

Strongcoat UN201

Epoxy roller coatings and self-levelling floor toppings



DESCRIPTION

Strongcoat UN201 is a two component multi-use epoxy resin. It can be used either as a smooth roller coating, textured roller coating, self-levelling floor topping or as a broadcast system.

APPLICATIONS

- » Floor coatings with different surface finishes.
- » Self-levelling floor toppings with either smooth or broadcast surface finishes.
- » Strongcoat UN201 can be used to over-coat Strongcoat UN101 flooring systems as a decorative and protective final layer of the flooring system.

ADVANTAGES

- » Excellent adhesion.
- » Aesthetic look.
- » Can be used for multiple applications.

SYSTEM COMPONENTS

A) For use as a smooth roller coating

Primecoat: 1 - 2 coats of Strongcoat UN101 (optional)*
Coating: 1 - 2 coats of Strongcoat UN201

B) For use as a textured roller coating

Primecoat: 1 - 2 coats of Strongcoat UN101 (optional)*
Coating: 1 coat of Strongcoat UN201 + Don Extender

C) For use as a coarser roller coating with improved slip resistance

Primecoat: 1 - 2 coats of Strongcoat UN101
Coating: 1 coat of Strongcoat UN201 + Strongcoat UN201 Filler #3 (0.1 - 0.8 mm) + Don Extender

D) For use as a low thickness self-levelling floor topping

Primecoat: 1 - 2 coats of Strongcoat UN101
Floor topping: 1 coat of Strongcoat UN201 + Strongcoat UN201 Filler #5 (top cut 0.1 mm)

TECHNICAL PROPERTIES @ 25°C:

Mixed density: (neat resin)	1.45 ± 0.1 g/cm ³
Solids content:	100%
Compressive strength: BS 6319, Part 2	Resin (filled 1:1) > 48 MPa @ 7 days
Flexural strength: BS 6319, Part 3	Resin (filled 1:1) > 35 MPa @ 7 days
Tensile strength: BS 6319, Part 7	Resin (filled 1:1) > 13 MPa @ 7 days
Abrasion resistance: (1000 g, 1000 cycle) ASTM D4060, weight loss CS17 wheel	Resin (filled 1:0.4) < 145 milligram
Shore D hardness: ASTM D2240	> 80
Foot traffic:	After 24 hr
VOC: ASTM D2369	< 50 g/ltr

E) For use as a medium thickness self-levelling floor topping

Primecoat: 1 - 2 coats of Strongcoat UN101
Floor topping: 1 coat of Strongcoat UN201 + Strongcoat UN201 Filler #4 (0.1 - 0.3 mm)

F) For use as a broadcast system

Primecoat: 1 - 2 coats of Strongcoat UN101
Floor topping: 1 coat of Strongcoat UN201 + Strongcoat UN201 Filler #4 (0.1 - 0.3 mm)
Aggregate dressing: Antislip Aggregate #2 or #3
Sealcoat: 1 coat of Strongcoat UN201

* Priming low to medium absorbent substrates is not necessarily required.



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COVERAGE				
Component	Mixed Resin : Sand : Don Extender mixing ratio	Strongcoat UN201 Filler (Quartz Sand Gradation)	Coverage Rate	Thickness
A) Smooth roller coating	1 : 0 : 0 (no sand or extender needed)	-	0.30 - 0.35 kg/m ² /coat	200 - 240 microns/coat
B) Textured roller coating	1 : 0 : 0.015 (no sand needed)	-	0.50 - 0.80 kg/m ²	350 - 550 microns
C) Coarser roller coating with improved slip resistance	10: 1 : 0.015	Strongcoat Filler #3 (0.1 - 0.8 mm)	0.6 - 0.9 kg/m ²	400 - 600 microns
D) Low thickness self-levelling floor topping	1 : 0.4 : 0 (no extender needed)	Strongcoat Filler #5 (Top cut 0.1 mm)	1.65 kg/m ² /mm	1 mm
E) Medium thickness self-levelling floor topping	1 : 1 : 0 (no extender needed)	Strongcoat Filler #3 (0.1 - 0.8 mm)	1.95 kg/m ² /mm	1.5 - 3 mm
F.1) Broadcast System	1 : 1 : 0 (no extender needed) Broadcast Antislip Aggregate #2 or #3 and seal with Strongcoat UN201 sealcoat	Strongcoat Filler #4 (0.1 - 0.3 mm)	1.95 kg/m ² /mm and 6 kg/m ² for Antislip Aggregate #2 or #3	Depending on Antislip Aggregate used
F.2) Sealcoat	1 : 0 : 0 (no sand or extender needed)		0.5 kg/m ²	340 microns

METHOD OF USE

SUBSTRATE PREPARATION

Concrete substrates should be fully cured and achieve a minimum compressive strength of 25 N/mm² and a minimum pull-off strength of 1.5 N/mm².

The concrete substrate should be below 75% RH and have less than 4% moisture content. Alternatively, Strongcoat DPM should be used after consulting with DCP's Technical Department.

