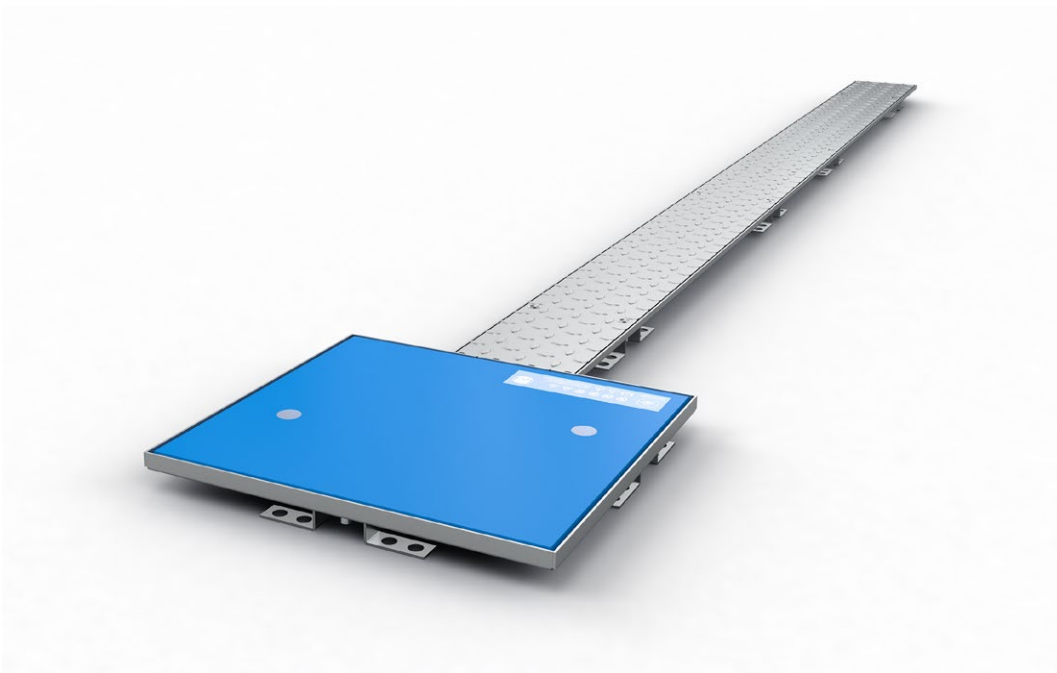


WCPS-R-3013[™]

Installation & Assembly Instructions



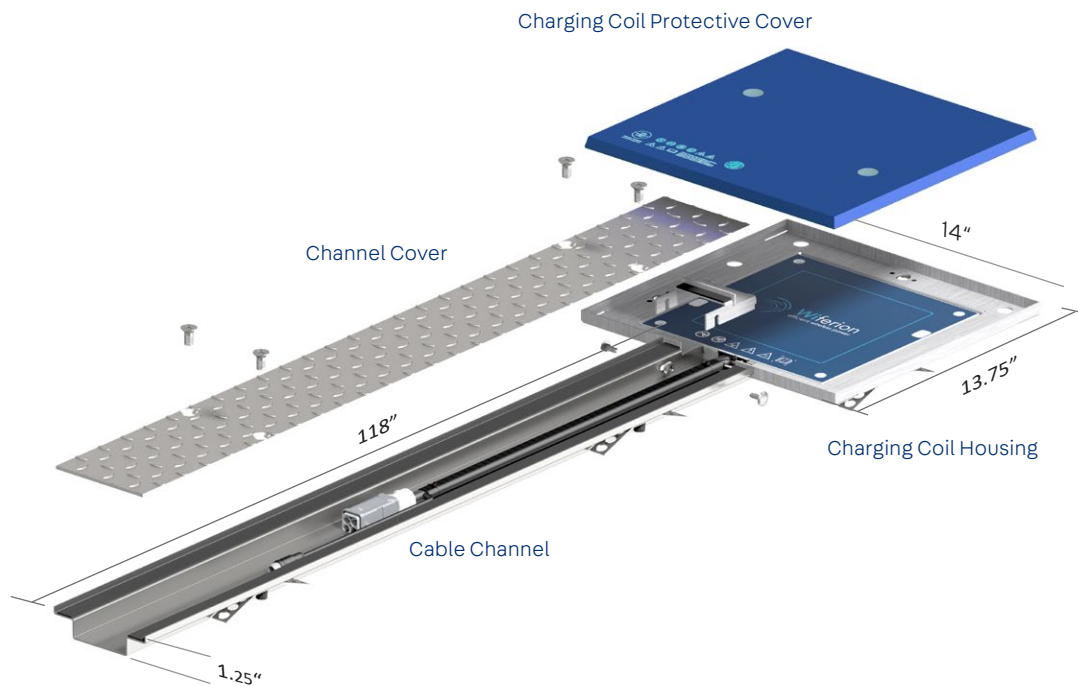
Opportunity at Every Stop[™]

WCPS-R-3013™

Components

The WCPS-R-3013 consists of 4 primary components, the Charging Coil Housing, the Cable Channel, Channel Covers and the Charging Coil Cover.

