

CONSTRUCTION MATERIALS | MASONRY DAMP-PROOFING

# HORIZONTAL BARRIER AGAINST RISING DAMP WITH SILRES® BS

# MOISTURE *DESTROYS BUILDINGS*

Damp is the enemy of every wall. In masonry, plasters and paintwork, it damages the materials, leads to increased energy consumption and restricts the uses to which rooms can be put by fostering mildew. This, in turn, can be harmful to residents' health.

The risk is particularly high with buildings that do not have vertical or horizontal moisture barriers and are close to the groundwater level, in direct contact with the ground or in other contact with water.

This includes buildings constructed prior to the end of the nineteenth century, in which the moisture barriers are generally non-existent or have seriously deteriorated.

Close-up of a Bugatti Palace exterior wall after restoration with SILRES® BS.



Example of moisture damage: the Bugatti Palace in Molsheim (Alsace, France) displayed severe damage due to groundwater prior to its renovation.



# SILRES® BS

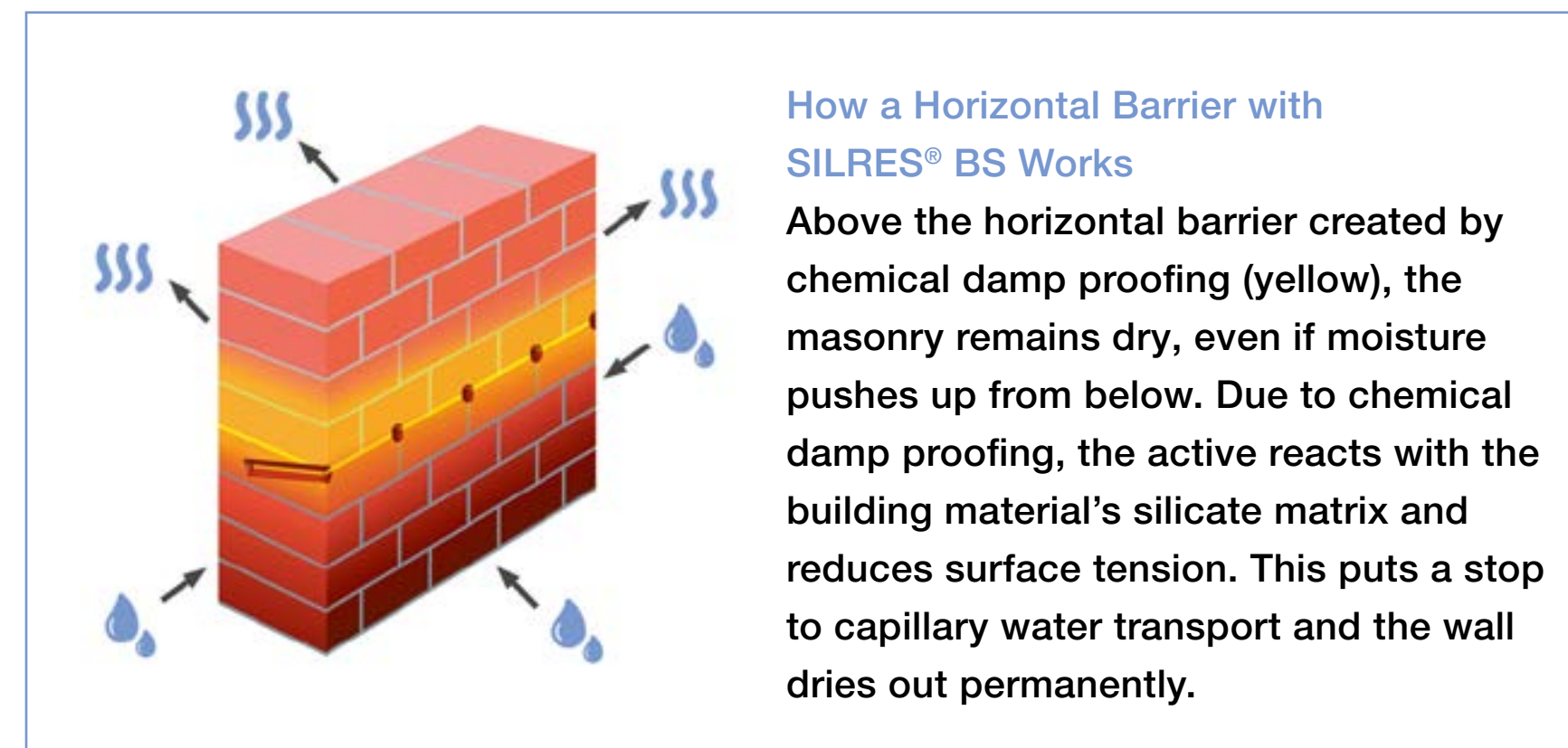
## PROTECTS AGAINST MOISTURE

Chemical damp proofing has proven both an efficient countermeasure where moisture damage already exists and a good preventive measure.

