

STAGESTEP *Flooring Solutions*

For Dance, Theater & the Performing Arts

Installation Instructions



**PORTABLE, PERMANENT FLOORING AND SUBFLOOR SYSTEMS
FOR STUDIO, STAGE & TOURING**

(215) 636-9000 ■ info@stagestep.com ■ stagestep.com

(800) 523-0960

(Toll Free in the U.S.)

(866) 491-9019

(Toll Free in Canada)

Updated as of April 2018. Supersedes previously published materials.

Preparation and Overview

- Inspection of Material/Vinyl Floor Preparation – Do’s & Don’ts 3
- Moisture Test/Job Conditions/Subfloors/Grade Levels 4
- Underlayments/Strip Wood or Plank Flooring/Concrete Floors..... 5
- Resilient Floors/Color Matching/Associations 6
- Bone Dry Plus and Stagestep Adhesive Application 7

Rollout Flooring Installation – Five Ways to Install

- Temporary Installation 8
- Semi-Permanent Installation (With 2” Double Faced Tape) 8
- Semi-Permanent Installation (With 4” Professional Seam Tape) 8
- Long-term Semi-Permanent Installation with ReUseIt 1.5..... 9-11
- Permanent Installation (With Stagestep Adhesive) 10-12
- Heat Welding 13

Springstep Floor Installation.....

- Springstep II (4’ x 8’ ply supplied locally with foam blocks/cubes).....14
- Springstep III (4’ x 8’ ply supplied locally with foam sheeting)15
- Springstep IV13

Springstep IV-A (foam sheeting) & B/C (cubes with & without adhesive)..... 17-18

Permanent Hardwood Flooring using SpringFlex.....19

Encore Flooring20-21

Vented Wall Base Installation..... 22

Floorshield Maintenance System.....

- FloorShield Maintenance for Vinyl Flooring (Initial & Re-Application) 23
- FloorShield Maintenance for Wood Flooring (Initial & Re-Application).....24

Stagestep Product List & Pricing 25

Quick Reference Chart For Installation Of Sheet Vinyl Flooring				
Flooring Type	Temporary	Short Term Semi-Permanent	Long Term Semi-Permanent	Permanent
Dancestep II	0	0	0	0
Dancestep Plus	0	0	0	0
Quietstep	0	0	0	G
Rave	0	0	G	X
Ovation	0	0	G	X
Bravo Classic	0	0	G	X
Super Bravo	0	0	0	G
Super Timestep	0	0	0	0
Timestep	0	0	0	0
Timestep T	0	0	G	X
Woodstep	0	0	0	0
Woodstep Plus	0	0	0	0
Woodstep Ultra	0	0	0	0

Quick Reference Chart For Installation of Wood Flooring				
Encore Permanent Flooring System	0 X	0 X	0 X	G 0

O = Optimum G = Good X = Not recommended.
Circumstances and budget may dictate other options.

INSPECTION OF MATERIAL

Material should be delivered to the job site in its original unopened packaging with all labels intact.

Please examine the packaging for any damage which may have occurred during transit. The contents shipped to you should be secured to an 8' pallet with orange strapping.

Upon receipt, all rolls of vinyl flooring should be immediately removed from this box, inspected and stood upright on a perfectly level surface or leaned against a wall in the most upright position possible. Failure to do so may result in deformation of the vinyl product, for which **Stagestep** is not responsible, voiding the warranty.

If you have any questions about the condition of the flooring you have received, or if the rolls have been removed from their packaging, please take multiple photos from different angles. Be sure the photos are clear with good lighting and no glare. Contact your **Stagestep** salesperson or our customer service representative as soon as possible. All damaged product must be noted on the shipping receipt at the time of delivery.

Materials must be stored in an area that is fully enclosed and weather-tight, with a permanent HVAC system set to a uniform temperature of 68 degrees and a relative humidity of 50-70% for at least 72 hours prior to and during the installation.

Material should always be visually inspected during installation. No labor cost will be covered on claims based on visual defects that could have been seen prior to or during installation. Installation of flooring denotes acceptance.

CAUTION: All slabs must be covered or sealed with a vapor barrier. Use **Stagestep Plastic Vapor Barrier** and **Moisture Proof Tape**, or **Stagestep** supplied **Bone Dry Plus**. Note that the space between the sealed concrete floor and the subfloor must be vented for any moisture which collects. This is achieved by a 1/4" to 1/2" gap around the perimeter of the subfloor. Use **Vented Wall Base** to conceal this gap and allow moisture to escape.

Wood, like vinyl, needs time to acclimate to the space. Most wood floors require professional installation except for **Stagestep's Encore** flooring system. For more information on installation preparation for subfloors and wood flooring systems, please see pages 14–21. For pricing of **Stagestep** installation products, including **Springstep IV** subfloor systems see page 25.

Stagestep is not responsible for costs related to the delay, damage or installation of its flooring. Floors are insured in customer's name against shipping damage. All floors will be replaced free of charge if there is a manufacturer defect or if damaged by the trucking company.

VINYL FLOOR PREPARATION

Do's & Don'ts

DO: Make sure the smooth surface is up and foam or texture side down when installing. To lay flooring, securely hold the ends of the roll and unroll flooring from the core so that smooth-side surface is always facing up. Save core or center tube for future use unless installing permanently. (Flooring returned to **Stagestep** for any reason must be re-rolled using core or center tube) requires flooring to be securely held and roll unraveled. The unrolling of vinyl flooring may require 2 – 4 people with adequate strength depending on length of roll and weight.

DO NOT: Flip flooring edge over edge. Flooring will tear or crack. Be careful not to severely bend vinyl flooring. Such bending or inadvertent stepping on folded flooring can result in stretch marks or cracking, depending on the type of vinyl.

DO: Wash the new floor 2-3 times with **ProClean** and lukewarm water before using. For special non-slip requirements or treatments, call our customer support department.

DO NOT: Use rosin, solvents, abrasive cleaners, cola, vinegar, (concentrated) ammonia, bleach, or any product that says it will leave your floor shiny.

DO: Keep the space at a standard room temperature of 68°-78° F and have a humidity between 50-70% prior to and during the installation process. The use of humidifiers or dehumidifiers may be required.

VINYL FLOORING

- Ensure that moisture tests of the concrete slab have been conducted and meet standard for moisture content. Have the permanent HVAC system turned on and set to a minimum of 68 - 78° F. and a relative humidity between 50 - 70% for a minimum of 72 hours prior to, during and after installation. After the installation, the maximum temperature should not exceed 100°F for any short period of time.
- Flooring material has been acclimatized to the installation area for a minimum of 24 hours prior to installation.

- Only **Stagetest** approved adhesive should be used. Using an unapproved adhesive may void warranty. (See page 25 for product list with pricing.) Use a 1/32" x 1/16" x 1/32" fine notch trowel only.
- 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.
- Some of **Stagetest** sheet vinyl has a fiberglass interlayer which gives them dimensional stability. They will not shrink or compress. If cut too full or back rolled, it can result in a bubble.
- Install all cuts and rolls in consecutive sequence.
- Ensure that all recommendations for subfloor and job site conditions are met prior to beginning the installation. Once the installation is started, you have accepted those conditions.

MOISTURE TEST

It is essential that moisture tests be taken on all concrete and wood floors regardless of the age or grade level. Concrete should be tested in a minimum of three places for every 1,000 square feet. The test should be conducted according to ASTM F1869-98 using a calcium chloride test or digital meter. The test should be conducted around the perimeter of the room, at columns, and where moisture may be evident. The moisture emission from the concrete should not exceed 5.0 lbs. per 1,000 square feet in 24 hours. Wood should be tested with a digital moisture meter and should have a content not lower than 5% and not higher than 10%. If your results exceed these limits, please contact us for more information. It is not the floor installer's responsibility to conduct the test. However, the floor covering installer is responsible to make sure these tests have been conducted with proper results prior to installing the floor covering.

When moisture tests are conducted, it only indicates the conditions at the time of the test. The flooring contractor cannot be held responsible if moisture is present in the future and causes a failure.

JOB CONDITIONS

The installation of flooring should not begin until the work of all other trades has been completed, especially overhead trades.

Areas to receive flooring should be clean, fully enclosed, weather-tight with the permanent HVAC set at a uniform temperature of 68-78°F and a relative humidity between 50-70%. The flooring material should be conditioned in the same manner. Maximum temperature should not exceed 100°F after instal-

lation for any short period of time. All reasonable efforts must be made to keep installed floor at room temperature and proper humidity at all times.

Areas to receive flooring shall be adequately lit to allow for proper inspection of the substrate, installation and seaming of the flooring, and final inspection.

NOTE: Moisture tests should be conducted after HVAC system has been installed and all materials have had ample time to acclimatize. Failure to have a controlled environment within the recommended 68°-78° F and 50-70% relative humidity may cause flooring system failure.

SUBFLOORS

No floor covering is better than the subfloor over which it is installed. The finished appearance and performance of the floor covering will be determined and affected, in part, by the condition of the subfloor. It is essential that all subfloors be structurally sound, finished smooth, flat, level, permanently dry, clean, and free of all foreign materials such as dust, paint, grease, oils, solvents, curing and hardening compounds, sealers, asphalt, and old adhesive residue. Flat and level means, and the applicable parameter to maintain product warranties is 1/8" – 1/4" for every 10 feet. Subfloor preparation should be done with the permanent HVAC set 68°-78° F and humidity controlled at 50-70%.

Vacuuming the subfloor with a commercial shop vac is a preferred method for removing dirt and dust. For concrete floors, damp mopping the subfloor is an excellent way to remove fine dust. A clean subfloor ensures proper bond between the subfloor and the floor covering.

NOTE: Wherever trade names, trademarks, product names, or company names are mentioned, they are used only as a reference to establish a comparative standard of quality. It should not be assumed that these products are the only products for the suggested or intended use. Also, it does not mean that other products of similar or equal quality may not be suitable.

GRADE LEVELS

1. On Grade A location for a finished floor with no portion below ground level, and with the floor and the ground in contact or separated by less than 18" of well-ventilated space between the bottom of the lowest horizontal structural member and the ground at any point.
2. Above Grade A location for a finished floor where the floor is not in contact with the

ground and which provides at least 18" of well-ventilated space between the bottom of the lowest horizontal structural member and the ground at any point.

