THE SILRES® PORTFOLIO: PROTECTING YOUR BUILDING MATERIALS AGAINST WATER

Decorative Coatings  
Facade Impregnation  
Concrete  
Insulation Materials  
Damp Proofing  

Brick and Roof Tiles  
Gypsum  
Boards  
Wood  
Anti-Stain & Color Enhancers
SILRES® protects buildings and surfaces from water damage, improving functionality and aesthetics. Facades look better for longer and remain energy efficient, even when in contact with humidity and water.

Partnering with the Pioneer
By choosing our portfolio, you also profit from more than 50 years of experience and expertise. The first silicone resins for building protection originated from WACKER laboratories. Today, we provide you with a comprehensive, time-tested and innovative portfolio that includes tailored solutions for many applications, climates and substrates.

Profiting from Individual Services
Partnership is one of our core competencies. Our experienced technical service engineers offer personalized and comprehensive services through a close network of technical centers worldwide. We work hand in hand with you, helping you select products and optimize formulations, testing your products and using our experience to assist you with application issues. Our dedicated experts and well-equipped labs are at your disposal.
PRESERVING BUILDING MATERIALS – PROTECTING ASSETS

Based on water-repellent silicones, WACKER'S SILRES® brand has been synonymous with effective building protection for decades. Its purpose is to preserve the value of old and new buildings and to protect them against weathering and structural damage.

Various construction materials, such as mineral substrates or wood, are porous, and contact with water produces a capillary effect. This can allow large volumes of water to penetrate the building material within a short time. SILRES® utilizes capillary active forces, penetrating into the pores of the mineral building material, where it is deposited on the pore walls. Water can no longer wet these siliconized pores, yet water-vapor permeability is unaffected.

Chemical Reaction
The basic material for the production of silicone resin is quartz. Organo-modified silicones have a molecular structure that is compatible with the silicate matrix of mineral substrates. This accounts for the extraordinary efficiency of hydrophobic impregnation. The organic groups are directed toward the center of the capillaries and pores, while the active ingredient reacts with the silicate matrix of the building material, reducing surface tension within the capillaries and pores and blocking capillary action. The result is long-lasting hydrophobic protection.

Effects
- Low water uptake
- High water-vapor permeability
- Barrier against harmful, water-soluble salts
- The resulting hydrophobic impregnation is extremely resistant to cold, heat and UV light.

More information
www.wacker.com/silres
SILRES® BS FOR DECORATIVE COATINGS
Decorative coatings formulated with SILRES® BS remain visually attractive and retain their functionality for longer. Their water-repellent effects prevent moisture from penetrating the substrate – an action that could otherwise impair the energy efficiency of the facade. Primers based on SILRES® BS show additional benefits.

Decorative Coatings
SILRES® BS silicone products are used for formulating hydrophobic paints and plasters with the following properties:

- Low water uptake
- High water-vapor permeability
- Reduced dirt pick-up
- Scratch resistance
- Anti-stain

More information
www.wacker.com/deco
**SILRES® BS**  
**DECORATIVE COATINGS**

### Decorative Coatings Paints and Plasters

<table>
<thead>
<tr>
<th>Product group</th>
<th>SILRES® BS 54</th>
<th>SILRES® BS 60</th>
<th>SILRES® BS 6042</th>
<th>SILRES® BS 1306</th>
<th>SILRES® BS 1346</th>
<th>SILRES® BS 1310</th>
<th>SILRES® BS 333</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>Silicone resin emulsions</td>
<td>Silicone resin emulsions</td>
<td>Modified silicone resin emulsions</td>
<td>Polysiloxane / functional silicone resin emulsions</td>
<td>Reactive polysiloxane emulsions</td>
<td>Polysiloxane / functional silicone resin emulsions</td>
<td>Reactive polysiloxane emulsions</td>
</tr>
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### Applications

