

constructive solutions

#### FLOORING PRODUCTS

## NITOFLOR® PU600 & NITOFLOR® PU200

#### **NITOFLOR PU600**

# High performance, self-levelling, cementitious polyurethane industrial floor topping.

Nitoflor PU600 has been designed to produce flooring for applications that require high resistance to mechanical stress and chemical attack, that are subject to extreme temperatures and need to be applied within a limited timeframe. Nitoflor PU600 is top-coated with Nitoflor PU200.

#### **ADVANTAGES**

- Handles extreme temperatures
- · High chemical resistance
- · Hard wearing abrasion resistant
- Low odour and non-tainting during application
- · Fast turnaround times
- · Anti-microbial properties
- Excellent slip resistance properties with aggregates broadcast

#### **TYPICAL APPLICATIONS:**

Wet processing zones in chemical processing plants and food preparation and manufacturing areas.



#### NITOFLOR PU200

### High build, cementitious polyurethane top coating for industrial flooring.

Nitoflor PU200 has been designed to be used as a sealer coating for Nitoflor PU600 polyurethane cement floor topping, without aggregates or with a broadcast textured surface. It can also be used as a stand alone coating for concrete.

#### **ADVANTAGES**

- Excellent chemical resistance
- Hard wearing abrasion resistant
- · Low odour and non-tainting during application
- Low VOC emission
- Complies with the Green Building Council of Australia requirements
- Fast turnaround
- Anti-microbial properties
- Excellent slip resistance properties with aggregates broadcast

#### **TYPICAL APPLICATIONS:**

Chemical storage plants, food processing industries, plant rooms, laboratories, warehouses, and industrial manufacturing zones.



### Nitoflor® PU600

#### **Design Criteria**

Nitoflor PU Cement flooring consists of Nitoflor PU600 (topping), a slip-resistant aggregate (optional) and Nitoflor PU200 (top coating). Nitoflor PU600 is designed to be applied between 3-6mm thickness. The depth of the topping is determined by physical site parameters and the degree of temperature resistance required by the floor (see properties table for temperature resistance).

#### **Properties**

The following results were obtained in controlled laboratory conditions at 20°C and 50% relative humidity.

Bond Strength, EN1542:	Greater than cohesive strength of 25MPa concrete >1.5 MPa
Compressive Strength, AS1478:	> 50 MPa
Flexural Strength, AS1012.11:	23.1 MPa
Shore D hardness, ASTM D2240:	80
Coefficient of thermal expansion, ASTM C351:	3.5 x 10 <sup>-5</sup> / °C
Water Absorption (80°C), ASTM D570:	0.8%
Impact resistance, ASTM D2794:	1.8 kg / 110 cm
VOC, CS 01350:	25 g/l
Chemical Resistance, ASTM C722-18:	Good resistance to wide spectrum of organic and inorganic acids, alkalis, amines, salts and solvents. Check resistance to required chemicals induding dilution percentage and temperature with your local Parchem sales office
Density:	1.735 g/m³

#### Coverage

At 3 to 4mm thick, each 18.45kg pack of Nitoflor PU600 will cover approximately 3.5m2 (5.2kg / m²).

At 5 to 6mm thick, each 18.45kg pack of Nitoflor PU600 will cover approximately  $2.1m^2$  ( $8.7kg / m^2$ ).

Nitoflor Anti-Slip Grains 01 should be applied at 3 to 4kg / m<sup>2</sup>.

Nitoflor PU200 should be applied at 0.5mm thick - each 9.85kg kit covering approximately 13.1m² per single coat (2 coats recommended).

