 Method Statement/Specification

**Ultratuff**

**Waterproofing Membrane System – Exterior Decks**

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| **PREPARED FOR:** |  |
| **CONTRACT:** | Installation of allnex construction products:**Ultratuff Waterproofing Membrane System****Exterior Decks**Project: |
| **DATE:** | February 2023 |
| **SCOPE:** | 1. General Conditions of Contract.
2. General assessment and scope of work.
3. Pre-Start Execution.
4. Substrate requirements & surface preparation.
5. Pre-Installation Preparation.
6. Application Conditions.
7. Installation: allnex **Ultratuff.**
8. Maintenance.
9. Cleaning.
10. Quality Assurance.
11. Protection Of Work.
12. Warranty.
13. Approved Installation Companies.
14. Documents to be consulted along with this specification.
 |
| **PREPARED BY:** | Colin Nolanallnex Construction ProductsPh - +64 3 366 6802Mob - +64 21 956 160Email - colin.nolan@allnex.com[www.allnexconstruction.com](http://www.allnexconstruction.com)  |
| **REFERENCES:** |  |

**1.0 GENERAL CONDITIONS OF CONTRACT**

1. All materials shall be installed using best trade practices and in accordance with the manufacturers recommendations or instructions. If any doubt exists please contact allnex Construction Products for advice.
2. Materials may only be installed by allnex approved applicators using staff skilled in the installation of all products covered by this specification. Applicators are to make available senior skilled staff to supervise the work while in progress.
3. The Applicator shall take reasonable steps to protect the general public, his work and adjacent surfaces during the time that his work is in progress.
4. Applicators are required to provide an acceptable Health and Safety programme which meets all the requirements of the current “Health & Safety in Employment” legislation. Applicators must also comply with any other relevant government legislation or local body laws, regulations or requirements.
5. The Applicator is to provide samples showing colour and finish for final approval by the client or his consultant prior to commencing work on site.
6. This specification is to be read in conjunction with relevant product information and conditions of contract which may be issued by the client.
7. The Applicator is to inspect all areas to be treated and must be satisfied that the surface is satisfactory to receive the proposed allnex system. If any doubt exists it is the responsibility of the Applicator to seek advice from allnex Construction products.
8. Any warrantee required will be supplied by the allnex approved applicator and backed up by our agreement with them.

*Refer: Section 11 below.*

1.9 allnex Q.A. procedure and documentation is to be accurately recorded and kept on site during the contract. allnex construction products reserves the right to inspect this documentation at any time. A copy of all relevant Q.A. information is to be returned to allnex within one month of completion of the work on site.

1.10 There shall be no substitute materials used unless written approval is provided by allnex Construction Products prior to the installation.

**2.0 GENERAL ASSESSMENT**

2.1 This specification has been prepared to detail the requirements and ensure client understanding as to the waterproofing system being proposed for the afore-named project by allnex Construction Products.

 The correct installation will increase the durability, life expectancy and aesthetics of the facilities and will also provide site personnel with a safe working environment.

 2.2 Applicators will be required to work closely with the main contractor and / or their designated co-ordinator / consultant to minimise disruption as a result of any work undertaken. Specific time requirements and logistics are to be negotiated directly between the Applicator and the main contractors authorised personnel.

2.3 Any change required during the course of the contract must be in writing.

2.4 The main contractor is to organise the removal of necessary equipment, plant etc. prior to the commencement of the contract.

2.5 allnex Ultratuff is a no odour option; however, all sensitive equipment or materials likely to be affected by the installation process (e.g. dust) should be removed from the area.

 2.6 Provision for falls to drains, pre-filling etc. is to be discussed, priced and confirmed in writing, prior to the commencement of the contract. Repair any unsatisfactory falls, levels, etc. using Polymer Screed - allnex Screed 20**+** as appropriate.

