

Technical Data Sheet

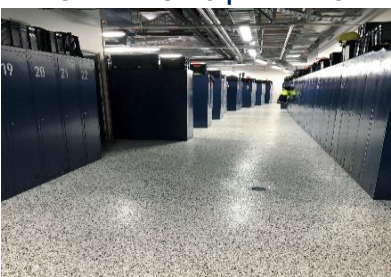


Terraflake Decorative Flake Coating System

DESCRIPTION:

Terraflake is a two-pack water-based epoxy with bonded coloured plastic chips, encapsulated within a clear topcoat. Terraflake is a medium build coating system suitable for application in both interior | exterior situations to residential and light commercial areas. Terraflake gives a smooth glossy finish with excellent wear resistance.

TYPICAL FEATURES | BENEFITS:



- Water-based epoxy resin base-coat gives excellent concrete penetration and adhesion.
- Available in various slip-resistance options.
- Clear topcoat options for different applications *Refer: Topcoat Glaze Coat Options- Below*
- Excellent adhesion to properly prepared substrates.
- Very good abrasion and scuff resistance.
- Excellent slip resistance. Specification is needed of the degree required. *Refer: Terraflake Surface Finish | Non-Slip Options - Below*
- Cured Film is non-toxic.
- Not moisture permeable.
- Attractive Surface Finish – High gloss.
- Follows contours of upstands and coves.
- Will withstand hydrostatic pressure.
- Moderate chemical resistance.
- Colour: See colours listed below.



COLOURS:

The flake is available in one size which contains a graded flake size mix. They are supplied in a range of colours which are blended by your contractor to **your** colour choices. *Also the HYBRID STONE RANGE of colours emulating various natural stone appearances.*



Hybrid Stone "Agate"



Hybrid Stone "Limestone"



Hybrid Stone "Slate"



Basalt



Hardtack



Outback



Keyz



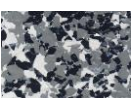
Silhouette



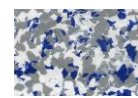
Mamba



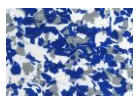
Checker



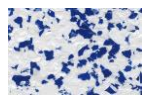
Pitch



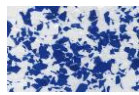
Greymist



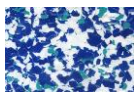
Bass



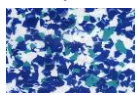
Broadbeach



Tasman



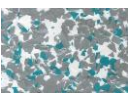
Glacier



Oceania



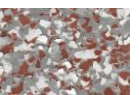
Huka



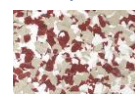
Whio



Gravel



Autumn



Bauxite



Caramel

Review colours: *Refer: Terraflake Colour Chart*

PERFORMANCE DATA:

Properties	Values
Minimum Thickness:	0.9mm
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:	5.1Kw/m ² .
Smoke Value	21%.min
Chemical Resistance:	Refer: Chemical Resistance charts for: Various Glaze Options
Adhesion to correctly prepared substrate:	1.5MPa minimum – Concrete Failure GB2567-2008. 2.77(KJ/m ²). - Concrete failure
Heat resistant:	+55°C
Slip resistance:	R11 to R13. Refer: Slip resistance chart
Aquakem - Touch Dry ~ Ready for Flake Application	+20°C ~ 75%RH 8 hours *May be reduced with high air flow and increased temperature
Glaze coat over Flaked Aquakem:	+20°C ~ 70%RH 18 hours
Recoat Time: ~ Revathane Glaze ~ Aquaglaze UV ~ Rapidcote	+20°C ~75%RH 6 -8 hours 2 hours per coat * Dependent on air flow* 1 hour per coat * Dependent on air flow*
Light Foot Traffic:	+25°C ~ 70%RH 12 Hours
Full Use:	+25°C ~ 70%RH 72 hours

RECOMMENDED USES:

- Ablution areas.
- Retail: shops, offices.
- Construction and Mining Industry.
- Patios, decks, steps, carports etc.
- Chemical and Oil Industry.
- Schools.
- As an applied coating to concrete, plaster, fibre cement sheeting, and plywood substrates.
- Sports rooms: changing rooms, wet areas.
- Residential garages and workshops.
- Dairy sheds, factories and food processing areas.
- Showrooms, foyers, display areas.
- Slip resistant floor finishes.
- Also, as wall finishes to hygiene areas.