3. **Below Grade** A location for a floor structure which is in contact with the ground or with less than 18" of well-ventilated space between the bottom of the lowest horizontal structural member and the ground, at any point and if part or all of the floor is below ground level.

DEFINITIONS

1. **Subfloor** That structural layer intended to provide support for design loadings. The subfloor is the substrate for the underlayment.
2. **Underlayment** The layer of material installed on or over the subfloor to provide a smooth, clean surface to receive the resilient floor covering.
3. **Subfloor/Underlayment Combination** Designed to meet the structural requirements and provide a smooth surface to receive the floor covering.

While many types of subfloor construction are acceptable for use with our products, **Springstep** and **SpringFlex** subfloors are the **ONLY** acceptable subfloor/underlayment combinations for our flooring. **DanceStep II, Dancestep Plus, Woodstep Plus** and **Woodstep Ultra** should be installed directly on your existing smooth surface, and do not require a sprung subfloor.

For further information you may refer to ASTM F141. For wood subfloors, refer to ASTM F1482.

Existing floors must be structurally sound, free from excessive movement and have well-ventilated air space below. Our floor coverings should not be installed over wooden subfloors built on sleepers over, on grade, or below grade concrete floors without the use of a vapor barrier. Failure to use a vapor barrier will result in high rates of failure due to the excessive moisture vapor emissions from the concrete. (See page 25 for product list with pricing.)

UNDERLAYMENTS

Underlayment panels are used to correct deficiencies in the subfloor and to provide a smooth, sound surface on which to adhere the resilient flooring. Use ¼" luan. Most of the time they are not needed.

Other types of underlayment panels such as Tecply, Multiply, and Masonite Brand Underlayment should **not be used** with our subfloor systems. Always install and fasten underlayment panels according to the manufacturer's recommendations.

There are certain types of subfloors and underlayment that through years of experience are known to be prone to failure and regardless of which underlayment is used, any failures in the performance of the underlayment, or **Stagestep** floor coverings due to the underlayment, is the responsibility of the underlayment manufacturer and not **Stagestep**.

STRIP WOOD/PLANK FLOORING

Due to expansion and contraction of strip and plank subflooring during seasonal changes, we recommend **Springstep IV** underlayment panels be installed over these types of floors.

NOTE: The use of a skim coat of patching material over wooden subfloors may cause more problems than it resolves especially in joint areas. The moisture from the patch is absorbed by the wood, swelling the wood fibers, causing telegraphing through the newly installed floor covering. Proper installation of a wooden subfloor is critical to the successful installation of your flooring surface. Installation of wooden subfloors should be given the same attention as when installing our floor coverings.

CONCRETE FLOORS

(Refer to ASTM F710-98)

Floors shall be smooth, rigid, flat, level, permanently dry, clean, and free of all foreign material such as dust, paint, grease, oils, solvents, curing and hardening compounds, sealers, bond breakers, asphalt and old adhesive, residue.

Concrete shall have a minimum compressive strength of 3500 psi/150 pounds per cubic feet and be covered with a **Vapor Barrier** prior to construction of the subfloor. Telegraphing of patched joints and subfloor imperfections may often be accentuated if the flooring material is maintained with a high gloss finish.

NOTE: The use of **Stagestep Vapor Barrier**, either liquid like **Bone Dry**, or 8 mil. or better plastic barrier, is mandatory when installing our products over, above, on, or below grade concrete. Failure to do so will void all warranties.

EXISTING RESILIENT FLOORS

Most **Stagestep** floor coverings may be installed over a single layer of non-cushioned resilient flooring provided it meets certain conditions.

- The existing flooring must be fully adhered and well-bonded.
- The existing flooring must not be embossed or textured enough that it will telegraph through the new flooring.
- All waxes and finishes must be removed and rinsed with clean water and a pH test should be conducted to assure stripper residues have been removed. An adhesive bond test should be conducted to ensure proper bond between the adhesive and the existing flooring material.
- Cuts, gouges, dents, and other irregularities must be repaired or replaced.
- The current subfloor must be sprung and must meet the recommendations of the existing and the new floor covering.
- The use of embossing levelers is not recommended for commercial installations.

NOTE: Application of a skim coat of patching material over the existing resilient flooring may cause more problems than it resolves, such as bonding failures, cracking and indentations.

The responsibility of determining if the existing flooring is suitable to be installed over rests solely with the installer and flooring contractor. If there is any doubt as to its suitability, it should be removed or an acceptable underlayment installed over it.

Installations over existing resilient flooring may be more susceptible to indentation, and there is always a possibility the existing flooring may telegraph through. Remember, your flooring is no better than what you lay it over.

Telegraphing is when the seams of the subfloor/underlayment shows through to the surface of the flooring. This condition should not affect activity on the surface or impact wear. It is a common occurrence with floating wood subfloors.

RADIANT HEATED FLOORS

Stagestep floor coverings may be installed over radiant heated floors provided the operating temperature does not exceed 85°F. To allow proper adherence of the adhesive to the subfloor, the radiant heating system should be lowered or turned off for at least 48 hours prior to installation of our flooring material. This

will ensure the surface temperature of the subfloor does not exceed 65°F during the installation of the flooring material.

The room temperature must be maintained at a minimum of 65°F prior to, during, and after installation for 72 hours. Then, the temperature of the radiant heating system can be increased. When raising the floor temperature, do so gradually so that the substrate and flooring material can adapt to the temperature change together. A rapid change could result in bonding problems.

For more information, contact our technical support at **(800) 523-0960**.

The use of **Stagestep Vapor Barrier**, 8 mil. or better plastic barrier, is mandatory when installing our products over, above, on, or below grade concrete. Failure to do so will void all warranties.

COLOR MATCHING

When more than one roll of a color is being installed, all material should be from the same numbered batch. If material is from more than one batch, be sure to match the different batches as closely as possible. When installing **Stagestep** vinyl flooring, all sheets must be installed running in the same direction.

ASSOCIATIONS AND INSTITUTES

For more extensive guidelines and information on the mentioned topics, we encourage you to contact the following associations:

- APA — The Engineered Wood Association
253-565-6600 or www.apawood.org
- ACI — American Concrete Institute
248-848-3700 or www.concrete.org
- PCA — Portland Cement Association
(847) 966-6200 or www.cement.org
- RFCI — Resilient Floor Covering Institute
(706) 882-3833 or www.rfci.com
- ASTM — American Society for Testing and Materials
610-832-9500 or www.astm.org

BONE DRY PLUS APPLICATION

Surface sealers, paint, grease, oils and adhesives, etc., must be removed prior to the application of **Bone Dry Plus**. Slick, hard troweled surfaces should be etched with **Bone Dry Plus** products, or mechanically opened to enable **Bone Dry Plus** to penetrate into the concrete.

Use **Bone Dry Plus** at full strength. Do not dilute. Saturate the surface with **Bone Dry Plus**. Application can be made with an airless sprayer or hand pumped garden type sprayer. Do not allow **Bone Dry Plus** to pond or puddle, as a white residue will likely form on the surface.

The time for the application of additional material can be judged by observing the time it takes for **Bone Dry Plus** to soak into the concrete. If the material soaks in quickly, generally less than 15 minutes after application, additional applications are required.

If necessary, 24 hours after the final application of **Bone Dry Plus**, flush or mop the surface thoroughly with water to remove any foreign material that may be brought through the concrete up to the surface.

After certain applications, a crust of both alkali and lime may be brought through the concrete up to the surface. To remove, use a stiff bristle brush or scrubbing machine with a wire block brush. After removal, flush with water to clean the surface.

The concrete is now cleaned, deodorized and permanently sealed. Flooring can be installed approximately 72 hours after application. You can safely walk on concrete during the 72 hour window, although surface can be slippery when wet.

ADHESIVE APPLICATION

Preparation of Surfaces

Use on grade, above grade, or below grade (if the floor covering is recommended for below grade installations). May be used over plywood, hardboard, concrete, terrazzo, steel, and well-bonded, wax-free floor coverings. Use a high quality latex/Portland cement patching compound to fill or level any irregular areas. The floor must be sound, dry, and free from dirt, dust, old adhesives, grease, wax, or other foreign matter. Concrete floors must be fully cured, free from dust, moisture, excessive alkalinity, curing agents, and excessive moisture vapor emissions (5 lbs./1,000 SF/24 hrs.) On and below grade concrete must have a satisfactory moisture barrier beneath the slab. Do not use Safe-Set 299 where moisture is present in the concrete subfloor; moisture may retard or prevent the adhesive from setting. May be used over old cutback adhesive provided the following procedure is followed: scrape and remove the adhesive to expose

at least 80% of the concrete surface. Random specs of adhesive and the appearance of a brown surface stain are acceptable.

Application Instructions

The adhesive and room should be maintained at a minimum temperature of 65°F for 48 hours prior to, during, and after installation. For porous subfloors apply the adhesive with a 1/16" x 1/16" x 1/16" square notched trowel; for non-porous subfloors use a 1/32" x 1/32" x 1/16" trowel. Immediately after spreading the adhesive, roll it with a short nap roller dampened with adhesive to flatten the adhesive ridges. This procedure will ensure that the trowel notch pattern does not telegraph through to the finished floor. When using the "wet-set method" of installation test the adhesive to see if it has "strings" and is moist to the touch before installing the floor covering. Check periodically to make sure there is full transfer of adhesive to the back of the floor covering. When using the "tacky" method of installation allow the adhesive to become tacky before beginning the installation (adhesive should not transfer to the finger when touched). That set-up time will vary with the temperature, humidity, and porosity of the subfloor. To test, touch the adhesive lightly; if it does not transfer to your finger, proceed with the installation. Place the vinyl flooring into the adhesive within two hours of spreading. (Place carefully and accurately because the tiles cannot be repositioned easily). Within an hour of installation roll the entire floor with a 100 lb. roller. Roll twice, once in each direction. Restrict heavy foot traffic or rolling loads for at least 24 hours.

