 Specification

**Sureshield ZV Heavy Duty Screed Topping System**

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| **PREPARED FOR:** | Client: |
| **CONTRACT:** | Installation of allnex Construction Products. Sureshield ZV heavy duty screed topping system.Project: |
| **DATE:** | December 2022 |
| **SCOPE:** | 1. General conditions of contract.
2. General assessment.
3. Pre-Start Execution.
4. Substrate Requirements and Surface Preparation.
5. Material Pre-Promotion & Hardener Addition Guidance.
6. Installation: allnex **Sureshield ZV.**
7. Application of Coves | Drains | Up -stands.
8. Installation of control joints | sealants etc.
9. Maintenance.
10. Cleaning.
11. Quality Assurance.
12. Completion & Protection of the Work.
13. Warranty.
14. Installation Companies.
15. Documents to be Consulted.
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| **NOTES:** |  |

**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. A finished Sureshield ZV floor may show some trowel marks in critical lighting situations as the floor is a hand applied topping system. These marks do not reduce the practical characteristics of the floor topping. The

 quality of lighting during installation is critical to the final result and it is recommended to install the floor

 under the finished lighting or provide a high standard of temporary lighting fixed in an overhead position.

1.9 Any warrantee required will be supplied by the allnex Applicator and backed up by our agreement with them.

*Refer: Section 13 below*

1.10 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.

1.11 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 synthetic resin wall and/or floor toppings 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 All food or food packaging likely to be affected by the installation process (e.g. fumes /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 STZ prefill system.

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| **Floor Fall Definitions** |
| 1:50 | Liquids will free run to drainage |
| 1:80 | Liquids will migrate to drainage |
| 1:100 | Some ponding of liquids will occur, squeegee to drainage will be required. |

 *Floor Fall:*

 *The existing floor slab 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 floor 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 concrete floor slab the difference between the lowest (floor 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 concrete 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 floor slab shall be corrected (if required) using STZ Prefill. Refer: allnex STZ Prefill design document.*

 *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 All flooring is to comply with co-efficient of friction requirements to ensure compliance with current legislation.

2.8 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 The allnex Sureshield ZV system is also suitable for upgrading and resurfacing existing sound resin floor topping systems. Consult allnex construction products for specific project advice.

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

2.11 Technical Data

 Refer to allnex Construction Website for the latest technical literature.

2.12 Materials

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| **Element** | **Values** |
| Primer: | Intafloor ZV PrimerSurechem VE Hardener | M100Cobalt |
| Flooring System Matrix:Colour: | Intafloor ZV ResinSurechem VE Hardener | M100Cobaltallnex STZ Flooring SandTBC (as Specified) |
| Floor Surface Finish: | ***Refer Floor Surface Finish Definitions Below:- Section 2.13***Choose as Appropriate: |
| Coving System:Cove Height:Cove Radius:Colour:  | Intafloor ZV ResinSurechem VE Hardener M100Cobaltallnex STZ Cove SandSurface Finish Smooth :mm25mm | 50mm | 75mm or other (Delete as Necessary)TBC (as Specified) |
| Topcoat: | Intafloor ZV Clear Topcoat ResinSurechem VE Hardener M100Cobalt |
| Cove Capping Detail: | STZ Cove Strip: 5.2 or 9.2 Rebated |
| Cove Capping Sealant: | Sabreseal CR |
| Floor Joint Sealant: | allnex K130 | Sabreseal SMP60 |
| Pot-Life: | +200C ~ 50%RH | 20 - 30 minutes |
| Hard Dry: | +250C ~ 50%RH | 3 hours |
| Light Foot Traffic: | +250C ~ 50%RH | 3 hours minimum |
| Full Use: | +250C ~ 50%RH | > 4 hours |
| Recoat: | Anytime within 24 hours. |
| ***After 24 hours: Severe mechanical abrasion*** |
| SG kg/litre: ~Resin | Hardener | Aggregate | 2.148 |
| Thinning: | Flooring Matrix - Do not thinTopcoats – Not Recommended However; Topcoat may be thinned with Styrene Monomer (maximum 5%)***Caution: Thinning with Styrene will cause an odour and the possibility of Food Tainting*** |
| Clean up: | allnex acetone |
| Dangerous Good Class:  | Refer SDS sheets |
| Packaging:  ~ Intafloor ZV Primer ~ Intafloor ZV Resin ~ Intafloor ZV Topcoat ~ Surechem VE Hardener ~ Cobalt | 20 kg Open top metal container20 kg Open top metal container20 kg Open top metal container 5 kg Plastic Bottle0.9kg | 3.6kkg Tin |
| Shelf life: | 6 months from date of manufacture(After this period consult with allnex) |

