

# Fosroc Polyurea Method Statement

## Section A : Health, Safety and Environment

### A1. Personal safety requirements:

- 1.1 Observe the site owner's Health, Safety and Environment policy at all times and obey all written and verbal instructions from site managers and representatives.
- 1.2 Wear Personal Protective Equipment at all times including hard hat, safety glasses, boots, gloves, air hood and masks as required.
- 1.3 When using high-pressure plural component spray equipment, all personnel working in the application area must wear double-filter breathers with Occupational Safety and Health Administration (OSHA) ratings.
- 1.4 When applying coatings in enclosed areas, all personnel working within the enclosed area must wear full-face masks with OSHA-rated supplied air respirators.

### A2. Cleaning:

Clean spills and oversprays as they occur, and equipment as necessary, using Fosroc proprietary solvents and equipment cleaners.  
Clean site to the site owner's satisfaction prior to final acceptance.

## Section B : General

### B1. Quality Control Procedures:

#### - including mandatory maintaining of a Daily Project Log

A sample panel must be prepared for guidance and as reference panel for the project. The sample panel must be step down to show each coat /procedure. All work standards will be measured against this approved sample.

Product batch numbers must be recorded on delivery along with the compilation of certificates of conformity.

A Daily Project Log must be maintained throughout the course of the project. See Sections B2 to B5 below for Project Log requirements, and see the end of the document – Daily Project Log Template which should be used.

### B2. Environmental Conditions:

– mandatory that all conditions below must be met, for application work to be carried out. A Daily Project Log, with several readings per day, must be maintained, of air and surface temperatures, humidity and dew point. See end of document for Daily Project Log Template.

#### i) Air temperature:

Polyurea WPE/ FLM -30°C to +70°C

Polyurea WH 200 +5°C to +60°C

#### Surface Temperature:

Polyurea WPE/ FLM -30°C to +80°C

Polyurea WH 200 +5°C to +70°C

Important Note: for applications where the surface temperature is below +5°C, e.g. in cold storage rooms in service or in cold external conditions; Fosroc must be consulted for project-specific advice.

#### ii) Weather Conditions; The relative humidity must be ≤ 90% (Note: ≤ 85% for Polyurea WH 200) and

Surface temperature must be at least 3°C above the dew point.

Recommended equipment for the monitoring of Dew Point is the Positector ® DPM.



**B3. Concrete Substrate Condition:**

– mandatory that all conditions below must be met, for application work to be carried out. A Daily Project Log must be maintained, detailing substrate condition, preparation methodology and repair work, primer used and coverage rate. See end of document for Daily Project Log Template.

- iii) The concrete must have achieved 75% of its design strength. If the condition iv) below is met, normally this would indicate that 75% of design strength has been achieved. If in doubt, contact Fosroc for further advice.
- iv) Concrete relative humidity (as measured by the “Vaisala test”) must be  $\leq 75\%$  \*.  
Alternatively, concrete moisture meter must show  $<5\%$  moisture \*.  
Calcium Chloride test for moisture transmission must show  $\leq 14.6\text{g/ m}^2 /24\text{hours}$  ( $\leq 3\text{ lb/ 24hr/1,000 ft}^2$ ).

\* Note: If the concrete relative humidity is  $>75\%$  and/or contains  $>5\%$  moisture, Fosroc Primer 195 must be used. Contact Fosroc for further advice.  
In this case the concrete surface must not be completely coated; a suitable surface area must be left exposed for the entrapped moisture to escape.

**B4. Steel Substrate Condition:**

The surface must be field tested for soluble salts. See Section C2.3 for details of the test and treatment methodology.

**B4. Equipment:**

The following list of equipment must be adopted as a *minimum* requirement.

