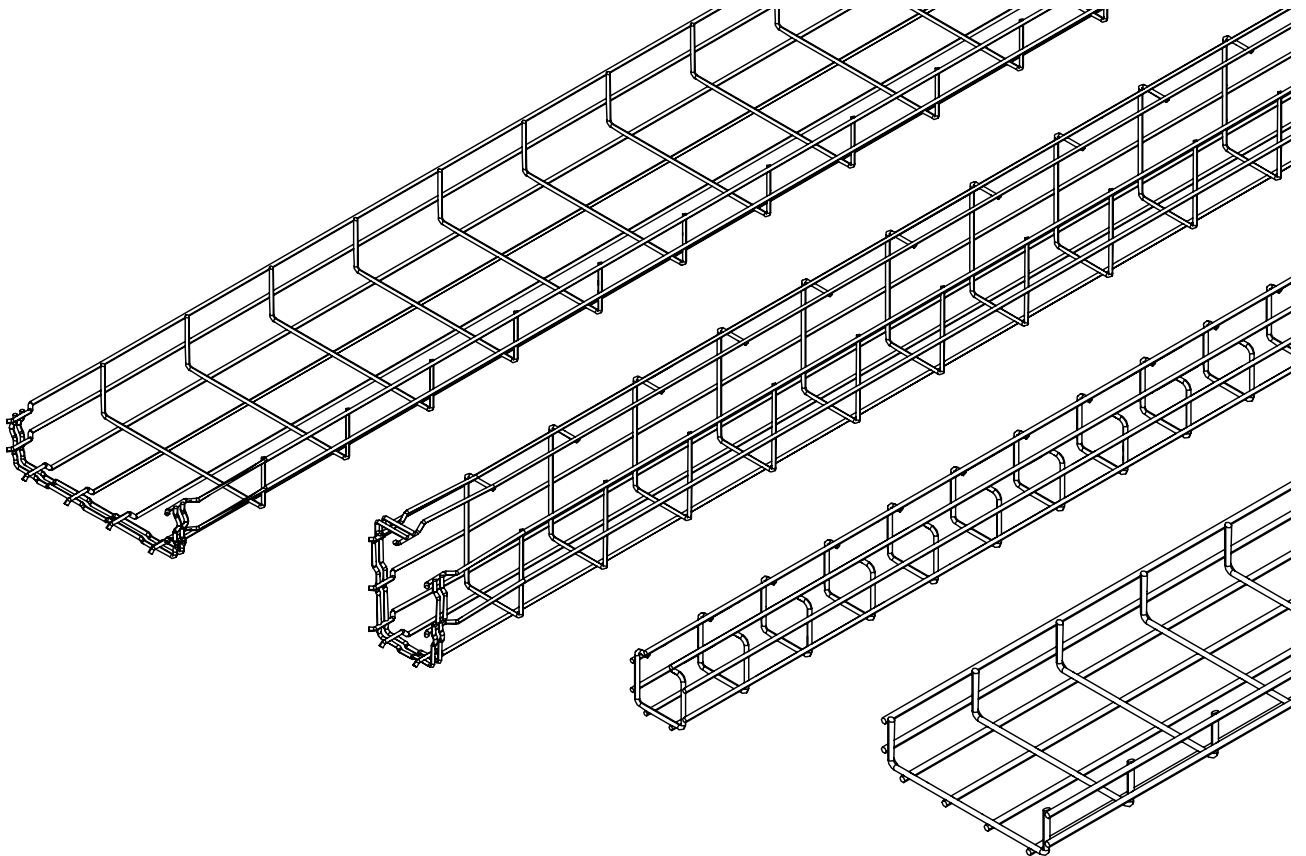


**Mesh cable tray systems**  
Mounting instructions



## **Mesh cable tray systems**

Mounting instructions

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# 1 General information

## 1.1 Target group

These instructions are intended for specialists and/or instructed technical personnel (e.g. engineers, architects, heads of construction and mounting and installation engineers) charged with the installation of mesh cable tray systems.

## 1.2 Relevance of these instructions

- These instructions are based on the standards valid at the time of compilation December 2020.
- Please read the instructions carefully before starting installation. We will not accept any warranty claims for damage caused through non-observance of these instructions.
- Any images are intended merely as examples. Mounting results may look different.

## 1.3 Types of safety information



### Type of risk!

Shows a possibly risky situation. If the situation is not avoided, then death or serious injury may result.



### Type of risk!

Shows a possibly risky situation. If the situation is not avoided, then light or minor injury or damage to property may result.



### Type of risk!

Shows a possibly damaging situation. If the situation is not avoided, then damage to the product or the surroundings may occur.

### Note!

*Indicates important information or assistance!*

## 1.4 Correct use

The mesh cable tray systems support and route all types of cables. Depending on the type and version of mesh cable tray, as well as the corrosion protection used, the mesh cable tray systems can be used in different indoor and outdoor settings.

The luminaire support system is suitable for use at ambient temperatures of - 20 °C to + 120 °C. At temperatures below - 20 °C, the material will become brittle and may not be processed further.

The mesh cable tray systems are not designed for any other purpose than those described here. If the mesh cable tray systems are used for another purpose, any liability, warranty or damage claims shall be rendered null and void.

### 1.5 Basic standards

The mesh cable tray systems fulfil the requirements of DIN EN 61537 VDE 0639:2007-09 – Cable management – Cable tray systems and cable ladder systems (DIN EN 61537 and VDE 0639:2007-09).

## 2 General safety information

Observe the following general safety information on handling the mesh cable tray systems:

- Protective gloves must be worn during all mechanical mounting work.
- The mesh cable tray systems must be included in the protection measures and/or the equipotential bonding.
- The inclusion in the equipotential bonding of the overall system must be performed by specialist personnel.
- The maximum load capacity of the mesh cable tray system may not be exceeded; the maximum support spacing must be observed.

## 3 Recommended tools

For installation, we recommend

- a bolt cutter for mesh cable trays (OBO item no. 6017700), for cutting the mesh cable trays,
- combination pliers and slotted screwdriver for fastening connectors
- a socket wrench set for installing different connectors.

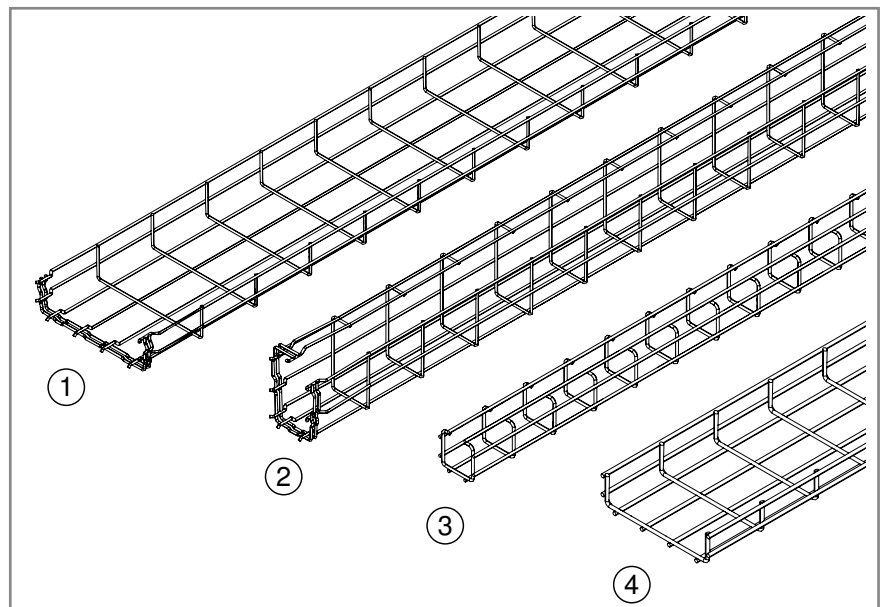
## 4 System overview

### 4.1 Product description

OBO mesh cable tray systems stand out through their high load capacity and good ventilation. They can be used universally. The mesh cable trays are suitable for the installation of power cables and cables in various areas of application. The grid widths allow cables to be easily fed in and out in various directions. The easily separable wires and the bending capacity of the mesh cable trays enable the simple creation of bends, branches and exits. Four different mesh cable tray types are available, depending on the requirements, area of application and cable quantity. The innovative Magic connector system for GRM and G-GRM mesh cable tray types enables assembly without the use of tools.

### 4.2 Types of mesh cable trays

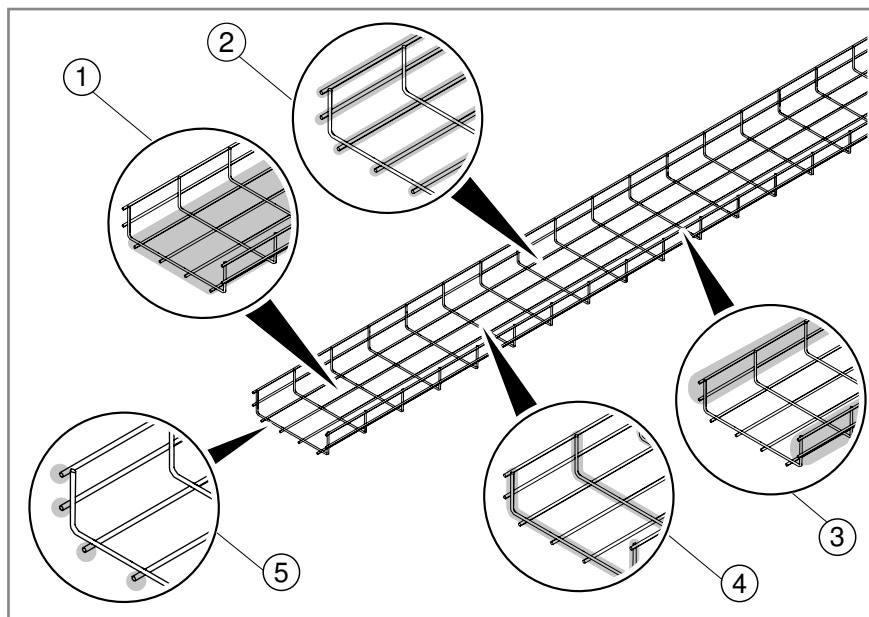
Mesh cable trays are available in four different types with various heights and widths.



**Fig. 1:** Types of mesh cable trays

- ① Magic GRM mesh cable tray
- ② Magic G-GRM G mesh cable tray
- ③ C-GR C mesh cable tray
- ④ Heavy-duty SGR mesh cable tray

### 4.3 Part designations for mesh cable trays



**Fig. 2:** Mesh cable tray parts

- ① Mesh cable tray floor
- ② Longitudinal wire
- ③ Mesh cable tray edge
- ④ Transverse wire
- ⑤ Wire ends


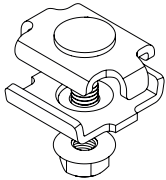
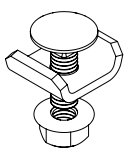
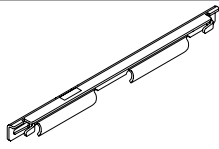
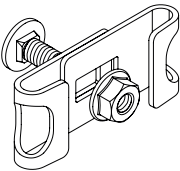

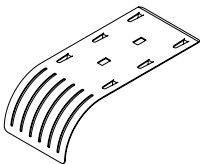
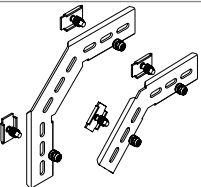
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## 4.4 System accessories for mesh cable tray mounting

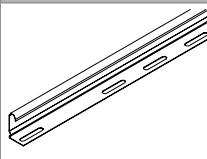
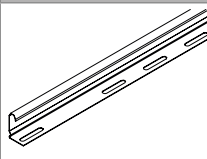
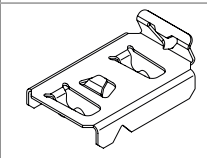
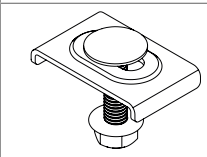
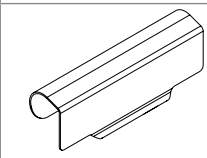
Comprehensive system accessories enable flexible installation of the different mesh cable tray types, depending on the requirements on the construction site.

### 4.4.1 Accessories for mesh cable tray connection

Accessories		Function	GRM	G-GRM	C-GR	SGR
Joint connector Type GSV 34		Screwed straight connection of mesh cable trays screwed connection of mesh cable trays with vertical exit/bend/T branch/cross-over/reduction	X	X	X	
Joint connector Type GUV 6		Screwed straight connection of mesh cable trays, screwed connection of mesh cable trays with vertical exit/corners/T branch/cross-over/reduction				X
Mesh cable tray connector, long Type GRV 245		Screwless straight connection of mesh cable trays	X			X
Corner connector Type GEV 36		Screwed connection with elements created on-site, such as bends, cross-overs, branches, reductions	X		X	X
Slotted steel strap, bent		Creation of bends and T branches	X		X	
Cable exit plate Type KAB GR		For cable exit to maintain bend radii	X		X	X
Installation profile 90° Installation profile 45° Type MW 45/MW 90 with KS 23 35 hold-down clamp		Vertical exit from mesh cable tray	X		X	

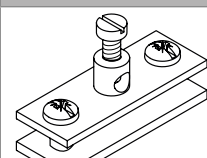
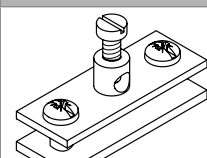
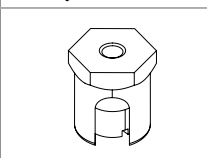
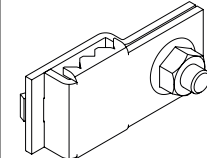
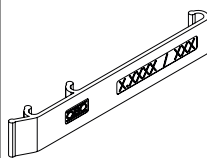
Tab. 1: Accessories for connectors and exits

#### 4.4.2 Accessories for barrier strip mounting

Accessories		Function	GRM	G-GRM	C-GR	SGR
Barrier strip Type TSG		Separation of cables with different functions	X		X	
Hold-down clamp Type KS GR		Screwless barrier strip fastening on mesh cable tray	X		X	
Hold-down clamp Type GKT 38		Screwed barrier strip fastening on mesh cable tray	X		X	
Barrier strip connector Type TSGV		Screwless connection of barrier strips	X		X	

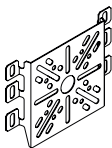
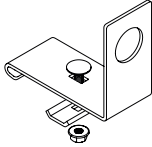
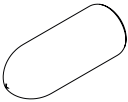
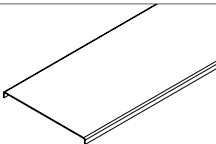

Tab. 2: Barrier strip accessories

#### 4.4.3 Accessories for equipotential bonding

Accessories		Function	GRM	G-GRM	C-GR	SGR
Earthing clamp Type 939		Creation of equipotential bonding	X	X	X	X
Earthing screw Type EKL		Creation of equipotential bonding	X	X	X	
Connection and earthing terminal Type VEK-GRM		Creation of equipotential bonding	X	X	X	
Identification plate Type KS HR (orange, yellow, blue, green)		Creation of equipotential bonding	X	X	X	X

Tab. 3: Accessories for equipotential bonding

## 4.4.4 Miscellaneous accessories

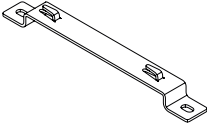
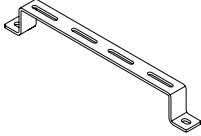
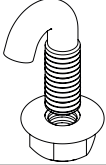
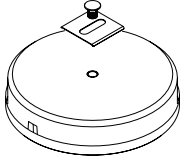
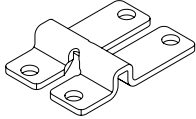
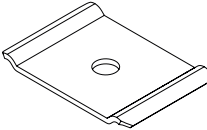
Accessories		Function	GRM	G-GRM	C-GR	SGR
Mounting plate Type MP UNI		Fastening of junction boxes	X		X	X
Side holder Type SH KAB		Mounting of cable glands	X		X	
Protective cap Type GR KS		Cover for wire ends	X	X	X	X
Cover Type DGRR or type DRLU		Protection against contamination, weathering	X			
Cover clamp Type DKU		Fastening of cover on mesh cable tray	X		X	

Tab. 4: Miscellaneous accessories

## 4.5 System accessories for floor, wall and ceiling mounting

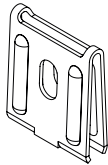
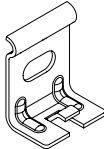
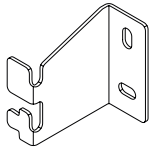
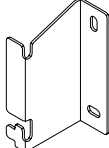
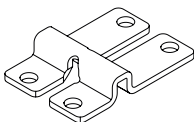
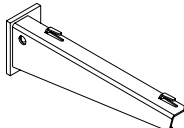
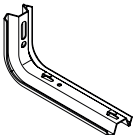
The mesh cable trays can be mounted directly on the floor, wall or ceiling using different mounting material. The different options are shown below.

### 4.5.1 Accessories for floor mounting

Product		Suitable for			
		GRM	G-GRM	C-GR	SGR
Stand-off bracket Type DBLG 20/...		X		X	
Stand-off bracket DBL without hook Type DBL 50 300		X	X	X	X
Hook screw Type HS M6x13 (with combination nut) for stand-off bracket		X	X	X	X
FangFix stone with TrayFix mounting system		X		X	
Wall bracket Type WB GR for 3.8 mm grid wire		X			
Hold-down clamp Type GKS 50 (for 50 mm grids)		(X)		(X)	X

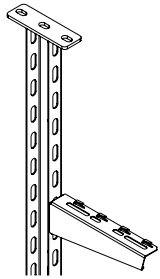
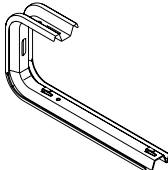
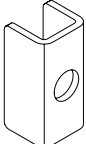
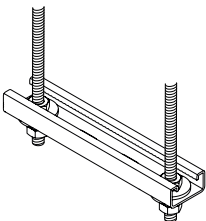

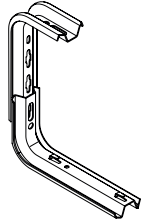
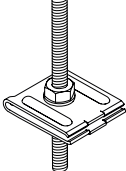
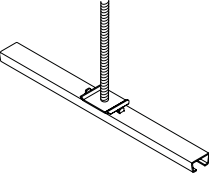
Tab. 5: Accessories for floor mounting

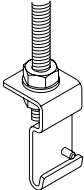
## 4.5.2 Accessories for wall mounting

Product		Suitable for			
		GRM	G-GRM	C-GR	SGR
With wall bracket Type K 12 1818 for mesh cable tray widths up to 200 mm		X	X	X	
Wall holder Type WH GRM 35 for GRM 35 50		X			
Wall holder, horizontal Type WBH CGR50 for CGR 50				X	
Wall holder, vertical Type WBV CGR50 for CGR 50				X	
Wall bracket Type WB GR		X			
Wall and support bracket Type AWG 15 (with clamping lugs)		X		X	
Wall and support bracket Type TPSAG (with clamping lugs)		X		X	

Tab. 6: Accessories for wall mounting

4.5.3 Accessories for ceiling mounting

Product		Suitable for			
		GRM	G-GRM	C-GR	SGR
With suspended support Type US 3 K and wall and support bracket Type MWAG 12 (screwless on bracket due to clamping lugs)		X		X	
With wall and ceiling bracket Type TPDG		X		X	
Spacer Type DS 4 (for use in profile Type TP)		X		X	
Mounting rail Type MS 41 on threaded rods		X		X	X
Fastening clip Type BC GR (in conjunction with MS 41 mounting rail)		X	X		
Bracket Type TPSAG with support Type TP		X		X	
Centre and pendulum suspension with threaded rod Type 2078 and wall bracket Type K 12 1818		X		X	X
Centre suspension with hanger Type GMS and hold-down clamp Type GKS 50 for 50 mm grid width		X	X	X	X

Product		Suitable for			
		GRM	G-GRM	C-GR	SGR
Suspension with side holders Type SH M 10 and threaded rods Type 2078/M10		X	X	X	

**Tab. 7:** Accessories for ceiling mounting

## 5 Cutting mesh cable trays

A bolt cutter is required for shortening mesh cable trays to the required length or cutting out segments.

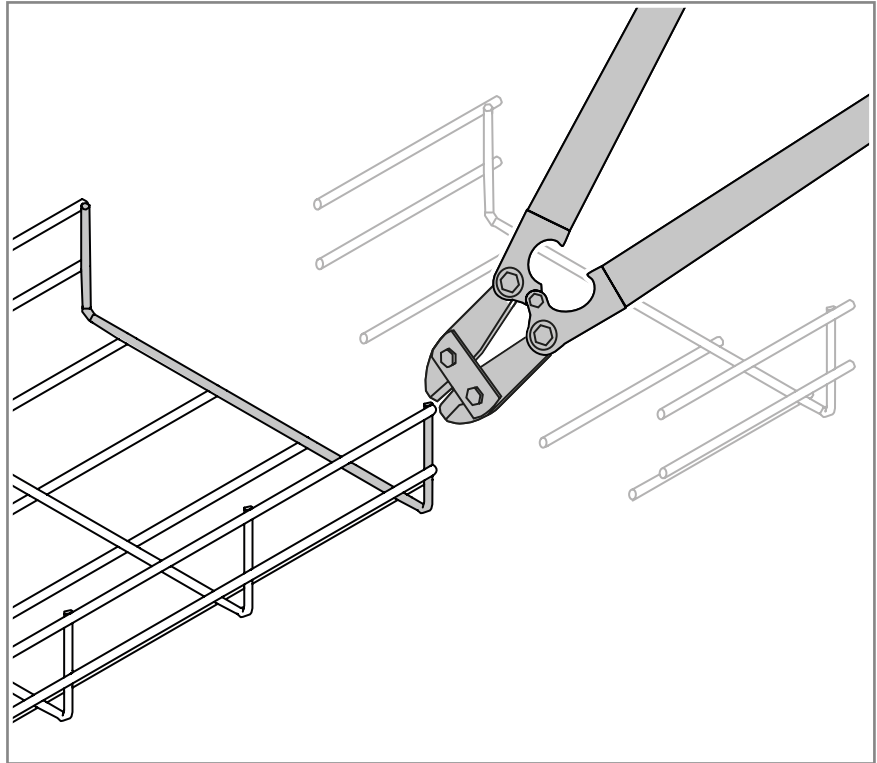


**CAUTION**

### **Risk of cutting!**

During cutting work, metal chips or sharp cut edges can cause injuries to eyes and hands!

- Wear protective glasses and gloves.
- Deburr cut edges.



**Fig. 3:** Cutting a mesh cable tray

1. Cut the mesh cable tray wires at the transverse wires, so that no wire ends protrude.
2. Deburr cut edges if necessary.



## 6 Creating straight connections for mesh cable trays

Mesh cable trays are mounted differently lengthwise, depending on the type.

### 6.1 Mounting Magic connections

Suitable for GRM, G-GRM

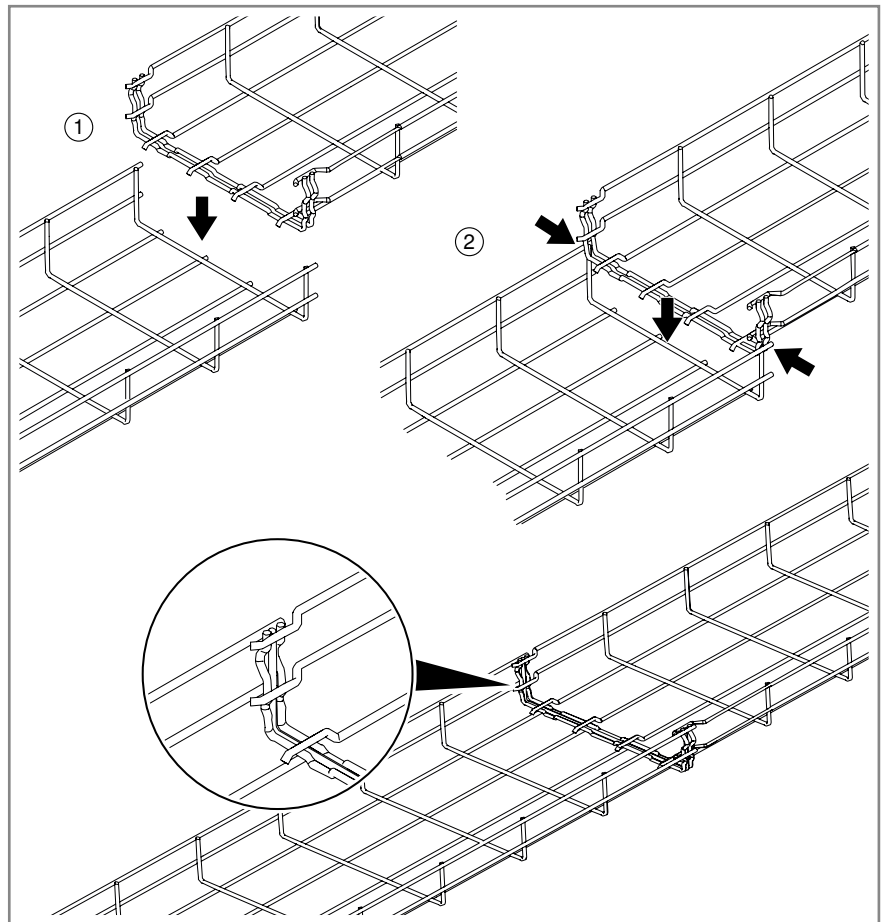
The Magic connection is an interlocking connection that does not require the use of any tools.



#### **Danger of crushing!**

Fingers can be crushed in the joint area when two mesh cable trays are joined.

Hold the mesh cable trays outside the joint area.



**Fig. 4:** Creating a straight connection with the Magic connection

1. Push the mesh cable trays into each other from above at the joint and push downwards until they stop.

## 6.2 Mounting GSV 34 joint connectors

Suitable for GRM, G-GRM, C-GR

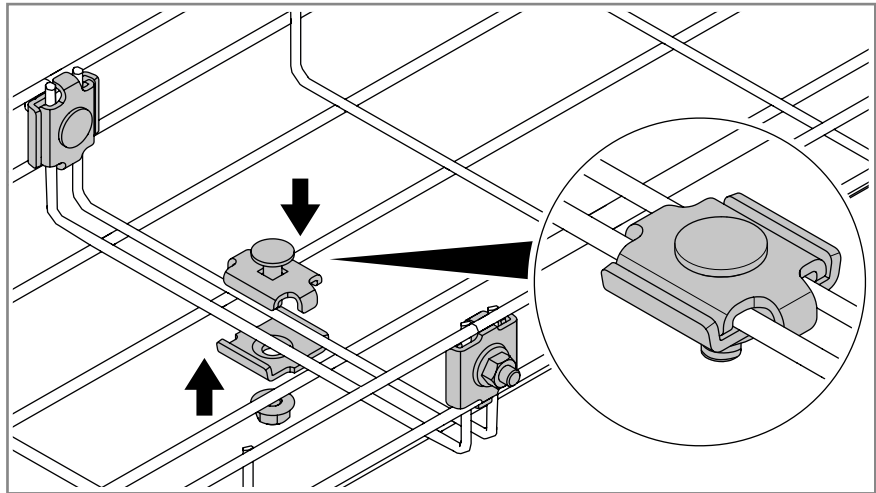
GSV 34 joint connectors are used to connect cut Magic mesh cable trays or mesh cable trays without Magic connection. A different number of joint connectors must be mounted, depending on the width of the mesh cable tray.

**ATTENTION**

### Cable damage through incorrectly set screw connections!

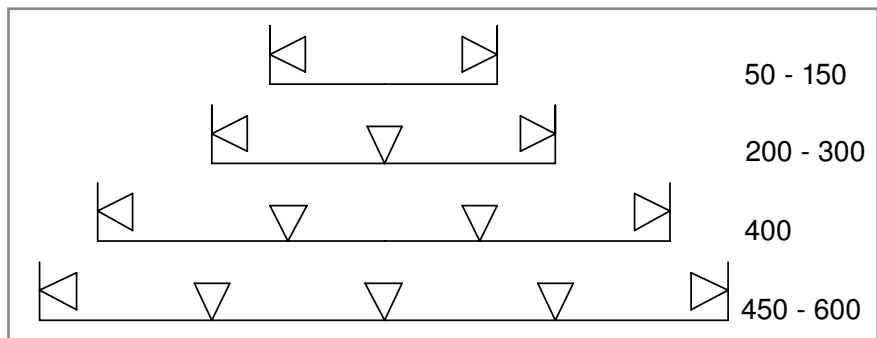
Sharp-edged threads can damage cables.

Always insert bolts from the inside to the outside of the mesh cable tray and screw on the nut from outside.



**Fig. 5:** Connecting mesh cable trays with GSV 34 joint connectors

1. Cut the mesh cable tray to length.
2. Place the mesh cable trays so that they abut.
3. Place the top and bottom parts of the joint connector on the outside and inside of the mesh cable tray.
4. Insert the truss-head bolt through the joint connector.
5. Screw on the joint connector with a nut.



**Fig. 6:** Number and position of joint connectors depending on mesh cable tray width

Quantity	Mesh cable tray width
2	50 – 150 mm
3	200 – 300 mm
4	400 mm
5	450 – 600 mm

### 6.3 Mounting GU 6 joint connectors

Suitable for SGR

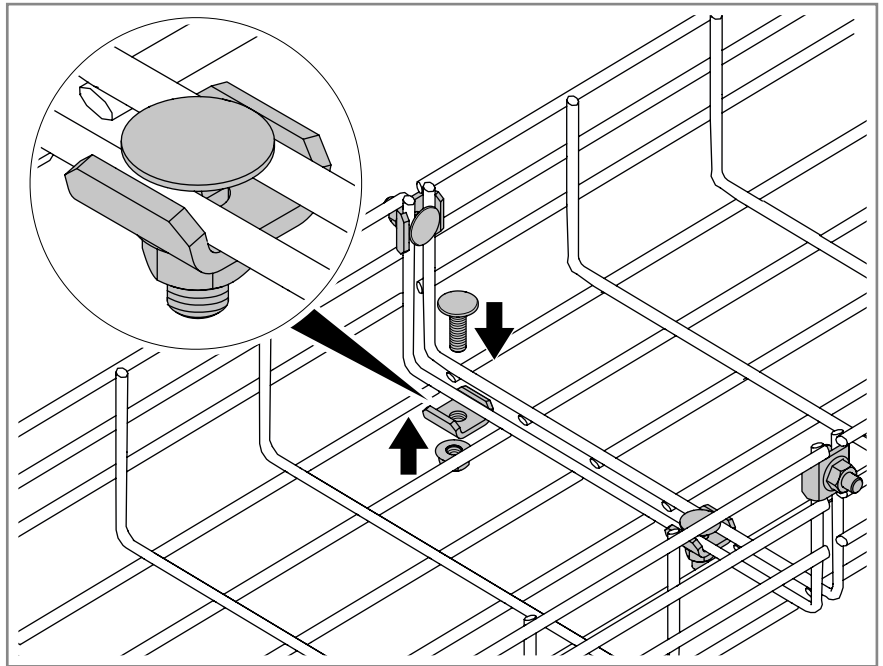
GU 6 joint connectors are used to connect cut or uncut heavy-duty mesh cable trays. A different number of joint connectors must be mounted, depending on the width of the mesh cable tray (see “Fig. 6: Number and position of joint connectors depending on mesh cable tray width” on page 18).

**ATTENTION**

**Cable damage through incorrectly set screw connections!**

Sharp-edged threads can damage cables.

Always insert bolts from the inside to the outside of the mesh cable tray and screw on the nut from outside.