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|  **Falls**  |
| Decks | BalconiesMaximum Deck Area 40m2Fibre Cement Compressed SheetSuspended Concrete Slab | 1:401:60 |
| Gutters *(fall to waste)* | 1:100 minimum |

 *Minimum Falls as above or as proscribed by local bodies or current legislation.*

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

 *Falls:*

 *The existing falls shall be checked in the following manner.*

1. *Around the perimeter of all walls, the levels shall be checked at maximum 500mm centres.*

*A continuous horizontal level shall be struck based on the highest point level found.*

1. *Where a level finish is called for the highest point level shall be found.*

*This point will determine the base point for the floor and the wall perimeter.*

*iii) Where falls are built into the substrate the difference between the lowest (waste) points and the highest (level determined under (i) and (ii) above) shall be checked against the levels proposed in the documents.*

 *Should the Applicator find that the substrate requires remedial work before he can commence his application, then he shall request the Main Contractor to rectify the areas of defect.*

 *Once the existing levels and proposed base levels are determined, the existing substrate shall be corrected (if required) using* Polymer Screed - allnex Screed 20**+** as appropriate.*. Refer: allnex Construction Products for specific project advice..*

 *Prefill shall be laid over all areas necessary to achieve the following results:*

*i) Around the perimeter of all walls and to all areas where a level floor finish is specified prefill shall be applied to provide a sub base level of +/- 3mm over a 3-metre grid.*

1. *To areas where a fall is specified prefill shall be applied to provide a sub base where a line laid between the high and low points shall be of constant gradient and very by no more than 3mm over a 3-metre length.*

2.7 If for any reason the Applicator is unable to carry out the installation of the allnex system in accordance with this specification, and relevant material data sheets, it is the responsibility of the Applicator to bring this to the attention of the client and / or allnex Construction Products in writing. This must be done prior to the commencement of the work.

2.9 Applicators are required to clean up all debris etc from the work area once their work is completed.

2.10 Technical Data

 Refer to *allnex Construction Website* for the latest technical literature.

 ***GUIDANCE NOTE***

 ***Use this clause when specifying by performance. Refer to the NZBC verification method D1/VM1 and acceptable solution D1/AS1. This clause may justify expansion, particularly where tiles are being laid in public areas.***

**2.12 Properties**

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| --- | --- |
| **Element** | **Values** |
| Minimum Thickness:  | 1.2mm DFT |
| Minimum Application Temperature: Air | +10°C |
| Maximum Application Relative Humidity: Air | 85% |
| Ultratuff System Steps:  | *Refer Section: 2.13 – 2.14*  |
| Cove upstand Detail: | As specified by Architect / Engineer |
| Sealants: | Simson ISR 70-50 *(supplied by Bostik)* |
| Aquakem: *Only used on wet concrete installations* ~ Pot-Life ~ Surface Dry ~ Recoat ~ Minimum ~ Maximum  ~ Hard Dry  | +250C ~ 75%RH | 45 minutes2 hours2 hours18 hours*In good conditions (Heat | Air flow) the second coat could be done on the same day.* *If you can walk on the basecoat without it “sheering” under your feet then you can apply the second coat of Aquakem.* *Generally the first coat will be dry enough after two (2) hours at 250C* 24 hours minimum*Allow 48 hours of cure prior to the application of the Duraseal and subsequent Ultratuff membrane* |
| Duraseal: ~ Dry Time   | +250C ~ 50%RH | 30 – 60 minutes*Note* *Apply Ultratuff within 24 Hours* |
| Ultratuff:  ~ Recoat  ~ Minimum  ~ Full Cure  | +250C ~ 50%RH | > 1 hour (unreinforced)>3 hours *(with the inclusion of Fibreglass)*  7 days |
| Flexiglaze: | +200C ~ 50%RH | > 24 hours.  |
| Thinning:  | Do not thin any components |
| Clean up: ~ Aquakem ~ Duraseal  ~ Ultratuff | clean up in waterclean up in waterclean up in water whilst wet | Xylene if dry |
| Dangerous Good Class:  | Refer SDS sheets |
| Packaging:  ~ Aquakem Resin | Hardener ~ Aquakem Resin ~ Aquakem Hardener ~ Duraseal  ~ Ultratuff ~ Flexiglaze | 8 litre Kit (2 x 4 litre Plastic Pails)10 litre Plastic Pail10 litre Plastic Pail4 litre Plastic Bottle | 20 litre Plastic Pail15 litre Plastic Pail10 litre Plastic Pail |
| Shelf life:  ~ All products listed above    | 12 months from date of manufacture.*(After this period consult with allnex)* |

