



Your ideas become reality®

# CushionStep™

FLOORING

Installation, Warranty, Care and Maintenance



# Why CushionStep™?

## Best

### Comfort

- CushionCore™ HD – soft, thick (**120 mils**) and durable structure for superior underfoot comfort other hard surfaces can't match.
- VisionGuard® – exceptional protection from stains, fading and wear for peace-of-mind.

### Flexibility

- Freedom to remove and replace as your needs and décor choices change with modified loose-lay installation, or install with full-spread adhesive.
- Water-friendly – install in basements and other areas with high moisture, such as kitchens and baths.

### Style

- MasterWorks Technology® with VTx™ – our most realistic visuals with added texture for an incredibly natural look and feel.
- Wide array of patterns and textures for every décor.

## Better

### Comfort

- CushionCore – soft, thick (**100 mils**) structure for superior underfoot comfort other hard surfaces can't match.
- VisionGuard – exceptional protection from stains, fading and wear for peace-of-mind.

### Flexibility

- Freedom to remove and replace as your needs and décor choices change with modified loose-lay installation, or install with full-spread adhesive.
- Water-friendly – install in basements and other areas with high moisture, such as kitchens and baths.

### Style

- MasterWorks Technology – our most realistic visuals for an incredibly natural look.
- Wide array of patterns and textures for every décor.

## Good

### Comfort

- CushionCore – soft, thick (**80 mils**) structure for superior underfoot comfort other hard surfaces can't match.

### Flexibility

- Freedom to remove and replace as your needs and décor choices change with modified loose-lay installation, or install with full-spread adhesive.
- Water-friendly – install in basements and other areas with high moisture, such as kitchens and baths.

### Style

- Wide array of patterns and textures for every décor.

## Installation Materials

- S-288 Residential Flooring Adhesive
- S-194 Patch, Underlayment & Embossing Leveler
- S-195 Underlayment Additive
- S-199 One-Part Embossing Leveler
- Acrylic Double-Face Tape
- S-564 Low Gloss Seam Coating Kit
- New Beginning® Resilient Deep Cleaning Floor Stripper
- Once 'n Done® Resilient & Ceramic Floor Cleaner
- Shinekeeper® Resilient Floor Finish
- Satinkeeper® Resilient Low Gloss Floor Finish

## Floor Care Recommendations



### Floor Protectors

- Floor protectors evenly distribute furniture weight and help prevent indentations from forming on your vinyl floor.



### New Beginning Resilient Deep Cleaning Floor Stripper

- For all vinyl floors
- Solves tough cleaning problems



### Seam Coating Kit

- Protects seams from dirt and wear.
- Use S-564 Seam Coating Kit for semi gloss or low gloss floors.



### Once 'n Done Resilient & Ceramic Floor Cleaner

- No-rinse floor cleaner for no-wax vinyl, ceramic, and laminate floors



### Satinkeeper Resilient Low Gloss Floor Finish

- For all low gloss vinyl floors
- Restores shine to older floors



### Shinekeeper Resilient Floor Finish

- For all high gloss vinyl floors
- Restores shine to older floors

## Installation Instructions

### General Information

CushionStep flooring can be installed by two installation methods. It is designed for use with either the modified loose lay installation method using an acrylic double-face tape under seams, or it can be installed by the full spread method using S-288 adhesive. Depending on the type of subfloor, size and complexity of the room, and the type of traffic expected in the room, the full spread option may be recommended. CushionStep should not be installed by perimeter fastening methods.

The modified loose lay method requires that the flooring be cut 3/16" to 1/4" away from all vertical surfaces such as walls, cabinets, pipes, etc. This gap will then be covered with moldings or wall base. An acrylic double-face tape is used under seams. This method may be used over suspended wood subfloors and underlayments in rooms that have only one seam or less, and in rooms with concrete subfloors regardless of size or number of seams. In certain areas of the country, where seasonal moisture and humidity changes are severe, the movement in wood subfloors can cause a raised area or a buckle in the flooring near a perimeter pinch point. Typically, if this happens, it will occur during prolonged periods of cold weather when indoor conditions become very dry and the wood subfloor/underlayment components dry out and shrink. Should this happen and a buckle occurs, the flooring should be gently lifted or pulled back from the pinch point and retrimmed.

