

Jacobsen Shaw Contract Nordic LVT Flooring & NZ Building Code E3

E3 – Amendment 7 to Acceptable Solution E3/AS1 for Internal Moisture

Amendment 7 to the Acceptable Solution E3/AS1, for Clause E3 Internal Moisture of the New Zealand Building Code came into force on 3 November 2021, with the previous Amendment 6 expiring on this date. Amendment 7 was effective from 5 November 2020, however, was subject to a one-year transition period.

One of the main changes is that Amendment 7 now includes the reclassification of dishwashers and washing machines as Sanitary Appliances and basins and sinks as Sanitary Fixtures. There is a requirement for ensuring flooring solutions which must now have a finish that is both impervious and easily cleaned extending at least 1.5 metres from all sanitary fixtures and appliances.

Independently Tested -

Jacobsen Shaw Contract Nordic LVT Flooring is an E3 Alternative Solution

Independently tested in New Zealand by SGS Industrial Certification Services, a 48-hour water spill test showed that there was no noticeable change to the Jacobsen Shaw Contract Nordic LVT Flooring and that there was no water penetration through to the flooring substrate when installed using the following method:

- Substrate Flooring Membrane: If required, substrate to be protected by Uzin PE 414 BiTurbo Blocking Primer to act as a barrier against moisture penetration.
- Shaw Contract Nordic LVT adhered to the substrate using Uzin KE68T 1-Component Hybrid Adhesive.
- All perimeter edges and penetrations to be sealed with a MS Silicone.

Notes:

- A membrane is only required in a defined wet area such as a bathroom or shower room, however, in a multilevel residential building this should be a consideration.
- In a kitchen/scullery area the Uzin KE68T Hybrid Adhesive provides a sufficient barrier against moisture penetration to the substrate.
- If required a suitable levelling compound will be recommended by Jacobsen and Uzin.

Jacobsen®

Inspired flooring since 1962

Installation and Maintenance

Installation and maintenance are to be carried out following the Shaw Contract Installation and Maintenance guide attached except for the alterations highlighted above.

The following documents are attached:

SGS Report / Certificate

Shaw Contract – Installation, Maintenance, Warranty and Datasheet

Uzin Datasheets - PE 414 BiTurbo Blocking Primer and KE 68T Hybrid Adhesive

Further Information

For further information please contact Jacobsen via phone 0800 800 460

Or refer to the Jacobsen website <https://jacobsen.co.nz/contact/>

jacobsen.co.nz

Auckland | Wellington | Christchurch | 0800 800 460

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TEST CERTIFICATE No.: INZ81948-02

Client: Jacobsen Creative Surfaces Limited
 Order No.: Not specified
 Sample Description: Luxury Vinyl Plank (LVT) with Uzin KE 68T Adhesive
 Identification: Shaw Nordic 2.5mm Dryback 48 hours
 Material Specification: Not specified
 Tested in accordance with: Client Instruction

Test: To test the leakage potential of flooring sample supplied.

Method: Three planks were assembled and glued to a clear perspex sheet by the client and delivered to SGS. Two 4.3cm long diameter areas (tee and line intersection between the planks) were selected and sealed off by SGS and then exposed to 5cm³ water which contained red coloured food dye. The sample was left to soak water for 24 hours at 23°C and 50% R.H. No refill was required if dyed water evaporated or drained. After 24 hour duration, any remaining dyed water was removed and the flooring sample was visually inspected for any signs of leakage. If there was no any signs of leakage, the sealed area was refilled with 5cm³ dyed water for another 24 hours. After another 24 hour duration, any remaining dyed water was removed and the flooring sample was visually inspected for any signs of leakage.

Results: No water leakage was observed after both 24 hours and 48 hours.



Image 1: Front side of the flooring sample.



Image 2: Perspex side of the flooring sample.

Acceptance Criteria: Report findings

Tested by: B. Tang	Reviewed By: Alistair Remmington	Authorised By: Kelvin Chin
Date: 8 July 2024	12-Jul-24 <i>Alistair Remmington</i>	12-Jul-24 <i>Kelvin Chin</i>

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.
 WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was(were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativeness of any goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted unless otherwise stated the results shown in this test report refer only to the sample(s) tested. Samples will be retained for two (2) weeks after test date before disposal at SGS New Zealand Limited's discretion. Returning of samples to be advised in writing. Storage (when agreed by SGS New Zealand Limited) or return of samples at client's expense.

TEST CERTIFICATE No.: INZ81948-02

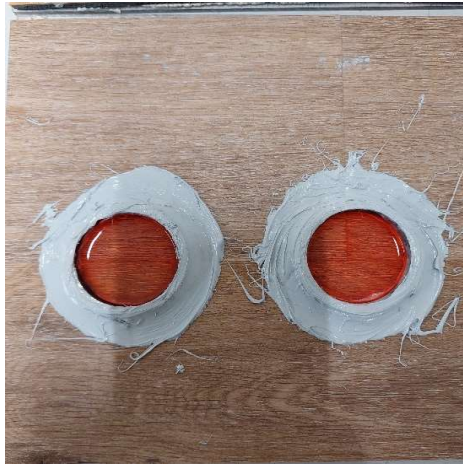


Image 3: Both sealed areas were able to hold water for total 48 hours.

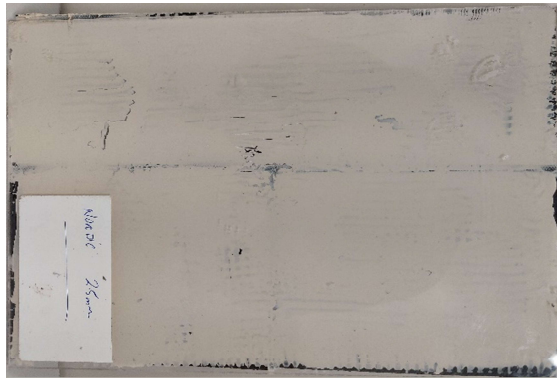


Image 4: No water leakage observed.

ShawContract®

Nordic 2.5

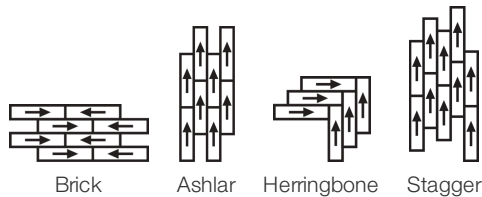
Collection	Nordic	
Style Number	4446V	
Construction	Heavy Commercial Luxury Vinyl Tile	
Finish	ExoGuard+®	
	U.s.	Metric
Nominal Dimensions	7 in w x 48 in l	18 cm w x 122 cm l
Actual Dimensions	7.25 in w x 48.00 in l	18.42 cm w x 121.92 cm l
Wear Layer Thickness	22 mil (0.022 in)	0.56 mm
Overall Thickness	0.098 in	2.5 mm
Edge Profile	Micro-Bevel	
Installation Type	Dry Back	
Installation	Direct Glue	
Recommended Adhesive	S150-95 Resilient Tile Spray, 4200 Resilient Tile 4 Gallon, 2200 Resilient Tile 4 Gallon or 4151 Multi-Use Premium 4 Gallon	



Packaging

Pieces Per Carton	16 pcs	
Area Per Carton	38.66 sq ft	3.59 sq m
Weight Per Carton	34.42 lbs	15.61 kg

Recommended Installation Method



Coordinating Products

LVT: Nordic 5.0

Performance + Testing

Residual Indentation (Astm F1914)	Passes
Resistance To Heat (Astm F1514)	Passes
Resistance To Light (Astm F1515)	Passes
Resistance To Chemicals (Astm F925)	Passes
Coefficient Of Friction (Astm D2407, Slip Resistance)	≥0.5, meets the recommended static coefficient of friction for ADA walking surfaces

Test Reports may be included or listed by the manufacturing/inventory style number as opposed to the noted selling style number.

