

Technical Data Sheet

Terraflex Fibre-reinforced Deck Coating System



DESCRIPTION:

Terraflex is a fibreglass reinforced waterproofing deck membrane. It is liquid applied in-situ to adapt to the design and shape of the area being waterproofed. It is based on a high quality, durable acrylic resin.

TYPICAL FEATURES | BENEFITS:

- Laminated system
- Long life, UV stable, Light Foot traffic suitable.
- Light colours only recommended
- Single Component
- Will conform to complex shapes, upturns and downturns.
- Terraflex is compliant with NZBC within B2 Durability and E2 water ingress.
- Terraflex is 15-year durable as Terraflex is an exposed membrane.
- Easy to use and apply
- Fully bonded system
- Easily cleaned.
- Weatherproof
- Durable acrylic system

PERFORMANCE DATA:

Minimum Thickness	1.0mm
Minimum Application Temperature: Air	+10°C
Maximum Application Relative Humidity: Air	85%

RECOMMENDED USES:

- Decks, patio's, suspended decks, roofs, plant rooms.
- For use over concrete and correctly installed plywood.
- For waterproofing complex shapes e.g. balustrades; curved surfaces, curved balustrades. Multi-directional shapes

LIMITATIONS:

- For use for exposed deck surfaces only. i.e. uncovered.
- It is dependent on a stable, non-moving substrate. This is particularly true for plywood which must be well fixed. Terraflex does not hold a weakly installed deck together.
- Terraflex is a membrane; some blistering and peaking on joints often occurs due to the plywood/slab expansion and contraction.
- Structural movement will lead to the sheet substrate moving and this is often expressed at sheets joints and peaking of the membrane at that point.
- Do not apply in multiple wet layers or apply so thickly so that it does not through dry. Ensure each layer is fully through dry before proceeding. Otherwise blisters may occur.
- Application to uncured concrete (minimum recommended cure 28 days). Application to damp surfaces. (Refer to allnex)
- Application to unstable or defective substrates without approved remedial treatment prior to installation.
- Application below +10C.
- Application to unstable or defective substrates without approved remedial treatment prior to installation.

SUBSTRATE:

Preparation

All substrates shall be stable and solid.

Preliminary Work

Ensure that preliminary work, such as formation of falls and flashing rebates, grooves and ducts, provision of battens, rounded edges, fillets and overflows, installation of vents and countersinking edges and outlets, is complete and properly constructed to enable the Terraflex System to work as intended.

This work and the substrate need to be smooth, clean and dry.

Falls

Roofs: 1:30

Decks: 1:40

Gutters 1:100 minimum; or as proscribed by local bodies.

Confirm that the substrate, including falls, surface finish, fillets, sumps, countersinking terminations and projections, will permit Terraflex work of the required standard.

CONCRETE:

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 Terraflex.

The moisture content shall be less than 75% RH.

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 Terraflex.

Check falls and reset falls if necessary using allnex Floor Levelling Compound (FLC).

PLYWOOD:

Plywood must comply with AS/NZS2269 for structural plywood and be a minimum 17.5mm H3.2 treated CCA (water-based treatment) with a square edge.

The deck must have the correct falls to comply with current National and Local Body Legislation.

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)

Flush fill all screw heads and sheet joints using allnex Fairing Cream.

Frame centres should be at a maximum 600mm. Centre nog joists at 1200mm.

All joints must be left with a uniform finish.

APPLICATION CONDITIONS:

Products such as Terraflex require **good drying conditions** to allow water to evaporate from the coating. Do not apply in temperatures less than 10°C or when wet weather is likely. Good **air movement** is the best method of drying water-based products.

Working in hot, dry windy conditions will be difficult as the material will setup too rapidly.

Study weather forecasts to ensure that the material will be fully and through dry prior to any rain.

PREPARATION: - Installation

Primer

Prime all substrates including vertical wall areas and coves as prepared with Aquaguard 101. This should be applied as one coat at approximately 5m²/mixed litre. Mix and apply Aquaguard 101 as per data sheets and specification.

Take care to apply Aquaguard 101 into joint areas with a brush.

Allow the Aquaguard 101 to cure 24 hours prior to proceeding.

Joints

All joints should be taped prior to the full membrane application. Joints will require Allnex 100mm reinforcing tape. Use slip joint lap (Joint safe tape) prior in any high movement areas. Wider strips will be needed to form coves. In all cases, apply a heavy coat of Terraflex body coat and lay in the CSM strip and apply a further body coat. Immediately use a metal laminating-roller (refer to Allnex range) to bring the body coat up through the CSM. Use a garden sprayer to apply a **fine water mist**. This ensures that the Terraflex is fluid and wets the glass readily.

Allow to fully dry (test), prior to the full membrane installation.

Membrane

Following priming and joint preparation, roll a full coat of Terraflex body coat over the whole surface. Include roll-downs into drains and cove ups behind flashings. Lay the 300gsm mesh into the body coat. Allow minimum 75mm overlaps.

****Note****

This is a critical step and take care this minimum 75mm overlap is achieved. Roll the entire surface with a laminating roller. This will bring up the body coat through the mesh.