The full-spread method may be used at any time over the approved subfloors and underlayments, and it is required under the following conditions:

- Installations over suspended wood subfloors that require more than one seam or have an island cabinet sitting on top of the CushionStep flooring
- Installations where net fitting is required around the perimeter of the room
- Installations that will be subject to rolling appliances such as portable dishwashers or microwave carts

As with many flooring products, the full-spread method generally requires somewhat more attention to the condition of the substrate so that it will not telegraph irregularities through the finished floor. Flash coving CushionStep is not recommended.

The Suitable Substrates, Job Conditions/Preparation and Care and Maintenance Sections that follow are appropriate for either of the two installation methods.

### Suitable Substrates

All substrates listed below must be properly prepared and meet certain requirements. There may be other exceptions and special conditions for these substrates to be suitable for CushionStep flooring installation.

- Concrete (on all grade levels)
- Approved suspended wood underlayments
- Existing, single-layer, resilient floors
- Ceramic tile, terrazzo, marble
- Polymeric poured (seamless) floors
- Radiant-heated substrates must not exceed a maximum surface temperature of 85° F (29° C)

**Do not install over:**

- Particleboard, waferboard, OSB or single-layer STURD-I-FLOOR panels
- Existing resilient tile floors that are on or below grade
- Existing cushioned vinyl flooring
- Asphalt tile
- Carpet
- Strip wood or plank flooring

**Job Conditions/Preparation**

- Substrates must be level, dry, clean, smooth, and free from paint, varnish, wax, oils, solvents and other foreign matter.
- In renovation or remodel work, remove any existing adhesive residue\* so that 100% of the overall area of the original substrate is exposed.
- When installing over an existing resilient floor, use S-199 One-Part Embossing Leveler or S-194 Patch, Underlayment & Embossing Leveler/S-195 Underlayment Additive to fill and smooth any embossing in the old floor. This is particularly important when fully adhering CushionStep flooring.
- The area to receive resilient flooring and the flooring materials and adhesives should be maintained at a minimum of 65° F (18° C) for 48 hours before installation, during installation and 48 hours after completion. Maintain a minimum temperature of 55° F (13° C) thereafter.
- Always keep the flooring rolled face-out until ready to install.
- Verification must be made that subfloor moisture levels do not exceed acceptable limits when installing flooring over concrete subfloors. Conduct a calcium chloride test to measure subfloor vapor transmission levels prior to installation. Armstrong offers as a guideline, a maximum acceptance moisture emission level of three lbs./1000 sq. ft./24 hrs. for CushionStep flooring. If subfloor moisture vapor transmission levels exceed the recommended limit, the concrete must be allowed to dry-out prior to installing the floor.

\* Some previously manufactured asphaltic "cutback" adhesives contained asbestos. For removal instructions, refer to the Resilient Floor Covering Institute's publication [Recommended Work Practices for Removal of Resilient Floor Coverings](#).

**⚠ WARNING: EXISTING IN-PLACE RESILIENT FLOOR COVERING AND ASPHALTIC ADHESIVES. DO NOT SAND, DRY SWEEP, DRY SCRAPE, DRILL, SAW, BEADBLAST, OR MECHANICALLY CHIP OR PULVERIZE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC "CUTBACK" ADHESIVE, OR OTHER ADHESIVE.**

These **existing in-place** products may contain **asbestos fibers** and/or **crystalline silica**.

Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard.

Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm.

Unless positively certain that the existing in-place product is a non-asbestos-containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content and may govern removal and disposal of material.

See current edition of the Resilient Floor Covering Institute (RFCI) publication [Recommended Work Practices for Removal of Resilient Floor Coverings](#) for instructions on removing all resilient floor covering structures or contact your retailer or Armstrong World Industries, Inc. 1 800 233 3823.

The floor covering or adhesive in this package does NOT contain asbestos.

