

## COMMERCIAL TILE INSTALLATION INSTRUCTIONS

*Premium Excelon® Crown Texture®, Premium Excelon® Stonetex™; Premium Excelon® Feature™ Tile, Strips, & Insets; Standard Excelon® Imperia® Texture; Safety Zone™*

### VCT INSTALLATION:

S-515 Adhesive, S-1000 Adhesive, S-319 Adhesive, Flip® Spray

### SUBSTRATES:

Concrete; Approved Suspended Wood; Steel, Stainless Steel, Aluminum; Ceramic Tile, Terrazzo, Marble; Polymeric Poured (Seamless Floors)

### TILE-ON SYSTEM:

Existing Resilient Sheet Floors; Vinyl Composition, Vinyl Asbestos, Asphalt, and Vinyl Tile (On Grade or Suspended Only)

NOTE: To install over steel, stainless steel, or aluminum, use S-319. In areas subject to direct sunlight, topical moisture, or temperature fluctuations, use S-1000.

NOTE: VCT tiles are packaged face down except for the last tile in the carton. Before opening, flip the carton of tiles upside down. After removing the first tile, the rest will be face up.

### ACCEPTABLE SUBFLOORS & UNDERLAYMENTS: Wood

Flooring can be installed on suspended wood, OSB, or a treated plywood subfloor with a 1/4" underlayment and a minimum of 18" of well-ventilated air space below. Armstrong Flooring does not recommend installing resilient flooring on wood subfloors applied directly over concrete or on sleeper-construction subfloors over, on, or below grade concrete. Subfloors must meet local and national building codes. Trade associations, such as the APA - The Engineered Wood Association, offer structural guidelines for meeting various code requirements. Refer to ASTM F 1482 Standard Practice for Installation and Preparation of Panel Type Underlayments to receive Resilient Flooring for additional information.

Wood strip, board, or plank subfloors must meet structural requirements. If the top layer is tongue-and- groove and the strip wood is 3" or less in face width, cover with 1/4" or thicker underlayment panels. All other layers should be covered with 1/2" or thicker underlayment panels.

Subject to the board manufacturer's recommendations and warranties, the following underlayments may be used with Armstrong Flooring:

- Plywood rated as suitable underlayment for resilient floor coverings
- Poplar or Birch Plywood with a fully sanded face and exterior glue
- Luan Plywood, Type 1 (Exterior)
- Fiber Reinforced Gypsum Underlayment, Fiber Cement Board & Cementitious Backerboard rated as suitable underlayment for resilient floor coverings

Armstrong Flooring does not recommend OSB or Treated Plywood (unless covered with a 1/4" of APA plywood underlayment), Particleboard or Hardboard.

### Underlayments for resilient floors must:

- be structurally sound
- be designed for resilient flooring underlayment purposes
- be a minimum of 1/4" thick
- have panels smooth enough so that texture or graining will not show through
- resist dents and punctures from concentrated loads
- be free of any substance that may stain vinyl such as edge patching compounds, marking inks, paints, solvents, adhesives, asphalt, dye, etc.
- be installed in strict accordance with the board manufacturer's recommendations

For approved underlayments, Armstrong Flooring suggests the panels be lightly butted and not filled or flashed, unless the manufacturer specifically recommends filling the joints. Differences in the thickness of wood panels should be corrected by sanding. Allow the panels to condition to the job site per manufacturer's recommendations.

### Concrete

New and existing concrete subfloors must meet the requirements of the current edition of ASTM F710, "Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring". Regardless of the type of concrete or other cement-like material used as a base for resilient flooring, in the event of underlayment failure, the responsibility for warranties and/or performance guarantees rests with the concrete or cement- like material manufacturer and not with the manufacturer of resilient flooring.

