

Technical Data Sheet

Supascreed Heavy Duty Floor Topping System

allnex

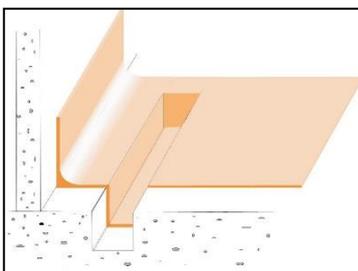
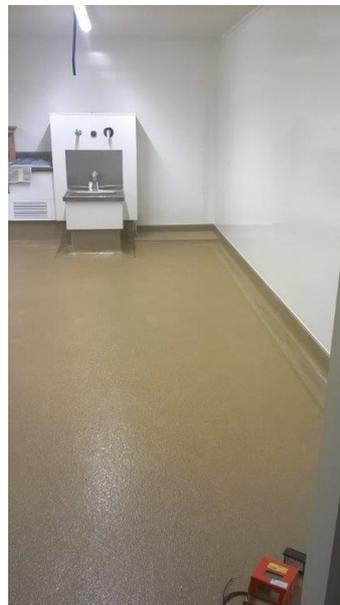
DESCRIPTION:

Supascreed is an industrial grade floor topping system specifically designed for the food industry. Supascreed resin is blended with specially graded silica quartz aggregates to produce a floor system that is hard and durable, Non-slip, resistant to impact, abrasion, thermal shock and chemicals/food acids, yet is non-porous, seamless, hygienic and easily cleaned. Supascreed is fully bonded to the concrete to prevent water creep.

TYPICAL FEATURES | BENEFITS:



- Supascreed is a heavy duty monolithic, hardwearing, low allergenic 6mm minimum thick floor topping, often with coving.
- Low Odour.
- Non-flammable.
- May be used in food safe areas.
- Excellent chemical resistance. *Refer: chemical resistance chart below.*
- Excellent abrasion resistance.
- Excellent impact resistance.
- Excellent adhesion to properly prepared substrates.
- Easily cleaned. See comments at end. Waterblast resistant.
- Excellent slip resistance. Specification is needed of the degree required.
** Note* please read detail within.*
- Able to be formed into coving, plinths sumps etc.
- Will not support bacteria or fungal growth. Contains inhibitors to retard microbial growth.
- Cured Film is non-toxic.
- HACCP approved manufacturing process.
- Not moisture permeable.
- Colour: Natural Gold; **or** other colours dependant on aggregate/colour selection.
- The system may be pigmented for full thru-colour permanence.
- Will form coves to any required height or radius.
- Suitable for use in dry or wet situations including ramps.
- One-pass, installed flooring.
- Integrated floors, coves, drains, nibs and upstands.
- Carefully managed falls to drains to help prevent ponding water.



PERFORMANCE DATA:

Properties	Values
Minimum Thickness	6mm
Minimum Application Temperature: Air	+5°C
Maximum Application Relative Humidity: Air	85%
In-service temperatures - wet : on fully cured system	6mm -30 to +65°C
Chemical Resistance	Resistant to chemical spillage – <i>cured 7 days at +25°C.</i> <i>Refer: Chemical resistance chart</i>
Adhesion to correctly prepared substrate	1.5MPa minimum – Concrete Failure
Co-efficient of expansion 10-/mm/m/°C	-2.23
Compressive Strength	Nom. 93MPa
Flexural strength	25Mpa
Tensile strength	6N/mm ²
Heat resistant	65°C
Moisture absorption: ASTM D570-63	0.04%
VOC Emission:	8.6 g/L
Weight per m ²	6mm - 12.88kgs 8mm - 17.18kgs
Slip resistance	R11 to R13. Refer: Slip resistance chart

RECOMMENDED USES:

