

Glue Down Installation Guidelines for *Sound Solution* and *Sound Solution Plus*

Adhesive choice:

Sound Solution H.P.A., High Performance Underlayment Adhesive is designed to adhere Sound Solution Premium Acoustical Underlayment to the sub-floor. **Sound Solution H.P.A., High Performance Wood Flooring Adhesive** is a high solid, water resistant, patented Tri-Polymer adhesive, patent no. 5,721,302, formulated for the installation of engineered plank and pre-finished solid plank wood flooring. **Sound Solution H.P.A. for Wood Flooring** is an excellent adhesive for installing flat milled solid plank up to one half inch thickness to the Sound Solution underlayment. Maximum dimensions for ½ inch solid flooring are 3"x36". For solid plank with a thickness of less than ½ inch the maximum dimensions are 5"x72". The maximum dimensions for engineered hardwood flooring are 7"x96". **Sound Solution H.P.A. High Performance Wood Flooring Adhesive** should not be used to adhere Sound Solution underlayment to the sub-floor.

These specially formulated adhesives are easy to spread, easy to clean-up, and have low VOC content. They can be used on most commonly found sub-floors and brands of wood flooring designed for "glue-down" installations. The excellent re-bond characteristic helps to minimize call backs from "popping" or "hollow spots". *Sound Solution H.P.A.* ensures a strong, water resistant bond. The formula is freeze-thaw stable and non-hazardous.

Alternatively, many major flooring adhesive manufacturers can recommend adhesives from their line that they have tested with Sound Solution underlayment. Prior to the start of the installation the installer must determine that the chosen adhesive(s) as well as job-site conditions meet or exceed all applicable standards of the wood flooring manufacturer and Healthier Choice. Installation of hardwood flooring should be one of the last jobs of any construction project.

Site Conditions:

The building should be completely enclosed. All outside doors and windows should be properly installed with latching mechanisms in place.

Landscaping should be sufficiently completed to direct water away from the building. Gutters and downspouts should be in place.

All concrete, masonry, plastering, drywall and other wet work should be completed and thoroughly dry prior to beginning the installation. Texturing and paint primer coats should be completed. Where possible the installation of the base molding should not take place until after the wood flooring has been installed.

Adequate ventilation should be available. The HVAC system for the building should be operational. The flooring should not be exposed to extremes of temperature, humidity or moisture. The installation site should have a consistent temperature of at least 65 F (air and sub-floor and humidity levels should be between 35-55% for a minimum of 72 hours prior to and following the installation.

Basements and crawl spaces should be dry and adequately ventilated. Sub-floors must be checked for moisture content and emissions using industry accepted methods. Crawl spaces should meet local building codes regarding minimum heights, cross ventilation and the use of vapor retarders.

Sub-floors must be free from dust, dirt, grease, wax, curing agents, sealers, oil and any other bond inhibiting substances. The sub-floor should be level within 3/16" in 10' or 1/8" in 6'. Moisture content of the sub-floor and the wood flooring should vary no more than 4%.

Concrete must be dry with moisture emission rates that do not exceed 3 lbs/1000 sq ft/24 hrs as measured by the Anhydrous Calcium Chloride Test (ASTM-F-1869-98). Concrete surface pH must not exceed 9. Before moisture testing begins, the slab must be cured for a minimum of 30 days. Fill low areas with a cementitious leveling compound or latex milk additive latex patch with a minimum 3,000 psi compressive strength. Leveling compounds must be tested to ensure they are properly cured and within the manufacturer's specified requirements before proceeding with the installation. Mechanical surface profiling is the preferred sub-floor preparation method. Mechanically profile the sub-floor to medium-grit sandpaper texture. Sanding or scouring with open paper or a titanium disk is preferred. Remove curing and parting compounds and other surface hardeners and floor coatings according to the manufacturer's instructions. Lightweight or acoustical concrete, less than 3,000 psi, must be primed with a compatible primer. DO NOT install wood flooring below grade.

For Wood Joist Systems the sub-flooring should be structurally sound, free of loose panels or boards, and free of protruding fasteners. Moisture content should be within normal industry standards for the areas average environmental conditions. Underlayment panels should be fastened according to the manufacturer's specifications. All panel seams should be sanded level and prepared according to the manufacturer's instructions. Minimum sub-flooring: 5/8" CDX plywood sub-floor/underlayment (Exposure 1), maximum 16" o.c. construction. Install the flooring perpendicular to the floor joists. Do not install flooring over existing glue down wood flooring or nailed down wood flooring that is wider than 3 ¼". Wide plank floors must be covered with an acceptable underlayment.

SOUND SOLUTION may be installed over existing full spread sheet vinyl and vinyl tiles (non-embossed and non-cushion backed) if the existing flooring is well bonded. Clean the surface thoroughly and de-gloss the surface using an abrasive pad to create a suitable sub-floor. Resilient sub-floors must be free from dust, dirt, grease, wax, sealers, oil and any other bond inhibiting substances. These substances must be removed with the appropriate stripper/removers. Fill low areas with a cementitious leveling compound or a latex milk additive latex patch with minimum 3,000 psi compressive strength. Leveling compounds must be tested to ensure they are properly cured and within the manufacturer's specified requirements before proceeding with the installation, repair or replace loose flooring products. *Never sand any*

resilient flooring that may contain asbestos fibers.