- Protective clothing : Protective overalls
- : Good quality gloves, goggles and face mask, supplied air hood
- Preparation : Proprietary blasting equipment.
- Mixing : Pneumatic pump and mixers.
- Priming : Spreader

Polyurea WPE/FLM/WH 200: **Recommended:**

**Wiwa DuoMix PU460 with Probler P2 Gun**

**Note: Probler P2 Gun is highly recommended and can be retrofitted onto older spray machines**

Other:

- Graco: EXP-2/ EXP-3 (Electric)
- HXP series (Hydraulic)
- Fusion AP (Air Purge Gun)
- Fusion MP (Mechanical Purge Gun)

**Note Graco E-10 is NOT a suitable polyurea equipment**

- Gusmer: FF 2500 (Hydraulic)
- FF 3500 (Hydraulic)



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	H-20/35 (Pro Hydraulic)
	GX-7 DI (Mechanical Purge Gun)
	GAP Pro (Air Purge Gun)
GlasCraft:	GlasCraft MH, MMH, MHIII (Hydraulic)
	Probler (Air Purge Gun)
	Probler P3 (very low output/thin film applications)

The Applicator must maintain testing, spray and other installation equipment in proper operating condition throughout testing, preparation and installation. Provide minimum one reserve spray equipment as required.

Equipment and hoses must be flushed with appropriate non-solvent, inert chemical, when not in use for prolonged periods – contact local Fosroc office for advice if required.

#### **B5. Application Details:**

- **The project log must include details of pump and gun models used, static and dynamic working pressures and temperatures, amount of product used, surface area covered and dry film thickness readings (several per application day, using ultrasonic gauge). See end of document for Daily Project Log Template.**

#### **Temperature of components in line hoses;**

Polyurea WPE/ FLM	: +70 °C to +80°C
Polyurea WH 200	: +65 °C to +75°C
<b>Process Pressure</b>	: 1,750 - 2,200 psi (120 - 150bar)
<b>Tack-free Time</b>	: ≤ 15 seconds
<b>Cure Time, walkable</b>	
Polyurea WPE/ FLM	: 2 minutes
Polyurea WH 200	: 10 minutes
<b>Light Foot Traffic</b>	
Polyurea WPE/ FLM	: 15 - 20 minutes
Polyurea WH 200	: 24 hours

Note: at the lower end of the application temperature range, and especially at the bottom end of the range (-30°C for Polyurea WPE/ FLM, +5°C for Polyurea WH 200), longer cure and trafficable times must be expected; consult Fosroc for advice.

#### **B6. Applicator:**

The client/ main contractor must be satisfied that the applicator has suitable equipment and expertise, and will follow the procedures detailed in this Method Statement and the relevant product data sheets.

#### **B7. Source of Products: - A log of product batch numbers must be maintained**

Only Fosroc products are to be used in the application, with such products being sourced from Fosroc directly or from a Fosroc authorised distributor.



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## **B8. Storage of products:**

### **Fosroc Polyurea A Side (ISO)**

Storage temperature +5 to +30°C.

Keep dry. Keep from freezing. Keep containers tightly closed when not in use. Recommended storage in covered, temperature-controlled environment. Use dry air desiccant for intake vent on drum.

### **Fosroc Polyurea B Side (AMINE)**

Storage temperature +5 to +30°C.

Keep dry. Keep from freezing. Keep containers tightly closed when not in use. Recommended storage in covered, temperature-controlled environment. Use dry air desiccant for intake vent on drum.

If the product is coloured (pre-pigmented), the use of drum rollers is recommended, to allow periodic rotation to prevent pigment settlement.

### **Fosroc Polyurea WCS, Fosroc Nitoprime 31, Fosroc Primer 195, Fosroc Nitoprime 150, Fosroc Nitoproof UVR Topcoat, Fosroc Nitodek UVR Topcoat**

Storage temperature +5 to +30°C.

Keep dry. Keep from freezing. Keep containers tightly closed when not in use. Recommended storage in covered, temperature-controlled environment.



## Section C : Application Methodology

### C1. System:

Filler/ Surface repair	: Fosroc Nitomortar FC/ FCB
Fosroc Nitoprime 31/ Primer 195	: 2.5 - 4.0 m <sup>2</sup> / litre (250-400ml /m <sup>2</sup> ) on concrete/ surface repair
Fosroc Primer 195	: 150ml/ m <sup>2</sup> on steel
Sand (fire-dried) Broadcast	: DRY Quartz sand 0.2 - 0.5 mm particle size
Fosroc Polyurea	: 1.5-3.0 mm thickness, see product Data Sheet
Field/ Day Joints	: Nitoprime 150 (see C10.1)
Movement Joints	: Proofex Total Tape (see C10.2)
Colour stable topcoats	: Fosroc Nitoproof UVR Topcoat (see C13) Fosroc Nitodek UVR Topcoat (see C14)
Low Pressure Spray Repair/ Small Area System	: Fosroc Polyurea WCS (see C15)