- Food process floors where a high degree of hygiene is required. Approved by regulatory authorities.
- Ablution blocks: Kitchens | Laundries | Toilets.
- Beverage Processing: Bottling Plants | Breweries | Fruit Juice | Wine etc.
- Cool Stores: Freezers | Chillers etc.
- Commercial Kitchens: Main Kitchen | Freezers | Chillers | Cool Stores etc.
- Dairy Factory Floors. Main Process Halls | Rooms etc.
- Meat Processing: Abattoirs | Butchery floors | Poultry | Freezers | Chillers | Cool Stores etc.
- Seafood Processing: Wet Fish | Shellfish | Freezers | Chillers | Cool Stores etc.
- Sports facilities: Changing Rooms | Showers | Toilets for hard-wearability.
- Supermarkets: Deli | Fish | Meat | Freezers | Chillers | Cool Stores etc.
- Floors where a high degree of chemical, mechanical and slip resistance is of prime importance.
- Interior/exterior use. Concrete repair and protection – resurfacing damaged or broken concrete with a more physical and chemical resistant surface.
- Can be applied to new or existing sound concrete and also over old resin floors.
- Suitable for use in dry or wet situations including ramps.
- To provide excellent underfoot slip resistance in commercial applications.
- Floors, walls, upstands, plinths etc. where a high degree of chemical, mechanical and slip resistance is of prime importance.
- Concrete repair and protection – resurfacing damaged or broken concrete with a more physical and chemical resistant surface.
- Can be applied to new or existing sound concrete, timber or other surfaces.
- Floors above work spaces: Supascreed forms a watertight barrier and is compliant with E3 Internal water 3.1.1e. Use full fibreglass laminated floor and Joint safe tape in these situations.

LIMITATIONS:

- Application to uncured concrete (minimum recommended cure 28 days). Tolerant of damp surfaces. (*Refer: to allnex Bulletin on application options on wet or uncured concrete*).
- Application to unstable or defective substrates without approved remedial treatment prior to installation.
- Application below +5°C.
- Application to unstable or defective substrates without approved remedial treatment prior to installation.
- Application over existing coatings/toppings (refer to allnex) or over concrete cure or release agents without allnex approval or over ceramic tiles without specific written allnex design specification.
- Areas where hot oil is used or bakeries with floor ovens: - *Refer: allnex Surecote 500AR | Nuthane | Sureshield | Surechem VE*
- Avoid the use of strong chemicals outside those shown on the Supascreed Chemical Resistance Chart (below).
- Cracking in adjacent walls and concrete substrate will likely telegraph through the Supascreed.
- A finished Supascreed floor may show some trowel marks in critical lighting situations as the floor is a hand applied topping system. These marks do not reduce the practical characteristics of the floor topping. The quality of lighting during installation is critical to the final result and it is recommended to install the floor under the finished lighting or provide a high standard of temporary lighting fixed in an overhead position.

COLOUR OPTIONS:

Standard Gold Supascreed – with graded natural coloured quartz aggregate



**Supascreed standard colour:
using clear resin with the natural
coloured quartz aggregate blend**

Pigmented Supascreed

Supascreed may be pigmented to a range of colours.

These colour chips below are example estimate colours only. Refer to:- BS5252 | AS2700 or RAL charts for colour reference. Other colours available on request.

Ask your contractor for a floor sample for both the colour and texture prior to start.

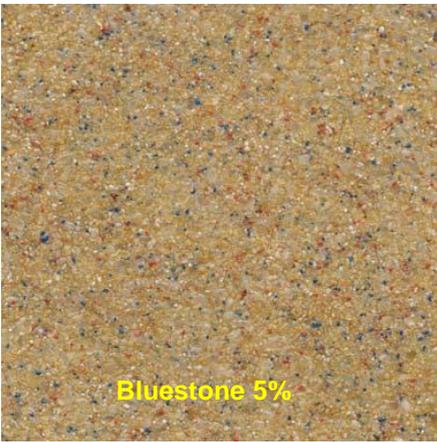


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08B17	08B19	08B21	10B25	18B17	18B19	22B25	02C37	08C33	08C37	08C39
10C37	14C35	16C35	18C37	22C37	02D44	04D45	06D43	12D45	14D43	16D45
18D41	18D44	20D41	20D43	20D44	20D45	22D43	22D45	04E53	04E56	08E51
08E56	14E51	14E56	14E58	16E53	16E56	18E51	20E50	20E51	20E53	22E53

Decorative Supascreed - blended with a range of coloured quartz aggregate



Decorative Supascreed made with increasing levels of coloured quartz aggregates. Please note that the cost of the system increases with aggregate concentration.



