Cementitious SL Underlayment 2-20mm F

Description

Cementitious SL Underlayment 2-20mm F is a fibre-reinforced, self-levelling, cementitious screed for the levelling of all kinds of substrates such as cement floor screeds in layers of between 2 and 20 millimetres thick.

This smoothing compound is self-levelling, shrink-resistant, stress-resistant, and fast setting. It can be pumped mechanically.

It cures through both the hydration of the mineral binder materials and the polymers forming a film.
Thanks to the rapid reaction rate, the floor is walk-ready after 3 hours!

Extremely well suited as a substrate underneath tiling, carpet, or parquet flooring.

Properties

Fibre-reinforced	
Mineral-bound - solvent-free	
Very good mechanical properties	
Colourfast	
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)]	1.65
Ring flow (mm)	150
Processing time (min.)	30
Walk-ready (hours)	3
Compressive strength[2] (N/mm²)	> 30
Bend resistance[2] (N/mm²)	> 7
Min. processing temp. (ºC)	10

[1] = mixed product, ISO 2811-1/+ 23ºC/50% RH
[2] = ISO 196-1 / @ 28 days / + 23ºC/50% RH

Form

Powder, grey

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 +5ºC and +30ºC.

Processing

Mixing ratio: 5kg/litres of water per 25kg bag of powder.

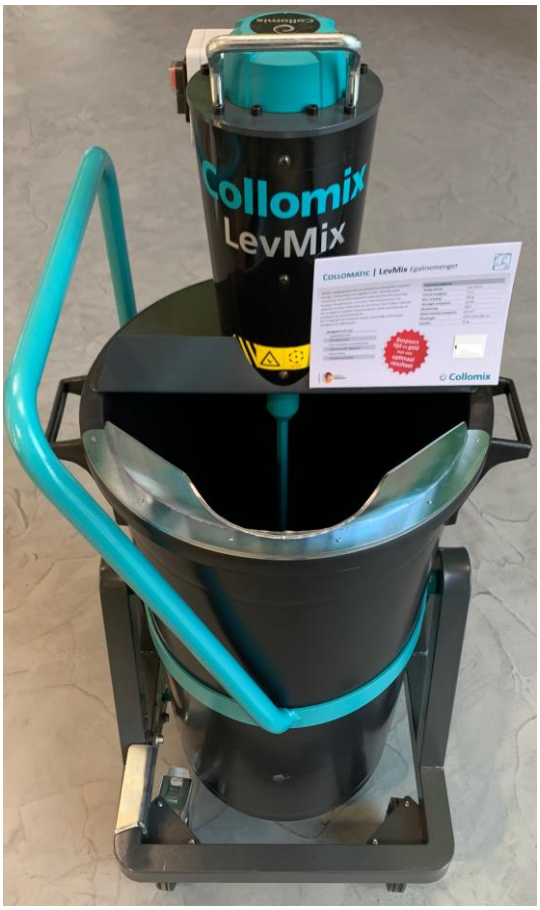
Use the Collomix AQiX water dosing device or scales to measure the correct amount of water.

Do not use a measuring cup!

Pour the water into the bucket, add a bag of Cementitious SL Underlayment 2-20mm F, and mix it for 3 minutes to create a homogeneous substance.

We recommend mixing it in the Quartzline Mobile Mixer.
The Quartzline Mobile Mixer lets you mix quantities of between 50kg and 75kg.

Quartzline Mobile Mixer



Collomix LevMix

How to use the Quartzline Mobile Mixer:

Put the water and pigment in the bucket and mix at speed 2.
Next, slowly empty the first two bags into the mixer and gradually increase the speed to setting 3 to 4, making sure the mixture does not splatter.

Now turn off the mixer and scrape the sides of the bucket.

Turn the mixer back on and gradually increase the speed to the maximum setting of 6 as you add the contents of the third bag. The maximum speed should be reached when you have added roughly half of the contents of the third bag.

If the mixer starts to struggle to generate an eddy in the substance when you are halfway into emptying the third bag, raise the mixing rod approximately 7.5cm.

As soon as the bag has been emptied completely, scrape the sides again and wait until all the cement has been absorbed and there is no more powder.

Next, vigorously mix the mixture into a homogeneous, lump-free mass.
Lower the mixer after 1.5 minutes and mix for another 1.5 minutes.

As soon as the mixer has mixed for three minutes, turn the speed down to 1 and switch off the mixer.

Roll the mobile mixer to the application location and pour all of the mixture out of the mixer as quickly as possible or empty the mixer into 20 litre buckets and take the material to the application location in the buckets. Since the mixture can start to bind / react at the bottom of the buckets, make sure you change the 20 litre buckets in time.

Cementitious SL Underlayment 2-20mm F is for indoor use only and is not suitable for rooms where it will constantly be exposed to moisture.

The floor must always be fixed to the floor screed, i.e. it cannot be a floating floor.