The WCPS-R-3013 can be configured in a variety of ways including adding multiple charging stations off of a main channel, using right angle channels and adding extensions. All systems come with channel connectors and leveling hardware.



Primary Components	Product Code	Optional Components	Product Code
Charging Coil Housing	WCPS-KE-L-3013	Extension Channel (3 mtr)	WCPS-K-30-S
Leveling Anchor	WCPS-NA	Extension Channel Cover Set	WCPS-SKDS-12-F
PCX Protective Cover	WCPS-D-13	Extension Channel Connector	WCPS-KV-30-S
Quick Connector	WCPS-KESV 30-E	Extension Side Profile Gasket	WCPS-SPG-19
Screw(s)	UKS M3 x 6E		
Leveling Bar	WCPS-NBKE-S	Channel T-Connector	WCPS-KTV-30-S
Primary Channel (3 mtr)	WCPS-AK-30	Channel L-Connector	WCPS-KLV-30-S
Channel Cover Set (3x1 mtr)	WCPS-SKD5-12-F		
Leveling Anchor	WCPS-NA		
Leveling Bar	WCPS-NBK-S		
End Plate	WCPS-KEB-30-S		
Side Profile Gasket	WCPS-SPG-19		

WCPS-R-3013™

Specifications

WCPS-R-3013 In-Floor Specifications

Item: WCPS-R-3013

Primary Channel Sections:

- Max. channel length: 7.50 m (295")
- Material thickness: 2mm (0.08")
- Material type: Steel 1.0226 (Z275)
- Coating: Hot-dip Galvanized
- Depth: 30mm (1.25")
- Width Outer: 127.2mm (5")
- Length: 2,966mm (116.75")
- Weight: 24.9kg (54.9 lbs) *including covers below

Certifications & Ratings:

- IP65 Rating
- CE Certified
- VDE Certified (DIN EN 50085-2-2)
- Flame retardant cover plate (Bfl-S1)

Channel Cover(s):

- Static Load: 15kN (3,372lbf)
- Thickness: 6mm (0.25")
- Material type: Steel 1.0122 (S235JRC)
- Coating: Hot-dip Galvanized
- Dimensions: 1000 x 120 x 5 mm (39.5" x 4.75" x 0.25")

Extension Channels

- Material thickness: 2mm (0.08")
- Material type: Steel 1.0226 (Z275)
- Coating: Hot-dip Galvanized
- Depth: 30mm (1.25")
- Width Outer: 127.2mm (5")
- Length: 3,000mm (118")
- Weight: 24.9kg (54.9 lbs) *including covers

Charging Coil Housing:

- Depth: 30mm (1.25")
- Dimensions: 350 x 328 x 30 mm (13.75" x 13" x 1.25")
- Thickness: 2mm (0.08")
- Material type: Stainless Steel (1.4301)
- Weight: 2.2 kg (4.85 lbs)

Charging Coil Cover:

- 322 x 344 x 13 mm (12.67" x 13.5" x 0.5")
- Dynamic surface pressure: 8MPa
- Certified static load 15kN (3,372lbf)
- Interference free cover 13mm (0.5")
- Chemical resistant
- Weight: 4.3kg (9.5 lbs)

WCPS-R-3013™

Contractor Installation Checklist



Know-How

Before starting ground work and installation of WCPS, ensure that the contracted firm has read the installation instructions and watched the integration video.



Material Check

Verify that all delivered materials and quantities match the planning documentation.



Ground Marking

The included milling template from Jordahl facilitates precise marking of the milling zone.