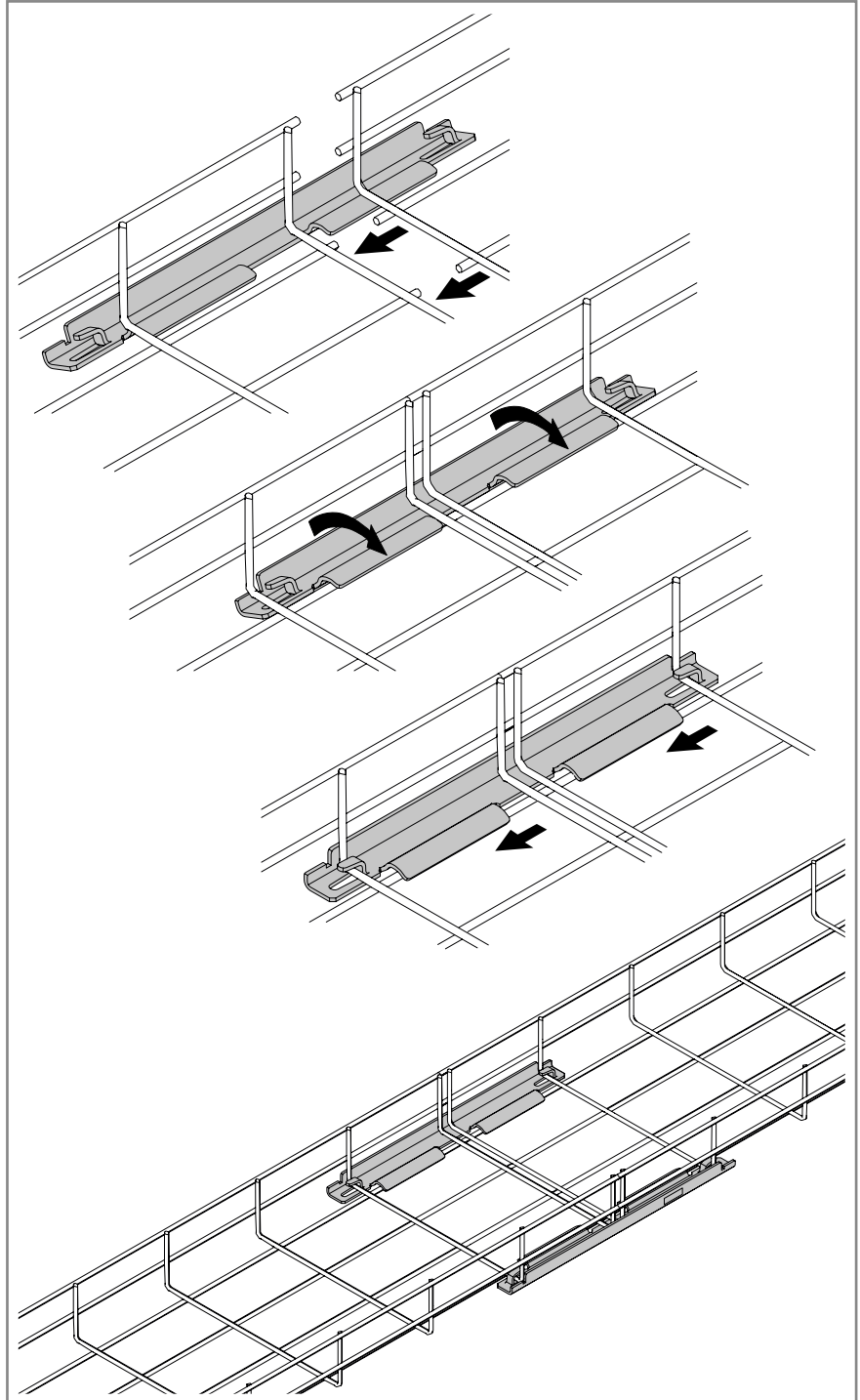
**Fig. 7:** Connecting heavy-duty mesh cable trays with GU 6 joint connectors

1. Cut the mesh cable tray to length.
2. Place the mesh cable trays so that they abut.
3. Place the bottom part of the joint connector on the outside of the mesh cable tray.
4. Insert the truss-head bolt into the bottom part from the inside of the mesh cable tray.
5. Screw on the joint connector with a nut.

## 6.4 Mounting long mesh cable tray connectors

Suitable for GRM, C-GR

GSV 245 long mesh cable tray connectors are used for lengthwise connections of cut and uncut mesh cable trays without the use of screws. One mesh cable tray connector is mounted on each side of the mesh cable tray.



**Fig. 8:** Connecting mesh cable trays with long mesh cable tray connectors

6. Place the mesh cable trays so that they abut.
7. Lay the mesh cable tray connectors over the outer longitudinal wire of both mesh cable trays.
8. Move the mesh cable tray connectors sideways and hook in the mesh cable trays under the clamping lugs.

## 7 Creating corners and bends with cut cable trays

For flexible creation of corners and bends, mesh cable tray segments are cut out and the mesh cable trays bent accordingly. Different connectors are mounted for stabilisation and connection purposes.

### 7.1 Creating 90° corners with GSV 34 joint connectors

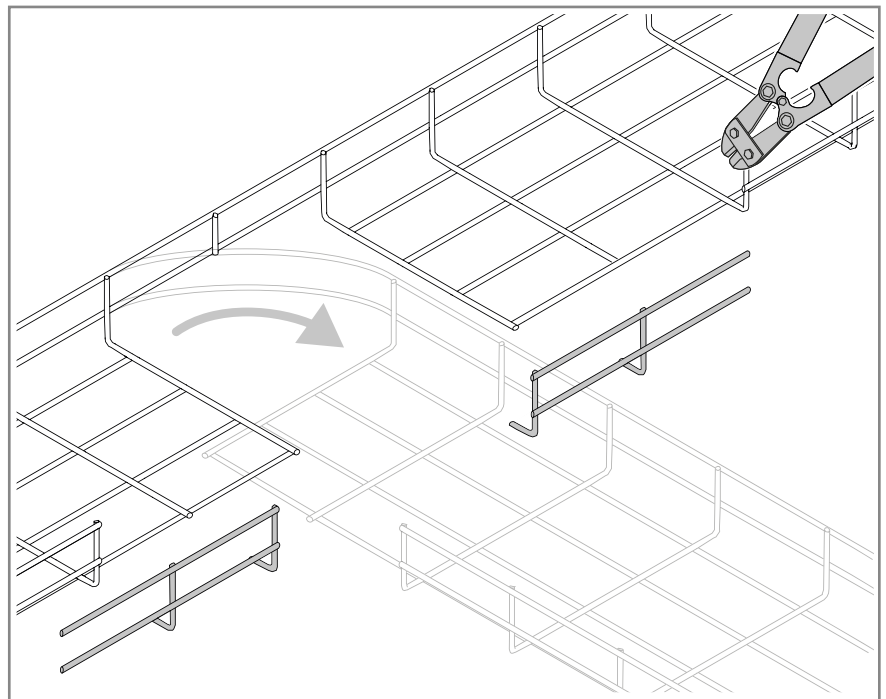
Suitable for GRM, G-GRM, C-GR

#### ATTENTION

#### **Cable damage through incorrectly set screw connections!**

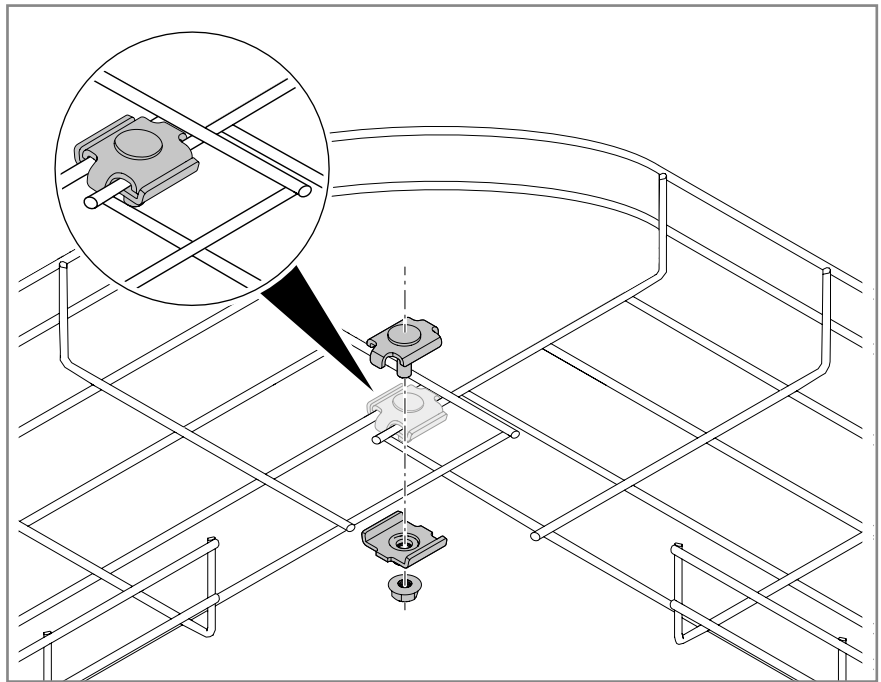
Sharp-edged threads can damage cables.

Always insert bolts from the inside to the outside of the mesh cable tray and screw on the nut from outside.



**Fig. 9:** Cutting a mesh cable tray for a corner

1. Cut out the mesh cable tray segments.
2. Bend the mesh cable tray by 90° so that the mesh cable tray segments overlap.

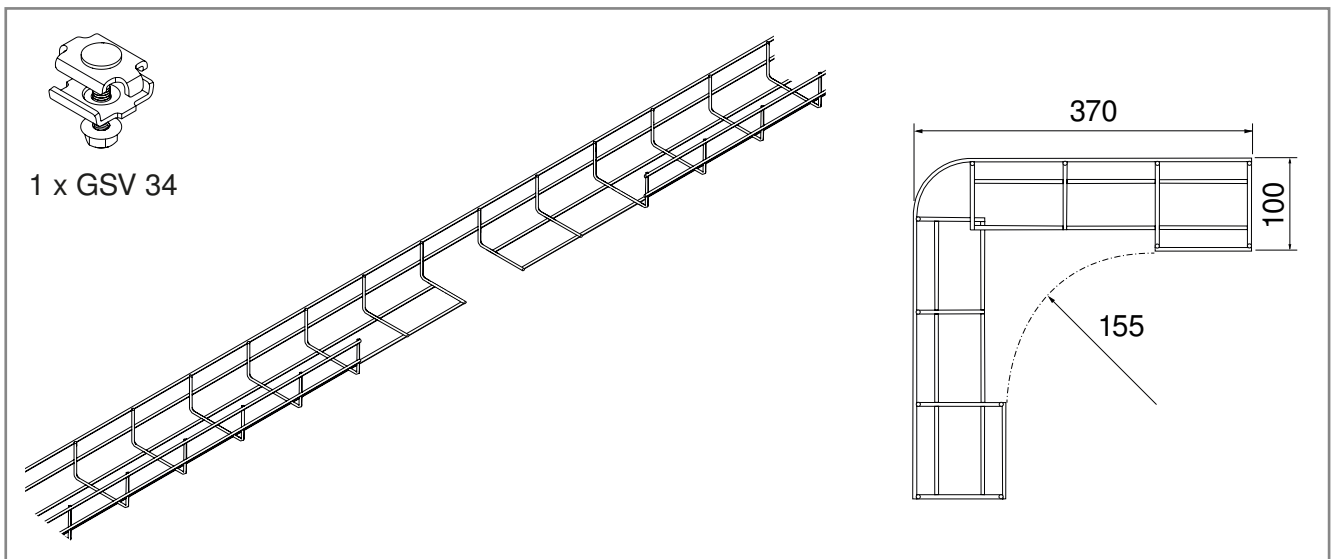


**Fig. 10:** Connecting a corner using GSV 34 joint connectors

3. Place the top and bottom parts of the joint connector over and under the overlapping mesh cable tray segments.
4. Insert the truss-head bolt through the joint connector.
5. Screw on the joint connector with a nut.

### 7.1.1 Overview: 90° corners for different tray widths

Depending on the width of the mesh cable tray, a different number of mesh cable tray segments must be cut out in order to be able to bend a 90° angle. The following shows how the different mesh cable tray widths must be cut.



**Fig. 11:** 90° corner with tray width 100 mm

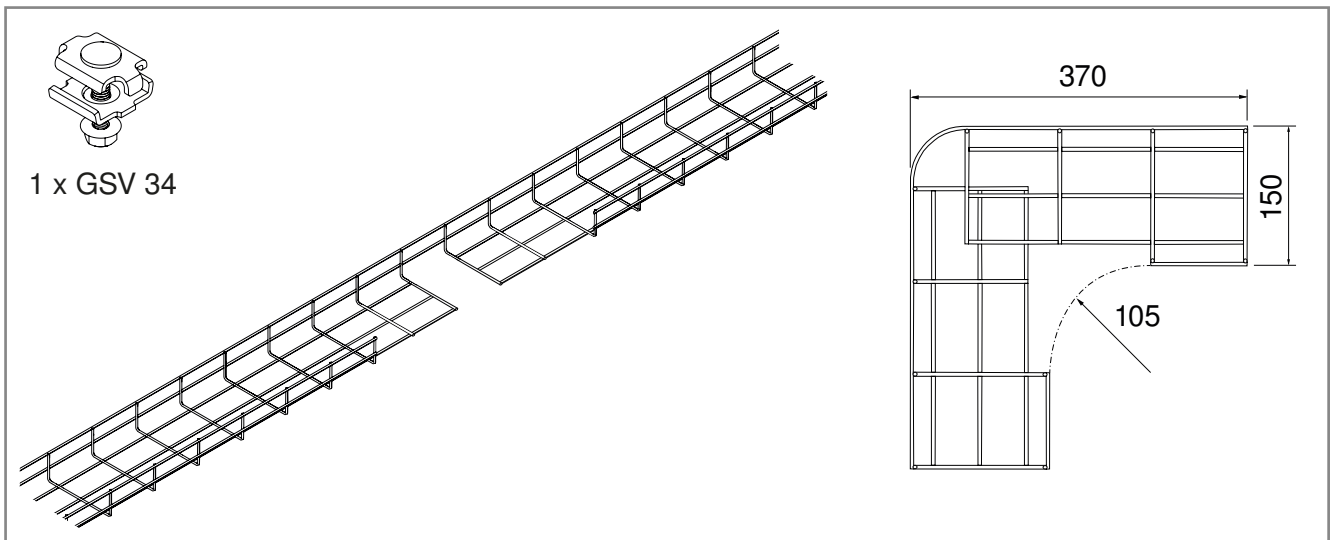


Fig. 12: 90° corner with tray width 150 mm

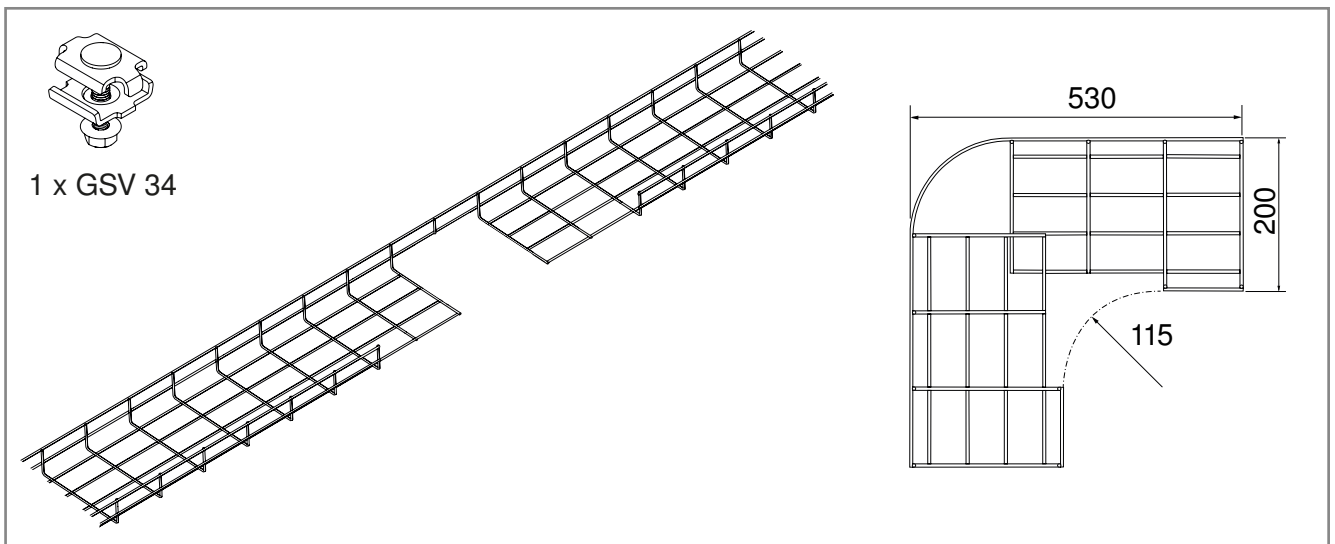


Fig. 13: 90° corner with tray width 200 mm

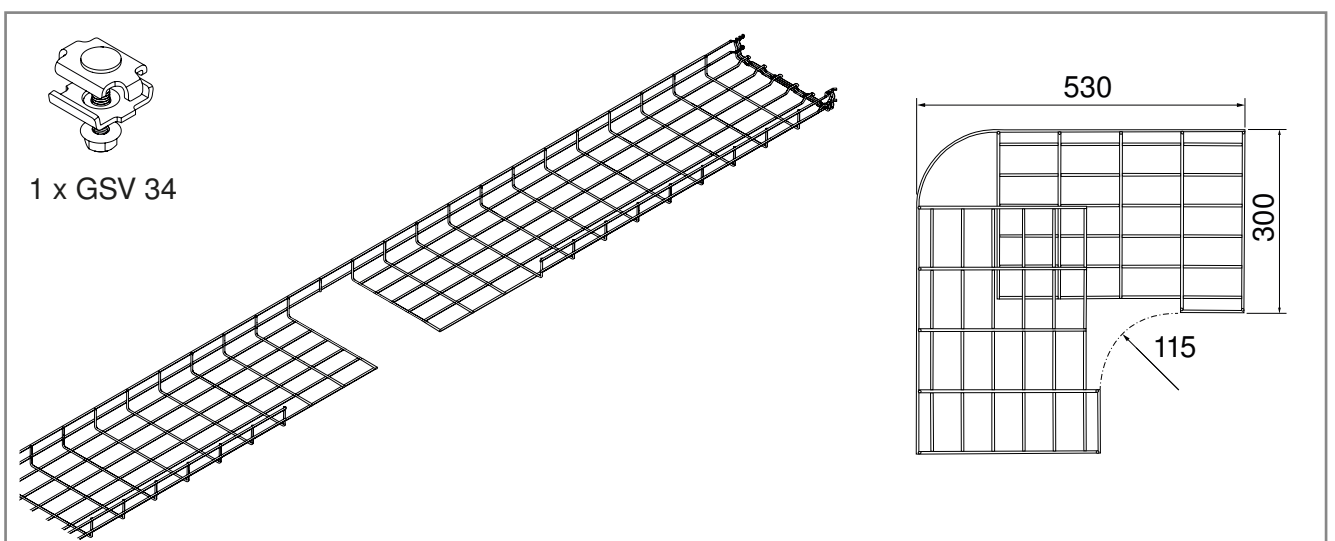


Fig. 14: 90° corner with tray width 300 mm

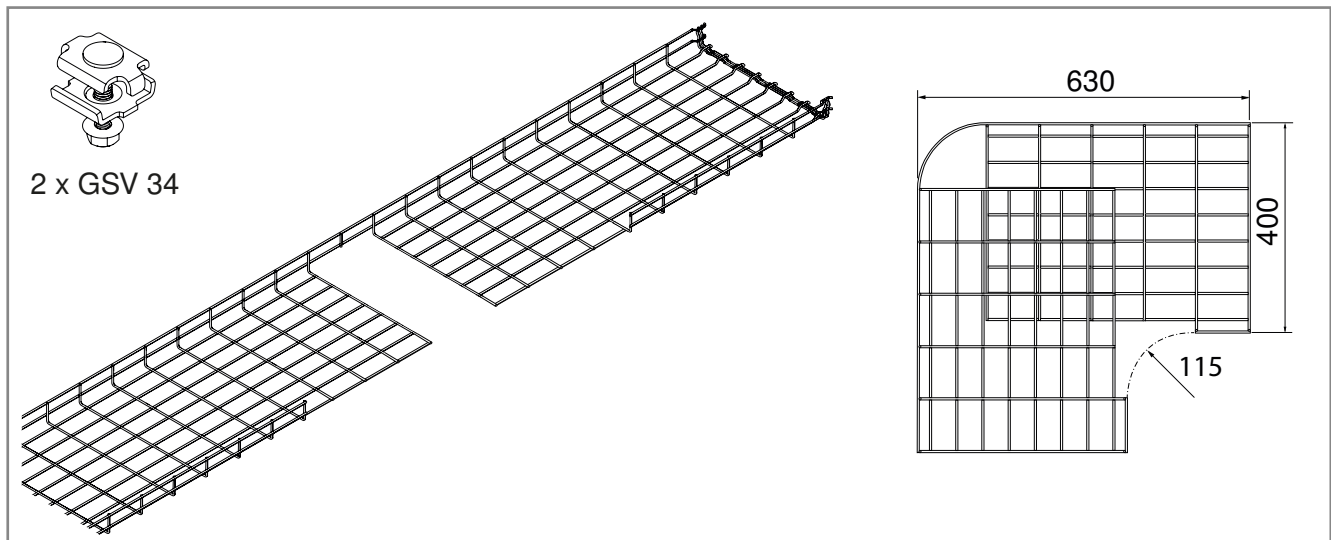


Fig. 15: 90° corner with tray width 400 mm

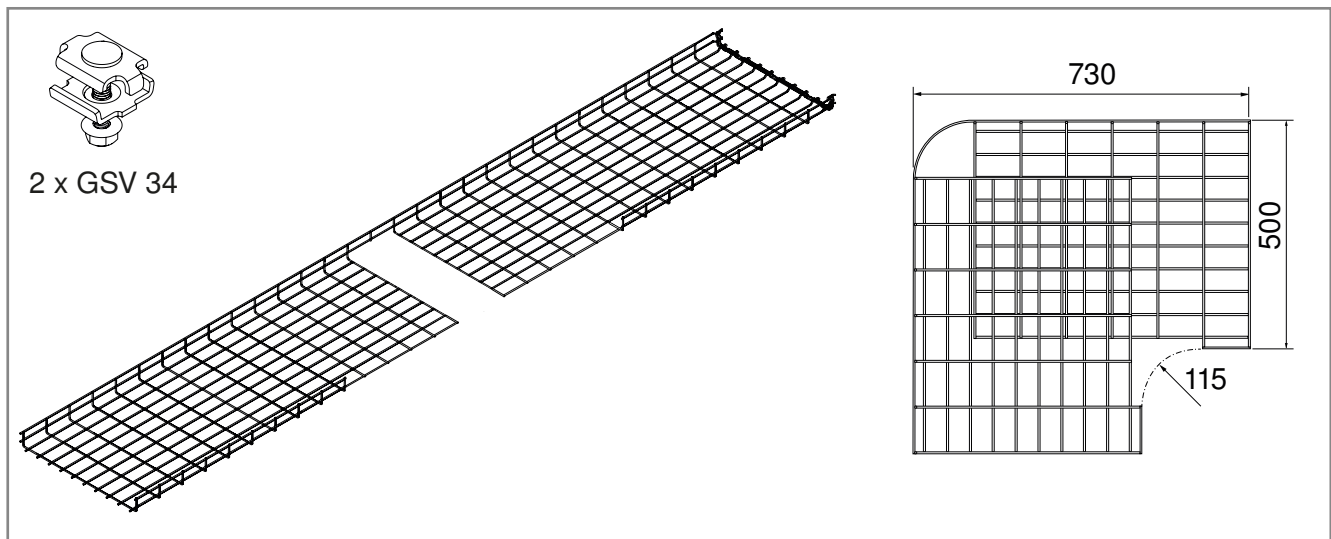


Fig. 16: 90° corner with tray width 500 mm

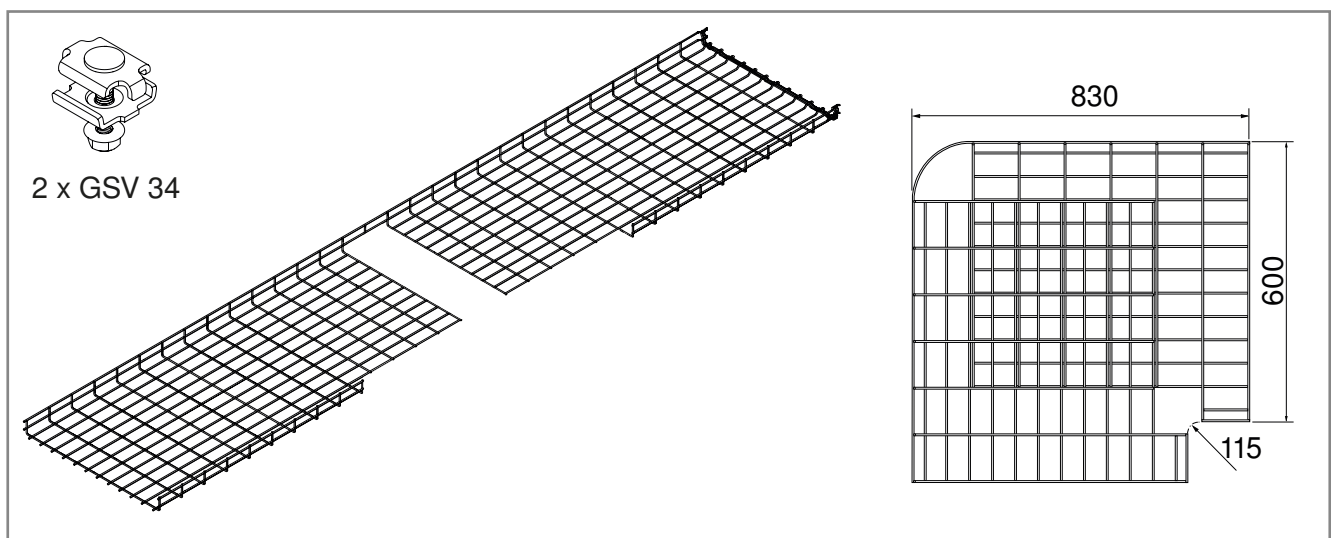


Fig. 17: 90° corner with tray width 600 mm



## 7.2 Creating 90° corners with slotted steel straps

Suitable for GRM and C-GR.

If the 90° corners are created with a bent slotted steel strap, a GSV 34 joint connector is also mounted to connect the overlapping mesh cable tray segments.

### ATTENTION

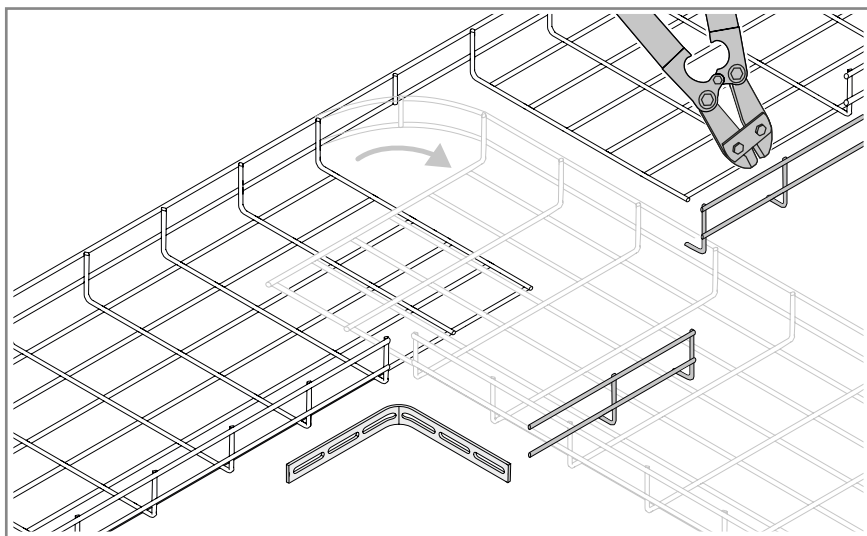
#### Cable damage through incorrectly set screw connections!

Sharp-edged threads can damage cables.

Always insert bolts from the inside to the outside of the mesh cable tray and screw on the nut from outside.

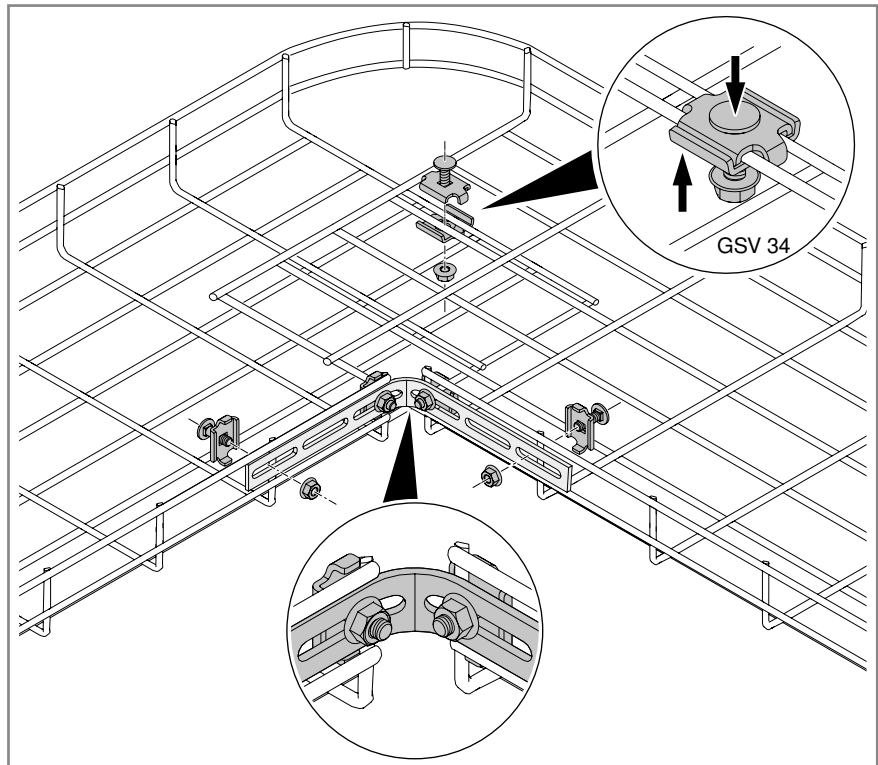
#### Note!

*The mesh cable trays are cut as described in chapter "7.1.1 Overview: 90° corners for different tray widths" on page 22. However, one fewer segment is removed from the left and right of the cut-out area on the mesh cable tray edge, in order to be able to mount the slotted steel strap.*



**Fig. 18:** Cutting a 300 mm-wide mesh cable tray for a corner with slotted steel strap

1. Cut out the mesh cable tray segments.
2. Bend the mesh cable tray by 90° so that the mesh cable tray segments overlap.



**Fig. 19:** Mounting GSV 34 joint connectors and a slotted steel strap

3. Position the slotted steel strap between the longitudinal wires of the mesh cable tray edge.
4. Place the top and bottom parts of a joint connector on both sides of the slotted steel strap.
5. Insert the truss-head bolt through the joint connector.
6. Screw on the joint connector with a nut.
7. Mount the slotted steel strap with 4 joint connectors.
8. Place the top and bottom parts of a GSV 34 joint connector over and under the overlapping mesh cable tray segments.
9. Insert the truss-head bolt through the joint connector.
10. Screw on the joint connector with a nut.

