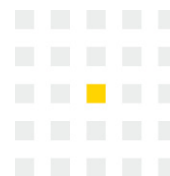


Technical data sheet



Polished or Nano-etched - Decorative Cementitious Overlay



Description

CHRYSO® Granicrete is a blend of exclusive selected dry powders containing portland cement, hardwearing minerals and additives. **CHRYSO® Granicrete** is a polymer modified cementitious base that allows for thin skin topping applications, once ground and polished **CHRYSO® Granicrete** offers a hard wearing and decorative finish. The surface may also be Nano-Etched to provide an exposed aggregate type finish.

The system may be coloured by adding micronised iron oxide pigments not exceeding 5% by weight of the **CHRYSO® Granicrete** Overlay powder. This in turn would compliment the exposed, polished aggregate finishes.

Searching for a modern and trendy decorative look, the **CHRYSO® Granicrete** allows for a customized solution.

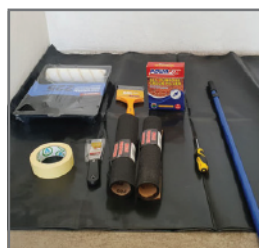
Advantages

- Easy to apply.
- Polished from low sheen down to deep mirror finishes.
- Aesthetic range of finishes.
- Wide range of architectural features.
- Warm earth colour range.
- UV stable.
- Stain resistant subject to sealer selection.
- Quick drying, reduces turn-around time.

Properties

- Liquid - Powder ratio: 0.185 ml of polymer 21 per 1kg powder
- Flow on Drop table: 180 mm no dropping (BS EN 1015 - 3) 230 mm at 25 drops
- Wet density: 1800 kg/m³
- Approximate Yield: 25 kg powder
+ 25 kg granite aggregate
+ 9.25 l polymer 21
= 33 l
i.e. 5.5 m² at 6 mm thick

- Excellent mechanical properties.
- Excellent adhesion.
- Excellent abrasion properties.
- May be applied in internal or external applications.



Tools for primer

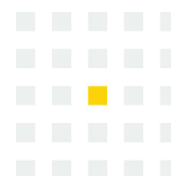


Tools for mixing and application



Helical stirrer

Technical data sheet



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Surface Preparation

- Ensure all surfaces are clean and sound, free of oil, loose paint and contaminants that may impair the bonding properties of the product.
- Ensure that surfaces are ground to a smooth finish and are free of dust and dirt.
- Any sharp protruding points need to be ground off as these will reflect through the product due to the thin product application thickness.

Mixing

- 210 ml **CHRYSO® Polymer 21** to 1 kg **CHRYSO® Granicrete** mix or 9.25 l **CHRYSO® Polymer 21** to 50 kg **CHRYSO® Granicrete** mix.
 - **Warning:** When mixing, first pour 80% of **CHRYSO® Polymer 21** into a clean mixing vessel, whilst stirring, slowly add **CHRYSO® Granicrete** powder to the mix and thoroughly mix until a smooth lump free homogenous mix is obtained, thereafter add the granite aggregate and mix before adding the 20% balance of the **CHRYSO® Polymer 21**. Thoroughly mix to obtain the required consistency. Use a helical type mortar mixer.
- Should a mixed batch in the mixing vessel dry do not re-temper the mix, it is recommended to discard and prepare a fresh batch.

Priming

- Apply **epidermix 116** epoxy primer to the prepared surface by brush or short nap roller ensuring that the surface is well covered, whilst the epoxy is still tacky broadcast 1.8mm silica aggregate into the surface at a rate of approximately 1 kg/m² and allow the system to cure overnight.
- The coverage rate of the **epidermix 116** is approximately 3 m²/l, this may vary subject to the surface profile and porosity.

- Ensure that the primed surface is kept clean between product applications. Once the system has cured overnight sweep off the excess and loose particles of silica sand and clean the area.
- The surface is now ready to receive the **CHRYSO® Granicrete** application.

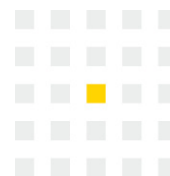
Application

- Set up your gauge rails to the required thickness of the overlay.
- Apply the **CHRYSO® Granicrete** mix and strike off to the required thickness.
- With the use of a steel float or bull float finish off to the desired finish to obtain either:
 - A polished surface by grinding or
 - Treated surface to obtain an exposed aggregate finish.
- If required lightly spray **CHRYSO® Poly Densifier** over the surface to aid in finishing.