### C2. Surface Preparation:

- 2.1 All surfaces must be clean and free from debris, loose or flaking material, standing water, oil, grease and organic growth.
- 2.2 Concrete surfaces must be free from laitance and any traces of shuttering, release oils and curing compounds.
- 2.3 Steel/ marine surfaces must be checked for soluble salts; Test with Chlor\*Test. If the level of soluble salts exceeds recommended limits, jetwash the surface and then retest. If the level of soluble salts still exceeds recommended limits, treat with Chlor\*Rid as a 0.1% solution in warm water.  
Repeat the process until acceptable limits are reached.  
Maximum amounts of soluble salts (micrograms per cm<sup>2</sup>):  
Chlorides 3 immersion, 7 non-immersion  
Nitrates 5 immersion, 10 non-immersion  
Sulfates 10 immersion, 20 non-immersion
- 2.4 Blasting is highly recommended as an effective method of surface preparation and to provide a suitable key for Polyurea coating. Abrasive blast per ICRI Technical Guideline No. 03732 or SSPC SP13. Achieve a concrete surface profile of ICRI CSP-3 to CSP-5. The minimum blast profile must be 75 - 100 microns.
- 2.5 Following the above preparation, care must be taken to ensure that any surface irregularities are filled with Fosroc Nitomortar FC/ Fosroc Nitomortar FCB.
- 2.6 For Bare Steel all welding seams must have a surface finish which ensures that the quality of the paint system will be maintained in all respects. Holes in welding seams, undercuts,



cracks, etc. must be avoided. If holes are found, they must be remedied by welding and/or grinding. All weld spatters must be removed. All sharp edges must be removed or rounded off in such a way that the specified film thickness can be build-up on all surfaces. The radius of the rounding must be minimum 2 mm. The steel must be of first class quality and must not have been allowed to rust more than corresponding to grade B of ISO 8501-1:2007. Any laminations must be removed. Blast cleaning to Sa 2½. (ISO 8501-1:2007). Roughness: using abrasives suitable to achieve a coarse surface of Grade Medium G (50-85µm, Ry5) (ISO 8503-2).

- 2.7 For application onto bituminous torched-on membranes, no surface primer is required.
- 2.8 For application onto asphalt surfaces of <18 months old, flame treatment and primer is required; suitable equipment for flame treatment is the Ripack 2000 heat gun.
- 2.9 For application onto asphalt surfaces of >18 months old, wire brush the surface; no surface primer is required.
- 2.10 For application onto Galvanised metal – new metal requires degreasing with degreasing agent, old metal surface needs a brush-off abrasive blast clean (also known as a sweep blast).
- 2.11 For application onto metal decking, Primer 195 must be used.

### **C3. Filling Of Surface Irregularities with Fosroc Nitomortar FC/ FCB:**

- 3.1 Refer to the relevant Fosroc Nitomortar product data sheet. Before mixing together, the hardener and base components must be stirred thoroughly in order to disperse any settlement.
- 3.2 The entire contents of the hardener and base containers must be mixed together thoroughly, until a uniform consistency, a fully homogeneous trowellable mortar, is achieved.
- 3.3 Due to the easy workability of the product, the mixed product can be taken directly from the mixing vessel or subdivided onto spot boards for individual applicators.
- 3.4 Apply the mixed Fosroc Nitomortar FC/ FCB to the substrate using appropriate application equipment; such as trowel, scraper, filling knife, squeegee.
- 3.5 Once the Fosroc Nitomortar FC/ FCB is cured (approx. 4-6 hrs @ 35°C/ 10-12 hrs @25°C) it shall be slightly abraded and cleaned to a dust-free surface before the application of primer.
- 3.6 All cracks shall be chased to a 5mm x 5mm groove and filled using Fosroc Nitomortar FC/ FCB.