<table>
<thead>
<tr>
<th>Applications</th>
<th>SILRES® BS 54</th>
<th>SILRES® BS 60</th>
<th>SILRES® BS 6042</th>
<th>SILRES® BS 1306</th>
<th>SILRES® BS 1346</th>
<th>SILRES® BS 1310</th>
<th>SILRES® BS 333</th>
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</thead>
<tbody>
<tr>
<td>Silicone resin emulsion paints and plasters – SREP®</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Silicate emulsion paints and plasters</td>
<td>***</td>
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<td>***</td>
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<td>***</td>
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</tr>
<tr>
<td>High-PVC emulsion paints</td>
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<td>***</td>
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<tr>
<td>Medium-PVC emulsion paints</td>
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<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>***</td>
</tr>
<tr>
<td>Lime paints (whitewash paints)</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Top coats for ETICS</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Pronounced water-beading effect in paints and plasters</td>
<td>**</td>
<td></td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Interior paints and plasters (stain-resistant, low VOC)</td>
<td>**</td>
<td></td>
<td>**</td>
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</table>

### Properties

<table>
<thead>
<tr>
<th>Properties</th>
<th>SILRES® BS 54</th>
<th>SILRES® BS 60</th>
<th>SILRES® BS 6042</th>
<th>SILRES® BS 1306</th>
<th>SILRES® BS 1346</th>
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<tbody>
<tr>
<td>Solids content [%]</td>
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<td>60</td>
<td>54</td>
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<td>pH approx. [-]</td>
<td>5</td>
<td>7</td>
<td>5</td>
<td>6 – 7</td>
<td>7 – 8</td>
<td>6 – 7</td>
<td>7 – 8</td>
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</tbody>
</table>

Suitable •  Recommended ••  Highly recommended •••
SILRES® BS 
DECORATIVE COATINGS

**Primers**
Silicone-based primers create a hydrophobic zone beneath the coating. This leads to additional benefits, such as improved adhesion, and provides decorative coatings with lasting protection from water.

**Powder Additives**
The WACKER SILRES® POWDER additives portfolio comprises silane/silicone-based products manufactured by two different technologies. In one, the active substance is deposited on the surface of an inorganic carrier while, in the other, it is encapsulated. SILRES® POWDER additives can be easily added to dry formulations without compromising hardness, adhesion and strength in the end product. They are compatible with a broad range of dry additives and remain stable in alkaline formulations.

**pH Adjuster**
SILRES® BS 168 is a water-based, solvent-free and silicone-based pH-adjuster for use in waterborne emulsion paints and plasters, for interior and exterior applications.

SILRES® BS 168 contains 55% solids and is an excellent option for low-VOC and low-odor systems.

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**Table: Primers**

<table>
<thead>
<tr>
<th>Product</th>
<th>SILRES® BS 1001</th>
<th>SILRES® BS 3003</th>
<th>SILRES® BS 290</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product group</td>
<td>Silane / siloxane emulsions</td>
<td>Silane / siloxane emulsions</td>
<td>Silane / siloxane</td>
</tr>
<tr>
<td>Applications</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waterborne primers</td>
<td>**</td>
<td>***</td>
<td></td>
</tr>
<tr>
<td>Waterborne emulsion primers</td>
<td>**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solventborne primers</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Properties</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active content [%]</td>
<td>50</td>
<td>60</td>
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**Table: Powders**

<table>
<thead>
<tr>
<th>Product</th>
<th>SILRES® POWDER A</th>
<th>SILRES® POWDER D</th>
<th>SILRES® POWDER E</th>
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</thead>
<tbody>
<tr>
<td>Product group</td>
<td>Silicone on carrier</td>
<td>Encapsulated functional silane</td>
<td>Encapsulated functional silane</td>
</tr>
<tr>
<td>Applications</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grouts for tiles and stones</td>
<td>**</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>Stuccos and plasters</td>
<td>***</td>
<td>**</td>
<td>***</td>
</tr>
<tr>
<td>Thick-layer plasters (monocouche/monocapa)</td>
<td>**</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>In bulk hydrophobic mineral-based systems</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
<tr>
<td>On surface hydrophobic mineral-based systems</td>
<td>**</td>
<td>**</td>
<td>***</td>
</tr>
<tr>
<td>Properties</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active content [%]</td>
<td>50</td>
<td>35</td>
<td>65</td>
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</tbody>
</table>

Suitable • Recommended •• Highly recommended •••
SILRES® BS
FACADE IMPREGNATION

Hydrophobic impregnation of facades reduces maintenance and repair costs. Impregnation makes the surface easier to clean, enhances the value of the property, and potentially reduces heating costs. Impregnation with SILRES® BS products combines excellent technical performance with easy application.

