

September 2021 replaces
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Bostik Waterproofing systems Universal

**INSTALLATION INSTRUCTIONS FOR BOARDS,
PLASTER AND CONCRETE, VTvF & VTgF AND VTv & VTg**





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Bostik is the holder of the certificates SC0055-13 and SC0056-13.
SC0055-13 applies to PURUS Line and PURUS Corner in combination with Bostik waterproofing systems VTg10 and VTgF Universal.

SC0056-13 applies to Unidrain linear floor drains 1001-1004, 3002 and Unidrain corner floor drain 2011 in combination with Bostik waterproofing systems VTg10, VTgF Universal and Bostik Pro VTgF-X.

RISE Certification is the approval body for certificates for drains close to walls.

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<div>ETA -13/0215</div> <div>ETAG 022 part 2</div> <div>Watertight covering kits for wet room walls and floors</div> <div>Classification of the system and declared values of the product and system characteristics, see Declaration of Performance</div> <div>Date ETA: 24.05.2016</div>	<div>ETA -16/0085</div> <div>ETAG 022 part 1</div> <div>Watertight covering kits for wet room walls and floors</div> <div>Classification of the system and declared values of the product and system characteristics, see Declaration of Performance</div> <div>Date: ETA 2016-02-08</div>

INDUSTRY STANDARDS

All industry rules for bases, material and their properties are specified in the trade rules of the Swedish Ceramic Tile Council for wet rooms. The trade rules can be downloaded from www.bkr.se or be ordered in printed format from the Swedish Ceramic Tile Council.



Industry rules for waterproofing wet rooms

INDUSTRY RULES OF THE SWEDISH CERAMIC TILE COUNCIL FOR WET ROOMS BBV 21:1

- The wet room is divided into wet zones. Wet zone 1 is the entire floor area in the wet room, the walls in the tub/shower area and wall surfaces plus at least one metre. If the outer wall is included in wet zone 1, the entire outer wall is to be considered as wet zone 1. Wet zone 2 is all other wall surfaces. See the picture and table below.
- Board structure walls and floors in wet zone 1 must be covered with a waterproof foil-type system, i.e. Bostik waterproofing systems VTvF & VTgF Universal.
- Board structure walls in wet zone 2 must be covered with a foil-type system, i.e. Bostik waterproofing system VTvF Universal or a rollable Bostik waterproofing system VTv Universal. The transition between the different waterproofing systems must be sealed using sealing tape Universal.
- Solid walls and floors, i.e. concrete ceilings, polished concrete or brick, must be covered with a foil-type system, i.e. Bostik waterproofing systems VTvF & VTgF Universal, or a rollable system, i.e. Bostik waterproofing systems VTv & VTg Universal.
- We recommend a wet room board specified by the board manufacturer, but this is not a requirement.

WET ZONE 1	VTv	VTvF	VTg	VTgF
Separate wet room boards on walls		•		
Solid wall such as plastered brick or lightweight concrete/concrete	•	•		
Board material and screed on floor				•
Solid concrete floor			•	•
WET ZONE 2	VTv	VTvF	VTg	VTgF
Cardboard-covered plasterboard on walls	•	•		
Separate wet room boards on walls	•	•		
Solid wall such as plastered brick or lightweight concrete/concrete	•	•		

WHERE DO THE RULES APPLY AND WHAT IS A WET ROOM?

The rules apply to the function and application of waterproofing systems on various bases where tiles or mosaics will form the surface layer on floors and walls in site-built wet rooms in residential buildings or areas with equivalent water load. Wet rooms are considered to be areas where floors and wall surfaces may be exposed, fully or partly, to recurrent water spray, such as areas where showers or bathtubs are installed. The rules can be applied, fully or partly, when natural stone, glass or similar products are used as a surface layer. The rules apply to ceramic tiles that are fitted using thin-layer technology. Thin-layer technology means that tiles are placed on an adhesive that has been combed with a notched trowel, applied on top of the waterproof membrane. These rules do not apply to other types of execution, such as thick grout or when the surface layer will consist of other materials, such as coloured cement products. Residential areas where the following regulations can be applied include laundry rooms, toilets and

areas with water heaters, heat pumps, boilers or similar. The rules can also be applied for other areas if there is a risk that the floor could be subjected to leaking water or water spills. Residential kitchens are not subject to requirements for waterproofing membranes on floors. The rules apply to both new construction and renovation. Rules concerning water and sewage installations are not included in BBV. For these, please refer to the Säker Vatteninstallation (Safe Water Installation) Trade Rules. See www.sakervatten.se. Rules for electrical installations are not included in BBV. For these, please refer to applicable Swedish standards. See www.elsakerhetsverket.se. Rules for paint work are not included in BBV. For these, please refer to Måleribranschens Våtrumskontroll (MVK) trade rules for wet rooms.

HOW TO ENSURE THAT WORK IS DONE PROPERLY?

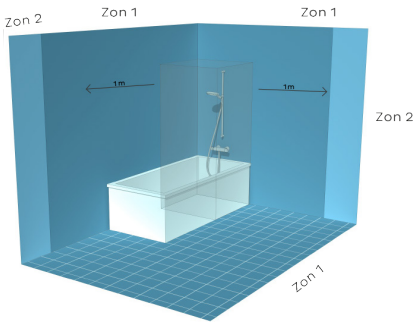
Bostik's installation instructions must be followed, and the specified products must be used when building the structure. Only then is the work considered to have been carried out in accordance with BBV. It is important to read the technical data sheets when using the products included in the installation instructions. For more information, contact your Bostik dealer or visit the website www.bostik.se.

Certified companies must issue a Quality Document, Appendix A to BBV, after each wet room contract. The Quality Document must be issued by the certified company whose personnel performed the waterproof membrane and must be submitted to the client and user/resident on completion of the work. The Quality Document is part of the contractor's undertaking for wet room contracts under BBV and must therefore be provided without delay. The Quality Document must be available in connection with the final inspection. The certified tiler who performed the work must conduct self-inspection to verify that the work has been carried out in accordance with BBV and according to the relevant installation instructions. The quality documentation is completed by the company's wet room supervisor or certified tiler in one of the digital media provided by the Swedish Ceramic Tile Council for certified companies. The tiler's self-inspection can also be conducted directly in the mobile application. The Quality Document is then signed electronically by the wet room supervisor, and the certified tiler who performed the waterproof membrane must be named.

If more than one certified tiler has carried out work in a wet room, their names must be recorded under other information. The Quality Document is sent to the client/resident by email together with a link to the relevant installation instructions for the approved waterproofing system or, alternatively, in paper form. A copy of the Quality Document and a link to installation instructions are archived digitally and are available at the certified company for their own documentation and also so that they can be presented in connection with quality audits. As a supplement to the above Quality Document, self-inspection for Bostik's approved waterproofing system can be completed. See www.bostik.se under 'Tätskikt' or 'Hjälpmedel & Verktyg.'

Wet room zones:

Zone 1 = Entire floor plus the blue section on the wall. If part of the outer wall is included in wet zone 1, the entire wall must be treated as belonging to wet zone 1. Zone 2 = Other surfaces.



How to prepare the base

All products in the waterproofing system are tested together to meet the requirements of the current industry rules. No part of the system may therefore be replaced.

SEALS

Sealing tape and pipe collars should be applied to all transitions, wall/floor angles, wall/wall angles and pipe penetrations. Rules concerning water and sewage installations are not included in BBV. For these, please refer to the Säker Vatteninstallation (Safe Water Installation) Trade Rules. See www.sakervatten.se. Rules for electrical installations are not included in BBV. For these, please refer to applicable Swedish standards. See www.elsakerhetsverket.se. Rules for paint work are not included in BBV. For these, please refer to Måleribranschens Våtrumskontroll (MVK) trade rules for wet rooms.

WALL BASE

Suitable support for waterproofing is concrete, plaster and approved wet room boards as well as cardboard-covered plasterboard.

Concrete, wall filler, lightweight concrete

The concrete should have hardened for at least three months and be cast to form a smooth finish. Irregularities, cracks and voids must be filled using e.g. Bostik Rep & Fix. Any laitance and cement film, mould oil and other contaminants must be removed. Please note that pre-mixed wall filler or adhesive cannot be used as filler.

