

Method Statement

Ref. #: DCP03/08-0162-A-2022



Bituproof 50

(Water-based bitumen coating)



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Section A : General Comments

General Notes:

The information below is a detailed overview of the application of DCP's **Bituproof 50** bituminous coating 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.

Note: This guideline is written specifically for **Bituproof 50**.

High-Temperature Working:

Bituproof 50 can be applied at temperatures between 5 and 45°C. However, It is suggested that, for temperatures above 30°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. Ensure proper and adequate ventilation.
- iv. Plan for enough materials, tools, and labor to ensure a continuous applicant process.

Low-Temperature Working:

It is suggested that, for temperatures below 5°C, the following guidelines are adopted as good working practice:

- i. Unmixed materials should be stored at room temperature.
- ii. Avoid applying the product if the temperature is around 5°C and falling.
- iii. Do not apply under rain or snow, and avoid dew points conditions before and during application.

System Products:

Bituminous coating: Bituproof 50

Adhesive: Flexseal GA700

Protection Board: Plasti-Board









Tools and Equipment:

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

Personal protection : Protective overalls

Goggles or a face mask
Good quality gloves

: Safety shoes : Safety helmet

Equipment : Stiff wire brush (Fig.1)

Soft brush (Fig.2)

: Air compressor with hose (Fig.3)

: Brush (Fig.4)
: Broom (Fig.5)
: Squeegee (Fig.6)
: Airless spray (Fig.7)











Fig.1: Stiff wire brush

Fig.2: Soft brush

Fig.3: Air compressor with hose

Fig.4: Brush











Fig.7: Airless spray



Section B : Application

1.0 Substrate Preparation

- 1.1 Surface preparation is very important to get the highest performance of **Bituproof 50**.
- 1.2 All surfaces to be protected must be clean and free from any laitance, wax, grease, dirt, oil, and standing water. In addition, the substrate should be levelled and free from contamination such as mortar and paint splashes, or curing compounds.
- 1.3 Excess laitance, old coatings or surface treatments are best removed by mechanical grinding, light sand/grit blasting followed by vacuum cleaning to remove dust debris. All preparation equipment should be of a type approved by DCP.



1.4 Surfaces contaminated with oil or grease should be cleaned using a chemical degreaser or a suitable cleaning method which assures the surface is free from any oil traces. Consult our technical department to advise on the suitable method for removing the contamination.



- 1.5 Structurally unsound and friable concrete, surface defects and imperfections such as voids and deep cracks should be repaired with a suitable cementitious mortar before application. Consult the DCP's Technical Department for specific recommendations.
- 1.6 (30 x 30) mm or "less" fillet of polymer-modified sand/cement screed should be applied at all right-angle corners and any pipe/drain penetrations.

2.0 Application

- 2.1 Stir **Bituproof 50** well before use.
- 2.2 **Bituproof 50** may be applied by brush, broom or squeegee.
- 2.3 As a primer for bituminous membranes:
 - 2.3.1 Apply **Bituproof 50** as the primer coat by brush at a rate of 5 m²/litre and allow to dry.





- 2.4 As a protective coating:
 - 2.4.1 **Bituproof 50** can be spray applied using airless spray machine.
- 2.5 **Bituproof 50** can be diluted with clean water at a ratio of up to 5% depending on the required thickness and application conditions.
- 2.6 For efficient waterproofing, it is recommended to apply two coats of **Bituproof 50** to avoid possible pinholes in the membrane.



- 2.7 Apply the first coat over the prepared and clean substrate evenly and in one direction, coverage rate will depend on surface roughness and the end use of the product:
 - Protective/damp proofing coating: 3.5 5 m²/litre per coat.
- 2.8 The first coat should be applied to obtain a continuous uniform coating.



- 2.9 It is recommended that while first coat is still wet, all right angle corners and pipes/drain penetrations shall be reinforced with 20 cm wide fibreglass mesh $(60 \text{ g/m}^2 \text{ or more})$.
- 2.10 Press the fibreglass mesh firmly into place without wrinkles and allow to dry.
- 2.11 Allow a minimum of 2 hours between coats so that each coat is allowed to dry before applying the next coat.
- 2.12 Ensure the membrane is not punctured or damaged during subsequent operations.
- 2.13 Apply the second coat at a right angle and at the same rate mentioned above and allow it to dry.
- 2.14 Surfaces coated with **Bituproof 50** should not be exposed to water for a minimum of 72 hours after application.
- 2.15 Each independent area of application should have sufficient materials, equipment, and labour.





3.0 Curing

3.1 **Bituproof 50** must be cured overnight before any subsequent works.



4.0 Application of Plasti-board

- 4.1 **Plasti-board** should be laid over the bituminous coating material continuously.
- 4.2 Use **Flexseal GA700** as an adhesive between the bituminous membrane and the protection board to ensure the boards are fixed in place.
- 4.3 Apply **Flexseal GA700** on the surface of **Plasti-board** and place the board over the dry coat of **Bituproof 50**.
- 4.4 Consumption of **Flexeal GA700** will depend on the thickness (weight) of the used protection board, and the wind conditions.
- 4.5 Generally, spot application on the corners and middle of the board are enough to hold it in place.
- 4.6 A 3-5 cm is the recommended overlap.
- 4.7 Backfilling over the protection board should be done within 2 weeks from the adhering process of **Plasti-board**.

Note: Alternatively, bituminous sealant can be used as an adhesive for Plasti-board.

5.0 Cleaning

- 5.1 All tools used for **Bituproof 50** application must be cleaned immediately with clean water when still
- 5.2 Hardened materials must be cleaned using **DCP Solvent** mechanically.





6.0 Limitations

- 6.1 Special care should be taken to provide an unbroken coating at external corners and similar exposed protrusions.
- 6.2 **Bituproof 50** doesn't require any special curing but must be protected from rain, and water until coating has cured.
- 6.3 Application should not be carried out when there is standing or running water.
- 6.4 **Bituproof 50** should be protected or covered within 7 days of application.
- 6.5 **Bituproof 50** should not be exposed to long-term UV.

Notes:

- If it is exposed for <u>more than one week and up to three months</u>, an additional layer of **Bituproof 50** shall be applied over the exposed coat if visual damage or cracking is noted in the coat, without the need to remove the exposed coat.
- If **Bituproof 50** has been exposed for <u>more than three months</u>, and visual damage or cracking is noted in the coat then the exposed coat must be removed by grinding or sand blasting and the substrate should be recoated by applying two layers of **Bituproof 50**.

Section C : Cautions

Health and safety

Bituproof 50 should not come in contact with skin or eyes. Goggles and gloves should be used. In case of accidental contact with skin, immediately flush with plenty of water.

Fire:

Bituproof 50 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 **Bituproof 50**. 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.