



Cable conduction  
and protection  
system

# Insulating cable tray

# 66

raw material  
colour

**U23X**

**Grey**



# 66

**U23X**

Grey

Insulating  
cable tray

For support, protection and conduction of cables

- **Good performance outdoors and to corrosion due to over 40 years experience in outdoor installations.**
- Insulating material, providing electrical safety.
- Designed to support full load.


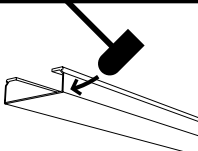
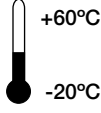



Raw material

**U23X**Cable trays and  
elements

Compliant



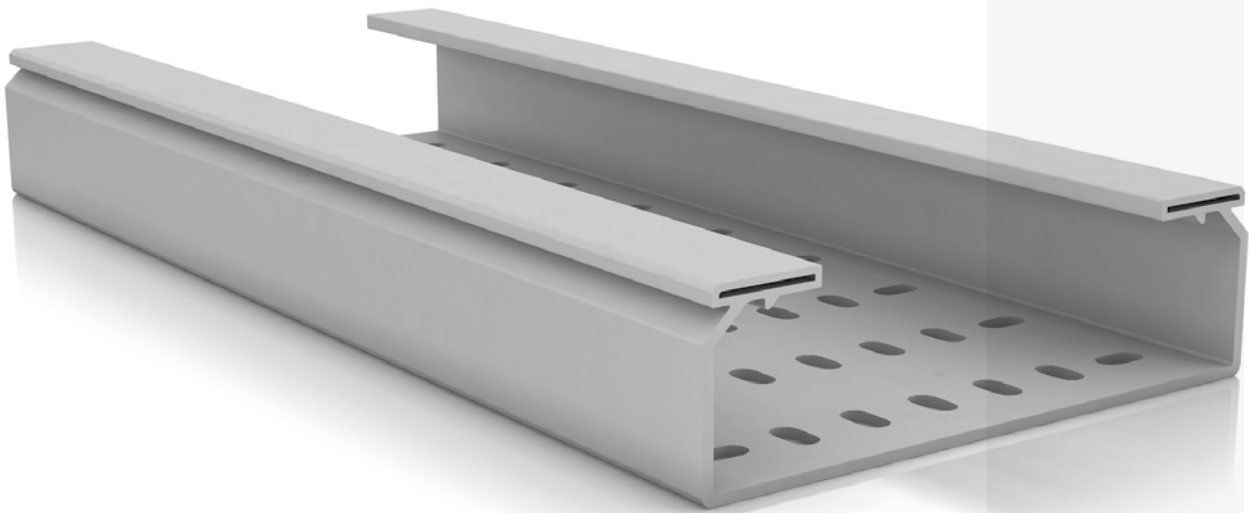
Technical characteristics

<p><b>Electrical</b></p>  <p><b>IEC 61537*</b></p> <p>Insulating material.</p> <hr/> <p>No earthing required.</p>	<p><b>Mechanical</b></p>  <p><b>IEC 61537*</b></p> <p>20J at -20°C (except 60x75: 5 J and 60x100: 10 J).</p> <hr/> <p>IK10 acc./EN 50085-2-1 (cable tray with cover).</p>	<p><b>Service temperature</b></p>  <p><b>IEC 61537*</b></p>	<p><b>Corrosion</b></p>  <p><b>ISO/TR 10358 DIN 8061</b></p> <p>Good resistance to corrosion and to chemical agents.</p>
<p><b>Outdoors</b></p> <p>Suitable for outdoor</p>  <p><b>ANSI/UL 568</b></p> <p>Good performance outdoors and with exposure to UV rays.</p>	<p><b>In front of fire</b></p>  <p>Glow-wire test at 960°C.</p> <hr/> <p>Non flame propagating.</p> <hr/> <p>Reaction to fire, Class M1 acc./UNE 201010.</p> <hr/> <p>Flammability test UL94: V0 (thickness of the material tested: 2.5 mm).</p>		

\* The values indicated according to IEC 61537 have been tested under the equivalent standard EN 61537. BS EN 61537 is the UK implementation of EN 61537 and IEC 61537.

Insulating  
cable tray

**66** **U23X**  
Grey



Length

**3 m**

Colour

**Grey**

**RAL 7035**

Non perforated  
or perforated base

### Quality marks



### Approvals



### Conformity declaration



See updated technical  
information of each  
part number on  
[www.unex.net](http://www.unex.net)

66

U23X  
Grey

Insulating  
cable tray



Petrochemical industry



Railway infrastructure



Airport: technical gallery





Water treatment: desalination plant



Railway infrastructure



Waste water treatment plant

66

U23X

Grey

Insulating  
cable tray



Photovoltaics



Pharmaceutical industry

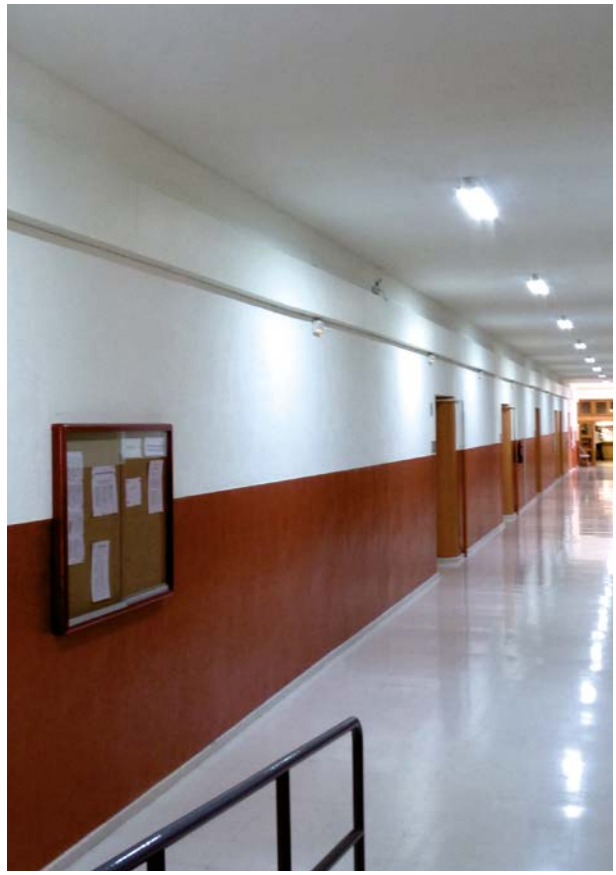


Infrastructure: parking





Work spaces: conference hall



School

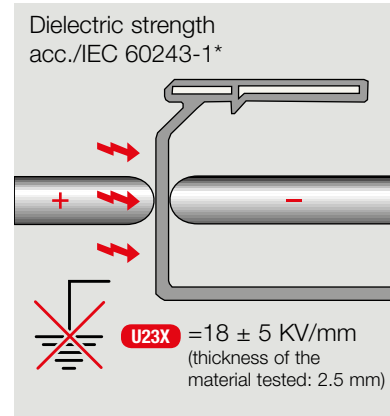
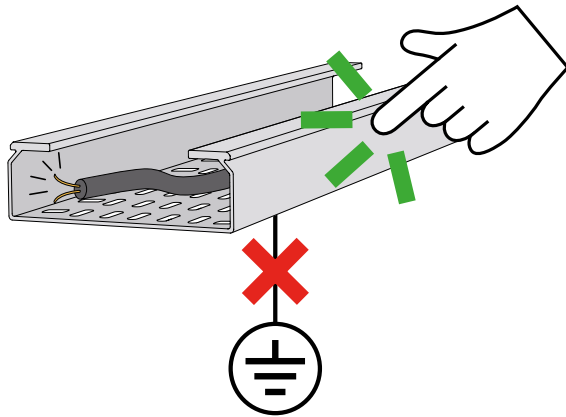


Infrastructure: harbour

# Higher safety for the installation

Insulating material: increased protection for people and cables

Provides additional insulation for people and cables, which remains unaltered in the course of time.



