# **GENERIC APPLICATION SPECIFICATION FOR THE**

# APPLICATION OF ULTRASEAL BRUSH RIGID



# **SUBSTRATE: CONCRETE**

#### 1.0 Weather Conditions:

No coating shall be done when relative humidity exceeds 70%. The surface temperature must be greater than 3° C above dew point. The ambient temperature must be greater than 5° C. Environmental conditions shall be checked every 2 hours or if the weather condition changes.

#### 2.0 Pre-preparations:

- Visual inspection must be done on concrete surface to check for porosity, exposed aggregate, protrusions, cracks, physical damage or contaminants.
- Concrete surfaces must preferably be cured for a minimum of 28 days.

#### 2.1 Pre-cleaning:

- Vacuum cleaning or air blast cleaning may be used to remove all loose dirt, dust and debris in accordance with ASTM D4258.
- If required, detergent water cleaning and steam cleaning may be used to remove oils and grease from the concrete.

## 3.0 Surface Preparation:

The preparation of concrete using certain mechanical methods:

- Hand or power tool cleaning
- Scarifying
- Abrasive cleaning
- Portable centrifugal blast cleaning
- High Pressure water cleaning

All existing coating and laitance must be removed.

# 3.1 Moisture content:

Moisture levels must be preferably less than 7%.

# Methods to use:

- Plastic sheet method (ASTM 4263)
- Moisture meter electrode (ASTM F2170-02)

#### 4.0 Cleanliness of Surface Prior to Application:

- No significant visual dust.
- Newly abraded profile is cleaned to a dust and debris ISO 8502-3 max rating 2.

# 5.0 Application of NuCote MT/GP Primer Wet Concrete Primer.

## Method of application:

- Brush
- Roller
- Squeegee (back rolled with a roller)

Typical dry film thickness:  $150 - 200 \mu m$ 

## Overcoating time:

 Minimum 6 hours / Maximum 24 hours at 25° C (depending on ambient conditions)

# 5.1 Application of UltraSeal Brush Rigid:

## Method of application:

- Brush
- Roller

Mix ratio: 100:32.5 Pbm

Theoretical concentration/m<sup>2</sup>: ± 1.3 Kg at 1 mm (excl wastage)

Typical dry film thickness: 1.5 - 2 mm

#### Overcoating time:

- Min: 8 hours (Must be touch dry)
- Max: 16 hours @ 25° C

Pot life: ± 15 - 20 minutes at 25° C

## 5.1 Application of NuCote UVC:

#### Method of application:

- Brush
- Roller
- Spray

Mix Ratio: 4:1 Pbv

Theoretical coverage/m<sup>2</sup>: 8 - 10 m<sup>2</sup>/Lt

Typical dry film thickness: 80 - 100 µm

#### Overcoating time:

- Min: 6 hours (Must be touch dry)
- Max: 24 hours @ 25° C

Pot life: ± 60 minutes at 25° C

**Addition:** 300 – 500 gr glass beads added to NuCote UVC for non-slip or silica sand in the Polybron coating followed by UVC coasting

# 6.0 Required Surface Preparation if Overcoating Time Has Expired:

- A circular sand motion is recommended with medium pressure to cross cut the Polyurethane coating and break the substrate gloss. Linear high speed sanding may leave the parent coating polished.
- Solvent wipe abraded area using Ultrasolve 900-003 (MEK) making sure the newly abraded profile is cleaned to a dust and debris ISO 8502-3 max rating 2.
- Wait for solvent, MEK to flash off. This will take ± 15 minutes at 25° C at 50% relative humidity.
- Brush apply 20 μm of Bakkie Bond 520-003 and leave until "tacky". This will take ± 2 hours at 50% RH and 25° C.
- Brush apply over Bakkie Bond 520-003 using UltraSeal Brush Rigid.

# GENERIC APPLICATION SPECIFICATION FOR THE

# APPLICATION OF ULTRASEAL BRUSH RIGID (continued)



# 7.0 Inspection and Test Reports:

- Daily reports for humidity, temperature, dew point shall be recorded.
- Dust and debris reports.
- Dry film thickness measurements (SSPC PA9)
  Ultrasonic gauge.
- Moisture content reports.

# 8.0 Technical Data Sheets and Material Safety Data Sheets:

The following Technical Data Sheets and Material Safety Data Sheets are provided with the specification:

- Ultrasolve 900-003 (MEK)
- NuCote MT/GP Primer
- UltraSeal Brush Rigid
- NuCote UVC
- Bakkie Bond 520-003

Manufactured by NUI – Member of the RIGIFoam Group