 **2.13 Ultratuff Standard System – Exterior Decks – *Surface Finish: Fibreglass Reinforcement Texture***

|  |  |
| --- | --- |
| **System Step** | **Component and Coverage** |
| **Wet Concrete Only****Coverage****1st Coat****2nd Coat** | Aquakem3 m2/ litre3 m2/ litre  |
| **Primer Coat****Coverage on Aquakem****Coverage on Porous Concrete****Coverage on Fibre Cement** | allnex Duraseal7m2  / litre5m2  / litre5m2  / litre |
| **1st Body Coat****Coverage** | Ultratuff1.1m2  / litre |
| **Fibreglass Reinforcement** | 300gsm Chopped Strand Matt |
| **2nd Body Coat****Coverage** | Ultratuff1.5m2  / litre |
| **UV Protection** **1st Coat****2nd Coat** | Flexiglaze8m2  / litre8m2  / litre |

 **2.14 Ultratuff Standard System – Exterior Decks -*Surface Finish: Textured utilizing gloop loop roller.***

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| --- | --- |
| **System Step** | **Component and Coverage** |
| **Wet Concrete Only****Coverage****1st Coat****2nd Coat** | Aquakem3 m2/ litre3 m2/ litre  |
| **Primer Coat****Coverage on Aquakem****Coverage on Porous Concrete****Coverage on Fibre Cement** | allnex Duraseal7m2  / litre5m2  / litre5m2  / litre |
| **1st Body Coat****Coverage** | Ultratuff1.1m2  / litre |
| **Fibreglass Reinforcement** | 300gsm Chopped Strand Matt |
| **2nd Body Coat****Coverage** | Ultratuff1.5m2  / litre |
| **Additional Non-Slip** **Coverage** | Ultratuff1.5m2  / litre*Applied with Gloop Loop Roller* |
| **UV Protection** **1st Coat****2nd Coat** | Flexiglaze8m2  / litre8m2  / litre |

 **2.15 Ultratuff Standard System – Exterior Decks - *Surface Finish: Coloured Quartzzite Aggregate)***

|  |  |
| --- | --- |
| **System Step** | **Component and Coverage** |
| **Wet Concrete Only****Coverage****1st Coat****2nd Coat** | Aquakem3 m2/ litre3 m2/ litre  |
| **Primer Coat****Coverage on Aquakem****Coverage on Porous Concrete****Coverage on Fibre Cement** | allnex Duraseal7m2  / litre5m2  / litre5m2  / litre |
| **1st Body Coat****Coverage** | Ultratuff1.1m2  / litre |
| **Fibreglass Reinforcement** | 300gsm Chopped Strand Matt |
| **2nd Body Coat****Coverage** | Ultratuff1.5m2  / litre |
| **3rd Body Coat****Coverage** | Ultratuff1.5m2  / litre*Apply Quartzzite aggregate into this coat* |
| **Decorative Non – Slip** **Coverage** | Quartzzite Aggregate4 - 6kg/m2 |
| **UV Protection** **1st Coat****2nd Coat** | Revathane 2m2  / litre4m2  / litre |

## **3.0 PRE-START EXECUTION**

### 3.1 Storage

Accept all materials and accessories undamaged and dry. Store drums, pails and aggregates upright with other material on level surfaces in non-traffic, non-work areas that are enclosed, clean and dry and devoid of solar heat gain.

### 3.2 Handling

 Avoid damage to drums and accessories.

### 3.3 Preparation

 Record batches and stock numbers. Follow the allnex QA requirements for preparatory conditioning of materials working temperatures and conditions before, during and after application of the selected systems.

Protect the work from solar heat gain.

### 3.4 Do Not Start

 Work shall not commence until the building is enclosed, all wet work is complete and good lighting is available.

For external applications protect the work area from adverse climatic conditions.

### 3.5 Inspect

 Inspect the substrate to ensure it complies with the requirements of the selected finish system.

### 3.6 Protection

 Protect adjoining work surfaces and finishes during the installation.

3.7 Site Safety

3.7.1 Ensure a site meeting has been held to acquaint other site workers with the requirement for closed access to the work area.

