



# SCHOMBURG

Problems Solved.



## PLANNING AND APPLICATION CONSULTANT

For building waterproofing  
and restoration

[schomburg.com](https://www.schomburg.com)



## Problems solved. For any requirement.

Restoring, renovating, and modernising older existing buildings has become increasingly important in recent years. The most important aspect for permanently maintaining a building is protection against moisture.

It's imperative that the waterproofing is reliable. SCHOMBURG possesses decades of experience in this area, and we offer you an assortment of products that are matched exactly to each other.

This brochure is intended to provide you practical help and reliable solutions for upcoming tasks. Further information about SCHOMBURG and our product systems can be found at [www.schomburg.com](http://www.schomburg.com).



# Planning and application consultant for building waterproofing and restoration



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# Planning and using waterproofing

## Protect and preserve value

Protecting a building against penetrating moisture, ensuring a pleasant living environment on the interior, and granting the building eternal youth: Accepting these challenges means working with knowledge and precision to implement projects to the satisfaction of the building owner.

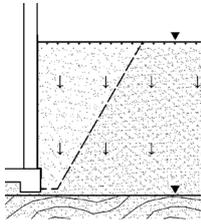
Living and working in a hygienic environment with a pleasant temperature that is healthy above all else is not a matter of course. To ensure long-term preservation of the value of a building, carefully planned waterproofing solutions are needed. Every building is continuously exposed to external environmental conditions and must be adjusted individually in accordance with the surrounding influences. The waterproofing products and system components must be compatible with each other and matched to suit each other.

From substrate preparation to waterproofing for waste water treatment plants and crack waterproofing, SCHOMBURG offers a complete package for every thinkable challenge. Building components in the ground especially require high-quality, professional implementation of waterproofing. Follow-up improvements

or even essential restorations involve high costs and require a lot of time, since after the building pit is filled in, the exterior area is difficult to access. For this reason, SCHOMBURG offers optimised solutions for cellar exterior waterproofing in particular to ensure a water-tight cellar.

Selection of matching waterproofing components for cellar masonry depends on a variety of factors. On the one hand, this depends on the use of the cellar, while on the other, various so-called "water impact classes" are involved. In this case, the type and method of penetrating moisture are referred to. Pressing groundwater from outside required another type of waterproofing application than normal ground moisture. The correct application is regulated in the technical documents. This specifies corresponding waterproofing procedures for corresponding water impact classes.

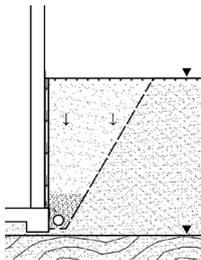
# Water impact classes



## Ground moisture and non pressure water for floor slabs and walls in direct ground

These impact classes are present when **severely water-permeable** ground is present ( $k > 10^{-4}$  m/s) and the measured water level (maximum groundwater/maximum flood level)  $\geq 50$  cm lies below the lowest

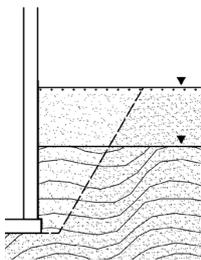
waterproofing level. This impact can be waterproofed using a polymer-modified bituminous thick layer coating (PMBC) or a cementitious, crack-bridging waterproofing slurry (MDS).



## Ground moisture and non pressure water for floor slabs and walls in direct ground with drainage

These impact classes are present when **less water-permeable** ground is present ( $k \leq 10^{-4}$  m/s) and the measured water level (maximum groundwater/maximum flood level)  $\geq 50$  cm lies below the lowest waterproofing level. The resulting water accumulation is removed by permanently functioning drainage.

If the drainage does not function, pressing water is present. This impact can be waterproofed using a polymer-modified bituminous thick layer coating (PMBC) or a cementitious, crack-bridging waterproofing slurry (MDS).



## Moderate exposure to pressure water

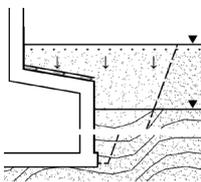
This impact class is present when groundwater, accumulating water, or flood water affect the component directly in the ground. Up to a water column of  $\leq 3$  m, the building component may be waterproofed with polymer-modified bituminous thick layer

coating (PMBC). The use of cementitious, crack-bridging waterproofing slurry is not intended for this impact class and may only be agreed to separately with the respective employer.

## High exposure to pressure water

This impact class is present when groundwater, accumulating water, or flood water affect the component in direct ground and the foundation depth is  $\geq 3$  m. The impact class distinguishes between two situations. Situation 1: The groundwater and flood water level is beneath the foundation depth.

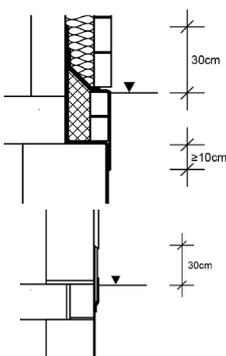
Situation 2: The groundwater and flood water level is 3 m above the foundation depth. With this exposure, the use of PMBC or flexible polymer-modified thick layer coatings (FPD) are to be agreed separately with the customer.



## Non-pressurised water on earth-covered slabs

This impact class is present if an earth-covered ceiling is impacted directly by precipitation with a water load of  $\leq 10$  cm accumulation depth and the measured water level is  $\geq 30$  cm below the lowest point of the ceiling.

This impact can be waterproofed using a polymer-modified bituminous thick layer coating (PMBC).



## Splash water at the wall base and capillary water in and under walls in direct ground

The "wall base" describes the area approx. 20 cm below the top edge and approx. 30 cm above the top edge. In this area, the building component must be waterproofed against penetrating moisture with polymer-modified bituminous thick layer coating or a

cementitious, crack-bridging waterproofing slurry. To avoid rising capillary water in walls in direct ground, it is possible to use a cementitious, crack-bridging waterproofing slurry as profile waterproofing.



## Preparing substrates

### For ideal results

A sustainably functioning waterproofing requires a thorough and carefully prepared building surface to be treated. After all, the finished waterproofing is only as good as the substrate will allow.



The waterproofing materials must harmonise with the substrate and require the best possible bonding for secure and long-lasting sealing function. For this reason, substrate pretreatment with its specific requirements is particularly important. The technical documents specify the basic principles and details like the evenness, burr removal, and cleaning, as they apply to every user or installer.

The ideal pre-treatment of the substrate is based on the respective present waterproofing situation. For example, waterproofing on basement walls requires other procedures than with coatings in garages. Depending on the relevant area, there are different system solutions for the respective application area.

### Building condition survey

Before any waterproofing measures, a professional building condition analysis of the substrate must be completed. In case of concrete substrates, bubble formation frequently results in the still wet coating. This is due to the air voids that are hardly visible and often covered with concrete paste on the surface of the concrete. The air trapped in the pores expands due to exposure to sunlight and continuously pushes outwards. In this case, the fresh coating is pressed away from the substrate. This is prevented by removing the cement paste layer using diamond grinding or shot blasting. In case of more stubborn concrete paste, sandblasting may even be necessary for clean removal. The open pores may then be filled with suitable mortar or with the right SCHOMBURG waterproofing following application of a primer.

Thanks to these work steps, the substrate is pre-treated optimally so that the waterproofing is able to be completed functionally after the drying phase of the mortar.



### **Substrate preparation with SCHOMBURG products**

The substrate must be load-bearing, fine-pored, and free of dirt and dust. Unevenness and ridges must be evened out meticulously. As previously discussed in the building condition analysis, open butt joints up to 5 mm and surface profiles and unevenness of stones (e.g. plaster grooves on brickwork or heavy concrete blocks) must be levelled using grouting, e.g. with AQUAFIN-1K. Depressions that are not closed and larger than 5 mm, e.g. mortar pockets or damaged areas must be closed with mortar, e.g. using ASOCRET-M30.

Furthermore, the surface must be free of gaping cracks and adhesion inhibiting substances, e.g. oil, paint, laitance layers, and loose components. On the floor slabs, laitance layers must be thoroughly removed mechanically down to the solid core to ensure a high level of bonding. The base slab transition, which is a sensitive, delicate area, should be pre-treated with slurry using AQUAFIN-1K. Next, a coved fillet is applied while still wet using ASOCRET-M30. Alternatively, the coved fillet area can be applied using ASO-Joint-Tape-2000-S together with AQUAFIN-RB400.

After curing completely, the coved fillet area, including 15 cm of the front side, is also covered with AQUAFIN-RB400.

The substrate should be pre-wetted so that it is matt damp while applying the waterproofing layer. Strongly absorbent substrates like aerated concrete must be primed with AQUAFIN-Primer for improved adhesion. On metal substrates, use ASODUR-SG3 (including quartz sand sprinkling) as a pore-sealed primer. If ASOCRET-HFF is used to level off the surface in large layer thickness widths (up to 30 mm), the process is the same. If dampness from the rear is expected, then use ASODUR-SG3-superfast instead.

Ideal substrates consist of dense concrete, cement-based screeds, P II and P III plaster, and fully grouted masonry work. Formwork and heavy concrete blocks, as well as uneven masonry must be levelled with cement-based mortar.



## Cellar exterior waterproofing for new and existing buildings

### Bituminous thick layer coatings (PMBC)

Dry and absolutely sealed basement areas cannot be taken for granted. Optimum exterior basement waterproofing is one of the most important requirements for a building that should be protected from moisture damage in the long term. Because moisture can penetrate basement spaces from a variety of angles, different waterproofing systems are required to produce comprehensive protection and a dry, mould-free living environment.

#### COMPONENTS

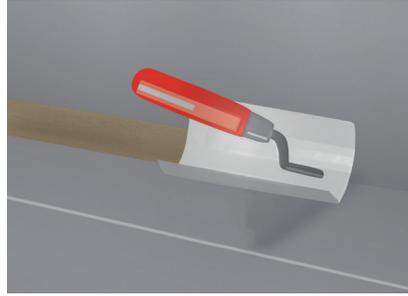
**AQUAFIN-1K**  
**ASOCRET-M30**  
**AQUAFIN-Primer**  
**ADF-Rohrmanschette**  
**AQUAFIN-RB400**  
**COMBIDIC-2K-CLASSIC /**  
**COMBIDIC-2K-PREMIUM**  
**COMBIDIC-1K-S**  
**ASOL-FE**  
**ADF-Rohrmanschette**  
**ASO-Verstärkungseinlage**

# Application



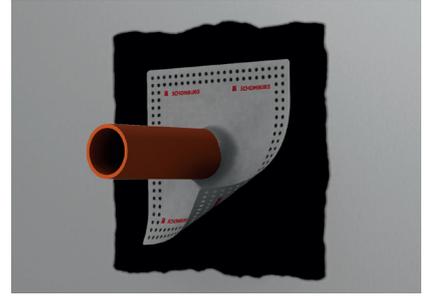
## 1. Level the substrate (as required)

Surface levelling with ASOCRET-M30 in a single application or AQUAFIN-1K in a minimum of two applications by means of trowel or with suitable spray equipment.



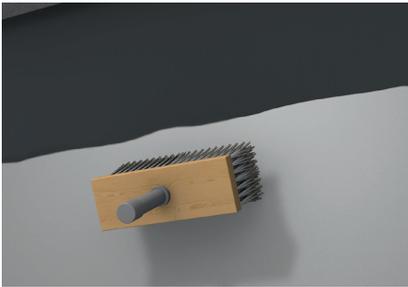
## 2. Waterproof the wall-floor transition

Install a cementitious sealing cove in the wall-floor transition with ASOCRET-M30. First apply a bonding slurry. This can consist of ASOCRET-M30 or AQUAFIN-1K. Alternatively, the sealing cove can be made of ASO-Joint-Tape-2000-S.



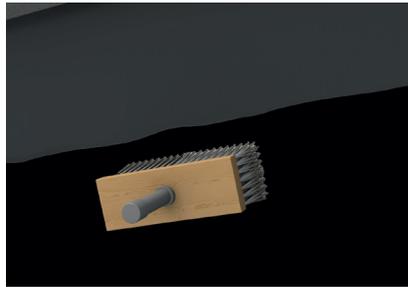
## 3. Waterproof pipe penetrations

Apply COMBIDIC-2K-CLASSIC or COMBIDIC-2K-PREMIUM with a 4 mm notched trowel and smooth it, adhere the ADF-Pipe-Gasket without wrinkles and then process it covering the whole area.



## 4. Base waterproofing transition

Apply AQUAFIN-RB400 in at least two application steps using a brush, flat trowel, or suitable spray equipment. Application at least 30 cm above and at least 20 cm below ground level.



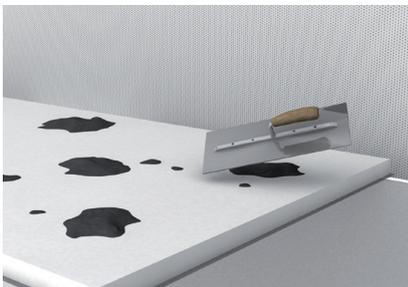
## 5. Primer

Before applying COMBIDIC-2K-PREMIUM or COMBIDIC-2K-CLASSIC, the substrate must be primed with ASOL-FE diluted 1:5 with water.



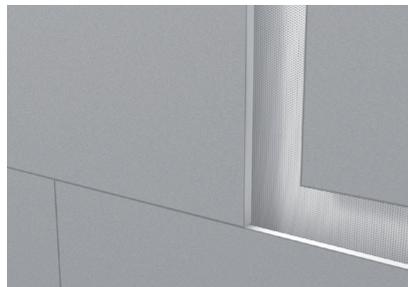
## 6. PMBC waterproofing

Apply COMBIDIC-2K-PREMIUM, COMBIDIC-2K-CLASSIC using trowel techniques with exposure-based layer thickness. Apply the bituminous thick layer coating with an overlap of at least 10 cm on the base waterproofing (figure 4).



## 7. Protection and drainage plates

After drying out the waterproofing layer, apply bituminous thick layer coating in dollops to the uncovered side of a suitable protection and drainage element, and then press it onto the waterproofed substrate.



## 8. Perimeter insulation

Adhere the insulation in accordance with the manufacturer's specifications close-fitting and offset covering the whole area using COMBIDIC-2K-CLASSIC or COMBIDIC-2K-PREMIUM.



## Cellar exterior waterproofing for new and existing buildings

### With rapid cementitious waterproofing (FPD)

Dry and absolutely sealed basement areas cannot be taken for granted. Optimal basement exterior waterproofing is among the most important requirements for a building that is intended to preserve sustainably it from water damage. Because moisture can penetrate basement spaces from a variety of angles, different waterproofing systems are required to produce comprehensive protection and a dry, mould-free living environment.

#### COMPONENTS

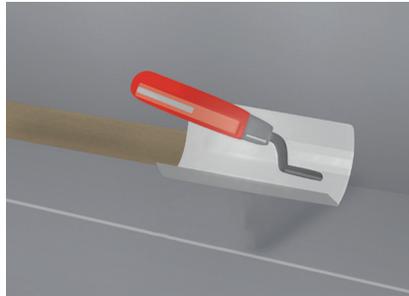
**AQUAFIN-Primer**  
**AQUAFIN-1K**  
**ASOCRET-M30**  
**ADF-Rohrmanschette**  
**AQUAFIN-RB400**  
**ASO-Dichtband-2000-S**

# Application



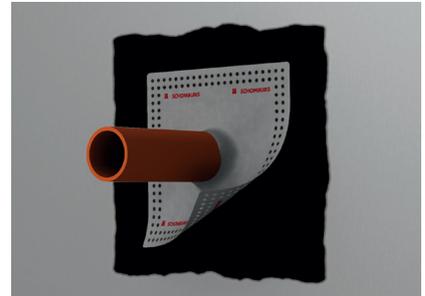
## 1. Level the substrate (as required)

Surface levelling with ASOCRET-M30 in a single application or AQUAFIN-1K in a minimum of two applications by means of trowel or with suitable spray equipment.



## 2. Waterproof the wall-floor transition

Install a cementitious sealing cove in the wall-floor transition with ASOCRET-M30. First apply a bonding slurry. This can consist of ASOCRET-M30 or AQUAFIN-1K. Alternatively, the sealing cove can be made of ASO-Joint-Tape-2000-S.