**2.13 Sureshield ZV Surface Finish Design Options**

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| **allnex rating**  | **Description** | **CF Rating** | **SRV Rating** | **R Rating** | **Examples** | **Topcoat Requirements**  |
| **Installation Type** | **NZ/AS3661.1****1993** | **AS/NZS 4586** |  | **Completely homogeneous floor areas** | **Number** **of coats**  | **Spread Rate****per litre** |
| **NR1**  | Smooth: Steel trowel floated.  | 0.46  | 43 | R11 | Dry areas e.g. Bakeries  | 1  | 4.0m2 |
| **NR2**  | Non-slip & Hard-Wearing:Glass float Finish | 0.56  | 53 | R12 | Light-Wet areas e.g. Heavy-duty bakery.  | 1  | 4.0m2  |
| **NR3.A**  | Medium duty non-slip:Glass float finish and 18/36 non-slip aggregate is broadcast into the wet surface. Apply a Medium Sprinkle with areas of no non-slip. Follow this with roller applied topcoat2. This gives a good combination of Nonslip and cleanability.  | 0.62  | 56.5 | R12 | Continually Wet areas with non-slip required. e.g. Light duty Meat, Fish. Wet area Bakery.  | 2 1st Coat 2nd Coat  | 4.0m2 4.0m2  |
| **NR3.B**  | Heavy duty non-slip:Glass float and the 18/36 non-slip aggregate is broadcast into the wet surface. This is a full spread applied heavily. Follow this with roller applied topcoat.  | 0.73  | 64.5 | R13 | Heavy duty e.g. Butchery, abattoirs Fish Processing  | 2 1st Coat 2nd Coat  |  2.5m2 4.0m2  |
| **NR4**  | Very sharp non-slip: Glass float and is broadcast with 18/36 mixed 50/50 with Silicon carbide non-slip aggregate into the wet surface. Follow this with roller applied topcoat.  | 0.73  | 64.5 | R13 | Heavy duty processing areas with extra slip hazards.  | 2 1st Coat 2nd Coat  |  2.5m2 4.0m2  |
| **NR5**  | Specialised very heavy-duty non-slip***:*** *Refer: allnex for a specification.*  | 0.73   | 64.5 | R13 |   |   |   |

## **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.

3.7.4 The use of fans to provide positive forced air draft and/or extraction is recommended.

3.7.5 Flammable 3C.

3.7.6 Erect “No Smoking” signs. No Welding or naked flames permitted within a 10-metre radius during installation.

3.7.7 Have fire extinguishers readily available.

 *Refer: safety data sheets (SDS) for all requirements.*

### 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 Have a moisture content less than 75% RH or 18% WME *(exceptions seek further advice from allnex construction products technical)*

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

4.1.6 For slab on ground installations a suitable vapour resistant membrane beneath the concrete slab is required.

* + 1. A surface free of cement laitance or other contaminants and any roughly screeded or floated areas.
		2. Remove all concrete curing agents, contaminants and any other material likely to affect the adhesion of the Sureshield ZV.
		3. Cracks in the concrete are to be bandaged using allnex 450gsm fibreglass or treated as a control joint as appropriate.

