

Technical Information

Permarock Silicone^{Ultra} K-Finish



**High performance through-colour exterior render / plaster for exterior use.
Based on hybrid binder with nano-quartz matrix structure for clean facades**

Product Description

Field of Application:

A ready-to-use through-coloured textured render plaster with hybrid nano-quartz structured binder for use with Permarock External Wall Insulation (EWI) Systems, Permarock Exterior Render System, and PermaRend Exterior Render Systems.

Suitable for application onto sound, existing mineral substrates, uncoated concrete and over sound existing coatings (emulsions and silicates).

Properties:

- Approved for use with Permarock EWI Systems under KIWA Agrément BDA certificates
- High colour stability
- Low consumption — easy to apply
- Weather-resistant, water-repellent
- Highly water vapour permeable
- Reaction to fire: A2-s1,d0 (EN 13501-1)
- Water thinnable
- Ecologically compatible. Low odour
- Contains microbiocides to resist algae and fungi attack

Pack size:

20 kg plastic pail.

Colour:

- White - Can be tinted to colour shades from the Permarock and Façade A1 colour ranges.
- Colours with lightness factor < 20 are unsuitable for application onto EWI systems with EPS insulation.
- Dark shades may require or benefit from an additional equalizing coat of Permarock Silicone^{Ultra} Façade Coating to maintain colour consistency.

Gloss Level:

Matt (flat)

Storage:

Cool, frost-free and protected against direct sunlight.

Shelf Life:

Unopened containers: 12 months from date of manufacture.

Product Base / Vehicle:

Unique hybrid binder system combining silicone emulsion with organically cross-linked quartz silicate particles.

Product Code:

628/COL/K15

Technical Data:

Fire Behaviour:	A2-s1,d0 as per DIN EN 13501-1
Density:	approx. 1.3 g/cm ₃
Water vapour permeability:	S _d (H ₂ O) < 0.07 m
Coefficient of water absorption:	w < 0.1 kg/(m ² .h _{0.5})
Consistency:	Paste-like

Product	Texture	Grain Size (mm)	Consumption (kg/m ²)*
Permarock Silicone ^{Ultra} K15	Stippled	1.5	approx. 1.9 - 2.0

* The exact rate of consumption is best determined by a trial application. Figures do not allow for spillage / waste.

Application

Preparation of Substrates:

Substrates must be sound / stable, clean, dry and free from all materials that may prevent good adhesion. Remove unsound coatings of enamels, emulsion paints, synthetic renders / plasters and unsound mineral paint coatings completely. Clean sound, adherent paint coatings to remove all dirt, dust, etc. Clean surfaces infested with organic growth (mould, algae, etc.) by pressure washing then treat the surface with Permarock Moss & Mould Remover and allow to dry thoroughly.

Surfaces should be flat and even in order to achieve consistency of finish. Do not apply to horizontal surfaces exposed to rain or moisture.

Mineral substrates, including polymer-modified cement-based reinforcement layers of Permarock EWI and Exterior Render systems and PermaRend systems are to be treated with a full coat of Permarock K&R Primer, in a colour to approximately match the colour of the finish, prior to application of Permarock Silicone^{Ultra} through-colour textured renders.

New cement-free basecoats do not require priming if the finish coat is similar in colour to the basecoat. Old cement-free basecoats require priming with Permarock K&R Primer before application of Permarock Silicone^{Ultra} through-colour textured renders.

Allow priming coats to dry thoroughly before applying Permarock Silicone^{Ultra} materials. To prevent staining of the finish coatings always ensure that the scaffold boards are free from dust before commencing application of the final coat.

Preparation of Material:

Ensure all material for any elevation is of the same colour and from the same manufactured batch to ensure consistency of colour. If material from more than a single manufactured batch is to be used on a single elevation, then all of that material must be thoroughly blended together to achieve a single, uniform colour prior to commencing the application of the material.

Thoroughly stir Silicone^{Ultra} K Finish with a clean, stainless steel, low speed electric paddle mixer to a uniform consistency. Although not usually necessary, the working consistency can be adjusted by the addition of tap water: Max. 1% (Max 200ml) for trowel application, or max. 2% (Max 400ml) for spray application. Avoid over-mixing or entrapment of air.

Where water is added to aid workability ensure that all buckets of material are adjusted by the same amount to avoid differences in the finished material.

Method of Application:

Permarock Silicone^{Ultra} K Finish can be applied manually, using clean stainless steel trowels, or by machine using with suitable spraying equipment.

For spray application the nozzle size depends on the grain/ particle size (nozzle size approx. = grain size x 4). Working pressure: 0.3 to 0.4 MPa (3 to 4 bar). Apply thoroughly an homogeneous layer during spray application. Avoid visible overlapping that may be caused by storeys of scaffolding.

Immediately after application (by trowel or machine), the material should be rubbed down to the grain size and any excess material should be removed, leaving a uniformly textured decorative finish.

Treat K-Finish evenly with a plastic float, PU- or rigid EPS-board by circularly 'ironing', and always working in the same direction and with even pressure to ensure consistency of finish.

Always work to a wet edge and take care to avoid lapping the material, particularly at scaffold board level, which can result in visible 'lift lines' in the finished product which might only be visible after the scaffold has been removed.

Wherever possible, entire elevations shall be completed in a single operation to avoid joint marks in the finish. Often this can be achieved by working to natural breaks in the building or working to breaks in colour or texture.

Day Working Joints:

Where day working joints are unavoidable they should be aligned with other building features.

Day working joints can be achieved using masking tapes: Apply a suitable proprietary masking tape at the required day joint position and apply the finish overlapping the edge of the tape. Carefully remove the tape whilst the finish is still wet to leave a fair edge. Once the finish is adequately dry and hardened, the subsequent application can be made up to the previously completed section by protecting the edge of the completed section with masking tape. Careful application is required up to the tape to achieve a

Application Conditions:

Processing temperature (material, substrate, water and ambient air temperature at the work face during application and drying: Minimum + 5 °C / maximum + 30 °C.

Tool Cleaning:

Immediately after use with water.

Drying / Drying Time:

At + 20 °C / 65% relative humidity the material is surface dry after approx. 24 hours and is cured, recoatable and ready for stress after 2-3 days.

The material dries physically by water evaporation. Drying time is extended by low temperatures and/or high relative humidity. Freshly applied material should be protected from precipitation and freezing during the drying phase

Particle / Grain Size:

K 1.5mm



Advice

Further details :

Please request our material safety data sheet, by e-mailing permarock@permarock.com