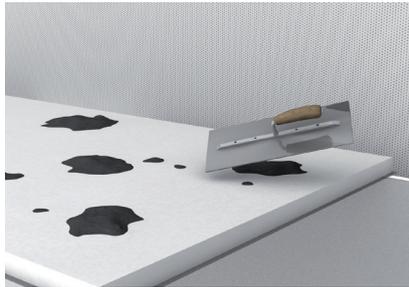
## 3. Waterproof pipe penetrations

Apply AQUAFIN-RB400 with a 4 mm notched trowel and smooth it, adhere the ADF-Pipe-Gasket) without wrinkles and then process it covering the whole area.



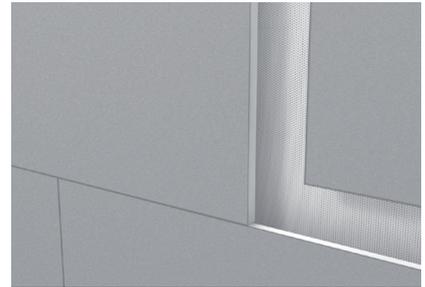
## 4. FPD-MDS waterproofing

Apply AQUAFIN-RB400 with a trowel/brush or the spray technique with a load case-appropriate layer thickness.



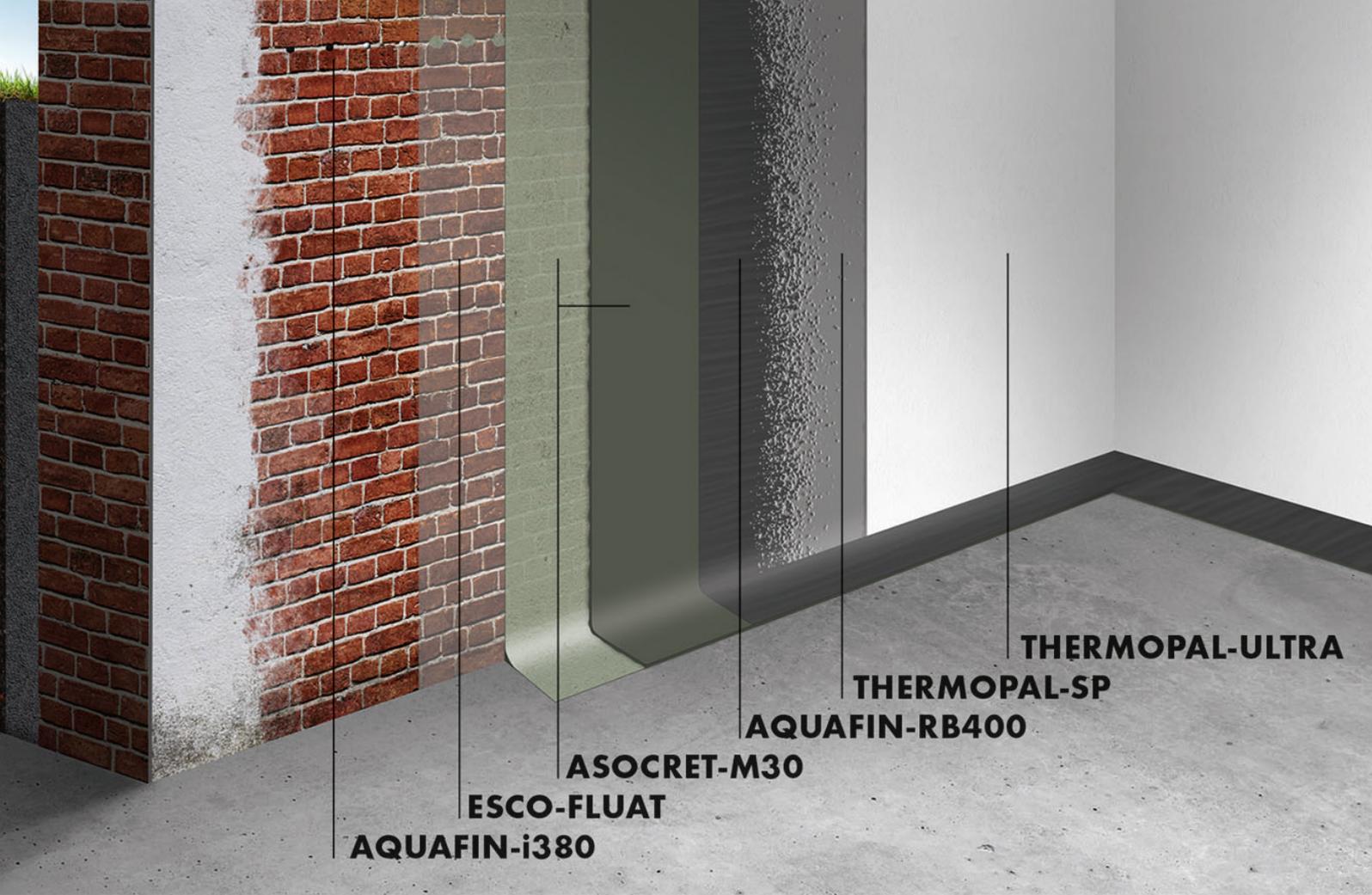
## 5. Protection and drainage plates

After the waterproofing layer has dried, the protective layers can be bonded to cover the whole area with a mixture of AQUAFIN-RB400 / quartz sand 0.1–0.35 mm and a suitable notched trowel using the Buttering-Floating method.



## 6. Perimeter insulation

Bond the insulation tightly with AQUAFIN-RB400 and offset, such that it covers the whole area in accordance with the manufacturer's instructions.



**AQUAFIN-i380**

**ESCO-FLUAT**

**ASOCRET-M30**

**AQUAFIN-RB400**

**THERMOPAL-SP**

**THERMOPAL-ULTRA**

## Retrospective Basement interior waterproofing in existing buildings

In the flexible system with radon protection

Protection for buildings against extended destruction by water is a central topic of building restoration. Buildings directly in the ground that are not protected against moisture are exposed to decay. A damp wall is also a thermal bridge that can result in subsequent damages. In light of increasing energy costs, a dry wall contributes to the reduction of energy costs. Additional aspects of renovation include improved living comfort and improved real estate value. Retroactive cellar interior waterproofing is the most efficient way to fulfil this requirement.

### COMPONENTS

**AQUAFIN-RB400**

**ASOCRET-M30**

**ESCO-FLUAT**

**THERMOPAL-SP**

**THERMOPAL-ULTRA**

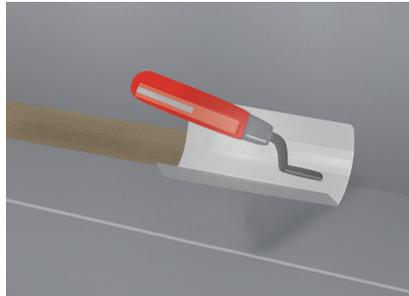
**THERMOPAL-FS33**

# Application



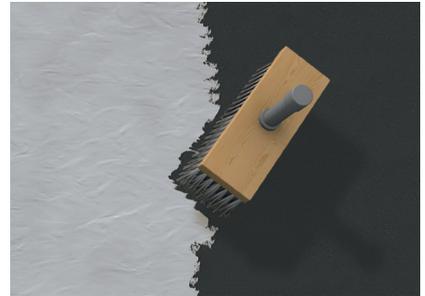
## 1. Levelling and pre-sealing

Levelling of the exposed, load-bearing wall surfaces and application of the pre-seal in one application step with ASOCRET-M30 as a levelling and waterproof plaster. Treat the wall surfaces with ESCO-Fluat beforehand.



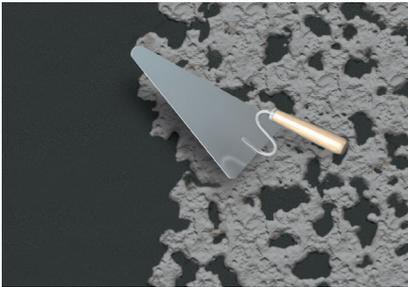
## 2. Waterproof the wall-floor transition

Install a cementitious sealing cove in the wall-floor transition with ASOCRET-M30.



## 3. Waterproof wall surfaces (crack-prone)

After curing the surfaces, AQUAFIN-RB400 is applied in two application steps using a brush/trowel or spray techniques.



## 4. Splatterdash coat

A fully covering splatterdash coat of THERMOPAL-SP is applied to the waterproofed substrate for improved bonding of the following restoration plaster.



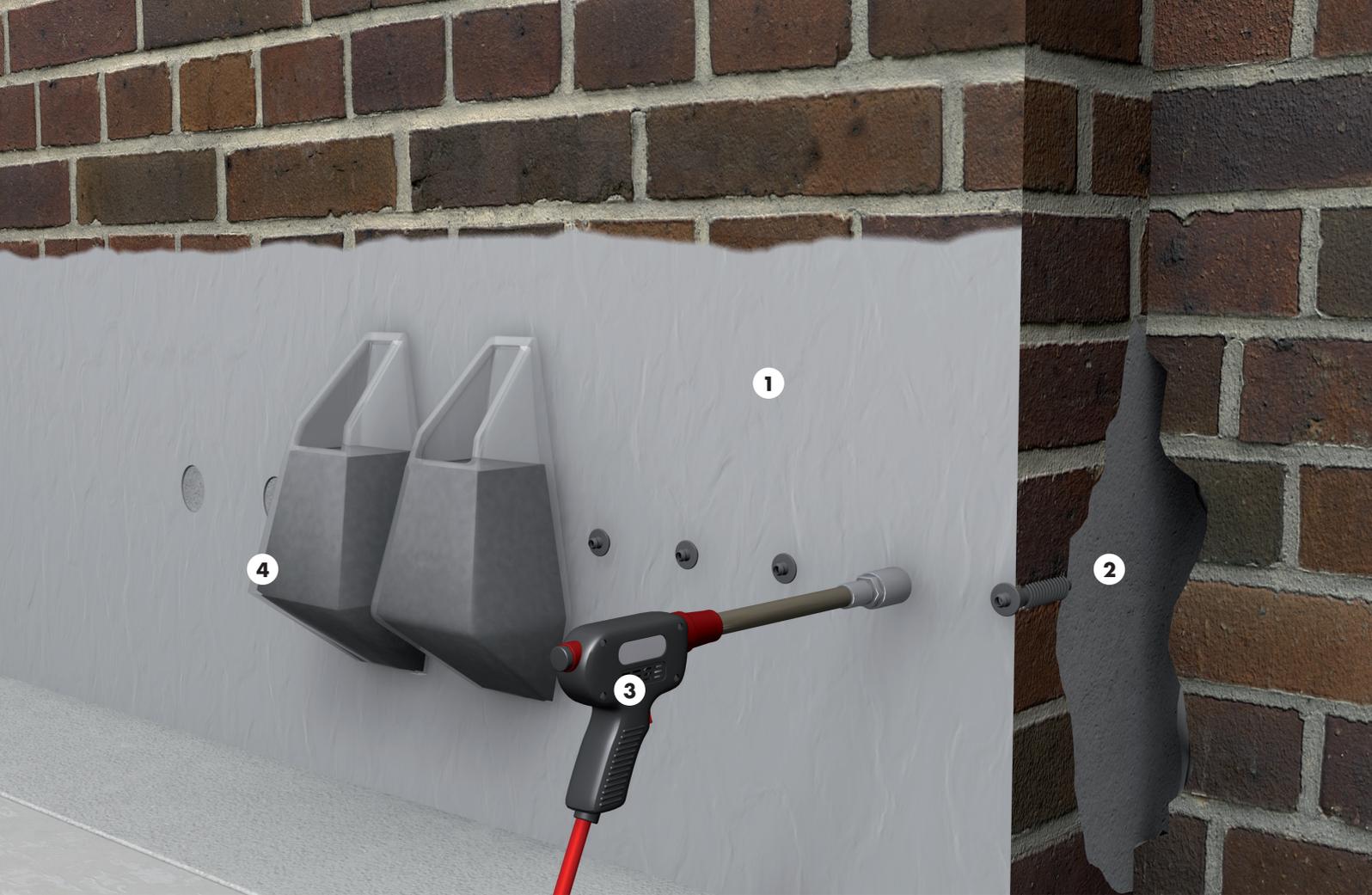
## 5. Apply restoration plaster

Apply up to max. 3 cm THERMOPAL-ULTRA in one application step. After sufficient standing time, the surface may be grid floated or rubbed down.



## 6. Apply fine plaster

Apply THERMOPAL-FS33 cementitious fine plaster using trowel techniques in the required layer thickness up to max. 3 mm. After drying, treat the surface with a sponge rubber or a felt or sponge board.



## Retroactive horizontal barrier with liquid injection material

In case of damage due to capillary rising moisture, it is possible to apply a horizontal barrier to the masonry work retroactively. Depending on the thickness of the masonry work and the degree of moisture penetration, the pressure injection process may be suitable. In this case, holes featuring a distance from each other of 10–12.5 cm from hole centre to hole centre are drilled into the masonry work. The drilled holes are arranged horizontally in the bearing joint or at an angle of 45°. The drilled hole depth is approximately 5 cm less than the masonry thickness. Corresponding injection packers are used in the pressure process to inject the injection material into the substrate.

### COMPONENTS

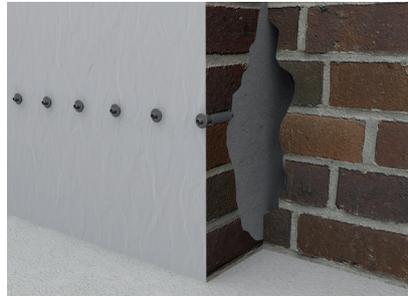
**AQUAFIN-1K**  
**ASOCRET-BM**  
**ASOCRET-M30**  
**AQUAFIN-F**

# Application



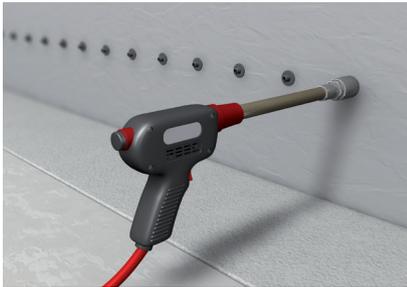
## 1. Level the wall surface

To optimise the distribution of the horizontal barrier, AQUAFIN-1K is applied up to approx. 10 cm above the planned drilled hole depth using brush techniques.



## 2. Fill voids

Fill voids and flaws in the substrate with ASOCRET-BM drilled hole material.



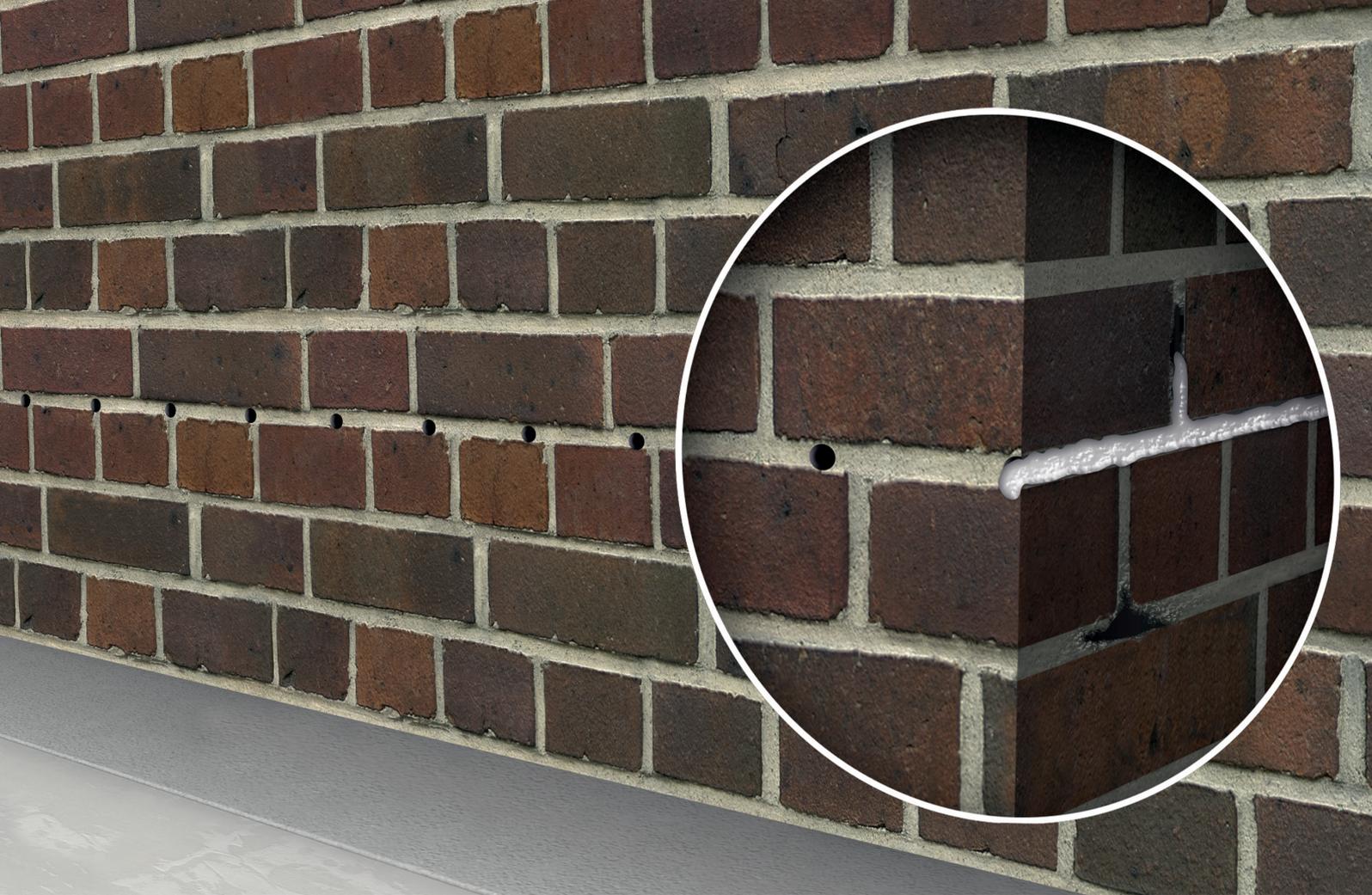
## 3. Produce the horizontal barrier

After drilling the holes (drilled hole distance between 10-12.5 cm), inject AQUAFIN-F with low pressure techniques (<10 bar) into the substrate using injection packers. The injection pressure is maintained until the area near the packer appears glossy-matte. After approx. 24 hours, remove the packers and close the holes with ASOCRET-BM.