Polished Surface

- It is required that the **CHRYSO® Granicrete system** cures for at least 2 days.
- In cold weather conditions allow for 1 extra day of curing. Thereafter the grinding process may commence
- The grinding and polishing process is carried out in a number of phases, generally down to an 800 grit that would provide a high gloss finish or further polishing phases that would provide a deep mirror type finish, approximately 3000 green diamond grit. The process will also include surface densifier applications, burnishing and finally a sealed or waxed finish.
- **CHRYSO® Poly Densifier** usually applied after the first grind and before the final grind/polish, and is applied at approximately 12 m²/5 l. See the **Chryso Poly Densifier** data sheet for additional information.

Technical data sheet



Polished or Nano-etched - Decorative Cementitious Overlay

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- With the use of a steel float or bull float finish off to the desired finish to obtain either:
 - A polished surface by grinding or
 - Treated surface to obtain an exposed aggregate finish.
- If required lightly spray **CHRYSO® Poly Densifier** over the surface to aid in finishing.
- Washing off is usually done within 24 hours after pouring.
- Approximate consumption:
 - 5 m² per ℓ
- See **CHRYSO®Deco Wash Pico** data sheet for additional information.
- Consult your local CHRYSO/a.b.e.® representative for information on deeper exposed aggregate results.

Polished Surface

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Exposed Aggregate Finish

- **CHRYSO®Deco Wash Pico** is a surface retarder that can be sprayed to lightly retard concrete surface setting. The finished look obtained has a "sanded" or "acid washed" aspect.
- **CHRYSO®Deco Wash Pico** provides a qualitative and consistent finish.
- It must be uniformly sprayed onto the surface of the fresh concrete.

Sealing

- A choice of sealers offered, water based, solvent borne and 2K systems.
- The choice of sealer will depend upon the end use of application and environment the product is exposed to.
- This may include general or chemical resistant properties required of the finish.
- Always do a test sample of the sealer to ascertain the outcome as solvent borne sealers generally offer a darker finish opposed to water borne sealers. Sealer types are indicated under MAINTENANCE below.

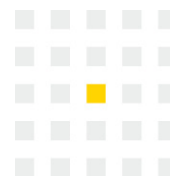
Colour

- Standard available colours:
 - Silica, Dune, Pebble, Cobble, Sandstone, Terracotta, Limestone and Ash.
 - Other colours may be added to achieve the desired outcome, do not exceed 5% by weight of the **CHRYSO® Granicrete** powder content.
 - Only use micronized pigments.

Approximate Coverage - (Mixed Product)

- 25 kg **CHRYSO® Granicrete Overlay** + 25 kg **CHRYSO® Granite aggregate** + 9.25 ℓ **CHRYSO® Polymer 21** will yield approximately 33 ℓ. i.e. 5.5 m² at 6 mm thick

Technical data sheet



Polished or Nano-etched - Decorative Cementitious Overlay

- Application rates may vary subject to surface profile, irregularities and absorption rates.

Maintenance

- CHRYSO® Granicrete surfaces must be coated with an appropriate sealer. The condition of the sealer is to be examined periodically in order to determine whether there is any need for an additional wax or sealer coating.
- If the site is regularly cleaned, there might not be any need for a new coat of sealer for several years.
- Refer to the sealer product data sheets, typically: CHRYSO® FiniSol Brut or Perle, **abe.® cote PUD** clear, matt or gloss, and **abe.® cote 222** acrylic gloss sealer.

Consult your local CHRYSO/a.b.e.® representative for information on other sealers if required.

Cleaning of Equipment

- Tools, brushes and mixing equipment should be cleaned with water immediately after use and before material has set.
- Hardened material can only be removed by mechanical means.

Protection on Completion

- Ensure that CHRYSO® Granicrete is not subjected to rain or draughts during the first 24 hours of curing as this may lead to dissolving of the polymer leaving white marks and/or cracking and crazing.
- Tape up doorways with polythene if necessary, to prevent air movement during application.
- Subsequently ensure the room has sufficient ventilation to allow the overlay to dry.
- Ensure adequate protection from other trades and traffic after installation, the surface must be free of dirt and dust before priming and application of the decorative overlay.

Temperature and relative humidity

Internal air and floor temperatures must exceed + 5 °C.

Packaging

CHRYSO® Granicrete:

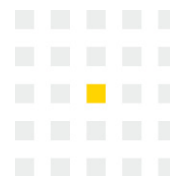
- 25 kg CHRYSO® Granicrete overlay in plastic buckets
 - 25 kg CHRYSO® Granicrete Silica aggregate in a polypropylene bag
 - 25 kg CHRYSO® Granicrete Aggregate in a polypropylene bag
- ##### **CHRYSO® Polymer 21:**

- 5 l jerry can
- 25 l jerry can

Storage

- CHRYSO® Granicrete must be stored in a cool dry place.
- Lids of buckets must be tightly closed.
- CHRYSO® Granicrete has 12 months shelf life provided the product is sealed and protected from humidity.

