

Specification #GE HEALTHCARE WETROOMS IW01042020

Project:	Healthcare Wet Rooms - Set Down Subfloors, Waterproofing, and Sheet Vinyl Installation.
Specification Prepared for:	NZ Healthcare Facilities Projects.
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Proposed Systems:	UZIN PE520 Waterbased Additive/Primer. UZIN SC980 Low Shrink Rapid set Cement. Roberts 48 Universal Acrylic Primer. RLA Flexiseal P.U.D Waterproof Membrane. UZIN PE 280 Waterbased Primer. UZIN NC182 Rapid Set Low Slump Mortar. (floors) UZIN NC888 Fine Finishing Compound (walls) UZIN KE 2000s Acrylic Vinyl Adhesive. UZIN KR430 2-Part Polyurethane Vinyl Adhesive.

Scope:

For the application of preformed wet area and shower base set-downs, and the installation of the Specified Commercial Sheet Vinyl Floor and Wall -Coverings.

The following installation guideline is to be read in conjunction with all relevant industry standards and Manufacturers technical Datasheets provided.

All substrates are to comply with the New Zealand standard NZS/AS 1884-2013 Floor coverings - Resilient sheet and tiles - Laying and maintenance practices in particular clause 3.1.1.4

(a) Planeness - when a straightedge 3000 mm long is placed at rest at two points 3000 mm apart on the surface, no part of the surface shall be more than 3 mm below the straightedge.

(b) Smoothness (abrupt deviation of the surface) - When a straightedge 200 mm long is placed at any position at rest on the surface, no part of the surface shall be more than 0 mm below the straightedge.

(c) Soundness - the surface shall be without cracks, crazing, dusting, rain damage, spalling, efflorescence or delamination

NOTE:

All substrates with poor surface form or excessive profile and unsuited to the direct application of the floor coverings must have corrective systems applied (e.g. steel-trowelled underlay), as agreed between the purchaser and the floor laying contractor.

Before laying operations begin, materials such as grease, oil, paint, existing floor coverings, curing or parting agents, or any surface treatment which could adversely affect adhesion shall be removed from the subfloors. The concrete surface should be a steel trowel finished but not a burnished finish. Mechanical diamond grinding or Captive Shot-blasting will remove all surface contaminants eg. demarcation lines, paint residues, release and curing agents and provide an open porosity that allows

For the application of and surface penetration of primers and adhesives. All substrates are to be thoroughly vacuumed to remove any dust, dirt and loose materials.

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UZIN Substrate correction systems are recommended to provide compliance to the flooring industry standards.

Substrate preparation is fundamental to the longevity and overall performance of all flooring systems.

Site Conditions:

NZS/AS1884 – 2013

3.1.2 Air-conditioned areas states:

'Where air conditioning is installed, no underlayment or floor covering shall be installed on the subfloor until the conditioning units have been in operation at expected operating temperature and humidity for at least seven days. During this period the temperature and humidity shall not be allowed to fall outside the recommended limits of the manufacturer of the floor covering. These conditions shall be maintained during installation and for 48h thereafter. Where air conditioning is to be installed but is not yet operational, it is recommended that the room be maintained within the temperature range of 18°C to 30°C for 7 days prior to and during installation and for 48h thereafter.

NOTE: Without such temperature control at this stage, subsequent movement of the subfloor, underlay and floor covering may occur.

All warranties will be void if installations are carried out in site conditions that differ from the manufacturers installation parameters.

Substrate PH:

All substrate PH levels are to comply with NZS AS 1884-2013,

Substrate Moisture

New Zealand Standard NZS AS 1884-2013 Floor coverings - Resilient sheet and tiles - laying and maintenance practices 2.1.1.2 states 'Before subfloor preparation is performed and a floor covering is installed on a concrete subfloor the dryness of the concrete shall be determined as described in Appendix A'.

The acceptable level of relative humidity for a concrete substrate to receive resilient flooring is 75% RH or less, regardless of whether the measurement is on-slab or in-slab.

A2.2 Hygrometer testing – Concrete only (in-slab method)

In-Slab method: In the case of hygrometer readings within the concrete floor, typically, a specifically manufactured plug is inserted into a hole drilled of a specific diameter and depth as per manufacturer's instructions. The plug provides for an air space sealed from the ingress of surface atmosphere, which is exposed to the specified depth of the concrete floor.