Warranties

[15 Year Commercial Limited](#)

[Commercial 15 Year Underbed Bond Warranty](#)

Material Health & Environmental Certifications

Climate Impact

Total Recycled Content

0% (Pre-Consumer 0% | Post-Consumer 0%)

Global Product Assessment

FloorScore® | Certified

Country of Origin | Imported

Green Leed Contribution Credit

EQ Credit: Low Emitting Materials
Option 1: Product Category Calculations

FloorScore Certified

[Installation Guidelines](#)

[Maintenance Guidelines](#)

Please visit www.shawcontract.com for the most current warranty information. Specifications are subject to nominal manufacturing variance. Material supply and/or manufacturing processes may necessitate changes without notice.

This product is an exclusive design and may not be duplicated in any manner. Use of this design in the creation of another product design is also strictly prohibited.
****Allowable spend is domestic (US) spend in categories in which we have diverse suppliers from which to choose. Compared to non-allowable spend which includes categories in which we do not have domestic, small or diverse suppliers available to meet our needs.

Visit shawcontract.com/testing for more information.

Available Colorways

					
Aspen 77100 LRV 54.5 V2 - Slight Variation	Natural 77101 LRV 42.2 V2 - Slight Variation	Honey 77103 LRV 26.8 V2 - Slight Variation	Alder 77104 LRV 25.5 V3 - Moderate Variation	Calm 77111 LRV 36.8 V2 - Slight Variation	Blonde 77112 LRV 37.6 V2 - Slight Variation
					
Driftwood 77120 LRV 30.6 V3 - Moderate Variation	Birch 77140 LRV 35.8 V2 - Slight Variation	Fir 77155 LRV 42.0 V2 - Slight Variation	Radiant 77710 LRV 21.1 V2 - Slight Variation	Redwood 77720 LRV 22.0 V2 - Slight Variation	Elm 77721 LRV 22.7 V2 - Slight Variation

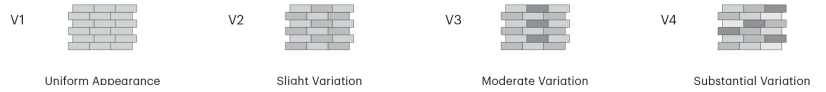


Balance 77755 LRV 30.7 V2 - Slight Variation
 Golden 77756 LRV 15.2 V3 - Moderate Variation

Quick Ship 4 weeks

Color and Visual Variation Index

Shade and texture variation is inherent in all resilient products and can vary significantly from piece to piece. Samples should be used to assess color.



COMMERCIAL RESILIENT

GENERAL INFORMATION

All substrates to receive moisture sensitive floor covering require proper moisture testing.

- Use cementitious patching and leveling compounds that meet or exceed Shaw's maximum moisture level and pH requirements. Use of gypsum-based patching and/or leveling compounds which contain Portland or high alumina cement and meet or exceed the compressive strength of 3,000 psi are acceptable.
- For cracks or saw cuts deeper than 1", follow the preparation and application instructions for Shaw QuikFill. QuikFill is a 2-part urethane treatment that prevents future damage from moisture penetrating to the surface of the slab that may damage or breakdown adhesives or unapproved patching compounds.
- It is recommended that resilient floor covering installation shall not begin until all other trades are completed.
- Material should always be visually inspected prior to installations. Any material installed with visual defects will not be considered a legitimate claim as it pertains to labor cost.
- Perform Bond testing to determine compatibility of adhesive to the substrate.

STORAGE AND HANDLING

Store all rolls standing upright; DO NOT lay rolls for long periods

- When more than one roll of a color is being installed, all material should be from the same batch and the rolls must be installed in consecutive order. If material from more than one batch is to be used, the job should be laid out so that different batch numbers are not installed side by side.
- Flooring material and adhesive must be acclimated to the installation area for a minimum of 48 hours prior to installation.
- Store cartons of tile or plank products flat and squarely on top of one another. Preferably, locate material in the "center" of the installation area (i.e. away from vents, direct sunlight, etc.) Storing cartons in direct sunlight may affect proper acclimation by inducing thermal expansion/contraction.
- When palletizing on a jobsite vinyl plank or tiles need to be stacked 2 rows high side by side with no airspace between. Then quarter turned for 2 rows side by side, not to exceed 12 boxes high. A 5/8" or thicker plywood must also be placed on the pallet first.
- Do not stack pallet's 2 high unless utilizing a 1" thick plywood in between pallets.

SITE CONDITIONS

- Areas to receive flooring should be adequately lighted during all phases of the installation process. Controlled environments are critical. Fully functional HVAC systems are the best way to ensure temperature and humidity control.

- DO NOT INSTALL RESILIENT FLOORING PRODUCTS UNTIL THE WORK AREA CAN BE TEMPERATURE CONTROLLED.
- The permanent HVAC system must be operational and functional and set to a minimum of 65°F (20°C) or a maximum of 85°F (29°C), for a minimum of 7 days prior to, during, and after installation. Once the installation is complete the temperature should not exceed 85°F (29°C).

SUBFLOOR INFORMATION

Note: All substrates to receive resilient flooring shall be dry, clean, smooth and structurally sound. They shall be free of dust, solvent, paint, wax, oil, grease, residual adhesive, adhesive removers, curing, sealing, hardening/parting compounds, alkaline salts, excessive carbonation/laitance, mold, mildew, and other foreign materials that might prevent the adhesive from bonding.

If the adhesive residue is asphalt-based (cut-back), or any other type of adhesive is present, it must be removed by industry accepted methods such as mechanical removal or wet scraping.

If a chemical abatement has been performed, use Shaw Surface Prep EXT to remove any residual chemicals present. Once Shaw Surface Prep EXT has been properly cleaned and removed, apply one coat of Shaw MRP for additional protection.

Adhesive removal through the use of solvents or citrus adhesive removers is not recommended. Solvent residue left in or on the subfloor may affect the new adhesive and floor covering.

WARNING! DO NOT SAND, DRY SWEEP, DRY SCRAPE, DRILL, SAW, BEAD BLAST OR MECHANICALLY CHIP OR PULVERISE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC "CUT BACK" ADHESIVES OR OTHER ADHESIVES.

These products may contain either asbestos fibers and/or crystalline silica. Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm. Unless positively certain that the product is a non-asbestos-containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content and may govern the removal and disposal of material. See current edition of the Resilient Floor Covering Institute (RFCI) publication Recommended Work Practices for Removal of Resilient Floor Coverings for detailed information and instructions on removing all resilient covering structures. For current information go to www.rfci.com.

WOOD SUBFLOORS

Wood subfloors must be structurally sound and in compliance with local building codes.

- It is recommended that your chosen APA underlayment grade panels be designed for installation under resilient flooring, and carry a written warranty covering replacement of the entire flooring system.
- Double-Layered APA rated plywood subfloors should be a minimum 1" total thickness, with at least 18" well ventilated air space beneath.
- Insulate and protect crawl spaces with a vapor retarder covering the ground.
- Particleboard, chipboard, flakeboard, OSB, hardboard or similar are not recommended subfloor materials and require the additional layer of an APA ¼" underlayment grade panel.
- **DO NOT** install over sleeper construction subfloors or wood subfloors applied directly over concrete. Underlayment panels can only correct minor deficiencies in the sub-floor while providing a smooth, sound surface on which to adhere the resilient flooring.
- Any failures in the performance of the underlayment panel rest with the panel manufacturer and not with Shaw Industries, Inc.
- SHAW resilient flooring is not recommended directly over fire-retardant treated plywood or preservative treated plywood.
- The materials used to treat the plywood may cause problems with adhesive bonding. An additional layer of APA rated 1/4 " thick underlayment should be installed.
- Always follow the underlayment manufacturer's installation instructions.
- Crumb rubber underlayments are not an acceptable option for use with resilient floor coverings due to performance issues resulting from chemical incompatibilities.

STRIP – PLANK WOOD FLOORING:

- Due to expansion/contraction of individual boards during seasonal changes a 1/4 " or thicker APA rated underlayment panels must be installed over these types of subfloors.
- Wood flooring installed directly over concrete is **NOT** an approved subfloor.

CONCRETE SUBFLOORS

NEW AND EXISTING CONCRETE SUBFLOORS SHOULD MEET THE GUIDELINES OF THE LATEST EDITION OF ACI 302 AND ASTM F710, "STANDARD PRACTICE FOR PREPARING CONCRETE FLOORS TO RECEIVE RESILIENT FLOORING" AVAILABLE FROM THE AMERICAN SOCIETY FOR TESTING AND MATERIALS, 100 BARR HARBOR DRIVE, WEST CONSHOHOCKEN, PA 194 28; 610-832-9585; [HTTP://WWW.ASTM.ORG](http://www.astm.org).

