

# Ducting System \* ITMAX

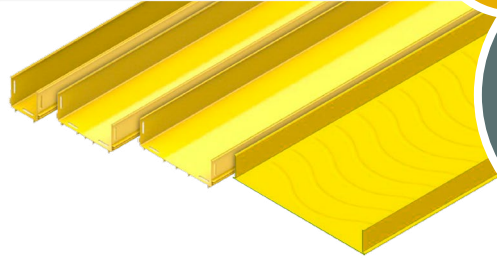
Organization  
and safety for  
your Data Center.



Lightera

Unique solution, with easy installation and expansion.

New!



600 mm wide

**Fast  
Installation**

**Easy  
Routing**

**Optical Patch Cords  
Protection**

**More versatility for  
your project!**

Raceways 100, 220, 300  
or 600 mm wide.



## DID YOU KNOW?

> Cabling infrastructure accounts for up to 5% of the cost of the Data Center.

> Good infrastructure and cabling can prevent up to 50% of installation problems.

> The life cycle of the infrastructure is greater than 10 years.

# Why use ITMAX ducts?

The ITMAX Ducting System is the perfect complement to ITMAX LIGHTERA optical and copper solutions. The best way to combine innovation and high performance connectivity with organization and safety for your Data Center. Install with agility and speed and expand whenever necessary, without major investments.



### Compliant with international standards.

The entire system was designed in accordance with **ANSI/TIA-569-E: Telecommunications Pathways and Spaces**.



### They offer more safety for your projects.

ITMAX Ducts comply with the **UL2024 - Standard for Cable Routing Assemblies and Communications Raceways**. They also meet the requirements of the European RoHS Directive.



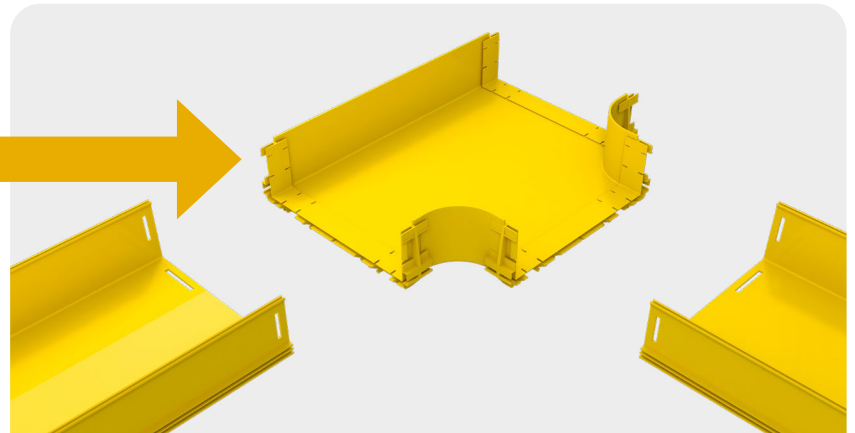
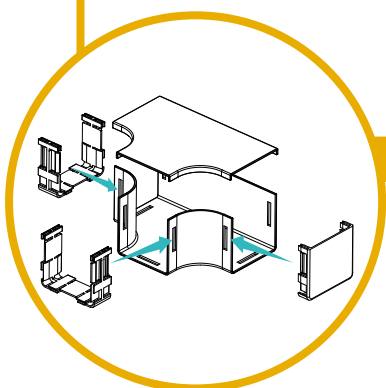
### Preserve the greatest asset of your company: people's lives.

All plastic components are manufactured in **Noryl®** - high-strength, flame-retardant, halogen-free plastic and **UL94V-0 certified**. In case of fire, there is no production of corrosive acids and the gases emitted by burning are non-toxic, so it does not cause harm to people.



### They allow easy post-installation expansion.

Adapting to different scenarios, its diversity of parts allows avoidance of physical obstacles in the installation sites, thereby enabling routing of patch cords to different routes within the facilities.



# Complete System

## Plug-and-play.

The ITMAX Ducting System has two methods of connecting parts: slotless, which does not require special tools to connect parts; and Slotted, which works through holes already present in the parts\*.

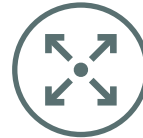
ITMAX Ducts are available in dimensions that meet various needs of cords density, respecting the 40% maximum raceway fill required by the standard.



Allows assembly without tools\*



Provides the ideal bend radius for optical fibers



Easy post-installation adjustments

# 1

## Adaptable Configurations

### Raceways

Widths range from 100 mm (lowest density) to 600 mm (highest density).

