Method Statement

Ref. #: DCP00/08-0103-A-2022

Bituproof FLX

(Water-based elastomeric rubberized bitumen waterproof 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 FLX** 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 FLX.**

High-Temperature Working:

Bituproof FLX 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 FLX**

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.5: Broom

Fig.6 Squeegee

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 FLX**.

1.2 All surfaces to be waterproofed 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 Priming

2.1 **Bituproof FLX** can be normally applied over well-prepared substrates directly without a primer.

2.2 If a primer is required, or in case of dusty or highly porous surfaces; dilute **Bituproof FLX** with an equal quantity of clean water (1:1), and apply this diluted mix as the primer coat by brush and allow 4 - 6 hours until touch dry.

2.3 The primer coat can be applied to freshly cast concrete immediately after shuttering has been struck and over damp surfaces; provided that no free water is present.

3.0 Application

3.1 Stir **Bituproof FLX** well before use.

3.2 **Bituproof FLX** may be applied by brush, roller, broom or squeegee.

3.3 **Bituproof FLX** can be spray applied using an airless spray machine.

3.4 **Bituproof FLX** can be diluted with clean water at a ratio of up to 10% depending on the required thickness and application conditions.

3.5 For efficient waterproofing, it is recommended to apply two coats of **Bituproof FLX** to avoid possible pinholes in the membrane.

3.6 **Bituproof FLX** can be applied as a curing compound when applied in two coats at a rate of 4 m²/litre per coat.

3.7 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 m²/litre per coat.
- **Waterproof coating:** 1 - 1.5 m²/litre per coat.
- **Curing compound:** 4 m²/litre per coat.

3.8 The first coat should be applied to obtain a continuous uniform coating.

3.9 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 g/m^2 or more).

3.10 Press the fibreglass mesh firmly into place without wrinkles and allow to dry.

3.11 Allow a minimum of 4 hours between coats so that each coat is allowed to dry before applying the next coat.

3.12 Ensure the membrane is not punctured or damaged during subsequent operations.

3.13 Apply the second coat at a right angle and at the same rate mentioned above and allow it to dry.

3.14 Surfaces coated with **Bituproof FLX** should not be exposed to rainwater or ponding water for a minimum of 72 hours after application.

3.15 Each independent area of application should have sufficient materials, equipment, and labour.

3.16 If a plaster or cement render is to be applied on the bitumen-coated surface, a third coat is recommended to be applied, followed by clean dry sand broadcasted onto the coating whilst it is still wet.

4.0 Curing

4.1 **Bituproof FLX** must be cured overnight before any subsequent works.

4.2 Allow a minimum of 48 – 72 hours drying period before plastering, rendering, or laying floor screeds.

5.0 Application of Plasti-board

5.1 **Plasti-board** should be laid over the waterproofing material continuously.

5.2 Use **Flexseal GA700** as an adhesive between the waterproof membrane and the protection board to ensure the boards are fixed in place.

5.3 Apply **Flexseal GA700** on the surface of **Plasti-board** and place the board over the dry coat of **Bituproof FLX.**

5.4 Consumption of **Flexeal GA700** will depend on the thickness (weight) of the used protection board, and the wind conditions.

5.5 Generally, spot application on the corners and middle of the board are enough to hold it in place.

5.6 A 3 – 5 cm is the recommended overlap.

5.7 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**.*

6.0 Cleaning

6.1 All tools used for **Bituproof FLX** application must be cleaned immediately with clean water when still wet.

6.2 Hardened materials must be cleaned using **DCP Solvent** mechanically.

7.0 Limitations

7.1 Special care should be taken to provide an unbroken coating at external corners and similar exposed protrusions.

7.2 **Bituproof FLX** doesn't require any special curing but must be protected from rain, and water until coating has cured.

7.3 Application should not be carried out when there is standing or running water.

7.4 **Bituproof FLX** should be protected or covered within 7 days of application.

7.5 **Bituproof FLX** should not be exposed to long-term UV.

Notes:

- *If it is exposed for more than one week and up to three months, an additional layer of **Bituproof FLX** 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 FLX** has been exposed for more than three months, 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 FLX.***

Section C : Cautions

Health and safety

Bituproof FLX 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 FLX 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 FLX**. 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.