

## Coating GWV

### Description

Quartzline Coating GWV is a two-part, water-based, coloured, silk gloss and Water vapour diffusion open epoxy coating. This coating features outstanding mechanical properties and chemical resistance including hot tire resistance. (The varying quality of rubber tires makes it impossible to obtain a full warranty on car tire durability)

The coating is also renowned for its excellent hiding power and very good UV resistance for an epoxy system.

Ideal for storage and logistics areas, assembly halls, workshops, garages, parking decks, loading docks/ramps and agricultural applications.

Use 3% to 5% Quartzline "antislip kfu" to achieve a non-slip finish.

### Properties

Waterbased	
Silkgloss	
Vapor-permeable	
Physiologically harmless	
Low odor	
Very good hiding power	
Very good mechanical and chemical resistant	
Solvent free	
Hot tire resistant	
Viscosity <sup>1</sup> (mPa.s)	350 - 450
Density <sup>2</sup> (g/cm <sup>3</sup> )	1.30
Potlife @ 20 °C (min.)	~ 30
Abrasion resistance <sup>3</sup> (mg)	~ 65
Adhesive strength <sup>4</sup> (N/mm <sup>2</sup> )	> 1.5 (Concrete fracture)

<sup>1</sup> = Brookfield, LV3, 30 RPM, @ 23°C

<sup>2</sup> = ISO 2811-1, + 23°C/50% R.H

<sup>3</sup> = Taber Abrasion, CS10, 10N and 1000 cycles

<sup>4</sup> = EN 4624, 14 days/+ 23 °C/50% R.H

### Taber Abrasion

CS10, 10N load, 0 - 500 Cycles +/- 32,5 mg

CS10, 10N load, 500 - 1000 Cycles +/- 32,9 mg

CS10, 10N load, 1000 - 1500 Cycles +/- 30,9 mg

→ Total after 1000 Cycles +/- 65,4 mg

→ Total after 1500 Cycles +/- 96,3 mg

CS17, 10N load, 0 - 500 Cycles +/- 49,1 mg

CS17, 10N load, 500 - 1000 Cycles +/- 48,3 mg

CS17, 10N load, 1000 - 1500 Cycles +/- 47,4 mg

→ Total after 1000 Cycles +/- 97,4 mg

→ Total after 1500 Cycles +/- 144,8 mg

### Form

**Component A:** Liquid, coloured

**Component B :** Liquid, yellow

Almost all RAL, NCS AND SIKKENS colours are available. Other colours available on request

Application at different stages and combining different batch numbers in one project could result in slight matting and colour differences, to avoid this:

**Order all materials for your project at the same time**

In direct sunlight discolouration and colour deviation can occur, this will not affect the functionality or performance of the coating.

## Packaging

Component A: 1,2 kg, 2,4 kg and 4,8 kg buckets  
Component B: 2,55 kg, 5,1 kg and 10,2 kg buckets  
Component A+B: 3,75 kg, 7,5 kg and 15 kg sets

## Shelf life/storage

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

## Mixing

**Mixing ratio:** Component A : Component B = 32 : 68 (parts by weight)

**Water:** 650 grams for 3,75 kg set, 1300 grams for 7,5 kg Set and 2600 grams for 15 kg set

While mixing add part B to part A and mix continuously for 2 minutes until a uniform mixture has been achieved.

Depending on the desired viscosity, gradually add small amounts of the water at intervals, making sure that the previous amount has been fully dissolved into the mixture. Start with small amounts of water and slowly increase as the mixture gets thinner.

**NEVER** adjust the water content during a project, because this will lead to colour differences for sure.

After the two components have been uniformly mixed, gradually add the water at intervals and in very small steps while mixing. This is to ensure that the water is fully absorbed by the mixture.

To ensure thorough mixing pour the materials into a second container and mix again for one minute to achieve an even consistency.

If "Antislip KFU" is needed, it should be added at this stage and mixed for another 30 seconds.

Mixing is preferably done with a power mixer at high speed with a Quartzline WK 90 mixer paddle.

## System construction

When applying less than 250 grams per square metre, Coating GWV can be directly applied onto most substrates. Always perform a preliminary adhesion test.

### **Primer for porous substrates:**

On porous surfaces use Quartzline "Primer BHH" which will penetrate the substrate and ensure a strong mechanical bond.

