

# Technical Data Sheet

## Surecote 200 Hi-Build Epoxy Coating System



### DESCRIPTION:

Surecote System 200 is a two pack hi-build epoxy coating system suitable for application to a wide variety of floor substrates; usually concrete but including timber & steel.

### TYPICAL FEATURES | BENEFITS:



- Solvent free, no odour.
- Good filling properties to smooth out pitted floors to give an even appearance.
- The normal system is a 1mm film build in a one or two coat application.
- Can be applied at >2mm for badly pitted floors.
- Very good abrasion and scuff resistance.
- Good flow properties to help even out imperfections.
- Tolerant of application to a slightly damp surface.
- Finish reduces glare and reflection.
- Excellent resistance to a wide variety of chemicals and petroleum products – refer to chemical resistance chart.

#### Note

*Thin film epoxy coatings, e.g. Terratuff, achieve a much lower total film thickness, but still need a two - three coat application.*

*Surecote System 200 combines economy with film thickness to achieve that desired monolithic appearance.*



### COLOURS:



Neutral Grey N23



Koala Grey N45



Light Grey N35



Driftwood X34



Blue Grey N53



Lead Grey N55

Surecote 200 stocked colour is N35 light Grey.

Surecote 200 is available in many colours in the standard:

#### BS5252: Colour Chart

[https://www.allnexconstruction.com/getmedia/c4abad6f-3858-4de0-98ca-568dc2f0583d/BS5252\\_ColourChart.pdf?disposition=attachment](https://www.allnexconstruction.com/getmedia/c4abad6f-3858-4de0-98ca-568dc2f0583d/BS5252_ColourChart.pdf?disposition=attachment)

#### AS2700: Colour Chart

[https://www.allnexconstruction.com/getmedia/cce497cd-9f53-44de-8d9b-c0e1c73f2103/Colour\\_Chart\\_AS2700\\_S\\_2011.pdf?disposition=attachment](https://www.allnexconstruction.com/getmedia/cce497cd-9f53-44de-8d9b-c0e1c73f2103/Colour_Chart_AS2700_S_2011.pdf?disposition=attachment)

RAL: colours & special colours are also available.



**PERFORMANCE DATA:**

Minimum Application Temperature: Air	+10°C
Maximum Application Relative Humidity: Air	85%
In-service temperatures:	-20 to +55°C
Fire properties: Critical radiant flux: TEST METHOD ISO-9239-1	9.1 Kw/m <sup>2</sup>
Slip resistance:	with added non-slip aggregates, (see later)
Chemical Resistance	Resistant to chemical spillage –cured 7 days at 25°C. Refer: Chemical resistance literature.

**RECOMMENDED USES:**

- Ablution areas.
- Bulk retail.
- Construction and Mining Industry.
- Chemical and Oil Industry.
- Food processing facilities.
- Hospitality.
- Healthcare.
- Pharmaceutical and Cosmetics.
- Clean rooms: seamless smooth hygienic floors
- Refineries.
- Residential garages and workshops.
- Retail and display areas: Vehicle showrooms | studios
- Sewerage treatment plants.
- Silos.
- Slip- resistant floor finishes.
- Warehouses.
- Pulp and Paper mills.

**LIMITATIONS:**

- Application below +10°C. This will impede the flow, application and curing.
- Application to green (uncured) concrete. Will tolerate damp concrete.
- Application to unsound substrates.
- Application to incorrectly prepared surfaces.
- Weathering/UV -
  - \* Some chalking will occur in time but will maintain good film integrity.
  - \* Some yellowing will occur.

**HEALTH & SAFETY:** Refer safety data sheets (SDS).

- Avoid skin contact.
- Wear safety equipment.

**SUBSTRATE:**

All substrates shall be stable and solid.

**Concrete: New**

Shall have a surface which has been mechanically trowelled to AS3610:1995 U3/NZ/3114:1987U3 finish.

Concrete shall be cured for a minimum of 28 days prior to the installation of the Surecote 200.

Minimum Compressive Strength at 28 days cure: 25 MPa. (25 N/mm<sup>2</sup>)

The moisture content shall be less than: 75% RH.

Have a suitable vapour resistant membrane beneath the concrete.

**Concrete: Old**

Minimum Compressive Strength: 25 MPa. (25 N/mm<sup>2</sup>)

The moisture content shall be less than: 75% RH.

Have a suitable vapour resistant membrane beneath the concrete.

**\*\*\*\*Note\*\*\*\***

If the substrate is an above grade slab and waterproofing is required to comply with NZBC E3, consult with allnex Construction Products.

**QUALITY ASSURANCE:**

The allnex Licensed Contractor shall ensure all QA checks have been undertaken prior to the installation process and subsequently during the installation process. The completed documentation must be made available to allnex and the client/clients authorised personnel.