## 4. Alternatively: Pressureless Injection

In a pressure-free process, storage containers are engaged in the drilled holes and filled with the injection material. The distribution in the substrate takes place exclusively via gravity and the absorptive behaviour of the substrate. Continue the filling process until no more injection medium is able to be absorbed. Similar to the pressure process, the drilled holes are sealed with the ASOCRET-BM or ASOCRET-M30 drilled hole mortar.



## Retroactive horizontal barrier with paste injection material

AQUAFIN-i380 is an effective solution for retroactive horizontal barriers. The Silan-based injection cream is processed without any pressure or using the low pressure techniques and has a hydrophobic effect on rising moisture in the masonry work. The material has been tested and certified in accordance with the WTA data sheet ("masonry injection against capillary moisture") at a penetrating moisture level of 95%. Classic, aqueous horizontal barriers are applied without any pressure up to a penetrating moisture level of < 60%. At a moisture penetration level of > 60%, application using low pressure techniques is recommended. One of the many advantages of AQUAFIN-i380: Even in case of a moisture penetration level up to 95%, this injection cream can be used without any pressure. The active ingredient contained is very fine and highly effective due to its special production technique. It does not react with the water, but rather only with the substrate. AQUAFIN-i380 is hydrophilic and therefore distributes itself especially rapidly in the water present in the masonry work. This will lead to 100% saturation of the pores over time. After the reaction with the substrate, the capillary

have been made water-repellent. Capillary water transportation is prevented and the substrate dries out.

The practical 550 ml tubular bag is applied using an injection pistol. Slowly pressing and simultaneously pulling out the injection hose ensures that the drilled holes are filled completely. Due to the creamy consistency, application is also possible on horizontal drilled holes and inhomogeneity in the masonry work. The risk of controlled run off like with aqueous horizontal barriers is omitted.

### COMPONENTS

**AQUAFIN-i380**  
**ASOCRET-BM**  
**ASOCRET-M30**

# Application



## 1. Drill holes

Create drilled holes at a distance of approx. 12.5 cm and a drill angle of 0° – 45° with an electro-pneumatic drill that operates as shudder-free as possible.



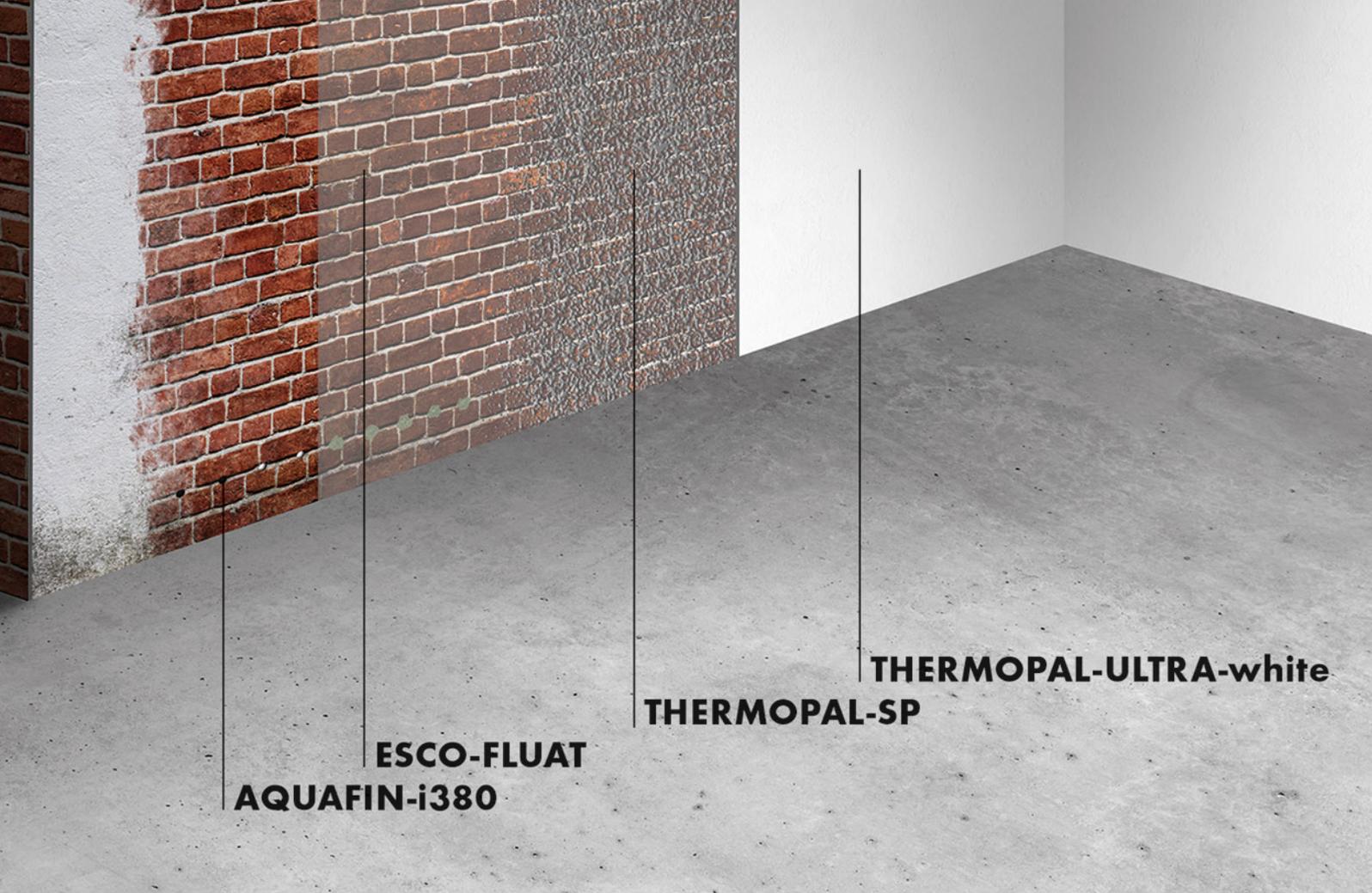
## 2. Clean drilled holes

Prior to injection, dust from drilling must be removed thoroughly to ensure maximum possible absorption of the active substance in the masonry work.



## 3. Produce the horizontal barrier

After cleaning the drilled holes, AQUAFIN-i380 is injected using an injection pistol without any pressure. Material must be pressed in until the drilled hole is filled completely. After successful horizontal waterproofing, drilled holes are sealed using ASOCRET-BM or ASOCRET-M30 drilled hole and void filling mortar in accordance with the structure.



**ESCO-FLUAT**  
**AQUAFIN-i380**

**THERMOPAL-SP**

**THERMOPAL-ULTRA-white**

## Renovation of salt-loaded substrates in the THERMOPAL system

Moisture and salt-loaded substrates frequently occur in legacy buildings. For professional and enduring restoration of these surfaces, the existing salt loading must be analysed exactly to ensure that the right product systems can be used. The THERMOPAL system developed for this is not only suitable for surfaces like this, it also supports renovation of formerly mould-contaminated surfaces at the same time. Legacy buildings become completely restored structures.

### COMPONENTS

**ESCO-FLUAT**  
**THERMOPAL-SP**  
**THERMOPAL-GP11**  
**THERMOPAL-ULTRA-white**  
**THERMOPAL-FS33**

# Application



## 1. Salt-loaded surface

The salts present in the masonry work have a hygroscopic effect and migrate to the surface, since less moisture is present there due to the evaporation zone and good conditions for crystal formation are available there. This causes the plaster surface to decay.



## 2. Apply salt converter

Saturate the exposed masonry work with ESCO-FLUAT one or two times using brush techniques (depending on the salt loading and absorbency of the substrate). Salts that damage the building are transformed into salts that are less soluble and cannot be transmitted to the new, fresh plaster layer.



## 3. Apply splatterdash coat

Apply THERMOPAL-SP drying mortar as semi-covering plaster primer preparation in accordance with plastering technique standards (approx. 50% surface wetting) featuring a layer thickness of max. 5 mm. Pre-wet the substrate lightly as required to ensure good bonding.



## 4. Apply base plaster

In case of larger surface irregularities, THERMOPAL-GP11 is applied in layer thickness from 10 - 30 mm (in multiple layers in case of thicker surfaces). Strike off the previous layer with a plasterer's darby, and immediately after stiffening, roughen up horizontally and allow to dry.



## 5. Apply restoration plaster

Apply up to max. 3 cm THERMOPAL-ULTRA-white in one application step. After sufficient standing time, the surface may be grid floated or rubbed down.



## 6. Apply fine plaster (optional)

Apply THERMOPAL-FS33 cementitious fine plaster using trowel techniques in the required layer thickness up to max. 3 mm. After drying, remove the surface with a sponge rubber or a felt or sponge board.



## Waterproofing of ground-level installation solutions

Double-façade masonry work, without basement

Waterproofing ground-level elements in double-façade wall structures is a special challenge for planners and the workers implementing it. The fact that waterproofing also involves a variety of professions is also difficult.

The AQUAFIN sealing system, which consists of a variety of highly elastic joint tapes combined with AQUAFIN-RB400 flexible cementitious waterproofing, enables the particular element to be reliably waterproofed within the context of alternating materials.

### COMPONENTS

**AQUAFIN-Primer**  
**AQUAFIN-RB400**  
**ASO-Dichtband-2000-S**  
**ASO-Dichtband-2000-S-Ecken**  
**ASO-Anschlussdichtband**

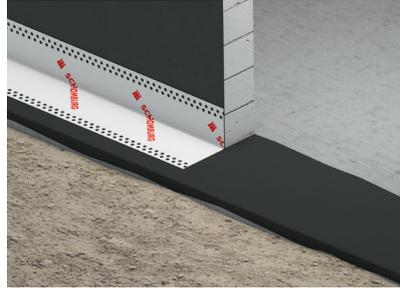


# Application



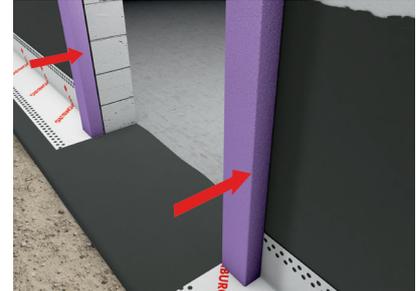
## 1. Wall-base slab connection waterproofing

The first application step is to apply waterproofing with AQUAFIN-RB400 until up to the front side of the concrete base slab.



## 2. Install ASO-Joint-Tape-2000-S

While the first application step with AQUAFIN-RB400 is still wet, ASO-Joint-Tape-2000-S is installed at an angle free of voids. Joint adhesion is always applied with an overlap of 5-10 cm.



## 3. Installation in wall edge insulation strips

Next, the wall edge insulation strip is installed or fastened in the area of the window soffit using AQUAFIN-RB400.



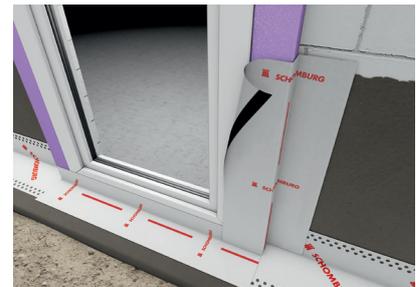
## 4. Ground-level element assembly

Installation and stabilisation of the ground-level element is completed in accordance with the manufacturer's instructions.



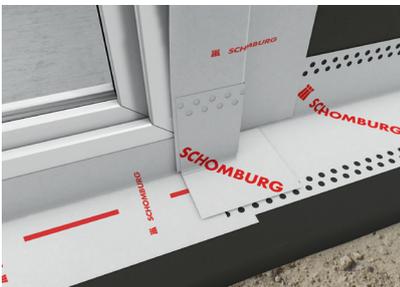
## 5. Horizontal feature waterproofing

Fasten ASO-Connector-Joint-Tape after removing the separating strip by pressing on the installation element and the insulation strip. The joint tape is adhered to the substrate using AQUAFIN-RB400.



## 6. Vertical feature waterproofing

ASO-Connector-Joint-Tape is fastened on the installation element as described in step 5. The joint tape is also adhered to the substrate using AQUAFIN-RB400.



## 7. Protection against back floating possibility

In order to avoid back floating possibility, the area of the previously completed joint tape application and the corner of the insulation strip are secured by installing ASO-Joint-Tape-2000-S-Corner. AQUAFIN-RB400 is used for adhesion.



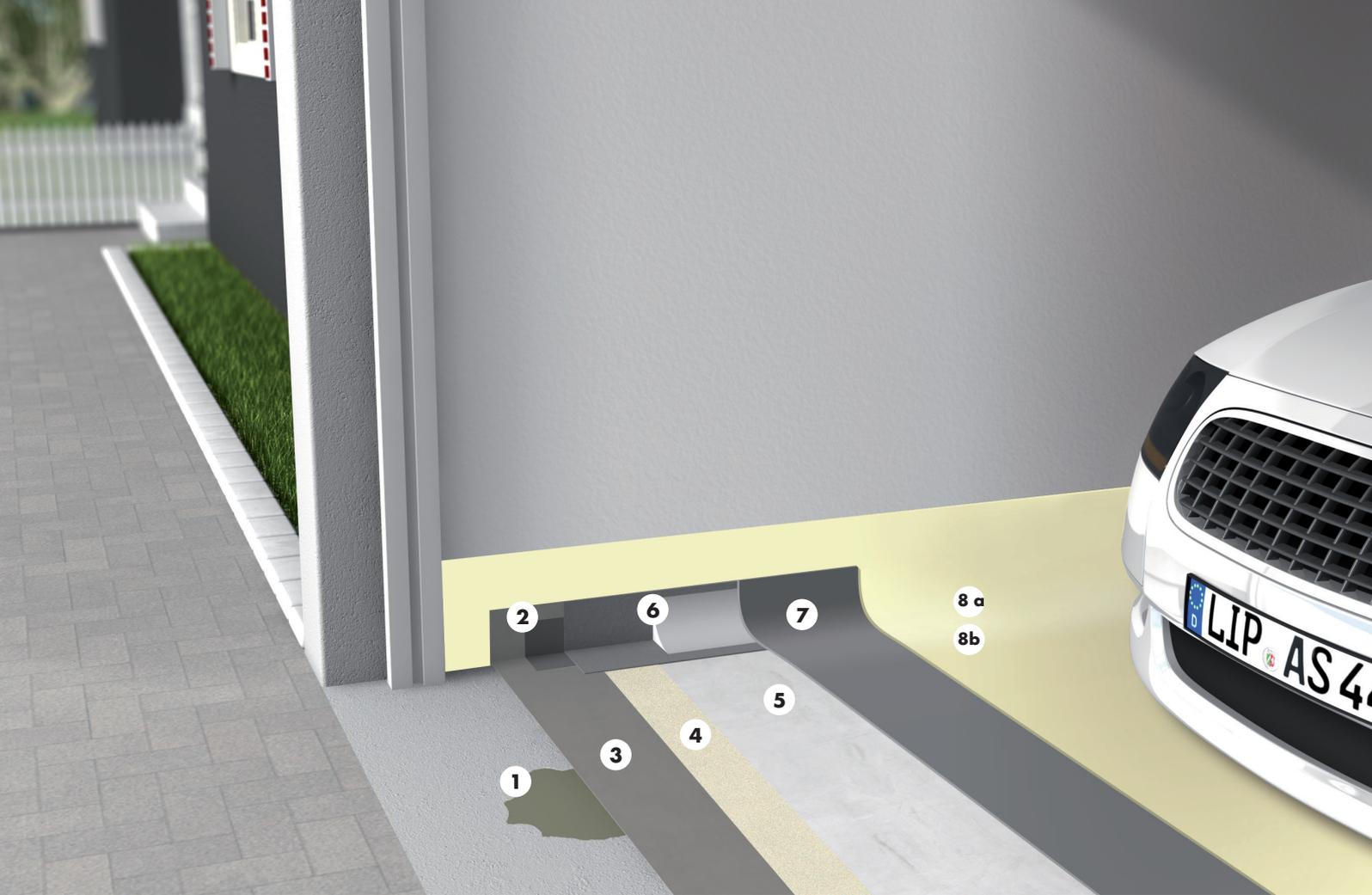
## 8. Installation in waterproofing

After installation of feature waterproofing, joint sealing tapes in the area of the base waterproofing are coated in two layers with AQUAFIN-RB400.



