



WET ROOM SYSTEM

INSTALLATION INSTRUCTIONS FOR:

KD+ Foil system Trygg

KD+ Foil system Projekt

KD+ Rollbart system

KD PLUS Installation Instructions,
October 2021. 1st edition





WET ROOM SYSTEM

KD PLUS Installation Instructions,
October 2021. 1st edition



KD+ FOIL SYSTEM
KDP-0002
ETA 21/1014 of 04/01/2022
Kakel & Design at Sverige AB



KD+ ROLLABLE SYSTEM
KDP-0001
ETA 21/1013 of 04/01/2022
Kakel & Design at Sverige AB

PLEASE NOTE!

It is the original assembly instructions in Swedish that are the legally binding. This is an English translation done to the best of ability.



SYSTEM KD+ FOIL TRYGG



SYSTEM KD+ FOIL PROJEKT



SYSTEM KD+ ROLLBART

INSTALLATION INSTRUCTIONS

These Installation Instructions are designed for those who intend to renovate or build a new bathroom. To comply with current regulations, it is important to follow our installation instructions and use the products mentioned in our pamphlet to get an approved result.

All industry requirements for substrates, materials and their properties are found in the Swedish Ceramic Tile Council's Trade Rules for Wet Rooms (BBV). The Trade Rules can be downloaded from www.bkr.se or ordered in printed format from the Swedish Ceramic Tile Council.

Before you start, we recommend reading the entire instruction manual and our product data sheets so that you feel ready to use the right products and accessories.

The instruction manual can be used in applicable parts when private individuals do the installation work (do-it-yourself work) as well as for contracts carried out by contractors affiliated with another trade association. In the latter case, documentation should be made in accordance with the guidelines for that organization.

PREPARATIONS

Prepare carefully so the work will be easier to do, and to avoid unpleasant surprises in the course of the work. Check the substrate and surface for suitability and that all floor gradients are correct, because it is usually too late to fix these once the waterproofing is done. The requirements for floor gradients can be found in section 4.2 of BBV. Make sure you have the right tools to do the work the right way. Everything goes so much smoother and faster if the correct tools are used.

QUALITY ASSURANCE DOCUMENT

Competent companies shall issue a quality assurance document after each wet room contract according to Appendix A of BBV. Checking of performed work is done through self-inspection that is documented in one of the digital media provided by the Ceramic Tile Council. The quality assurance document is then sent to the client/residents after the work is completed. Copies are archived for presentation during any quality reviews. For more info, see BBV 21:1 section 2.5.

SPLICING BETWEEN KD+ FOIL SYSTEM AND KD+ ROLLABLE SYSTEM

If you need to use both KD+ Foil system and KD+ Rollable system in the same space, one should splice according to these instructions:

First, complete the KD+ Rollable system on the surface to be sealed with it and allow it to dry. Then the remaining surface is sealed with KD+ Foil system so that it overlaps the KD+ Rollable system by at least 50 mm. Follow the respective installation instructions for KD+ Rollable system and KD+ Foil system. Allow to dry at least 30 min. Then seal the overlap/joint by rolling the KD+ Sealing membrane once (1) over the joint. Allow to dry at least 12 hours before tiling.

BACKGROUND INFO

BBR (The Swedish National Board of Housing, Building and Planning) states that wet rooms must be water and steam resistant. The Ceramic Tile Council's Trade Rules for Wet Rooms explains how this is achieved. The rules for water and sewage installations can be found online: www.sakervatten.se. BBV was developed by the Swedish Ceramic Tile Council. The latest edition (BBV from January 2021) has been harmonised with the Trade Rules for safe water installations, the GVK Flooring Industry's Wet Room Controls and the MVK Painting Industry's Wet Room Controls. The rules for water and sewage and sanitation products/installations can be found online: www.sakervatten.se. There are also rules here for drains at or near walls.

BBV refers to the rules for the functioning and application of waterproofing systems on different substrates when wall tiles, floor tiles or mosaics form the surface layer on floors and walls in built in situ wet rooms in homes or spaces with a corresponding water loads.

Wet room means spaces where floors and wall surfaces may be subjected in whole or in part to recurrent water spray, such as rooms with showers or bathtubs installed.

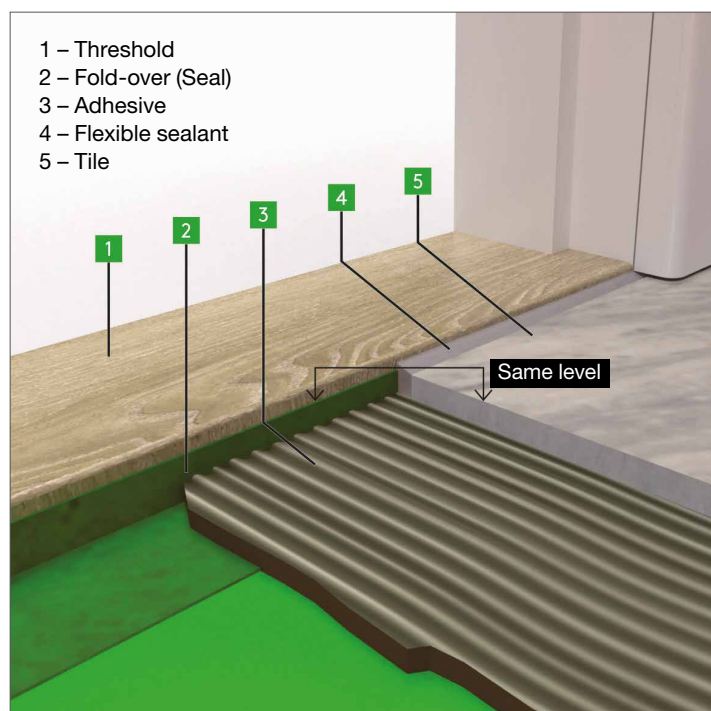
The rules may be applied, in whole or in part, when natural stone, glass or similar products are used as a finishing layer. The rules apply to ceramic tiles installed using thin-layer technology.

REPAIRS

Repairing a waterproofing layer may be possible depending on the conditions in each individual case. Repairing damaged KD+ Foil System before tiles are installed is the easiest to do. This is done by cutting a piece of KD+ Foil or KD+ Sealing strip that is so large that it covers at least 5 cm more area than the damage itself. Mount this using KD+ 2K Foil adhesive or KD+ Splice adhesive using the same technology as for overlapping joints. Make sure that the overlap is at least 5 cm.

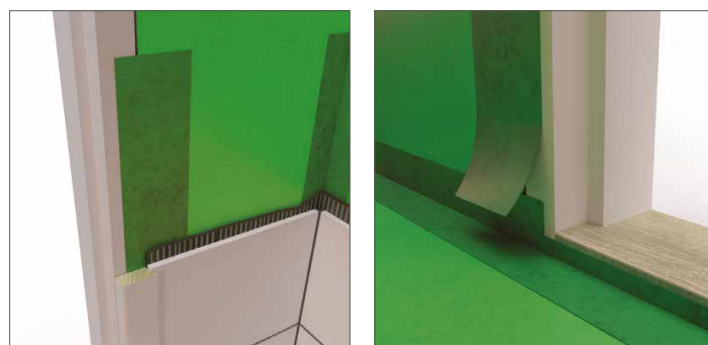
For all other repairs, KD+ Technical Support should be contacted for advice before any repair work begins. Contact details are available online: www.kdplus.se.

SEALS & FASTENERS



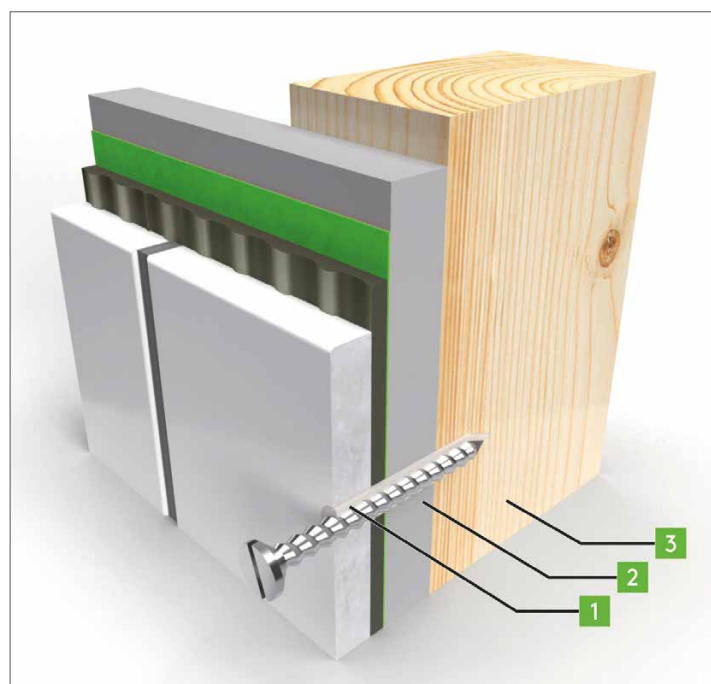
Completion along thresholds

KD+ Foil should be folded over against the threshold at the level of the finished floor. One can also do this using the KD+ Sealing strip glued with KD+ Splice adhesive or self-adhesive KD+ Butyl strips.



Completion along door frames

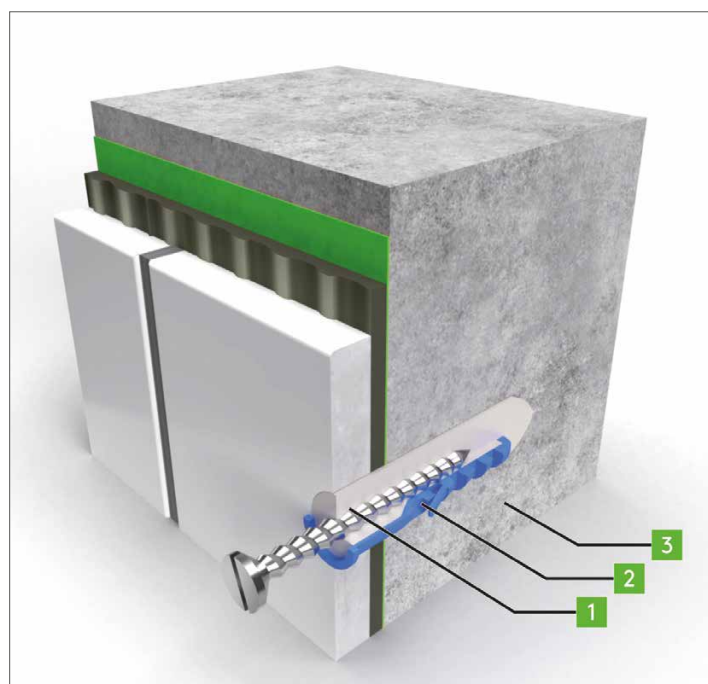
Completions alongside door frames can be done e.g. using KD+ Foil or KD+ Sealing strips glued with KD+ Splice adhesive or self-adhesive KD+ Butyl strip.



Fastenings

Screws should be fastened to solid constructions such as concrete, masonry, wood planks, noggings/blockings or the equivalent. It is important that screw holes and any plugs are sealed with KD+ Splice adhesive and that these seal against the waterproofing layer. Other solutions can be used, such as adhesive systems.

- 1 – KD+ Splice adhesive or equivalent
- 2 – Sheet materials
- 3 – Planks



Fastening to concrete

Fastening to concrete is done using plastic plugs and screws. Apply wet room silicone before inserting the plug here, and also before mounting the screw. Making holes in places for bathtubs and showers should be avoided.

- 1 – KD+ Splice adhesive or equivalent
- 2 – Plug and KD+ Splice adhesive or equivalent
- 3 – Concrete walls or equivalent

WET ZONES IN WET ROOMS

Wet zone 1

Floor-to-ceiling walls for bathtub or shower and wall surfaces for at least one metre outside of them, as well as the entire floor area of the wet room. A one-metre area outside the space for bathtub or shower, the opposite wall surface, including end, are in wet zone 1. If part of an outer wall is included in wet zone 1, the entire wall shall be treated as belonging to wet zone 1. The reason for this is that the major driving force for moisture is in the outer wall of the wet room due to the large differ-

ences between outdoor and indoor temperature, especially during the winter months. Take the dimensions of the shower walls into account as well as the size and location of the bathtub when assessing the extent of wet zone 1. Client and contractor should communicate this.

Wet zone 2

Other wall surfaces.



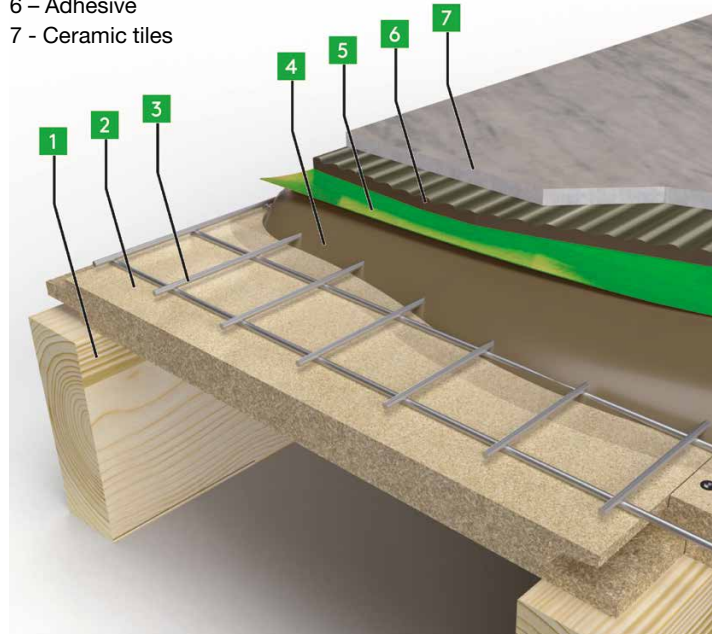
Choice of wet room system	KD+ Foil system Projekt	KD+ Foil system Trygg	KD+ Rollbart system
WET ZONE 1			
Wall – Board structure	●	●	○
Wall – Solid structure	●	●	●
Floor – Board structure	●	●	○
Floor –Solid structure	●	●	●
WET ZONE 2			
Wall – Board structure	●	●	●
Wall – Solid structure	●	●	●

CONSTRUCTIONS

Wooden beams

Wooden beams should always be reinforced to adapt bending stiffness to the ceramic surface. A tried-and-tested way of doing this is with reinforcement mesh and boards. See the construction image. Selecting a suitable boards is done in consultation with the supplier. KD+ Wet room system should not be applied directly to a substrate of boards. Exceptions can be made for certain types of floorboards, after approval is given by KD+ Technical Support.

- 1 – Floor joist with cc distance 300-600 mm
- 2 – Floor chipboard glued and screwed
- 3 – Spot-welded steel mesh,
- 4 – Levelling screed, not less than 12 mm
- 5 – Waterproofing,
- 6 – Adhesive
- 7 - Ceramic tiles



Solid constructions

Concrete substrates should have a rough exterior surface. A smooth or glossy concrete surface must be grinded or sanded first. Unevenness and damage in the substrate is repaired with a cement-based screed recommended by the supplier. The substrate should maintain a temperature between +10 to +30 degrees C.

Maximum moisture content of the substrate:

85% RF when using KD+ Sealing membrane

93% RF when using KD+ 2K Foil adhesive

Substrate

Substrates for KD+ Waterproofing system should be durable, dry, cleaned and free of loose particles. Cavities and irregularities should be packed or sanded before sealing begins. Remove putty residue, paint spillage, clean lime polish, plaster polish etc. can damage adhesion and must be removed. Wall and floor substrates in wet rooms must be documented or proven suitable as a base for waterproofing and tiling. If this is not the case, they should be replaced or supplemented with suitable material.