The product is to be installed within the required control range to ensure a fully cured hard wearing monolithic floor topping system.

Information to be recorded daily is:

- Concrete sub-base or prefill mix.
- Material batch numbers used.
- Sequence of mixing, ratios and quantities and formula.
- Substrate moisture content & Substrate temperature.
- Ambient temperature | Ambient relative humidity.
- Daily detail of licenced contractors on-site.

**PRODUCT PROPERTIES:**

Pot Life	+14°C ~75%RH +18°C ~75%RH +25°C ~75%RH	80 minutes 70 minutes 55 minutes
Touch Dry	+14°C ~75%RH +25°C ~75%RH	5.2 hours 3 hours
Recoat time ~ Minimum ~ Maximum	+25°C ~75%RH	16 hours 48 hours
Full Cure	+25°C ~75%RH	48 hours
Viscosity cps	3000	
SG kg/litre	1.56	
Solids Content	100%	
Thinning	Maximum 5% Solvent HA	
Clean Up	Solvent HA	
Dangerous Good Class ~ Surecote 200 Resin ~ Surecote 200 Hardener	Hazard Class 3   Packing Group II Hazard Class 8   Packing Group I	
Packaging ~ Surecote 200 Resin ~ Surecote 200 Hardener	<u>16 litre Unit</u> 12 litre (20kg) 4 litre (4kg)	
Shelf life	12 months from date of manufacture. (After this period consult with allnex)	

**SURFACE PREPARATION:****Concrete:**

Prepare concrete by mechanical abrasion method to:- **CSP4-5** (Concrete Surface Profile Scale - International Concrete Repair Institute)

See technical literature:- [http://www.allnexconstruction.com/pdf/Floor\\_Preparation\\_Requirements.pdf](http://www.allnexconstruction.com/pdf/Floor_Preparation_Requirements.pdf)

Remove all concrete curing agents, contaminants and any other material likely to affect the adhesion of the Surecote 200.

Do not apply over existing coating without checking compatibility (compatible with most 2 component coating systems). However over coating is not likely to be successful without strong, coarse sanding or abrasion.

Prefill any large divots with allnex K125 or Epoxy Fairing Cream and diamond grind to remove any highpoints or contaminants.

**COVES:**

Where required:

See technical literature – Details:- [http://www.allnexconstruction.com/pdf/Details\\_resin-floor-topplings.pdf](http://www.allnexconstruction.com/pdf/Details_resin-floor-topplings.pdf)

Install Coves:

- Small Pencil Coves: Supaset | Supascreed | Sureshield
- Other Coves: Supascreed | Sureshield

Install allnex cove upper termination metal strips: **5.2mm or 9.2mm rebated strip**.

Use a rebated wall cut if the coving strip cannot be used.

Install fibreglass CSM cloth in floor/wall internal junctions. (Required on surfaces other than Concrete upstands)

**STZ PREFILL:** (for adding falls, slope modification and floor angles)

Where required:

STZ prefill system types: See STZ technical literature. [http://www.allnexconstruction.com/pdf/stz\\_prefill.pdf](http://www.allnexconstruction.com/pdf/stz_prefill.pdf)

The falls must be specified pre-tender. (Surecote 200 is medium build floor coating and prefill may involve significant extra materials).

The quantities of materials required to raise the floor height at wall perimeters is often underestimated. To do this may involve significant extra costs and should be discussed and agreed. It is a very common for STZ prefill system to be used under Surecote 200 to create falls to drains and other filling applications. Normally for new work falls are laid in the concrete and fall to drains. However in refurbishment the drains and falls are incorrect. Sometimes new drains are installed. The Prefill create falls of at least 1: 50 to ensure no ponding water.

(1:100 will fall but will have standing water in places).

**SURECOTE SYSTEM 200: KIT SIZE AND COVERAGE:****UNFILLED**

Part A	12 litres (20kg)
Part B	4 litres (4kg)
Mix Total - litres	16 litres (24kg)
Mix Coverage:	1mm ~ 1 litre /m <sup>2</sup> = 16m <sup>2</sup> / Kit
	2mm ~ 2 litres/m <sup>2</sup> = 8m <sup>2</sup> / Kit
	3mm ~ 3 litres/m <sup>2</sup> = 5.33m <sup>2</sup> / Kit
	4mm ~ 4 litres/m <sup>2</sup> = 4m <sup>2</sup> / Kit

**SURECOTE SYSTEM 200: KIT SIZE AND COVERAGE:****FILLED**

Part A	12 litres (20kg)
Part B	4 litres ( 4kg)
Part C - Filler	12 litres (19.2kg ) SG: 1.6kg/litre
Mix Total - litres	28 litres (43.2kg)
	3mm ~ 3 litres/m <sup>2</sup> = 9.33m <sup>2</sup> /Kit
	4mm ~ 4 litres/m <sup>2</sup> = 7.00m <sup>2</sup> /Kit