Clean-up

Dried adhesive can be difficult to remove; take care to remove wet adhesive from the surface of the material before it dries. Fresh adhesive (less than 8 hours old) can be removed with ice cold soapy water and wet cloth. For dried adhesive film, use mineral spirits or acetone carefully, as these products can compromise the floor finishes. Always refer to the material manufacturer for proper dried adhesive removal procedures.

FIVE WAYS TO INSTALL

- Temporary Installation
- Semi-Permanent Installation
- Long-Term Semi-Permanent Installation
Using **ReUseIt 1.5**
- Permanent Installation

TEMPORARY INSTALLATION

Use Top Tape, Vinyl or Cloth Tape. (See page 25 for product list with pricing.)

1. Floor must be installed over a clean, smooth, level and dry surface. It is best to install over a sprung subfloor.
2. Before taping, unroll flooring and allow to sit on subfloor until flooring lies flat and acclimates to room temperature.

Letting the floor sit overnight or longer is ideal. Flooring must lie flat before taping. Leave a 1/16" gap at all seams and a 1/2" gap at walls.

3. Tape all seams and the perimeter of the floor using 1-1/2" or 2" vinyl or cloth tape.

SEMI-PERMANENT INSTALLATION

2–3 Years

Use Double-Faced Tape and Top Tape, Vinyl or Cloth Tape. (See page 25 for product list with pricing.)

1. Seal concrete slab against moisture. On concrete slab, use liquid moisture barrier such as **Bone Dry Plus** as directed (see page 7), or **Stagestep Vapor Barrier** plastic sheeting 8 mil or greater. If using plastic sheeting, roll out and place so each sheet overlaps 5" – 7" with **Moisture Proof Tape** at seams, and allow to run up to wall and tape with same waterproof tape at base of perimeter to seal moisture below.
2. Subfloor (ideally sprung subfloor) surface must be clean, dry, level, and smooth, with all screw holes and seams filled with wood putty, wood filler or taped over. (See instruction for **Springstep II, III, or IV.**) It is not necessary to tape tight fitting seams as should be the case with properly installed **Springstep II, III, or IV.** Taping will result in possible telescoping which is normal.
3. Roll out flooring and let it acclimate to room temperature. When the floor arrives, it may be rolled inside out. Please make certain that the smooth side is up, and the foam or textured surface is down. The room temperature should be the highest temperature the room will reach when in use. (Remember, all those bodies working creates heat.) Acclimatizing the floor may take anywhere from a few hours to a few days.

4. Make certain the floor is lying flat to the subfloor and that all seams are even. Make all appropriate cuts. Leave a 1/2" gap at walls and a 1/16" gap between the seams.
5. Your floor should look like it is ready to be used.
6. Secure one end of each roll of flooring with weight so it will not move.
7. Mark the edges of the flooring onto the subfloor with a pencil. Begin by re-rolling the flooring roll closest to the furthest wall onto its core and apply double-faced tape to the subfloor at the marked perimeter and down the middle 3.25 ft. from the edge. Leave all other rolls in place and rolled out.
8. Roll the flooring into place and check positioning over the tape.
9. If all is fine, roll up the floor, remove the protective paper from the double-faced tape and re-roll over the exposed tape surface. Be careful not to step on rolled down vinyl over the double-faced tape until you are confident the vinyl is flat without any ripples or rolls.
10. Repeat procedures 7 through 9 for each roll.
11. If necessary, use a 75 lb. roller to further secure the floor using an "S" path allowing ripples or air bubbles to be pushed out and not trapped under the flooring.
12. Tape all seams and perimeter of the floor using 1-1/2" or 2" vinyl or cloth tape.

CAUTION: Change top tape every three months or as necessary. Change double-faced tape a minimum of every two years. Failure to do so can cause flooring to crack and ripple.

SEMI-PERMANENT INSTALLATION

3–4 Years

Use double-faced professional **4" seam tape.** (See page 25 for product list with pricing.) **No top tape is required.**

1. Seal concrete slab against moisture. On concrete slab, use liquid moisture barrier such as **Bone Dry Plus** as directed (see page 7), or **Stagestep Vapor Barrier** plastic sheeting 8 mil or greater. If using plastic sheeting, roll out and place so each sheet overlaps 5" – 7" with **Moisture Proof Tape** at seams, and allow to run up to wall and tape with same waterproof tape at base of perimeter to seal moisture below.

2. Subfloor (ideally sprung subfloor) surface must be clean, dry, level, and smooth, with all screw holes and seams filled with wood putty, wood filler or taped over. It is not necessary to tape tight fitting seams as should be the case with properly installed **Springstep II, III or IV**. Taping will result in some telescoping which is normal.
3. Roll out flooring and let it acclimate to room temperature. When the floor arrives, it will be rolled inside out. Please make certain that the smooth side is up, and the foam or textured surface is down. Room temperature should be the highest temperature the room will reach when in use. (Remember, all those bodies working create heat.) Acclimatizing the floor may take anywhere from a few hours to a few days.
4. Make certain floor is lying flat to the subfloor and that all seams are even. Make all appropriate cuts. Leave a 1/2" gap at all walls. Seam areas may be overlapped by up to 1 inch and double, or trace cut to realize two fresh edges so that edges of the 2 adjacent rolls are perfectly aligned. Do not make the double cuts until step 11.
11. If necessary, use a 75 lb. roller to further secure the floor using an "S" path allowing ripples or air bubbles to be pushed out and not trapped under the flooring.
12. Once entire floor surface has been rolled, if you have overlapped the rolls at seams, double or trace cut all seams. Once all seams have been cut, roll seam area with 75 to 100 lb. roller.
13. Tape perimeter of the room using 1-1/2" or 2" vinyl or cloth tape unless covered by optional vented cove base.

CAUTION: Change **4-inch seam tape** a minimum of every three years. Failure to do so can cause flooring to crack and ripple.

LONG TERM SEMI-PERMANENT INSTALLATION

Use **Stagelstep's ReUselt 1.5** (See pages 25 for product pricing.)

NOTE: Overlap and double-cutting will reduce coverage of material in the floor width. Please be sure that there is enough material to complete the job before installing the floor in this manner.

5. Your floor should look like it is ready to be used.
6. Secure one end of each roll of flooring with weight so it will not move.
7. Mark the edges of the flooring onto the subfloor with a pencil. Begin by re-rolling the flooring roll closest to the furthest wall onto its core and apply 4" professional seam tape to the subfloor at the marked perimeter and down the middle 3.25 ft. from the edge. Leave all other rolls in place and rolled out.
8. Re-roll out this roll to check the positioning over the tape.
9. If all is fine, roll up the floor, remove the protective paper from the doubled-faced tape and re-roll over the exposed double-faced tape. Be careful not to step on rolled down vinyl over the double-faced tape until you are confident the vinyl is laid out flat without any ripples or rolls. Rolling out vinyl flooring onto adhesive should always be done slowly and methodically.
10. Repeat procedures 7 through 9 for each roll.
1. Seal concrete slab against moisture. On concrete slab, use liquid moisture barrier such as **Bone Dry Plus** as directed (see page 7), or **Stagelstep Vapor Barrier** plastic sheeting 8 mil or greater. If using plastic sheeting, roll out and place so each sheet overlaps 5" – 7" with **Moisture Proof Tape** at seams, and allow to run to wall and use same tape at base of perimeter to seal moisture below.
2. Subfloor (ideally sprung subfloor) surface must be clean, dry, level, and smooth, with all screw holes and seams filled with wood putty, wood filler or taped over. It is not necessary to tape tight fitting seams as should be the case with properly installed **Springstep II, III or IV**. Taping will result in telescoping which is normal.
3. **ReUselt 1.5** is installed perpendicular to the direction of the rollout floor surface. If your floor runs north-south, the **ReUselt 1.5** will run east-west.
4. **ReUselt 1.5** covers the entire floor surface.
5. As you roll out **ReUselt 1.5**, you expose the adhesive on the bottom which will stick to your subfloor.
6. As one person slowly walks backwards unrolling **ReUselt 1.5**, another person secures the adhesive to the subfloor by smoothing it out with a stiff bristle push broom or roller. (See step 1 illustration.) Rolling out vinyl flooring onto adhesive should always be done slowly and methodically.
7. When you reach a wall, cut **ReUselt 1.5** with a utility knife and start the next run. It is good to line up seams as close as possible; however, slight

overlaps or gaps are OK. (See step 1 illustration.)

8. Roll out top flooring perpendicular to the **ReUselt 1.5**; make all rough cuts along wall perimeter, and let top flooring acclimate for at least 24 hours. If floor edges are damaged or deformed, seam areas may be overlapped by up to 1 inch and double or trace cut to realize two fresh edges. Do not make double cuts until step 12. (See step 2 illustration.)
9. Roll your flooring up half way using a flooring tube. Do this one section at a time. Peel off the protective layer on **ReUselt 1.5** exposing the top adhesive. (See step 3 illustration.)
10. Gently roll flooring back into adhesive, making sure not to shift or change alignment of the flooring. Smooth out flooring from the center to the edges.
11. Repeat procedure on each half of the remaining sheets of flooring. Do not cut any seams at this time. (See step 4 illustration.)
12. Once all flooring has been affixed to the **ReUselt 1.5**, roll each sheet one at a time from the center to the edges with a 75 to 100 lb. floor roller. (See step 9 illustration.)
13. Once entire floor surface has been rolled, double cut or scribe all seams. Be careful not to cut the **ReUselt 1.5** during this procedure. Cutting the **ReUselt 1.5** at the seam areas will weaken its ability to properly hold the seams closed. Once all seams have been cut, roll seam area with 75 to 100 lb. roller. (See step 5 illustration.)

TIPS

1. Room should be warm and dry. **ReUselt 1.5** should not be used in damp areas or outside.
2. If a mistake is made and the floor gets tangled or misaligned, gently pull floor material up and try again. If **ReUselt 1.5** gets dirty, damaged, or wet, cut damaged area out and lay in replacement piece.
3. Test **ReUselt 1.5** to confirm it will stick to your subfloor prior to installation.