### Outlets

Installation of vertical outlets is fast, requires no cuts in the raceways, which is ideal for EDA and Server environments with small and medium density situations. Side outlets are ideal for HDA and MDA environments, designed for medium and high density.

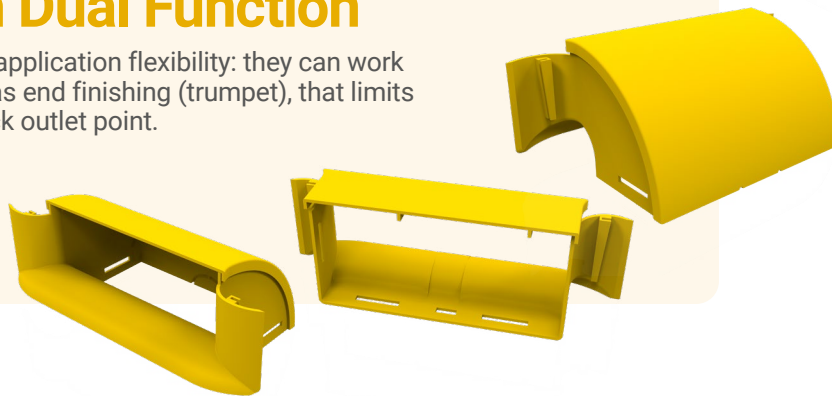
Up to 600 mm wide

Up to 6,680 optical cords



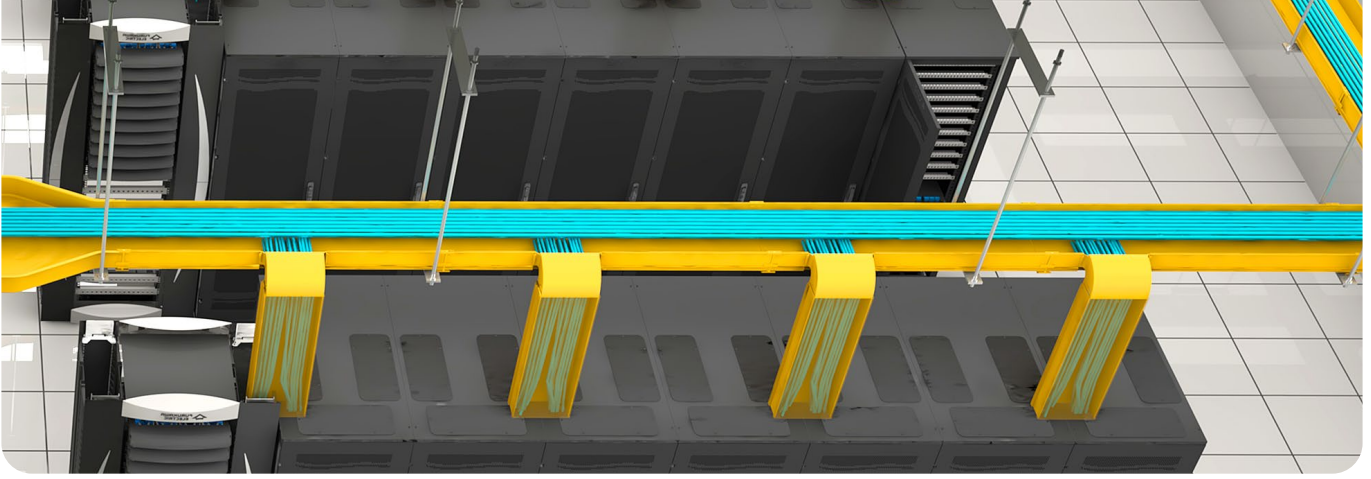
## More versatility: parts with Dual Function

Some parts offer an application flexibility: they can work as a side outlet and as end finishing (trumpet), that limits cord bends at the rack outlet point.

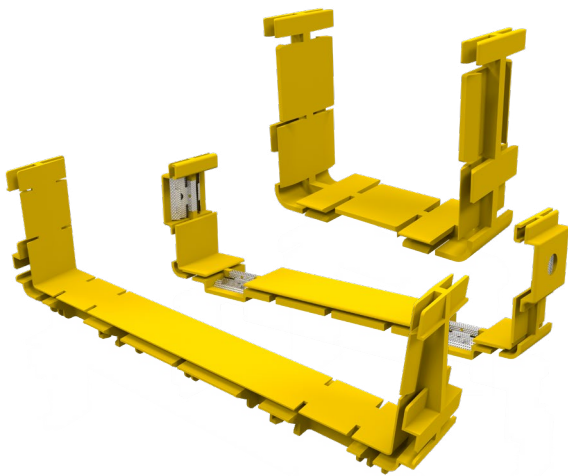


\* Except for 600 mm parts.