Note: If substrate moisture exceeds the industry standard required or there are other subfloor issues contact Gilt Edge Industries Ltd for instruction

Product Descriptions:

UZIN PE520 Water Based Additive/Primer

Water-based additive/primer for installations of levelling compounds. For **porous** substrates. Diluted 4:1 with water for '**wet on wet**' installations. Install levelling compound while primer is still wet. UZIN PE520 additive/primer is used as an additive for enhanced flexibility and adhesion in levelling compounds. An Ideal primer for adhesive application which is applied by brush, roller or spray.

UZIN SC980 Low shrink Rapid Set Cement.

UZIN SC980 Low shrink Rapid set Cement is a rapid Hydraulic setting cementitious binder for the production of rapid screeds that are quickly ready for covering, largely shrink-free and with low-stress properties, dimensionally stable, without dishing and no setting at edges even at larger areas. UZIN SC980 Low shrink Rapid Cement is particularly suited for the formation of falls in wet areas where a pre-formed set-down is provided.

Roberts R48 Universal Acrylic Primer.

Roberts R48 Universal Primer is a rapid drying solvent free low VOC water based acrylic primer. For use over porous and non-porous substrates, Roberts Universal primer is compatible with cement based ceramic tile adhesives and levelling compounds.

RLA Flexi-Seal P.U.D Waterproof Membrane.

Flexi-Seal PUD is a blue, water based polyurethane modified, flexible waterproofing membrane. It is a single part fast drying and UV stable and does not require the use of any reinforcement. Can be used over concrete, render, rendered brickwork, block work, fibre-cement, gyprock, plywood and particle board surfaces.

UZIN PE280 Water-Based Primer

UZIN PE280 is a very low emission and film-forming dispersion primer for use over residues of adhesives and levelling compounds and as a bonding agent on dense and smooth surfaces or directly onto epoxy and PU based primers. For use prior to application of levelling compounds on cement and calcium sulphate screeds for floor covering and wood flooring installations.

UZIN NC182 Low Slump Trowel Applied Mortar.

UZIN NC 182 Rapid cure Low slump Mortar is a water mixed cementitious filling, smoothing and high build levelling compound that will finish to a feather edge and build to any thickness.

UZIN NC888 Surface Flushing Compound.

UZIN NC888 Surface Flushing Compound is a water mixed very fine, smooth and extremely rapid setting compound on substrates without primer and for smoothing out to a feather-edge, for smoothing and filling pin holes and small voids to a maximum thickness of 4.0mm.

UZIN KE2000S – Universal Flooring Adhesive

UZIN KE 2000S is a strong dispersion adhesive with short open time and long working time for application with the pressure sensitive, wet set adhesive and double drop bonding method. For use on floors and walls. For interior use.

UZIN KR430 2-part Polyurethane Adhesive (For shower waste outlet surrounds.)

UZIN KR430 is a 2-component polyurethane adhesive is used to bond vinyl to most common building substrates including concrete, cementitious levelling compounds, timber and steel, providing a bond highly resistant to water and most common chemicals.

Ensuites/Wet Rooms Set Downs Installation Procedure:

- Aggressively diamond-grind the substrate set downs to remove all laitence and existing surface contaminants with appropriate Concrete grinding equipment.

For bonded screeds a tie-coat is to be applied to the prepared substrate as follows:

Please note that the prepared substrate must be dampened with water prior to the tie-coat application.

- Mix 4 parts UZIN SC980 with 1 part UZIN PE520 additive combined with a small quantity of sand. Adjust to a fluid consistency with the addition of clean potable water.
- Apply mixed formulation to the prepared substrate by brush and broom.
- Application of the mixed screed to tie-coat must be '**Wet on Wet**'.
- Mix UZIN SC980 with builder's screed mix sand 0.3/6.0 mm and water using screed pump or compulsory mixer. Choose cement/sand mixing ratio according to quality required, see "Application table" contained in manufacturers datasheets provided.
- The required amount of water (note WZ value of max. 0.45) depends on the sand moisture content. Mortar consistency should be between 'wet earth' and 'plastic', make sure not to mix too thin.
- Install mixed UZIN SC980 Rapid setting cement formulation into the wet tie-coat application. (Fall to wastes can be generated readily with this system.)

Some surface finishing and/or flushing may be required prior to the installation of resilient floor-coverings or water-proofing membranes. Please refer below for recommendations.

Do not apply primers or surface finishing systems within 48 hours at 20 deg C from installation of the NC198 Modified cement mortar.

