



# **L**legrand



# A DEDICATED PATH

# FOR AN EFFICIENT INSTALLATION



The Legrand Group boosts its offer for data centres with its innovative fibre raceway system. Dedicated to digital data distribution, the fibre raceway cable tray is the ideal solution to ensure an optimal, optical fibre cabling and a highly efficient network at all times.

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



# FIVE IMPORTANT REASONS

# FOR USING FIBRE RACEWAY







#### 1. CABLE MANAGEMENT SYSTEM

With the strong growing demand of fibres, fibre cords need to be segregated from copper services and routed in an enclosed duct raceway system. The benefits of this system include:

- A bright yellow distinctive duct colour
- Protection against compression
- Protection against bend radius
- Raceway is available in 50, 100, 220, 300 and 600 mm

#### 2. MEETS IMPORTANT STANDARDS

- Low Smoke Zero Halogen (LSZH) and self-extinguishing to avoid 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

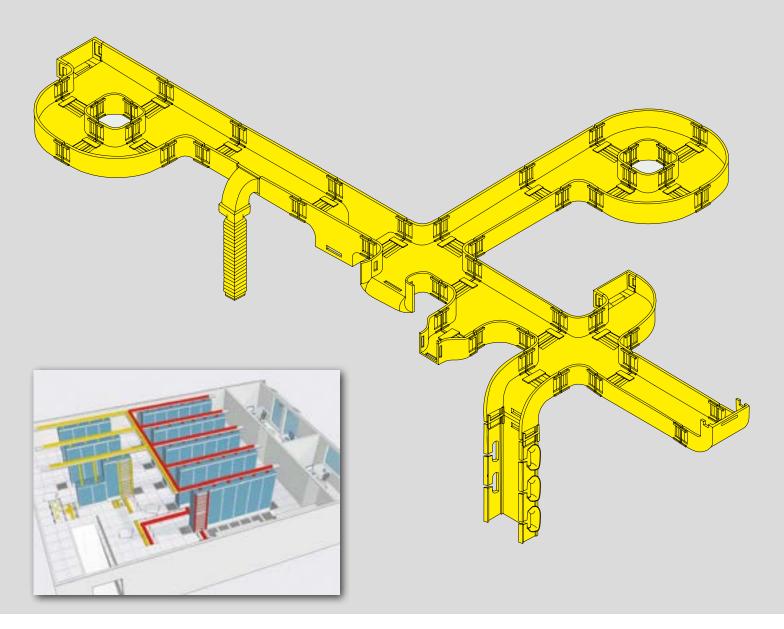
Pre-slotted duct and accessories simply snap together with slotted or slotless couplers, express outlets and breakout kits.

#### 4. ZERO DOWN TIME

Fibre raceway can easily be changed or extended without the need to remove the existing fibre or shut down.

#### 5. FULLY RECYCLABLE

The granulate Noryl, which is used for fibre raceway, is fully recyclable (cradle to cradle) which is a very important issue for future data centres.



#### Program

Duct size (mm)		50 x 50			100 x 10	0	2	220 x 10	0	3	300 x 10	0	6	00 x 10	0
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	-	-	-	-	-	-
Convoluted tubing	Spl	it 200 m	m Ø	Sp	lit 38 mı	n Ø	Sp	lit 50 mı	n Ø	50 2	x 50 squ	ıare			
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 occur to the cords due to crushing. This is not the number of optical fibre cords that fibre raceway can accommodate if completely filled.

#### Selecting the Ducting - Raceway size

Fibre raceway is available in five sizes. It is 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 only specify for existing needs. It is ultimately more cost-effective to provide for the future and over-specify when it comes to capacity.