## Quick installation:



## 2 Joiners

**Slotless** (requires no slots at the raceways endings, its coupling is performed by a screw locking system that allows to attach raceways and parts with or without slots); or **Slotted** (joiner system with snaps that uses the slots at the raceways and parts endings to attach them).

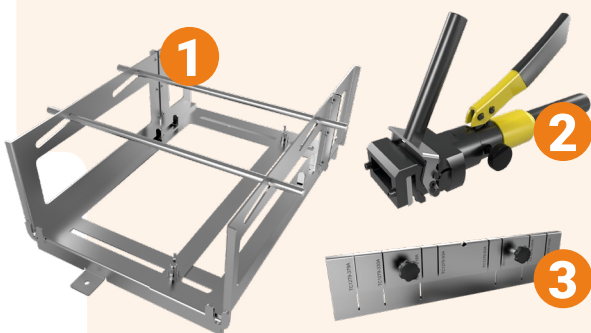
## 3 Mounting Brackets

Specially developed to support and lock the raceways, they must always be installed as close as possible to the ends and joining points. They must always respect the maximum distance of 900 mm between each other for optical patch cords application.

## More convenient:



## Faster:



## 4 Tools

Simple handling tools that facilitate the installation and ensure correct alignment and connection between the different parts.

- 1 **Cutting tool:** guides the cutting process in order to get perpendicular cuts for raceways that enable its correct attachment to the other system parts.
- 2 **Slotting tool:** allows the creation of slots at the raceway endings when it is cut.
- 3 **Side outlet cutting tool:** guides the cutting of the raceway walls to create windows in which the side outlets fit, creating branches from there.

# Application

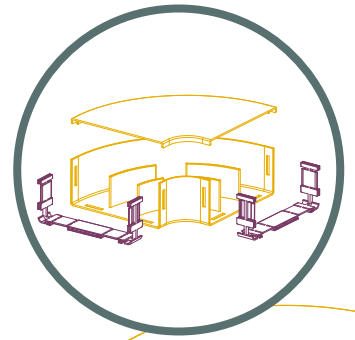
Learn about the complete system.



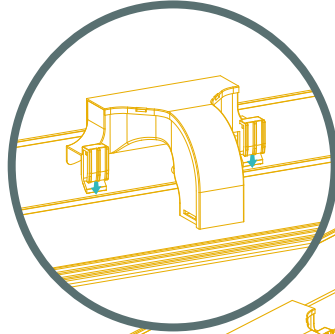
Find out more about:  
**ITMAX Racks**

- > Open and closed racks;
- > Cable managers, trays and blank panels.