Bluestone 5%



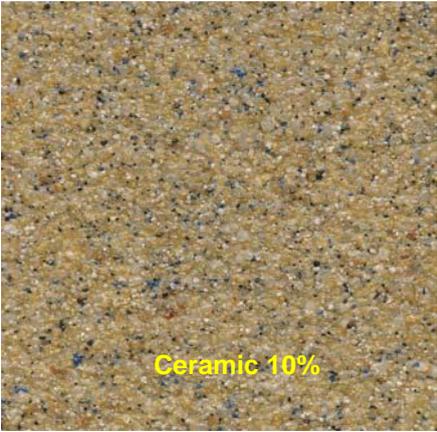
Bluestone 10%



Bluestone 15%



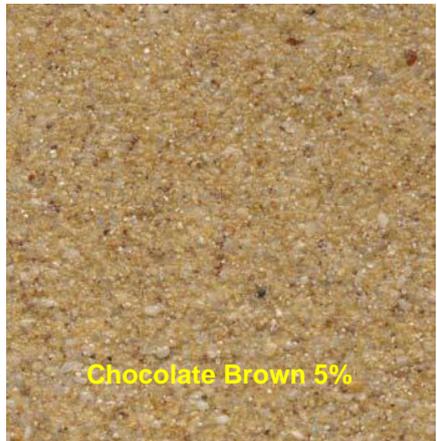
Ceramic 5%



Ceramic 10%



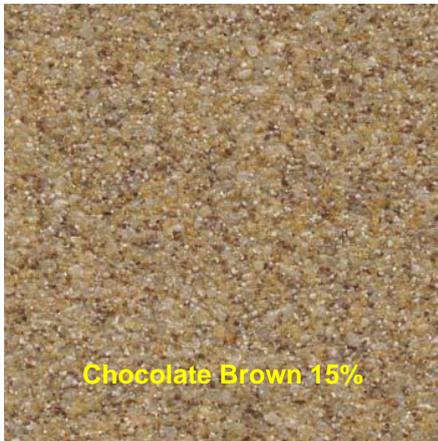
Ceramic 15%



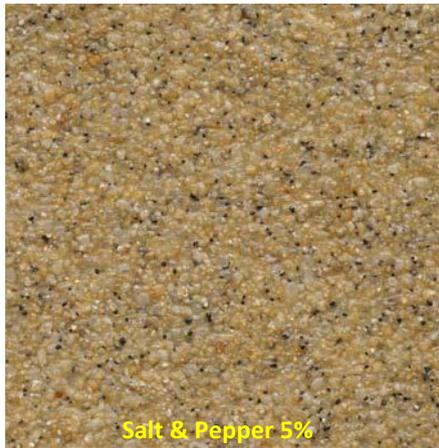
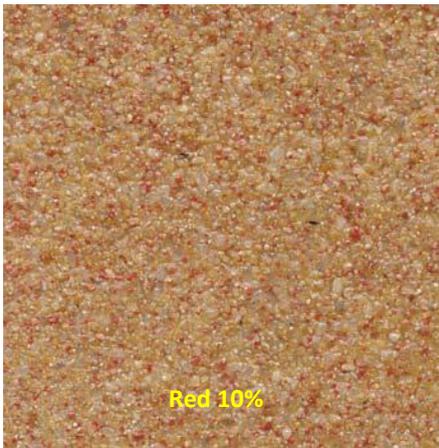
Chocolate Brown 5%

