SOLUTIONS FOR BASEMENT WATERPROOFING RENOVATION

BUILDING TRUST

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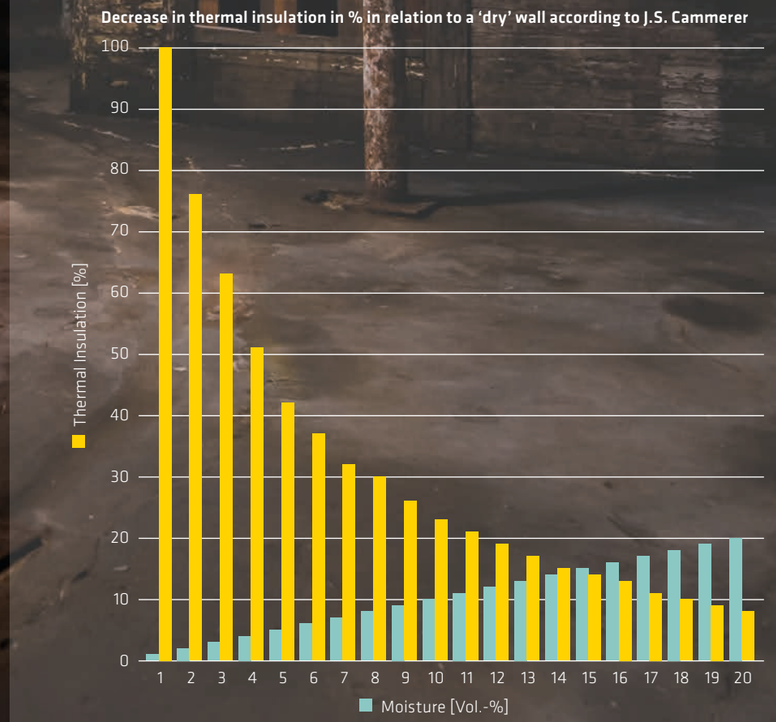
Renovating basement waterproofing improves quality of life by creating a healthier, more comfortable home. A dry basement prevents mold, mildew, and musty odors, reducing respiratory issues and protecting belongings from damage. It also allows the space to be used as a functional area—like a gym, office, or guest room—enhancing both comfort and daily living.

Waterproofing also helps cut heating costs. Moisture in the basement raises humidity and damages insulation, forcing your heating system to work harder. By keeping water out and maintaining insulation efficiency, waterproofing reduces heat loss, boosts energy efficiency, and lowers utility bills.

Lastly, a properly waterproofed basement increases property value. Buyers are more confident in homes protected against water damage and mold. A clean, dry, or even finished basement adds usable space and makes the home more appealing, improving resale potential in a competitive market.



WATERPROOFING SOLUTIONS

MAIN CAUSES OF UNTIGHT AN BASEMENT

CONCRETE DEFECTS AND INTERRUPTIONS occurring at joints, cracks and penetrations of installations are the main causes of water penetration through concrete walls.

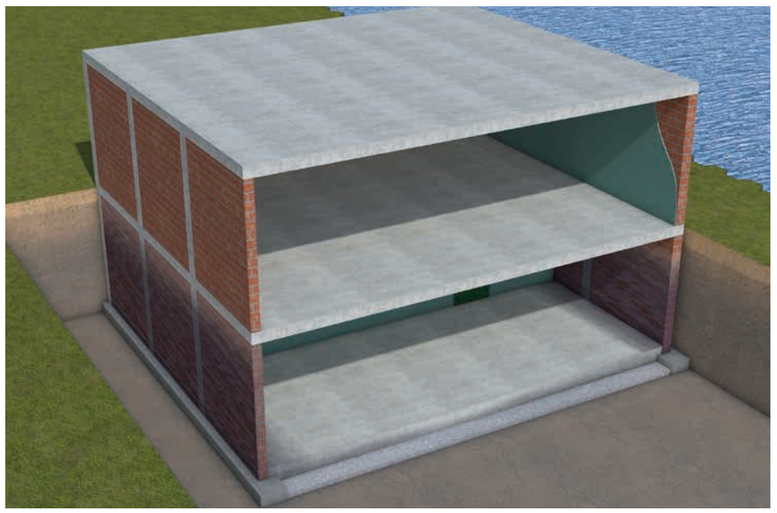
Concrete can be made in such a way that it offers great difficulty to water penetration by using additives such as Sika® Viscocrete® or Sika® Fume®.