## Modified Loose Lay Method

The modified loose lay method requires that the flooring be cut 3/16" to 1/4" away from all vertical surfaces such as walls, cabinets, pipes, etc. This gap will then be covered with moldings or wall base. With this method the CushionStep flooring should be allowed to "float" freely over the subfloor. This is particularly important over wood subfloors as the wood can grow and shrink with changes in moisture content. The CushionStep will be bonded at seams, however, with an acrylic double-faced tape designed for use with vinyl flooring. Only one seam is permitted when using this method over suspended wood subfloors and underlayments. Multiple seams are allowed when this method is used over concrete subfloors.

Tape may also be used at doorways if needed, however the preferred method is to use transition strips, similar to a T-molding, that cover the edge of the flooring while at the same time allowing for some movement of the flooring beneath the molding. **Do not use the tape around the entire perimeter of the room and do not install base cabinets on top of the flooring.**

Modified loose lay method is not recommended on stairs. Installations in bathrooms are acceptable; however, the acrylic double-faced tape should be used where the flooring butts up against tubs, shower stalls or toilets. To prevent water seepage and damage to the subfloor, silicone caulk must be used to seal the edges of the flooring at these fixtures. Leave a smaller gap of approximately 1/16" to 1/8" between the floor and these bathroom fixtures. Fill the gap with a neat bead of caulk using a high quality, non-shrinking, pigmented caulk of appropriate color.

**Planning and Layout**

- Plan the layout so seams in the new flooring fall at least 6" away from seams and joints in existing flooring and underlayments.
- Remove wall base and quarter-round moldings.
- The decorative trim and jamb moldings at doorways should be under-cut to allow flooring to slip underneath as you can't hide perimeter gaps with wall base in these areas.
- After preparation work is completed be sure to sweep and vacuum entire work area taking extra care to remove all dust and debris.

**Fitting**

- Unroll material and lay flat to allow the roll curl to relax before fitting.
- **Do not cut full or net. Must maintain 3/16" to 1/4" gap at vertical surfaces.**
- Recommended fitting procedures include pattern scribing, straight scribing or freehand knifeing.

**Procedure**

If more than one piece of flooring is used the pieces should be pattern matched and double-cut prior to placing the acrylic double-faced tape under the seam. The edges where the seam will be cut should be overlapped with a piece of scrap material underneath to protect the substrate while cutting through both pieces of flooring. It is important that the seam be cut in a straight line using a straight edge as a guide. The knife should be held completely vertical to put a clean 90-degree edge at the seam. Seams should be cut net, not full or snug as that can result in buckles.

Do not straightedge and butt seams as this can lead to loose and tight areas along the seam resulting in buckles or distortion. Also, do not try to stretch or compress material at the seam to obtain pattern match. This too can result in buckles or distortion.

Armstrong recommends an acrylic double-faced tape designed for use with vinyl flooring to install CushionStep flooring. Ordinary carpet tapes may "read" through and impact the final installed appearance of your floor. Carpet tapes may also cause discoloration to the flooring.

After the flooring has been properly fit and positioned in the room, gently fold back the seam edges and apply the acrylic double-faced tape, centered under the seam. Before removing the release liner from the top of the tape, use a clean cloth and hand pressure to thoroughly bond the tape to the subfloor. Then, remove the release liner from the tape and carefully reposition the seam for a net fit. Thoroughly roll the seam with a hand roller to complete the bond. CAUTION: Do not stand or walk on the release liner, as it is extremely slippery. Place it in a wastebasket immediately upon removal from the tape.

Tape may also be needed under relief cuts that were made to slip around pipes, etc. and at some doorways where transition moldings cannot be used. Do not overuse tape and do not tape around the perimeter of the room.

Replace or install wall base and quarter-round moldings to cover the gap around the perimeter of room. Fasten molding to the vertical surface. Do not nail through new floor. Do not pinch the molding down on top of the flooring. Leave a slight clearance between the molding and flooring so any effects of seasonal movement in the home due to temperature or humidity changes will be minimized.

Armstrong S-564 Seam Coating Kit for low gloss floors must be used to coat any seams at the completion of the installation. Do not use S-585 seam cleaner on CushionStep flooring. The freshly applied seam coating must be protected for several hours from dirt, dust and traffic. Follow instructions on package.

## Full Spread Method

### Planning and Layout

- Plan the layout so seams in the new flooring fall at least 6" away from seams and joints in existing flooring and underlayments.
- Do not install over expansion joints.
- Remove wall base and quarter-round moldings if appropriate. (CushionStep may be fit net when installed full spread.)