The temperature in the working space and substrate should be between +10 and +30 degrees C.

All industry requirements for substrates, materials and their properties are stated in the Ceramic Tile Council's Trade Rules for Wet Rooms, BBV 21:1.

Heated floors

When underfloor heating is installed, the basic rule is that the underfloor heating must be turned off during waterproofing and tiling work and 28 days thereafter. If you have any questions, please contact KD+ Technical Support or www.kdplus.se

Substrate preparation

Strongly absorbent substrates should be primed with KD+ Primer. Standard absorbent substrates do not need to be primed, but we recommend doing this because it reduces material consumption and provides longer drying times for KD+ Sealing membrane and KD+ 2K Foil adhesive. Non-absorbent materials are not primed. In case of uncertainty, see www.kdplus.se for more information.

Substrate	KD+ Primer	Water
Concrete	1 part	3 parts
Plastering	1 part	3 parts
Plaster polish	1 part	3 parts
Cement-based spackle	1 part	3 parts
Plasterboard	1 part	3 parts



PRODUCT RANGE

KD+ Wet room system

Here is some brief information about the products included in the KD+ Wet room system and which products are included in each system.

More detailed information such as a technical data sheets can be found online: www.kdplus.se.

PRODUCT	FOIL SYSTEM KD+ PROJECT	FOIL SYSTEM KD+ SAFE	SYSTEM KD+ ROLLABLE
KD+ Foil Projekt 1x30m	●	○	○
KD+ Foil Trygg 1x30m	○	●	○
KD+ Vapour barrier	○	○	●
KD+ Sealing membrane 20kg	●	○	●
KD+ Splice adhesive	●	●	○
KD+ 2K Foil adhesive	●	●	○
KD+ Pipe collar 10-24	●	●	●
KD+ Pipe collar 15-38	●	●	●
KD+ Pipe collar 28-50	●	●	●
KD+ Pipe collar 50-75	●	●	●
KD+ Pipe collar 75-110	●	●	●
KD+ Pipe collar duo cc60 12-35	●	●	●
KD+ Inner corner	●	●	●
KD+ Outer corner	●	●	●
KD+ Sealing strip 30m	●	●	●
KD+ Butyl tape 20m (self-adhesive)	●	●	●
KD+ Drain collar	●	●	●
KD+ Project fix 20 kg	●	●	●
KD+ Light fix DR 15 kg	●	●	●
KD+ Flex fix DR S1 White 20kg	●	●	●

Not included in the Wet room system:

KD+ Primer 1 kg

KD+ Primer 4 kg



KD+ Foil Projekt 1x30m
KD+ Folie Projekt
Article: 1KD21130



KD+ Foil Trygg 1x30m
KD+ Folie Trygg
Article: KD21230



KD+ Vapour barrier /
KD+ Ångspärr
Article: KD11106



KD+ Sealing membrane 20kg
KD+ Tätmembran
Article: KD11220



KD+ Splice adhesive
KD+ Skarvlim
Article: KD114014



KD+ 2K Foil adhesive 6.65kg
KD+ 2K Folielim
Article: KD11306



KD+ Projekt fix 20kg
KD+ Projektfix
 Article: KD31120



KD+ Light fix DR 15kg
KD+ Lättfix
 Article: KD31215



KD+ Flex fix DR S1 White 20kg
KD+ Flexfix DR S1 Vit
 Article: KD31320



KD+ Pipe collar 10-24
KD+ Rörmanschett
 Article: KD21010



KD+ Pipe collar 15-38
KD+ Rörmanschett
 Article: KD21015



KD+ Pipe collar 28-50
KD+ Rörmanschett
 Article: KD 21028



KD+ Pipe collar 50-75
KD+ Rörmanschett
 Article: KD 21050



KD+ Pipe collar 75-110
KD+ Rörmanschett
 Article: KD21075



KD+ Pipe collar duo cc60 12-35
KD+ Rörmanschett
 Article: KD 21060



KD+ Inner corner
KD+ Innerhörn
 Article: KD21001



KD+ Outer corner
KD+ Ytterhörn
 Article: KD21002



KD+ Sealing strip 30m
KD+ Tätremsa
 Article: KD21003



KD+ Butyl tape
KD+ Butylremsa
 Article: KD21004



KD+ Drain collar
KD+ Brunnsmanschett
 Article: KD21037



KD+ Primer 1kg
 Article: KD11001



KD+ Primer 4kg
 Article: KD11004

INSTALLATION INSTRUCTIONS FOR KD+ TRYGG AND PROJEKT FOIL SYSTEM



USING KD+ FOIL SYSTEM

KD+ Foil Trygg is installed using KD+ 2K Foil adhesive.

KD+ Foil Project is installed using KD+ 2K Foil adhesive or KD+ Sealing membrane.

Vapour penetration resistance:

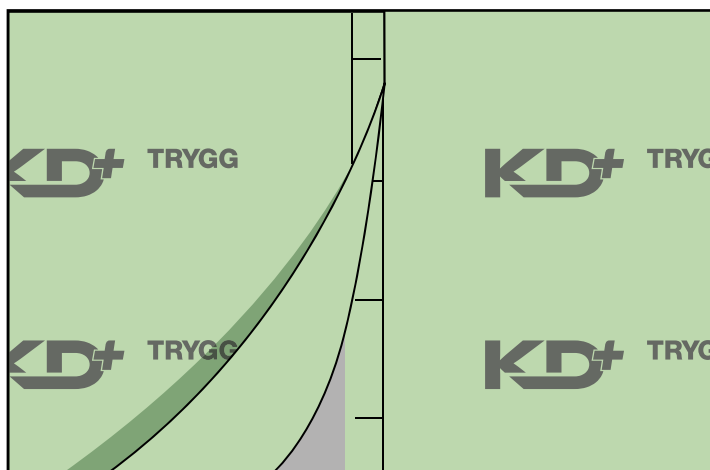
KD+ Foil system Safe 2 800 000 s/m

KD+ Foil system Project 1 520 000 s/m

Before you begin:

1. The substrate must be clean, dry and free of dust.
2. The substrate must be suitable for sealing and tiling.
3. Pre-treat with primer if necessary according to primer guide.
4. Make sure the gradient to floor drains is correct and done correctly.
5. Make sure that all perforations in the substrate are done correctly.

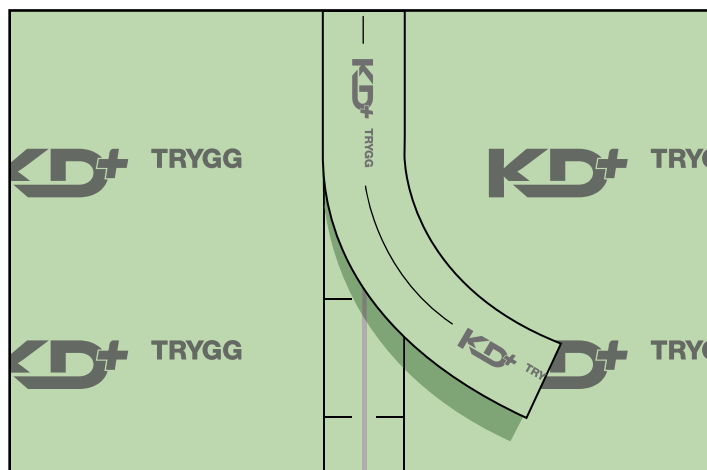
There are two ways to splice the foil seams:



Overlap or edge-to-edge

It is possible to splice the foil seams in 2 ways. Either with an overlap of at least 5 cm or edge-to-edge with a KD+ Sealing tape over the joint.

The general rule for all joints between KD+ Foil, KD+ Sealing tape, KD+ Internal and External Corners and KD+ Pipe collars is that there should always be at least 5 cm overlap. KD+ Foil has a marking 5 cm from the edges to show where the least overlap is.



Please Note:

ALL overlaps should be glued with KD+ 2K Foil adhesive or KD+ Splice adhesive. DO NOT use KD+ Sealing membrane to glue the joints.

DRYING TIMES

KD+ Foil system

Before tiling:

KD+ 2K Foil adhesive – 4 hrs

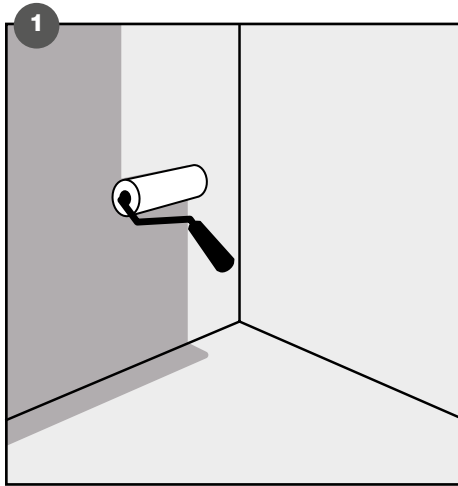
KD+ Sealing membrane – 24 hrs

KD+ Splice adhesive – 24 hrs

WALL

Installation and
splicing with:
KD+ 2K Foil adhesive

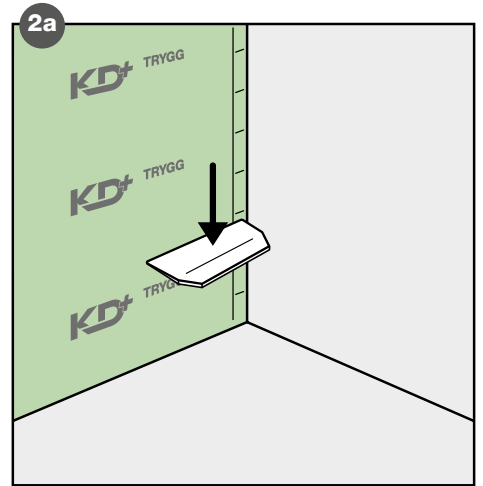
Please Note:
KD+ Foil Trygg should
NOT be installed with
KD+ Sealing membrane.



Apply the Foil adhesive

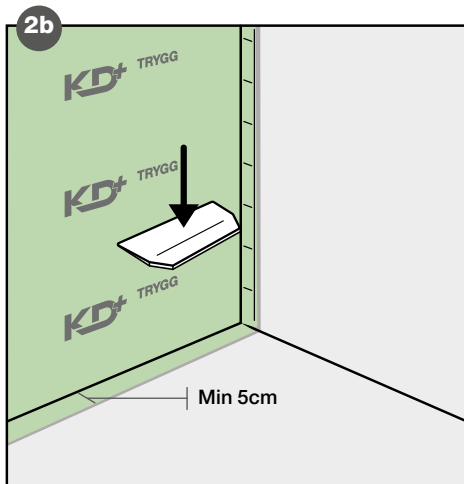
Apply KD+ 2K Foil adhesive to the surface with a roller (or suitable tool).

- Not more than you can install in about 15 min. The working time may vary due to external circumstances.) - Consumption approx. 0.8 kg/ m².
- KD+ 2K Foil adhesive can be diluted with 1.5 dl water/batch of 6.65 kg for ease of application.



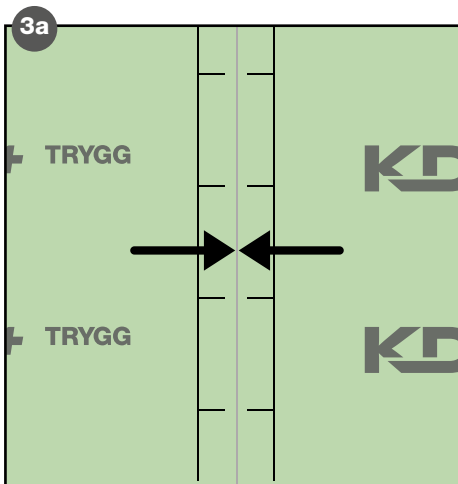
Install the seam: Edge-to-edge

Install the first seam foil in line, and press it down using the appropriate tool with round edges to avoid damaging the foil. Be sure that no bubbles or folds have formed. Excess adhesive should be smoothed out.



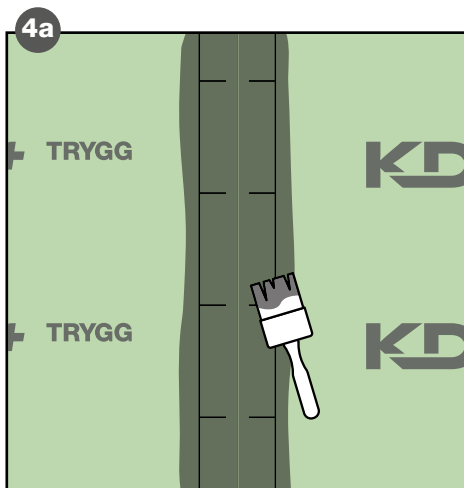
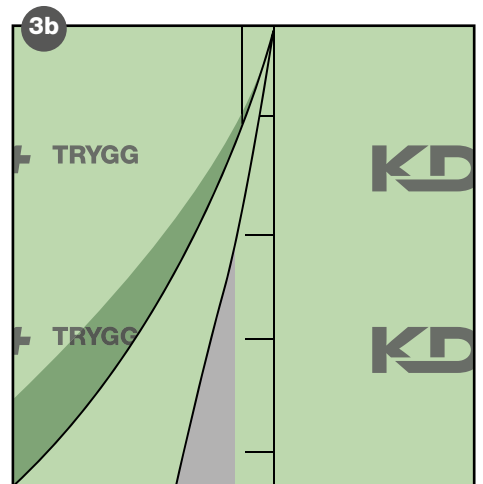
Install the seam: With overlap

If you want to splice against foil on the floor using the overlap approach, the wall foil should fold at least 5 cm onto the floor and be glued in the same way. Clean the inner corner of excess material.



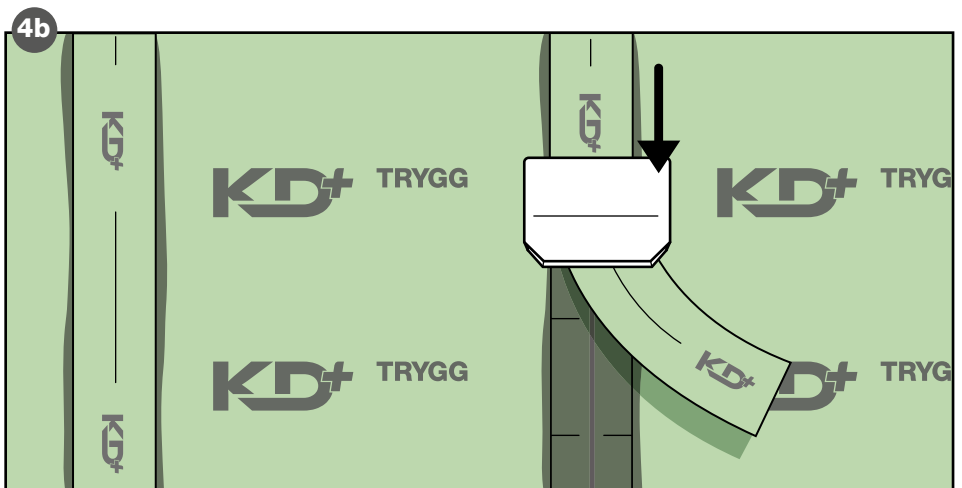
Keep installing the seams

Set the next seam in the same way – either edge-to-edge or with at least 5 cm overlap on the previous seam.