**SURECOTE 200 MIXING:****Mix Ratio: By volume - Unfilled**

Resin - Part A	3 parts
Hardener - Part B	1 part

**Mix Ratio: By weight - Unfilled**

Resin - Part A	5 parts
Hardener - Part B	1 part

**Mix Ratio: By volume – With Filler**

Resin - Part A	3 parts
Hardener - Part B	1 part
Filler - Part C	3 parts = 4.8 kg SG: 1.6kg/litre

**Mix Ratio: By weight – With Filler**

Resin - Part A	5 parts
Hardener - Part B	1 part
Filler - Part C	4.8 parts

**PRIMING:**

\*\* If required on weak or porous concrete\*\*

Use Supascreed Primer (**Solvent Free**) Apply evenly at 5-6m<sup>2</sup>/Lt.

Allow to fully dry before application of the Surecote 200 system.

**Alternative Primer:**

Dilute Surecote 200 with Solvent HA (6 parts to 1 part and use that as a primer).

\*\*\*Note\*\*\*

This alternative primer option will no longer be solvent or odour free

**MIXING METHOD:**

Add complete contents of Surecote System 200 Resin (Part A) and Surecote System 200 Hardener (Part B) to a suitable container. Power mix at low speed (approximately 300rpm) for 2 minutes ensuring both compounds are homogeneously blended and the colour is uniform. Scrape the pail sides with a long broad-knife and then mix again. Mix slowly to avoid air entrapment.

\*\*\*\*Note\*\*\*\*

Ensure no unmixed materials remain on the sides, rims or lips of the containers.

**APPLICATION METHOD:**

Roller | Brush | Trowel | Notched Trowel or notched rubber squeegee.

Pour onto the prepared and primed surface and spread evenly using the appropriate method. Normally apply in one coat only over the primed surface. Take care to ensure the specified thickness of application by calculating material quantities and methods of application. Work with a team of applicators to mix, transport to the workface, apply and finish to keep a wet edge transitioning to a natural floor break. Use a spiked roller as required to assist with levelling and to reduce air bubbles. Isolate access to prevent people and wind-blown dust and dirt affecting the finish.

\*\*\*\*Note Well\*\*\*\*

If the Surecote 200 is required to be applied at less than 1mm, then Solvent HA may be added (5% by volume).

This will allow the coating to be applied in the range 0.5 – 1.0mm.

This addition will also increase the working time (easier to apply). However; the monolithic visual effect will be reduced, shrink-back will occur and the system will clearly no longer be solvent or odour free.

Solvent thinning is a not a usual process.

**SLIP RESISTANT FINISHES:**

Rating	Non-slip Media	Quantity m <sup>2</sup>	Application
R10	Microcells	2.78 grams	Mixed into kit - applied in first coat ~ 500 grams per 16 litre Kit
R10	J61 Sand	2 kg	Broadcast into first wet coat
R11	K20s sand	2 kg	Broadcast into first wet coat
R12	K20s   18/36 aggregate 50/50 blend	2 kg	Broadcast into first wet coat
R13	7/14 aggregate **More aggressive non-slip can be achieved with 16 grit Aluminium Oxide.	2 kg	Broadcast into first wet coat

**OVERGLAZE - CLEAR \*\* OPTIONAL\*\***

Over glaze can be advantageous where chemical staining may occur.

Over glaze with one coat of allnex Revathane non-yellowing polyurethane (Refer: Revathane technical data).

Over glazes are not commonly required.

**\*\*\*\*Caution\*\*\*\***

**When over glazing; severe mechanical abrasion is required to obtain the required inter-coat adhesion parameter.**

**Refer: allnex Construction Products for advice.**

**JOINTS:**

All concrete control and construction joints should be carried through the Surecote 200 using allnex K130 Epoxy or Bostik Seal n Flex sealant.

**MAINTENANCE:****Repairs:**

- Chemically clean.
- Mechanically abrade surface.
- Repair any divots with allnex K125 or Fairing Cream.
- Apply Surecote 200 as per "Installation instructions".

**CLEANING:****Smooth Surface:**

Conventional floor cleaning procedures are normally adequate to maintain clean and hygienic surface.

**Non-slip Surface:**

Mopping may **not** adequately remove dirt and grime from the surface profile of the Surecote 200. We therefore recommend the use of a soft bristled broom in conjunction with the cleaning solution.

**\*\*\*\* Note\*\*\*\***

Ensure all detergent materials, dirt etc. is thoroughly rinsed from the surface following cleaning.

**FIXING OF PLANT AND MACHINERY:**

Mechanical fixings into the floor must be resin fixed. This is to ensure that there is no water migration into the substrate.

Conventional expanding plugs, screws or anchors are not an acceptable fixing method.