### Below-Grade & On-Grade Concrete Floors

1. The slab must be of good quality, standard density concrete with low water/cement ratios consistent with placing and finishing requirements, having a maximum slump of 4", a minimum compressive strength of 3000 psi, and following the recommendations of ACI Standard 302.1R for Class 2 or Class 4 floors and the Portland Cement Association's recommendations for slabs on ground.
2. The concrete slab must be dry, clean, smooth, structurally sound, and free of foreign materials that might prevent adhesive bond as described in the current edition of ASTM F710, Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.
3. The concrete slab must be protected from ground moisture with an effective and intact vapor retarder that conforms to the requirements of the current edition of ASTM E1745, "Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill Under Concrete Slabs."
4. The concrete slab must be placed directly on the vapor retarder.
5. The concrete must be wet cured with a moisture-retaining curing cover. Do not use spray-on curing compounds because these reduce the drying rate of concrete and can interfere with the adhesive bond.
6. Before installing the finished flooring, moisture, alkali and bond testing must be conducted.
7. Moisture testing must be performed in accordance with the current edition of ASTM F2170 "Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes" (preferred method) or in accordance with the current edition of ASTM F1869, "Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride." See the section on Moisture Testing for more details.
8. Unless otherwise indicated in the adhesive specifications, the surface of the concrete must have a pH of 9 or less when tested according to the method described in the current edition of ASTM F710.
9. Bond testing must be performed to determine compatibility of the adhesives to the concrete slab.
10. After the concrete has cured and is dry, clean construction joints, saw cuts, score marks and cracks, and fill with an underlayment. Use high quality Portland Cement, calcium aluminates, or gypsum-based products. The floor fill, topping or underlayment must also have a minimum compressive strength of 3500 psi. When using these products, be sure to follow the manufacturer's recommendations regarding application, drying time, and moisture testing. S-194 Patch, Underlayment & Embossing Leveler, S-463 Level Strong and S-466 Patch Strong meet or exceed this requirement as underlayments.
11. Repaired areas must be finished flush with the surface of the concrete and allowed to fully dry before the installation of the floor covering.

12. Actual expansion joints or other moving joints with elastomeric fillers are designed to absorb movement in concrete slabs. Cementitious underlayments, patches and resilient flooring installed across expansion joints often crack or buckle when the slabs move. Armstrong Flooring does not recommend flooring products be installed across expansion or isolation joints. Expansion joint covers are available for use with various floor coverings and should be specified by the architect.
13. Dusty concrete slabs may be primed with one coat of S-185 Latex Primer. Sweep or vacuum the concrete and apply the S-185 with a 3/8" nap paint roller. You may also prime concrete subfloors with the recommended flooring adhesive for the material about to be installed. When using adhesive as a primer, allow the adhesive to dry completely
14. After sweeping/vacuuming, apply the adhesive using a smooth-edge trowel.
15. A rough concrete floor can be ground smooth with a commercial diamond or carbide-equipped grinding machine. If the concrete subfloor is extremely rough or uneven, it may be too great a job to smooth this way. In this case, apply a cementitious underlayment such as S-194, S-463 or S-466. A smooth, flat, uniform surface is necessary as a good base for resilient flooring.

### Above-Grade Concrete Floors

Above-grade concrete is usually protected from most sources of moisture except the moisture initially in the mix and water vapor in the atmosphere. As with concrete placed on and below grade, above-grade concrete must be kept damp during the curing process to permit hydration to occur. Concrete poured on a metal deck is often produced with lightweight aggregate that can retain excess water longer than normal-weight aggregate. Because drying is only possible from the top surface, such construction usually takes additional drying time. Floors on metal decks or above-grade structural concrete floors must be dried and must meet the same requirements as described in Sections C-2 and C-3 for slabs on and below grade. Follow steps 7-15 above.

### Curing, Sealing, Hardening, or Parting Compounds

Curing compounds leave a film that can interfere with adhesion. Use should be avoided on surfaces that will later be covered with resilient floor covering. Where applicable, a letter of compatibility should be obtained from the manufacturer before the use of a curing compound.

When curing, sealing, hardening, or parting compounds have been used, the following general statements can be made:

- If they contain soap, wax, oil, or silicone, the compounds must be removed before a resilient floor can be installed. The compounds can be removed by using a terrazzo or concrete grinder, by sanding with a drum sander or by using a polishing machine equipped with a heavy-duty wire brush.
- here are many materials that do not contain soap, wax, oil, or silicone and are advertised as being compatible with resilient flooring adhesives. Conduct bond tests to determine the need for removal. If the bond fails after 72 hours, the compound must be removed.

NOTE: In the event of adhesion failure, the responsibility for warranties and/or performance guarantees rests with the compound manufacturer and not with the manufacturer of the resilient flooring and/or adhesives.

### Existing Resilient Floors

VCT can be installed over existing on- and above-grade VCT and Sheet. The responsibility for determining if the old resilient flooring is well bonded to the subfloor and will not show through the final installation rests with the contractor and the installer. Armstrong Flooring does not recommend installing new flooring over existing rubber or slip retardant floors.

- Confirm that the existing flooring is completely and firmly bonded. Existing flooring must have been properly installed over underlayments and subfloors recommended as suitable for resilient flooring. They may not show evidence of moisture or alkaline.