Recommended tools

- Slot Milling Machine
- Hammer Drill
- Handheld Joint Cutter
- Cordless screwdriver
- Grinder
- Dry Mortar & Grout
- Marking equipment/paint
- Hammer
- Torx Driver set
- Metal drill bits
- Countersunk drill bits
- Allen key
- Core drill
- Shop Vac and Sweeper
- Foil to protect surfaces



Documentation

The following documents should be available on-site:

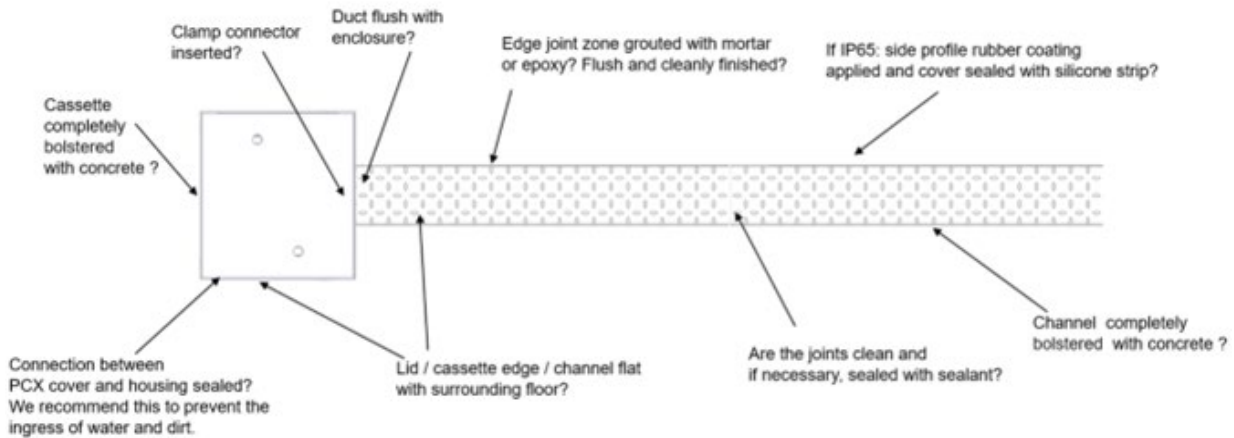
- Assembly instructions
- Project documents & plans
- Installation drawings
- Materials list
- Written approval for the installation area. In particular, approval with regard to: rebar, reinforcement, underfloor heating, pipes etc.
- Declaration by construction supervisor of construction acceptance protocol.

Efficient Assembly

- Follow the assembly instructions. If you have any questions, please contact Jordahl.
- The WCPS system should only be cut to size after the installation zone has been assessed.
- The first channel cover segment must be shortened to remove the underlap.
- Holes for the channel covers should be drilled on site. Ensure congruence with thread. 4x screw connection are required per channel cover.
- Initial assembly of the WCPS should be done outside of the milling zone.
- Only use products for assembly which come from Jordahl.

WCPS-R-3013™

Contractor Installation Checklist



Correct alignment of the first channel section

The first channel section is specially shaped for connection to the charging coil housing.

- Note the correct insertion direction of the screws.
- The levelling bars help to position the system exactly in the center of the milling zone

Leveling the WCPS

Ensure that the WCPS system is level with the surrounding surface.

- Use the leveling bar to level the system to the correct height.
- Concrete or mortar can also be pre-filled in the milling zone to underlay the channel. Avoid contamination of screw holes by covering with masking tape prior to filling.

Clean work & safeguarding

- Tape over threaded holes before grouting to avoid contamination of the holes
- Protecting the surfaces around the joints saves time-consuming cleaning at the end.
- The installation site must be secured and the mortar allowed to fully cure. A note on the time of release after drying should be sent to the end customer.

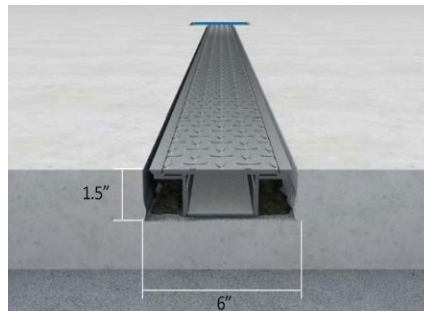
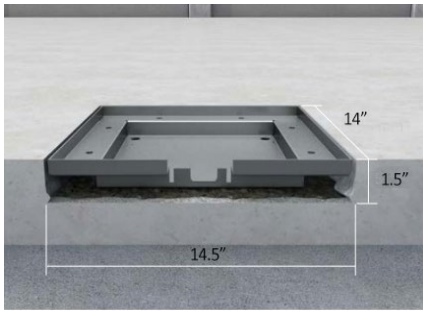
Marginal zones

- All parts of the WCPS must be fully lined with high performance mortar.
- Use low-shrinkage and fast-hardening mortar and grout for the highest dynamic and static loads.
- Once fully cured, check through taped holes to see if grout has been successfully backfilled. *The top layer (5-10 mm) can also be filled with a resilient epoxy for industrial floors.
- To avoid cracks, observe mixing ratios and curing times of all materials and cover or moisten the surface until it is completely dry.
- Backfilling of the concrete grout or mortar mixture should be carried out in layers and should be sufficiently compacted and recompactd using a trowel or vibrator so that no voids or cavities can occur.