WACKER's SILRES® BS brand products – high-quality building-protection agents based on silicone resin technology – make the company a pioneer and technology leader.

Chemical damp proofing involves the injection of an agent directly into the masonry through drilled holes. SILRES® BS silicone microemulsion concentrates, and recently also SILRES® BS creams, have proven particularly successful here. Injected into the masonry, they form permanent bonds to yield a

highly efficient horizontal barrier. This puts a stop to capillary rising damp and any associated transport of harmful substances, and allows the wall to dry out. It provides lasting protection for buildings – as verified by long-term studies and numerous reference objects.



SILRES® BS is a registered trademark of Wacker Chemie AG.

### Benefits of a Horizontal Barrier with SILRES® BS

- Long-lasting aesthetic enhancement of exterior walls
- Increased value of the building
- Improved indoor air quality and comfort
- Rooms that had been unusable made habitable again
- Reduction in maintenance costs and renovation work
- Energy saving due to lower heating requirements



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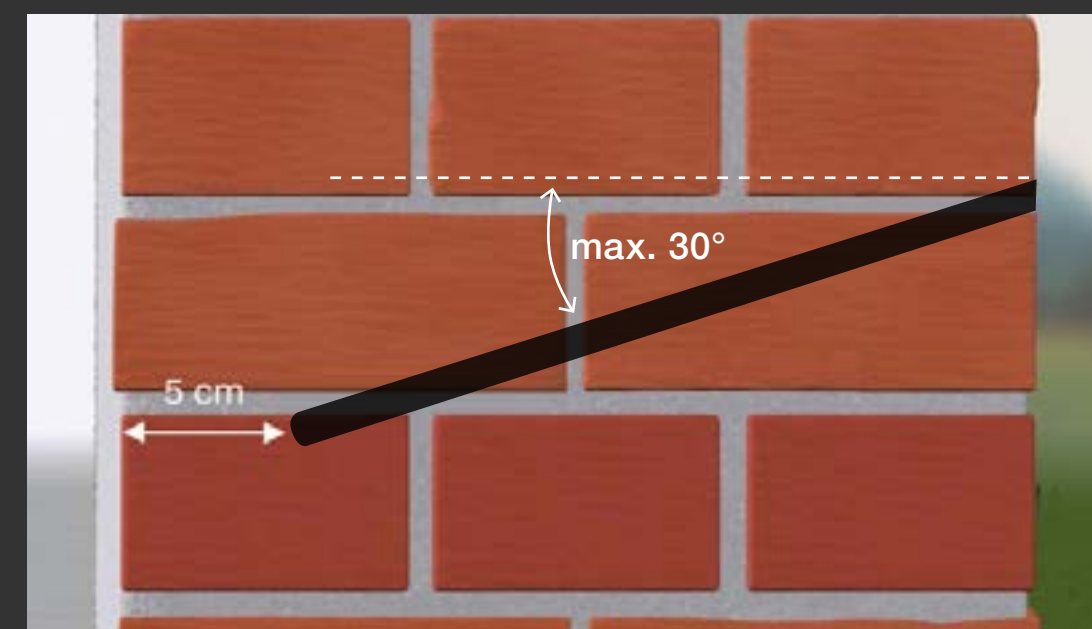
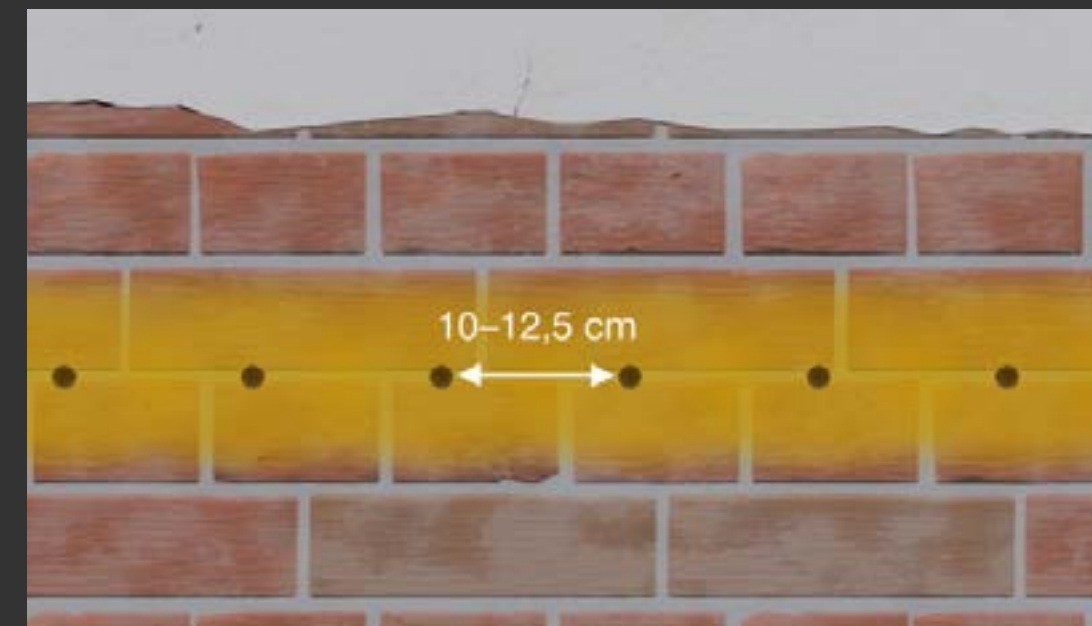
# SILRES® BS SMK 550