ReUselt 1.5 is designed to work with **Stagestep** subfloor systems and most plywood types, however, **Stagestep** cannot guaranty suitability with any system other than its own systems. Suitability should be tested prior to installation

The sticking power of **ReUselt 1.5** is less than normal double-faced tape. Remember, **ReUselt 1.5** is designed to be removed and not render the subfloor or

vinyl flooring unusable. Other permanent installation methods typically mean that the subfloor and vinyl floor cannot be used again. It may be necessary to use double-faced tape or 4" seam tape to hold **ReUselt 1.5** to secure its leading edges.

CAUTION: Extreme heat can damage **ReUselt 1.5** resulting in its failure to bond flooring to subfloor. Call us if this is likely to happen or is happening. Use 4" seam tape available to fix this issue.

NOTE: Do not overlap seams if doing so will compromise floor fit! Do not use **ReUselt 1.5** to install **Time-step T**. Use double-faced tape and top tape. Overlap and double cutting will reduce coverage of material in the floor width. Please make sure that there is enough material to complete the job.

PERMANENT INSTALLATION

Use **Stagestep** Adhesive. (See page 7 for instructions and page 25 for product list with pricing.)

Professional installation recommended. Complete instructions are included with each container of **Stagestep** Adhesive. Seams should be double cut by a professional. Chemical welding is not recommended. Heat welding is not necessary but again should only be done by a professional. We carry heat **Welding Rod** material in all colors if you wish a virtually seamless floor. If you have any questions, call us at **(800) 523-0960** or see page 13 for more details.

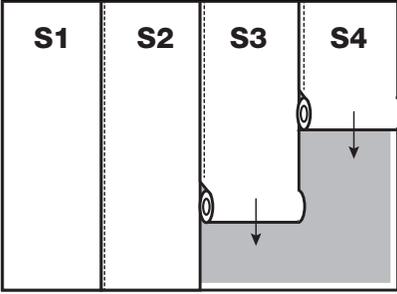
CUTTING AND FITTING SHEETS

Stagestep sheet vinyls are flexible and easy to handle when properly acclimated. In most cases, a qualified installer will be able to hand fit the material in areas where base or trim moldings will be installed after the installation is completed.

1. Cut the required length off the roll, including enough to run up the wall 2-3" at either end.
2. Push the length of the sheet as close to the starting wall as possible, letting the extra length run up the wall at each end.
3. Set the scribes to a minimum of 3/8" more than the greatest distance between the wall and the flooring material. Scribe the shape of the wall onto the flooring.
4. Next, cut the material along the scribe line using a utility blade knife. Place the fitted sheet approx 1/2" from the wall. There should be a 1/2" gap around entire perimeter of room.
5. Cut second sheet with proper extra length.

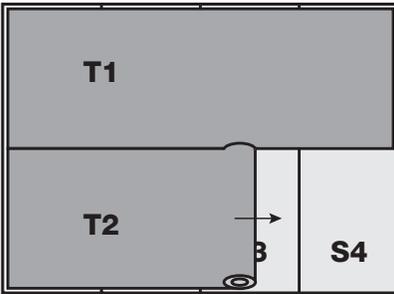
REUSEIT INSTALLATION STEPS

STEP 1



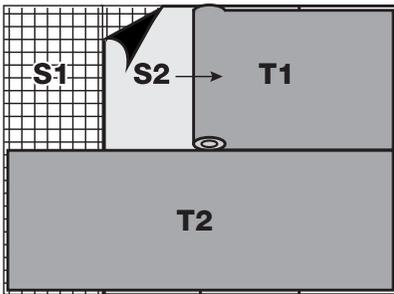
S = ReUseIt 1.5

STEP 2



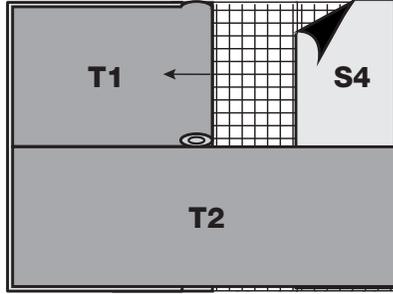
S = ReUseIt 1.5
T = Dance Floor Surface

STEP 3



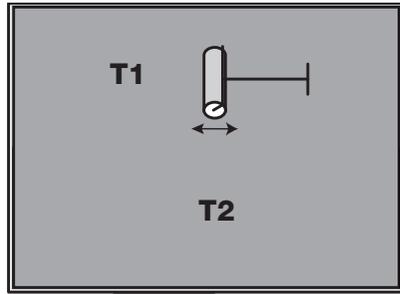
S = ReUseIt 1.5
T = Dance Floor Surface

STEP 4



S = ReUseIt 1.5
T = Dance Floor Surface

STEP 5



T = Dance Floor Surface

6. Position second sheet with a 1/2" - 1" overlap over first sheet at the seam.
7. Repeat steps 5 and 6 for as many sheets as necessary to complete the area or those sheets that can be installed that day.
8. Lap back all overlapped sheets as one, halfway back.
9. Snap chalk line along area where adhesive will be spread to assure an even and straight line of adhesive. Spread adhesive with proper notched trowel over entire area. Be very careful not to leave any adhesive ridges or puddles.

NOTE: The subfloor porosity and room atmosphere conditions (temperature, humidity, etc.) can affect the working time of the adhesive. Floor must be placed into adhesive while wet. Do not install flooring into dry adhesive.

10. Push lapped flooring from the fold onto adhesive, working toward the wall. **DO NOT FLOP MATERIAL IN** – air will be trapped causing bubbles. Rolling or laying out vinyl flooring onto adhesive should always be done slowly and methodically.
11. Roll floor with 75 to 100 lb. roller in both directions. Roll across with width first, then across the length. Using the top floor piece edge as a guide, cut bottom sheet with a sharp utility knife.

NOTE: To ensure proper bonding of the material, it is recommended to roll the material next to the walls with a hand seam roller.

12. After material has been laid into the adhesive, double, trace or scribe cut seams. If scribe cutting, underscribe the seams using the short scribes with either the scribe blade or scribe pin.

NOTE: Set 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. Heat Welding **Stagestep** Vinyl Sheet Flooring is optional. (See heat welding instructions on page 13.) When installing **Super Timestep**, both seam edges must be trimmed as the factory edge is at 45° angle.

13. Cut material along scribe line with utility knife.
14. Roll the seam with a hand roller.
15. Repeat the same procedure on the other half of the room. **TAKE CAUTION NOT TO OVERLAP ADHESIVE LINES OR LEAVE RIDGES OF ADHESIVE.**
16. Heat weld seams the following day if required. See heat welding instructions below.

NOTE: The above instructions assume a permanent install with adhesive. Therefore, these instructions are for professional installers. Any questions, please call us at **(800) 523-0960**.

HEAT WELDING

To be done by experienced professionals only

Heat welding is the optional procedure for all seams, coving, and corner fill pieces of our sheet vinyls. Heat welding provides for strong and hygienic seams. **They are not invisible. Heat welding is not appropriate for temporary or semi-permanent installations.**

The welding cord for our vinyls is made of pure PVC which is designed to melt at the same temperature as the PVC of the sheet vinyl flooring. This is why you should never use **Welding Rods** other than those specified for the product you are installing.

Heat welding should be done after the flooring adhesive has set-up, usually a minimum of 24 hours after sheet vinyl installation.

It is always a good idea to practice on a scrap piece of material first to ensure proper temperature and speed.

PROCEDURE

1. Seam edges should be tight. Gaps in the seam will deter a quality weld.
2. Groove seam using a vinyl groover. The depth of the groove should be about 2/3 the depth of the material. Be careful not to go too deep. This is very important to ensure proper strength and bonding of the **Welding Rod**.
3. The ends of the seam, where the groover cannot reach, must be completed using the hand groover.
4. Clean all grooves thoroughly.
5. Use only professional quality welding guns that will maintain the proper temperatures. Use 5mm speed tip.
6. Preheat welding gun for several minutes before beginning.
7. Cut length of **Welding Rod** long enough to weld over half the seam.
8. Insert rod through welding nozzle about 3-4", hold on to excess and immediately begin welding.
9. The welding tip should always be parallel to the flooring and directly over the groove.
10. Determine the correct welding speed by ensuring that the **Welding Rod** actually melts into the groove. A small bead should form on either side of the **Welding Rod**.

11. While the **Welding Rod** is still warm, trim the excess material with the crescent knife and trim plate in one continuous movement.
12. If the **Welding Rod** has not properly bonded, a new piece of rod can be fused in and trimmed.
13. Repeat the same procedure on the other half starting from the opposite wall working toward the center. Overlap the **Welding Rod** approximately 1" where they join.
14. After the rod has cooled to the touch, make the final trim using only the crescent knife.
15. Minor repairs and smoothing out of the rod may be done using the butane repair tool.

NOTE: Seamless does not mean invisible. Heat welding prevents moisture from penetrating the seam and destroying the adhesive.

SPRINGSTEP II SUBFLOOR

CONSTRUCTION

Materials needed

- Two layers of 1/2" underlayment grade solid core no void plywood, one side finished. (To be supplied locally.)
 - Springstep** 2" high density foam cubes or 3" x 3" x 3/4" foam blocks.
 - Contact cement or liquid nails. (To be supplied locally) but not necessary if using peel and stick cubes or blocks.
 - 1" to 1 1/2" continuous thread wood deck screws with counter sinking heads. Do not use drywall screws or nails. (To be supplied locally.) (See schematic at bottom of page.)
 - Vapor barrier (choice of plastic sheeting such as **Stagetest Vapor Barrier** with reinforcement scrim laminated between polyethylene layers or a liquid vapor barrier like **Bone Dry Plus**.)
 - Moisture Proof Tape** to tape vapor barrier at seams if using plastic sheeting.
 - Tape floor patch to fill screw holes and realize a smooth surface. (To be supplied locally)
- Glue or peel and stick foam blocks to bottom layer of ply. (See schematic at bottom of page.)
 - Position bottom layer of ply with foam affixed. Stagger seams.
 - Run top layer of ply perpendicular to bottom layer. (See schematic on page 15.)
 - Floor is complete when you reach the walls or the desired size. Leave 1/2" gap around perimeter.
 - Tape or patch screw heads and sand seams to realize smooth surface if necessary.
 - Transition pieces are available. (See page 25 for product list with pricing. Product may require a custom order.)
 - It is not necessary to tape tight fitting seams as should be the case with properly installed **Springstep II**. Taping will result in telescoping which is normal.