### 7.3 Creating 90° bends with GEV 36 corner connectors

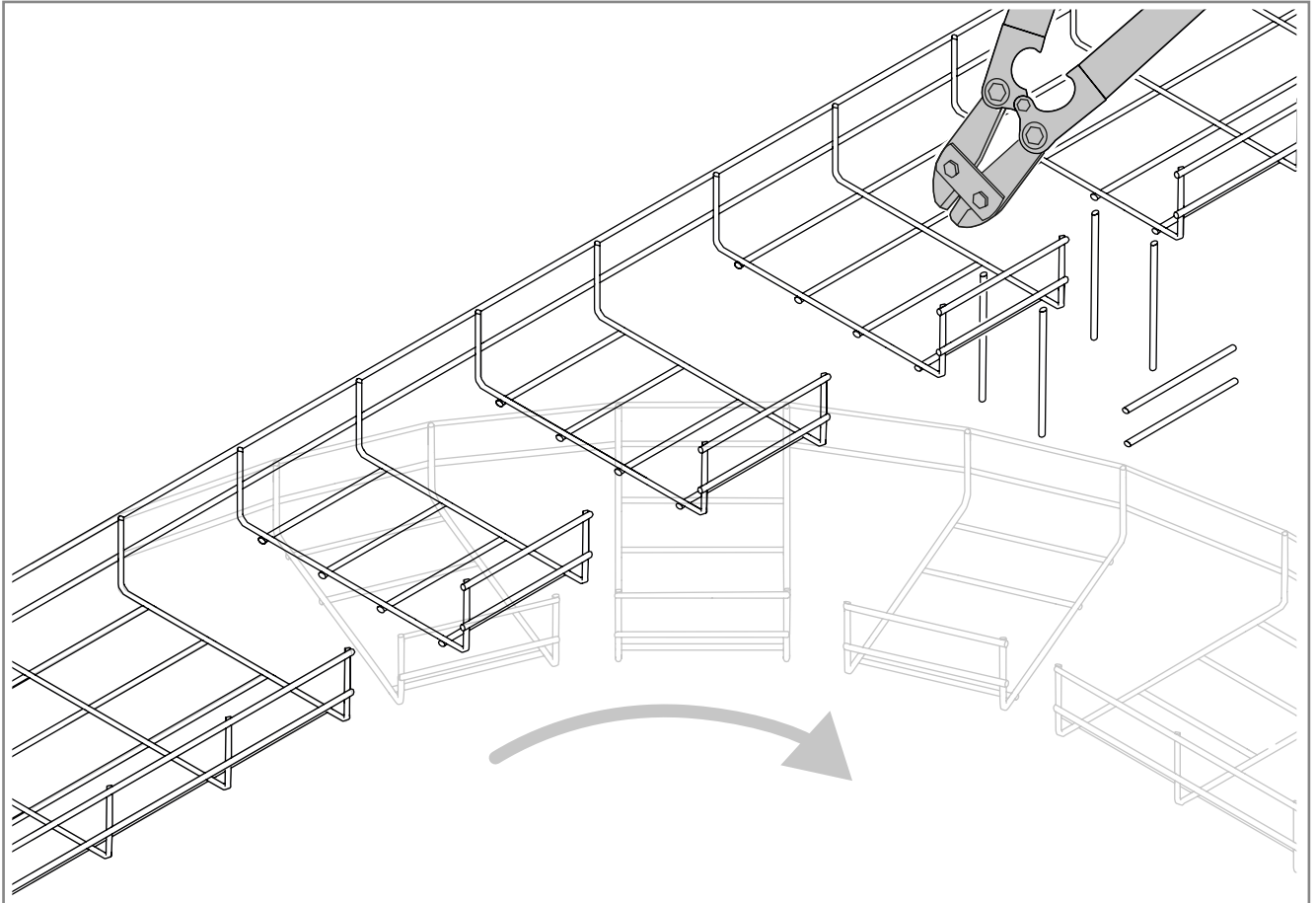
Suitable for GRM, C-GR, SGR

#### ATTENTION

#### Cable damage through incorrectly set screw connections!

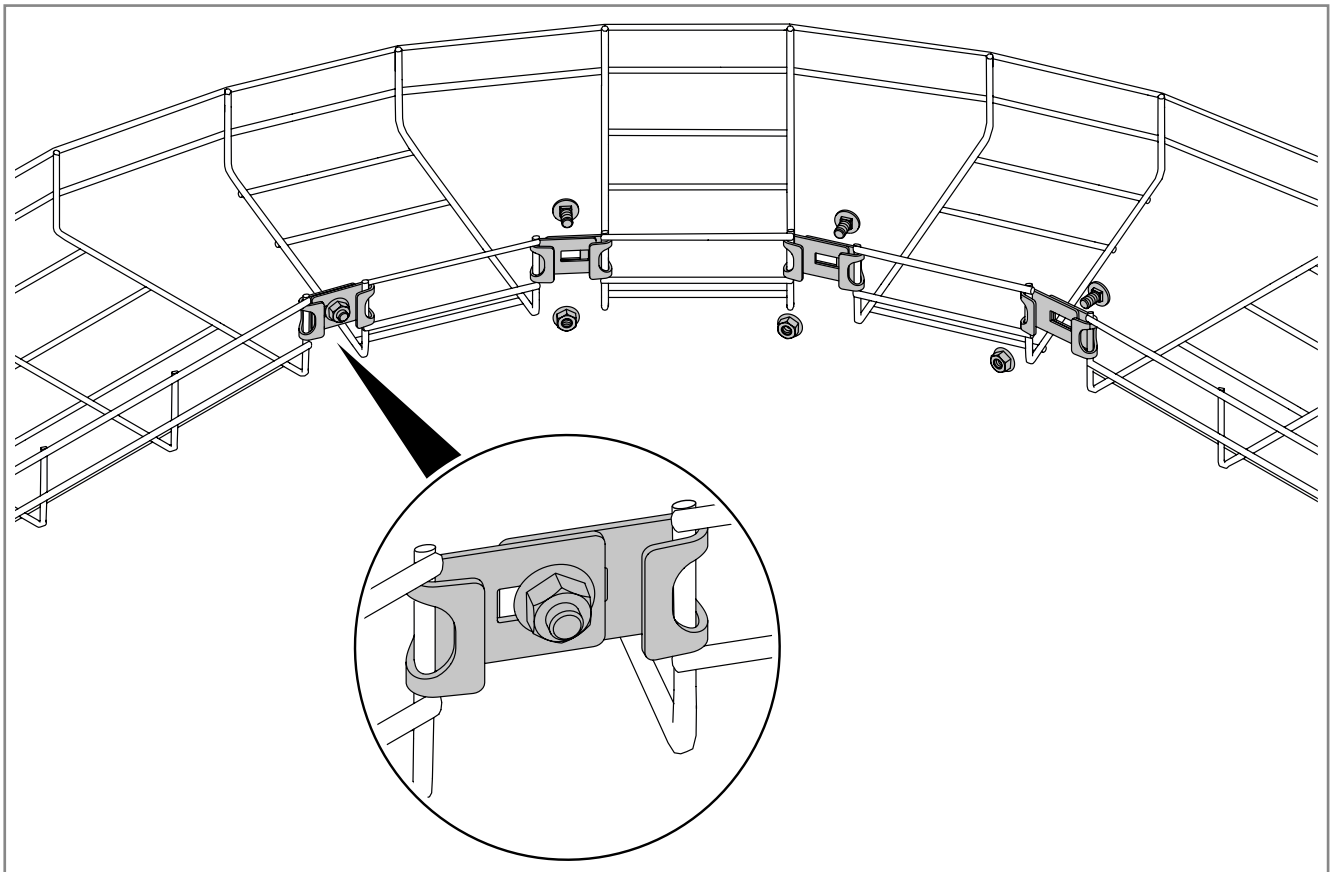
Sharp-edged threads can damage cables.

Always insert bolts from the inside to the outside of the mesh cable tray and screw on the nut from outside.



**Fig. 20:** Cutting a mesh cable tray for a 90° bend

1. Cut out the mesh cable tray segments.
2. Bend the mesh cable tray to create a 90° bend.

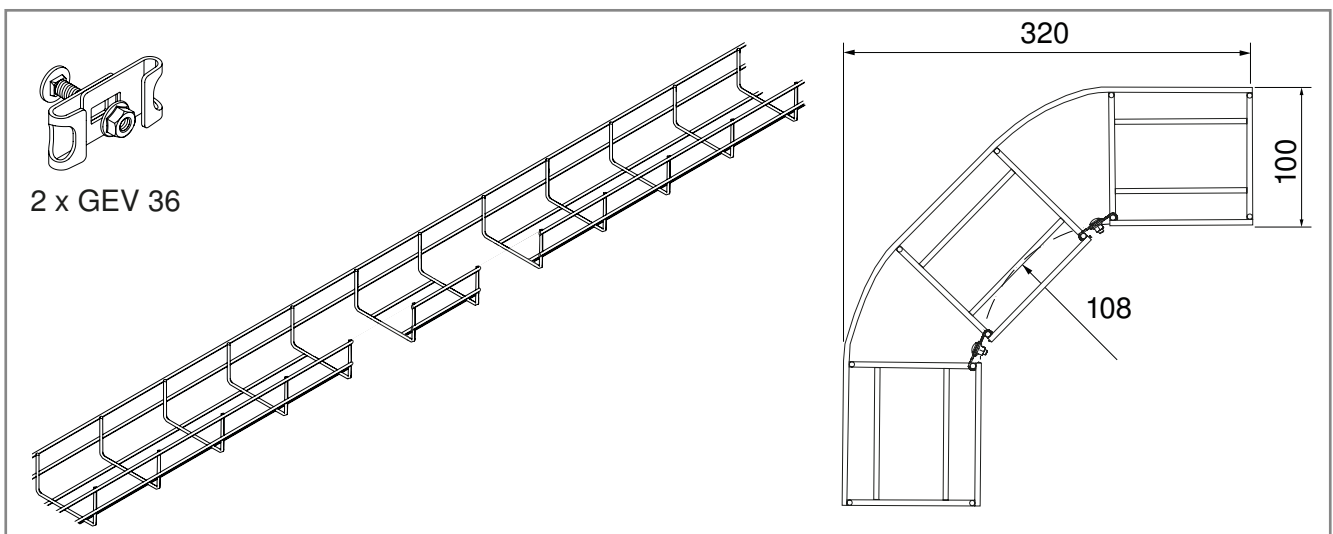


**Fig. 21:** Connecting the bend with GEV 36 corner connectors

3. Attach GEV 36 corner connectors between the individual segments and adjust to the appropriate width.
4. Insert a truss-head bolt through the corner connector.
5. Tighten the corner connector with a nut.

**7.3.1 Overview: 90° bends with different mesh cable tray widths**

Depending on the width of the mesh cable tray, a different number of mesh cable tray segments must be cut out/notched in order to be able to create a 90° angle with the GEV 36 corner connector. The following shows how the different mesh cable tray widths must be cut.



**Fig. 22:** 90° bend with tray width 100 mm

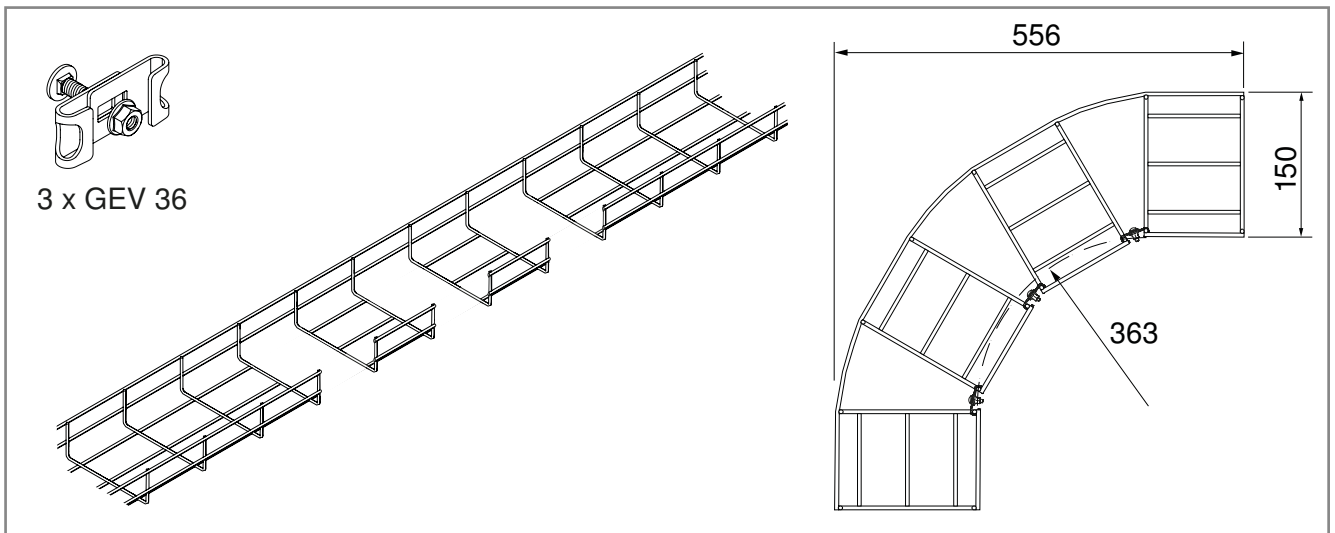


Fig. 23: 90° bend with tray width 150 mm

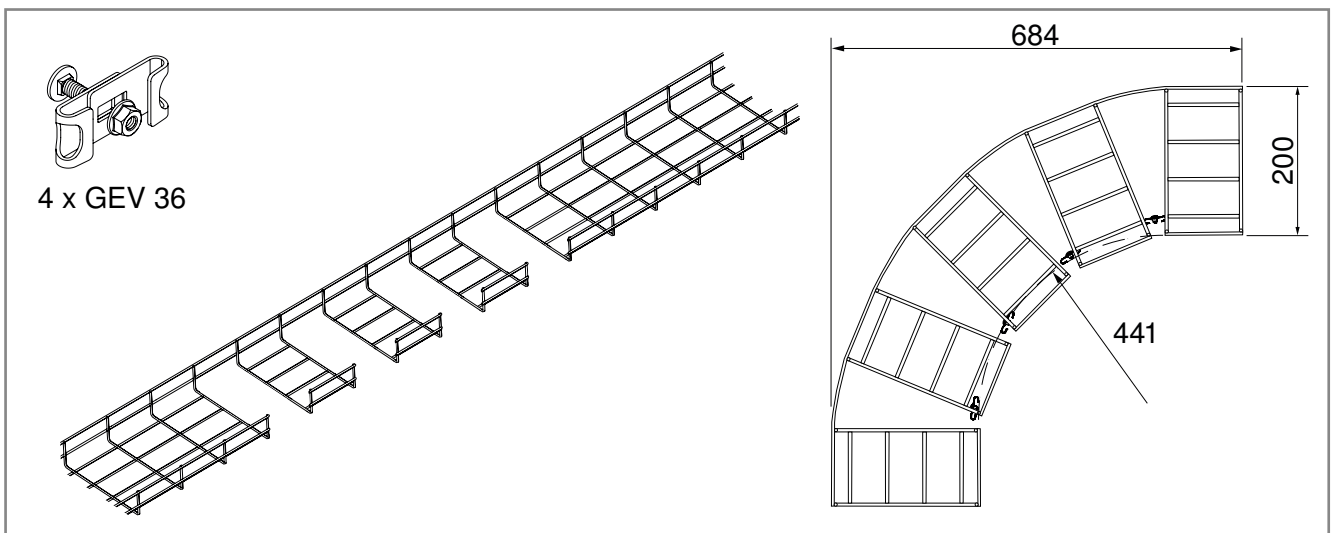


Fig. 24: 90° bend with tray width 200 mm

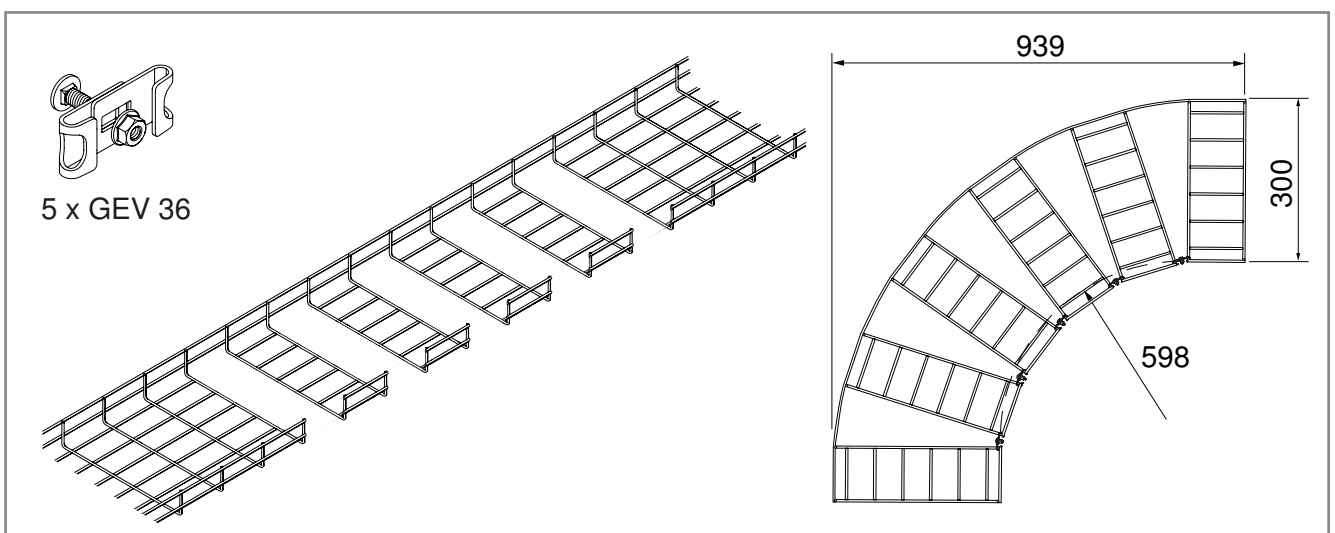


Fig. 25: 90° bend with tray width 300 mm

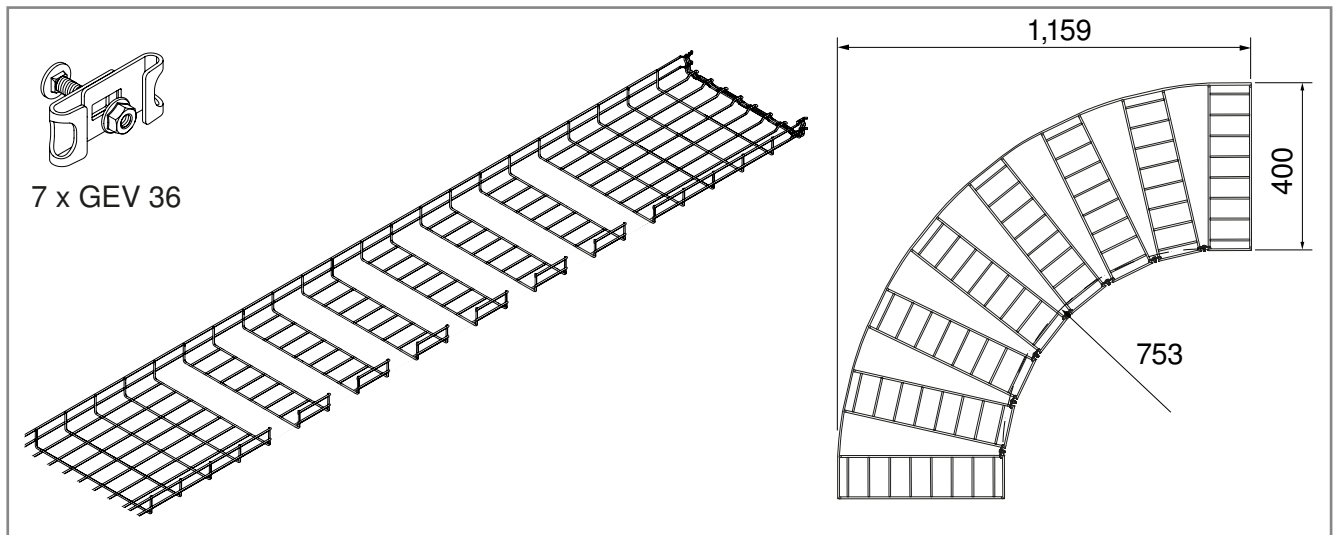


Fig. 26: 90° bend with tray width 400 mm

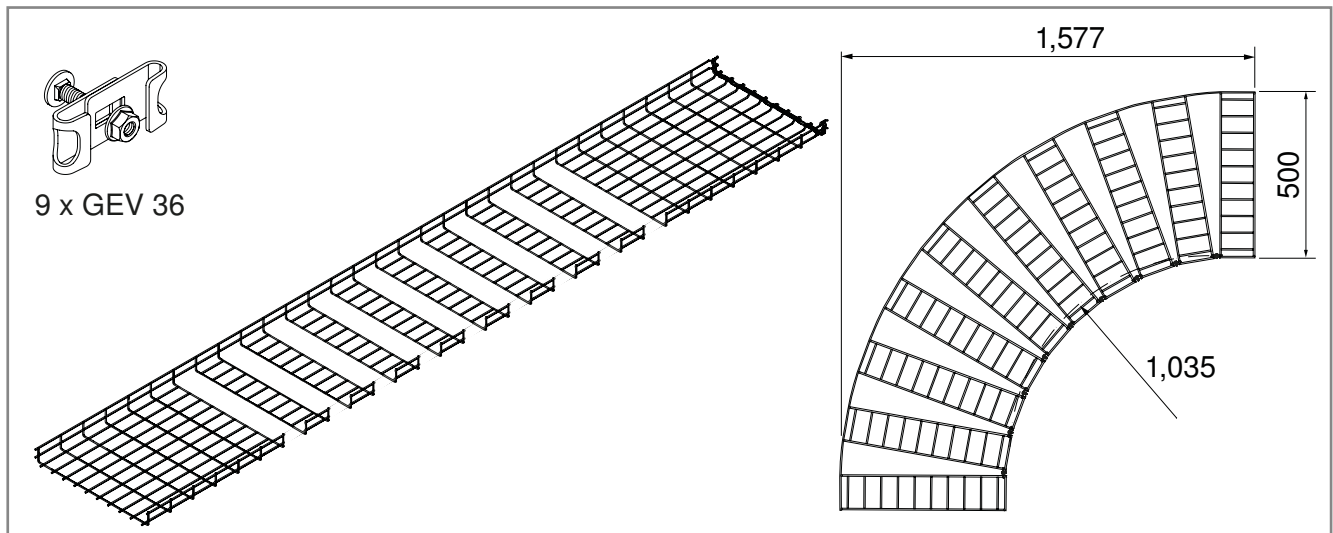


Fig. 27: 90° bend with tray width 500 mm

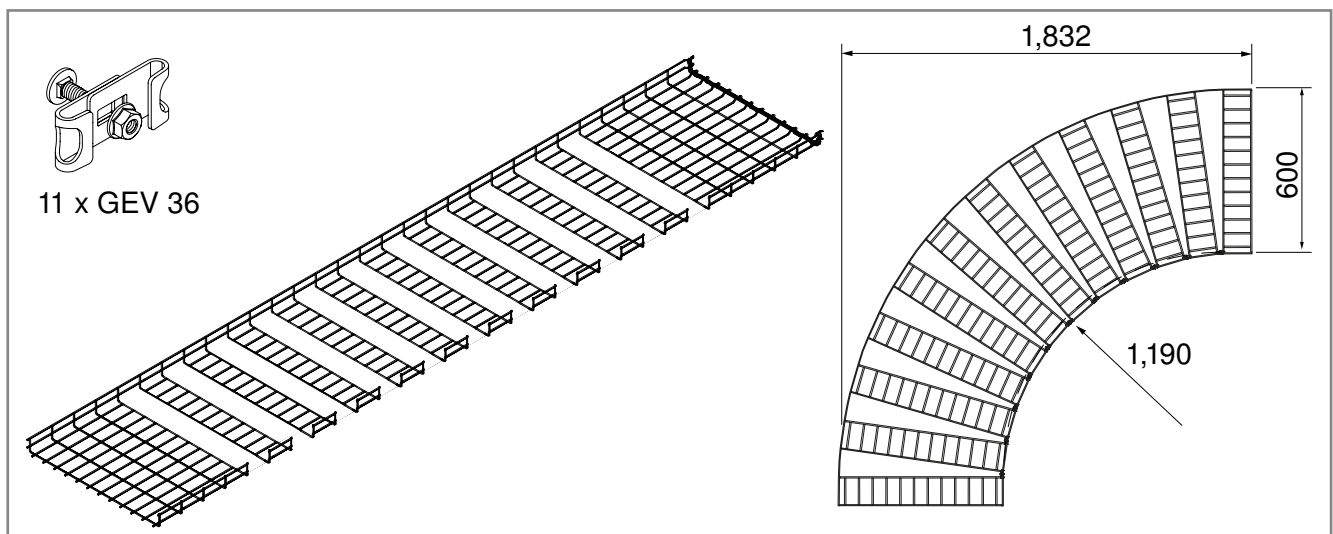


Fig. 28: 90° bend with tray width 600 mm

## 7.4 Creating a reduction

Suitable for GRM, C-GR and SGR

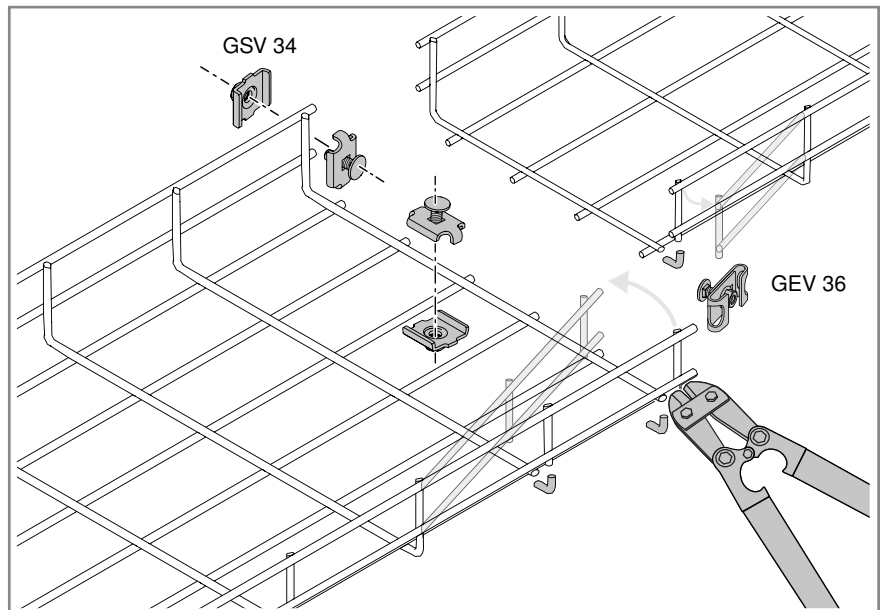
Mesh cable trays are cut and bent to create reductions on smaller mesh cable tray widths. The reduction can be created asymmetrically on only one side or symmetrically on both sides of the mesh cable tray. Reductions are created with GSV 34 joint connectors and GEV 36 corner connectors.

### ATTENTION

#### Cable damage through incorrectly set screw connections!

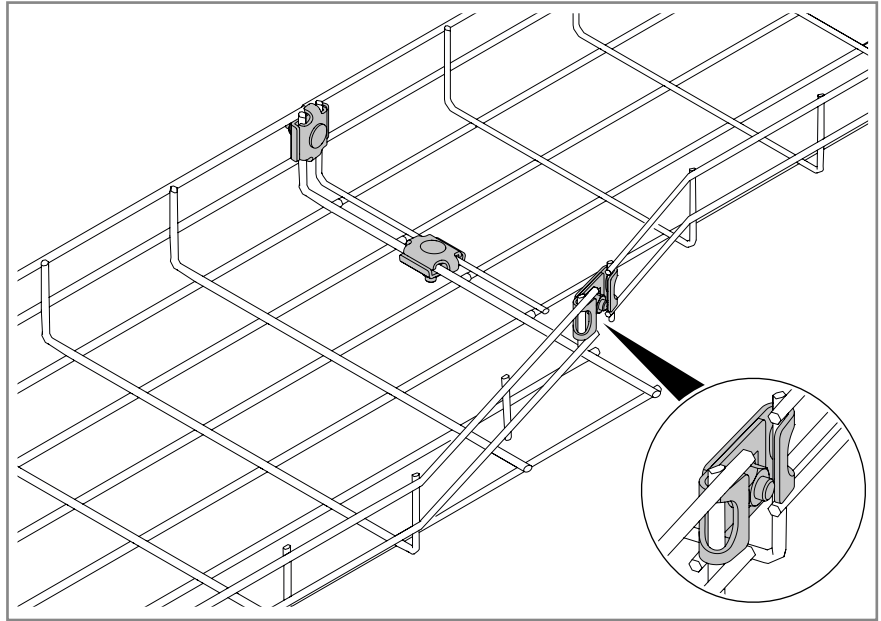
Sharp-edged threads can damage cables.

Always insert bolts from the inside to the outside of the mesh cable tray and screw on the nut from outside.



**Fig. 29:** Cutting a mesh cable tray for asymmetrical reduction

1. Cut off the connection between the mesh cable tray edge and floor.
2. Bend the edge segment of the wider mesh cable tray inwards.
3. Bend the edge segment of the narrower mesh cable tray outwards.



**Fig. 30:** Creating an asymmetrical reduction with GSV 34 and GEV 36

4. Place the mesh cable trays so that they abut.
5. First mount the GSV 34 joint connectors at the joint of the mesh cable tray floor and edge.
6. Then attach GEV 36 corner connectors between the cut segments and adjust to the appropriate width.
7. Insert a truss-head bolt through the corner connector.
8. Tighten the corner connector with a nut.



## 7.5 Creating a T branch

Suitable for GRM, C-GR and SGR

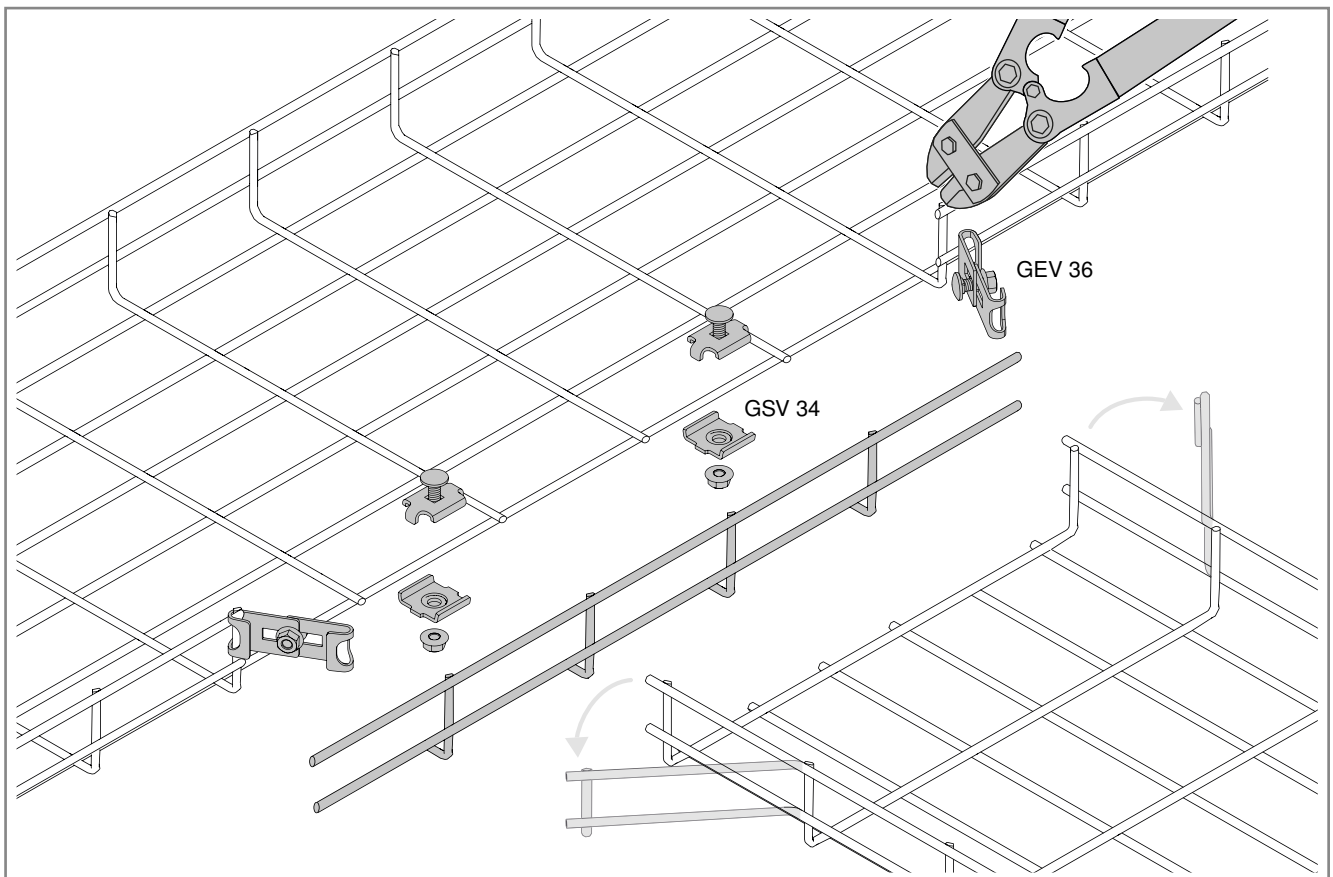
Mesh cable trays are cut, bent and joined together to create T branches with branching mesh cable trays. T branches are created with GSV 34 joint connector and GEV 36 corner connectors.