Splicing with KD+ Sealing strip with 2K Foil adhesive

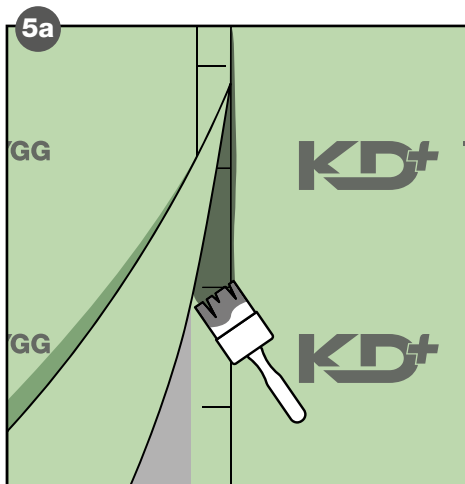
Apply KD+ 2K Foil adhesive with a roller or brush etc. over the joint.



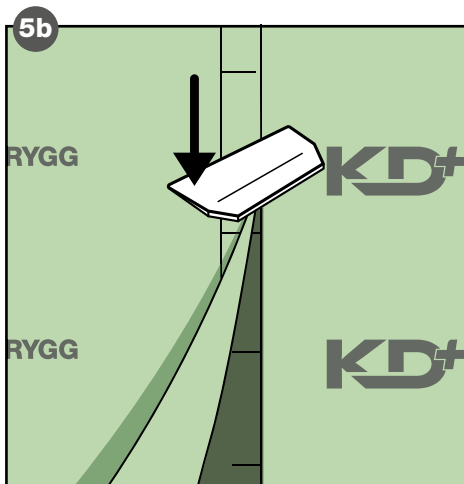
Install KD+ Sealing strip

Install KD+ Sealing strip in the middle of the joint in the wet adhesive and spread it using the appropriate tool without sharp edges so you do not risk damaging the KD+ Foil. Make sure you get full coverage of adhesive between strip and foil. Overlap at least 5 cm in both directions is essential here.

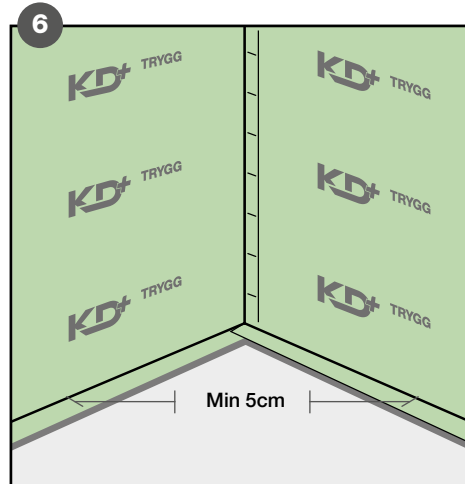
Excess adhesive should be smoothed out.



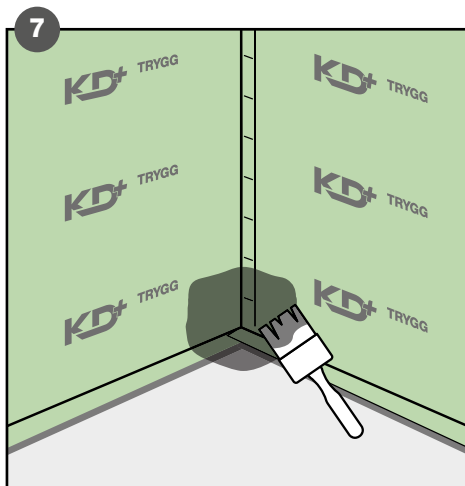
Splicing the overlap with KD+ 2K Foil adhesive
Apply with a brush or roller.



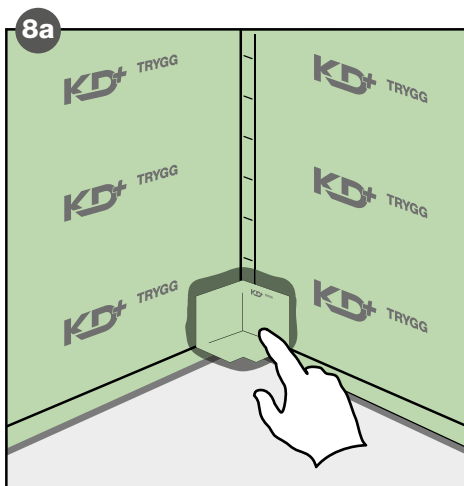
Splicing the overlap with KD+ 2K Foil adhesive
The joint is pressed together with the appropriate tool. Make sure full coverage is achieved and no bubbles/blisters are formed. Excess adhesive should be smoothed out.



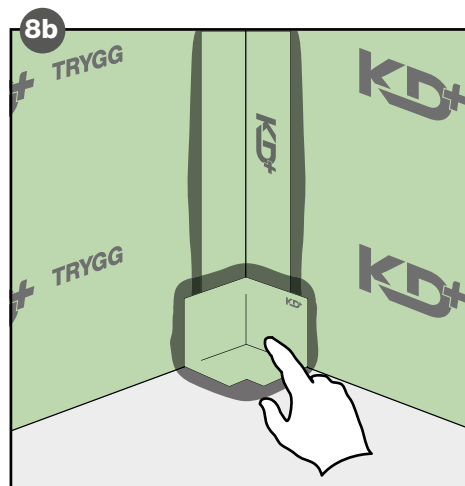
Wall/floor corners: Overlap
The fold-over on the floor should be done so that at least 5 cm of overlap is achieved at the joint with the floor foil.



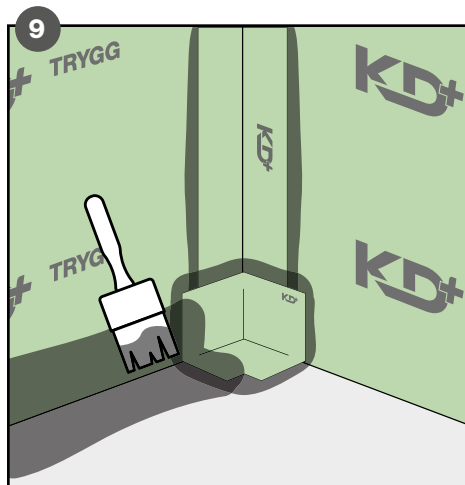
Corner: Wall/floor corner overlap
Apply KD+ 2K Foil adhesive with a brush etc. or KD+ Splice adhesive with a cartridge sprayer and adhesive spreader on the entire surface that KD+ Internal corner and outer corner should cover.



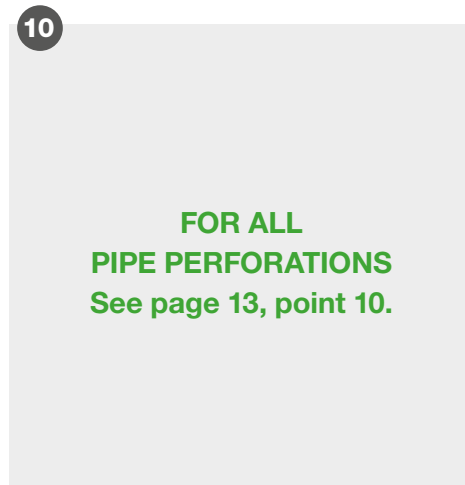
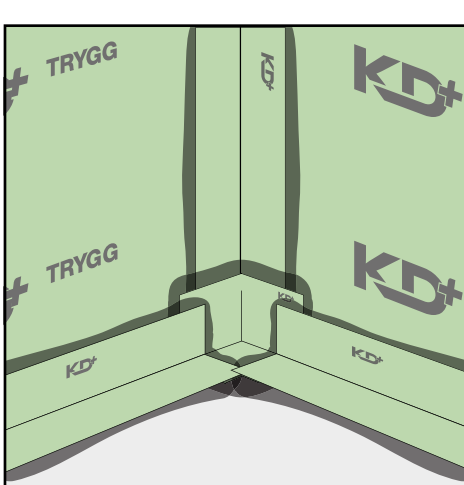
Install the corner: Overlap
KD+ Inner corners and KD+ Outer corners should be installed at all wall/wall/floor corners. Install the KD+ Internal corner in the wet adhesive and spread it using the appropriate tool. Make sure that full coverage is achieved and no blisters form. Excess adhesive should be smoothed out.



Corner: Edge-to-edge
Install KD+ Internal corners and KD+ External corners the same as when overlapping. See point 8a. Installation of KD+ External corners is done according to the same principle.



Wall/floor corners: Edge-to-edge, with sealing strip
Apply KD+ 2K Foil adhesive with a brush etc. on at least the entire surface that KD+ Sealing strip should cover. Cut KD+ Sealing strip to the correct length with at least 5 cm overlap with KD+ Foil, KD+ Internal corner or KD+ External corner. Spread firmly and make sure full coverage is achieved and no blisters or folds are formed.

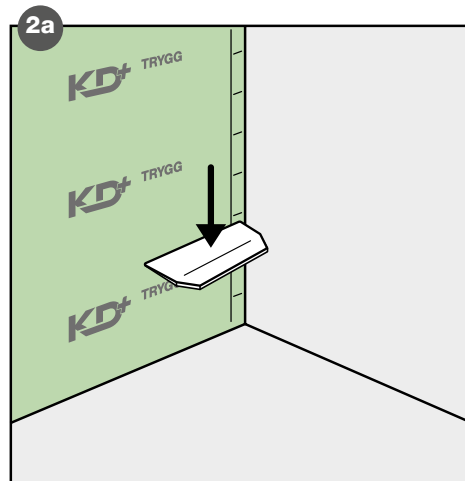
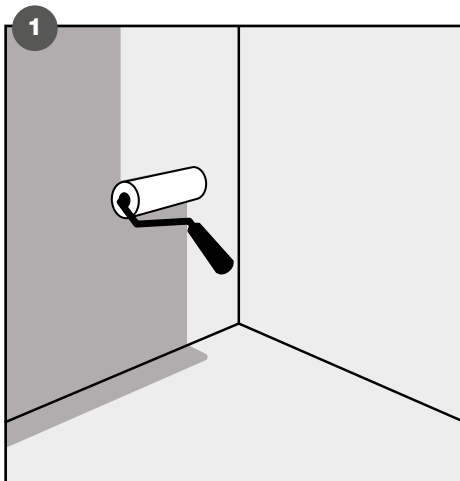


**FOR ALL
PIPE PERFORATIONS**
See page 13, point 10.

WALL

By applying
KD+ Foil adhesive
when splicing

Please Note:
KD+ Foil Trygg should
NOT be installed with
KD+ Sealing membrane.



Apply

Apply KD+ 2K Foil adhesive or KD+ Sealing membrane with roller or suitable tool to the surface.

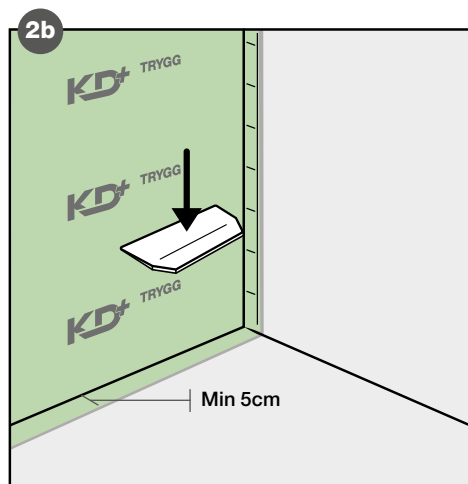
- No more than you can install in about 15 minutes. The working time may vary due to external circumstances.)

- Consumption approx. 0.8 kg/m².

- KD+ 2K Foil adhesive can be diluted with 1.5 dl water/batch of 6.65 kg for ease of application.

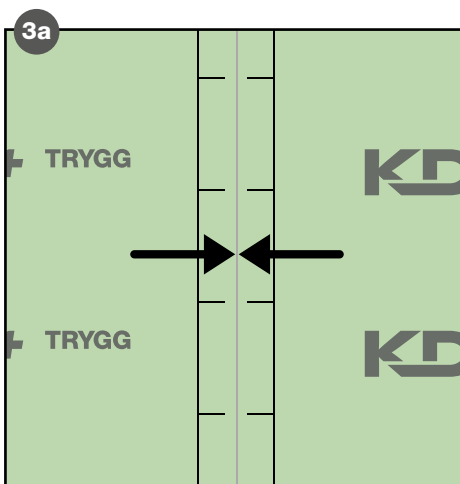
Install the seam: Edge-to-edge

Install the first seam foil in line, and press it down using the appropriate tool with round edges to avoid damaging the foil. Be sure that no bubbles or folds have formed. Excess adhesive should be smoothed out.



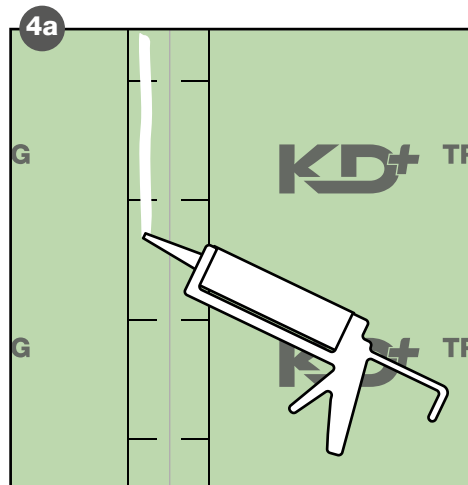
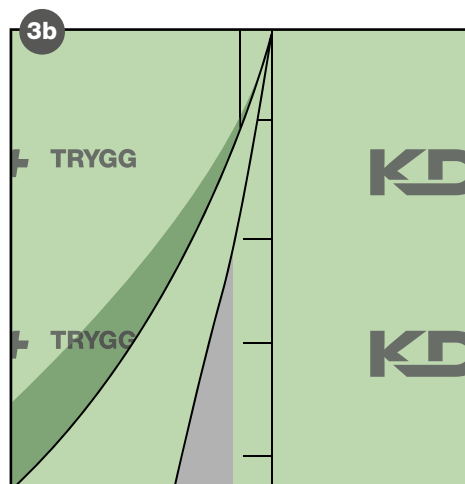
Install the seam: With overlap

If you want to splice against foil on the floor using the overlap approach, the wall foil should fold at least 5 cm onto the floor and be glued in the same way. Clean the inner corner of excess material.



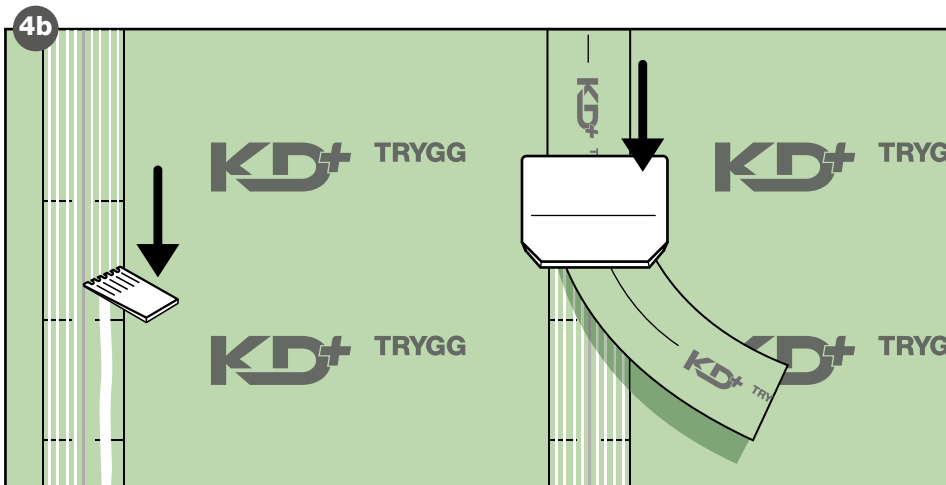
Continue to install the seams

Set the next seam in the same way – either edge-to-edge or with at least 5 cm overlap on the previous seam.