It is **important** that the pressure of the roller brings material up, rather than trying to force it down. This process ensures the **inside of the CSM** is "wetted" by the Terraflex.

The sufficient quantity is indicated by surplus spots being forced up by the action of the roller.

Apply a second coat of Terraflex wet on wet and roll evenly.

Allow these coats to dry (test thoroughly dry) and follow with a third coat of Terraflex.

Allow to dry and glaze surface with one thin coat of Terraflex tinted appropriately. Allow to dry. Optional: Use Aquaglaze UV to add gloss and to help reduce scuffing.

****Note Well****

It is important that more **thinner** coats are applied, rather than fewer thicker coats. Excessively thick coats retard drying and may lead to blisters.

HEAVY DUTY AREAS:

Include a second layer of mesh in the 3rd body coat of Terraflex and add a 4th coat to the system. This markedly improves wear and impact resistance. Edge and step details may be further reinforced in this way.

TERRAFLEX COVERAGE:

<i>System Stage</i>	<i>Material</i>	<i>Coverage Rates Usage M²</i>
Primer	Aquakem (Aquaguard 101) Resin/Hardener	5 m ² litre
Terraflex 1 st Body-coat	Terraflex	1 m ² litre
Fibreglass Reinforcement	Chopped Strand Matt ~ 300 gsm	1 m ²
Terraflex 2 nd Body-coat	Terraflex	3 m ² litre
Terraflex 3 rd Body-coat	Terraflex	6 m ² litre
Colour Glaze Coat	Terraflex	8 m ² litre
Optional Gloss Coat	Aquaglaze UV	10 m ² litre

PRODUCT PROPERTIES:

Aquakem (Aquaguard 101) Pot Life	25°C -50%RH	2 hours															
Aquakem (Aquaguard 101) Surface Dry	25°C -50%RH	4 hours															
Aquakem (Aquaguard 101) Hard Dry	25°C -50%RH	24 hours minimum Allow 48 hours of cure prior to the application of the Terraflex membrane															
Terraflex	25°C -50%RH	> 4 hours between coats Dependent of weather condition															
Thinning	Do not thin																
Recoat	Anytime within 24 hours. After 24 hours: Severe mechanical abrasion																
Dangerous Good Class ~ Aquakem Resin ~ Aquakem Hardener ~ Terraflex ~ Aquaglaze UV	Not Regulated Hazard Class 9 Packing Group III Not Regulated Not Regulated																
Packaging ~ Aquakem Resin ~ Aquakem Hardener ~ Terraflex ~ Aquaglaze UV	<table border="0"> <tr> <td><u>8 litre Unit</u></td> <td> </td> <td><u>20 litre Unit</u></td> </tr> <tr> <td>4 litre</td> <td> </td> <td>10 litre</td> </tr> <tr> <td>4 litre</td> <td> </td> <td>10 litre</td> </tr> <tr> <td colspan="3">15 litre plastic pail</td> </tr> <tr> <td colspan="3">10 litre plastic pail</td> </tr> </table>		<u>8 litre Unit</u>		<u>20 litre Unit</u>	4 litre		10 litre	4 litre		10 litre	15 litre plastic pail			10 litre plastic pail		
<u>8 litre Unit</u>		<u>20 litre Unit</u>															
4 litre		10 litre															
4 litre		10 litre															
15 litre plastic pail																	
10 litre plastic pail																	
Clean up	All components clean up in water.																
Shelf life	6 months from date of manufacture (After this period consult with allnex)																

COLOUR OPTIONS:

- Generally Light Grey BS00A01 – May be tinted to other light colours

HEALTH & SAFETY: Refer materials safety data sheets.

- Wear Overalls and PPE when using this product.

MAINTENANCE and CLEANING:

- Inspect yearly.
- Membrane peaking is indicating deck movement - Inspect.
- Re-apply Terraflex as appropriate.
- Low wear decks should be recoated every 5 years with Terraflex.
- Do not allow wear to damage fibres of the CSM material.

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 topping system.

Information to be recorded daily is:

- 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.

PRODUCER STATEMENT:

Compliant with NZBC B2 Durability and E2 water ingress: 15-year durable as Terraflex is an exposed membrane. Undertake regular inspections.

Terraflex should be re-glazed as appropriate (every 5 years or more often depending on wear).

Apply new fibreglass and Terraflex on any weak areas.

Specifically excluded is cracking in substrates, which exceeds the movement capability of the Terraflex system.

The user should note that wrinkling or seaming is due to substrate movement.

allnex Industries Ltd state that the Terraflex system is compliant with the Building Act

This technical data sheet is to be read in conjunction with other relevant technical data sheets. If any doubt or confusion exists please contact allnex Construction Products.

Date: Dec 2019

Replaces: Dec 2017

Allnex Construction products, a Division of Allnex New Zealand Ltd

Auckland - 14 Industry Road Penrose phone: 095836544. Hamilton - 18 Somerset Street Frankton phone: 07-847-8658

Wellington - 19A Jamaica Drive Grenada North 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 blue to green is positioned above the letters "e" and "x".

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.