#### configure your system

		Solid ducts	Solid ducts with cover	Slotted couplers	Slottin	g tools
		Length 2000 mm	Length 2000 mm	Tool required	Hand-operated	Foot-operated
	50 50	T04070.04	T04070 04VA	104070 70	T04070 440	11
-	50 x 50	TC1279-81	TC1279-81XA	TC1279-73	TC1279-118	-
	100 x 100 220 x 100	TC1279-23 TC1279-21	TC1279-23ASN TC1279-21ASN	TC1279-27 TC1279-25	TC1279-51	TC1279-500KIT
0	300 x 100	TC1279-275	TC1279-275A	TC1279-320KIT		

ERTICAL ELBO	OWS, TEES, CROS	SES AND END CAP	s					
		Vertica	Vertical elbows up (with cover)			Vertical elbows down (with cover)		
		30°	45°	90°	30°	45°	90°	
					RIF	No.		
	50 x 50	-	TC1279-143-45A	TC1279-143A	TC1279-87-30A	TC1279-87-45A	TC1279-87A	
	100 x 100	TC1279-113-30A	TC1279-113-45A	TC1279-113A	TC1279-111-30A	TC1279-111-45A	TC1279-111A	
	220 x 100	TC1279-125-30A	TC1279-125-45A	TC1279-125A	TC1279-123-30A	TC1279-123-45A	TC1279-123A	
	300 x 100	-	TC1279-283A	TC1279-298KIT	-	TC1279-285A	TC1279-193A	
-	600 x 100	-	-	-	-	-	-	
Fixing wi	th couplers	1x 🚺	1x 🔱	1x 🔱	1x 🔱	1x 🔱	1x 🔱	

<sup>1 :</sup> Vertical 220mm drop-off module in a 300mm horizontal duct

#### **Ducting coupler options**

The fibre raceway system has two options for coupling the components together: slotted couplers or slotless couplers.

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

Slotted couplers	Slottin	Saw kit	
Tool required	Hand-operated	Foot-operated	Mitre box
L			0

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



Slotless couplers	Saw kits		Horizontal elbows (with cove	r)
No slotting tool required	Mitre box	30°	45°	90°
	0			
-	-	TC1279-77-30A	TC1279-77-45A	TC1279-77A
TC1279-248A		TC1279-47A	TC1279-31-45A	TC1279-31A
TC1279-250A	TC1279-MITRE	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 (100 x 100 to 220 x 100)	TC1279-57	TC1279-251
TC1279-01A	TC1279-11A	TC1279-61A	TC1279-331A (220 x 100 to 300 x 100)	TC1279-56	TC1279-252
TC1279-279A	TC1279-277A <sup>(1)</sup>	TC1279-300A	-	-	TC1279-288
TC1279-412	-	TC1279-416	-	TC1279-435	-
2x 🔱	2x 🔱	2x 🔱	2x Inote: different width	1x 🔱	

Slotless couplers 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 coupler into place.

Slotless couplers	Saw kit	
No slotting tool required	Mitre box	Screwdriver
1	0	



configure your system (continued)

REDUCERS, SUF	PPORT BRACKETS	S AND OUTLETS				
		Reducers with cover	Reducers	Duct end support brackets		
			Left hand	Right hand		
	50 x 50	TC1270 01A (5050 400400)			TC1279-127F	
	100 x 100	TC1279-91A (50 x 50 - 100 x 100)	TC1070 07A (400 000 400)	TC1070 0EA (400 400 000 400)	TC1279-57D	
	220 x 100	-	TC1279-07A (100-220 x 100)	TC1279-05A (100 x 100 - 220 x 100)	+	
	300 x 100	TC1279-281A (300-220 x 100)	-	-	-	
-	600 x 100	TC1279-408 (300-600 x 100)		<u>-</u>	-	
Fixing with	h couplers	1x 🔱	1x 🚺	1x 🚺	-	

DROP-OFF SOLUTIONS, HIGH CAPACITY DUCT OUTLETS AND TUBES							
	Fibre drop-	Fibre drop-off solutions		High capacity duct outlets			
	See conduit 50 mm	See square conduit	Without convoluted tube	With convoluted tube			
	1						
50 x 50 100 x 100 220 x 100 300 x 100 600 x 100	TC1279-41KIT	TC1279-89KIT	- TC1279-452A TC1279-454A -	- TC1279-452KIT TC1279-454KIT -			
Fixing with couplers	-	-	1x 🔰	-			

BRAND ADAPTO	PRS				
			ADC/CommScope		
		ADC 4" -100x100	ADC 6" 100-100 RH	ADC 6" 220-100 LH	
		Sty Sell		1	
	50 x 50	-	-	-	
	100 x 100	TC1279-109KIT	TC1279-472KIT	-	
	220 x 100	-	-	TC1279-149KIT	
	300 x 100	-	-		
	600 x 100	-	-	-	

<sup>1:</sup> Fibre raceway tubing is used for feeding entering or exiting fibres 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.