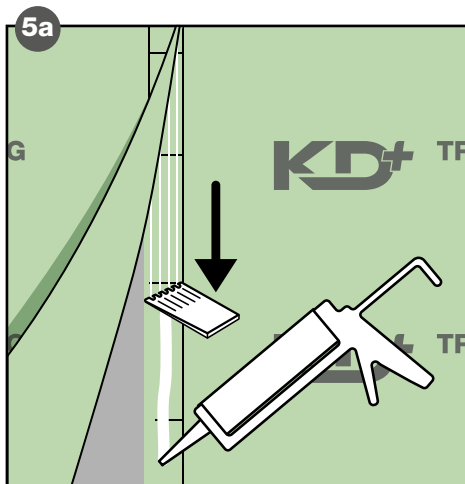
Splicing with KD+ Sealing tape with KD+ Foil adhesive

Apply KD+ Foil adhesive using a cartridge sprayer and smooth out using an adhesive spreader again to a thickness of 0.5 mm.



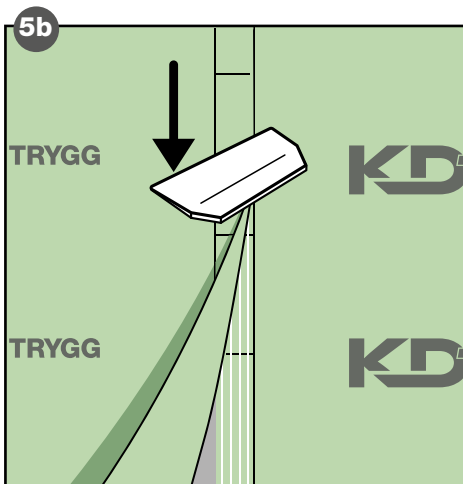
Splicing with KD+ Sealing strip with KD+ Splice adhesive

Install KD+ Sealing strip in the middle of the joint in the wet adhesive and spread it using the appropriate tool without sharp edges so you do not risk damaging the KD+ Foil. Make sure you get full coverage of adhesive between strip and foil. Overlap at least 5 cm in both directions is essential here. Excess adhesive should be smoothed out.



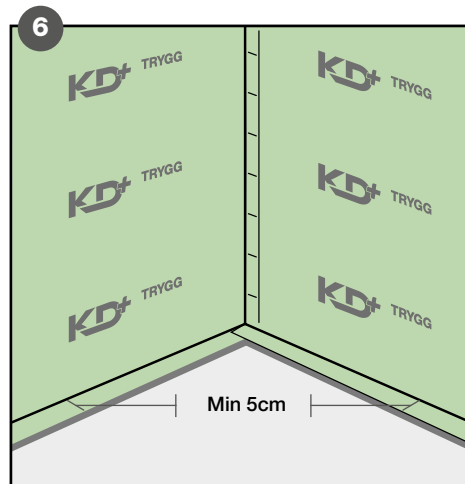
5a Splicing the overlap with KD+ Splice adhesive

KD+ Splice adhesive is applied with a cartridge sprayer and re-sealed with an adhesive spreader to 0.5 mm thickness throughout the joint. Remove KD+ Sealing membrane that has penetrated before KD+ Splice adhesive is applied.



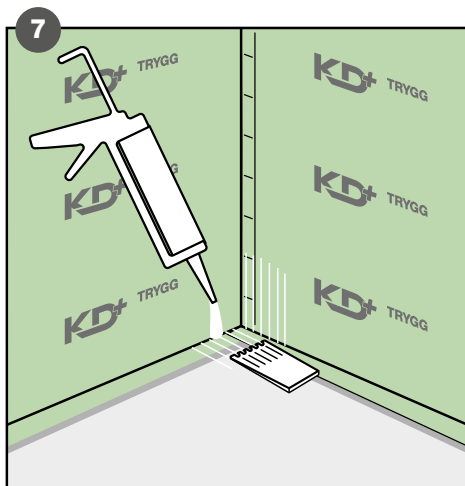
5b Splicing the overlap with KD+ Splice adhesive

The joint is pressed together with the appropriate tool. Make sure full coverage is achieved and no blisters have formed. Excess adhesive should be smoothed out.



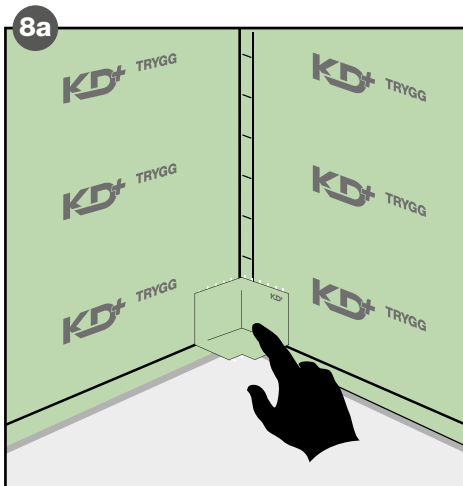
6 Wall/floor corners: Overlap

The fold-over on the floor should be done so that at least 5 cm of overlap is achieved at the joint with the floor foil.



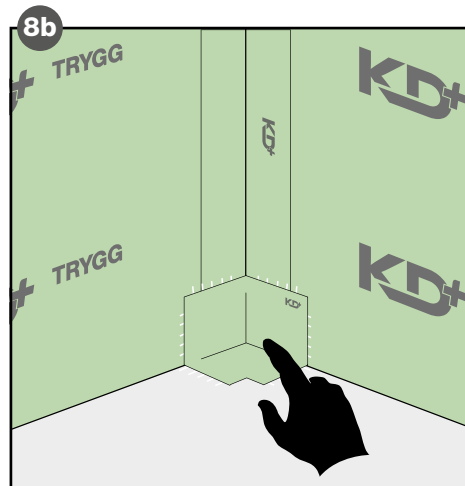
7 Corner: Wall/floor corner overlap

Apply KD+ Splice adhesive with a cartridge sprayer and adhesive spreader to the entire surface that KD+ Inner corner and Outer corner should cover.



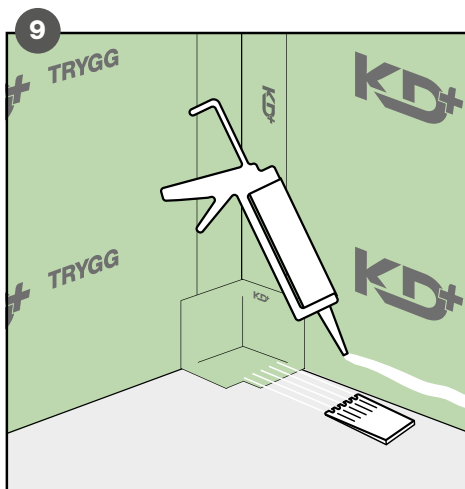
8a Install the corner: Overlap

KD+ Inner corners and KD+ Outer corners should be installed at all wall/wall/floor corners. Install the KD+ Inner corner in the wet adhesive and spread it using the appropriate tool. Make sure that full coverage is achieved and no blisters form. Excess adhesive should be smoothed out.



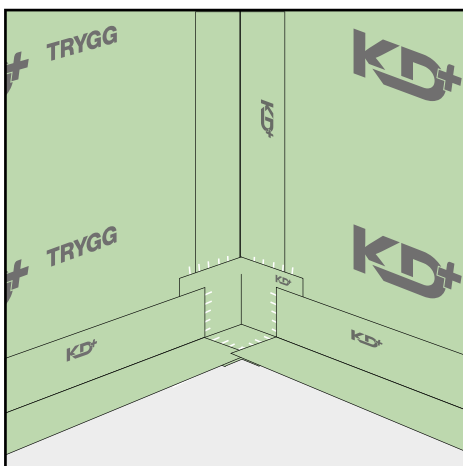
8b Corner: Edge-to-edge

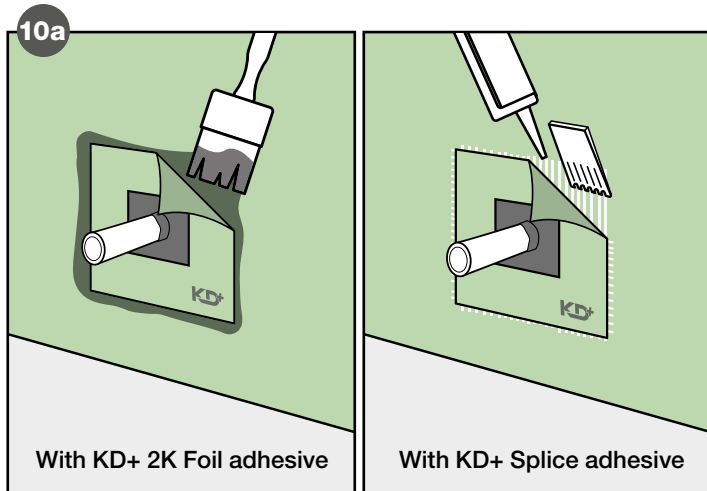
Install KD+ Inner corners and KD+ Outer corners the same as when overlapping. See point 8a. Installation of KD+ Outer corners is done according to the same principle.



9 Wall/floor corners: Edge-to-edge, with sealing strip

Apply KD+ Splice adhesive with a cartridge sprayer and adhesive spreader to the entire surface that KD+ Sealing strip should cover. Cut to KD+ Sealing strip TO the correct length with at least 5 cm overlap with KD+ Foil, KD+ Inner corner or KD+ Outer corner. Spread out, and make sure full coverage is achieved and no blisters or creases form.

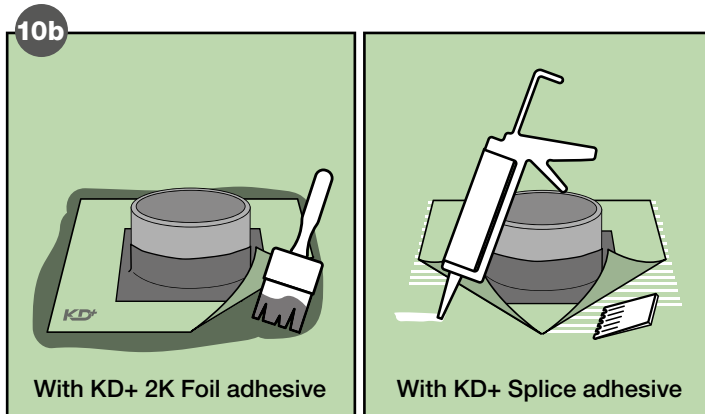




Sealing pipe perforations, WALLS

All pipe perforations to be sealed should have the pipes fixed, protrude perpendicular to the substrate and the pipes should be cleaned.

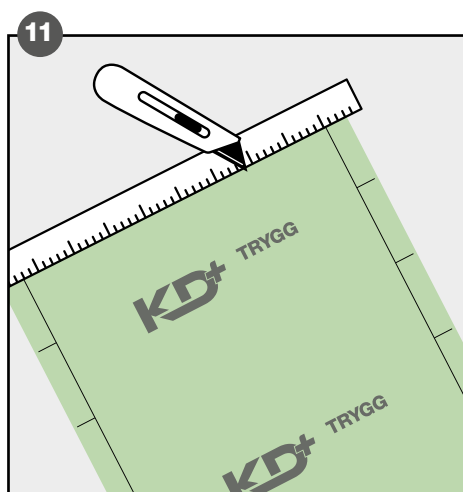
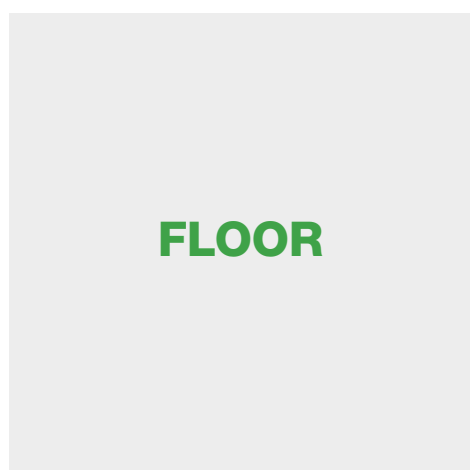
1. Choose the appropriate size of KD+ Pipe collar.
2. Apply KD+ 2K Foil adhesive or KD+ Splice adhesive to **THE FOIL**.
3. Thread the sleeve gently over the pipe and press firmly so full backfilling is achieved. Excess adhesive should be smoothed out.



Sealing pipe perforations: FLOOR

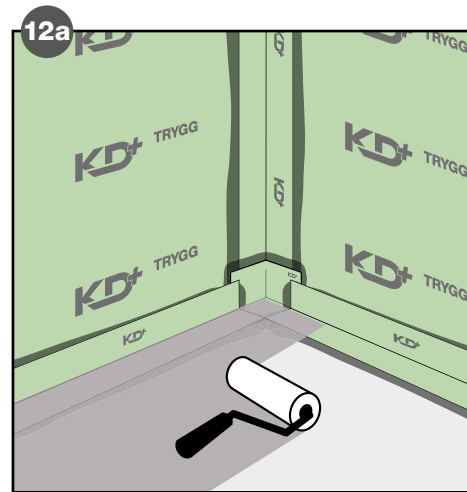
All pipe perforations to be sealed should have the pipes fixed, protrude perpendicular to the substrate and the pipes should be cleaned.

1. Choose the appropriate size of KD+ Pipe collar.
2. Apply KD+ 2K Foil adhesive or KD+ Splice adhesive to **THE FOIL**.
3. Thread the KD+ pipe collar gently over the tube into the wet adhesive, and press firmly so full backfill is achieved. Excess adhesive should be smoothed out.
4. KD+ Pipe collar 75-110, KD+ 2K Foil adhesive or KD+ Splice adhesive should also be applied to the pipe so it reaches over the sleeve. Recommended for all pipe collars.



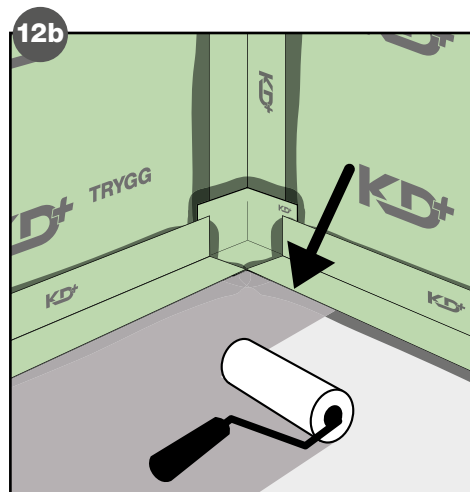
Prepare the foil

Cut to the KD+ Foil seams so no joints ends up in the area where the drain sleeve is to be mounted. No joint between KD+ Foil may end up over KD+ Drain collar.



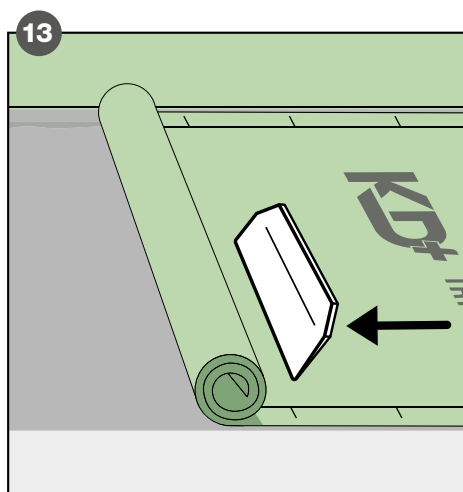
Install the foil with KD+ 2K Foil adhesive

Install KD+ Foil Projekt and Trygg on floors with KD+ 2K Foil adhesive. Apply KD+ 2K Foil adhesive using the appropriate tool. Do not apply it to a larger surface than you can install in about 15 minutes. The working time may vary depending on the external circumstances. Consumption approx. 0.8 kg/m².