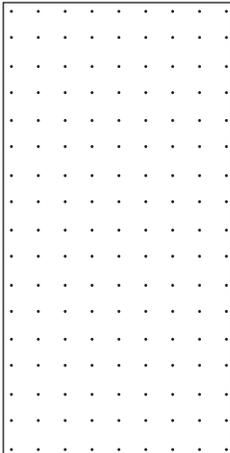
NOTE: Do not use any wood with moisture content exceeding 10%.

CAUTION: By using substandard wood and/or hardwood, you increase the risk of subfloor failure. Rough edges, defective or non-specified screws can result in damage to your wear surface. Double check that your subfloor is secure and sound.

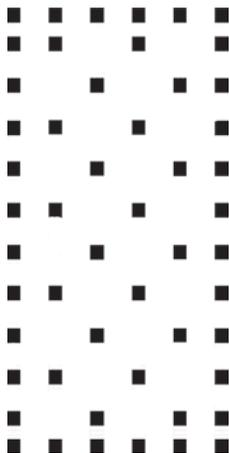
PROCESS

- Seal concrete slab against moisture. On concrete slab, use liquid moisture barrier such as **Bone Dry Plus** as directed (see page 7), or **Stagetest Vapor Barrier** plastic sheeting 8 mil or greater. If using plastic sheeting roll out and place so each sheet overlaps 5" – 7" with **Moisture Proof Tape**

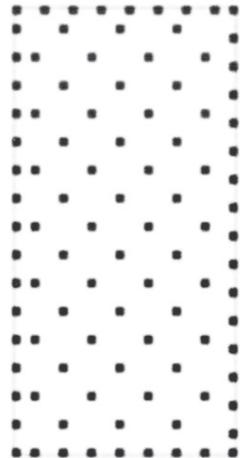
Screws 6" on center
150-160 screws
per 4' x 8' sheet
of plywood



Springstep II
3" x 3" Foam Block Layout
52 Required per
4' x 8' sheet



Springstep II
2" Foam Cube Layout
100 Required per
4' x 8' sheet



SPRINGSTEP III SUBFLOOR

CONSTRUCTION

Materials needed

- Two layers of 1/2" underlayment grade solid core no void plywood, one side finished.
(To be supplied locally.)
- Stagetest** 1/2" foam sheeting (rolls come in 5' width by your custom length up to 100').
- 1" continuous thread wood deck screws with counter sinking heads. Do not use drywall screws or nails. (To be supplied locally.) (See schematic below.)
- Vapor barrier (choice of plastic sheeting such as **Stagetest Vapor Barrier** with reinforcement scrim laminated between polyethylene layers or a liquid vapor barrier such as **Bone Dry Plus**.)
- Moisture Proof Tape** to tape vapor barrier at seams if using plastic sheeting.
- Tape floor patch to fill screw holes and realize a smooth surface. (To be supplied locally.) (See page 25 for product list with pricing.)

PROCESS

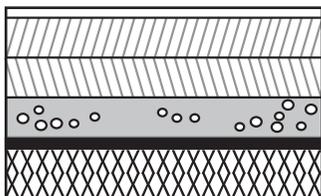
- Seal concrete slab against moisture. On concrete slab, use liquid moisture barrier such as **Bone Dry Plus** as directed (see page 7), or **Stagetest Vapor Barrier** plastic sheeting 8 mil or greater. If using plastic sheeting roll out and place so each sheet overlaps 5" – 7" with **Moisture Proof Tape** at seams, and allow to run up to wall and tape with same waterproof tape at base of perimeter to seal moisture below.

- Roll out foam sheeting to conform to slab.
- Tape seams of foam.
- Loosely lay bottom layer of ply directly on foam. Stagger seams.
- Run top layer of ply perpendicular to bottom layer. (See schematic below.)
- Use 1" continuous thread wood deck screws with counter sinking heads.
- Floor is complete when you reach the walls or desired size. Leave 1/2" gap around perimeter.
- Tape or patch screw heads and sand seams to realize smooth surface if necessary.
- It is not necessary to tape tight fitting seams as should be the case with properly installed **Springstep III**. Taping will result in telescoping which is normal.

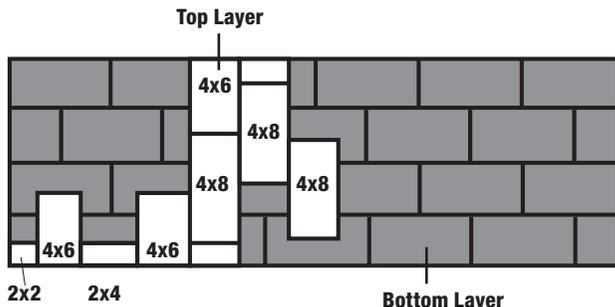
NOTE: Do not use any wood with moisture content exceeding 10%.

CAUTION: By using substandard wood and/or hard-wood, you increase the risk of subfloor failure. Rough edges, defective or non-specified screws can result in damage to your wear surface. Double check that your subfloor is secure and sound.

SPRINGSTEP III CROSS SECTION



- FLOORING
- TOP LAYER 1/2" PLYWOOD (FINISHED ONE SIDE)
- BOTTOM LAYER 1/2" PLYWOOD
- 1/2" FOAM
- VAPOR BARRIER
- CONCRETE SLAB



SPRINGSTEP IV SUBFLOOR

Springstep IV is a nominal 2' x 2' random wafer board made with a resin that resists moisture. Comes pre-assembled with 3/4" thick L-shaped foam forms. Designed for multi-purpose studios.

Springstep IV-A

Unassembled panels with 1/2" thick foam sheeting (for firm, absorbent floor and sound reduction). Excellent for ballroom dance.

Springstep IV-B

Unassembled panels with 2" foam cubes for increased resiliency. Ideal for high impact activities.

CONSTRUCTION

Materials needed

1. **Stagestep Springstep IV** panels.
2. Vapor barrier (choice of plastic sheeting such as **Stagestep Vapor Barrier** with reinforcement scrim laminated between polyethylene layers or our liquid vapor barrier, **Bone Dry Plus**).
3. **Moisture Proof Tape** to tape vapor barrier at seams if using plastic sheeting.
4. **Vented Wall Base**. (Optional)
5. Transition pieces or ramps. (Optional)
6. Tools: Rubber mallet or hammer, 2 x 4 block, rotary saw to cut perimeter panels.

PROCESS

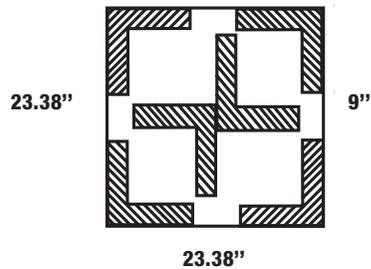
1. Seal concrete slab against moisture. On concrete slab, use liquid moisture barrier such as **Bone Dry Plus** as directed (see page 7), or **Stagestep Vapor Barrier** plastic sheeting 8 mil or greater. If using plastic sheeting roll out and place so each sheet overlaps 5" – 7" with **Moisture Proof Tape** at seams, with same waterproof tape at base of perimeter to seal moisture below.
2. Press or tap boards into each other making sure to stagger seams. Can use mallet and 2 x 4 blocks on groove side of panel.
3. Every other row should begin with a full board. Rows should alternate starting with full boards and half boards as illustrated.
4. Leave 1/4" – 1/2" gap at walls to allow air to circulate and floor to expand.
5. Floor is complete when you reach the walls or the desired size.
6. **Vented Wall Base** and transition pieces/ramps are available.

The average two-person crew can complete a minimum of 125-150 sq. ft. per hour, 1,000-1,200 sq. ft. per day.

NOTE: A vapor barrier over your slab is required with all subfloors. The use of **Stagestep Vapor Barrier**, 8 mil is mandatory when installing our products over, above, on, or below grade concrete. Failure to do so will void all warranties.

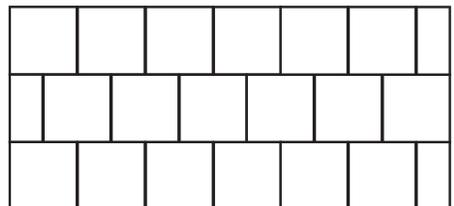
*Resiliency is the measurement of "spring." Increased resiliency = more "spring." Less resiliency = more firm. Shock absorption of all SSIV products is virtually the same and helps to prevent dance and sport related impact injuries.

Foam Form Layout



Pre-assembled with 3/4" thick "L-shaped" foam forms

Staggered Brickwork Pattern



(See page 25 for product list with pricing.)

SPRINGSTEP IV-A SUBFLOOR

(for firm floor and sound reduction)

CONSTRUCTION

Materials needed

1. **Stagestep Springstep IV** panels.
2. **Stagestep** 1/2" foam sheeting (rolls come in 5' width by your custom length up to 100').
3. Vapor barrier (choice of plastic sheeting such as **Stagestep Vapor Barrier** with reinforcement scrim laminated between polyethylene layers or **Stagestep** supplied liquid vapor barrier **Bone Dry Plus**).
4. **Moisture Proof Tape** to tape at foam seams and also tape **Vapor Barrier** at seams if using plastic sheeting.
5. **Vented Wall Base**. (Optional)
6. Transition pieces or ramps. (Optional)
7. Tools: Rubber mallet or hammer, 2 x 4 block, rotary saw to cut perimeter panels.

PROCESS

1. Seal concrete slab against moisture. On concrete slab, use liquid moisture barrier such as **Bone Dry Plus** as directed (see page 7), or **Stagestep Vapor Barrier** plastic sheeting 8 mil or greater. If using plastic sheeting, roll out and place so each sheet overlaps 5" – 7" with **Moisture Proof Tape** at seams, with same waterproof tape at base of perimeter to seal moisture below.
2. Roll out foam sheeting to conform to slab.
3. Tape seams of foam.
4. Press or tap boards into each other making sure to stagger seams. Can use mallet and 2 x 4 blocks on groove side of panel.
5. Every other row should begin with a full board. Rows should alternate starting with full boards and half boards as illustrated.
6. Leave 1/4" – 1/2" gap at walls to allow air to circulate and floor to expand.
7. Floor is complete when you reach the walls or the desired size.
8. **Vented Wall Base** and transition pieces/ramps are available.