Technical data sheet



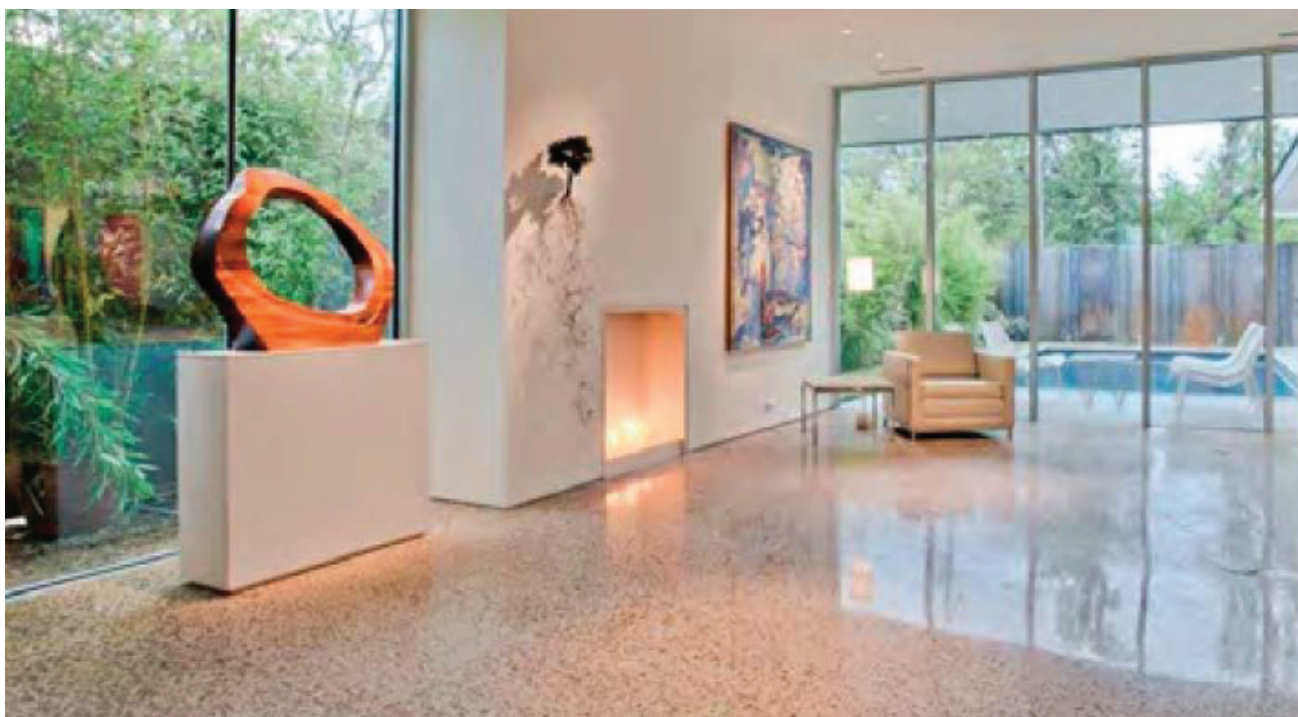
Polished or Nano-etched - Decorative Cementitious Overlay

Health and Safety

- Keep out of reach of children.
- Avoid contact with skin and eyes.
- Wear appropriate protective equipment and clothing.
- Product safety information required for safe use is not included. Before handling, read product and safety data sheets and container labels for safe use, physical and health hazard information.
- For more information, please refer to the material safety data sheet.

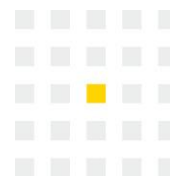
Warning

The **CHRYSO® Granicrete** system is meant for use by trained and experienced professionals. Manufacturer's instructions must be strictly followed. Use of product on any worksite lies outside manufacturer's control and responsibility. Should a product however seem to be defective in spite of every care taken by the manufacturer, the manufacturer will only be held responsible for the cost of replacement of defective product. It is the responsibility of the person applying the product to determine suitability of use of product prior to application and to bear any risks sustained from any erroneous prior analysis or use. Before proceeding to any application, please refer to the systems and process technical information.



The information contained in this document is given to the best of CHRYSO's knowledge and is the result of extensive testing. However, this document will not under any circumstances be considered as a warranty involving CHRYSO's liability in case of misuse. Tests should be carried out before any use of the product to ensure that the methods and conditions of use of the product are satisfactory. CHRYSO specialists are at the disposal of the users in order to help them with any problems encountered.

COLOUR CHART



Polished or Nano-etched - Decorative Cementitious Overlay

These colours are provided as a guidance only and exact colour matches will be dependent on the surface condition.