#### **C4. Priming:**

- 4.1 Primer to be used on sound, dry concrete or concrete surface repair (refer to Section B2) and at ambient/substrate temperature of  $\geq 10^{\circ}\text{C}$  is Fosroc Nitoprime 31. If the minimum temperature or concrete substrate condition is not met, then Fosroc Primer 195 must be used. For steel surfaces use Primer 195, for other surfaces consult Fosroc for advice.
- 4.2 Mix the entire contents of the hardener and base containers well, ensure the mixed product is of uniform consistency. DO NOT dilute the primer under any circumstances.
- 4.3 Apply the mixed primer immediately at a consistent coverage rate (in the range 250-400ml per  $\text{m}^2$  dependent on concrete porosity). Note on occasions where the substrate is *extremely* porous,  $>400\text{ml}$  per  $\text{m}^2$  may be required. Recommended coverage rate of Fosroc Primer 195 on steel is  $150\text{ml}$  per  $\text{m}^2$ .
- 4.4 Broadcast DRY sand (fire-dried, 0.2 - 0.5mm diameter) onto the wet primer (see Section C5).
- 4.5 Allow the primer to become touch-dry (ca.2hour@ $35^{\circ}\text{C}$ / 4hrs@ $20^{\circ}\text{C}$ / 6hrs@ $10^{\circ}\text{C}$ / 8hrs@ $5^{\circ}\text{C}$ ) before applying the Fosroc Polyurea, otherwise pinholing may occur due to trapped air in the substrate expanding on application of the hot-spray applied Fosroc Polyurea.
- 4.6 The entire primed surface must be coated within 24 hours. If the primer has been allowed to dry  $>24$  hours then a fresh application of primer ( $100\text{ml}$  per  $\text{m}^2$ ) must be carried out, and allowed to become touch-dry (see above) before applying the Fosroc Polyurea.

#### **C5. Sand Broadcast onto Primer:**

- 5.1 This methodology is designed to maximise intercoat adhesion between primer and polyurea coating, by providing a rough surface profile with high exposed surface area for the polyurea coating to adhere to (mechanical as well as chemical locking). This methodology is (i) highly recommended but optional in the case of application of Fosroc Polyurea WPE/ WH 200/ WCS (except in internal tank coating applications where it is mandatory) and (ii) mandatory for the application of Fosroc Polyurea FLM for trafficked areas.
- 5.2 Broadcast DRY quartz sand (fire-dried, 0.2 - 0.5 mm particle diameter) evenly onto the wet primer at a suggested rate of  $4 \text{ m}^2$  per kg (range 2.5 -  $10 \text{ m}^2$  per kg).
- 5.3 Allow the primer to dry (see 4.5 above). Remove any loose sand by brush, vacuum or positive air pressure.
- 5.4 Use of coloured sand in place of regular sand is recommended on metal surfaces, as the colouration acts as a visual guide as to where priming has taken place.

#### **C6. Application of Fosroc Polyurea WPE/ FLM/ WH 200:**

- 6.1 If appropriate, add pigment paste to Part B AMINE drum in the correct quantity as appropriate. Using a drum mixer, mix at low speed 300-400rpm for 20 minutes or until a homogeneous mixture is formed without any streaks. In the case of pre-pigmented coloured Part B AMINE, similarly mix the product at low speed 300-400rpm for 10 minutes or until a





homogeneous mixture is formed without any streaks. DO NOT mix at higher speed, in order to avoid air entrapment. DO NOT dilute the product under any circumstances.

- 6.2 Fosroc Polyurea is spray-applied using a plural-component proportioner with air purge or mechanical purge spray gun and tip (see section B2). The components in the line hoses must be circulated and heated (see section B5 for process details).
- 6.3 Apply Fosroc Polyurea at a consistent rate using a standard cross-hatch spray pattern, with a minimum of 2 alternate directional passes for complete coverage, at the required application coverage rate.

### **C7. Application Technique Quality test – water sinking test**

The physical properties of applied Polyurea coating is highly dependent on having good equipment and application technique; Polyurea coating, if applied correctly with good spray technique by a trained applicator, should have low entrained air content and an applied specific gravity of just over 1.0. A simple but effective test for coating quality is to carry out the “water sinking test”. A sprayed sample film of debonded polyurea should be placed in water – sink indicates a “pass”, float indicates a “fail”. In the case of a “fail”, equipment must be checked or replaced and spray technique improved by practice and/or training in order to attain a “pass” prior to commencing application work.