LIMITATIONS:

- Application below +10°C.
- Application to incorrectly prepared surface.
- Heavy industrial wear areas. – use Decorative Terrazite.
- Application to green (uncured) concrete. Allow 28 days. **** Will tolerate damp concrete****
- Application to unsound substrates.
- Areas subjected to severe chemical attack – use Sureshield.
- Application over existing coatings – remove.

TERRAFLAKE SYSTEM TYPES

System Step	Revathane Topcoat Option	Rapidcote Topcoat Option	Aquaglaze UV Topcoat Option
Primer	Aquakem	Aquakem	Aquakem
Basecoat	Aquakem	Aquakem	Aquakem
Flakes	Flake Blend	Flake Blend	Flake Blend
Topcoats	Revathane	Rapidcote	Aquaglaze UV

TOPCOAT GLAZE COAT OPTIONS

Revathane Recommended & preferred topcoat Interior/exterior	Rapidcote Clear Interior/exterior	Aquaglaze UV Interior/exterior
Aliphatic, UV protected Solvent based: moisture cured polyurethane. Suitable for all applications but does have a very strong odour during application.	Suitable for most applications Do not use in cold, damp situations. Long term exposure to extreme UV may cause yellowing. Best applied in conditions with good air movement to assist in drying. Overcoat time 1 hour in good drying conditions. Three (3) coats required if using non-slip additives	Aliphatic, UV protected polyurethane. Suitable for most areas but best suited to light domestic traffic. Do not use in cold, damp situations. Best applied in warm conditions with good air movement to assist in drying. May be over-coated as soon as touch dry. Very low solvent content so it is suitable for solvent sensitive situations and its use implies that Terraflake is fully water-based.
Theoretical Film Build ~ Minimum 250 microns ~ 3 x coats	Theoretical Film Build ~ Minimum 250 microns ~ 2 x coats	Theoretical Film Build ~ Minimum 250 microns ~ 5 x coats

TERRAFLAKE SURFACE FINISH | NON-SLIP OPTIONS

Surecote Type	Description	Description	CF Rating	SRV Rating	R Rating	Non-Slip
	Installation Type	Finish Type	NZ/AS 3661.1 1993	AS/NZS 4586		Application Rates
Type A	Smooth: No non-slip addition	Smooth	0.46	41	R11	N/A
Non-Slip Class 1	Fine non-slip: ~ Microcells	Fine non-slip	0.54	50	R11	Applied in second to last Coat Revathane @150grams/4 Ltr Aquaglaze UV @150grams/4 Ltr Rapidcote @ 50grams/4 Ltr
	~ Revtred	Fine-Medium non-slip	0.56	51	R12	12 grams / m ² Broadcast application
Non-Slip Class 2	Medium - Heavy: non-slip: Note Well* Use of the following aggregates will change/dicolour the appearance of the Terraflake system ~ Q900 ~ Walton Park 18/36 ~ Aluminium Oxide 16 grit ~ Walton Park 7/14 ~ Aluminium Oxide 12 grit	Fine – medium garnet Medium-round silica Coarse- sharp/angular Coarse- round silica Very coarse -sharp	0.73 0.73 0.75 0.75 0.75	64 64 65 65 65	R13	1.0 kg / m ² These non-slip aggregates are broadcast into the first wet coat

SUBSTRATE: – Preparation

All substrates shall be stable and solid.

Note

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 Terraflake.

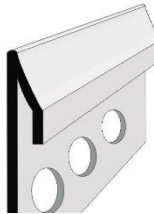
The moisture content shall be less than 75% RH. (Refer allnex Bulletin on application options for wet or uncured concrete).

PLYWOOD | TIMBER | FIBRECEMENT

Refer: Terraflake Method Statement / 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. (Terraflake is 0.9mm 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 Terraflake 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 Terraflake.

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 Terraflake applied directly.

Resurfacing:-

Refer: [Terraflake Maintenance & Re-Sealing](#).

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:-

Terraflake 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.

Date: September 2023
Replaces: February 2023

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

www.allnexconstruction.com

The logo for allnex, featuring the word "allnex" in a bold, lowercase, sans-serif font. The letters "a", "l", "l", and "n" are white, while the "e" and "x" are blue. A horizontal line with a color gradient from purple to green passes through the middle of the letters.

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.