\* BS EN 60243-1 is the UK implementation of EN 60243-1 and IEC 60243-1.

Insulating material:

Advantages	Benefits
<p>Avoids creepage towards the conducting element:</p> <ul style="list-style-type: none"> <li>• Risk of indirect contacts with the conducting element is reduced.</li> <li>• Possible sources of fire are reduced.</li> <li>• No need to earth the conducting element.</li> <li>• Avoids hot spots and electrical arcs between cables and cable tray.</li> </ul>	<p>Increased protection for people and cables.</p>
<p>Increased protection against indirect contacts: Provides an insulating enclosure:</p> <ul style="list-style-type: none"> <li>• Protection degree IP3X/IP2X: Cable tray + cover.</li> <li>• Protection degree IP3XD: Non perforated cable tray + cover + joint cover piece + flat corners and semi T cover.</li> </ul>	
<p>No earthing required:</p> <ul style="list-style-type: none"> <li>• No maintenance.</li> </ul>	<p>Cost saving due to the ease of the installation, project management and maintenance.</p>



## Good resistance to corrosion

The raw material assures excellent behaviour in front of corrosion; this feature is inherent, **it is not achieved by applying a coating to the final product.**

Therefore, the corrosion protection remains unchanged:

- In the course of time.
- After cutting and manual processing the material in the worksite.



## Outdoor behaviour

Unex insulating cable trays are designed to assure a good protection against the UV rays:

- Own raw material formulation, suitable for UV rays exposure.
- Unex insulating cable trays are endorsed by **40 years' experience** in outdoor installations.

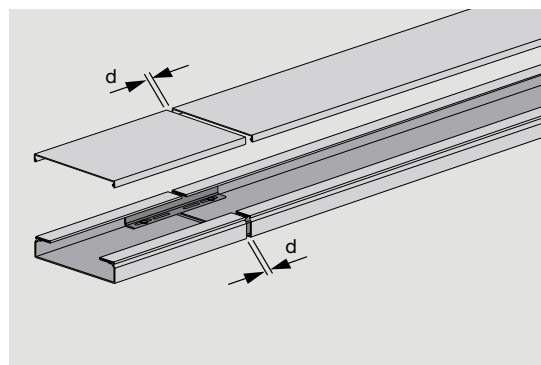


Unex insulating cable trays are designed to absorb linear expansion. The **“d” distance** between two lengths varies depending on the difference between the maximum temperature and the installation temperature.

### Separation between lengths

$\Delta T$ (°C)	d (mm)
20	5
30	7
40	9
50	11

$$\Delta T = T_{\max} - T_{\text{inst.}}$$



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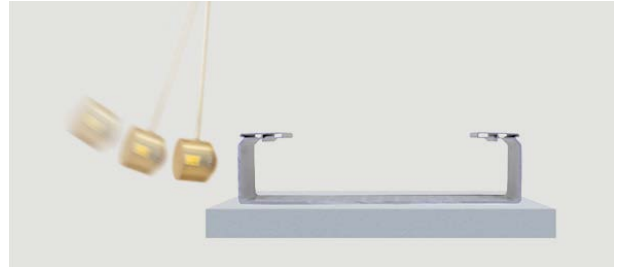
## High impact absorption

### Impact test acc./IEC 61537\* at the minimum declared temperature.

Unex designs its cable trays to avoid impact damage at their lowest declared temperature (-20°C).

Impact resistance	Minimum temperature
20 J	-20°C

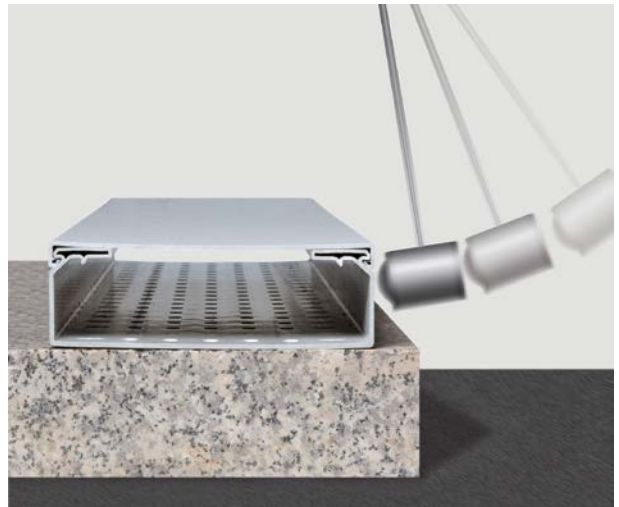
Except sizes 60x75: (5 J) and 60x100: (10 J).



### Impact test acc./EN 50085-1\*

Unex insulating cable tray with cover, by complying with the European Standard EN 50085-2-1\*, is considered a protecting enclosure (trunking).

Impact test for trunkings: IK10 (with cover fixing).



## Reaction to fire

Unex cable tray passes the flammability and flame-propagation tests included in IEC 61537\* with the best classification required from organic materials.



### Glow-wire test IEC 61537\*.

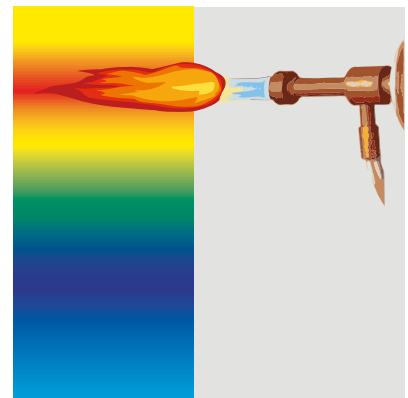
Test measuring the material's flammability by overheating a conductor.



### Non-flame propagating IEC 61537\*.

Test measuring flame spread caused by electrical ignition sources.

**Flammability test UL94: V0**  
(thickness of the material tested: 2.5 mm).



### No heat propagation.

As a result of the low thermal conductivity of insulating materials, no hot spots are generated away from the fire source.

\* BS EN 61537 is the UK implementation of EN 61537 and IEC 61537.

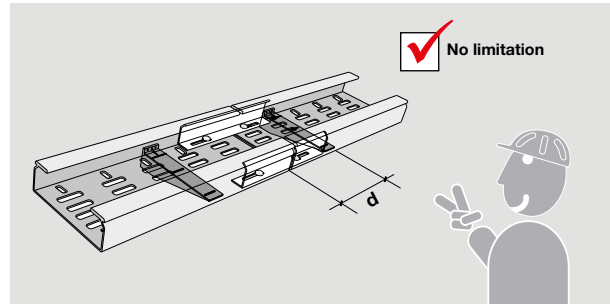
\* BS EN 50085-1 is the UK implementation of EN 50085-1.

