

GENERIC APPLICATION SPECIFICATION FOR THE APPLICATION OF ULTRASEAL POLYURETHANE ON CONCRETE WITH TOPCOAT



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-cleaning:

- 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

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 µm

Overcoating time:

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

5.1 UltraSeal Polyurethane on Concrete with Topcoat

Method of application:

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

Typical film thickness (DFT): 1 mm @ 1.2 m²/Lt

Overcoating time:

- Minimum 6 hours, maximum 24 hours (depending on ambient conditions)

5.2 Application of NuCote UVC with Glass Beads – For non slip:

Method of application:

- Brush
- Roller
- Spray

Typical dry film thickness: 80 µm

Overcoating time:

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

Mix ratio: 4:1Pbv

Theoretical coverage/m²: 8 – 10 m²/Lt

Pot life: 60 minutes at 25° C

Additions: 500 gr glass beads added to NuCote UVC for non-slip

6.0 Required Surface Preparation if Overcoating Time Has Expired:

- Dry abrade the surface thoroughly with sandpaper to provide a mechanical key and wash down with MEK or Methylene Chloride immediately before applying a bonding agent. Or
- Wet abrade the surface with MEK or Methylene Chloride and waterpaper immediately before applying a bonding agent.
- Brush apply the bonding agent and leave until tack free.

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.

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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:

- NuCote MT Primer
- UltraSeal Polyurethane
- NuCote UVC

Manufactured by NUI – Member of the RIGIFoam Group

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