### Fitting

- Unroll material and lay flat to allow the roll curl to relax before fitting.
- CushionStep's structure makes it a dimensionally stable product. It should be cut **net** to vertical surfaces or slightly loose where it will be covered with molding or wall base. **Do not cut full or compression fit.**
- Recommended fitting procedures include pattern scribing, straight scribing or freehand knifeing.

### Procedure

If seams are involved, they should be double-cut dry prior to spreading adhesive in the seam area. Use a piece of scrap material underneath the seam when cutting. Do not straightedge and butt seams as this can lead to loose and tight areas along the seam resulting in buckles or distortion. Also, do not try to stretch or compress material at the seam to obtain pattern match. This too can result in buckles or distortion.

Use Full Spread adhesive method with S-288 Residential Flooring Adhesive. Apply adhesive with fine notching of the S-891 Trowel (notching is 1/32" deep, 1/16" wide and 5/64" apart). It is important to use the correct trowel notching. Inspect and replace worn trowels frequently. Follow adhesive open time and working time recommendations on the adhesive label.

When installing over nonporous surfaces such as existing resilient flooring and embossing levelers, allow enough open time for the adhesive to dry until tacky with no transfer to the finger (Dry-to-Touch) before placing the material into it. This normally takes 30 minutes or more, depending on temperature and humidity. After the adhesive has reached this condition, there is at least one hour working time in which to install and roll the flooring.

When installing over porous surfaces such as concrete and wood, allow the adhesive enough open time to thicken slightly but not become completely dry to the touch. Use the set-in-wet procedure for placing the material into the adhesive. The adhesive should be wet enough to transfer readily to the backing of CushionStep. Keep in mind that the seam must also be laid into place before the adhesive has had a chance to set up over porous surfaces.

**Adhesive Open Time and Trowel Notching**  
**Spread rate: 250-300 sq. ft. / gal.**

Adhesive	Set-in-Wet for Porous Substrates	Dry-to-Touch for Existing Resilient Flooring and other Nonporous Substrates
S-288	Open time: Minimum of 10-20 minutes Fine notch: 1/32" deep, 1/16" wide, 5/64" apart	Open time: 30 minutes or more Fine notch: 1/32" deep, 1/16" wide, 5/64" apart

**Note: Allowing the proper open time will help to minimize knee marks, roller marks and trapped air blisters. The amount of open time will vary according to job conditions – temperature, humidity, air flow and type of substrate.**

**Roll thoroughly.** Starting at the center and working toward the edges, roll in two directions using a 100-lb. roller. Seams must be hand rolled, then rolled again with a 100-lb. roller. Give special attention to cleaning adhesive residue from seam areas as they must be clean and dry in order to proceed with seam treatments. Clean excess adhesive from the surface of the flooring using a clean, white cloth dampened with detergent and water. Mineral spirits will remove dried adhesive residue.

Replace or install wall base and quarter-round moldings as needed. Fasten molding to the vertical surface. Do not nail through the new floor.

Armstrong S-564 Seam Coating Kit for low gloss floors must be used to coat any seams at the completion of the installation. Do not use S-585 seam cleaner on CushionStep flooring. The freshly applied seam coating must be protected for several hours from dirt, dust and traffic. Follow instructions on package.

## Care and Maintenance Instructions

Proper care and maintenance will help ensure your floor always looks its best. Simply follow our maintenance and prevention steps outlined below.

**CAUTION:** Most damage to new floors is done when moving kitchen appliances. Caution should be observed so any heavy objects, particularly kitchen appliances, do not gouge and tear material. **When moving heavy objects into place, always use hardboard or underlayment panels to protect floor.** Use strips of hardboard under feet of appliances as they are moved into final position. Tilt appliance slightly to remove strips. To further protect against heavy, sharp-edged furniture and appliance legs, the use of floor protectors is recommended. Your Armstrong retailer can help select the right protectors.

