

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 and wall 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 smooth floor system option is a 1mm film build in a one or two coat application.
- May also be installed with specific non-slip profiles tailored to suit the environment.
- 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.



Non-Slip Profile - Option



SURECOTE 200 SURFACE FINISH DESIGN OPTIONS:

Surecote 200 can be applied as a [smooth surface](#) or [profiled non-slip](#) application.

The degree of the surface profile is determined by the non-slip requirement for the environment.

Refer: [Surecote 200 Specification](#).

For specific advice. Refer: [allnex Construction Products](#).

COLOURS:

Surecote 200 stocked colour is N35 light Grey.

Surecote 200 is available in many colours in the following charts:

BS5252: Colour Chart | **AS2700: Colour Chart** | **RAL:** colours & special colours are also available.

PERFORMANCE DATA:

Properties	Values	
Minimum Thickness:	1mm	
Minimum Application Temperature: Air	+10°C	
Maximum Application Relative Humidity: Air	85%	
In-service temperatures - wet : on fully cured system	-20 to +55°C	
Critical Radiant Flux:	9.1Kw/m ² .	
Chemical Resistance	Resistant to chemical spillage –cured 7 days at +25°C. Refer: Chemical resistance chart	
Adhesion to correctly prepared substrate	1.5MPa minimum – Concrete Failure GB2567-2008. 2.77(KJ/m ²). - Concrete failure	
Impact Resistance: AS 1580.406.1	Impact Energy (J) 6.9	
Heat resistant	+55°C	
Slip resistance	R11 to R13. Refer: Slip resistance chart	
Solids Content	100%	
SG kg/litre	1.56	
Weight per m ²	1mm thickness.	1.56kg
Touch Dry	+14°C ~ 75%RH +25°C ~ 75%RH	5.2 hours 3 hours
Recoat Time	~ Minimum ~ Maximum	+25°C ~ 70%RH 16 hours 48 hours
Full Use	+25°C ~ 70%RH	> 48hours

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
- If the substrate is an above grade slab and additional waterproofing is required, then tank the floor and coved upstands with a layer of 450gsm CSM fibreglass. This will provide a seamless waterproofing layer.
- 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.

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CHEMICAL RESISTANCE:

The following chart shows a representation of the chemical resistance of some of the colours available. Resistant to chemical spillage –cured 7 days at 25°C.

- Note
- Variables which may under extreme conditions, influence the chemical or corrosion resistance are:
- Temperature of chemical concentration.
 - Intermittent or continuous contact.
 - Application in adverse conditions.
 - Risks of evaporation from spillage causing concentration to rise adversely.

Test Procedure	Observation	Results
Spot Testing.	Checked for chemical attack and hardness throughout the testing period.	Taken at the times specified.

Test Media	Concentration	Time Lapse			Test Media	Concentration	Time Lapse		
		1 Hour	3 hours	6 Hours			1 Hour	3 Hours	6 Hours
ACIDS					ALKALIS				
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	SOLVENTS				
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		
PETROCHEMICALS					DISINFECTANTS & CLEANERS				
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
OTHERS					SALT SOLUTION				
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)

NON-SLIP:- floor definitions:

The contractor shall ensure that the surface finish in all zones is agreed with the client.

(Samples to be supplied and agreed prior to start of the contract)