### ATTENTION

#### Cable damage through incorrectly set screw connections!

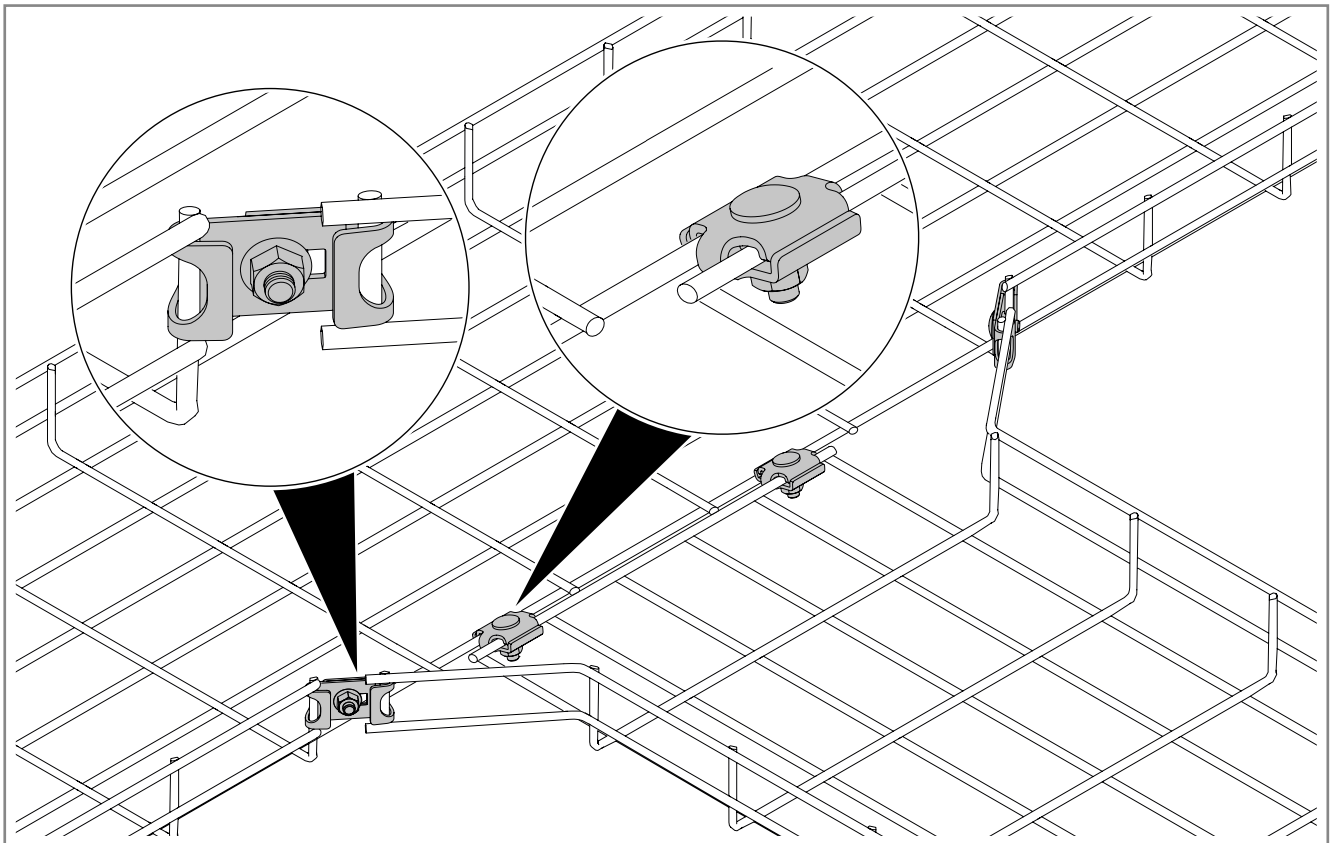
Sharp-edged threads can damage cables.

Always insert bolts from the inside to the outside of the mesh cable tray and screw on the nut from outside.



**Fig. 31:** Cutting a mesh cable tray for a T branch

1. Cut off segments from one mesh cable tray edge.
2. Cut off the connection between the edge and floor on a second mesh cable tray.
3. Assemble the mesh cable trays in a T shape.



**Fig. 32:** Mounting corner connectors and joint connectors

4. Assemble the mesh cable trays in a T shape.
5. First mount the GSV 34 joint connectors at the joint.
6. Then attach GEV 36 corner connectors between the cut edge segments and adjust to the appropriate width.
7. Insert a truss-head bolt through the corner connector.
8. Tighten the corner connector with a nut.

## 7.6 Creating a cross-over

Suitable for GRM, C-GR and SGR

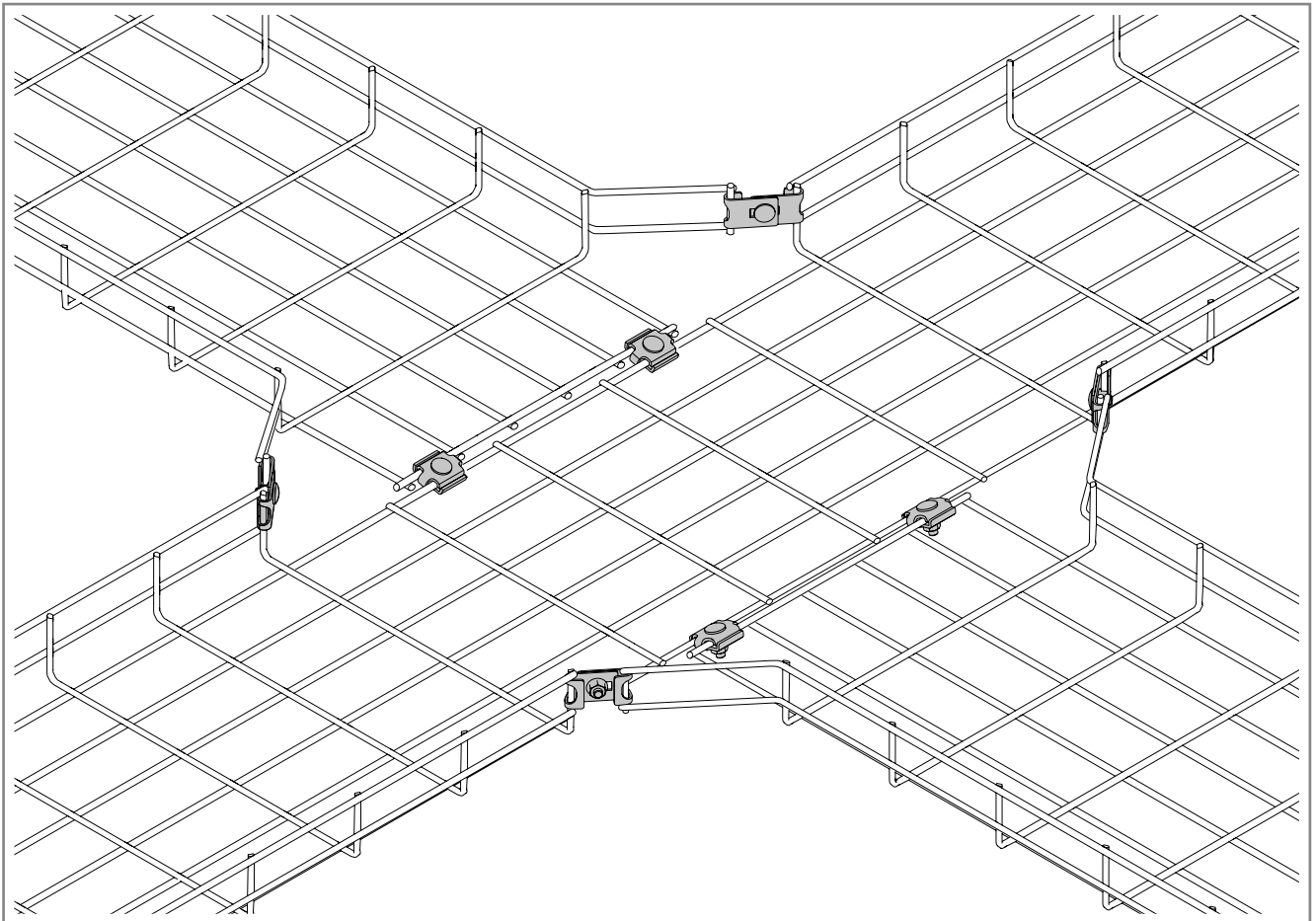
Mesh cable trays are cut, bent and joined together to create cross-overs with branching mesh cable trays. A cross-over is created in the same way as a T branch with GSV 34 joint connectors and GEV 36 corner connectors (see "7.5 Creating a T branch" on page 33).

### ATTENTION

#### **Cable damage through incorrectly set screw connections!**

Sharp-edged threads can damage cables.

Always insert bolts from the inside to the outside of the mesh cable tray and screw on the nut from outside.



**Fig. 33:** Creating a cross-over

1. Cut off segments from both mesh cable tray edges on the continuous mesh cable tray.
2. Cut off connections between mesh cable tray edges and floors on opposite mesh cable trays.
3. Assemble the mesh cable trays in a cross shape.
4. First mount the GSV 34 joint connectors at the joint.
5. Then attach GEV 36 corner connectors between the cut edge segments and adjust to the appropriate width.
6. Insert a truss-head bolt through the corner connector.
7. Tighten the corner connector with a nut.

## 8 Creating exits and height offsets

To route cables from mesh cable trays into lower mesh cable trays, or to avoid obstacles, mesh cable trays are cut and straight, bent or lateral exits and height offsets are created.

Suitable for GRM, C-GR and SGR

### ATTENTION

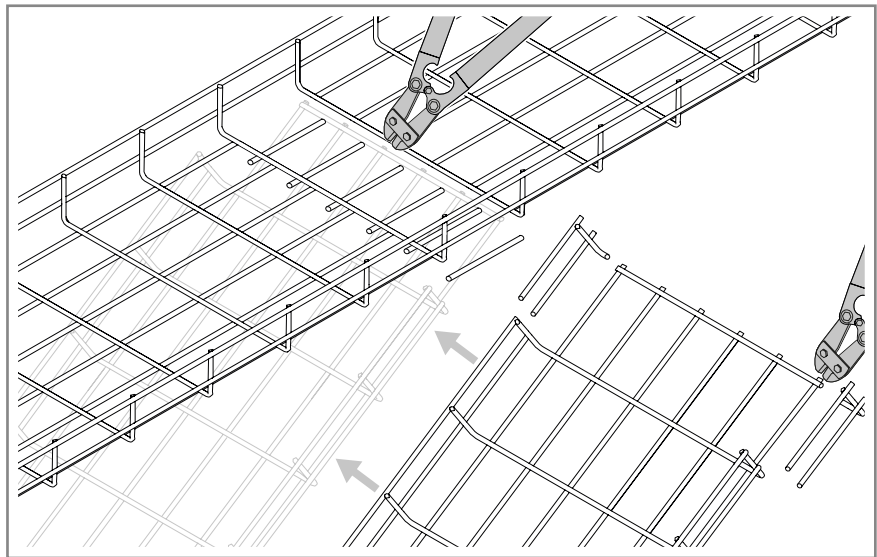
#### **Cable damage through incorrectly set screw connections!**

Sharp-edged threads can damage cables.

Always insert bolts from the inside to the outside of the mesh cable tray and screw on the nut from outside.

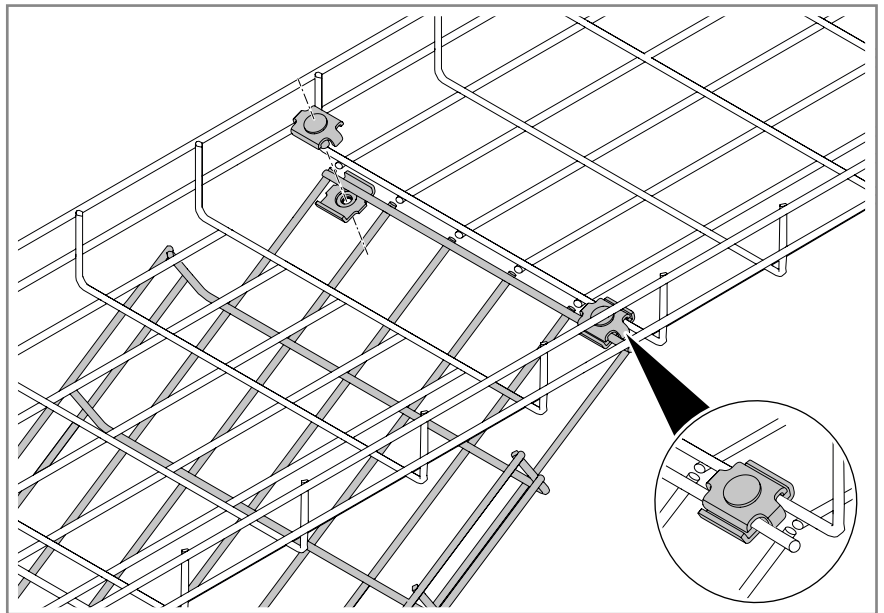
### 8.1 Creating a straight exit with GSV 34 joint connectors

Mesh cable trays can be cut and connected using GSV 34 joint connectors to create a straight exit.



**Fig. 34:** Cutting a mesh cable tray for an exit

1. Cut out a row of mesh from the floor of the continuous mesh cable tray.
2. Cut off the first segments of both edges of the exiting piece of mesh cable tray.
3. Connect the two mesh cable trays together.



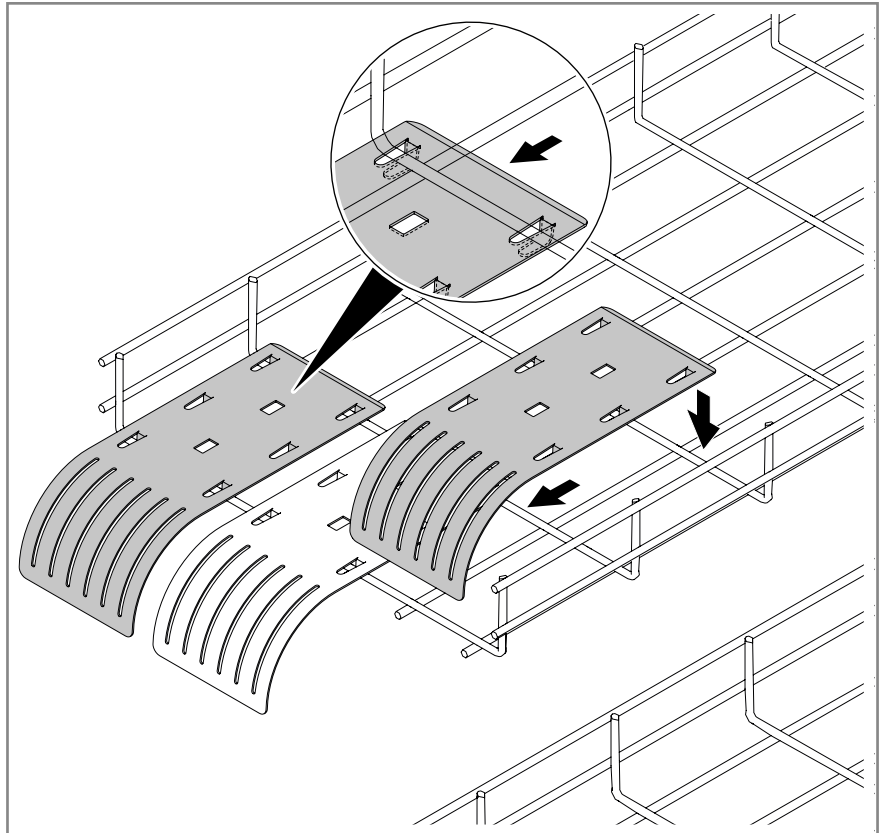
**Fig. 35:** Creating an exit with GSV 34 joint connectors

4. Place the top and bottom parts of a joint connector at the joint.
5. Insert the truss-head bolt through the joint connector.
6. Screw on the joint connector with a nut.
7. Mount at least two joint connectors, depending on the mesh cable tray width.

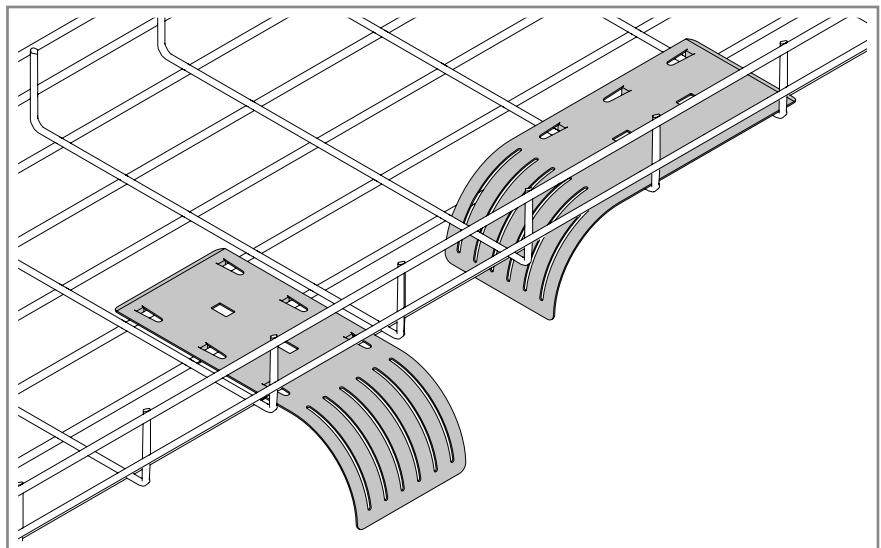
## 8.2 Creating an exit with cable exit plates

Suitable for GRM and C-GR.

One or more cable exit plates are mounted to create a straight or lateral exit, depending on the width of the cable tray or the exit.



**Fig. 36:** Creating a straight exit with cable exit plates



**Fig. 37:** Creating a lateral exit with cable exit plates

1. Push the cable exit plate with clamping lugs onto the mesh cable tray.
2. If necessary, clamp the clamping lugs using combination pliers.

### 8.3 Creating an exit with installation profiles

Suitable for GRM, C-GR mesh cable trays

The MW 45 and MW 90 installation profiles are mounted to create an exit (and entrance?) at 45° and 90° angles. The profiles are each mounted using two KS 25 35 hold-down clamps. The installation method is the same for both angles.

#### ATTENTION

#### Cable damage through incorrectly set screw connections!

Sharp-edged threads can damage cables.

Always insert bolts from the inside to the outside of the mesh cable tray and screw on the nut from outside.

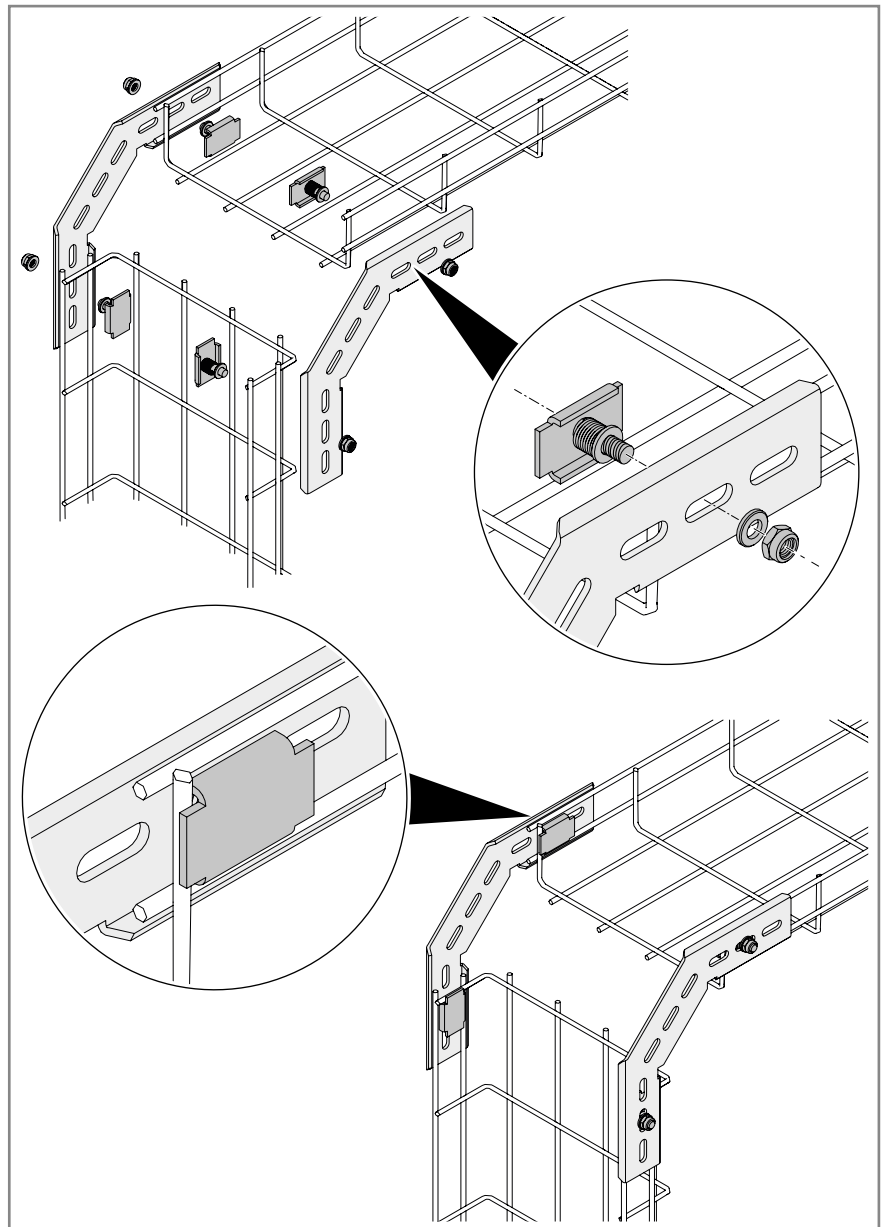


Fig. 38: Mounting 90° installation profiles

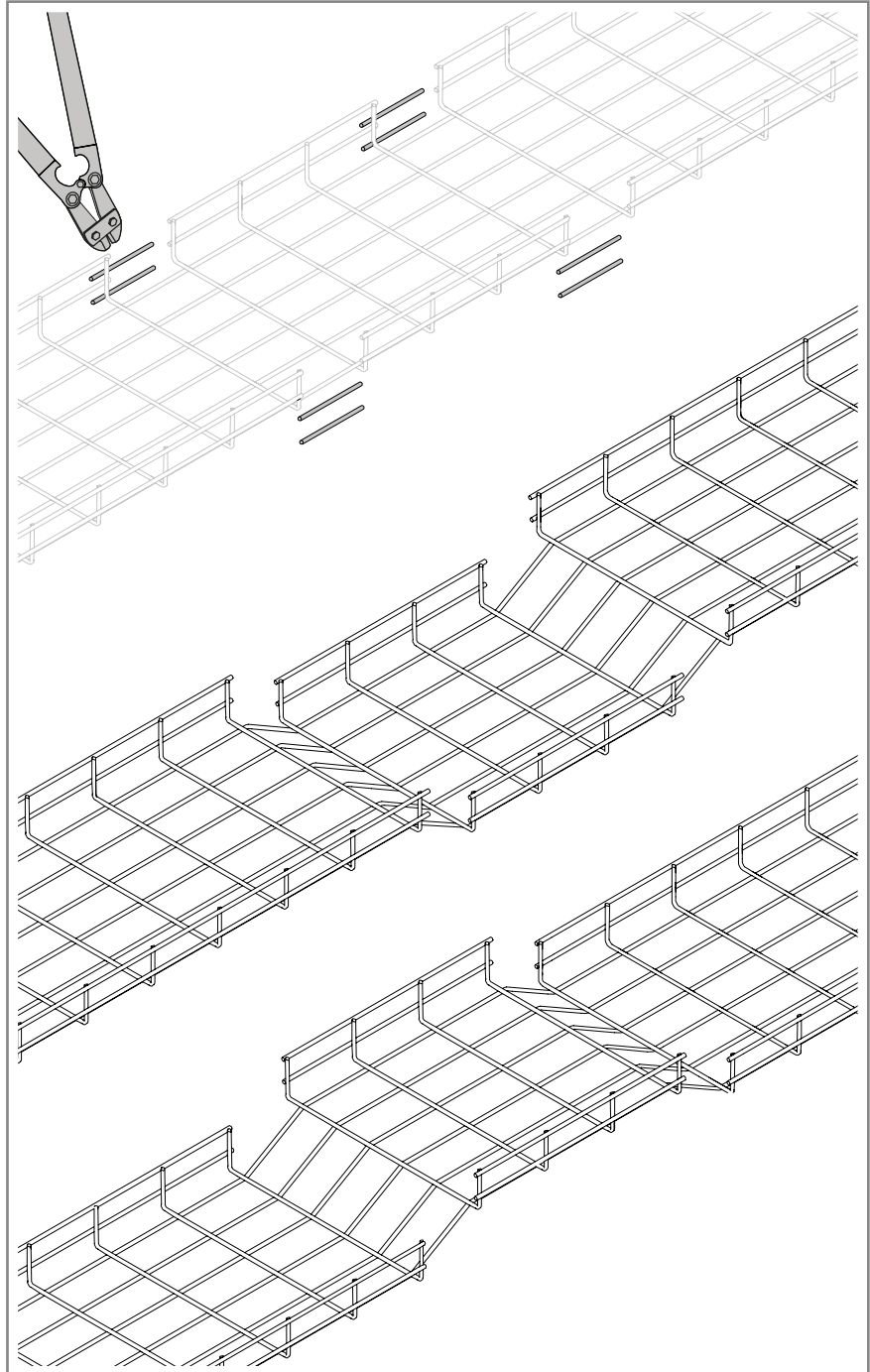
1. Place the installation profile on both mesh cable tray edges on the horizontal mesh cable tray from the outside.
2. Place the hold-down clamp on the mesh cable tray wire and profile from the inside.
3. Screw on the hold-down clamp with a nut.
4. Repeat the installation steps for the exiting mesh cable tray.

### 8.4 Creating a height offset

Suitable for GRM, C-GR and SGR

Mesh cable trays are cut and bent to create height offsets. The height offset can be falling or rising and have different angles of 30 – 60°.

**Note!** *Only bend the mesh cable tray up to 60° to prevent the wires from breaking.*



**Fig. 39:** Falling and rising height offsets

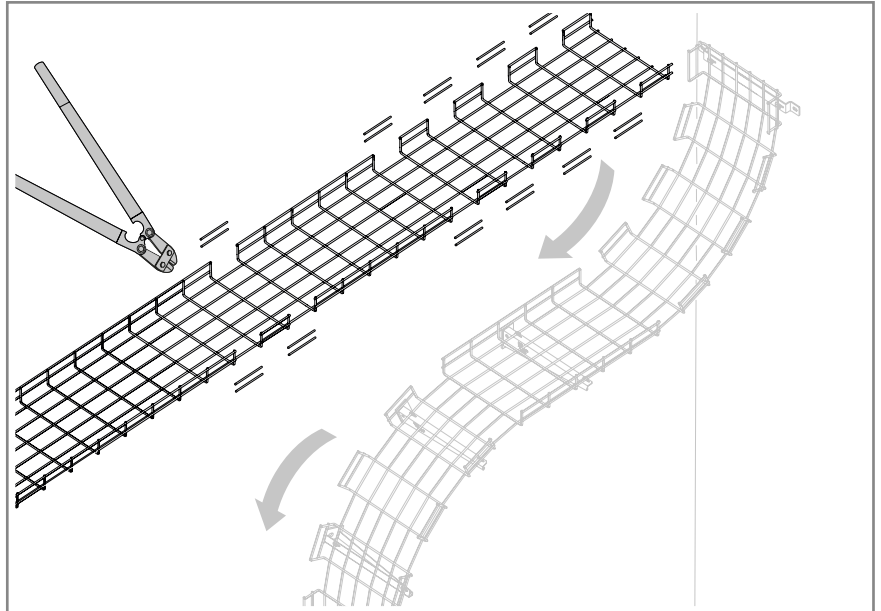
1. Cut out one segment from each side of the mesh cable tray.
2. Bend the mesh cable tray upwards or downwards at the desired angle.



## 8.5 Creating a rising/falling bend

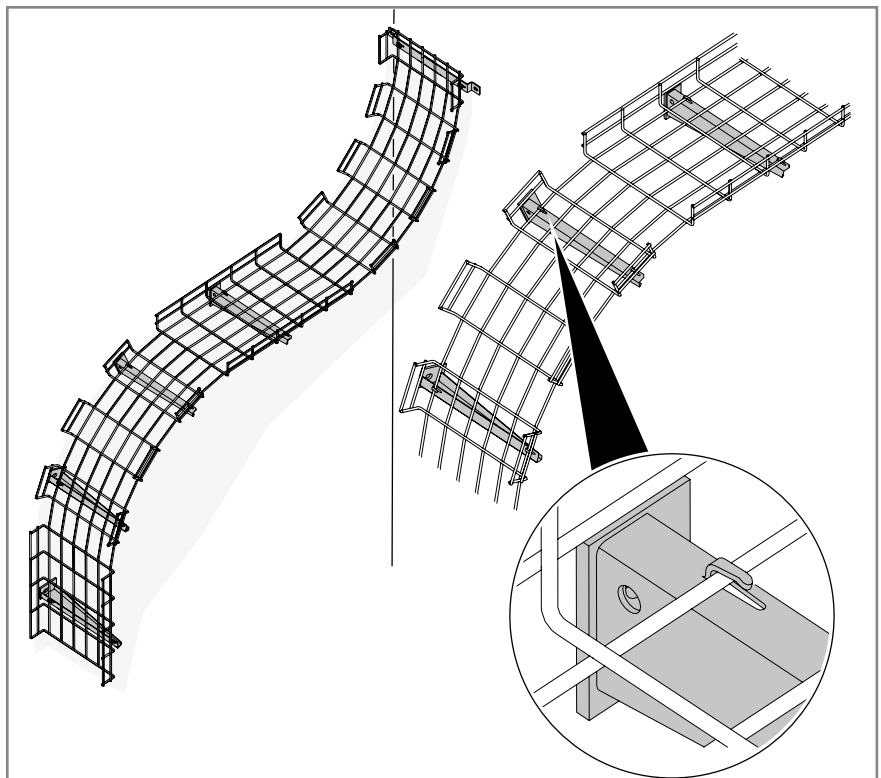
Suitable for GRM, C-GR and SGR

Mesh cable trays are cut and bent to create rising and falling bends with different radii. The rising and falling bends are mounted on wall and support brackets.



**Fig. 40:** Cutting a mesh cable tray for rising/falling bends

1. Cut out every second segment of the mesh cable tray edges, depending on the requirements.
2. Bend the mesh cable tray in the desired radius.