## Designed to work at 100% cable capacity

### Safe working load test **Type I acc./IEC 61537\***

- Longitudinal deflection <1% and transverse deflection <5%.
- Safety coefficient **1.7**.

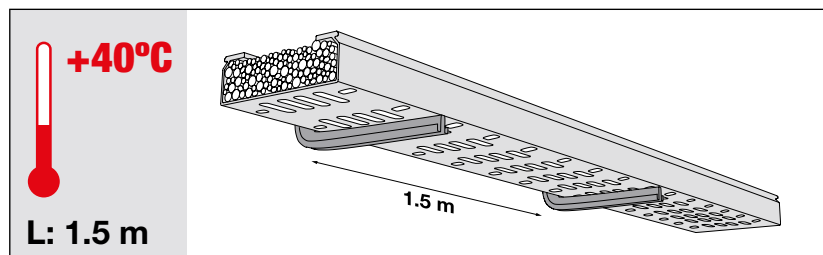
Allows placing the junctions at any point between two brackets, assuring the safe admissible load.



## Type I full load

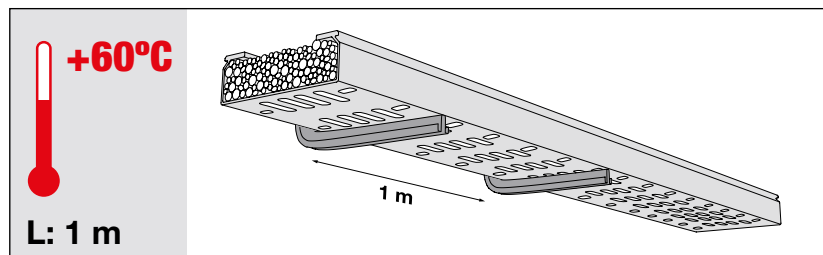
### Higher safety for the installation.

Simpler calculation process in the design of the cable tray, execution and control of the installation. Load resistance in future extensions of the installation.



Unex has designed a cable tray which is able to:

- Support the load of all the cables that may fit in the tray, considering the filling ratio.



## Safe working load (SWL) in (kg/m) or (N) acc/ IEC 61537\*

Sizes (mm)	60x75	60x100	60x150	60x200	60x300	60x400	100x200	100x300	100x400	100x500	100x600
<b>Safe working load (Kg/m) SWL</b>	<b>7.9</b>	<b>10.8</b>	<b>16.6</b>	<b>22.5</b>	<b>33.7</b>	<b>45.6</b>	<b>37.6</b>	<b>57.3</b>	<b>77.2</b>	<b>96.6</b>	<b>116.5</b>
<b>Safe working load (N) SWL</b>	<b>78</b>	<b>105</b>	<b>162</b>	<b>220</b>	<b>330</b>	<b>446</b>	<b>369</b>	<b>561</b>	<b>756</b>	<b>946</b>	<b>1141</b>

For cable trays of width  $\geq 300$  mm the use of a base union is necessary to comply with the requirements of full load transverse deflection defined by international Cable trays Standard IEC 61537.

## Packaging

A packaging designed to protect the product's characteristics during transport and storage, until the moment of final use.



\*BS EN 61537 is the UK implementation of EN 61537 and IEC 61537.



