CreteCote Microcement Datasheet

CreteCote is a pigmented, thin film cement-based coating which is versatile and durable. It is a two coat system which produces a 1.6mm smooth decorative finish suitable for application onto wood or steel floated concrete floor slabs and screeds, ceilings and plastered or previously painted walls. For interior and exterior walls, and interior floors only. Supplied as Part 1 (**CreteCote Powder**) and Part 2 (**CreteCote Catalyst**), or as a TwinPack.

Technical Data

Type	Modified two-part cement-based coating
Colours	See website: www.cemcrete.co.za
Pot life	45 minutes
Working time after mixing	20 - 30 minutes
Initial set	1 hour
Light floor traffic after application	3 - 4 hours depending on weather
Compressive strength (28 days)	± 35MPa
Mixing water temperature	Best between 10°C and 25°C
Application temperature (ambient)	6°C to 25°C
Slab temperature	6°C to 25°C
Application thickness	Minimum 1.6mm overall 2 coats (max 0.8mm / coat)
Density	1 250g/litre
Protection during application	Protection barriers required against wind and sun (no contact with product)

NOTE: All surface beds should have a damp proof membrane and all parapet and boundary walls must be waterproofed on top, and substrates must attain moisture levels less than 5% before the application of Cemcrete CreteCote.

Storage

CreteCote can be stored unopened for 12 months from date of invoice above 5°C.

Suitable Surfaces

CreteCote is suitably designed for application onto interior surfaces (such as screeds, plastered or previously PVA painted walls, ceilings, etc) as well as exterior plastered or previously PVA painted walls, that are integrally sound (no cracking, no crumbling or friability, good compressive strength, etc.) and of a quality and consistency suitable for application (smooth and level). Cemcrete cannot be held liable should the **CreteCote** application be compromised as a result of failure or de-bonding (adhesion failure) occurring within the substrate due to deficiencies or lack of surface preparation.

Interior Floor and Exterior / Interior Wall Tolerances

The success of an installation is highly dependent on substrate conditions and the quality of substrate preparation before applying **CreteCote**. Since **CreteCote** is normally applied at 0.8mm per coat, it is important that all highs and lows are addressed before application of **CreteCote** (no more than 3mm off the datum line). In identifying the highs and lows a straight edge should be placed on the substrate and rotated through 360 degrees around the centre point (the larger the area the longer the straight edge should be). This exercise will highlight the valleys and ridges.

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Interior Floor Surface Preparation

Existing interior surfaces

Floors should preferably be ground with a floor grinder to remove surface residue and to expose the true condition of the floor. Ensure that all cracks, holes and loose areas are properly repaired before application. PrimerCote mixed with some Concrete Primer to a stiff paste can be used for this purpose prior to priming with Concrete Primer. It is suggested to first prime shallow holes with Concrete Primer prior to patching. For larger holes use a suitable rapid repair mortar. Application over moving joints or cracks can result in cracking and delamination. All construction, cold joints, structural joints and/or structural cracks which may be dynamic before and/or after the **CreteCote** application must be extended through to the surface of the **CreteCote** application in the form of voided joints. All voided joints including saw cuts should be filled with suitable joint filler.

All applicable surfaces to be structurally sound and free from grease, oil, wax, carpet glue, bitumen, and dust or anything that might interfere with adhesion. Remove dust and loose material with a high pressure washer or with a vacuum cleaner and stiff brush. If previous bonding material is still prevalent, a concrete floor grinder or shot blaster using the finest grit available should be used. Scrub the surface using a suitable concrete degreaser and flush well with clean water. Allow to dry properly.

New interior surfaces

The concrete or cement screed should be finished to a smooth and level surface and allowed to cure for at least 28 days (wet curing for the first 7 days), subject to the screed having a moisture content less than 5%, before applying **CreteCote**. Ensure that the concrete or screed is integrally sound, dry, smooth, level and free of dust and laitance in any form.

Interior And Exterior Wall Surface Preparation

Existing Wall surfaces

Preferably, walls should be properly abraded to remove surface residues, loose defective paint and to expose the true condition of the substrate to which the **CreteCote** is to be applied. Ensure that all cracks, holes and loose areas are properly repaired before application. Cemcrete's Paste Crack Filler can be used for this purpose prior to priming with two coats of Cemcrete's Concrete Primer. It is suggested to first prime shallow holes with the Concrete Primer prior to patching. Application over moving joints or cracks can result in cracking and delamination. All construction, cold joints, structural joints and / or structural cracks which may be dynamic before and / or after the **CreteCote** application must be extended through to the surface of the **CreteCote** application in the form of voided joints, or alternatively one can make provision for a slip joint (See the relevant slip joint datasheet). All voided joints should be filled with suitable joint filler.
All applicable surfaces to be structurally sound and free from grease, oil, wax, wall paper glue, dust or anything that might interfere with adhesion. Remove dust and loose defective paint if any. Scrub the surface using a suitable concrete degreaser and flush well with clean water. Allow to dry fully.

