

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 moisture cured polyurethane 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.
- Non-yellowing
- Clear topcoat options for different applications
- Excellent adhesion to properly prepared substrates.
- Very good abrasion and scuff resistance.
- Excellent adhesion to properly prepared substrates.
- Excellent slip resistance. Specification is needed of the degree required.

**** Note****

Please read detail contained within document.

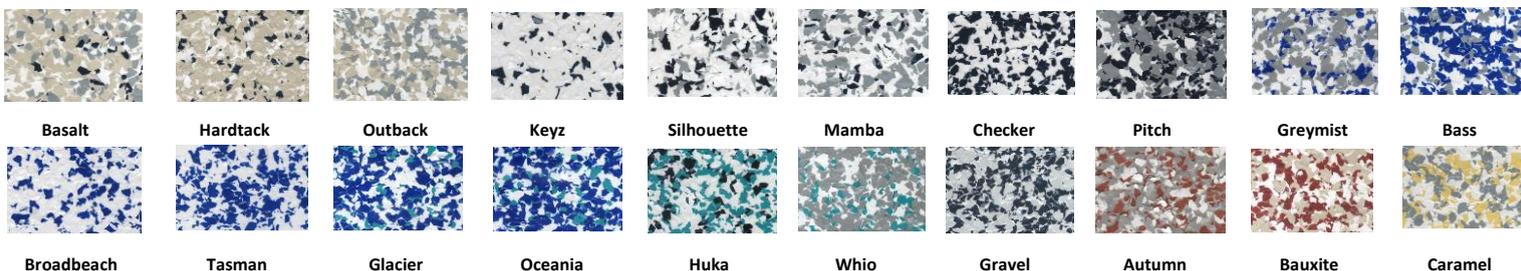


- Cured Film is non-toxic.
- Not moisture permeable.
- Attractive Surface Finish – High gloss.
- Follows contours of upstands and coves.
- Will withstand hydrostatic pressure.
- Moderate chemical resistance.
- Colour: See colours listed below.



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 to create the finished Terraflake effect. See sample colours below



Review colours: http://www.allnexconstruction.com/pdf/Terraflake_sample_colour_chart.pdf?v=1.2

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 Terrazzite.
- Micronized flake is best applied in a tile pattern; as large areas (without a pattern) may appear uneven.
- 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.

HEALTH & SAFETY:

Refer safety data sheets (SDS).

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 Terraflake.

Minimum Compressive Strength at 28 days cure: 25 MPa. (25 N/mm²)

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/mm²)

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.

Fibre Cement Sheet:

Fibre cement is close butted, glued and is to be mechanically fastened with 50 x 10g Comsheet 316 stainless screws at 75mm centres around the perimeter and 150mm centres within the sheets. (All fastenings must be countersunk 2 - 3mm) Frame centres should be at a maximum 600mm.

Centre nog joists at 1200mm. Refer to the Manufacturer's installation instructions

All screw holes must be flush filled as per the Manufacturer's instructions.

All joints must be left with a uniform finish.

Plywood Sheet:

Plywood must be CCA (water-based treatment) with a square edge.

Plywood is loose butted, staggered and is to be mechanically fastened by corrosion resistant screws (preferably 50mm 316 stainless screws) at 150mm centres around the perimeter and 200mm centres within the sheets. (All fastenings must be countersunk minimum of 0.5mm) Frame centres should be at a maximum 600mm. Centre nog joists at 1200mm.

All joints must be left with a uniform finish.