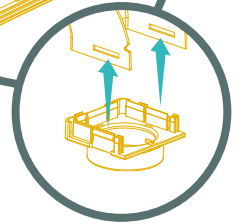
Horizontal  
Elbow  
90 Degrees



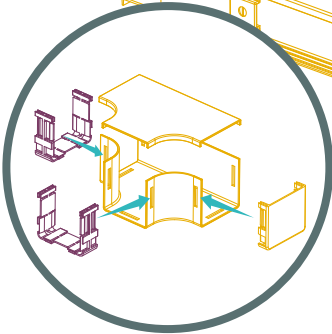
Vertical  
Outlet



Side Outlet 90 Degrees  
+ Joiner  
+ End Cap with  
Tube Outlet



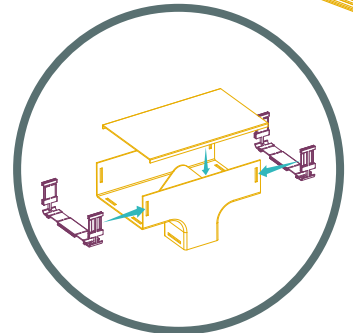
Horizontal  
Tee



Reducer

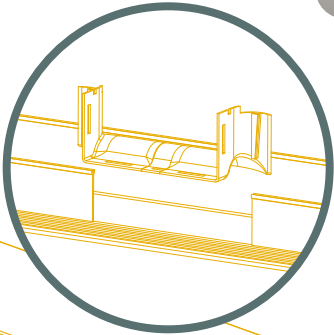


Vertical  
Tee

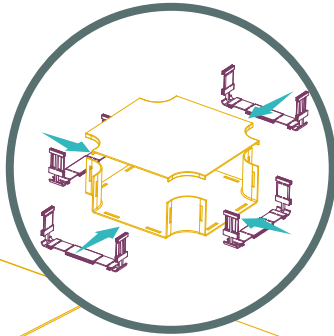




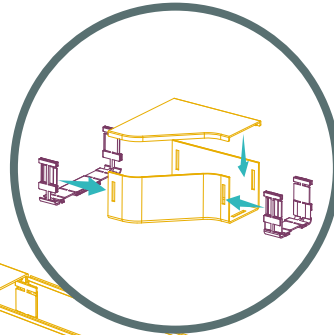
**Side Outlet**



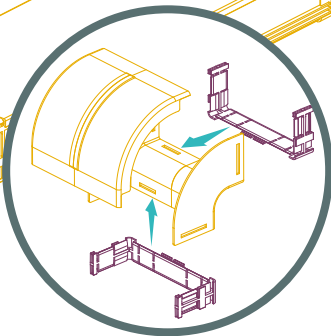
**Horizontal Cross**



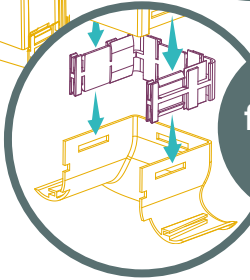
**Left Hand Reducer**



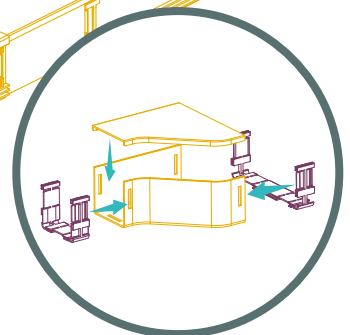
**Vertical Elbow 90 Degrees**



**Side Outlet**

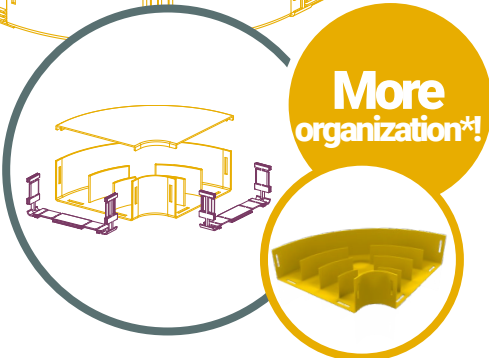


**Dual function:**  
used as a finishing



**Right Hand Reducer**

**Horizontal Elbow 90 Degrees**



**More organization\*!**

*\* Organization fins available exclusively in widths of 220 and 300 mm.*

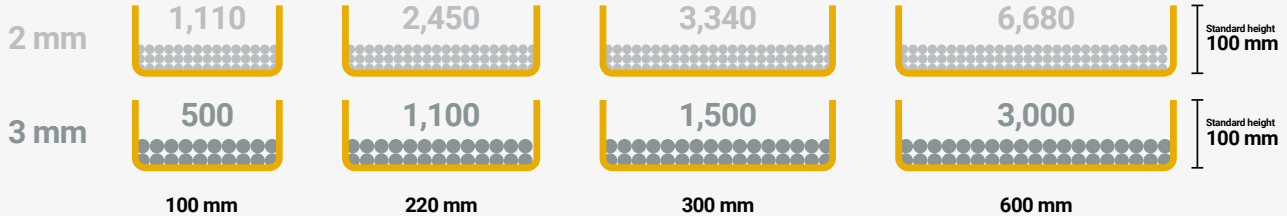
# Best Practices

When designing your Data Center with ITMAX ducts, always consider these aspects.

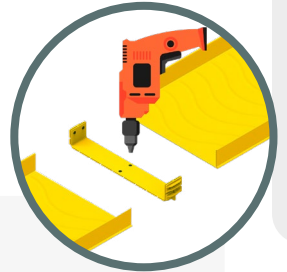
## Versatile System: 4 raceway widths

Shorter installation time, easy routing and fiber protection.  
Standard length of 2 m for all raceways models.