## THE SOLUTION FOR HISTORIC BUILDINGS AND MONUMENTS

SILRES® BS SMK 550 is a high-quality silicone microemulsion concentrate. Diluted in water, it is an outstanding chemical damp-proofing agent. This specialty product creates an effective horizontal barrier even at high moisture contents and thus puts a stop to rising damp in masonry.

SILRES® BS SMK 550 – Application

Filling Cavities in Masonry with SILRES® BS SMK 550



### Benefits of SILRES® BS SMK 550

- Solvent-free, silane/siloxane-based silicone microemulsion concentrate
- Simple dilution by addition to tap water
- Injection preferably under pressure, but also possible without pressure
- Excellent penetration, even in masonry saturated with moisture
- Multi-step injection: cavity filling with microfine cement slurry followed by injection of silicone microemulsion
- Individually tailored solution for every building site
- WTA- and CSTC-certified

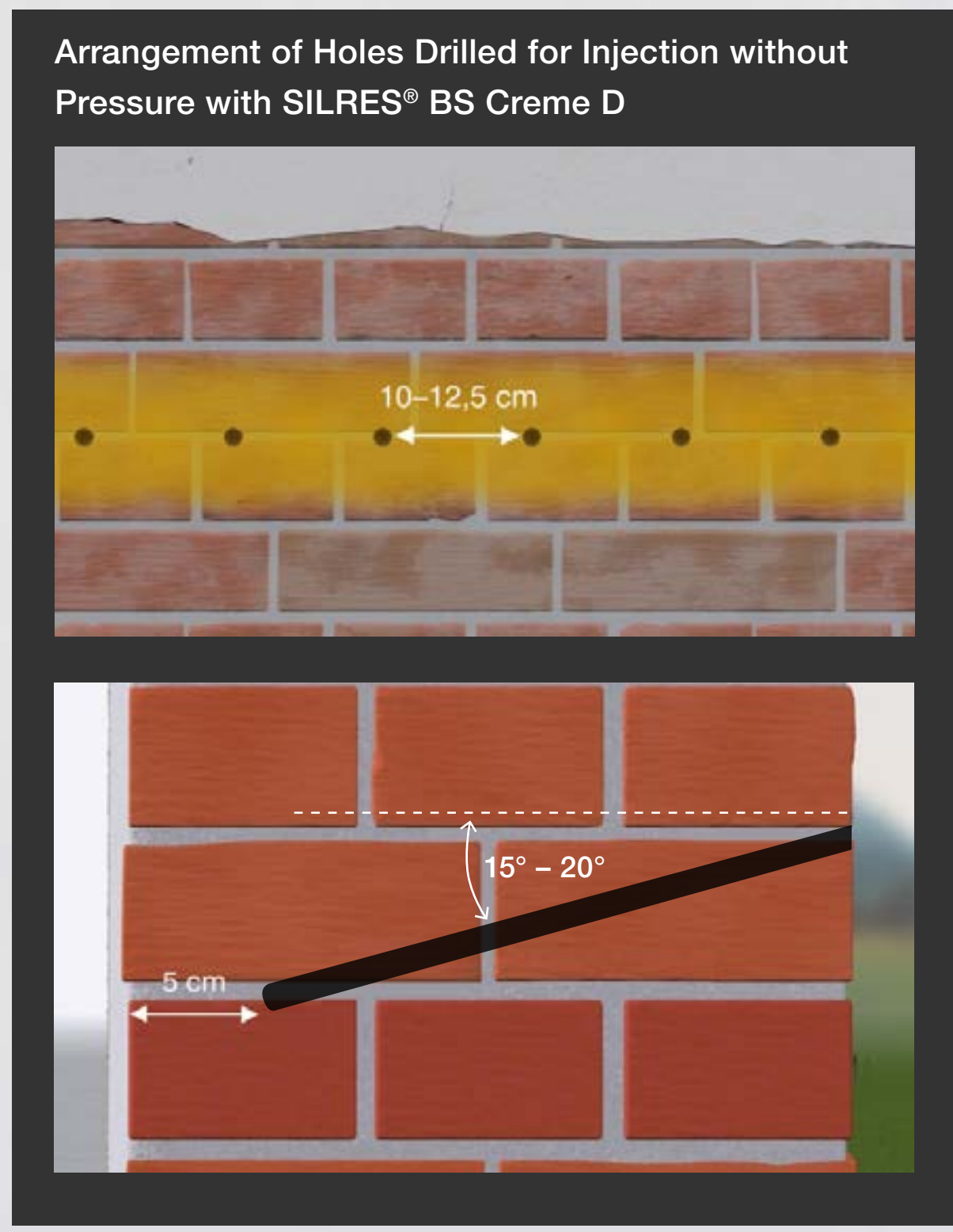


# SILRES® BS CREME D

## THE SIMPLE SOLUTION – EVEN WITHOUT PRESSURE

SILRES® BS Creme D is a highly efficient water-repellent agent. The ready-to-use product is ideal for chemical damp proofing – both with and without pressure. The water-repellent cream forms a lasting horizontal barrier against capillary rising damp.

SILRES® BS Creme D – Application



### Benefits of SILRES® BS Creme D

- Aqueous, solvent-free, silane/siloxane-based, water-repellent cream
- Ready-to-use injection agent
- Simple injection without pressure using a cartridge gun or under slight pressure with a pump
- Optimum distribution in the mortar joint due to high active-agent content
- Effective even at high saturation levels (up to 95%)
- No elaborate preparation of the masonry necessary, e.g. sealing with cement slurry
- WTA-certified



# CREATING TOMORROW'S SOLUTIONS

## A Diverse Array of Products for Growing Markets

Our product portfolio ranges from silicones, binders and polymeric additives all the way up to bioengineered pharmaceutical actives. Rounding these out is hyperpure silicon for semiconductors and solar applications.