WCPS-R-3013™

Milling Considerations

Milling or chiselling out should only be carried out by experienced specialists. A minimum depth of $\geq 1.5''$ is to be provided (1.25'' channel depth + min. .25'' for relining the grout). The joint width should be between .5'' and .75'' on each side to better compensate for unevenness of the floor. Ground unevenness can be compensated for by backfilling the joint using a fast-hardening non-shrink grout or screed rated for the highest dynamic and static loads: e.g. Quikcrete® FastSet™ Non-Shrink Grout or Quikcrete® Non-Shrink Precision Grout or equivalent.



Ground work using a Slot Milling Machine and a Hammer Drill



Cut

Use a cross cut technique with the slot milling machine. Be sure to set the right cutting depth in advance.



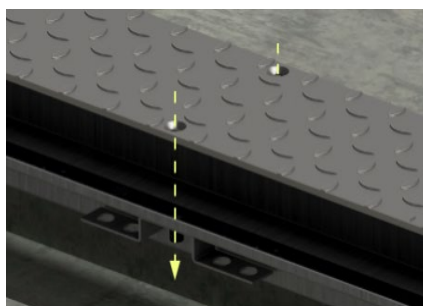
Chisel

Using a Hammer Drill, break out the concrete.



Clear

Clear out the milled flooring.



Attaching the Channel Covers

Align, measure and mark the hole positions carefully and then drill congruent through-holes for attaching the cover to the channel. Counter sink the holes in the channel covers to keep the screws flush with the surface.