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.
- 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 - Aquakem	+15°C ~75%RH +25°C ~75%RH +35°C ~75%RH	3.5 hours 2 hours 1 hour
Touch Dry & Flake - Aquakem	+20°C ~75%RH	8 hours
Glaze coat over Flaked Aquakem	+20°C ~75%RH	18 hours
Recoat Time ~ Revathane Glaze ~ Aquaglaze UV ~ Rapidcote	+20°C ~75%RH +20°C ~75%RH +20°C ~75%RH	6 -8 hours 2 hours per coat * Depends on air flow* 1 hour per coat * Depends on air flow*
Light Foot Traffic	+20°C ~75%RH	12 hours
Full Use	+20°C ~75%RH	72 hours
Thinning ~ Aquakem ~ Revathane Glaze ~ Aquaglaze UV ~ Rapidcote	Not recommended Not recommended Not recommended Not recommended	
Clean up ~ Aquakem ~ Revathane Glaze ~ Aquaglaze UV ~ Rapidcote	Warm soapy water Solvent HA Warm soapy water Solvent HA	
Dangerous Good Class ~ Aquakem Resin ~ Aquakem Hardener ~ Revathane ~ Aquaglaze UV ~ Rapidcote ~ Rapidcote Hardener	Not Regulated Hazard Class 9 Packing Group III Hazard Class 3 Packing Group III Not Regulated Hazard Class 3 Packing Group III Hazard Class 3 Packing Group III	
Packaging ~ Aquakem Resin ~ Aquakem Hardener ~ Revathane Glaze ~ Aquaglaze UV ~ Rapidcote Clear ~ Rapidcote Hardener	<u>8 litre Unit</u> <u>20 litre Unit</u> 4 litre 10 litre 4 litre 10 litre 4 litre 20 litre 10 litre 9.8 kg (10 litre) 1 kg (1 litre)	
Shelf life ~ Aquakem Resin ~ Aquakem Hardener ~ Revathane Glaze ~ Aquaglaze UV ~ Rapidcote Clear ~ Rapidcote Hardener	12 months from date of manufacture. (After this period consult with allnex) 12 months from date of manufacture. (After this period consult with allnex) 12 months from date of manufacture. (After this period consult with allnex) 12 months from date of manufacture. (After this period consult with allnex)	

SURFACE PREPARATION:

Prepare concrete by mechanical abrasion method to CSP3

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

COVES:

Where required:

See technical literature – Details:- http://www.allnexconstruction.com/pdf/Details_resin-floor-toppings.pdf

Concrete Floors - Concrete Upstand

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

Install allnex cove upper termination metal strips: **5.2mm or 9.2mm rebated strip** with Supascreed or Sureshield.
Use a rebated wall cut if the coving strip cannot be used.

Plywood Floor:

- Coves may be installed utilising a timber fillet
- 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

The falls must be specified pre-tender. (Terraflake 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 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 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).

TERRAFLAKE GLAZE OPTIONS:

Revathane <i>Recommended & preferred topcoat</i>	Aquaglaze UV	Rapidcote Clear
Solvent based: Aliphatic, UV protected moisture cured polyurethane. Interior/exterior. Suitable for all applications but does have a very strong odour during application.	Aliphatic, UV protected polyurethane. Suitable for most areas but best suited to light domestic traffic. Interior/exterior. 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. <i>Very low solvent</i> content so it is suitable for solvent sensitive situations and its use implies that Terraflake is fully water-based.	UV protected. Suitable for most applications Interior/exterior. Do not use in cold, damp situations. 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
Theoretical Film Build - Minimum 250 microns ~ 3 x coats	Theoretical Film Build - Minimum 250 microns ~ 5 x coats	Theoretical Film Build - Minimum 250 microns ~ 2 x coats

SLIP RESISTANT FINISHES:

Typical co-efficient of friction “wet” NZS/AS3661.1:1993:

CF	R-Rating	Non-slip Media	Quantity m ²	Application
NA	R9	NA	NA	Applied without non-slip addition
0.54	R10	Microcells	2.78 grams	Applied in the second coat Revathane @ 150grams / 4 litre Aquaglaze UV @ 150grams / 4 litre Rapidcote @ 50 grams / 4 litre
0.56	R10	Revtred	12 grams	Broadcast into second wet coat
0.63	R11	K20s Sand	1 kg	Broadcast into first wet coat
0.73	R12	K20s Sand / WP18/36	1 kg	Broadcast into first wet coat
	R13	WP7/14	1 kg	Broadcast into first wet coat
	R13+	16 grit Aluminium Oxide	1 kg	Broadcast into first wet coat

R11 May be difficult to clean.
R12 & R13 Will be abrasive underfoot and hard to clean.
R11 R12 R13 These finishes may retract significantly the appearance of the product.

MAINTENANCE:

The glaze coats wear upon use and require reglazing to maintain a good appearance, aid cleaning and to protect the flakes. Inspect yearly and repair high wear areas to protect the flakes.

For full details see: **Terraflake Maintenance Technical Literature.**

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 Terraflake. 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:

Chemical spillages should be cleaned up immediately.

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