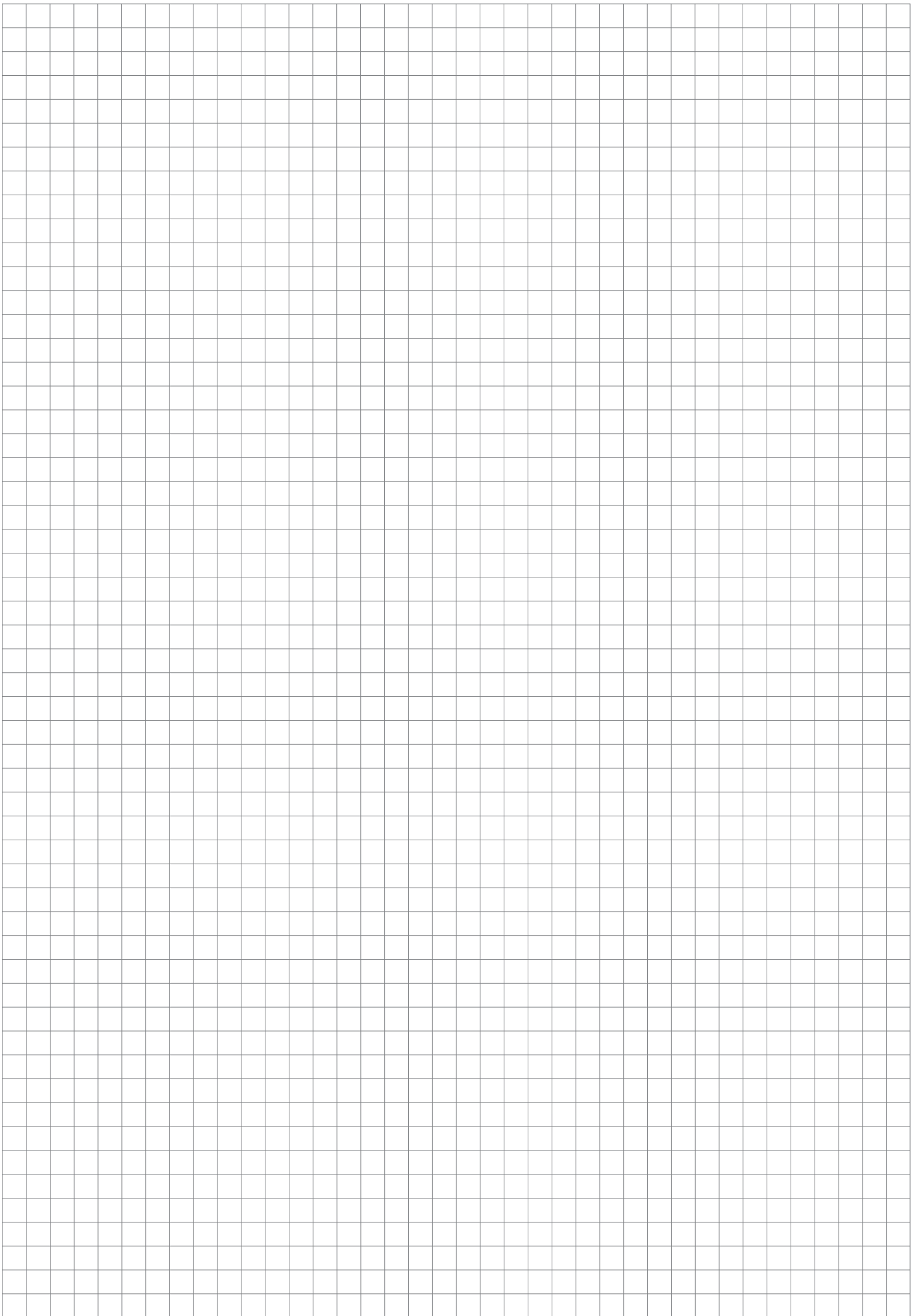


Assembly

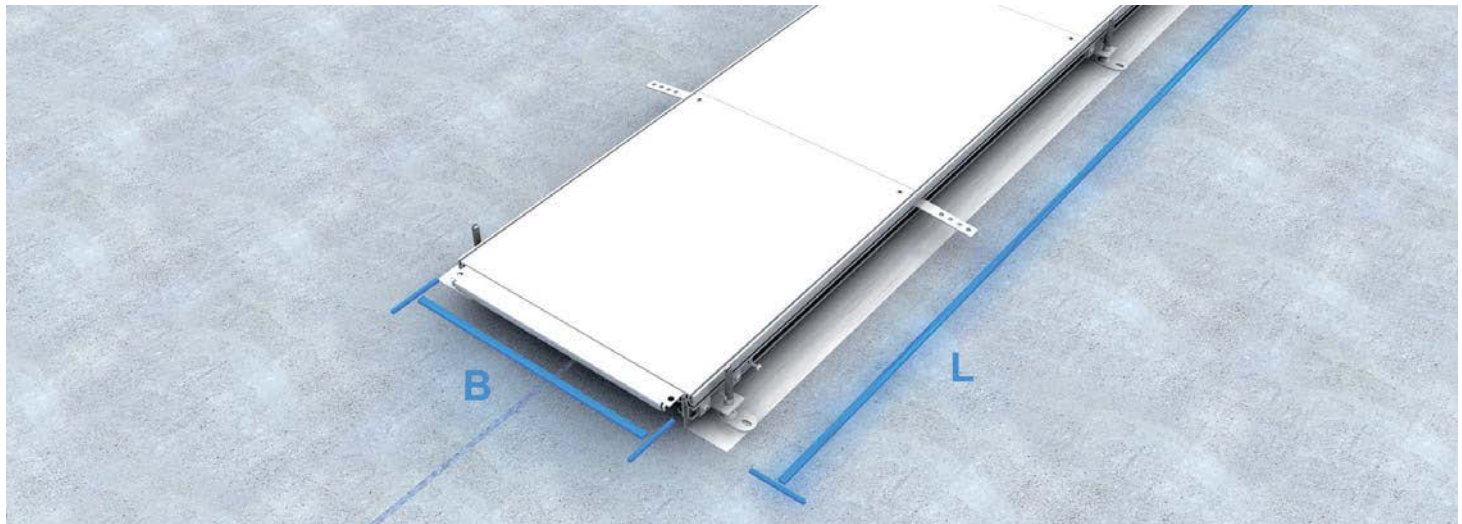
Screed flush duct	F03-F07
Screed flush heavy-duty duct	F08-F09
Hollow space floor box	F10-F11
Fire protection for screed-covered underfloor systems	F12-F13
Screed-covered cable duct	F14-F15
Plastic brush assembly units	F16-F21
Plastic installation units	F22-F27
Shuttering units	F28-F29
Cartridge units made of high-grade steel	F30-F31
Heavy-duty cartridge units made of high-grade steel	F32
Cartridge installation units made of high-grade steel	F33-F34
Single outlets	F35-F39
Compact single outlets	F40-F41
Device installation cups and installation devices	F42-F43
Device mounting cup UG45	F44-F45
Connector systems	F46-F47
Flat conductor adapter FI/LS	F48-F49
Data-device carriers	F50
Device carrier CEE socket	F51
Device Inserts	F52-F53





Screed flush duct

Assembly instruction

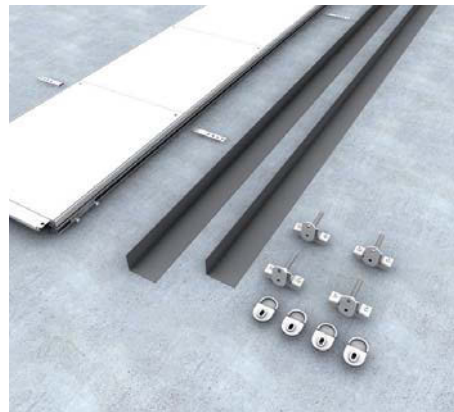


Before mounting read the technical information „Assembly Requirements“. Pre-assembled screed flush duct UEBS with four dummy covers in nominal widths B = 200, 300 and 400 and 500 mm made of steel plate with a length L of 2000 mm. Optional levelling areas between 60-110 mm and 100-150 mm. Three systems are available. Steel plate side panel as the basic version, synthetic side panels for impact noise isolation and as a closed base tub for EMV cable routing.



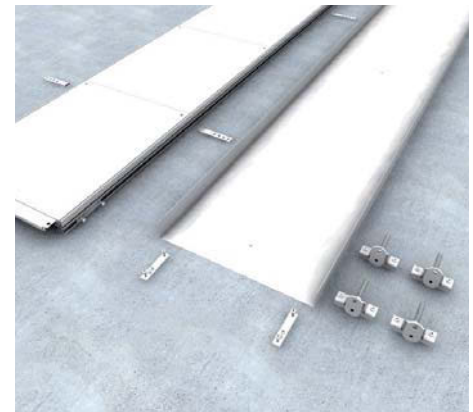
1 | UEBS with steel plate side panel

Necessary mounting material in addition to the UEBS with steel plate side panel: 1x side panel set UEBSMSP S and 4x levelling units UEBSST.



2 | UEBS with synthetic side panel

Mounting material required in addition to the UEBS with synthetic side panel: 1x panel set UEBSMSP, 4x levelling units UEBSST and 4x rubber cuffs UGM-SLF.



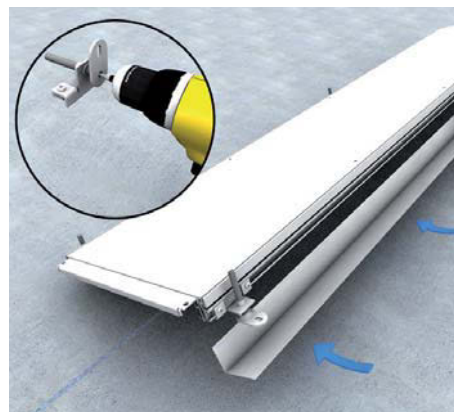
3 | UEBS with tub

Mounting material needed in addition to UEBS with steel plate tub: 1x base tub UEBSMSW and 4x levelling units UEBSST.



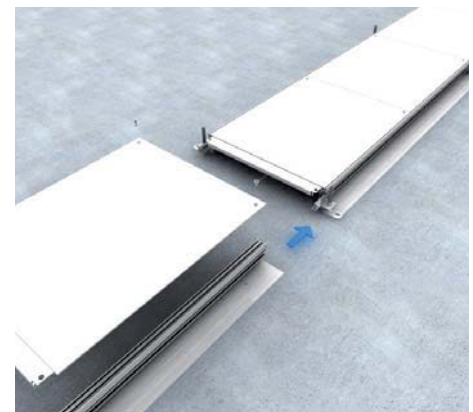
4 | Duct alignment

Measure the duct course according to the approved layout drawing and mark it using a plumb line. Lay out pre-assembled duct according to duct course and marking. Note binding height metre point.



5 | Levelling units / side plate

Insert and pre-position one side panel and two levelling units per duct side sideways into the duct aluminium profile. The individual levelling units can be roughly set to the required height in advance.

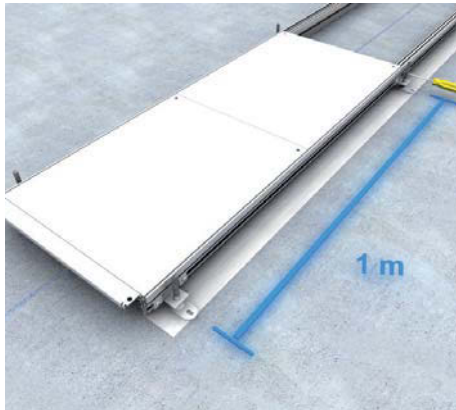


6 | Duct piece assembly

Release end dummy cover of the delivered duct, align ducts and finally push together. Link levelling units and cross beams to the duct parts. Note that the cross beam is tightly screwed to the dummy cover as provided by the factory.

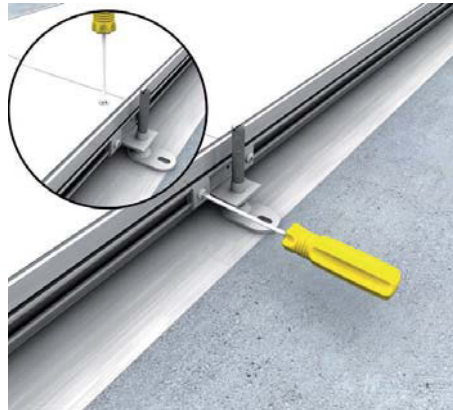
Screed flush duct

Assembly instruction



7 | Positioning the levelling units

Position levelling units according to the course of the duct at intervals of one metre and screw them to the aluminium profile. Comply with the levelling unit height of 80 respectively 150 mm. Firmly connect together all metal parts of the duct system.



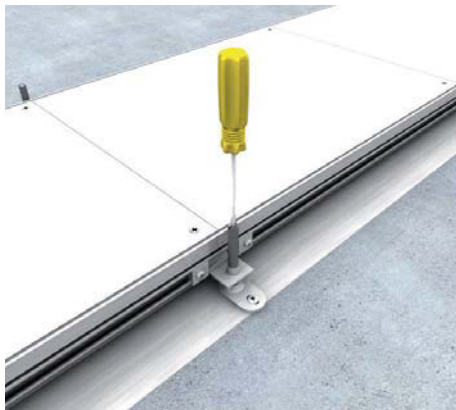
8 | Mounting the duct

Screw levelling units so that they overlap with both duct pieces. While doing so, comply with that the dummy cover is tightly connected with the closest following duct part by means of a cross beam.



9 | Plugging of the levelling foot

Align levelling on the side wall and drill a hole. Fasten levelling feet firmly to the rough concrete using nail plugs.



10 | Adjusting the levelling

Level the completely mounted duct system to the required screed height using a laser or digital tube level. The levelled duct system must not be walked upon or strained in any other way.



11 | Mounting the separating panels

Plug the synthetic separating panels directly into the rough concrete in 1-metre-intervals.



12 | Screed anchor

Latch screed anchor into the duct segment's outer profile. The screed anchors serve as a firm connection between duct and screed, thereby helping to prevent a later fissuring. Four screed anchors per duct unit are included in the delivery.



13 | Shortening the levelling units

If needed the levelling units can be shortened below screed level. All open areas must be masked according to DIN before the application of screed.



14 | Low levelling of 60–100mm

For a floor construction of up to 110 mm, use levelling unit UBSST 80S. The side panel brackets must be turned according to the desired side height. Correspondingly, a levelling height of 60-90 mm respectively of 80-110 mm is possible.

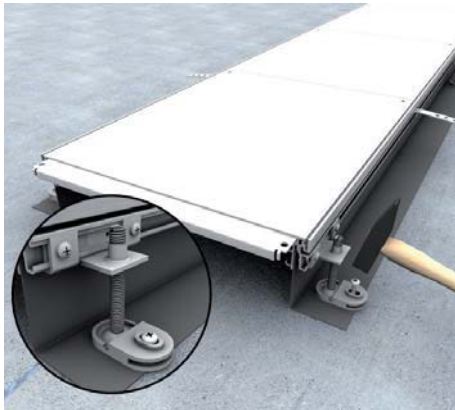


15 | High levelling of 100–150mm

For a floor construction of up to 150 mm, use levelling unit UBSST 150S. The side panel brackets must be turned according to the desired side height. Correspondingly, a levelling height of 100-130 mm respectively of 120-150 mm is possible.

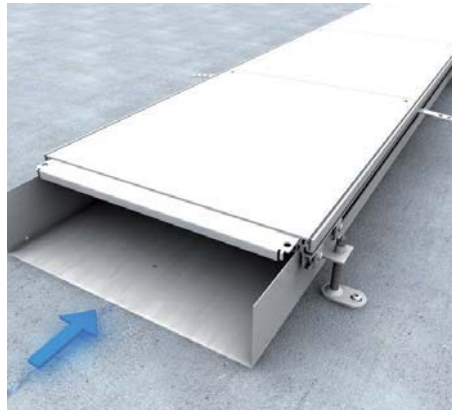
Screed flush duct

Assembly instruction



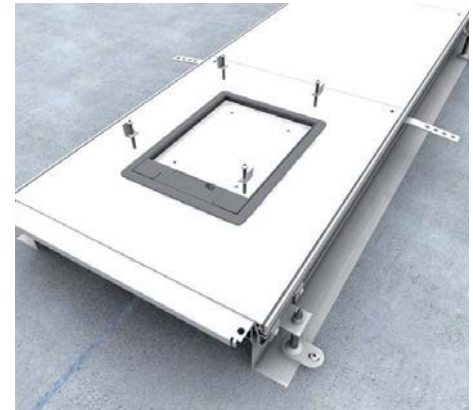
16 | Impact sound decoupling

For an impact sound decoupling of the duct system use synthetic side panels only. Additionally push rubber cuffs over the levelling units. Then mount the two connected components onto the rough concrete using nail plugs.



17 | Tube mounting

When using a floor tube, the required levelling height must be complied with. Select tube type H = 60, 80, 100 respectively 120 mm and push into the duct side profile. The levelling is done after the plugging to the rough concrete.



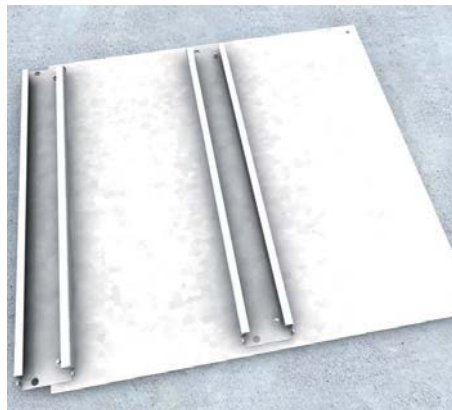
18 | Assembly covers

After the assembly of the duct system, the corresponding dummy covers must be replaced by assembly covers for installation units and adjusted to the duct course. To mount installation units, use special claws with a clamping range of at least 2 mm.



19 | Cross beam

In the course of adjusting the cover sections, the cross beam must be loosened from the dummy cover or assembly cover. The corresponding cover must be shortened, drilled in again and finally screwed into the side profile.



20 | Cross beam B = 400 mm

The 400 mm and 500 mm duct covers have additional cross beams. The cross beams are attached with a distance of 25 cm from one another. An additional duct support is therefore unnecessary.



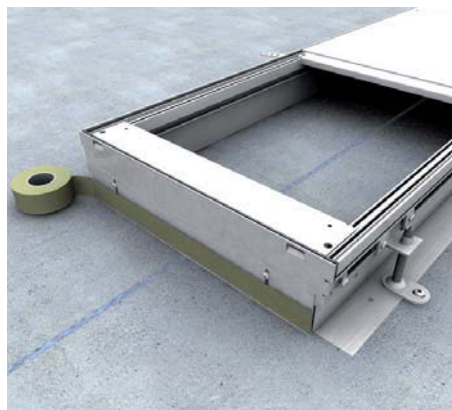
21 | Carpet edge

According to delivery condition, the turnable carpet protection edge is flush with the duct embedded in the screed-flush duct. If needed, it can be turned creating a 3 mm floor cover edge.



22 | Dummy cover

The dummy covers (width B - 6 mm) are delivered with one cross beam that can be screwed on one side, and are to be bolted to the side profile of the duct in offset on the nearest overlapping cross beam with two bolts.



23 | End piece

Insert the end piece sideways into the duct profile and screw tightly together. A height adjustment by 3 mm is possible by means of carpet protection edge. If needed, the lower openings can be masked.

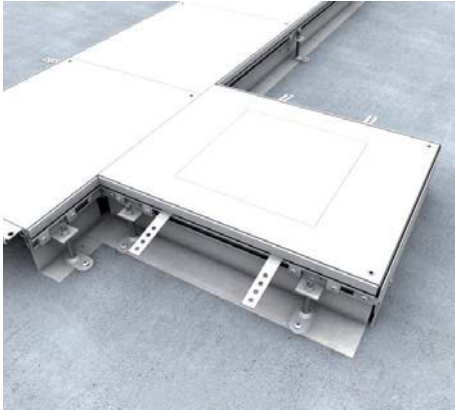


24 | Accessory set for 75 mm height

Notch and burr the side panel of the duct. Bend open side panel of the hollow space floor box along the perforation and insert one mounting sleeve UM between duct and hollow space floor box. Fix hollow space floor box to the rough concrete and insert shuttering unit.

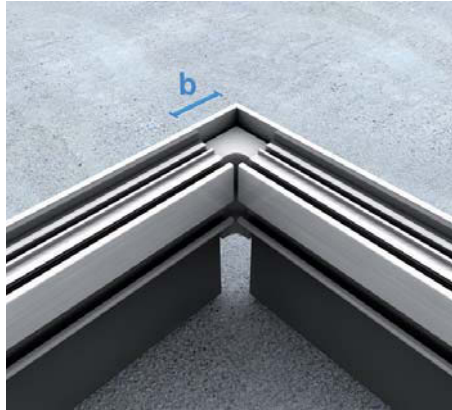
Screed flush duct

Assembly instruction



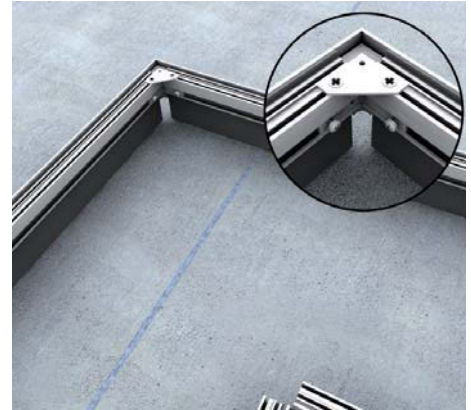
25 | Accessory set for 60-110 mm height

Notch and burr the side panel of the duct. Connect accessory set to the duct using a coupler and affix to the rough concrete. The installation unit can be inserted immediately after the completion of the screed work and the removal of the dummy cover.



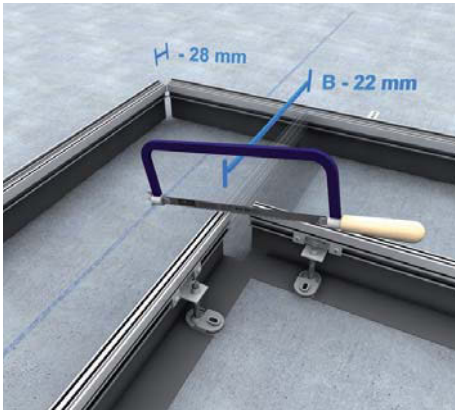
26 | Corner connection

The synthetic corner connection ($b = 26 \text{ mm}$) is for making a formed part during assembly. After cutting the duct profile, insert the connection into it and screw them together using the steel plate corner connection. Depending on the rotating direction the corner connection can be used as an inside or outside corner.



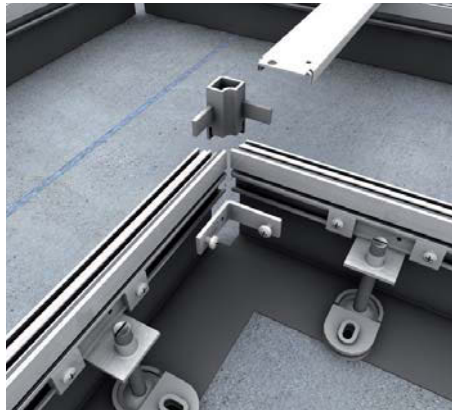
27 | Coupler plate

A coupler plate must be inserted in addition to the corner connection. The plate should be mounted in the corner using the provided screws, thus creating the necessary fastening point.



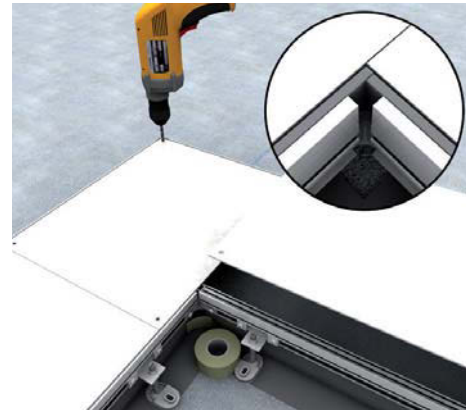
28 | Cutting a 90° bend

In order to create a 90° bend, an aluminium outside profile must be shortened by 28 mm and both aluminium inside profiles by $B - 22 \text{ mm}$ each, after the laying of the duct. Side panels and dummy covers should be cut as needed.



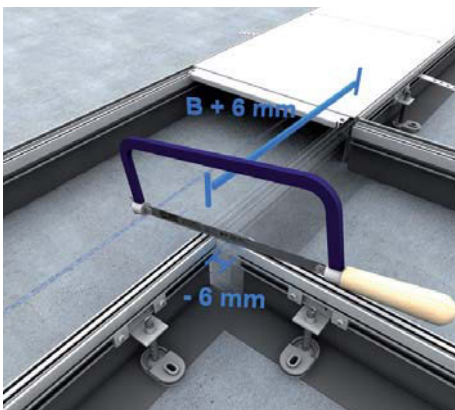
29 | Mounting a 90° bend

Push duct pieces together and link together using the separately supplied bend assembly set. Then screw them together using the corner connection.



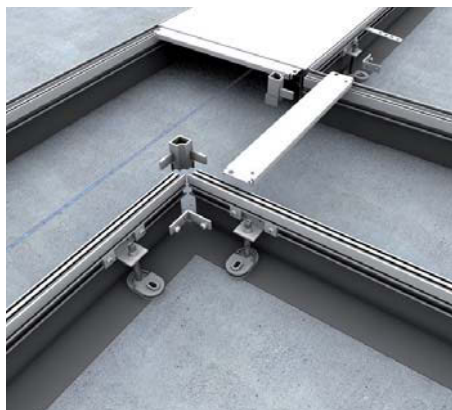
30 | 90° bend final assembly

Cut cover sections and if needed, ream mounting holes. Insert cross beam for support. Slide in carpet edge, 3 mm overlaying in the corners, and mark open areas. Cover and screw duct section.



31 | Cutting a T-junction

In order to create a T-junction after the laying of the duct, the duct must be notched end-to-end on one side by $B + 6 \text{ mm}$. Shorten the aluminium profiles of the incoming duct on both sides by 6 mm each. Cut side panels and dummy covers.



32 | Mounting a T-junction

Push duct pieces together and link together using the T-junction assembly set included in the delivery. Then screw them together using the corner connection. In order to create an intersection, use two T-junction assembly sets.

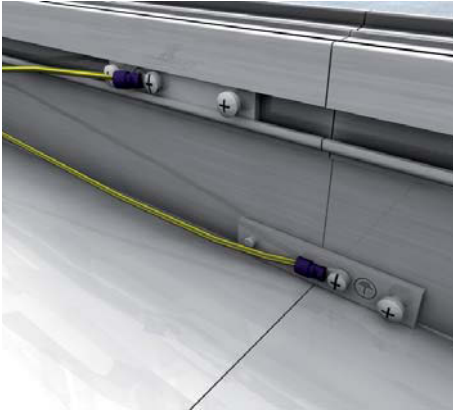


33 | T-junction final assembly

Cut cover, ream mounting holes and insert cross beam for support. Slide in carpet edge, making sure that they are overlaying 3 mm in the corners and mark open areas. Cover and screw duct section. Do not lay dummy cover joints in junction areas.

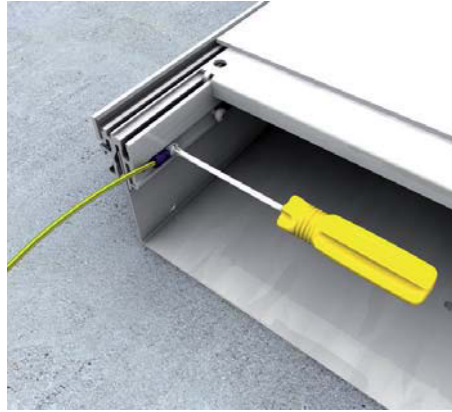
Screed flush duct

Assembly instruction



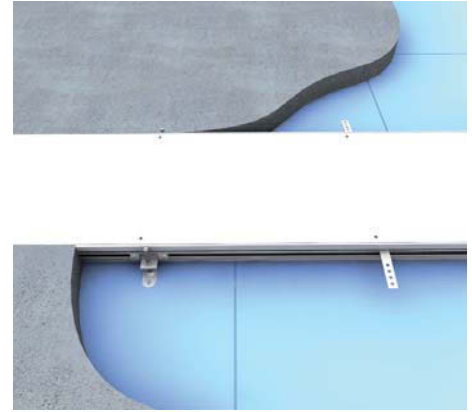
34 | Duct tub grounding

Align both base tubs, then firmly connect together using the side connections. Thereby both parts and the grounding connector are included in the potential equalisation.



35 | Duct grounding

The ground conductor terminal can be included in the grounding measure by means of the grounding connector included in the delivery. One grounding connector per duct unit is included in the delivery.

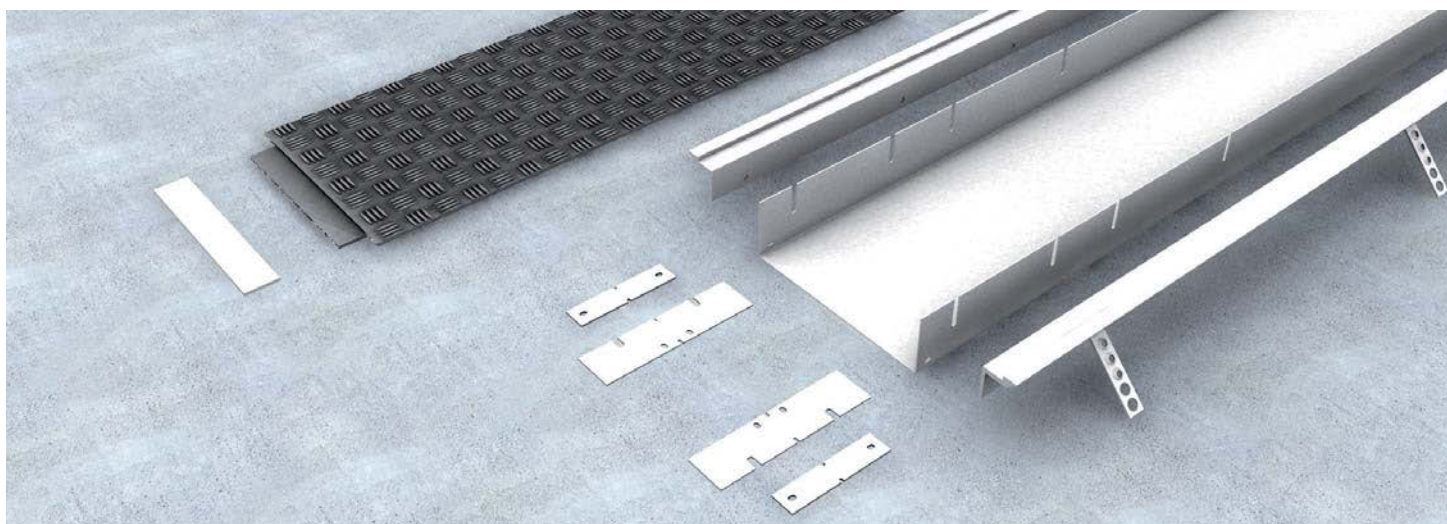


36 | Screed work

Pay attention to a good screed compaction and conciseness in order to avoid cracks in the screed. Only load after the screed has hardened. Don't use insulation strips for decoupling.

Screed flush heavy-duty duct

Assembly instruction



The screed-flush heavy duty duct consist of a heavy duty duct bottom piece UBK, three heavy duty dummy covers UBKD, two side profiles UBKPR, and of mounting and connecting material. These parts are contained in the shipment as individual parts. The duct can be installed in the widths of 200, 300 and 400 mm with a levelling height of 100 to 200 mm and can bear loads of 5 to 25 kN.



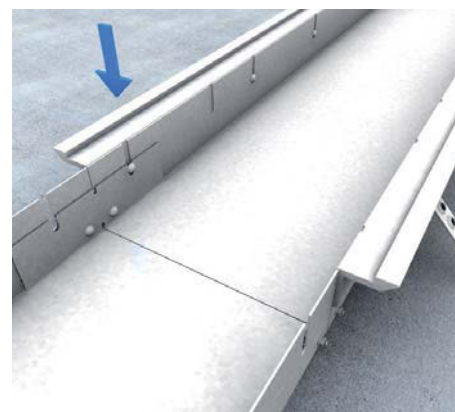
1 | Duct alignment

Measure the duct course according to the approved layout drawing and mark it using a plumb line. Lay duct bottom piece UBK according to duct course and marking and align in dead centre.



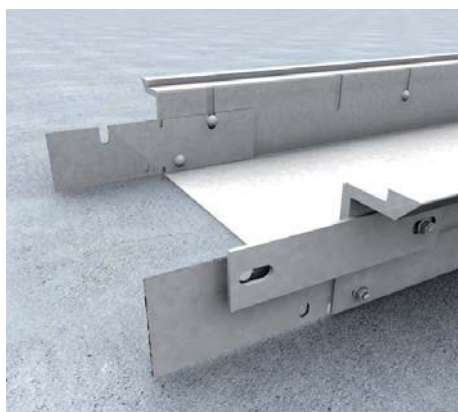
2 | Inside couplers

Push duct bottom pieces together and screw together using inside couplers UBKV.



3 | Side profile

Insert side profile UBKPR into the trenches of the duct bottom piece from the outside using pre-assembled screws.