Board material

Wood-based boards should not be used as a base for waterproof membranes and tiling. Board structures must be documented as suitable for use in wet rooms and must be installed according to the manufacturer's instructions. Board walls must meet the tolerance requirements as described

BASES IN GENERAL

- Before work begins, the base must be checked to ensure that it is able to sustain weight and that it is clean and dry.
- Existing surface finishing must be removed, such as wet room mats, wallpaper and paint. Any deviations in application on existing bases must be recorded in the quality document.
- The relative humidity (RH) of the base should not exceed 85%.
- The structure must be well dried before the waterproofing membrane is applied, max. 8% moisture, 6% for underfloor heating.
- Concrete slabs on the ground and in basements should be checked for penetrating moisture. If penetrating moisture occurs, only shower areas and areas with regular water spray should be sealed. Contact Bostik on tel.: 042-195000 for more information on measures to be taken in the event of penetrating moisture.
- Material and base should have a temperature of at least +10°C before starting installation. Contact Bostik on tel.: 042-195000 for further information about diffuse-open waterproofing system.
- The temperature in the room must be at least +10°C and max 25°C.
- Gaps, larger than 2 mm, between pipes and walls and gaps in wall and floor angles are filled or grouted with Bostik Acrylic Sealant before applying the waterproofing.
- Pipe penetrations must be installed according to the instructions of Säker Vatten (www.sakervatten.se).

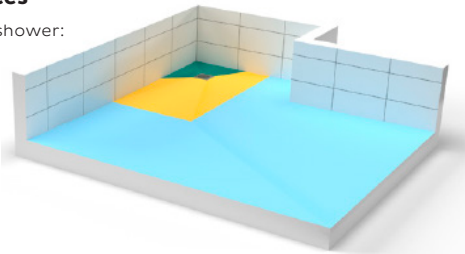
in the Swedish Ceramic Tile Council's trade rules for wet rooms and AMA Hus. Absorbent materials must be pre-treated with Primer 6000 diluted 1:1 with water. Non-absorbent boards need not be primed.

FLOOR BASES

Suitable bases for waterproofing are concrete and screeds. Where a toilet, bidet or similar is to be installed on the floor, a level installation area of at least 300x400 mm is required. The gradient of the installation area may not exceed 1:100 (10 mm/m). All gradient specifications are measured in the direction of the floor drain. Alternative floor gradient for fixed installations, large-format tiles, disability access, more than one floor drain or similar must be agreed before execution. Agreement on alternative floor gradient must always be documented in the Quality Document, Appendix A to BBV.

Gradient tolerances

Space for bathtub and shower:
■ 1:25-1:150
7-40 mm/m
■ 1:50-1:150
7-20 mm/m
■ Other floor areas:
1:100-1:200
5-10 mm/m



Concrete

Should have hardened for at least three months and have a grated surface. Irregularities, cracks and voids must be filled using e.g. Screed Combi 10. Any laitance and cement film, mould oil and other contaminants must be removed. The concrete's deformation due to shrinkage must be taken into consideration. The relative humidity (RH) should not exceed 85.0%.

Screed

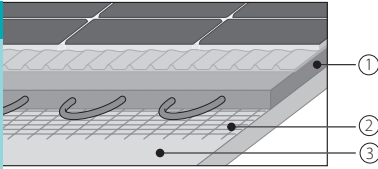
Must be cement-bonded, e.g. Bostik Fiber Universal, Fibre Universal Rapid or Build Universal.

Wooden joists

Joists must be reinforced in order to adapt the flexural rigidity between joists to ceramic cladding. Wood quality C24 and dimension 45 x 220 mm. Floor chipboards must always be glued and screwed according to the board manufacturer's instructions. The joists must have a flexural rigidity that corresponds to 22 mm floor chipboards mounted on battens with a max cc of 300 mm (up to 4.2 between the supports).

WET ROOM FLOOR STRUCTURE

1. Screed
 2. Mesh reinforcement
 3. Floor chipboard
- NOTE! For grooved floor chipboard with plates and water-based underfloor heating coil, see installation instructions at www.bostik.se. Cables/pipes should not be placed under floor-mounted toilets or bidets.



Screed must always be applied to floor chipboards before the waterproofing membrane is installed. If the distance between the battens is 600 mm, the joist must be reinforced with short pieces with a centre distance of 300 mm. Floor chipboards must be primed using Bostik Primer 6000 diluted 5:1 with water (5 parts primer to 1 part water). The design includes mesh reinforcement, Bostik Iron Force Net. The minimum thickness of the screed must be 12 mm at the floor drain. Use Bostik Fiber Universal or Fiber Universal Rapid.

Heated floor

Underfloor heating cables must be bedded in at least 10 mm filling compound. For water-based underfloor heating, the heating pipes must be bedded in a layer of filling compound that corresponds to 1/10 of the cc distance between the heating pipes. For example, a cc distance of 200 mm corresponds to 20 mm of filling compound above the heating pipe. The routing of electrical underfloor heating must be performed by a qualified electrician. Underfloor heating systems must be installed according to the manufacturer's instructions and subject to any layout drawings. Operation and startup of systems must be carried out according to the respective manufacturer's instructions and guidance, but not earlier than 28 days after tiling. For heated floors, the adhesives Fix Universal Flex or Fix Universal Light DR should be used. Ceramic tiles with water absorption of more than 6% may not be used on underfloor heating systems.

FLOOR DRAIN

Floor drains must be type-approved and installed according to the manufacturer's instructions. The floor drain must level with the surface of the membrane. If necessary, a type-approved elevation system for the drain may be used. Drains manufactured before 1990 must be replaced. The minimum thickness of the screed must be 12 mm at the drain. Please note that special regulations apply to HWS products and drains close to walls, and those regulations can be obtained from the website of the Swedish Ceramic Tile Council or Säker Vatten.

TAPS AND HEATING PIPES

No pipe penetrations are permitted through floors in wet rooms other than for drains and floor drains. The distance between drain pipes and the wall's waterproof membrane must be at least 60 mm. Drain pipes are not permitted in bath or shower spaces. The distance between the base for the floor's waterproof membrane and the upper edge of the wastewater pipe may not be less than 40 mm when installing the waterproof membrane. Wastewater pipes or connection sleeves for toilets must have a smooth surface. Pipes must be fixed at penetrations. The maximum permitted cavity between pipe and base (adjoining board/filler etc.) is 2 mm, larger holes must be filled Bostik acrylic sealant. Exceptions to the above may apply in bathrooms or shower rooms with water heaters, heat pumps or water meters. Pipe penetrations in such areas can be executed in floors for such appliances with a pipe penetration sleeve. Pipe penetration sleeves are not permitted in bathtub or shower spaces. No water pipe penetrations are permitted through walls in bathtub or shower spaces other than water pipes directly to the mixer tap. Pipes must be fixed at penetrations. The maximum permitted cavity between pipe and base (adjoining board/filler etc.) is 2 mm, larger holes must be filled Bostik acrylic sealant. The distance between pipes and the floor's/wall's watertight membrane must be at least 60 mm. The centre distance between pipes with a diameter of 32 mm or less must be at least 60 ± 2 mm. If the diameter is over 32 mm, the distance between the pipes must be 60 mm or more, see the figure below. Here, the pipe diameter is measured on the surface which is to be sealed. Check with the manufacturer of the pipe system.

FLEXIBLE SEALANT IN WET ROOMS

Flexible sealants (silicone) should only be used where they are structurally necessary due to expected movements.

Flexible sealants should normally be used:

- In corners and angles where the base on both sides is concrete cast less than a year before tiling.
- In new construction where risk of movement in the base can be expected. For example, at wall angles where board structures abut the concrete wall or board structures abut other board structures.
- At transitions to other materials on walls such as door frames/architraves, window frames/sills/door sills. In such cases, a paintable flexible sealant must be used.
- In ceiling/wall angles. A paintable flexible sealant must be used where at ceiling angles. Silicone should not be used as it makes painting difficult.