Key Factors for Durability

- Significant reduction of water uptake by at least 80%
- High water-vapor permeability, substrate stays breathable
- Hydrophobic barrier due to extensive penetration
- Strong bonding with substrate
- Resistance to UV-light

More information
www.wacker.com/facadeimpregnation
## SILRES® BS FACADE IMPREGNATION

### Facade Impregnation

<table>
<thead>
<tr>
<th>Product</th>
<th>Water-Based</th>
<th>Solvent-Dilutable</th>
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<tbody>
<tr>
<td>Product group</td>
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<td>SILRES® BS 290</td>
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<tr>
<td></td>
<td>SILRES® BS 3003</td>
<td>SILRES® BS 280</td>
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<tr>
<td></td>
<td>SILRES® BS 4004</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SILRES® BS CREME F</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SILRES® BS SMK 1311</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SILRES® BS 290</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SILRES® BS 280</td>
<td></td>
</tr>
</tbody>
</table>

### Main advantage

- **High compatibility with polymer dispersions**
- **Very stable in dilution & concentrate**
- **Outstanding beading effects**
- **Single-step application, ready-to-use**
- **Offering for professional applicators**
- **Well-known, solvent-dilutable all-rounder**
- **Specialty for lime-based natural stone**

### Applications

<table>
<thead>
<tr>
<th>Water repellent top coats by roller, brush or low-pressure equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brick, clinker</td>
</tr>
<tr>
<td>Mortar, grout</td>
</tr>
<tr>
<td>Sand-lime brick</td>
</tr>
<tr>
<td>Sandstone</td>
</tr>
<tr>
<td>Limestone, marble</td>
</tr>
<tr>
<td>Granite</td>
</tr>
<tr>
<td>Mineral plaster</td>
</tr>
</tbody>
</table>

### Properties

| Active ingredient [%] | 50 | 60 | 50 | 25 | 100 | 100 | 100 |

**Suitable • Recommended •• Highly recommended •••**
SILRES® BS
FOR
CONCRETE
PROTECTION
WACKER offers particularly long-lasting and cost-efficient concrete protection agents for surface impregnation, integral treatment, and coating.

**Hydrophobic Impregnation**
Octylsilanes and silane-based creams are well known high-quality impregnating agents for long-lasting protection of all kinds of concrete against structural damage. Used for prevention, this technology reduces maintenance costs especially of infrastructure concrete (e.g. bridges) significantly.

The benefits are:
- Drastic reduction in water uptake
- Chloride barrier against reinforcement corrosion
- Retention of high water-vapor permeability
- Extensive penetration
- UV-resistant and long-lasting
- Invisible

More information: www.wacker.com/concreteprotection

**Concrete Admix**
SILRES® BS silanes and dedicated silane/siloxane emulsions are high-quality products for integral treatment of load-bearing concrete structures and concrete artifacts. Their mechanical properties must not be affected when they are used for waterproofing concrete or protection of concrete structures against water-initiated deterioration processes (e.g. alkali silicate reaction, reinforcement corrosion). In pavers and blocks, the main purpose is efflorescence reduction, water beading is a desirable optical effect.

The benefits are:
- Drastic reduction in water uptake
- Stopped or slowed alkali silicate reaction
- Reduction of chloride ingress
- Little impact on mechanical properties
- Reduction of efflorescence
- Beading effect in pavers and blocks

More information: wacker.com/flooringprotection

**Flooring Protection**
SILRES® BS 6920 is a new alpha-silane terminated binder based on a patented technology for cement-bound floors. It provides excellent properties in all thin-layer applications.

