

Method Statement

Nitoflor TS5000

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 Fosroc mixing paddle and mixing vessel, or</i>
	:	<i>Forced-action mixer, fitted with a suitable paddle</i>
<i>Application equipment</i>	:	<i>Spreading trowel</i>
	:	<i>Tamping rod, or similar</i>
	:	<i>Steel 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%.
- 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 laitance 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. Fosroc must approve any alternative preparations 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 the appropriate prime - Nitoprime 25 - solvent based epoxy resin primer
- 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 ‘ponding’.
- 2.5 Allow the solvent in the Nitoprime 25 to evaporate thereby leaving the primer tacky. The maximum overlay time is 3 hours @20°C and 1½hours at 30°C.
- 2.6 Porous substrates may require a second primer coat - when the first coat is directly absorbed into the substrate leaving characteristic light coloured dry patches.

	Normal Overcoating Times		
Primer	20°C	30°C	40°C
Nitoprime 25	8 – 12 hours	6 – 8 hours	4 – 6 hours

3.0 Mixing

- 3.1 Nitoflor TS5000 flooring is supplied in three pre-weighed packs (base, hardener, aggregate) 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 The base component should be added to the mixing vessel first, followed by the hardener, and these two components mixed together for approximately 2 minutes until it is homogeneous.
- 3.4 Thereafter, the contents of the graded aggregate pack should be slowly added and mixing carried out for a further 3 minutes until all components are blended thoroughly.

4.0 Covings

Completion of a coving detail is best completed by an experienced, specialized applicator

- 4.1 It is possible to create a coving of up to 150 mm height using Nitoflor TS5000, but this should be completed before laying the main floor area.
- 4.2 Prime as per main floor area, then overcoat as per section 2.6.
- 4.3 Apply the mixed compound to the cove area using a small hand trowel, and finish off using a special ‘cove’ trowel.

5.0 Application (laying)

- 5.1 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.
- 5.2 Once mixed, the material must be used within its pot life of 45minutes @ 20°C or 20 minutes @30°C.
- 5.3 The material should be spread to a uniform thickness across the floor area using a wooden trowel or rake.
- 5.4 The material should then be tamped with a wooden float to ensure full compaction, and finished to a closed texture using a steel trowel. Screeding rods may be useful to maintain the minimum thickness of material.
- 5.5 Sealer Coat - One day old Nitoflor TS5000 may be sealed using Nitoflor FC range of coatings.

6.0 Floor joints

- 6.1 All existing expansion or movement joints should be followed through the new floor surface.
- 6.2 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.

7.0 Cleaning

- 7.1 Clean all tools and equipments with **water** immediately after application.
- 7.2 If the material sets on the tools, mechanical methods should be applied to clean.

Section C : Approval and Variations

This method statement is offered by Fosroc as a 'standard proposal' for the application of Nitoflor TS5000. 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.