- Waxes, polishes, and other finishes must be removed with a commercially available stripper. We would recommend using a 3M® Black pad for stripping purposes only. Do not allow the stripping solution to dry at any time. Thoroughly rinse the existing flooring with clean water after removing the stripping solution. Do not flood with water or stripping solution at any time.
- Indentations or damaged areas should be replaced or repaired.

### Polymeric Poured Floors, Metal, Ceramic Tile, Quarry Tile, Terrazzo & Marble

Armstrong Flooring VCT may be installed directly over polymeric poured floors. To install flooring over polymeric poured floors, the surface must be roughened and then a Portland cement-type underlayment applied. Mix S-194 with the S-195 Underlayment Additive.

Polymeric poured floors must be well cured, have no history of moisture related problems, be free of any residual solvent, smooth, structurally sound, and well bonded to a concrete subfloor. Loose or damaged areas must be completely removed and patched with S-194 as necessary. Remove any "nubby" texture with wet, sharp sand and a floor machine equipped with carborundum stones. Do not use a skim coat of latex underlayment to smooth the surface as it will not adhere reliably.

Armstrong Flooring VCT may be installed directly over ceramic tile, quarry tile, terrazzo or marble subfloors on all grade levels which are firmly bonded to a structurally sound substrate. Clean the floor of all paint, varnish, oil, wax and finishes. Roughen glazed or very smooth surfaces and repair badly fitted joints or cracks with, S-466 or S-194. If the floors are badly worn or have low places, they should be leveled with, S-466 or S-194. To install over metal, the surface must be roughened and then a Portland cement-type underlayment applied at a minimum of 1/8" thickness. Mix S-194 with the S-195 Underlayment Additive.

### JOB CONDITIONS/PREPARATION

- Resilient flooring should only be installed in temperature-controlled environments. It is necessary to maintain a constant temperature before, during and after the installation. Therefore, the permanent or temporary HVAC system must be in operation before the installation of resilient flooring. Portable heaters are not recommended, as they may not heat the room and subfloor sufficiently. Kerosene heaters should never be used.
- The surface shall be free of dust, solvents, varnish, paint, wax, oil, grease, sealers, curing compounds, residual adhesive<sup>1</sup>, adhesive removers and other foreign materials that might affect the adhesion of resilient flooring to the substrate or cause a discoloration of the flooring from below. Spray paints, permanent markers and other indelible ink markers must not be used to write on the back of the flooring material or used to mark the substrate as they could bleed through, telegraphing up to the surface and permanently staining the flooring material. If these contaminants are present on the substrate, they must be mechanically removed prior to the installation of the flooring material.
- In renovation or remodel work, remove any existing adhesive residue<sup>1</sup> so that 100% of the overall area of the original substrate is exposed.

<sup>1</sup> Some previously manufactured asphaltic "cutback" adhesives contained asbestos (see warning statement on the last page). For removal instructions, refer to the Resilient Floor Covering Institute's publication Recommended Work Practices for Removal of Resilient Floor Coverings.

- Allow all flooring materials and adhesives to condition to the room temperature for a minimum of 48 hours before starting the installation.
- The area to receive the resilient flooring should be maintained at a minimum of 65° F (18° C) and a maximum of 100° F (38° C) for 48 hours before, during and for 48 hours after completion.
- During the service life of the floor, the temperature should never rise above 100° F (38° C) nor fall below 55° F (13° C). The performance of the flooring material and adhesives can be adversely affected outside this temperature range.

- Conduct calcium chloride tests or percent relative humidity tests. Testing for internal relative humidity of concrete slabs must be conducted in strict accordance with the current edition of ASTM F2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes. All tests must meet allowable moisture limits. Any area that exceeds the allowable moisture limit must be further dried to an acceptable level or treated with a moisture remediation system before flooring installation. Performance of any third-party moisture remediation system rests with the manufacturer of that system, not with Armstrong Flooring. As a reminder, these tests cannot predict long-term moisture conditions of concrete slabs. They are only indicators of moisture conditions at the time the tests are conducted.
- MVER tests must be conducted in accordance with the current edition of ASTM F1869 Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride. When performing these tests, it is important to remove any curing agents or residues down to the bare concrete. The calcium chloride tests are to be performed only on ordinary concrete floors and are not applicable on lightweight concrete, smoothing or leveling compounds, or gypsum underlayments.