**Fig. 41:** Example of a rising/falling bend with mounting on AWG 15 wall/support bracket

## 9 Mounting barrier strips

Suitable for GRM, C-GR

A TSG barrier strip is mounted to the mesh cable tray in order to separate different voltage areas from each other. The barrier strip can be screwed on to the mesh cable tray with GKT 38 hold-down clamp or mounted without screw connections with the KS GR hold-down clamp.

### ATTENTION

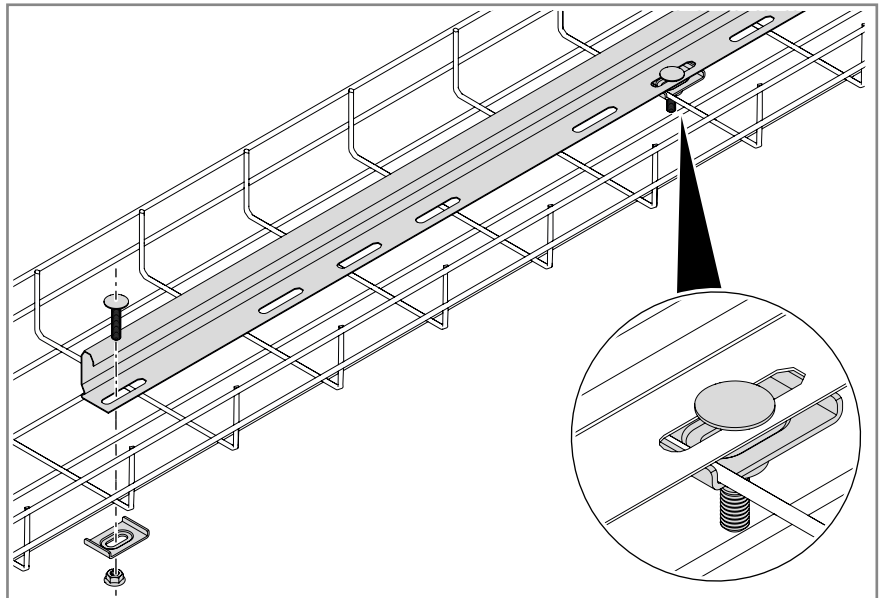
#### **Cable damage through incorrectly set screw connections!**

Sharp-edged threads can damage cables.

Always insert bolts from the inside to the outside of the mesh cable tray and screw on the nut from outside.

### 9.1 Mounting barrier strips with screw connections

The barrier strip is mounted with a GKT 38 hold-down clamp with a screw connection.

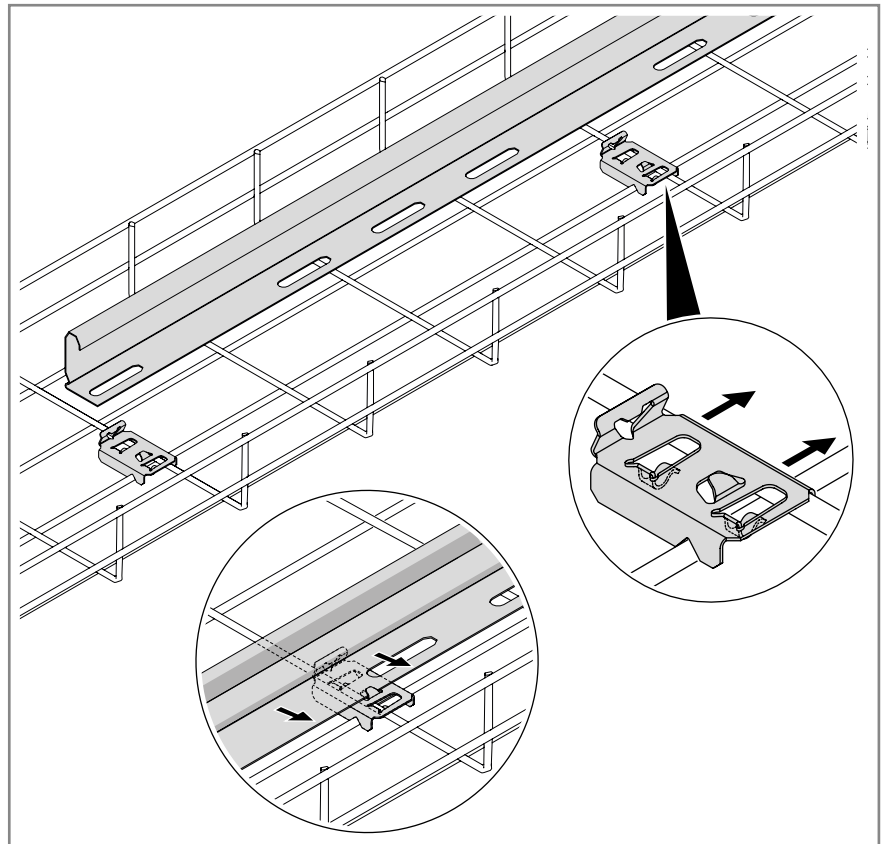


**Fig. 42:** Mounting a barrier strip with GKT 38 hold-down clamps

1. Place the barrier strip on the mesh cable tray.
2. Set the base of the hold-down clamp against the underside of the mesh cable tray wire and barrier strip.
3. Insert the truss-head bolt through the barrier strip bore hole and hold-down clamp from above.
4. Screw on the hold-down clamp with a nut.

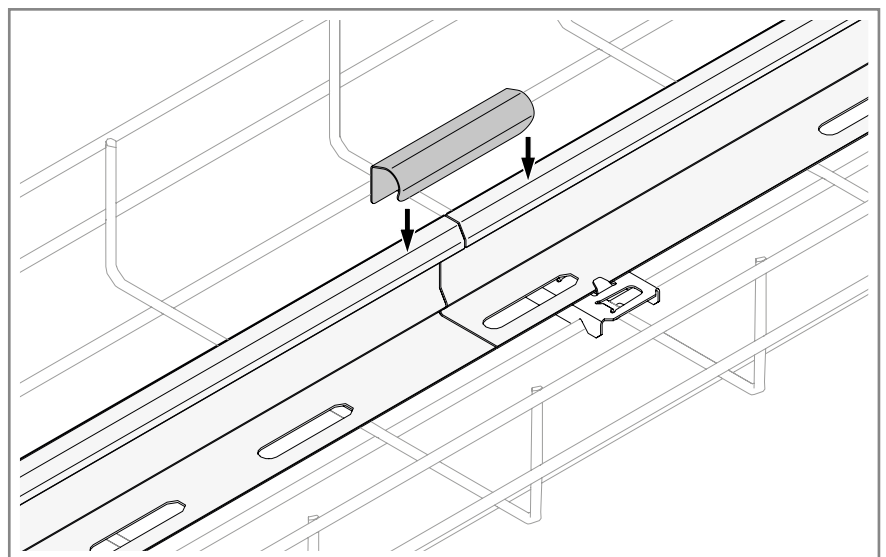
## 9.2 Mounting barrier strips without screw connections

The barrier strip is mounted with a KS GR hold-down clamp without a screw connection.



**Fig. 43:** Mounting a barrier strip with KS GR hold-down clamp

1. Place the hold-down clamp on the mesh cable tray wire.
2. Engage the hook of the hold-down clamp under the mesh cable tray wire.
3. Clamp the barrier strip in the hold-down clamp.



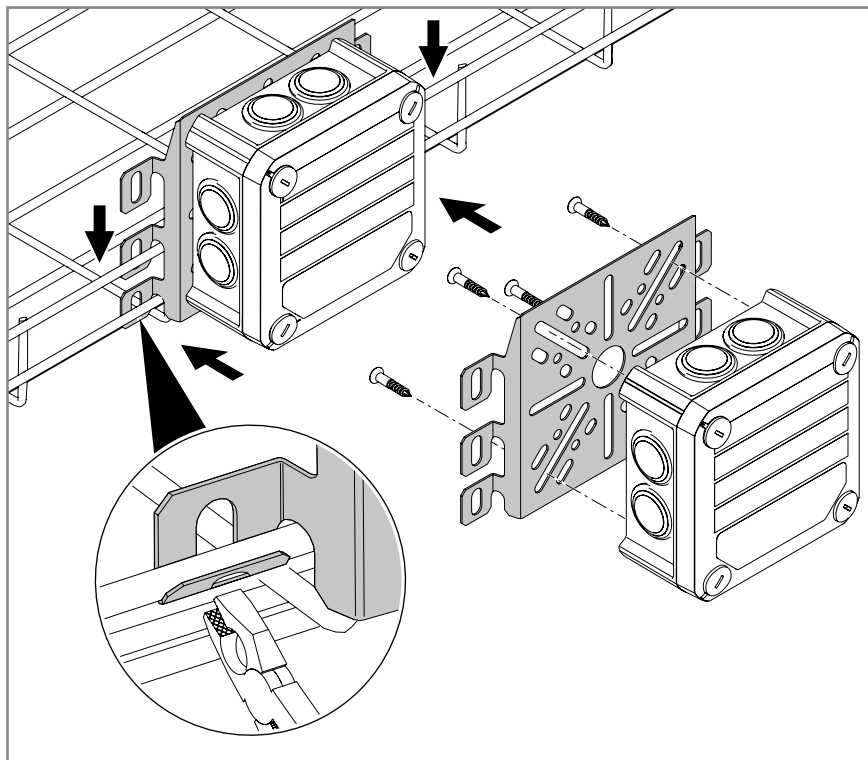
**Fig. 44:** Mounting a barrier strip connector

4. Clamp the TSVG barrier strip connector at the joint of the two barrier strips.

## 10 Mounting MP UNI mounting plates

Suitable for GRM, C-GR, SGR

An MP UNI mounting plate is mounted as an adapter in order to mount a junction box on the mesh cable tray.



**Fig. 45:** Mounting a MP UNI mounting plate with junction box

1. Hook the mounting plate into the mesh cable tray edge.
2. Clamp the hook using combination pliers.

## 11 Mounting side holders

Suitable for GRM and C-GR

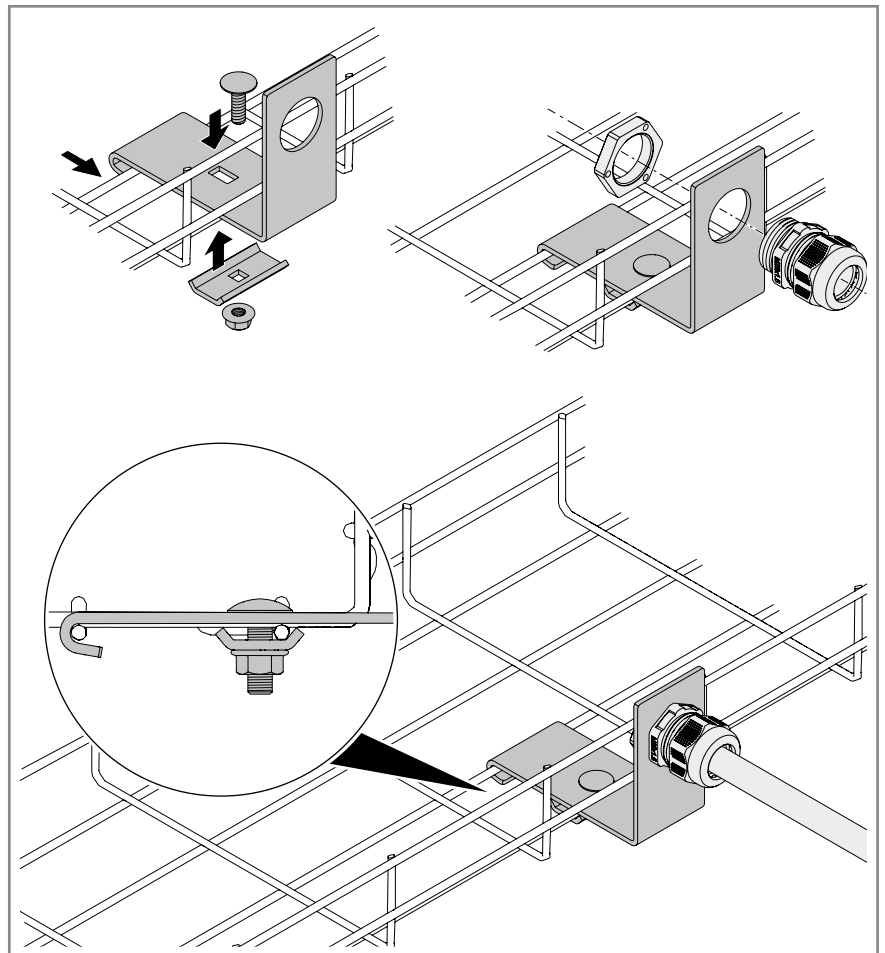
An SH KAB side holder is mounted in order to mount a cable gland to the mesh cable tray.

**ATTENTION**

### Cable damage through incorrectly set screw connections!

Sharp-edged threads can damage cables.

Always insert bolts from the inside to the outside of the mesh cable tray and screw on the nut from outside.



**Fig. 46:** Mounting a side holder

1. Push the side holder onto the longitudinal wire of the mesh cable tray.
2. Mount the screw connection of the side holder in such a way that a longitudinal wire is also clamped.

## 12 Mounting covers

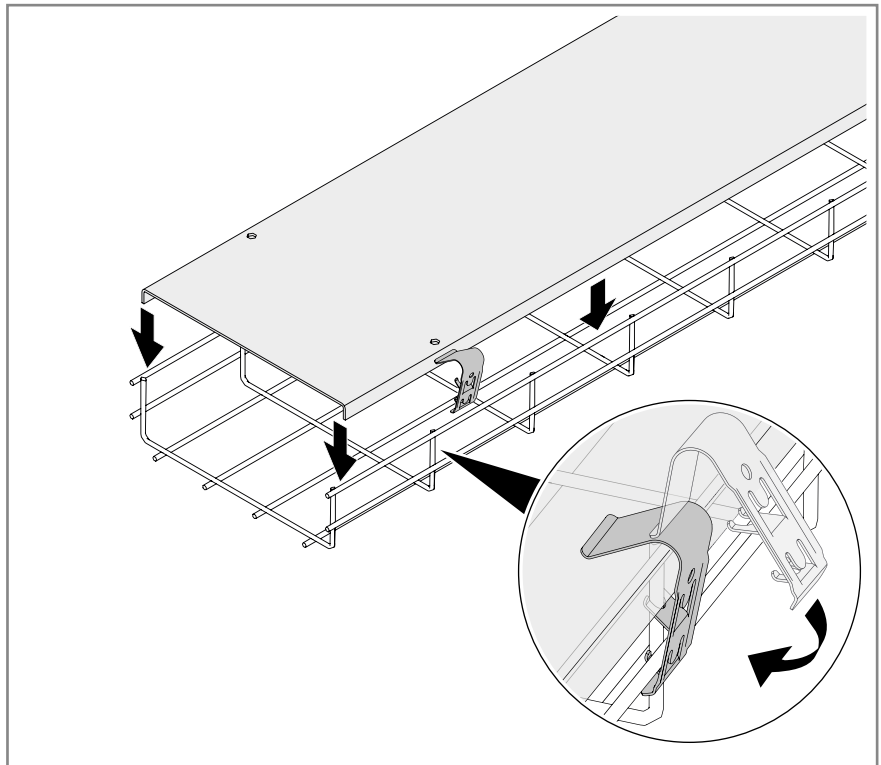
Two types of covers can be used to protect the mesh cable tray systems from contamination and weathering. DRLU covers are mounted with the DKU cover clamp. DGRR covers are mounted without tools, as they are snapped onto the mesh cable tray edges.

The covers can be shortened to any length.

The covers are always cut straight and not with a mitre.

### 12.1 Mounting DRLU covers with cover clamps

Suitable for GRM

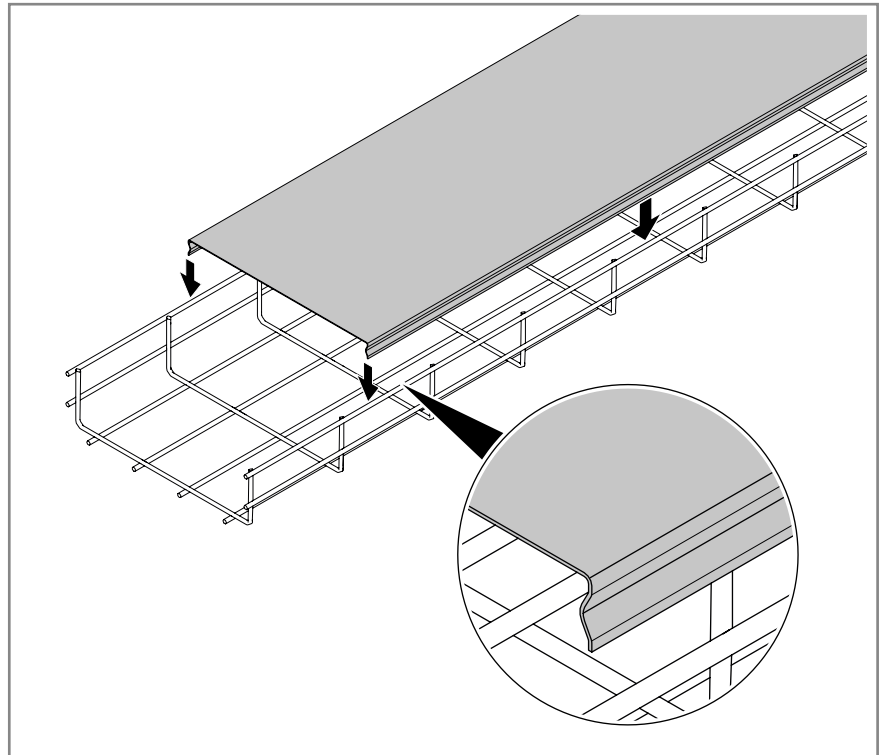


**Fig. 47:** Mounting the cover with cover clamps

1. Shorten the cover if necessary.
2. Place the cover on the mesh cable tray.
3. Clamp the cover clamps under the longitudinal wire on the mesh cable tray edge, so that the hooks of the clamp hook into the transverse wire at the same time.

## 12.2 Mounting DGRR covers

Suitable for GRM



**Fig. 48:** Snap on the cover.

1. Shorten the cover if necessary.
2. Place the cover on the mesh cable tray.
3. Snap the cover onto the mesh cable tray edges.

## 13 Creating equipotential bonding

Equipotential bonding must be created to earth the mesh cable tray system. The equipotential bonding for mesh cable tray systems can be mounted with the 939 earthing clamp or VEK-GRM connection and earthing terminal.



**WARNING**

### **Risk of electric shock!**

Contact with electrical current can lead to an electric shock. Fatal or serious injuries are possible.

Work on the electrical system may only be performed by electrical specialists.

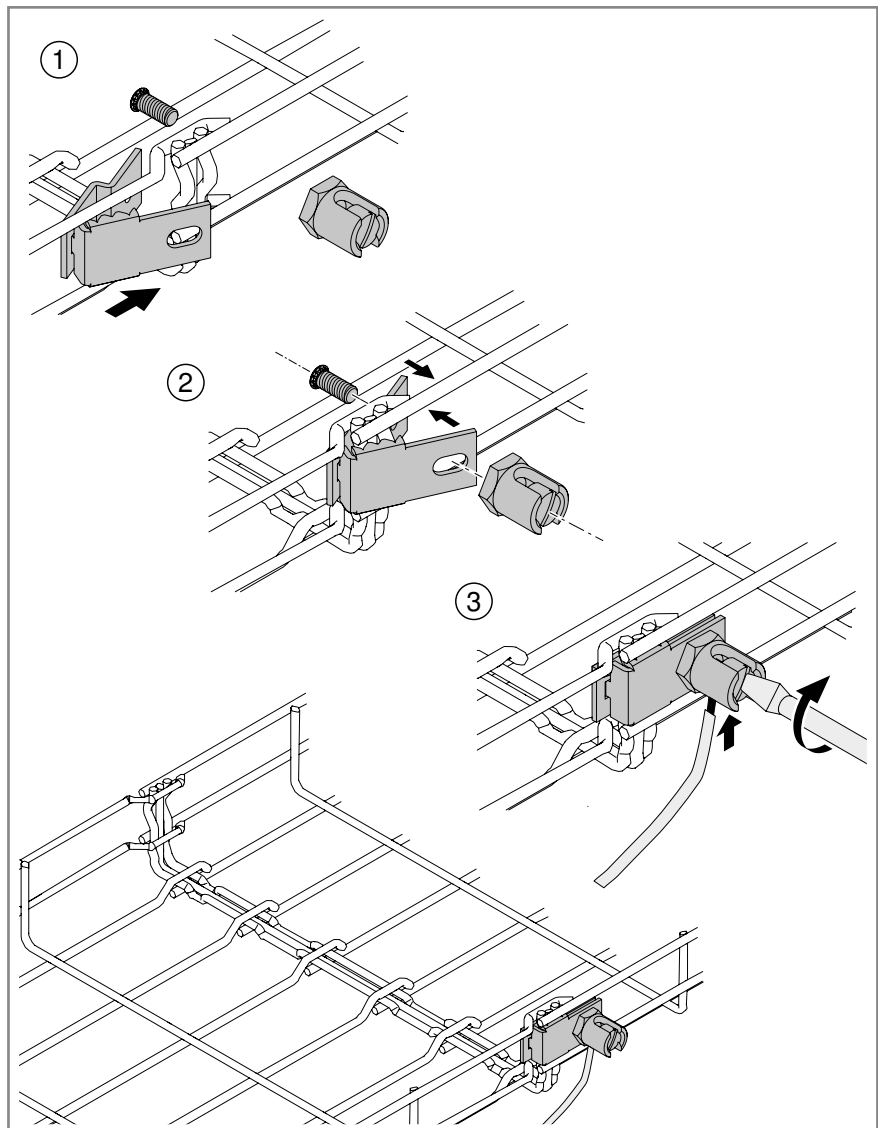
### **Note!**

*When mounting the system components, the screw connections automatically create continuous equipotential bonding of the entire mesh cable tray system. The system must be connected to the equipotential bonding of the overall system at least once.*

### 13.1 Creating equipotential bonding with earthing terminal

Suitable for GRM, G-GRM, C-GR and SGR

The VEK-GRM earthing terminal is mounted together with the EKL earthing screw in order to be able to connect an earthing cable.



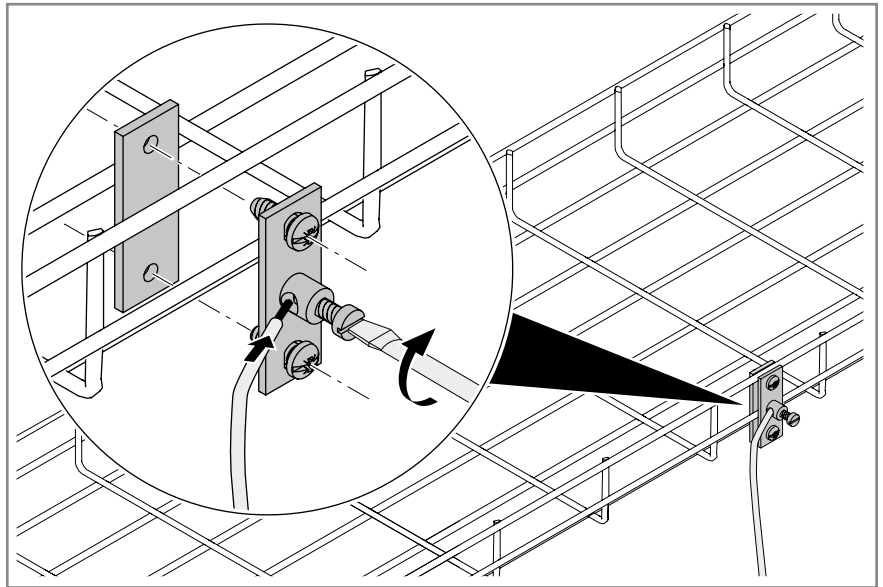
**Fig. 49:** Mounting an earthing terminal

1. Place the earthing terminal at the joint of two mesh cable tray edges.
2. Mount the earthing terminal on the mesh cable tray using an earthing screw.
3. Mount the equipotential bonding cable to the earthing screw.



### 13.2 Creating equipotential bonding with earthing clamp

Suitable for GRM, G-GRM, C-GR and SGR



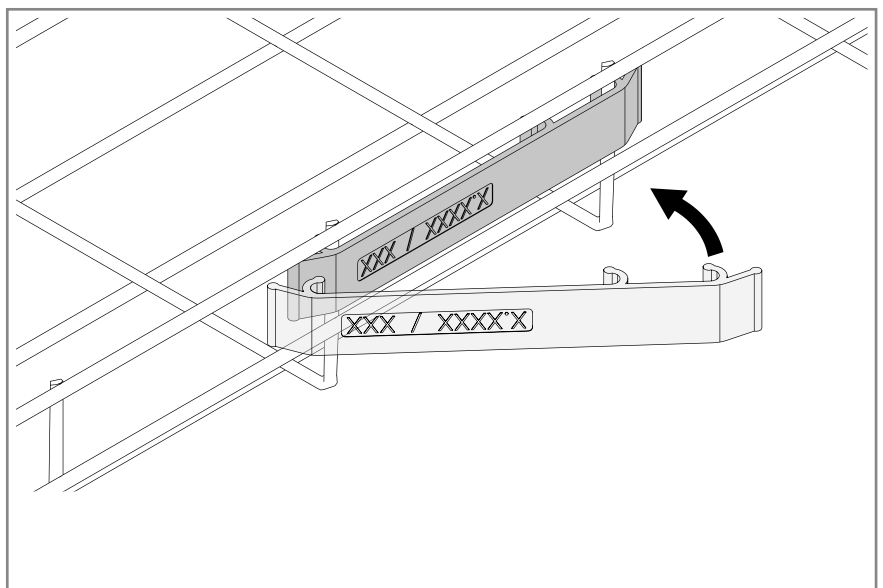
**Fig. 50:** Mounting an earthing clamp

1. Place the earthing clamp parts on the inside and outside of the mesh cable tray edges.
2. Connect the earthing clamp parts with screws.
3. Mount the equipotential bonding cable to the earthing clamp.

### 13.3 Mounting identification plates

Suitable for GRM, G-GRM, C-GR and SGR

An identification plate can be mounted to mark the routing of data cables in the mesh cable tray, for example. The identification plate is available in orange, yellow, blue and green.



**Fig. 51:** Mounting an identification plate

1. Write on the identification plate as required and clamp it to the mesh cable tray.

### 14 Mounting mesh cable trays on the floor, wall, ceiling

Mesh cable trays are mounted on the floor, wall or ceiling using different mounting systems, depending on requirements.

**Note!** *The fastening material must be selected to suit the substrate and the calculated load values. The screws and anchors shown in these instructions are examples only.*

#### 14.1 Mounting mesh cable trays on the floor

The following systems are suitable for floor mounting:

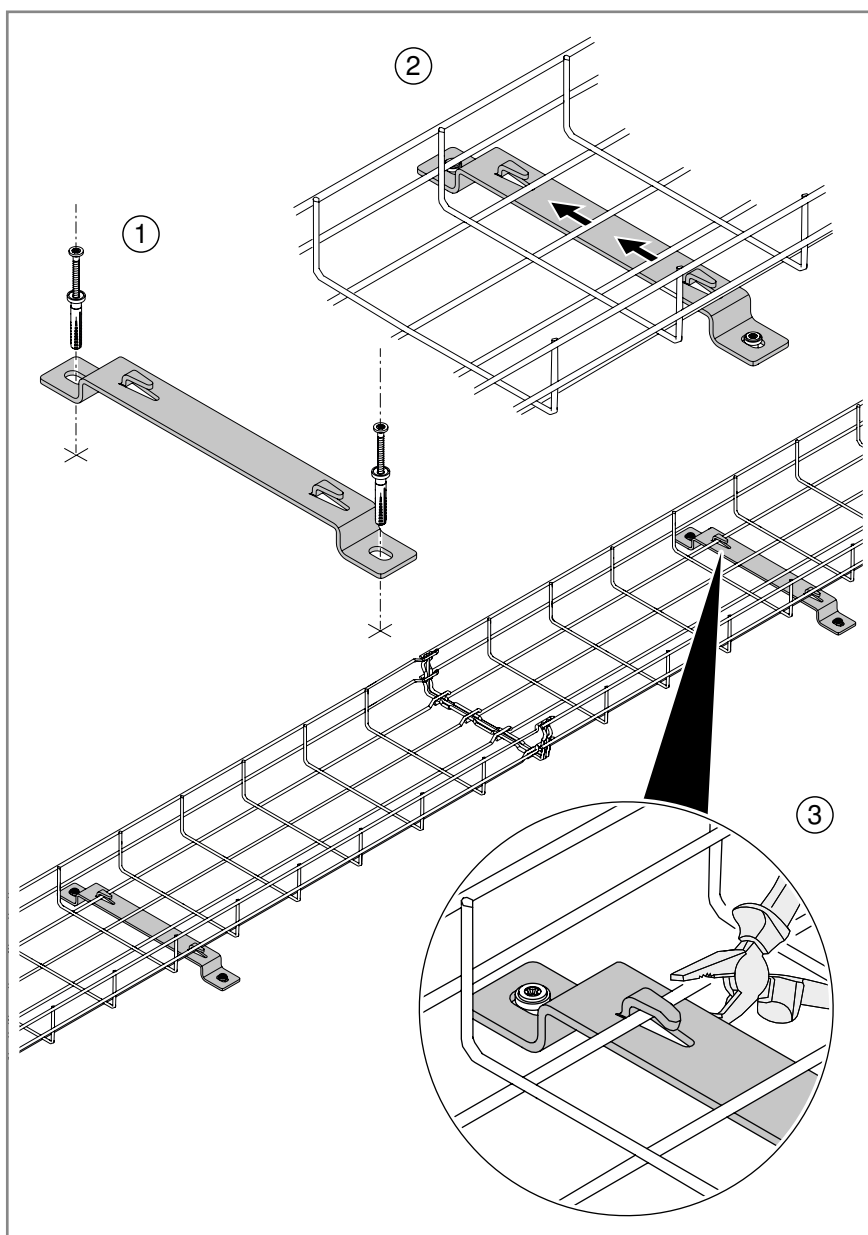
- DBLG 20/... stand-off bracket with clamping lugs
- DBL 50 300 stand-off bracket with HS hook screw
- FangFix stone with TrayFix mounting system
- WB GR wall bracket (for 3.9 mm mesh cable tray wire)
- GKS 50 hold-down clamp (for 50 mm grids)

**Note!** *Due to the individual mounting options of the mesh cable tray systems, there are no general specifications for the permissible load capacity and maximum support spacing. Observe the permissible load capacity and maximum support spacing according to the individual plan.*

### 14.1.1 Mounting with DBLG 20/... stand-off brackets

Suitable for GRM and C-GR.

The DBLG 20/... stand-off bracket has clamping lugs to which the mesh cable trays are clamped.