- Required Moisture Testing - maximum moisture level per ASTM 1869 CaCl is 8 lbs. and ASTM 2170 In-situ Relative Humidity 90% per 1000 sq.ft. in 24 hours. PH of concrete sub-floor needs to be between 7 & 10.

- Substrates shall be smooth, structurally sound, dry, clean and free of all foreign material such as dust, wax, solvents, paint, grease, oils, old adhesive residue, curing and hardening/ curing compounds, sealers and other foreign material that might prevent adhesive bond.
- On or below-grade slabs must have an effective vapor retarder directly under the slab.
- Wet curing 7 days is the preferred method for curing new concrete.
- Curing compounds (DO NOT USE). If present they can interfere with the bond of the adhesive to the concrete. Seek assistance from a substrate manufacturer if curing agents are detected.
- Remove curing compounds 28 days after placement, so concrete can begin drying.
- Concrete floors shall be flat and smooth within 1/8" in 6 feet or 3/16" in 10 feet.
- F-Number System: Overall values of FF 36/ FL 20 may be appropriate for resilient floor coverings.
- Expansion and isolation joints in concrete are designed to allow for the expansion and contraction of the concrete. Resilient flooring products should never be installed over expansion joints. Expansion joint covers designed for use with resilient floorings should be used. Control joints (saw cuts) may be patched and covered with resilient once the concrete is thoroughly cured, dry and acclimated.
- S150 / LokWorx Resilient - may not exceed 95% RH and LokWorx + Resilient Adhesive/4151 Adhesive 99% RH. Concrete floors must be tested per the latest edition of ASTM F710.

NOTE: IT MAY NOT BE THE FLOOR COVERING INSTALLER'S RESPONSIBILITY TO CONDUCT THESE TESTS. IT IS, HOWEVER, THE FLOOR COVERING INSTALLER'S RESPONSIBILITY TO MAKE SURE THESE TESTS HAVE BEEN CONDUCTED, AND THAT THE RESULTS ARE ACCEPTABLE PRIOR TO INSTALLING THE FLOOR COVERING. WHEN MOISTURE TESTS ARE CONDUCTED, IT INDICATES THE CONDITIONS ONLY AT THE TIME OF THE TEST .

LIGHTWEIGHT CONCRETE

All recommendations and guarantees as to the suitability and performance of lightweight concrete under resilient flooring are the responsibility of the lightweight concrete manufacturer. The installer of the lightweight product may be required to be authorized or certified by the manufacturer. Correct on-site mixing ratios and properly functioning pumping equipment are critical. To ensure proper mixture, slump testing is recommended.

- Lightweight aggregate concretes having dry densities greater than 90 lbs. per cubic foot may be acceptable under resilient flooring.
- Concrete slabs with heavy static and/or dynamic loads should be designed with higher strengths and densities to support such loads.

- Surface must be permanently dry, clean, smooth, free of all dust, and structurally sound.
- Perform Bond testing to determine compatibility of adhesive to the substrate. Shaw 9050 primer can be utilized to promote adhesion.
- Three internal relative humidity tests should be conducted for areas up to 1000 SF. One additional test, for each additional 1000 SF.

RADIANT HEAT

Radiant Heating: Radiant-heated subfloor systems can be concrete, wood or a combination of both.

The heating systems components must have a minimum of 1/2" separation from the flooring product. The system must be on and operational for at least 2 weeks prior to installation to reduce residual moisture. Three days prior to installation lower the temperature to 65°F (20°C), after installation gradually increase the temperature in increments of 5°F to avoid overheating. Maximum operating temperature should never exceed 85°F (29°C). Use of an in-floor temperature sensor is recommended to avoid overheating. Contact the manufacturer of your radiant heating system for further recommendations.

Electric Radiant Floors: consist of electric cables (or) mats of electrically conductive materials mounted on the subfloor below the floor covering. Mesh systems are typically embedded in thin-set. When embedding the system components, use cementitious patching and leveling compounds that meet or exceed Shaw's maximum moisture level and pH requirements. Use of gypsum-based patching and/or leveling compounds which contain Portland or high alumina cement and meet or exceed the compressive strength of 3,000 psi are acceptable.

Hydronic Radiant Floors: pump heated water from a boiler through tubing laid in a pattern under the flooring. Typically installed in channels under a wooden subfloor (or) imbedded in concrete slabs. Requires the installer follow a specific nailing pattern to avoid penetration of the heat system.

EXISTING FLOORCOVERINGS

RESILIENT FLOOR COVERING:

- Must be single layered, non-cushion backed, fully adhered, and smooth. Show no signs of moisture or alkalinity.
- Waxes, polishes, grease, grime, and oil must be removed.
- Cuts, cracks, gouges, dents and other irregularities in the existing floor covering must be repaired or replaced.
- Embossing leveler recommended to aid in proper bonding and to prevent telegraphing.
- Do not install over rubber based substrates.

NOTE: THE RESPONSIBILITY OF DETERMINING IF THE EXISTING FLOORING IS SUITABLE TO BE INSTALLED OVER TOP OF WITH RESILIENT , RESTS SOLELY WITH INSTALLER/FLOORING CONTRACT OR ON SITE. IF THERE IS ANY DOUBT AS TO SUITABILITY, THE EXISTING FLOORING SHOULD BE REMOVED, OR AN ACCEPTABLE UNDERLAYMENT INSTALLED OVER IT . INSTALLATIONS OVER EXISTING RESILIENT FLOORING MAY BE MORE SUSCEPTIBLE TO INDENTATION.

Quarry Tile, Terrazzo,
Ceramic Tile, Poured Floors
(Epoxy, Polymeric,
Seamless):

- Must be totally cured and well bonded to the concrete.
- Must be free of any residual solvents and petroleum derivatives. Waxes, polishes, grease, grime, and oil must be removed.
- Show no signs of moisture or alkalinity.
- Cuts, cracks, gouges, dents, and other irregularities in the existing floor covering must be repaired or replaced.
- Fill any low spots, holes, chips and seams that may telegraph through the new flooring. Grind any highly polished or irregular/smooth surfaces.
- Quarry tile or Ceramic tile grout joints and textured surfaces must be filled with an embossing leveler or substrate manufacturer approved material.

ADHESIVES

In order to receive a underbed warranty, the product being installed must be approved for underbed applications (see product specification) and must be installed with S150, LokWorx+ or 4151.

SHAW LOKWORX+/4151

Installer friendly, premium high strength (non-staining) acrylic adhesive, designed to permanently install SHAW flooring. May-be used on all grades of concrete: on, above, or below grade in the absence of excess moisture, as well as suspended approved wood floors.

Note: To properly apply adhesive snap white chalk lines along areas where adhesive will be spread to ensure an even and straight line of adhesive. Spread adhesive with a 1/16" (wide) x 1/32" (depth) x 1/32" (apart) trowel to cover the chalk line on one side and meet up to it on the other. If glue is spread over the chalk line it will need to be removed. (DO NOT overlap adhesive.) - Troweling new adhesive over an area already spread may result in telegraphing. Be very careful not to leave any adhesive ridges or puddles.

Porous substrates: Spread adhesive with a 1/16" x 1/16" x 1/16" square notch trowel. Resilient flooring may be placed into adhesive after 10 –20 minutes open time. Install resilient flooring into adhesive when the spacing in between the adhesive transitions from opaque to clear. Roll with a 100 lb. roller immediately after flooring is placed, ensuring complete contact with the adhesive. **DO NOT** exceed the working time of the adhesive.

Non-porous substrates: Once the adhesive is troweled backroll the adhesive

to prevent trowel ridges from telegraphing. Install resilient flooring into adhesive when it becomes 80% clear (dry to touch, is tacky with minimal transfer to fingers). This will normally require 30 to 45 minutes of drying time at suggested installation temperature and humidity, **DO NOT** exceed working time of the adhesive (refer to adhesive label).

Roll with a 100 lb. roller immediately after flooring is placed, ensuring material has complete contact with adhesive.