#### **Curing Times**

	@10°C	@20°C	@30°C
Light traffic:	36 hrs	24 hrs	12 hrs
Full traffic:	72 hrs	48 hrs	24 hrs
Full chemical cure:	12 days	7 days	5 days

#### Supply

Nitoflor PU600 - 18.45kg kit (10.54 litres mixed)					
Nitoflor PU600/PU200 Part A Base	FC605200-2.60KG				
Nitoflor PU600/PU200 Part B Hardener	FC605201-2.80KG				
Nitoflor PU600 Part C Fillers	FC605202-12.4KG				
Nitoflor PU600/PU200 Colour Pigment 0.65KG					
Nitoflor PU Colour N43 Pipeline Grey 650g	FC605227-0.65KG				
Nitoflor PU Colour Curtain Call 650g	FC605228-0.65KG				
Nitoflor PU Colour G21 Jade 650g	FC605225-0.65KG				
Nitoflor PU Colour R63 Red Oxide 650g	FC605226-0.65KG				
Nitoflor PU Colour B23 Bright Blue 650g	FC605229-0.65KG				
Nitoflor PU Colour Y54 Oatmeal 650g	FC605230-0.65KG				
Nitoflor PU Colour Y15 Sunflower 650g	FC605231-0.65KG				

#### Temperature Resistance (Applies to both Nitoflor PU600 & Nitoflor PU200)

Location	Dry Process (Smooth Flooring)	Dry Process (Slip Resistance)	Chemical Storage / Loading & Unloading	Wet Process / Cold Rooms	
Flooring Usage Category	General (Smooth topping)	Medium duty		Heavy duly	
Total Application Thickness	3.5mm	4-5mm	5-6mm	8-9mm	
Nitoflor PU600 Thickness	3mm	3-4mm	4-5mm	6mm	
Nitoflor PU200 Application	Single coat	Single coat	Single coat	Two coats	
Service Temperature (related to fully cured flooring)	-15°C to 55°C	-15°C to 65°C	-20°C to 90°C	-25°C to 100°C	
Cleaning Temperature	80°C	80°C	90°C	100°C	
Thermal Shock Range	-15°C to 80°C	-15°C to 80°C	-20°C to 90°C	-25°C to 100°C	

Nitoflor PU200, as a stand alone product, has a thermal shock range of 0°C-60°C

Please refer to the Technical Data Sheet for further information on this product.

### Nitoflor® PU200

#### **Design Criteria**

Nitoflor PU200 is applied as either a top coat to Nitoflor PU600 aggregates or without a broadcast textured surface, or as a stand alone coating to concrete floors. Alternatively, Nitoflor PU200 can be applied as a top coat of a broadcast layer of Nitoflor PU200. As a top coat to Nitoflor PU600, it is applied as a single coat at 0.75 kg/m² (6.6m² / 5kg kit). When producing a floor for a wet process area, a second coat might be required. As a stand alone coating, it is applied as 2 coats to prepared concrete at 0.75 kg/m² / coat (total 6.5m2 / 9.85kg kit).

#### **Properties**

The following results were obtained in controlled laboratory conditions at 20°C and 50% relative humidity.

of organic and inorganic acids,		
Water Absorption (80°C), ASTM D570:  0.8%  VOC, CS 01350:  49 g/l  Chemical Resistance, ASTM C722-18: Good resistance to wide spectrum of organic and inorganic acids, alkalis, amines, salts and solvents Check resistance to required chemicals induding dilution percentage and temperature with your local Parchem sales office.	Bond Strength, EN1542:	2.3 MPa
VOC, CS 01350:  49 g/l  Chemical Resistance, ASTM C722-18: Good resistance to wide spectrum of organic and inorganic acids, alkalis, amines, salts and solvents Check resistance to required chemicals induding dilution percentage and temperature with your local Parchem sales office.	Shore D hardness, ASTM C351:	80
Chemical Resistance, ASTM C722-18:  Good resistance to wide spectrum of organic and inorganic acids, alkalis, amines, salts and solvents Check resistance to required chemicals induding dilution percentage and temperature with your local Parchem sales office.	Water Absorption (80°C), ASTM D570:	0.8%
of organic and inorganic acids, alkalis, amines, salts and solvents Check resistance to required chemicals induding dilution percentage and temperature with your local Parchem sales office.	VOC, CS 01350:	49 g/l
Density: 1.493 g/cm <sup>3</sup>	Chemical Resistance, ASTM C722-18:	alkalis, amines, salts and solvents. Check resistance to required chemicals induding dilution percentage and temperature with
	Density:	1.493 g/cm <sup>3</sup>