The water sinking test must be carried out on free-film sprayed samples at the start of, and subsequently on a regular basis during the course of, a working day, results noted in the Daily Project Log and the samples labelled and retained.

### **C8. Coating Thickness testing**

Coating thickness should be tested and recorded using an Ultrasonic Coating Thickness tester such as the Positector ® 200.

### **C9. Watertightness/ Holiday testing**

- 9.1 Flood testing on a deck can be carried out  $\geq 3$  hours after polyurea application. If application is onto geotextile (see C.12), it is recommended to test 24 hours after polyurea application.
- 9.2 Holiday testing should be carried out using a Buckley PHD 1-20kV type holiday tester. This has a squeegee-type testing head and offers a warning sound if a holiday is found.

### **C10. Treatment of field/day joints and movement joints:**

- 10.1 The method to be utilized when beginning work  $>12$  hours following previous application work (field/day joints), or in the case of dirty or dusty coating surface; Clean and reactivate the polyurea surface with a Nitoprime 150 wipe; apply at a suggested rate of 10g per  $m^2$ , to a minimum overlap of 50mm (preferably 100mm) onto the previous coating. Apply polyurea when the surface is dry, typically after 20-30 minutes at temperatures of (+20°C to +35°C).
- 10.2 Movement joints should be debonded with a continuous strip of Proofex Total Tape prior to polyurea application.

### C11. Anti-slip feature/ third component spray system for special systems:

- 11.1 Anti-slip feature can be achieved by immediately post-spraying a fine mist of Fosroc Polyurea over the coating surface, allowing discrete droplets to fall onto the coating surface to give anti-slip feature; or alternatively, by the introduction of fine, dry sand into the coating as a separate component supplied in-situ by spray gun modified by addition of a OL3K Drymix unit, or by careful use of appropriate sandblasting equipment. Coloured sand is recommended in place of regular sand where a specific visual effect is required, or where resistance to water/ salts ingress is a concern, e.g on some road surfaces, on metal substrates, in marine applications.
- 11.2 Special coating properties may be provided by the introduction of specialized fillers, rubbers and/or and fibres, provided as a separate component supplied in-situ by spray gun modified by addition of a OL3K Drymix unit. Contact Fosroc for further advice on the OL3K unit.



Fig: OL3K Drymix unit; storage (left) and modified spray gun with injector above spray nozzle (right)

### C12. Use of Geotextile as separation layer with Fosroc Polyurea WPE/ WH 200:

Where a geotextile layer is specified e.g for a non-bonded roof membrane or secondary waterproofing application, the geotextile should be pinned down to the substrate and then oversprayed with Fosroc Polyurea.

Non-woven Polypropylene-type geotextiles are recommended, typically grades 140g/m<sup>2</sup> are used for roofs and 340g/m<sup>2</sup> for below-ground construction.

### C13. Application of Fosroc Nitoproof UVR Topcoat

Nitoproof UVR Topcoat is a colour stable and fire rated topcoat suitable for coating polyurea, particularly Fosroc Polyurea WPE/ WH 200. See Fosroc Nitoproof UVR Topcoat data sheet for detailed information.

Pour and drain the full contents of the hardener container into the base container and mix thoroughly with a slow speed electric stirrer fitted with an appropriate paddle, for a minimum of 3 minutes until homogeneous. Apply to the Fosroc Polyurea surface at the required coverage rate using a medium-hard rubber squeegee, then lightly backroll with a roller to remove the squeegee lines, leaving a uniform finish. Allow to dry, approximately 6 hours at 20°C. A sand broadcast can be used for anti-slip effect, see Fosroc Nitoproof UVR Topcoat data sheet for further information.



## C14. Application of Fosroc Nitodek UVR Topcoat

Nitodek UVR Topcoat is a colour stable, flooring grade traffickable topcoat suitable for coating polyurea, particularly Fosroc Polyurea FLM. See Fosroc Nitodek UVR Topcoat data sheet for detailed information.