## 9. Completely applied wall structure

After completely drying the base waterproofing, the insulation and facing structure is completed.



## Garage repairs

With the ASO restoration system

Frequent use of the garage area places high demands on the materials that are used. Because every time you drive a vehicle in or out, dirt, and high quantities of rainwater in particular, are also carried inside. The moisture can easily penetrate into the floor via the walls and cause moisture damage. In order to prevent these and other damages, SCHOMBURG has developed an ideal application technique with the right components. Damage that has already occurred is able to be repaired and the garage area is able to be repaired as best as possible.

### COMPONENTS

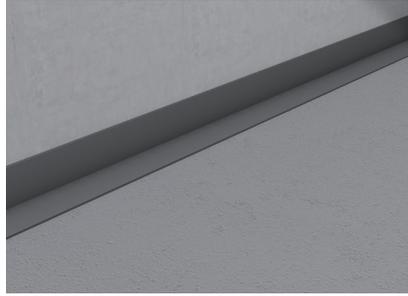
**ASOCRET-M30**  
**RD-SK50**  
**ASOCRET-HFF**  
**ASODUR-B351**  
**ASODUR-V360W**  
**ASODUR-V2260**  
**ASODUR-SG2**  
**AQUAFIN-Primer**  
**ASO-Antislide**  
**INDU-Primer-S**  
**INDUFLEX-PU**  
**Quarzsand**  
**ASODUR-GH-S**

# Application



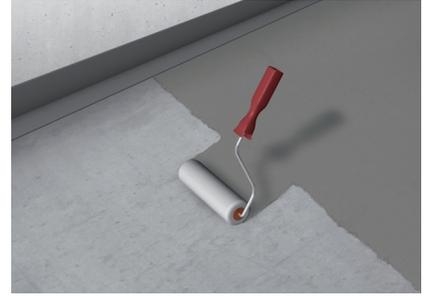
## 1. Level out damaged areas

Before application the substrate must be mechanically prepared, either by shotblasting or grinding and vacuuming. Widen existing cracks, vacuum and seal with ASODUR-GH-S. Close coarse damaged areas with ASOCRET-M30 using trowel techniques with a layer thickness of 3 to 30 mm.



## 2. Edging strips

Apply the RD-SK50 edging strips in the wall-floor transition. The substrate is bonded using a self-adhering foil. After fixing, RD-SK50 presses onto the wall so that straining and acoustic bridges may be prevented.



## 3. Applying primer

Apply suitable primer to the open-pored substrate.

- low exposure without moisture penetration AQUAFIN Primer
- moderate to high exposure with moisture penetration ASODUR-SG series



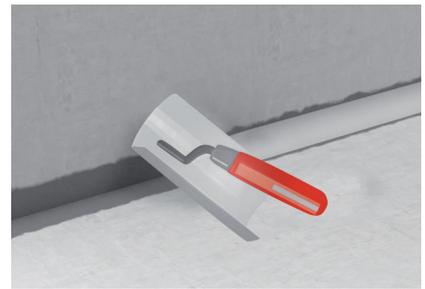
## 4. Quartz sand

If primed in advance with ASODUR-SG2, the surface must be evenly sanded with suitable quartz sand. After hardening, remove loose quartz sand by vacuuming. This entire step is not necessary when priming with AQUAFIN Primer.



## 5. Level the surface

Mix ASOCRET-HFF self-levelling floor levelling compound with the specified quantity of water and apply in a single application step on the primed substrate to max. 35 mm. When selecting the primer, please observe the currently applicable technical data sheet!



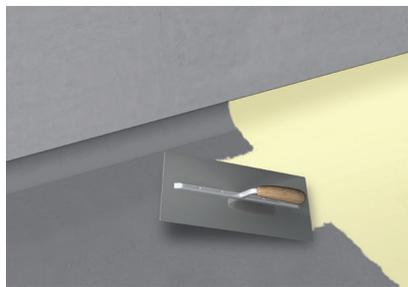
## 6. Create the covered fillet

Apply the created covered fillet wet in with ASOCRET-M30 with an edge height of at least 4 - 6 cm into the wet selected ASODUR primer against the edging strips (covered fillet stepped). After the covered fillet has hardened, remove the edging strips and prime the joint edges with INDU-Primer-S. The joint is sealed with INDUFLEX-PU.



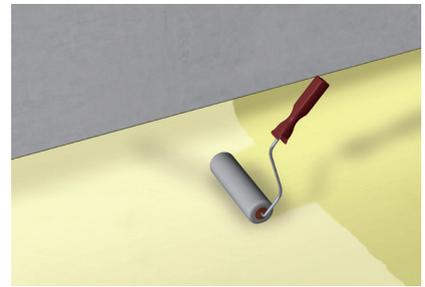
## 7. Prime the levelling layer

Apply the respective ASODUR primer to the open-pored substrate crosswise, filling the pores evenly using rolling techniques.



## 8a. Apply coating

In case of heavy exposure, ASODUR-B351 is applied evenly in a single application step with a rake and ventilated with a spiked roller in a criss-cross manner. Optionally apply non-slip sealing; for this purpose seal the hardened coating in a single application step with a mixture of ASODUR-V2260 and 10 wt.% ASO-Antislid using a rolling technique.



## 8b. Applying sealing

For light to moderate exposure, ASODUR-V360W is applied in a single application step by means of crosswise rolling. Optionally apply non-slip sealing; for this purpose seal the hardened sealing in a single application step with a mixture of ASODUR-V360W and 10 wt.% ASO-Antislid using a rolling technique.



## Facade impregnation

### Colour deepening and prevention of fouling

Facade impregnation is one of the most frequent procedures involved with the area of building restoration and maintenance. The exterior area of a building is exposed by weathering influences like rain, sunlight, wind, frost, etc. Clean and professionally installed facade impregnation protects the substrate against penetrating water using hydrophobic, water-repellent media. At the same time, the trapped water vapour is able to escape, which permanently avoids moisture damage. Thanks to ASOLIN-SFC45, facades consisting of brick, clinker, natural stone, lime-sand stone, and cementitious plasters are protected sustainably against damaging water influences, successfully treating them within the scope of care and maintenance of existing buildings.

#### COMPONENTS

**ASOLIN-SFC45**

# Application

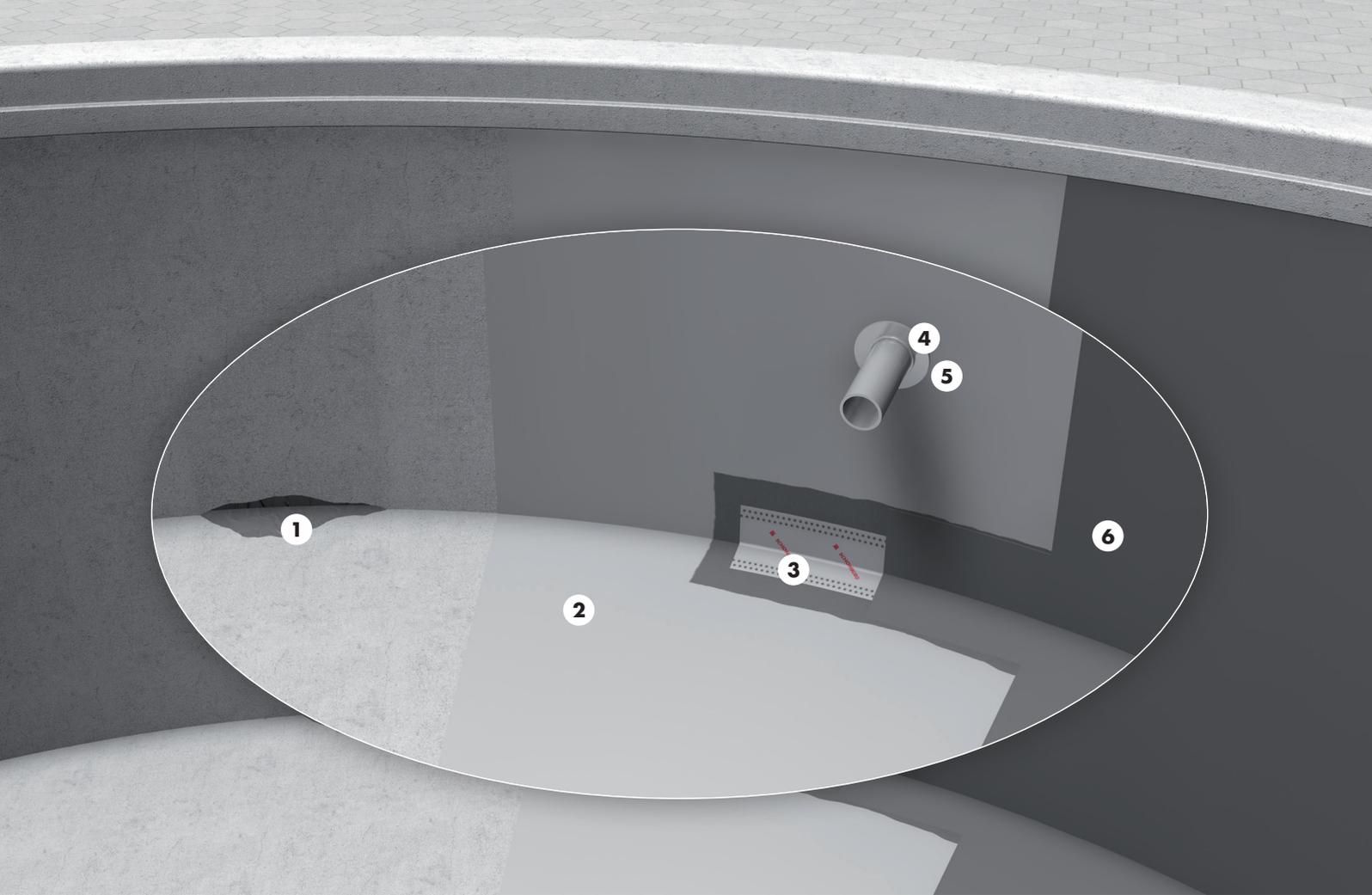


## 1. Cleaning

Clean the surfaces to be treated as hydrophobic thoroughly using a high-pressure cleaner with rotating jets. Fouling and moss or algae coatings are removed completely.

## 2. Apply impregnation

After the façade has dried completely, apply the solvent-free façade cream ASOLIN-SFC45 with a lambskin roller until it fully covers the entire surface. The paste consistency makes very economical, clean, and reliable application possible. A material buffer remains on the substrate during application, which enables very deep penetration of the effective substance into the substrate.



## Waterproofing and repair of wastewater treatment plants

### Cementitious restoration concept

Waterproofing and repairs on civic wastewater treatment plants represent very specific requirements for the materials and coatings that are used inside the building. The dirt and rain water that enters into the plant via the sewer system passes through various cleaning stages. Due to the various water qualities, the concrete surfaces are exposed to a variety of chemical stresses. Moisture from the rear and bubble formation due to osmotic pressure are only a part of the resulting damage scenarios. For this reason, water-contacting concrete elements must be permanently protected during repair procedures with specific special primers and water-repellent surface waterproofing.

#### COMPONENTS

**ASOCRET-HS-Flex**  
**ASOCRET-BIS-5/40**  
**ASOCRET-BIS-1/6**  
**AQUAFIN-2K/M-PLUS**  
**ASO-Dichtband-2000-S**  
**ASODUR-SG3-thix**  
**Quarzsand**

# Application



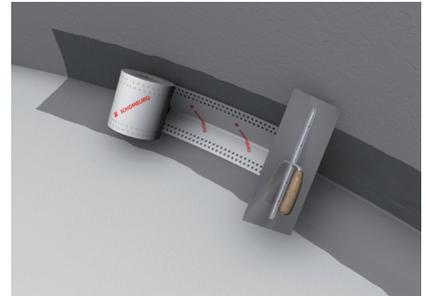
## 1. Level out damaged areas

Repair small crack damage and voids with a trowel or float. Application of ASOCRET-BIS-5/40 while still wet onto adhesive slurry. ASOCRET-HS-Flex.



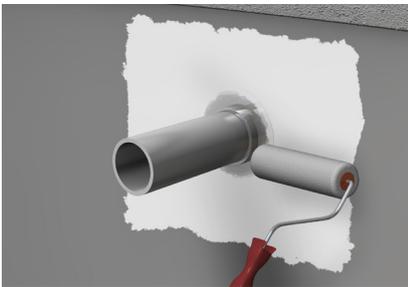
## 2. Level the surface

Apply ASOCRET-BIS-1/6 onto the prepared substrate in the desired layer thickness up to 6 mm in a single application step. The surface may not be processed retroactively with a wide brush or a wet flat trowel. For smooth transitions on the repair surface, a sponge may be used afterwards to rub the area.



## 3. Waterproof the wall-floor transition

Apply AQUAFIN-2K/M-PLUS in the transition between the wall and floor and across connecting joints using brush and trowel techniques and adhere ASO-Joint-Tape-2000-S free of voids and wrinkles. Application covering the whole area takes place during area waterproofing.



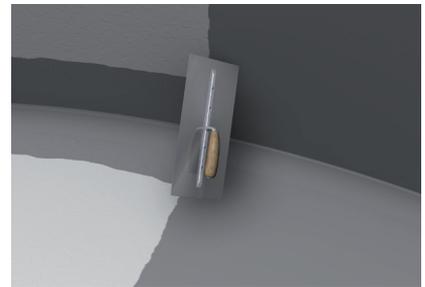
## 4. Transition to the flange structure

In the area of the flange structure, apply ASODUR-SG3-tix special pre-primer along the sanded flange structure using a brushing and rolling technique. After curing, apply the 2nd layer of ASODUR-SG3-tix using a rolling technique and scatter quartz sand 0.5 - 1.0 mm on the primer while still fresh.