However, any inhomogeneity, interruption or placing defect will offer direct pathways for water penetration.

THE NATURAL POROSITY OF MATERIALS plays a significant role in facilitating water penetration in the case of masonry walls.

Moisture in combination with salts is the most common cause of building decay.

Damp walls and mouldy surfaces not only make cellars unusable but can also seriously damage the foundations.



BENEFITS OF BASEMENT WATERPROOFING

Safety and durability improvement
Foundation stability, resilience to natural disasters and longer lifespan for foundations

Climate stability
Basements are cooler in the summer and warmer in the winter. Well insulated and waterproofed basements reduce heating and cooling costs.

Healthy environment
Renovating basement waterproofing enhances a healthy living environment by preventing water intrusion, blocking harmful radon gas infiltration, and stopping the growth of unhealthy mold.

Increase of property value
“Finishing a basement ... increases the value of a property ... up to 20 - 30% in the United Kingdom.”

(https://www.proficiencyltd.co.uk/basements-conversion-london/cellar-add-value.html)

Increase of life’s quality
Basement becomes as an “extra” part of the home with additional space for leisure and storage. As the noise created in basements are poorly transmitted, they are also ideal for home offices

WATERPROOFING RENOVATION OF CONCRETE WALLS

In situations with water ingress due to localized damage of the waterproofing system, appropriate repairs to seal the leaking areas have to be undertaken. These can often only be done by injection, because of inadequate access to the waterproofing system itself in most basements and below ground structures.

WHERE TO USE	Concrete basements with leaking cracks or joints or water penetrating through concrete defects.
KEY BENEFITS	No excavation necessary. All treatments can be done from inside.
LIMITATIONS	In case of poor concrete quality and severe water infiltration the box-in-box technique may be the only viable solution.