Cord Outside Diameter

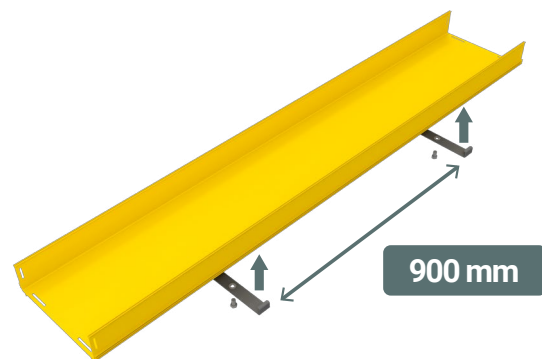
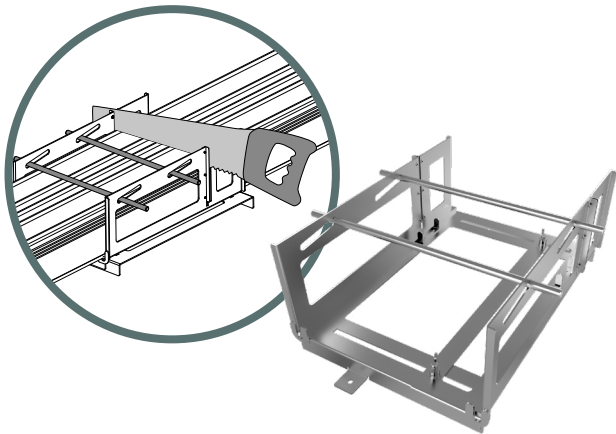


**Attention:** 600 mm raceways and parts must be connected in a special way



## Modular Assembly

The raceways standard length is 2 m, but they can be easily cut with the aid of a tool if necessary.

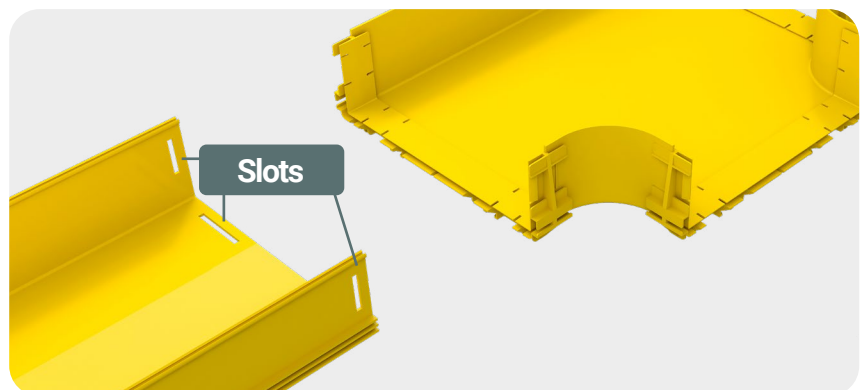


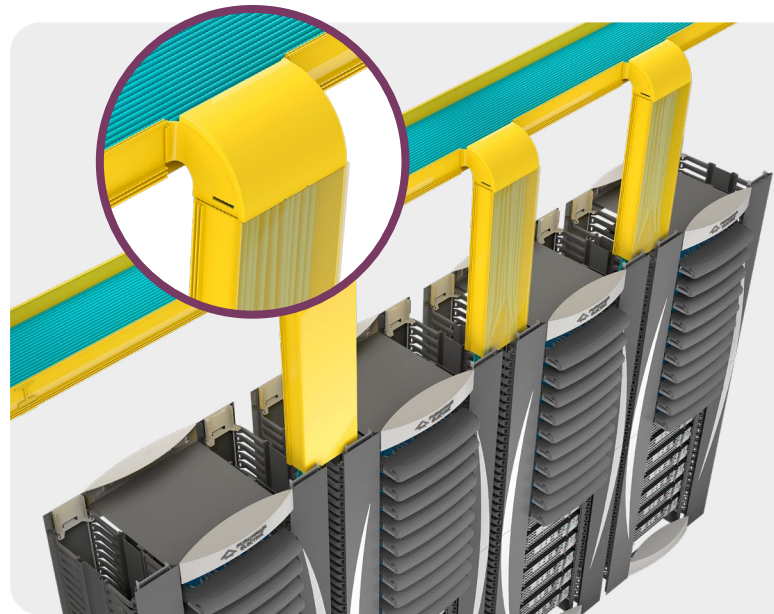
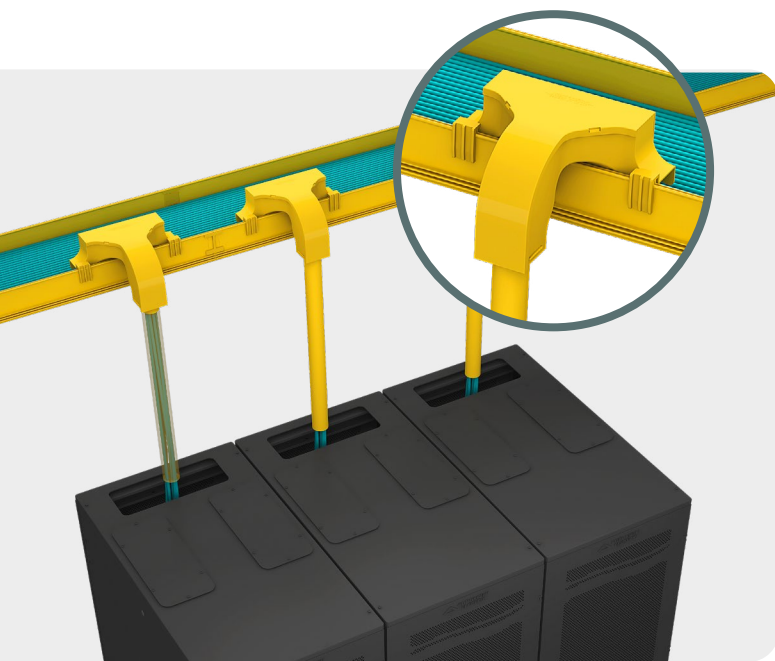
## Convenient Brackets