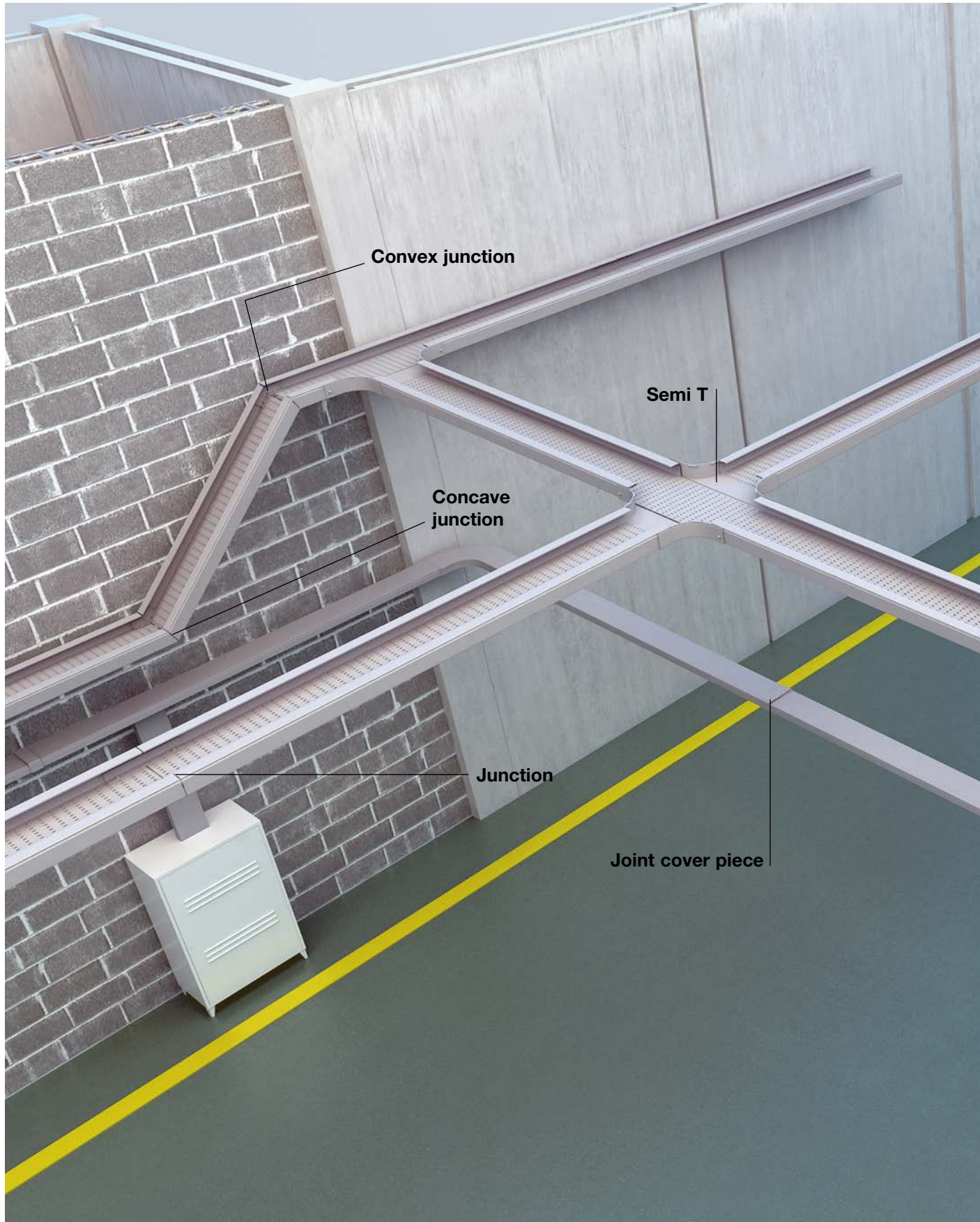
66

U23X  
Grey

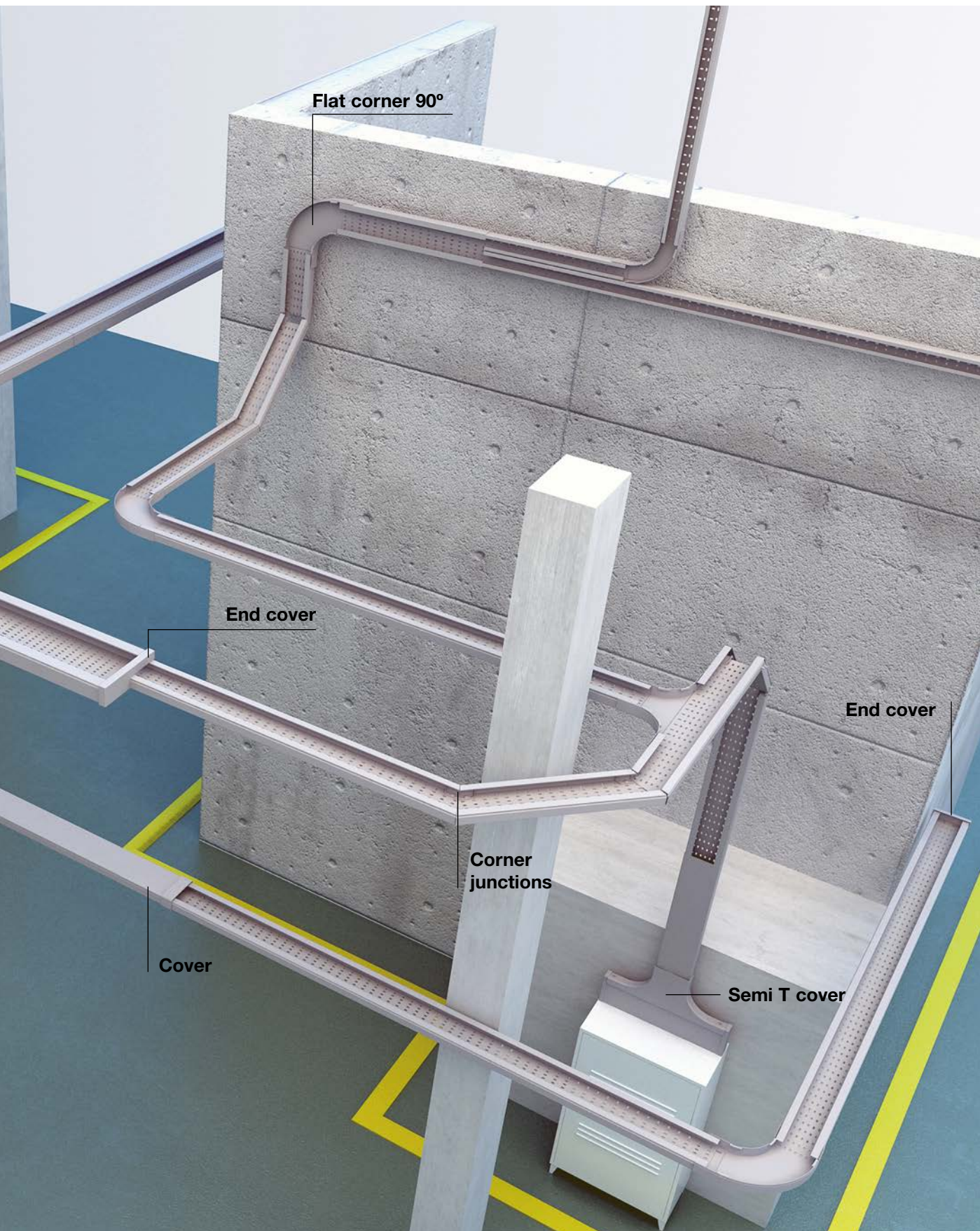
Insulating  
cable tray

# Elements for cable conduction

Safe, easy and quick mounting









66

U23X

Grey

Insulating  
cable tray

# Supporting elements

U23X

Temperature	≤ 40°C	≤ 60°C
Distance between brackets (L)	1.5 m	1 m

## Wall

### Directly (1 level)



#### Horizontal supports in:

- U23X (insulating).
- SST. AISI 304 with grey epoxy coating.
- Galvanized steel with grey epoxy coating.

#### L bracket in:

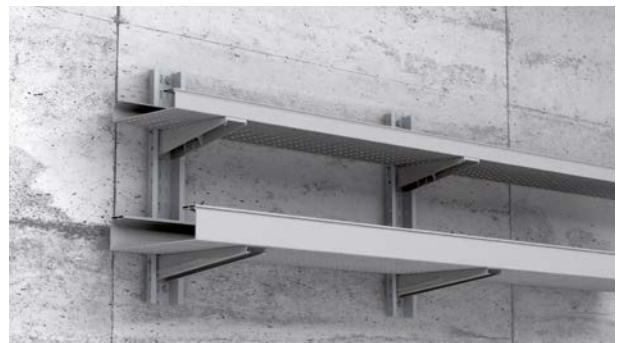
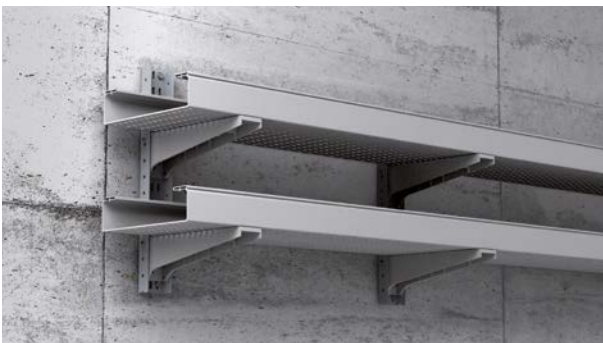
- Steel sendzimir.
- Galvanized steel with grey epoxy coating.



#### Insulating vertical support in U23X ⚠

Just one piece: added safety.

### By means of a profile (several levels)



#### Perforated U profile in:

- U23X (insulating).
- With insulating horizontal supports in U23X.

#### Perforated Ω profile in:

- SST. AISI 304 with grey epoxy coating.
  - Galvanized steel with grey epoxy coating.
- With horizontal support U23X and/or metallic.



## Ceiling

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### Two L brackets in:

- Steel sendzimir.
- Galvanized steel with grey epoxy coating.



### Metallic perforated U profile in:

- SST. AISI 304 with grey epoxy coating.
  - Galvanized steel with grey epoxy coating.
- With insulating horizontal supports **U23X**.



### Metallic perforated $\Omega$ profile in:

- SST. AISI 304 with grey epoxy coating.
  - Galvanized steel with grey epoxy coating.
- With horizontal supports **U23X** and/or metallic.

## Floor

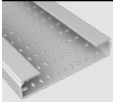




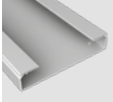


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**Insulating vertical support in **U23X****

Just one piece: added safety.







Trays must be fixed to the insulating vertical supports by means of metal screws in every mounting layout.