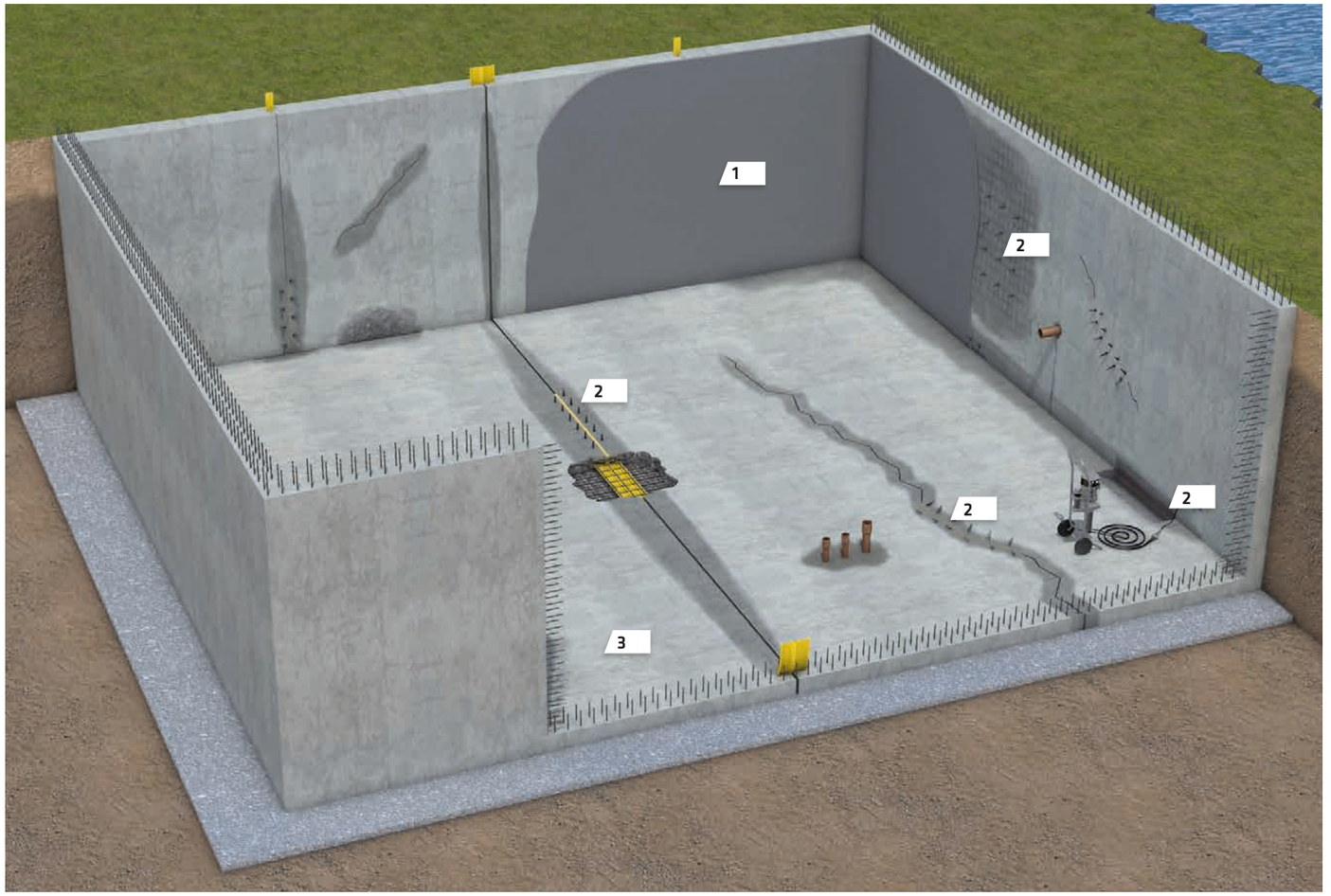
1. INTERNAL VERTICAL BARRIERS

Sika®-1 Pre-Bag LC Render	Low Cement, spray applied 3-coat render system for internal waterproofing of below-ground structures, basements, cellars and vaults.
SikaTop®- 107 Seal / Plus	2-component, polymer modified, rigid cementitious waterproofing mortar, internally and externally applied for full surface waterproofing and tanking.
Sikalastic® Drylok	Ready-to-use coating for concrete and masonry to stop water ingress from the negative side.
Sika MonoTop®-160 Migrating	Single component cementitious crystallisation slurry.

3. COMPLEMENTARY PRODUCTS

for joint sealing and waterproofing

Sikadur-Combiflex® SG System	Over-banding sealing tape system for post-sealing and waterproofing of construction and movement joints, around penetrations and for connections.



2. INJECTION SYSTEMS

SikaInject®-102	PU-based single-comp., low viscosity, water-reactive injection resin for stopping of high-water intrusions.
SikaInject®-201 DE	PU-based 2-comp., super-low viscosity injection resin for permanent waterproofing according to EN 1504-5 (Stopping of flowing water).
SikaInject®-304 DE	3-comp. polyacrylic with adjustable potlife and extremely high elongation for curtain injection and permanent waterproofing according to EN 1504-5.
SikaFuko® Injection system	Injection hoses for construction joints and other details, with. or without swelling strips, which can be used for sealing by.injection and re-injection in the event of future movement etc.
Sikadur®-52	2-comp. epoxy system, for structurally seal dry concrete cracks.

EXTERNAL (POSITIVE-SIDE) WATERPROOFING OF MASONRY WALLS

When external access and excavation are possible, the preferred waterproofing method is the application of vertical barriers on the exterior side help keep the wall dry, protected. Additionally, installing a horizontal barrier at the lowest feasible level of the wall effectively eliminates the risk of rising damp.