Flexible sealants should not be used:

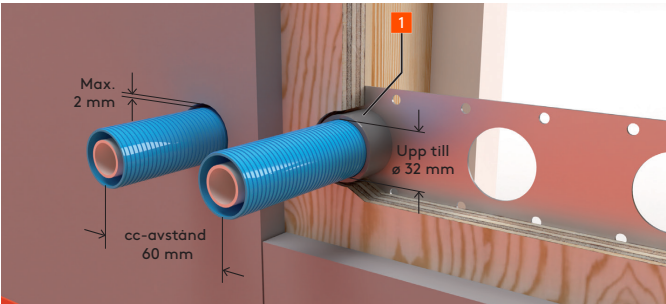
- At the lower edge of ceramic wall coverings that overlap turn-ups on plastic flooring
- In joints between ceramic floor tiles and the tile frame of floor drains

MAINTENANCE

Guidelines for maintenance of ceramic wall and floor coverings are available from the Swedish Ceramic Tile Council (Byggkeramikrådet). Maintenance guidelines are also available in the handbook of the Swedish Ceramic Tile Council.

FIXINGS

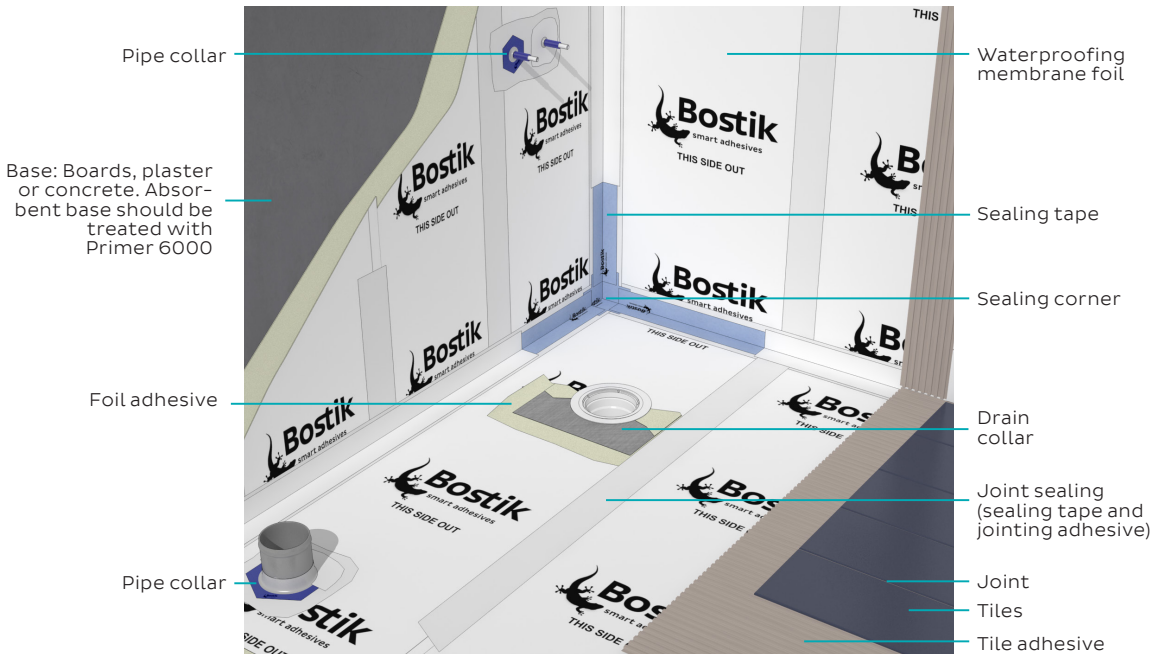
- In order for the space to meet the requirements for waterproof wet rooms, it is crucial to consider the following:
- Avoid any penetrations by showers and bath tubs.
 - Avoid penetrations by gluing certain components. If the item can be glued (shape and material), Bostik Maxi Bond X-treme or Bostik X-press can be used.
 - All penetrations must be made in solid structures such as concrete, brick or posts. Fixing cannot usually be made in the board material without being screwed into something solid (wooden post or 15-mm structural plywood)
 - The hole for the fixing must be filled with Bostik Silicone Wet Room or Build and Sanitary, push in a plug, apply silicone to the plug and fasten the screw.



Select the right pipe and drain collars

PIPES/DRAINS	PIPE COLLAR
Water pipe	10-24 mm
Sink drain	32-55 mm
Toilet drain	75-110 mm
2 holes	8-24 mm
Drain collar	370x370 mm
Drain collar (design drains)	1500x200 mm

Exploded view foil system

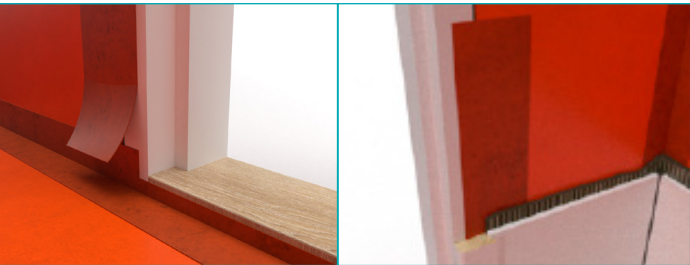


SEALING ON FRAMES

Doorframes must level with the base for the waterproofing membrane. The frame must be installed before applying the waterproofing membrane. If this is not the case, it must be noted as a deviation in the Quality Document. The upper edge of the turn-up by the doorway must be at least 20 mm above the horizontal level of the waterproofing membrane around the floor drain flange.

Sill in line with the wall: Sealing should be carried out continuously between threshold, frame and wall.

Sealing on frames: protects the internal structure of the wall.



Bostik waterproofing systems VTvF & VTgF Universal



Bostik waterproofing systems VTvF & VTgF are a foil system used as waterproofing under ceramic coverings on floors and walls in wet rooms in houses and similar places. Waterproofing systems VTvF & VTgF are able to absorb deformations and are used for concrete, light concrete, plaster, spackled surfaces and board structures. Bostik waterproofing systems VTvF and VTgF have been tested according to the European Standard ETAG 022 and comply with the Swedish National Board of Housing, Building and Planning's (Boverket) Building Regulations BFS 2011:6 as amended until and including BFS 2020:4, BRR. The system is approved by the Swedish Ceramic Tile Council (BKR). The approval documentation can be found on BKR's website www.bkr.se. The system's resistance to water vapour permeability is greater than 2,560,000 s/m.

WHAT YOU NEED:

- Materials**
- ☐ Bostik membrane foil
 - ☐ Bostik sealing tape and sealing corners
 - ☐ Bostik pipe collars and drain collars
 - ☐ Bostik Membrane Universal (foil adhesive) **or 1**
 - ☐ Bostik Floor & Wall Tac (film glue) **or 2**
 - ☐ Bostik Foil Adhesive Universal (foil adhesive, jointing adhesive) **or 3**
 - ☐ Bostik Foilseal Grab (jointing adhesive)
 - ☐ Bostik Primer 6000
 - ☐ Bostik Fix and Joint

- Tools**
- ☐ Roller
 - ☐ Brush
 - ☐ Smooth plastic trowel
 - ☐ Trowel
 - ☐ Toothed trowel

Calculation of quantities – see consumption tables page 18

Wall VTvF Universal

PREPARATION

Fill cracks larger than 2 mm in corners, in board joints and at pipe penetrations using Bostik acrylic sealant. Measure and cut all the strips to size in advance. Prime absorbent surfaces with Primer 6000.

HOW TO APPLY THE FOIL AROUND CORNERS

Note that it will be difficult to apply the foil around corners without folds if the walls are not vertical and straight. To avoid use of tape or the risk of folds in corners, it is a good idea to cover the corner with just 50 mm of foil as follows:

- Mark a straight line 950 mm from the corner (shower)

- Fold the foil 50 mm into the corner on the opposite wall.
- Apply the entire strip ending in the corner to create a 50 mm overlap.
- Glue the overlap with Bostik Foilseal Universal, alternatively Bostik Foil Adhesive Universal according to the instructions below.
- The other strips are applied edge to edge (alternatively 50 mm overlap).