		Cable tray sizes (mm)	60x75	60x100	60x150	60x200
 <p><b>Grey</b> RAL 7035 (Part no. 66xxx)</p>						
	<b>Perforated cable tray</b> 3 m		<b>66090</b>	<b>66100</b>	<b>66150</b>	<b>66200</b>
	<b>Non perforated cable tray</b> 3 m		<b>66091</b>	<b>66101</b>	<b>66151</b>	<b>66201</b>
	<b>Cover</b> 3 m		<b>66072</b>	<b>66102</b>	<b>66152</b>	<b>66202</b>

### Junction parts in **U23X**

	<b>Junction with bolt</b>		<b>66824</b>
	<b>Bolts</b>		<b>66832</b>
	<b>Junction without bolt</b>		<b>66825</b>
	<b>Nuts and bolts</b> (M 8 DIN 603 ISO 8677)		<b>66809</b>

### Cable conduction parts in **U23X**

	<b>Divider</b> 3 m		<b>66821</b>
	<b>Nuts and bolts</b> (M 8 DIN 603 ISO 8677)		<b>66809</b>
	<b>Reinforced divider</b> 3 m		<b>66826</b>
	<b>Nuts and bolts</b> (M 8 DIN 603 ISO 8677)		<b>66809</b>
	<b>Divider fixing for telecommunications</b>		<b>66840 (2) (3)</b>
	<b>Divider</b> 3 m		<b>73830</b>

(1) As an alternative for metallic nuts and bolts and plugs, when insulating protection is required, use part numbers 66829 Hexagonal nuts and bolts AISI 304 (M 8x25 DIN 6921) + 66819 Insulating protector for plugs.

(2) Only for perforated cable trays.

(3) Precise 2 fixings per meter of divider in horizontal paths, 3 fixings per meter in vertical paths and 4 fixings per meter in horizontal paths and vertical position.

60x300

60x400

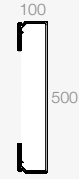
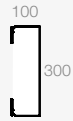
100x200

100x300

100x400

100x500

100x600

**66300****66400****66220****66320****66420****66520****66620****66301****66401****66221****66321****66421****66521****66621****66302****66402****66202****66302****66402****66502****66602****66824****66834****66832****66825****66835**

+

+

**66809****66839 (1)****66821****66831**

+

+

**66809****66839 (1)****66826****66836**

+

+

**66809****66839 (1)****66840 (2) (3)**

+

**73830**

See next page





Cable tray sizes (mm)		60x75	60x100	60x150	60x200
<div style="border: 1px solid black; border-radius: 10px; padding: 5px; display: inline-block;">Grey</div> RAL 7035 (Part no. 66xxx)					
	<b>Perforated cable tray</b> 3 m	<b>66090</b>	<b>66100</b>	<b>66150</b>	<b>66200</b>
	<b>Non perforated cable tray</b> 3 m	<b>66091</b>	<b>66101</b>	<b>66151</b>	<b>66201</b>

### Cable conduction parts in U23X

	<b>Flat corner 90°</b>	<b>66060</b>	<b>66110</b>	<b>66160</b>	<b>66210</b>
+ 4 x <b>Nuts and bolts</b> (M 8 DIN 603 ISO 8677)		<b>66809</b>			
	<b>Flat corner cover 90° (2)</b>	<b>66061</b>	<b>66111</b>	<b>66161</b>	<b>66211</b>
	<b>End cover (3)</b>	<b>66093</b>	<b>66113</b>	<b>66163</b>	<b>66213</b>
	<b>Joint cover piece</b>	<b>66094</b>	<b>66114</b>	<b>66164</b>	<b>66214</b>
	<b>Semi T</b>	<b>66078</b>	<b>66128</b>	<b>66178</b>	<b>66228</b>
+ 6 x <b>Nuts and bolts</b> (M 8 DIN 603 ISO 8677)		<b>66809</b>			
	<b>Semi T cover (2)</b>	<b>66079</b>	<b>66129</b>	<b>66179</b>	<b>66229</b>
	<b>Cover fixing IK10 (5)</b>	<b>66845</b>			
	<b>Tele rail</b> 2 m	<b>6035</b>			
		<b>6050</b>			

- (1) As an alternative for metallic nuts and bolts and plugs, when insulating protection is required, use part numbers 66829 Hexagonal nuts and bolts AISI 304 (M 8x25 DIN 6921) + 66819 Insulating protector for plugs.
- (2) Include 4 nuts and bolts part no. 66001 AISI 304 to fix optional cover.
- (3) Include 2 nuts and bolts AISI 304.
- (4) Part numbers 66428, 66448 and 66548 require 7 screws to fix to the cable tray. Part number 66648 requires 8 screws.
- (5) To mount over fixing screws of the unions. Not compatible with bolts.

60x300

60x400

100x200

100x300

100x400

100x500

100x600

<b>66300</b>	<b>66400</b>	<b>66220</b>	<b>66320</b>	<b>66420</b>	<b>66520</b>	<b>66620</b>
<b>66301</b>	<b>66401</b>	<b>66221</b>	<b>66321</b>	<b>66421</b>	<b>66521</b>	<b>66621</b>



<b>66310</b>	<b>66410</b>	<b>66230</b>	<b>66330</b>	<b>66430</b>	<b>66530</b>	<b>66630</b>
+	+	+	+	+	+	+
<b>66809</b>		<b>66839 (1)</b>				
<b>66311</b>	<b>66411</b>	<b>66211</b>	<b>66311</b>	<b>66411</b>	<b>66511</b>	<b>66611</b>
<b>66313</b>	<b>66413</b>	<b>66233</b>	<b>66333</b>	<b>66433</b>	<b>66533</b>	<b>66633</b>
<b>66314</b>	<b>66414</b>	<b>66234</b>	<b>66334</b>	<b>66434</b>	<b>66534</b>	<b>66634</b>
<b>66328</b>	<b>66428 (4)</b>	<b>66248</b>	<b>66348</b>	<b>66448 (4)</b>	<b>66548 (4)</b>	<b>66648 (4)</b>
+	+	+	+	+	+	+
<b>66809</b>		<b>66839 (1)</b>				
<b>66329</b>	<b>66429</b>	<b>66229</b>	<b>66329</b>	<b>66429</b>	<b>66529</b>	<b>66629</b>
<b>66845</b>		<b>66855</b>				
<b>6035</b>						
<b>6050</b>						

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		Cable tray sizes (mm)	60x75	60x100	60x150	60x200
<span style="border: 1px solid black; border-radius: 10px; padding: 2px;">Grey</span> <b>RAL 7035</b> (Part no. 66xxx)						
	<b>Perforated cable tray</b> 3 m		<b>66090</b>	<b>66100</b>	<b>66150</b>	<b>66200</b>
	<b>Non perforated cable tray</b> 3 m		<b>66091</b>	<b>66101</b>	<b>66151</b>	<b>66201</b>

### Other junction parts in U23X

	<b>Base unions (1)</b> Limiting the transversal cable sag. Note: 2 screws are included.	
1 x + 4 x	<b>Corner junctions</b> Mounting corner junctions at 45° Note: A unit is composed by a set of 2 pieces (right and left).  <b>Nuts and bolts</b> (M 8 DIN 603 ISO 8677)	<b>66841</b>  +  <b>66809</b>
2 x + 4 x	<b>Convex change</b> - 45° level-changing  <b>Nuts and bolts</b> (M 8 DIN 603 ISO 8677)	<b>66842</b>  +  <b>66809</b>
2 x + 4 x	<b>Concave change</b> + 45° level-changing  <b>Nuts and bolts</b> (M 8 DIN 603 ISO 8677)	<b>66843</b>  +  <b>66809</b>
2 x + 8 x	<b>Vertical hinge</b> Variable-angle level changing.  <b>Nuts and bolts</b> (M 8 DIN 603 ISO 8677)	<b>66813</b>  +  <b>66809</b>
2 x + 4 x	<b>Horizontal hinge</b> <span style="background-color: red; color: white; padding: 2px;">U24X</span>  <b>Nuts and bolts</b> (M 8 DIN 603 ISO 8677)	<b>66844</b>  +  <b>66809</b>

(1) For cable trays of width  $\geq 300$  mm the use of a base union is necessary to comply with the requirements of full load transverse deflection defined by international Cable trays Standard IEC 61537.