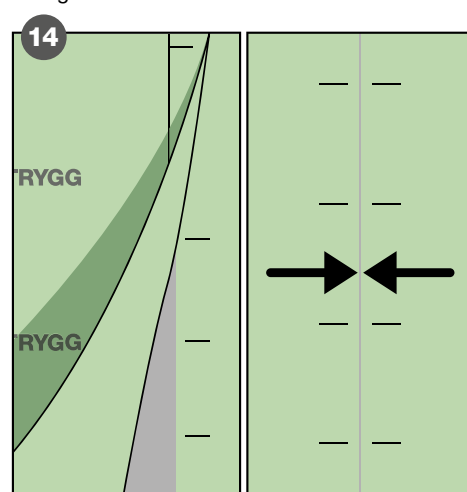
Install the foil with KD+ Sealing membrane

Install KD+ Foil Projects can be done using KD+ Sealing membrane. Then overlap and joints should be glued with KD+ Splice adhesive or KD+ 2K Foil adhesive. KD+ Sealing membrane must not be used in joints and overlaps.



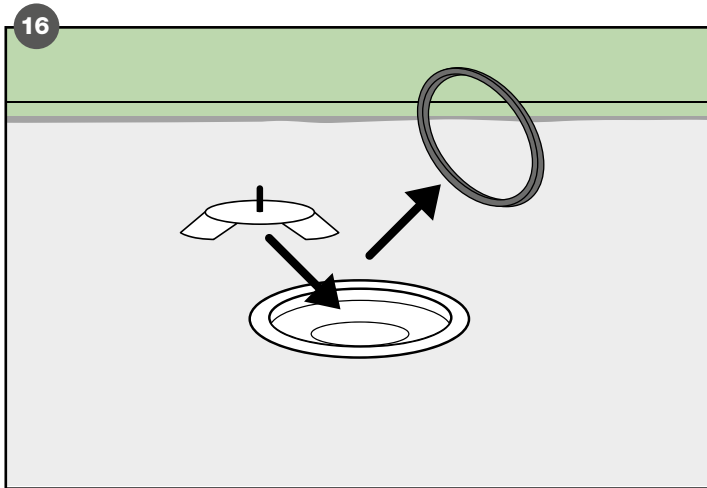
Installing foil on floors

Install the first foil seam and press it using the appropriate tool with round edges to avoid damage. Be sure that no bubbles or folds have formed. Make sure full coverage is achieved. Excess adhesive should be smoothed out.



Keep installing the seams

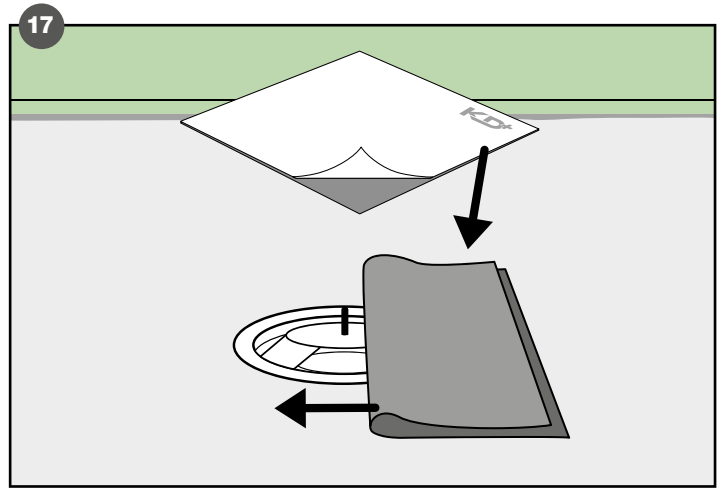
Set the next seam in the same way – either edge-to-edge or with overlap the same way as installing foil on walls. Splicing occurs in the same way as on walls.



Floor drain connection:

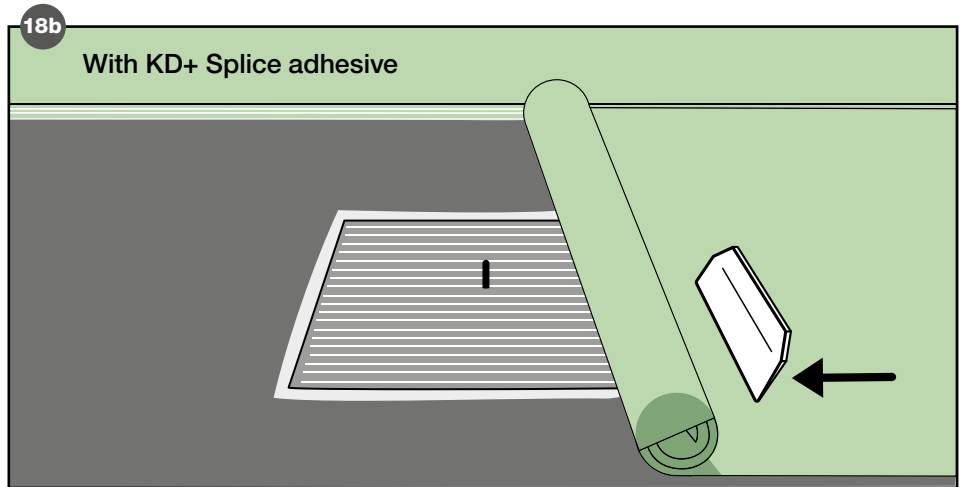
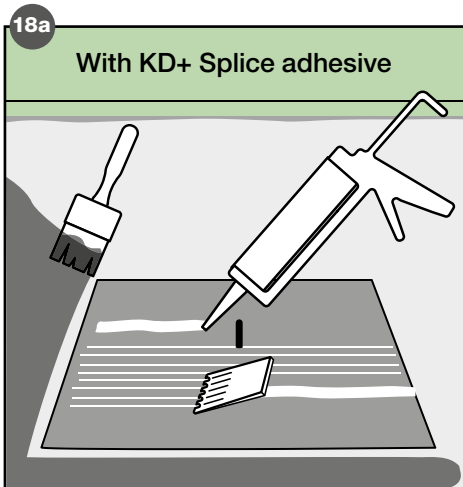
PURUS floor drain with spring clamp ring

Remove the clamp ring. Place the foot of the Purus knife in the drain. Center the KD+ Drain collar over the drain.



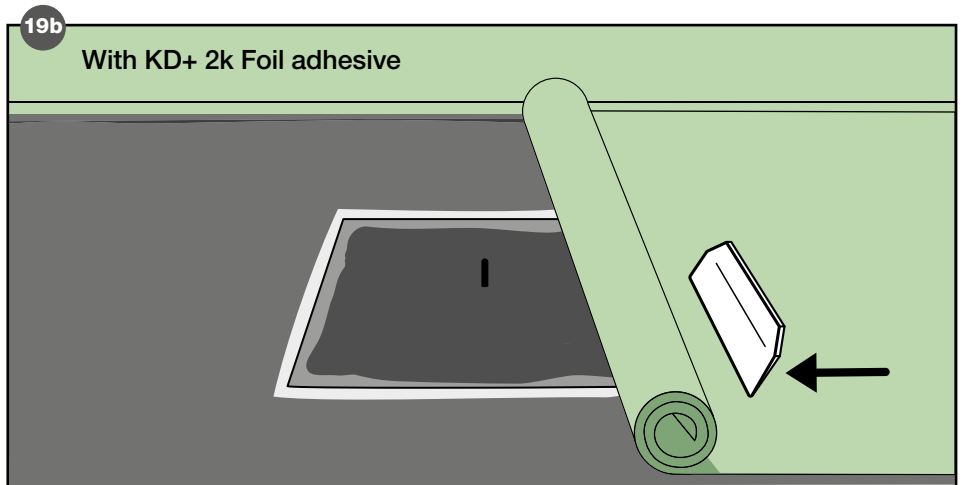
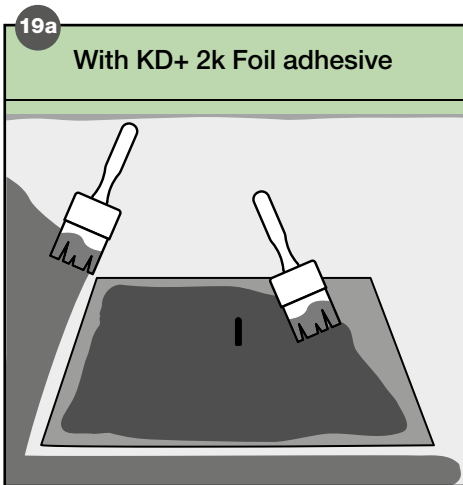
Floor drain connection: PURUS floor drain with clamp ring

Remove the protective paper on half the sleeve and spread it without blisters or creases forming. Repeat with the second half in the same way.



Floor drain connection: Installing foil on the floor

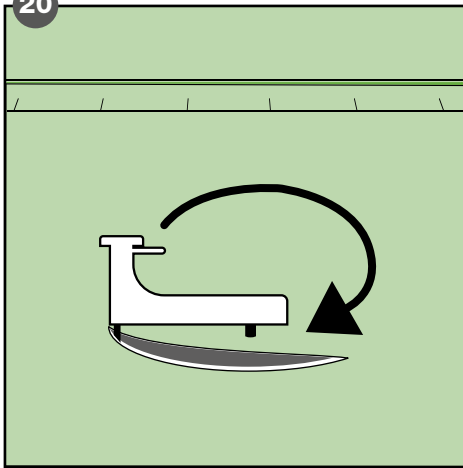
Apply KD+ Sealing membrane to the surface around the sleeve. Apply KD+ Splice adhesive to the drain collar and fold-over onto wall foil. No joint between KD+ Foil may end up over KD+ Drain collar. Spread KD+ Foil into the fresh material so no blisters are formed and full backfilling is achieved.



Floor drain connection: Installing foil on the floor

Apply KD+ 2K Foil adhesive to the entire surface (including the drain collar and the fold-over onto the wall foil) No joint between KD+ Foil should end up over the KD+ Drain collar. Spread KD+ Foil into the fresh material so no blisters are formed and full backfilling is achieved.

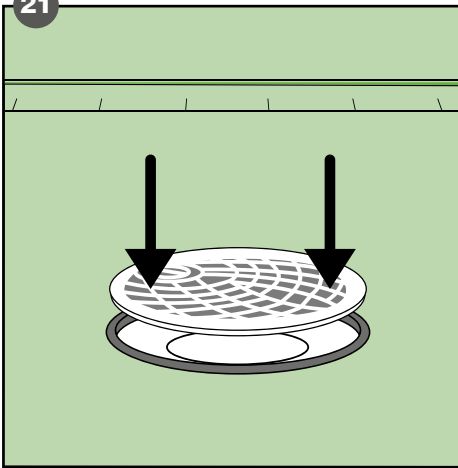
20



Set the Purus knife and cut

Cut the hole with the Purus knife and bring the foot of the Purus knife from the floor drain.

21



Install the clamp ring

Install/push down the clamp ring using the plastic strainer that comes with the drain and Make sure that the clamp ring is in the correct position.

See page 24 of the Installation Instructions for other types of floor drains, or check out www.kdplus.se

INSTALLATION INSTRUCTIONS FOR KD+ ROLLBART WET SYSTEM



USING KD+ ROLLBART SYSTEM

KD+ Rollable system can be used on all solid constructions and sheet constructions on walls in wet zone 2.

Vapour penetration resistance KD+ Rollbartsystem $>2\ 622\ 000\ \text{s/m}$.

Before you begin:

1. The substrate must be clean, dry and free of dust.
2. The substrate must be suitable for sealing and tiling.
3. Pre-treat with primer if necessary according to Primer Guide.
4. Make sure the gradient to floor drains are done correctly.
5. Make sure that all perforations in the substrate are done correctly.

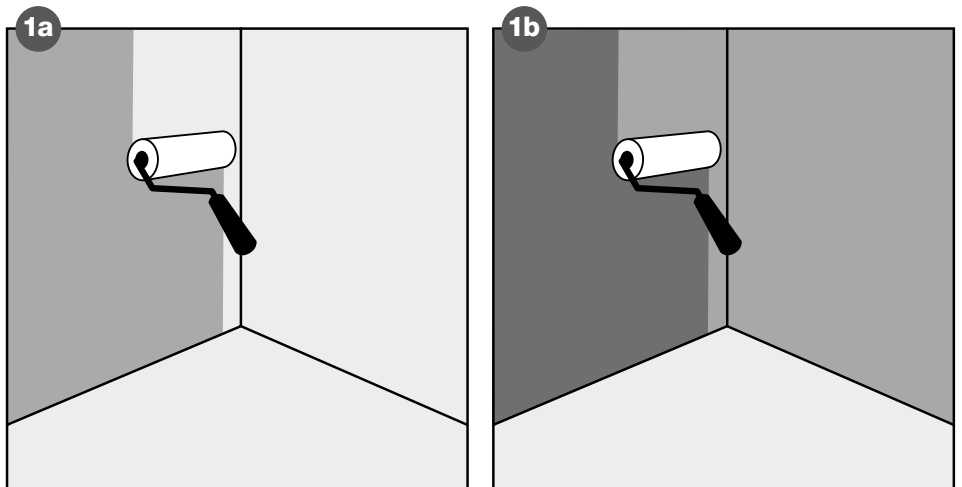
DRYING TIMES

Approximate drying times at 23 °C and 50% RF.

KD+ Vapour barrier 1st layer	- about 30 min
KD+ Vapour barrier 2nd layer	- about 60 min
KD+ Sealing membrane 1st layer	- about 1 hr
KD+ Sealing membrane 2nd layer	- at least 12 hr

Please note: On floors, it must dry long enough to withstand walking before applying the next layer.

WALL
Rollable system

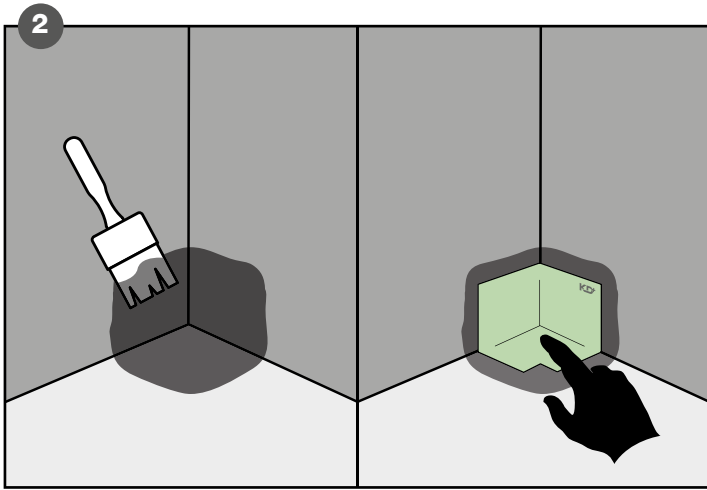


KD+ Vapour barrier is applied in 2 layers

The first layer should dry **at least 30 min** before applying the second layer.

The second layer should dry **at least 60 min**. Total consumption not less than 0.3 kg/m².