SOUND SOLUTION INSTALLATION:

1. Roll out the *Sound Solution* cushion and trim to fit the floor leaving no gaps around the perimeter of the room. *Sound Solution* should be laid at right angles to the wood flooring's direction.
2. Pull back one half of the "cut-in" piece(s).
3. If using *Sound Solution High Performance Underlayment Adhesive*, apply with the recommended trowel. (See below) Allow 10-20 minutes open time before placing *Sound Solution* into the adhesive. If sub-floor is non-porous a longer open time will be required.* NOTE: *Sound Solution* is a non-porous, waterproof membrane. Consideration must be given to the initial "open time" of the adhesive to avoid trapping water under the *Sound Solution*. Temperature and relative humidity will determine the actual amount of open time needed and the adhesive's working time. A 100% adhesive transfer rate to *Sound Solution* is required. If proper transfer is not achieved, remove dried adhesive and reapply the adhesive with the recommended trowel allowing the appropriate open time before proceeding. Floor fans or blowers can be used to reduce the necessary open time of the adhesive.
4. If using an alternative adhesive to adhere *Sound Solution* to the sub-floor, modify step 3 as necessary to conform to the adhesive manufacturer's recommendations. . Consideration must be given to the initial "open time" of the adhesive to avoid trapping water under the *Sound Solution*. Temperature and relative humidity will determine the actual amount of open time needed and the adhesive's working time. A 100% adhesive transfer rate to *Sound Solution* is required. If proper transfer is not achieved, remove dried adhesive and reapply the adhesive with the recommended trowel allowing the appropriate open time before proceeding. Floor fans or blowers can be used to reduce the necessary open time of the adhesive.
5. Roll completed installation with a 35lb. three-section roller in a north-south direction and then in an east-west direction to ensure adequate seating into the adhesive. Do not use a roller heavier than 35 lbs.
6. Seams should be butted together leaving no gaps or overlaps. If installing the underlayment on concrete, or below grade sub-floors, be sure to tape the seams together with two inch packing tape (for added moisture protection).
7. *Sound Solution High Performance Underlayment Adhesive* achieves a firm set in 8-10 hours. Light traffic can be allowed after this time. Heavy traffic should be restricted for a minimum of 12 hours. If wood flooring is not to be installed on the same day, take care to protect the cushion from damage by using plywood panels or other means until the wood flooring can be installed.

WOOD FLOORING INSTALLATION:

1. Follow wood flooring manufacturer's instructions for layout, requirements for expansion space and any special precautions for installation.
2. Apply adhesive with the recommended trowel. (See below) Allow approximately 20 minutes open time before placing wood flooring. Working time for adhesive is approximately 45 minutes. If sub-floor is non-porous a longer open time will be required. NOTE: *Sound Solution* is a non-porous, waterproof membrane. Consideration must be given to the initial "open time" of the adhesive to avoid trapping water under the wood flooring. Temperature and relative humidity will determine the actual amount of open time needed and the adhesive's working time. A 100% adhesive transfer rate to the wood flooring is required.
3. Lay wood flooring into wet adhesive. Occasionally lift a piece of flooring to assure that a 100% adhesive transfer is achieved. If proper transfer is not achieved, remove dried adhesive and reapply the adhesive with the recommended trowel allowing the appropriate open time before proceeding. The use of non-transferring tape may be required to secure patterns and minimize movement until installation has been completed. Be sure to remove tape immediately after completion of the installation to avoid damaging the wood. Do not use masking tape. NOTE: *Sound Solution* is a non-porous, waterproof membrane. Consideration must be given to the initial "open time" of the H.P.A. to avoid trapping water under the floor.
4. If using an alternative adhesive to adhere the wood flooring to the *Sound Solution*, modify step 3 as necessary to conform to the adhesive manufacturer's recommendations.
5. Leave appropriate expansion space around the perimeter of the room and at any stationary objects.
6. If plank is bowed or warped, use weights to ensure flooring is in full contact with the adhesive during the adhesive curing process.
7. Roll completed installation with a 100lb. roller in a north-south direction and then in an east-west direction to ensure adequate seating into the adhesive.
8. The adhesive achieves a firm set in 8-10 hours. Furniture placement and foot traffic should be restricted for a minimum of 24 hours.
9. Remove wet adhesive with a damp cloth. If adhesive dries, remove the adhesive with safety solvent. Test solvent on a scrap piece of flooring to ensure solvent does not affect the floors finish.

GENERAL TROWEL RECOMMENDATIONS:

Engineered and solid plank flooring: 3/16" x 3/16"x3/16" square notch trowel (40-50 sq. ft./gal.)

Parquet: 1/8" x1/8" x1/8" u notch trowel (90-100 sq. ft./gal)

Sound Solution to sub-floor: 1/16" x 1/16" x1/16" square or u notch trowel (125-150 sq. ft./gal)

*Determining whether the sub-floor is porous is the responsibility of the user. You can check the sub-floor is porous if the water is absorbed within a few seconds. If the water beads and is not absorbed within a few seconds the sub-floor is non-porous.