(2) As an alternative for metallic nuts and bolts and plugs, when insulating protection is required, use part numbers 66829 Hexagonal nuts and bolts AISI 304 (M 8x25 DIN 6921) + 66819 Insulating protector for plugs.



60x300

60x400

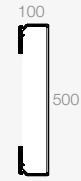
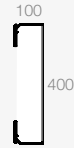
100x200

100x300

100x400

100x500

100x600



66300

66400

66220

66320

66420

66520

66620

66301

66401

66221

66321

66421

66521

66621

66820

66820

66830

66841

66851

+

+

66809

66839 (2)

66842

66852

+

+

66809

66839 (2)

66843

66853

+

+

66809

66839 (2)

66813

66833

+

+

66809

66839 (2)

66844

66854

+

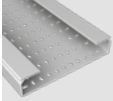




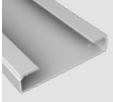
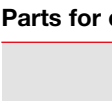
+

66809


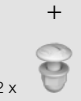






66839 (2)

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Parts for direct wall fixing (one level)

	Cable tray sizes (mm)	60x75	60x100	60x150	60x200
	<b>Grey</b> RAL 7035 (Part no. 66xxx)				
	<b>Perforated cable tray</b> 3 m	<b>66090</b>	<b>66100</b>	<b>66150</b>	<b>66200</b>
	<b>Non perforated cable tray</b> 3 m	<b>66091</b>	<b>66101</b>	<b>66151</b>	<b>66201</b>

Parts for direct wall fixing (one level) in **U23X** and steel

	<b>Insulating U23X</b> <b>Horizontal support</b> SST AISI 304 with grey epoxy coating Galvanized steel with grey epoxy coating	<b>66103</b>	<b>66153</b>	<b>66203</b>
	<b>Nuts and bolts</b> (M 8 DIN 603 ISO 8677)	<b>66809</b>		
	<b>L bracket</b> Galvanized steel with grey epoxy coating Steel Sendzimir	<b>66106</b>	<b>66206</b>	
	<b>Nuts and bolts</b> (M 8 DIN 603 ISO 8677)	<b>66107</b>	<b>66207</b>	
	<b>Insulating vertical support U23X</b> Note: Use metal screws to fix the tray.	<b>66075</b>	<b>66155</b>	<b>66205</b>
	<b>Nuts and bolts</b> (M 8 DIN 603 ISO 8677) SST AISI 304	<b>66839 (1)</b>		
	<b>Nuts and bolts</b> (M 8x25 DIN 6921) SST AISI 304	<b>66829</b>		
	<b>Insulating protector for plug</b> LDPE	<b>66819</b>		

(1) As an alternative for metallic nuts and bolts and plugs, when insulating protection is required, use part numbers 66829 Hexagonal nuts and bolts AISI 304 (M 8x25 DIN 6921) + 66819 Insulating protector for plugs.

60x300

60x400

100x200

100x300

100x400

100x500

100x600

<b>66300</b>	<b>66400</b>	<b>66220</b>	<b>66320</b>	<b>66420</b>	<b>66520</b>	<b>66620</b>
<b>66301</b>	<b>66401</b>	<b>66221</b>	<b>66321</b>	<b>66421</b>	<b>66521</b>	<b>66621</b>



<b>66303</b>	<b>66403</b>	<b>66203</b>	<b>66323</b>	<b>66403</b>	<b>66503</b>	<b>66603</b>
+				<b>66423</b>	<b>66523</b>	<b>66623</b>
+				<b>66424</b>	<b>66524</b>	<b>66624</b>
+				+		
<b>66809</b>		<b>66839 (1)</b>				
<b>66306</b>						
+						
<b>66307</b>						
+						
<b>66809</b>						
<b>66305</b>	<b>66405</b>	<b>66205</b>	<b>66305</b>	<b>66405</b>	<b>66605</b>	
+		+	+	+	+	
<b>66839 (1)</b>						
<b>66829</b>						
+						
<b>66819</b>						

See next page



Parts for wall fixing with profiles (several levels)

	Cable tray sizes (mm)	60x75	60x100	60x150	60x200
	<p>Grey</p> <p>RAL 7035</p> <p>(Part no. 66xxx)</p>				
	<b>Perforated cable tray</b> 3 m	<b>66090</b>	<b>66100</b>	<b>66150</b>	<b>66200</b>
	<b>Non perforated cable tray</b> 3 m	<b>66091</b>	<b>66101</b>	<b>66151</b>	<b>66201</b>

Parts for wall fixing with profiles (several levels) in **U23X** and steel

	<b>Insulating U profile</b> 2 m <b>U23X</b>	<b>66806</b>		
	<b>Insulating horizontal support</b> <b>U23X</b>	<b>66103</b>	<b>66153</b>	<b>66203</b>
	<b>Mounting pin</b> SST AISI 304	<b>66812</b>		
	<b>Nuts and bolts</b> (M 8 DIN 603 ISO 8677)	<b>66809</b>		
	<b>Ω perforated profile</b> SST AISI 304 with grey epoxy coating L = 0,50 m	<b>66837</b>		
	Galvanized steel with grey epoxy coating	<b>66937</b>		
	SST AISI 304 with grey epoxy coating L = 3 m	<b>66897</b>		
	Galvanized steel with grey epoxy coating	<b>66997</b>		
	<b>Insulating U23X</b>	<b>66103</b>	<b>66153</b>	<b>66203</b>
	<b>Horizontal support</b>			
<b>Mounting pin</b> SST AISI 304	<b>66812</b>			
<b>Nuts and bolts</b> (M 8 DIN 603 ISO 8677)	<b>66809</b>			

(1) As an alternative for metallic nuts and bolts and plugs, when insulating protection is required, use part numbers 66829 Hexagonal nuts and bolts AISI 304 (M 8x25 DIN 6921) + 66819 Insulating protector for plugs.  
 (2) Can be mounted with the mounting pin part no. 66812.