### **Primer for non-porous substrates:**

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

**Scratch coat:** For extra levelling and/or to seal the substrate, an additional scratch coat of Quartzline "Primer BHH" with Microdol A100 filler could be an option. A scratch coat is preferably applied at 0,5 to 1 kg per square metre

**Wearing course:** **Coating GWV**

## Consumption

Coating System	Product	Consumption
Primer (optional)	Primer BHH	125 - 250 g/m <sup>2</sup>
	Primer GW	100 - 150 gr/m <sup>2</sup>
Scratch Coat (optional)	Primer BHH + filler	500 - 1000 g/m <sup>2</sup>
<u>Wearing course</u>	<b>COATING GWV</b>	<b>200 - 250 g/m<sup>2</sup></b>
<u>Wearing course</u> (optional)	<b>COATING GWV</b>	<b>200 - 250 g/m<sup>2</sup></b>

All values are theoretical and depend on absorption, coarseness and evenness of the substrate and on material loss, etc.

## 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.

The substrate must be sound and of sufficient compressive strength (minimum 25 N / mm<sup>2</sup>), with a minimum pull-off strength of 1,5 N/mm<sup>2</sup>.

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

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.

The concrete or screed substrate has to be primed. If in doubt, apply to a test area first. Uneven substrates must be levelled in order to achieve an even substrate. Use 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.

If the surface is older than 48 hours, always perform a preliminary adhesion test.

## Application conditions

Surface temperature: Minimum 10°C, maximum +25 °C

Ambient temperature: Minimum 10°C, maximum +25 °C

Relative air humidity: Maximum 80% R.H.

During hardening, humidity must not exceed 80% of the maximum RH and care must be taken to ensure that sufficient ventilation and fresh air can remove the excess moisture. If the air is saturated, the film **CANNOT** dry.

Dew point: Beware of condensation!

The substrate and uncured floor must be at least 3°C above dew point to reduce the risk of condensation or efflorescence on the floor finish.

## **Application**

Processing time	20 minutes @ 20 °C
Touch dry @ 20 °C	12 hours
Foot traffic @ 20 °C	24 hours
Light traffic @ 20 °C	48 hours
Fully cured @ 20 °C	7 days

Check the R.H. and dew point before application.

Pour a small quantity of mixed material into a bucket and work the edges with a brush and a 10 cm piled roller. To avoid accelerated drying and caking do not work too far ahead.

Pour Coating GWV onto the substrate and distribute evenly with a squeegee or a piled roller. Depending on the size of the application area, use either a 25 cm or preferably a 50 cm wide piled roller to apply the coating.

If possible pour out the entire bucket in one go to avoid a fast reaction within the mass of the bucket.

Apply the coating quickly and evenly. Always work wet on wet.

While applying, try to keep draughts to a minimum. Keep windows and doors closed. This will avoid accelerated drying.

As soon as the coating has been correctly applied and evenly spread, start ventilating to avoid saturating the air with water vapor.

If there is no ventilation and the coating remains moist for too long, surface imperfections and insufficient coating film-formation may occur.

In spaces that are difficult to ventilate, extra ventilation must be introduced using fans or blowers.

Make sure that no glossy patches are left behind, caused by absorption of the coating by the roller.

Work as quickly as possible and always within the pot life, which will depend on the temperature.

## **Remarks**

NEVER mix component A and component B with the water at the same time, always mix A and B together first and then slowly add the water while mixing.

After application, Quartzline Coating GWV must be protected from damp, condensation and water for at least 7 days (+20 °C).

Uneven or dirt covered substrates should not be treated with thin coatings. Both substrate and adjacent areas should always be thoroughly prepared and cleaned prior to application.

The incorrect assessment and treatment of cracks may lead to a reduced service life and recurrent cracking.

If heating is required do not use gas, oil, paraffin or other fossil fuel heaters as they produce large quantities of both CO<sup>2</sup> and water vapour which may adversely affect the finish. Only use electrically powered warm air blower systems when heating is needed. Switch off underfloor heating during application and for the first 48 hours, after this period you may increase the temperature gradually.

### **Cleaning/maintenance**

To maintain the appearance of the floor after application, the floor system 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 how to safely handle, store and dispose 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.