## Innovations that Improve Quality of Life

Resource scarcity, climate change, urbanization: the challenges of our time demand new responses. In our search for solutions, we invest some 3.5% of our annual sales in research and development. With their emphasis on using energy efficiently and protecting the climate and our environment, our products are already improving quality of life for people all over the world.

## Global Knowledge for Local Markets

When you work with WACKER, you have 100 years of chemistry expertise at your disposal, with access to the research findings and best practices of our experts throughout the world. Our knowledge base consists of a network of 22 technical centers, 13 training centers and our basic research center.

**And most importantly: we are there wherever you need us – worldwide. Our local specialists know your markets and speak your language. Working with them, you will find innovative solutions that win over your customers and make you more competitive.**

## Follow us:

Find us on LinkedIn, YouTube and Twitter, and we'll keep you up to date on the latest and discuss current issues with you.

All figures are based on fiscal 2018.



## Silicones and Polymers

3,200 specialty products from organic and inorganic chemistry



## Global Market Leader

In dispersions and dispersible polymer powders based on vinyl acetate-ethylene (VAE), in building-protection silicones and in the production of cyclodextrin and cystein.



## Globally Active

- Sites worldwide
- Headquartered in Munich
- 24 production sites in Europe, Asia and the Americas
- 22 technical centers
- 13 WACKER ACADEMY training centers
- 50 sales offices



Employees: 14,500



## Total Sales

€4,98 billion



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