*Resiliency is the measurement of "spring."

SPRINGSTEP IV-B/C SUBFLOOR

(for increased resiliency)*

CONSTRUCTION

Materials needed

1. **Stagestep Springstep IV** panels.
2. **Stagestep** 2" high density foam cubes. 2" foam cubes and **Springstep IV** panels will ship in separate packages.
3. Contact cement or liquid nails for **SSIV-B** (To be supplied locally but not needed if using peel and stick cubes or blocks).
4. Vapor barrier (choice of plastic sheeting such as **Stagestep Vapor Barrier** with reinforcement scrim laminated between polyethylene layers or **Stagestep** supplied liquid **Vapor Barrier Bone Dry Plus**).
5. **Moisture Proof Tape** to tape vapor barrier at seams if using plastic sheeting.
6. **Vented Wall Base**. (Optional)
7. Transition pieces or ramps. (Optional)
8. Tools: Rubber mallet or hammer, 2 x 4 block, rotary saw to cut perimeter panels.

SPRINGSTEP IV-B/C SUBFLOOR PROCESS

(Continues on page 18)

SPRINGSTEP IV-B/C SUBFLOOR

(Continued)

PROCESS

1. Seal concrete slab against moisture. On concrete slab, use liquid moisture barrier such as **Bone Dry Plus** as directed (see page 7), or **Stagestep Vapor Barrier** plastic sheeting 8 mil or greater. If using plastic sheeting roll, out and place so each sheet overlaps 5" – 7" with **Moisture Proof Tape** at seams, with same waterproof tape at base of perimeter to seal moisture below.
2. Glue/apply foam cubes with liquid nail/contact adhesive or "peel and stick" to bottom of **SSIV-B** panel. Shipped bottom-side up of **SSIV-C**. Bottom-side is typically lighter in color. (See image 1 for foam layout.) After attaching foam cubes flip right-side up.
3. Press or tap boards into each other making sure to stagger seams. Can use mallet and 2 x 4 blocks on groove side of panel.
4. Every other row should begin with a full board. Rows should alternate starting with full boards and half boards as illustrated. (See image 2 and 3.)
5. Leave 1/4" – 1/2" gap at walls to allow air to circulate and floor to expand.
6. Floor is complete when you reach the walls or have achieved the desired size.
7. **Vented Wall Base** and transition pieces/ramps are available.

After foam cubes have been attached to the panels, the average two-person crew can complete 125-150 sq. ft. per hour, 1,000-1,200 sq. ft. per day.

The use of **Stagestep Vapor Barrier**, 8 mil or better plastic barrier, is mandatory when installing our products over, above, on, or below grade concrete. Failure to do so will void all warranties.

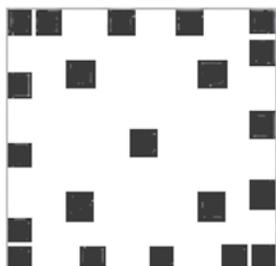


Image 1:
Follow 2"x2"x2"
Foam Block Layout

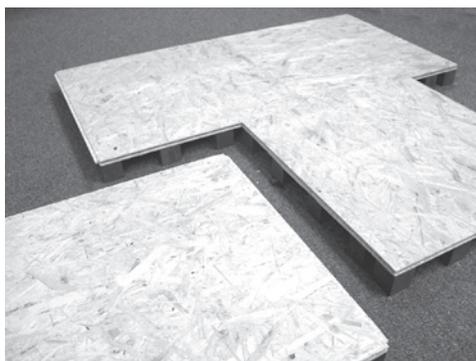


Image 2:
Springstep IV-B Subfloor
Fit panels together tightly at seams.
Alternating seams as shown below.

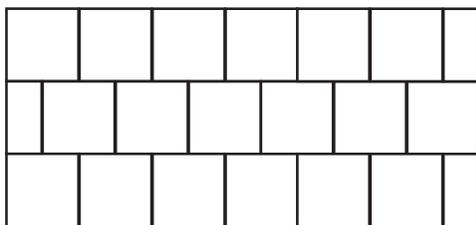


Image 3:
Staggered Brickwork Pattern

PERMANENT HARDWOOD FLOORING SYSTEM USING SPRINGFLEX

1. On concrete slab, use liquid moisture barrier such as **Bone Dry Plus** as directed (see page 7), or **Stagestep Vapor Barrier** plastic sheeting 8 mil or greater. If using plastic sheeting roll out and place so each sheet overlaps 5" – 7" with **Moisture Proof Tape** at seams, and tape with same water-proof tape at base of perimeter to seal moisture below. Check that the floor is dry, even and dustless
2. Install the first component row at a 45° angle to the wall. Measure 16' 4" from the corner to each side. This is how you get a 45° angle. (See image 2.)
3. Continue installing with the 45° angle. You can install several rows (e.g. 3 rows) at the same time. Check that the measurements between the elements are 14" (inches) center to center and the empty area between the elements is approx 12" (inch). An end joint in one row needs to be staggered at the minimum of 20" (inches) from an end joint in the next row. (See image 3.)
4. Install the entire area. (See image 4.)
5. Install wood boards on top of **Stagestep's SpringFlex** subfloor. Apply a bead of glue on the subfloor strip prior to placing each hardwood strip. Maintain same gap distance from the hardwood to wall as used during subfloor installation. Space can be adjusted and maintained by using wedges. (See image 5.)

6. Nail the wood board to each subfloor strip using standard hardwood staples. Fasteners should be of the glue coated type. Do not use normal nails or screws. Follow standard hardwood nailing procedures using a hardwood floor nail gun and driving fasteners/staples through the tongue at 45° angle. (See image 6.)
7. Apply glue to the groove of the short side of the hardwood board. Glue may also be applied to the length of the long side of the board. Also remember to apply glue between the hardwood board and the subfloor strips. Hardwood end joints in one row needs to be staggered at the minimum of 20 inches from an end joint in the next row. (See image 7.)
8. Continue to lay the boards until the floor is finished, remove all wedges. Apply any additional coatings as instructed. If installing vented molding or other decorative trim pieces be sure to not install tightly against floor surface. (See image 8)

STIFFENING

The floor must be stiffened e.g. near the doorways, auditoriums, storages and other places, which carry heavy loads. Stiffen the sprung structure by using pieces of plywood. Use glue and nails to keep them in place. (See image 9)

NOTE: Permanent wood flooring system must be installed by a professional installer who is familiar with installing this type of flooring system. **Stagestep** has a recommended installation team that ensures the proper install. Local installers must consult with a **Stagestep** representative prior to installation.

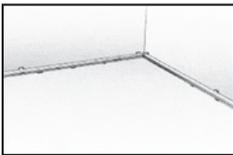


Image 1

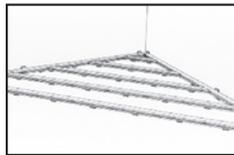


Image 4

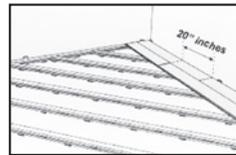


Image 7

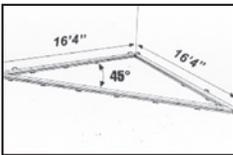


Image 2

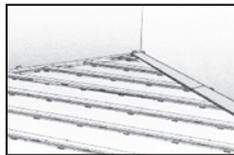


Image 5

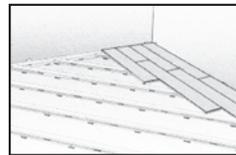


Image 8

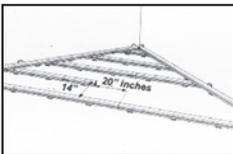


Image 3

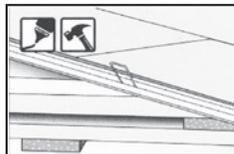


Image 6

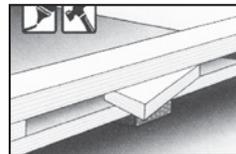


Image 9

ENCORE FLOORING

PREPARATIONS

Store the floor planks in the room of installation. Allow to acclimate 48 hours prior to install. Read the installation instructions carefully before installing. **Encore** flooring with click and lock is laid as a floating floor.

Encore is joined together without being attached to the existing floor. The planks are joined together without glue.

- The subfloor must be dry, level, and solid.
- Check the level of the subfloor over a measured length of 7 ft. and a measured length of 1 ft. If any unevenness is greater than $\pm 1/8"$ over a measured length of 7 ft. or greater than $\pm 1/16"$ over a measured length of 1 ft, the subfloor must be leveled first.
- The room must be set at a uniform temperature between 68°–78° F. with a relative humidity between 50–70%. If the relative humidity is less than 30%, there is an increased risk of the planks becoming concave. Both the room and the planks shall be warmed to normal room use temperature before the floor is laid. In most cases, the flooring needs to be protected against moisture from the concrete surface below by using a **Vapor Barrier**. We recommend sheet that is laid with a **Stagetest Vapor Barrier 7"** overlap.

NOTE: Installing a vapor barrier is required on any slab made of concrete or concrete joists, concrete flooring directly on the ground, crawl space foundation, or underfloor heating systems. See product list on page 25. The slab should be cleaned thoroughly to avoid mold.

- On concrete slab, use liquid moisture barrier such as **Bone Dry Plus** as directed (see page 7), or **Stagetest Vapor Barrier** plastic sheeting 8 mil or greater. If using plastic sheeting roll out and place so each sheet overlaps 5" – 7" with **Moisture Proof Tape** at seams, and tape with same waterproof tape at base of perimeter to seal moisture below. Check that the floor is dry, even and dustless
- The planks should be laid so that the length or the long-side of the boards spans the short-side or narrowest dimension of the room. The floor moves as the air humidity changes and therefore there must be a movement joint of at least 1/2" and up to 1" next to walls and fixed objects in the room. This movement joint shall be provided around the entire floor.
- The cove base needs to be 50% wider than the movement joint. Example: If you have installed the floor with a movement joint of 3/4" in between the floor and wall, the cove base must

be at least 1 1/2" otherwise there is a risk that the floor's shrinkage will mean that you will get a gap between the floor and the cove base when the floor shrinks during the dry part of the year.