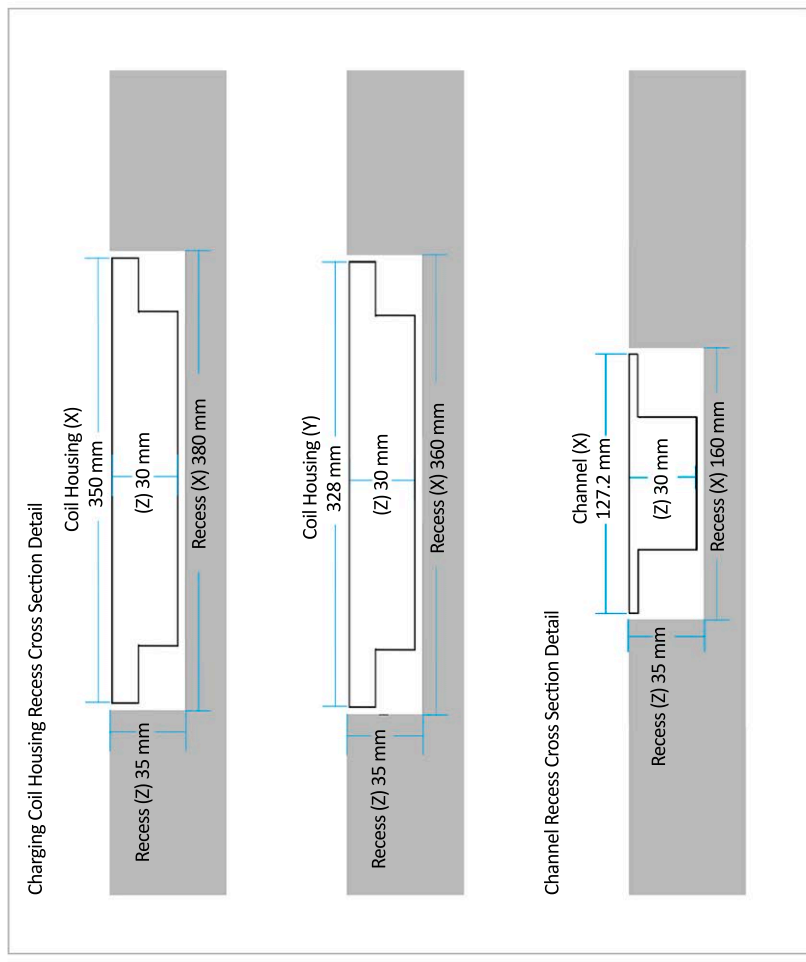
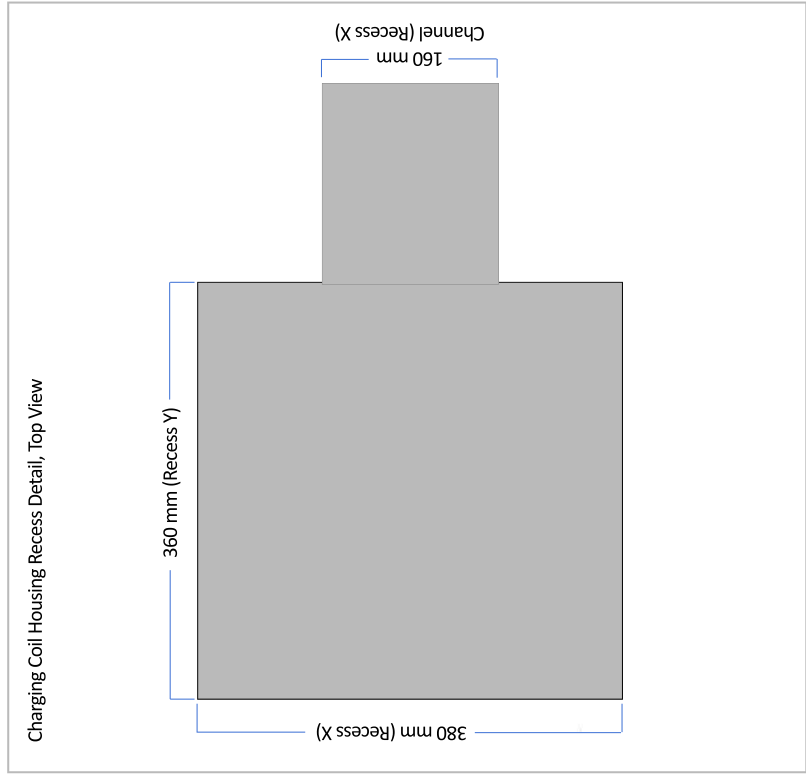
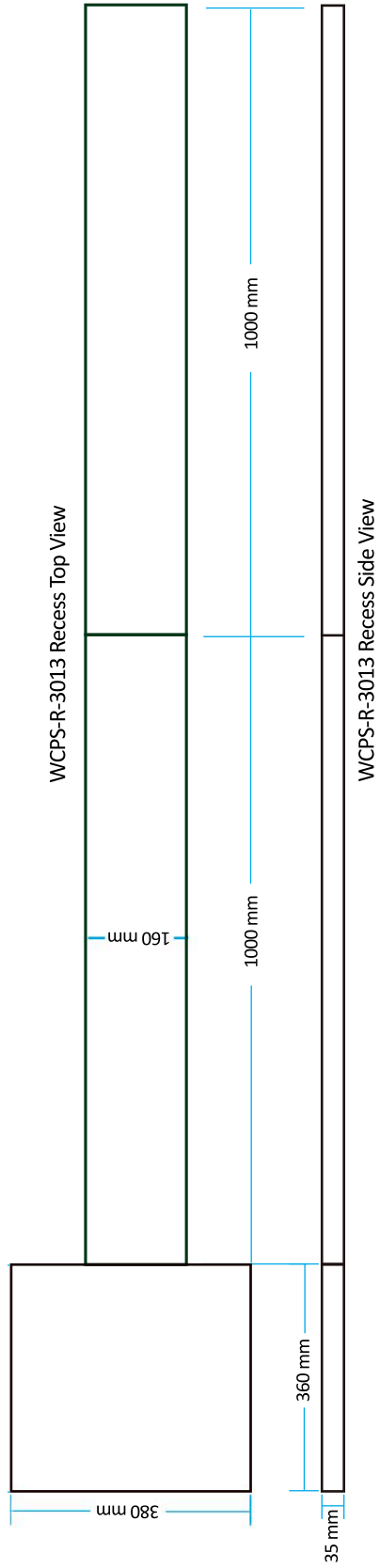


The cable outlet in the channel cover

Cut or Drill a hole where the cable exits the channel and connects to the power source. Ensure sufficient bending radius for the cable (~7.5 cm).

WCPS-R-3013™

Milling Guide



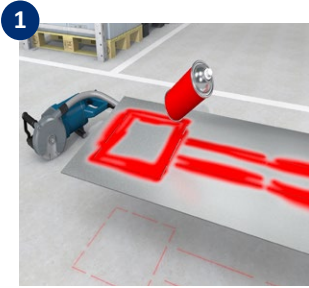
WCPS-R-3013™

Installation Overview

The installation instructions cover the work steps when the floor has already been milled. For additional milling instructions contact sales@jordahlusa.com

Once the ideal charging points are identified, the floor of existing buildings will be milled to the needed measurements or in the case of new construction, corresponding locations may be formed as part of the construction process.

