

Method Statement

Ref. #: DCP03/08-0010-A-2024



Setseal C

(Flexible acrylic cement modified two-component waterproof and protective coating)



Table of Content

SECTION A: GENERAL COMMENTS	3
General Notes	3
High-Temperature Working	3
Low-Temperature Working	3
Tools and Equipment	4

SECTION B: APPLICATION	5
Substrate Preparation	5
Priming	6
Mixing	6
Application	7
Cleaning	8
Remarks	9

SECTION C: CAUTIONS	9
Health & Safety	9

SECTION D: APPROVAL AND VARIATIONS 9	
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Section A : General Comments

General Notes:

The information below is a detailed overview of the application of DCP's **Setseal C** waterproofing and protection system and should be read in conjunction with the relevant technical data sheet prior to application. All DCP Products should be applied by experienced specialist contractors.

All the points below assume the correct preparation of the relevant surface.

High-Temperature Working:

It is suggested that, for temperatures above 35°C, the following guidelines are adopted as good working practice:

- i. Unmixed materials and equipment should be stored in a cool shaded area and away from direct sunlight.
- ii. Avoid application during the peak temperature of the day.
- iii. Plan for enough materials, tools, and labor to ensure a continuous applicant process.

Low-Temperature Working:

It is suggested that, for temperatures below 10°C, the following guidelines are adopted as good working practice:

- i. Unmixed materials should be stored at room temperature.
- ii. Cold temperatures will affect the properties of the material.
- iii. Avoid applying the waterproof coating if the temperature is around 5°C and falling.
- iv. Do not apply under rain or snow, and avoid dew points conditions during application.



Tools and Equipment:

It is suggested that the following list of equipment are adopted as a minimum requirement



Fig.2: Empty bucket

Fig.1: Low speed drill fitted with suitable paddle



Fig.4: Trowel

Fig.3: Brush

Fig.5: Hopper type spray machine



Section B : Application

1.0 Substrate Preparation

- 1.1 New concrete or cementitious substrates should be at least 28 days old.
- 1.2 The substrate (new or existing) should be clean, sound, smooth, and free from contamination such as mortar and paint splashes, curing compounds, oil, and grease.
- 1.3 Excess laitance deposits, organic growth, mold release agents, or any other loose materials are best removed by high-pressure water jetting, or light grit blasting.



1.4 Any surface imperfections, honeycombing, damaged or deteriorated concrete should be repaired with a suitable cementitious repair mortar. Consult the DCP's Technical Department for specific recommendations.



- 1.5 Repair work should not produce a dusty and flaky finish.
- 1.6 It is recommended to create fillet on corners using sand-cement or repair mortar.
- 1.7 Avoid contact with other substrates that may be affected by spillage or overcoating by applying masking tape.



Notes:

- It is recommended to test the adhesion between the substrates and Setseal C on a small area on site before proceeding with the works to ensure that the substrate is well prepared and compatible with the product.
- Solvent-based primers and coatings like **Repcoat primer** and **Setseal A** should be removed mechanically before applying Setseal.
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2.0 Priming

2.1 No special primer is required, but the substrate should be presoaked with clean water to a saturated surface dry (SSD) condition prior to the application of **Setseal C**.



3.0 Mixing

- 3.1 A mechanically powered mixer or drill fitted with a suitable paddle-type should be used to ensure proper mixing.
- 3.2 Locate the mixer or the mixing container as close as possible to the area of application to minimize the transporting time.
- 3.3 Place the liquid component of **Setseal C** into a clean container, and add the dry powder slowly to the liquid while mixing continuously with a low-speed mixer/drill (400 600 rpm).
- 3.4 Mixing should be continued for 3 minutes until a uniform consistency and a lump-free mixture are obtained.



- 3.5 Allow the mix to rest for 2 3 minutes, and then remix for an additional 1 minute without adding any more liquid.
- 3.6 Mixed **Setseal C** should be applied to the prepared, dampened surface within its pot life (approximately 45 minutes @ 25°C from the start of mixing), pot life varies after mixing depending on the ambient and material temperature.