IMPORTANT : DO NOT use Shaw LokWorx+/LokWorx Resilient / 4151 as a pressure sensitive adhesive. Loss of adhesion can result if the flooring is not installed within the working time of the adhesive. **DO NOT** allow the adhesive to “skin” over or dry. Too much open time will result in an insufficient bond and may promote telegraphing of the trowel ridges. Perform Bond testing to determine compatibility of adhesive to the substrate. Shaw 9050 primer can be utilized to promote adhesion if needed.

Note: Open time and working times may vary based on temperature, humidity, substrate porosity, trowel size and air flow.

**SHAW S150-95 -
UNIVERSAL AEROSOL
SPRAY ADHESIVE:**

- Water-based aerosol adhesive recommended for installations of: vinyl sheet, plank and tiles, vinyl composition tile, or cove base over porous and non-porous substrates. May-be used in occupied buildings and greatly reduces the handling and application requirements associated with conventional adhesives. Demonstrates highly aggressive grab and shear strength.
- Outstanding moisture resistance (95% RH) and Ph up to 11, plasticizer migration resistance. Spray application eliminates the need for trowels and paint rollers. Zero calculated VOC's/ CRI Green Label Plus Approved.
- Store appropriately (65° F to 95° F (18° C to 35° C), out of direct sunlight and away from heat sources or open flames as the contents are under pressure and the can may burst.
- **DO NOT** allow Shaw S150 to freeze.
- Shelf Life: 2 year when stored in original packaging. Coverage: 130-150 sq. ft. /gallon.
- Heat welding can be performed 1 hour after installation.

Application:

- Shake well before using – contents under pressure. Although Shaw S150 has good directional control while spraying, care should be taken to protect delicate surfaces and baseboards with either a shield or paper masking.
- Stand in an upright position and tip the can so it is pointed straight towards the floor, then depress the trigger tip mechanism.

- Aim the spray so that the adhesive falls like snow as you slowly walk back and forth. **DO NOT** use sweeping motion as it will not give you the proper spray pattern, avoid overlapping. The substrate should have an even application of adhesive for proper coverage. *Failure to apply the adhesive correctly may result in telegraphing of adhesive (lumpy appearance) through the flooring material.
- Wait until the adhesive is tacky to the touch, and adhesive does not transfer to finger tips, before installing flooring. High humidity and low temperatures will lengthen open time. Keep the adhesive dust-free while it dries.
- Working time should not exceed 1 hour. Install flooring per guidelines.
- Installation: Roll flooring immediately after installation is complete with an appropriate 75 – 100 lbs. 3- section roller.

Safety and Clean-up:

Wet adhesive overspray or drips should be cleaned with soap and water on a clean cloth. Sheet Dried adhesive may require the use of a solvent adhesive cleaner. Between uses, clean the spray tip immediately with a clean wet cloth to prevent accumulation of dried adhesive. Empty aluminum spray cans should be relieved of excess pressure and recycled or disposed of in accordance with local requirements.

IMPORTANT : Recommended to perform a bond test in order to determine adhesive working time per job site conditions. The strength of the bond test will indicate whether Shaw 9050 floor primer is necessary.

9050- PH BLOCKER/FLOOR PRIMER: 9050 is an acrylic solution made to neutralize excess alkali that is also recommend as a primer coat to prevent over absorption of adhesive and to ensure a better bond. Formulated with an antimicrobial agent, it provides protection against bacteria, fungi, and mildew in the wet or dry state. Contains no solvent, alcohol, or other hazardous materials per OSHA 29 CFR 1910.1200. Non-photo chemically reactive per rule # 102. Available in 4 -gallon pails.

RESILIENT SHEET VINYL PRODUCTS

INSTALLING RESILIENT SHEET VINYL PRODUCTS

- Required Moisture Testing - maximum moisture level per ASTM 1869 CaCl is 8 lbs. and ASTM 2170 In-situ Relative Humidity 90% per 1000 sq.ft. in 24 hours. PH of concrete sub-floor needs to be between 7 &10.
- The permanent HVAC system turned on and set to a minimum of 65°F (20°C) or a maximum of 85°F (29°C), for a minimum of 7 days prior to, during and after installation. After the installation, the temperature should not exceed 85°F (29°C).

- Flooring material and adhesive must be acclimated to the installation area for a minimum of 48 hours prior to installation.
- Use only Shaw approved flooring adhesives.
- Non porous substrates use a 1/16" wide x 1/32" deep x 1/32" apart (U) notch trowel only, unless using S150-95 Spray Adhesive. For porous substrates use a 1/16" x 1/16" x 1/16" square notch trowel.
- Material should always be visually inspected prior to installations. Any material installed with visual defects will not be considered a legitimate claim as it pertains to labor cost.
- Shaw's sheet products are dimensionally stable. They will not shrink or compress. It is recommended to allow material 24 hours unrolled and lying flat on the job site prior to installation.
- Install all cuts and rolls in consecutive sequence.
- Direction is dependent upon the actual layout. Refer to the Product Specification for proper direction.
- Ensure that all recommendations for sub-floor and jobsite conditions are met prior to installation. Once the installation has begun, you have accepted these conditions.

NOTE: Recommended to use floor protection after installation. **DO NOT** use a plastic adhesive based protection system.

CUTTING AND FITTING SHEETS:

- Measure, identify, and mark your control line for the sheet good installation.
- Cut the required length off the roll, including enough to run up the wall 2" at either end.
- Push the length of the sheet as close to the starting wall as possible, letting the extra length run up the wall at the far end.
- The material should still be aligned on the control line.
- Place a straight edge on top of the material along the starting wall, and proceed to cut along the straight edge. This cut technique is a direct scribe. Pattern scribing, three wall scribing, use of a wall trimmer or freehand cutting all are acceptable methods as well.
- Push the fitted sheet gently to the starting wall while keeping it aligned.
- Free hand knife the opposite wall of the starting wall. Pattern Scribing or direct scribe is also acceptable. Continue to free hand knife, pattern scribe, or direct scribe material for the remainder of the installation area.
- Opening up the sheets in the width/length are acceptable. **DO NOT** fold as care should be taken not to crease material. **DO NOT** back roll vinyl backed floorings.
- Snap white chalk lines or use pencil along areas where adhesive will be spread to ensure an even and straight line of adhesive.
- **DO NOT** use permanent marker.
- Carefully place flooring into adhesive, working toward the wall. **DO NOT FLOP MATERIAL IN**—air may be trapped, causing bubbles.

- After material has been laid into the adhesive, recess scribe the seams using either the scribe blade or scribe pin.
- Hold the knife blade straight up and down to make final cut. **DO NOT UNDERCUT.**
- Repeat the same procedure for additional seams in the room.
- Recommended to massage curl the end joints to help ensure they lay flat. Putting weight on the end joints will help to ensure proper bonding as the adhesive sets up.
- Roll the glued areas right away to within 6" of the seam on either side with a 3 section 100 lb. roller. Roll the seam area with a hand-seam roller to bring the seam edges to equal heights. Re-roll the entire glued floor area with the 100 lb. roller within the working time of the adhesive. Continue to roll the floor throughout the working day to ensure a proper bond.
- Heat welding Shaw sheet flooring is always recommended.
- Heat weld seams the following day when using LokWorx+/LokWorx Resilient / 4151 or 1 hour with S150-95. See heat weld instructions. Contact Shaw product support for assistance if not familiar with scribing techniques or heat welding.

NOTE: TO ENSURE PROPER BONDING OF THE MATERIAL, IT IS RECOMMENDED TO ROLL IN THE MATERIAL NEXT TO THE WALLS WITH A HAND SEAM ROLLER.

SEAMING:

Seams may be cut by either the straight edging/edge trimming one side & recess scribing the second sheet, or the overlap & double cut method.