Plan ahead to ensure as few joints as possible on the walls and floor in the shower zone. Always use whole strips in shower corners and over floor drains.

INSTALLATION OF WATERPROOFING FOIL ON THE WALL



1

Roll Bostik Foil Seal Universal alternatively Apply Membrane Universal liberally on the wall, one strip at a time. See the consumption table on page 18.



2

The waterproofing foil is installed vertically edge to edge or with a 50 mm foil overlapping according to the marked lines.



3

Smooth the strips with a plastic trowel. Squeeze any excess adhesive out against the foil edges. Check that the glue is evenly distributed behind the foil. The foil can be applied 50 mm onto the floor. Another option is to cut the foil at a floor/wall angle and then seal it with a waterproofing strip.



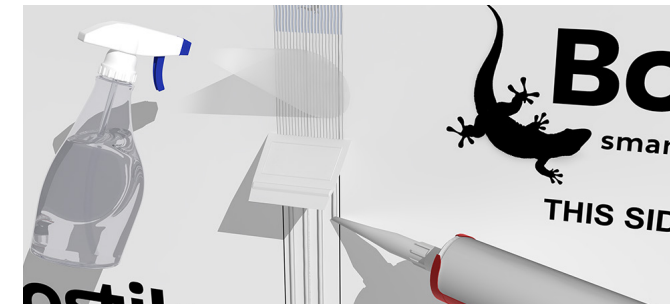
4 ALTERNATIVELY 1 EDGE-TO-EDGE (FOIL ADHESIVE UNIVERSAL)

Brush/roll the Foil Adhesive Universal between the marked foil lines. Install the waterproofing strip (avoid folds and blisters). Then seal the entire sealing tape at least 50 mm outside the tape with Foil Adhesive Universal or Membrane Universal.



4 ALTERNATIVELY 2 OVERLAP FOIL (FOIL ADHESIVE UNIVERSAL)

Fold the overlapping foil and brush Foil Adhesive Universal under the entire overlap. Press back the overlap with smooth putty. Then seal the entire overlap and at least 50 mm outside with Foil Adhesive Universal alt. Membrane Universal.



4 ALTERNATIVELY 3 GLUED WITH FOILSEAL UNIVERSAL

Apply even glue lines. Smooth out the glue with a trowel. Apply water to the glue (this will speed up the drying time). Apply the sealing tape Universal to the wet adhesive and smooth with a plastic trowel (no folds or blisters). Any excess glue is spackled back over the joint. Then seal the entire sealing tape at least 50 mm outside the tape with Membrane Universal.



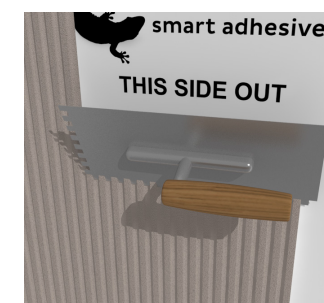
5

Select the correct size of pipe collar (see page 6). Attach the pipe collar with Foilseal Universal or Foil Adhesive Universal (avoid folds and blisters). Electric pipes must be sealed in a similar manner. Seal the tape and pipe collars at least 50 mm outside the tape with Membrane Universal, alternatively Foil Adhesive Universal.



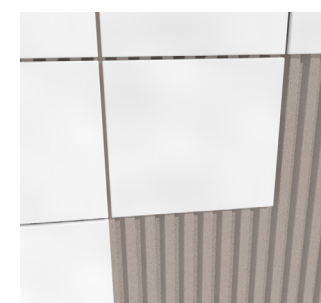
6

Brush Membrane Universal alternatively Foil Adhesive Universal around the drain pipe for sinks and wall-mounted toilets so that the entire pipe collar attaches properly. Also brush at least 50 mm outside the pipe collar.



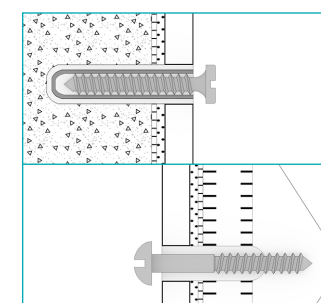
7

Tiles can be applied after 12 hours' drying time. Apply adhesive using the smooth side of the trowel. Even out using the notched side. For the suitable adhesive, notch size and use, see page 18. NOTE! Do not spread out onto a larger fix surface than what you can manage to lay within 15 min.



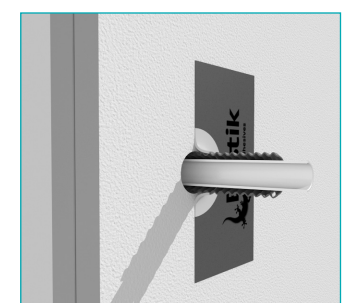
8

Apply the tile by pressing and twisting it against the base. Check regularly that the back of the tile is fully attached. Remove any adhesive that protrudes more than half the joint depth. Allow to dry for 12 hours before grouting.



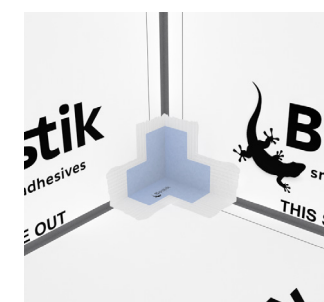
9 PENETRATIONS

All penetrations must be made in solid structures such as concrete, brick or posts. The hole for the fixing must be filled with Silicone Wetroom. Push in the plug, fill with silicone and fasten the screw. To avoid penetrations, many components can be glued (see page 6 Fixing).



10 PIPE-IN-PIPE

In case of pipe-in-pipe systems, the pipe collar must sit tightly against the sheathing and not against water pipe.



11 INSTALLATION OF INSIDE CORNERS

Brush or roll Bostik Foil Adhesive liberally on all corners (internal and external) and apply the sealing corners wet on wet.



12 INSTALLATION OF INNER CORNERS

Brush or roll Bostik Foil Adhesive Universal or Membrane Universal on the applied sealing corners and at least 50 mm outside the corners. NOTE! Avoid any folds or blisters on the corners.



13 SEALING ON FRAMES

Sealing on frames: protects the internal structure of the wall.

Floor VTgF Universal



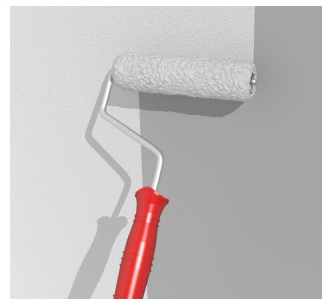
REMEMBER!

High performance concrete must be levelled with low alkaline levelling compound, Fiber Universal or Fiber Universal Rapid.

Floor chipboard must be reinforced with screed, Fibre Universal or Fibre Universal Rapid and wire welded reinforcing mesh.

Before applying the waterproofing membrane, pre-treat the floor with Primer 6000.

INSTALLATION OF WATERPROOFING MEMBRANE FLOOR



1

Apply the foil adhesive liberally on the wall, one strip at a time. See the consumption table on page 18.



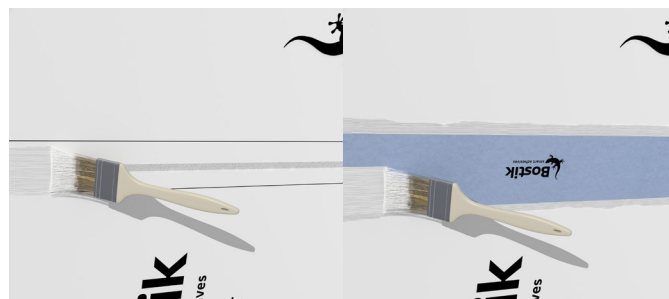
2

The waterproofing foil is installed edge to edge or with a 50 mm foil overlapping according to the marked film lines.



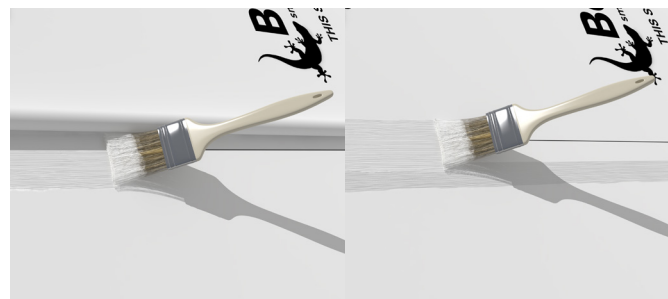
3

Use a plastic trowel with rounded corners to even out any folds and blisters that have formed when the waterproofing membrane foil, sealing tape, internal and external corners were applied.