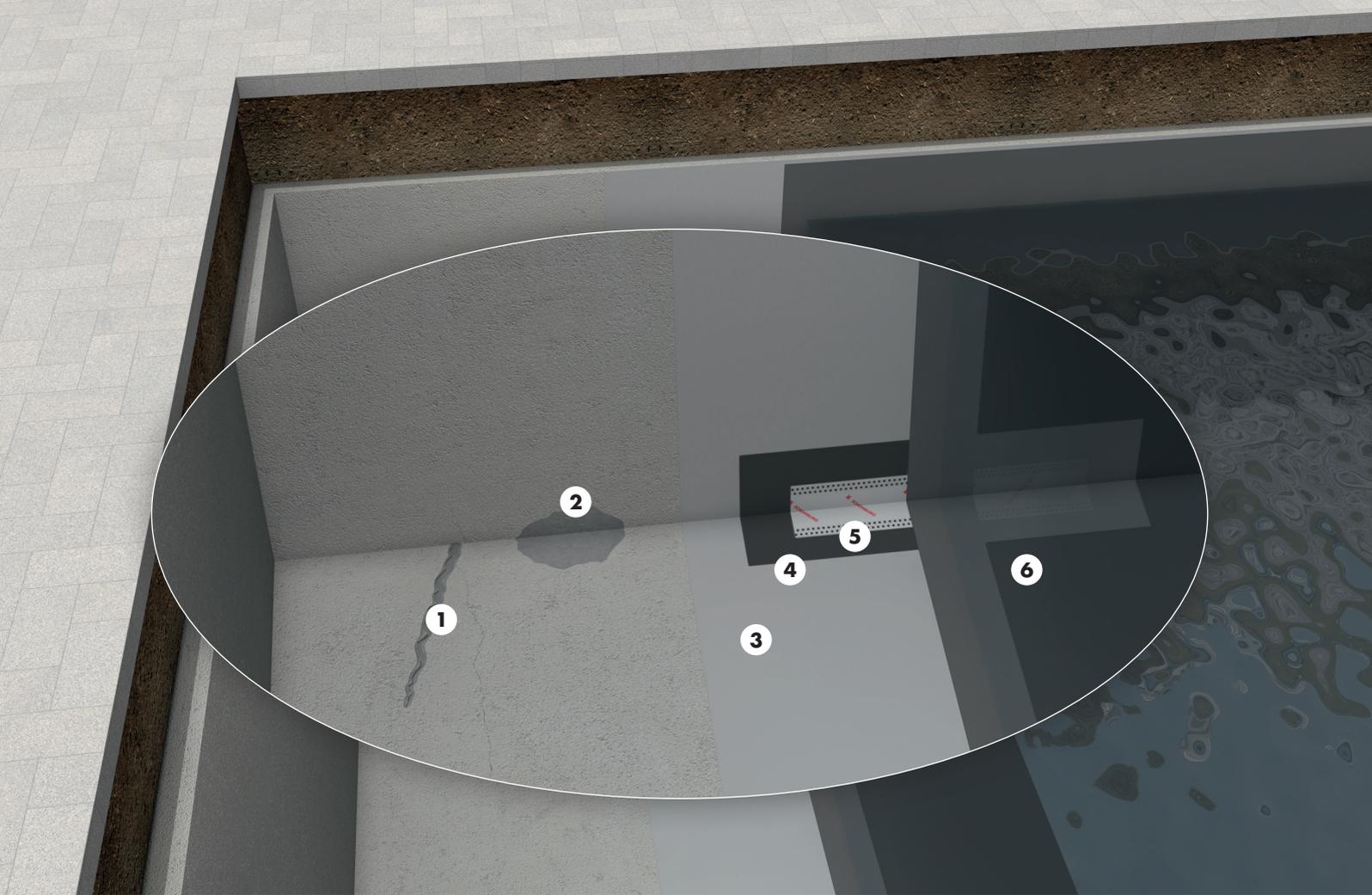
## 5. Quartz sand

After curing, apply the 2nd layer of ASODUR-SG3-tix using a rolling technique and scatter quartz sand 0.5 - 1.0 mm on the primer while still fresh.



## 6. Waterproof surfaces

Apply AQUAFIN-2K/M-PLUS in a minimum of two application steps using spray, brush, or trowel techniques.



## Waterproofing and repair of process water containers

### Cementitious restoration concept

Whether commercial, industrial, or agricultural purposes are involved, process water must possess specific quality characteristics, depending on the required uses. Irrigation water, for example, must be free of ground and plant-damaging substances, while cooling water may not be allowed to damage devices with lime and algae. In spite of the different components and quality classes involved, all process water has one thing in common: They do not in fact have potable quality, but they still have high demands on the substrates of the respective container. Ideal, building-specific maintenance procedures are able to protect process water containers sustainably and reliably against potential stresses.

#### COMPONENTS

**ASOCRET**-HS-Flex  
**ASOCRET**-BIS-5/40  
**ASOCRET**-BIS-1/6  
**AQUAFIN**-RB400  
**ASO**-Dichtband-2000-S

# Application



## 1. Crack restoration

Assess and seal cracks professionally (see the chapter on crack restoration).



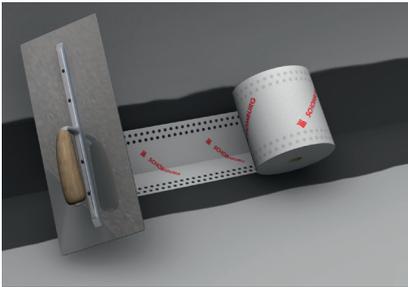
## 2. Level out damaged areas

Close damaged areas and voids with ASOCRET-BIS-5/40 using trowel techniques. Application is completed while still wet onto the ASOCRET-HS-Flex adhesive slurry.



## 3. Level the surface

Apply ASOCRET-BIS-1/6 onto the prepared substrate in the desired layer thickness up to 6 mm in a single application step and processed retroactively using a felt or sponge board.



## 4. + 5. Waterproof the wall-floor transition

Apply AQUAFIN-RB400 in the transition between the wall and floor and across connecting joints using brush and trowel techniques and adhere ASO-Joint-Tape-2000-S free of voids and wrinkles. Application covering the whole area takes place during area waterproofing.



## 6. Waterproof surfaces

Apply AQUAFIN-RB400 in a minimum of two application steps using spray, brush, or trowel techniques.



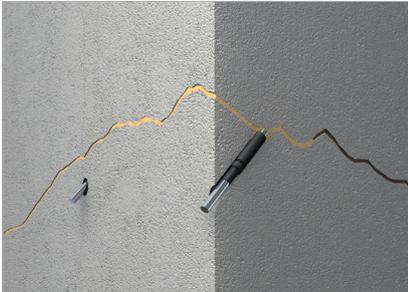
## Reinforced concrete protects container construction against chemical and mechanical degradation

The protection of reinforced concrete components is essential for durability and longevity. Particularly with load-bearing building components such as foundations and pillars, inadequate protection of surfaces and joints can result in significant damage to the structure. Due to high mechanical loads and strong chemical corrosion, the functionality and service life of containers, pools and gutter systems are severely restricted and shortened. In individual cases, the destructive influence is so great that a reduction in the concrete on the surface can be seen after just a few years. Then it is important to carry out the right refurbishment measures at an early stage. The SCHOMBURG system products provide targeted protection against aggressive influences.

### COMPONENTS

**AQUAFIN**-P1/-P4  
**ASOCRET**-HS-Flex  
**ASOCRET**-BIS-1/6  
**ASOCRET**-BIS-4/40  
**ASODUR**-SG3  
**ASODUR**-SG3-thix  
**ASODUR**-V2370

# Application



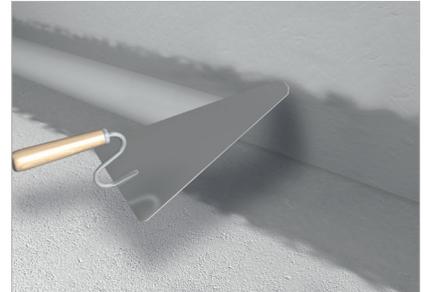
## 1. Crack restoration

Static or water-conducting cracks in the concrete must be sealed professionally (refer to the chapter "Crack restoration").



## 2. Level the surface

Apply ASOCRET-BIS-1/6 in a single application step up to 6 mm layer thickness on the surface. Application is completed while still wet onto the ASOCRET-HS-Flex adhesive slurry.



## 3. Create the covered fillet

Create a sealing groove in the wall-floor transition using ASODUR-SG3 and quartz sand 0.06 - 1.50 mm in a mix ratio of 3:25 GT. The sealing fillet must be laid while still wet onto the previously applied primer layer of ASODUR-SG3.



## 4. Transition to the flange structure

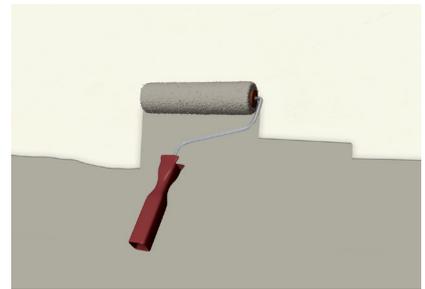
In the area of the flange structure, apply ASODUR-SG3-thix special pre-primer free of pores over the flange structure with a short-pile wool roller and spread with rough quartz sand immediately. After sufficient curing, further waterproofing measures may be applied.



## 5. Applying primer

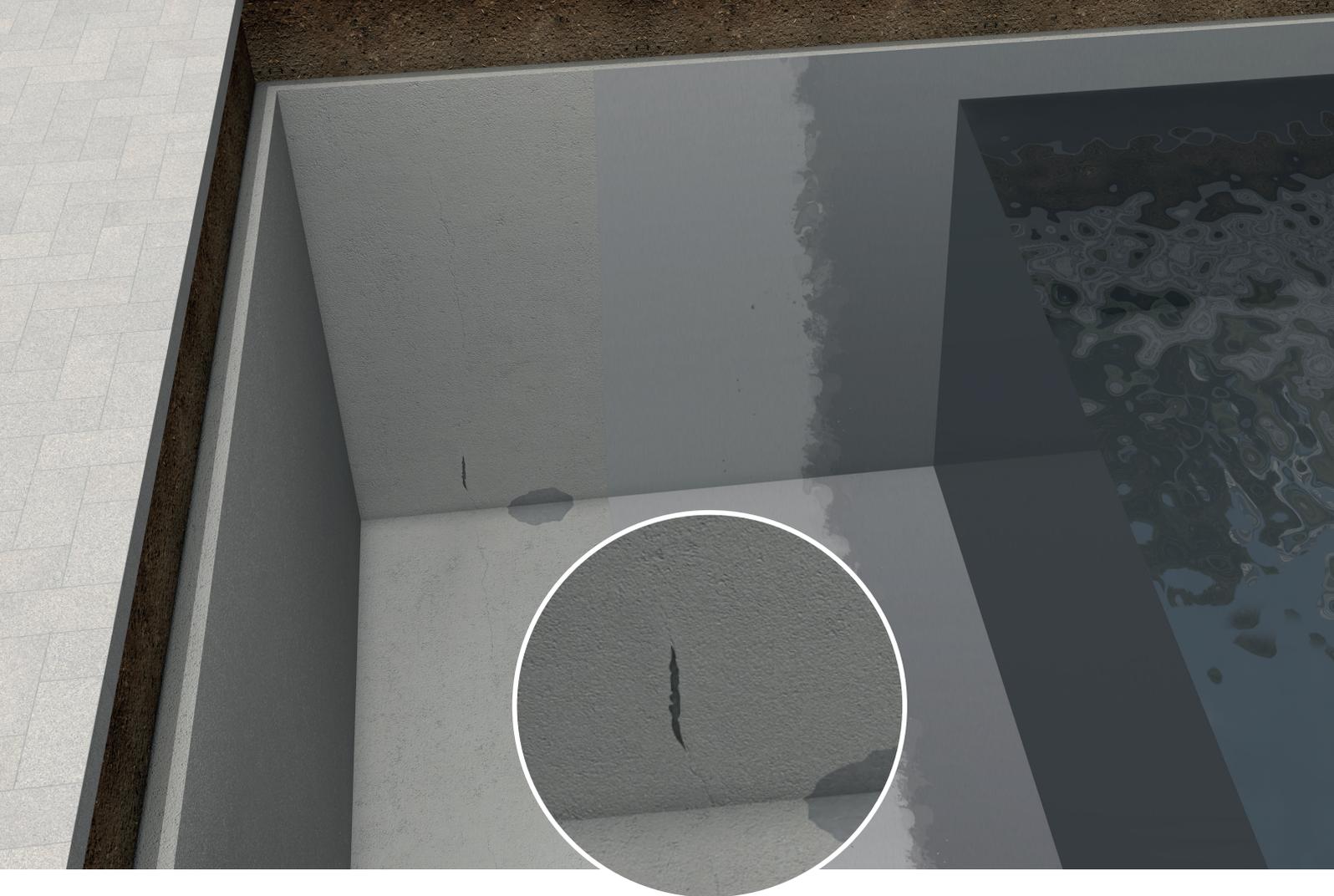
Wall: Roll ASODUR-SG3-thix on first equally with a short-pile wool roller, then brush it into the surface zone carefully using a priming brush and then rework it again with the wool roller.

Floor: Apply ASODUR-SG3-thix in dollops using a rubber lipped scraper, brush it in thoroughly, and roll it out afterwards.



## 6. Surface protection

Apply ASODUR-V2370 by rolling or spraying of a minimum of least two coats. The overcoating time depends on the temperature. Please read the technical data sheet.



## Crystalline waterproofing

Subsequent renovation of reinforced concrete structures

Crystalline waterproofing represents a fascinating waterproofing process. After application on the concrete surface, the active substances migrate out of the waterproofing material into the interior of the component, where it promotes crystal growth. The smallest pores and cracks are filled with crystals and are therefore impenetrable by capillary water! "An enemy becomes a friend": The water penetrating the building component acts as a means of transportation for active substances and carries them deep into the substrate. An additional advantage: AQUAFIN®-IC waterproofing is suitable for drinking water containers!

### COMPONENTS

**FIX 20-T**  
**ASOCRET-IM**  
**AQUAFIN-IC**

# Application



**1. Open cracks and damaged areas** Remove all loose components from the cracked and damaged areas. Break open the static cracks up to a width of at least 20 mm and a depth of at least 25 mm.



**2. Immediate waterproofing for water breakthroughs** Water breakthroughs are sealed professionally with rapidly hardening cementitious FIX 20-T sealing mortar.



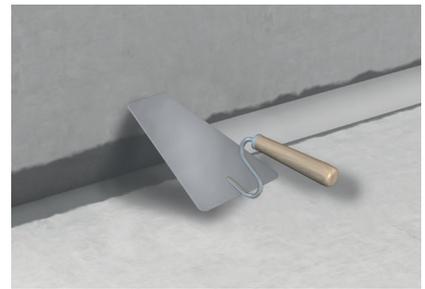
**3. Mix the FIX 20-T** Mix a powder quantity corresponding with the water breakthrough together with approx. 25% water to produce a homogenous consistency able to be kneaded. Form a suitable plug by hand. Work quickly: The pot life is only approx. 3 minutes!



**4. Plugging the water ingress points** Press the formed plug into the leak position. Hold the plug firmly in place by hand until it has hardened. Process the plugged position immediately afterwards with a trowel.



