

Binder UV

Description

Quartzline Binder UV is a two part lightfast polyurethane binder for marble and stone carpets.

The most outstanding characteristics of this binder are its excellent UV resistance, very good flexibility and a beautiful high gloss finish. The thixotropic properties in Quartzline Binder UV ensure a perfect balance between substrate adhesion and stone binding, making Quartzline Binder UV the ideal binder for patios, passageways, swimming pools, driveways, living rooms, offices etc.....

Properties

Solvent free

UV resistant

Flexible and elastic

Suitable for indoor and outdoor use

Almost non-allergenic

Viscosity ² (mPa.s) 4500 - 5000

Shore Hardness ³ > D60

¹ = EN 12190, 14 days / + 23°C / 50% R.H

² = Brookfield, LV4, 30 RPM, @ 23°C

³ = DIN 53505, 14 days n/ + 23°C / 50% R.H

Form

Component A: Liquid, cloudy and yellowish

Component B: Liquid, clear transparent

Packaging

Component A: 1,75 kg bucket

Component B: 1,75 kg plastic container

Sets: 3,5 kg

Shelf life/storage

Up to 6 months after the production date if kept in the original, sealed, unopened and undamaged packaging and stored dry between +5 °C and +30 °C.

Mixing

Mixing ratio: Component A : Component B = 50 : 50 (by weight)

Add part B to part A and mix continuously for 2 minutes until a uniform mixture has been achieved

Next pour the mixture onto the stones or marble and mix until it becomes homogeneous. The binder must not accumulate in the mixture as this can cause foaming at a higher concentration.

Mixing of the binder is preferably done with a power mixer on low speed, from 300 to 400 RPM, with a Quartzline WK 90 mixer paddle.

Mixing of the binder into the stones or marble is preferably done with a power mixer on low speed, from 300 to 400 RPM, with a Quartzline WK 200 mixer paddle.

System construction

Primer for porous substrates:

Quartzline "Primer BHH" is used on porous substrates. This primer will penetrate the substrate, fill the pores and ensure a strong mechanical bond.

Primer for non-porous substrates:

Quartzline Primer GW is used on non-absorbent substrates. This primer has excellent physical adhesion, especially for ceramic tiles.

For interior use, the Primer Universal can also be used. Primer Universal is an economic alternative with very good adhesion properties on porous as well as non-porous substrates. One disadvantage with this primer is its very low filling capabilities and water penetrating the substrate when the floor is being cleaned using excessive amounts of water. Therefore never use Primer Universal in wet areas such as bathrooms etcetera.

When in doubt always perform a preliminary adhesion test.

Wearing course:

The following Quartzline floor systems can be used:

- Stone carpets bonded with Quartzline Binder UV
- Marble carpets bonded with Quartzline Binder UV

Seal coat:

A marble- or stone carpet floor can be sealed with Quartzline Topper 12. Topper 12 can ONLY be used indoors.

Outside flooring can never be sealed so that water can escape (flow away). Water that cannot escape the structure will freeze in winter and can damage the floor.

Topcoat:

For extra wear resistance and gloss, Quartzline Coating PU 125 can be used for inside applications.
For a High Gloss outdoor finish use the Coating PA Transparent

The Quartzline Binder UV is part of the following system:

Stone-Line Metallic

Stone-Line Outdoor

Marble-Line Outdoor

Consumption

Use 3,5 kg Quartzline Binder UV onto 50 kg Marble or coloured Quartz

Usage 2-3 mm quartz is around 13 kg/m²

Usage 1-2 mm quartz is around 11 kg/m²

Usage 1-4 mm marble is around 14 kg/m²

Usage 4-8 mm marble is around 17 kg/m²

The substrate must be sound and of sufficient compressive strength (minimum 25 N / mm²), with a minimum pull-off strength of 1,5 N/mm².

The surface must be clean, dry and free of all contaminants such as dirt, oil, grease, previous coatings and surface treatments.

When in doubt always perform a preliminary adhesion test.

Substrate preparation

Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.

Weak concrete and loose cementitious levelling must be removed and surface damage such as blowholes and voids must be repaired with Quartzline Epoxygel and then primed again. Never use polyester putty, this will result in bad adhesion.

Uneven substrates must be levelled using Quartzline Cementitious SL Underlayment or Cementitious SL Constructive. Please see respective Technical Data Sheets for more information.

All dust, loose and friable material must be fully removed from all surfaces before applying the product, preferably using a brush and/or industrial vacuum cleaner.

Application conditions

Surface temperature: Minimum 15°C, maximum +30°C

Ambient temperature: Minimum 15°C, maximum +30°C

Substrate moisture content: < 4% damp
To be tested with a carbide meter.

Relative air humidity Maximum 60% R.H.

Dew point: Beware of condensation!

The temperature of the substrate and non-hardened material must be at least 3°C higher than the dew point to reduce the risk of condensation, efflorescence or stickiness (carbamate formation) on the floor finish.

Application

ATTENTION: Always mix part A thoroughly before partial use !

After securely following the mixing process it is most important to spread the material evenly on the substrate using a trowel.

A spray bottle filled with water can be used to minimize the stickiness of granulates onto the trowel. Use as little water as possible to minimize the chance of water to polyurethane foaming reaction.
For terminations and creep hatch covers always use aluminium corner strips instead of plastic corner strips. Plastic corner strips must only be used to divide fields of different colours within the floor and will be damaged very quickly if used in exposed areas.

Processing time @ 20°C	25 minutes
Foot Traffic @ 20°C	1 day
Fully cured @ 20°C	7 days

Check the moisture content of the substrate, the R.H. and dew point before applying the product.

For outdoor use, shield the floor from rain for **at least 1 day**.

Remarks

Protection from rain and water is necessary during processing and hardening.

Wrong assessment and treatment of cracks can result in a reduction of lifespan and recurring cracking.

Mixed materials must be processed immediately as workability will be reduced when pot life date expires.

If heating is required, do not use gas, oil, paraffin or other fossil fuel burners. These produce large quantities of CO₂ and water vapour, which can adversely affect the finish. For heating, only use electrically powered hot air ventilation systems.

Cleaning/maintenance

To maintain the appearance of the floor after application, the floor must be kept clean and all spillages removed immediately.

The floor must be cleaned regularly using a rotary brush, mechanical scrubbers, scrubber dryer, high pressure washer, wash and vacuum techniques etc.

Always use suitable detergents and waxes.

Clean the floor with tepid water. Never use hot water (warmer than 40 °C).

Value base

All technical data stated in this technical data sheet is based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

Health and safety information

For information and advice on the safety handling, storage and disposal of chemical products, users should refer to the most recent material safety data sheet containing physical, ecological, toxicological and other safety related data.

Legal notes

This information, and in particular the recommendations related to the application and end use of Quartzline products, is provided in good faith based on our current knowledge and experience of the products. It is valid for products that are correctly stored, treated and applied under normal conditions in accordance with Quartzline's recommendations.

In practice, differences in materials, substrates and actual on-site conditions are such that no warranty in respect of merchantability or of suitability for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered.

The user of the products must test the product's suitability for the intended application and purpose. Quartzline reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the technical data sheet for the product concerned, copies of which will be supplied on request.