

Alpha SL Underlayment 5-40mm

Description

Alpha SL Underlayment 5-40mm is a gypsum plaster-bound smoothing mortar that is suitable for levelling healthy indoor calcium sulphate-bound substrates (anhydrite or alpha-semi-hydrate) in layers of between 5mm and 40mm.

Alpha SL Underlayment 5-40mm can be applied over a professionally installed underfloor heating system. The heating schedules must be observed prior to commissioning.

Alpha SL Underlayment 5-40mm is easy to pump and sand. Alpha SL Underlayment 5-40mm is self-levelling, shrink-resistant, stress-resistant, and fast setting.

Alpha SL Underlayment 5-40mm is not suited for use on wooden, industrial, and permanently moist or humid floors (such as outdoors and in bathrooms). Alpha SL Underlayment 5-40mm must be finished with a floor covering.

Properties

Gypsum plaster-bound	
Solvent-free	
Polymer-modified	
Re-pumpable	
Multi-purpose	
Suitable for various types of finishing	
Fast drying and setting	
Self-levelling, even application	
Density ¹ (g/cm ³)	1.64
Processing time (min.)	30
Min. processing temp. (°C)	10
Walk-ready (hours)	3
Compressive strength ² (N/mm ²)	> 25
Bend resistance ² (N/mm ²)	> 6

¹ = ISO 2811-1/+ 23°C/50% RH

² = ISO 196-1 / @ 28 days / + 23°C/50% RH

Form

Powder, white

Packaging

25kg bag

Shelf life/Storage

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

Processing

Mixing ratio: 4.5kg/litres of water per 25kg bag of powder.

Use the Collomix AQiX water dosing device or scales to measure the correct amount of water.

Do not use a measuring cup!

Pour the water into the bucket, add a bag of Alpha SL Underlayment 5-40mm, and mix it for 3 minutes to create a homogeneous substance.

Alpha SL Underlayment 5-40mm is for indoor use only and is not suitable for rooms where it will constantly be exposed to moisture.

System structure

Primer: ALWAYS apply a coat of **Primer Universal** under Alpha SL Underlayment 5-40mm.
Apply the floor primer between 10°C and 25°C. Start in the farthest corner and work your way towards the exit. Use a lambswool roller.

Tiles and plastic substrates must be properly degreased before they are primed.

Substrate	Primer/water ratio	Consumption
Anhydrite or calcium sulphate-bound substrates	1:1	250 g/m ²
Wood	undiluted	300 g/m ²
Linoleum	1:1	150 g/m ²
PVC	1:1	150 g/m ²
Tiles	undiluted	150 g/m ²
Natural stone	undiluted	250 g/m ²
Steel	undiluted	250 g/m ²
Cementitious levelling compounds	1:1	250 g/m ²

PRIMER CONSUMPTION FIGURES ARE NOT ABSOLUTE AND DEPEND ON A VARIETY OF FACTORS.

Highly absorbent substrates must be saturated with Primer Universal in the correct mixing ratio to prevent absorption of the mixed water into the surface, which can lead to problems such as shrinkage, surface pores or a weak and dusty surface.

Levelling screed: Alpha SL Underlayment 5-40mm

The Alpha SL Underlayment 5-40mm must be finished using some form of floor finish.

Consumption

You will need 2,0kg of mixed Alpha SL Underlayment 5-40mm per 1 m² / mm.

Layer thickness	Ready-to-use mortar consumption	Powder consumption
5mm	10.00kg	8.20kg
10mm	20.00kg	16.40kg
20mm	40.00kg	32.80kg
40mm	80.00kg	65.60kg

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

Quartzline Alpha SL Underlayment 5-40mm is part of the system:

Construct-Line

Preparing the substrate

Alpha SL Underlayment 5-40mm can be applied on top of underfloor heating constructions. The underfloor heating start-up protocol must be fully completed in advance in accordance with the supplier's guidelines. Switch off the heating one day before levelling; switch the heating on again at least 24 hours after levelling, in steps of a maximum of 5°C water temperature per day.