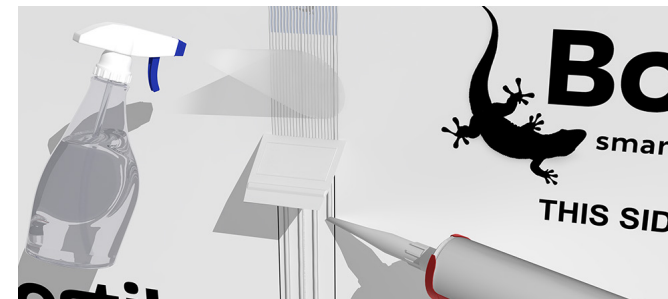
4 ALTERNATIVELY 1 EDGE-TO-EDGE (FOIL ADHESIVE UNIVERSAL)

Brush/roll the Foil Adhesive Universal between the marked foil lines. Install the waterproofing strip (avoid folds and blisters). Then seal the entire sealing tape at least 50 mm outside the tape with Foil Adhesive Universal or Membrane Universal.



4 ALTERNATIVELY 2 OVERLAP FOIL (FOIL ADHESIVE UNIVERSAL)

Fold the overlapping foil and brush Foil Adhesive Universal under the entire overlap. Press back the overlap with smooth putty. Then seal the entire overlap and at least 50 mm outside with Foil Adhesive Universal alternatively Membrane Universal.



4 ALTERNATIVELY 3 GLUED WITH FOILSEAL UNIVERSAL

Apply even glue lines. Smooth out the glue with a trowel. Apply water to the glue (this will speed up the drying time). Apply the sealing tape Universal to the wet adhesive and smooth with a plastic trowel (no folds or blisters). Any excess glue is spackled back over the joint. Then seal the entire sealing tape at least 50 mm outside the tape with Membrane Universal.



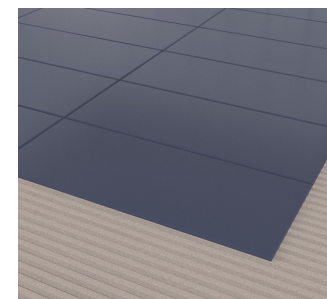
5

Select the correct size on the pipe collar (see page 6) and attach with Foilseal Universal or Foil Adhesive Universal (avoid folds/blisters). Brush Membrane Universal or Foil Adhesive Universal around the drain pipe for sinks and toilet to ensure full coverage of the entire pipe collar. Also brush 50 mm outside.



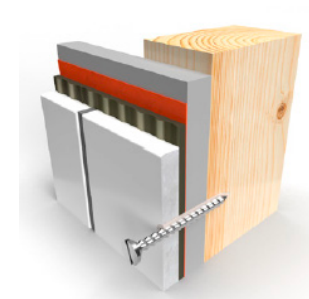
6

Tiles can be applied after 12 hours' drying time. Apply adhesive using the smooth side of the trowel. Even out using the notched side. For the suitable adhesive, notch size and use, see page 18. NOTE! Do not spread out onto a larger fix surface than what you can manage to lay within 15 min.



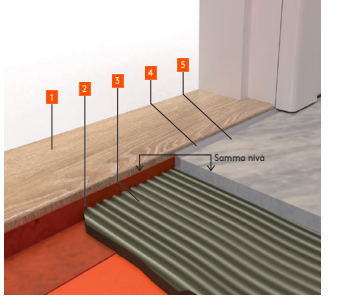
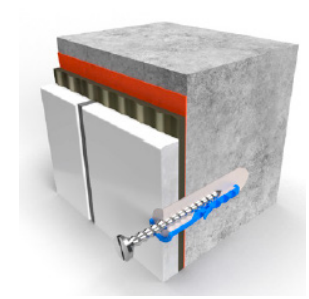
7

Apply the tile by pressing and twisting it against the base. Check regularly that the back of the tile is fully attached. Remove any adhesive that protrudes more than half the joint depth. Allow to dry for 12 hours before grouting.



8 FIXING IN WOODEN POST AND CONCRETE WALL

All possible penetrations must be made in solid structures such as concrete, brick or posts. The hole for the fixing must be filled with Silicone Wetroom. Push in any plug and inject silicone into the plug and fasten the screw. The screw should be at the bottom of the joist. Bostik does not recommend penetrations in floors and the toilet should be glued onto the floor using wet-room silicone.



9 SILL

The waterproofing membrane must be folded up against the sill to the level of the finished floor. The flexible base must be applied as shown in the sketch. For bathrooms without a door sill (accessible for people with disabilities), the drop should be at least 20 mm from the doorway to the drain and the waterproofing membrane folded up against the bathroom tiles. 1. Sill 2. Upper edge 3. Tile adhesive 4. Flexible sealant 5. Ceramic tiles

Sealing of floor drain Purus or Jafo

Installation of a floor drain collar is critical to achieving a waterproof wet room. In the following, we will describe how to install the floor drain collar for two of the most common floor drain types.

The drain and any sheath are HWS products and must always be installed by a qualified HWS engineer. NOTE! If the floor collar is to be installed on other types of floor drains such as design drains/grooves, go to www.bostik.se/Dokumentarkiv/Arbetsbeskrivningar. During installation, the temperature of the drain collar must be at least 15°C.



DRAINS CLOSE TO THE WALLS

For specific instructions for drains close to walls, go to:
www.bostik.se › Service Center or Hjälpmedel & Verktyg › Work descriptions › Instructions drains close to walls in wet rooms.

SEALING OF FLOOR DRAIN – PURUS

REMEMBER!

Clean the drain flange and into the drain set using denatured alcohol before installing the drain collar.

1

Check that the floor is clean and free from dust. Apply Purus knife holder.

2

Centre the drain collar over the floor drain with the adhesive side facing down and the fibre surface facing up.

3

Apply Foilseal Universal and smooth the joint adhesive with a trowel on the fibre surface of the drain collar. Add water to the glue. Alternatively, use Foil Adhesive Universal.

4

Apply the waterproof membrane foil on the floor and over the drain collar (see instructions on page 10, image 1). Carefully rub the foil onto the base. After 2-3 hours, the drain is cut open as shown in Figure 5.

5

Use the accompanying tools for the Purus drain to cut the hole for the drain.

6

Remove the application holder and then fold down the foil and drain collar so that it lies against the edge of the drain.

7

To ease the installation of the clamping ring, you can brush a thin layer of Membrane around the edge of the drain where the clamping ring will be placed.
NOTE! Use a grey clamping ring for the PURUS drain.

8

Place the accompanying drain grate on the clamping ring and press until it clicks into place. Check that the ring is level.

SEALING OF FLOOR DRAIN – JAF0

REMEMBER!

Disassemble the lid, grate and clamping ring and remove the O ring. Clean the drain flange and into the drain set using denatured alcohol before installing the drain collar.

1

Check that the floor is clean and free from dust. Place the Jafo template.

2

Centre the drain collar over the floor drain with the adhesive side facing down and the fibre surface facing up.

3

Apply Foilseal Universal and smooth the joint adhesive with a trowel on the fibre surface of the drain collar. Add water to the glue. Alternatively, use Foil Adhesive Universal.

4

Apply the waterproof membrane foil on the floor and over the drain collar. Carefully rub the foil onto the base. After 2-3 hours, the drain is cut open as shown in Figure 5.

5

Cut around Jafo's template.
The collar must go all the way down to where the conic groove becomes horizontal. No collar must be placed under the clamping ring.

6

Remove the template and then fold down the foil and drain collar so that it lies against the edge of the drain.

7

Remove the template and then fold down the foil and drain collar so that it lies against the edge of the drain. Brush a thin layer of Membrane Universal around the edge of the drain where the clamping ring will be located.