The WCPS-R-3013® is then inserted and leveled and the Wiferion® etaLINK 3000™ is positioned and connected to an appropriate power source. Support is available for all project phases, from approval, planning and construction supervision to finished installation.



1 Mark the location with the provided template.



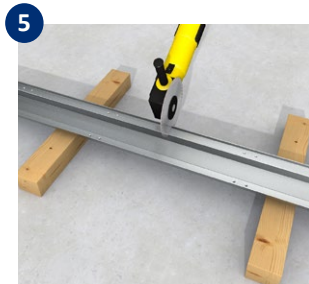
2 Cut the pattern using a saw depth of 1.5 inches.



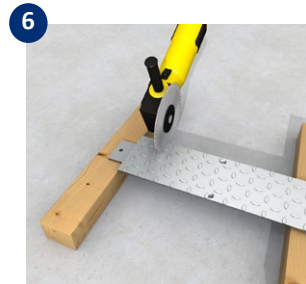
3 Use a hammer drill or other suitable tool to mill the surface inside the cut lines to a depth of 1.5 inches.



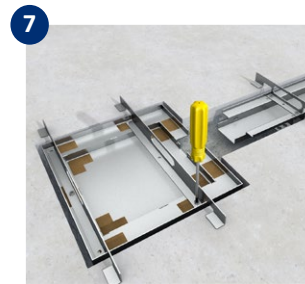
4 Check all measurements and depths for accuracy



5 Cut the channels to plan length and angle.



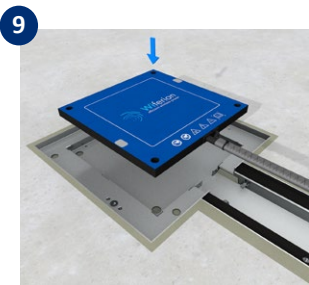
6 Cut the channel covers to plan length and angle.



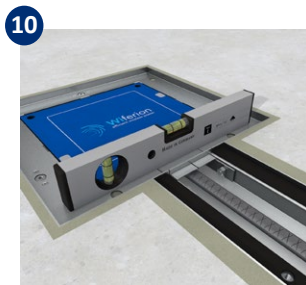
7 Connect the leveling bars to the coil housing unit and channel and level as necessary.



8 Clear all contaminants from the WCPS housing and channel.



9 Insert the Wiferion etaLINK 3000 charging coil into the housing and the cable into the channel.



10 Check leveling for accuracy.



11 Attach the channel covers



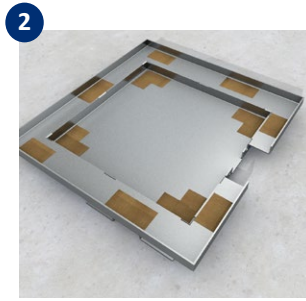
12 Seal the WCPS

WCPS-R-3013 Complete Installation Instructions



3 levelling anchors are required to mount the housing.

Attach using 2 x M3x6 countersunk screws per levelling anchor.



Mask the rivet nuts and threads of the leveling anchors to avoid contamination from grout.



The remaining holes in the housing are masked from below.

The large holes serve as a check point to verify grouting has been done optimally underneath.

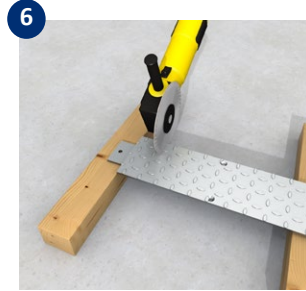


Before cutting the channel sections, take into account the correct direction of the channel.

*The channel is formed at the factory for connection to the housing. Do not cut the formed end of the channel.



Before inserting the channel into the milled recess, cut individual channel sections according to the installation plan and check for fit within the recess. If necessary, drill holes for corner connectors and T-branches.



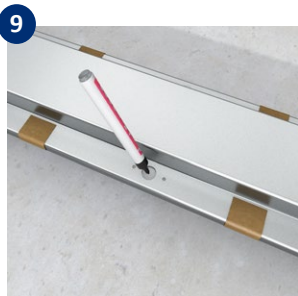
Before inserting the channel into the milled recess, cut individual covers according to the installation plan.



Hook the end piece into the channel and align it. Mask off the slots.



Press out the pre-cut metal plates at the required positions for the leveling anchors.



