

## 1. Product Profile

**StenSilan WW** is a single component, silane based, water impermeability and impregnation material for all mineral surfaces. **StenSilan WW** has chemical groups that react with mineral surfaces. These groups are chemically bound to the surface and make the surface hydrophobic (water repellent). It has high surface covering and diffusion properties. It is milk-like water borne liquid forming an invisible layer after application. It is resistant to UV radiation and it also increases the resistance of the surface it covers.

**StenSilan WW** is available in 10 liter packages.

## 2. Uses

**StenSilan WW** makes natural stone, marble, ceramic, plaster and gas concrete surfaces hydrophobic; therefore, it prevents them to absorb water. **StenSilan WW** does not form a protective layer separate from the surface but does not allow water to enter the structure by chemically binding to these materials and forming a hydrophobic structure in depth. Therefore, it does not prevent the structure to breathe and permeate gases; it prevents water deposits beneath the coating and prevents adhesive failure of coatings in time. Since heat transmission coefficient of the water absorbing materials will be increased, it also indirectly contributes to heat isolation.

Natural appearance of surfaces where **StenSilan WW** is applied does not change. Surfaces coated with **StenSilan WW** are not affected from contaminants carried by water. **StenSilan WW** is used in protection of all kinds of mineral surfaces exposed to atmospheric conditions and wetting effect of rain water or water from other sources due to these properties.

Another positive effect of the water repellent property of **StenSilan WW** is preventing cases of bringing up salt during curing which is observed at water absorbent surfaces. **StenSilan WW** maintains its hydrophobic property for 5-10 years depending on the penetration depth and abrasion of the surface. At the end of these periods **StenSilan WW** application must be repeated. **StenSilan WW** does not damage but improve paintability of the surfaces.

## Hydrophobic and Oleophobic Surface Impregnation and Protection Material

### Highlights

- Waterborne
- Silane based and single component
- Low viscosity transparent fluid
- Allows breathing of surface
- Keeps the natural appearance of surface
- Very high surface covering and diffusion
- Impregnates the surface; no film layer
- Protects the surface from contaminants carried by water
- Resistant to UV radiation
- Sprayable

Some of the major applications are:

- Surfaces like brick, concrete, plaster and mosaic
- Protection of historical and contemporary artwork produced with stone carving and sculpture technique from atmospheric effects
- Concrete floors and surface coatings, roads, runways, terraces, screen walls **Stenkim®** provides technical support for selecting StenSilan branded product that fits best to your surface, application conditions and equipment.

### 3. Application

**StenSilan WW** is applied at wide areas by spraying. It can be applied on small areas by means of brush or roller. For continuous protection on wide surfaces, application by pouring on the surface and then spreading on the surface by means of a brush provides better results than using a brush wetted by the material, on the surface.

Surface cleaning, removing dust and loose parts, and repairing the cracks are required before the application. Application can be carried out on moist or dry surfaces. However, it is required to protect the material from water contact and rain until the applied material cures. Floor temperature must be considered carefully because if the material dries too fast it cannot penetrate into the concrete. It must not be used at floor temperatures higher than 50°C.

It is sufficient to wet the surface with **StenSilan WW** during the application. But in cases where protection in depth is required from the material, the amount of **StenSilan WW** used per square meter must be increased. The consumption is 2.5 to 10 m<sup>2</sup>/l depending on the surface properties and desired protection level.

Opened packages must be consumed as soon as possible. If the whole package will not be used, sufficient amount must be taken to another container and the container must be closed again tightly. Tools used must be cleaned at the end of the job. Since the material may adhere on all materials including glass, it must not smear on undesired places. In indoors applications, application must be carried out after the goods and plants are covered. Turbid and settled, partially cured materials must not be used.

### 4. Cleaning

Mixing and application tools must be cleaned with plenty of water right after being used.

### 5. Safety

Applicators and supervisors must read Material Safety Data Sheet (MSDS) carefully and observe the considerations written therein. Emptied packages must be handled in compliance with relevant regulations and laws.

### 6. Storage

Storage temperature must be between 10°C and 30°C. The packages must not be exposed to direct sunlight. Stored unopened in these conditions, the shelf life is 6 months. It is inflammable. It must be stored away from open fire and sources of ignition.

### 7. Company Liability

The information contained in this document is based on site experience of and laboratory tests done by **Stenkim®** and meant to give general information. It is the purchaser's responsibility to ensure applicability of products to their use. All **Stenkim®** products are available in specified quality and conditions. The company accepts no liability whatsoever unless the transportation, storage, application conditions and customer use are overseen by **Stenkim®**.

**Stenkim®** reserves the right to update all information contained in this document without notice.

### 8. Technical Data

Property	Result
Viscosity	>5 cps
Density	1.00 ± 0.05g/cm <sup>3</sup>
Consumption	0.1 - 0.4 l/m <sup>2</sup>
Concentration	Min 6%

**Stenkim®** reserves the right to make changes in the values in this table at any time.