4.1.10 Deep depressions, impact damage, hollows etc. to be repaired or filled as appropriate using STZ Prefill.

4.1.11 Repair any unsatisfactory falls, levels, etc. using STZ Prefill as appropriate to suit the proposed floor finish.

**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 = Bush Hammer Units |
| Minimum Requirement | CSP 4 or 5 |
|  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 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.

4.2.3 Have a moisture content less than 75% RH or 18% WME *(exceptions seek further advice from allnex Construction Products).*

4.2.4 All falls and levels to be accurately laid into the concrete.

4.2.5 For slab on ground installations a suitable vapour resistant membrane beneath the concrete slab is required.

4.2.6 A surface free of any roughly screeded or floated areas.

* + 1. No traces of cure membranes.
		2. Cracks in the concrete are to be bandaged using allnex 450gsm fibreglass or treated as a control joint as appropriate.

4.2.9 Deep depressions, impact damage, hollows etc. to be repaired or filled as appropriate using STZ Prefill.

4.2.10 Repair any unsatisfactory falls, levels, etc. using STZ Prefill.

 **4.2.11 Existing 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 = Bush Hammer Units |
| Minimum Requirement | CSP 4 or 5 |
|  Refer: allnex Surface Preparation Technical Literature |

 **4.3 Plywood | Fibre-cement**

 Consult allnex for information.

 **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. |
| Plywood Sheet Joints: | All joints must be left with a uniform finish. |
| Fibreglass Laminate: | Install Intafloor ZV 450gram Chopped Strand Matt Laminate to all areas of Plywood. |

 **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.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. |
| Fibreglass Laminate: | Install Intafloor ZV 450gram Chopped Strand Matt Laminate to all areas of Fibre Cement. |

 Note

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

**5.0 MATERIAL PRE-PROMOTION & HARDENER ADDITION GUIDANCE**

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| ***Intafloor ZV Primer, Resin & Topcoat must be Pre-Promoted with Cobalt solution prior to use.*** |

 5.1 New Pails of Intafloor ZV Primer | Resin & Topcoat are marked as un-promoted.

 5.2 allnex supply the Intafloor ZV materials in pails with open top lids, thus enabling the Cobalt to be mechanically

 mixed into the resin base

 *Note*

 *Use a separate Hardener dispenser and mark it for Cobalt use only.*

 *The cobalt can be added up to 12 hours prior to use.*

 *Always add Cobalt first, mix and use as required.*

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| ***Never Mix Cobalt and Hardener******Pre- Train Staff ……..The lids are marked as un-promoted, Once promoted re label, tick or mark***  |

 5.3 Good Trade Practice

 Mix the cobalt into the resin in a separate operation on the same day as use, away from the work area.

 Then take the promoted material to the workface for catalyst addition.

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| ***Check the Cobalt’s age and stability by doing a TRIAL prior* to work start.** |
| Promote the Resins at the correct level, then add a 1.5% catalyst to check that the reaction starts.  |
| Even if high catalyst levels are added, un-promoted resins will not cure.  |
| This trial can also be used if confusion occurs about Cobalt addition.  |

 5.4 Be well organised and train staff clearly in the promotion and catalysation process - Mistakes are costly

 **5.5 Promotor (Cobalt) Addition**

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| **Product** | **Promotor** |
|  Intafloor ZV Primer 20kg | 200 grams Cobalt Solution |
| Intafloor ZV Resin 20kg | 100grams Cobalt Solution \*\*Special Note\*\* |
|  Intafloor ZV Topcoat 20kg | 200grams Cobalt Solution |

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| **\*\*SPECIAL NOTE\*\*** |
| If Installing Sureshield ZV Traxite to reinstate non-slip requirements,increase the ***Cobalt addition*** of the ***Intafloor ZV Resin as below*** |
| Intafloor ZV Resin 20kg | 200grams Cobalt Solution |