Always installed as close as possible to the ends and joining points, respecting the maximum distance of 900 mm between them.

## Easy to expand and connect

To continue the path, remove the end cap and fit the part.  
Simple and convenient!



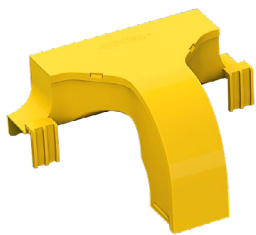


## Quick installation for lower densities: no cuts in the raceways needed.

Applications of drop-offs in EDAs/Racks and Servers with vertical outlets. Ideal for environments from lower to medium density.

## Make side cuts for higher densities.

With the help of the **Side Outlet Cutting Tool** it is possible to open windows at the raceways and allow their derivation.



Low Density

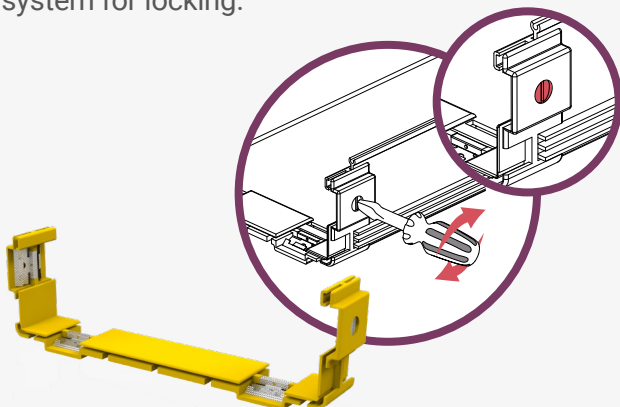
Medium Density

High Density

## Joiners

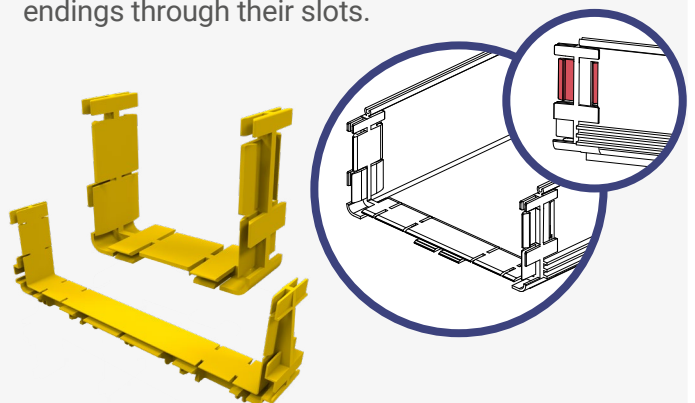
### Slotless

The slotless joiner does not require slots in the raceways, it is attached to them and uses a screw system for locking.



### Slotted

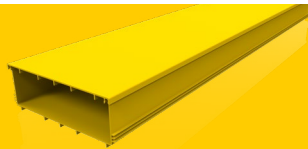
All the 2 m long standard raceways have factory made slots at their endings. The slotted joiner has snaps to attach and lock the ducts and parts endings through their slots.



# Quick Reference

Make your purchase easier. Always keep the product descriptions at hand.