3.7.2 Ensure Health and Safety requirements are understood and agreed to prior to the commencement of the

 contract.

3.7.3 Overalls are recommended when using this product.

### 3.8 Technique

Before beginning the installation confirm the proposed layout of material, location of control joints and other visual considerations of the finished work.

**4.0 SUBSTRATE REQUIREMENTS**

 **4.1 New Concrete**

4.1.1 New concrete shall have a surface which has been mechanically trowelled to NZS3114:1987 U3 finish or better.

4.1.2 A minimum compressive strength of 25 MPA at 28 days cure..

4.1.3 A minimum cure time of 28 days.

4.1.4 Substrate Temperature ideally +10°C min / +40°C max, applications in lower temperatures will cause the material cure to become adversely affected.

4.1.5  *Substrate Moisture Content:* allnex Ultratuff can be installed on substrates with a high moisture content. The substrate needs to be visibly dry and have a nominal pull-off strength of a min 1.5 N/mm2, with No ponding water.

*Note*

*Two (2) Primer Coats of Aquakem at a spread rate of 3m2/litre/coat must be used in this instance*

 *Refer: allnex Aquakem Method Statement/Specification technical literature*

4.1.6 All falls and levels to be accurately laid into the concrete. *Refer: 2.6 above.*

4.1.7 A suitable vapour resistant membrane beneath the concrete slab is required.

4.1.8 A surface free of cement laitance or other contaminants and any roughly screeded or floated areas. No traces of cure membranes

4.1.9 Deep depressions, impact damage, hollows etc to be repaired or filled as appropriate using allnex Supaset.

4.1.10 Repair any unsatisfactory falls, levels, etc using Polymer Screed - allnex Screed 20**+** as appropriate.

 4.1.11 Cracks in the substrate are to be chased to allow for the application of the 15mm wide x 3mm deep Silicon Modified Paintable (SMP) bead of sealant (Simson ISR 70-50 supplied by Bostik) or similar, to act as a joint filler and bond breaker.

 **4.1.12 New Concrete Surface Preparation**

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| --- |
| **allnex recommend mechanical abrasion techniques as the surface preparation method.** |
| Preferred Option | Captive Shot blasting |
| Secondary Option | Diamond Grinding  |
| Minimum Requirement | CSP 3 |
|  *Refer: allnex Surface Preparation Technical Literature* |

**4.2 Existing Concrete**

4.2.1 Ensure existing concrete is sound and stable with a minimum compressive strength of 25 MPA.

4.2.2 *Substrate Moisture Content:* allnex Ultratuff can be installed on substrates with a high moisture content. The substrate needs to be visibly dry and have a nominal pull-off strength of a min 1.5 N/mm2, with No ponding water.

*Note*

*Two (2) Primer Coats of Aquakem at a spread rate of 3m2/litre/coat must be used in this instance*

*Refer: allnex Aquakem Method Statement/Specification technical literature.*

4.2.3 Remove all contaminants including cement laitance, dirt, grease, oil, fats, existing coatings, unsound substrate etc by steam cleaning, captive shot blasting, grinding, scabbling, hammering etc as appropriate.

4.2.4 All falls and levels to be accurately laid into the concrete. *Refer: 2.6 above*

4.2.5 A suitable vapour resistant membrane beneath the concrete slab is required.

4.2.6 A surface free of cement laitance or other contaminants and any roughly screeded or floated areas. No traces of cure membranes.

4.2.7 Deep depressions, impact damage, hollows etc to be repaired or filled as appropriate using allnex Supaset.

4.2.8 Repair any unsatisfactory falls, levels, etc using Polymer Screed - allnex Screed 20**+** as appropriate.

 4.2.9 Cracks in the substrate are to be chased to allow for the application of the 15mm wide x 3mm deep Silicon Modified Paintable (SMP) bead of sealant (Simson ISR 70-50 supplied by Bostik) or similar, to act as a joint filler and bond breaker.