8


Install the clamping ring using the accompanying screws. Fix the screws diagonally until the clamping ring is stable.

Transition between rolled system and foil system

TRANSITION FLOOR/WALL ANGLE


REMEMBER!

Wet rooms are divided into different wet zones with varying requirements for waterproofing system, see page 4. Wet zone 2 can be sealed using a rolled system and also applies to board structures. The transition can be made between the floor and wall, but also between walls. In order for the application to be approved, both structures must be from the same supplier. Contact Bostik in case of doubt.



1

Roll the wall with Moisture Barrier Universal. Apply the waterproof membrane foil on the floor until the wall angle. Install waterproofing corners and strip with Foilseal Universal at all corners and angles. Press down with plastic putty to avoid folds and creases.




2

Brush a layer of Membrane Universal over the seals and at least 50 mm outsider. Complete the waterproofing of the wall according to VTv (see page 16).

TRANSITION WALL/WALL ANGLE


TRANSITION BETWEEN VTvF & VTgF OCH VTv & VTg

If the design allows, it is also possible to seal the opposite transition, meaning that waterproofing membrane foil is applied to the wall and a rolled system is applied to the floor. Seal all joints with corners and tape as described above. Check where wet zone 1 ends and wet zone 2 starts. All transitions must be made outside wet zone 1.



1

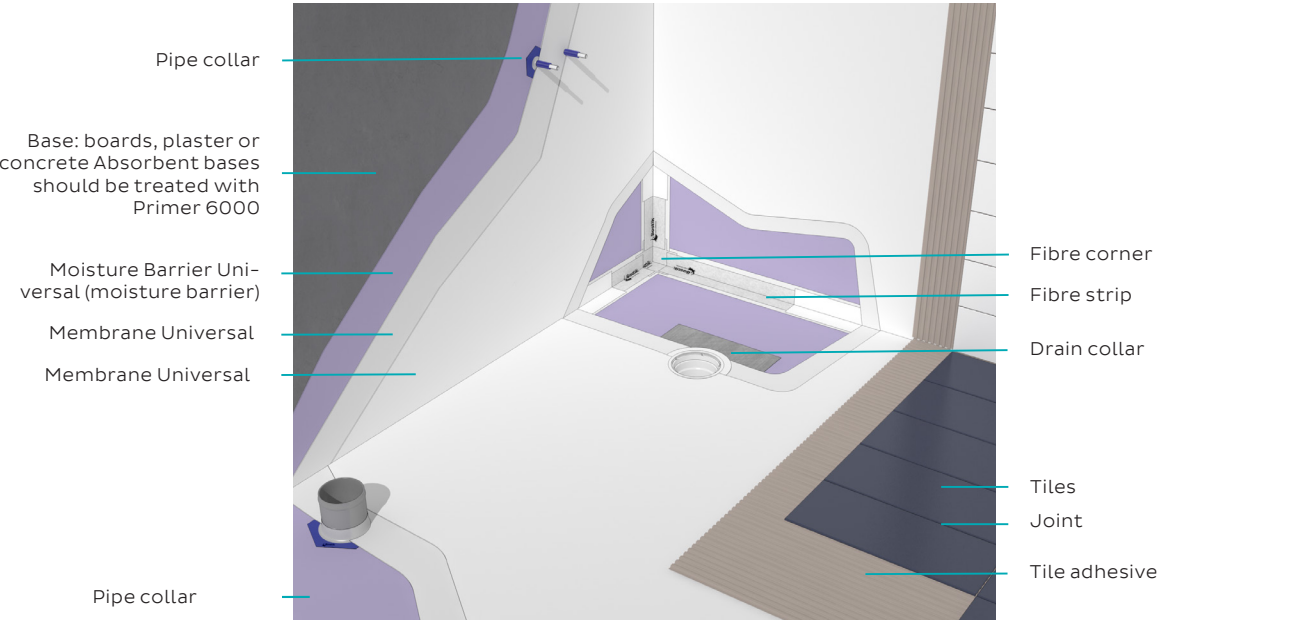
Roll the wall with Moisture Barrier Universal in zone 2. In wet zone 1, apply the waterproofing membrane foil on the wall until the angle. Install waterproofing corner and strip in wet Foilseal Universal. Press down with the plastic trowel. Avoid blisters/folds.



2

Brush a layer of Bostik Membrane Universal over the seals. Complete the waterproofing of the wall according to VTv (see page 16).

Exploded view of rolled system

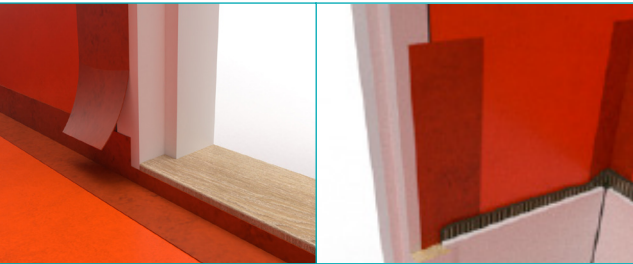


SEALING ON FRAMES


Doorframes must level with the base for the waterproofing membrane. The frame must be installed before applying the waterproofing membrane. If this is not the case, it must be noted as a deviation in the Quality Document. The upper edge of the turn-up by the doorway must be at least 20 mm above the horizontal level of the waterproofing membrane around the floor drain flange.

Sill in line with the wall: Sealing should be carried out continuously between threshold, frame and wall.

Sealing on frames: protects the internal structure of the wall.




Replacing ceramic tiles



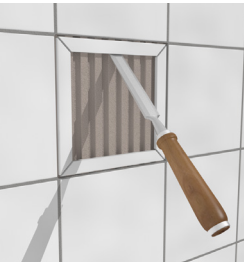
1

Cut or scrape the grouting around the damaged tile. Be careful not to damage the waterproofing membrane. NOTE! Use protective glasses and gloves.




2

Cut grooves through the tile using a tile saw or grinder. Do not cut deeper than the depth of the tile.



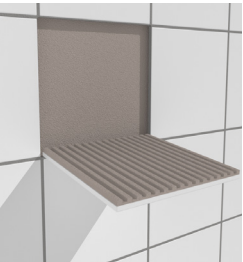
3

Remove tile pieces using a chisel and a hammer. Be careful not to damage the waterproofing membrane.



4

Use a chisel or other suitable tool to carefully scrape away remaining tile adhesive and grouting.



5

Apply the tile with tile adhesive on the back of the tile. Press the tile and seal after 12 hours. If the waterproofing membrane is damaged, contact Bostik 042-195000 for detailed instructions on how to repair the waterproofing.

Bostik membrane foil system VTv & VTg Universal

Bostik's waterproofing systems VTv and VTg Universal are liquid-based systems used for waterproofing behind ceramic surface covering on floors and walls in wet rooms in homes and spaces with similar use. Waterproofing systems VTv & VTg are able to absorb deformations and are used for concrete, light concrete, plaster and board structures only for zone 2.

Bostik waterproofing systems VTv and VTg Universal have been tested according to ETAG 022 and comply with the Swedish National Board of Housing, Building and Planning's (Boverket) Building Regulations BFS 2011:6 as amended until and including BFS 2020:4, BRR. The system is approved by the Swedish Ceramic Tile Council (BKR). The approval documentation can be found on the councils website www.bkr.se. The system's resistance to water vapour permeability is greater than 1,551,000 s/m.

WHAT YOU NEED:

Materials

- ☐ Bostik Moisture Barrier Universal (moisture barrier)
- ☐ Bostik Membrane Universal
- ☐ Bostik Fibre strips & Fibre corner
- ☐ Bostik Pipe collars & drain collars
- ☐ Bostik Fix & Fog

Tools

- ☐ Roller
- ☐ Brush



Wall VTv

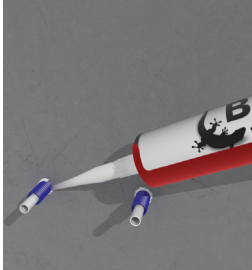
PREPARATION

Fill cracks larger than 2 mm in corners, in board joints and at pipe penetrations using Bostik acrylic sealant.