System structure

Primer: **ALWAYS use a coat of Primer Universal underneath a Quartzline Cementitious SL system.**

Apply the floor primer between 10°C and 25°C. Start in the farthest corner and work your way towards the exit. Apply the floor primer using a watering can with a fine spout, and spread it out using a soft broom. Let the primer dry until a film forms, which is when it acquires a transparent gloss. Remove or spread out any primer puddles before finishing the floor. Apply the smoothing compound within 24 hours.

For other substrates, see the list below:

Substrate	Primer/water ratio	Consumption
Sand cement	1:3	300 - 500 g/m^2
Concrete	1:1	150 - 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 with the right mixing ratio to prevent the mixing water from being absorbed into the substrate, which could lead to issues such as cracking, shrinkage, surface pore formation, or a weak and dusty surface.

Primer BHH/SL-EP Scratchcoat followed by a coat of Primer Universal is also an option to prevent these issues with absorbent substrates.

See TDS Primer Universal / SL-EP Scratchcoat for details.

Finishing coat: ***Cementitious SL Underlayment 2-20mm F***

This layer is ready for sanding after 24 to 48 hours.
All dust must be removed before varnishing.

PLEASE NOTE: The unsanded floor is very susceptible to dirt that cannot be removed. When sanding or varnishing the floor, therefore, wear only socks or appropriate footwear.

If the sanding machine you use has wheels, make sure these are clean, because they may leave marks. We recommend putting masking tape on the wheels.

Next steps: Finish Cementitious SL Underlayment 2-20mm F with Quartzline SL-PU, SL-EP 2K, Cementitious SL Decorative, or another floor covering system.

FOR ALL CEMENTITIOUS SYSTEMS:
The substrate needs to have been properly saturated to prevent absorption and make sure that the water in the Cementitious SL Underlayment 2-20mm F remains available for cement hydration.

Consumption

You will need 2,0kg of Cementitious SL Underlayment 2-20mm per m^2 / mm.

Layer thickness	Ready-to-use mortar consumption	Powder consumption
3mm	6.00kg	4.95kg
4mm	8.00kg	6.60kg
5mm	10.00kg	8.25kg
6mm	12.00kg	9.90kg

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

Quartzline Cementitious SL Underlayment 2-20mm F is part of the system:

Construct-Line Underlayment

Preparing the substrate

The underfloor heating must **ALWAYS** be turned off and have cooled down completely.

The substrate must be healthy, free of cracks, stable, and offer sufficient load-bearing capacity and compressive strength (at least 25 N/mm²), with a minimum bond strength of 1.5 N/mm². It must furthermore be clean, dry, and free of dirt, oil, grease, and other contaminants. It must have sufficient load-bearing capacity and be free of cracks, stable, and cleared of any substances that may have an adverse effect on the bond. Glue residues can be evened out, provided they are sufficiently adhesive and water-proof.

Weak concrete and any loose levelling material must be removed and any surface imperfections, such as holes and hollow spaces, must be filled with Quartzline Epoxy Gel and then treated with primer again.

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

Before applying the product, all dust and loose elements must have been completely removed from all surfaces, preferably using a broom and/or industrial vacuum cleaner..

Concrete substrates must be pretreated mechanically using a dust-free blasting or grinding machine to remove the cement laitance and obtain a roughened, adhesive, and clean surface.

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

For substrates with up to 6% residual moisture content, use a moisture barrier such as Primer DPM. Apply a coat of non-thinned Primer Universal on the moisture barrier before using the smoothing compound.

PLEASE NOTE WHEN DEALING WITH ANHYDRITE:

When applying the product on anhydrite, we strongly recommend using Quartzline Alpha SL Underlayment.

The anhydrite's moisture content cannot exceed 0.5 CM-%.
(heated floors <0.3 CM-%).

Processing conditions

Substrate temperature: Minimum 10ºC, maximum 25ºC

Ambient temperature: Minimum 10ºC, maximum 25ºC

Relative air humidity: Maximum 40% – 75% RH

Dew point: Beware of condensation!

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

Processing

Processing time at 20ºC	25 minutes
Capable of bearing a light load at 20ºC	3 hours
Fully set at 20ºC	28 days

The binding and drying of the levelling mortar depend on the thickness of the coat and conditions such as the temperature, humidity, and substrate. Shield the freshly applied levelling mortar from draughts and direct sunlight while drying. Check the RH and dew point before application.

Pour the smoothing compound 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 cement or cementitious flooring products.

Cementitious SL Underlayment 2-20mm F is for indoor use only and not suitable for permanently moist or humid spaces. The floor must always be fully fixed, i.e. not floating.

Freshly applied Cementitious SL Underlayment 2-20mm F must be protected against moisture, condensation, and water load for a period of at least 24 hours.

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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.

Different mixers, mixing times, mixing speeds, and natural differences in the components of levelling mortars may lead to colour differences in the end result.
To get the most even colour, make sure the work area is as clean as possible and work to a fixed pattern.

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.