 **4.2.10 Existing Concrete Surface Preparation**

|  |
| --- |
| **allnex recommend mechanical abrasion techniques as the surface preparation method.** |
| Preferred Option | Captive Shot blasting |
| Secondary Option | Diamond Grinding  |
| Minimum Requirement | CSP 3 |
|  *Refer: allnex Surface Preparation Technical Literature* |

 **4.3 Plywood | Fibre-cement**

 *Note*

 *Wherever possible prime the Plywood and Fibre-cement with Duraseal prior to sheet installation.*

 *Pay particular attention to the edges of the sheets.*

 **4.3.1** **Plywood Sheet:**

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| **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. |
| Filling of Countersunk Fastenings: | Flush fill all screw heads and sheet joints using allnex Fairing Cream. |
| Plywood Sheet Joints: | All joints must be left with a uniform finish. |

 **4.3.2 Fibre Cement Sheet**

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| --- | --- |
| **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 - MinimumWalls : 9mm – Minimum |
| Fibre Cement Fastening Type: | 316 Stainless Screws - 50mm x 10g |
| Fastening Spacings: | Perimeter: As per manufacturer’s instructionsCentres: As per manufacturer’s instructions. |
| Countersink Fastening: | All fastenings must be countersunk as per Manufacturer’s instructions. |
| Filling of Countersunk Fastenings: | Flush fill all screw heads and sheet joints using allnex Fairing Cream. |
| Fibre Cement Sheet Joints: | All joints must be left with a uniform finish. |

 *Note*

 *In all cases:- Refer to the Manufacturer’s installation instructions.*

**5.0 PRE - INSTALLATION PREPARATION**

 5.1 Round all edges at downturns.

 5.2 Install fillets at floor to wall junctions.

 5.3 Ensure Drains / vents & overflows are rebated and installed correctly.

 5.4 Ensure Flashings and the correct installation of movement/control joints has been achieved.

 5.5 The surface of any PVC rainwater outlets shall be scuff sanded.

**6.0 APPLICATION CONDITIONS:**

6.1 Products such as Ultratuff require *good drying conditions*.

 6.2 *Do not* apply in temperatures less than 10°C .

 6.3 Good *air movement*is the best method of drying.

 6.4 *Exterior Installation:* Working in hot, dry windy conditions will be difficult as the material will setup rapidly.

 or in situations when wet weather is likely.

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

## **7.0 INSTALLATION OF ALLNEX ULTRATUFF WATERPROOFING MEMBRANE.**

*Note Well*

 *Excessively thick coats retard drying and may lead to blisters.*

 7.1 Ensure the substrate is properly prepared and is suitable to receive the allnex Ultratuff finish.

 7.2 Neatly mask out and protect all areas not covered by the proposed work.

 **7.3 Primer Application – *Wet Concrete* Only**

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| **Aquakem Mixing Ratio**  |
| **Maximum coverage 3m²/litre/coat.****2 x Coats Required** |
| **Aquakem Part A** | **1 part (by volume or weight)** |
| **Aquakem Part B** | **1 part (by volume or weight)** |
| 7.3.1 Aquakem Part A | Part B are to be thoroughly mixed in the correct proportions.  7.3.2 Mix for a minimum of 3 minutes at 200-300rpm.7.3.3 Apply two coats of Aquakem by brush and roller ensuring it is worked well into the prepared substrate.7.3.4 Allow Aquakem to fully cure.  *Drying Time - Aquakem – 48 hours @20OC*7.3.5 Subsequently, the Aquaguard 101 shall be primed, to ensure adhesion, with allnex Duraseal at a spread rate of 7m2/ litre |

 **7.4 Primer – *Standard Installations***

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| **Primer Type**  |
| **Metal** | Anti-corrosion metal primerFollowed by Duraseal |
| **Concrete | Plywood | Fibre-cement** | Duraseal |

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| --- |
| **Duraseal**  |
| **Do not dilute**  |
| **Application Technique: Roller | Brush** |
| **Maximum Coverage:** **Concrete: 5m²/litre/coat.****Fibre Cement : 5m²/litre/coat.****Plywood: 5m²/litre/coat.** |

 7.4.1 Apply Duraseal

 7.4.2 Do not allow to pond.

 7.4.3 Ultratuff should be applied over the Duraseal as soon as it is dry and within 24 hours of application.

 *Dying Time - Duraseal – 30 - 60 minutes @20OC*

 **7.5 Fibre-cement and Plywood Floor Joints and Upstand Reinforcement**

 7.5.1 Check Primer application and once dry, proceed with the installation as follows.

 7.5.2 All sheet joints are to be over-spatuled with 15mm wide smear of Silicon Modified Paintable (SMP) bead of sealant (Simson ISR 70-50 supplied by Bostik) to act as a joint control measure / semi- bond breaker.