60x300

60x400

100x200

100x300

100x400

100x500

100x600

<b>66300</b>	<b>66400</b>	<b>66220</b>	<b>66320</b>	<b>66420</b>	<b>66520</b>	<b>66620</b>
<b>66301</b>	<b>66401</b>	<b>66221</b>	<b>66321</b>	<b>66421</b>	<b>66521</b>	<b>66621</b>

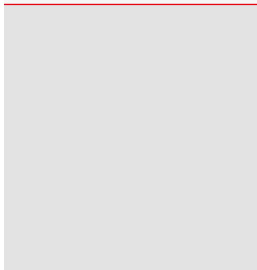








<b>66806</b>						
+	+	+	+			
<b>66303</b>	<b>66403</b>	<b>66203</b>	<b>66323</b>			
<b>66812</b>						
+			+			
<b>66809</b>			<b>66839 (1)</b>			
<b>66837</b>						
<b>66937</b>						
<b>66897</b>						
<b>66997</b>						
+	+	+	+	+	+	+
<b>66303</b>	<b>66403 (2)</b>	<b>66203</b>	<b>66323</b>	<b>66403 (2)</b>	<b>66503 (2)</b>	<b>66603 (2)</b>
	<b>66423</b>			<b>66423</b>	<b>66523</b>	<b>66623</b>
	<b>66424</b>			<b>66424</b>	<b>66524</b>	<b>66624</b>
	+	+		+	+	+
<b>66812</b>	<b>66822</b>	<b>66812</b>		<b>66822</b>		
<b>66809</b>						
<b>66839 (1)</b>						

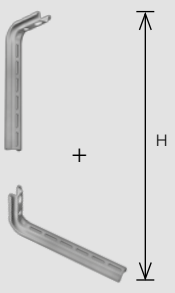
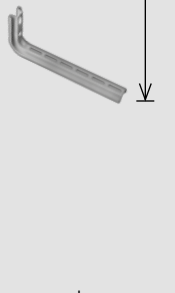
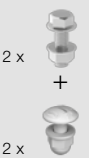
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Ceiling supports

	Cable tray sizes (mm)	60x75	60x100	60x150	60x200
	Grey RAL 7035 (Part no. 66xxx)				
	<b>Perforated cable tray</b> 3 m	<b>66090</b>	<b>66100</b>	<b>66150</b>	<b>66200</b>
	<b>Non perforated cable tray</b> 3 m	<b>66091</b>	<b>66101</b>	<b>66151</b>	<b>66201</b>

Ceiling fixing parts in steel

	Galvanized steel with grey epoxy coating	<b>66106</b> +	<b>66106</b> +
	<b>H = 150 mm</b>	<b>66106</b>	<b>66206</b>
	Steel Sendzimir	<b>66107</b> +	<b>66107</b> +
	<b>L bracket</b> + <b>L bracket</b>	<b>66107</b>	<b>66207</b>
	Galvanized steel with grey epoxy coating	<b>66206</b> +	<b>66206</b> +
	<b>H = 250 mm</b>	<b>66106</b>	<b>66206</b>
	Galvanized steel with grey epoxy coating	<b>66207</b> +	<b>66207</b> +
	<b>H = 350 mm</b>	<b>66107</b>	<b>66207</b>
	Steel Sendzimir	<b>66306</b> +	<b>66306</b> +
	Galvanized steel with grey epoxy coating	<b>66106</b>	<b>66206</b>
	<b>H = 350 mm</b>	<b>66307</b> +	<b>66307</b> +
	Steel Sendzimir	<b>66107</b>	<b>66207</b>
	<b>Nuts and bolts</b> (M 8x25 DIN 6921) SST AISI 304	<b>66829 (1)</b>	
	<b>Nuts and bolts</b> (M 8 DIN 603 ISO 8677) <b>U23X</b>	<b>66809 (2)</b>	

(1) To fix both L brackets, use nuts and bolts part no. 66829.

(2) To fix the cable tray to the L bracket, use nuts and bolts part no. 66809.

60x300

60x400

100x200

100x300

100x400

100x500

100x600

<b>66300</b>	<b>66400</b>	<b>66220</b>	<b>66320</b>	<b>66420</b>	<b>66520</b>	<b>66620</b>
<b>66301</b>	<b>66401</b>	<b>66221</b>	<b>66321</b>	<b>66421</b>	<b>66521</b>	<b>66621</b>



<b>66106</b> + <b>66306</b>	
<b>66107</b> + <b>66307</b>	
<b>66206</b> + <b>66306</b>	
<b>66207</b> + <b>66307</b>	
<b>66306</b> + <b>66306</b>	
<b>66307</b> + <b>66307</b>	
<b>66829</b> (1) + <b>66809</b> (2)	

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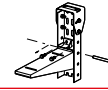


## Mounting of U perforated ceiling supports

(Compatible with cable trays **up to 60x300 mm**).

In installations with ceiling supports, the load calculations should be checked.

### Perforated U profile



### Supporting elements

		SST AISI 304 with grey epoxy coating	Galvanized steel with grey epoxy coating
	<b>U profile connector</b>	<b>66880</b>	<b>66980</b>
	<b>Nuts and bolts</b> (M 8x25 ISO EN 6921) SST AISI 304	<b>66829</b>	
	<b>Perforated U profile</b> L = 0,25 m	<b>66808</b>	<b>66908</b>
	L = 0,50 m	<b>66838</b>	<b>66938</b>
	L = 3 m	<b>66898</b>	<b>66998</b>
	<b>U profile Protector</b> PVC Plasticized	<b>66902</b>	
	<b>Insulating horizontal support</b>	See table below for horizontal supports (compatible only with insulating supports in <b>U23X</b> ).	
<b>Mounting pin</b> SST AISI 304	<b>66812</b>		

		Cable tray sizes (mm)	60x75	60x100	60x150	60x200
	<b>Perforated cable tray</b> 3 m		<b>66090</b>	<b>66100</b>	<b>66150</b>	<b>66200</b>
	<b>Non perforated cable tray</b> 3 m		<b>66091</b>	<b>66101</b>	<b>66151</b>	<b>66201</b>
	<b>Horizontal support</b> <b>U23X</b> Insulating SST AISI 304 with grey epoxy coating		<b>66103</b>		<b>66153</b>	<b>66203</b>
	<b>Nuts and bolts</b> (M 8 DIN 603 ISO 8677) Galvanized steel with grey epoxy coating		<b>66809</b>			

(1) Can be mounted with the mounting pin part no. 66812.

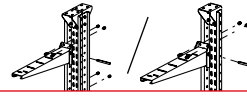
(2) As an alternative for metallic nuts and bolts, when insulating protection is required, use part numbers 66829 Hexagonal nuts and bolts AISI 304 (M 8x25 DIN 6921) + 66819 Insulating protector for plugs.

## Mounting of $\Omega$ perforated ceiling supports

(Compatible with all sizes of cable tray).

In installations with ceiling supports, the load calculations should be checked.

### Perforated $\Omega$ profile



### Supporting elements

		SST AISI 304 with grey epoxy coating	Galvanized steel with grey epoxy coating	
	<b><math>\Omega</math> profile connector</b>	<b>66890</b>	<b>66990</b>	
	<b>Nuts and bolts</b> (M 8x25 DIN 6921) SST AISI 304	<b>66829</b>		
	<b>Perforated <math>\Omega</math> profile</b>	L = 0,50 m	<b>66837</b>	<b>66937</b>
		L = 3 m	<b>66897</b>	<b>66997</b>
	<b><math>\Omega</math> profile protector</b> PVC Plasticized	<b>66903</b>		
	<b>Horizontal support</b>	See table below for horizontal supports.		
	<b>Mounting pin</b> SST AISI 304	<b>66812 (1)</b>		

(1) For horizontal supports in **U23X** use part no. 66812. For metallic supports use part no. 66822.