**5. Improve voids** Flawed areas should be improved with FIX 20-T or with ASOCRET-IM.



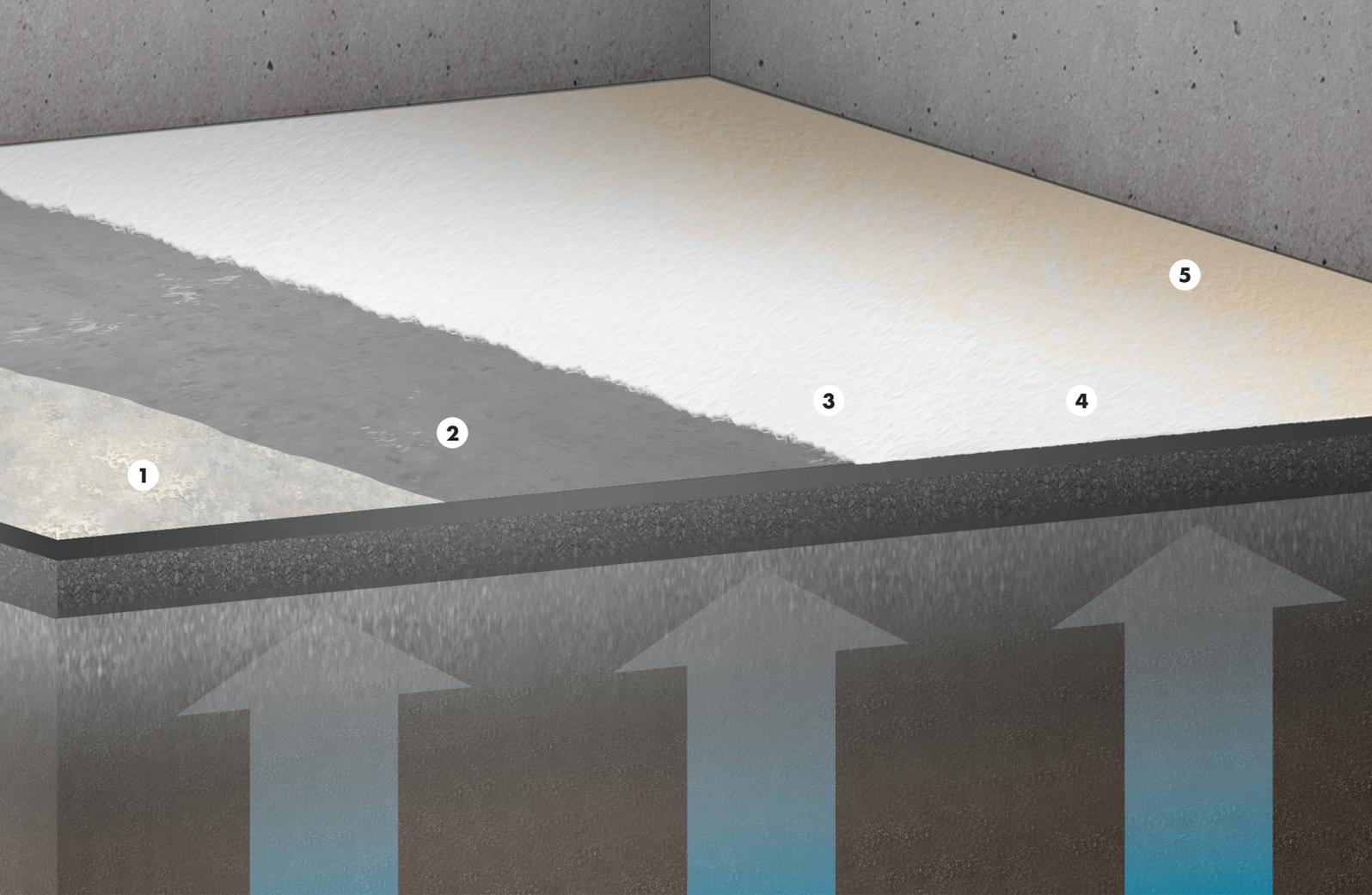
**6. Creating covered fillet** Produce the covered fillet with ASOCRET-IM featuring an edge height of approx. 4 cm in the area prepared with still wet AQUAFIN®-IC slurry. After approx. 1-3 hours, rework ASOCRET-IM with AQUAFIN®-IC.



**7. Application of AQUAFIN®-IC** Dampen all surfaces to be waterproofed with clean water. Apply two layers of AQUAFIN®-IC in the required useful quantity with a roofer's brush, wide brush, or using spray techniques. Apply the second layer while the first layer is still sticky and has not yet dried out.



**8. Retreating existing surfaces** The fresh coating must be protected against weathering influences, e.g. sunlight, wind, rain, and frost, etc. The waterproofing layer must be kept damp for at least 3! Complete the first damping after approx. one day.



## Vapour barrier for damp substrates

### In the epoxy resin system

Moisture from the rear and high residual moisture on “green” concrete substrates are frequently extremely prone to damage or prolong building time. The ASODUR-SG2 and ASODUR-SG3 special primers have been used successfully for many years to prevent the damaging influences of rising moisture, and they are also extremely resistant to chemical influences and able to be applied very diversely.

In addition to applications on industrial and commercial floor surfaces and in agricultural buildings, use in private home and apartment construction when there is risk of rising damp and valuable floor coverings like natural stone or parquet need to be protected for the long term.

#### COMPONENTS

**ASODUR-SG2**  
**ASODUR-SG3**

# Application



## 1. Substrate preparation

Substrates must be load-bearing and sufficiently firm (concrete class: min. C 20/25 and cement-based screed class min. CT-C35-F5), and free of separating and adhesion-inhibiting substances like paint residues. Depending on the texture of the substrate to be treated, suitable processes must be used, e.g. grinding.



## 2. Cleaning preparations

The dust particles resulting from this measure that is taken to prepare the substrate should generally be removed using an industrial vacuum.



## 3. Material application

The correctly mixed 2-component material is applied using a rubber lipped scraper on the pre-wetted substrate (matte damp appearance) and intensively brushed in using scrub brushes.



## 4. Rolling on

To ensure equal material film on the substrate surface, a suitable lamb's wool roll should be used to roll the still wet applied material out again equally.



## 5. Sanding

Immediately after applying the material, the wet applied primer layer, and only in case of ASODUR-SG2, should be sanded equally using suitable quartz sand. ASODUR-SG3 does not need to be sanded because a chemical bond results. After hardening, remove loose quartz sand by vacuuming.



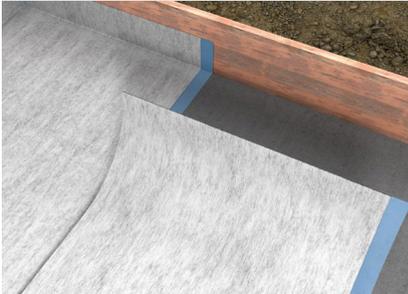
## Foil sealing in new buildings to waterproof concrete

Exterior waterproofing with fresh concrete waterproofing membrane

Even in classic watertight (waterproof) concrete, cracks, e.g. due to shrinkage and pressure, cannot be ruled out. Water penetrates deeper than planned into the concrete component or, in the case of separating cracks, even into the building. The classic remedy would be to inject resin until the crack closes. It becomes problematic when there is no water, but, for example, the radon gas or water is not always present and we consider inaccessible areas that have already been developed. In these cases, it makes sense to plan the AQUAFIN-WM12 fresh concrete waterproofing membrane as strip waterproofing. Inserted into the formwork, it forms a solid bond with the concrete that prevents water running behind it and forms an additional waterproofing layer.

### COMPONENTS

**AQUAFIN-WM12**  
**AQUAFIN-WM12-Ecken**  
**AQUAFIN-CA**  
PVC-Band



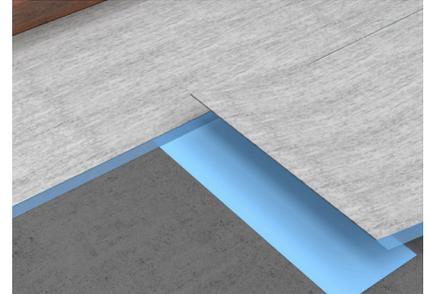
### 1. Joints with AQUAFIN-CA structural adhesive

Strips of the AQUAFIN-WM12 fresh concrete waterproofing membrane can be joined with the AQUAFIN-CA structural adhesive. Application takes place a minimum of 4 cm on the PVC overlapping strips over the entire surface.



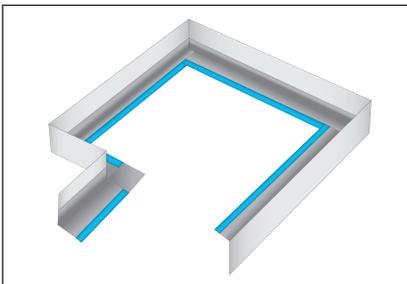
### 2. Thermal merging

The strips of the AQUAFIN-WM12 can be joined with hot air welders. A joint width of 4 cm is required here.



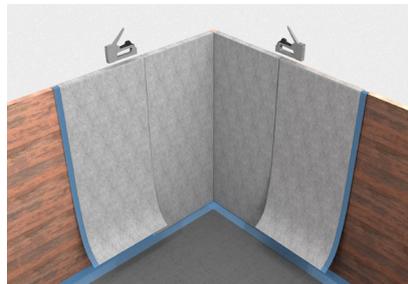
### 3. Area waterproofing

Waterproofing of the surface is carried out with T-prods. The PVC sheeting system component is overlapped a minimum of 5 cm and thermally jointed or bonded.



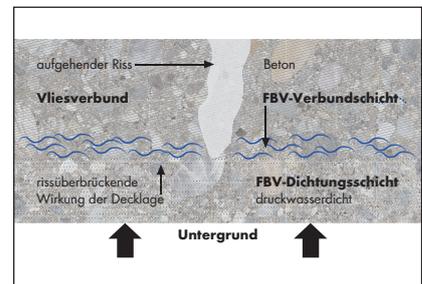
### 4. Floor application sequence

As the first work step, it is suggested to produce the surrounding edge upstand. After working out the details such as intersections, the surface closure takes place.



### 5. Wall installation / formwork

AQUAFIN-WM12 is installed on the formwork using impact staplers or clips. After stripping the formwork, the wall and floor waterproofing is connected to one another using PVC tape. Then seal tie and installation points with PVC tape.



### 6. Concrete protection / waterproofing gas / water

The fresh concrete waterproofing membrane has a high crack-bridging capacity so that even subsequently appearing cracks in the concrete component do not result in waterproofing problems. The PP fleece laminated to the PVC waterproofing layer creates a solid bond between the strip waterproofing and waterproof concrete that prevents water running behind it.



## Crack repair of substrates

### In the epoxy resin system

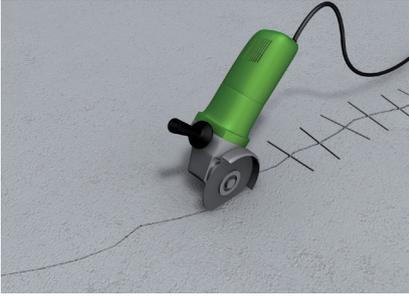
The rapid setting silicate casting resin ASODUR-GH-S is suitable for sealing cracks and joints in unheated and heated cementitious screeds, for crack and joint widths up to approx. 5 mm. The 2-component casting resin has very good penetration properties, is tested for low emissions and can be mixed without tools. In the practical complete kit - with precisely matched quantities of A and B components of the casting resin, the appropriate protective work gloves for application and 20 screed clamps - you have everything you need quickly and safely to hand.

#### COMPONENTS

**ASODUR-GH-S**  
**ASODUR-K900**  
**Quarzsand**

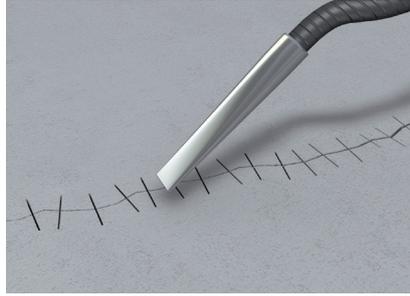


# Application



## 1. Open the cracks

Open the crack or joint with a cutting disc along the length (approx. up to half or two thirds of the screed depth). Cut traverse sections featuring a depth of 10 cm length at a right angle at a distance of 30 cm.



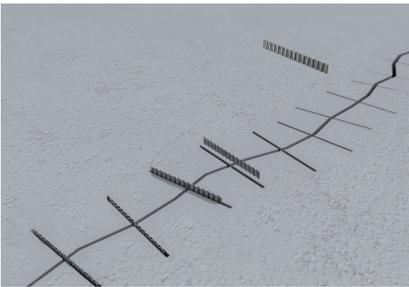
## 2. Clean

Remove dust and dirt and carefully clean the area that has been cut open with an industrial vacuum cleaner or similar equipment.



## 3. Mixing

Mix the A and B components together and shake for a minimum of 15 seconds.



## 4. Insert screed clamps

Insert the included screed clamps into the cut groove.



## 5. Cast the cracks

Pour the mixed ASODUR-GHS material into the prepared grooves free of voids. Remove the excess material.



## 6. Quartz sand

After reaching the gel phase, evenly sprinkle in quartz sand (grain size 0.1 to 0.6 mm).



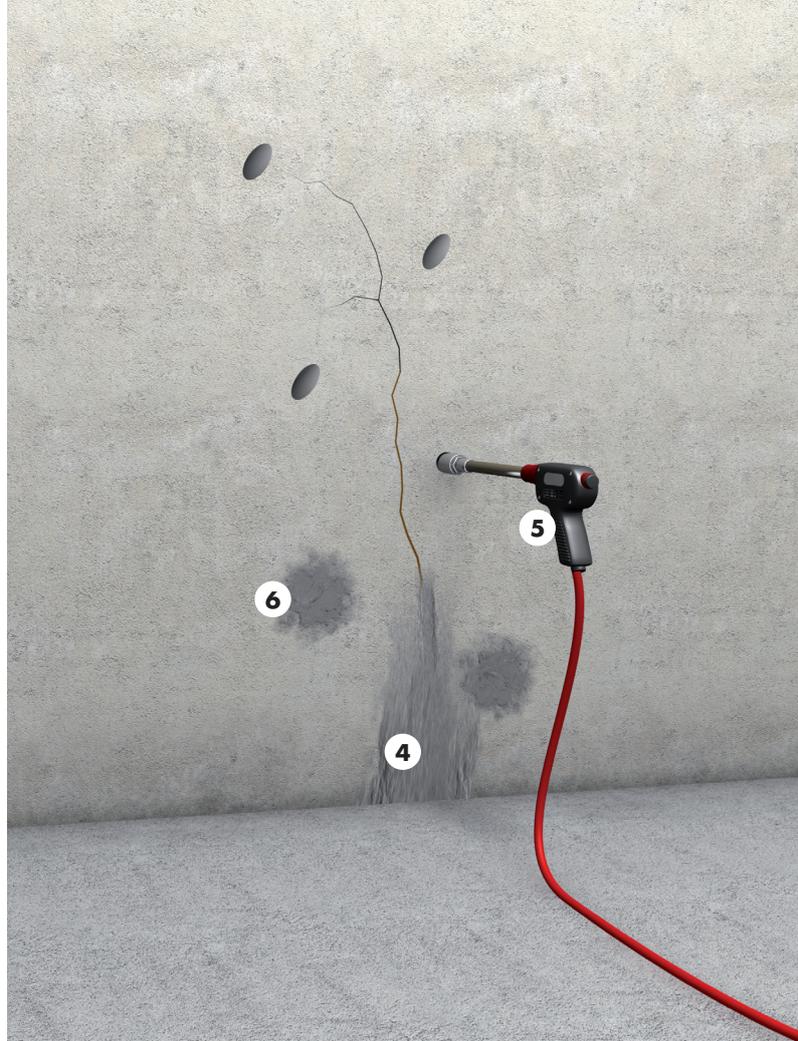
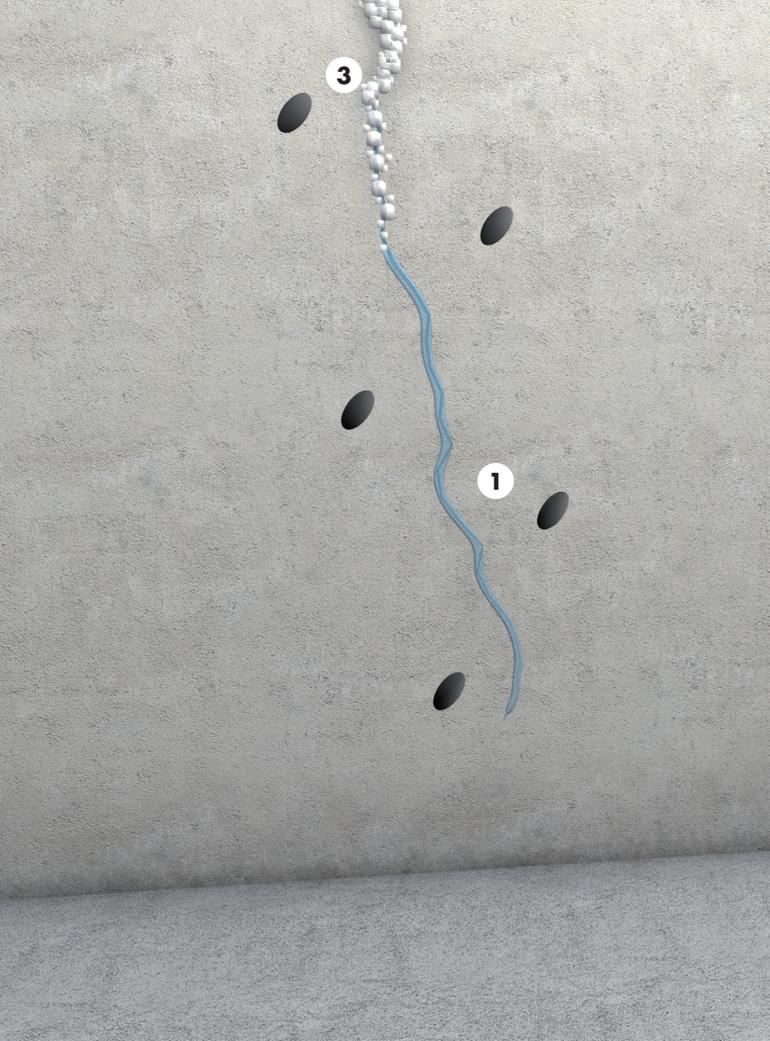
## 7. Vacuuming

After hardening, remove loose sand by vacuuming.