### Immediately After Installation

- If your floor has seams, then for eight hours after seam application, protect the sealed seams on your flooring. This will ensure proper seam bond. If your seams are disturbed before they're dry, permanent damage may result.
- Maintain room temperature at 65° F (18° C) for 48 hours after installation is completed. This assures proper curing, setting and bonding of products.
- If your floor has been installed with the full-spread installation method, then the adhesive under your floor needs time to thoroughly dry after installation. Therefore, we recommend that you do not scrub or wash your floor for five days.

### Caring for Your Floor

- Sweep or vacuum regularly to remove loose dirt, which can scratch your floor. NOTE: We do not recommend vacuums that have a beater bar since it can visibly damage your flooring surface. Additionally, we do not recommend electric brooms with hard plastic bottoms with no padding as use may result in discoloration and deglossing.
- Never use highly abrasive scrubbing tools on any Armstrong floor.
- Wash your floor regularly with Armstrong™ Once 'n Done Resilient & Ceramic Floor Cleaner.
- For heavy duty cleaning, use Armstrong New Beginning Resilient Deep Cleaning Floor Stripper.
- Do NOT use detergents, abrasive cleaners, or "mop and shine" products. These products may leave a dull film on your floor.
- Over time, if the shine on your floor begins to dull, Armstrong Shinekeeper Resilient Floor Finish or Satinkeeper Resilient Low Gloss Floor Finish can be used to renew your floor's shine. Do NOT use paste wax or solvent-based polishes.
- CushionStep flooring, like other types of smooth floors, can become slippery when wet. Allow time for floor to dry after washing. Immediately wipe up wet areas from spills, foreign substances, or wet feet.

### Proactive protection for your floor

- When moving appliances or heavy furniture, lay a plywood panel on your floor and "walk" the item across it. This protects your floor from scuffing and tears.
- Use floor protectors, such as Armstrong Floor Protectors, on furniture to reduce indentation. The heavier the item, the wider the floor protector needed.
- Be careful with rolling casters. They can damage the floor. Therefore, we do not recommend them. If you choose to use them, the double-wheel type is the best option.
- Place a walk-off mat at outside entrances to reduce the amount of dirt brought into your home. We strongly recommend mats without a latex or rubber backing since these backings can cause permanent discoloration.
- All Armstrong floor care products have been specifically developed to care for Armstrong floors. You may purchase Armstrong floor care products at your local flooring retailer.

## Warranty

### Warranty Requirements

Proper installation plays a key role in the performance of Armstrong floors. Installation defects are not covered by our warranty and are the responsibility of your installer. Armstrong floors should be installed according to the Armstrong Guaranteed Installation System. This means that Armstrong installation products specifically designed for Armstrong floors should be used when installing Armstrong floors. If the Armstrong Guaranteed Installation System is followed, we guarantee that, for the specified warranty period, from the date of purchase:

- The floor edges won't curl
- The floor seams won't open
- The floor will stay bonded
- Armstrong adhesives, underlayments, and seam treatments won't stain the floor
- The floor will not crack over underlayment joints

### What Will Armstrong Do If Any of the Above Happen?

If any of the above should occur within the specified warranty period, Armstrong will either repair the defective area or replace the floor with comparable Armstrong flooring of similar color, pattern, and quality at our option. And, if your floor was professionally installed, Armstrong will also pay reasonable labor costs for the direct repairs or replacement. Please note that Armstrong will replace or repair a floor discolored from mold, mildew or alkali one time. If the replacement or repair fails in the same manner a second time, the flooring conditions may not be acceptable for the installation of vinyl sheet flooring.

## Armstrong 20-Year Limited Residential Warranty

### Best 20-YEAR RESIDENTIAL WARRANTY

#### What is covered and for how long?

The Armstrong 20-year limited warranty means that for 20 years from the date of purchase, your floor:

- Will not rip, tear or gouge from normal household use
- Will not permanently indent when proper floor protectors are used†
- Will not wear through\*
- Will not permanently stain from common household stains
- Will not permanently stain from traffic stains including asphalt driveway sealer
- Will not permanently stain from rubber-backed mats
- Will not permanently scuff from shoe soles
- Will not fade or discolor from heat or sunlight
- Will not discolor from moisture or underlayment panels
- Will not contain manufacturing defects

† The heavier the item, the wider the floor protectors should be.

\* Wear-through is defined as loss of the floor design due to normal household use.