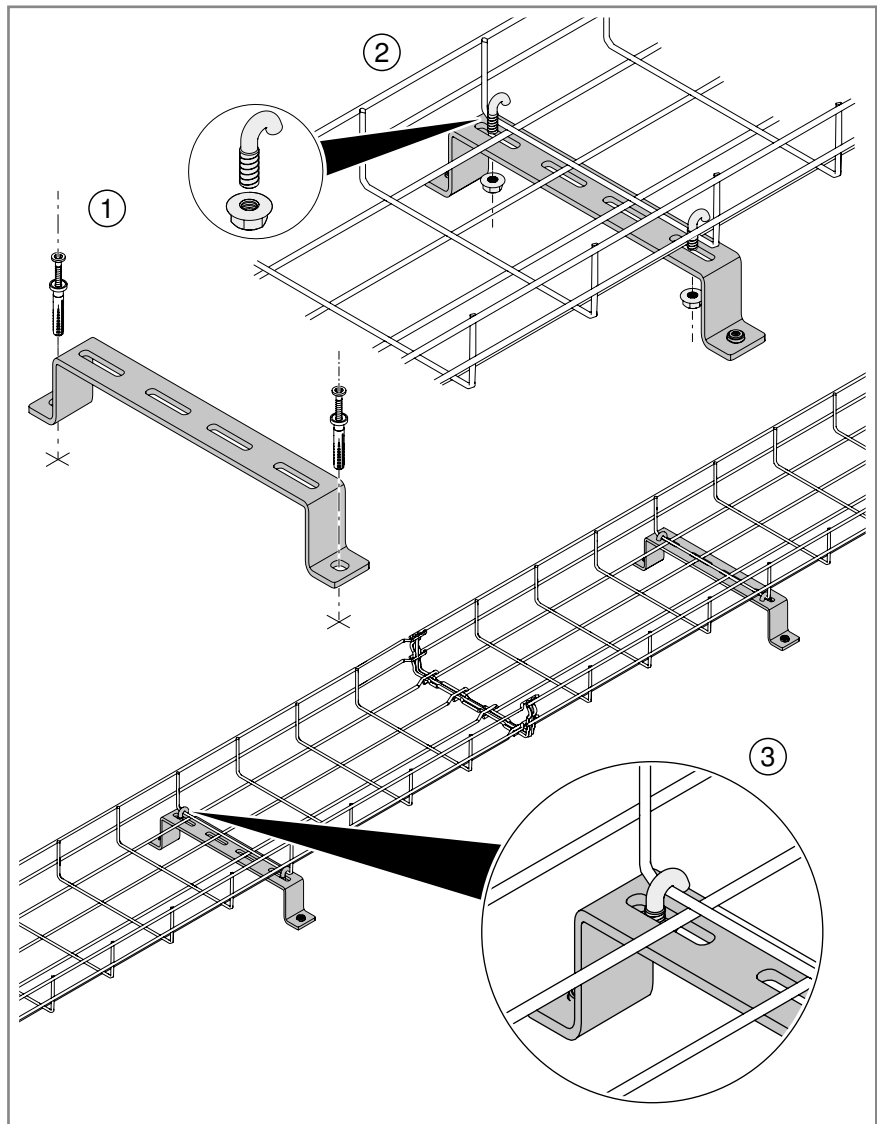
**Fig. 52:** Mounting a mesh cable tray on DBLG 20/... stand-off brackets

1. Draw on the drill holes for the stand-off brackets and drill them.
2. Mount the stand-off brackets on the floor.
3. Push the mesh cable tray under the clamping lugs.
4. Clamp the clamping lugs using combination pliers.

### 14.1.2 Mounting with DBL50 300 stand-off brackets

Suitable for GRM and SGR

The mesh cable tray is mounted on the DBL 50 300 stand-off bracket using the HS M6x13 hook screw and combination nut.

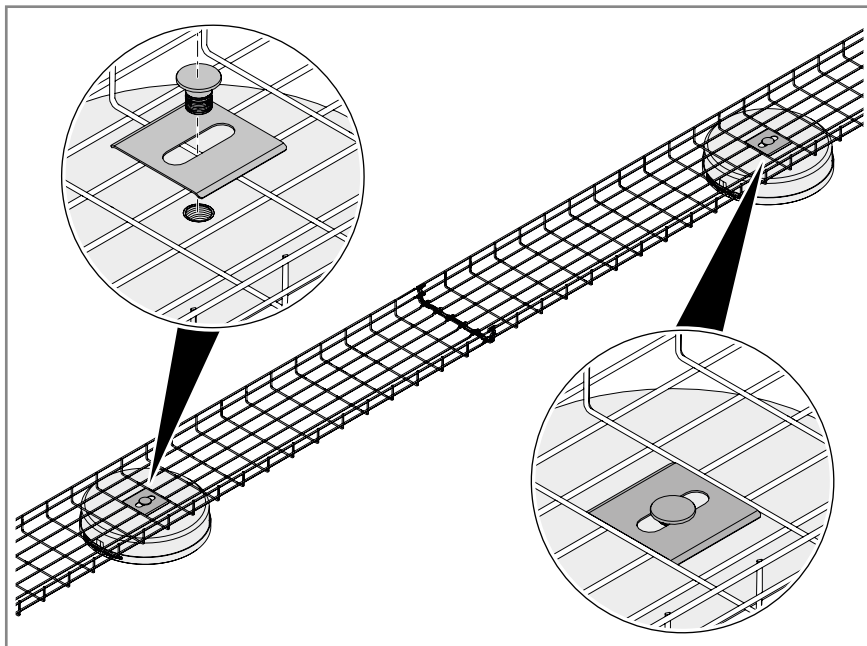


**Fig. 53:** Mounting a mesh cable tray on DBL 50 300 stand-off brackets

1. Draw on the drill holes for the stand-off brackets and drill them.
2. Mount the stand-off brackets on the floor.
3. Place the mesh cable tray on the stand-off brackets.
4. Screw the mesh cable tray to the stand-off brackets using hook screws and combination nuts. The transverse wire of the mesh cable tray must be clamped with the hook screw.

### 14.1.3 Mounting to FangFix stone

The mesh cable tray is mounted to the FangFix stone using the TrayFix mounting system.



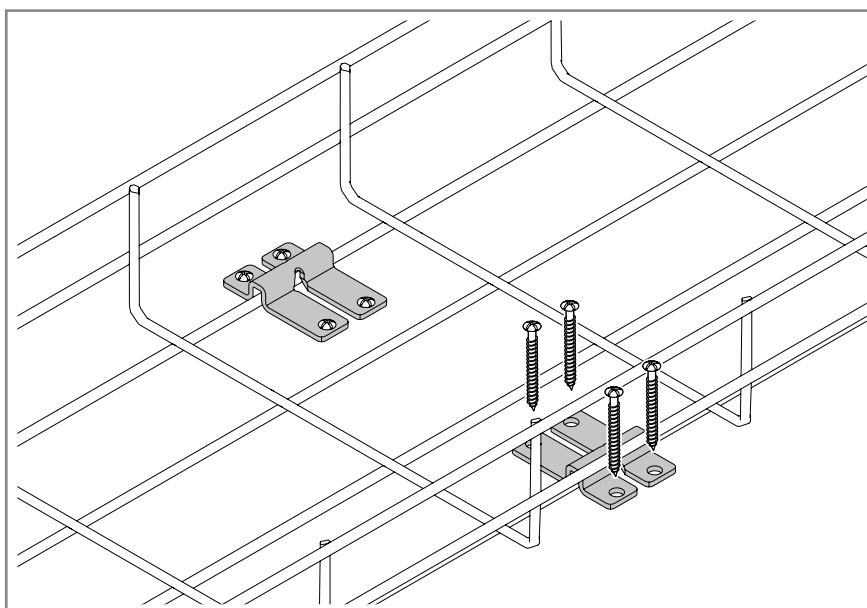
**Fig. 54:** Mounting the mesh cable tray to FangFix stone

1. Position the FangFix stones on the floor.
2. Place the mesh cable tray on the FangFix stones.
3. Screw the mesh cable tray to the FangFix stones using the TrayFix mounting system. Two longitudinal wires of the mesh cable tray floor must also be clamped.

### 14.1.4 Mounting with WB GR wall brackets

Suitable for GRM with a wire thickness of 3.9 mm

The mesh cable tray is screwed or riveted to the floor with the WB GR wall bracket.

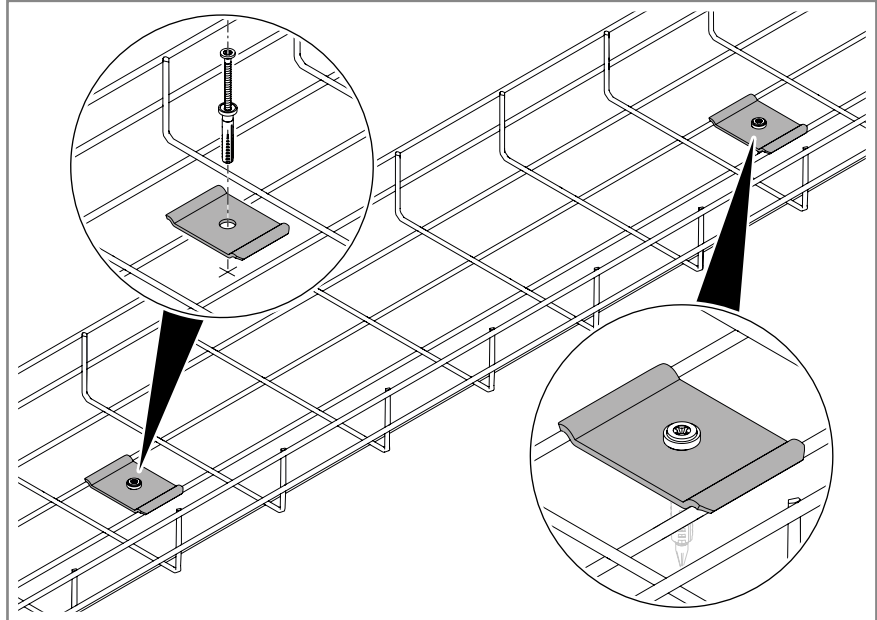


**Fig. 55:** Mounting a mesh cable tray on the floor with WB GR wall brackets

1. Place the mesh cable tray on the floor.
2. Draw on the drill holes for the wall brackets and drill them.
3. Place the floor fasteners over the longitudinal wires of the mesh cable tray.
4. Mount the mesh cable trays on the floor with floor fasteners.

### 14.1.5 Mounting with GKS 50 hold-down clamps

Suitable for GRM, C-GR



**Fig. 56:** Mounting a mesh cable tray on the floor with GKS 50 hold-down clamps

1. Place the mesh cable tray on the floor.
2. Draw on the drill holes for the hold-down clamp and drill them.
3. Place the hold-down clamp over the longitudinal wires of the mesh cable tray.
4. Mount the mesh cable tray on the floor with the hold-down clamp.

## 14.2 Mounting mesh cable trays on the wall

The following systems are suitable for wall mounting:

- K 12 1818 wall bracket (for mesh cable tray widths up to 200 mm)
- WH GRM 35 wall holder for GRM 35 50
- WBH CGR50 horizontal wall holder for CGR 50
- WBV CGR50 vertical wall holder for CGR 50
- WB GR wall bracket
- AWG 15 wall and support bracket (with clamping lugs)
- TPSAG wall and support bracket with clamping lugs

**Note!**

*Due to the individual mounting options of the mesh cable tray systems, there are no general specifications for the permissible load capacity and maximum support spacing. Observe the permissible load capacity and maximum support spacing according to the individual plan.*



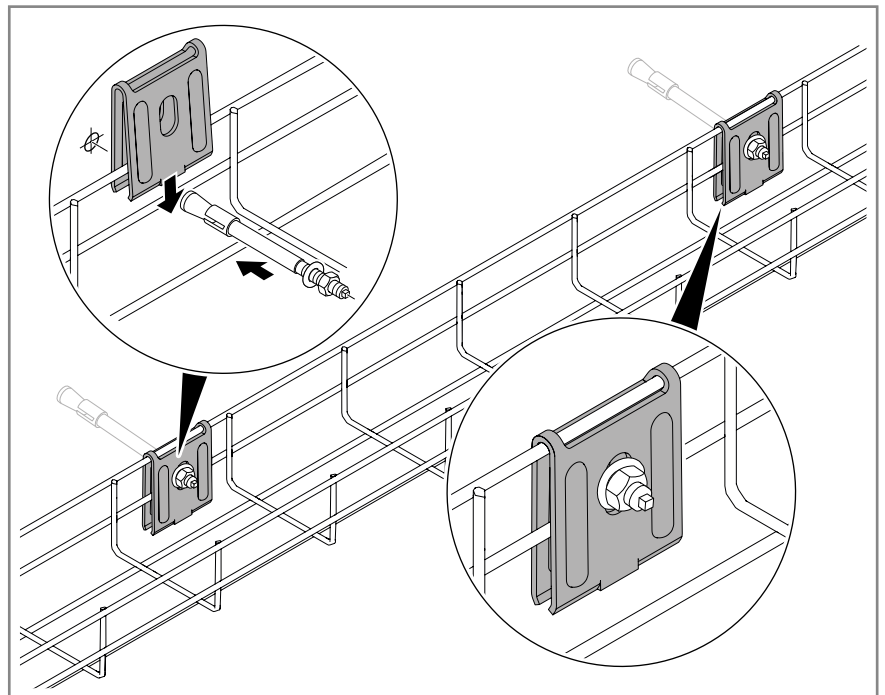
**Danger due to high working height!**

When installing at height, there is a risk of falling and/or that parts may fall. Falls and/or falling components can cause serious injuries.

- Do not work alone.
- Use fall protection as required.
- Secure the area below the installation against access.
- Wear safety shoes and a helmet.

### 14.2.1 Mounting with K 12 1818 wall brackets

Suitable for GRM, C-GRM and C-GR for widths up to 200 mm

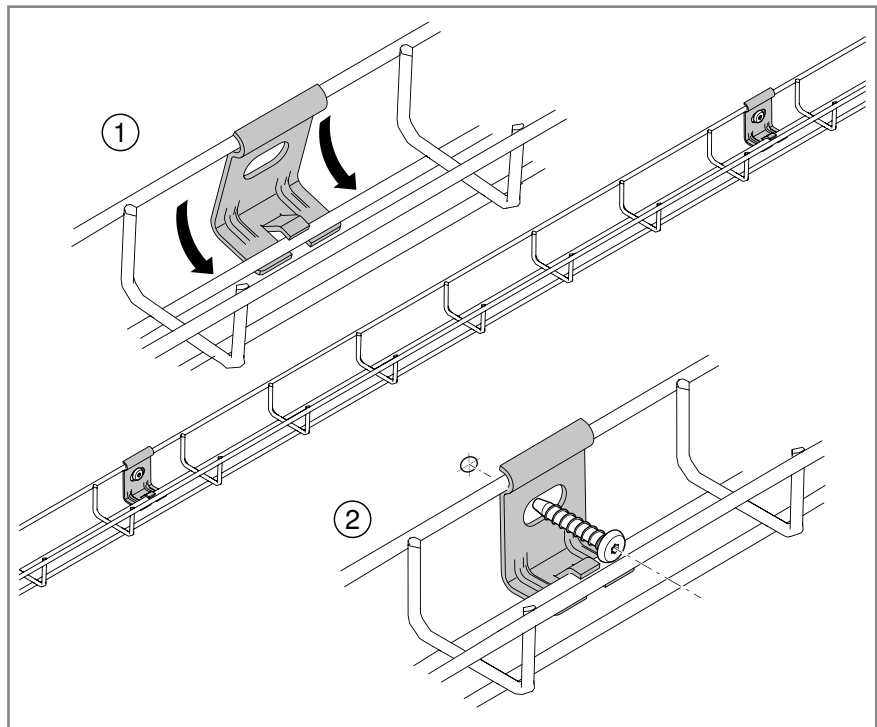


**Fig. 57:** Mounting a mesh cable tray with K 12 1818 wall brackets

1. Draw on the drill holes for the wall brackets and drill them.
2. Clamp the wall brackets over the upper longitudinal wire of the mesh cable tray.
3. Mount the mesh cable tray on the wall with wall brackets.

### 14.2.2 Mounting with WH GRM 35 wall holders

Suitable for GRM 35 50



**Fig. 58:** Mounting a mesh cable tray GRM 35 50 with WH GRM 35 wall holders

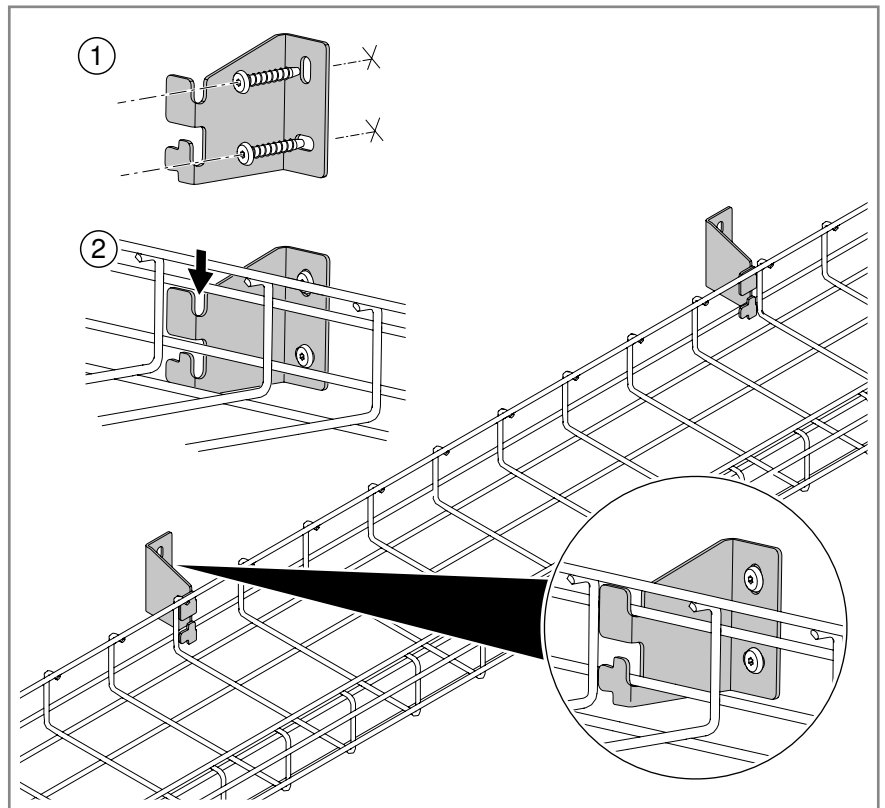
1. Draw on the drill holes for the wall holders and drill them.
2. Clamp the wall holder to the mesh cable tray.
3. Mount the mesh cable tray on the wall with wall holders.



### 14.2.3 Mounting with WBH horizontal wall holders

Suitable for C-GR 50

The mesh cable tray is laid horizontally using the WBH horizontal wall holder. It is simply hooked into the holder.



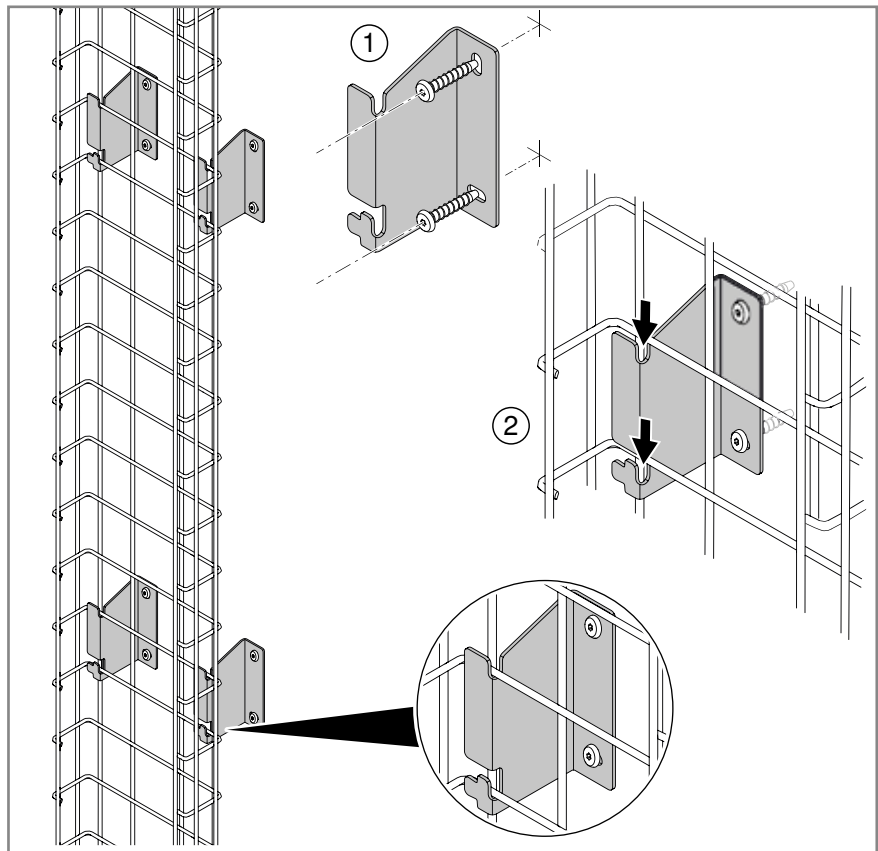
**Fig. 59:** Mounting a mesh cable tray with WBH horizontal wall holders

1. Draw on the drill holes for the wall holders and drill them.
2. Mount the wall holders on the wall.
3. Hang the mesh cable tray on the wall holders.

### 14.2.4 Mounting with WBV vertical wall holders

Suitable for C-GR 50

The mesh cable tray is laid vertically using the WBH vertical wall holder. It is simply hooked into the holder.



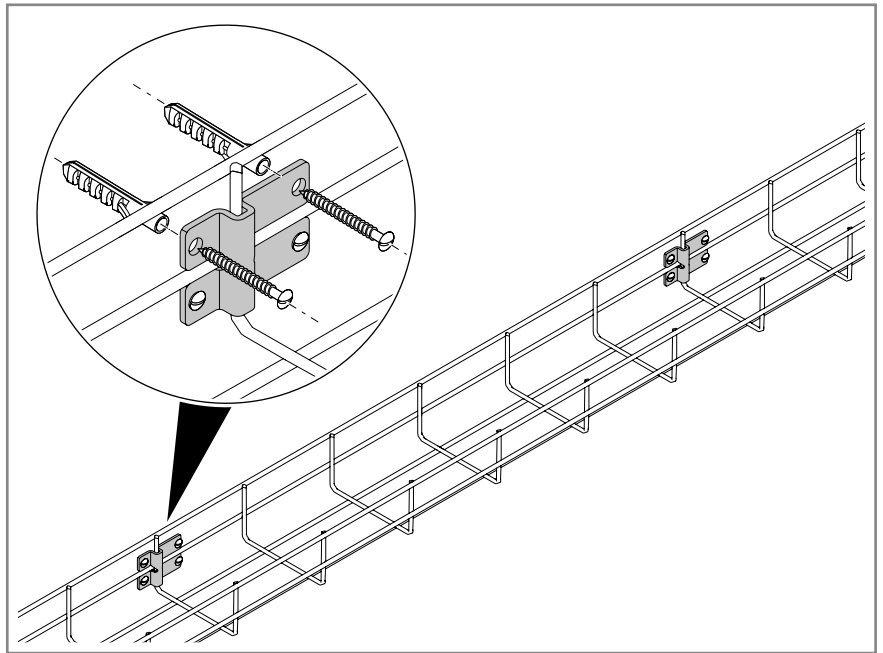
**Fig. 60:** Mounting a mesh cable tray with WBH vertical wall holders

1. Draw on the drill holes for the wall holders and drill them.
2. Mount the wall brackets on the wall.
3. Hang the mesh cable tray on the wall holders.

### 14.2.5 Mounting with WB GR wall brackets

Suitable for GRM

The WB GR wall bracket can be mounted on the wall using screws or rivets.



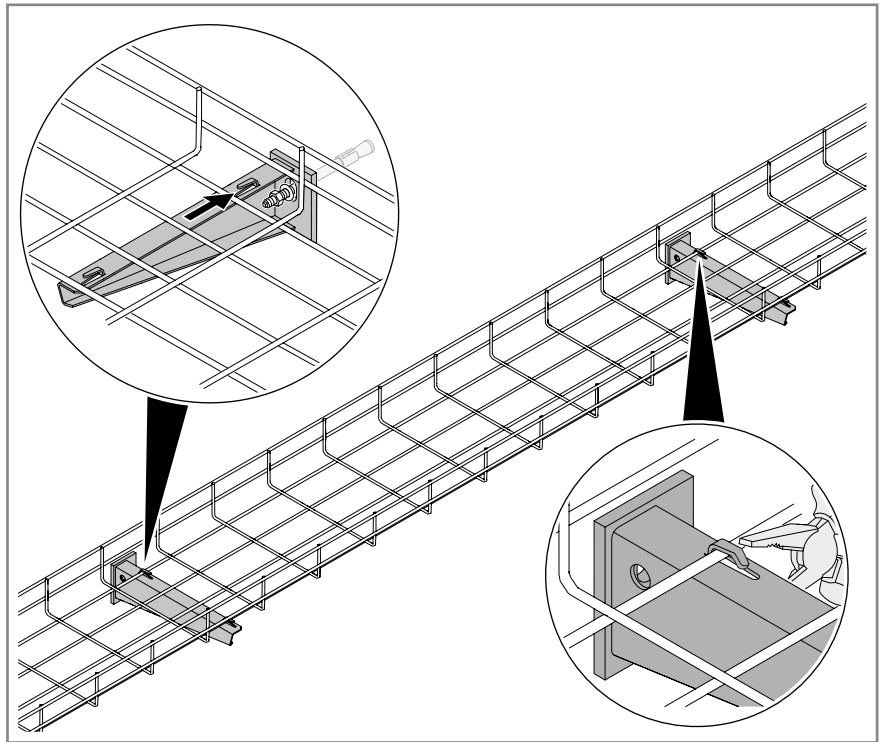
**Fig. 61:** Mounting a mesh cable tray with WB GR wall brackets

1. Draw on the drill holes for the wall brackets and drill them.
2. Place the wall brackets over the transverse wire of the mesh cable tray edge.
3. Mount the mesh cable tray on the wall with wall brackets.

### 14.2.6 Mounting with AWG 15 wall and support brackets

Suitable for GRM and C-GR

The AWG 15 wall and support bracket has clamping lugs to which the mesh cable trays are clamped.



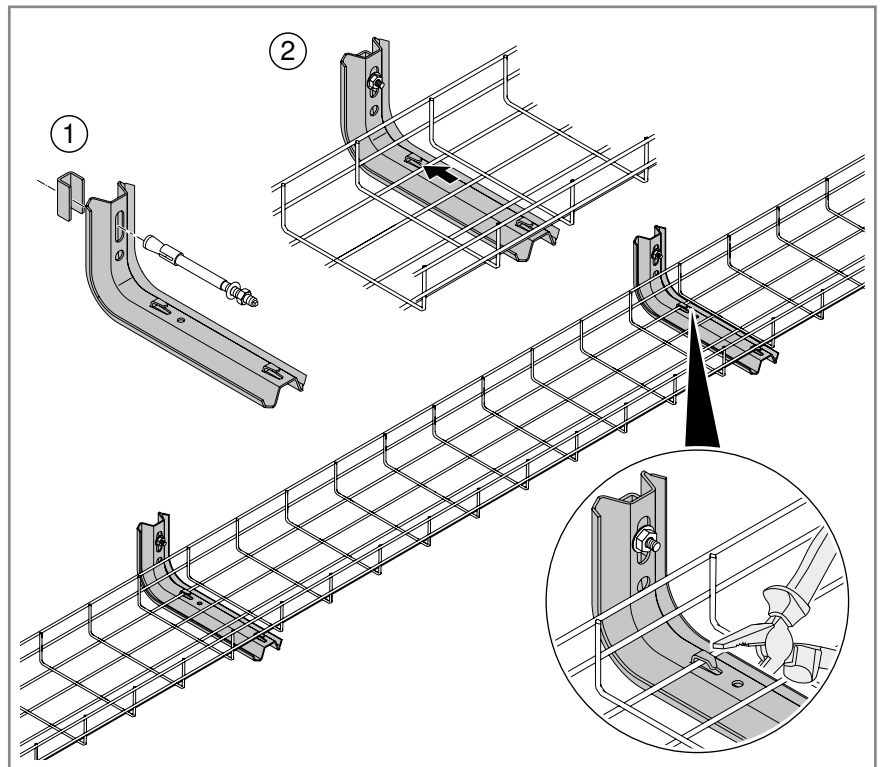
**Fig. 62:** Mounting a mesh cable tray on AWG 15 wall and support brackets

1. Draw on the drill holes for the wall and support bracket and drill them.
2. Fasten the wall and support bracket on the wall.
3. Push the mesh cable tray under the clamping lugs.
4. Clamp the clamping lugs using combination pliers.

## 14.2.7 Mounting with TPSAG brackets

Suitable for GRM and C-GR

The TPSAG bracket has clamping lugs to which the mesh cable trays are clamped.



**Fig. 63:** Mounting a mesh cable tray on TPSAG brackets

1. Draw on the drill holes for the brackets and drill them.
2. Fasten the brackets on the wall.
3. Push the mesh cable tray under the clamping lugs.
4. Clamp the clamping lugs using combination pliers.

### 14.3 Mounting mesh cable trays on the ceiling

The following systems are suitable for ceiling mounting:

- US 3 K suspended support with wall/support brackets
- TPDG wall and ceiling bracket
- MS 41 mounting rail with BC GR fastening clip on 2078/M10 threaded rods
- Centre and pendulum suspension with K 12 1818 wall bracket
- Centre suspension with GMS hanger and GKS 50 hold-down clamp for 50 mm grid width
- SH M 10 side holder with 2078/M10 threaded rods

**Note!**

*Due to the individual mounting options of the mesh cable tray systems, there are no general specifications for the permissible load capacity and maximum support spacing. Observe the permissible load capacity and maximum support spacing according to the individual plan.*

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**WARNING**

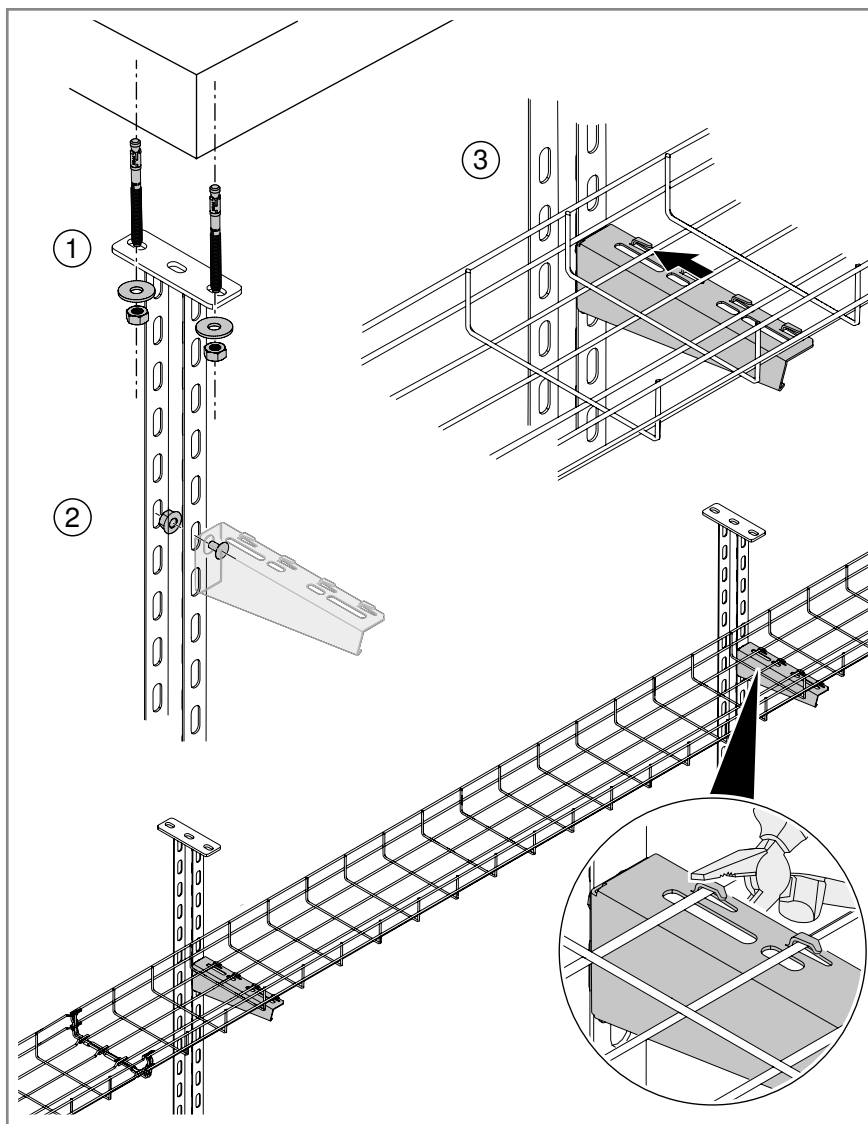
**Danger due to high working height!**

When installing at height, there is a risk of falling and/or that parts may fall. Falls and/or falling components can cause serious injuries.