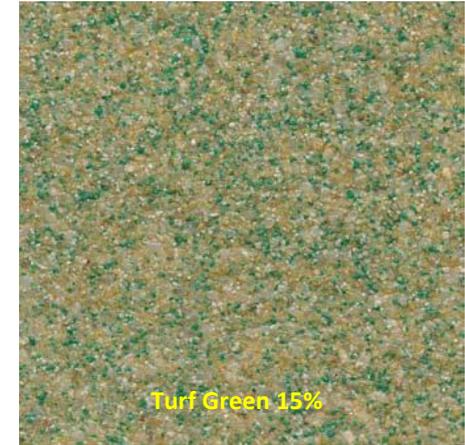
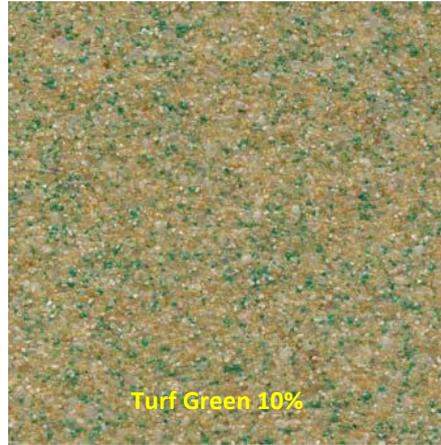
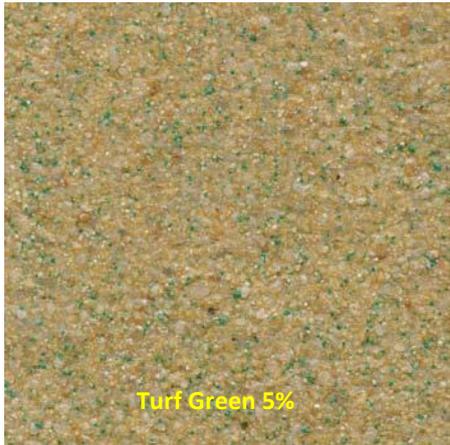
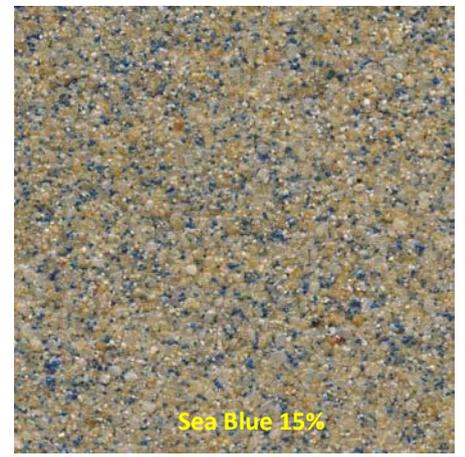
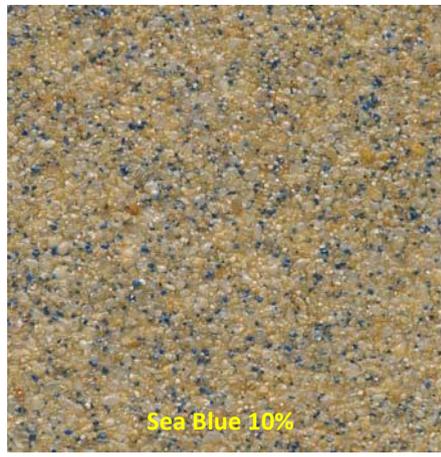
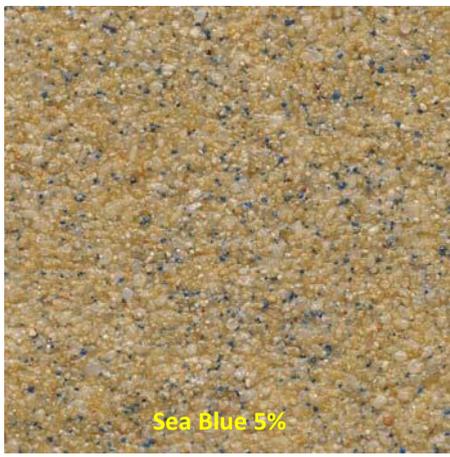


Chocolate Brown 10%



Chocolate Brown 15%





CHEMICAL RESISTANCE CHART

Test Procedure	Observation	Results
Total immersion.	Checked for chemical attack and hardness throughout the testing period.	Taken after 3 weeks exposure.

Test Media	Concentration	Supascreed	Test Media	Concentration	Supascreed
ACIDS			ALKALIS		
Hydrochloric Acid	10%	M	Potassium Hydroxide	30%	U
Sulphuric Acid	10%	M	Caustic Soda	50%	U
Sulphuric Acid	25%	M			
Acetic Acid	10%	U			
Acetic Acid	50%	D	SOLVENTS		
Nitric Acid	10%	M	Ethanol		M
Citric Acid	10%	U	Toluene		M
Lactic Acid	90%	A	Acetone		A
Phosphoric Acid	30%	U	Isopropanol		U
PETROCHEMICALS			DISINFECTANTS CLEANERS		
Kerosene		M	Detergent (DET 18)	100%	U
			Bleach Sod Hyd Cl	2.5%	M
			MEKP – M50		M
OTHERS			SALT SOLUTION		
Sugar Syrup	30%	U	Brine	20%	M
Distilled Water		U			