The benefits are:
- Water vapor permeable (no blistering)
- 1K formulation (avoids mixing errors on the construction site)
- Easy to apply
- Solvent-free
- High heat resistance
- Easy to refurbish
- Suitable for refurbishment of PU/EP floors
- Application possible below 15 °C
- Thin-layer technology (app. 100 g/m²)
## SILRES® BS
### CONCRETE PROTECTION

<table>
<thead>
<tr>
<th>Concrete Protection</th>
<th>Surface Impregnation</th>
<th>Admixture</th>
<th>Coating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>SILRES® BS 1701</td>
<td>SILRES® BS 1801</td>
<td>SILRES® BS 6920</td>
</tr>
<tr>
<td>Product group</td>
<td>Silane</td>
<td>Silane</td>
<td>Hybrid polymer</td>
</tr>
<tr>
<td></td>
<td>Silane cream</td>
<td>Silane / siloxane emulsion</td>
<td></td>
</tr>
<tr>
<td><strong>Applications</strong></td>
<td><strong>Infrastructure (EN 1504-2)</strong></td>
<td><strong>Concrete facades / elements</strong></td>
<td><strong>Waterproof C. (EN 934-2)</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Alkali-silica protection</strong></td>
<td><strong>Paver anti-efflorescence</strong></td>
<td><strong>Floor coating</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Floor coating</strong></td>
<td><strong>Active content [%]</strong></td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Properties</strong></th>
<th>Suitable •</th>
<th>Recommended ••</th>
<th>Highly recommended •••</th>
</tr>
</thead>
</table>

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**Active content [%]**
- 100
- 80
- 100
- 50
- 60
- 100

_Suitable • Recommended •• Highly recommended •••_
SILRES® BS
INSULATION MATERIALS

To a greater or lesser extent, all mineral construction and insulation materials are hydrophilic in character. Together with the large pore volume of construction, and especially insulation, materials, this leads to an increase in capillary water absorption. Hydrophobization with SILRES® BS increases and maintains the insulation performance of inorganic insulating materials and prevents damage.

The benefits are:
- Maximum reduction of capillary water uptake
- Minimal reduction of water-vapor permeability
- Extensive penetration depth
- Adequate alkaline resistance
- Resistance to UV-light, high and low temperatures
- Surfaces not rendered shiny or tacky; no yellowing
- Environmentally compatible
- Saves energy and reduces CO₂ emissions
- More comfortable indoor climate

More information
www.wacker.com/insulation
## Insulation Materials

<table>
<thead>
<tr>
<th>Product</th>
<th>Product group</th>
<th>Applications</th>
<th>Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>SILRES® BS 1042</td>
<td>Emulsion of reactive siloxane</td>
<td>Glass and stone wool</td>
<td>Active content [%] 60</td>
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<tr>
<td>SILRES® BS 1052</td>
<td>Emulsion of non-reactive siloxane</td>
<td>Blowing wool</td>
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</tr>
<tr>
<td>SILRES® BS 5133</td>
<td>Emulsion of reactive siloxane</td>
<td>Expanded minerals</td>
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</tr>
<tr>
<td>SILRES® BS 5137</td>
<td>Emulsion of reactive siloxane</td>
<td>Aerated lightweight concrete</td>
<td></td>
</tr>
<tr>
<td>SILRES® BS 45</td>
<td>Emulsion of silicone resin</td>
<td></td>
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</tr>
<tr>
<td>SILRES® BS 16</td>
<td>Silicone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SILRES® BS 5350</td>
<td>Silicone fluid</td>
<td></td>
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</table>
SILRES® BS
FOR
HORIZONTAL BARRIERS AGAINST RISING DAMP

SILRES® MAKES THE DIFFERENCE
Rising damp is particularly common in buildings that do not have horizontal moisture barriers and that are close to the groundwater level or in direct contact with the soil or water.

Chemical damp proofing involves the injection of an agent directly into the masonry through drilled holes. SILRES® BS Silicone Microemulsion Concentrate and SILRES® BS CREME have proven particularly successful here. Injected into the masonry, they form permanent bonds that 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 various reference objects.

Benefits of a Horizontal Barrier with SILRES® BS
- Long-lasting aesthetic enhancement of walls
- Increased value of the building
- Improved indoor air quality and comfort
- Unusable rooms made habitable again
- Can help reduce maintenance costs and renovation work
- Saves energy by lowering heating requirements

How a Horizontal Barrier with SILRES® BS Works

More information
www.wacker.com/dampproofing
SILRES® BS
FOR BRICK & ROOF TILE IMPREGNATION
SILRES® BS
BRICK & ROOF TILE IMPREGNATION

Post-production hydrophobic impregnation with SILRES® BS protects clay-based construction materials against efflorescence, allowing them to remain breathable.