Notes:

- Do not mix part of packs under any condition, as this will change the mixing ratio between the powder and the liquid polymer which will affect the material performance.
- Slow speed mixer should be only used.
- While mixing, ensure that the mixing blade is kept below the surface of the mix to prevent air entrapment.
- > Do not mix more than the amount of material to be placed within its working time.
- The liquid part of **Setseal C** should only be used for mixing.
- Do not use material from damaged bags.
- Do not use additives of any kind.

4.0 Application

4.1 **Setseal C** can be applied by brush, roller, or spray machines. The mixed material should be brushed well into the surface.



- 4.2 Care must be taken not to spread the materials too thin.
- 4.3 For spray application, a maximum of 1 litre of water may be added to the mix if needed depending on the type of spray machine
- 4.4 The first coat should be applied at a wet film thickness of 1 mm. When the material begins to drag, do not add any water, but dampen the surface again.
- 4.5 Work the mix firmly onto the prepared substrate, strike off with the brush in one direction for a neat appearance, and to provide a mechanical key for the second coat.





- 4.6 Spray applications of the first coat may require back brushing or brooming to properly fill voids and achieve uniformity and optimum adhesion.
- 4.7 When applying by spray a 3 4 mm nozzle is recommended.
- 4.8 In well-ventilated areas, a minimum of 4 hours, depending on the prevailing ambient temperature, should be given for the first coat to cure before applying the second coat.
- 4.9 For limited ventilation or at low temperatures, allow for 24 48 hours before applying the second coat.
- 4.10 If the first coat is left exposed for a long period, it is recommended to wash the surface with water and remove any excess moisture before applying the second coat, to ensure a dust-free surface.
- 4.11 Fiber-reinforced mesh or more preferably **AquaProof Tape Flex** can be placed into the first coat and pressed firmly while still wet prior to the application of the second coat to the areas of wall/floor angle connections, cold joints, and cracks.
- 4.12 For brush application, the second coat should be applied in a perpendicular direction to the previous layer to ensure good bond and coverage.
- 4.13 To achieve a smooth finish, it is recommended to finish the surface with a trowel immediately after brushing the second coat.
- 4.14 If a cementitious plaster or cementitious tile adhesive (recommended C2TE grade) is to be applied over **Setseal C,** finish off the second coat with horizontal brush strokes to give more grip.
- 4.15 Condensation of water may occur in the curing phase of the first coat if **Setseal C** is applied in closed or badly ventilated areas. In such cases, any standing water has to be removed from the surface.

Coverage of Setseal C:

Approximately 11.5 – 12.5 m² per 20 kg pack, for one coat @ 1 mm thickness. Note: Coverage highly depends on the condition of the surface and the method of application.

5.0 Cleaning

- 5.1 All tools should be cleaned immediately after finishing using clean water.
- 5.2 Hardened materials should be cleaned mechanically.





6.0 Remarks

- 6.1 Confirm availability of mixing equipment.
- 6.2 Check the substrate in advance. Ensure that the substrate is in good condition and clean.
- 6.3 Fair faced concrete should be roughened mechanically to ensure good adhesion, if this is not possible contact DCP technical department for advice.
- 6.4 Do not change the product mixing ratio.
- 6.5 No standing water should remain during application.
- 6.6 **Setseal C** should not be applied onto frozen substrates or if the ambient temperature is around 5°C and falling.
- 6.7 The area must not be exposed to standing or moving water during application.
- 6.8 In confined or unventilated areas, it is typically recommended to wait 5 7 days after the application of the second coat, to conduct the water ponding test.

Section C : Cautions

Health and safety

Setseal C may cause irritation to the skin or eyes. Avoid contact with skin or eyes. In case of accidental contact with eyes, immediately flush with plenty of water for at least 10 minutes and seek medical advice if necessary.

Fire:

Setseal C is nonflammable.

For further information on refer to the Material Safety Data Sheet.

Section D : Approval and Variations

This method statement is offered by DCP as a 'standard proposal' for the application of **Setseal C**. It remains the responsibility of the Engineer to determine the correct method for any given application. Where alternative methods are to be used, these must be submitted to DCP for approval, in writing, prior to commencement of any work. DCP will not accept responsibility or liability for variations to the above method statement under any other condition.