

Method Statement

Nitoflor SL3000

Section A : General Comments

High temperature working

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

- (i) Store unmixed materials in a cool (preferably temperature controlled) environment, avoiding exposure to direct sunlight.
- (ii) Keep equipment cool, arranging shade protection if necessary. It is especially important to keep cool those surfaces of the equipment which will come into direct contact with the material itself.
- (iii) Try to avoid application during the hottest times of the day.
- (iv) Make sufficient material, plant and labour available to ensure that application is a continuous process.

Equipment

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

<i>Protective clothing</i>	:	<i>Protective overalls</i>
	:	<i>Good quality gloves, goggles and face mask</i>
<i>Preparation equipment</i>	:	<i>Suitable equipment/materials to ensure proper preparation of the substrate (see section 1.0)</i>
<i>Mixing equipment</i>	:	<i>1 KW slow speed drill, 400 or 500 rpm, plus</i>
	:	<i>Fosroc mixing paddle and mixing vessel, or</i>
	:	<i>Forced-action mixer, fitted with a suitable paddle</i>
<i>Application equipment</i>	:	<i>Spiked roller and shoes</i>
	:	<i>Spreading trowel</i>

Application - points of note

Fosroc operates a policy to encourage the use, where possible, of approved or licensed applicators. This ensures that works are completed satisfactorily so that the long term performance of the materials is assured.

Section B : Application Method

The prevailing relative humidity should not exceed 75% at **any stage** of the application.

1.0 Surface Preparation

- 1.1 New concrete, or cementitious substrates, should be at least 28 days old and have a moisture content not exceeding 5% (Rh <75%).
- 1.2 Existing concrete floors which require refurbishment must be prepared to ensure a strong adhesive bond between the flooring system and the existing floor.
- 1.3 The substrate (new or existing) should be clean, sound and free from contamination such as mortar and paint splashes curing compounds, oil and grease. Excess laitence deposits are best removed by light mechanical scabbling, grinding or grit/captive blasting followed by vacuum cleaning to remove dust debris. All preparation equipment should be of a type approved by Fosroc.
- 1.4 All blowholes and other surface undulations greater than 1 mm in depth should be repaired with a proprietary, repair compound - consult the local Fosroc office for specific recommendations.
- 1.5 Oil and grease contamination must be completely removed by grinding down to sound, clean concrete. Alternatively, captive/grit blasting techniques can be used to provide the required substrate.
- 1.6 Where these methods are considered impracticable, alternative methods may be considered but a clean, sound and dry substrate must still result. In particular it is essential that the substrate does not suffer from conditions of rising damp. Any alternative preparations must be approved by Fosroc prior to commencement of work, as Fosroc will not accept responsibility under any other condition.

2.0 Priming

- 2.1 Immediately prior to priming, the substrate should be thoroughly cleaned to remove any remaining traces of dust or other loose material
- 2.2 Prepared substrates should be primed using Nitoprime 25. Steel surfaces should be degreased, grit blasted to SA2½ standards and primed with Nitoprime 25.
- 2.3 Add the entire contents of the hardener tin to the base tin and mix the two primer components thoroughly for at least 2 minutes - under no circumstances should part mixing be considered.

- 2.4 Once mixed, the primer should be applied immediately to the prepared substrate using stiff brushes and/or rollers. The primer should be well ‘scrubbed’ into the substrate to ensure full coverage, but care should be taken to avoid over application or ‘puddling’.
- 2.5 Allow the primer to dry (see table below) before proceeding to the next stage, do not proceed whilst the primer is ‘tacky’ as this will lead to unsightly marks in the finished surface.
- 2.6 Porous substrates may require a second primer coat - when the first coat is directly absorbed into the substrate - but minimum overcoating times must still be observed (see table below).
- 2.7 The minimum overcoating times will vary slightly according to the porosity of the substrate. However, they should be in accordance with the following :

Primer	Ambient temperature at the time of application		
	20°C	30°C	40°C
Nitoprime 25	8 – 12 hours	6 – 8 hours	4 – 6 hours

3.0 Mixing

- 3.1 Nitoflor SL3000 flooring is supplied in four pre-weighed packs (base, hardener, aggregate and colour pack) which are ready for immediate on-site use. Part mixing of these components is not acceptable and will affect both performance and appearance of the finished floor, and would furthermore automatically invalidate Fosroc’s standard product guarantee.
- 3.2 Mixing should be carried out using either a forced action mixer; or a heavy duty, slow-speed drill with proprietary mixing paddle attachment. All such equipment should be of a type and capacity approved by Fosroc. The components should be mixed in a suitably sized mixing vessel.
- 3.3 Add the entire contents of the colour pack into the base pack and mix for 15-30 seconds, until homogeneous.
- 3.4 Empty the hardener pack into the mix of base and colour pack and mix until an even texture and colour is obtained.
- 3.5 Thereafter, the contents of the graded aggregate pack should be slowly added and mixing carried out for a further 3 minutes until completely homogenous material is obtained.

4.0 Application (laying)

- 4.1 The applicator should ensure that there are sufficient supplies of plant, labour and materials to make the mixing and subsequent application process a continuous one for any given, independent floor area.

- 4.2 Once mixed, the material must be used within its specified pot life of 1 hour @ 25°C or 20 mins @ 35°C.
- 4.3 The material should be poured onto the prepared and primed substrate as soon as mixing is complete. It should be spread to the required thickness using a pin screed, if not a serrated trowel; with care taken not to overwork the resin, spreading evenly and slowly.
- 4.4 Immediately after laying, the material should be rolled, using a spiked nylon roller, to remove slight trowel marks, and to assist air release. The rolling should be carried out using a 'back and forth' technique along the same path. An overlap of 50% with adjacent paths is recommended.
- 4.5 The rolling process should be continued for a minimum of 5 times on the same path, but should be carried out in accordance with the maximum times given below :

	Ambient temperature at the time of application		
	20°C	30°C	40°C
Max elapsed time for light spiked rolling from time of final trowel	30 – 40 mins	20 – 30 mins	10 – 20 mins

- 4.6 For enhanced slip resistance properties, Nitoflor FC140 can be applied to the substrate and broadcasted with anti-slip grain no. 4. The Nitoflor SL3000 should have cured (48 hours @ 25°C or 36 hours @ 35°C) prior to the application of the FC140.

5.0 Floor joints

- 5.1 All existing expansion or movement joints should be followed through the new floor surface.
- 5.2 Joint sealant & joint geometry should be compatible with the floor type used, intended exposure conditions and likely movement characteristics of the substrate - consult the local Fosroc office for more details.

Section C : Approval and Variations

This method statement is offered by Fosroc as a 'standard proposal' for the application of Nitoflor SL3000. 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 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.