- Recess scribe method - On non-patterned material, trim approximately 1/2" off one selvage edge of seam with a straightedge and sharp knife or edge trimmer. Cut second sheet allowing proper extra length. Position the second sheet with a 1/2" -1" overlap over first sheet at the seam. Set recess scribes so that the seam will have a slight gap, about half the thickness of a razor blade. If cut too full, it will result in bubbles or ridges. Recess scribe seam. Repeat for as many sheets as necessary to complete the area.
- Double cut method-Utilizing a straight edge and a new razor blade hold the knife straight up and down and cut through both pieces in one cut. Cutting through the top layer while scoring half of the bottom layer at the same time, and finishing with a hook blade, is acceptable.
- On patterned material, overlap the selvage edges to align the pattern width and length. For wood patterns align the bevel edge of the planks. Place a 4 " wide scrap of material under the seam area. Place a straight edge directly over the beveled edge of the plank. Using a new razor blade hold the knife straight up and down to cut through both pieces in one cut. Cutting through the top layer while scoring half of the bottom layer at the same time, and finishing with a hook blade, is acceptable.

NOTE: SET RECESS SCRIBES SO THAT THE SEAM WILL HAVE A SLIGHT GAP, ABOUT

HALF THE THICKNESS OF A RAZOR BLADE. IF CUT TOO FULL, IT WILL RESULT IN BUBBLES OR RIDGES. DO NOT SEAM FACTORY EDGES.

HEAT WELDING:

Heat welding is the recommended procedure for seams, coving, and corner fill pieces.

- Professionally heat welded seams provide a strong, watertight, hygienic, monolithic surface.
- The welding rod (4 mm) is designed to melt at the same temperature as the sheet flooring, thermally fusing the two together.
- Heat welding should be done 24 hours after installation using Shaw LokWorx+/LokWorx Resilient / 4151. Shaw S150-95 can be heat welded in 1 hour after completed installation.
- Seam edges should be slightly gapped and vertical. Wide gapped or undercut seams will prevent quality welds.
- The depth of the groove should be 1/2 to 2/3 the thickness of the material using a 3.5 mm grooving tool. Be careful not to go too deep. The groove must also be centered along the two edges. This is very important to ensure proper strength and bonding of the welding rod.
- Clean grooves thoroughly of all foreign contamination, including dust.
- Use only professional quality welding equipment that will maintain sufficient temperatures. A narrow preheat 4 mm tip is required.
- Preheat welding gun prior to welding. Preheat to 450° C and then adjust up or down.
- Practice on a scrap piece to fine tune temperature and pace. Long extension cords may affect welding temperature settings.
- Determine the correct welding speed by ensuring that the welding rod actually fuses into the groove. On the scrap practice piece try to pull the weld out of the groove. If the rod pulls out of the groove adjust temperature until it will no longer pull out of the groove.
- Tip must remain parallel to the finished floor. A small ridge must form on either side of the welding rod, at the vinyl surface. If no ridge forms, you have not heat welded the seam correctly.
- While the welding rod is still warm, trim off 1/2 the excess rod with a spatula knife or Mozart skiver and trim plate in one continuous movement.
- After the rod has cooled to room temperature, make the final trim pass using a razor sharp spatula knife or Mozart skiver in one continuous movement.

CHEMICAL WELD:

- Ensure seam is completely clean and dry.
- Pour entire contents of sealer into applicator bottle and allow any air bubbles to dissipate.

- Insert the tip of the applicator down into the seam. Pull back at a steady pace applying a constant pressure on the bottle, applying enough sealer to seal the edges of the sheet and leaving a small bead (1/8") of sealer on the surface of the seam.
- Keep all traffic off the seam for a minimum of 24 hours.

FLASH COVE INSTALLATION:

- Flash coving is an extension of the sheet flooring up the wall to form a wall base.
- Seams in the flash coved areas should be treated the same as seams throughout the rest of the installation.
- 4 "- 6" flash coving is common. For all heights in excess of 6" check applicable local building codes.
- Use LokWorx+/LokWorx Resilient, 4151 or S150 adhesive in flash coved areas. Use a brush or roller to apply adhesive to the wall and cove stick area.
- Adhesive must be allowed some open time, usually about 10 – 15 minutes.
- After fitting material into adhesive, use a hand roller to assure contact with the adhesive.

RESILIENT TILE AND PLANK PRODUCTS

- Required Moisture Testing - maximum moisture level per ASTM 1869 CaCl is 8 lbs. and ASTM 2170 In-situ Relative Humidity 90% per 1000 sq.ft. in 24 hours. PH of concrete sub-floor needs to be between 7 & 10.
- The permanent HVAC system is turned on and set to a minimum of 65°F (20°C) or a maximum of 85°F (29°C), for a minimum of 7 days prior to, during and after installation. After the installations, the maximum temperature should not exceed 85°F (29°C).
- Do not stack more than 5 cartons high.
- Flooring material and adhesive must be acclimated to the installation area for a minimum of 48 hours prior to installation.
- Non porous substrates use a 1/16" wide x 1/32" deep x 1/32" apart (U) notch trowel only, unless using S150-95 Spray Adhesive. For porous substrates use a 1/16" x 1/16" x 1/16" square notch trowel.
- Material should always be visually inspected prior to installation. Any material installed with visual defects will not be considered a legitimate claim as it pertains to labor cost.
- Make sure all material is from the same batch number. Install tiles running in same direction (arrows are on back of tile).
- Ensure that all recommendations for sub-floor and jobsite conditions are met prior to beginning the installation. Directional designs are optional, however, once the installation is started, you have accepted those conditions.
- Shaw tile and plank - Install using conventional tile and plank installation techniques. Plank products should have a minimum of 6 – 8" seam stagger.
- Carefully determine where to begin tile or plank installation.
- It is customary to center rooms and hallways so borders are not less than half a tile or plank.

- Working out of multiple boxes at a time is recommended.
- In hallways and small spaces, it may be simpler to work lengthwise from one end using a center reference line as a guide.
- Make sure cut edges are always against the wall.
- To properly cut LVT /LVP products score the top side of the material with a utility knife. Bend the product and finish the cut through the backside. This will ensure the cleanest cut. It may be necessary to use a heat gun to cut around vertical obstructions. Allow the heated LVT /LVP to return to room temperature before installation.
- Cutting resilient product into a fine point may lead to delamination. Use an ethyl cyanoacrylate based glue to help fuse the resilient point together. Be sure to clean all glue from the top surface immediately. Alcohol based glues may cause resilient products to swell.
- Roll the plank/tile with a 3 section 100 lb. roller Re-roll the entire glued floor area with the 100 lb. roller within the working time of the adhesive. Continue to roll the floor throughout the working day to ensure a proper bond.

NOTE: Adhering tape to the surface of your resilient flooring could damage the surface.

Do not use tape to secure floor protection directly to the floor during construction or renovation. Instead, adhere tape to the material used to protect the floor and secure it to the base molding along the wall. A material such as ram board can also be used to protect your flooring.

Resilient Maintenance Checklist

Proper care of your resilient floor will help maintain the appearance and performance of your resilient floor by following recommended preventative, routine and wet cleaning guidelines.

Maintenance instructions for Shaw Hard Surface Resilient and USFloors Resilient.

POST CONSTRUCTION CLEANING

- Dry mop floor using a micro fiber mop pad or appropriate floor vacuum to remove dust particulate from the floor.
- Spray neutral pH cleaner, such as Shaw TOTALCARE® Hard Surface Cleaner or Diversey Stride, onto the floor in manageable area (spray mist will dry quickly). Use a micro fiber wet mop pad to mop the floor with cleaner. If pad becomes dirty, be sure to replace the pad with a new micro fiber wet mop pad. Work floor in sections.
- Always rinse the floor with water only by mopping water to remove any remaining residue from the floor.

In the event where dry wall dust/construction dust is mopped with water only, a residue film will appear on the floor after drying. Use the process below to remove the film from the floor.

Process to remove construction residue or cloudy film from resilient flooring

1. Dry mop floor to remove any construction dust or exterior soil tracked onto the flooring. Use micro fiber dry mop pad. If micro fiber dry mop pad gets dirty, replace pad with a clean pad.
2. Spray neutral pH cleaner, such as Shaw TOTALCARE® Hard Surface Cleaner or Diversey's Stride, onto the floor in manageable area (spray mist will dry quickly). Work floor in sections. For smooth surface, use a low rpm (175 rpm) buffer with a 3M red pad on flooring with neutral pH cleaner applied to the floor to remove the residue film. (Never Dry Buff). For embossed or textured flooring, use a cylindrical brush scrubber with red brushes and a neutral pH cleaner applied to the floor to remove the residue film.
3. Using a wet micro fiber mop pad, rinse with water only to remove any remaining residue from the flooring. When wet mop pad becomes dirty, be sure to replace the pad with a new micro fiber wet mop pad.
4. Repeat steps #2 and #3, if necessary.