 7.5.3 All joints should be Fibreglass taped prior to the full membrane application.

 7.5.4 Install allnex Joint Safe Tape at all floor/wall junctions.

 7.5.5 Sheet Joints will require a 100mm wide strip of 300gsm chopped strand fibreglass matt or polyester cloth tape.

 *Note*

*The polyester cloth tape will dry more quickly than the chopped strand mat.*

 7.5.6 Wider strips will be needed to detail internal corners and upstands.

7.5.7 In all cases, apply a heavy coat of Ultratuff 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.

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

 **7.6 Fibreglass Reinforcement Preparation**

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| --- | --- |
| **Element** | **Value** |
| Fibreglass Salvage edge: | The salvage edge of the fibreglass matt must be “teased’ prior to installation. |

 7.6.1 The “teasing” of the salvage edge assists with the overlap application.

**7.7 Ultratuff Body Coats & (Full Fibreglass Reinforcement)**

*Exterior Applications*

 *Full Fibreglass Reinforcement is required in all exterior areas.*

7.7.1 Once the sheet joint and floor/wall reinforcing has cured, apply evenly by way of roller / brush the first body-coat of Ultratuff to the area to be laid up.

*Note*

*Use a long nap roller to ensure an even coverage and that enough material is used to ensure a complete “wet out” of the fibreglass matt.*

7.7.2 A wet edge must be maintained across the work face to allow the next section of Ultratuff to be worked in without showing a ridge.

7.7.3 Install the pre – prepared 300gsm chopped strand matt into the wet resin body-coat.

*Note*

 *The fibreglass is to have a minimum 75mm minimum overlap.*

 7.7.4 The fibreglass matt is also to be laid over any outlet flange plate and turned down Into any waste, finishing with a clean edge.

 7.7.5 The fibreglass matt is installed across the area and up the upstand

7.7.6 The fibreglass matt is to be worked with a “Parsley Cutter*” (laminating roller)* to bring the resin through the matt thus ensuring a complete “wetting out” of the inside of the fibreglass chopped strand matt.

*Critical Step*

*If there is not enough Ultratuff on the substrate surface prior to the installation of the 300gsm chopped strand matt it will be difficult to obtain a full “wet out” of the matt.*

*Applying more Ultratuff to the surface and trying to work it back into the matt will cause a dry laminate finish*

*and is unacceptable.*

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

 *Allow these coats to dry (test thoroughly dry)*

 7.7.8 Once the first application is cured any pin holes and or shrinkage cracks must be filled with Simson ISR 70-50 sealant before the application of the second coat.

 7.7.9 Apply the second body coat of Ultratuff 001FC.

 *Note*

*This coat must be applied at “right angles” to the previous Body coat and take care to ensure that the Ultratuff is worked into all areas with particular attention being paid to all internals and externals*

 7.7.10 When the second application of the Ultratuff is complete and dry; no pin holes, thin spots, perforations or lumps should be evident.

 7.7.11 A minimum of 1.2mm dry film thickness must be achieved.

 7.7.12 Re-check for pinholes and/or shrinkage cracking in areas of heavy application. *(E.g. internals and angles).* If these exist, then “smear” fill them with Simson ISR 70-50 sealant. And apply a further coat of Ultratuff as necessary.