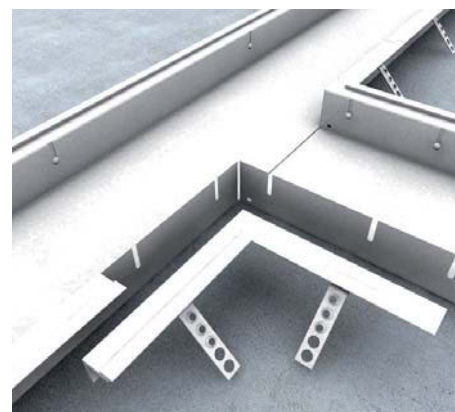
4 | Coupler

Bolt duct bottom piece, side profile, and inside couplers together at the joints using couplers UBKPRV.



5 | Fixing

Mount duct to the rough concrete in two places per length using plugs.

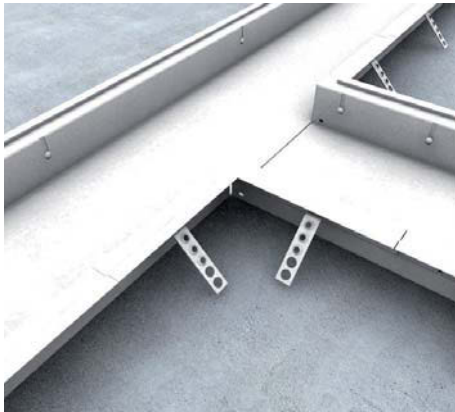


6 | Inward profile bend

In order to create a branch, notch the duct bottom piece as well as the side profile. Then insert two inward profile bends UBKIB.

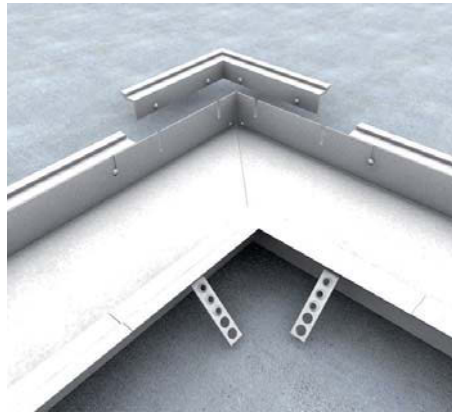
Screed flush heavy-duty duct

Assembly instruction



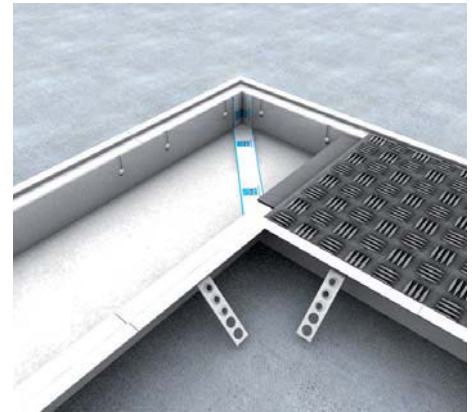
7 | Shortening a T-junction

Push the branch duct bottom piece to the notch, shorten the side profile by 0,3 m and hinge it behind the inward bend.



8 | Outward profile bend

Cut duct bottom pieces to length and mitre. Then hinge profile inward and outward bends (UBKAB). The outside curve is to be mounted on site using connectors UBKPRVE.



9 | T-junction final assembly

Push the branch duct bottom piece to the notch and cut the dummy cover UBKD as well as the profile.



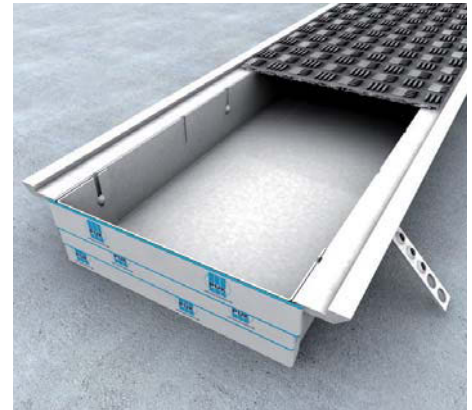
10 | End piece

Hinge end piece UBKEB into duct bottom piece and align.



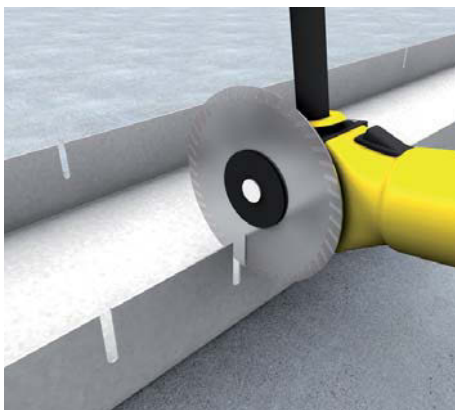
11 | Spacer

Before applying screed, insert one spacer UBKDB per duct metre. The distance plate is to be removed after the hardening of screed.



12 | Dummy cover

Mask all open areas and insert dummy covers only after the application of screed.



13 | Slotting

If needed, add slots to the duct bottom piece, then burr and galvanise the joints.



14 | Adjust levelling

Level duct system to the required screed height using a laser or digital tube level.



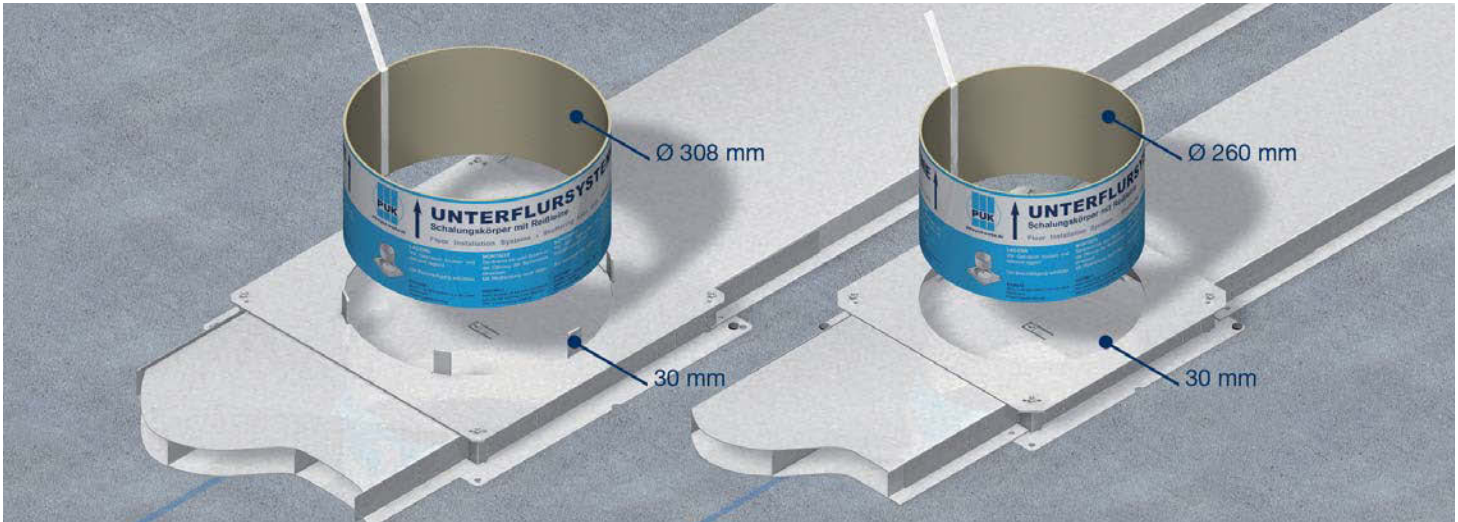
15 | Levelling

Height levelling over 35 mm is possible due to the side slot in the duct bottom piece.

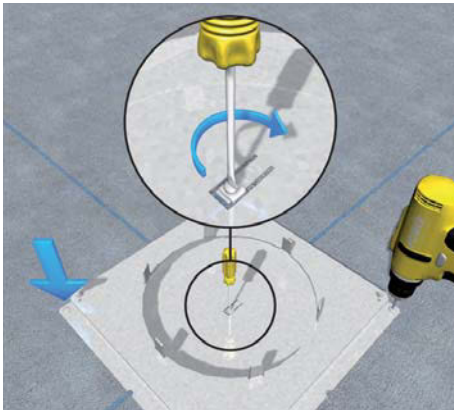


Hollow space floor box, round

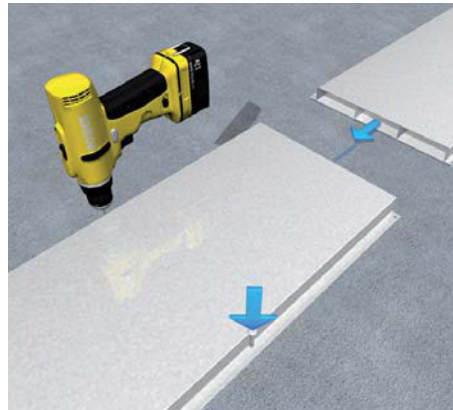
Assembly instruction



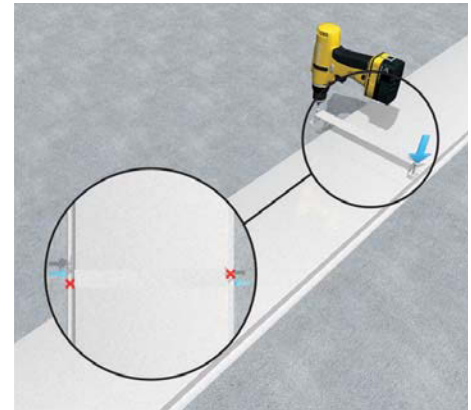
Hollow space floor box for round installation units Ø 305 mm or Ø 258 mm and underfloor ducts of up to 250 or 350 mm width with heights of 28/38/48 mm. Comply with minimum screed covering of 35 mm.



1 | Hollow space floor box
Align floor box dead centre to the duct course. Fasten on the slab ceiling and screw the earthing lug tight. Bend open side walls at the perforation. Set one floor box per change of direction in the duct system.



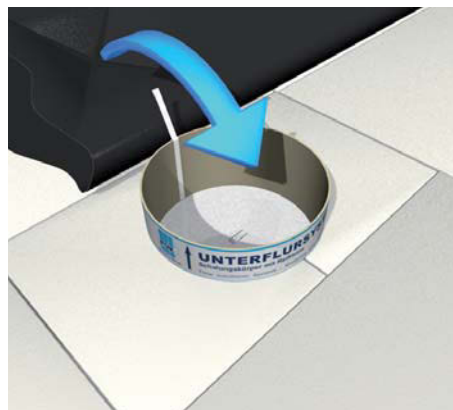
2 | Duct
Cut duct, lay up and align. Burr and galvanize cutting edges. Fasten with two nail plugs through the holes in the duct's side notch. Push duct to dead stop into the box.



3 | Clip
Align duct segments flush and push together. Use one clip per duct joint. Fasten overlapping with two nail plugs. Factor in potential equalization when inserting plugs.



4 | Inserting the shuttering pipe
Insert shuttering pipe straight from the top into the floor box opening. Floor box and shuttering pipe make one mounting unit. Mask all openings in the duct system. Apply insulation flush to duct system and to shuttering pipe.



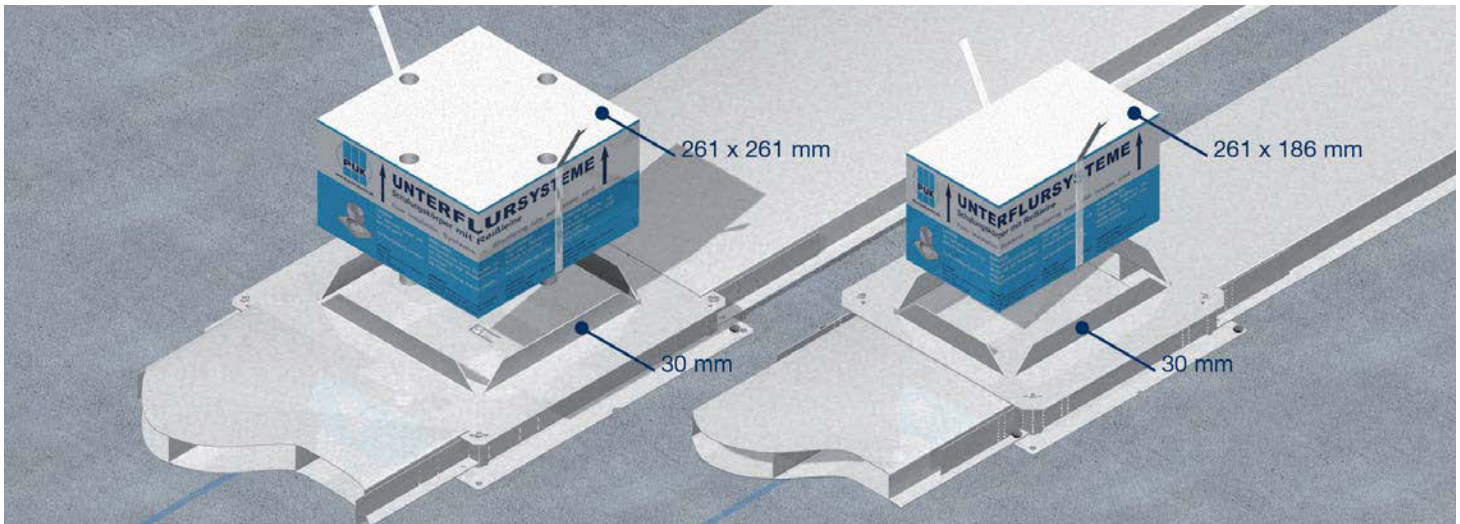
5 | Screed work / Subsonic noise insulation
The shuttering pipe must be sprayed with formwork oil. The underfloor system must be insulated against subsonic noise. Mask the shuttering pipe with foil. Foil thickness must be < 2 mm. Apply screed neatly to the shuttering pipe.



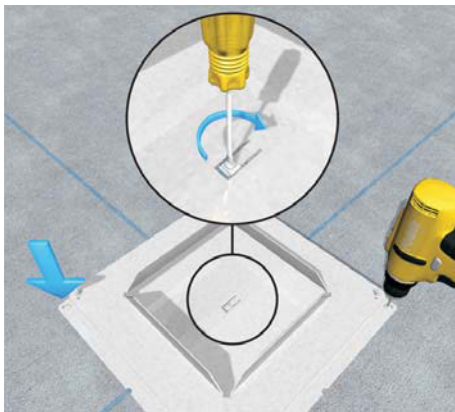
6 | Removal of shuttering pipe
Remove shuttering pipe with the release cord from the hardened screed. Process floor cover to the cleaned assembly opening (Ø 260 mm, Ø 308 mm).

Hollow space floor box, quadrangular

Assembly instruction

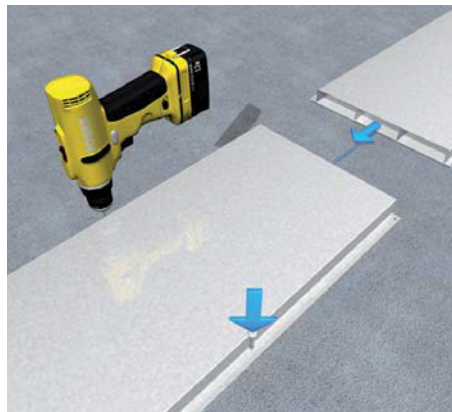


Hollow space floor box for quadrangular installation units 258 x 258 mm or 258 x 184 mm and underfloor ducts of up to 250 or 350 mm width with the heights 28/38/48 mm. Comply with minimum screed covering of 35 mm.



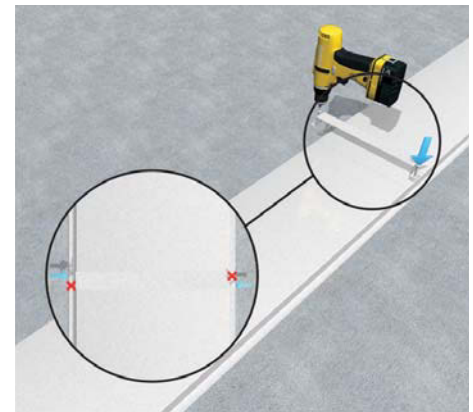
1 | Hollow space floor box

Align floor box dead centre to the duct course. Fasten on the raw ceiling and screw the earthing lug tight. Bend open side walls at the perforation. Set one floor box per change of direction into the duct system.



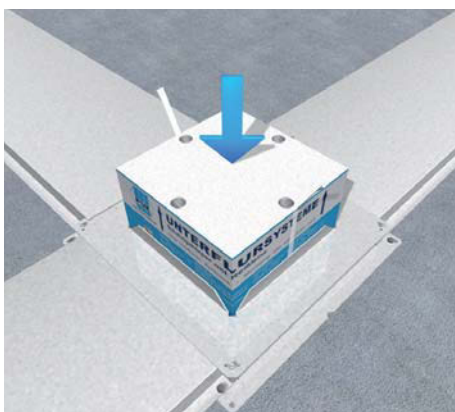
2 | Duct

Cut duct, lay up and align. Burr and galvanize cutting edges. Fasten with two nail plugs through the holes in the duct's side notch. Push duct to dead stop into the box.



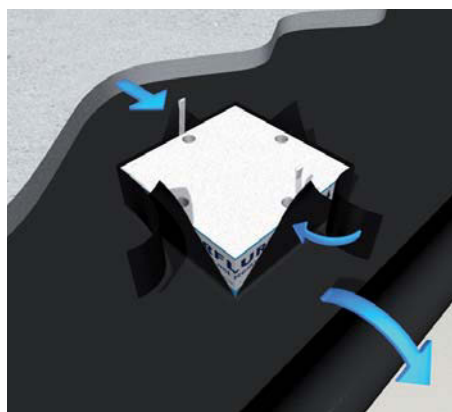
3 | Clip

Align duct segments flush and push together. Use one clip per duct joint. Fasten overlapping with two nail plugs. Factor in potential equalization when inserting plugs.



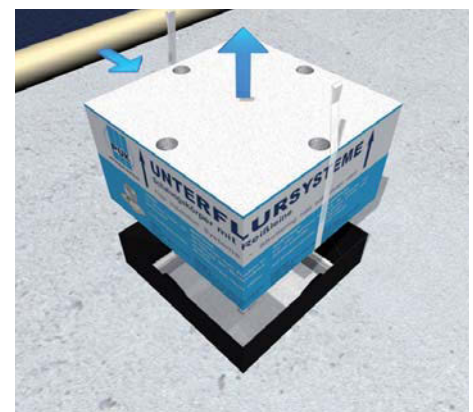
4 | Inserting the shuttering unit

Insert shuttering unit straight from the top into the floor box opening. Floor box and shuttering unit make one mounting unit. Mask all openings in the duct system. Apply insulation flush to duct system and to shuttering unit.



5 | Screed work / Subsonic noise insulation

The shuttering unit must be sprayed with formwork oil. The underfloor system must be insulated against subsonic noise. Mask the shuttering unit with foil. Foil thickness must be < 2 mm. Apply screed neatly to the shuttering unit.

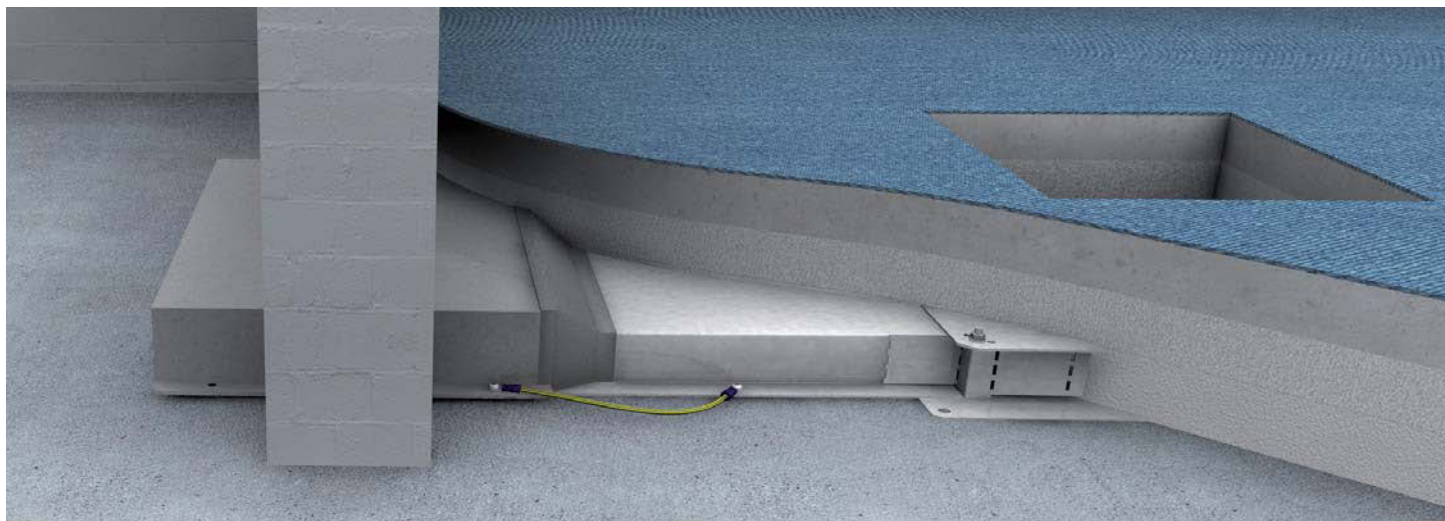


6 | Removal of shuttering unit

Remove shuttering unit with the release cord from the hardened screed. Process floor cover to the cleaned installation opening (261 x 261 mm, 261 x 186 mm).

Fire protection for screed-covered underfloor systems

Assembly instruction



Fire stop (cable seal WD90, Wichmann system) for screed-covered underfloor ducts with a width of 350 mm, available in the heights of 28, 38 and 48mm. Other sizes upon request. For the installation in fire protection walls of fire resistance grading S90.



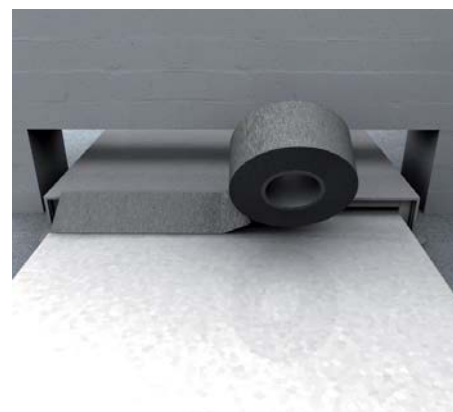
1 | Scope of delivery

The fire stop shipment includes an underfloor cable box and a quality label. Two EasyFoam smoke protection plugs can be ordered in addition to the content of delivery.



2 | Positioning the cable box

Place the cable box into the wall opening. The box must not protrude from the wall by more than 8,5 cm.



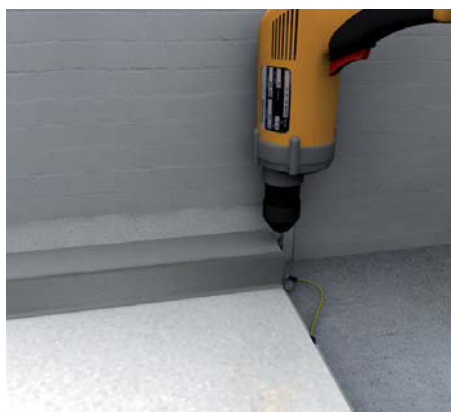
3 | Sealing

Push the screed-covered underfloor ducts flush to the fire stop and seal with rubber band. Ducts must not be led through the fire stop.



4 | Plastering

Thoroughly plaster into wall depth using mineral mortar or joint filling made of hard cement.



5 | Mounting the steel unit

Firmly plug the three-sided steel plate housing to the fire stop on the raw floor, allowing for an earthing connection.



6 | Inspection opening

In order to create an inspection chamber or an installation opening, mount hollow floor box to the underfloor duct and then insert shuttering unit.

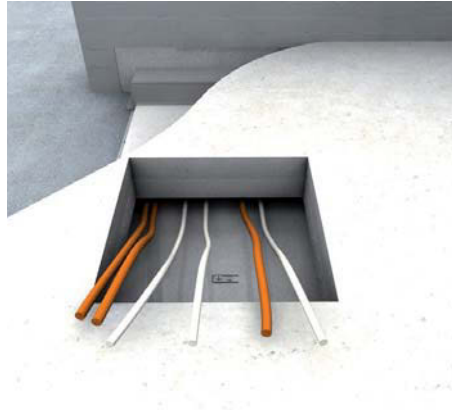
Fire protection for screed-covered underfloor systems

Assembly instruction



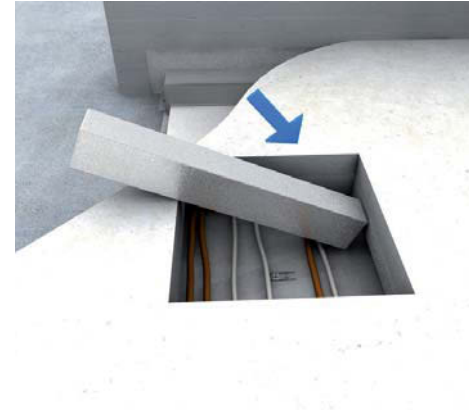
7 | Applying screed

After the completed mounting of the screed-covered duct system, apply sealing, impact noise insulation and screed.



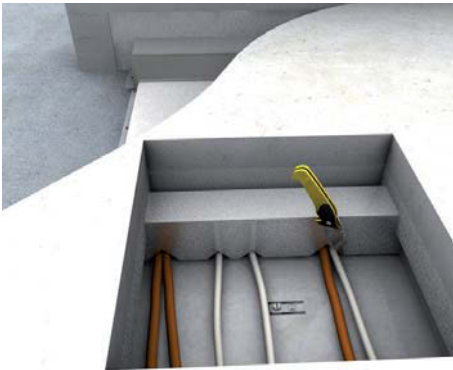
8 | Cable routing

Lay cables in screed-covered underfloor duct and fire stop. The ground below the partition must be even and not flammable.



9 | Smoke control

Place EasyFoam smoke protection plugs over the entire width of hollow floor box.



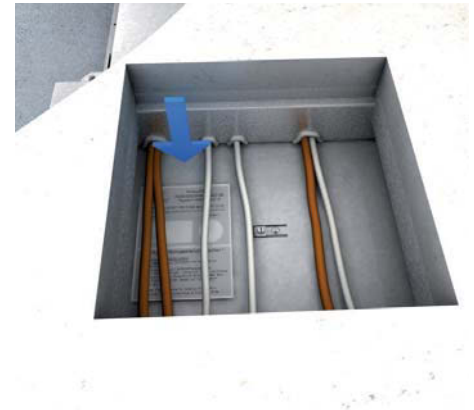
10 | Adjusting the size

Cut Easy-Foam smoke protection plugs according to the cable sizes.



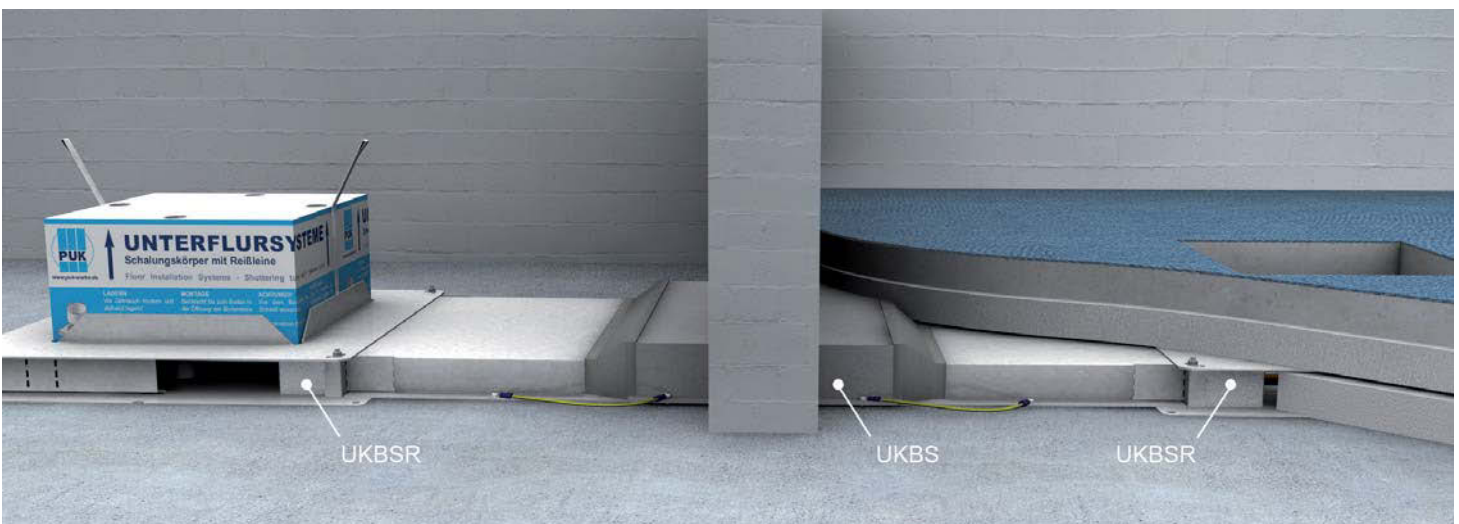
11 | Sealing

All remaining openings must be sealed using silicone or EasyFoam fire protection foam.



12 | Quality label

Fill in quality label and fix to the hollow floor box. Hand in declaration of compliance together with permit.

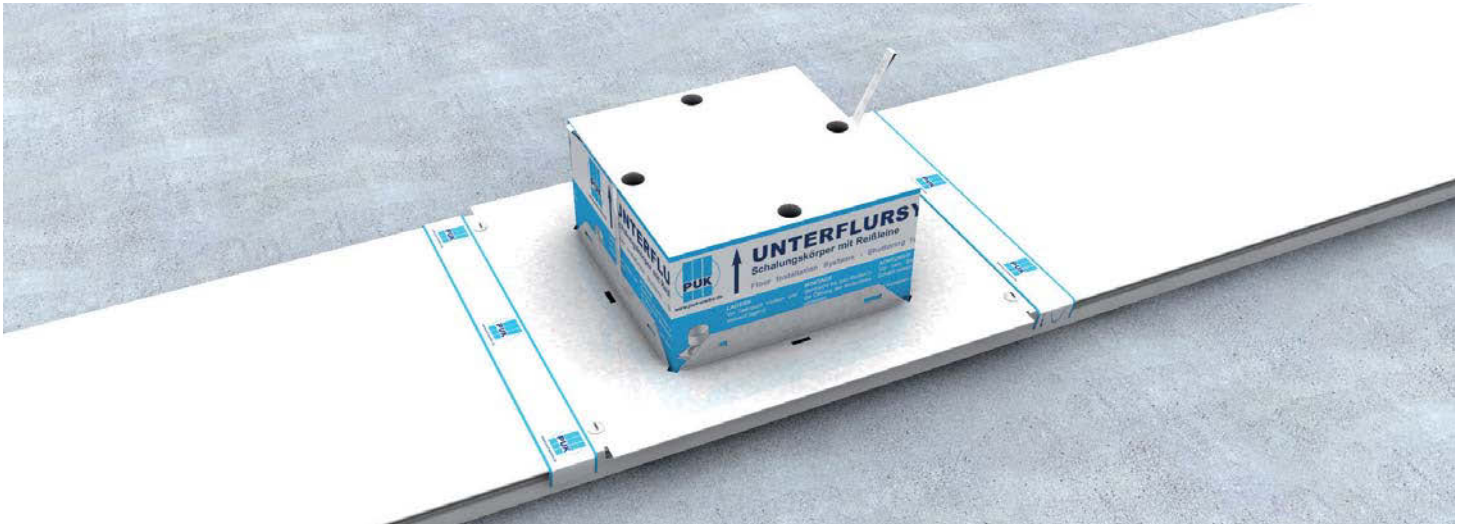


13 | Fire protection components

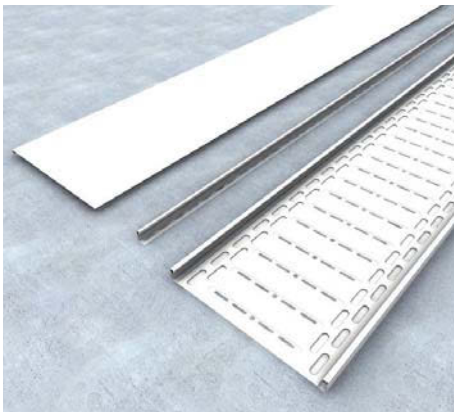
The fire stop must be installed according to DIN 4102-4 in brickwork of up to 10cm thickness and sealed on both sides of the nearest hollow floor box using EasyFoam smoke protection plugs. The underfloor fire stop has a capacity of up to 100% for holding cables. All cables can be led through the fire stop without diameter restrictions, as well as glass fibre cables, hollow plastic pipes (up to a diameter of 50 mm) and single control cables made of steel, copper or plastic (up to 15 mm diameter).