## Alternatively

For fine cracks up to a width of 0.4 mm, use the epoxy resin grout ASODUR-K900.



## Waterproofing of wall surfaces

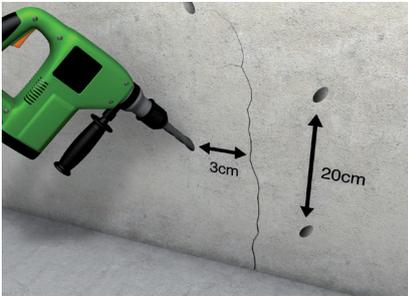
### With crack injection

During building restoration and repairs, professional crack restoration is indispensable. Cracks result when the stresses influencing the substrate are larger than the resistance of the individual building components. If water penetrates the cracks, then they can place the usefulness of the building in enormous danger. For this reason, crack compression is absolutely necessary to recover the resistance of the substrate. Not only is this possible by filling individual cracks, but also by injecting special injection resins, which spread in the substrate and form a tough elastic foam under the influence of water. This system waterproofs cracks not only temporarily, but sustainably.

#### COMPONENTS

**AQUAFIN-P1**  
**AQUAFIN-P4**  
**ASODUR-EKF**  
**ASOCRET-BIS-1/6**

# Application



## 1. Drilling

Cracks that are present are offset at a respective distance of 20 cm at an angle of 45° to the crack.



## 2. Cleaning

Clear any drilling debris that has resulted in the drilled holes using oil-free compressed air.



## 3. Waterproof water-conducting cracks

Insert corresponding injection packer into the drilled holes. Press AQUAFIN-P1 into water-conducting cracks. The material reacts with the water to produce a waterproof, tough elastic foam to stop water penetration. The excess foam is removed after curing so it is flush with the surface.



## 4. Dam up cracks

In case of cracks that do not conduct water, the crack area is insulated using ASODUR-EKF. AQUAFIN-P4 is injected after the insulating material cures completely.



## 5. Permanently waterproof cracks

During application of AQUAFIN-P1, additional injection using AQUAFIN-P4 elastic crack waterproofing is necessary.



## 6. Seal drilled holes

After the injection resin has hardened, insulation may be removed for visual reasons as required. Seal the drilled holes with ASOCRET-BIS-1/6.



## Retrospective execution of construction/movement joints in concrete construction With thermoplastic joint tape

The highly flexible ASO-Tape sealing tape is particularly suitable for watertight structures. Combined with the epoxy resin universal adhesive ASODUR-K4031 it can be used for sealing construction and movement joints as well as sealing cracks and voids in concrete constructions. It is also suitable for additional sealing treatment on transitions, wall penetrations or various construction materials.

### COMPONENTS

**ASO-Tape**  
**ASODUR-K4031**



# Application



## 1. Substrate preparation

Prepare the cleaned, load-bearing substrate by mechanical means. Substrates must be load-bearing and sufficiently firm (concrete class: min. C 20/25 and cement-based screed class min. CT-C35-F5), and free of separating and adhesion-inhibiting substances like paint residues.



## 2. Cleaning preparations

The dust particles resulting from this measure that is taken to prepare the substrate should generally be removed using an industrial vacuum.



## 3. Masking the surface

Mask off the expansion area on the substrate and on the tape. Mask off at the margin, the mortar should overlap the building component by at least 1 cm.



## 4. Applying adhesive

Stir comp. A and comp. B together and decant the mixture into a clean container. Then stir the mixture for a second time. In order to ensure bedding covering the whole area, apply ASODUR-K4031 at least 1 cm wider than the amount of ASO-Tape you use.



## 5. Peeling off the adhesive tape

Remove the adhesive tape in the area of the joint.



## 6. Inserting and pressing on

Lay out the ASO-Tape and press it on with a suitable tool.



## 7. Grouting and peeling off

Ensure the ASODUR-K4031 is spread over all of the ASO-Tape. Remove all adhesive strips.



## 8. Bonding

Ensure that there is an overlap of 5-10 cm with a minimum film thickness of 1 mm when bonding the ASO-Tape to the mortar.



## 9. Hot air welding

Using hot air and pressure, weld the tape joints with an overlap of at least 5 cm.



## Execution of construction joints in concrete construction

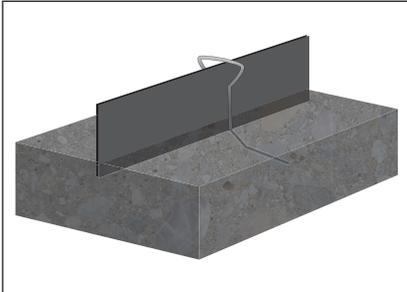
### With crystalline waterstop sheet

In the construction joint, the potential for water ingress due to improper waterproofing is relatively high. Waterproofing with AQUAFIN-CJ5 provides triple security. In addition to the circulation extension of penetrating water, the AQUAFIN-CJ5 waterstop sheet provides further security factors. The cementitious coating forms a strong adhesive bond with the waterproof concrete so that "breaks" and the resulting cracks tend not to occur. However, if the movement of the component results in a crack, the crystalline coating of the waterstop sheet provides support. In the event of contact with water, crystals form and cracks up to 0.4 mm can be sealed.

#### COMPONENTS

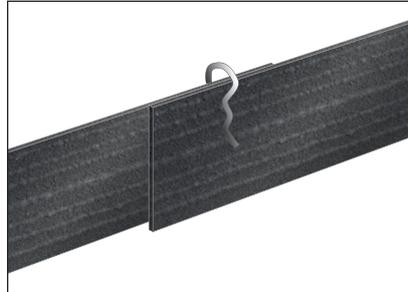
**AQUAFIN-CJ5**  
Halteklammern  
Omega-Holder

# Application / effect



### Fastening with omega clips

The crystalline waterstop sheet AQUAFIN-CJ5 is placed on the reinforcement with the omega clip in the middle of the joint. The omega clip is attached to the reinforcement with tie wire. A concrete inclusion of > 3 cm must be ensured.



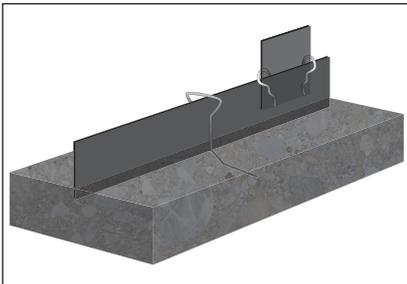
### Jointing of waterstop sheets

With AQUAFIN-CJ5, secure overlap joints with retaining clips. For immersion depths of up to 8 m, fix in place with a holding clip with an overlap of 5 cm. For immersion depths of 8 to 20 m, fix in place with two holding clips with an overlap of 20 cm.



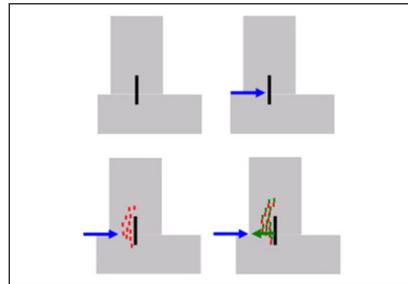
### Corner solutions

In corners, the waterstop sheet AQUAFIN-CJ5 is simply bent into the required shape.



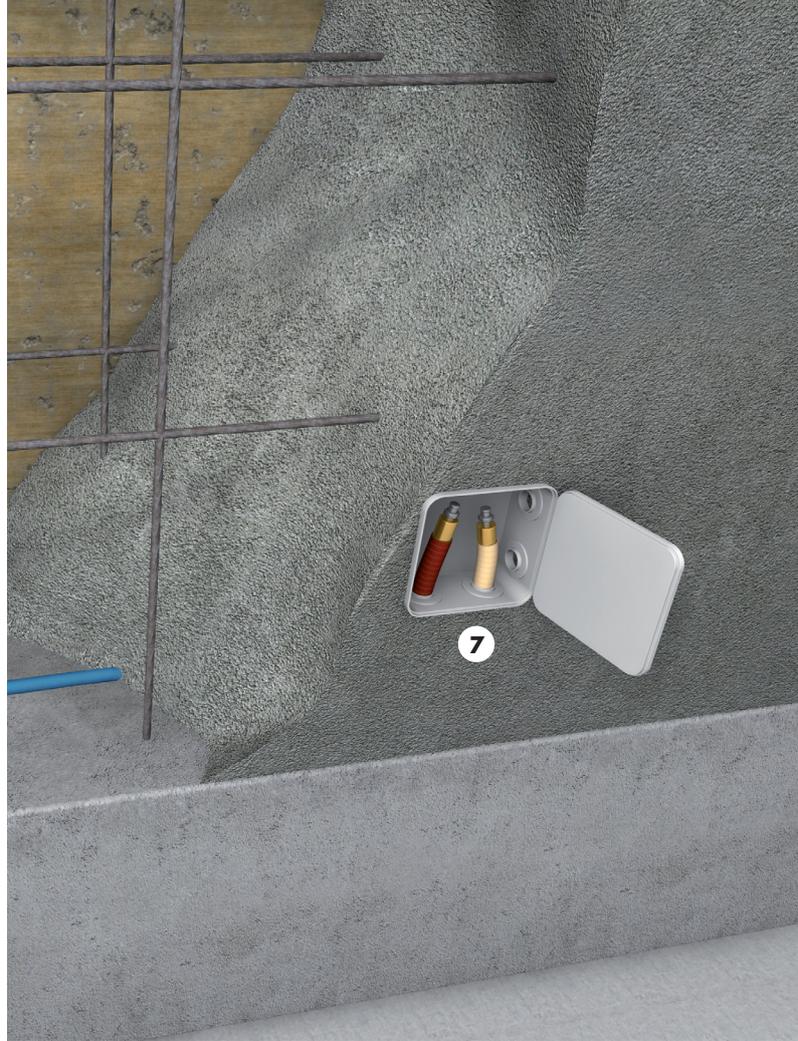
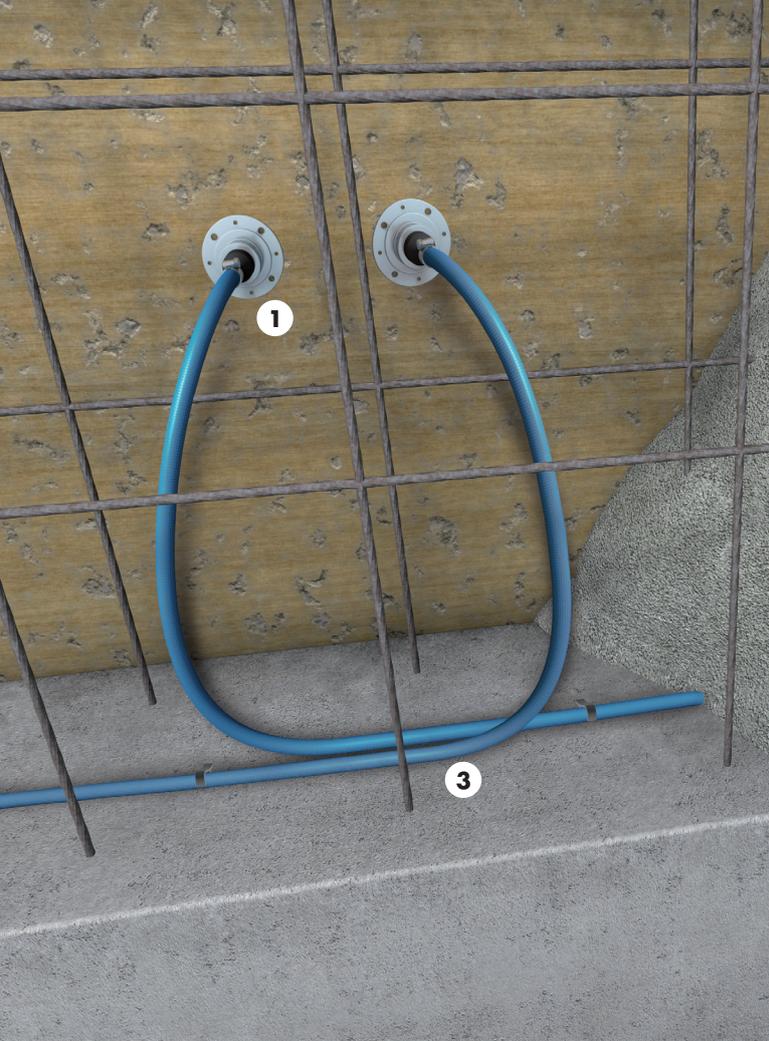
### Construction joint wall / slab bonding

A transition from the working joint in the wall / floor transition to a vertical working joint is made using two holding clips that are attached on both sides. The overlapping of the waterstop sheet is a minimum of 5 cm.



### Secure sealing with AQUAFIN-CJ5

The cementitious coating forms a strong adhesive bond with the waterproofing concrete so that "breaks" / cracks tend not to occur. However, if the movement of the component results in a crack, crystals form and cracks up to 0.4 mm can be sealed in the event of contact with water.



## Execution of construction joints in concrete construction

### With injection hose system

A "white tank" is a structure consisting of concrete with increased resistance to penetrating water. These parts are normally partially or completely in direct ground.

The concrete assumes a load-bearing as well as sealing function without additional waterproofing measures.

During building construction, concrete sections result in construction joints that must be waterproofed against groundwater and moisture using special procedures.

The advance installation of an injection hose made of PVC has also proved to be an effective system.

The injection of resin that distributes itself throughout the complete area of the joint and any possible voids throughout the concrete makes it possible retroactively to waterproof the concrete quickly and easily without costly work steps.

#### COMPONENTS

- AQUAFIN-CJ1**
- AQUAFIN-CJ-Set**
- AQUAFIN-P1**
- AQUAFIN-P4**

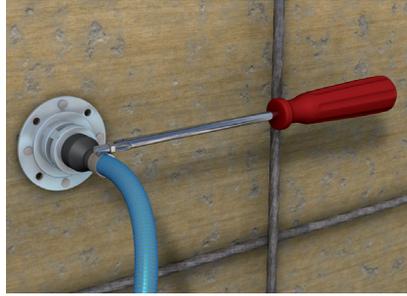


# Application



## 1. Standard packer

Nail a standard packer at the start and end point (max. 10 m) on the inside of the formwork.



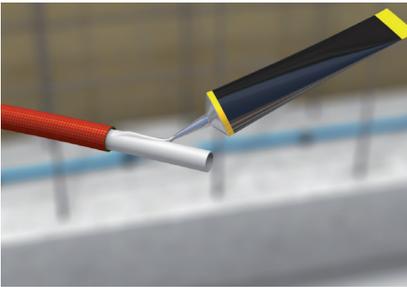
## 2. Fasten the injection hose

Fasten the AQUAFIN-CJ1 injection hose carefully with the help of the hose clamp on the packer.



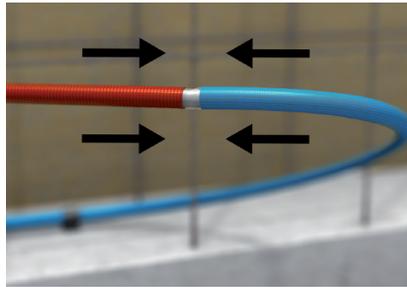
## 3. Lay out the injection hose

Lay the injection hose featuring a concrete covering of at least 8 cm to the water-conducting side and then fasten it with holding clips (6 per m) onto the concrete to prevent slipping or floating upwards.



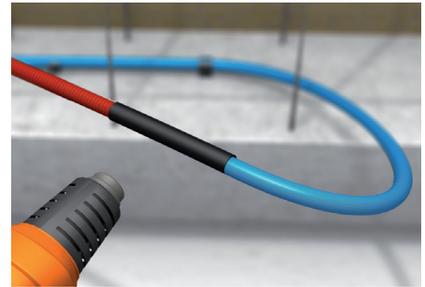
## 4. Adhere ventilation hose

Apply the included PVC adhesive on the projecting connection collar of the ventilation hose.



## 5. Connect the injection hose

Attach the AQUAFIN-CJ1 injection hose directly onto the prepared connection collar, and then wait for the drying time to finish.