Pour and drain the full contents of the hardener container into the base container and mix thoroughly with a slow speed electric stirrer fitted with an appropriate paddle, for a minimum of 3 minutes until homogeneous. Apply to the Fosroc Polyurea surface at the required coverage rate using a medium-hard rubber squeegee, then lightly backroll with a roller to remove the squeegee lines, leaving a uniform finish.

Allow to dry, approximately 12 hours at 20°C. A sand broadcast, or preferably the addition of Fosroc Nitodek UVR anti-slip grains into the product mix (contact Fosroc) can be used for anti-slip effect, see Fosroc Nitodek UVR Topcoat data sheet for further information.

For car park decking applications with Fosroc Polyurea FLM, See Fosroc Polyurea FLM data sheet for detailed information.

## C15. Application of Fosroc Polyurea WCS – Low Pressure Spray and Pour Applications

15.1 **Spray applications** – use Fosroc Polyurea WCS pneumatic gun with Fosroc Polyurea WCS spray static mixer.

15.1.1 The pneumatic gun is pre-assembled and maintenance free. Air pressure of 7-8 bar (100-120psi) must be provided at site. Installation instructions:

- (i) Screw the pressure gauge/ air inlet at the underside of the handle of the pneumatic gun until it sits tightly.
- (ii) Close the air flow switch on the air-pressure regulator.
- (iii) The red adjusting wheel adjusts the piston speed. The “1” setting is minimum speed (Min.), and the “8” setting is maximum speed (Max.). The recommended setting is “7” (Engagement).
- (iv) Attach the air outlet pipe from the compressor to the air inlet on the underside of the gun handle, to introduce air pressure to the gun.
- (v) Draw back the pistons by pressing the square red button on the gun handle.

15.1.2 Loading the cartridge and static mixer:

- (i) Shake the cartridge well before use, to redisperse pigment.
- (ii) Hold the cartridge upright and remove the protective cap. Ensure that there is no blockage in the two material openings. If necessary, carefully remove any blockage material.
- (iii) Push the spray static mixer onto the cartridge top and secure it by screwing on tightly. Keep the cartridge upright.
- (iv) Load the cartridge into the gun with the cartridge and gun upright, to avoid spillage or premature mixing of the two components.
- (v) Connect the air pressure feed pipe to the air inlet on the spray nozzle, until it clicks tight. Please listen out for an audible click of the airline, as this ensures a tight fit. Ensure that the spray nozzle is sitting on the mixer tip evenly, as a bad fit might lead to a reduction in spray quality and could cause an unwanted blockage.
- (vi) With the gun and cartridge still upright, open the valve at the air-pressure regulator to open air flow to the spray nozzle.

### 15.1.3 Spray application instructions:

- (i) Prepare a disposable vessel or surface and point the gun toward it. Tilt the gun horizontally and pull the trigger to start spray application. The material will be pushed forward by the pistons and the air pressure at the spray nozzle will provide a spray fan.
- (ii) Spray onto the disposable area for a few seconds to allow the two components to equalise. If necessary the spray fan can be adjusted by turning the fine-tuning regulator on the air pressure valve.
- (iii) When the required spray fan and consistent colour is achieved, direct the gun toward the surface or object that you are wishing to coat and continue spraying. The gun should be kept at an angle as close as possible to perpendicular (90°) to the substrate. The distance between the gun and the substrate should be in the range of 0.8 - 1.0 meter for efficient application. Coating texture is affected by this distance, shorter gives finer texture, longer gives coarser texture (with a potential for overspray). The spray operation should be continued until the cartridge is empty, or the coating work is complete.
- (iv) If application is stopped for more than a few seconds, it is possible that the nozzle will block with hardening material. In such cases switch off air flow to the spray nozzle, then (with the cartridge upright) carefully remove the old static mixer, attach a fresh static mixer, return air flow to the spray nozzle and continue the application.
- (v) Part used cartridges can be stored for reuse later. With the cartridge upright, remove the static mixer from the cartridge and reseal the cartridge by replacing the cap. Ensure that the cap is replaced in the original way, to avoid material crossover and blockage.
- (vi) To remove used or part used cartridge from the gun, draw back the pistons by pressing the square red button on the gun handle.
- (vii) For vertical applications, recommended maximum thickness per coat is 1mm. If a higher thickness is required, apply additional coats at maximum 1mm per coat, and the time gap between each coat should be minimum 1hour to avoid sagging.