Align & mark the drilling position with a punch or pencil.



Align and drill holes for M6x16 countersunk screws in the channel cover.



Be sure to align the holes with the pre-threaded holes in the channel leveling anchors.

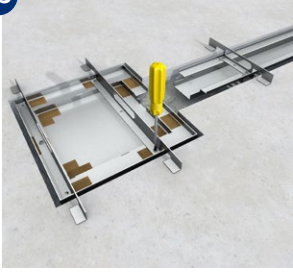
Mask the blind rivet nuts of the levelling anchors to protect them from penetrating grout.



Be sure to align the holes with the pre-threaded holes in the channel leveling anchors.

Mask the blind rivet nuts of the levelling anchors to protect them from penetrating grout.

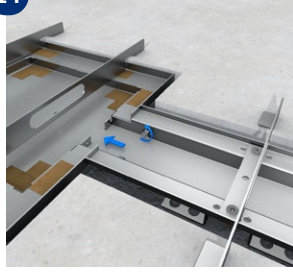
13



Mount the leveling bars on the channel and housing. (2 x housing and 3-4 per 118" channel).

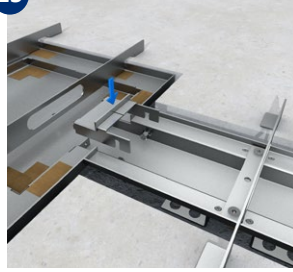
The distance between the leveling bars should be less than 35". Protect the blind rivet nuts against penetrating grout.

14



Place the prefabricated channel and housing unit in the milled recess using the leveling bars and push the channel into the housing unit.

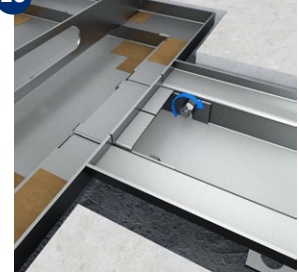
15



Slide the channel with housing connector to the opening of the housing edge.

Slightly loosen the first pair of screws of the channel side profile and hook in the quick connector.

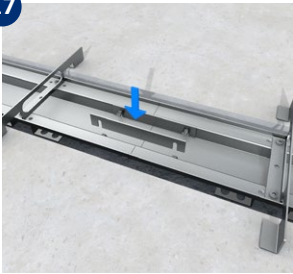
16



Push the channel into the housing and attach using the supplied channel connector and screws:

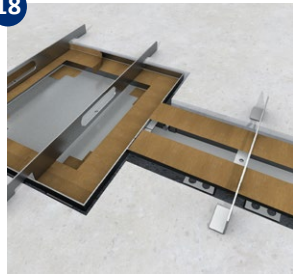
FRSV 6 x 12 / Nut: SEMS 6

17



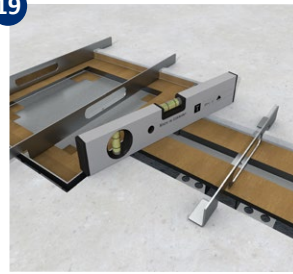
If more than 118" of channel is required, connect another channel segment using channel connectors and mask the joints from the outside.

18



To protect against overflowing grouting material, mask all openings of the channel and housing unit.

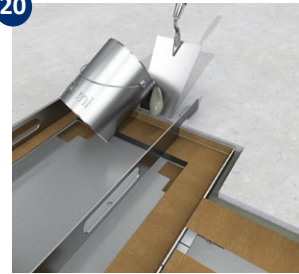
19



After taping off all open areas, re-insert the system into the milled recess.

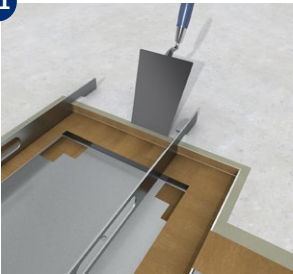
Make a final check of all installed components in the recess to ensure that they are aligned flat and straight with the surrounding ground.

20



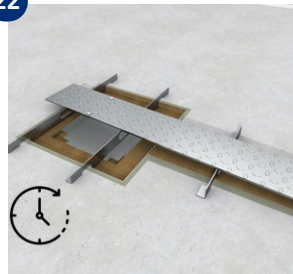
For backfilling, we recommend quick-setting low-shrinkage grout or screed rated for the highest dynamic and static loads: e.g. Quikcrete® FastSet™ Non-Shrink Grout or Quikcrete® Non-Shrink Precision Grout or equivalent. Ensure no air holes remain under the channel. A high-performance 2K epoxy can also be used as the top layer which is filled into a remaining < 0.5" deep joint.