Screed-covered cable duct

Assembly instruction

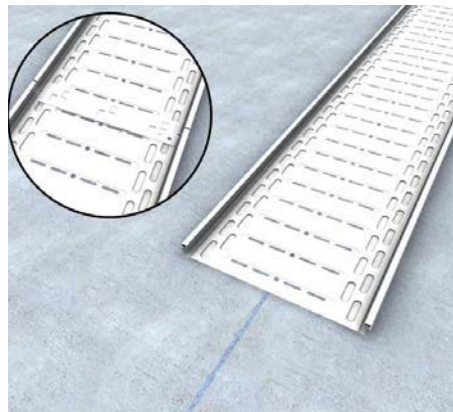


Open, two- respectively three compartment cable duct UKR in the nominal widths $B = 300, 400$ and 500 mm, made of steel sheet with length L of 3000 mm. In heights of $35, 60, 85$ and 110 mm. Loading capacity up to $0,75$ kN. Consisting of a bottom piece with a barrier strip and a separate top piece.



1 | UKR

The screed-covered cable duct consists of a duct bottom piece UKR, a cable duct dummy cover UKD and one, respectively two barrier strips UKTR, including the necessary material for mounting and connecting.



2 | Duct alignment

Measure the duct course according to the approved layout drawing and mark it using a plumb line. Lay bottom piece according to duct course and marking and align in dead centre. Cut ducts and push flush together using the coupler plate VB.



3 | Fixing

Mount duct to the rough concrete in one place per length using plugs.



4 | Junction

In order to create a junction, notch the duct bottom piece according to the width of the duct branch.



5 | Barrier strip

Always fasten barrier strips UKTR symmetrically to the rough concrete using plugs once per metre.

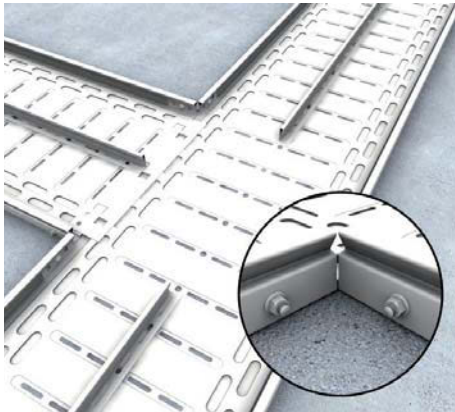


6 | Fastening of barrier strip

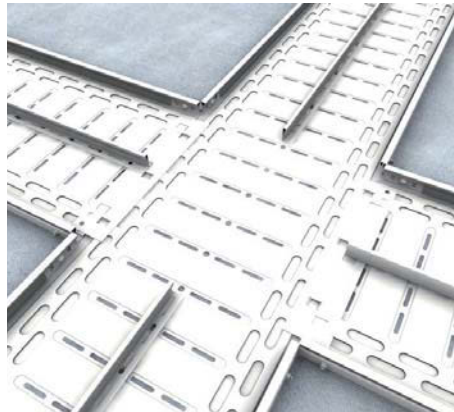
Barrier strips must be mounted in parallel offset of the duct.

Screed-covered cable duct

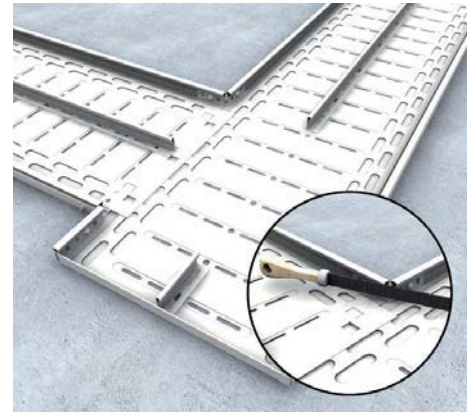
Assembly instruction



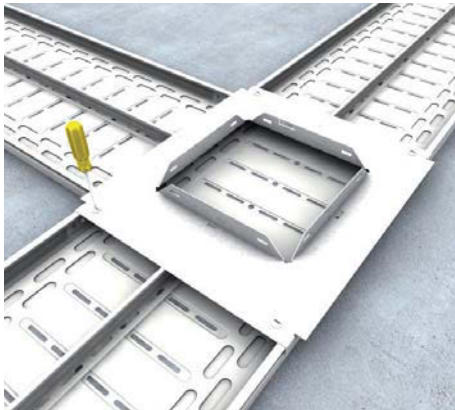
7 | Fitting components
T-extensions, junctions, and 90°bends can be created by notching the duct. Screw couplers together on the inside.



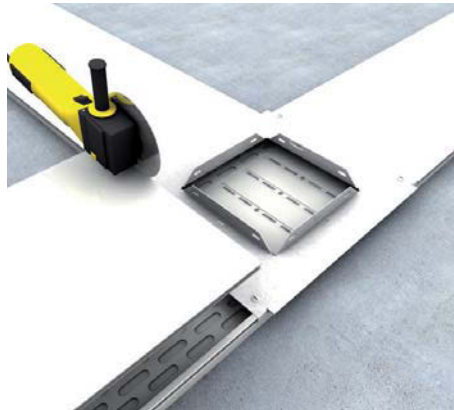
8 | Duct segments
The duct segments are connected by means of extension accessories UKAZ.



9 | Final assembly of fitting components
The barrier strips must be cut flush at the notches of the extensions and junctions. Trim the interfaces neatly and cold-galvanise.



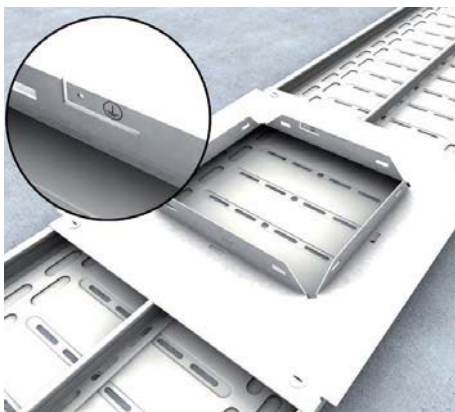
10 | Assembly cover fitting component
The levelled assembly covers UKDA are mounted to the duct using turning bolts. In case of a subsequent removal of the cover, mark position for the cable pull.



11 | Dummy covers
Cut dummy covers UKD accurate to measurement, place on the duct and then latch in.



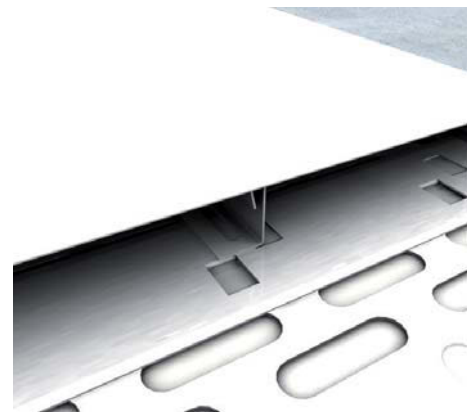
12 | Shuttering unit
Insert shuttering unit straight, arrow pointing up, into the opening of the assembly cover. All open areas must be masked according to DIN before applying the screed.



13 | Assembly cover
The assembly covers UKDA are levelled dead centre in duct course and mounted to the duct using turning bolts. All conductive parts must be considered in the potential equalisation.



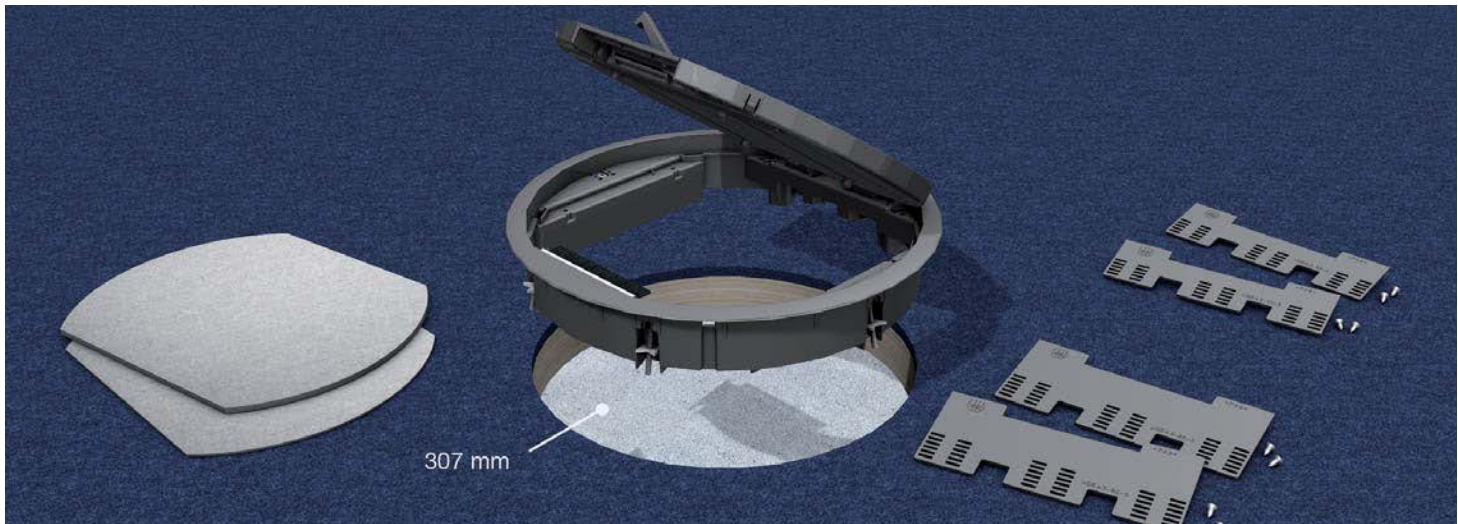
14 | Duct assembly
Mount duct bottom piece and dummy cover on parallel offset.



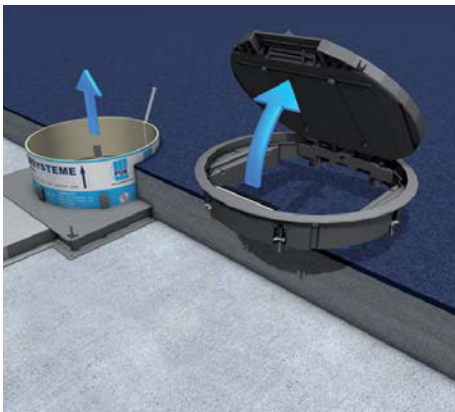
15 | Assembly opening
Barrier strips must not extend into the assembly opening, but must end 1-2 mm before.

Plastic brush installation units UEK3, round

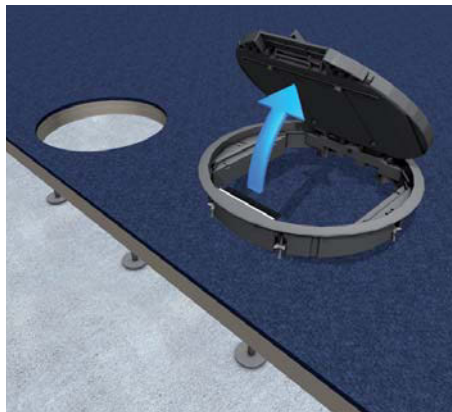
Assembly instruction



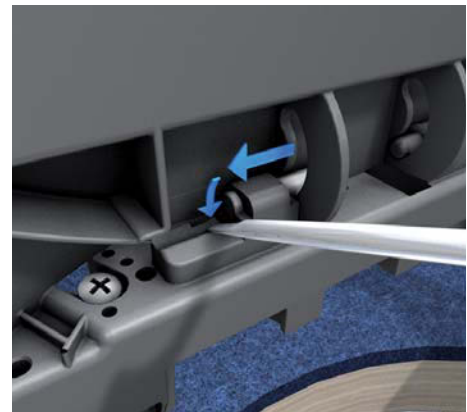
Round installation unit with a brush cable outlet, external diameter of 305 mm, for installation of up to three device containers. For floor cover depths of 10, 8, 5, and 3 mm. Lock-in leads of 50 or 80 mm needed for complementation.



1 | Screed floors
In case of a screed-covered system, remove shuttering tube and insert installation unit directly into the installation opening.



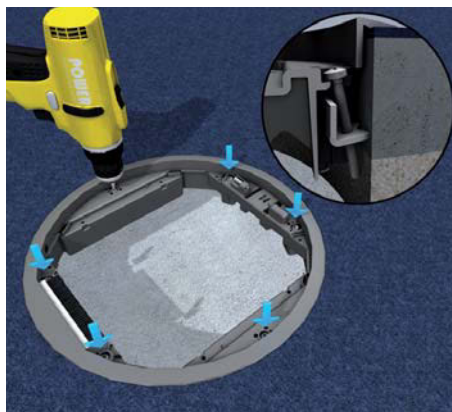
2 | Hollow floors and raised floors
For hollow or raised floors insert installation unit directly into the installation opening.



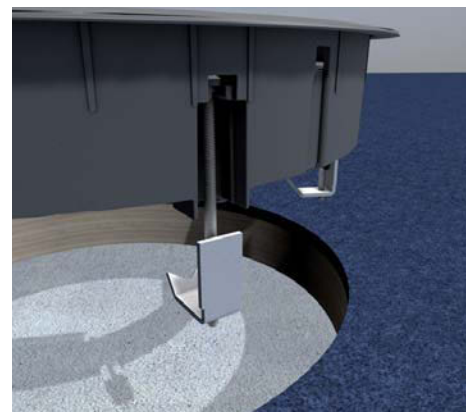
3 | Hinged cover mechanism
Open cover completely, press lug down with a screwdriver while moving the hinge to the left at the same time.



4 | Hinged cover removal
Press hinge together using pliers until the lugs snap out of the frame. Remove cover towards the front.



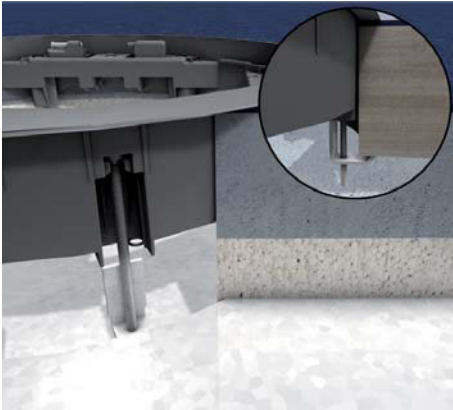
5 | Fastening the installation frame
Insert frame into installation opening from the top and tighten the pre-assembled claws with a crosshead screw. Check to ensure that the frame fits tightly.



6 | Claws
Custom model applications require the use of claw UDKS 40-80. If that is the case, the pre-assembled claws are removed and replaced. Turn claw body so that the frame can be inserted from the top.

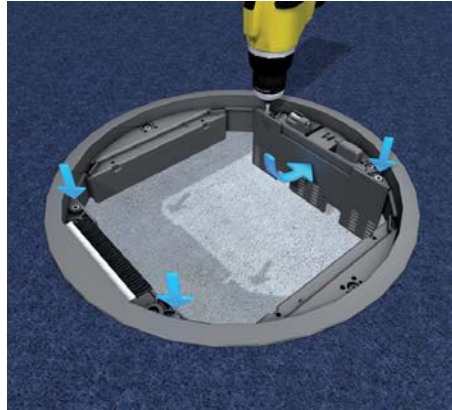
Plastic brush installation units UEK3, round

Assembly instruction



7 | The use of claws

The claws UDKS 40-80 stretch under the raised floor panel, into the screed or into the cover plate of the floor box.



8 | The mounting of lock-in leads

The separately delivered lock-in leads can be inserted into the installation unit from the top and tightly screwed. For a flat installation the 50 mm lock-in lead must be used.



9 | Inserting the device cup

Latch the device cup as deeply into the lock-in lead as possible.



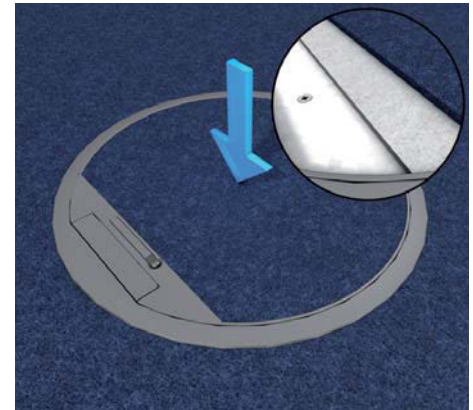
10 | Lock-in leads

Depending on the installation situation, lock-in leads of heights either 50 mm and 80 mm can be chosen. Device cups can be gradually lowered by up to 30 mm.



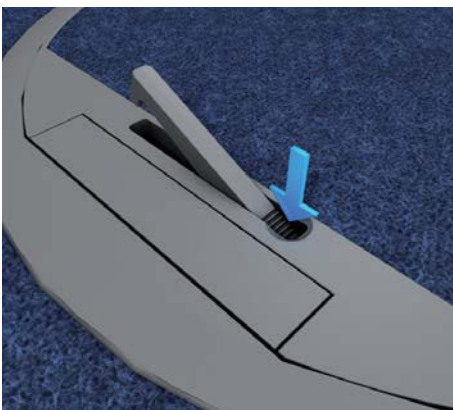
11 | Releasing the device cup

Insert screwdriver or mounting lever between frame and device cup. Release lugs on the side individually and remove device cup.



12 | Floor cover in hinge cover

After replacing the hinge cover, leave cover open in locking position. Cut floor cover to no more than 10 mm from its precise fit and glue onto the steel reinforcement. Optionally, cover inlays are available of 2 mm or 5 mm thickness.



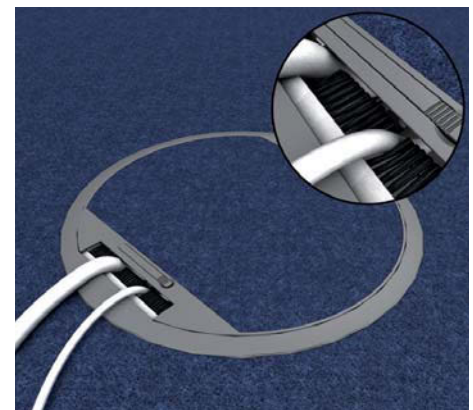
13 | Opening lever

Operate self-locking opening lever behind the cable outlet.



14 | Cable connection flap

Pan cable connection flap by 180° and latch it in.

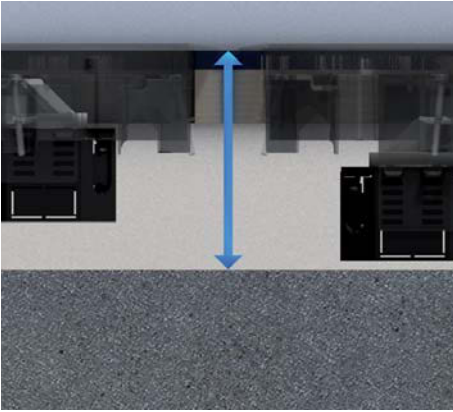


15 | Brush cable outlet

Lead out cables through the open brush cable outlet.

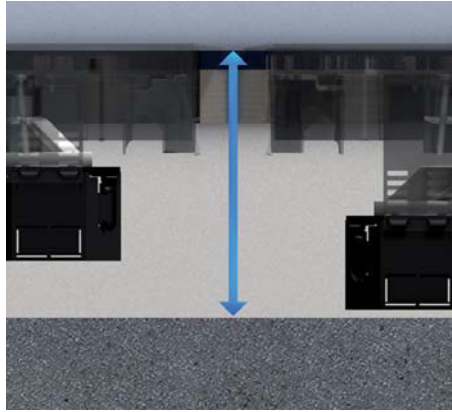
Plastic brush installation units UEK3, round

Assembly instruction



16 | Minimum installation height

Minimum installation height: 89 mm when using a 50 mm lock-in lead, respectively 109 mm when using a 80 mm lock-in lead, and in connection with coupler plugs up to H = 35 mm.



17 | Maximum installation height

Maximum installation height: 109 mm when using a 50 mm lock-in lead, respectively 134 mm when using a 80 mm lock-in lead.



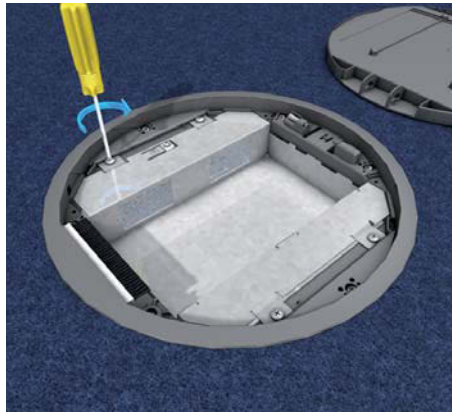
18 | The use of UG45

The device cup UG45-4 is suitable for using installation devices measuring 45 x 45 mm or 45 x 22,5 mm. Minimum installation height: 82 mm when using the 50 mm lock-in lead, respectively 102 mm when using the 80 mm lock-in lead and in connection with coupler plugs up to H = 35 mm.



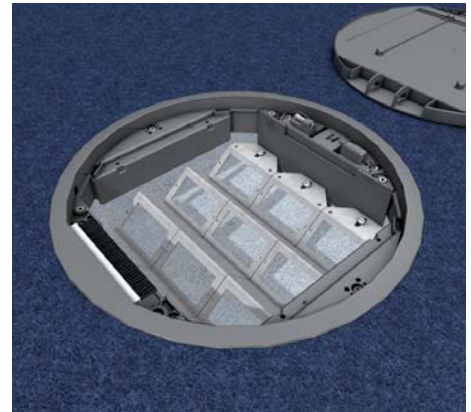
19 | The use of UG3

To achieve an even flatter installation depth, use our newly developed device cup UG3. Minimum installation height: 82 mm when using a 50 mm lock-in lead, respectively 102 mm when using an 80 mm lock-in lead and in connection with coupler plugs up to H = 35 mm.



20 | Device insert

Place device into the installation unit from the top and tighten to the frame using four threaded screws. Minimum installation depth: 63 mm. Suitable for maximum two double sockets and up to six data modules. Install installation technology using boards.

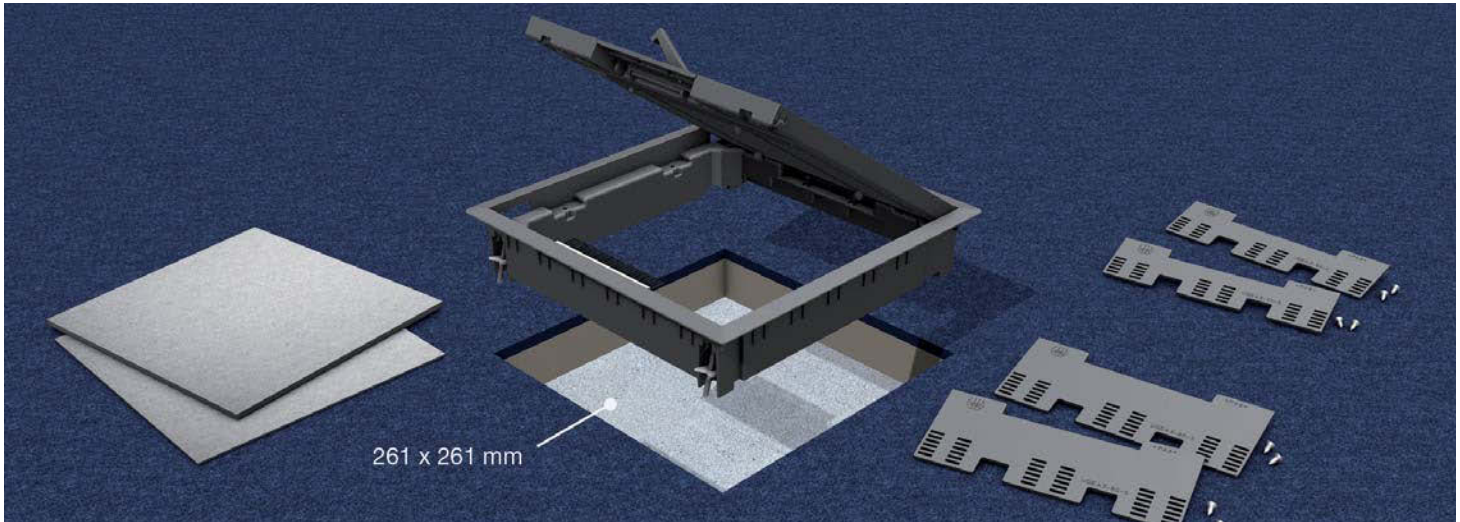


21 | Data device carrier

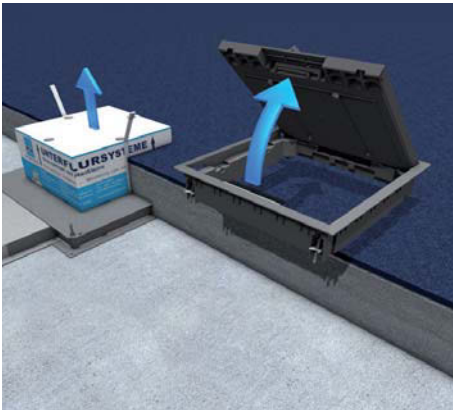
Up to nine data modules can be installed in the data device carrier using boards in the installation unit. Minimum installation height: 96 mm when using a 50 mm lock-in lead, respectively 116 mm when using an 80 mm lock-in lead set.

Plastic brush assembly units UEK3, quadrangular

Assembly instruction

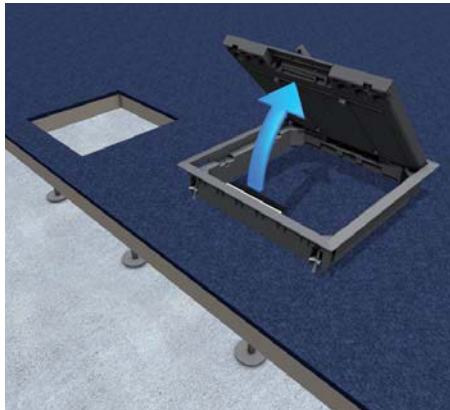


Quadrangular installation unit with a brush cable outlet and external dimensions of 280 x 280 mm for the installation of up to three device cups. For floor cover depths of 10, 8, 5, and 3 mm. Lock-in leads of 50 or 80 mm needed for complementation.



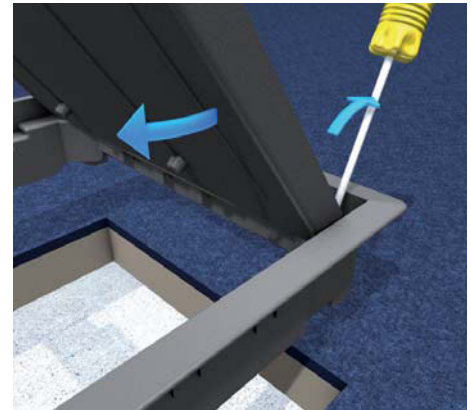
1 | Screed floors

In case you chose a screed-covered system remove shuttering field and insert installation unit directly into the installation opening.



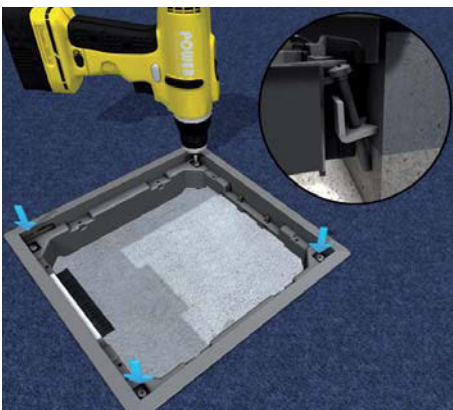
2 | Hollow floors and raised floors

For hollow or raised floors insert installation unit directly into the installation opening.



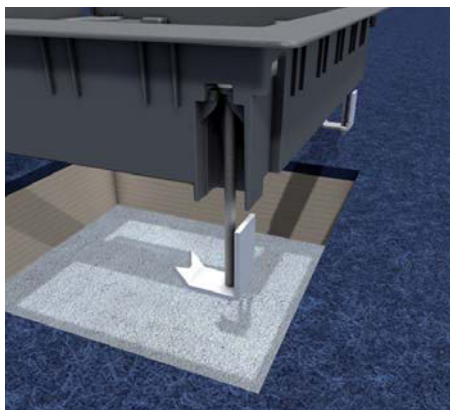
3 | Hinged cover removal

Open cover completely, pull firmly to the front on the right and release from the hinge using a screwdriver.



4 | Fastening the installation frame

Insert frame into installation opening from the top and tighten the pre-assembled claws with a crosshead screw. Check to ensure the frame fits tightly.



5 | Claws

Custom-made applications require the use of claw UDKS 40-80. If that is the case, the pre-assembled claws are removed and replaced. Turn claw body so that the frame can be inserted from the top.

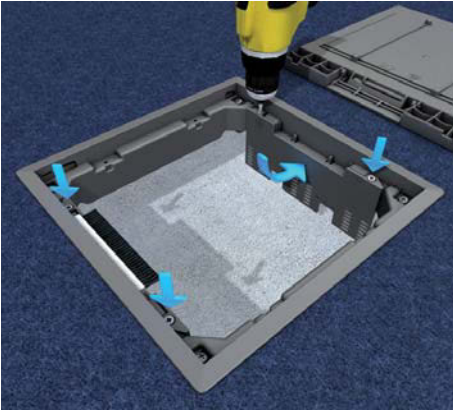


6 | The use of claws

The claws UDKS 40-80 stretch under the raised floor panel, into the screed or into the cover plate of the floor box.

Plastic brush assembly units UEK3, quadrangular

Assembly instruction



7 | The mounting of lock-in leads

The separately delivered lock-in leads can be inserted into the installation unit from the top and tightly screwed. For a flat installation the 50 mm lock-in lead must be used.



8 | Inserting the device cup

Latch the device cup as deeply into the lock-in lead as possible.



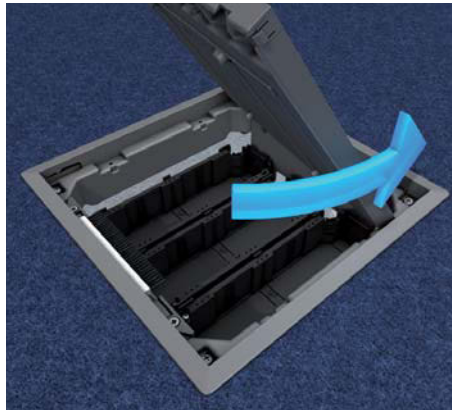
9 | Lock-in leads

Depending on the installation situation, lock-in leads of heights either 50 mm and 80 mm can be chosen. Device cups can be gradually lowered by up to 30 mm.



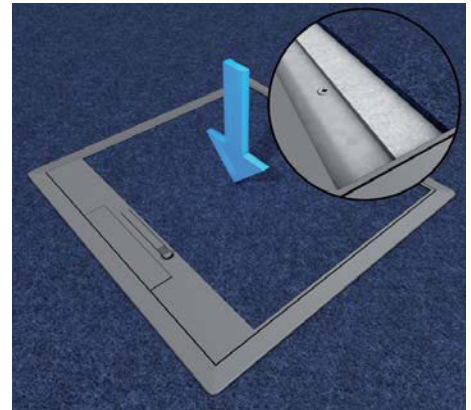
10 | Releasing the device cup

Insert screwdriver or mounting lever between frame and device cup. Release lugs on the side individually and remove device cup.



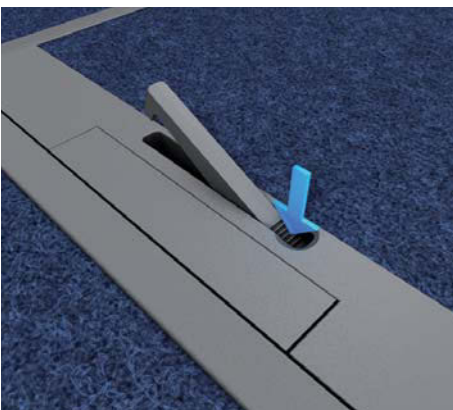
11 | Inserting the hinged cover

Insert hinged cover from the left back side, push firmly backwards on the right and latch in the hinge. The hinged cover can be inserted rotated by 180° and remains open in locking position.



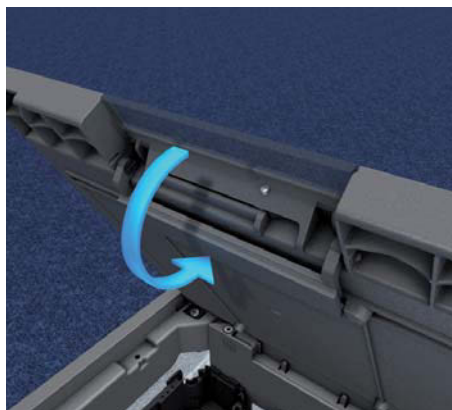
12 | Floor cover

Cut floor cover to no more than 10 mm from its precise fit and glue onto the steel reinforcement. Optionally, cover inlays in 2 mm or 5 mm thickness are available.



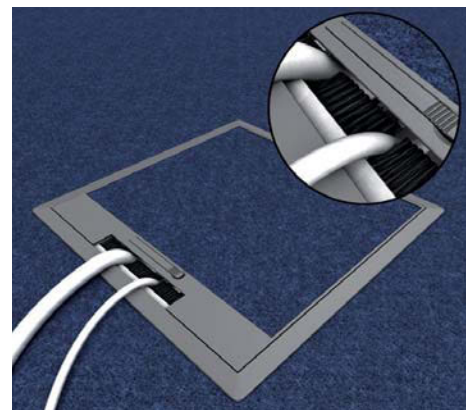
13 | Opening lever

Operate self-locking opening lever behind the cable outlet.



14 | Cable connection flap

Pan cable connection flap by 180° and latch it in.