Applications
SILRES® BS offers solutions for the hydrophobization of:
• Roof tiles
• Facade bricks
• Flower pots
• Floor tiles

Mode of Action
Application is very easy: the clay products are simply dipped into or sprayed with the hydrophobization agent.

How Hydrophobic Treatment of Open Pore, Heavy Clay Ceramic Works

<table>
<thead>
<tr>
<th>In-Plant Surface Treatment</th>
<th>SILRES® BS 16</th>
<th>SILRES® BS 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product group</td>
<td>Siliconates</td>
<td>Silane / siloxane concentrates</td>
</tr>
<tr>
<td>Main advantage</td>
<td>Best available cost-benefit ratio for clay roof tiles</td>
<td>Suitable protection for engobe and alkaline roof tiles</td>
</tr>
</tbody>
</table>

Applications
Water-repellent treatment by dipping or spraying
- Clay-based construction materials
- Concrete roof tiles
- Engobed, fired clay

Properties
- Active ingredient [%] 34 100

Suitable • Recommended •• Highly recommended •••

More information
www.wacker.com/roof
SILRES® BS FOR GYPSUM
SILRES® BS
GYPSUM

Gypsum is a traditional building material that is becoming increasingly important in modern construction applications. Gypsum boards in particular are lightweight, can be installed quickly and are easy to replace. The biggest disadvantage of gypsum-bound construction materials is their low moisture resistance. This challenge can be met with SILRES® BS. Thanks to the chemical interaction between the gypsum crystals and the silicone, these materials provide far more efficient protection than organic water repellents.

SILRES® BS is used for the water-repellent treatment of gypsum-based products used in wet or humid areas:

**Wallboards**
Used as admixture with significant benefits over wax additives (for all wallboard plants)

**Fiberboards**
Surface treatment with excellent hydrophobic properties

**Blocks**
Emulsion additives with improved miscibility. Siliconates produce a treated surface.

**Dry mix**
Dry powder admix with excellent hydrophobation properties and storage stability.

More information
www.wacker.com/gypsum

<table>
<thead>
<tr>
<th>Gypsum</th>
<th>SILRES® BS 94</th>
<th>SILRES® BS 46</th>
<th>SILRES® BS 16</th>
<th>SILRES® BS POWDER G</th>
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<tbody>
<tr>
<td>Product group</td>
<td>Polymethylhydro-siloxane</td>
<td>Polymethyl-hydro-siloxane emulsion</td>
<td>Silconate</td>
<td>Carrier-based powder containing Silicone resin</td>
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<td>Applications</td>
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</tr>
<tr>
<td>Gypsum wallboard</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Gypsum fiberboard</td>
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<td>Gypsum blocks</td>
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<tr>
<td>Gypsum drymix</td>
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<td>Active ingredient [%]</td>
<td>100</td>
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<td>34</td>
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SILRES® BS FOR FIBER-CEMENT BOARDS
SILRES® BS FIBER-CEMENT BOARDS

SILRES® BS can be used for the hydrophobic treatment of fiber-cement boards. WACKER offers the right solution for surface and integral treatment to achieve a drastic reduction in capillary water uptake.

Benefits:
• Increased freeze-thaw resistance
• Better dimensional stability in wet areas
• Integral treatment impregnation prevents additional water ingress at cut edges
• Keeps paint from peeling
• Suitable for air-cured and autoclaved process

<table>
<thead>
<tr>
<th>Fiber-Cement Boards</th>
<th>Surface Treatment</th>
<th>Integral Treatment</th>
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<tbody>
<tr>
<td>Product</td>
<td>SILRES® BS 3003</td>
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<tr>
<td>Product group</td>
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<td>Siloxane concentrates</td>
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<tr>
<td>Main advantage</td>
<td>Water-based</td>
<td>Suitable for autoclaved and air-cured fiber-cement</td>
</tr>
<tr>
<td>Applications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air-cured</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Autoclaved</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Properties</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active ingredient [%]</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

More information
www.wacker.com/fibercementboards
SILRES®
WOOD APPLICATIONS

For Long-Lasting Protection
Water damages wood in two ways: by accelerating the rotting process and by causing swelling and shrinking. The use of the right SILRES® silicone product can provide long-lasting protection from water by keeping the water absorption very low – even after years of outdoor weathering.