 **5.6 Hardener Addition**

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| **Hardener** |
| Surechem VE Hardener  |  Curox M-100 |

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| **Minimum Hardener addition is 1.5%****(Non-compliance with this will result in uncured material and system failure)** |

 5.6.1 Increase Hardener levelsfor thin films (*Primer & Topcoats*) to ensure prompt cure. (i.e. use 2.5% )

 5.6.2 Decrease Hardener levels for thicker films (Sureshield ZV *Resin Screed*) to avoid exotherm. (i.e. use 1.5%)

 5.6.3 Ensure pre-trials are done on site, in site conditions.

 5.6.4 The thickness and ambient floor and air temperature has a large effect on the cure profile.

## **6.0 INSTALLATION OF THE ALLNEX FLOOR FINISH**

 **6.0 - 8.0mm Thick Sureshield ZV Topping**

 6.1.1 Ensure the substrate is properly prepared and is suitable to receive the allnex Sureshield ZV finish.

 6.1.2 All flooring is to comply with slip co-efficient of friction requirements to ensure compliance with current Legislation.

 Install allnex Sureshield ZV strictly in accordance with the specifications and recommendation of allnex construction products, and accurately laid to a minimum thickness of 6.0mm -8.0mm (refer: Specified thickness)

 Note

 allnex STZ Flooring Sand shall be dry and to allnex formula and have been box blended to ensure evenness of colour**.**

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

 **6.2 Primer Application**

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| **Primer Mixing Ratio**  |
| **Maximum coverage 6m²/litre/coat.** |
| **Intafloor ZV Primer** | Per Kg  |
| **Surechem VE Hardener | Curox M100** | 1.5 -2.5% -on weight of resin  |

 6.2.1 Intafloor ZV Primer and Surechem VE Hardener | M100 are to be thoroughly mixed in the correct proportions.

 6.2.2 Apply a minimum one coat of Intafloor ZV Primer by brush and roller ensuring it is worked well into the prepared substrate.

 6.2.3 Coverage rate and number of coats of Primer will vary depending on the porosity of the substrate.

 6.2.4 Apply a light broadcast of Walton Park 18/36 into the wet ZV primer coat. (this will allow for easier application of the Sureshield ZV Screed)

 6.2.5 Wait until Intafloor ZV Primer has gelled/set before over-coating.

 **6.3 Sureshield ZV Topping Installation**

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| **Sureshield ZV Mixing Ratio & M2 Coverage (Floors) @ 8mm @ 6:1 Aggregate to Resin Ratio**  |
| **Intafloor ZV Resin** | 2.454kg  |
| **Surechem VE Hardener | M100** | 1.5 -2.5% -on weight of resin  |
| **STZ Flooring Sand** | 14.72kg |
| **Total Weight M2** | 17.18kg |

 6.3.1 Sureshield ZV must be applied in such a manner to achieve a minimum 6.0mm – 8.0mm thickness. (as specified)

 6.3.2 Accurately weigh and power mix the Intafloor ZV Resin & Surechem VE Hardener. Add the STZ Flooring Sand (correct weight) to the mixed resin and hardener, mix until homogenous, consistent and free of lumps

*Note*

 *Maximum Intafloor ZV Resin: Filler (sand) ratio 1:6 parts by weight.*

 6.3.3 Higher aggregate Resin / Aggregate rates are used for coving.

 6.3.4 Apply allnex Sureshield ZV flooring to the correctly prepared and primed substrate using a screed box, bars or angle strips as a guide, trowel using suitable glass, steel trowels, power float etc.

 6.3.5 Ensure the matrix is well compacted and free of ridges or unevenness.

 6.3.6 Successive mixes must be homogeneously blended together into wet allnex Sureshield ZV mixes.

 6.3.7 Access to repair wet floor areas during installation can be achieved using crampons or special spiked shoes.

 6.3.8 Adequate lighting is to be provided to ensure defective surface finishing can be easily identified and corrected during the installation process.