21



In order to avoid air pockets and to distribute the filling compound optimally, "recutting" along the channel and housing edges is recommended.

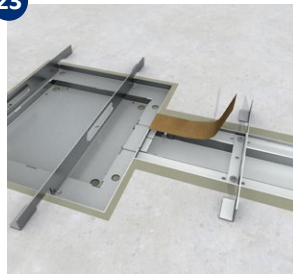
22



The grouted housing and channel must be weighed down to prevent flooding. This can be done by placing the channel cover or other heavy flat object on top.

Once the flow strength of the grout has been reached, clean and test the grout as required.

23



Remove the adhesive strips and clean the system and surrounding area.

24



Check for complete filling of the holes in the housing support surface. If cavities are present, they must be filled.

25



Remove the leveling bars after the grout has cured.

*Refer to the manufacturer's instructions for grout drying and curing times.

26



Before inserting the charging pad, check for contamination and clean the entire system if necessary.

The channel and housing must be completely free of contamination.

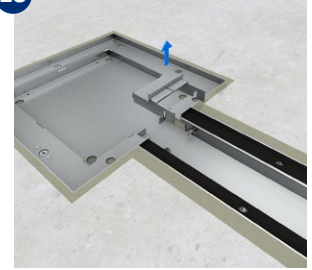
27



Attach the side profile rubber gasket. The threads in the channel must remain free so that the channel cover can be screwed on later.

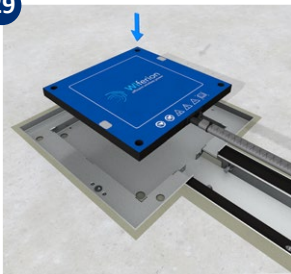
*Important: *The housing unit does not receive any rubber coating.*

28



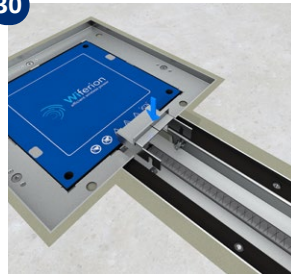
Temporarily remove the quick connector in preparation for the installation of the charging pad.

29



Insert the Wiferion etaLINK 3000 Charging Pad.

30



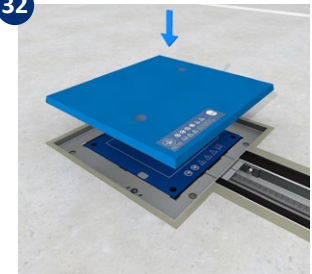
Reattach the quick connector. Screw the quick connector and the channel tightly together.

31



The quick connector must be flat with the contact surface of the housing.

32



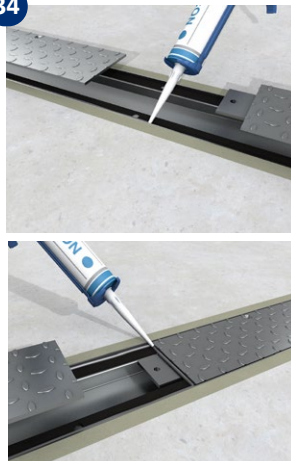
Insert the WCPs Protective PCX cover.

33



To prevent water or dirt from entering the housing, apply sealant to the joint between the PCX cover and the edge of the housing.

34



The same applies to the channel and the channel cover.

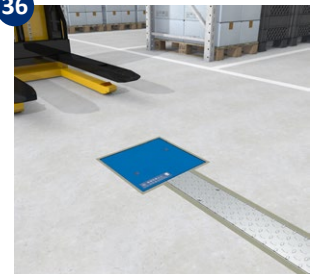
35



Screw the channel cover to the channel.

Screw types:
Countersunk M6 x 16
(ISO 10642)

36



The fully assembled WCPs system including the Wiferion charging pad must now be put into operation by a suitable specialist.

T Branch connection



1
Layout the 3 channel sections and the WCPS-T connector. If necessary, measure for and drill holes in the channel sections, corresponding to the locations on the WCPS-T connector.



2
Push the Channel sections together with the WCPS-T connector and attach it to the Channel sections.



3
Mask off connection points and slots.

Right Angle connection



1
Layout the 2 channel sections and the WCPS-L connector. If necessary, measure for and drill holes in the channel sections, corresponding to the hole locations in the WCPS-L connector.



2
Push the Channel sections together with the WCPS-L connector and attach it to the Channel sections.



3
Mask off connection points and slots.



For more information, jordahlusa.com/WCPS

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