- Do not work alone.
  - Use fall protection as required.
  - Secure the area below the installation against access.
  - Wear safety shoes and a helmet.
-

**14.3.1 Mounting with suspended support and MWAG 12 wall/support brackets**

Suitable for GRM and C-GR

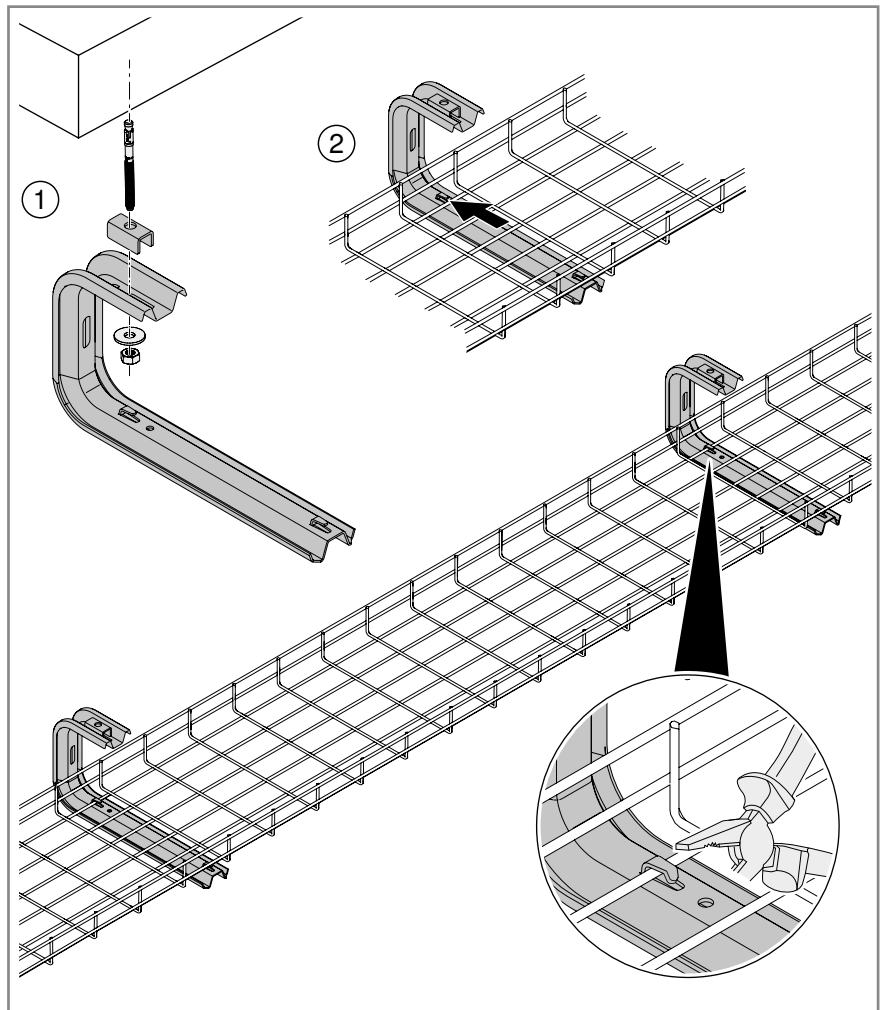


**Fig. 64:** Mounting a mesh cable tray on MWAG 12 brackets

1. Draw on the drill holes for U3 suspended supports and drill them.
2. Mount the U3 suspended support on the ceiling.
3. Screw the wall/support bracket to the U3 suspended support using M10x25 truss-head bolts and nuts.
4. Push the mesh cable tray under the clamping lugs on the wall/support bracket.
5. Clamp the clamping lugs using combination pliers.

### 14.3.2 Mounting with TPDG wall and ceiling brackets

Suitable for GRM and C-GR



**Fig. 65:** Mounting a mesh cable tray on TPDG wall and ceiling brackets

1. Draw on the drill holes for the wall and ceiling brackets and drill them.
2. Mount the wall and ceiling bracket on the ceiling.
3. Push the mesh cable tray under the clamping lugs on the wall and ceiling bracket.
4. Clamp the clamping lugs using combination pliers.

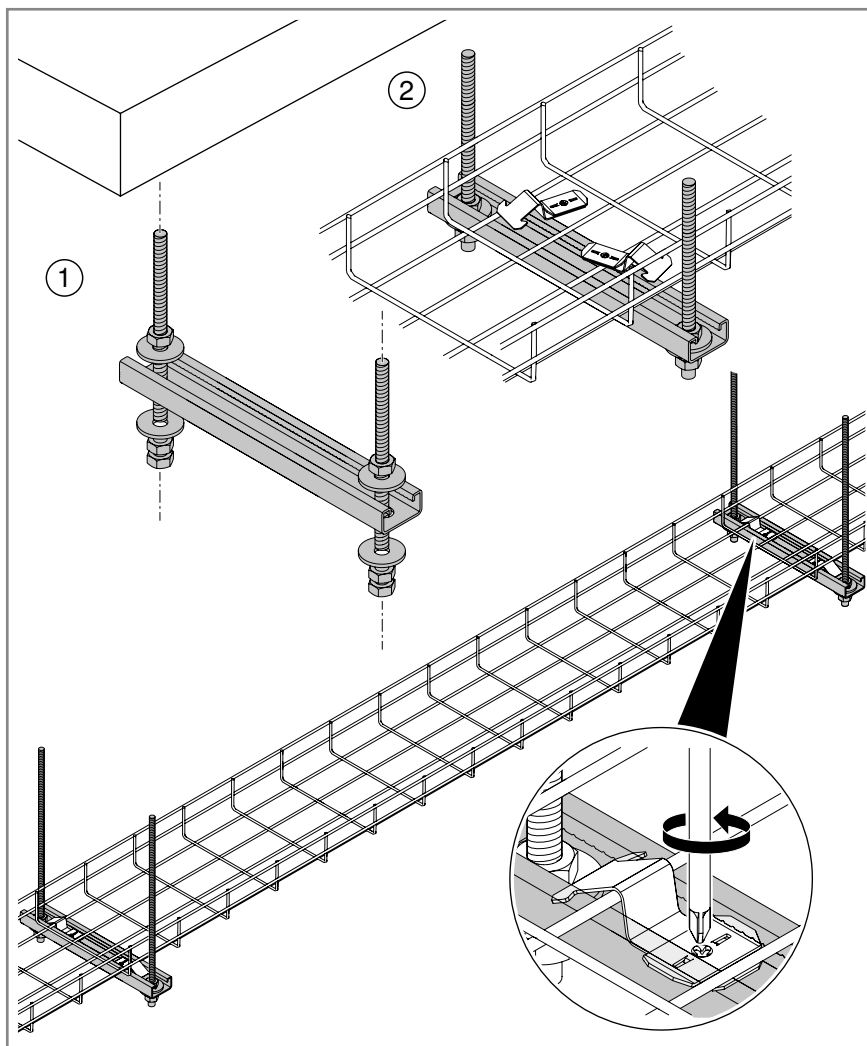


### 14.3.3 Mounting with MS 41 mounting rails and BC GR fastening clips

Suitable for GRM, C-GR and SGR

The MS 41 mounting rail is mounted on the ceiling using two threaded rods. The mesh cable tray is fastened to the mounting rail with the BC GR fastening clip. Two or more fastening clips are required depending on the width of the tray.

**Note!** *Ensure uniform spacing of the mesh cable trays from the ceiling so that the joints of the mesh cable trays can be easily connected.*

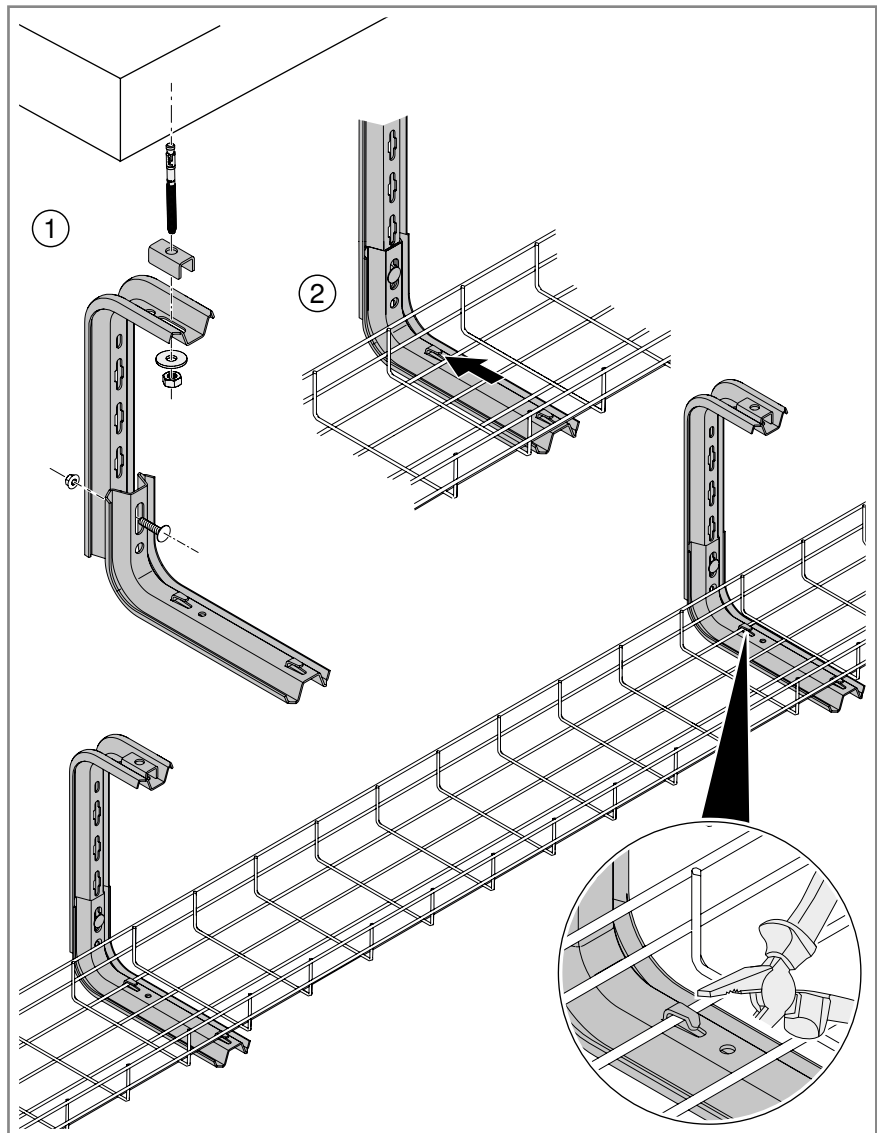


**Fig. 66:** Mounting a mesh cable tray on MS 41 mounting rails with BC GR fastening clips

1. Draw on the drill holes for the threaded rod suspension and drill them.
2. Mount the threaded rods on the ceiling.
3. Mount the mounting rail on the threaded rod with washers and nuts.
4. Push the mesh cable tray between the threaded rods.
5. Insert the fastening clip in the mounting rail.
6. Lock the fastening clip.

### 14.3.4 Mounting with TPSAG brackets and TP supports

Suitable for GRM and C-GR



**Fig. 67:** Mounting a mesh cable tray on TPSAG brackets

1. Mount the bracket and support with truss-head bolts and nuts.
2. Draw on the drill holes for the support and drill them.
3. Mount the support on the ceiling.
4. Push the mesh cable tray under the clamping lugs on the bracket.
5. Clamp the clamping lugs using combination pliers.

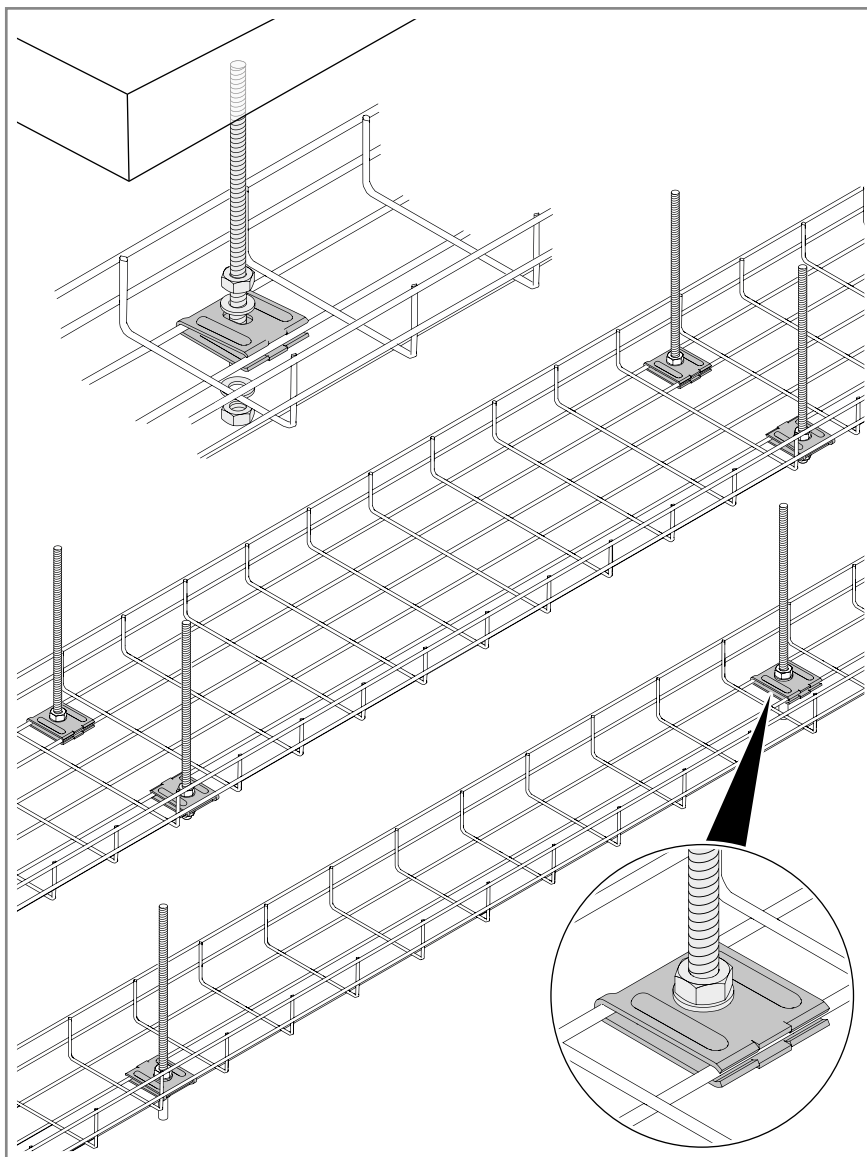
### 14.3.5 Mounting with centre or pendulum suspension

Suitable for GRM, C-GR and SGR with 50 mm grid width

A centre suspension is mounted for a mesh cable tray width of up to 200 mm. A pendulum suspension is mounted for a width from 300 mm.

The centre or pendulum suspension is created with threaded rods and the K 12 1818 wall bracket.

**Note!** *Ensure uniform spacing of the mesh cable trays from the ceiling so that the joints of the mesh cable trays can be easily connected.*



**Fig. 68:** Mounting a mesh cable tray with centre or pendulum suspension

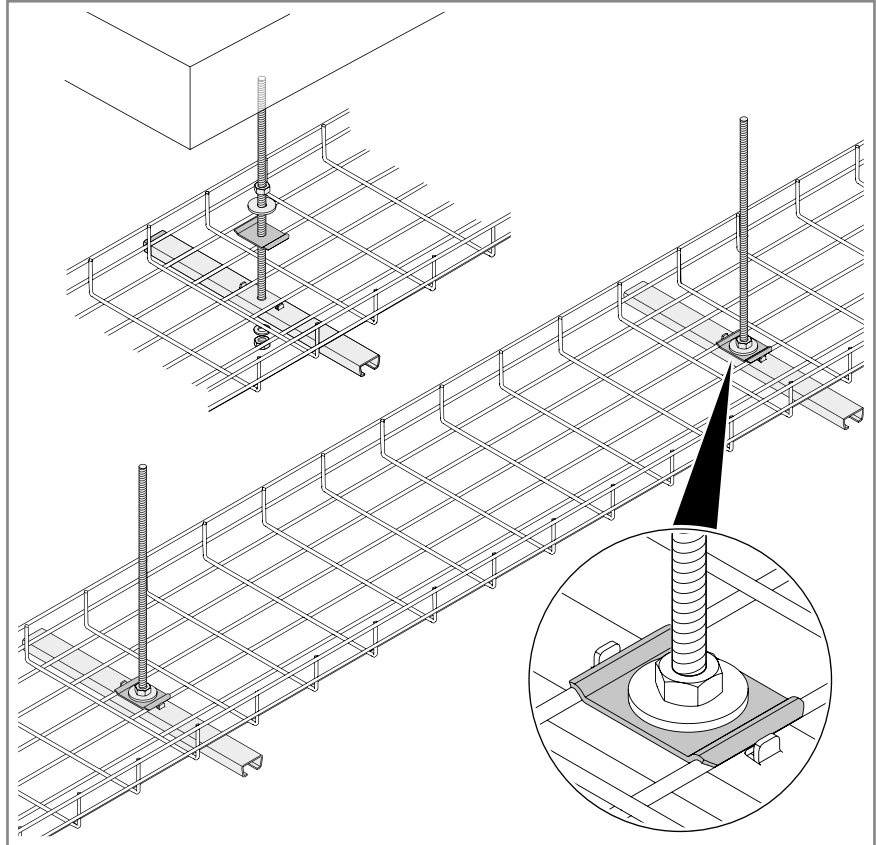
1. Draw on the drill holes for the threaded rod suspension and drill them.
2. Mount the threaded rods on the ceiling.
3. Clamp the wall bracket to the floor of the mesh cable tray. For centre suspension, position the wall bracket at the side; for pendulum suspension, on the left and right of the mesh cable tray floor.
4. Mount the mesh cable tray and wall bracket to the threaded rod using nuts and washers.

### 14.3.6 Mounting with centre suspension and GKS 50 hold-down clamps

Suitable for GRM, G-GRM, C-GR and SGR with 50 mm grid width

The centre suspension is mounted with threaded rod, GMS hanger and GKS 50 hold-down clamp.

**Note!** *Ensure uniform spacing of the mesh cable trays from the ceiling so that the joints of the mesh cable trays can be easily connected.*



**Fig. 69:** Mounting a mesh cable tray with centre suspension and hold-down clamp

1. Draw on the drill holes for the threaded rod suspension and drill them.
2. Mount the threaded rods on the ceiling.
3. Screw the nut onto the threaded rod.
4. Place the mesh cable tray on the hanger.
5. Place the hold-down clamp on the mesh cable tray and hanger. Two longitudinal wires must be clamped down by the hold-down clamp.
6. Mount parts to the threaded rod from below using washer and nut.

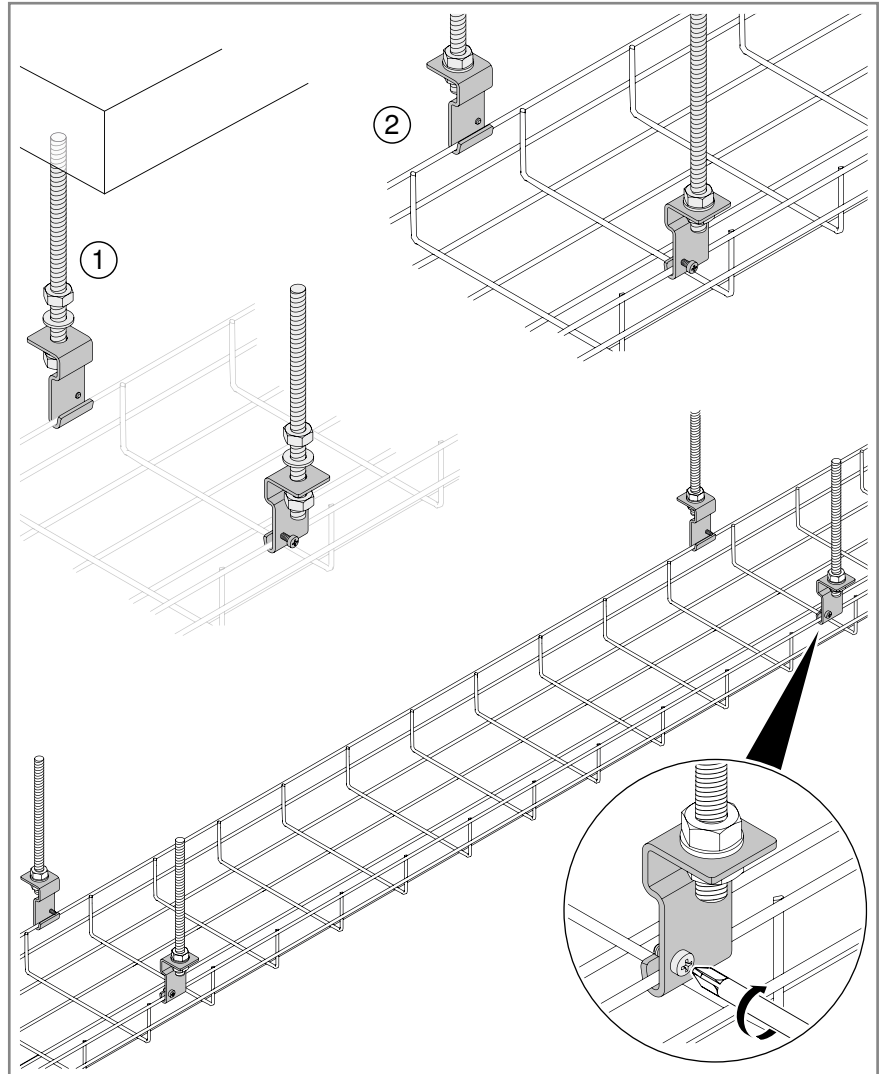
### 14.3.7 Mounting with SH M 10 side holders

Suitable for GRM, C-GRM and C-GR

The SH M 10 side holder is mounted under the ceiling with threaded rods.

**Note!**

*Ensure uniform spacing of the mounting rail on the ceiling so that the joints of the mesh cable trays can be easily connected.*

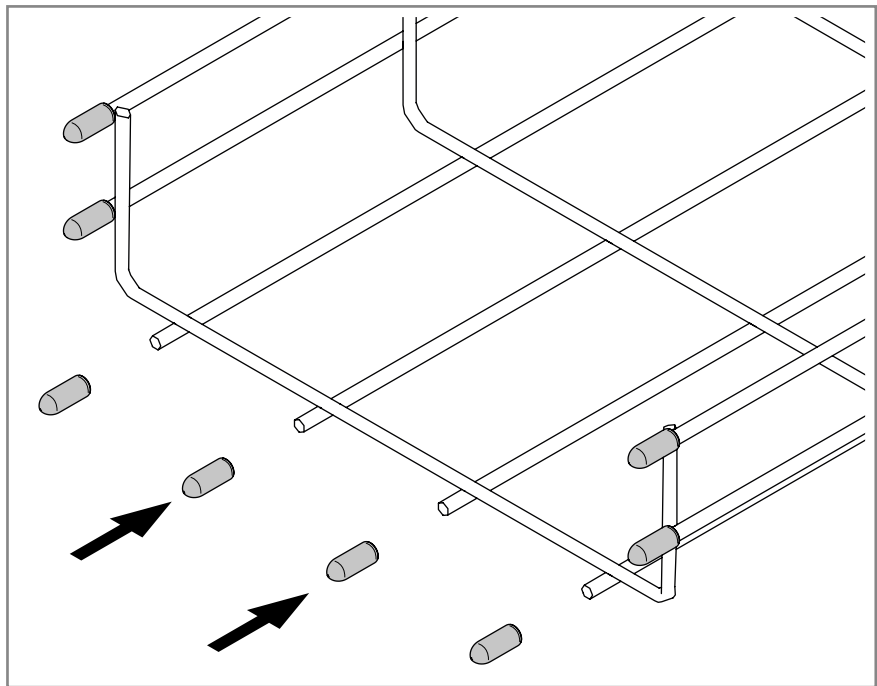


**Fig. 70:** Mounting a mesh cable tray with side holders

1. Draw on the drill holes for the threaded rod suspension and drill them.
2. Mount the threaded rods on the ceiling.
3. Mount the side holder on the threaded rod with nut and washers.
4. Hook the mesh cable tray into the side holder.
5. Fix the mesh cable tray in the side holder with a screw.

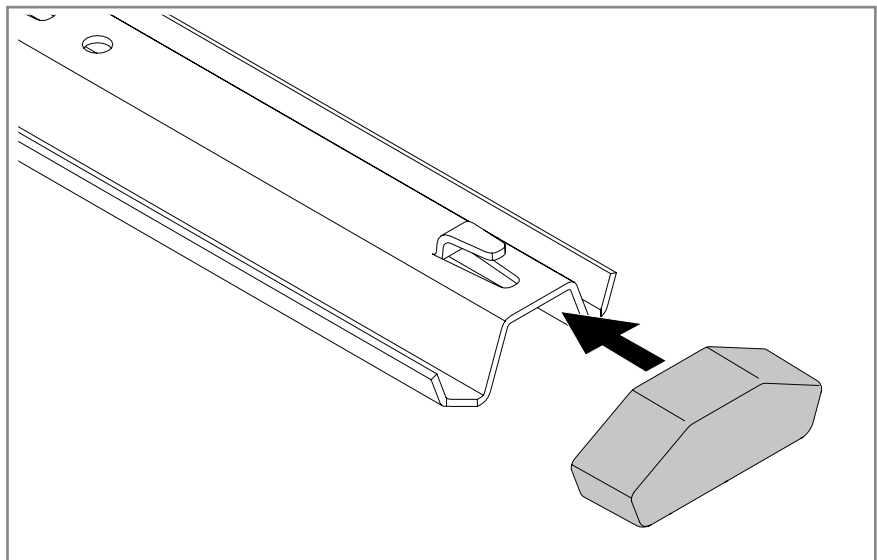
## 15 Mounting end caps

End caps are fitted to prevent injuries caused by sharp edges on the grid wire ends.



**Fig. 71:** Mounting end caps on wire ends

Attach end caps to all wire ends.



**Fig. 72:** Mounting an end cap on a TP profile

Attach end caps to all TP profile ends.

## **16 Maintaining a mesh cable tray system**

The stability and function of the mesh cable tray system can be impaired by external influences, such as damage or machine vibrations.

Loose connection elements must be retightened and damaged parts replaced. In addition, we recommend regular checks to see if the connection to the overall equipotential bonding is still intact.

## **17 Dismantling a mesh cable tray system**

Dismantling the mesh cable tray system takes place in the reverse order to mounting.

## **18 Disposing of a mesh cable tray system**

1. Residual metal: As scrap metal
2. Packaging: As household waste

Comply with the local waste disposal regulations.

## 19 Technical data

### Mesh cable trays, length 3,000 mm

Designation	Type	Side height mm	Width mm	Wire Ø mm	Usable cross-section cm <sup>2</sup>	Material	Item no.
GR-Magic® mesh cable tray	GRM 35 50 G	35	50	3.9	17.5	G	6000069
GR-Magic® mesh cable tray	GRM 35 100 G	35	100	3.9	35	G	6000062
GR-Magic® mesh cable tray	GRM 35 150 G	35	150	3.9	52.5	G	6000063
GR-Magic® mesh cable tray	GRM 35 200 G	35	200	3.9	70	G	6000064
GR-Magic® mesh cable tray	GRM 35 300 G	35	300	4.8	105	G	6000066
GR-Magic® mesh cable tray	GRM 35 50 FT	35	50	3.9	17.5	FT	6000069
GR-Magic® mesh cable tray	GRM 35 100 FT	35	100	3.9	35	FT	6000071
GR-Magic® mesh cable tray	GRM 35 150 FT	35	150	3.9	52.5	FT	6000072
GR-Magic® mesh cable tray	GRM 35 200 FT	35	200	3.9	70	FT	6000073
GR-Magic® mesh cable tray	GRM 35 300 FT	35	300	4.8	105	FT	6000075
GR-Magic® mesh cable tray	GRM 35 50 VA4301	35	50	3.9	17.5	V2A	6000054
GR-Magic® mesh cable tray	GRM 35 100 VA4301	35	100	3.9	35	V2A	6000055
GR-Magic® mesh cable tray	GRM 35 150 VA4301	35	150	3.9	52.5	V2A	6000056
GR-Magic® mesh cable tray	GRM 35 200 VA4301	35	200	3.9	70	V2A	6000057
GR-Magic® mesh cable tray	GRM 35 300 VA4301	35	300	4.8	105	V2A	6000059
GR-Magic® mesh cable tray	GRM 35 50 VA4401	35	50	3.9	17.5	V4A	6000086
GR-Magic® mesh cable tray	GRM 35 100 VA4401	35	100	3.9	35	V4A	6000087
GR-Magic® mesh cable tray	GRM 35 150 VA4401	35	150	3.9	52.5	V4A	6000089
GR-Magic® mesh cable tray	GRM 35 200 VA4401	35	200	3.9	70	V4A	6000090
GR-Magic® mesh cable tray	GRM 35 300 VA4401	35	300	4.8	105	V4A	6000091
GR-Magic® mesh cable tray	GRM 55 50 G	55	50	3.9	16	G	6001441
GR-Magic® mesh cable tray	GRM 55 100 G	55	100	3.9	40	G	6001442
GR-Magic® mesh cable tray	GRM 55 150 G	55	150	3.9	63	G	6001444
GR-Magic® mesh cable tray	GRM 55 200 G	55	200	3.9	87	G	6001446
GR-Magic® mesh cable tray	GRM 55 200 4.8 G	55	200	4.8	87	G	6001447
GR-Magic® mesh cable tray	GRM 55 300 G	55	300	4.8	129	G	6001448
GR-Magic® mesh cable tray	GRM 55 400 G	55	400	4.8	175	G	6001450
GR-Magic® mesh cable tray	GRM 55 500 G	55	500	4.8	220	G	6001452
GR-Magic® mesh cable tray	GRM 55 600 G	55	600	4.8	265	G	6001454
GR-Magic® mesh cable tray	GRM 55 50 FT	55	50	3.9	16	FT	6001415
GR-Magic® mesh cable tray	GRM 55 100 FT	55	100	3.9	40	FT	6001416
GR-Magic® mesh cable tray	GRM 55 150 FT	55	150	3.9	63	FT	6001418
GR-Magic® mesh cable tray	GRM 55 200 FT	55	200	3.9	87	FT	6001420
GR-Magic® mesh cable tray	GRM 55 200 4.8 FT	55	200	4.8	87	FT	6001421
GR-Magic® mesh cable tray	GRM 55 300 FT	55	300	4.8	129	FT	6001424
GR-Magic® mesh cable tray	GRM 55 400 FT	55	400	4.8	175	FT	6001428
GR-Magic® mesh cable tray	GRM 55 500 FT	55	500	4.8	220	FT	6001432
GR-Magic® mesh cable tray	GRM 55 600 FT	55	600	4.8	265	FT	6001436
GR-Magic® mesh cable tray	GRM 55 50 VA4301	55	50	3.9	16	V2A	6001070
GR-Magic® mesh cable tray	GRM 55 100 VA4301	55	100	3.9	40	V2A	6001072
GR-Magic® mesh cable tray	GRM 55 150 VA4301	55	150	3.9	63	V2A	6001074
GR-Magic® mesh cable tray	GRM 55 200 VA4301	55	200	3.9	87	V2A	6001076
GR-Magic® mesh cable tray	GRM 55 300 VA4301	55	300	4.8	129	V2A	6001078
GR-Magic® mesh cable tray	GRM 55 400 VA4401	55	400	4.8	175	V2A	6001080
GR-Magic® mesh cable tray	GRM 55 500 VA4401	55	500	4.8	220	V2A	6001082
GR-Magic® mesh cable tray	GRM 55 600 VA4401	55	600	4.8	265	V2A	6001085
GR-Magic® mesh cable tray	GRM 55 50 VA4401	55	50	3.9	16	V4A	6001087
GR-Magic® mesh cable tray	GRM 55 100 VA4401	55	100	3.9	40	V4A	6001088
GR-Magic® mesh cable tray	GRM 55 150 VA4401	55	150	3.9	63	V4A	6001090