INSTALLATION

1. Work out first how many planks you need. If the last plank is narrower than 2", you will need to saw the first plank as well. When installing flooring with click and lock, the work is made easier if you start with the long side that has most doors. If there are doors on the short side of the room, begin each plank row on that side.
2. Start in a corner and work from left to right with the long underlip out towards the room. The distance of the long side to the wall can be adjusted later when three rows have been laid.
3. An additional element must be installed using double-sided tape on the underside of the plank on the wall side to stop the plank from "sagging." This element is provided by cutting excess support material from the boards that will be installed in the last row. This support element will be approximately 1 3/8" wide x 84" long.
4. Press the next floor plank at an angle against the first one and lay it down. Continue in the same way along the length of the first row. (A gap of 1/2" to 1" must be maintained around the perimeter of the floor.)
5. Cut the last plank in the first row to the correct length and begin the next row with the piece that is left over. Check using a piece of string that the starting planks lie in a straight line. The end joints of the planks must be staggered by at least 10 in. (in wall-to-wall installations). (See #5)
6. The best thing is to make a staggered pattern of planks width-wise. (See #6)
7. Press the floor plank at an angle against the plank in front. Tap lightly with a hand block while carefully pressing down the plank at the same time. (See #7)
8. Press in a wedge at the short end under the plank already installed. (See #8)
9. Press in the next plank's short end at an angle and lay down the long side. (See #9)
10. Tap lightly with the hand block on the long side at the same time as you carefully press the plank down and it will be easier to position it.

TIP: The work is easier if you screw together two blocks so that the hand block is higher. (See #10, 11)
11. The first floor row sometimes needs to be adjusted

to a crooked wall. Draw the contour of the wall on the floor planks. Saw the last plank but remember that an additional resilient element may need to be installed using double-sided tape underneath on the wall side to prevent the plank from “sagging”. (See #12)

12. Holes are drilled in the plank for heater pipes. The holes shall be at least twice as large as the calculated movement joint plus the pipe's diameter. Example: If the floor is 32 feet wide, $32 \times .02 = .6$ in. This means that the hole must be 1.2" larger than the pipe. Saw. When the plank is fitted, the sawn-out piece is glued in place and the holes covered with pipe collars. If you need to cut a door architrave, use a floor plank as an underlay so you get exactly the right height. If you need to knock a plank lengthways, protect the plank joint with a cut-off from a short end. Skirting boards must not be nailed or pressed down so that the floor is locked. All connection rails must be anchored in the concrete to permit natural movement of the wooden floor. If you plan to carry out more building work in the room, remember to protect the floor with protective paper that allows moisture through. Our floors should not be installed until all other building work has been completed. Planks can be laid from all directions if necessary. **Encore** flooring is also easy to take up. This facilitates installation around doors, for example. (See #13)

13. Proceed as follows if you cannot gain access to angle in a plank under a door architrave or low radiators, for example:

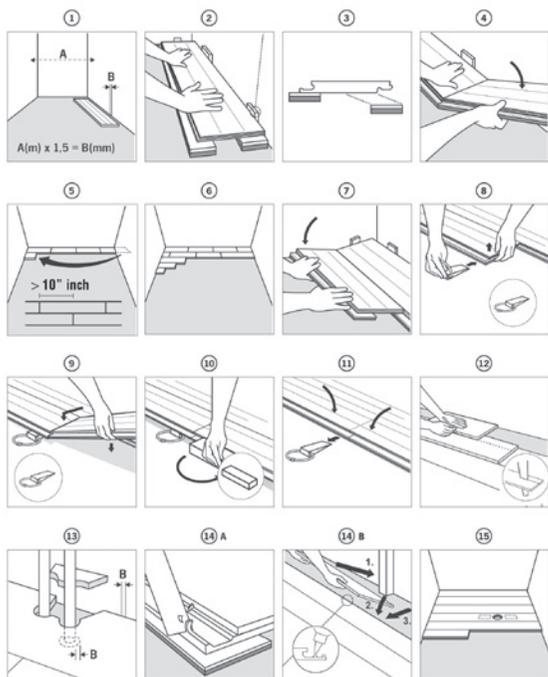
- 14a - Cut away 2/3 of the locking edge.
- 14b - Glue. Tap the plank into place using a cleat.

CARE AND MAINTENANCE

One of the major benefits with **Encore** is that it is so easy to keep clean and tidy. Daily care is best done by vacuum-cleaning or using a dry mop and occasional moist wiping using a well-wrung cloth. Use **ProClean** or floor cleaner with a pH no higher than 8. If a cleaning machine is used, the amount of water should be as little as possible. The machine must not leave any watermarks when it turns or stops. Residual moisture shall have dried completely within a minute. Follow the instructions for the respective surface treatment during maintenance.

Spillage will not leave any traces on **Encore** if wiped up immediately. If the floor is subject to heavy wear, it is probably best to renovate it by machine sanding and applying a new surface treatment. **Encore** has a surface layer that can be sanded and refinished a number of times. If you should get a mark on the floor you can try and remove it using a mild detergent (without ammonia) such as **Proclean, FloorShield Cleaner** or floor cleaner diluted in warm water. If this does not help, following are a few hints on how to remove difficult marks. Take care when using strong stain removal materials since using too much and applying too much pressure could affect the finish.

NOTE: Ask the advice of our staff if you have any questions concerning building moisture, if you plan to install a floor on a structure that is different than what we have described here or if anything else is unclear. If you find a damaged or faulty plank, put it aside. It can be surplus or used for finishing. You can exchange a faulty plank.



VENTED WALL BASE

1. Install **SSIV**, or other sub-floor system as required leaving 1/4" to 1/2" half inch gap around perimeter of room. (See images 1 & 2.)
2. Starting in the corner of the room, affix vent backing to wall using **Vented Cove Based Double-Faced Tape** or cove base adhesive so that the top of the vent backing is 4 inches above the surface of the subfloor. Note some of the vent backing will be below the sub-floor surface in the gap that was made during installation of the sub-floor. (See image 3.)
3. Continue installing vent backing around the entire perimeter of the room making cuts as needed.
4. Install surface as instructed. (See image 4.) Trim floor surface flush to the edge of the sub-floor. Do not install surface tight to the vent backing, and use caution not to damage vent backing.

5. Install **Vented Cove Base** by starting in corner of room and adhering base to the vent backing using **Vented Cove Based Double-Faced Tape** or cove base adhesive, continue around perimeter of room trimming base where needed.

TIP: To create finished corners cut toe of base on a 45 degree angle using a standard utility knife. (See image 5.)

NOTE: Base toe can be heat welded to floor surface using standard heat welding procedures, however, **this process should only be done by a trained professional.**

The purpose of **Vented Wall Base** is to cover the 1/4" to 1/2" gap between the subfloor and the wall while still allowing moisture from the room to escape from beneath subfloor and not be trapped causing the subfloor to fail.

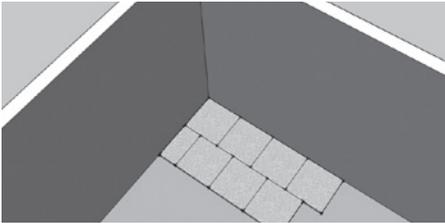


Image 1

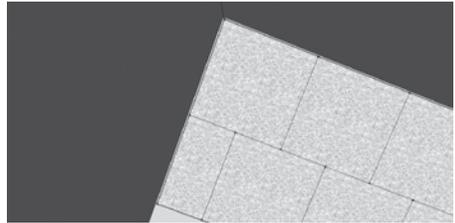


Image 2

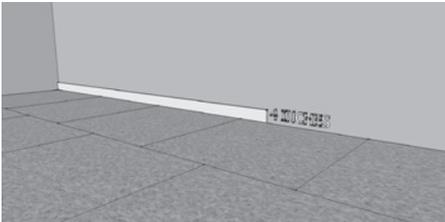


Image 3

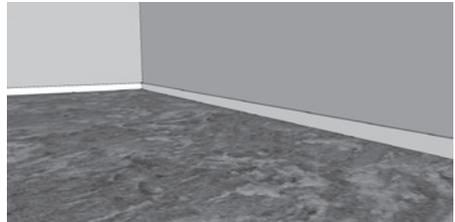


Image 4

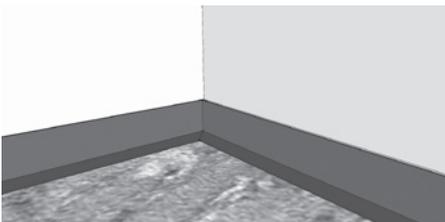


Image 5

FLOORSHIELD FOR VINYL

Initial Application

STEP 1

Strip the floor

Remove course dirt by vacuum or sweeping. Dilute stripper 1 part stripper to 5-10 parts water. Take the liquid stripper and completely strip the floor with a floor scrubbing machine with an attached green or red pad. This will remove all the manufacturer oils and installation footprints. If all the dirt is not removed thoroughly, the finish will not stick to the floor correctly.

STEP 2

Clean the floor

Do a thorough cleaning to remove all of the stripper liquid from the floor. You can use a shop vac to remove the excess stripper liquid. Once finished cleaning the floor, do a warm water rinse to make sure it is completely free of the stripper liquid. Again, you may use a shop vac to remove the excess liquid. Make sure that all stripper liquid is entirely removed from the floor or the finish will not stick correctly.

STEP 3

Finish the floor

An HVAC system should be used to control temperature in 68°-78° F. range. Windows and all outside doors should be closed during application and drying. Floor should not be exposed to sunlight. Radiant heated floors should be turned off several hours before finishing. Shake bottle of **FloorShield Finish** thoroughly. Use the applicator(s) supplied with the **FloorShield Maintenance System** to apply 2 coats to the floor. The first coat is applied in one direction, the second coat is applied perpendicular to the first coat. When applying the finish, do not put pressure on the applicator. **FloorShield Finish** should be applied heavily but not milky so that solution will self-level. Each bottle of finish covers 500/sf for 2 coats. You must apply the 2 coats of finish within a 24 hour period. Allow at least 2 hours before applying the second coat. It must be dry to the touch one hour before applying second coat. Do not use fans or forced air to dry the finish. Allow for natural drying time. **FloorShield Finish** will continue to harden over the period of one week. Allow 36 hours to pass before barefoot dancing on the floor. Tap dancing should be avoided for 48 hours.

