

# Technical Data Sheet

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## TERRAFLAKE

### Decorative Flooring with Flake Finish – Seamless, safe & waterproof.

GENERIC TYPE Epoxy bonded coloured plastic chips, encapsulated within a moisture cured polyurethane topcoat.

#### TYPICAL PROPERTIES/ FEATURES

- Terraflake is a decorative, tough, durable, seamless floor coating system, designed for interior/exterior application to residential and light commercial areas.
- Good abrasion resistance.
- Easily cleaned.
- NON-Slip with Revtred increased anti-slip addition option. R10 wet ramp; See later
- Moderate chemical resistance.
- Will withstand hydrostatic pressure.
- Excellent UV resistance.
- Non-yellowing.
- Follows contours of upstands and coves.
- Minimum application temperature +10°C.
- Fire: Critical Radiant Flux 5.1 K/m<sup>2</sup>
- Finish is gloss.
- Colour – 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 create the finished Terraflake effect.
- SUGGESTED USES: As an applied coating to concrete, plaster, fibre cement sheeting, and plywood substrates.
- Ablution blocks and service areas.
- Sportsrooms, changing rooms, wet areas
- Dairy sheds, factories and food proc, processing areas (MAF approved).
- Patios, decks, steps, carports etc.
- Showrooms, foyers.. Display areas
- Shops, offices, schools, cafeterias.
- Also as wall finishes to hygiene areas.



**Australia** A Division of Nuplex Industries Limited  
www.nuplexconstruction.com.au

**New Zealand** A Division of Nuplex Industries (NZ) Limited  
Auckland T: +64 9 5836544 F: +64 9 5253709

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[www.nuplexconstruction.co.nz](http://www.nuplexconstruction.co.nz)

FreePhone 0508-882288

[ncpsales@nuplex.com](mailto:ncpsales@nuplex.com)

FreeFax 0508553344

#### LIMITATIONS:

- Heavy industrial wear areas. – use Decorative Terrazzite
- Areas subjected to severe chemical attack – use Sureshield
- Application over existing coatings – grind off
- Application to unstable substrates.
- Micronized flake is best applied in a tile pattern as large areas (without a pattern) may appear uneven.

#### Preparation of the Flakes

Terraflake is provided in plain colours in 1 kg bags. Into a large flat bottomed plastic box (fish box). Mix the flakes as shown in the Colour chart mix formula . An SAMPLE extract is shown below. The 1kg bags mean that no weighing will be required. Mix the flakes with care to avoid crushing them. Carefully turn them over with fingers. Make large batches to avoid repeated mixes.

For finer flakes, gently crush the flakes and or sieve them.

The flake should be Sieved after blending to remove the "Fines/dust" and this will give a better appearance..

Mix by weight	White	Black	Beige	Dark Brown	Grey	Dark Blue #1	Teal Blue	Royal Blue
Checker	5	5						
Otago	5		5	2				

Refer to [www.nuplexconstruction.co.nz](http://www.nuplexconstruction.co.nz) for:

- Colour chart
- Colour chart formulas.

APPLICATION METHOD: Terraflake is a multi-coat applied system.

REFER to the individual datasheets of Aquaguard 101 and Revathane.

#### a) Substrate Preparation

**Concrete:** Acid etch, coarse diamond grind or shotblast to achieve a surface profile. The surface must be clean and free from all oils etc. Fill any holes with Nuplex Durabond. The Aquaguard 101 will tolerate a slightly damp surface (but not wet).

**Plywood:** The plywood should be flooring grade and screw fixed. Sand the surface with 80 grit paper. Fill holes with Nuplex Fairing Cream. Any joints should be epoxied using 450gsm CSM fibreglass in a 145mm wide strip. Use K36 epoxy resin as the binding resin.

#### b) Application System

Apply the Aquaguard 101, by brush or roller, to the prepared surface. Allow to dry overnight. Apply the second coat and whilst wet, apply the flakes. Ensure the surface remains wet to receive the flakes by the use of a water mister.

If making a tile pattern, it is best to tint the basecoat to the "grout-line" tone. Once cured apply masking tape on the first basecoat. These masking lines will form the "grout-line". Apply the second coat (also tinted) and flakes in the normal way.

Flakes may be applied by hand, spreader or compressed air. Apply at 0.5 kg / sqm . Allow the flake coats to cure and gently rub with a hand-stone to smooth. Sweep and vacuum.

#### c) Glaze Options

##### (i) Revathane Recommended & preferred topcoat

Aliphatic, UV protected moisture cured polyurethane. Suitable for all application but does have a very strong odour during application.

(ii) Terraflake Aqua Glaze

Waterbased, 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 overcoated 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 waterbased.

**NON-slip additions** - broadcast into the second coat of Revathane and Overcoated with a third coat.

R9 as applied base system

R10: Apply Microcells @ 150 grams per 4 lt Revathane. Mixed into Revathane before application..

or (commonly) broadcast Revtred glass spheres at a rate of 12 grams per sqm.

R11: Apply K20s sand @ 1 kg per m<sup>2</sup> into the first coat

R12: Apply a blend of K20s and 18/36 into the first coat

R13: Apply 7/14 coarse into the first coat; more aggressive non-slip can be achieved with 16 grit Aluminium Oxide

Note well:

The R11 may be difficult to clean.

R12 & R13 will be abrasive underfoot and hard to clean.

COVERAGE RATES:

**1.0 Aquaguard 101 Basecoat:**

1<sup>st</sup> coat 3m<sup>2</sup>/litre

2<sup>nd</sup> coat 3m<sup>2</sup>/litre

**2.0 Flakes:**

0.5kg/m<sup>2</sup> (2m<sup>2</sup> / kg of flake) .

**3.0 Topcoat**

**Revathane Glaze:** 3 coats @ 6m<sup>2</sup>/litre/coat

Or Aqua Glaze: 4-5 coats @ 10m<sup>2</sup>/litre/coat. – optional.

*Revathane is the preferred and recommended system*

Revtred: 12 grams/m<sup>2</sup> - optional

FILM BUILD:

Basecoats: 250 micron

Flakes: 150 micron

Glaze: 300 micron (200 micron Aqua)

Total: 700 micron (600 micron Aqua)

DRY TIMES:

Basecoat (touch): 4 hours

(Recoat and flake): 8 hours

Glaze application

(over flaked basecoat): 18 hours

Aqua Glaze (per coat): 1-2 hours

Recoat: 6-8 hours

Full system:

Light foot traffic: 12 hours

Full use: 72 hours

CLEAN UP:

Basecoat/Aqua Glaze: water/detergent before the products cure.



Revathane Glaze:

Nuplex Solvent HA

CAUTION with Revathane

- Provide adequate ventilation.
- Wear protective clothing.
- Refer to data sheets and Material Safety Data Sheets for Revathane / Aquaguard 101.

**Sample material estimate for**

100m<sup>2</sup> job

Aquaguard 101 Part A 3 x 10lt pails

Aquaguard 101 Part B 3 x 10lt pails

Blended Colour Flakes 50kg

Revathane Glaze: 12 x 4lt tins

MAINTENANCE: The glaze coats wear upon use and require reglazing to maintain a good appearance, aid cleaning and to protect the flakes.

For full details see *Terraflake maintenance* data.

**Revathane:** Clean and degrease, sand and wipe with Reglaze Etch.

**Aquaglaze:** Clean and degrease, sand with 120 grit paper.

Inspect yearly and repair high wear areas to protect the flakes.