Technical Data Sheet

Revathane Aliphatic Polyurethane Coating System

DESCRIPTION:

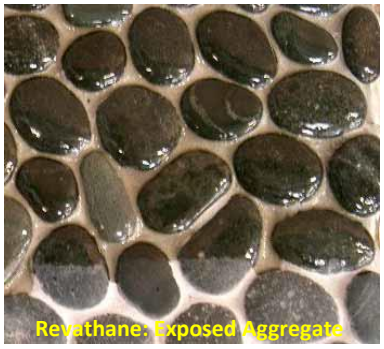
Revathane is a single component polyurethane, high gloss clear coating, non-yellowing and moisture cured. Revathane gives a smooth glossy finish with excellent wear resistance.

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: Polished Concrete

Revathane: Timber Floor

Revathane: Timber Floor

Revathane: Traxite Colourfine

Revathane: Terraflake

SYSTEM OPTION FOR EXTERIOR NON- SLIP CONCRETE COATING:

System Step	Application
Prepare Concrete	Prepare Concrete
1st Coat	Revathane at 3m²/litre *Whilst wet apply non-slip aggregates in a light even broadcast.* Non-coloured aggregate: use K20s Coloured Aggregate: use allnex Quartzzite in plain colours or a blend.
2nd Coat	Overcoat with Revathane at 6m²/ litre evenly.
3rd Coat	Overcoat with Revathane at 6m²/ 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:

Properties		Values	
Minimum Application Temperature: Air		+10°C	
Maximum Application Relative Humidity: Air		85%	
In-service temperatures - wet : on fully cured system		-10 to +40°C	
Heat resistant:		+40°C	
Chemical Resistance:		Resistant to chemical spillage –cured 7 days at 25°c. *Refer: Chemical resistance section.*	
Slip resistance:		R11 to R13. *Refer: Slip resistance chart*	
Volatile Organic Content (1999/13/EC):		~ 59 %	
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 ~ 70%RH	7 days
Unaffected by water:		+20°C ~ 70%RH	>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:		Refer SDS	
Packaging:		4 litre tin | 20 litre metal pail *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 +2°r (After opening, contents will have a limited shelf life)	

RECOMMENDED USES:

- Aggregate glaze – Driveways.
- Slip resistant floor finishes.
- Cork and coloured cork.
- Parquet.
- Particle board.
- Polished concrete coating (clear).
- 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*.
- Barrier coat for areas of high abrasion, dirt pick-up, chemical contamination.

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.

NON-SLIP:- floor definitions:
Typical co-efficient of friction "wet" NZS/AS3661.1:1993:
(*Samples to be supplied and agreed prior to start of the contract*)

Revathane 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: Roller applied -	Smooth	0.46	41	R11	
Non-Slip Class 1	Fine/Medium duty non-slip: Roller applied with the addition of:- ~ Microcells *Mixed into the Revathane prior to application.* *Applied in the second to last coat.* ~ Revtred *broadcast into the second to last coat*	Fine non-slip Fine-Medium non-slip	0.54 0.56	50 51	R11 R12	@100grams/4 Ltr 12 grams / m^2
Non-Slip Class 2	Medium duty aggregate: non-slip: Roller applied with the addition of:- ~ J61 Sand ~ Q900 *Broadcast into the wet Revathane coating with further coats over the aggregate* *Broadcast*	Fine – Silica Sand Fine – medium garnet	0.63 0.73	57 64	R12 R13	2.0 kg (or less) / m^2

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 Revathane.
The moisture content shall be less than 75% RH.

Plywood | Fibre-cement
Plywood Sheet:

Element	Value
Framing:	All framing must comply with current legislation. *Framing must take into consideration all loading parameters.*
Plywood:	Must Comply with AS/NZS2269.
Plywood Type:	H3.2 treated CCA (water-based treatment) with a square edge.
Plywood Thickness:	Floors: 17mm – Minimum. Walls : 12mm – Minimum.
Plywood Installation:	Loose butted.
Plywood Fastening Type:	Corrosion resistant screws - preferably 50mm stainless screws.
Fastening Spacings:	Perimeter: 150mm. Centres: 200mm.
Countersink Fastening:	All fastenings must be countersunk 0.5mm. *Fill with allnex Fairing Cream.*
Plywood Sheet Joints:	All joints must be left with a uniform finish.
Surface Preparation:	Mechanically sand all areas with 120 grit paper.

Fibre Cement Sheet

Element	Value
Framing:	All framing must comply with current legislation *Framing must take into consideration all loading parameters.*
Fibre Cement:	Must Comply with AS/NZS2269
Fibre Cement Type:	With rebated edges that can be stopped to flush the joints.
Fibre Cement Thickness:	Floors: 18mm - Minimum Walls : 9mm – Minimum
Fibre Cement Fastening Type:	316 Stainless Screws - 50mm x 10g
Fastening Spacings:	Perimeter: As per manufacturer's instructions Centres: As per manufacturer's instructions.
Countersink Fastening:	All fastenings must be countersunk as per Manufacturer's instructions. *Fill as per the Manufacturer's instructions.*
Fibre Cement Sheet Joints:	All joints must be left with a uniform finish.
Fibre Cement Sheet Joints: - Flushing	All joints must be flushed in accordance with the Manufacturer's instructions.

Note
In all cases:- Refer to the Manufacturer's installation instructions.

Timber:
Ensure fixings are below the surface, filled and sanded.

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:
Ensure that all dust is removed and that the surface is free from oils, fats etc. It may be applied over old moisture cured polyurethanes providing cleaning and sanding has occurred.

Concrete:
Prepare concrete by mechanical abrasion method to: - ***CSP2.*** (Concrete Surface Profile Scale - International Concrete Repair Institute)
See technical literature: Surface Preparation
Remove all concrete curing agents, contaminants and any other material likely to affect the adhesion of the Aquaglaze UV.

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

Sanding Procedure as follows:-

Stage	New Timber Floors	Old Timber Floors
1st	40 or 60 grit	
2nd	60 or 80 grit	
3rd	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:

Revathane Coverage	4 litre Tin - Coverage	20 litre Tin - Coverage
Concrete Floors Unit Coverage @ 6m2 / litre /coat ~ 3 x coats	 8m^2	 40m^2
Concrete Walls Unit Coverage @ 8m2 / litre /coat ~ 2 x coats ~ 3 x coats	 16m^2 10.66m^2	 80m^2 53.3m^2
Terraflake Unit Coverage @ 6m2 / litre /coat ~ 3 x coats	 8m^2	 40m^2
Timber/cork flooring: Unit Coverage @ 8m^2/litre/coat ~ 3 x coats ~ 4 x coats	 16m^2 8m^2	 53.33m^2 40m^2
Plywood | Custom Wood Walls Unit Coverage @ 8m^2/litre/coat ~ 3 x coats ~ 4 x coats	 16m^2 8m^2	 53.33m^2 40m^2

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

Note
It is best to apply multiple thin coats, rather than heavy coats.

SUBSEQUENT RECOATING:
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.

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.

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.

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