LEGEND:

U	Unaffected (i.e. after 3-week exposure the samples have not changed)	M	Marked (Short term exposure, the test media will leave a mark on the sample)
A	Attacked (Short- or long-term exposure, the mechanical properties will deteriorate)	D	Destroy (Short- or long-term exposure, damage will occur)

Solutions are Aqueous unless otherwise stated

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)

allnex rating	Description	CF Rating	SRV Rating	R Rating	Examples	Topcoat Requirements	
	Installation Type	NZ/AS3661.1 1993	AS/NZS 4586		Completely homogeneous floor areas	Number of coats	Spread Rate per litre
NR1	Smooth: Steel trowel floated.	0.46	43	R11	Dry areas e.g. Bakeries	1	4.0m ²
NR2	Non-slip & Hard-Wearing: Glass float Finish	0.56	53	R12	Light-Wet areas e.g. Heavy-duty bakery.	1	4.0m ²
NR3.A	Medium duty non-slip: Glass float finish and 18/36 non-slip aggregate is broadcast into the wet surface. Apply a Medium Sprinkle with areas of no non-slip. Follow this with roller applied topcoat. This gives a good combination of Nonslip and cleanability.	0.62	56.5	R12	Continually Wet areas with non-slip required. e.g. Light duty Meat, Fish. Wet area Bakery.	2 1 st Coat 2 nd Coat	4.0m ² 4.0m ²
NR3.B	Heavy duty non-slip: Glass float and the 18/36 non-slip aggregate is broadcast into the wet surface. This is a full spread applied heavily. Follow this with roller applied topcoat.	0.73	64.5	R13	Heavy duty e.g. Butchery, abattoirs Fish Processing	2 1 st Coat 2 nd Coat	2.5m ² 4.0m ²
NR4	Very sharp non-slip: Glass float and is broadcast with 18/36 mixed 50/50 with Silicon carbide non-slip aggregate into the wet surface. Follow this with roller applied topcoat.	0.73	64.5	R13	Heavy duty processing areas with extra slip hazards.	2 1 st Coat 2 nd Coat	2.5m ² 4.0m ²
NR5	Specialised very heavy-duty non-slip: <i>Refer: allnex for a specification.</i>	0.73	64.5	R13			

Note

- The aggregates must be broadcast into the wet Supascreed body coat; not into topcoat.
- The First Topcoat is Supascreed Resin/Hardener : Final Coat is Supascreed Resin/Hardener.
- Ensure the contractor supplies information on the above non-slip ratings and provides a cured sample showing the surface finish.

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 Supascreed 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 14 days prior to the installation of Supascreed. (Refer: Note Below)

The moisture content shall be less than 75% RH.

Note

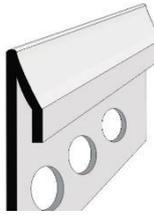
Supascreed can be installed on 14-day old concrete providing conditions outlined in our Technical Bulletin 'Resin Floors on Wet Concrete' are complied with.

PLYWOOD | TIMBER | FIBRECEMENT

Refer: Supascreed 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. (*Supascreed is 6mm 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 500 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 Supascreed.

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 approved applicator 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.
- 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 Supascreed applied directly; following the correct surface preparation requirements.

Resurfacing:

allnex recommend **three** (3) options:

- Re-aggregating with Supascreed.
- Re-aggregating with Surecote 500 AR. *(This will provide a higher degree of chemical resistance if required).*
- A third option is Nuthane Traxite which offers a monolithic and non-slip coloured finish, with no odours.
(Refer: allnex Construction products for advice on the suitability of this option for the chosen environment)

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:-

Supascreed is compliant with the following :

- E3 Internal water 3.1.1.e.
- 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.

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

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

OTHER PRODUCT USE:

SUPASCREED CRS (Concrete Repair System) - Fairing Compound:

SUPASCREED MIXING RATIO: Medium Paste		SUPASCREED MIXING RATIO: Fine Paste	
Supascreed Resin	600 grams	Supascreed Resin	600 grams
Supascreed Hardener	200 grams	Supascreed Hardener	200 grams
Plus Talc 325	1.200 kg	Plus Talc 325	1.600 kg
J61 Silica Sand	1.200 kg		

Date: July 2023

Replaces: Dec 2022

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