

Coating EPG

Description

Coating EPG is a two part, solvent-free, pigmented epoxy roller coat for concrete and cementitious screeds with good mechanical properties.

Use Quartzline Coating EPG to achieve a glossy epoxy coating finish.

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

Use 3% to 5% Quartzline "Antislip KM" to achieve an anti-skid finish.

Heavy duty anti-skid surfaces for underground carparks can be achieved using quartz, mandurax or granite.

Properties

Liquid proof	
Near solvent free	
Easy application	
Economical	
Excellent hiding power	
Easy to clean, even antiskid	
Good chemical and mechanical resistance	
Electrical conductivity	>100 GΩ
Viscosity ¹ (mPa.s)	1600 - 1900
Density ² (g/cm ³)	1,64
Shore Hardness ³	>D90
Compression strength ⁴ (N/mm ²)	> 70
Flexural strength ⁴ (N/mm ²)	> 40
Adhesive strength ⁵ (N/mm ²)	> 1.5 (Concrete fracture)

¹ = Brookfield, LV3, 30 RPM, @ 23°C

² = ISO 2811-1, + 23°C/50% R.H

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

⁴ = ISO EN 196-1, 28 days / + 23°C / 50% R.H

⁵ = EN 4624, 14 days / + 23 °C / 50% R.H

Taber Abrasion

CS10, 10N load, 0 - 500 Cycles +/- 20 mg
 CS10, 10N load, 500 - 1000 Cycles +/- 20 mg
 CS10, 10N load, 1000 - 1500 Cycles +/- 16 mg

→ Total after 1000 Cycles +/- 40 mg
 → Total after 1500 Cycles +/- 56 mg

CS17, 10N load, 0 - 500 Cycles +/- 28 mg
 CS17, 10N load, 500 - 1000 Cycles +/- 32 mg
 CS17, 10N load, 1000 - 1500 Cycles +/- 37 mg

→ Total after 1000 Cycles +/- 60 mg
 → Total after 1500 Cycles +/- 100 mg

Form

Component A: Liquid, coloured
Component B: Liquid, transparent, clear to slightly 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 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: 6,25 kg and 12,5 kg bucket
Component B: 1,25 kg and 2,5 kg bottle
Component A+B: 7,5 kg and 15 kg sets

Shelf life/storage

Up to 12 months from date of production if stored correctly in original, unopened and undamaged sealed packaging, stored dry between +5 °C and +30 °C.

Mixing

Mixing ratio: Component A: Component B = 83.33: 16.67 (by weight)

Add part B to part A and mix continuously for 2 minutes until a uniform mixture has been achieved. If "Antislip KM" is needed, it is added at this stage.

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

To minimize air bubbles avoid over mixing.

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

System construction

Levelling: Rough or uneven surfaces must be levelled first using Quartzline Cementitious SL Underlayment or Constructive.
See TDS Cementitious SL.

Primer for porous substrates:

On porous surfaces use SL-EP Scratchcoat or Quartzline Primer BHH which will penetrate the substrate and ensure a strong mechanical bond. Instead of the Primer BHH there also can be primed with the Coating EPG.

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 extra scratch coat can be an option. SL-EP Scratchcoat or Quartzline Primer BHH with Microdol A100 filler. A scratch coat is preferably applied at 0,5 to 1 kg per square meter.

Antiskid: Regarding heavy duty anti-skid surfaces for car parks, either the scratch coat or the first layer of Coating EPG has to be fully saturated with quartz, mandurax or granite. (Additional documentation for this procedure is available on request.)

Wearing course: **Coating EPG**

For regular anti-skid surfaces, use the Quartzline "Antislip KM" 3% to 5% maximum.

If the Coating EPG is applied in two separate layers, it will suffice to use the "Antislip KM" only in the last layer.

Topcoat: For extra wear resistance, UV protection and a matt or satin finish, Coating PU MG Matt or Satin Gloss can be used.

The Quartzline Coating EPG is part of the following systems:

Protect-Line Coat HS

Protect-Line Eco Deck HS

Consumption

Coating System	Product	Consumption
Levelling (optional)	Cementitious SL Underlayment	6 - 20 kg/m ²
Primer	Primer BHH / Coating EPG	125 - 250 gr/m ²
	SL-EP Scratchcoat	150 - 500 gr/m ²
	Primer GW	100 - 150 gr/m ²
Scratch Coat (optional)	Primer BHH + Filler	500 - 1000 gr/m ²
	SL-EP Scratchcoat	500- 1000 gr/m ²
<u>Wearing course</u>	Coating EPG	200 - 500 gr/m²
Topcoat (optional)	Coating PU MG Matt or Satin Gloss	150 - 175 gr/m ²

Higher temperatures generally give a better flow, better defoaming properties and less chance on carbamation.

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 / mm²), with a minimum pull-off strength of 1,5 N/mm².

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.

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.

Application conditions

Substrate temperature:	Minimum 10°C, maximum +30 °C
Ambient temperature:	Minimum 10°C, maximum +30 °C
Relative air humidity:	Maximum 75% R.H.
Moisture content substrate:	< 4% moisture Test using a carbide measurement
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

Pot-life	40 minutes @ 10 °C 25 minutes @ 20 °C 15 minutes @ 30 °C
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.

Remarks

Do not apply the Coating EPG on substrates with rising moisture.

After application Quartzline Coating EPG must be protected from damp, condensation and water for at least 24 hours.

For areas with limited exposure and normal absorbent concrete substrates priming is not necessary for roller coating systems.

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.

Mixed materials must be processed immediately as flow and defoaming will be reduced when pot-life expires.

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

For exact colour matching, ensure that the Quartzline Coating EPG is applied in each area from the same control batch number.

Under certain conditions, underfloor heating combined with high point loading, may lead to imprints in the resin.

If heating is required do not use gas, oil, paraffin or other fossil fuel heaters. These produce large quantities of both CO² and water vapour which may adversely affect the finish.

For heating, only use electric powered warm air blower systems.

Do not use any underfloor heating during application or 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, Coating EPG 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

The 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.