WHERE TO USE	Masonry basements exposed to water without pressure where access and excavation around the basement is possible.
KEY BENEFITS	Waterproofing on the external (positive) side keeps walls dry and protected.
LIMITATIONS	If access to the external side of the walls is not possible this technique is not applicable.

1. EXTERNAL VERTICAL BARRIERS

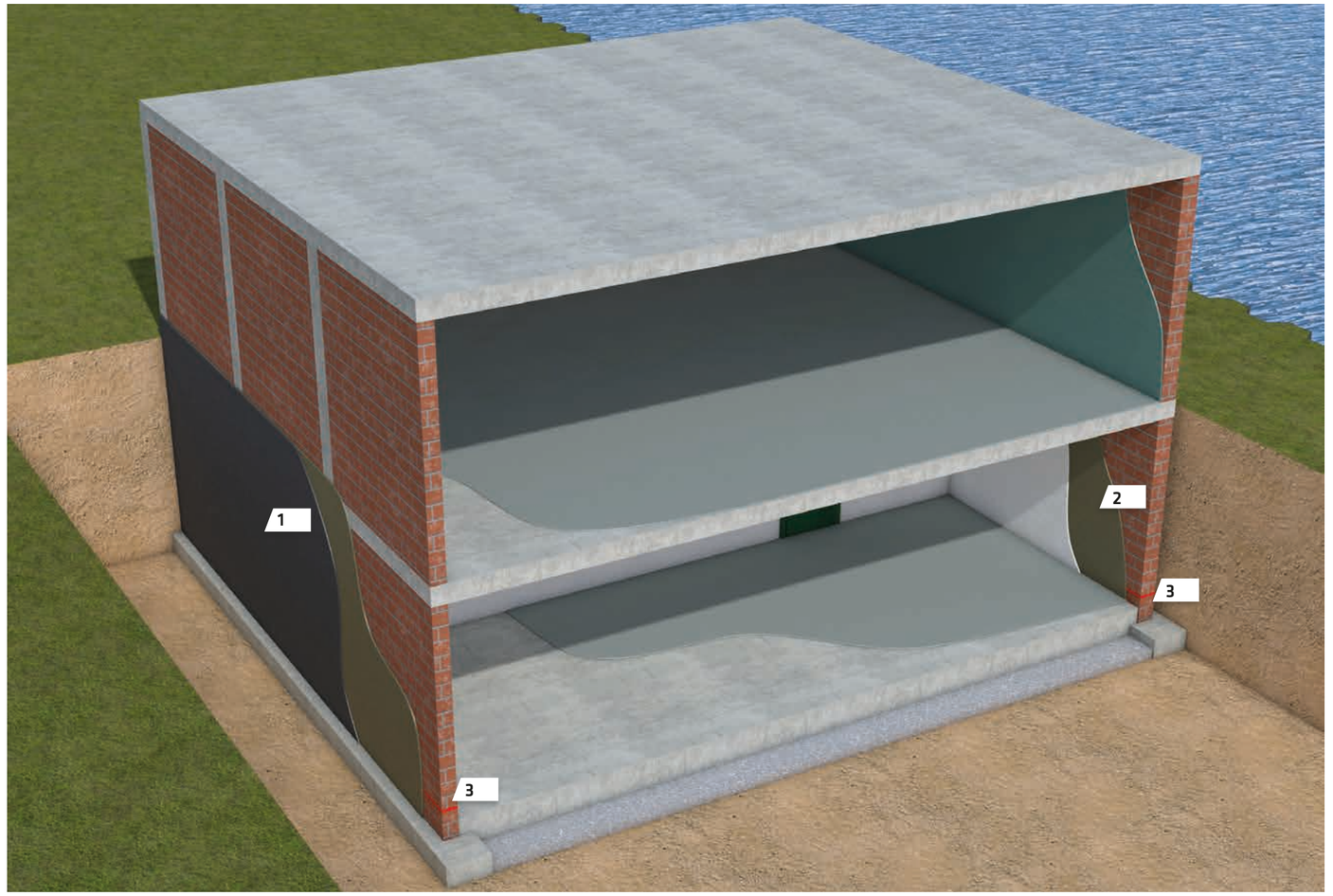
with three options against positive pressure