When the resilient flooring is cleaned properly, the floor will have the same visual as right out of the box!

PREVENTATIVE MAINTENANCE

1. Care for newly installed floors.

- Avoid heavy traffic for 24 hours.
- Adhering tape to the surface of your resilient flooring could damage the surface.
Do not use tape to secure floor protection directly to the floor during construction or renovation. Instead, adhere tape to the material used to protect the floor and secure it to the base molding along the wall. A material such as ram board can also be used to protect your flooring.
- Proper furniture protection is required to prevent scratching and scuffing of LVT flooring. It is recommended to use industrial strength felt protection. These can be purchased from the following websites: www.1877floorguy.com, www.expandedtechnologies.com, www.flexifelt.com.
- Moving heavy objects requires protective barriers to distribute the weight such as ram board to prevent damage to the wear layer.
- Place chair pads underneath rolling chairs to prevent damage to the LVT flooring.
- Remove adhesive residue with a clean white cloth dampened with odorless mineral spirits or isopropyl alcohol.
- Only low moisture or damp mopping is recommended initially, if needed.
- Wait 4 days before normal wet cleaning and/or auto scrubbing the floor.
- Avoid direct sunlight on LVT flooring as it can cause fading and expansion of vinyl planks. Use window protection.
- Surface temperature should not exceed 100F (38C) from sunlight, bed bug treatment, steam mop, etc, and temperatures should not fall below 55F (13C). Exposing product to temperatures outside the recommended range could cause expansion of vinyl planks.
- Avoid using mop and shine products on resilient flooring.
- Some disinfectants contain chemicals that can stain, discolor and cause general harm to your flooring product. Quaternary Ammonium Salts are among those that have been found to be harmful to your flooring when used over time. Take care to choose pH neutral products only.
- Walk-off mats should be used at all entrances to absorb soil and moisture. If mats are placed directly on top of the resilient floors, use mats without latex or rubber backings to avoid possible discoloration.

2. Identify and address all sources of soiling.

- Maintain a clean exterior (parking lots and walk ways) where dirt enters the building.
- Proper mats should have non-staining backing, use PVC backed matting. Use mats at entranceways, transition areas and special areas such as food service areas/restrooms to confine soil, oil, grease and high moisture areas.
- Entrance mats keep soil and moisture outside. Two matting categories are:
 - Soil Removal – used at exterior entrances to remove soil from shoes
 - Absorbent mats – used inside to minimize moisture
- Mats should cover at least 6 footsteps to capture soil transferring from shoes. Additional matting may be necessary during inclement weather. Include mats in the maintenance program and keep them clean.

ROUTINE MAINTENANCE

1. Remove dry soil.

- Sweep, vacuum or dust-mop frequently to remove soil particles that can abrade the wear layer.
- Dust mop treatments are not recommended since these products can transfer and attract soil.
- Do not use vacuums with rotating beater bars on hard surfaces.

2. Promptly address spots and spills.

- All spills should be addressed as quickly as possible to avoid staining and slip/fall hazards.
- Absorb wet spills and if necessary use a neutral pH vinyl cleaner* and rinse with water.
- Isopropyl alcohol or mineral spirits can be used for oil/grease (petroleum-based) and/or scuff marks.

3. Remove scuffs.

- Cleaning with an auto scrubber or spray buffing with a spray/buff solutions* using a low (175 rpm) machine and red pad will remove scuff marks. Agitation is the key to remove these marks.
- A tennis ball placed on the end of a stick, such as a broom handle, can be used as a tool to remove scuff marks. This allows you to remove scuffs from a standing position on smaller areas.

WET CLEANING

- Always pre-vacuum or dry dust mop before wet cleaning.
- Use neutral pH vinyl cleaner* and follow the manufacturer's instructions for dilution and use.
- Common systems are: 1) Micro fiber wet mop or mop and two-bucket system, and 2) Automatic scrubbing with a red 3M pad/equivalent brushes.
- Rinse the floor with clean water. Repeat the rinse process if necessary to remove all haze
- Do not use brown or black pads/brushes. These pads are too aggressive and can damage the floor.
- Products containing bleach and steam mops are not recommended.

The above guidelines are recommended to maintain LVT, LVP, SPC, WPC and sheet resilient products. Application of finish is optional in certain applications. Always follow the finish manufacturer's instructions for mixing and method of application. It is also recommended that if finish is applied, additional cleaning products be from the same manufacturer due to compatibility issues. Specialty floors such as sports floors with cushion back, ESD/static-control and floating floors will have exceptions to the maintenance guidelines. Contact the Information Center or Technical Support at 877.502.7429.

*There are many available cleaning and maintenance products for hard surfaces, especially resilient floors. These products should be evaluated since each location can have different requirements due to the type of soil, performance expectations and available maintenance equipment. Applying finishes will change the original product and the finish becomes the wear layer. The following are suggested products to assist the maintenance program:

- Neutral Cleaners: Diversey STRIDE® or PROMINENCE®, Shaw TOTALCARE® Hard Surface Cleaner, Hilway Direct Neutral Cleaner
- Spray and Buff: Diversey SNAPBACK®

- Matte Finish: Diversey Carefree Matte® Hilway Direct Plus Matte
- Gloss Finish: Diversey Carefree® Hilway Direct Plus Gloss
- Technical phone numbers:
 - Diversey: 1.800.558.2332
 - Shield Industries for Shaw Cleaner: 1.877.209.7309
 - www.1877floorguy.com 1.877.356-6748

SUGGESTED FREQUENCY CHART FOR RESILIENT FLOOR CARE

Traffic Level	Vacuum or Dust Mop	Spot Removal	Wet Mop or Auto-Scrub
Light <ul style="list-style-type: none"> • Private offices • Cubicles 	2+ times per week	As needed	Wet Mop Weekly Scrub Quarterly
Moderate <ul style="list-style-type: none"> • Shared offices • Secondary hallways • Conference rooms • Classrooms 	1 time per day	As needed	Wet Mop Daily Scrub Monthly
Heavy <ul style="list-style-type: none"> • Common entrances • Elevators • Main hallways • Break rooms • Work rooms • Mail rooms • Patient rooms • Waiting areas 	1+ times per day	As needed	Wet Mop Daily Scrub Weekly

This chart represents a general guideline; identify and schedule your facility for specific conditions and frequencies.

Resilient SPC Limited Warranty - 15 Year Commercial / 20 Year Residential

Shaw Industries, Inc. ("the Company") warrants its resilient SPC products under this Commercial Limited Warranty when used in the proper fit for use environment for normal indoor commercial applications.

The warranty belongs to you, the original end-use purchaser, and begins when you purchase the resilient and extends for the limited warranty period stated above. The basis of any warranty related claim is the original "Company" invoice or authorized "Company" dealer.

The resilient must be installed in accordance with the Company's installation guidelines and specifications. The product must be maintained in accordance with the Company's maintenance (resilient care) recommendations and such maintenance (resilient care) continues throughout the duration of the original installation. Damage resulting from a failure to follow installation and cleaning/maintenance guidelines will not be covered under this warranty.

Installation guidelines, specifications, and resilient care recommendations can be obtained from your dealer. For additional information, please see the bottom of this page.

WHAT THE WARRANTY COVERS

- **Manufacturing Defects** – The Company warrants that the floor plank or tile will be free from manufacturing defects during the period of this warranty. Manufacturing defects include delamination, core voids, thickness variation, and dimensional stability defects. Dimensional stability related defects are defined as dimensional changes in the width and/or length of the product greater than the tolerances as defined in ASTM F2199. Thickness variation is defined as thickness exceeding the thickness tolerance as defined in ASTM F3261.
- **Wear** – The vinyl layer of the floor plank is warranted not to wear through under normal commercial use during the period of this warranty. Gloss reduction, scratches and dents in the finish are not considered surface wear and are not covered under the warranty. Wear through is defined as wear due to normal foot traffic will not wear through to the pattern layer of the product.
- **Top Down Moisture** – The Company warrants that for the stated warranty period, the structural integrity of the floor plank or tile will not be significantly diminished by exposure to surface moisture. While moisture will not affect the floor's integrity, it is probable that, when excessive moisture accumulates in buildings or on building materials, mold (and/or) mildew growth can occur (particularly if the moisture problem remains undiscovered or unaddressed). Damage caused by mold and/or mildew growth, excessive moisture, hydrostatic pressure, floods, and standing water from leaky pipes is excluded from this warranty.