SURFACE PREPARATION

Concrete surfaces must be degreased using degreasing products, torching or any other suitable method which assures the surface is free from any oil traces. Concrete surfaces are to be mechanically prepared to remove laitance and achieve a flat surface, grit blasting or surface profiling equipment are preferred.

Acid etching can be used after consulting with DCP's Technical Department. Surface defects such as voids and blowholes should be repaired before application. Consult DCP's Technical Department for the best repair material.

Surfaces must be free of any dust or loose particles before product application. Use suitable methods like vacuuming or sweeping.

If possible, apply the product on a small test area before actual application to check for any problems with the surface preparation.

PRIMING

If a primer is needed according to the system components section, Strongcoat UN101 primer shall be applied using a brush, roller or squeegee to obtain a continuous primer coat.

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If needed, apply an additional coat of Strongcoat UN101, and allow to dry before the primer is covered with other flooring systems. For further details, please refer to Strongcoat UN101 technical data sheet.

MIXING

Prior to mixing, stir individual components of Strongcoat UN201. Add the Strongcoat UN201 hardener to the base and using a jiffy-type mixer attached to a slow running electric drill, mix for approximately 2 minutes.

Once the Strongcoat UN201 hardener and base have been mixed, transfer the entire contents into a Casco or Creteangle-type mixer, taking care to ensure that the bottom and sides are thoroughly scraped.

Start the mixer and transfer to it the entire contents of the Strongcoat UN201 quartz sand and Don Extender if necessary, taking care to ensure that these are completely dry and lump-free. Continue mixing for approximately 2 minutes.

Note: Never mix Strongcoat UN201 by hand as this could lead to areas of uncured material.

APPLICATION

A, B & C) Coatings

Apply Strongcoat UN201 as coating using a roller or brush to the required thicknesses.

D & E) Self-leveling floor toppings

Pour the mixed material onto the primed surface and spread using a trowel or rake at the required thickness and allow to attain a smooth finish. While still wet, thoroughly spike roll Strongcoat UN201 in two directions to help eliminate the entrapped air.

F) Broadcast system

Pour the mixed material of the medium thickness self-leveling floor topping onto the primed surface and spread using a trowel or rake at the required thickness and allow to attain a smooth finish.

While still wet, thoroughly spike roll Strongcoat UN201 to help eliminate the entrapped air. While still wet, broadcast with Antislip Aggregate #2 or #3 to excess and wait until it gets dry, then remove excess aggregate. Apply Strongcoat UN201 sealcoat with a roller at the required thickness.

CLEANING

Strongcoat UN201 can be removed by DCP solvent prior setting.

CHEMICAL RESISTANCE SPOT TEST @ 1 HOUR (AFTER FULL CURE 7 DAYS) ASTM D1308

Sulphuric Acid 25%	Resistant
Phosphoric Acid 20%	Discoloration
Hydrochloric Acid 10%	Resistant
NaOH 50%	Resistant
Brake Fluid	Resistant
NaCl saturated	Resistant
Citric Acid 25%	Slightly discoloration
Lactic Acid 10%	Discoloration
Xylene	Resistant

PACKAGING

Option 1:

Base: 25 kg.
Hardener: 5 kg.
Base and hardener: 30 kg.

Option 2:

Base: 220 kg drum.
Hardener: 44 kg drum.
Base and hardener: 1 drum (220 kg) base and 1 drum (44 kg) hardener = 264 kg.

Option 3:

Base: 220 kg drum.
Hardener: 132 kg drum.
Base and hardener: 3 drums (220 kg) base and 1 drum (132 kg) hardener = 792 kg.

Contact DCP for the proper Strongcoat UN201 Filler packaging details based on the flooring system required.

STORAGE

Store in a dry area out of direct sunlight at temperatures between 5°C and 35°C.

SHELF LIFE

Strongcoat UN201 has a shelf life of 12 months from date of manufacture if stored in proper conditions and unopened packs.

If these conditions are exceeded, DCP Technical Department should be contacted for advice.



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CAUTIONS

HEALTH AND SAFETY

Strongcoat UN201 should not come in contact with skin and eyes.

In case of accidental splashes to the eyes, rinse thoroughly with clean water and seek medical advice. Suitable protective gloves and goggles should be worn.

Do not use solvent to clean Strongcoat UN201 from skin.

For further information refer to the Material Safety Data Sheet.

FIRE

Strongcoat UN201 is nonflammable. DCP solvent is flammable. Ensure adequate ventilation. Do not use near a naked flame and do not smoke during use.

Flash Point:

DCP Solvent: 37°C.

MORE FROM DON CONSTRUCTION PRODUCTS

A wide range of construction chemical products are manufactured by DCP which include:

- » Concrete admixtures.
- » Surface treatments
- » Grouts and anchors.
- » Concrete repair.
- » Flooring systems.
- » Protective coatings.
- » Sealants.
- » Waterproofing.
- » Adhesives.
- » Tile adhesives and grouts.
- » Building products.
- » Structural strengthening.



Note:

We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.