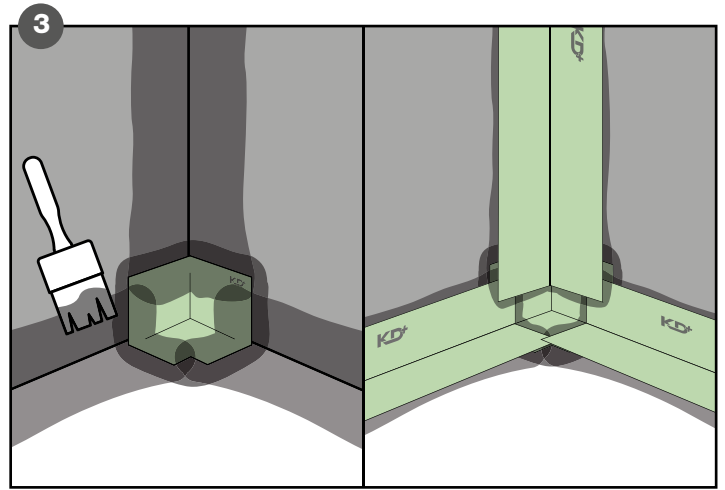
Drying times may vary depending on temperature and humidity etc.



Install Sealing membranes in corners

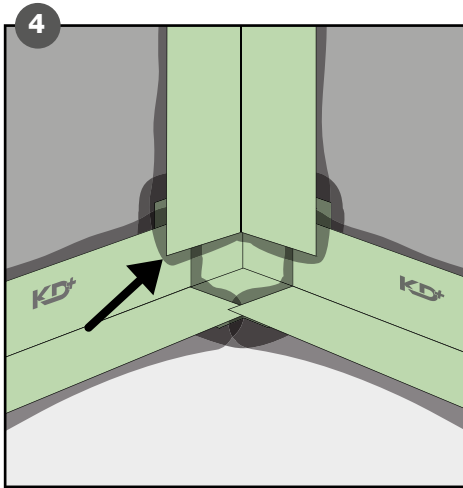
Apply a flowing layer of KD+ Sealing membrane in corners with a small roller/brush or another suitable tool. Install KD+ Inner corner/KD+ Outer corner in wet membrane. Make sure that no blisters or creases form and that all air is pushed out below the seals.

This should be done within 12 hours of applying KD+ Vapour barrier.



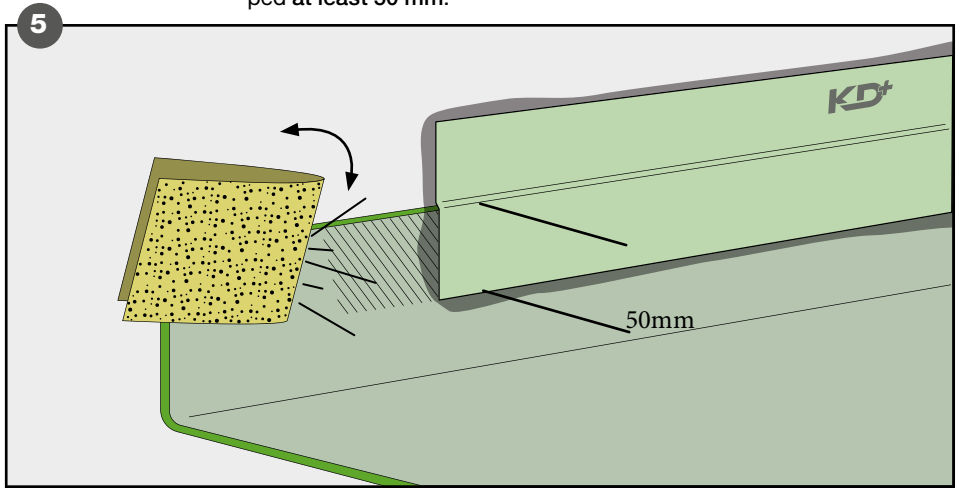
Install KD+ Sealing strip at floor/wall corners

Cut KD+ Sealing strips to the right lengths. Apply a flowing layer of KD+ Sealing membrane along the floor/wall corner, wall/wall corner and plate joints. Install KD+ Sealing strips in wet membrane. Make sure that no blisters or creases form and that all air is pushed away under the strips. Use a small roller/brush or another suitable tool. KD+ Inner/outer corners and KD+ Sealing strips should always be overlapped at least 50 mm.



Always overlap the Sealing strip

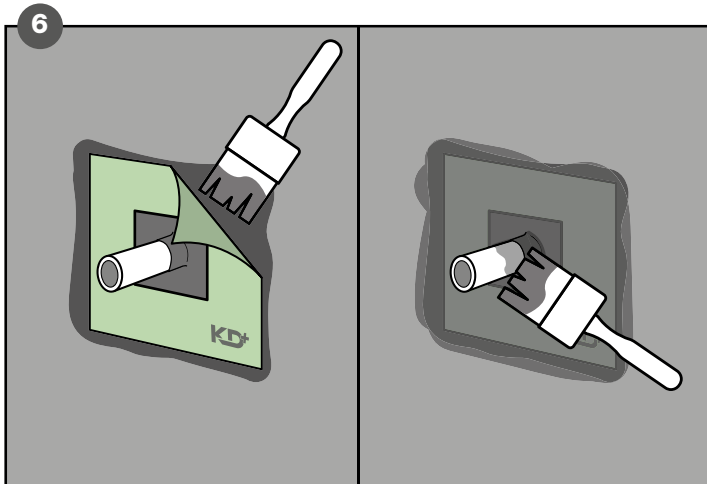
KD+ Sealing strip along wall/wall corners and sheet joints should always overlap horizontal. Sealing strips along floor/wall corners or Sealing strips over folded floor mats.



Installing KD+ Sealing strips on plastic mats on floors

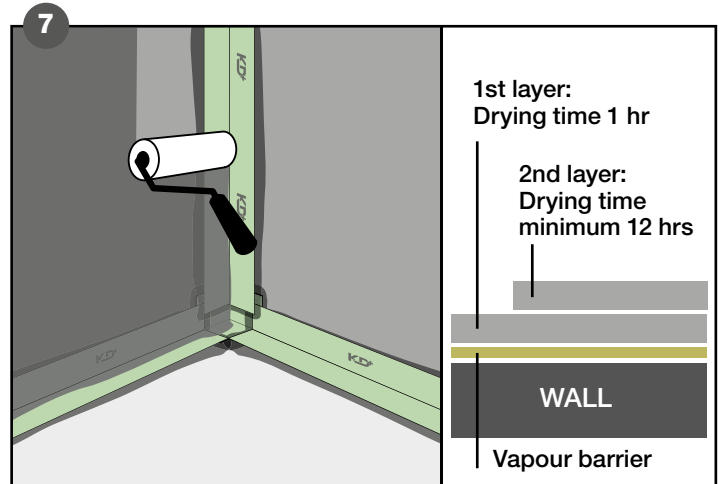
In the case of plastic mats on floors with fold-overs, KD+ Sealing strip is installed over the mat's edge using KD+ 2K Foil adhesive or KD+ Splice adhesive. Make sure that no blisters or folds form.

- The overlap on plastic mats should be at least 50 mm.
- The edge of the mat must be cleaned and roughened with sand paper on the part covered by KD+ Sealing strip.



Sealing of pipe perforations

All pipe perforations to be sealed should have the pipes fixed, protrude perpendicular to the substrate and the pipes should be cleaned. Choose the appropriate size of KD+ Pipe collar. Apply KD+ Sealing membrane to the surface of the collar and outward on the pipe. Thread the collar gently over the pipe and press the sleeve so full backfill is achieved and no creases are formed. Add another layer of KD+ Sealing membrane to the collar and outward onto the pipe.

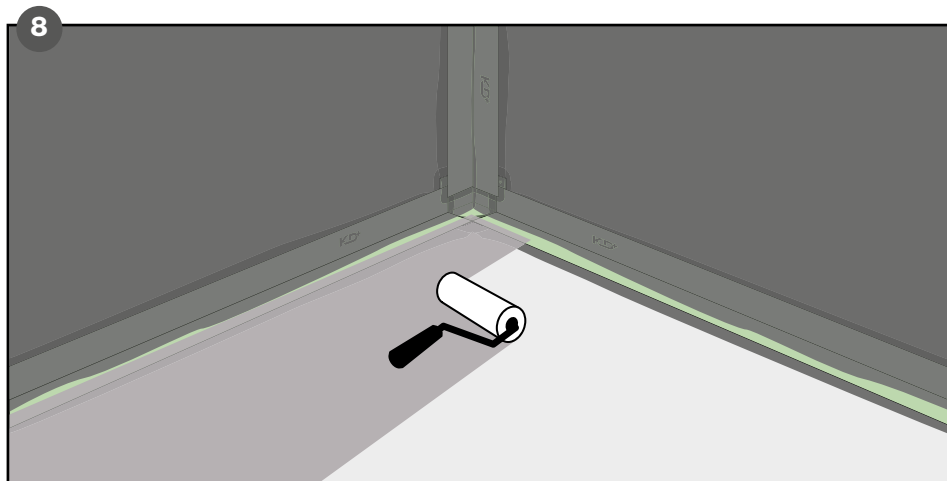


Application of KD+ Sealing membrane

After all the seals have been performed, KD+ Sealing membranes are applied in 2 layers using 0.5 kg/m² each. Total consumption not less than 1 kg/m². The appropriate tool is a roller and/or brush. The first layer should dry about 1 hour before layer 2 is put on. The second layer should dry at least 12 hours before tiling can be done. Drying times may vary depending on temperature and humidity etc.

FLOOR

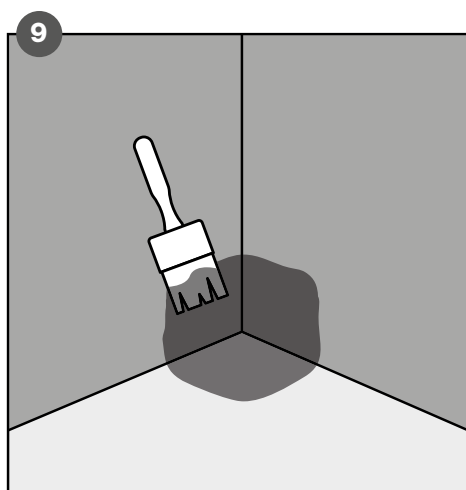
Rollable system



Apply KD+ Vapour barrier to the floor in 2 layers

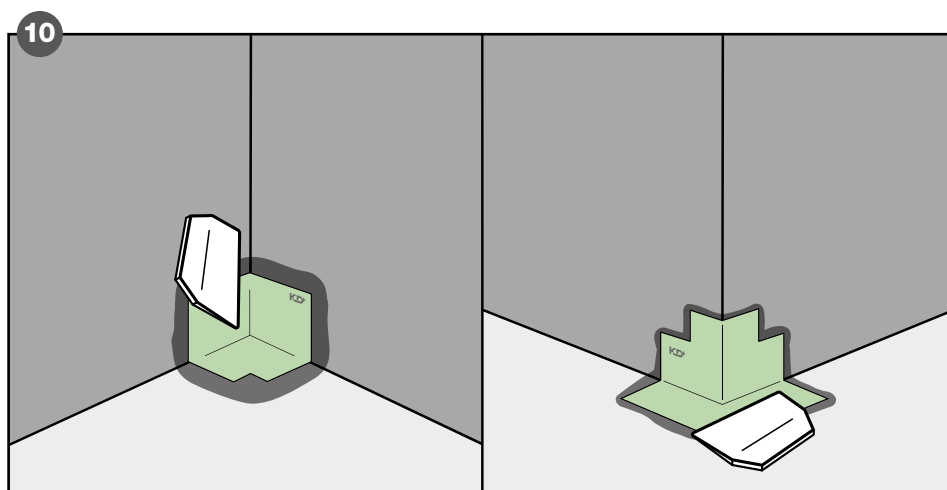
The first layer should dry at least 30 minutes before the second layer is applied. The second layer should dry at least 60 min. Total consumption not less than 0.3 kg/m². Drying times may vary depending on temperature and humidity etc.

– If not all the seals along floor/wall corners are done while sealing the walls, this must be done now. If they are already done, go to point 13.



Apply the sealing membrane to corners

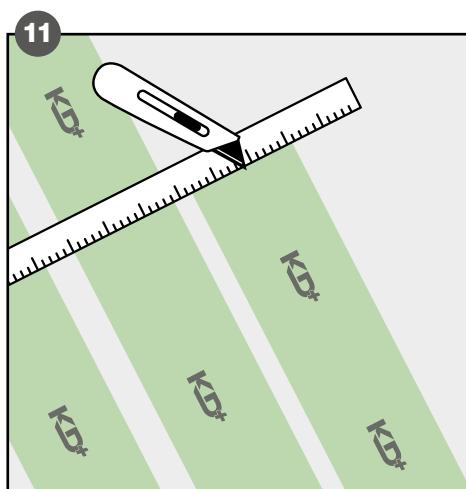
Apply KD+ Sealing membrane to the entire surface so KD+ Inner corner or Outer corner is covered.



Installing corners in sealing membranes

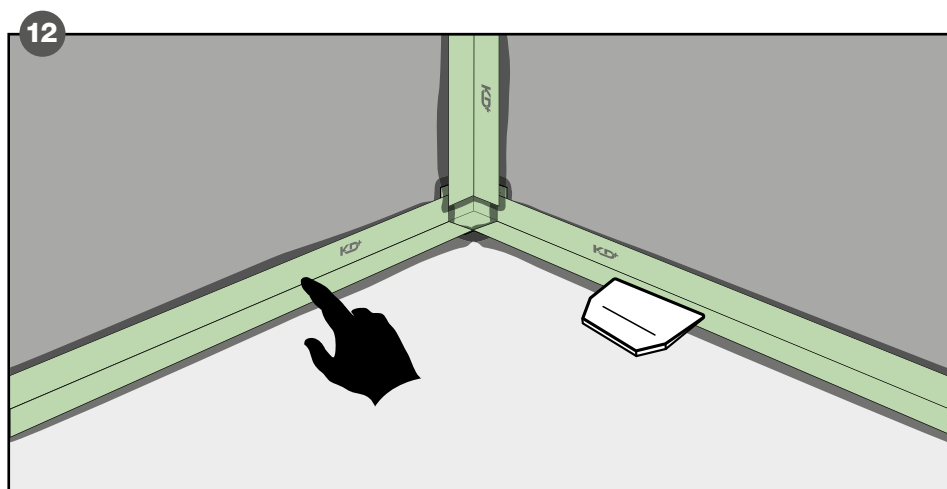
KD+ Inner corners and KD+ Outer corners should be installed at all wall/wall/floor corners. Install the KD+ Inner Corner in the wet sealing membrane and spread with the appropriate tool. Make sure that full coverage is achieved and no blisters form. Excess KD+ Sealing membrane that penetrates should be smoothed out.

Installation of KD+ Outer corners is done according to the same principle.



Preparing the sealing strips for floor/wall corners

Cut KD+ Sealing strips to the right lengths. Apply a flowing layer of KD+ Sealing membrane at a floor/wall corner.



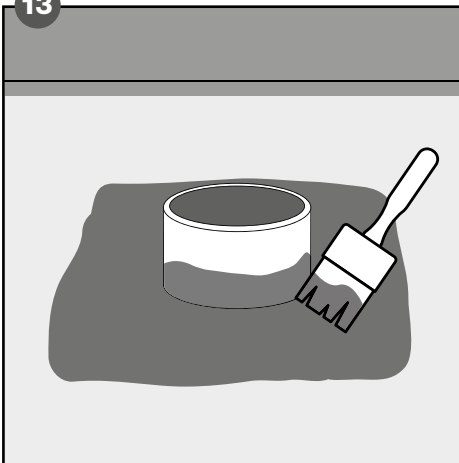
Installing Sealing strips

Install KD+ Sealing strips in wet membrane. Make sure that no blisters or creases form and that all air is pushed away under the strips. Use a small roller/brush or another suitable tool. KD+ Inner/outer corners and KD+ Sealing strips should always be overlapped at least 50 mm.

