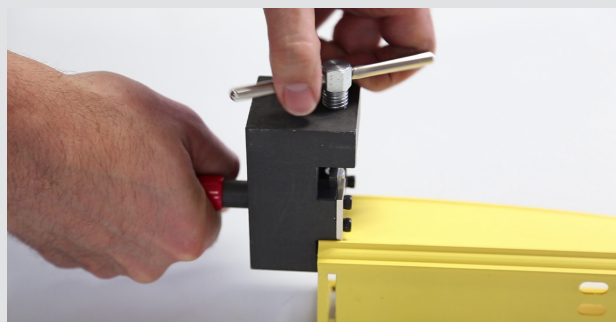
- For making duct end slots easily, accurately, simply, quickly and repeatedly
- Tool made from materials to ensure a long, reliable service life
- Tool has a lifting handle
- Metal tool box (for storage and transport, c/w foam insert) included

Slots the following duct sizes:

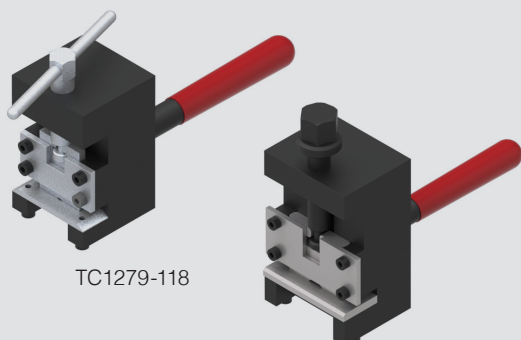
Duct size	Cat.Nos
100x100mm	TC1279-23
220x100mm	TC1279-21
300x100mm	TC1279-275



### ■ Hand-operated slotters - TC1279-118 & TC1279-51



The slotting tool is used to make a small slot at the bottom and on both sides at the ends of duct. This process is a simple mechanical means of preparing a shortened length duct for connection to another standard part: e.g. elbow, cross connector, tees, adaptor assembly, duct end or drop offs, etc.










TC1279-118

TC1279-51

Cat.Nos	Description
TC1279-51	For 220x100mm, 300x100mm and 100x100mm ducts
TC1279-118	For 50mm ducts

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**World Headquarters**

and International Department  
87045 Limoges Cedex - France

☎ : + 33 (0) 5 55 06 87 87

Fax: + 33 (0) 5 55 06 74 55