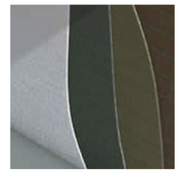
SikaTop®-107 Seal / Plus	2-component, polymer modified, rigid cementitious waterproofing mortar, internally and externally applied for full surface waterproofing and tanking.
Sikalastic®-1K	One-component, polymer modified cementitious waterproofing with crack-bridging ability.
Sika® Igolflex® range	Cold applied liquid bituminous membranes available as water-based or solvent-based.

3. DAMP PROOF COURSE (DPC)

to prevent moisture from rising through masonry as a result of capillary action

SikaMur® Injectocream®-100	Silane-based injectable damp proof course for stopping rising in masonry walls. WTA certified.





2. INTERNAL FINISHING

Sika®-1 Pre-Bag LC Render	Low Cement, spray applied 3-coat render system for internal waterproofing of below-ground structures, basements, cellars and vaults.
SikaMur® Dry/Finish	Renovation mortar / finishing render for rehabilitating damp- and salt- damaged masonry.
Sikalastic® Drylok	Ready-to-use coating for concrete and masonry to stop water ingress from the negative side.

CURTAIN INJECTION WATERPROOFING OF MASONRY WALLS

When external access and excavation are possible, the preferred waterproofing method is the application of vertical barriers on the exterior side help keep the wall dry, protected. Additionally, installing a horizontal barrier at the lowest feasible level of the wall effectively eliminates the risk of rising damp.

WHERE TO USE	Masonry basements exposed to water with pressure where access and excavation around the basement is not possible.
KEY BENEFITS	Dry walls without the need of excavation.
LIMITATIONS	Highly deteriorated masonry or unstable loose fill behind the walls.

1. EXTERNAL VERTICAL BARRIERS
(where accessible)

SikaTop®-107 Seal / Plus	2-component, polymer modified, rigid cementitious waterproofing mortar, internally and externally applied for full surface waterproofing and tanking.
Sikalastic®-1K	One-component, polymer modified cementitious waterproofing with crack-bridging ability.
Sika® Igolflex® range	Cold applied liquid bituminous membranes available as water-based or solvent-based.