New surfaces

The cement plaster should be finished to a relatively smooth, hard and level surface and allowed to cure for at least 28 days (wet curing for the first 7 days), subject to the wall having a moisture content less than 5%, before applying 2 coats of Cemcrete's Concrete Primer followed by **CreteCote.** Ensure that the cement plaster is integrally sound, dry, smooth, level and free of dust and laitance of any form. Wall substrate repairs should be carried out as per existing surfaces instructions above. Application over moving joints or cracks can result in cracking and delamination. All construction, cold joints, structural joints and / or structural cracks which may be dynamic before and / or after the **CreteCote** application must be extended through to the surface of the **CreteCote** application in the form of voided joints. All voided joints should be filled with suitable joint filler.

Priming

For porous floor and wall surfaces with a good mechanical key, prime the surface with two coats of Cemcrete's Concrete Primer. A third coat may be required if the substrate is very porous. Apply each coat perpendicular to the other allowing each coat to dry in between. It is imperative that you refer to the relevant datasheets for the mixing and application instructions. All priming treatments should be allowed to dry for 24 hours before applying **CreteCote**.

Mixing

You will need to purchase the correct quantity of **CreteCote Catalyst (Part 2)** for the quantity of **CreteCote Powder (Part 1)** you require.

Pour approximately 80% of the **CreteCote Catalyst (Part 2)** solution into the bucket. Add the **CreteCote Powder (Part 1)** and mix mechanically slowly adding the balance of the catalyst solution as required until a workable plaster consistency is achieved. Do not mix manually. Once mixed let the product stand for a minute before remixing it again. If required more liquid can be added to obtain the required workable consistency. In order to maintain product properties and workability when working in small or complex areas, **CreteCote** should be mixed in smaller batches ensuring that the correct mix proportions are maintained. Ensure that the product is agitated regularly so as to maintain the correct consistency. Do not tamper with mixed batches (add more liquid) as this will compromise your finish. Discard any **CreteCote** that has set in the bucket.

Application

Before application, ensure that the prepared surface is cool and protected from wind and sun and other elements. Using a firm sponge rub the first layer thinly onto the surface, then, while within reach and still wet, smooth the surface using a rounded pool trowel. Then sponge the next section and repeat the process. Each layer applied must not exceed a depth of 0.8mm even if high spots remain exposed. Work small areas at close range always maintaining a wet edge. As soon as the first layer is dry, marks left by uneven trowelling should be removed by sanding by hand **within** 24 hours after application. Sand in a circular motion using 120 grit abranet sand paper. Prior to applying the next coat be sure to clean the previous coat with a clean damp sponge to remove all dust. However, the surface should only be damp and not 'wet'. Remove all dust and debris from the surface before applying subsequent layers as required until a smooth uniform finish is achieved. When sanding the final coat, before sealing, sand with a 240 grit abranet sand paper in a circular motion within 24 hours after application, so as not to leave any sanding marks on the surface. Use a sanding block when sanding to prevent finger marks on the finish. Protect finished areas until properly sealed.

Curing

The completed work should be allowed to air cure for 24 hours after application.

Sealing

The moisture in the applied **CreteCote** must be less than 5% prior to sealing. Ensure that the surface is free of any form of laitance or dust etcetera, before priming with Cemcrete's Sealer Primer followed with a suitable sealer fit for purpose in accordance with the manufacturer's instructions. Sealers are best applied to a cool surface in multiple thin coats until an even sheen is achieved. Allow sufficient drying time between coats (product specific in accordance with the manufacturer's instructions). Cemcrete manufacture a wide range of sealers designed for a specific purpose, dry film thickness and durability (example: for use in wet areas etc.) Please contact your local representative for the best solution to meet your needs.

Maximum hardness of the protective sealer is normally achieved 7 - 10 days after application and extra care should be taken during this period, especially on floor applications. Do not slide furniture across the floor / surface as this can damage the newly applied coating. Furniture foot pads are advisable (these are normally made up from non abrasive materials such as carpet).

NOTE: For a uniform colour tone from floor to wall, adopt the same floor sealing method used for the floor, on the wall.

Floor maintenance

Maintain **CreteCote** floors with Cemcrete's CreteCare range of floor care products in accordance with the manufacturer's instructions. Sweeping, mopping and vacuuming is a necessity for all floors irrespective of the final finish. Refer to relevant CreteCare datasheets.

Coverage

CreteCote applied as instructed should cover approximately 8m² to 10m² per 10kg paper bag (**CreteCote Powder Part 1**) mixed with 5L liquid (**CreteCote Catalyst Part 2**).

Packaging

CreteCote Powder Part 1   - 10kg paper bag
CreteCote Catalyst Part 2   - 5L container
CreteCote TwinPack   - TwinPack of 10kg powder and 5L liquid

Abranet sand paper also available from Cemcrete.

Colours

Please refer to our website: www.cemcrete.co.za for the updated colour choices. It is important to remember that final colours may differ from those depicted on the colour charts as a result of factors such as site conditions and choice of sealer etc. It is important to base your final decision on site samples applied by the same contractor and under the same conditions as is governed by the relevant contracting parties. We recommend two samples should be made by the contractor, one for the client and one as a retained sample.

Manufacturer's Warranty

Cemcrete warrants that the products manufactured by it shall be free from material defects and will be consistent with its normal high quality. Should any of the products be proven defective, the liability to Cemcrete shall be limited to replacement of the product ex-factory. Cemcrete makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties expressed or implied. The user shall determine the suitability of the product for his intended use and assume all risks and liability in connection therewith.