 6.3.9 Lubricate tools and equipment used during the installation with a sparing amount of Styrene Monomer.

 6.3.10 Use Acetone only to clean tools and equipment.

 6.3.11. Ensure all finished edges of the Sureshield ZV are supported to avoid damage.

 **6.4 Sureshield ZV Surface Finish Design Options -** Refer: Section 2.13 Sureshield ZV Surface Finish Design Options

* Finish Smooth - Utilizing Steel Trowel Techniques.
* Light Texture – Finish Utilizing Glass Float Techniques.
* Finish utilizing the following method to obtain the correct Anti-Slip Profile.

 6.4.1 Evenly distribute into the wet resin screed the design screed aggregate blend.

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

* + 1. Suitable methods of distributing the aggregate are:

Hand distribution

Hopper gun | Air driven distribution

6.4.4 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.

6.4.5 Further aggregate is then added.

 6.4.6 This process is repeated until the area is complete.

6.4.7 As soon as the resin has hardened sufficiently (to allow walking across) all excess aggregate is to be removed by sweeping followed by vacuuming to remove dust etc.

6.4.8 Sureshield ZV may be applied to skirting’s, coves and upstands if required with the use of specially formed trowels. Refer Section 8.0 below.

 **6.5. Topcoats**

 6.5.1 Once finished and hardened apply the Intafloor ZV Topcoat.

 The Topcoat(s) must be applied only to clean and dry surfaces.

 6.5.2 First Topcoat is applied using Intafloor ZV Resin.

 6.5.3 Final Topcoat is applied using Intafloor ZV Topcoat.

  *Note*

 *Intafloor ZV Topcoat is waxed, thus ensuring the correct surface cure is obtained.*

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| **Topcoat Mixing Ratio**  |
| **Refer to Surface Finishes Schedule (Section 2.13) for Number of Coats and Coverage** |
| **Intafloor ZV Resin** | Per Kg  |
| **Intafloor ZV Topcoat** | Per Kg |
| **Surechem VE Hardener | M100** | 1.5 -2.5% -on weight of resin  |

 6.5.4 Intafloor ZV Topcoat Resin and Surechem VE Hardener are to be thoroughly mixed in the correct proportions (Hardener: 1.5% - 2.5% on Intafloor ZV Resin Topcoat weight).

 Topcoat application rates depend on the Surface Finish Texture.

 Refer: Sureshield ZV Surface Finish Design Options

6.5.5 Thinning of Topcoats

 Not Recommended

 However; Intafloor ZV Topcoat may be thinned with Styrene Monomer (maximum 5%)

 ***Be aware that thinning with Styrene Monomer will cause an odour and the possibility of Food Tainting***

 *Note*

 *Additional topcoats will reduce surface texture and slip resistant properties.*

**Observe minimum/maximum recoat recommendations**

## **7.0 APPLICATION OF COVES | DRAINS | UPSTANDS ETC****.**

 7.1 Ensure the substrate is properly prepared and is suitable to receive the allnex Sureshield ZV Cove finish.

 7.2 **Cove Reinforcement**: Apply a Fibreglass bandage to the junctions between all timber framed or insulated panel walls and floors using 450 gsm chopped strand glass matt and Intafloor ZV Resin. The Fibreglass is to extend to full height of cove/upstand and a minimum 50mm onto floor.

7.3 **Cove Capping**: Install allnex Sureshield 5.2 | 9.2 rebated cove cap termination detail strictly in accordance with the specifications and recommendation of allnex Construction Products and specific site requirements.

 Ensure aluminium cove flashing is mechanically fixed at a minimum of 300mm centres and positively sealed to provide a hygienic finish and overlap the fibreglass bandage.

 7.4 Coves and skirting’s can be completed as part of the main floor or following the installation of the main floor.

 If coves are installed post the main floor then the floor must be protected during cove/skirting installation.

