

## Silox® 860 D / 861 D



## Epoxy coating and glue with high resistance

Silox<sup>®</sup>860 D is an all-round useable compensation compound, glue compound, sealing compound and coating compound for building employments. The binder is a high-qualitiy epoxy liquid resin in combination with a hardener, modified by an ARCAN procedure. The 860-D contains mineral fillers and hydraulic setting additives.

Ready-to-use mixtures of Silox<sup>®</sup>860 D are characterised by a particularly high stability and filling power combined with a pronounced tackiness. The product is therefore easy to process even on uneven walls with large peak-to-valley height or overhead.

## Silox®860 D The standard product

Silox<sup>®</sup>860 D adheres excellently to all mineral substrates - even moist ones - and to metals. No special primers or undercoats are required for clean, load-bearing substrates. Blowholes and pore-free coatings made of this product are absolutely impermeable to liquids but open to diffusion.

The intercoat adhesion is excellent, special measures (sanding, etc.) are not necessary when applying several layers - even with longer waiting times.

## Application $\diamond$ Glue mortar, compensation compound and spattle compound

For bonding natural and artificial stones, ceramics, concrete. Metal on mineral substrate, glass. For bonding and sealing of concrete elements, roadway boundaries, concrete pipes, manhole rings.

As a chemical dowel mass and safe mortar for setting wall anchors, reinforcement connections, also suitable for wet concrete.

For closing holes, blowholes, for levelling and smoothing. For repairing damaged floor surfaces and roadways.

#### Surface sealing

For the subsequent, surface sealing of walls and floors in contact with the ground on the air side (negative sealing), even with water under pressure. For waterproofing under tiles and tile coverings in wet rooms, on terraces and balconies\*.



#### Floor coatings

For reprofiling of damaged concrete surfaces and cycle coatings. As direct layered or multilayered use coating on industrial floors, ramps, screeds and similar surfaces, with bonded coatings with cement anhydrite and magnesite. As anti-skid treatment in wet areas.

Also by back humidity penetration by missing or damaged sealing.

 $\ast$  Coatings made of Silox  $^{\textcircled{\sc 8}}860$  D are rigid and not suitable for dynamic cracks



#### **Processing** Surface requirements

Surfaces need to be clean and free of separating dirt or coatings. Mineral surfaces must be sufficiently solid and load-bearing, the tear resistance should not be less than 1,5 N/  $mm^2$  over the entire surface. Sludge layers in concrete and screed must be removed, cracks and pores must be open.

Iron and steel must be derusted metallically bright (SA  $2\frac{1}{2}$ ). Residual mile scales and calamine must be removed. Hot-dip galvanised surfaces are to be washed with ammonia waterwith ammonium hydroxide under addition of a surface-active agent.

Silox $^{\otimes}860$  D is unsuitable for surfaces which are bonded with bitumen, asphalt or tar.



#### Mixing

Empty component A completely into the container of component B and stir with a mixing machine until the colour of the mixture is even and free of streaks. Then repot the mixture as usual and mix thoroughly once again. Do not stir in air !

The mixture stiffens considerably during the mixing process and becomes sticky and plastic. This effect is typical for the product and supports the extraordinarily good stability of Silox<sup>®</sup>860 D on vertical areas and on smooth surfaces.

By adding a little water - maximum 5% - the mixture becomes more liquid, but still remains sufficiently stable. The experienced user can easily adapt the material to the requirements "on site" by this dilution - e.g. when processing large surfaces in thin layers.



#### Application

Silox<sup>®</sup>860 D is applied manually with the usual tools (spatula, trowel, wall scraperl, notched trowel) and can also be sprayed like thin layer plasters or sealing slurries with light spraying machines ( screw pumps ). Depending on the spraying pressure and the supporting air volume, more or less fine-rough structured, even surfaces are created.

The machines and tools are cleaned with water - mixed with a little detergent if necessary. Fresh soiling caused by the material can also be removed by washing with water.

#### Processing time

The processing time of a mixture not additionally diluted with water is approx. 30 - 40 minutes at 20°C. Strong air movement or direct sunlight may cause a kind of skin formation on the surface of freshly applied layers earlier. Such surfaces should not be subsequently reworked by smoothing.