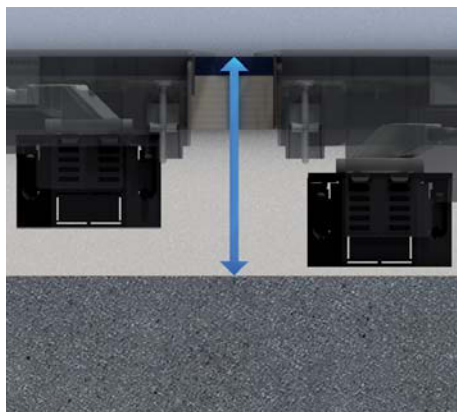


15 | Brush cable outlet

Lead out the cables through the open brush cable outlet.

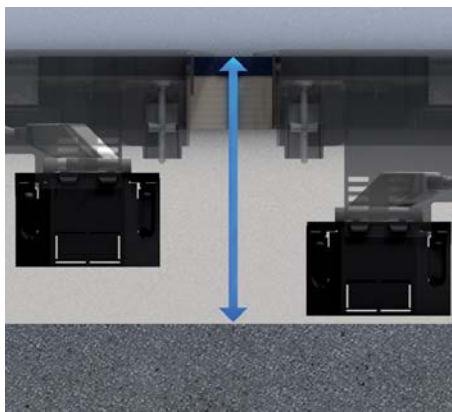
Plastic brush assembly units UEK3, quadrangular

Assembly instruction



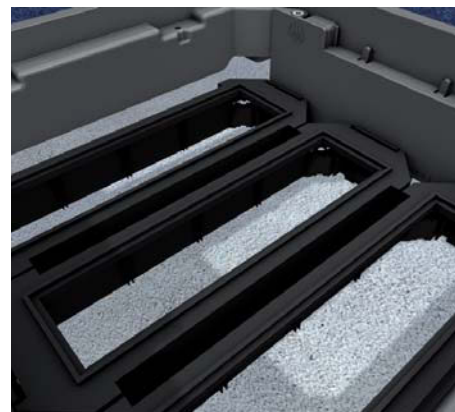
16 | Minimum installation height

Minimum installation height: 89 mm when using a 50 mm lock-in lead, respectively 109 mm when using a 80 mm lock-in lead, and in connection with coupler plugs up to H = 35 mm.



17 | Maximum installation height

Maximum installation height: 109 mm when using a 50 mm lock-in lead, respectively 134 mm when using a 80 mm lock-in lead.



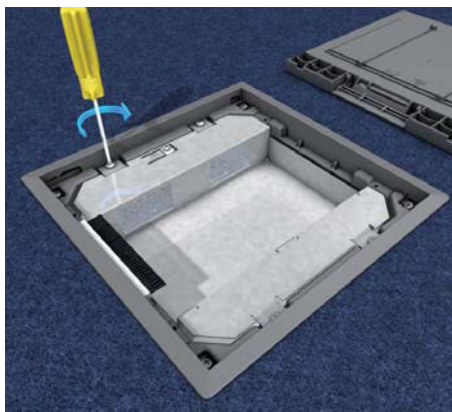
18 | The use of UG45

The device cup UG45-4 is suitable for using of installation devices measuring 45 x 45 mm or 45 x 22,5 mm. Minimum installation height: 82 mm when using the 50 mm lock-in lead, respectively 102 mm when using the 80 mm lock-in lead and in connection with coupler plugs up to H = 35 mm.



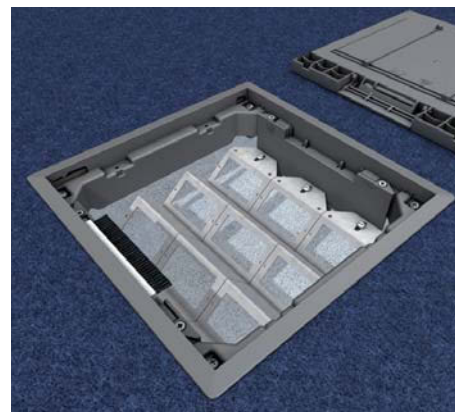
19 | The use of UG3

To achieve an even flatter installation depth, use our newly developed device cup UG3. Minimum installation height: 82 mm when using a 50 mm lock-in lead, respectively 102 mm when using an 80 mm lock-in lead and in connection with coupler plugs up to H = 35 mm.



20 | Device insert

Place device insert into the installation unit from the top and tighten to the frame using four threaded screws. Minimum installation depth: 63 mm. Suitable for maximum two double sockets and up to six data modules. Install installation technology using boards.

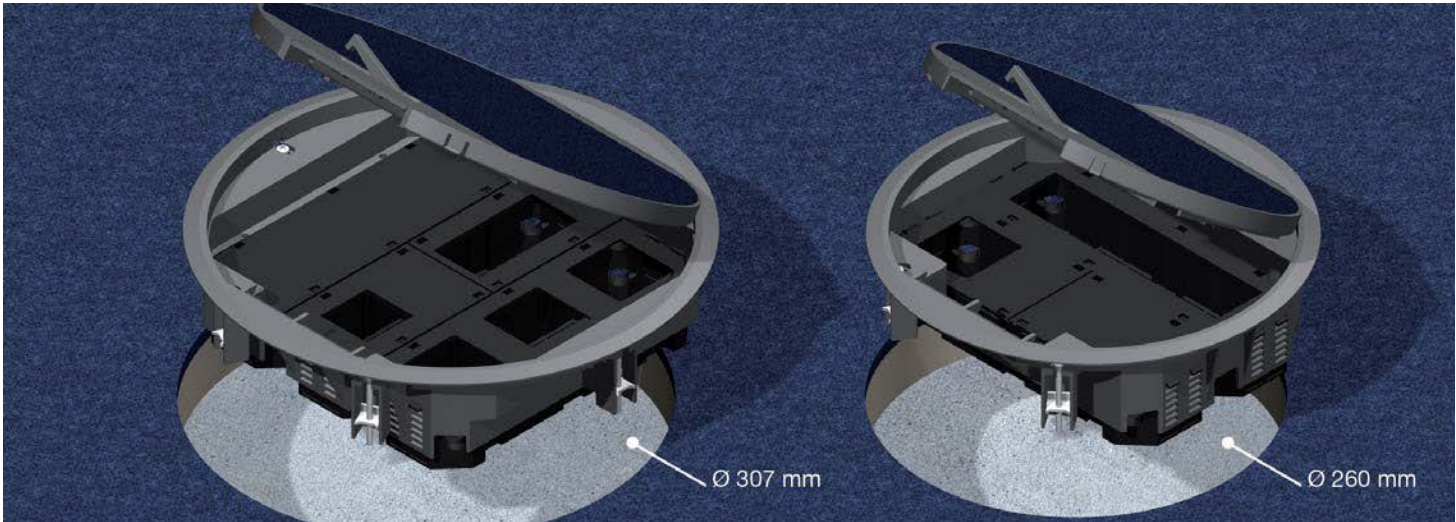


21 | Data device carrier

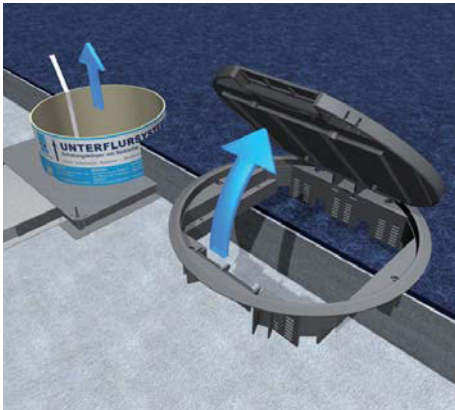
Up to nine data modules can be installed in the data device carrier using boards in the installation unit. Minimum installation height: 96 mm when using a 50 mm lock-in lead, respectively 116 mm when using an 80 mm lock-in lead set.

Plastic installation units, round

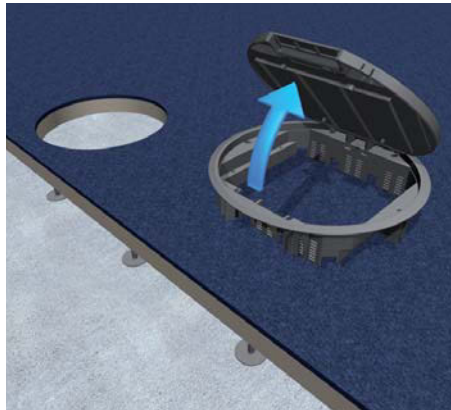
Assembly instruction



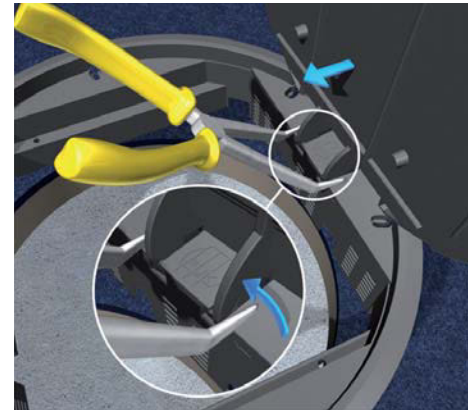
Round installation units, external diameter Ø 305 or Ø 258 mm, for installation of up to three device containers.



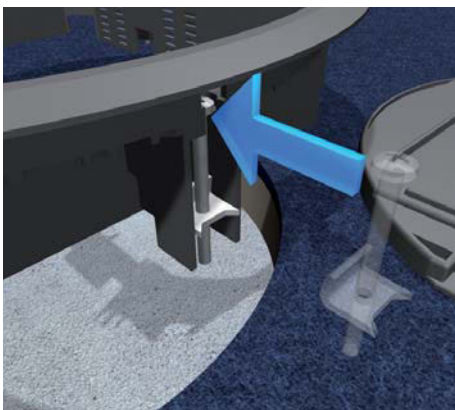
1 | Screed floors
For screed covered systems remove shuttering unit and mount directly into the opening.



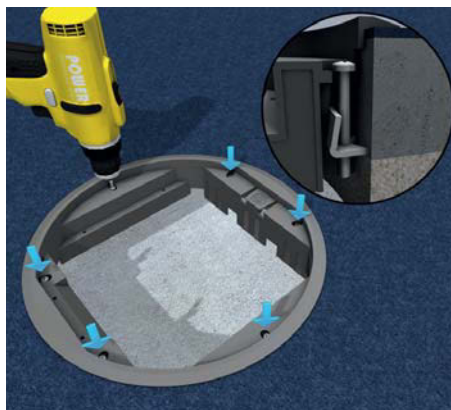
2 | Hollow space- and raised floors
For hollow space and raised floors mount directly into the installation opening.



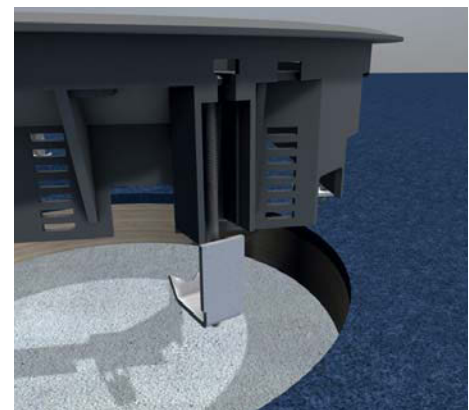
3 | Remove hinged cover
Open cover completely, pull hinge joint firmly out with tongs until the snap tabs are released from the frame. Remove cover to the front.



4 | Mounting claws
Mount the enclosed standard claw fasteners (range of claws 30 to 50 mm) into the acceptance in the frame.



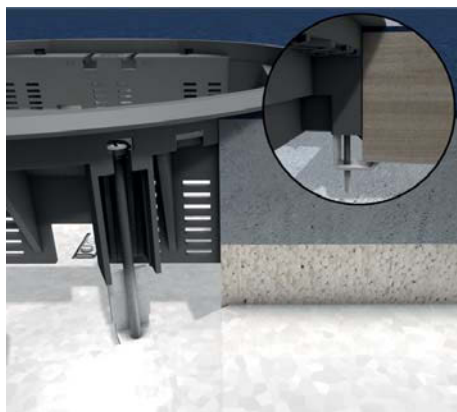
5 | Fastening the installation frame
Insert frame into installation opening from the top and tighten the pre-assembled claws with a crosshead screw. Check to ensure that the frame fits tightly.



6 | Claws
Custom model applications require the use of claw UDKS 40-80. If that is the case, the pre-assembled claws are removed and replaced. Turn claw body so that the frame can be inserted from the top.

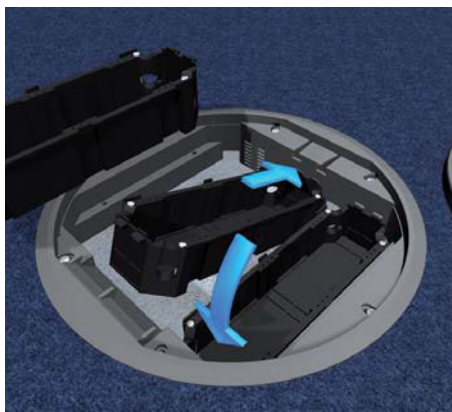
Plastic installation units, round

Assembly instruction



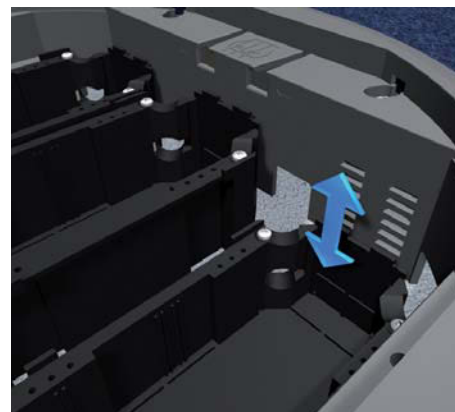
7 | The use of claws

The claws UDKS 40-80 stretch under the raised floor panel, into the screed or into the cover plate of the floor box.



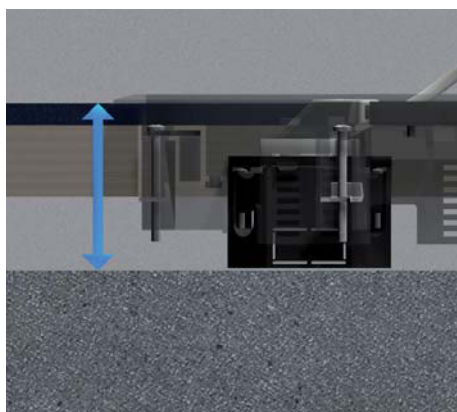
8 | Inserting device containers

Click device containers as deep as possible into the lock-in leads.



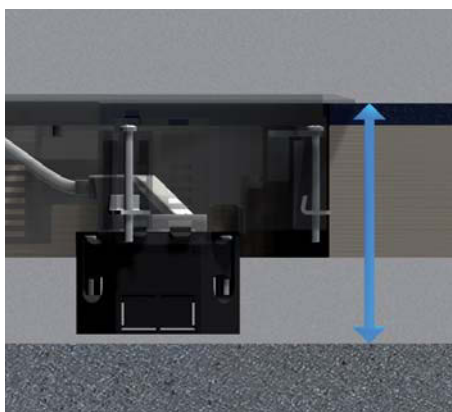
9 | Lock-in leads

For lowering the device container gradually down to 30 mm.



10 | Minimum installation height

Minimum installation height 74 mm and 87 mm for device plugs up to H = 35 mm.



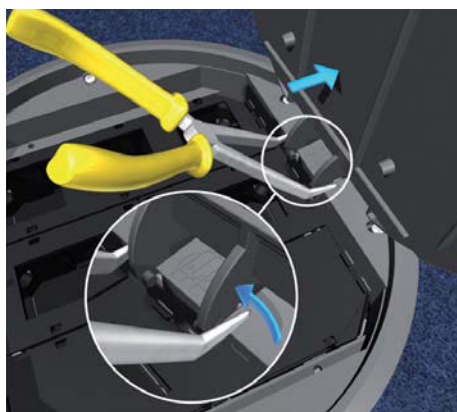
11 | Maximum installation height

Maximum installation height 104 mm for device plugs up to H = 50 mm.



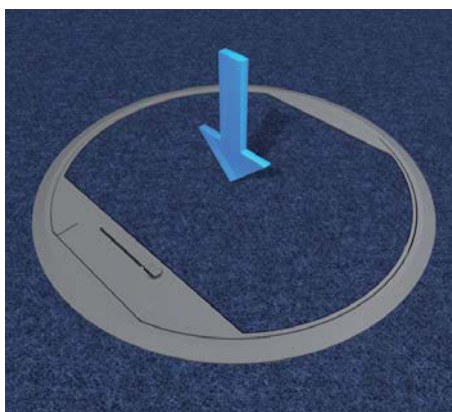
12 | Loosen device container

Insert screwdriver or mounting lever between frame and device container. Loosen snap tab and remove device container.



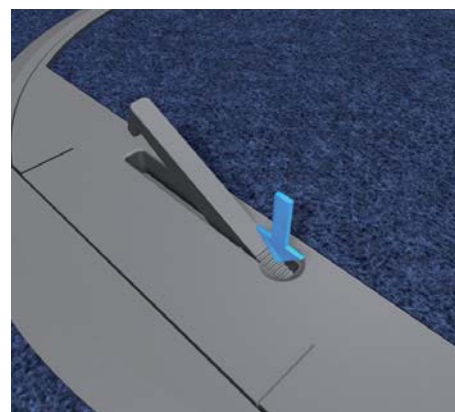
13 | Insert hinged cover

Push hinge joint together with tongs until the snap tabs lock into the opening in the frame. Insert cover to the back into the frame.



14 | Glue in bottom covering

Cut bottom coverings up to 8 mm accurately fitting and glue to the steel insert. Optional lid insert H = 3 mm.

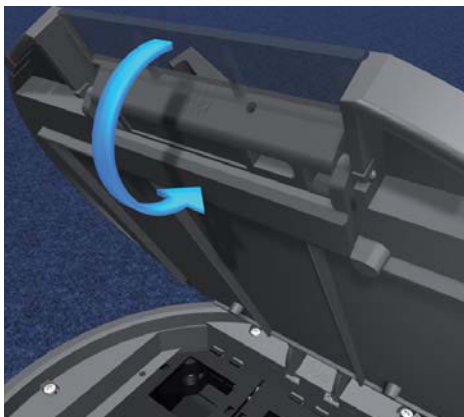


15 | Opening lever

Self-locking opening lever behind the cable outlet.

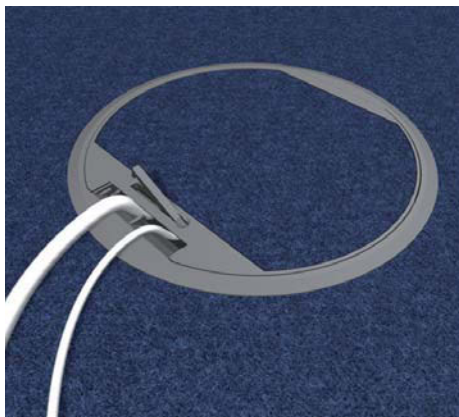
Plastic installation units, round

Assembly instruction



16 | Cable outlet

Swing around carriage cover by 180° and snap in.

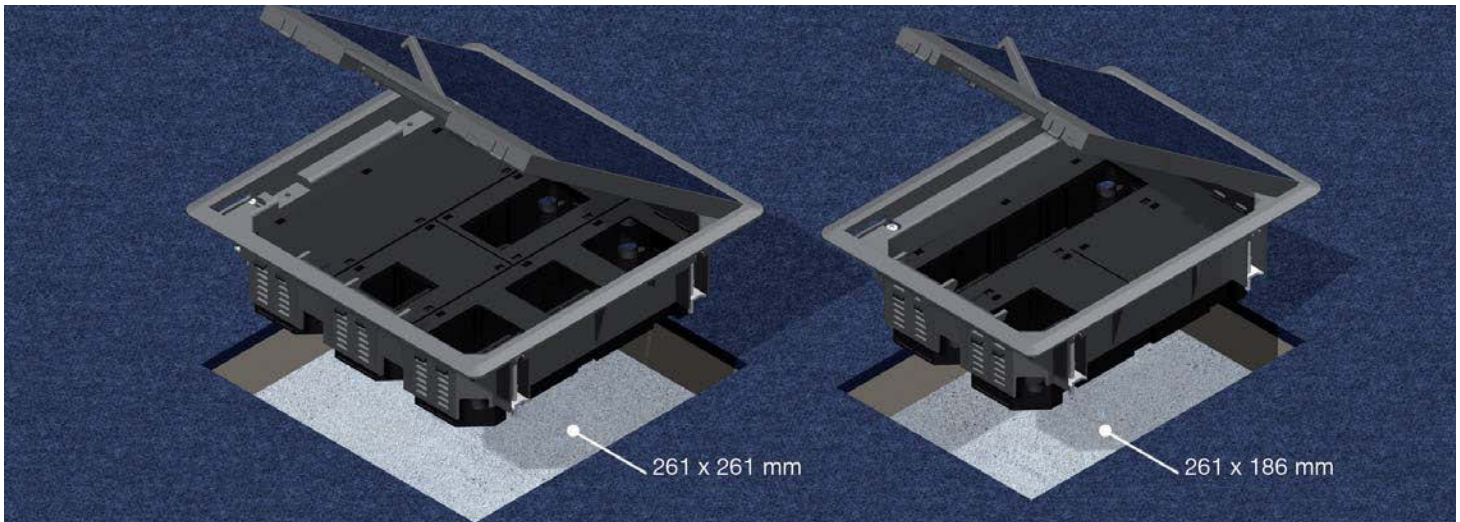


17 | Leading cables through

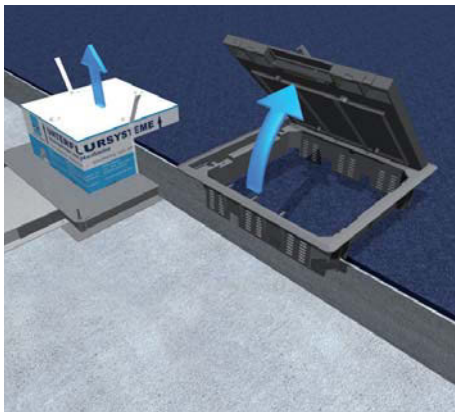
Leading cables through the open cable outlet.

Plastic installation units, quadrangular

Assembly instruction

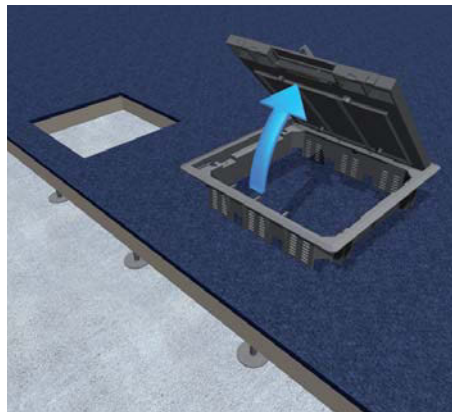


Quadrangular installation units, external dimension 258 x 258 mm or 258 x 184 mm, for installation of up to three device containers.



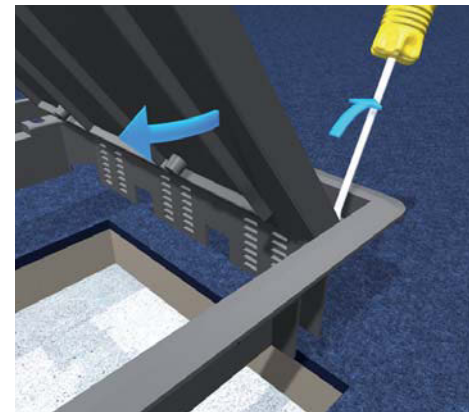
1 | Screed floors

For screed covered systems remove shuttering unit and mount installation unit directly into the installation opening.



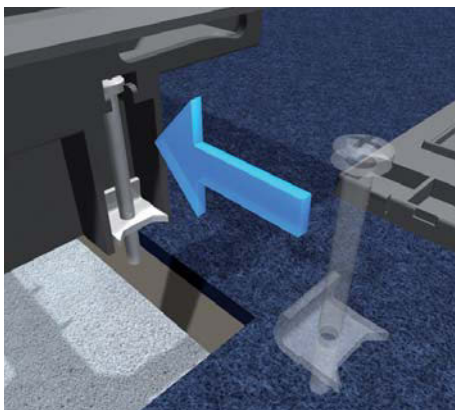
2 | Hollow space- and raised floors

For hollow space and raised floors mount installation unit directly into the installation opening.



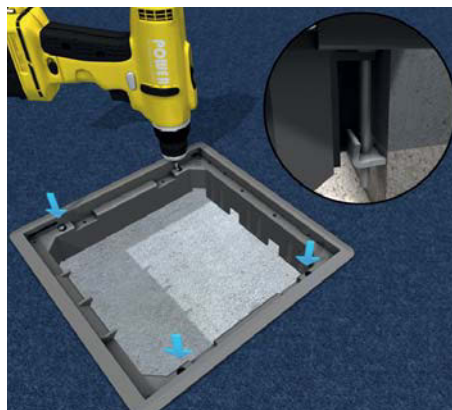
3 | Remove hinged cover

Open cover completely, pull firmly forward at the right side and loosen from hinge joint with a screwdriver.



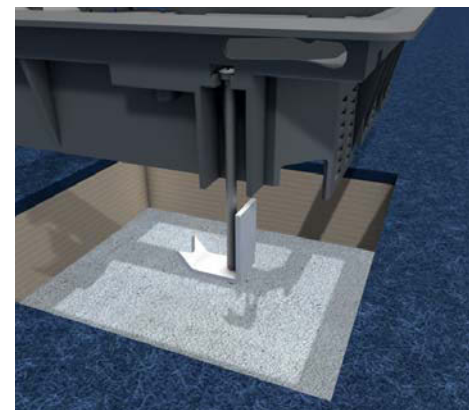
4 | Mounting claws

Mount the enclosed standard claw fasteners (range of claws 30 to 50 mm) into the acceptance in the frame.



5 | Fastening the installation frame

Insert frame into installation opening from the top and tighten the pre-assembled claws with a crosshead screw. Check to ensure the frame fits tightly.

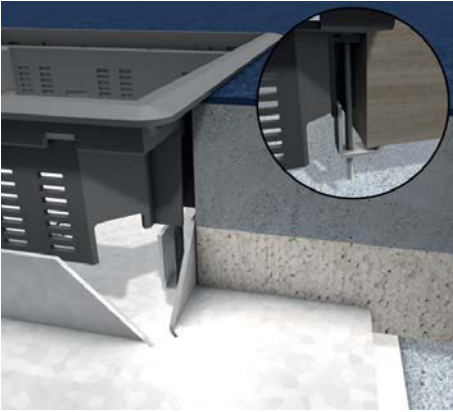


6 | Claws

Custom-made applications require the use of claw UDKS 40-80. If that is the case, the pre-assembled claws are removed and replaced. Turn claw body so that the frame can be inserted from the top.

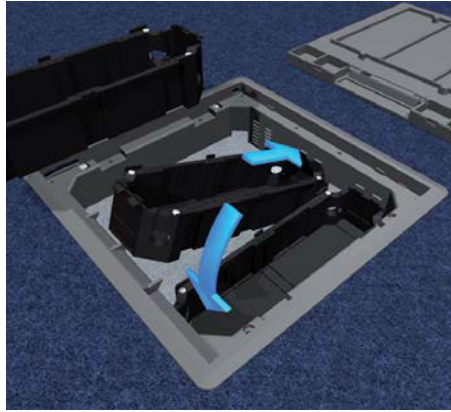
Plastic installation units, quadrangular

Assembly instruction



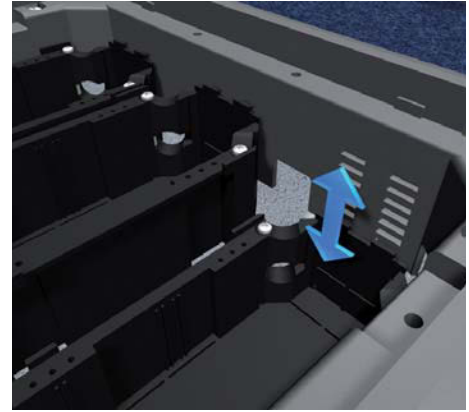
7 | The use of claws

The claws UDKS 40-80 stretch under the raised floor panel, into the screed or into the cover plate of the floor box.



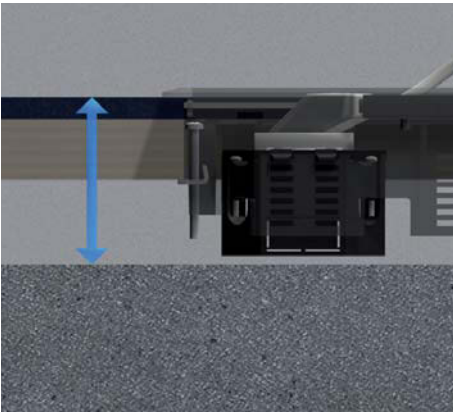
8 | Inserting device containers

Click device containers as deep as possible into the lock-in leads.



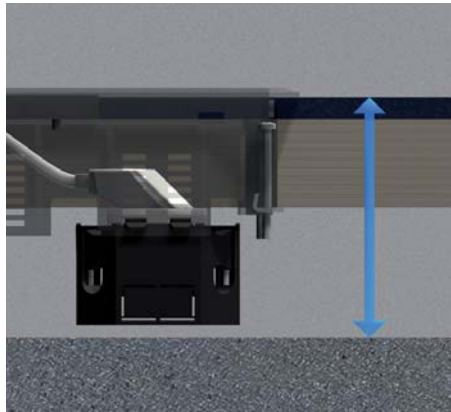
9 | Lock-in leads

Lower the device container gradually down to 30 mm.



10 | Minimum installation height

Minimum installation height 74 mm and 87 mm for device plugs up to H = 35 mm.



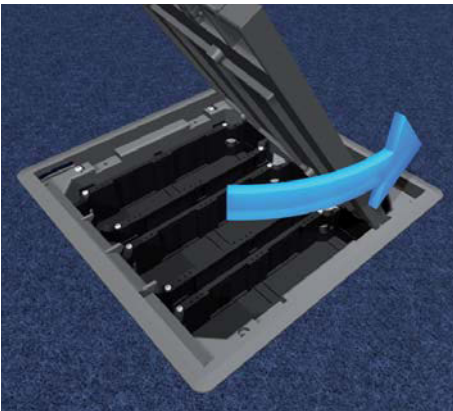
11 | Maximum installation height

Maximum installation height 104 mm for device plugs up to H = 50 mm.



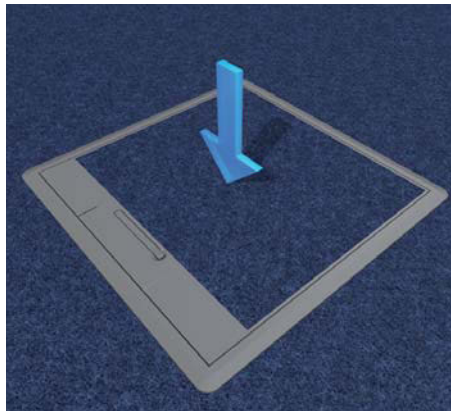
12 | Loosen device container

Insert screwdriver or mounting lever between frame and device container. Loosen snap tab and remove device container.



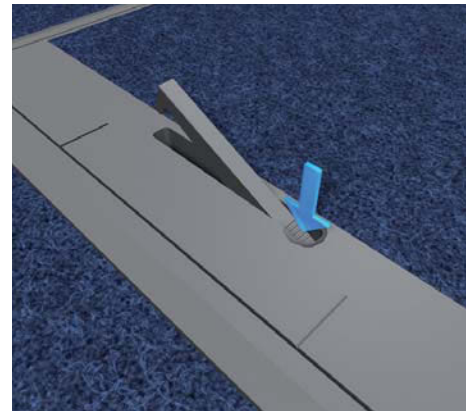
13 | Insert hinged cover

Attach opened hinged cover at the left back side, push firmly to the back on the right side and snap into hinged-joint.



14 | Glue in bottom covering

Cut bottom coverings up to 8 mm accurately and glue to the steel insert. Optional lid insert H = 3 mm.

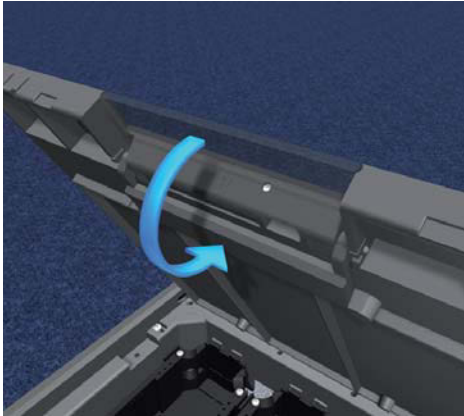


15 | Opening lever

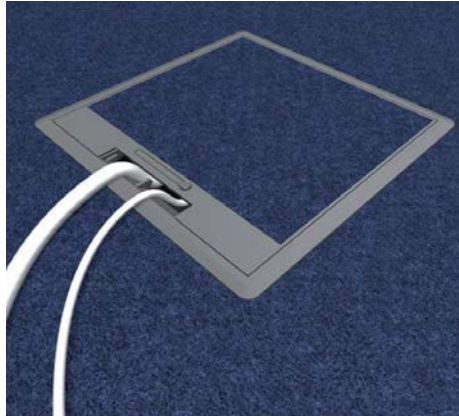
Self-locking opening lever is behind the cable outlet.