	Trumpet outlets		
50 x 50 down	100 x 100 down	100 x 100 horizontal	
TC1279-531ASL	TC1279-307ASL	TC1279-290ASL	TC1279-93A TC1279-218A TC1279-330A TC1279-379A
-	-	-	1x 🔱

Cut-out jig	Tubing <sup>(1)</sup>						
	Conduit 50 mm	Square 50 x 50 (L : 350 mm)	Square openable (L : 350 mm)				
			*				
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					
ADC 6" 220-100 RH	ADC 12" 300-100				
3	54 5 3 M				
-	-				
-	-				
TC1279-150KIT	-				
	TC1279-327KIT				
<u>-</u>	-				



#### 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		
				1.				
	50 x 50	TC1279-129KIT	347279	-	-	TC1279-147A		
	100 x 100	TC1279-14A	347280	TC1279-155KIT	TC1279-107KITA	TC1279-16A		
	220 x 100	TC1279-13A	347283	TC1279-155KIT	TC1279-106KITA	TC1279-15A		
	300 x 100	-	347283	-	TC1279-297AKIT	TC1279-297A		
	600 x 100	-	-	-	-	-		



#### Raised mounting kits



This mounting kit is used for supporting 50 mm duct above or below cabinets or iron work

#### TC1279-129KIT

Contents:

- 1 x Mounting plate 50 mm
- 1x 2 part hook and loop adhesive 1 x Threaded rod 12 mm x 400 mm
- 4 x Nuts 4 x Washers

#### TC1279-14A

Contents:

- 1 x Duct mounting bracket 100 mm 1 x Threaded rod 12 mm x 400 mm
- 3 x Nuts
- 3 x Washers
- 1 x Protective tube

#### TC1279-13A

Contents:

- 1 x Duct mounting bracket 220 mm
- 1 x Threaded rod 12mm x 400 mm
- 3 x Nuts
- 3 x Washers 1 x Protective tube

#### Ladder rack and channel mounting kits



#### TC1279-155KIT

Contents:

- 1 x Bracket
- 1 x Clamp bracket 2 x Washers, nuts and bolts

To be used with 100, 220 and 300 mm duct mounting kits



#### TC1279-DCUUM10

Contents: Pack of 10 clamps Used to clamp 100 x 50, 100 x 100, 200 x 100 and 300 x 100 Fibre Raceway ducts to 41 Channel

Dims. 64 x 35 x 2 cm (W x D x H)

For details of Swifts Cable Tray and Ladder ranges,



#### tooling components

#### ■ Foot-operated slotting tool - TC1279-500

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

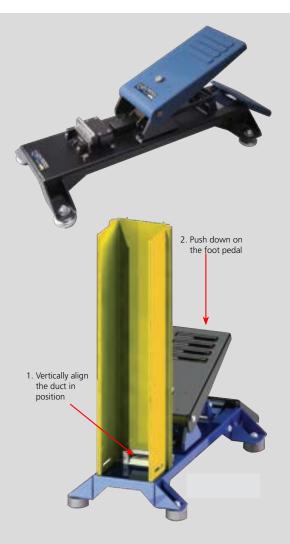
The jaws are made of hardened carbon steel for a long service life. To operate, place the duct side or end within the tool's cutting guides and hold the duct down flush with the top face of the tool. Press the foot-operated lever until a slot is made. Release the slotting punch using the foot-operated release pedal.

Remove and reposition the duct for the next slot. The slotting tool cuts a slot in the duct end to suit a standard coupler. The kit includes one foot-operated slotting tool and a metal tool box for storage and transport, complete with a foam insert.

Standard couplers are available separately. See Cat. Nos. TC1279-73, TC1279-27, TC1279-25 and TC1279-320KIT

#### Features:

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



#### ■ Hand-operated slotting tools - TC1279-118 & TC1279-51







The slotting tool is used to make a small slot at the bottom and on both sides of the ends of the 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.

Cat.Nos	Description
TC1279-51	For 220 x100 mm, 300 x 100mm and 100 x 100 mm ducts
TC1279-118	For 50 mm ducts

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