PERFORATIONS IN FLOORS

In floor surfaces, no other perforations than drains and floor drains should exist.

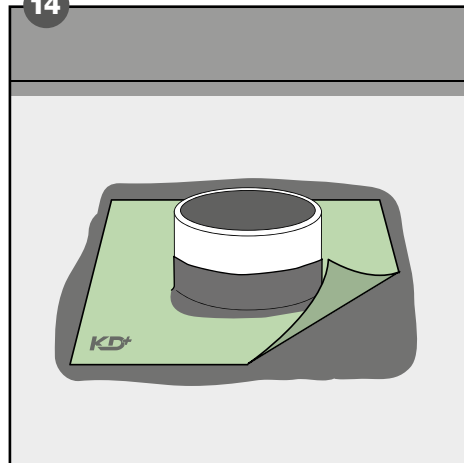
13



Apply the sealing membrane

Apply KD+ Sealing membrane to the entire surface so the collar covers up and around the pipe.

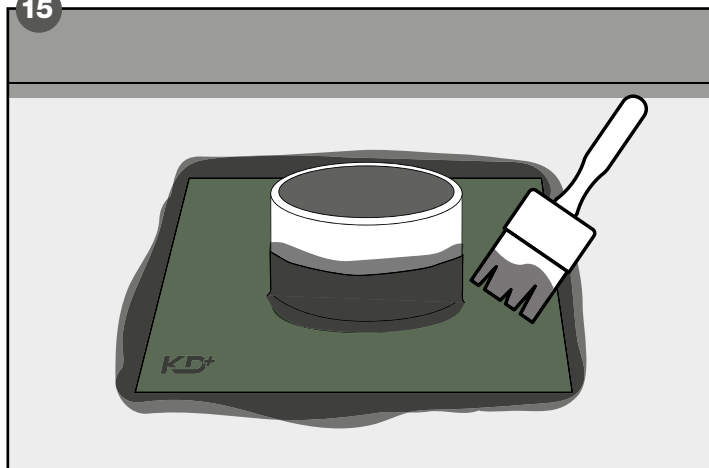
14



Install the sleeve

Choose the appropriate size of KD+ Pipe collar. Thread it gently over the pipe and press the collar into the wet membrane so full backfill is achieved. Excess adhesive should be smoothed out.

15

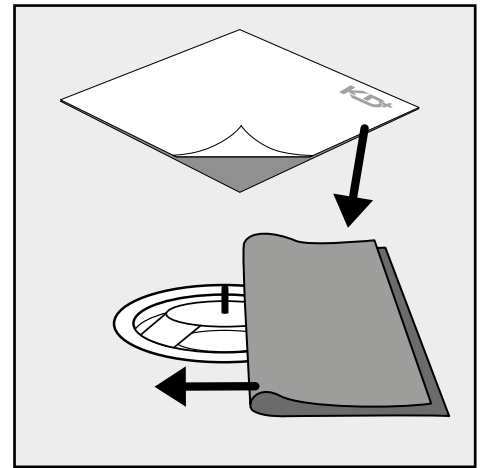
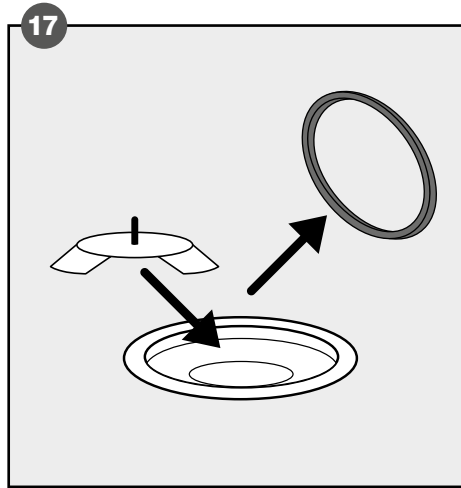


Sealing membranes on sleeves

Apply KD+ Sealing membrane over the entire collar and up around the pipe.

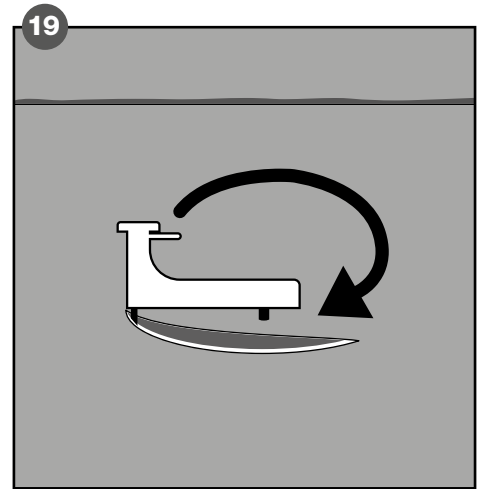
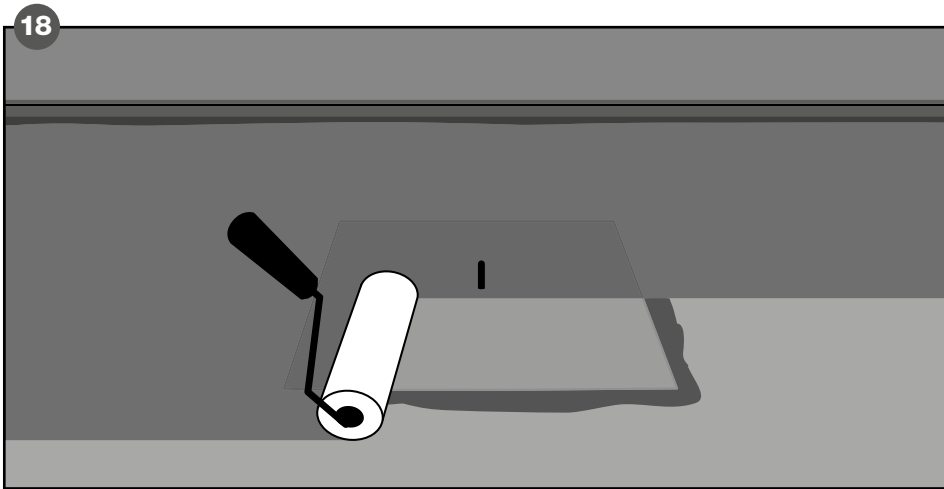
FLOOR DRAIN

Sealing drain connections
Other types of floor drains are listed in
*Installation of Alternative
Floor drains* page 24.



Floor drain connection: PURUS floor drain with spring clamp ring

Remove the clamp ring. Place the foot of the Purus knife in the drain. Center the KD+ Drain collar over the drain. Remove the protective paper on half the collar and spread it without blisters or creases forming. Repeat with the second half in the same way.

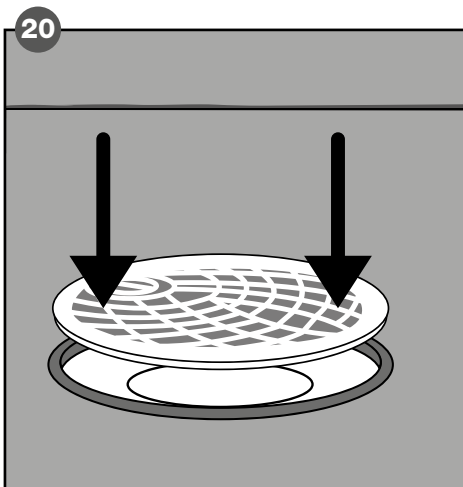


Apply KD+ Sealing membrane in 2 layers

After all the seals and KD+ Drain collar have been installed, KD+ Sealing membrane is applied in 2 layers using 0.5 kg/m² each. Total consumption not less than 1 kg/m². The appropriate tool is a roller and/or brush. The first layer should dry about 1 hour before layer 2 is put on. After the second layer, it should dry at least 12 hours before tiling can be done. Drying times may vary depending on temperature and humidity etc.

After the sealing membrane has dried

When the KD+ Sealing membrane has dried, holes can be cut using the Purus knife. Take the foot of the Purus knife out of the floor drain.



Install the clamp ring

Install the clamp ring using the plastic strainer that comes with the drain. Make sure that the clamp ring is in the correct position.

ALTERNATIVE FLOOR DRAINS

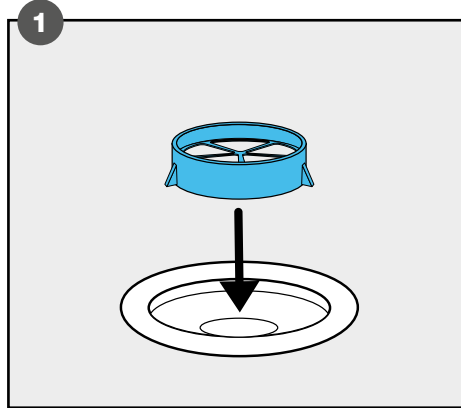
Floor drains close to walls

Installation instructions for connections
drains near walls can be found online:
www.kdplus.se

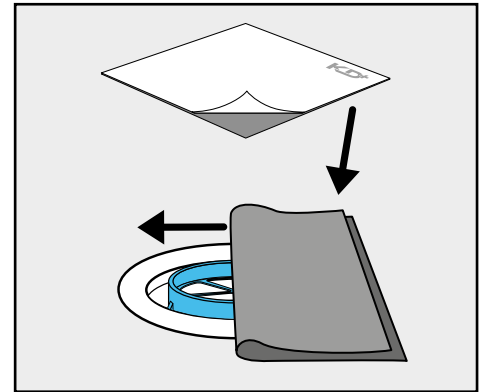
Please note:

For KD+ Rollable system, 2 layers should
KD+ Vapour barrier is first applied
according to the previous pages.

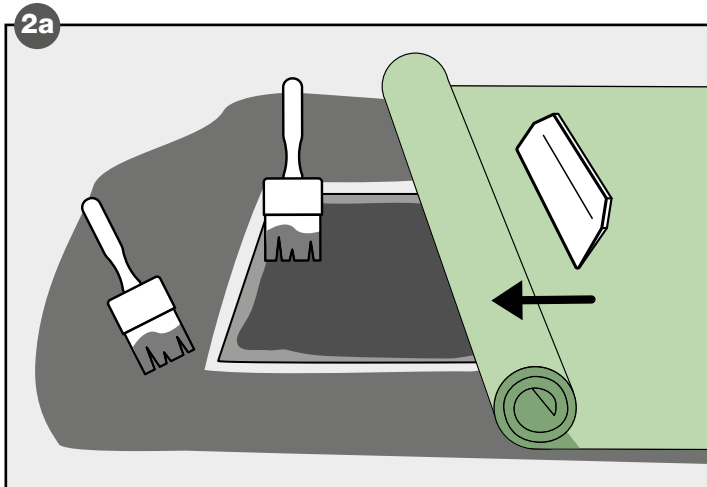
JAFO Floor drains with screwed clamp rings



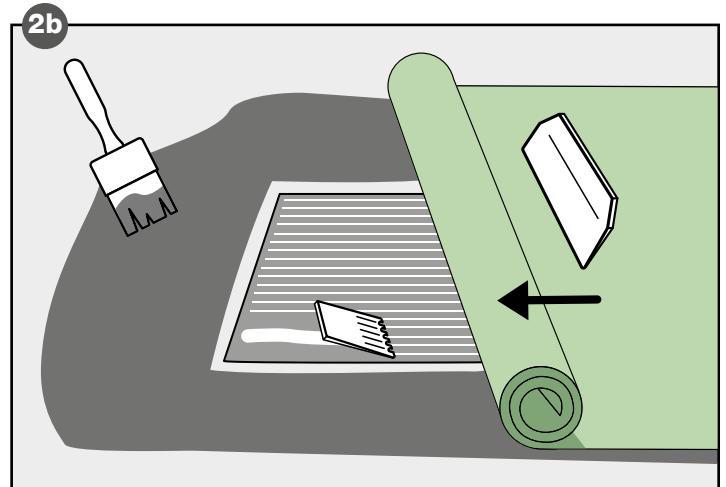
Place the JAFO template in the drain seat
Remove any o-ring/gasket in the clamp ring
seat. Center the KD+ Drain collar over the
drain. Remove the protective paper on half



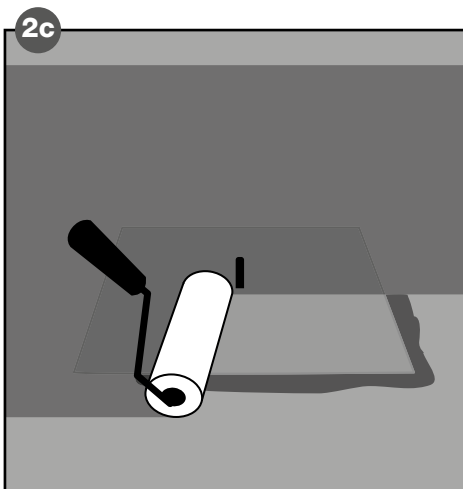
the collar and spread it out, without forming
blisters. Repeat with the second half in the
same way.



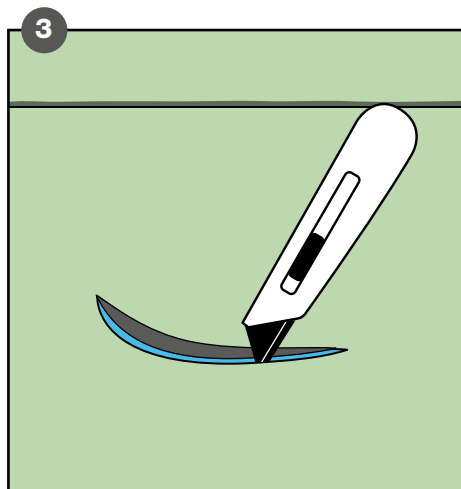
With KD+ 2K Foil adhesive: Installing foil on the floor
Apply KD+ 2K Foil adhesive to the surface to which KD+ Foil is to be
installed including the KD+ Drain collar. Spread KD+ Foil into the fresh
material so no blisters are formed and full backfilling is achieved.



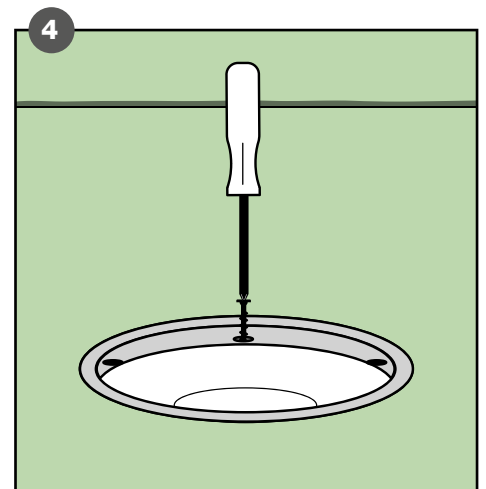
With KD+ Splice adhesive: Installing foil on the floor
Apply KD+ Sealing membrane to the surface around the KD+ Drain
collar. Apply KD+ Splice adhesive to KD+ Drain collar. Spread KD+ Foil
into the fresh material so no blisters are formed and full backfilling is
achieved.



ROLLABLE:
Apply the sealing membrane
Apply 2 layers of KD+ Sealing membrane as
described in the KD+ Rollable system instal-
lation instructions. Leave to dry for at least 12
hours.