60x300

60x400

100x200

100x300

100x400

100x500

100x600

<b>66300</b>	<b>66400</b>	<b>66220</b>	<b>66320</b>	<b>66420</b>	<b>66520</b>	<b>66620</b>
<b>66301</b>	<b>66401</b>	<b>66221</b>	<b>66321</b>	<b>66421</b>	<b>66521</b>	<b>66621</b>
<b>66303</b>	<b>66403 (1)</b>	<b>66203</b>	<b>66323</b>	<b>66403 (1)</b>	<b>66503 (1)</b>	<b>66603 (1)</b>
	<b>66423</b>			<b>66423</b>	<b>66523</b>	<b>66623</b>
	<b>66424</b>			<b>66424</b>	<b>66524</b>	<b>66624</b>
<b>66809</b>	<b>66839 (2)</b>					

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### Useful cross-sections (mm<sup>2</sup>)

Sizes (mm)		60x75	60x100	60x150	60x200	60x300	60x400	100x200	100x300	100x400	100x500	100x600
<span style="border: 1px solid black; border-radius: 10px; padding: 2px;">Grey</span> RAL 7035												
<b>Part numbers Perforated cable tray</b>		<b>66090</b>	<b>66100</b>	<b>66150</b>	<b>66200</b>	<b>66300</b>	<b>66400</b>	<b>66220</b>	<b>66320</b>	<b>66420</b>	<b>66520</b>	<b>66620</b>
<b>Part numbers Non perforated cable tray</b>		<b>66091</b>	<b>66101</b>	<b>66151</b>	<b>66201</b>	<b>66301</b>	<b>66401</b>	<b>66221</b>	<b>66321</b>	<b>66421</b>	<b>66521</b>	<b>66621</b>
		2910	4349	7132	9900	15301	20789	16077	25231	34506	44064	53492
Divider	Section occupied		344	344	344	344	344	534	534	534	534	534
	Max. no. of compartments	1	2	3	5	7	11	4	7	11	15	17
Reinforced divider	Section occupied			343	343	343	343	673	673	673	673	673
	Max. no. of compartments	1	1	2	2	3	5	2	3	5	5	5

### Load test conditions TEST TYPE I acc./IEC 61537\*

		<span style="background-color: red; color: white; padding: 2px;">U23X</span>										
<b>Temperature</b>		40°C					60°C					
<b>Distance between supports (L)</b>		1.5 m					1 m					
<b>Longitudinal deflection</b>		Lower than 1% of the distance between supports										
<b>Transverse deflection</b>		Lower than 5% of the tray's width										

### Safe working load (SWL) in (kg/m) or (N) acc./IEC 61537\*

Sizes (mm)		60x75	60x100	60x150	60x200	60x300	60x400	100x200	100x300	100x400	100x500	100x600
<b>Safe working load (Kg/m) SWL</b>		<b>7.9</b>	<b>10.8</b>	<b>16.6</b>	<b>22.5</b>	<b>33.7</b>	<b>45.6</b>	<b>37.6</b>	<b>57.3</b>	<b>77.2</b>	<b>96.6</b>	<b>116.5</b>
<b>Safe working load (N) SWL</b>		<b>78</b>	<b>105</b>	<b>162</b>	<b>220</b>	<b>330</b>	<b>446</b>	<b>369</b>	<b>561</b>	<b>756</b>	<b>946</b>	<b>1141</b>

For Cable trays of width  $\geq 300$  mm the use of a base union is necessary to comply with the requirements of full load transverse deflection defined by international Cable trays Standard IEC 61537.

\*BS EN 61537 is the UK implementation of EN 61537 and IEC 61537.

## Supports. Safe working load (SWL) (kg) or (N) acc./IEC 61537\*

U23X

Temperature	40°C	60°C
Admissible deflection	Lower than 5% of the length of the support	
Overload without collapsing (deformation is admitted)	1.7 times the safe working load declared	
<b>Part no.</b>	<b>Insulating horizontal support</b>	
<b>66103</b>	35kg (343 N)	25kg (245 N)
<b>66153</b>	45kg (441 N)	30kg (294 N)
<b>66203</b>	60kg (588 N)	40kg (392 N)
<b>66303</b>	60kg (588 N)	40kg (392 N)
<b>66403</b>	116kg (1134 N)	77kg (756 N)
<b>66323</b>	95kg (930 N)	65kg (637 N)
<b>66503</b>	145kg (1421 N)	96.6kg (947 N)
<b>66603</b>	175kg (1712 N)	116.5kg (1141 N)
<b>Part no.</b>	<b>Insulating vertical support</b>	
<b>66075</b>	12kg (117 N)	7.9kg (78 N)
<b>66155</b>	25kg (243 N)	16.6kg (162 N)
<b>66205</b>	56kg (554 N)	37.6kg (369 N)
<b>66305</b>	86kg (842 N)	57.3kg (561 N)
<b>66405</b>	116kg (1134 N)	77kg (756 N)
<b>66605</b>	175kg (1712 N)	116.5kg (1141 N)

**In Steel sendzimir, galvanized steel with grey epoxy coating or Steel AISI 304 with epoxy coating**

Temperature	40°C and 60°C			
Admissible deflection	Lower than 5% of the length of the support			
Overload without collapsing (Deformation is admitted)	1.7 times the safe working load declared			
	<b>Steel sendzimir</b>	<b>Steel epoxy</b>	<b>Steel AISI 304</b>	<b>Metallic horizontal support</b>
<b>Part no.</b>		<b>66424</b>	<b>66423</b>	116kg (1137 N)
		<b>66524</b>	<b>66523</b>	145kg (1421 N)
		<b>66624</b>	<b>66623</b>	175kg (1715 N)
	<b>Steel sendzimir</b>	<b>Steel epoxy</b>	<b>Steel AISI 304</b>	<b>Metallic L support</b>
<b>Part no.</b>	<b>66107</b>	<b>66106</b>		90kg (882 N)
	<b>66207</b>	<b>66206</b>		55kg (540 N)
	<b>66307</b>	<b>66306</b>		51kg (500 N)

\*BS EN 61537 is the UK implementation of EN 61537 and IEC 61537.





# Unex online: Tools for specification

[www.unex.net](http://www.unex.net)

## Technical information

- Technical specifications
- Mounting instructions
- Different database formats



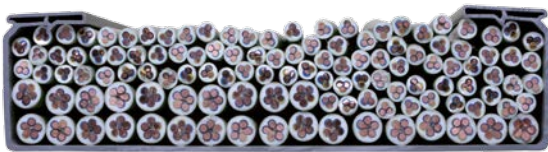
## Configurator

- Unex cable tray's configurator allows you to obtain a complete list of materials



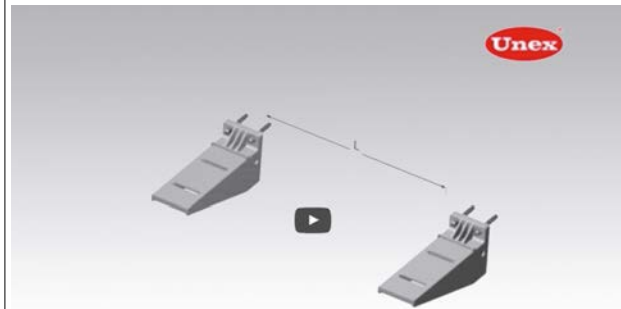
## Unexproject

- Your tool for dimensioning the cable tray according to the cables you are using in your project



## YouTube Unex Solutions

- Mounting videos



## EPLAN

Unex products are available in the EPLAN Data Portal, classified as "Electrical engineering" and "Mechanics".



## Databases

As a customer-oriented company, we provide our data in different formats: BIM-REVIT and 3D-DWG.