

# Technical Data Sheet

## Revathane Aliphatic Polyurethane Coating System *allnex*

### DESCRIPTION:

Revathane is a single component polyurethane, high gloss clear coating, non-yellowing and moisture cured. Revathane gives a smooth glossy finish with excellent wear resistance.

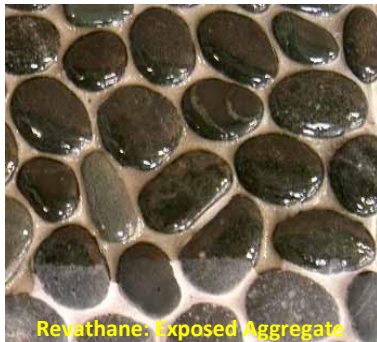
Revathane may also be used in many situations where protective coatings are a requirement including concrete, timber & fibre cement sheet.

### TYPICAL FEATURES | BENEFITS:



Revathane – Polished Concrete

- Interior | Exterior use.
- Non-yellowing - Aliphatic Polyurethane - It has a UV absorber incorporated.
- Excellent ease of use- single component.
- Attractive Surface Finish – High gloss.
- Excellent flow and adhesion properties.
- Available in various slip resistance options.
- Very good abrasion and scuff resistance.
- Easily cleaned.
- Good water and wear resistance once cured.
- Has exceptional exterior durability as confirmed by natural exposure trials.
- Suitable for frequent cleaning.



Revathane: Exposed Aggregate



Revathane: Timber Floor



Revathane: Timber Floor



Revathane: Traxite Colourfine



Revathane: Polished Concrete



Revathane: Terraflake

### SYSTEM OPTION FOR EXTERIOR NON- SLIP CONCRETE COATING:

System Step	Application
Prepare Concrete	Prepare Concrete
Apply	Revathane at 3m <sup>2</sup> /litre <b>Whilst wet apply non-slip aggregates in a light even broadcast.</b> No colour: use K20s Coloured Aggregate: use allnex Quartzzite in plain colours or a blend.
Apply	Overcoat with Revathane at 3m <sup>2</sup> / litre evenly.

\*\*\*\*Note well\*\*\*\*

This system does not imply waterproofing qualities to a deck.

It is also a light non-slip; not a heavy-duty non-slip. Refer: allnex Construction Products for a heavy-duty system.

**PERFORMANCE DATA:**

Minimum Application Temperature: Air	+10°C
Maximum Application Relative Humidity: Air	85%
In-service temperatures:	-10 to +40°C
Slip resistance:	With added non-slip aggregates, (see later)
Chemical Resistance:	Resistant to chemical spillage –cured 7 days at 25°C. Refer: Chemical resistance section.
Volatile Organic Content (1999/13/EC):	~ 59 %

**RECOMMENDED USES:**

- Aggregate glaze - Driveways
- Slip resistant floor finishes.
- Cork and coloured cork
- Parquet
- Particle board
- Polished concrete coating (clear).
- Barrier coat for areas of high abrasion, dirt pick-up, chemical contamination.
- Exterior concrete steps / concrete seats, bleachers
- Timber flooring; most types
- Imbedding non-skid aggregates.
- Plywood Walls
- Glaze coats for Traxite Colourfine
- Glaze coats for Terraflake

**LIMITATIONS:**

- Application below +10°C.
- Application to green (uncured) concrete. Allow 28 days.
- Contact with water within 36 hours after application.
- Continuous immersion in strong acids, alkalis or aggressive solvents.
- Application in very cold, damp, unventilated conditions.
- Application to unsound substrates.
- Application to incorrectly prepared surfaces.

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

- Avoid skin contact.
- If spraying wear protective clothing, gloves and eye and face protection, including suitable breathing protection such as an air supplied respirator or hood.
- Ensure MSDS sheets are displayed on site. Contents flammable.
- Harmful by inhalation and in contact with skin and eyes.
- Do not breathe vapour or spray.

**SUBSTRATES:**

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 Aquacolour.

Minimum Compressive Strength at 28 days cure: 25 MPa. (25 N/mm<sup>2</sup>)

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/mm<sup>2</sup>)

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**Plywood Sheet:**

Plywood must comply with AS/NZS2269 for structural plywood and be a minimum 12mm (walls) and 17mm (floors) H3.2 treated CCA (water-based treatment) with a square edge.

Plywood is loose butted and is to be mechanically fastened by corrosion resistant screws (preferably 50mm stainless screws) at 150mm centres around the perimeter and 200mm centres within the sheets. (All fastenings must be countersunk 0.5mm unless they are specifically set out for aesthetic display).

Frame centres should be at a maximum 600mm.

Centre nog joists at 1200mm.

**Timber:**

Ensure fixings are below the surface, filled and sanded.