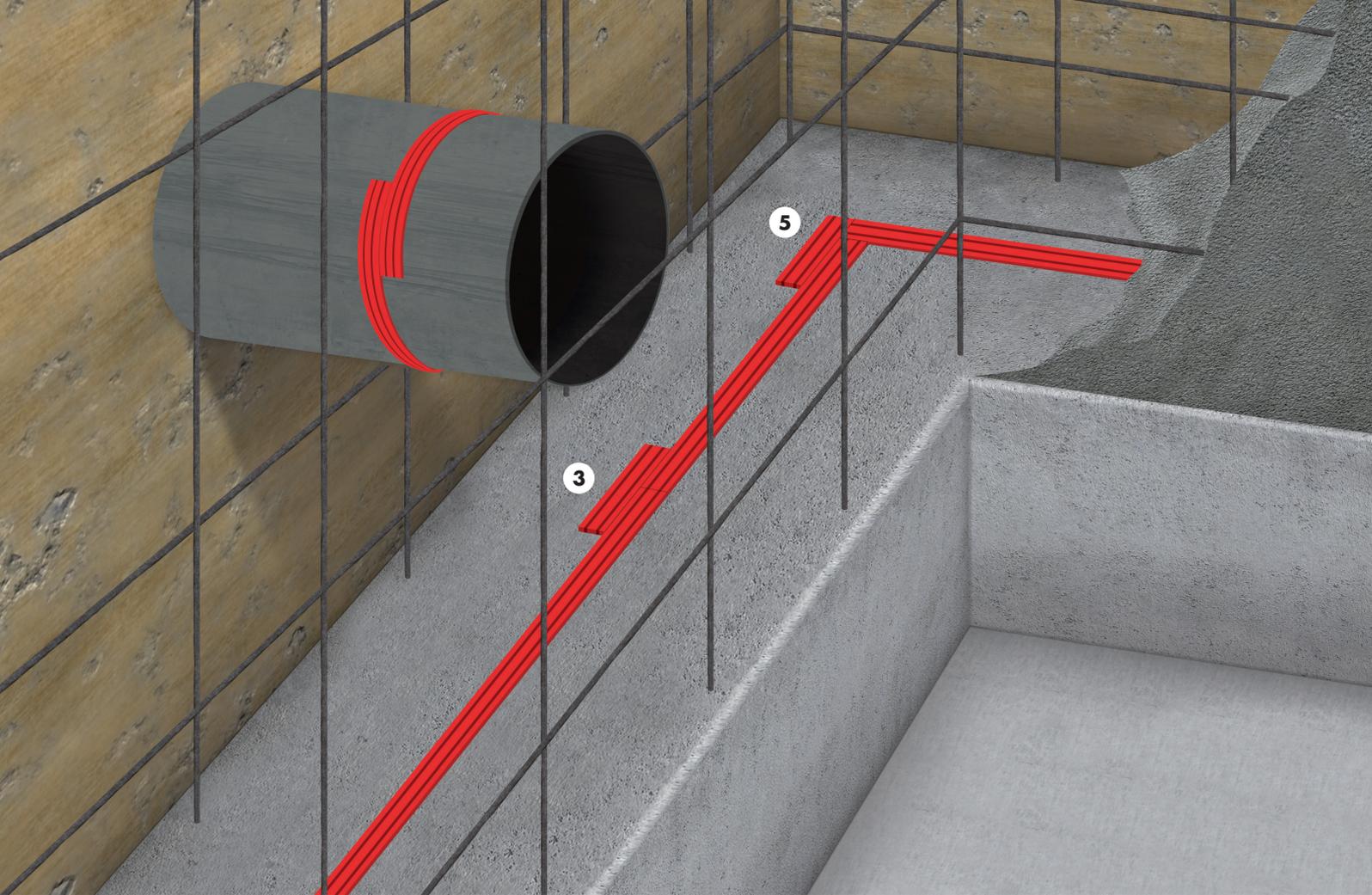
## 6. Connect the ventilation hose completely

Pull approx. 6-8 cm heat-shrink hose over the connection of the ventilation hose and the injection hose and use hot air to heat up the connection until the heat-shrink hose is tight and the connection has tightened.



## 7. Connect the various hose sections

Insert the hose ends of the ventilation hoses into a container for safekeeping and add injection nipples prior to injection (e.g. with AQUAFIN-P1 and AQUAFIN-P4).



## Execution of construction joints in concrete construction

### With swelling joint tape

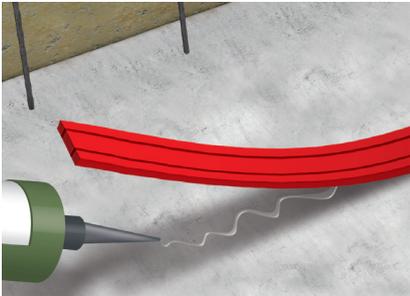
Another successful variation for waterproofing concrete construction joints is the use of so-called swelling rubber. Elastomer swelling tape consists of a special plastic and special filler materials, and they also react to water contact with strong and reliable swelling behaviour. Compared to swelling joint tape made of bentonite, elastomer joint tape has the advantage that it swells in a "form-stable" manner in contact with water (> 700%) and therefore cannot be washed out. The area of application includes construction joint waterproofing in in-situ concrete walls and element walls, joints that are constantly or temporarily exposed to loading from ground, slope, and/or surface water. Use is also possible in water exchange areas.

#### COMPONENTS

**AQUAFIN-CA**  
**AQUAFIN-CJ6\***  
**Fastening mesh**

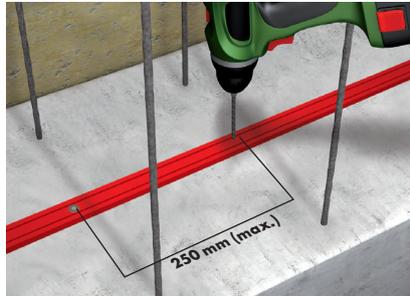
\* As an alternative to AQUAFIN-CJ6, AQUAFIN-CJ3 or AQUAFIN-CJ4 can also be used.

# Application



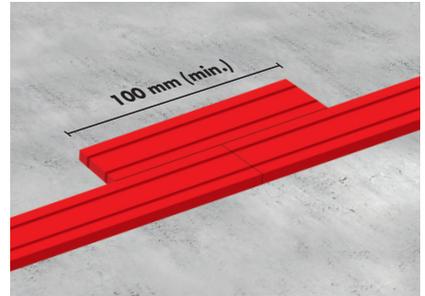
### 1a. Adhesion using assembly adhesive

Spray AQUAFIN-CA assembly adhesive onto the cleaned substrate using a hand cartridge and press in the AQUAFIN-CJ6 swelling joint tape covering the whole area until the assembly adhesive pushes out at the sides.



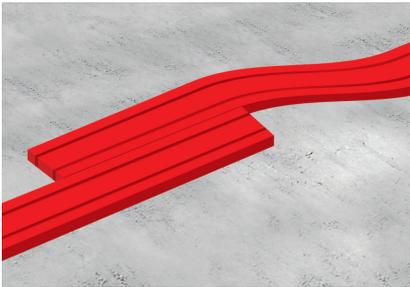
### 1b. Mechanical fastening

Alternatively, AQUAFIN-CJ6 can be fixed with a concrete covering of at least 8 cm to the water-conducting side with 4-6 fastening points or the fixing grid. The swelling joint tape must be applied covering the whole area of the concrete substrate.



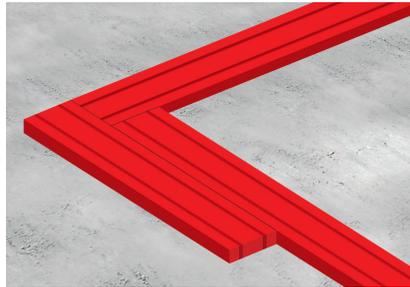
### 2. Blunt butt joints

Swelling tape connections can be applied as blunt connections. In case of larger wall profiles, secure the butt joints with a separate swelling tape featuring an overlap of at least 50 mm.



### 3. Overlapped butt joints

Alternatively, swelling tape connections can be applied with an overlap of at least 50 mm. In this case, both swellable waterstops should be positioned close together to prevent voids.



### 4. Corner connections

Corner connections should essentially be applied with an additional safeguard.



# General information for planning and execution

The right waterproofing for any exposure

	Bituminous waterproofing		
	COMBIDIC-1K	COMBIDIC-2K-CLASSIC/ PREMIUM	COMBIDIC-1K-S
<b>Building waterproofing</b>			
Ground moisture and non-pressing water ( W1.1-E, W1.2-E in accordance with DIN 18533)	+	+	+
Pressing water (W2.1-E in accordance with DIN 18533)	-	+	+
Non-pressing water on earth-covered slabs (W3-E)	-	+	+
Splash water and ground moisture at the wall base (W4-E in accordance with DIN 18533)	+	+	+
Retroactive building waterproofing in accordance with WTA datasheet 4-6-05D	+	+	+
Strip-shaped building waterproofing up to 0.25 mm opening width	-	+	+
Fastening protective and drainage panels	+	+	+
Full-surface adhesion of perimeter insulating materials	-	+	-

++ suitable for substrates that are subsequently not subject to cracking  
+ suitable

o only suitable as protection against back floating in combination with flexible cementitious waterproofing slurry

- unsuitable



Cementitious waterproofing			
	AQUAFIN-1K	AQUAFIN-2K/M-PLUS	AQUAFIN-RB400
<b>Building waterproofing</b>			
Ground moisture and non-pressing water ( W1.1-E, W1.2-E in accordance with DIN 18533)	o	+	+
Pressing water (W2-E in accordance with DIN 18533)	-	-	+
Non-pressing water on earth-covered slabs (W3-E)	+	+	+
Splash water and ground moisture at the wall base (W4-E in accordance with DIN 18533)	o	+	+
Retroactive building waterproofing in accordance with WTA datasheet 4-6-14/D	+	+	+
Cellar interior sealing in accordance with WTA datasheet 4-6-14/D	++	+	+
Strip-shaped building waterproofing up to 0.25 mm opening width*	-	+	+
Waterproofing in and under wall upstand surfaces	-	+	+
Wall-floor transition	o	+	+
Base waterproofing transition	++	+	+
<b>Container seals – water pressing from the inside</b>			
Drinking water containers	-	+	-
Service water container	++	+	+
Sewage treatment plants	++	+	+
Overflow basins	++	+	+
Water fountains, fonts	++	+	+
<b>Bonded waterproofing in combination with tiled finishes</b>			
Balconies/terraces	-	+	-
Shower areas in private buildings	-	+	-
Shower areas in public buildings	-	+	-
Swimming pools	-	+	-
Swimming pool decks	-	+	-

\* Based on building regulations list A, part 2 sequential number 1.4, a special agreement is necessary between the employer/contractor

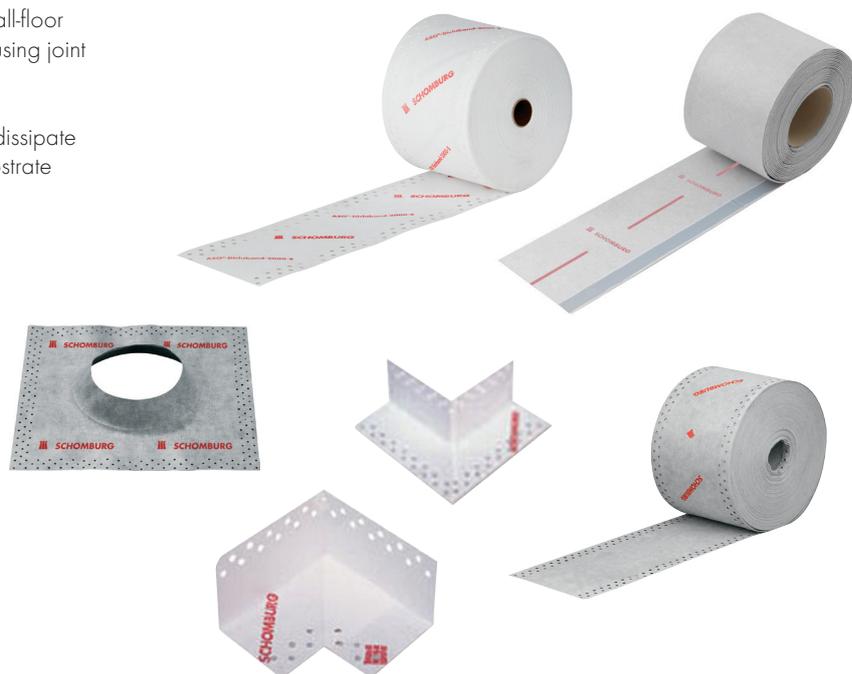
Note: The technical datasheets for the listed products must be observed.



## Joint and feature waterproofing with **joint sealing tapes**

Every component features corners, edges, and intersections in the form of pipes, channels, screws, and dowels that need to be waterproofed. An essential aspect of protection of buildings against dampness is also the integration of detail points like floor drains, wall-floor transition joints, or building component joints using joint tape.

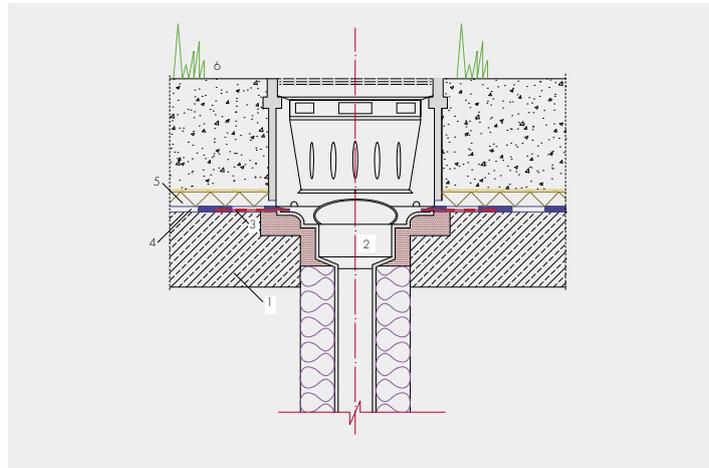
Additionally, joint tapes need to absorb and dissipate possible movements and stresses from the substrate reliably so that damage cannot result.



Special detail waterproofing solutions with joint sealing tape also need to protect building components and constructions in combination with the waterproofing layer against the influence of chemicals or hygienically questionable substances.

The reasons for damage can often be traced to the use of unsuitable joint tapes or pre-formed pieces.

SCHOMBURG offers a wide assortment of diverse joint tapes and pre-formed pieces.



## The benefits of joint tape constructions in the SCHOMBURG product range

### **Impermeability to water**

The most important requirement of waterproofing materials, impermeability to water in connection with high elasticity and crack bridging, is proven to be fulfilled completely by all SCHOMBURG joint tape types and pre-formed pieces.

### **Vapour permeability**

SCHOMBURG joint tape materials are water vapour permeable. If the waterproofing material to be used on and underneath the joint tapes is applied during joint adhesion overlapped, SCHOMBURG joint tape ensures reliable drying.

### **High resistance to alkalinity**

In case alkaline water penetrates up to the waterproofing layer, SCHOMBURG joint tape materials ensure that the joint tape cannot delaminate or disintegrate.

### **Resistance to chemical attacks**

Especially during production of waterproofing solutions in application areas that are exposed to higher chemical stresses, joint tapes also need to be resistant against the possible effects of aggressive inorganic or organic substances. Corresponding certificates for SCHOMBURG joint tapes are provided in our documents.

### **Connect the waterproofing material with the joint sealing tape**

SCHOMBURG joint tape guarantees very good surface adhesion of the waterproofing material used with the joint sealing tape. This ensures good bonding with the substrate.

### **Reliability due to pre-formed pieces**

SCHOMBURG offers a wide assortment of sophisticated pre-formed pieces. This increases the security of complete performance and saves costs. Cutting and the possible risk connected due to any resulting complaints.

### **Building-related special productions**

If connections and joint waterproofing can no longer be reliably or economically completed with the standard types and solutions, we recommend ASO-Joint-Tape-2000-S wide products. This material enables building-related special products easy to produce on the building site.

The SCHOMBURG Group develops, produces and distributes building product systems for the areas of:

- Waterproofing and repair of buildings
- Tiles/natural stone/screed application
- Ground protection/floor coating systems

For over 85 years SCHOMBURG's development competence has been recognised in both the domestic and the worldwide marketplace. Building product systems that are produced in-house are highly prized around the world.

Experts value the quality and the efficiency of building product systems, the services and therefore the core competence of the group of companies.

To meet the demanding requirements of an ever-changing market, we continuously invest in the research and development of new and already existing products. This guarantees an ever increasing product quality to the satisfaction of our customers.

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