## Main Raceways



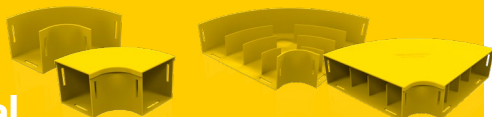
### With Lid

- 35150282 ITMAX Duct 100 mm Raceway with Lid
- 35150280 ITMAX Duct 220 mm Raceway with Lid
- 35150284 ITMAX Duct 300 mm Raceway with Lid

### Without Lid

- 35150283 ITMAX Duct 100 mm Raceway without Lid
- 35150281 ITMAX Duct 220 mm Raceway without Lid
- 35150285 ITMAX Duct 300 mm Raceway without Lid
- 35150286 ITMAX Duct 600 mm Raceway without Lid

## Horizontal Elbows 90 Degrees



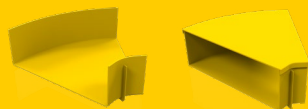
### With Lid

- 35150353 ITMAX Duct 100 mm Horizontal Elbow 90 Degrees with Lid
- 35150296 ITMAX Duct 220 mm Horizontal Elbow 90 Degrees with Lid
- 35150387 ITMAX Duct 300 mm Horizontal Elbow 90 Degrees with Lid

### Without Lid

- 35150354 ITMAX Duct 100 mm Horizontal Elbow 90 Degrees without Lid
- 35150297 ITMAX Duct 220 mm Horizontal Elbow 90 Degrees without Lid
- 35150124 ITMAX Duct 300 mm Horizontal Elbow 90 Degrees without Lid
- 35150390 ITMAX Duct 600 mm Horizontal Elbow 90 Degrees without Lid

## Horizontal Elbows 45 Degrees



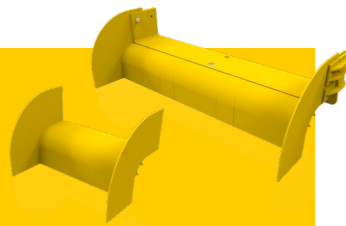
### With Lid

- 35150355 ITMAX Duct 100 mm Horizontal Elbow 45 Degrees with Lid
- 35150298 ITMAX Duct 220 mm Horizontal Elbow 45 Degrees with Lid
- 35150380 ITMAX Duct 300 mm Horizontal Elbow 45 Degrees with Lid

### Without Lid

- 35150356 ITMAX Duct 100 mm Horizontal Elbow 45 Degrees without Lid
- 35150299 ITMAX Duct 220 mm Horizontal Elbow 45 Degrees without Lid
- 35150381 ITMAX Duct 300 mm Horizontal Elbow 45 Degrees without Lid
- 35150391 ITMAX Duct 600 mm Horizontal Elbow 45 Degrees without Lid

## Vertical Elbows 90 Degrees



### With Lid

- 35150363 ITMAX Duct 100 mm Vertical Elbow 90 Degrees with Lid
- 35150364 ITMAX Duct 220 mm Vertical Elbow 90 Degrees with Lid
- 35150366 ITMAX Duct 300 mm Vertical Elbow 90 Degrees with Lid

### Without Lid

- 35150394 ITMAX Duct 600 mm Vertical Elbow 90 Degrees without Lid

## Horizontal Crosses



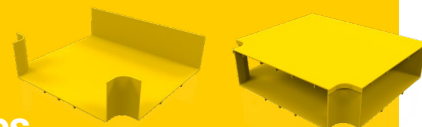
### With Lid

- 35150361 ITMAX Duct 100 mm Horizontal Cross with Lid
- 35150358 ITMAX Duct 220 mm Horizontal Cross with Lid
- 35150379 ITMAX Duct 300 mm Horizontal Cross with Lid

### Without Lid

- 35150362 ITMAX Duct 100 mm Horizontal Cross without Lid
- 35150359 ITMAX Duct 220 mm Horizontal Cross without Lid
- 35150378 ITMAX Duct 300 mm Horizontal Cross without Lid
- 35150393 ITMAX Duct 600 mm Horizontal Cross without Lid

## Horizontal Tees

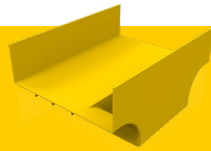


### With Lid

- 35150289 ITMAX Duct 100 mm Horizontal Tee with Lid
- 35150287 ITMAX Duct 220 mm Horizontal Tee with Lid
- 35150373 ITMAX Duct 300 mm Horizontal Tee with Lid

### Without Lid

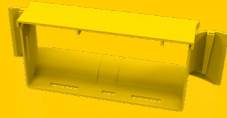
- 35150290 ITMAX Duct 100 mm Horizontal Tee without Lid
- 35150288 ITMAX Duct 220 mm Horizontal Tee without Lid
- 35150374 ITMAX Duct 300 mm Horizontal Tee without Lid
- 35150392 ITMAX Duct 600 mm Horizontal Tee without Lid