3. DAMP PROOF COURSE (DPC) / EXTERNAL INJECTION
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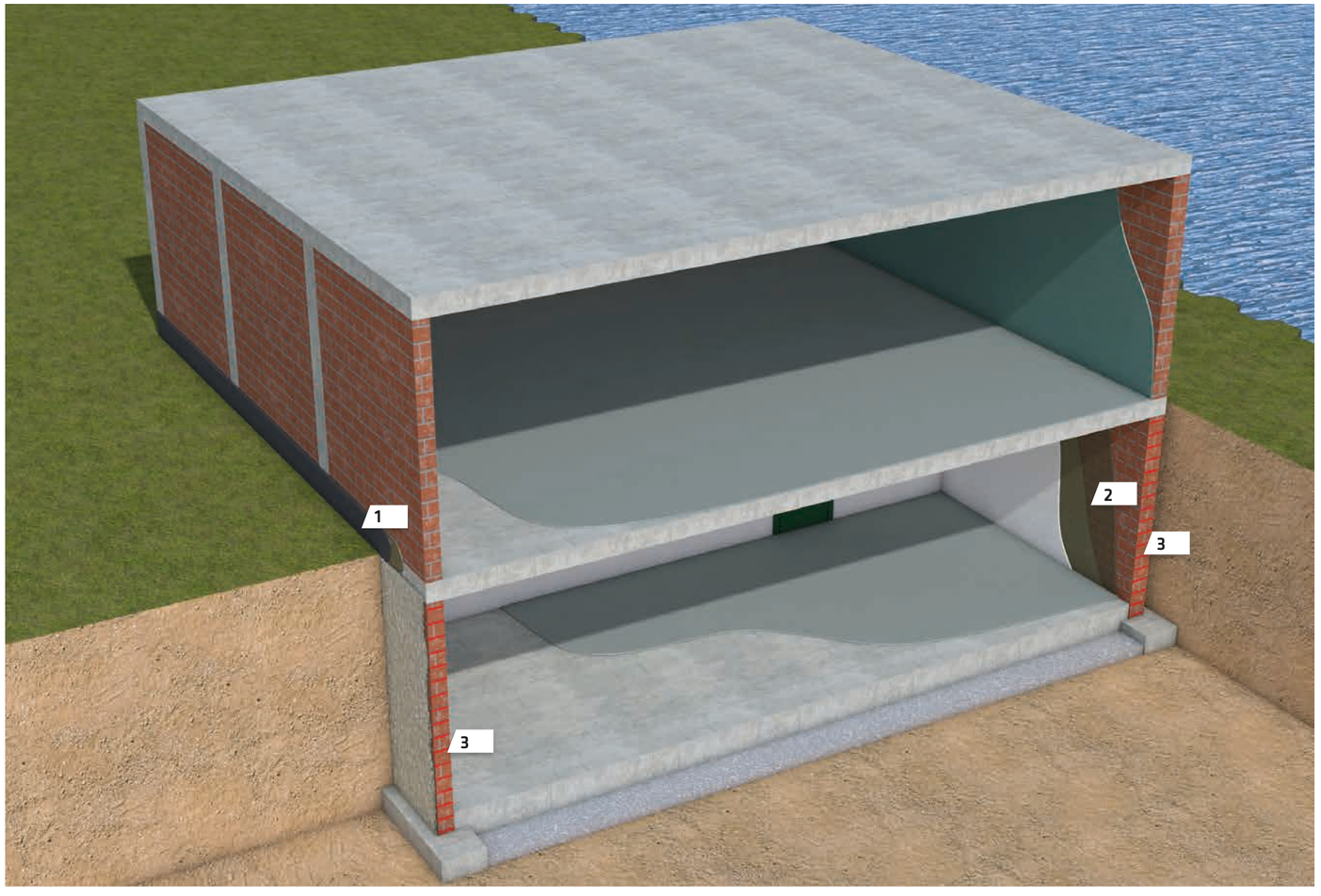

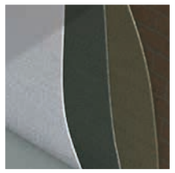

2. INTERNAL FINISHING
with three optional barriers suitable to withstand negative pressure

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INTERNAL (NEGATIVE-SIDE) WATERPROOFING OF MASONRY WALLS

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WHERE TO USE	Masonry basements exposed to water without pressure where access and excavation around the basement is not possible.
KEY BENEFITS	The most easy-to-install solution.
LIMITATIONS	Water penetration under pressure during flooding or in case of high water table level.