 7.7.13 Edge and step details may be further reinforced in this way.

*Note*

*If a smoother finish is required on upstand areas it is recommended that the use of surfacing tissue be incorporated into the system.*

*Observe minimum / maximum recoat recommendations*

 **7.8** **NON – SLIP APPLICATION**

 **7.8.1 Textured System *- Utilizing Gloop Loop Roller***

 7.8.2 Apply the Ultratuff using a Gloop Loop Roller

 7.8.3 Ensure material is applied evenly to produce and even non-slip texture pattern.

7.8.4 Ensure all areas are clean and dust free and apply the Revathane Topcoats.

 *Refer Section: 2.14 for coverage rates.*

7.8.5 Ensure Topcoats are applied as per the required application rates.

*Observe minimum / maximum recoat recommendations*

 **7.9 Textured System - *Utilizing Quartzzite Coloured Aggregate***

 7.9.1 Evenly apply the Ultratuff across the area to be laid ensuring the correct coverage is obtained.

7.9.2 As soon as the material has levelled sufficiently, **evenly** distribute into the wet Ultratuff coat to **excess** the design aggregate blend.

7.9.3 As the Ultratuff begins to show on top of the aggregate, additional aggregate is evenly broadcast until no more resin surfaces.

7.9.4 Suitable methods of distributing the aggregate are:

 ◼ Hand Broadcast

 ◼ Hopper gun | Air driven distribution

7.9.5 A wet edge must be maintained across the work face to allow the next section of resin to be worked in without showing a ridge.

7.9.6 Further aggregate is then added.

 7.9.7 This process is repeated until the area is complete.

7.9.8 As soon as the Ultratuff has cured all excess aggregate is to be removed by sweeping followed by vacuuming to remove dust etc.

7.9.9 Ensure all areas are clean and dust free and apply the Revathane Topcoats.

 *Refer Section: 2.15 for coverage rates.*

7.9.10 Ensure Topcoats are applied as per the required application rates.

*Observe minimum / maximum recoat recommendations*

**8.0 MAINTENANCE**

8.1 Ultratuff Deck Finishes should be checked on a regular basis for damage.

8.2 Damage should be reported immediately to enable repairs to inhibit any water ingression.

**9.0 CLEANING**

9.1 Ultratuff Deck Finishes benefit from being cleaned on a regular basis to ensure longevity of the system.

9.2 Ultratuff Deck Finishes may be cleaned with a Ph neutral detergent and light scrub followed by washing with clean water.

**10.0 QUALITY ASSURANCE**

 A log shall be kept by the approved applicator and made available to allnex at their request.

 Information to be recorded daily is but not limited to:-

* Material Batch Numbers
* Sequence of Mixing ratios and quantities and formula
* Substrate Moisture Content
* Substrate Temperature
* Ambient Temperature
* Ambient Relative Humidity

**11.0 COMPLETION & PROTECTION OF WORK**

The approved Applicator shall take reasonable steps to protect his work and the work of others trades during the time that his work is in progress.

 The General Contractor during the same time shall keep the areas free and clear of traffic. Thereafter, until the building is completed.

 It shall be the responsibility of the General Contractors to protect the allnex membrane from damage, paint droppings, or other contamination that may prove difficult to remove or detrimental to the finished membranes characteristics and performance.

 The approved Applicator shall:

* Check membrane has sealed all surfaces.
* All details are full and complete with no gaps that may allow water ingress.
* Ensure floor / topcoat is fully cured overnight prior to other trades or service.

**12.0** **WARRANTY**

allnex will assure that all products incorporated into this specification have been manufactured to allnex quality specifications and GMP procedures.

allnex will also assure that when correctly applied the system will meet the critical requirements of the allnex design specification.

However, given that allnex has no control over the substrate, the application environment and the application process all warranties are supplied by the approved Applicator and backed by our agreement with them.

The approved Applicator shall provide a warranty for a period of:

 **Fifteen (15) Years**

 The warranty period commences from the date of practical completion.

 Damaged areas must be repaired immediately to ensure continuity of the Warranty

**13.0 ALLNEX APPROVED REGIONAL INSTALLATION COMPANIES**

allnex will provide individual advice for specific projects and should be consulted.

 It is the nature on the trade that contractor skill levels, capability and experience vary.

**14.0 DOCUMENTS TO BE CONSULTED**

● allnex Approved Applicator List  ● allnex Product Technical Data Sheets

● allnex Waterproofing Details● allnex Technical Bulletins

● allnex Surface Preparation Document

 *GUIDANCE NOTE*

 *Include cross references to other sections where these contain related work.*

**Date: Feb 2023**

**Replaces NA**

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