## Vertical Tees

With Lid

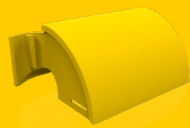
- 35150360 ITMAX Duct 100 mm Vertical Tee to 100 mm with Lid
- 35150293 ITMAX Duct 220 mm Vertical Tee to 100 mm with Lid
- 35150372 ITMAX Duct 300 mm Vertical Tee to 220 mm with Lid
- 35150384 ITMAX Duct 220 mm Vertical Tee to 220 mm with Lid



## Side Outlets

With Lid

- 35150367 ITMAX Duct 100 mm Side Outlet with Lid
- 35150385 ITMAX Duct 220 mm Side Outlet with Lid
- 35150386 ITMAX Duct 300 mm Side Outlet with Lid



## Side Outlets 90 Degrees

With Lid

- 35150396 ITMAX Duct 100 mm Side Outlet 90 Degrees with Lid
- 35150397 ITMAX Duct 220 mm Side Outlet 90 Degrees with Lid



## Vertical Outlets

With Lid

- 35150400 ITMAX Duct Vertical Top Outlet for 50 mm x 50 mm with Lid
- 35150382 ITMAX Duct Vertical Top Outlet for 100 mm x 100 mm with Lid



## End Caps

Slotless

- 35150370 ITMAX Duct 100 mm End Cap Slotless
- 35150371 ITMAX Duct 220 mm End Cap Slotless
- 35150377 ITMAX Duct 300 mm End Cap Slotless
- 35150395 ITMAX Duct 600 mm End Cap Slotless

With Outlet, for 44 mm Corrugated Conduit

- 35150365 ITMAX Duct 50 mm End Cap Outlet for 44 mm Corrugated Tube

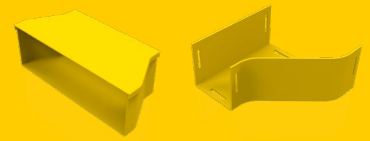
With Outlet, for 88 mm Corrugated Conduit

- 35150398 ITMAX Duct 100 mm End Cap Outlet for 88 mm Corrugated Tube



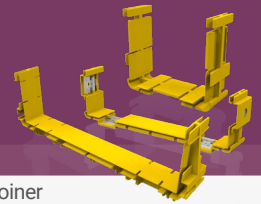
## Convoluted Flex Tubes

- 35150357 ITMAX Duct Convoluted Tube 50 mm x 2 m
- 35150399 ITMAX Duct Convoluted Tube 88 mm x 2 m



## Reducers

- 35150375 ITMAX Duct Reducer 300 - 220 mm with Lid
- 35150388 ITMAX Duct Reducer 600 - 300 mm without Lid
- 35150291 ITMAX Duct Right Reducer 220 - 100 mm with Lid
- 35150292 ITMAX Duct Left Reducer 220 - 100 mm with Lid



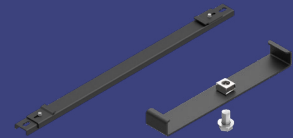
## Joiners

Slotted

- 35150295 ITMAX Duct 100 mm Slotted Joiner
- 35150294 ITMAX Duct 220 mm Slotted Joiner
- 35150383 ITMAX Duct 300 mm Slotted Joiner

Slotless

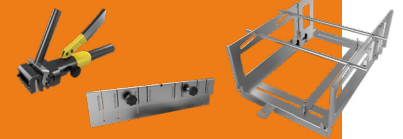
- 35150368 ITMAX Duct 100 mm Slotless Joiner
- 35150369 ITMAX Duct 220 mm Slotless Joiner
- 35150376 ITMAX Duct 300 mm Slotless Joiner
- 35150389 ITMAX Duct 600 mm Slotless Joiner



## Horizontal Mounting Brackets

- 35150414 ITMAX Duct Horizontal Mounting Bracket 100 mm
- 35150412 ITMAX Duct Horizontal Mounting Bracket 220 mm
- 35150425 ITMAX Duct Horizontal Mounting Bracket 300 mm
- 35150426 ITMAX Duct Horizontal Mounting Bracket 600 mm

\* Check the need for local infrastructure in the product manual.



## Tools

- 35150467 ITMAX Duct Cutting Tool 300, 220 and 100 mm
- 35150468 ITMAX Duct Side Outlet Cutting Tool
- 35150469 ITMAX Channel Slot Creation Tool with Case



Learn more