1. EXTERNAL VERTICAL BARRIERS

where accessible, with three options against positive pressure

SikaTop®-107 Seal / Plus	2-component, polymer modified, rigid cementitious waterproofing mortar, internally and externally applied for full surface waterproofing and tanking.
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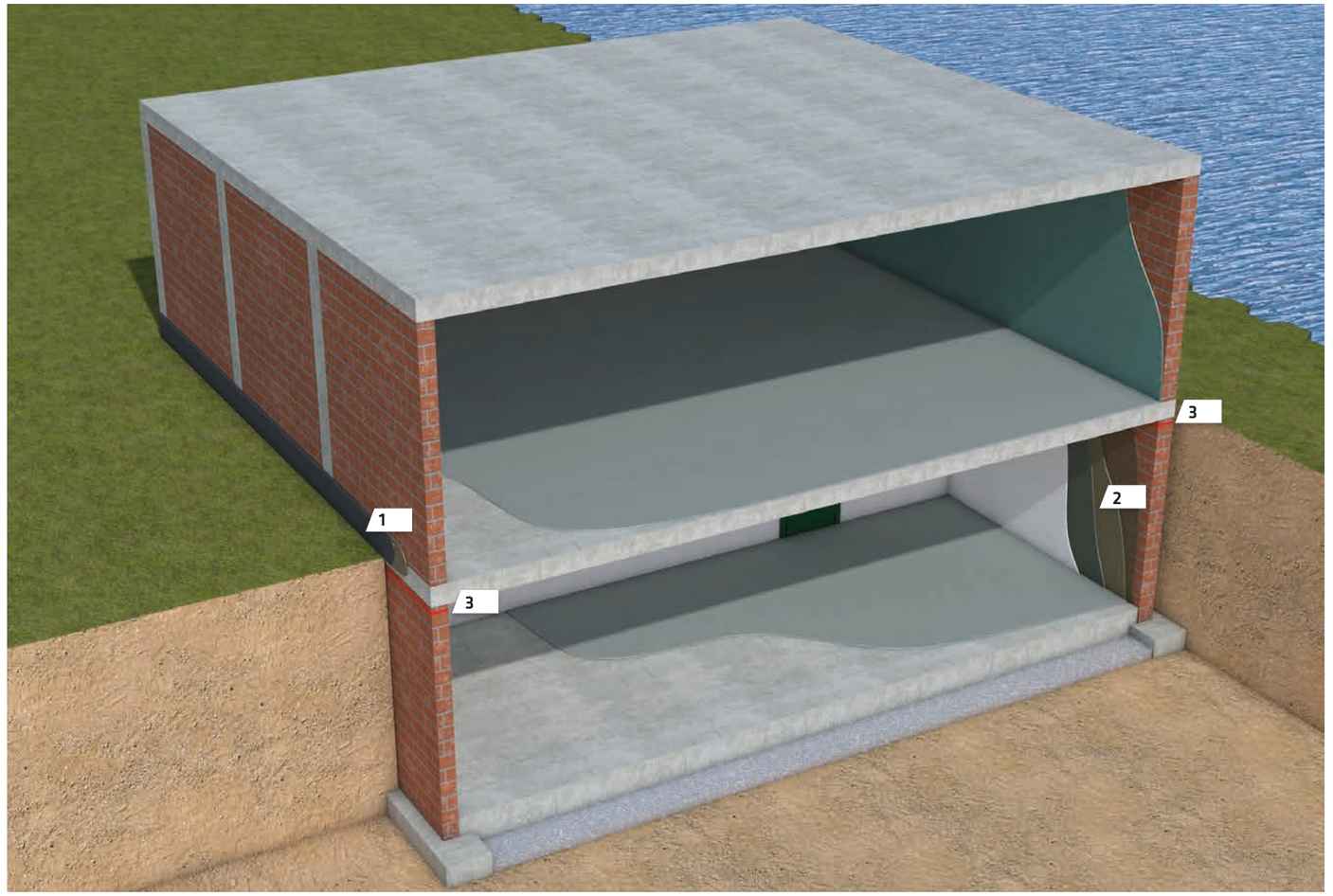

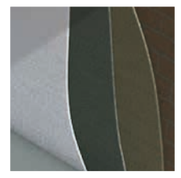

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A GLOBAL COMPANY BUT LOCAL PARTNER

WE ARE SIKA
Sika is a specialty chemicals company with a globally leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing, and protection in the building sector and industrial manufacturing. Sika has subsidiaries around the world and produces innovative technologies for customers worldwide. In doing so, it plays a crucial role in enabling the transformation of the construction and transportation sector toward greater environmental compatibility.

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