Plastic installation units, quadrangular

Assembly instruction



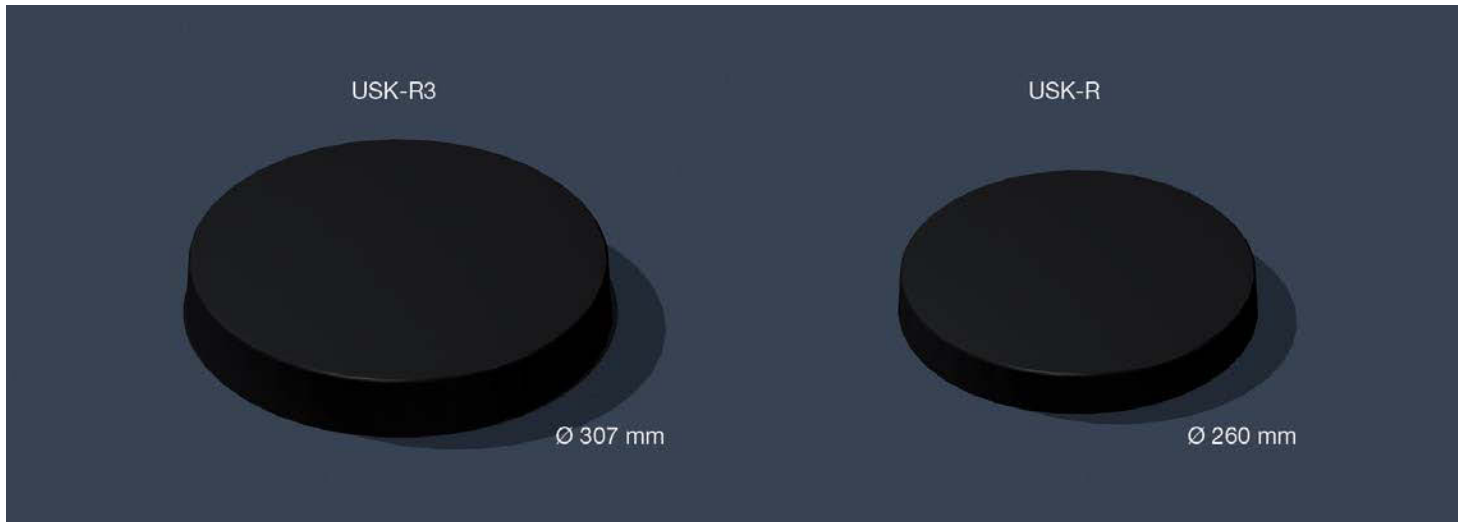
16 | Cable outlet
Swing around carriage cover by 180° and snap in.



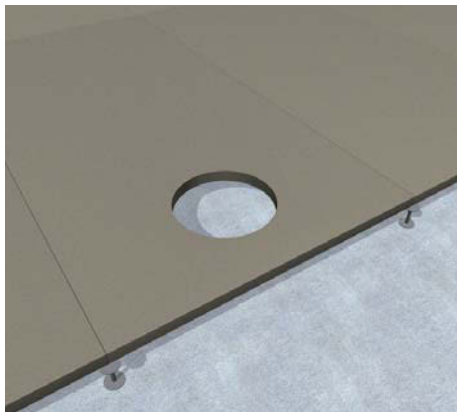
17 | Lead cables through
Lead cables through the open cable outlet.

Shuttering unit, round

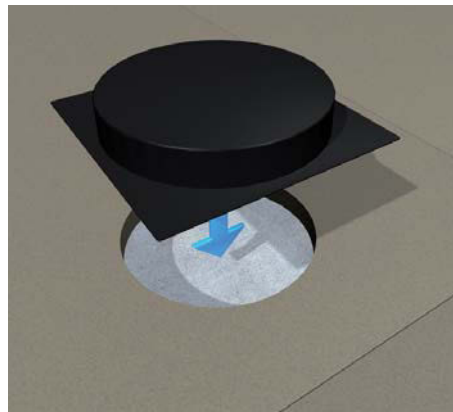
Assembly instruction



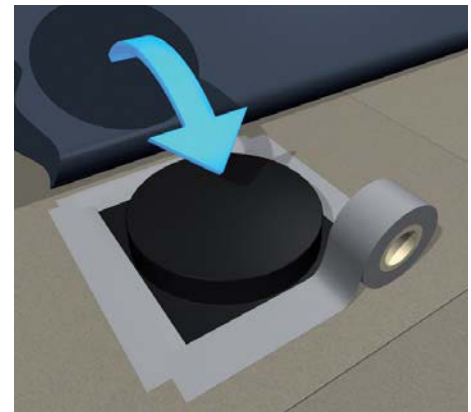
Round shuttering units in two designs, deep-drawing piece made of 1 mm plastic, height 50 mm for providing an opening in the hollow floor.



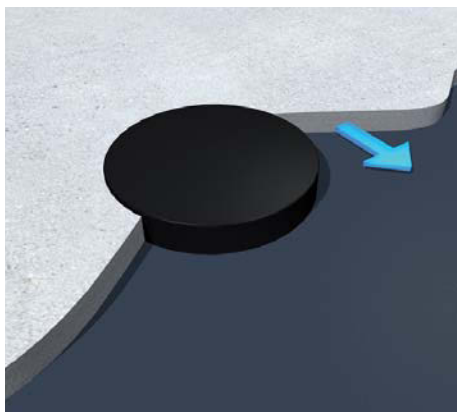
1 | Levelling of shuttering unit
Provide openings with cross section 307 mm or 260 mm in the assembled basic floor.



2 | Fixation of shuttering unit
Level the shuttering units on the hollow floor before applying the screed.



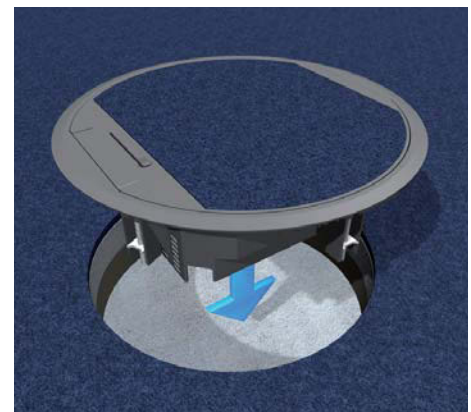
3 | Mounting of foil
Fix shuttering units to the floor with adhesive tape, cut out foil and overlap.



4 | Inserting screed
Spread the screed on the whole area and compact it neatly.



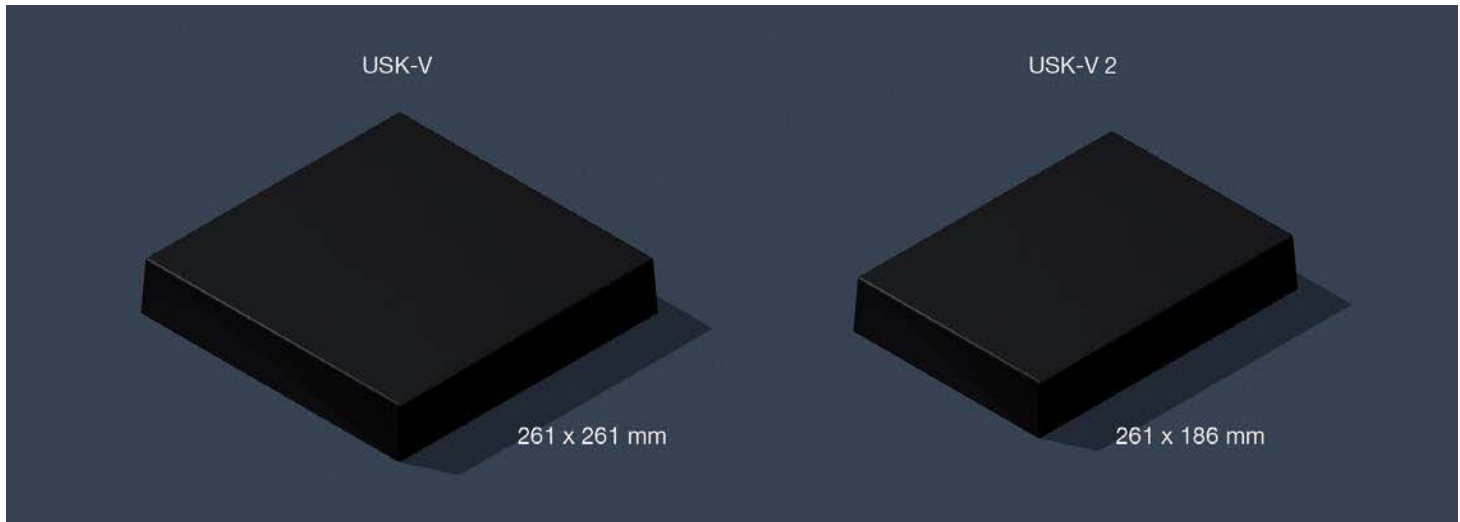
5 | Cut out opening
After the screed has hardened remove the overlapping lid and sidewalls neatly.



6 | Mounting assembly unit
After the floor covering has been laid insert the installation unit straight into the opening and fasten it with the claws evenly to the screed.

Shuttering unit, quadrangular

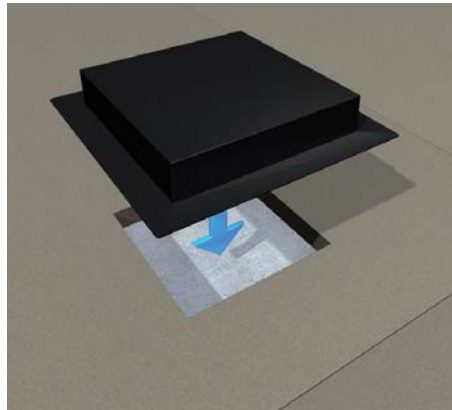
Assembly instruction



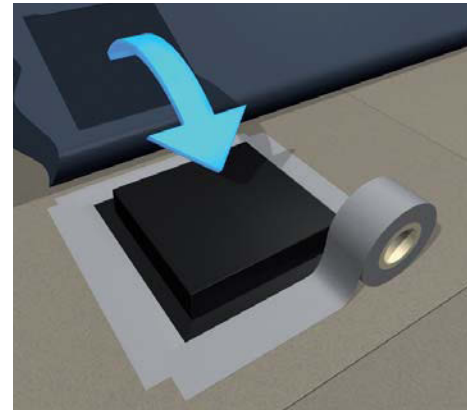
Quadrangular shuttering units in two designs, deep-drawing piece made of 1 mm plastic, height 50 mm for providing an opening in the hollow floor.



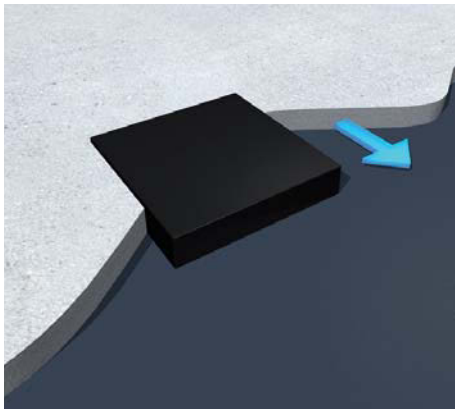
1 | Levelling of shuttering unit
Provide openings 261 x 261 mm or 261 x 186 mm in the assembled basic floor.



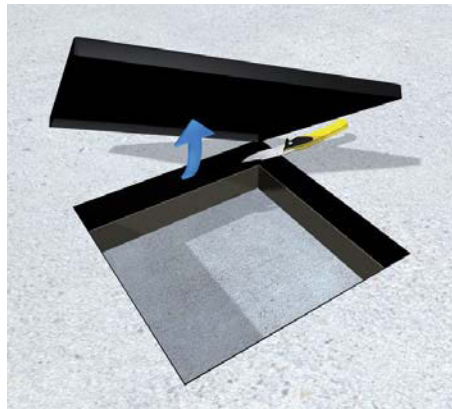
2 | Fixation of shuttering unit
Level the shuttering units on the hollow floor before applying the screed.



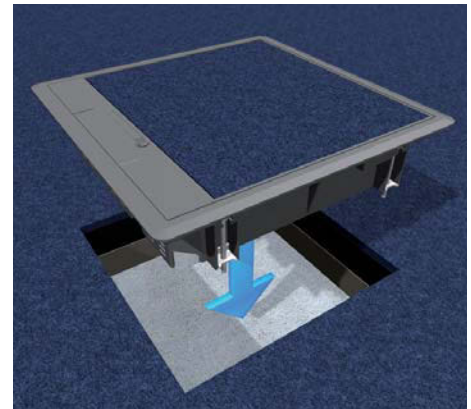
3 | Mounting of foil
Fix shuttering units to the floor with adhesive tape, cut out foil and overlap.



4 | Inserting screed
Spread the screed on the whole area and compact it neatly.



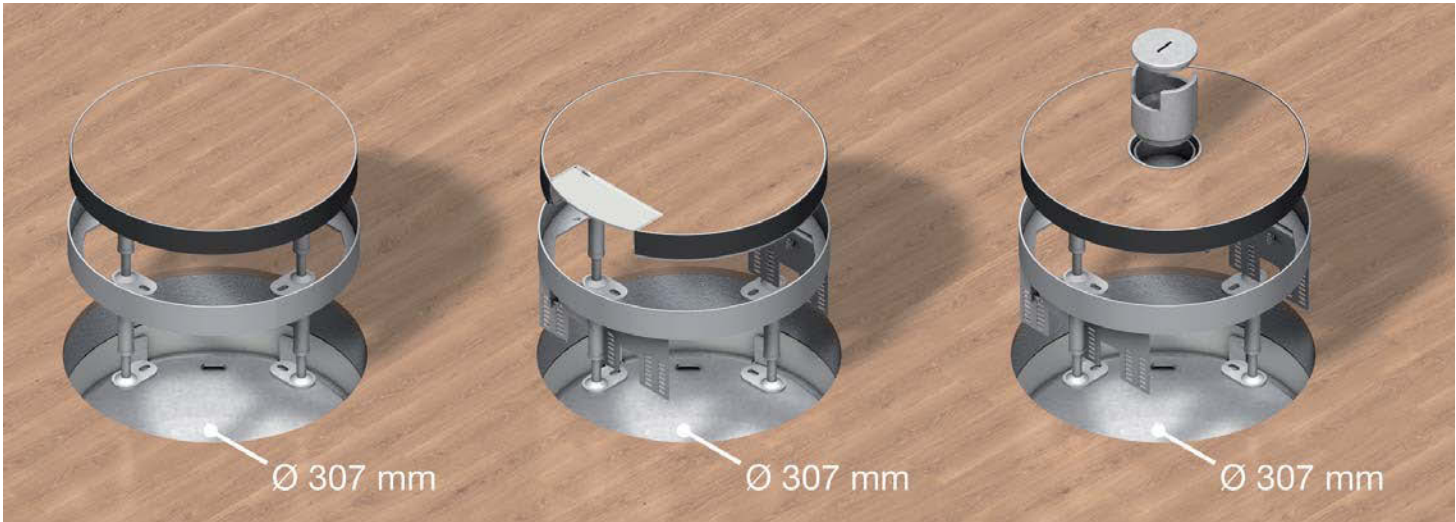
5 | Cut out opening
After the screed has hardened remove the overlapping lid and sidewalls neatly. Side walls must be maintained.



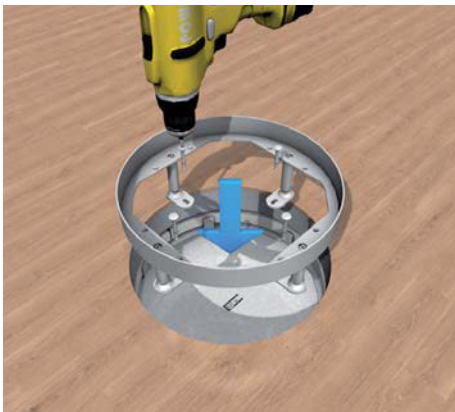
6 | Mounting assembly unit
After the floor covering has been laid insert the installation unit straight into the opening and fasten it with the claws evenly to the screed.

Cartridge units made of stainless steel, round

Assembly instruction



Round cartridge unit with hem made of stainless steel with an external diameter of 307 mm as a dummy cartridge unit, cable outlet cartridge unit and tube cartridge unit for the installation into screed and hollow floors. For 12/30 mm parquet and stone covers and linoleum in combination with rigid foam lid insert. Can be levelled from 100 to 155 mm.



1 | Levelling unit with frame
For parquet or stone floors insert the levelling device into the floor opening. Fasten the four levelling bases with nail plugs.



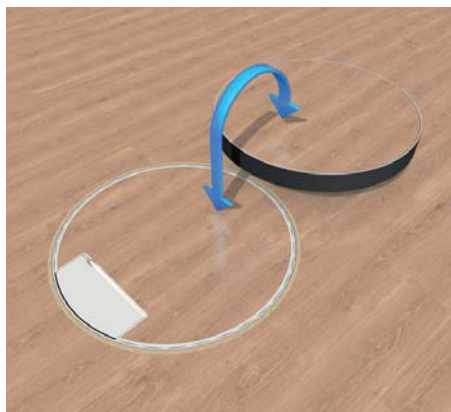
2 | Rubber seal
The cartridge is equipped with two rubber seals therefore there is no need for inserting them separately. The rubber seal inserted from the bottom guarantees the required subsonic noise, while the rubber seal on the side provides the needed seal. A regular maintenance and cleaning of the seals is necessary.



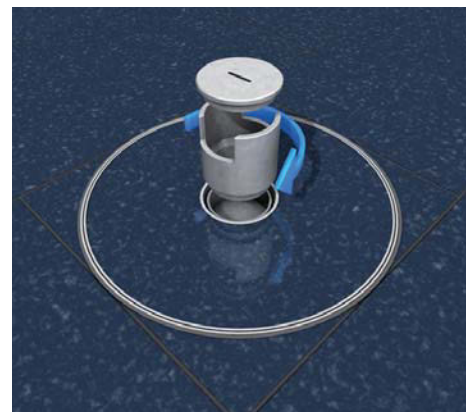
3 | Lock-in leads
Fasten both lock-in leads to the frame from the bottom, using two screws for each side. Make the grounding connection between levelling device and floor box.



4 | Floor adjustment
Align the installation frame flush on the level of the finished floor above the four levelling screws. Seal expansion joint revolving with cork or sealing mass. When using a coupler plug $H = 35$ mm observe the minimum installation depth $H_{min} = 100$ mm.



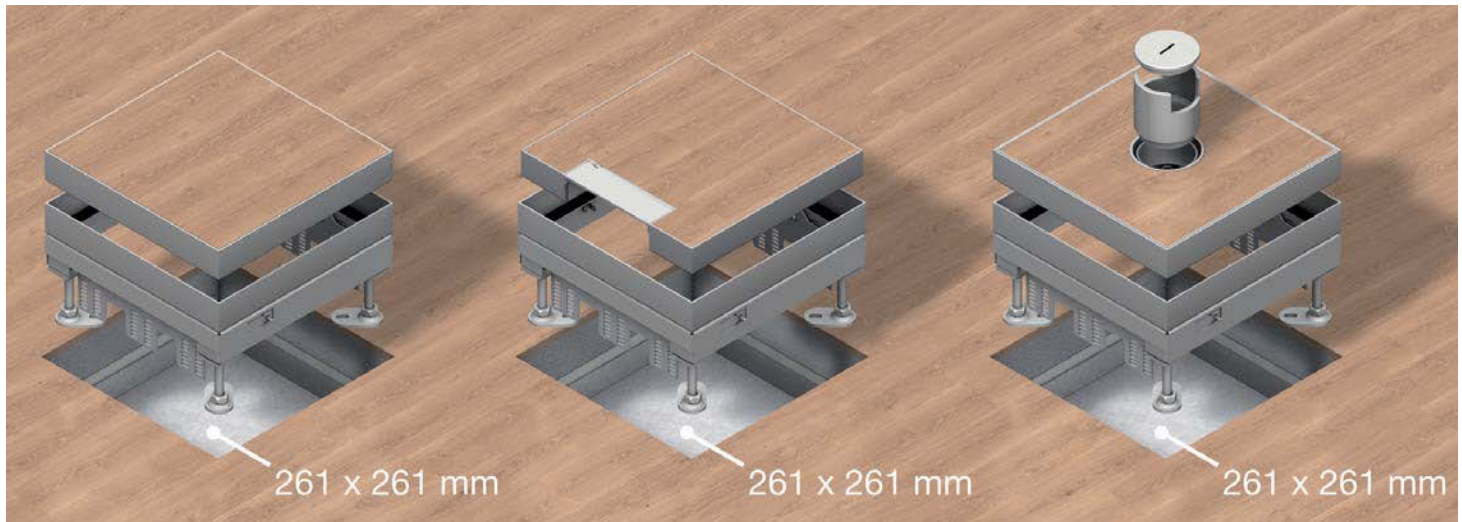
5 | Parquet cover
For damp-maintenance floors, such as parquet covers, use a dummy cartridge unit or a cable outlet cartridge unit. However the floor cover depth must be considered. Insert the replaceable cartridge into the frame.



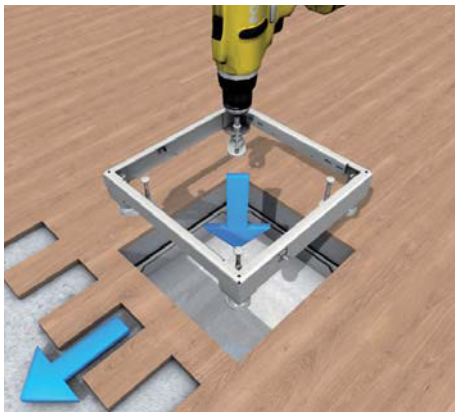
6 | Stone cover
For wet maintenance floor covers, such as stone covers, only a tube cartridge unit may be used. However the floor cover depth must be considered. Insert the replaceable cartridge into the frame. The tube can be screwed.

Cartridge unit made of stainless steel, quadrangular

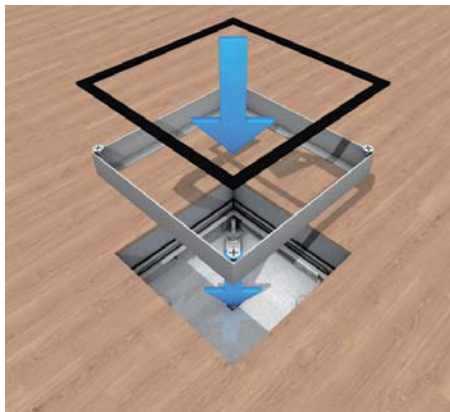
Assembly instruction



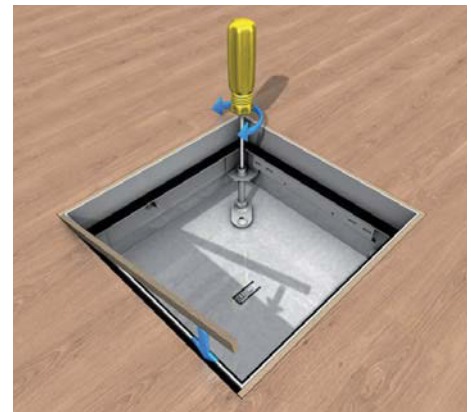
Quadrangular cartridge unit with hem, made of stainless steel, with the outside measurements of 261 x 261 mm as a dummy cartridge unit, cable outlet cartridge unit and tube cartridge unit for the installation into screed and hollow floors. For 12/22/32/42 mm parquet and stone covers and linoleum in combination with rigid foam lid insert. Can be levelled from 65 to 315 mm.



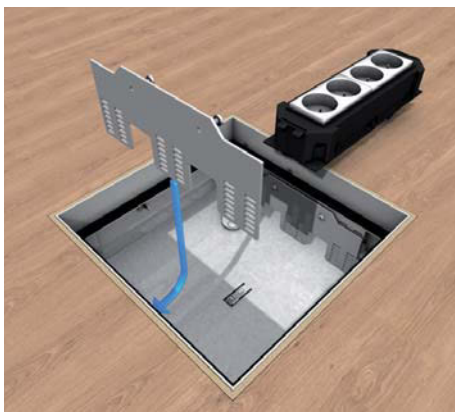
1 | Levelling device
For parquet or stone floors insert the levelling device into the floor opening. Fasten the four levelling bases with nail plugs.



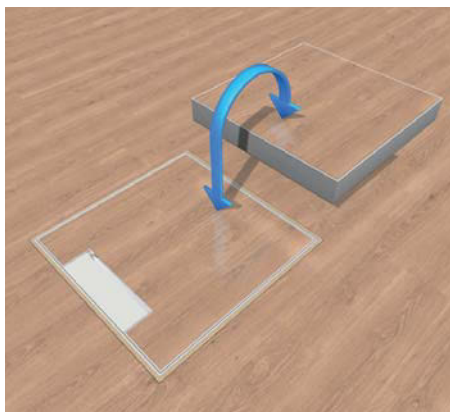
2 | Stainless steel frame
Screw the stainless steel frame to the levelling device with four screws. Glue rubber seal in place. Make the grounding connection between levelling device and floor box. A regular maintenance and cleaning of the seals is necessary.



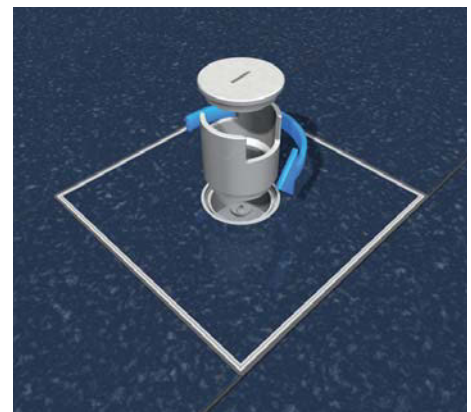
3 | Floor adjustment
Align the installation frame flush to the level of the finished floor with four levelling screws. Seal expansion joint revolving with cork or sealing mass.



4 | Lock-in leads
Mount both lock-in leads with two screws each on the side of the frame. Create grounding connection between levelling device and floor box. When using a coupler plug H = 35 mm, comply with the minimum installation depth H_{min} = 95 mm.



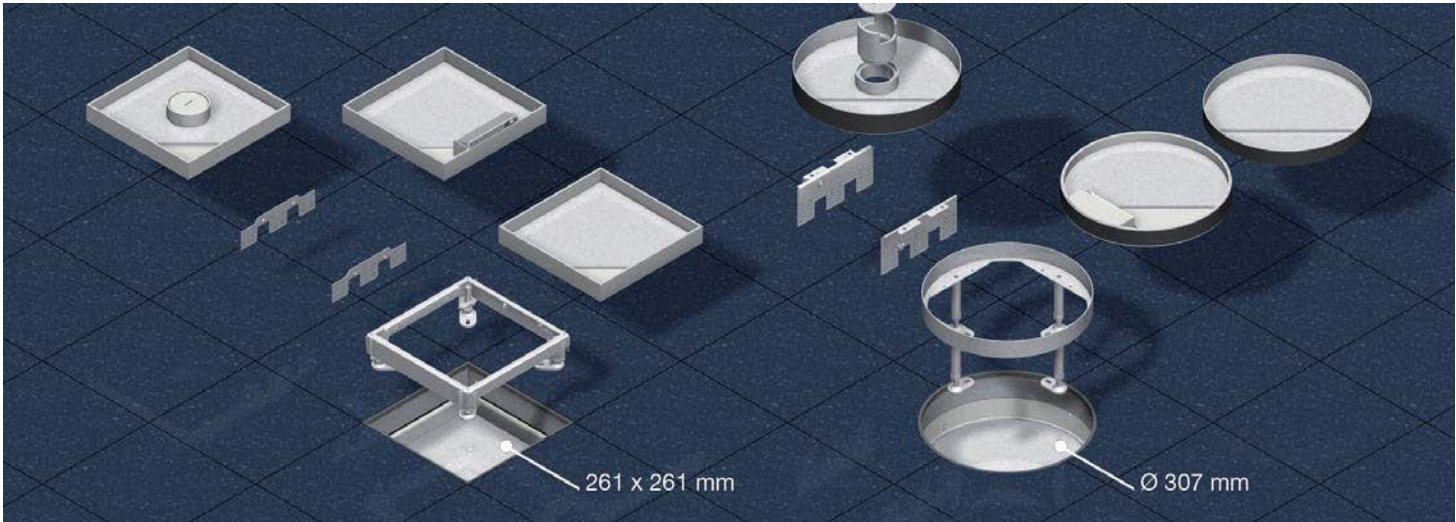
5 | Parquet cover
For damp maintenance floors such as parquet covers, use a dummy cartridge unit or a cable outlet cartridge unit. However, the floor cover depth must be considered. Insert the replaceable cartridge into the frame.



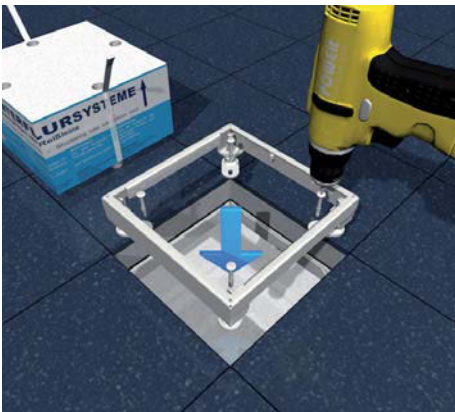
6 | Stone cover
For wet maintenance floor covers such as stone covers, only a tube cartridge unit may be used. However, the floor cover depth must be considered. Insert the replaceable cartridge into the frame. The tube can be screwed.

Heavy-duty cartridge units made of stainless steel

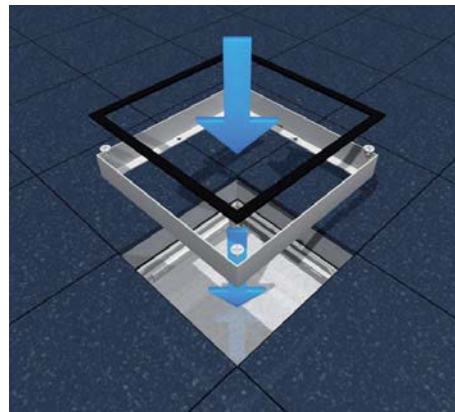
Assembly instruction



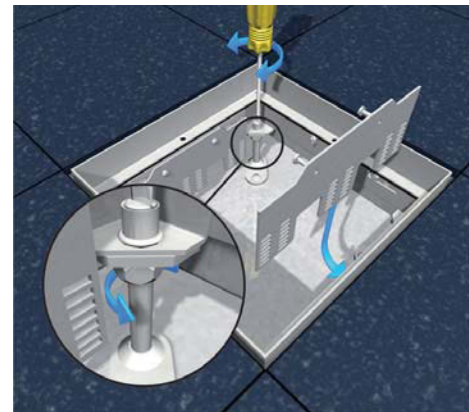
Stainless steel installation cartridge with levelling device, round or quadrangular design, as dummy-, cable-outlet- or tube outlet cartridge with steel insert for working loads up to 10 or 20 kN.



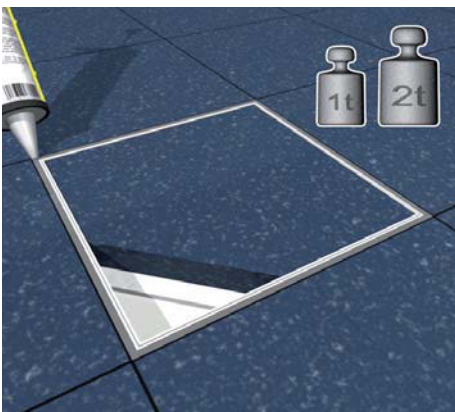
1 | Levelling device
Remove shuttering unit and insert levelling device into the floor opening. Fasten the four levelling bases to the slab with drilling screws.



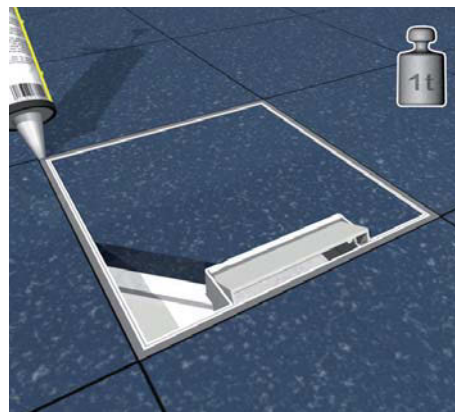
2 | Stainless steel frame
Attach device container installation frame first and then stainless steel frame to the levelling device and fasten with 4 screws. Glue in rubber sealing.



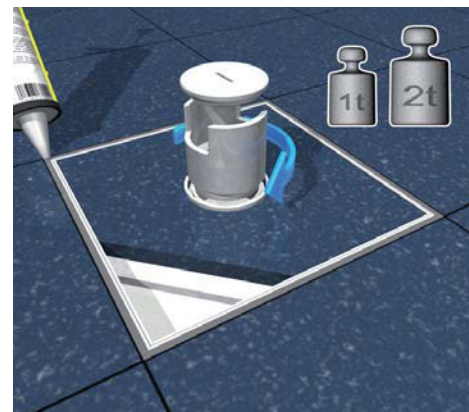
3 | Levelling to floor
Adjust installation frame flush to the height of the floor construction with the four levelling bolts. Lock the levelling bases against the frame with hex-nuts.



4 | Dummy cartridge 10 / 20 kN
Insert cartridge with integrated steel inlay into the frame, seal expansion gap. For coverings thicker than 16 mm in case of applied load 10 kN and 24 mm in case of applied load 20 kN.



