

Topcoat PU-125

Description

Topcoat PU-125 is a one-component water-based coating based on a polyurethane dispersion.

Topcoat PU-125 is ideal as a renovation coating to bring old, dull stone carpets back to life or to provide additional protection after applying a new quartz or marble stone carpet. Once cured, Topcoat PU-125 forms a hard, wear-resistant transparent, glossy finish.

Key features

Water-based	
Solvent free	
Fast drying	
Density ¹ (g/cm ³)	1.01
Viscosity ² (mPa.s)	400 - 450
Solids content	approx. 30%
Bond strength ³ (N/mm ²)	> 1.5 (concrete failure)

¹ EN 12190: 14 days / +23°C / 50% RH

² Brookfield: LV-4, 30 RPM, at +23°C

³ EN 4624: 14 days / +23°C / 50% RH

Form

Liquid, milky white

Packaging

10kg bucket

Shelf life/storage

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

Mixing and Applying

Mix the coating briefly before use (avoid over-mixing) and apply with a nap/sheepskin roller or microfibre roller.

System construction

Primer: Either 'Primer BHH' or 'Primer GW' can be used under a Quartzline Stone-Line or Marble-Line carpet.

On non-porous or semi-porous substrates use 'Primer GW', preferably broadcast while still wet with 0.25-0.4mm oven-dried sand.

With a quartz or marble stone carpet on a sand/cement screed, it is not necessary to seal the substrate: dust binding is sufficient, which can be done effectively using 'Primer Universal'.

Mixing ratios and amounts of 'Primer Universal' for use under a quartz or marble stone carpet

Substrate	Primer to water ratio	Consumption	Broadcasting Approx. 200
Sand/cement screed	1:3	200g/m ²	×
Concrete	1:3	150g/m ²	×
Anhydrite screed	1:3	150g/m ²	×
Wood	undiluted	150g/m ²	✓
Linoleum	1:1	150g/m ²	×
PVC	1:1	150g/m ²	✓
Tiles	undiluted	150g/m ²	✓
Natural stone	undiluted	150g/m ²	✓
Steel	undiluted	150g/m ²	✓
Self-levelling cementitious screed	1:1	250g/m ²	×

Wearing course: The following Quartzline floor systems can be applied:
 - Quartzline Stone-Line carpet
 - Quartzline Marble-Line carpet

Pore filler: Quartzline TOPPER 12 → squeegeed smooth

Topcoat: **Quartzline Topcoat PU-125**

Very poor, uneven substrates can be patched using Mortel D epoxy resin mortar. Alternatively, the substrate can be levelled using Quartzline's 'Cementitious SL Underlayment' or 'Cementitious SL Constructive' screeds. Before applying the mortar, the cementitious systems should be sanded and primed with Primer Universal.

Quartzline Topcoat PU-125 is an optional part of the following systems:

Marble-Line Indoor

Stone-Line Indoor

Consumption

Approx. 125gm per cubic meter for a floor sealed with Topper 12.

Substrate preparation

The substrate must be structurally sound and have a compression strength of at least 25 N/mm² and a minimum tensile (pull-off) strength of 1.5 N/mm².

The substrate must be clean and dry and free of all contaminants like dirt, oil, grease, etc.

Concrete substrates must be mechanically prepared using vacuum-assisted blast cleaning or scarifying equipment to form an open-textured, strong gripping surface free of cement laitance and other contaminants.

Weak concrete and loose cement-based leveling screed must be removed, and surface imperfections, such as blowholes and cavities, must be filled with Quartzline Epoxy Gel.

Before applying the product, all surfaces must be completely free of dust and loose particles. This should preferably be done using a broom and/or an industrial vacuum cleaner.

The concrete floor or cement screed must be primed or scraped to create a flat surface. Uneven areas must be levelled out, by sanding for example. Uneven substrates will need to be levelled first, using 'Quartzline Cementitious SL Underlayment' or 'Cementitious SL Constructive' screed. Please refer to the relevant Technical Data Sheets for more information.

Allow any levelling screeds, such as 'Cementitious SL Underlayment' for example, to dry thoroughly, then sand this and again prime with 'Primer Universal' diluted 1 to 1.

Prior to the installation of upper layers in a flooring system, the residual moisture content of the lower screeds must not exceed 2 CM% (less than 1.8 CM% for a heated floor).

WARNING: Anhydrite screed

Unfortunately, the quality of anhydrite screed can vary considerably. Bearing this in mind, Quartzline recommends that anhydrite screed be vacuumed first and then primed with Primer BHH, broadcast while still wet with 0.4-0.8mm oven-dried sand. Finish this off with a layer of undiluted 'Quartzline Primer Universal'. The residual moisture content of the anhydrite layer must not exceed 0.5 CM% (less than 0.3 CM% for a heated floor).

Application conditions

Substrate temperature:	Minimum +10°C, maximum +35°C
Ambient temperature:	Minimum +10°C, maximum +35°C
Substrate moisture content:	Less than 4% - measured using calcium carbide testing
Relative air humidity:	Maximum 75% RH
Dew point:	Prevent condensation

During drying, the relative humidity should not exceed 75%. While the product is drying, ensure that there is adequate ventilation and air circulation to remove excess moisture: the coating WILL NOT dry if the humidity is too high.

Application

Touch dry at +20°C	8 hours
Light traffic at +20°C	24 hours
Fully cured at +20°C	7 days

Before applying the coating, check the moisture content of the substrate, the RH and the dew point temperature.

Apply Topcoat PU-125 using a nap/sheepskin roller.

To keep the coating from drying too quickly, keep drafts to a minimum during application: keep windows and doors closed. However, as soon as the coating has been applied and has evenly spread, start ventilating to keep the air from becoming saturated with moisture. Without proper ventilation, the coating will remain wet for too long, increasing the likelihood of surface imperfections and inadequate film forming.

In rooms that are difficult to ventilate naturally, like a bathroom for example, additional ventilation should be used.

Special considerations

Low temperatures and/or high air humidity increase the curing times.

Topcoat PU-125 is not suitable for outdoor use or in rooms with constant high moisture.

If heating is required, do not use gas, oil, paraffin or other fossil fuels. These emit large quantities of both CO₂ and H₂O vapour, which can adversely affect the finish. For heating use only electrically powered warm air blower systems.

Cleaning / maintenance

To keep the floor in good condition after application of the coating, it should be kept clean and all spills mopped up immediately. The floor should be cleaned regularly using brushes, a mechanical scrubber, squeegee, high pressure washer, etc. Always use suitable cleaning agents.

Clean the floor with lukewarm water: never use hot water (temp. above 40°C).

Basis of values

All technical information on this technical data sheet is based on laboratory testing. Depending on the actual conditions the stated values may vary.

Health and safety information

For information and advice on safe handling, storage and disposal of chemical products, the user should refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related information.

Legal notices

The information, and, in particular, the recommendations relating to the application and end-use of Quartzline products are given in good faith based on Quartzline's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Quartzline's directions.

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

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 should always refer to the most recent edition of the Material Safety Data Sheet for the product concerned, copies of which will be supplied on request.