

CSS CRETE SEAL TECHNICAL BULLETIN

CSS Crete Seal is a unique two component polymer modified cement system for patching and levelling horizontal concrete surfaces. Applied at thicknesses from 40mm down to a feather-edge, it bonds tenaciously to the existing concrete surface without cracking and delaminating in thin layers.

CSS Crete Seal self levels on compaction and vibration and can be easily applied using an aluminium screed and/or steel float. Crete Seal can be applied to new concrete after 24 hours curing or to suitably prepared old concrete surfaces.

Areas of Use:

- Filling and levelling depressions, birdbaths, holes, etc. in concrete slabs prior to the application of waterproofing, tiles, **CSS Synpave Sports & Rec** and/or any protective coating
- Resurfacing old spalled concrete surfaces, prior to application of coatings
- Resurfacing and patching new concrete areas pitted by rain or adverse weather conditions

Surface Preparation:

Surface should be thoroughly cleaned, free from all dirt, dust, grease, paint, etc.

Concrete substrate must be thoroughly saturated with water and allowed to surface dry to a damp condition immediately prior to application of CSS Crete Seal.

Note: Failure to thoroughly saturate the substrate will cause rapid drying of the Crete Seal layer, resulting in poor chemical cure, surface cracking and loss of adhesion and strength, particularly in thin layered areas.

Application Procedure:

Prime surface with a slurry coat of Crete Seal mixture (add water to achieve a brushable slurry).

Apply Crete Seal standard mix while slurry priming coat is still wet. Crete Seal is supplied in two packs and it is recommended that these be mixed in the ratio of **5 parts by weight Crete Seal Part A Powder to 1.1 Parts by weight Crete Seal Part B Liquid**.

Inaccurate mixing will result in loss of properties after during. Pour approximately 75% of Powder into Liquid and hand stir with trowel or suitable paddle. When thoroughly mixed slowly add remainder of Powder with continuous stirring and mix until a lump free flowable consistency is achieved.

Place Crete Seal mix onto primed and saturated (surface dry) substrate and rough screed to approximate level using an aluminium screed bar or steel trowel. Finish to correct level using screed bar in a sweeping motion across the surface allowing the mixture to self level.

The Crete Seal surface can be steel trowelled to a smoother finish, if required, after allowing 5-20 minutes set up time, depending on temperature. Do not apply at temperatures below 5°C or above 40°C. Where practicable, when building to depths greater than 20mm, we recommend the application of about half the required build be spread and levelled followed by a 'Wet on Wet' application to finish. This will assist finishing.

Drying/Curing (in good drying conditions – Min. 20°C and Max. 50% R.H.)

Allow Crete Seal to cure for minimum:

48 hours prior to light foot traffic

72 hours prior to normal foot traffic

5 days prior to vehicular traffic

CSS Crete Seal must be primed with Moisture Seal (squeegee formula) prior to application of any CSS coatings. Crete Seal may be overcoated with other materials (depending on the type of material) after minimum 3 days curing. Trials should be conducted to determine suitability.

Note: CSS Crete Seal should not be applied in excessively hot or windy conditions, or when rain is imminent. Any ridges and edges can be smoothed with a grinder or stone after a minimum of 24 hours curing.

Packaging and Coverage:

The 24.4 kg kit is made up of 20kg Powder (Part A); and 4.4 kg Liquid (Part B). A 24.4 kg kit has a volume when mixed of 14.5 litres, equivalent to 0.0145 m³. The number of 24.4kg kits per m³ is 69.

Set out below is a table showing for various thicknesses of Crete Seal the coverage (m²) for each 24.4 kg kit and the number of kits required per 100m², at the nominated thicknesses.

PAGE 1 - REVISED

14/09/2020

Nominal Thickness	M ² Coverage per 24.4 kg kit (14.5 lts)	Number of 24.4 kg kits per 100m ²
1mm	14.5	7
5mm	4.0	35
10mm	1.5	70
15mm	1.0	105
20mm	0.7	140
Slurry Coat Primer	Allow extra .3 to .5 kg per m ² for concrete in good condition	

Compressive Strength: Greater than 370 kg/cm² (5261 Psi) (36MPA)
 Shear Bond Strength: Greater than 40kg/cm² (569 Psi) (3.9 MPA)
 Tensile strength: Greater than 63 kg/cm² (896 Psi) (6.13 MPA)
 Density : Greater than 1855 kg/m³
 Water Absorption: Less than 4.0%

SAFETY DIRECTIONS:

California Sports Surfaces supports best practice in material handling: gloves, mask, safety goggles and protective clothing should be worn. If the product comes into contact with the skin, wash off with warm soapy water. Avoid inhaling the dust by wearing a suitable dust mask and provide adequate ventilation. If swallowed drink plenty of water and seek medical advice. In case of contact with the eyes, rinse with an eye wash or wash away with plenty of water.

FIRST AID:

If poisoning occurs, contact a Doctor or Poisons Information Centre (phone Australia: 131126, New Zealand: 0800764766).

Emergency information: 1800033111 (all hours). See the Material Safety Data Sheet for additional information.

IMPORTANT:

Information and recommendations provided in this Technical data sheet are provided in good faith based on experience and current knowledge. It is important to note – all information is based on correct application and correct preparation of work. Differences in materials, site conditions, substrates, method of application make it impossible to provide a warranty – no legal relationship can be inferred from neither this information nor any liability. All orders are accepted subject to our terms and conditions of sale.

PLEASE CONSULT TECHNICAL DEPARTMENT FOR PRODUCT RECOMMENDATIONS AND ADVICE. PRE-TESTING OF SUBSTRATES IS AVAILABLE TO ENSURE PERFORMANCE OF PRODUCT UNDER ALL CONDITIONS.