**CHEMICAL RESISTANCE:**

Test Media	Concentration	Time Lapse			Test Media	Concentration	Time Lapse		
		1 Hour	3 hours	6 Hours			1 Hour	3 Hours	6 Hours
<b>ACIDS</b>					<b>ALKALIS</b>				
Hydrochloric Acid	10%	N	SM	SM	Potassium Hydroxide	30%	N	N	N
Sulphuric Acid	10%	N	SM	SM	Caustic Soda	50%	N	N	N
Sulphuric Acid	25%	N	SM	SM					
Acetic Acid	10%	SM	MH	MH					
Acetic Acid	50%	MH	MH	MH	<b>SOLVENTS</b>				
Nitric Acid	10%	SM	MH	MH	Toluene		N		
Citric Acid	10%	N	N	N	Acetone		N		
Lactic Acid	90%	MH	MH	MH	Isopropanol		SM		
Phosphoric Acid	30%	SM	MH	MH	Methanol		SM		
<b>PETROCHEMICALS</b>					<b>DISINFECTANTS &amp; CLEANERS</b>				
Kerosene		N	N	N	Ammonia Solution	25%	N	N	N
Industrial Gear Lubricant (Mobil 632)		N	N	N	Iodine (Betadine Solution)	10%	REC	REC	REC
Petrol 91 Unleaded		N			Bleach	2.15%	N	N	N
Fuel Oil – Diesel Oil		N	N	N	Dishwashing Liquid	100%	N	N	N
Hydraulic Fluid (Hyspin AWS646 - Castrol Oil)		N	N	N	MEKP – M50		N	N	N
<b>OTHERS</b>					<b>SALT SOLUTION</b>				
Food Emulsion (Milk)		N	N	N	Brine	20%	N	N	N

**LEGEND:**

N	No mark   No Effect	SM	Slightly Marked
D	Damaged   Blister	MH	Marked Heavily
REC	Recovered	EF	Evaluate Further

REC- Recovered (there was something there after removing the chemical, but it recovered quickly to undetectable)

Date: May 2021

Replaces: April 2021

**Allnex Construction Products, a Division of Allnex New Zealand Ltd**  
 Auckland - 14 Industry Road, Penrose. phone: 09-583-6544.  
 Hamilton - 18 Somerset Street, Frankton. phone: 07-847-8658.  
 Wellington - Unit 9A, 4 Glover Street, Ngauranga Gorge. phone: 04-240-0305.  
 Christchurch - 112 Carlyle Street, Sydenham. phone: 03-366-6802.  
 Customer Service: 0508-882-288 [cs.constructionnz@allnex.com](mailto:cs.constructionnz@allnex.com)  
[www.allnexconstruction.com](http://www.allnexconstruction.com)

**DISCLAIMER:** This information appearing in this Document (Details) concerning the product which is the subject of the Document (Product) is either based on present technical knowledge and tests done by allnex or tests done by, and data supplied from third parties including you, the customer. Since the actual use by you and by others of the Product is beyond the control of allnex, no warranty or representation, express or implied is made by allnex regarding the suitability for such use, nor does allnex accept any liability arising out of the use by you of other products or materials, whether third party or not, that may be referred to in this Document. allnex recommends that you carry out your own tests as to the suitability of the Product for your purpose, regarding which you accept full responsibility. In addition, if any of the Details appearing in the Document are based upon tests done by, and/or data supplied by any third party, allnex provides no warranties or representations in connection with those Details and you, the customer waives any right you may have against allnex in connection with the accuracy, completeness or otherwise of the Details. The information in this Document is not to be construed as absolutely complete or accurate since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations affecting use of the Product. allnex does not provide any warranty or representation to you that the Product does not infringe the intellectual property rights of any third party. All orders accepted shall be subject to the standard conditions of sale of allnex which are on the back of our invoice. In accepting the Product, you, the customer acknowledge and agree: **a.)** The Product is or may be of a hazardous nature and that you, the customer, are responsible for the disposal of the container housing the Product in accordance with the requirements and regulations of the relevant supervising government. **b.)** The Product has a limited shelf life and must be stored strictly in accordance with the guidelines and specifications related to it. **c.)** Where the Details relate to Product tested by allnex, those Details are indicative only, regarding which there may be batch to batch variation. **d.)** allnex gives no warranty or representation as to the applicability for the particular use by you, the customer, of the Product and you the customer shall be responsible for ensuring that the Product is fit for your intended use. **e.)** allnex's liability for breach of any term, condition, guarantee or warranty (express or implied and concerning the information in this Document or the Product more generally) including any liability for direct or indirect consequential loss (including indirect loss of profits), is limited to the maximum extent permitted by law and, at allnex's election, to either replacing or repairing the goods or paying the cost of replacing or repairing the goods, or in the case of services, supplying the services again.