The substrate must be clean, dry, and free from dirt, oil, grease, and other contaminants.

The substrate must be healthy and offer sufficient compressive strength (at least 25 N/mm²), with a minimum bond strength of 1.5 N/mm².

Weak substrates and loose levelling must be removed and surface damage, such as holes and cavities, must be filled with Quartzline Epoxy Gel and primed again.

DO NOT USE POLYESTER BASE FILLER, as this does not provide any adhesion.

If necessary, sand calcium sulphate-bound sub-floors (anhydrite) and remove the dust using an industrial vacuum cleaner.

The maximum permitted moisture content in anhydrite or any gypsum plaster-bound substrate is <0.5 CM-% (heated floors <0.3 CM-%).

A maximum residual moisture content of <2.0 CM-% is permitted in the case of successive floor system installations (heated floors <1.8 CM-%).

NOTE WHEN DEALING WITH ANHYDRITE SUBSTRATES:

Unfortunately, anhydrite comes in many different qualities, which is why we always speak of a healthy sub-floor.

Processing conditions

Substrate temperature: A minimum of 8°C, a maximum of +30°C

Ambient temperature: A minimum of 8°C, a maximum of +30°C

Relative air humidity: A maximum of 75% R.H.

Dew point: Beware of condensation!

The temperature of the substrate and the non-set material must be at least 3°C higher than the dew point to prevent a risk of condensation, crystalline growth, or cement laitance on the mortar surface.

Processing

Processing time at 20°C	Approx. 30 minutes
Walk-ready at 20°C	Approx. 3 hours
Dry at 20°C	Approx. 24 – 48 hours

Check the RH and dew point before application.

Pour the mortar out onto the primed substrate and spread out using a trowel, v-notched squeegee, or taping knife to get the required layer thickness.

Clean tools with water immediately after use.
Material that has set completely can only be removed mechanically.

Make sure windows and doors are closed and draughts are avoided. Depending on the climatic conditions, the floor can be sanded after 24 hours at the earliest, although we recommend waiting 48 hours before sanding the floor.

The floor should be finished within 7 days to prevent any cracking.

Comments

Do not mix with other floor products.

Freshly applied Alpha SL Underlayment 5-40mm must be protected against moisture, condensation, and water load for at least 24 hours.

Do not add more water than the prescribed amount. Stop adding water when the product starts to react.

Do not load the floor within the first 24 hours and do not exceed the prescribed layer thickness.

The end product offers limited water-resistance, so do not use in bathrooms.

Protect from direct sunlight, heat or strong wind and extreme temperatures to prevent rapid drying and hairline cracks. These superficial hairline cracks or crazing are common under these conditions and do not justify a complaint.

If coated over with any of the other Quartzline self-levelling screed or coating systems, additional mechanical pretreatment may be required to remove the cement laitance that may develop during processing as a result of excess water in the mixture or high humidity, causing sedimentation on the surface.

Value base

All technical data in this product information sheet is based on laboratory tests.
Data may change, depending on the circumstances.

Health and safety information

For information and advice on the safe handling, storage and disposal of chemical products, the user should refer to the most recent material safety data sheet, covering physical, environmental, toxicological and other safety-related data.

Legal notice

The information and, in particular, recommendations regarding the application and end-use of Quartzline products is provided in good faith based on Quartzline's current knowledge and experience of products that have been properly stored, handled and applied, under normal conditions.

In practice, the differences in materials, substrates and actual conditions on site may be such that no warranty can be derived from this information and advice with regard to the marketability or suitability for a particular purpose, nor any liability arising from any legal relationship, based on this information or from any written recommendations or any other advice given. Quartzline reserves the right to change product properties.

The property rights of third parties must be respected. All orders are accepted subject to our current terms of sale and delivery.

Users should always refer to the most recent issue of the Material Safety Data Sheet for the relevant product. A copy of this sheet will be provided on request.