This warranty does not cover: damage to the surrounding structure, walls, subfloor, fixtures, furniture, underlayment, moldings, trims, subfloor heating elements, or anything not on the floor plank or tile; damage resulting from mold and mildew growth due to prolonged exposure to moisture; or flooring installed outdoors.

- **No Acclimation** – The Company warrants the floor plank or tile can be installed without allowing the product to achieve room temperature as long as the building where product will be installed is acclimated and climate controlled as according to the installation guidelines.

WHAT CONDITIONS APPLY

For jobsite and floor preparation conditions, see product specific installation guidelines.

Any moisture related testing (i.e. relative humidity, pH, and calcium chloride) is not the responsibility of the Company and all issues related to subfloor moisture, including any product related issues, are excluded from this warranty.

Chair floor protectors are recommended to inhibit premature wear of the surface of the resilient. Replacement resilient will come from current running-line products comparable to the warranted product.

Your warranty does not cover the following: damage caused by improper installation and/or maintenance; differences in color between products and samples or photographs; problems arising from excessive moisture, alkali or water pressure from the sub floor, floods, indentation from improper loading including heavy static loads, high heels, spiked shoes, rolling loads, chairs or other furniture not using floor protectors; cracking, warping, soiling, fading, improper maintenance or abuse caused by items such as roller skates and/or golf shoes; surface scratches, changes in shading, texture and/or gloss during use; damage caused by chemically reactive material, adhesive or tape, dye, mold, stains, spillage, burns, gouges, scratches, indentations, accidents, abuse or any harsh scouring pads while buffing; damage due to U.V. light, thermal heat sources or damage to the floor caused by exposure to temperatures above 100°F (38°C) or is exposed to temperatures below 55°F (13°C).

WARRANTY LIMITATIONS

Shaw products are not warranted against squeaking, popping or crackling. Some squeaking, popping, or crackling is possible when installed using floated methods.

WHAT IF YOU NEED WARRANTY SERVICE

You, the original purchaser, will contact your authorized Company Dealer and/or Sales Representative for warranty or claim service. Please provide a valid proof of purchase and a detailed description of the issue, along with photographs showing the concern. Samples should be submitted for testing when available.

Dealers/Shaw Sales Representatives will file a claim via www.shawnow.com and submit the information you provided. A Shaw claims representative will thoroughly evaluate your claim.

Claims contact information: Shaw Industries Financial Services, PO Box 2128, Dalton, GA 30722 - 1-800-257-7429.

WHAT WE WILL DO

Should a defect covered under this warranty be found, the affected area will be repaired to conform to the warranty. If repair is not commercially practical, the Company may, at its sole option, replace the affected resilient or refund the proportional purchase price for the affected area. The Company will pay the reasonable costs for freight and labor. Any costs incurred for the moving of equipment, furnishings, partitions and the like, that were installed over the commercial product, will be at the consumer's expense.

NOTE: The warranty is not transferable. It extends only to the original end use purchaser. Shaw Industries Inc. does not grant to any person or entity the authority to create for it any obligation or liability in connection with this product. Shaw Industries Inc. shall not be liable to the consumer or any other person or entity for any incidental, special or consequential damages, arising out of breach of this limited warranty or any implied limited warranty (excluding merchantability).

All implied warranties, including an implied warranty of merchantability or fitness for a particular purpose, are hereby limited to the duration of this limited warranty. Some states do not allow the exclusion or limitation of implied warranties or the limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to the purchaser. This warranty gives the purchaser specific legal rights, such rights may vary from State to State.

1-Component PU Rapid Primer

UZIN PE 414 BiTurbo

Ready mixed reactive resin primer for flooring coverings including wood flooring

MAIN APPLICATION FIELD:

- ▶ blocking primer on unheated cementitious screeds and concrete up to 4 CM-% / 95% RH with 2 or 3 applied coats.
- ▶ blocking primer on heated constructions up to 2.5 CM-% / 85% RH with 2 or 3 applied coats.
- ▶ for subsequent installations with UZIN reactive resin adhesives



SUITABLE ON / FOR:

- ▶ dense or absorbent substrates, on well-bonded residues of adhesives or compounds (e.g. synthetic resin, neoprene, bitumen or dispersion adhesives residues)
- ▶ moisture sensitive substrates (e.g chip and OSB boards, gypsum and screed boards)
- ▶ new mastic asphalt screeds
- ▶ primed with UZIN PE 280 prior to installation with UZIN cement or calcium sulphate levelling compounds
- ▶ warm water underfloor heating systems
- ▶ exposure to castor wheels in accordance with DIN EN 12 529
- ▶ suitable for residential, commercial and industrial areas

PRODUCT BENEFITS/FEATURES:

UZIN PE 414 BiTurbo is a rapid drying, ready mixed polyurethane primer without plasticizing ingredients which offers a wide field of application. For interior use.

- ▶ easy handling
- ▶ easy application by roller or trowel
- ▶ excellent penetration
- ▶ fast drying
- ▶ moisture barrier up to 4 CM-% / 95% RH



TECHNICAL DATA:

Packaging	plastic canister
Pack Size	12 kg, 6 kg
Shelf Life	min. 9 months
Colour, wet	brown
Colour, dry	brown
Consumption	80 - 150 g/m ² per coat*
Drying Time	see application chart
Minimum Application Temperature	15 °C at ground level

*At 20 °C and 65% relative humidity.



SUBSTRATE PREPARATION:

The substrate must be sound, load-bearing, dry, free from cracks and free from materials (dirt, oil, grease) that would impair adhesion. Cement and calcium sulphate screeds must be abraded and vacuumed. Test the substrate in accordance with applicable standard or notices and report any deficiencies.

Any adhesion-reducing or unstable layers, e.g. release agents, loose adhesives, compounds, covering or paint residues, etc. must be removed, e.g. by brushing, abrading, grinding or shot-blasting. Used, smooth and non-absorbent substrates have to be cleaned intensively with UZIN Basic Cleaner and once dry must have a matt finish. Thoroughly vacuum loose material and dust. Allow the primer to dry completely.

The datasheets for other used products have to be observed.

APPLICATION:

1. Before use, allow containers to come to room temperature and shake well.
2. **For subsequent installation of wood flooring with UZIN reactive resin adhesives on dense or less absorbent substrates:** Apply UZIN PE 414 BiTurbo with the UZIN Nylon Roller. On very smooth and flat calcium sulphate flow screeds or precast screeds its also possible to use a squeegee. Wood flooring has to be installed within 72 hours after application; otherwise grind surface and vacuum if necessary.
3. **For solidification of substrates:** Apply UZIN PE 414 BiTurbo in 1 or 2 thin, non-foaming coats with the UZIN Nylon Roller.
4. **For blocking residual moisture:** Apply UZIN PE 414 BiTurbo in 2 coats with the UZIN Nylon Roller. The second coat can be applied after the first coat is set to foot traffic (after approx. 60 minutes) and needs to dry for min. 1 hour.
5. **For subsequent installation of levelling compounds and flooring adhesives:** Apply UZIN PE 280 on the dry UZIN PE 414 BiTurbo. If a DPM is necessary, applying 2 coats of UZIN PE 414 BiTurbo is necessary.
6. Clean tools with wipes of UZIN Clean Box immediately. Dry material can only be removed mechanically.

APPLICATION CHART:

Foundation / Application	Consumption	Drying Time
Prior to direct installations with UZIN PUR / STP / MSP adhesives	80 - 150 g/m ²	min. 1 hour*
On mastic asphalt, prior to direct installation of wood flooring with UZIN PUR / STP / MSP adhesives	80 - 150 g/m ²	12 hours*
Moisture barrier up to 4 CM-% / 95% RH	250 - 300 g/m ²	1st and 2nd coat: approx. 1 hour*

*At 20 °C and 65% relative humidity.