#### **Top Coating**

Coatings of Silox<sup>®</sup>860 D can be recoated after a waiting period of 24 hours with themselves or with diffusion-open EP sealers (Silox<sup>®</sup>EPW 857). Waiting times of 48 hours are recommended for diffusion-tight top coats, and even longer for very thick coats.

#### **Boundary conditions**

The minimum temperature of the surfaces should not be less than  $+7^{\circ}$ C. The product must not be used on glossy wet substrates. To avoid "burning" on highly absorbent substrates, moisten such surfaces before application or - better - prime with Silox<sup>®</sup>EPW 856.



#### Silox®861 D Specialist for floors and other horizontal areas

Silox<sup>®</sup>861 D corresponds in its properties and possible applications as far as possible to the basic Silox<sup>®</sup>860 D. However, the consistency is more liquid, the coating compound is also less sticky and not as stable as Silox<sup>®</sup>860 D.

This "softer" setting makes the material particularly suitable for coating horizontal surfaces. Silox®861 D can be used to produce visually appealing, wear-resistant floor coatings in industry and traffic areas, which are absolutely waterproof but still open to diffusion. Silox®861 D is also suitable for the full-surface coating of moisture-sensitive substrates such as anhydrite screeds or magnesite binder ("stone wood").



Additional sealing with the - also diffusion-open - pigmented Topcoat Silox<sup>®</sup>EPW 857 produces visually attractive, silk-matt surfaces which are easy to maintain and keep clean.

Coatings made of Silox<sup>®</sup>861 D are not self-levelling even at high layer thicknesses. However, they can be textured by rolling them with spiked rollers. This produces non-slip surfaces with an even nap structure.

Compared to the well-known "sprinkled" coverings made of resins and quartz sand, structured coverings made of Silox®EPW are much simpler and easier to clean. The abrasion and wear caused by the rough surface on the tyres and rollers of forklift trucks, pallet trucks and also by the soles of shoes is much less.

#### **Properties**

Material application type: Body structure: Moulded density: Machining time: Setting time: Chemically resilient: Adhesive tensile strenght on concrete: Adhesive tensile strenght on steel: Tensile strength:

### Colouring

**Product data** 

Standard colour: Special colour: 2 C Epoxy – system, minerally filled pasty compound, in different colours ~ 1,7 gr/ ml at 20°C ~ 30 – 40 minutes at 20°C ~ 12 h after 7 days  $\geq$  4,5N/ mm<sup>2</sup> (breakeage in th concrete)  $\geq$  12N/ mm<sup>2</sup>  $\geq$  15 N/ mm<sup>2</sup>

Cement-grey Stone – grey Light green Light beige (sand beige)

Silox®860 D/ 861 D Excellent concrete adhesion!



Concrete break at 5.4 N/mm<sup>2</sup> - adhesive tensile strength lab test without primer



# Storage

Safety The B component of Silox®860 D/861 D is an amidoamine resin emulsified in water. This component does not contain any flighty solvents and monomers the material is non flammable because of the contained water. When used as intended the material is harmless.



The A component contains an EP liquid resin and is labelled as dangerous substance. Keep the typical hygiene regulations while working with this product. It is important to keep the usual hygienic rules for the use of epoxy resins. If sprayed it is important to use breathing and eye protection. Spray fog should be not inhaled and the use of breathing protection is mandatory.

Stains with hardened material are difficult to remove, we recommend the protection of neighbouring concrete parts with covering or Transfix®480 or to clean immediately before hardening.

The A component is sensitive to frost, freezing makes it unusable. Avoid storage temperatures below 0°C. Keep the material away from children and unauthorised people.

Empty cans with liquid rests are special waste and requires a disposal after local regulations. The hardened product is harmless and could be disposed as building rubble.



These technical information describe the present-day state of knowledge these product. They should only inform about the possibilities of application and could not release the applicator of his commitment to check the possibility to use the product for the required application. Information for processing can be found in processing instructions of our product. Information about safe handling can be found in our current safety data sheet.

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## **ARCAN** Waterproof

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