7.5 Accurately weigh and thoroughly mix the Intafloor ZV Resin and Surechem VE Hardener in the correct proportions in a separate container. Add the graded aggregates (correct weight) to the mixed resin and hardener, mix until homogenous, consistent and free of lumps.

7.6 Apply evenly by way of trowel the Sureshield ZV Cove ensuring consistency along the detail. Ensure good compaction and the designed radius for the area is as indicated.

7.7 Ensure the transition of the cove base onto the flooring area is smooth, even and free of nibs and depressions that may hold dirt.

7.8 All cove details are finished smooth to aid cleaning.

7.9 As soon as the resin cove detail has hardened sufficiently de-nib followed by vacuuming to remove dust etc.

 ‘ 7.10 Once finished and hardened apply the Intafloor ZV Topcoats.

 *Refer: Section 6.5 above*

*Note*

*Additional Topcoats may be required in areas where a smoother finish is required*

**Observe minimum/maximum recoat recommendations**

**8.0** **INSTALLATION OF CONTROL JOINTS | SEALANTS ETC.**

 **8.1 Joints:**

 All concrete control and construction joints should be carried through the Sureshield ZV.

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| **Control | Construction Joints** | **Cold Joints | Non-Movement Joints** |
| **allnex K130 or Sabreseal SMP60** | **allnex K130 or Sabreseal SMP60** |
| **Floor Penetrations** | **Cove Cap Sealant** |
| **Sabreseal SMP60** | **Sabreseal CR** |

*Note*

 *The Control Joint Sealants must be installed with a bond breaker.*

8.2 The interface between the allnex Sureshield ZV flooring and stainless-steel drains, etc. are to be sealed using allnex K130 or Sabreseal SMP60 sealant.

8.3 All penetrations through the floor/coves, are positively sealed using Sabreseal SMP60

8.4 Ensure the metal cove capping is positively sealed using Sabreseal CR.

8.5 All cold joints between sections of the Sureshield ZV flooring/coves etc. may be sealed using allnex K130 or Sabreseal SMP60 sealant.

**9.0** **MAINTENANCE**

Ease of repair is a major advantage with allnex Sureshield ZV flooring.

Damaged areas are cut out and patched level using new materials quickly and with little disruption.

**10.0 CLEANING**

 See Separate Technical Literature

**11.0 QUALITY ASSURANCE**

 A log shall be kept by the licensed allnex contractor 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

**Refer: Documents QC.RF.1 | QC.RF.2 | QC.RF.3**

**12.0 COMPLETION & PROTECTION OF WORK**

The Licensed Resin Flooring Contractor 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 floor 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 Floor Finish from damage, paint droppings, or other contamination that may prove difficult to remove or detrimental to the finish floor characteristics and performance.

 The Licensed Resin Flooring Contractor shall:

* Check Top Coating has removed all “boney” / ‘dry” floor and cove surfaces.
* All cove details are full and complete with no gaps that may allow water ingress.
* De-nibbing, Ensure all rough surface dags are removed from floors and coves.
* Check non-slip surface texture is as specified and even.
* Check all water falls to drains, with no ponding as specified.
* Ensure floor / topcoat is fully cured overnight prior to other trades or service.

**13.0** **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 Resin Flooring Contractor and backed by our agreement with them.

The Resin Flooring Contractor shall provide a warranty for a period of:

 **TBC (as required) Years**

 The warranty period commences from the date of practical completion.

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

**14.0 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.

**15.0 DOCUMENTS TO BE CONSULTED**

* allnex Licensed Contractor List
* allnex Product Technical Data Sheets
* allnex Colour Formulas
* allnex Flooring Details
* allnex Cleaning Recommendations
* allnex Surface Preparation Document
* allnex Technical Bulletins
* allnex Exterior Installation

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**Replaces: Sept 2021**

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