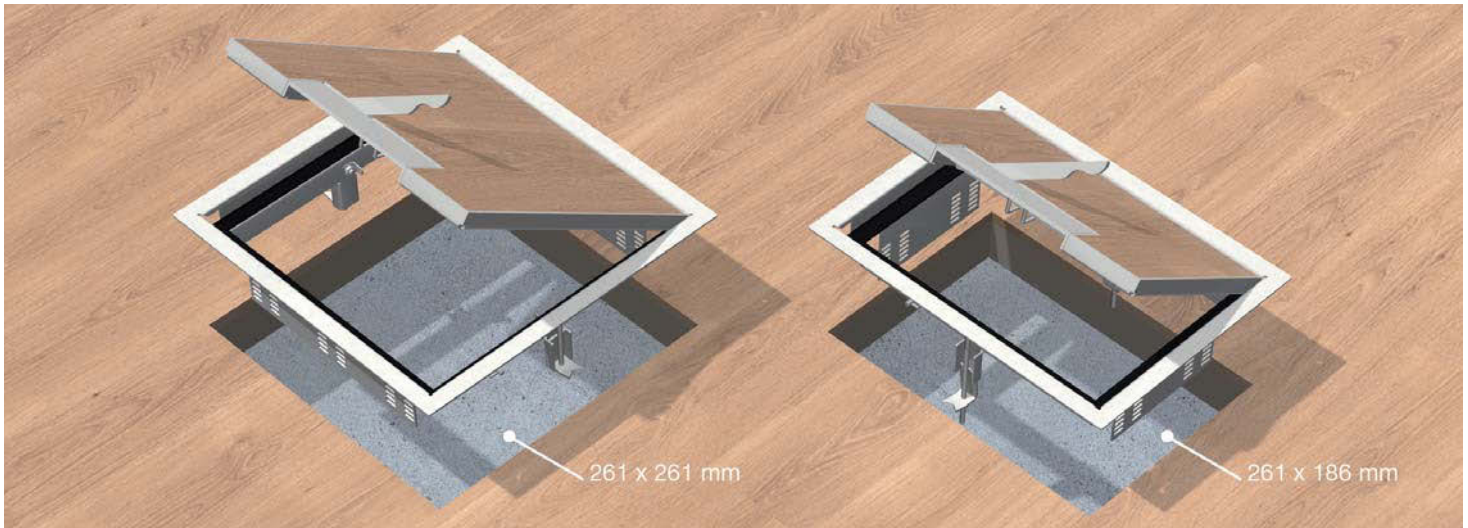
5 | Cable outlet cartridge 10 kN
Insert cartridge with integrated steel inlay into the frame, seal expansion gap. For coverings thicker than 16 mm.



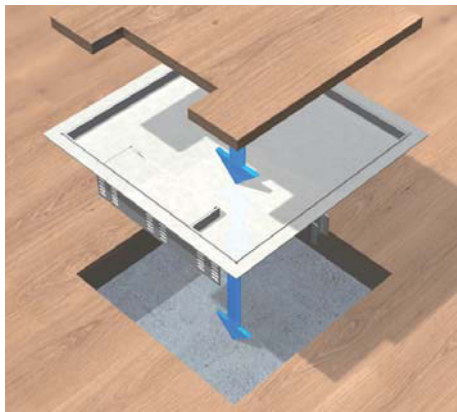
6 | Tube outlet cartridge 10 / 20 kN
Insert cartridge with integrated steel inlay and tube mounting set into the frame. Complete with tube. Seal expansion gap. For coverings thicker than 16 mm in case of applied load 10 kN and 24 mm in case of applied load 20 kN.

Cartridge installation unit made of high-grade steel, quadrangular

Assembly instruction

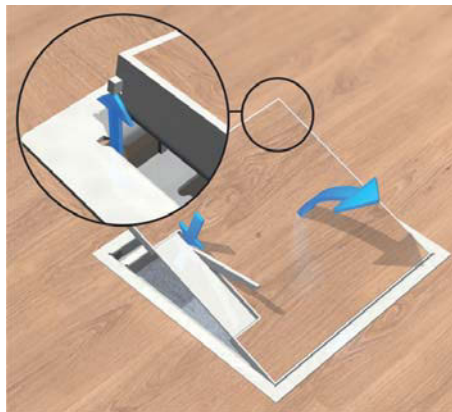


Quadrangular cartridge installation units with carpet protection frame made of high-grade steel with outer measurements of 284x284 mm or 284x211 mm for the installation in hollow space floors or raised floors. For parquet flooring of 12/22 mm.



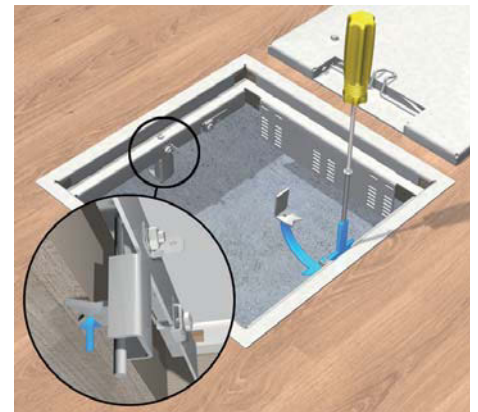
1 | Unit

For the installation of up to 3 device cups, place the cartridge installation unit UEKDD V E into the opening.



2 | Opening lever

Open the self-locking opening lever behind the cable outlet. Remove the cover sideways over the hinge.



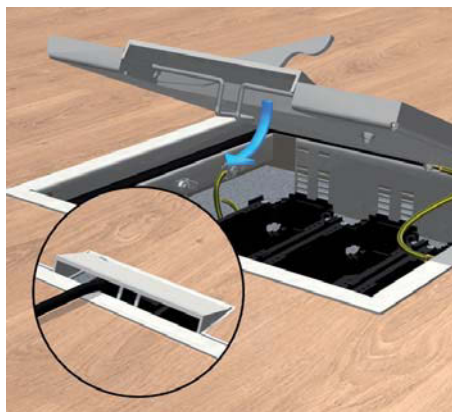
3 | Claws

Hinge the enclosed claws with the corresponding screws into the frame guide and pull tight.



4 | Rubber seal / Device cup

Glue the rubber seal to the impact-noise interface. Snap the device cup as deep into the lock-in leads as possible. When using an device plug H = 35 mm, minimum installation depth Hmin = 91 mm.



5 | Axis

Open the cable outlet with the opening lever and swivel the cable outlet axis.

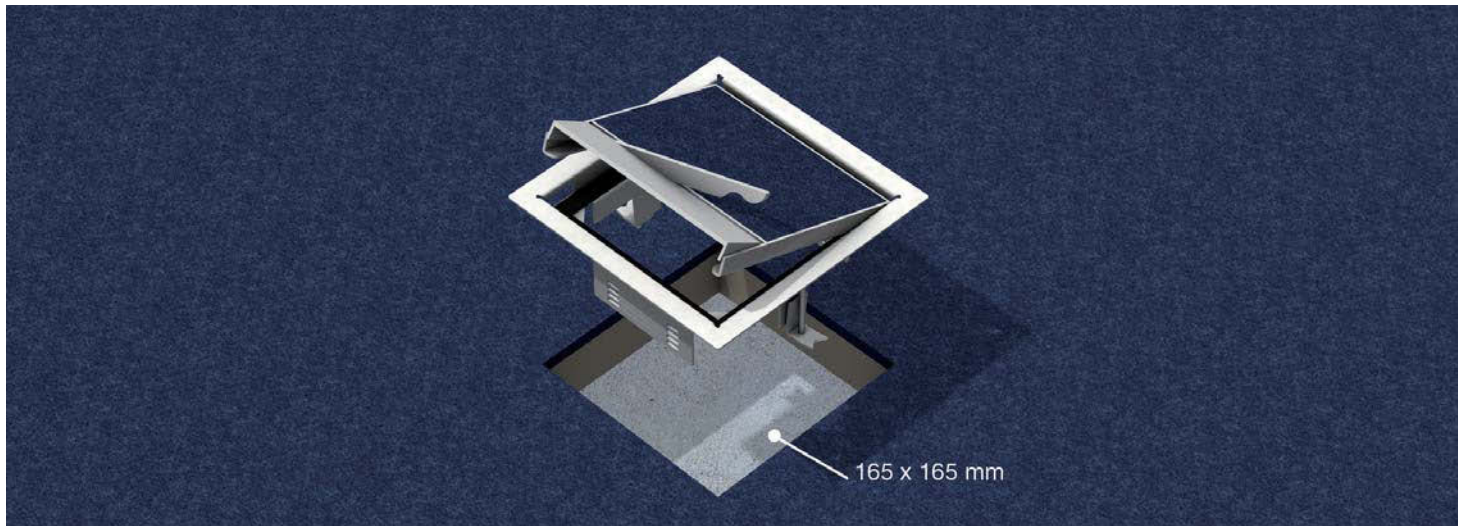


6 | Earthing connection

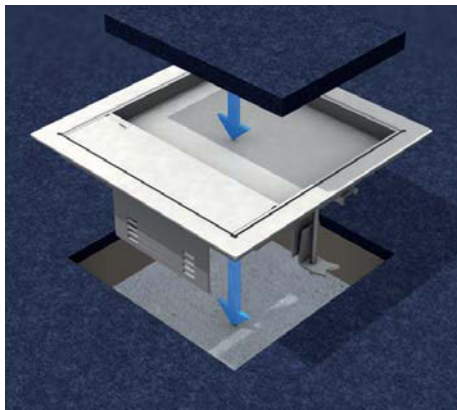
Make an earthing connection between the frame and the cover. Factor the installation unit into the potential equalization.

Cartridge installation unit made of high-grade steel, quadrangular

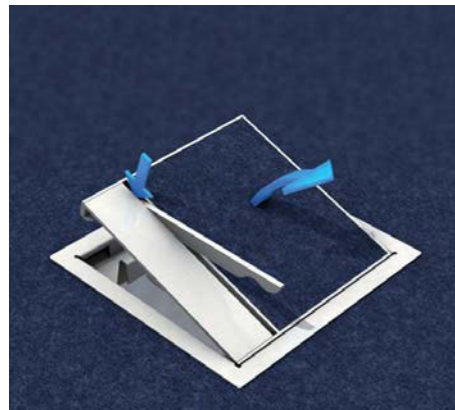
Assembly instruction



Quadrangular cartridge unit with carpet protection frame made of high-grade steel with outside measurements of 187x187 mm for the installation in hollow floors or raised floors, for a floor cover of 12/22 mm.



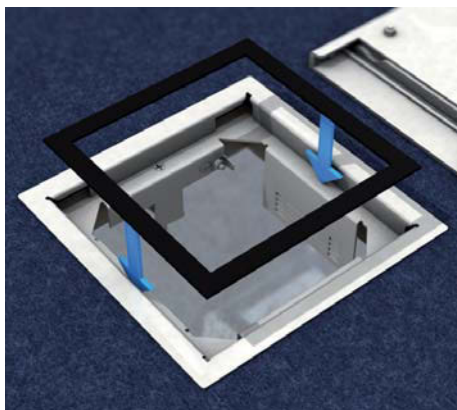
1 | Unit
For the installation of a device cup, place cartridge unit UEKDD1-2 V E into the opening.



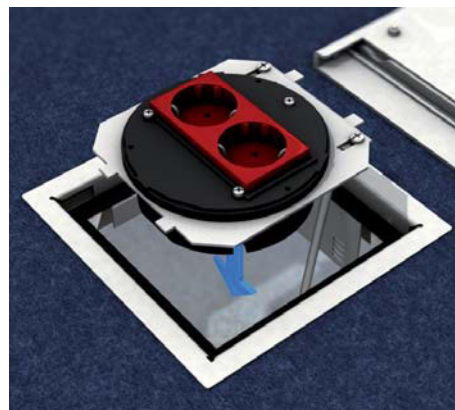
2 | Opening lever
Activate the self-locking opening lever behind the cable outlet and lift the lid out of the frame sideways through the hinge.



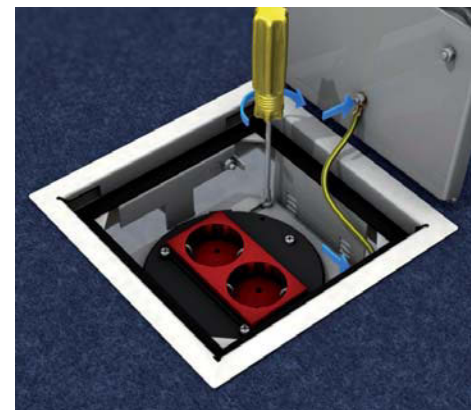
3 | Mounting of claws
Hinge the enclosed claws with the corresponding screws into the holding fixtures in the frame. Bring the claws in the right position and pull tight with a crosshead screw. Make sure the frame sits tightly.



4 | Rubber seal
Glue the rubber seal for impact-noise decoupling into the frame.



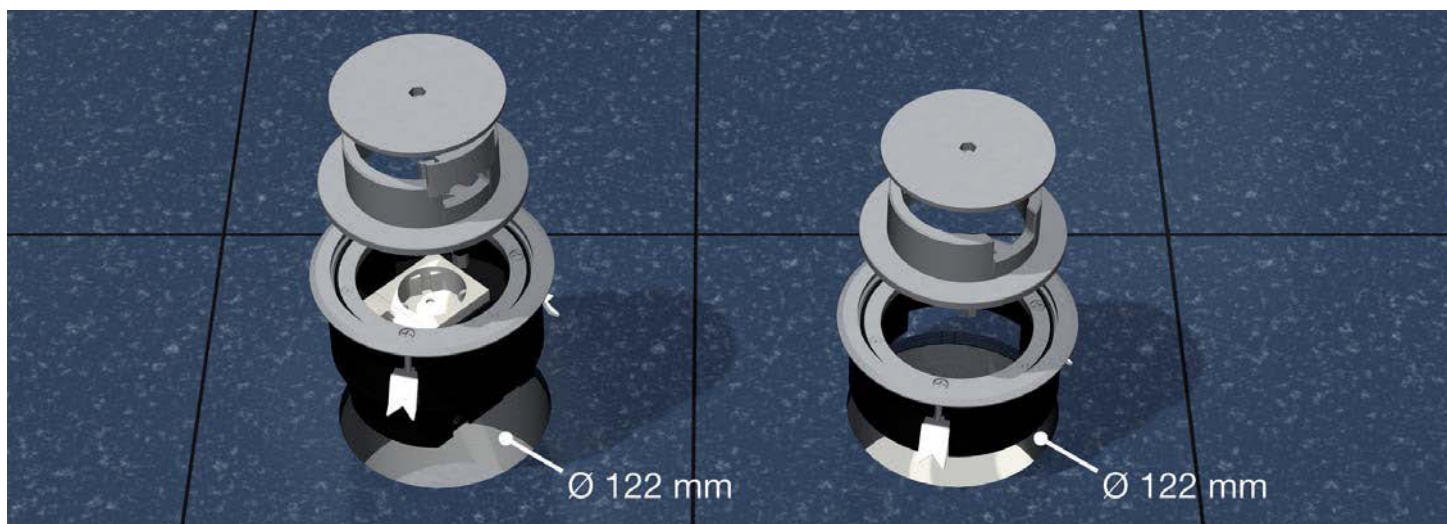
5 | Inserting of device cup
Insert plate with the pre-mounted and loaded device cup through the plate slide as deep into the lock-in leads in the frame as possible. A gradual lowering of the plate to max 20 mm possible.



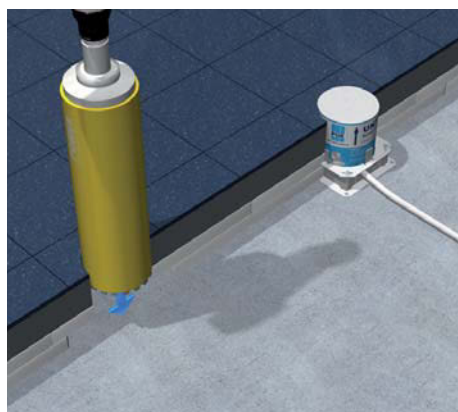
6 | Earthing connection
Fixate the plate in the lock-in lead and make an earthing connection between the single outlet frame and the cover. Factor the installation unit into the potential equalization.

Single outlet BODO, wet maintenance floors

Assembly instruction

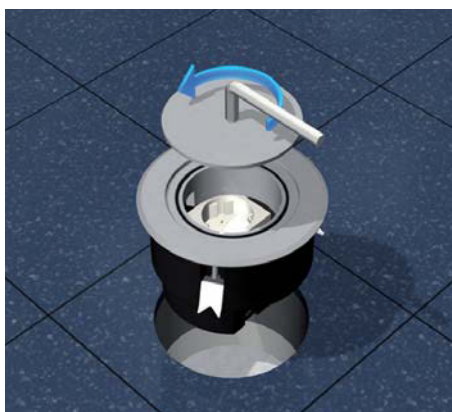


Round single outlet with protection frame made of aluminium, with an external diameter of 133 mm, equipped with an isolated ground receptacle and an RJ45 data socket (Legrand Typ Cat. 6A STP RJ45, 76573) or inspection chamber. For the installation into screed or raised floors. Other equipment options are available.



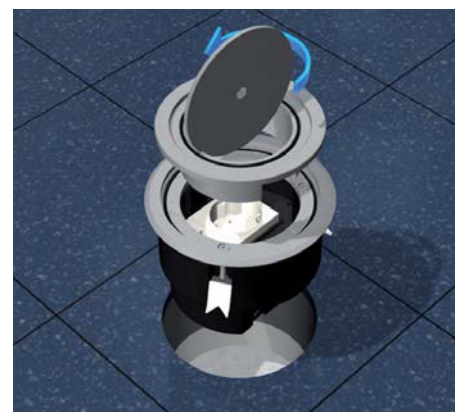
1 | Screed/raised floors

Create a floor opening in screed or raised floor by means of shuttering / drill bit or by using a hollow floor box with a shuttering unit.



2 | Cover

Open cover with the enclosed socket wrench counter-clockwise.



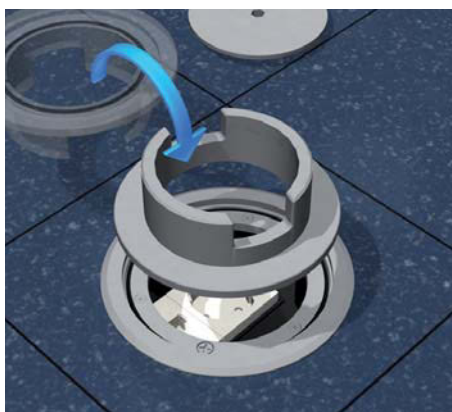
3 | Remove tube

Hinge the enclosed claws with corresponding screws into the notches in the frame. Bring claws to the right position and pull tight with a phillips screw. Make sure that the frame is solid.



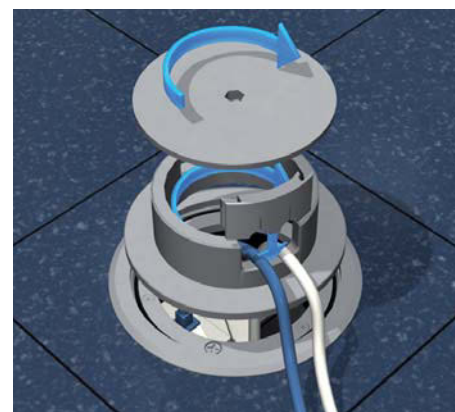
4 | Attach the frame and insert the strain relief

Protection frame has to seal accordingly when used in wet-maintained floors. Insert strain relief from below into the opening and secure the cable. Tighten the claws with cross-head screws.



5 | Tube insert

Bring single-outlet from closed to open state by swivelling the tube insert by 180°. Insert the rubber sleeve for a dust-proof sealing.



6 | Mounting

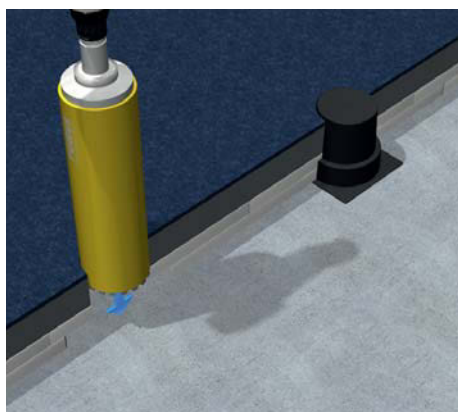
Insert straight or angle plug and bring out cables through cable outlet. Screw tube collet and tube cover tightly.

Single outlet BODO, dry maintenance floors

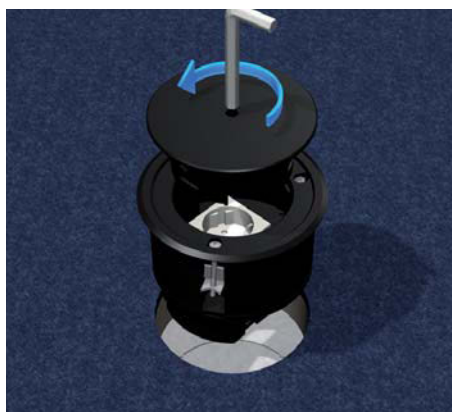
Assembly instruction



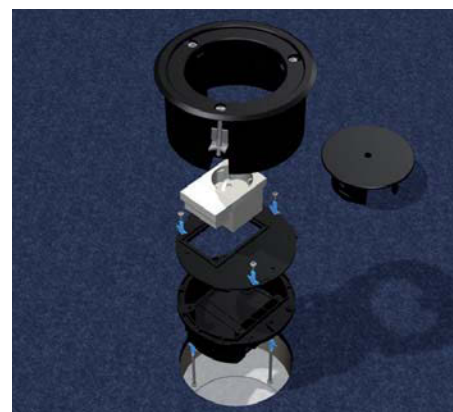
Round single outlet with protection frame made of synthetic material with an external diameter of 133 mm, equipped with an isolated ground receptacle or inspection chamber. For the installation into screed or raised floors. Other equipment options are available.



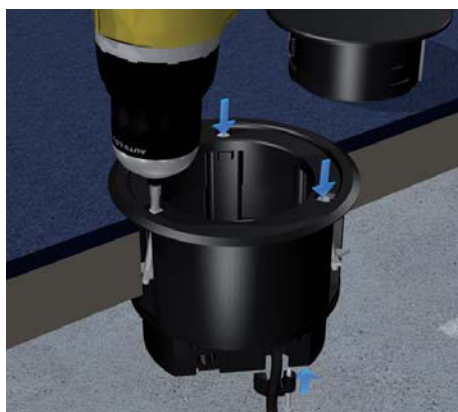
1 | Raised/hollow floors
Create a floor opening in screed or raised floor by means of shuttering or drill bit.



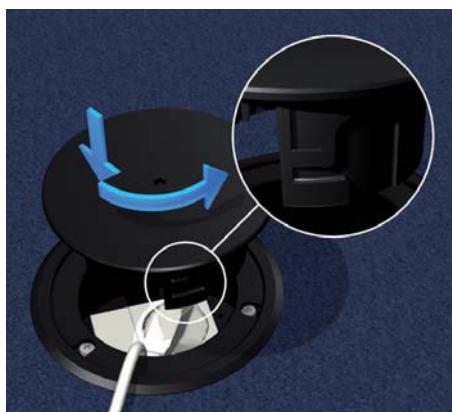
2 | Cable outlet cover
Open cable outlet cover with torx wrench (must be ordered separately) counter clock-wise by pulling it out.



3 | Assembly of receptacle
In order to connect disassemble the pre-converted single outlet, insert cable and connect to receptacle. Then assemble cover plate, receptacle and device cup.



4 | Fasten strain relief and frame
Insert the strain relieves from below and secure cable. Tighten claws with phillips head screws.



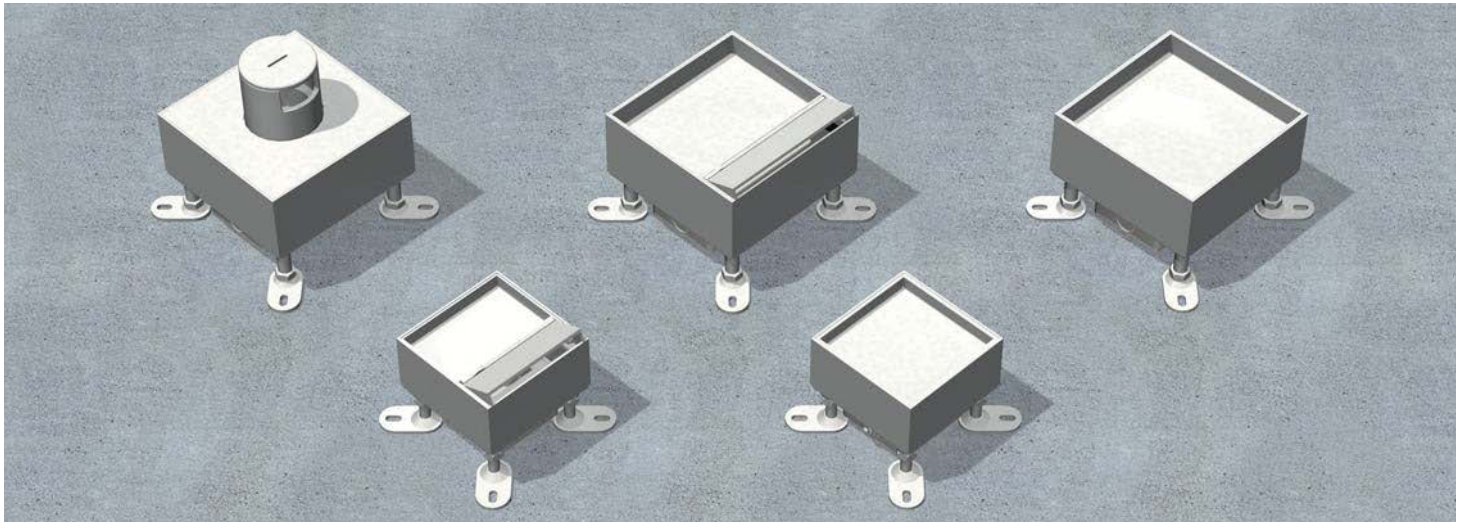
5 | Cable outlet
Place plug and insert cable outlet lid counter clockwise with bayonet locking device.



6 | Mounting
Lead the cable from an quadrangular or straight plug through the cable outlet.

Single outlet, quadrangular | Direct mounting in screed

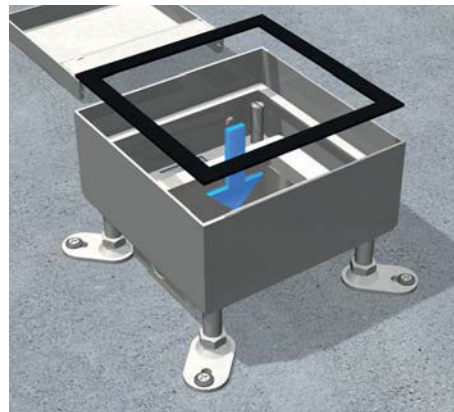
Assembly instruction



Quadrangular single outlets with outer measurements of 115 x 115 mm for the integration of up to two installation devices of 45 x 45 mm for direct screed mounting.



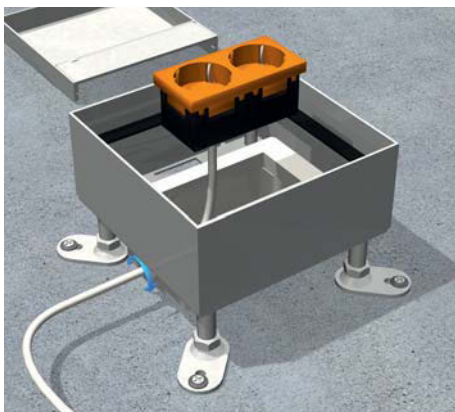
1 | Fixating
Mount the four levelling legs onto the rough concrete ceiling with nail plugs.



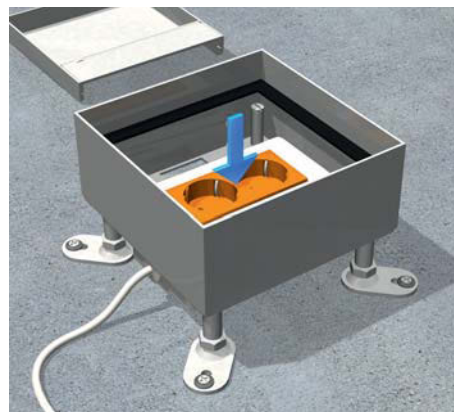
2 | Rubber sealing
Remove the lid and glue the rubber in place.



3 | Cable entry
For the cable entry use a tool to break the lateral perforation out of the frame and complete with strain relief.



4 | Safety sockets
Install electrical sockets and fuse strain relief.



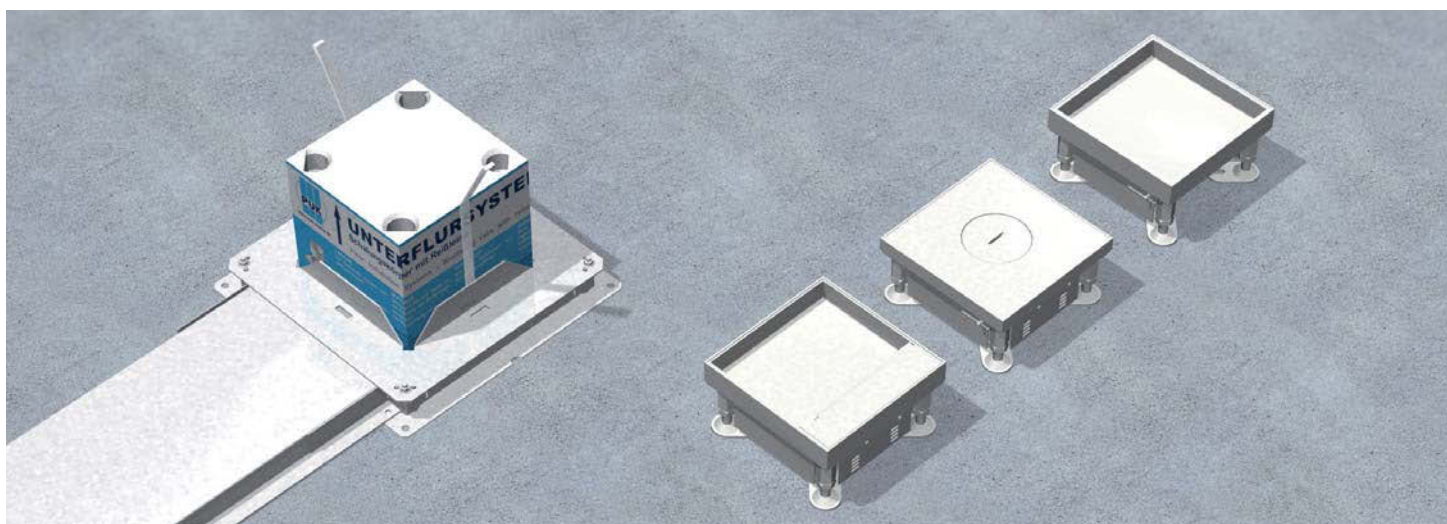
5 | Assembly
Latch the sockets into the frame. Factor the single outlet into the potential equalization.



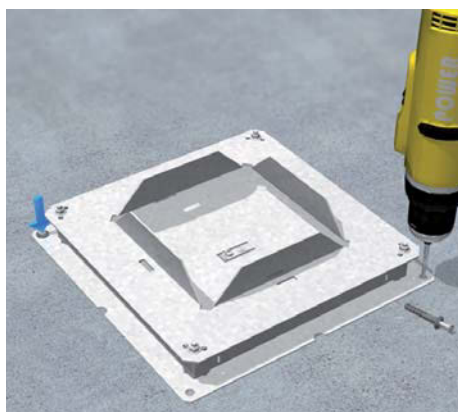
6 | Floor adjustment
Place the single outlet abreast finished floor level flush with the four levelling screws. Screed can now be applied.

Single outlet, quadrangular | Hollow space floor box

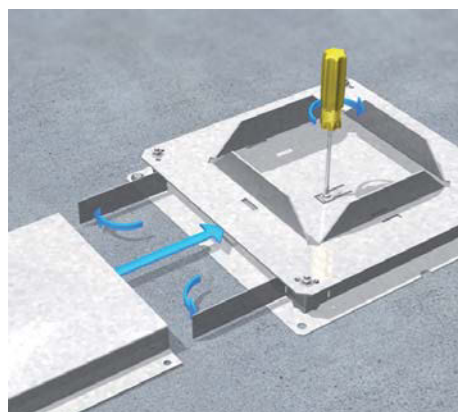
Assembly instruction



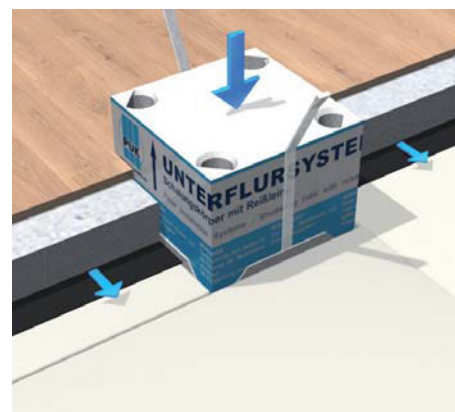
Quadrangular single outlets with external dimension of 160 x 160 mm for the integration of up to two installation devices of 45 x 45 mm for fixture in hollow space floor boxes.



