

SURFACE TREATMENT | STONE CARPET

# SILRES® BS 6920

## An Innovative Hybrid Binder for Stone Carpet

Stone carpet is an extremely durable, slip-resistant and seamless flooring alternative. It is more versatile than other flooring choices and is easy and quick to lay. Maintenance, too, is straightforward: simply vacuum on a regular basis and steam-clean as necessary. As further proof of its versatility, stone carpet can also be used to cover walls as well as floors. And it can be installed over existing tiled surfaces to produce stunning renovations. This system is suitable for indoor spaces and outdoor residential areas, such as balconies and terraces. Additional applications are reception rooms, and industrial and commercial flooring.

### An Innovative Binder Based on Patented Technology

SILRES® BS 6920 is an alpha-silane-terminated polyether based on WACKER's proprietary alpha-silane technology. SILRES® BS 6920 cures on contact with moisture and its chemical structure has been optimized to produce the necessary viscosity. Once the binder has cured, it possesses the high mechanical strength needed for holding the pebbles in the stone carpet together. If required, the carpet can be sealed with a topcoat.

### Product Description of SILRES® BS 6920

Appearance	Transparent liquid
Solids	100% (solvent-free)
VOC content	Low VOC (~0.5%, 6 g/l) (Directive 2010/75 EU)
Flash point	>100 °C
Viscosity	75 mPa s
Storage behavior	Long-term stable, non-sensitive to moisture

### Easy to Mix and Formulate

Due to its low viscosity, SILRES® BS 6920 can be easily mixed with standard equipment (dissolver, mixer) at low shear rates. The viscosity needed for laying stone carpet on floors and/or walls can be adjusted via the addition of a specific alpha-silane-terminated polyether in combination with pyrogenic silica.

For curing, SILRES® BS 6920 is usually

formulated with an amino-functional silane (e.g. GENIOSIL® GF 91 or GENIOSIL® DAPTM) that also ensures good adhesion to cementitious substrates. In general, SILRES® BS 6920 offers formulators considerable flexibility.

### Range of Applications

SILRES® BS 6920 is ideal for stone carpet floors in industrial, commercial and residential buildings. Examples are:

- Living spaces
- Maintenance rooms
- Entrance areas
- Showrooms
- Commercial flooring
- Reception rooms
- Museums
- Terraces
- Balconies



Stone carpet with typical particle size of 2–4 mm

**Easy to Apply, Fast Curing**

First, a prime coat of a pure binder formulation based on SILRES® BS 6920 for stone carpet is applied to prepare the surface and promote adhesion of the subsequent layer of stone carpet. A homogeneous mixture of stones and binder is then applied wet-on-wet to the treated surface. This layer is tack-free from 3 to 4 hours after treatment.

**Comparing SILRES® BS 6920 with Other Binder Systems for Stone Carpet**




Various binder systems for stone carpet are available. However, compared with these systems, SILRES® BS 6920 is easier to apply, environmentally sound and user-friendly.



Comparison of Typical Binder Systems		
1K PU	2K PU	SILRES® BS 6920
Solvent-borne (odor)	Solvent-free	Solvent-free
Flash point: approx. room temperature	Flash point: >100 °C	Flash point: >100 °C
Smooth processing	High viscosity, difficult processing	Smooth processing
Very sensitive to moisture	Very sensitive to moisture	Non-sensitive to moisture
Tacky for relatively long period (6 h)	Tacky for relatively long period (24 h)	Tack-free very quickly (3 to 4 h)
PU training mandatory for industrial use from August 24, 2023, on	PU training mandatory for industrial use from August 24, 2023, on	No mandatory training required

- Benefits of Binder Based on SILRES® BS 6920**
- 1K formulation
  - Easy to handle/apply
  - Solvent-free
  - Transparent
  - Heat resistant
  - Fire retardant
  - Fast curing (tack-free after 3 to 4 hours)



**Wacker Chemie AG**, 81737 Munich, Germany  
[www.wacker.com/contact](http://www.wacker.com/contact), [www.wacker.com](http://www.wacker.com)  
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