Water-Based Solution
SILRES® WH is a water-thinnable, solventless functional emulsion of a silicone resin. It is used to achieve a long-lasting beading effect and to reduce capillary water absorption. The beading effect is only visible after weathering, not immediately. Wood stains or wood coatings formulated with SILRES® WH are durable and long-lasting, and minimize the harmful effects caused by water uptake.

Solvent-Based Solution
SILRES® BS 290 is a solventless silicone concentrate-based on a mixture of silane and siloxane.

The hydrophobicity of solvent-borne wood applications can be improved by incorporating SILRES® BS 290 into the formulation.

More information
www.wacker.com/woodcoating

### Wood Hydrophobization

<table>
<thead>
<tr>
<th>Product</th>
<th>SILRES® WH</th>
<th>SILRES® BS 290</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product group</td>
<td>Silicone resin emulsions</td>
<td>Silane / siloxane</td>
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<tr>
<td>Applications</td>
<td>Waterborne impregnants</td>
<td>***</td>
</tr>
<tr>
<td>Waterborne stains or coatings</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>Solventborne impregnants</td>
<td>***</td>
<td></td>
</tr>
<tr>
<td>Solventborne stains or coatings</td>
<td>***</td>
<td></td>
</tr>
</tbody>
</table>

Suitable • Recommended •• Recommended •••
SILRES® BS FOR ANTI-STAIN, COLOR-ENHANCING AND ANTI-GRAFFITI
SILRES® BS provides very effective solutions for anti-stain, color-enhancing, anti-graffiti effects. Application is suitable for various substrates:

- Concrete
- Natural stone (porous and non-porous), e.g. marble, granite
- Synthetic stone
- Ceramic tiles (glazed and non-glazed)

Application of special silicone-based primer enables protection of:

- Metals, coated & non-coated
- Glass
- Plastics
- Wood
- Coated surfaces with common facade coatings
- Graffiti art

Benefits:

**Anti-Stain Treatment**
- Resistant to water- and oil-based stains
- No impact on surface appearance
- Improved cleaning properties

**Color Enhancement**
- Matt or gloss finish options available
- Excellent water and stain resistance
- Improved surface appearance

**Permanent Anti-Graffiti Coating**
- Graffiti is easy to remove
- Clean with just cold water using a pressure washer or wet sponge
- Posters detached easily
- Pigmentable
- Water-vapor permeable
- Use on all kinds of mineral substrates

More information
www.wacker.com/surfacetreatment

www.wacker.com/antigraffiti
### Surface Treatment

<table>
<thead>
<tr>
<th>Product</th>
<th>Anti-Stain</th>
<th>Color Enhancer</th>
<th>Anti-Graffiti</th>
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<tbody>
<tr>
<td>Product group</td>
<td>SILRES® BS 38</td>
<td>SILRES® BS 39</td>
<td>SILRES® BS 710</td>
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<tr>
<td></td>
<td>Silane / siloxane with fluorine components</td>
<td>Silane / siloxane emulsions with fluorine components</td>
<td>Silane / siloxane concentrates</td>
</tr>
<tr>
<td>Main advantage</td>
<td>Without impact on surface appearance</td>
<td>Improvement of surface appearance</td>
<td>Permanent 1K coating, free of oxime and tin</td>
</tr>
<tr>
<td>Applications</td>
<td>Water repellent top coats by roller, brush or low pressure equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection against water- and oil based stains</td>
<td>***</td>
<td>**</td>
<td>***</td>
</tr>
<tr>
<td>Color enhancement</td>
<td></td>
<td></td>
<td>***</td>
</tr>
<tr>
<td>Anti-graffiti</td>
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<td></td>
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<tr>
<td>Properties</td>
<td>Active ingredient [%]</td>
<td>46</td>
<td>25</td>
</tr>
</tbody>
</table>

Suitable •  Recommended ••  Highly recommended •••
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. They are rounded out by hyperpure silicon for semiconductors and solar applications.

Innovations that Improve Quality of Life
Resource scarcity, climate change, urbanization: the challenges of our age 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 23 technical centers, 14 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.

Employees: 14,700
Total Sales €4.93 billion

All figures are based on fiscal 2019.
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