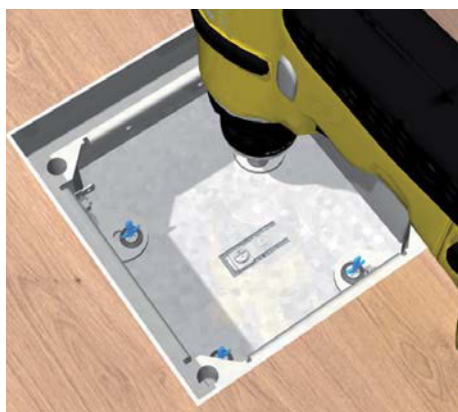
1 | Hollow space floor box
Align floor box in the centre to cable run. Mount with two nail plugs.



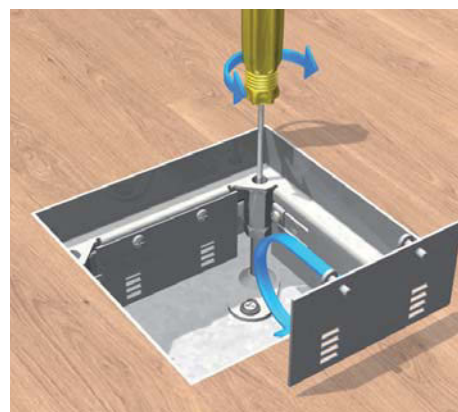
2 | Duct
Screw on earthing lug. Bend the sides of the floor box open along the perforation. Insert duct all the way into the box.



3 | Shuttering unit
Insert the shuttering unit, process screed to the body, remove the shuttering unit after precipitation.



4 | Fixation
Insert the frame and mount the four levelling legs onto the bottom of the hollow floor box with nail plugs.



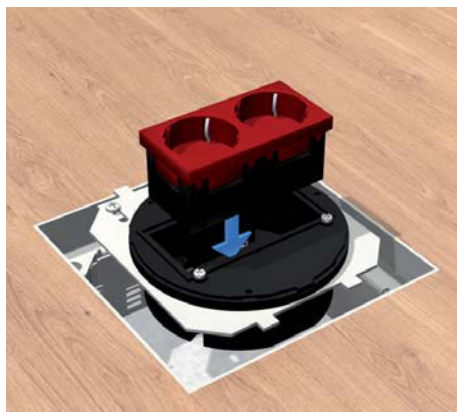
5 | Floor adjustment
Adjust the single outlet succinctly above the four levelling screws. Screw in the lock-in leads.



6 | Cover plate
Fix the cover plate onto the device cup with screws.

Single outlet, quadrangular | Hollow space floor box

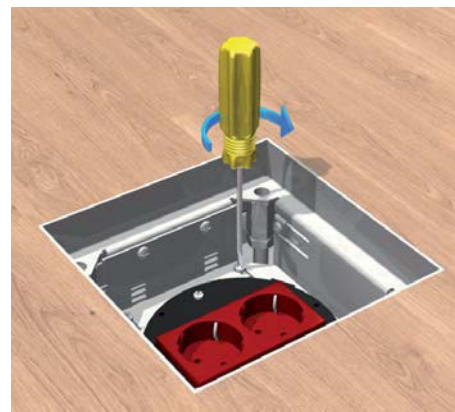
Assembly instruction



7 | Fixture of installation devices
Latch two installation devices 45 x 45 mm in the cover plate UARM-4-1 118.



8 | Device cup
Place the device cup into the plate, insert the ducts into strain relief and screw in the fixing bolt.



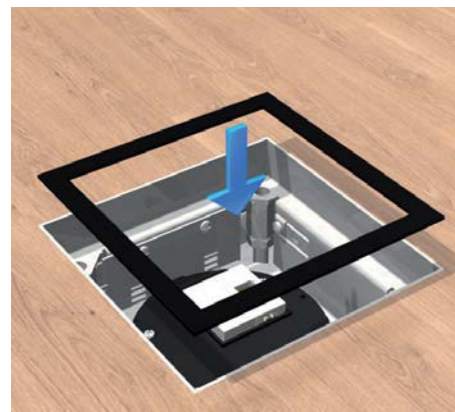
9 | Lock-in lead
Insert the plate above the plate slide as deeply into the lock-in leads as possible. For a stepwise shafting of the plate until up to 20 mm.



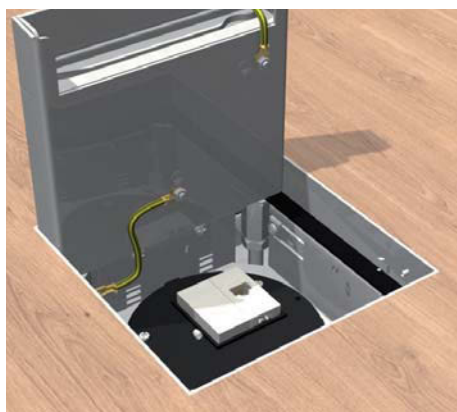
10 | Installation of installation devices
Latch one installation device 45 x 45 mm and one installation device 22,5 x 45 mm in cover plate UARM-3-1 118.



11 | Installation of installation devices
Latch two installation devices 22,5 x 45 mm in cover plate UARM-2-1 118.



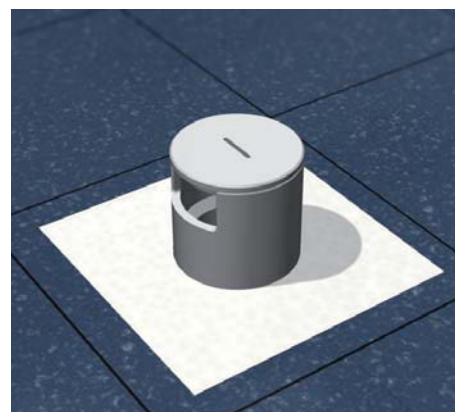
12 | Rubber seal
Glue the rubber seal into the frame.



13 | Earthing connection
Establish an earthing connection between the single outlet frame and the cover. Factor the single outlet into the potential equalisation.



14 | Single outlet
Close the cover.



15 | Tube
For wet maintenance floors install tube single outlet and tube.

Compact single outlet, quadrangular

Assembly instruction



Quadrangular compact single outlet, external dimensions 125 x 125 mm and 160 x 160 mm for installation directly into screed, suitable for dry and wet maintenance rooms. Scope of delivery contains floor box, stainless steel unit and shuttering unit. For parquet and stone floors of 12/22 mm levelling range: 80–125 mm or 90–135 mm.



1 | Floor box
Align floor box in dead centre as delivered. Bend open ears and fix to raw ceiling.



2 | Plastic conduit
Bend open perforation in the sides of floor box and insert plastic conduit.



3 | Casting screed
Seal all openings of the floor box as delivered and cast screed accurately to the shuttering unit. Remove shuttering unit when screed is hardened.



4 | Levelling to floor
Remove cartridge cover and rubber seal and adjust single outlet to floor height flush over the four levelling screws.



5 | Data systems
Insert connected data jacks from below into the plate. Fasten equipped plate at the side of the single outlet.



6 | Heavy current systems
Insert heavy current devices from the top and connect from below. Insert equipped plate using the snap tabs into the frame and fasten the opposite side.

Compact single outlet, quadrangular

Assembly instruction



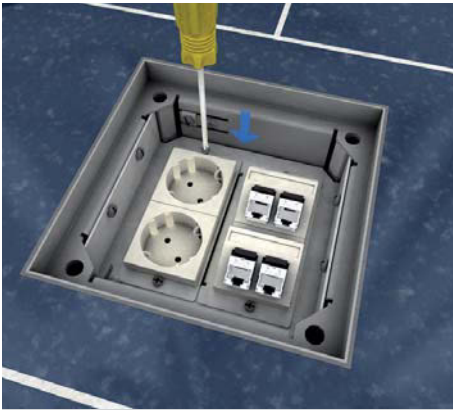
7 | Assembly
Insert heavy current and low current plugs.



8 | Single outlet
Insert rubber seal and cartridge cover. In case of dry maintenance floors install cartridge unit with cable outlet. Comply with potential equalization.



9 | Installation devices
Latch sockets and data devices into plate and connect conducts.



10 | Single outlet frame
Fasten equipped plates to single outlet frame.



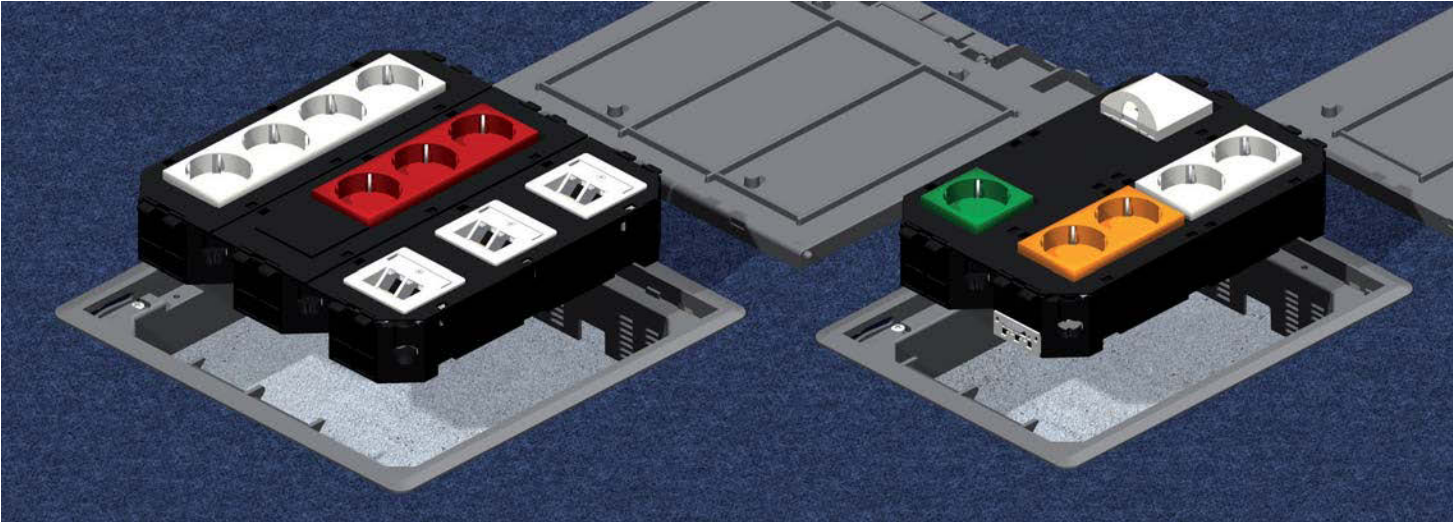
11 | Assembly
Insert heavy current and low current plugs.



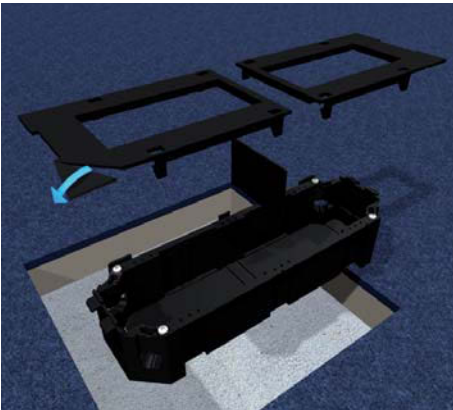
12 | Tube
Insert rubber seal and tube cover. In case of wet maintenance floors, mount single tube outlet and tube. Comply with potential equalization.

Device installation cups and installation devices

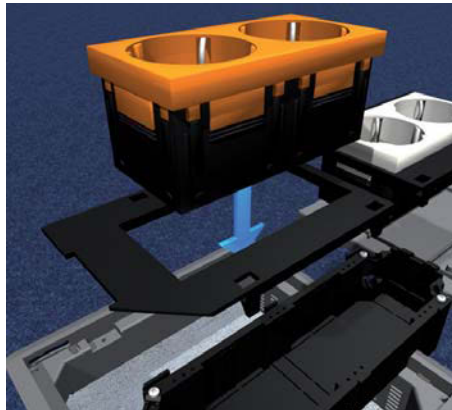
Assembly instruction



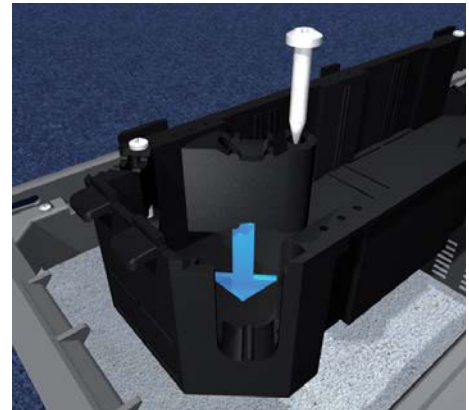
Device assembly container for locking into an assembly unit. For up to four installation devices for heavy current engineering or three installation devices for data systems technology.



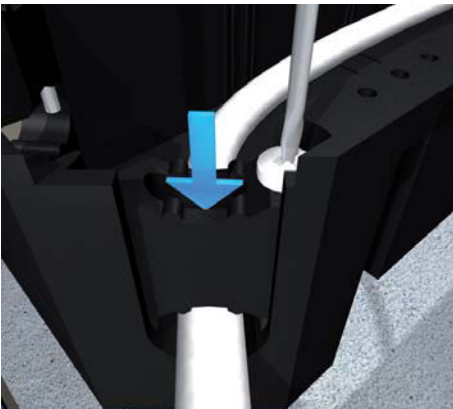
1 | Cover plates
Choose cover plates according to the requirements. Break off edges at the perforation if needed.



2 | Safety sockets
Snap safety sockets into the corresponding cover plate.



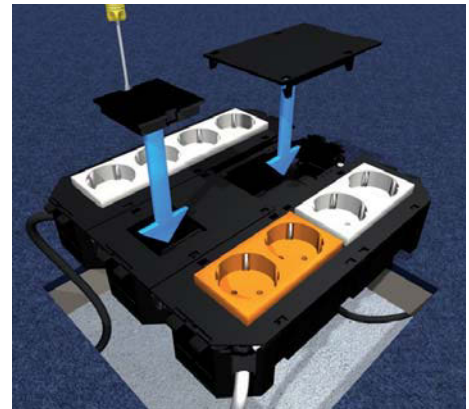
3 | Strain relief
Insert the four enclosed strain reliefs into the side openings of the device container and equip them with the fixing bolts.



4 | Cables
Insert cables from $\varnothing 6$ to $\varnothing 13$ mm and fasten the bolt.



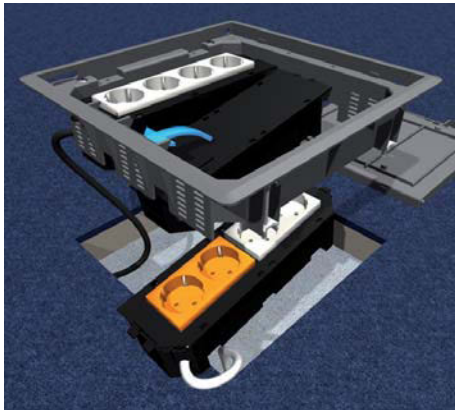
5 | Assembly
Install all components. Snap cover plates into the device container.



6 | Equipment
Equip empty spaces with dummy covers. Use tools for mounting and demounting of dummy covers.

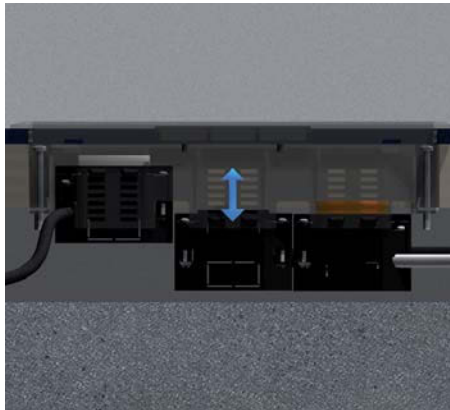
Device installation cups and installation devices

Assembly instruction



7 | Installation

Insert the device container as far as possible into the lock-in leads. Can be lowered down to 30 mm.



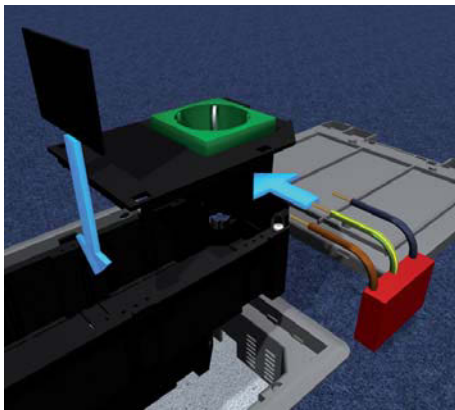
8 | Minimum / Maximum installation height

Minimum installation height 74 mm without device plugs and 88 mm for device plugs up to H = 35 mm. Maximum installation height 104 mm for device plugs up to H = 50 mm.



9 | Releasing device cup

Push mounting lever or screwdriver between frame and device cup. Release latches separately sideways and take out device cup.



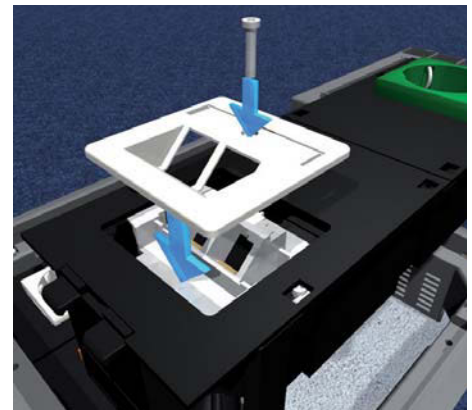
10 | Device separator

In case of different electric circuits and equipment use the device separator. Insert overvoltage protector into the push-terminals L, N and PE of the socket and complete with connecting line.



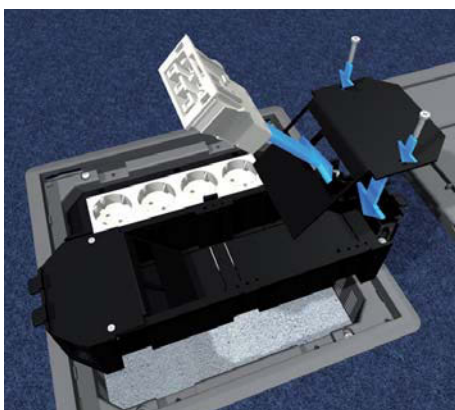
11 | Coupler clip installation devices

Lock in socket and overvoltage protector with the cover plate into the device cup. Screw installation devices with coupler clips into the device cup.



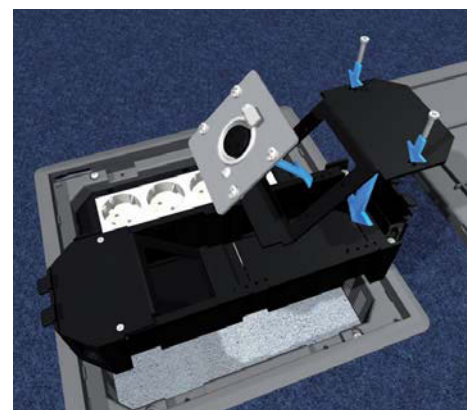
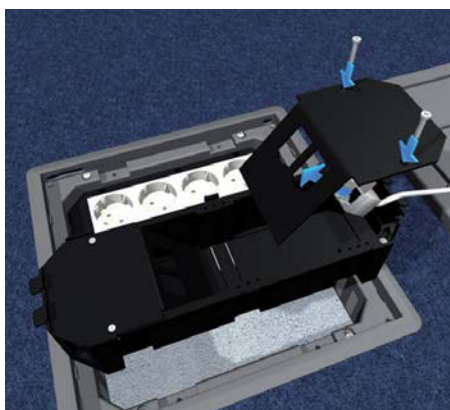
12 | Finalisation

Snap cover plates and screw cover in place. Close all openings with blind covers.



13 | Equipment of device cup

Quadrangular insert for half a device cup made of coated metal for components of data, fibre optic cable, audio and video technology, also for plug-in components and installation devices 45 x 45 mm. **Equip with up to two plug-in components according to the manufacturer's specifications and screw into the device cup.**



Device cup UG45

Assembly instruction

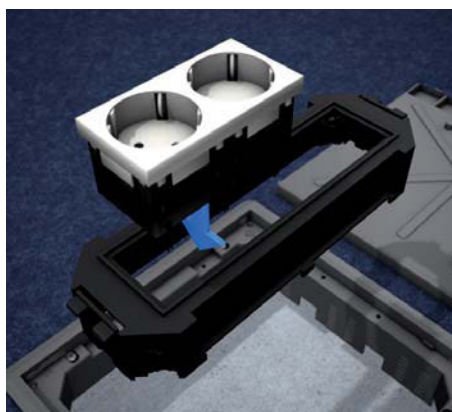


Installation and mounting must be done only by persons with appropriate electro-technical expertise and experience. Device cup UG45-4, for latching into an installation unit. Suitable for up to four heavy current engineering installation devices of 45 x 45 mm or eight installation devices of data technology / multimedia of 22,5 x 45 mm.



1 | System UG45

Installation devices can be inserted into the device cups UG45 directly from the top without additional cover plates. However, the use of heavy current engineering requires protection against contact from the bottom in the form of cover plates.



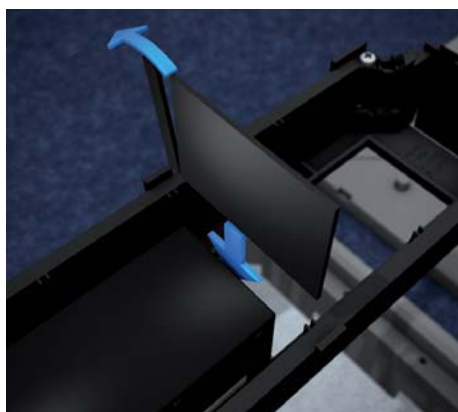
2 | Isolated ground receptacles

Latch isolated ground receptacles into the device cup from the top.



3 | Strain relief

Place the four strain reliefs included in the delivery into the side openings of the device cup, insert the cables of $\varnothing 6$ to $\varnothing 13$ mm into the strain reliefs, connect and secure using a fixing bolt.



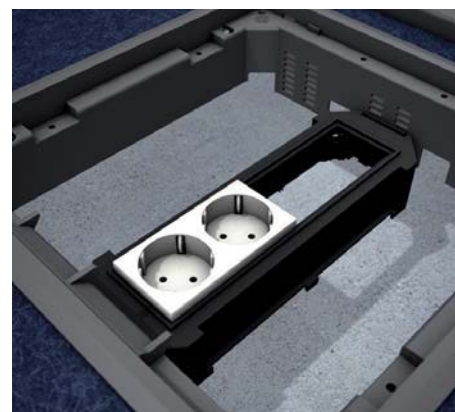
4 | Separating plate

Use separating plate in case of different electric systems and equipment. Break off separating plate along the side perforation and insert into the device cup from the bottom.



5 | Protection against contact

Installation devices of heavy current engineering require protection against contact in the form of a cover plate, to be latched below the device cup.



6 | Insertion

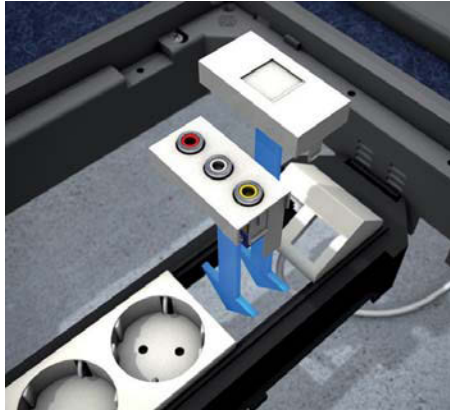
Latch the device cup as deeply into the lock-in lead as possible. The device cup can be lowered up to 30 mm.

Device cup UG45

Assembly instruction



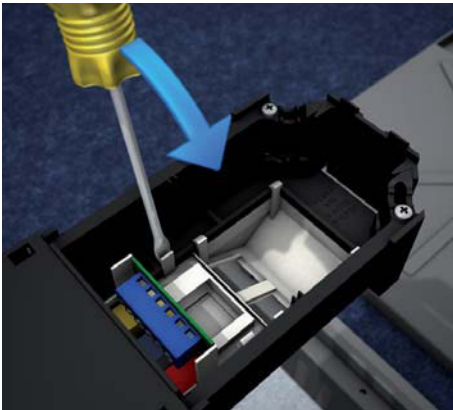
7 | Data coverage
Complete the data coverage using data single jacks and latch into the device cup from the top.



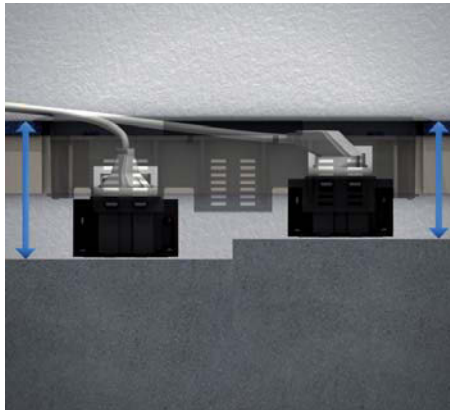
8 | Media modules
Latch the connected media modules into the device cup from the top.



9 | Cover plate
Unused spaces are covered with dummy cover plates.



10 | Releasing of components
Insert screwdriver between previously turned device cup and installation device of data technology, respectively heavy current engineering. Loosen latches individually and remove installation device.



11 | Minimum / maximum installation height
Minimum installation height when using an angle plug and the level 4 lock-in position: 81 mm. Maximum installation height when using a straight plug and the lowest lock-in position: 100 mm.



12 | Data device
After the completed equipment of the device cup, the patch cables can be plugged into the data device allowing for a bending radius of 45°.



13 | Heavy current
The device cup can be loaded with up to four heavy current engineering components.



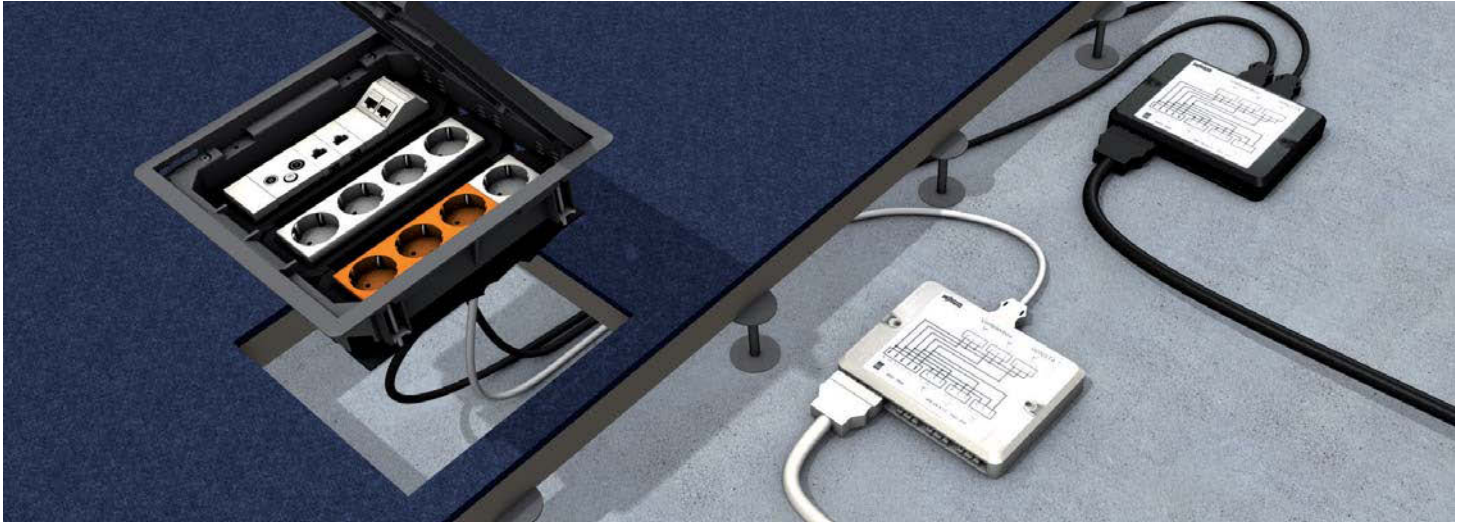
14 | Data and media technology
The device cup can be loaded with up to eight data/media technology components.



15 | Pre-assembled device cup
The device cups can be pre-assembled using the snap-in cover plate UAVS 113 and a snap-in piece. The pre-assembled device cups are delivered factory-provided fully pre-assembled with receptacles and prewired on device connectors.

Connector system WAGO | Device cup, pre-converted

Assembly instruction



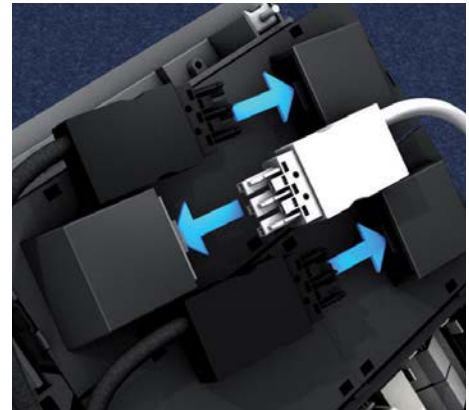
Pre-converted device cup, complete with snap-in plug component and pre-wired sockets. Including all covers and mounting material. For latching into a round or quadrangular installation unit. For up to four heavy current engineering installation devices. For the installation of 3-pole connecting lines with plug connector and socket component.



1 | Pre-converted device cups
Delivery of device cups: fully pre-mounted with sockets and pre-wired on connector plugs.



2 | Device mounting cup
Place the pre-converted device cup into the lock-in leads of the installation units as deep as possible.



3 | Connecting lines
Select cables according to colour (black: general net, white: data processing net) and length. Insert the socket component of the 3-pole connecting line onto the snap-in piece in the device cup.



4 | Installation unit
Place the complete installation unit with the device cups from the top into the existing floor opening and fixate in the floor with claws.



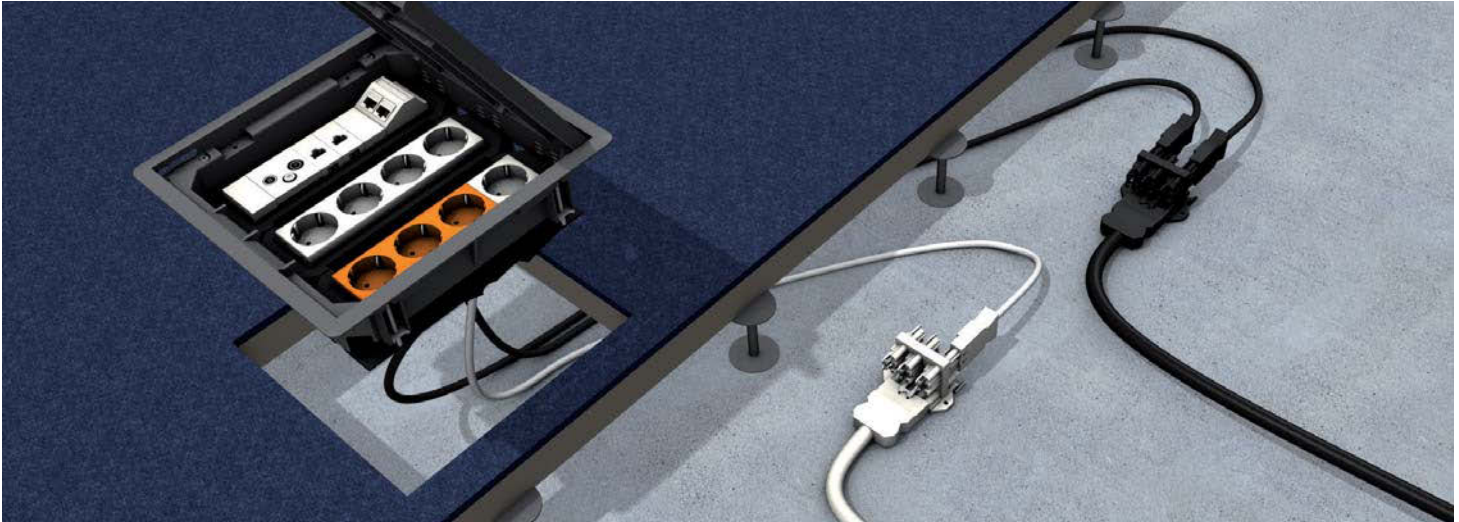
5 | Plug connector
Self-locking and coded plug connectors facilitate faultless mounting with the device cup. To release, unlatch the grey spring catch with a turn screw.



6 | Underfloor distributor
Insert the plug of the 3-pole connecting line in one of the six output sockets of the distributor and complete with 5-pole input.

Connector system Wieland | Device cup, pre-converted

Assembly instructions



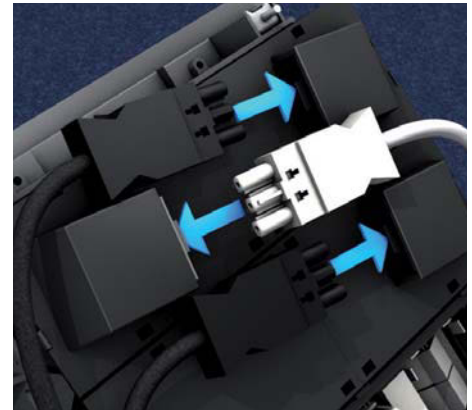
Pre-converted device cup, complete with snap-in plug component and pre-wired sockets. Including all covers and mounting material. For latching into a round or quadrangular installation unit. For up to four heavy current engineering installation devices. For the installation of 3-pole connecting lines with plug connector and socket component.