- Roller apply UZIN PE280 w/based primer with a water-based paints roller (PM012495) at a spread-rate of 6 sqm per kg without ponding and allow to dry.
- Power mix UZIN NC182 Low slump Mortar with water at a ratio of 1 x 20kg bag to 5.0L of clean potable water in a suitable mixing container until a smooth and homogenous texture is achieved.
- Apply mix UZIN NC182 Low slump Mortar to the primed (UZIN PE280 water-based primer) substrate to required thickness.
- Allow UZIN NC182 Low slump Mortar to cure.
- Apply Roberts 48 Universal Primer to the semi/porous Substrates:
Apply an even layer of Universal Primer as per manufacturers dilution rates to the semi/porous substrates).
- Allow primer to dry to a clear film (approx. 2 hours @ 25°C). Once Universal Primer is a tack free clear film, only then can levelling compounds be applied over the primer.
- At change of plane e.g. wall / floor or wall / wall junctions and floor waste water outlets use the following method:

Apply Butylseal tape as per manufacture and RLA Polymers applicator training guidelines to all applicable joining in wall cladding and waste water outlets. *NB: any cladding joins that are wider than 6mm must first be filled with Polyethylene Foam Backer (PF Rods) prior to tape application.*

- Apply two coats of Flexi-Seal PUD to the surface the second coat 90 degrees to the first to ensure even and complete membrane coverage.
- Wait 3 days for full cure before applying UZIN PE280 Water-based primer.
- Roller apply UZIN PE280 w/based primer to Flexi-Seal applied areas and remaining wetroom substrate with a water-based paints roller (PM012495) at a spread-rate of 6 sqm per kg without ponding and allow to dry.
- Apply UZIN NC182 Rapid set mortar (**Floors**) and UZIN NC888 Fine finishing compound (**Walls**) over cured UZIN PE280 Primer.

NB: The installation of the above cementitious levelling Compounds are to be carried out by an approved installation technician that is able to apply to a smooth

finish, as required by New Zealand Standard NZS AS 1884-2013 Floor coverings - Resilient sheet and tiles.

For the application of UZIN NC888 Fine finishing compound to the walls we highly recommend a trade registered plasterer or similar qualified technician to produce the required finish suitable for the application of the wall vinyl. Apply minimum 3.0mm thickness to provide an absorbent substrate for water based adhesives.

Wall Vinyl Installation Procedure:

NB: GIB AQUALINE MUST NOT HAVE ANY SURFACE TREATMENTS SUCH AS SEALERS OR PRIMERS APPLIED TO THE SURFACE PRIOR TO THE APPLICATION OF UZIN PE520 WATER-BASED PRIMER

- Apply UZIN PE 520 –as a substrate primer for porous wall substrates prior to acrylic adhesive application. Dilute at a ratio of 4 parts water to 1 part UZIN PE520 and roller apply to walls. Allow to fully dry prior to wall vinyl installation.
- Apply UZIN KE2000S – Universal Flooring Adhesive to the prepared substrate and install Wall Vinyl as per manufacturer's instructions.
- Complete installation according to vinyl manufacturer's instructions, ensuring the installation is rolled in both directions with the recommended roll weight, prior to the adhesive setting.
- Allow adhesive cure. (approx.. 24hrs)
- Thermoweld Wall Vinyl seams as per manufactures instructions.

Floor Vinyl Installation Procedure:

- Apply UZIN KE2000S – Universal Flooring Adhesive to the prepared substrate and install Floor Vinyl as per manufacturer's instructions.
- NB: Floor Waste Penetrations: A 400mm diameter area of UZIN KR430 2-component polyurethane adhesive to be applied to the substrate and lapped into the Floor Waste Water Outlet to secure vinyl. Install Floor Vinyl as per manufacturer's instructions into the wet adhesive and roll with a 75Lb Crain flooring roller. Weighting may be required in some areas/situations.
- Allow adhesive cure (approx. 24hrs) with a final cure reached after 7 days.
- Thermoweld Floor Vinyl seams as per manufactures instructions.

NB: All installations are to be carried out by an approved installation technician that provides all Health and Safety Data and is fully compliant with manufacturer and site requirements.

Flexi-Seal PUD Waterproof Membrane must be applied by a certified applicator.

All installations are to be carried out in accordance with the AS/NZ current standards and manufacturers' technical datasheets available on www.uzin.co.nz and www.giltedge.co.nz

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