### 15.2 **Pour applications** – use Fosroc Polyurea WCS manual gun with Fosroc Polyurea WCS pour static mixer.

- (i) Shake the cartridge well before use, to redisperse pigment.
- (ii) Hold the cartridge upright and remove the protective cap. Ensure that there is no blockage in the two material openings. If necessary, carefully remove any blockage material.
- (iii) Push the pour static mixer onto the cartridge top and secure it by screwing on tightly. Attach optional nozzle attachment if required. Keep the cartridge upright.
- (iv) Load the cartridge into the manual gun with the cartridge upright, to avoid spillage or premature mixing of the two components.
- (v) Tilt the gun horizontally and pull the trigger to start pour application. Discard mixed material onto a disposable area for a few seconds to allow the two components to equalise.
- (vi) When consistent colour is achieved, direct the gun toward the surface or object that you are wishing to bond/coat and continue gunning/spreading as appropriate.
- (vii) Part used cartridges can be stored for reuse later. With the cartridge upright, remove the static mixer from the cartridge and reseal the cartridge by replacing the cap. Ensure that the cap is replaced in the original way, to avoid material crossover and blockage.



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- (viii) To remove used or part used cartridge from the gun, draw back the pistons by pressing the clutch and pulling back on the piston lever.

#### **Section D : Approval and variations**

This method statement is offered by Fosroc as a 'standard proposal' for the application of Fosroc Polyurea. Any variation to the above system must be approved by Fosroc in writing.

Where alternative methods are to be used, these must be submitted to Fosroc for approval, in writing, prior to commencement of any work. Fosroc will not accept responsibility or liability for variations to the above method statement under any other condition.



FOSROC Polyurea - Daily Application Log Template		
Created by:		Date:
Project:	Application location detail:	
Applicator company:		
<b>HSE requirements</b>		✓
Confirm Disposable overalls:		
Confirm Safety shoes:		
Confirm Gloves:		
Confirm Safety glasses/ goggles:		
Confirm Air hood respirator:		
Other:		
<b>Surface Preparation</b>		
Type of substrate (concrete, steel etc)		
Description of substrate condition (how rough, how clean, how dry, any contamination etc):		
Concrete moisture level:		
Confirm calcium chloride test for moisture transmission:		
If concrete relative humidity >75%, give detail of surface area left exposed:		
Detail of method of substrate preparation:		
Detail of check for soluble salt levels (metal surfaces):		
Confirm substrate is now clean, dry, free of debris/contamination, etc:		
Detail of method for filling of surface irregularities:		
Other Detail:		
<b>Priming</b>		
Detail of which Primer used		
Primer Batch Number(s):		
Details of Primer coverage rate:		
Other Detail:		
<b>Polyurea Equipment</b>		
Reactor model:		
Spray gun model:		
Other Detail:		



<b>Polyurea Material and Application</b>						
Detail of which Polyurea Grade used						
Polyurea batch numbers:						
Polyurea storage conditions:						
Confirm initial spray-up sample taken for reference and labelled clearly						
Confirm initial water-sinking test carried out and "pass" sink achieved						
Confirm primer is touch-dry and no older than 24 hours since applied:						
If >24 hours since primer applied, confirm primer has been reapplied:						
<b>Temperature &amp; Humidity, Dew Point Checks, Spray-up samples</b>						
	1	2	3	4	5	6
Time of check:						
Air temperature:						
Substrate temperature:						
Relative humidity:						
Dew Point:						
Confirm that surface temp is >3°C above dew point:						
Process pressure static A:						
Process pressure static B:						
Process pressure dynamic A:						
Process pressure dynamic B:						
Material temperature A:						
Material temperature B:						
Material in-hose temperature:						
Confirm 1:1 ratio maintained:						
Confirm spraying in a cross-hatched pattern method:						
Confirm spray-up sample taken						
Dry film thickness check:						
Confirm water-sinking test carried out and "pass" sink achieved						
Confirm spray-up sample labelled and retained						
Details of polyurea coverage rate:						
Other Detail (any patch repairs, methodology etc):						