1 | Pre-converted device cups
Delivery of device cups: fully pre-mounted with sockets and pre-wired on connector plugs.



2 | Device mounting cup
Place the pre-converted device cup into the lock-in leads of the installation units as deep as possible.



3 | Connecting lines
Select cables according to colour (black: general net, white: data processing net) and length. Insert the socket component of the 3-pole connecting line onto the snap-in piece in the device cup.



4 | Installation unit
Place the complete installation unit with the device cups from the top into the existing floor opening and fixate in the floor with claws.



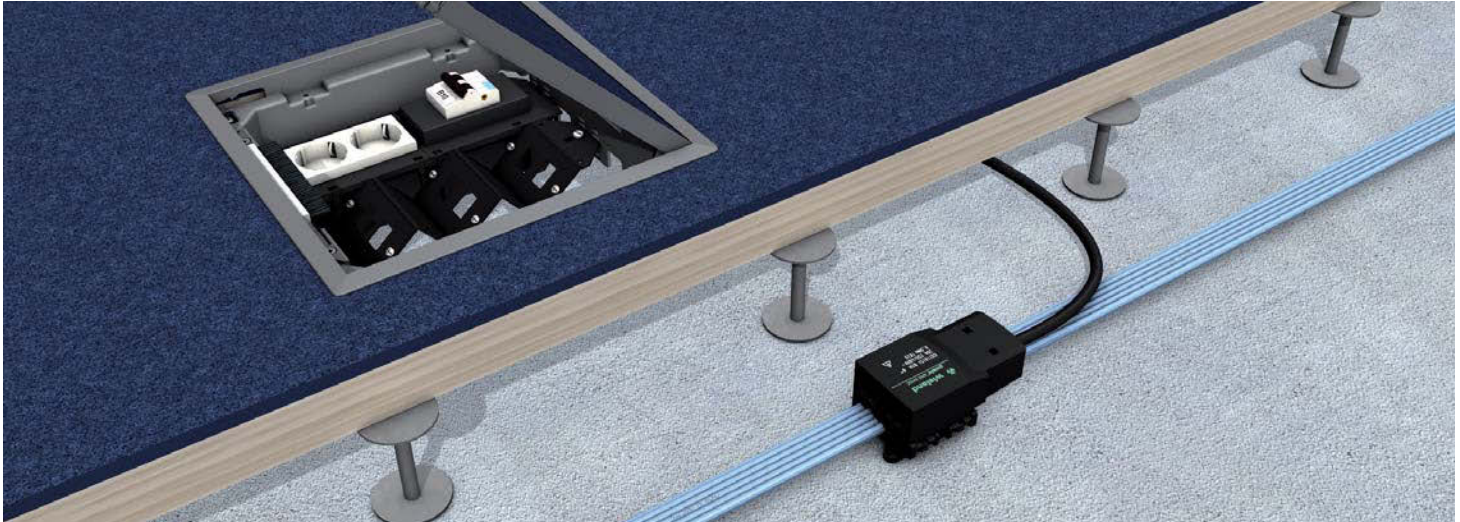
5 | Plug connector
Self-locking and coded plug connectors facilitate faultless mounting with the device cup. To release, unlatch the spring catch with a turn screw.



6 | Underfloor distributor
Insert the plug of the 3-pole connecting line in one of the six output sockets of the distributor and complete with 5-pole input.

Flat conductor adapter FI/LS 10A

Assembly instruction

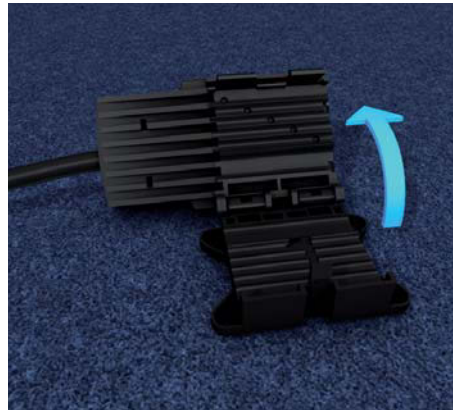


Installation must be done by persons with the necessary electrical and technical knowledge and experiences (DIN VDE 0620-1). Pre-tailored device cups, complete with snap-in device socket, pre-wired sockets, flat conductor adapter connected to a connecting cable and 10A FI/LS switch. Including all covers and assembly materials. To be latched into a round or square installation unit. For direct connection to flat conductors.



1 | Delivery condition

We deliver the pre-tailored device cup with a double isolated ground receptacle completely pre-assembled with FI/LS-switch 10A, connecting cable, flat conductor adapter and snap-in device socket.



2 | Flat conductor adapter

Open the bottom chamber of the connector module.



3 | Inserting flat cable

Insert flat cable flush into the coded floor board. Pay attention to the installation direction with regard to the outlet direction of the plug-in connectors.



4 | Fastening flat conductor

Open the top body chamber and fasten the flat conductor to the connector module using screws. Pay attention to the correct torque (0,5 Nm)!



5 | Closing the connector module

Close the top body chamber after the fastening. If necessary, fasten the floor plate to the desired ground using the fixing holes. Close the cover by locking it in place with an audible snap.



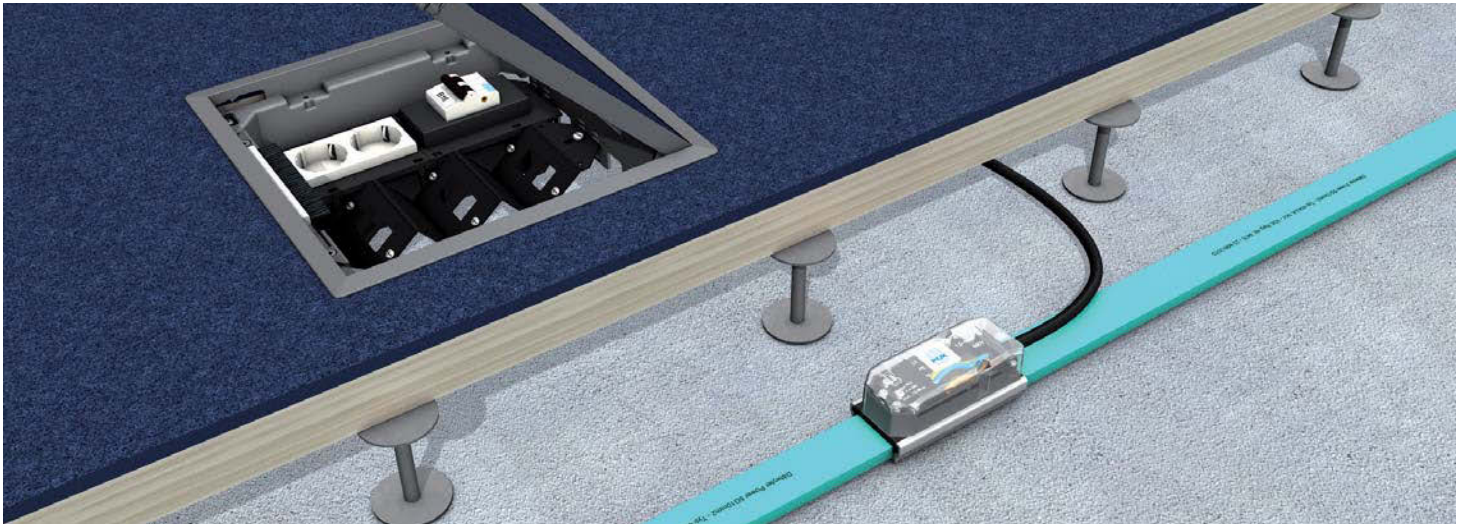
6 | Installation

Insert the pre-tailored device cups as deeply as possible into the lock-in leads of the installation unit.

Unless the cover closes completely, not all screws have been correctly tightened!

Flat conductor adapter FI/LS 16A

Assembly instruction



Installation must necessary be done by persons with the electrical and technical knowledge and experiences (DIN VDE 0620-1). Pre-tailored device cups, complete with snap-in device socket, pre-wired sockets, flat conductor adapter connected to a connecting cable and 16A FI/LS switch. Including all covers and assembly materials. To be latched into a round or square installation unit. For direct connection to flat conductors.



1 | Delivery condition

We deliver the pre-tailored device cup with a double isolated ground receptacle completely pre-assembled with FI/LS-switch 16A, connecting cable, flat cable adapter and snap-in device socket.



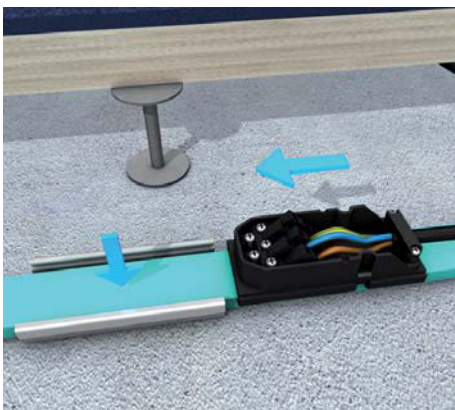
2 | Select phase

Remove body from cover and select phase. Phase pre-set on L1 according to delivery condition.



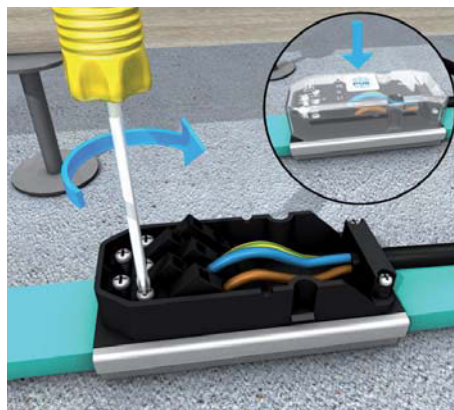
3 | Remove body

For inserting the flat cable the connector module must be removed from the conductor. Pay attention to the installation direction!



4 | Inserting flat cable

Place connector module onto the flat cable and insert into the coded conductor.



5 | Fastening flat cable

Fasten flat cable to the connector module with screws, then place body over it. Pay attention to the correct torque (1,2 ... 1,4 Nm)!

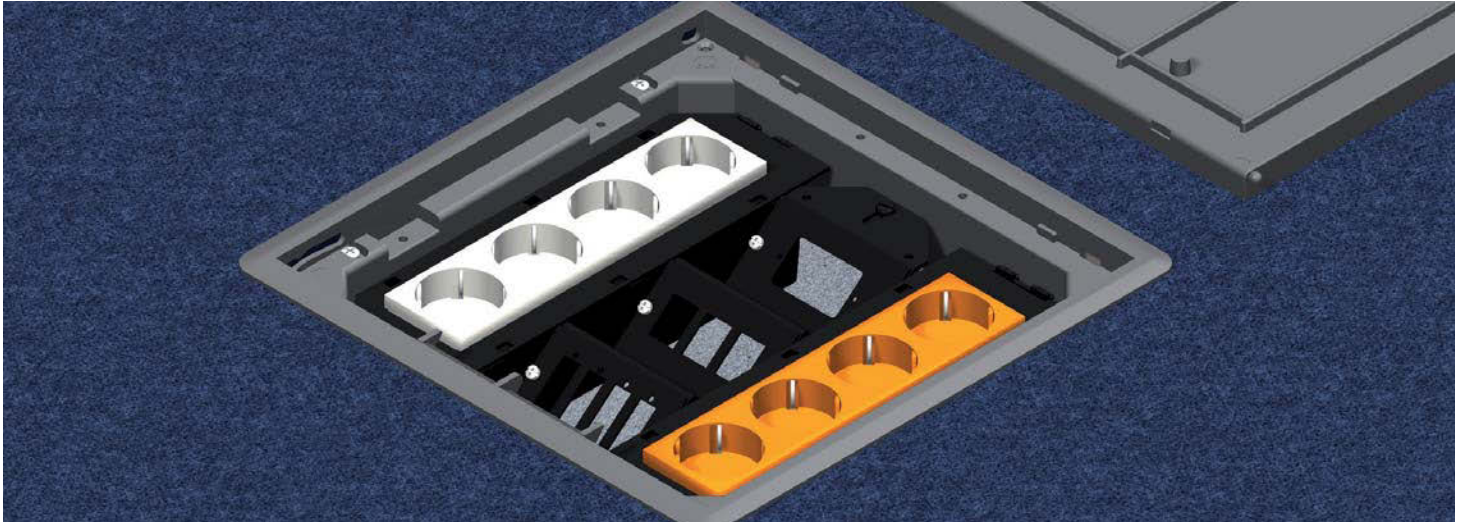


6 | Installation

Insert the pre-tailored device cups as deeply as possible into the lock-in leads of the installation unit. Unless the cover closes completely, not all screws have been correctly tightened!

Data-device carriers

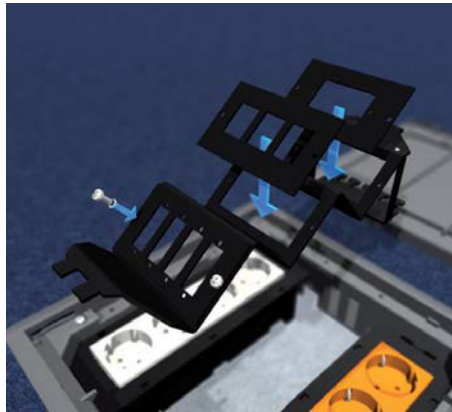
Assembly instruction



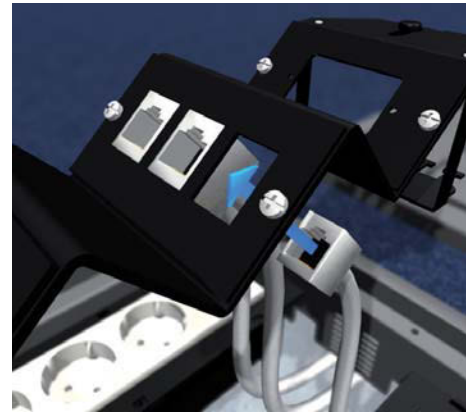
Data device carrier made of coated metal for snapping into the installation unit. For installation of up to nine single installation devices of data, audio and video technology, also for components of plug-in technology.



1 | Strain relief
Screw device carrier with strain relief tight before installation.



2 | Fitted board
Equip device carrier with up to three fitted boards according to the product specifications and screw tight.



3 | Single devices
Snap data single jack with feed cable into the fitted board from below. Screw single devices tight according to the specifications.



4 | Assembly of data-device carriers
Insert device carrier into the installation unit's lock-in leads and secure the latch on the opposite side with a screw into the lock-in.



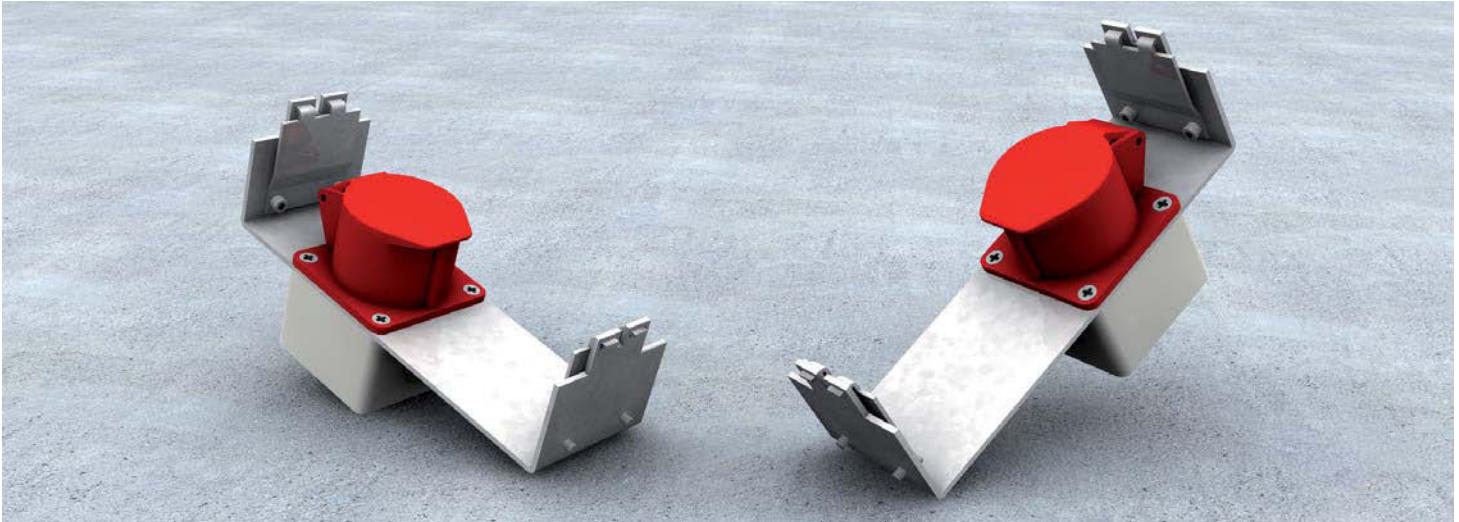
5 | Tailoring
Complete device cup with the corresponding cables of manufacturer. Note the installation height.



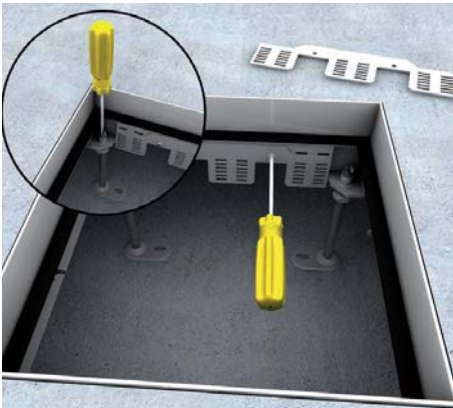
6 | Device carrier
Insert installation devices with couler clip into the device carrier from below and screw tight. Insert cover from above.

Device carrier CEE socket

Assembly instruction

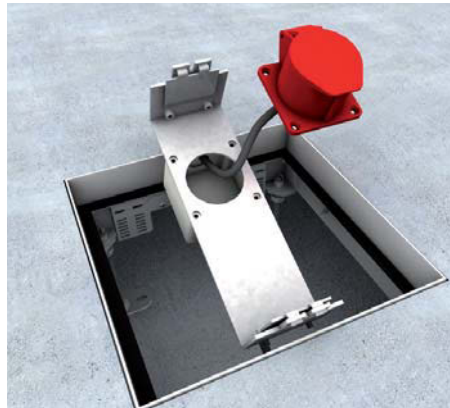


Carrier made of sheet steel with CEE socket 16A or 32A and box for centre installation into a round or quadrangular installation unit. Necessary installation height must be complied with before assembly.



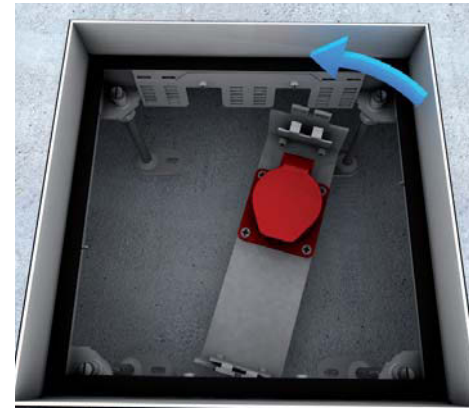
1 | Levelling unit

Position installation frame on finished floor level height flush with levelling legs. Screw the locking ladder set sideways to the frame. Locking ladder set available at 50 or 80 mm height.



2 | CEE-Connection socket

Detach CEE socket from box and device carrier by unscrewing four screws. Insert rubber seal. Insert connecting cable into container and clamp to CEE box. Reassemble device carrier completely.



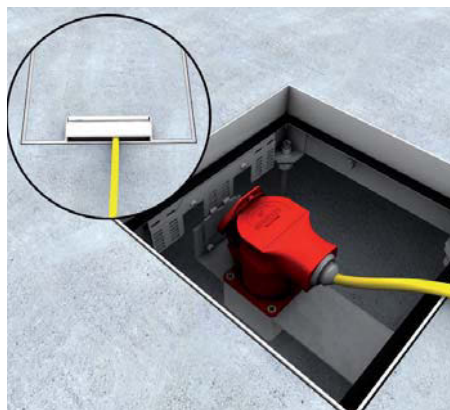
3 | Device carrier

Release socket screws on device carrier and lock-in lead. Insert the assembled device carrier into the lock-in leads from the bottom. Open hexagon socket bead and insert sideways.



4 | Lock-in lead

Device carrier with CEE socket and box in lock-in lead suitable for floor constructions from 160 mm. Always use the lowest locking position. Clamp device carrier firmly with a socket head wrench.



5 | Angle Plug

For floor constructions of at least 185 mm. Insert angle plug from and cartridge cover with cable outlet. Comply with bending radius to avoid pinched cables.

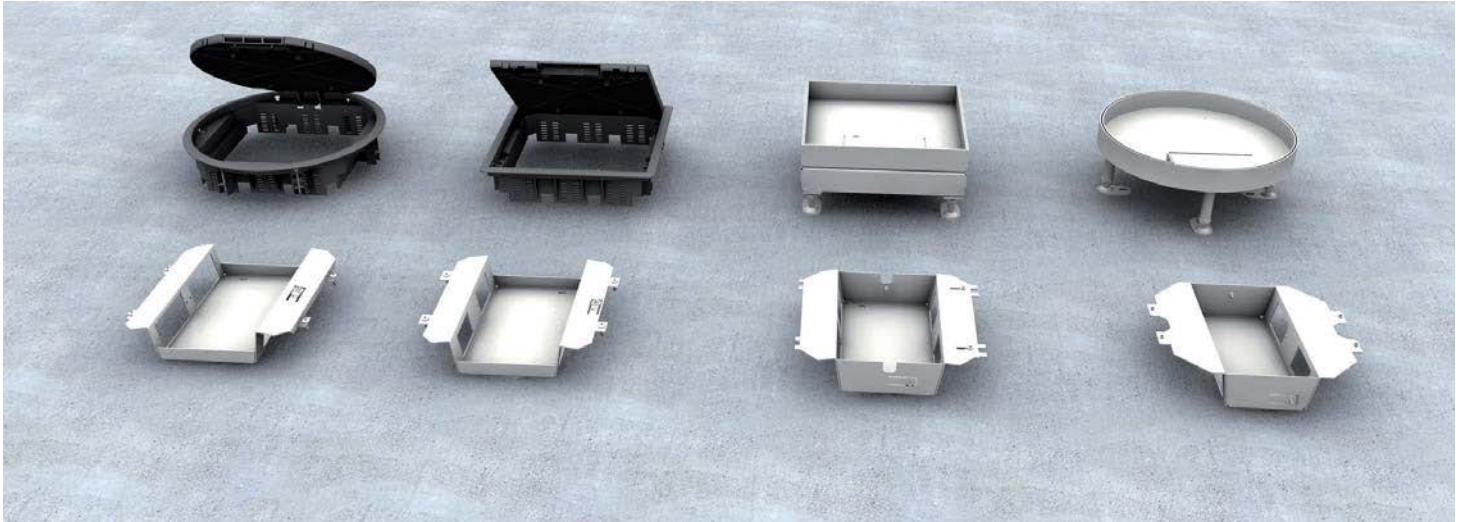


6 | Straight connector

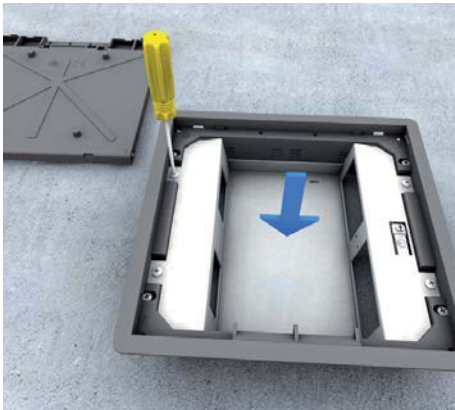
When using a straight connector, note that the cover cannot be closed while in use. Protect installation unit – accident risk!

Device inserts

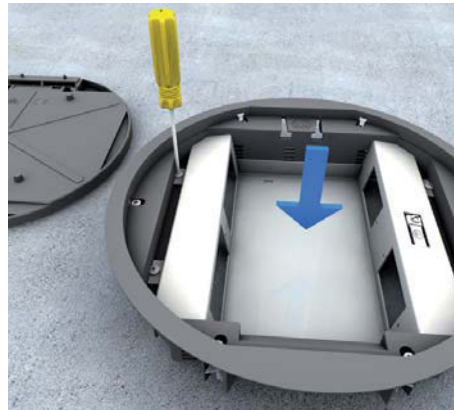
Assembly instruction



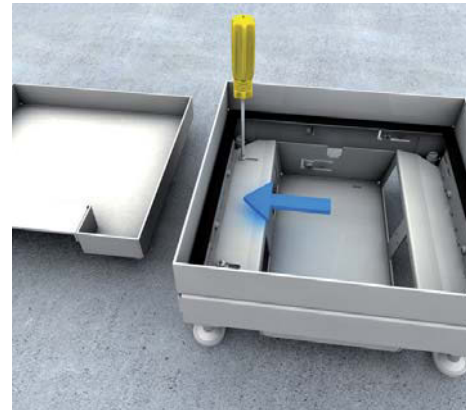
Device insert made of galvanised steel plate. To be inserted into round or quadrangular installation units made of plastic or stainless steel. For the accommodation of up to four installation devices of 45 x 45 mm and of six data single jacks. Suitable for floor constructions of at least 65 mm.



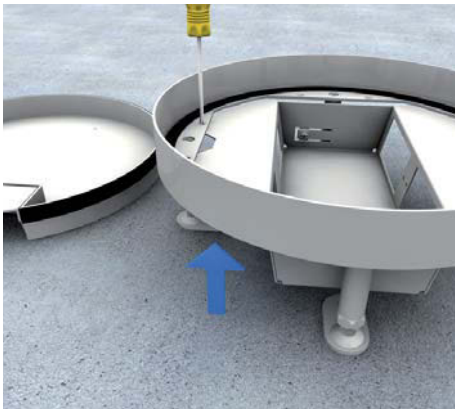
1 | Device insert, plastic, quadrangular
Place device insert into quadrangular plastic installation unit from the top and tighten firmly using four thread-rolling screws.



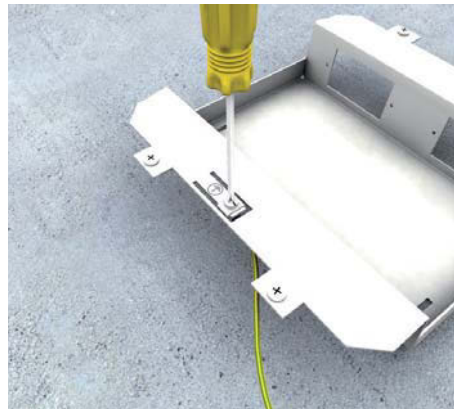
2 | Device insert, plastic, round
Place device insert into round plastic installation unit from the top and tighten firmly using four thread-rolling screws.



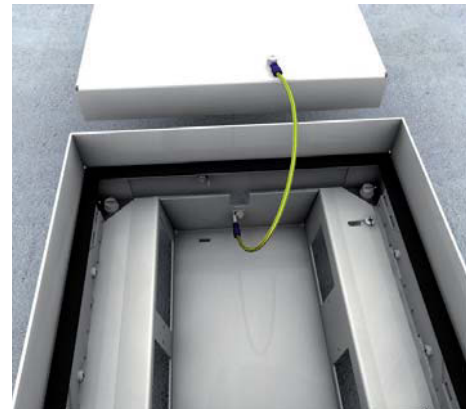
3 | Device insert, stainless steel, quadrangular
Place device insert sideways into quadrangular stainless steel installation unit and fix with two sliders in the existing snap-in holes of the levelling unit.



4 | Device insert, stainless steel, round
Place device insert into round stainless steel installation unit from the bottom and tighten firmly to frame with four countersunk head screws.



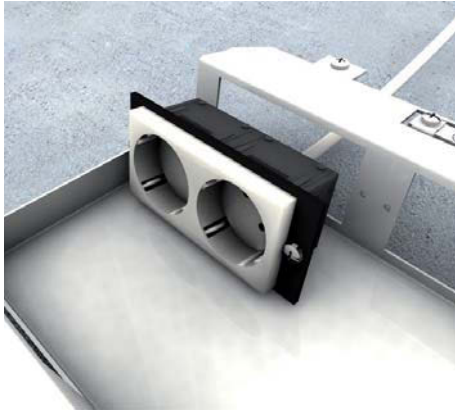
5 | Potential equalisation steel plate
All steel plate parts must be included in the potential equalisation. Screw earthing connection to the existing earthing lug.



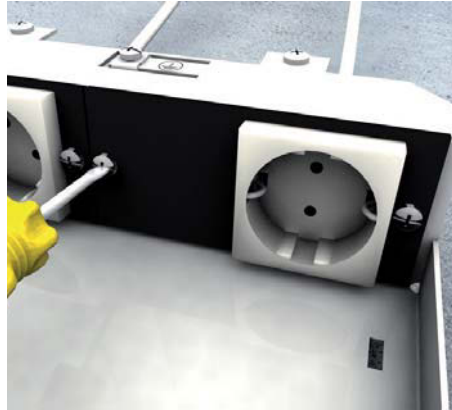
6 | Potential equalisation cover
Create potential equalisation between cover and frame with plug-in earth conductor.

Device inserts

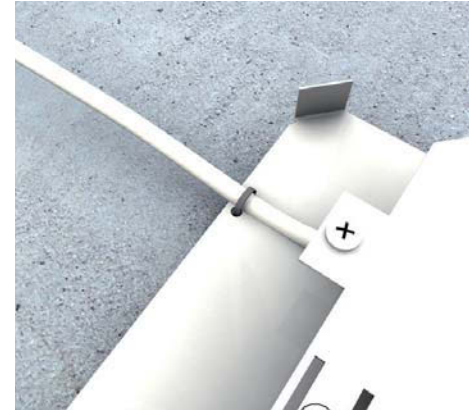
Assembly instruction



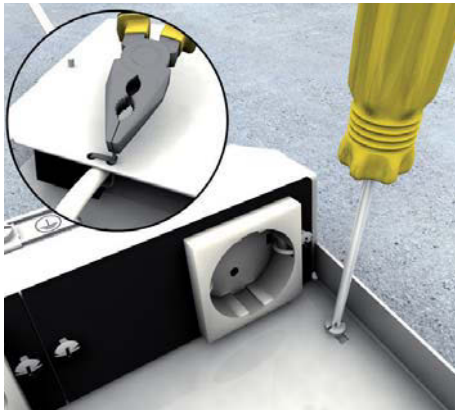
7 | Isolated ground receptacles 33°
 Latch 45 x 45 mm installation technology into front side of adapter board UGEE2, mount connecting cable to the isolated ground receptacle and screw the entire component to the device insert. Up to two double isolated ground receptacles can be used per device insert.



8 | Isolated ground receptacles 0°
 Latch installation technology 45 x 45 mm into front side of adapter board UGEE1, mount connecting cable to the isolated ground receptacle and screw the entire component to the device insert. Up to two single isolated ground receptacles can be used per device insert.



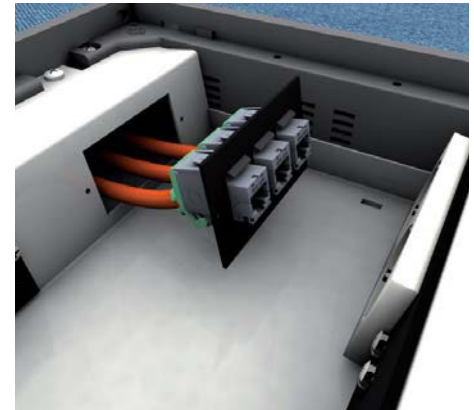
9 | Strain relief
 The high-voltage current technology must be secured to the cover plate UGE VR(K/E) against pulling direction using a cable retainer before installing the device insert. The strain relief of the data technology occurs directly at the single data jack.



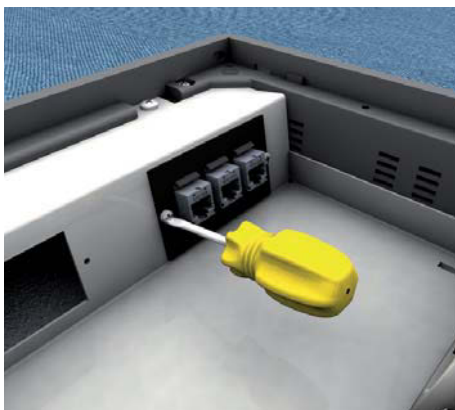
10 | Cover plate
 Position cover plate as a protection against contact below the high-voltage current side and screw to the device insert from the bottom. Then pull strain relief tight.



11 | Installation unit
 The device insert, pre-assembled to the heavy current technology, must be inserted into the installation unit sideways from the top.



12 | Data technology
 The equipment of data technology is completed on the opposite side. The connected data single jacks are to be latched into the installation opening of the adapter board UDEP from the back.



13 | Single data jack
 The boards with data technology must be screwed to the device insert. The type of board must be selected depending on the manufacturer. Up to six data single jacks can be used per device insert.



14 | Device insert
 Finally, the device insert must be firmly connected to the installation unit with screws.



15 | Angle plugs and straight plugs
 High voltage current cables or data technology cables can be connected via angle plugs and straight plugs. Comply with space requirements and dimensions of the connection system.