**PRODUCT PROPERTIES:**

Pot Life	+20°C ~75%RH	30 minutes
Touch Dry	+20°C ~75%RH	6 hours
Hard Dry	+20°C ~75%RH	12 hours
Recoat time ~ Minimum ~ Maximum	+20°C ~75%RH	6 hours 36 hours Normally recoating should be carried out within 18 hours of application in average conditions (i.e. next day), otherwise the film cures to such a degree that the adhesion of further coats becomes a problem (refer Reglaze Etch).
Full Cure	+20°C ~75%RH	7 days
Unaffected by water	>48 hours	
Solid Content	40%	
Thinning	Not Recommended Solvent HA if necessary (Add immediately prior to use.)	
Clean Up	Solvent HA. However, cleaning brushes completely is very difficult. It may be best to use disposable brushes.	
Dangerous Good Class	Hazard Class 3   Packing Group III	
Packaging	4 litre tin 20 litre tin allnex recommend its use from 4 litre tins to prevent wastage from occurring in larger pails.	
Shelf life	12 months from date of manufacture ~ Store above +20°r (After opening, contents will have a limited shelf life)	

**CAUTION:**

- As supplied, the contents are purged with nitrogen. An irreversible cure commences once exposed to the atmosphere.
- Do not return unused product to container as this may cause gelling of the product in the container.
- Solvent fumes may contaminate foodstuffs.
- Do not flood coat; particularly on timber or cork flooring
- Too early re-coating may cause “frying” or “crazing” of the film.
- Beware of rising damp | Water through substrate or control joints.
- Revathane is a clear finish it will accentuate any visible surface defects.
- Requires good ventilation and cross air movement to aid drying

**SURFACE PREPARATION:**

**Concrete:**  
Prepare concrete by mechanical abrasion method to: - **CSP2**. (Concrete Surface Profile Scale - International Concrete Repair Institute)  
See technical literature: - [http://www.allnexconstruction.com/pdf/Floor\\_Preperation\\_Requirements.pdf](http://www.allnexconstruction.com/pdf/Floor_Preperation_Requirements.pdf)  
Remove all concrete curing agents, contaminants and any other material likely to affect the adhesion of the Aquacolour.

**Plywood:**

Fill screw holes with allnex Fairing Cream.  
All joints must be left with a uniform finish.  
Mechanically sand all areas with 120 grit paper.

**Timber:**

Fill screw holes with appropriate filler to match colour of timber.

Stage	New Timber Floors	Old Timber Floors
1 <sup>st</sup>	40 or 60 grit	
2 <sup>nd</sup>	60 or 80 grit	
3 <sup>rd</sup>	80 or 100 grit	80 or 100 grit
Fine cut	100 or 120 grit	100 or 120 grit
Finish	Screen Back 120 grit	Screen Back 120 grit

\*\*\*\* Note\*\*\*\*

Do not burnish (close the grain) when undertaking preparation or delamination will occur.

**REVATHANE COVERAGE & FILM BUILD:**

Revathane Coverage	4 litre Tin - Coverage	20 litre Tin - Coverage
Concrete Floors Unit Coverage @6m <sup>2</sup> / litre /coat ~ 3 x coats	8m <sup>2</sup>	40m <sup>2</sup>
Concrete Walls Unit Coverage @8m <sup>2</sup> / litre /coat ~ 2 x coats ~ 3 x coats	16m <sup>2</sup> 16m <sup>2</sup>	80m <sup>2</sup> 53.3m <sup>2</sup>
Terraflake Unit Coverage @6m <sup>2</sup> / litre /coat ~ 3 x coats	8m <sup>2</sup>	40m <sup>2</sup>
Timber/cork flooring: Unit Coverage @ 8m <sup>2</sup> /litre/coat ~ 3 x coats ~ 4 x coats	16m <sup>2</sup> 8m <sup>2</sup>	80m <sup>2</sup> 53.3m <sup>2</sup>
Plywood   Custom Wood Walls Unit Coverage @ 8m <sup>2</sup> /litre/coat ~ 3 x coats ~ 4 x coats	16m <sup>2</sup> 8m <sup>2</sup>	80m <sup>2</sup> 53.3m <sup>2</sup>

**APPLICATION METHOD:**

Roller | Brush | Spreader | Conventional Spray | Airless Spray

Apply by chosen method ensuring a wet edge is kept throughout the entire application process.

Apply thin even coats.

Allow gentle cross ventilation which allows the migration of fumes and the support of the drying process.

Do not allow dust etc. to blow onto the wet surface.

Sand, disc off the surface between coats in some applications, e.g. timber.

**SLIP RESISTANT FINISHES:**

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

CF	Non-slip Media	Quantity m <sup>2</sup>	Application
0.54	Microcells (Ceramic spheres)	2.78 grams	Mixed into kit - applied in second coat ~ 100 grams per 4 litre Kit
0.56	Revtred (Glass Beads)	12 grams	Broadcast into second wet coat
0.63	J61 Sand (Fine sand)	2 kg (or less)	Broadcast into second wet coat

**MAINTENANCE:**

REVATHANE in exterior situations (e.g. used over flake finishes) will need regular maintenance (2-5 years).

In all situations, when recoating, both sand and Reglaze Etch prior to recoating.

**Repairs:**

Chemically clean.

Mechanically abrade surface.

Wipe with allnex Reglaze etch

Apply a further two (2) coats of Revathane

**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 Revathane. 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.

**CHEMICAL RESISTANCE:****Splash or occasional contact:**

Acids Good

Alkalis Good

Solvents Good

Water Excellent

Chemical spillages should be cleaned up immediately.

**PRODUCER STATEMENT:**

allnex state that Revathane is suitable as a clear coating for use in full exterior situations. If correctly maintained the coating will have a service life in excess of 5 years.

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Replaces: Nov 2019

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