Designation	Type	Side height mm	Width mm	Wire Ø mm	Usable cross-section cm <sup>2</sup>	Material	Item no.
GR-Magic® mesh cable tray	GRM 55 200 VA4401	55	200	3.9	87	V4A	6001091
GR-Magic® mesh cable tray	GRM 55 300 VA4401	55	300	4.8	129	V4A	6001093
GR-Magic® mesh cable tray	GRM 55 400 VA4401	55	400	4.8	175	V4A	6001095
GR-Magic® mesh cable tray	GRM 55 500 VA4401	55	500	4.8	220	V4A	6001097
GR-Magic® mesh cable tray	GRM 55 600 VA4401	55	600	4.8	265	V4A	6001099
GR-Magic® mesh cable tray	GRM 105 100 G	105	100	3.9	82	G	6002402
GR-Magic® mesh cable tray	GRM 105 150 G	105	150	3.9	130	G	6002404
GR-Magic® mesh cable tray	GRM 105 200 G	105	200	4.8	175	G	6002406
GR-Magic® mesh cable tray	GRM 105 300 G	105	300	4.8	268	G	6002408
GR-Magic® mesh cable tray	GRM 105 400 G	105	400	4.8	363	G	6002410
GR-Magic® mesh cable tray	GRM 105 500 G	105	500	4.8	459	G	6002415
GR-Magic® mesh cable tray	GRM 105 600 G	105	600	4.8	554	G	6002417
GR-Magic® mesh cable tray	GRM 105 100 FT	105	100	3.9	82	FT	6002431
GR-Magic® mesh cable tray	GRM 105 150 FT	105	150	3.9	130	FT	6002433
GR-Magic® mesh cable tray	GRM 105 200 FT	105	200	4.8	175	FT	6002435
GR-Magic® mesh cable tray	GRM 105 300 FT	105	300	4.8	268	FT	6002437
GR-Magic® mesh cable tray	GRM 105 400 FT	105	400	4.8	363	FT	6002439
GR-Magic® mesh cable tray	GRM 105 500 FT	105	500	4.8	459	FT	6002443
GR-Magic® mesh cable tray	GRM 105 600 FT	105	600	4.8	554	FT	6002445
GR-Magic® mesh cable tray	GRM 105 100 VA4301	105	100	3.9	82	V2A	6002451
GR-Magic® mesh cable tray	GRM 105 150 VA4301	105	150	3.9	130	V2A	6002455
GR-Magic® mesh cable tray	GRM 105 200 VA4301	105	200	4.8	175	V2A	6002457
GR-Magic® mesh cable tray	GRM 105 300 VA4301	105	300	4.8	268	V2A	6002460
GR-Magic® mesh cable tray	GRM 105 400 VA4301	105	400	4.8	363	V2A	6002463
GR-Magic® mesh cable tray	GRM 105 500 VA4301	105	500	4.8	459	V2A	6002466
GR-Magic® mesh cable tray	GRM 105 600 VA4301	105	600	4.8	554	V2A	6002469
GR-Magic® mesh cable tray	GRM 105 100 VA4401	105	100	3.9	82	V4A	6002475
GR-Magic® mesh cable tray	GRM 105 150 VA4401	105	150	3.9	130	V4A	6002476
GR-Magic® mesh cable tray	GRM 105 200 VA4401	105	200	4.8	175	V4A	6002477
GR-Magic® mesh cable tray	GRM 105 300 VA4401	105	300	4.8	268	V4A	6002479
GR-Magic® mesh cable tray	GRM 105 400 VA4401	105	400	4.8	363	V4A	6002481
GR-Magic® mesh cable tray	GRM 105 500 VA4401	105	500	4.8	459	V4A	6002483
GR-Magic® mesh cable tray	GRM 105 600 VA4401	105	600	4.8	554	V4A	6002485
Heavy-duty mesh cable tray SGR	SGR 55 100 FT	55	100	6	40	FT	6000122
Heavy-duty mesh cable tray SGR	SGR 55 150 FT	55	150	6	63	FT	6000190
Heavy-duty mesh cable tray SGR	SGR 55 200 FT	55	200	6	87	FT	6000209
Heavy-duty mesh cable tray SGR	SGR 55 300 FT	55	300	6	129	FT	6000331
Heavy-duty mesh cable tray SGR	SGR 55 400 FT	55	400	6	175	FT	6000451
Heavy-duty mesh cable tray SGR	SGR 55 500 FT	55	500	6	220	FT	6000515
Heavy-duty mesh cable tray SGR	SGR 55 600 FT	55	600	6	265	FT	6000775
Heavy-duty mesh cable tray SGR	SGR 55 100 A2	55	100	6	40	V2A	6000909
Heavy-duty mesh cable tray SGR	SGR 55 150 A2	55	150	6	63	V2A	6000913
Heavy-duty mesh cable tray SGR	SGR 55 200 A2	55	200	6	87	V2A	6000917
Heavy-duty mesh cable tray SGR	SGR 55 300 A2	55	300	6	129	V2A	6000925
Heavy-duty mesh cable tray SGR	SGR 55 400 A2	55	400	6	175	V2A	6000933
Heavy-duty mesh cable tray SGR	SGR 55 500 A2	55	500	6	220	V2A	6000941
Heavy-duty mesh cable tray SGR	SGR 55 600 A2	55	600	6	265	V2A	6000958
Heavy-duty mesh cable tray SGR	SGR 105 150 FT	105	150	6	130	FT	6003175
Heavy-duty mesh cable tray SGR	SGR 105 200 FT	105	200	6	175	FT	6003214
Heavy-duty mesh cable tray SGR	SGR 105 300 FT	105	300	6	268	FT	6003309
Heavy-duty mesh cable tray SGR	SGR 105 400 FT	105	400	6	363	FT	6003402
Heavy-duty mesh cable tray SGR	SGR 105 500 FT	105	500	6	459	FT	6003515
Heavy-duty mesh cable tray SGR	SGR 105 600 FT	105	600	6	554	FT	6003616
Heavy-duty mesh cable tray SGR	SGR 105 150 A2	105	150	6	130	V2A	6003623

## Technical data

Designation	Type	Side height mm	Width mm	Wire Ø mm	Usable cross-section cm <sup>2</sup>	Material	Item no.
Heavy-duty mesh cable tray SGR	SGR 105 200 A2	105	200	6	175	V2A	6003625
Heavy-duty mesh cable tray SGR	SGR 105 300 A2	105	300	6	268	V2A	6003627
Heavy-duty mesh cable tray SGR	SGR 105 400 A2	105	400	6	363	V2A	6003629
Heavy-duty mesh cable tray SGR	SGR 105 500 A2	105	500	6	459	V2A	6003631
Heavy-duty mesh cable tray SGR	SGR 105 600 A2	105	600	6	554	V2A	600363
Heavy-duty mesh cable tray SGR	SGR 155 300 G	155	300	6	438	G	6003681
Heavy-duty mesh cable tray SGR	SGR 155 450 G	105	450	6	663	G	6003684
Heavy-duty mesh cable tray SGR	SGR 155 500 G	105	500	6	738	G	6003685
Heavy-duty mesh cable tray SGR	SGR 155 600 G	105	600	6	888	G	6003687
Heavy-duty mesh cable tray SGR	SGR 155 300 FT	105	300	6	438	FT	6003692
Heavy-duty mesh cable tray SGR	SGR 155 450 FT	105	450	6	663	FT	6003695
Heavy-duty mesh cable tray SGR	SGR 155 500 FT	105	500	6	738	FT	6003696
Heavy-duty mesh cable tray SGR	SGR 155 600 FT	105	600	6	888	FT	6003698
G mesh cable tray Magic	G-GRM 50 50 G	50	55	3.9	17	G	6005535
G mesh cable tray Magic	G-GRM 50 50 FT	50	55	3.9	17	FT	6005520
G mesh cable tray Magic	G-GRM 50 50 V2A	50	55	3.9	17	V2A	6005550
G mesh cable tray Magic	G-GRM 50 50 V4A	50	55	3.9	17	V4A	6005565
G mesh cable tray Magic	G-GRM 75 50 G	75	53	3.9	22	G	6005538
G mesh cable tray Magic	G-GRM 75 50 FT	75	53	3.9	22	FT	6005523
G mesh cable tray Magic	G-GRM 75 50 V2A	75	53	3.9	22	V2A	6005553
G mesh cable tray Magic	G-GRM 75 50 V4A	75	53	3.9	22	V4A	6005568
G mesh cable tray Magic	G-GRM 125 75 G	125	75	3.9	61	G	6005541
G mesh cable tray Magic	G-GRM 125 75 FT	125	75	3.9	61	FT	6005526
G mesh cable tray Magic	G-GRM 125 75 V2A	125	75	3.9	61	V2A	6005556
G mesh cable tray Magic	G-GRM 125 75 V4A	125	75	3.9	61	V4A	6005571
G mesh cable tray Magic	G-GRM 150 100 G	150	100	3.9	107	G	6005544
G mesh cable tray Magic	G-GRM 150 100 FT	150	100	3.9	107	FT	6005529
G mesh cable tray Magic	G-GRM 150 100 V2A	150	100	3.9	107	V2A	6005559
G mesh cable tray Magic	G-GRM 150 100 V4A	150	100	3.9	107	V4A	6005574
C-mesh cable tray	CGR 50 50 FT	50	50	4.5	13	FT	6017428
C-mesh cable tray	CGR 50 100 FT	50	100	4.5	34	FT	6017436
C-mesh cable tray	CGR 50 200 FT	50	200	4.5	75	FT	6017444
C-mesh cable tray	CGR 50 300 FT	50	300	4.5	116	FT	6017452
C-mesh cable tray	CGR 50 400 FT	50	400	4.5	157	FT	6017460
C-mesh cable tray	CGR 50 50 VA4301	50	50	4.5	13	V2A	6016200
C-mesh cable tray	CGR 50 100 VA4301	50	100	4.5	34	V2A	6016235
C-mesh cable tray	CGR 50 200 VA4301	50	200	4.5	75	V2A	6016251
C-mesh cable tray	CGR 50 300 VA4301	50	300	4.5	116	V2A	6016253
C-mesh cable tray	CGR 50 400 VA4301	50	400	4.5	157	V2A	6016255

### Legend

G = Electrogalvanised

FS = Strip galvanised

FT = Hot-dip galvanised

V2A = Stainless steel

V4A = Stainless steel

St = Steel

PA = Polyamide

PVC = Polyvinylchloride

PE = Polyethylene

## Cover length 3,000 mm

Designation	Type	Length mm	Width mm	Plate thickness mm	Material	Item no.
Cover, unperforated	DRLU 050 FS	3,000	50	0.75	FS	6052056
Cover, unperforated	DRLU 100 FS	3,000	100	0.75	FS	6052103
Cover, unperforated	DRLU 150 FS	3,000	150	0.75	FS	6052153
Cover, unperforated	DRLU 200 FS	3,000	200	1.00	FS	6052210
Cover, unperforated	DRLU 300 FS	3,000	300	1.00	FS	6052307
Cover, unperforated	DRLU 400 FS	3,000	400	1.00	FS	6052405
Cover, unperforated	DRLU 500 FS	3,000	500	1.25	FS	6052512
Cover, unperforated	DRLU 600 FS	3,000	600	1.25	FS	6052609
Cover, unperforated	DRLU 050 DD	3,000	50	0.75	DD	6052640
Cover, unperforated	DRLU 100 DD	3,000	100	0.75	DD	6052643
Cover, unperforated	DRLU 150 DD	3,000	150	0.75	DD	6052647
Cover, unperforated	DRLU 200 DD	3,000	200	1.00	DD	6052650
Cover, unperforated	DRLU 300 DD	3,000	300	1.00	DD	6052656
Cover, unperforated	DRLU 400 DD	3,000	400	1.00	DD	6052662
Cover, unperforated	DRLU 500 DD	3,000	500	1.25	DD	6052668
Cover, unperforated	DRLU 600 DD	3,000	600	1.25	DD	6052674
Cover, unperforated	DRLU 050 VA4301	3,000	50	1.00	V2A	6052821
Cover, unperforated	DRLU 100 VA4301	3,000	100	1.00	V2A	6052824
Cover, unperforated	DRLU 150 VA4301	3,000	150	1.00	V2A	6052828
Cover, unperforated	DRLU 200 VA4301	3,000	200	1.00	V2A	6052831
Cover, unperforated	DRLU 300 VA4301	3,000	300	1.00	V2A	6052834
Cover, unperforated	DRLU 400 VA4301	3,000	400	1.00	V2A	6052837
Cover, unperforated	DRLU 500 VA4301	3,000	500	1.25	V2A	6052841
Cover, unperforated	DRLU 600 VA4301	3,000	600	1.25	V2A	6052844
Cover, unperforated	DRLU 100 VA4571	3,000	100	1.00	V4A	6052991
Cover, unperforated	DRLU 150 VA4571	3,000	150	1.00	V4A	6052992
Cover, unperforated	DRLU 200 VA4571	3,000	200	1.00	V4A	6052993
Cover, unperforated	DRLU 300 VA4571	3,000	300	1.00	V4A	6052994
Cover, unperforated	DRLU 400 VA4571	3,000	400	1.00	V4A	6052995
Cover, unperforated	DRLU 500 VA4571	3,000	500	1.25	V4A	6052996
Cover, unperforated	DRLU 600 VA4571	3,000	600	1.25	V4A	6052998
Cover, lockable	DGRR 50 FS	3,000	50	0.75	FS	6001840
Cover, lockable	DGRR 100 FS	3,000	100	0.75	FS	6001842
Cover, lockable	DGRR 150 FS	3,000	150	0.75	FS	6001844
Cover, lockable	DGRR 200 FS	3,000	200	0.75	FS	6001846
Cover, lockable	DGRR 300 FS	3,000	300	0.75	FS	6001848
Cover, lockable	DGRR 400 FS	3,000	400	0.75	FS	6001850
Cover, lockable	DGRR 500 FS	3,000	500	0.75	FS	6001852
Cover, lockable	DGRR 600 FS	3,000	600	0.75	FS	6001854
Cover, lockable	DGRR 50 FT	3,000	50	0.75	FT	6001820
Cover, lockable	DGRR 100 FT	3,000	100	0.75	FT	6001822
Cover, lockable	DGRR 150 FT	3,000	150	0.75	FT	6001824
Cover, lockable	DGRR 200 FT	3,000	200	0.75	FT	6001826
Cover, lockable	DGRR 300 FT	3,000	300	0.75	FT	6001828
Cover, lockable	DGRR 400 FT	3,000	400	0.75	FT	6001830
Cover, lockable	DGRR 500 FT	3,000	500	0.75	FT	6001832
Cover, lockable	DGRR 600 FT	3,000	600	0.75	FT	6001834
Cover, lockable	DGRR 50 A2	3,000	50	0.8	V2A	6001860
Cover, lockable	DGRR 100 A2	3,000	100	0.8	V2A	6001862
Cover, lockable	DGRR 150 A2	3,000	150	0.8	V2A	6001864
Cover, lockable	DGRR 200 A2	3,000	200	0.8	V2A	6001866
Cover, lockable	DGRR 300 A2	3,000	300	0.8	V2A	6001868
Cover, lockable	DGRR 400 A2	3,000	400	0.8	V2A	6001870
Cover, lockable	DGRR 500 A2	3,000	500	0.8	V2A	6001872
Cover, lockable	DGRR 600 A2	3,000	600	0.8	V2A	6001874

## Technical data

### Legend

G = Electrogalvanised  
 FS = Strip galvanised  
 FT = Hot-dip galvanised  
 V2A = Stainless steel  
 V4A = Stainless steel

St = Steel  
 PA = Polyamide  
 PVC = Polyvinylchloride  
 PE = Polyethylene  
 DD = Strip galvanised zinc/aluminium, double dip

### Accessories

Designation	Type	Dimensions, mm	Material	Item no.
Barrier strip	TSG 30 FS	3,000 x 30 x 26	FS	6062050
Barrier strip	TSG 30 DD	3,000 x 30 x 26	DD	6062314
Barrier strip	TSG 30 VA4301	3,000 x 30 x 26	V2A	6062052
Barrier strip	TSG 45 FS	3,000 x 45 x 26	FS	6062033
Barrier strip	TSG 45 DD	3,000 x 45 x 26	DD	6062321
Barrier strip	TSG 45 VA4301	3,000 x 45 x 26	V2A	6062025
Barrier strip	TSG 45 VA4571	3,000 x 45 x 26	V4A	6062028
Barrier strip connector	TSGV VA4310	60 x 20 x 13	V2A	6067970
Hold-down clamp for barrier strip fastening	KS GR VA4310	41.5 x 26	V2A	6062282
Hold-down clamp	GKT 38 G	38 x 24	G	6017037
Hold-down clamp	GKT 38 FT	38 x 24	FT	6017061
Hold-down clamp	GKT 38 VA4301	38 x 24	V2A	6017045
Hold-down clamp	GKT 38VA4401	38 x 24	V4A	6017092
Joint connector	GSV 34 G	34 x 28	G	6016596
Joint connector	GSV 34 FT	34 x 28	FT	6016634
Joint connector	GSV 34 VA4301	34 x 28	V2A	6016642
Joint connector	GSV 34 VA4401	34 x 28	V4A	6016648
Mesh cable tray connector, long	GRV 245 FS	245	FS	6016680
Mesh cable tray connector, long	GRV 245 DD	245	DD	6016684
Mesh cable tray connector, long	GRV 245 VA4404	245	V4A	6016688
Corner connector	GEV 36 G	53 x 23	G	6016715
Corner connector	GEV 36 FT	53 x 23	FT	6016723
Corner connector	GEV 36 VA4301	53 x 23	V2A	6016731
Corner connector	GEV 36 VA4401	53 x 23	V4A	6016764
Slotted steel strap, bent	5050 20X3 Ft	232 x 232 x 20	FT	6017371
Hold-down clamp	GKS 34 G	34 x 22	G	6016855
Hold-down clamp	GKS 34 FT	34 x 22	FT	6016820
Hold-down clamp	GKS 34 VA4401	34 x 22	V4A	6016859
Hold-down clamp	GKB 34 G	27.5 x 27	G	6016674
Hold-down clamp	GKB 34 VA4301	27.5 x 27	V2A	6016676
Hold-down clamp	GKS 50 07 FS	60 x 40	FS	6015263
Hold-down clamp	GKS 50 11 FS	60 x 40	FS	6015276
Hold-down clamp	GKS 50 07 FT	60 x 40	FT	6015271
Hold-down clamp	GKS 50 11 FT	60 x 40	FT	6015278
Earthing clamp	939	55 x 20		5043107
Connection and earthing terminal	VEK-GRM 3.9 FS	48 x 25	FS	6016694
Connection and earthing terminal	VEK-GRM 4.8 FS	48 x 25	FS	6016696
Earthing screw	EKL 25 M6	22 x Ø 25	M6	6404006
Earthing screw	EKL 35 M6	26 x Ø 35	M6	6404014
Side holder for cable gland	SH KAB 20 FS	100 x 53	FS	6015425
Side holder for cable gland	SH KAB 25 FS	100 x 53 x 43	FS	6015433
Cable exit plate	KAB GR FS	192.7 x 85	FS	6220139
Cable exit plate	KAB GR FT	192.7 x 85	FT	6220142
Cable exit plate	KAB GR VA 1.4301	192.7 x 85	V2A	6220145
Mounting plate	MP UNI FS	170 x 120	FS	7084773
Mounting plate	MP UNI DD	170 x 120	DD	7085114
Mounting plate	MP UNI VA4301	170 x 120	V2A	7085133

Designation	Type	Dimensions, mm	Material	Item no.
Identification plate	KS GR OR	127 x 18	PA	6017712
Identification plate	KS GR ZGB	127 x 18	PA	6017713
Identification plate	KS GR LBL	127 x 18	PA	6017714
Identification plate	KS GR SGN	127 x 18	PA	6017715
Bolt cutter	GR BS	450	St	6017700
End caps	GR KS 3.9 OR	15	PVC	6003750
End caps	GR KS 4.8 OR	15	PVC	6003754
45° mounting bracket	MW 45 SL 10 FT	178 x 103	FT	6017320
45° mounting bracket	MW 45 SL 10 VA4301	178 x 103	V2A	6017339
90° mounting bracket	MW 90 SL 17 FT	230 x 230	FT	6017347
90° mounting bracket	MW 90 SL 23 FT	230 x 230	FT	6017355
90° mounting bracket	MW 90 SL 17 VA4301	230 x 230	V2A	6016278
90° mounting bracket	MW 90 SL 23 VA4301	230 x 230	V2A	6016308
Hold-down clamp	KS 23 35 FT	35 x 23	FT	6015174
Hold-down clamp	KS 23 35 VA4301	35 x 23	V2A	6016529
U connector	GUV 6 G	23 x 28	G	6016572
U connector	GUV 6 FT	23 x 28	FT	6016573
U connector	GUV 6 A2	23 x 28	A2	6016574

**Legend**

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**Accessories for floor, wall and ceiling mounting**

Designation	Type	Dimensions, mm	Material	Item no.
Combination nut	KM M6 A2	10 x 6	V2A	6408966
Wall holder for CGR50, horizontal	WBH CGR50 VA4301	65 x 0	V2A	6016411
Wall holder for CGR 50, vertical	WBV CGR50 VA4301	5 x 60	V2A	6016415
Hook screw	HS M6x13 A2	24 x 6	VA2	1154990
Wall holder for GRM 3550	WH GRM35 FT	39 x 30 x 20	FT	6016443
Wall holder for GRM 3550	WH GRM35 VA4401	39 x 30 x 20	V4A	6016445
Wall and central fastener	K12 1818 FS	59 x 50 x 15	FS	6437109
Wall and central fastener	K12 1818 VA4301	59 x 50 x 15	V2A	6016421
Wall and central fastener	WB GR FT	47 x 32	FT	6017160
Wall and central fastener	WB GR A4	47 x 32	A4	6017164
Fastening clip	BC GR 4.8 VA	63 x 34	VA	6016665
TP support/wall and support bracket	TPSAG 145 FS	100 x 120 x 60	FS	6366015
TP support/wall and support bracket	TPSAG 195 FS	150 x 120 x 60	FS	6366023
TP support/wall and support bracket	TPSAG 245 FS	200 x 120 x 60	FS	6366031
TP support/wall and support bracket	TPSAG 345 FS	300 x 120 x 60	FS	6366066
TP support/wall and support bracket	TPSAG 145 FT	100 x 120 x 60	FT	6366131
TP support/wall and support bracket	TPSAG 195 FT	150 x 120 x 60	FT	6366135
TP support/wall and support bracket	TPSAG 245 FT	200 x 120 x 60	FT	6366139
TP support/wall and support bracket	TPSAG 345 FT	300 x 120 x 60	FT	6366143
Wall and support bracket	MWAG 12 11 FS	110 x 53 x 32.5	FS	6424600
Wall and support bracket	MWAG 12 21 FS	210 x 65 x 32.5	FS	6424608
Wall and support bracket	MWAG 12 31 FS	310 x 75 x 38	FS	6424616
Wall and support bracket	MWAG 12 41 FS	410 x 83 x 38	FS	6424624
Wall and support bracket	AW G 15 11 FT	110 x 40 x 50	FT	6420606
Wall and support bracket	AW G 15 16 FT	160 x 40 x 55	FT	6420607
Wall and support bracket	AW G 15 21 FT	210 x 40 x 60	FT	6420608

## Technical data

Designation	Type	Dimensions, mm	Material	Item no.
Wall and support bracket	AW G 15 31 FT	310 x 40 x 65	FT	6420610
Wall and support bracket	AW G 15 41 FT	410 x 70 x 40	FT	6420612
Wall and support bracket	AW G 15 51 FT	510 x 75 x 40	FT	6420614
Wall and support bracket	AW G 15 61 FT	610 x 80 x 40	FT	6420616
Wall and support bracket	AWG 15 11 VA4301	110 x 40 x 50	V2A	6420625
Wall and support bracket	AWG 15 21 VA4301	210 x 40 x 60	V2A	6420628
Wall and support bracket	AWG 15 31 VA4301	310 x 40 x 65	V2A	6420631
Wall and support bracket	AWG 15 41 VA4301	410 x 70 x 40	V2A	6420634
Wall and support bracket	AWG 15 51 VA4301	510 x 75 x 40	V2A	6420637
Wall and support bracket	AWG 15 61 VA4301	610 x 80 x 40	V2A	6420640
Wall and support bracket	AWG 15 11 VA4571	110 x 40 x 50	V4A	6420642
Wall and support bracket	AWG 15 21 VA4571	210 x 40 x 60	V4A	6420644
Wall and support bracket	AWG 15 31 VA4571	310 x 40 x 65	V4A	6420646
Wall and support bracket	AWG 15 41 VA4571	410 x 70 x 40	V4A	6420648
Wall and support bracket	AWG 15 51 VA4571	510 x 75 x 40	V4A	6420650
Wall and support bracket	AWG 15 61 VA4571	610 x 80 x 40	V4A	6420652
Threaded rod	2078 M6 1M G	1,000 x 6	G	3141047
Threaded rod	2078 M8 1M G	1,000 x 8	G	3141128
Threaded rod	2078 M10 1M G	1,000 x 10	G	3141209
Threaded rod	2078 M12 1M G	1,000 x 12	G	3141306
Threaded rod	2078 M6 2M G	2,000 x 6	G	3141048
Threaded rod	2078 M8 2M G	2,000 x 8	G	3141136
Threaded rod	2078 M10 2M G	2,000 x 10	G	3141140
Threaded rod	2078 M12 2M G	2,000 x 12	G	3141144
Threaded rod	2078 M6 1M V2A	1,000 x 6	V2A	3141327
Threaded rod	2078 M8 1M V2A	1,000 x 8	V2A	3141310
Threaded rod	2078 M10 1M V2A	1,000 x 10	V2A	3141312
Threaded rod	2078 M12 1M V2A	1,000 x 12	V2A	3141314
Threaded rod	2078 M6 2M V2A	2,000 x 6	V2A	3141328
Threaded rod	2078 M8 2M V2A	2,000 x 8	V2A	3141330
Threaded rod	2078 M10 2M V2A	2,000 x 10	V2A	3141339
Threaded rod	2078 M12 2M V2A	2,000 x 12	V2A	3141316
Threaded rod	2078 M6 1M V4A	1,000 x 6	V4A	3141482
Threaded rod	2078 M8 1M V4A	1,000 x 8	V4A	3141492
Threaded rod	2078 M10 1M V4A	1,000 x 10	V4A	3141502
Threaded rod	2078 M12 1M V4A	1,000 x 12	V4A	3141512
Threaded rod	2078 M6 2M V4A	2,000 x 6	V4A	3141484
Threaded rod	2078 M8 2M V4A	2,000 x 8	V4A	3141494
Threaded rod	2078 M10 2M V4A	2,000 x 10	V4A	3141504
Threaded rod	2078 M12 2M V4A	2,000 x 12	V4A	3141514
Side holder	SH M10 FS	58 x 31 x 31	FS	6015336
Side holder	SH M10 FT	58 x 31 x 31	FT	6015338
Side holder	SH M10 A4	58 x 31 x 31	A4	6015340
Central hanger	GMS 170 FS	170 x 35 x 18	FS	6015400
Central hanger	GMS 270 FS	270 x 35 x 18	FS	6015402
Central hanger	GMS 370 FS	370 x 35 x 18	FS	6015404
Central hanger	GMS 470 FS	470 x 35 x 18	FS	6015406
Central hanger	GMS 170 VA4404	170 x 35 x 18	V4A	6015418
Central hanger	GMS 270 VA4404	270 x 35 x 18	V4A	6015419
Central hanger	GMS 370 VA4404	370 x 35 x 18	V4A	6015420
Central hanger	GMS 470 VA4404	470 x 35 x 18	V4A4	6015421
TP wall and ceiling bracket	TPDG 145 FS	145 x 175 x 60	FS	6365906
TP wall and ceiling bracket	TPDG 195 FS	195 x 175 x 60	FS	6365914
TP wall and ceiling bracket	TPDG 245 FS	245 x 175 x 60	FS	6365922
TP wall and ceiling bracket	TPDG 345 FS	345 x 175 x 60	FS	6365949
TP wall and ceiling bracket	TPDG 145 FT	145 x 175 x 60	FT	6365977

Designation	Type	Dimensions, mm	Material	Item no.
TP wall and ceiling bracket	TPDG 245 FT	245 x 175 x 60	FT	6365981
TP wall and ceiling bracket	TPDG 345 FT	345 x 175 x 60	FT	6365985
TP wall and ceiling bracket	TPDG 145 FS	145 x 175 x 60	FS	6365906
TP wall and ceiling bracket	TPDG 195 FS	195 x 175 x 60	FS	6365914
TP wall and ceiling bracket	TPDG 245 FS	245 x 175 x 60	FS	6365922
TP wall and ceiling bracket	TPDG 345 FS	345 x 175 x 60	FS	6365949
TP profile	TPSG 3000 FS	3,000 x 60	FS	6366090
TP profile	TPSG 3000 FT	3,000 x 60	FT	6366093
End cap	TPS KS OR	23.6 x 19	PE	6364625
Spacer	DS 4 FS	40 x 20 x 18	FS	6416551
Spacer	DS 4 FT	40 x 20 x 18	FT	6416586
Truss-head bolt	FRS 10x25 TPS F	M10 x 25	F	6407536
Hexagonal bolt	SKS 10x60 F	M1 x 60	F	6408516
Stand-off bracket	DBLG 20 050 FS	120 x 30 x 20	FS	6015646
Stand-off bracket	DBLG 20 100 FS	170 x 30 x 20	FS	6015654
Stand-off bracket	DBLG 20 150 FS	220 x 30 x 20	FS	6015658
Stand-off bracket	DBLG 20 200 FS	270 x 30 x 20	FS	6015662
Stand-off bracket	DBLG 20 300 FS	370 x 30 x 20	FS	6015670
Stand-off bracket	DBLG 20 400 FS	470 x 30 x 20	FS	6015689
Stand-off bracket	DBLG 20 500 FS	570 x 30 x 20	FS	6015693
Stand-off bracket	DBLG 20 600 FS	670 x 30 x 20	FS	6015697
Stand-off bracket	DBLG 20 050 FT	120 x 30 x 20	FT	6015648
Stand-off bracket	DBLG 20 100 FT	170 x 30 x 20	FT	6015656
Stand-off bracket	DBLG 20 150 FT	220 x 30 x 20	FT	6015660
Stand-off bracket	DBLG 20 200 FT	270 x 30 x 20	FT	6015664
Stand-off bracket	DBLG 20 300 FT	370 x 30 x 20	FT	6015672
Stand-off bracket	DBLG 20 400 FT	470 x 30 x 20	FT	6015691
Stand-off bracket	DBLG 20 500 FT	570 x 30 x 20	FT	6015695
Stand-off bracket	DBLG 20 600 FT	670 x 30 x 20	FT	6015699
Tray fastening set 16 kg with TrayFix small	TrayFix-16-S	Ø 373 x 83.5		5403099
Tray fastening set 16 kg with TrayFix large	TrayFix-16-L	Ø 373 x 83.5		5403098
Tray fastening set 10 kg with TrayFix small	TrayFix-10-S	Ø 295 x 83.5		5403102
Tray fastening set 10 kg with TrayFix large	TrayFix-10-L	Ø 295 x 83.5		5403101

**Legend**

G = Electrogalvanised  
 FS = Strip galvanised  
 FT = Hot-dip galvanised  
 V2A = Stainless steel  
 V4A = Stainless steel

St = Steel  
 PA = Polyamide  
 PVC = Polyvinylchloride  
 PE = Polyethylene

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