FLOORSHIELD FOR VINYL

Re-application

STEP 1

Scuff the floor

If you already have used the **FloorShield Maintenance System** previously, you will not need to strip the floor. You will receive a burgundy pad to scuff the floor. Clean floor with **FloorShield Cleaner** as you normally do. Allow to dry. Place the pad onto a floor machine and use dry. Do not use with any liquids. Make sure you scuff the entire floor.

Once finished scuffing, you will need to do a warm water rinse to clean the floor of any residue. Make sure that all residue/dust resulting from the scuffing is removed from the floor or the finish will not stick correctly.

STEP 2

Finish the floor

An HVAC system should be used to control temperature in 68°-78° F. range. Windows and all outside doors should be closed during application and drying. Floor should not be exposed to sunlight. Radiant heated floors should be turned off several hours before finishing. Shake bottle of **FloorShield Finish** thoroughly. Use the applicator(s) supplied with the **FloorShield Maintenance System** to apply 2 coats to the floor. One coat is applied in direction of wood grain, the second coat is applied perpendicular to the first coat. When applying the finish, do not put pressure on the applicator. **FloorShield Finish** should be applied heavily but not milky so that solution will self-level. Each bottle of finish covers 500/sf for 2 coats. You must apply the 2 coats of finish within a 24 hour period. Allow at least 2 hours before applying the second coat. It must be dry to the touch one hour before applying second coat. Do not use fans or forced air to dry the finish. Allow for natural drying time. **FloorShield Finish** will continue to harden over the period of one week. Allow 36 hours to pass before barefoot dancing on the floor. Tap dancing should be avoided for 48 hours.

FLOORSHIELD FOR WOOD

Initial Application

STEP 1

Prime the floor

An HVAC system should be used to control temperature with relative humidity between 50–70% in 68°–78° F. range. Windows and all outside doors should be closed during application and drying. Floor should not be exposed to sunlight. Radiant heated floors should be turned off several hours before finishing. Floor must be fine sanded, clean, dry, free of dust, grease, oil and wax.

Thoroughly shake primer jug. Apply evenly in the direction of the wood grain to a properly prepared floor using applicator supplied with the **FloorShield Maintenance System**. Never pour Primer directly on wood floor. Let dry for 1 – 2 hours. If grain is raised, lightly sand. Repeat application process if wood is still absorbent.

STEP 2

Finish the floor

An HVAC system should be used to control temperature with relative humidity between 50–70% in 68°–78° F. range. Windows and all outside doors should be closed during application and drying. Floor should not be exposed to sunlight. Radiant heated floors should be turned off several hours before finishing. Shake bottle of **FloorShield Finish** thoroughly. Use the applicator(s) supplied with the **FloorShield Maintenance System** to apply 2 coats to the floor. One coat is applied in direction of wood grain, the second coat is applied perpendicular to the first coat. When applying the finish, do not put pressure on the applicator.

FloorShield Finish should be applied heavily but not milky so that solution will self-level. Each bottle of finish covers 500/sf for 2 coats. You must apply the 2 coats of finish within a 24 hour period. Allow at least 2 hours before applying the second coat. It must be dry to the touch one hour before applying second coat. Do not use fans or forced air to dry the finish. Allow for natural drying time. **FloorShield Finish** will continue to harden over the period of one week. Allow 36 hours to pass before barefoot dancing on the floor. Tap dancing should be avoided for 48 hours.

FLOORSHIELD FOR WOOD

Re-application

STEP 1

Scuff the floor

If you already have used the **FloorShield Maintenance System** previously, you will not need to strip the floor. You will receive a burgundy pad to scuff the floor. Place the pad onto a floor machine and use dry. Do not use with any liquids. Make sure you scuff the

entire floor. Once finished scuffing, you will need to vacuum floor and do a warm water rinse to clean the floor of any residue.

Once finished scuffing, you will need to do a warm water rinse to clean the floor of any residue. **Make sure that all residue/dust resulting from the scuffing is removed from the floor or the finish will not stick correctly.**

STEP 2

Finish the floor

An HVAC system should be used to control temperature with relative humidity between 50–70% in 68°–78° F. range. Windows and all outside doors should be closed during application and drying. Floor should not be exposed to sunlight. Radiant heated floors should be turned off several hours before finishing. Shake bottle of **FloorShield Finish** thoroughly. Use the applicator(s) supplied with the **FloorShield Maintenance System** to apply 2 coats to the floor. One coat is applied in direction of wood grain to the floor, the second coat is applied perpendicular to the first coat. When applying the finish, do not put pressure on the applicator. **FloorShield Finish** should be applied heavily but not milky so that solution will self-level. Each bottle of finish covers 500/sf for 2 coats. You must apply the 2 coats of finish within a 24 hour period. Allow at least 2 hours before applying the second coat. It must be dry to the touch one hour before applying second coat. Do not use fans or forced air to dry the finish. Allow for natural drying time. **FloorShield Finish** will continue to harden over the period of one week. Allow 36 hours to pass before barefoot dancing on the floor. Tap dancing should be avoided for 48 hours.

COLOR

FloorShield Color allows color to be applied to flooring within the context of a finish. Long-lasting and easy to apply, it is not necessary to sand the color off to remove it because the color resides within the first application of finish. For more information, contact **Stagestep** at **(800) 523-0960**.

Finishing can be done 24 hours after line painting has been completed. We recommend **FloorShield Finish** for wood. Remember that the floor may need to be cleaned once again to get rid of dust and dirt. If there are marks that cannot be removed using **FloorShield Cleaner** then clean area with **Wipeout Plus** or if using **FloorShield, FloorShield Cleaner**. The temperature in the room and the finish must be between 68°–78° F. when applying the finish. Spread the finish using a roller applicator finish. A sign of when it is time to finish the floor is when the painted lines become worn. Repair the worn lines and apply once again. Follow the instructions for renovation of finish.

Item	Each	Case
Vinyl Tape (1 1/2") 6 Roll Min.	\$ 7.00	\$ 134.00 (24 rolls)
Vinyl Tape (2") 6 Roll Min.	\$ 9.00	\$ 172.00 (24 rolls)
Clear Tape (1 1/2") 6 Roll Min.	\$ 8.00	\$ 153.00 (24 rolls)
Clear Vinyl Tape (2") 6 Roll Min.	\$ 10.00	\$ 192.00 (24 rolls)
Cloth Tape (1 1/2") 6 Roll Min.	\$ 18.00	\$ 460.00 (32 rolls)
Gaffers Tape (2") 6 Roll Min.	\$ 24.00	\$ 460.00 (24 rolls)
Release Double Faced Tape (2" wide, 36 yds.) 3 Roll Min.	\$ 22.00	\$ 422.00 (24 rolls)
Stagestep Vinyl Adhesive (4 gal.)(coverage 60 sq. yards) (20% off with cut-to-order flooring)	\$ 225.00	
4" Double-Faced Seam Tape 3 Roll Min.	\$ 35.00	
Welding Rod (300 feet)	\$ 75.00	
Glo-Tape (10 yds.)	\$ 18.00	
ReUseIt 1.5 (268 sq. ft.) (10% off with cut-to-order flooring)	\$ 225.00 per roll	
Vapor Barrier (400 sq. ft.) (20% off with cut-to-order flooring)	\$ 180.00	
Moisture Proof Tape (2" wide, 60 yds.) 3 Roll Min.	\$ 15.00	
Bone Dry Plus Concrete Sealer (5 gal. covers 650–750 sq. ft.) (20% off with cut-to-order flooring)	\$ 325.00	
Vented Wall Base 0	\$ 28.00/each (6.56 Linear feet per panel)	
FloorShield Color Kits	Call for Pricing	
FloorShield Maintenance Kit* (Initial Application - vinyl)		
500 sq. ft.	\$ 296.00	1000 sq. ft. \$472.00
1500 sq. ft.	\$ 648.00	2000 sq. ft. \$896.00
FloorShield Maintenance Kit* (Initial Application - wood)		
500 sq. ft.	\$ 384.00	1000 sq. ft. \$700.00
1500 sq. ft.	\$1,036.00	2000 sq. ft. \$1,352.00
FloorShield Maintenance Kit* (Re-Application - vinyl/wood)		
500 sq. ft.	\$ 212.00	1000 sq. ft. \$388.00
1500 sq. ft.	\$ 580.00	2000 sq. ft. \$776.00
SpringFlex Subfloor System**	Approx. \$ 3.00 per sq. ft. (beams only)	
SpringStep IV** Pre-assembled	\$ 13.00 per panel	
SpringStep IV-A** Unassembled (only)	\$ 12.00 per panel	
SpringStep IV-B** Unassembled	\$ 12.00 per panel	
SpringStep IV wood panels without foam**	\$ 7.00 per panel	
2" Foam Cube (2" x 2" x 2")	50¢ each***	
2" Peel & Stick Foam Cube (2" x 2" x 2")	60¢ each***	
3" Peel & Stick Foam Block (3" x 3" x 3/4")	40¢ each***	
1/2" Foam Sheeting	\$ 1.65/sq. ft.**	
3' Transition Ramp	\$ 70.00 each	

All vinyl tapes and double-faced tape are 36 yds. long. All cloth and gaffers tape are 55 yds. long.

Prices in USD and include shipping & handling in the 48 Contiguous United States except for **foam sheeting**, **SpringFlex** and all **Stagestep IV** varieties.

For shipping outside of the 48 Contiguous United States, please contact us at **(800) 523-0960**

Prices subject to change without notice.

* To order this product, please call **(800) 523-0960** to talk with a sales representative for details.

** Plus shipping and handling—contact Stagestep for freight estimate.

*** Minimum order 500 blocks/cubes for free shipping in the 48 Contiguous United States.

(800) 523-0960 • (215) 636-9000

(Toll Free in the U.S.)

(Toll Free in Canada)

stagestep.com • info@stagestep.com

USA • Canada • UK • Mexico • Australia • Singapore