HERE'S HOW

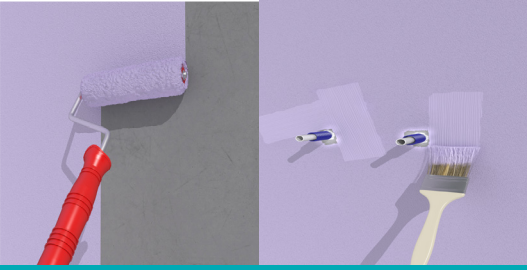
Start with the wall. Roll Bostik Moisture barrier Universal on the wall. Then seal wall and floor angles with Bostik Fibre Strip and Fibre Corner Universal and Bostik Membrane Universal. Then proceed to seal the pipes with Bostik Drain collars Universal.

APPLICATION




1

Fill larger cracks in corners, in board joints and at pipe penetrations using acrylic sealant or similar. Check that all pipes are thoroughly attached



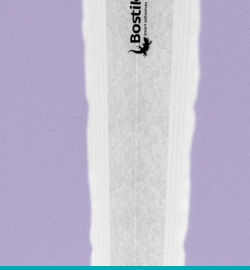
2

Apply Moisture Barrier Universal with a roller and brush on clean and dry walls. Use a short-haired roller. Consumption 0.2 kg/m² (0.16 litres/m²). Drying time on absorbent surfaces at normal room temperature is 20 - 30 minutes.




3

Brush/roll Membrane Universal in corners and angles.



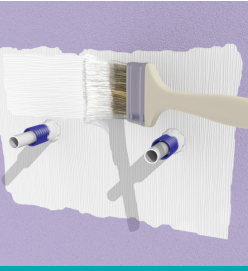
4

Install sealing tape and corners onto wet Membrane Universal.



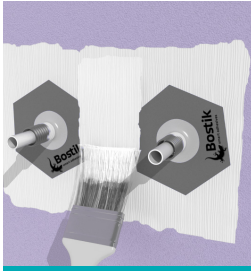
5

Brush a layer of Membrane Universal over the seals.



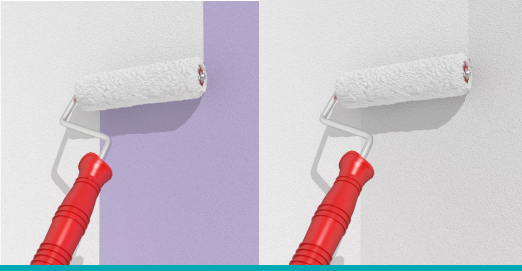
6

Brush Membrane Universal around the pipe penetrations and fit the pipe sleeve to the pipe in the wet waterproofing membrane. Repeat this process on the electrical pipes.



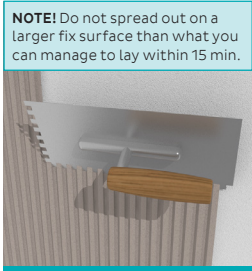
7

Brush a layer of Membrane Universal liberally over the pipe collars.



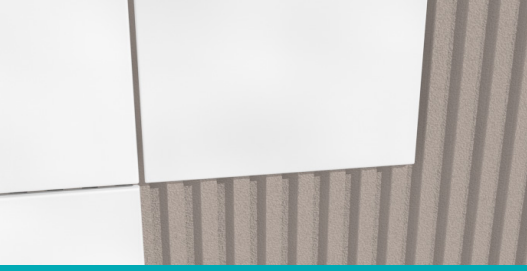
8

Roll Membrane Universal on the walls. Consumption 0.5 kg/m² (0.34 litres/m²). Drying time at normal room temperature 1-2 hours. Roll a second layer of Membrane Universal on the walls. Consumption 0.5 kg/m² (0.34 litres/m²). Total consumption Membrane: 1.0 kg/m² (0.68 litres/m²). You can start tiling after it has dried for 12 hours. Check the applied quantity by comparing the coated surface with the consumption of Membrane.



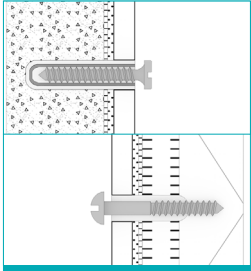
9

Apply adhesive using the smooth side of the trowel. Even out using the notched side. For the suitable adhesive, notch size and use, see page 18.



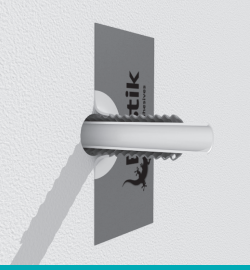
10

Apply the tile by pressing and twisting it against the base. Check that the back of the tile is completely covered with adhesive. Remove any adhesive that protrudes more than half the joint depth. Allow to dry for 12 hours before grouting.



11

All penetrations must be made in solid structures such as concrete, brick or posts. Fill the fixing hole with Bostik Wetroom Silicone, press the plug and screw in the screw.



12

In case of pipe-in-pipe systems, the pipe collar must sit tightly against the sheathing and not against water pipe.

NOTE! Do not spread out on a larger fix surface than what you can manage to lay within 15 min.

Floor VTg

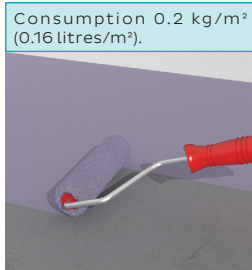
PREPARATION

Fill cracks larger than 2 mm in corners, in board joints and at pipe penetrations using Bostik acrylic sealant.

HERE'S HOW


For an even application result, use a short-haired roller to apply Bostik Moisture Barrier Universal. Seal wall and floor angles with Bostik Fibre Strip Universal and Bostik Membrane Universal. Then proceed to seal the pipes with Bostik Drain collars. Then apply the drain collar. Follow the instructions for each type of drain (see pages 12 and 13) only figure 1 + 2 for each drain. When installing the drain collar always use cutting tool from the drain supplier (Purus knife alternatively Jafo's template). For other drains contact Bostik.

APPLICATION




1

Consumption 0.2 kg/m² (0.16 litres/m²). Once the primer has dried, roll the floor with Moisture Barrier Universal. Use a short-haired roller. Drying time on absorbent surfaces at normal room temperature is 20 - 30 minutes.



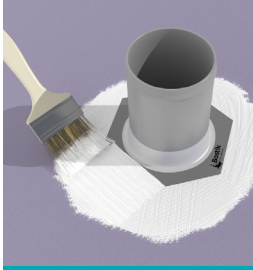
2

Brush/roll Membrane Universal in corners and angles. Apply on corners and strip onto the wet Membrane Universal. Brush a layer of Membrane Universal over the seals. Leave a minimum of 50 mm overlap between foil/inner and outer corners/sealing strip.



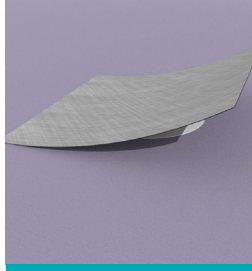
3

Brush the Membrane Universal around the drain pipe for sinks and toilet seat and fit the pipe collar to the wet Membrane Universal.



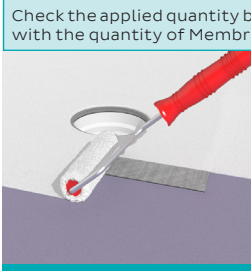
4

Brush a layer of Membrane Universal liberally over the pipe collars. Ensure that the entire pipe collar attaches properly and that no folds are formed.




5

Membrane Universal should be applied at least two times over the drain collar and the drain should only be cut open after the membrane has dried. The clamping ring is then fitted. See pages 12 and 13.



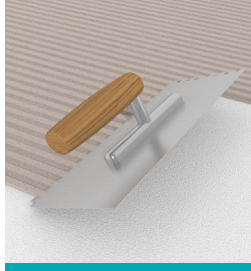
6

Roll Membrane Universal on other floor surfaces. Roll up to the clamping ring, but not on the clamping ring. Consumption 0.6 kg/m² (0.41 litres/m²). Drying time at normal room temperature is 1-2 hours.