#### Coverage

As a coating on concrete:	0.5mm thick; 13.5m² / 9.85kg kit applied as a single coat (2 coats recommended)			
As a single coat over Nitoflor PU600:	0.5mm thick; 13.5m² / 9.85kg kit (one coat)			

#### **Curing Times**

	@10°C	@20°C	@30°C
Light traffic:	36 hrs	24 hrs	12 hrs
Full traffic:	72 hrs	48 hrs	24 hrs
Full chemical cure:	12 days	7 days	5 days

#### Supply

Nitoflor PU200 - 9.85kg kit (6.75 litres mixed)				
Nitoflor PU600/PU200 Part A Base	FC605190-2.60KG			
Nitoflor PU600/PU200 Part B Hardener	FC605191-2.80KG			
Niloflor PU200 Part C Fillers	FC605192-3.8KG			
Nitoflor PU600/PU200 Colour Pigment 0.65KG				
Niloflor PU Colour N43 Pipeline Grey 650g	FC605227-0.65KG			
Niloflor PU Colour Curtain Call 650g	FC605228-0.65KG			
Niloflor PU Colour G21 Jade 650g	FC605225-0.65KG			
Niloflor PU Colour R63 Red Oxide 650g	FC605226-0.65KG			
Niloflor PU Colour B23 Bright Blue 650g	FC605229-0.65KG			
Niloflor PU Colour Y54 Oatmeal 650g	FC605230-0.65KG			
Niloflor PU Colour Y15 Sunflower 650g	FC605231-0.65KG			

#### Slip Rating - AS4586 (Applies to both Nitoflor PU600 & Nitoflor PU200)

Basecoat	Broadcast Aggregate	Topcoat	Dry Floor Friction	Wet Pendulum	Wet Barefoot Ramp	Oil Wet Ramp
Nitoflor PU200	Nil	Nil	D1	P4	-	-
Nitoflor PU200	Nitoflor Anti-Slip Grains 01 Silica Sand #16/30	Niloflor PU200	D1	P5	В	R11
Nitoflor PU600	Nil	Nitoflor PU200	D1	P4	-	-
Nitoflor PU600	Nitoflor Anti-Slip Grains 01 Silica Sand #16/30	Niloflor PU200	D1	P5	С	R11
Nitoflor PU600	Nitoflor Anti-Slip Grains 11 Aluminium Oxide #16	Nitoflor PU200	D1	P5	С	R12
Nitoflor PU600	Nitoflor Anti-Slip Grains 21 Calcined Bauxite #16/30	Niloflor PU200	D1	P5	С	R13

Please refer to the Technical Data Sheet for further information on this product.

### **Product Application with Slip Resistance**

Nitoflor PU200 as a sealer coat, used as a part of the polyurethane cementitious flooring

**Purpose:** To seal the surface and to achieve a balance between slip rating requirements and cleanability. **Broadcast aggregates:** optional – note 95% of applications use a slip resistance additive. Selection of aggregate is based upon the slip resistant requirements.

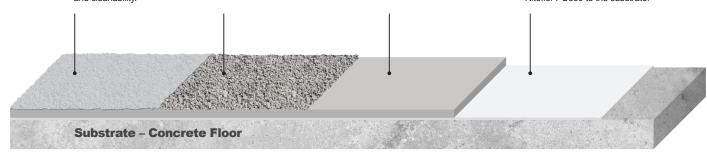
Purpose: To provide slip resistance.

Nitoflor PU600 as a topping. Thickness of the application depends upon the floor performance requirements.

**Purpose:** Protection of the floor against thermal / mechanical / chemical stresses.

Primer: optional -Nitoflor PU600 as a scratch coat (1.0 to 1.5mm) or Nitoflor PU200 as a primer.

Purpose: To bind the dust on the concrete substrate and to facilitate the adhesion of the Nitoflor PU600 to the substrate.



### **Colour Chart**

**Nitoflor PU600 and Nitoflor PU200** are available in seven colours including six Australian Standard colours.



Minimum Order Quantities ( MOQ), Order Quantity Breaks and Lead Times apply.

**OATMEAL Y54** 

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