Surecote Type	Description	Description	CF Rating	SRV Rating	R Rating	Examples
	Installation Type	Finish Type	NZ/AS 3661.1 1993	AS/NZS 4586		Completely homogeneous floor areas
Type A	Smooth: Roller applied - Solvent HA Addition	Smooth	0.46	41	R11	Dry areas Garages Clean rooms
Type B	Trowel applied – No Solvent					
Non-Slip Class 1	Fine/Medium duty non-slip: Roller applied with the addition of:- ~ Microcells ~ Revtrred	Fine non-slip	0.54	50	R11	Light wet areas Garages Workshops Clean rooms
		Fine-Medium non-slip	0.56	51	R12	
Non-Slip Class 2	Heavy duty Aggregate: non-slip: Trowel Applied with the addition of:- ~ Q900 ~ Walton Park 18/36 ~ Silver Grey Grit ~ Aluminium Oxide 16 grit ~ Walton Park 7/14 ~ Aluminium Oxide 12 grit	Fine – medium garnet	0.73	64	R13	Medium duty Butchery Abattoirs Fish Processing Veg Processing
		Medium-round silica	0.73	64		
		Medium- angular garnet	0.73	64		
		Coarse- sharp/angular	0.75	65		
		Coarse- round silica	0.75	65		
		Very coarse -sharp/angular	0.75	65		
Non-slip Coloured Quartz Finish	Decorative Aggregate: non-slip Trowel Applied with the addition of:- ~ Quartzzite Coloured Aggregate	Medium coloured Quartz	0.63	57	R12	Decorative Floors Sports facilities Changing Rooms Pool Concourses Education
Flake Finish	Decorative Flake Finish: non-slip Trowel Applied with the addition of:- ~ Microcells ~ Revtrred	Fine non-slip	0.54	50	R11	Decorative Floors Sports facilities Changing Rooms Education
		Fine-Medium non-slip	0.56	51	R12	

SUBSTRATE: – Preparation

All substrates shall be stable and solid.

******Note******

The ability of new or existing floors to take the loads as a result of the allnex Surecote 200 must be checked prior to installing. All control joints junction cracks in the substrate etc. are to be properly treated.

CONCRETE:

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

A minimum compressive strength of 25MPa at 28 days cure.

A minimum of 28 days prior to the installation of Surecote 200.

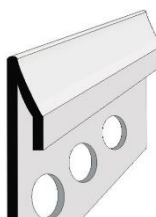
The moisture content shall be less than 75% RH. (Refer allnex Bulletin on application options for wet or uncured concrete).

PLYWOOD | TIMBER | FIBRECEMENT

Refer: Surecote 200 Specification

COVE TOPS:

Install allnex cove upper termination metal strips: **5.2mm or 9.2mm rebated strip.**(Refer: Typical Resin Flooring Details Document)



Cove Strip 5.2mm



Cove Strip Rebated 9.2mm

If the coving strip cannot be used refer to the Resin Flooring Details Document for options.

RESIN FLOORING DETAILS

Refer: [Typical Resin Flooring Details Document](#)

FALLS TO WASTES:

STZ prefill system (for adding falls, slope modification and floor angles).

Types: Refer: [STZ Prefill Technical Literature](#).

The falls must be specified pre-tender. (*Surecote 200 is 1-4 mm thick 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 situations the drains and falls are incorrect. Sometimes new drains are installed.

The Prefill can be installed to any thickness to create falls.

If the project is a food processing facility, ensure that your requirements fall within the guidelines of current legislation.

Floor Fall Definitions	
1:50	Liquids will free run to drainage
1:80	Liquids will migrate to drainage
1:100	Some ponding of liquids will occur, squeegee to drainage will be required.

JOINTS:

All concrete control and construction joints should be carried through the Surecote 200.

Jointing Options	
Control Construction Joints	Cold Joints Non-Movement Joints
allnex K130 or allnex Sabre Seal SMP60	allnex K130 or allnex Sabre Seal SMP60

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 coating system.

Information to be recorded daily is:

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

CLEANING & MAINTENANCE:

Cleaning:

Refer: [Cleaning Maintenance Document](#)

Repairs:

Can be undertaken with further new Surecote 200 applied directly.

Resurfacing:

allnex recommend **two** (2) options:

Smooth System

- Re-surfacing with further coats of Surecote 200.

Profiled | Non-Slip System

- A second option is Surecote Traxite which will reinstate the non-slip properties or add non-slip to a previously smooth surface finish.

FIXING OF PLANT AND MACHINERY:

Mechanical fixings into the substrate 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.

PRODUCER STATEMENT:

allnex Construction Products state that:-

Surecote 200 is compliant with:

- HACCP International Certification.
- E3 Internal water 3.1.1e.
- D1 (Access routes / slip resistance wet & dry).
- Complies with CLEANROOM and controlled environment:-AS/NZS ISO 14644.4: 2002 section E.2.1.4 Floors:-
 - That the floor shall be non-porous, slip resistant, abrasion resistant and resistant to chemicals.
 - That they shall support static and dynamic loads.
 - Complies with fire ratings.

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

- Contractors are to comply with all current legislation when using this product.

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