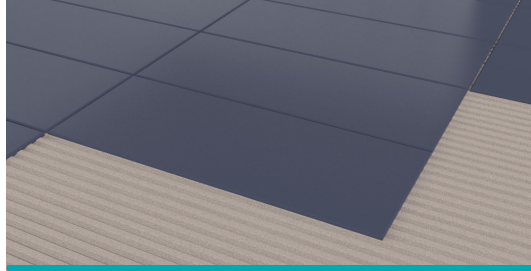
7

Roll a second layer of Membrane Universal over the entire floor surface. Consumption 0.6 kg/m² (0.41 litres/m²). Total consumption Membrane: 1.2 kg/m² (0.82 litres/m²). You can start tiling after it has dried for 12 hours.



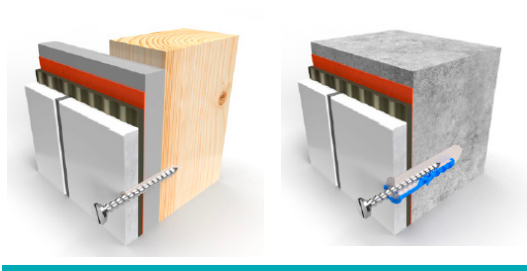
8

Apply adhesive using the smooth side of the trowel. Even out using the notched side. For the suitable adhesive, notch size and use, see page 18.



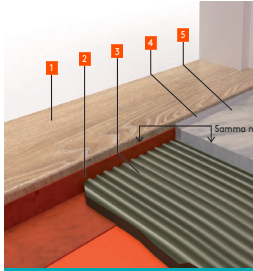
9

Apply the tile by pressing and twisting it against the base. Check that the back of the tile is completely covered with adhesive. Remove any adhesive that protrudes more than half the joint depth. Allow to dry for 12 hours before grouting. NOTE! Do not spread out onto a larger fix surface than what you can manage to lay in 15 min.



10 FIXING IN WOODEN POST AND CONCRETE WALL

All possible penetrations must be made in solid structures such as concrete, brick or posts. The hole for the fixing must be filled with Silicone Wetroom. Push in any plug and inject silicone into the plug and fasten the screw. The screw should be at the bottom of the joist. Bostik does not recommend penetrations in floors and the toilet should be glued onto the floor using wet-room silicone.



11 FOLD UP SILL

Sealing against sill must be done by turning up the membrane and associated sealing against the sill to at least the level of the finished floor. 1. Sill 2. Upper edge 3. Adhesive 4. Flexible sealant 5. Ceramic tiles



Consumption tables

Personal notes:

Consumption Bostik Waterproofing System Universal VTvF & VTgF (foil for floor and wall)

PRODUCT	CONSUMPTION PER M2	TIME INTERVAL
FOIL ADHESIVE Bostik Membrane Universal or 1 Bostik Foil Adhesive Universal or 2 Bostik Floor & Wall Tac or 3	0.5 kg 0.6 kg 0.3 kg	within 5 minutes within 5 minutes within 5 minutes
JOINTING ADHESIVE FOR SEALING STRIPS, CORNERS & PIPE COLLARS Bostik Foil Seal Grab	about 4 running metres per cartridge with strip, about 8 running metres per cartridge in case of overlap about 0.2 kg /lpm	
SILICONE WETROOM	approx. 9 running metres/cartridge (4 x 8 mm joint)	

Consumption of Bostik Waterproofing System Universal VTv (rolled for wall)

PRODUCT	CONSUMPTION PER M2	DRYING TIME +20°C
Bostik Moisture Barrier Universal (moisture barrier) Bostik Membrane Universal Total Bostik Membrane Universal	0.2 kg/m² (0.16 lit/m²) 2x 0.5 kg/m² (2x 0.34 lit/m²) 1.0 kg/m² (0.68 lit/m²)	30 min 2 hours 4 hours
POSSIBLE PRE-TREATMENT Bostik Primer 6000	approx. 100 g/m²	

Consumption Bostik Waterproofing System Universal VTg (rolled for floors)

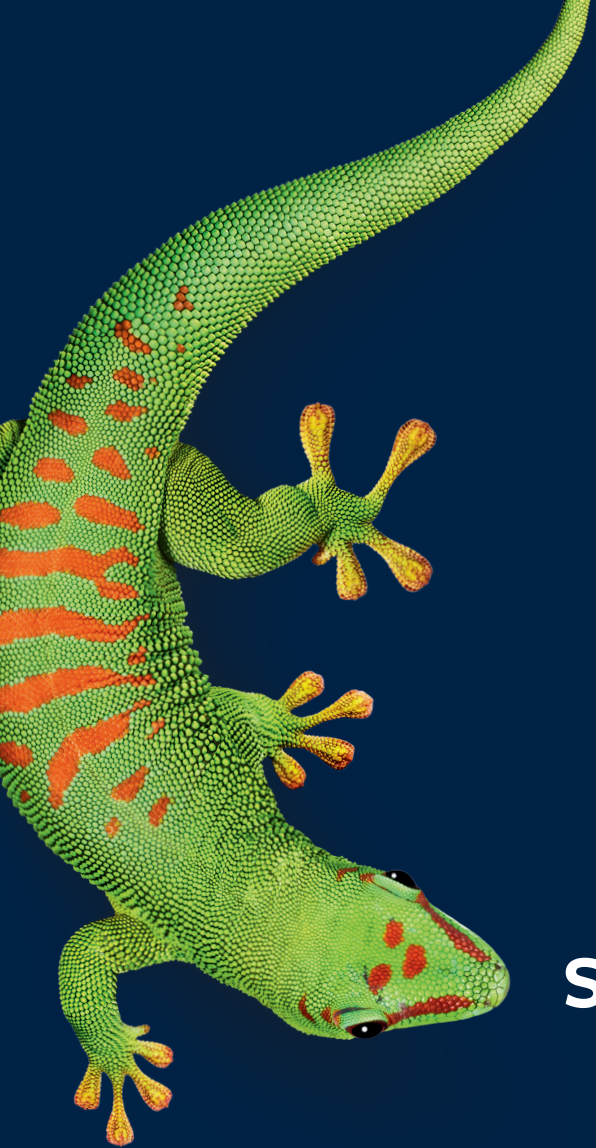
PRODUCT	CONSUMPTION PER M2	DRYING TIME +20°C
Bostik Moisture Barrier Universal (moisture barrier) Bostik Membrane Universal Total Bostik Membrane Universal	0.2 kg/m² (0.16 lit/m²) 2x 0.6 kg/m² (2x 0.41 lit/m²) 1.2 kg/m² (0.82 lit/m²)	30 min 2 hours 4 hours
POSSIBLE PRE-TREATMENT Bostik Primer 6000	approx. 100 g/m²	

Consumption adhesive kg/m²

TILE SIZE	FIXKAM	Fix Universal Flex	Fix Universal Light DR
5 x 5 cm	4 mm	1.7	1.2
15 x 15 cm	6 mm	2.2	1.7
25 x 25 cm	8 mm	2.8	2.1
30 x 60 cm	10 mm	4.0	2.5
60 x 60 cm	12 mm	5.0	3.4

Consumption grouting kg/m²

TILE SIZE	2 MM JOINT	3 MM JOINT	4 MM JOINT	5 MM JOINT	6 MM JOINT	8 MM JOINT	10 MM JOINT	12 MM JOINT
5 x 5 cm	0.6	0.8	1.0	1.0	1.3	-	-	-
10 x 10 cm	0.5	0.7	0.9	1.2	1.4	1.7	1.9	2.1
15 x 15 cm	0.4	0.5	0.8	0.9	0.9	1.2	1.5	1.8
10 x 20 cm	0.4	0.6	0.8	1.1	1.2	1.3	1.6	1.9
20 x 20 cm	0.4	0.4	0.7	0.8	0.8	0.9	1.2	1.5
20 x 25 cm	0.3	1.4	0.5	0.7	0.8	0.8	1.0	1.2
25 x 25 cm	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.1
30 x 30 cm	0.3	0.3	0.4	0.5	0.6	0.7	0.8	1.0
30 x 60 cm	0.2	0.3	0.4	0.5	-	-	-	-
60 x 60 cm	0.2	0.2	0.3	0.4	-	-	-	-



Smart service
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