## Armstrong 10-Year Limited Residential Warranty

### Better 10-YEAR RESIDENTIAL WARRANTY

#### What is covered and for how long?

The Armstrong 10-year limited warranty means that for ten years from the date of purchase, your floor:

- Will not rip, tear or gouge from normal household use
- Will not permanently indent when proper floor protectors are used†
- Will not wear through\*
- Will not permanently stain from common household stains
- Will not permanently stain from traffic stains including asphalt driveway sealer
- Will not permanently stain from rubber-backed mats
- Will not permanently scuff from shoe soles
- Will not fade or discolor from heat or sunlight
- Will not discolor from moisture or underlayment panels
- Will not contain manufacturing defects

† The heavier the item, the wider the floor protectors should be.

\* Wear-through is defined as loss of the floor design due to normal household use.

## Armstrong 5-Year Limited Residential Warranty

### Good 5-YEAR RESIDENTIAL WARRANTY

#### What is covered and for how long?

The Armstrong 5-year limited warranty means that for five years from the date of purchase, your floor:

- Will not rip, tear or gouge from normal household use
- Will not permanently indent when proper floor protectors are used†
- Will not wear through\*
- Will not fade or discolor from heat or sunlight
- Will not discolor from moisture or underlayment panels
- Will not contain manufacturing defects

† The heavier the item, the wider the floor protectors should be.

\* Wear-through is defined as loss of the floor design due to normal household use.

### What will Armstrong do if any of the above happens?

We will provide replacement Armstrong CushionStep of comparable quality, color and pattern. We exclude any liability for installation costs or other damages.

### What is NOT covered by this warranty?

- Damage caused by fire, flooding or intentional abuse.
- Damage caused by vacuum cleaner beater bar, caster wheels and cutting from sharp objects.
  - When vacuuming, we recommend using the wand attachment on your vacuum.
  - Because rolling casters can damage the floor; we do not recommend them
- Loss of gloss/scratching.
  - If some dulling occurs over time, depending on the amount of traffic, care and maintenance the floor receives, restore the floor's shine using Armstrong Shinekeeper Floor Polish.
- Minor color, shade or texture variations between samples or printed color photography and the actual material.
- Only floors graded "regular" are covered by this warranty.
- This warranty applies only to floors installed in owner-occupied or tenant-occupied residences. Commercial installations of residential products are not covered. Construction or installation related damage is not covered.
- Floors discolored from moisture or underlayment panels after having been repaired or replaced by Armstrong one time, or caused by excessive moisture from sources such as flooding and water leakage, are not covered by this warranty.
- Installation defects are not covered by this warranty.
- Damage caused by abuse such as moving appliances across the floor without adequate protection.
  - When moving appliances or heavy furniture, lay a plywood panel on your floor and "walk" the item across it. This protects your floor from scuffing and tears.

### What should you do if you have a problem?

We want you to be happy with your Armstrong floor. If you're not, call your retail store. They can answer your questions and, if necessary, start to process a claim. If you have further questions, please call us at 1 800 233 3823. PLEASE KEEP YOUR RECEIPT OR OBTAIN IT FROM THE ORIGINAL PURCHASER. Armstrong needs the receipt in order to verify date and proof of purchase to resolve any problems that may occur.

### What is excluded from this warranty?

Armstrong excludes and will not pay incidental or consequential damages under this warranty. By this we mean any loss, expense, or damage other than to the flooring itself that may result from a defect in the flooring. No implied warranties extend beyond the terms of this written warranty.

Please note: Some jurisdictions do not allow exclusion or limitations of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from jurisdiction to jurisdiction.

This warranty applies to floors purchased after August 1, 2009.

In Canada, these warranties are offered by Armstrong World Industries Canada, LTD.

The Armstrong logo and MasterWorks Technology® are registered trademarks in the United States and Canada. New Beginning®, Once 'n Done®, Satinkeeper®, Shinekeeper®, VisionGuard® and Your ideas become reality® are registered in the United States only.

© 2009 AWI Licensing Company

F-7635-809

Customer Relations and Technical Services  
1 800 233 3823 [www.armstrong.com](http://www.armstrong.com)

  
Your ideas become reality.