NuCote™
FLOORING PERFECTION

TECHNICAL
DATA SHEET

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NuCote™ PU MD
Medium duty PU screed 4 mm

PRODUCT DESCRIPTION

NuCote PU MD Self-Levelling, hard wearing, medium duty, flowable polyurethane floor screed based on a 3-part liquid and powder polyurethane resin system. The product presents good abrasion and impact resistant properties incorporating bacterial resistance

NuCote PU MD renders a smooth surface with good abrasion, chemical resistance and impact resistance. This system is durable for various environments especially with higher traffic.

ADVANTAGES

- Flowable Self smoothing
- Chemical resistant
- Abrasion resistant
- Seamless
- Impact resistance
- Non-slip finish
- Solvent free
- Temperature resistance
- Anti-bacterial properties
- Environmentally friendly
- Highly trafficable

APPLICATION AREAS

- Warehousing
- Lighter duty kitchens
- Packaging and printing
- Bakeries
- Butchery front of house
- Food preparation areas
- Beverage Processing
- Fabrication and engineers' environments
- Chemical resistant areas
- HACCP compliant areas

TECHNICAL DATA

DESCRIPTION	RESULTS
Compressive Strength	55 N/mm^2
Tensile Strength	6.5 N/mm^2
Flexural Strength	40 N/mm^2
Bond strength	>1.5 MPa (concrete failure)
Colours	Please refer to chart
VOC	3 g/Lt
Water Absorption	<0.2 %
Elastic Mod.	1350 N/mm^2
Impact Resistance Drop Test	< 3 mm
Heavy traffic	48 hours
Light traffic	24 hours
Abrasion Resistance Accelerated	< 0.03 mm
Kit yield	19 L
Pot life	< 15 minutes
Est. Coverage @ 4mm	4.75 m² per kit

Note: The values given below are average figures achieved in laboratory tests.

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PACKAGING
NUCOTE PU MD is supplied as a three component 19 Litre kit.

STORAGE AND STABILITY
Store in a cool, dry place on pallets off the ground. Area always to be covered and avoid direct sunlight and high humidity. Shelf life is 6 months from date of manufacture in original packaging.

SURFACE PREPARATION
Remove all laitance, any previous coatings, etc. and ensure sound concrete. Diamond grind/vacu-blast the surface to create a mechanical bond onto the concrete. Remove all dust and loose debris by sweeping and then vacuuming. The surface should have a light sanded profile for the **NuCote PU MD** system.

SUBSTRATE REQUIREMENTS
Concrete substrates to be of a good wood float finish or a steel floated finish with a minimum compressive strength of 25 MPa and 1.5 MPa in tensile adhesion strength. The surface must be laitance free with no dust of loose materials. The moisture content should always be monitored and be less than 5 % with no rising damp. Ensure DPM's are placed under the concrete screeds.
Before carrying out any work, the concrete substrate should be tested to determine the moisture vapour emission rate (MVER) according to test method ASTM F1869 or internal relative humidity (IRH) according to test method ASTM F2170 or use any approved and reliable substrate moisture testing equipment. For concrete slabs with an MVER of less than 5 lbs/1 000 ft2/24 hrs, use **NuCote GP Primer** or **NuCote PU Primer** one coat at 200 µm wet film thickness for resinous floors. If the MVER is over 5 lbs/1 000 ft2/24 hrs use **NuCote MT Primer** one coat at 200 µm followed by another coat of NuCote Moisture Barrier Primer with scatter aggregates (whenever scatter aggregates are specified).

PRIMING
Prime the concrete surface as per our specification with the specified primer. Alternatives are offered depending on the requirements of the substrate and environment as well as site conditions. The **NuCote GP Primer, NuCote MT Primer** or **NuCote PU Primer** is the most common primer, allow to cure overnight or for at least 16 hours prior to overcoating. Maximum overcoating time of 48 hours else preparation needs to be redone to ensure a chemical and mechanical bond. Ensure application conditions are between 15 and 25°C.

MIXING
Ensure that all resins are mixed in the containers prior to decanting by shaking well. Decant **NuCote PU** Part A into a mixing vessel or bucket, add **NuCote PU** Part B and start mixing for 1 minute. Then add the **NuCote PU MD** Part C (aggregate bag) and continue to mix for a further 2 minutes until uniform, lump free and flowable consistency.

PLACING
Pour onto the floor, rake and trowel, then spike roll to remove all the air entrapped. Allow to set and cure accordingly.

MAINTENANCE
Constant and regular cleaning is vital to any resin flooring system. Use of any solvent free detergents is advised to keep the floors in good condition.

CLEANING
Clean hands and skin immediately after use with industrial hand cleaner. Clean tools and equipment immediately after use with **NuCote Cleaner A** or **NuCote MEK.**

LIMITATIONS
- Do not apply **NuCote PU MD** at temperatures below 15°C. Avoid excessive heat (30°C and higher).
- Slab temperature: > 15°C.
- NuCote PU MD will not accommodate movement cracks as it is a rigid system.
- Foot traffic is allowable in approximately 24 hours.
- Application thickness: 4 mm**.**

COLOURS

	Agate Grey	RAL 7038
	Basalt Grey	RAL 7012
	Umbra Grey	RAL 7022
	Beige	RAL 1001
	Emerald Green	RAL 6001
	Honey Yellow	RAL 1005

WATCH POINTS

Humidity, moisture and curing of the primers are essential to these systems. The colours are not UV stable however, functional. They may discolour when exposed to direct sunlight or UV. Storage is also vital to ensure the materials remain in a workable condition.

DISCLAIMER

Colours will always vary according to the printed version on our literature. These products are sold according to our standard terms and conditions of sale which is available on request and may not be overridden by any other legal documentation. Whilst the information contained herein is true, accurate and represents our best knowledge, the user must contact **NuCote** immediately should any complications occur. Site conditions, labour and application issues are out of our control and the contractor holds this liability. Figures for consumption are estimates and theoretical and do not allow for wastage, surface profiles that are not up to standard, porosity, variations in levels etc.

SAFETY AND HANDLING

Please read the Materials safety datasheet as supplied by us for this product to ensure compliance with the OHSA NO. 85 of 1993 act. The finished system is not hazardous to health or environment.

HEALTH AND SAFETY INFORMATION

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. If inhaled move to fresh air. Consult a physician after significant exposure. If swallowed, clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. In case of skin contact, take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician when in contact with existing open wounds.

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent **Material Safety Data Sheet** containing physical, ecological, toxicological, and other safety-related data.

The Material Safety Data applicable to the handling of urethane raw materials should be read, understood, and rigidly adhered to. These are available on request from **NuCote.**

In accordance with ISO 9001:2015 and the Occupational Health and Safety Act (Act 85 of 1993), herewith Product and Safety Data Sheet. We hereby confirm that we have received a Product and Safety Data Sheet for **NuCote PU MD** system and are returning the obsolete copies.	
COMPANY NAME:	
SIGNATURE:	
NAME:	
DATE:	

CAUTION

The information contained in this bulletin is to the best of our knowledge true and accurate but any recommendations or suggestions, which may be made, are without guarantee since the conditions of use are beyond our control. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any material or its use.