IMPORTANT NOTES:

- ▶ A shelf life of 9 months when stored in moderately cool conditions, in the original packaging. Carefully and tightly reseal opened containers and use the contents quickly. Allow containers to come to room temperature before use.
- ▶ Best applied between 16 - 25 °C, with the floor temperature above 15 °C and relative air humidity below 65%. High temperatures and high air humidity shorten the drying time. Whilst low temperatures and low air humidity lengthen the drying time.
- ▶ Two coats are required on highly absorbent or old substrates and when used as a barrier against screed odours. Two coats are also required when using as a moisture barrier up to 4 CM% / 95% RH.
- ▶ When used over underfloor heating ensure it has been commissioned and fully tested in accordance with the manufactures guidelines.
- ▶ If installing wooden floors with UZIN reactive resin adhesives directly to the primer this must happen within 72 hours after applying the primer.
- ▶ For screeds constructions in contact with the ground or cementitious screeds with a moisture level higher than 4 CM% / 95% RH, epoxy resins such as UZIN PE 460 or UZIN PE 480, gritted, must be used.
- ▶ Follow the generally acknowledged rules of the trade and technology for the installation of wood flooring and floor covering in respective of the applicable national standards (e.g. EN, DIN, OE, SIA, etc.)

SEALS OF QUALITY & ECOLABELS:

- ▶ Solvent-free
- ▶ EMICODE EC 1 PLUS / Very low emission

COMPOSITION:

Moisture-curing, modified polyurethane prepolymers.

PROTECTION OF THE WORKPLACE AND THE ENVIRONMENT:

Solvent-free. Non flammable. Contains diphenylmethane-diisocyanate (MDI). Harmful on inhalation. Irritating to eyes, respiratory system and skin. There is limited evidence of a carcinogenic effect for respirable vapours of MDI. Harmful: May cause damage to organs through prolonged or repeated exposure. May cause sensitisation by inhalation and skin contact. Provide good ventilation. Use barrier cream, protective gloves and safety-goggles. After contact with skin, wash immediately with plenty of water and soap. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Observe safety information on product label as well as safety data sheet. Once cured, has a neutral odour and presents no physiological or ecological risk.

DISPOSAL:

Where possible, collect product residues and re-use. Do not allow dispersal into drains, sewers or ground. Empty, scraped and drip-free containers are recyclable. Containers with liquid residue, as well as the liquid product, are classed as Special Waste. Dried product residues are classed as Construction Waste. Therefore collect waste material and allow to harden, then dispose as Construction Waste.

1-Component Hybrid Adhesive

UZIN KE 68 T

1-Comp. hybrid adhesive for floor and wall applications

MAIN APPLICATION FIELD:

- ▶ rubber floor coverings in tiles up to 4 mm (e.g. norament®)
- ▶ luxury vinyl tiles or design floors
- ▶ PVC and CV floor coverings in sheets and tiles
- ▶ linoleum in tiles up to 4 mm
- ▶ PVC wall cladding (e.g. Altro Whiterock, Gerflor Decochoc)

SUITABLE ON / FOR:

- ▶ absorbent and non absorbent substrates
- ▶ deformable or elastic substrates (e.g. underlays, wood, please obtain technical advice for metal)

Note: Also suitable for processing on the floor. Obtain technical advice for additional combinations of floor covering and substrates.



PRODUCT BENEFITS/FEATURES:

UZIN KE 68 T is a ready to use and user-friendly 1-comp. hybrid adhesive with very low emissions. The compact adjustment of the adhesive is ideal for floor and wall applications. The adhesive is very resistant against heavy loads, high temperatures (up to 50 degree celsius) or humidity. For interior use.

- ▶ ideal consistency for working on vertical surfaces
- ▶ for installers with PUR or epoxy sensitization
- ▶ for areas with high temperatures
- ▶ suitable for wet area LVT installations, surface water must be removed within 24 h



TECHNICAL DATA:

Packaging	plastic bucket
Pack size	11 kg
Shelf life	min. 12 months
Colour, wet	beige
Colour, dry	beige
Consumption	250 - 2700 g/m ²
Working time	up to 40 minutes*
Minimum application temperature	15 °C at ground level
Loadable	after 24 hours*
Joint sealing	after 24 hours*
Final strength	after 3 - 5 days*

*At 20 °C and 65% relative humidity.



SUBSTRATE PREPARATION:

The substrate must be sound, load-bearing, dry, free from cracks and materials (dirt, oil, grease) that would impair adhesion. The surface must be free of dust and as even as possible. Test the substrate in accordance with applicable standard or notices and report any deficiencies.

The datasheets for other used products have to be observed.

APPLICATION:

1. Before use, allow the adhesive to come to room temperature. Pull off the foil cover after opening and remove any surface skin if necessary. Do not mix the skin in.
2. Apply an even coat of adhesive onto the wall using a suitable notched trowel. Do not apply more adhesive than can be laid with good transfer onto the back of the covering within the working time. Press down the covering well.
3. Remove residues while fresh with wipes from the UZIN Clean-Box. Hardened adhesive can only be removed mechanically.

CONSUMPTION INFORMATION:

For the adhesion of Altro Whiterock, Altro Debolon recommends a C2 trowel notch.

CONSUMPTION INFORMATION:

Coating/Backing	Toothing	Consumption approx.*
Smooth or slightly structured, e.g. PVC or LVT	A5	250 - 300 g/m ²
Structured, e.g. rubber	A2	350 - 400 g/m ²
Wood or engineered timber wall cladding	B3	900 - 1000 g/m ²
Rigid PVC wall cladding	C2	2500 - 2700 g/m ²

Observe the technical guidelines of the wall covering manufacturer.

IMPORTANT NOTES:

- ▶ A shelf life of 12 months when stored in moderately cool conditions, in the original packaging. Frost-resistant down to - 25 °C. Carefully and tightly reseal opened containers with the foil and use the contents quickly. Allow containers to come to room temperature before use.
- ▶ Best applied between 18 - 25 °C, with the floor temperature above 15 °C and relative air humidity below 65%. Low temperatures and low air humidity lengthen the working and drying time. Whilst high temperatures and high air humidity shorten the working and drying time.

- ▶ Humid substrates may cause secondary emissions and odours. Therefore, ensure the compound is dry before applying the adhesive.
- ▶ Installations onto substrates with old adhesive residues may cause interactions and lead to unpleasant odours. Ideally these should be removed completely. In all situations adhesive residues must be remedied via the use of primers and coatings of compound at least 3 mm thick.
- ▶ Before installing, the floor covering must be adequately acclimatised to the indoor climate and free from tension.
- ▶ Strong deformation of the roll ends, hanging bays, extremely raised edges or strong curvatures must be weighed down during the adhesion.
- ▶ Please check the adhesive recommendations (online) or obtain application advice when installing chlorine-free floor coverings.
- ▶ Follow the generally acknowledged rules of the trade and technology for the installation of floor covering in respective of the applicable national standards (e.g. EN, DIN, OE, SIA, etc.)
- ▶ For longer term/sustained potential surface water please use UZIN KR 430

SEALS OF QUALITY & ECOLABELS:

- ▶ Solvent-free, containing methoxysilane
- ▶ EMICODE EC 1 PLUS / Very low emission
- ▶ DE-UZ 113 / Environmentally friendly because of low emissions

COMPOSITION:

Silane-terminated prepolymers, mineral fillers, additives.

PROTECTION OF THE WORKPLACE AND THE ENVIRONMENT:

Solvent-free adhesive containing methoxysilane. Non flammable. Avoid contact with eyes and skin. When curing, produces traces of methanol. Ensure good ventilation during application. Wear protective gloves and safety-goggles. After contact with skin wash with plenty of water and soap. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Observe safety information on product label as well as safety data sheet. Once cured, has a neutral odour and presents no physiological or ecological risk

DISPOSAL:

Where possible, collect product residues and re-use. Do not allow dispersal into drains, sewers or ground. Empty, scraped and drip-free containers are recyclable. Containers with liquid residue, as well as the liquid product, are classed as Special Waste. Dried product residues are classed as Construction Waste. Therefore collect waste material and allow to harden, then dispose as Construction Waste.