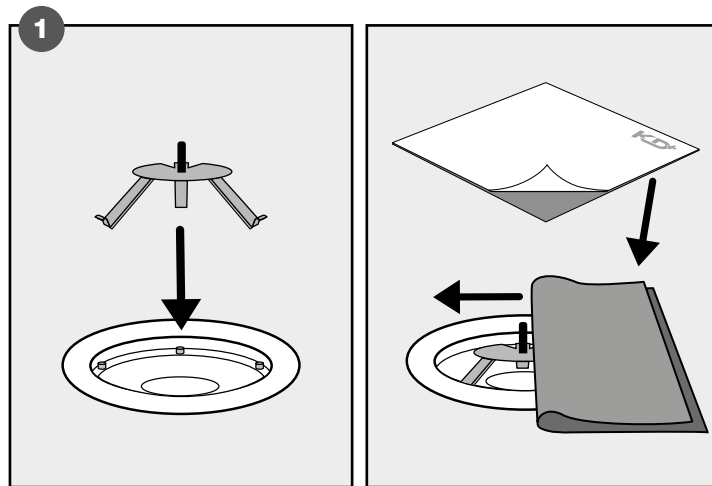


Cut hole according to the template
Cut the hole after the inside of the template
and remove the template.



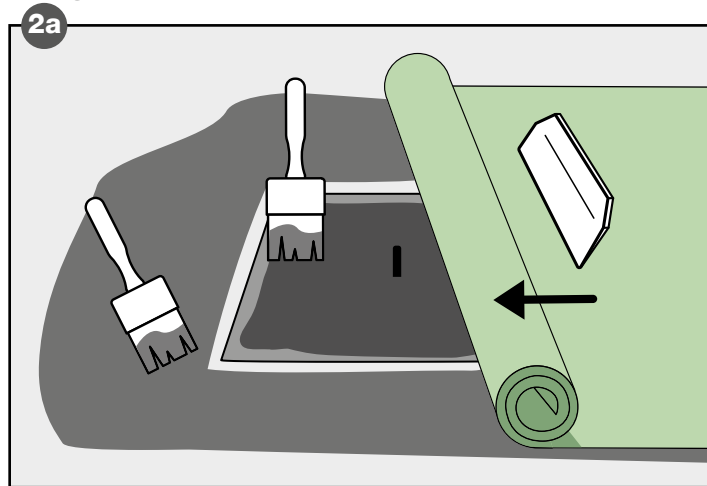
Install the clamp ring
Fit KD+ Foil and KD+ Drain collar into the floor
drain and screw the clamp ring alternating
diagonally with a screwdriver.

BLÜCHER Floor drains with screwed clamp ring



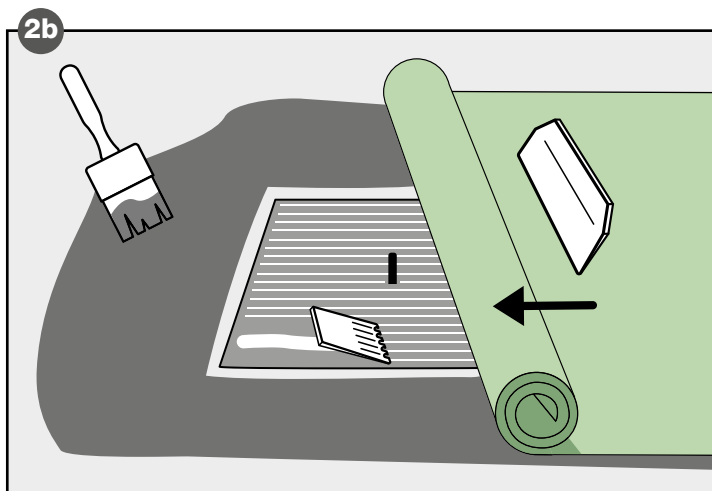
Set in the foot

Put the foot of the Blucher knife in the floor drain. Center the KD+ Drain collar over the drain. Remove the protective paper on half the collar and spread it without blisters forming. Repeat with the second half in the same way.



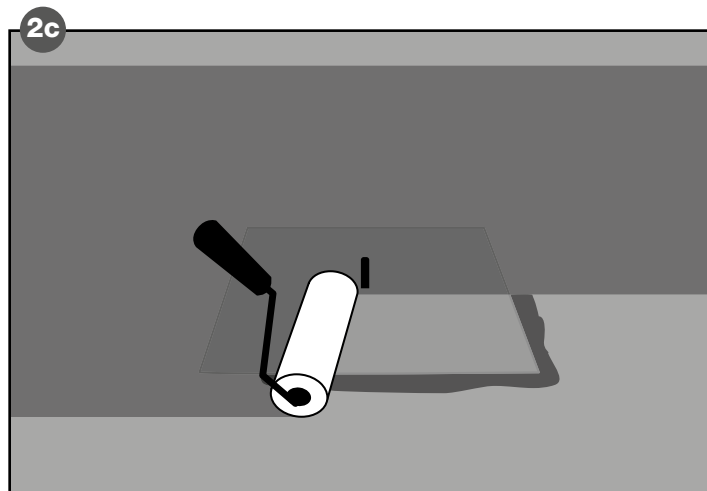
With KD+ 2K Foil adhesive: Installing foil on the floor

Apply KD+ 2K Foil adhesive to the surface to which KD+ Foil is to be installed including the KD+ Drain collar. Spread KD+ Foil into the fresh material so no blisters are formed and full backfilling is achieved.



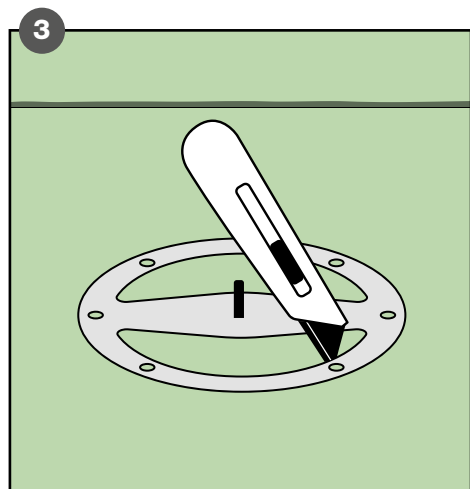
With KD+ Splice adhesive: Installing foil on the floor

Apply KD+ Sealing membrane to the surface around the KD+ Drain collar. Apply KD+ Splice adhesive to KD+ Drain collar. Spread KD+ Foil into the fresh material so no blisters are formed and full backfilling is achieved.



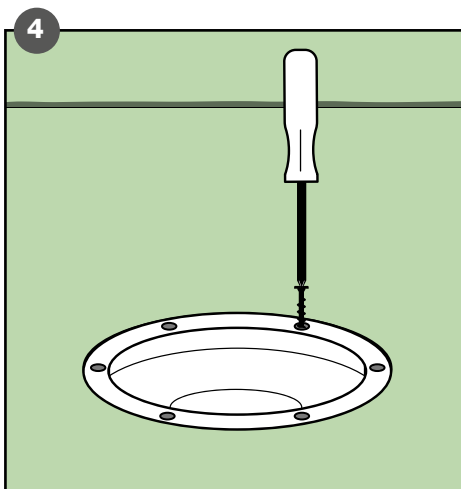
ROLLABLE: Apply the sealing membrane

Apply 2 layers of KD+ Sealing membrane as described in the installation instructions for KD+ Rollable system. Leave to dry for at least 12 hours.



Cut hole according to the template

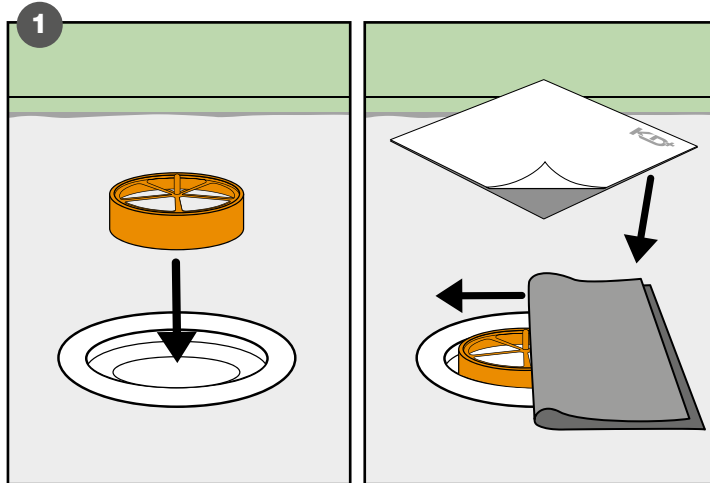
Set the template and cut the hole based on the inside of the template. Remove the template and foot from the floor drain.



Install the clamp ring

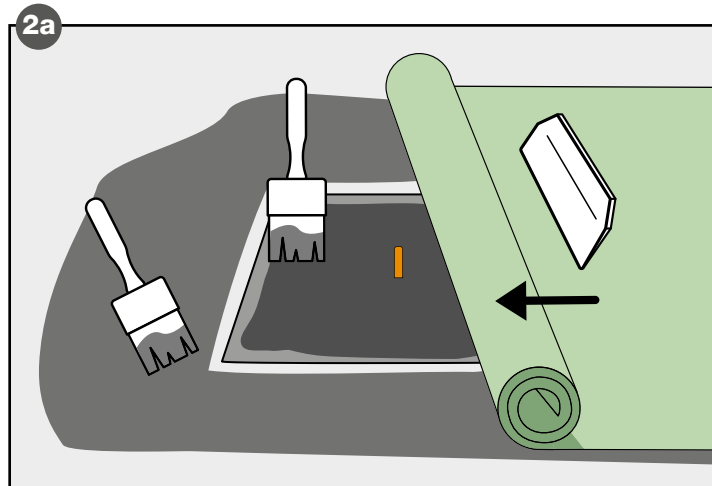
Fit KD+ Foil and KD+ Drain collar into the floor drain and screw the clamp ring alternating diagonally with a screwdriver.

FALUPLAST Floor drains with screwed clamp ring



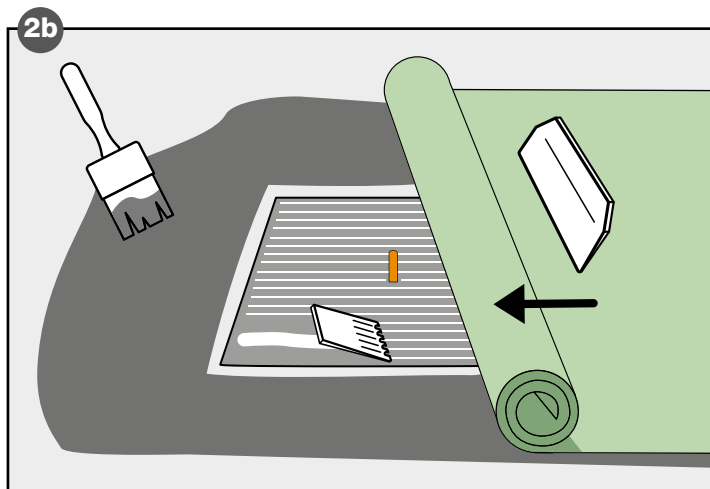
Place the template in the drain seat

Place the FALUPLAST template in the drain seat. Center the KD+ Drain collar over the drain. Remove the protective paper on half the collar and spread it without blisters forming. Repeat with the second half in the same way.



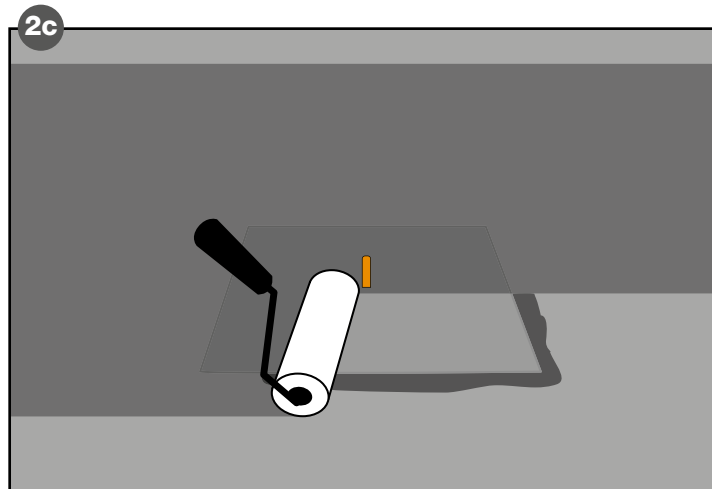
With KD+ 2K Foil adhesive: Installing foil on the floor

Apply KD+ 2K Foil adhesive to the surface to which KD+ Foil is to be installed including the KD+ Drain collar. Spread KD+ Foil into the fresh material so no blisters are formed and full backfilling is achieved.



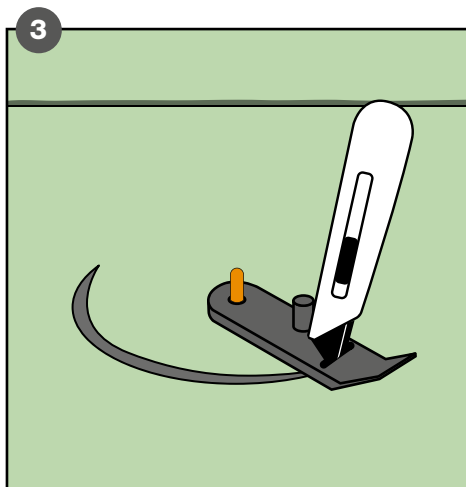
With KD+ Splice adhesive: Installing foil on the floor

Apply KD+ Sealing membrane to the surface around the KD+ Drain collar. Apply KD+ Splice adhesive to KD+ Drain collar. Spread KD+ Foil into the fresh material so no blisters are formed and full backfilling is achieved.



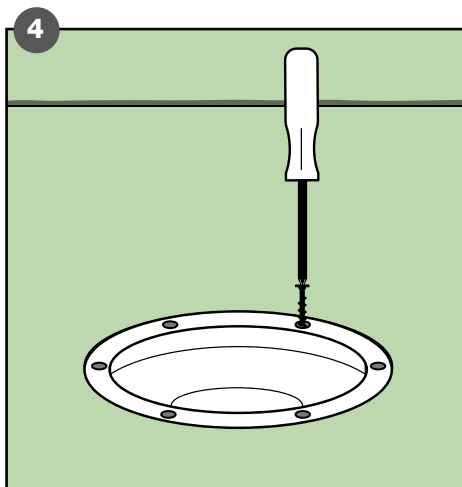
ROLLABLE: Apply the sealing membrane

Apply 2 layers of KD+ Sealing membrane as described in the installation instructions for KD+ Rollable system. Leave to dry for at least 12 hours.



Cut the hole

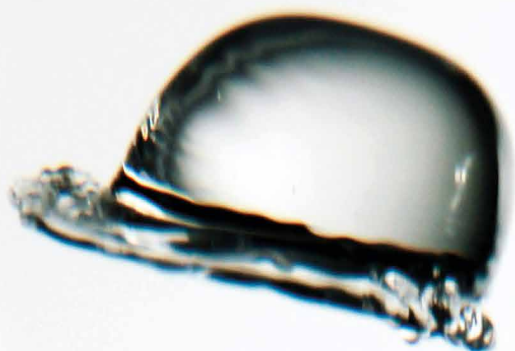
Cut the hole using the appropriate knife and Faluplast's knife guide. Remove the template and shape down the edges in the drain



Install the clamp ring

Install the clamp ring using the supplied screws. Tighten the screws alternately diagonally so that the clamp ring is in the correct position.

Instructions for other types of floor drains are found here:
www.kdplus.se



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