Adhesive	% Internal Relative Humidity (RH)	MVER, lbs. per 1000ft <sup>2</sup> / 24 hours	pH
S-515 Adhesive	95	7	11
S-1000 Adhesive	100	14	14
S-319 Adhesive	99	NA	12
Flip® Spray	95	NA	11
S-515 Adhesive	95	7	11

- Bond tests should also be conducted for compatibility with the substrate. It is recommended that this test be used to determine the compatibility of resilient flooring adhesives to concrete subfloors after the removal of old adhesives, curing agents, parting compounds, dust inhibitors, oil, grease, paint, varnish and other special surface treatments or conditions. Using the flooring material and recommended adhesives, install 3' x 3' panels spaced approximately 50" apart throughout the subfloor area. Select areas next to walls, columns, or other light traffic areas. Tape edges of panels to prevent edge drying of adhesive. When testing where a curing agent has been used, the curing agent must be removed in some areas for bond testing. If the panels are securely bonded after a period of 72 hours, you may conclude that the subfloor surface is sufficiently clean of foreign material for satisfactory installation.
- As an alternative to the removal of residual asphalt cutback adhesives or when installing over metal, you can apply a minimum 1/8" layer of cementitious underlayment, such as S-194 Patch, Underlayment and Embossing Leveler or S-466 Patch Strong™, as approved by the underlayment manufacturer. All warranties and/or performance guarantees concerning third-party underlayment failure rest with the underlayment manufacturer and not with Armstrong Flooring.
- Many adhesive removal products contain solvents that leave a residue within the subfloor. This residue can negatively affect the new adhesive and bleed through the new floor covering. The use of asbestos encapsulants or bridging materials over asphaltic adhesive is not recommended. These products may affect the bonding properties of the new adhesive.
- Radiant-heated substrates must not exceed a maximum surface temperature of 85° F (29° C).
- Concrete floors should be tested for alkalinity. The allowable readings are determined by the adhesive being used for installation.

## KEYS TO A SUCCESSFUL INSTALLATION

- Heat tiles from the back; do not heat from the front of the tile.
- Do not wash tile for at least 5 days after installation. This will allow the tile to become well seated in the adhesive and prevent excess moisture and cleaning agents from interfering with the adhesive

- Products installed using the Tile-On System may have less resistance to indentation. Select proper non-staining furniture rests and casters; the contact area should be smooth, flat, and firmly on the floor.
- S-1000 Adhesive is recommended for Safety Zone Tile in areas that may be exposed to frequent surface moisture and/or cooler temperatures. S-1000 Adhesive may also be used to install the first 3 to 5 rows of Safety Zone Tile when used in areas that will be affected by surface moisture and/or cooler temperatures.

## FITTING

- Before installing the material, plan the layout so tile joints fall at least 6 in. (152 mm) away from subfloor/underlayment joints. Do not install over expansion joints.
- When installing over an existing resilient floor, plan the layout so the new joints are a minimum of 6 in. (152 mm) away from the original seams.
- When installing over tile floors, joints should fall in the center of the tile. Avoid having border pieces less than 6 in. (152 mm) wide.

Adhesive	Open Time	Working Time	Traffic Post-Installation
S-515 Adhesive For use with VCT	Open Time: >30 minutes Dry-to-Touch only Trowel: U Notch 1/32" (0.8 mm) deep, 1/16" (1.6 mm) wide, 5/64" (2.0 mm) apart	24 Hours	Light Foot Traffic: 24 Hours Heavy Traffic & Rolling Loads: 72 Hours
S-1000 Adhesive For use with Safety Zone™ Tile	Set-In-Wet Open Time: Approximately 10 minutes Trowel: U Notch 1/32" (0.8 mm) deep, 1/16" (1.6 mm) wide, 1/32" (0.8 mm) apart	45 Minutes	Light Foot Traffic: 4 Hours Heavy Traffic & Rolling Loads: 8 Hours
S-319 Adhesive	Open Time: 15 minutes Applicator: 3/8" nap Roller	4 Hours	Immediate
Flip® Spray	Dry-to-touch: Approximately 30-40 minutes (no transfer of adhesive to finger) Refer to the provided spray patterns for proper application	4 Hours	Immediate

NOTE: S-515 should be dry-to-touch before installing tile and applied with a U Notch trowel [1/32 in. (0.8 mm) deep, 1/16 in. (1.6 mm) wide, 5/64 in. (2.0 mm) apart]. The amount of open time will vary according to job conditions, temperature, humidity, air flow and type of substrate.

## ABUTTING DIFFERENT GAUGES OF RESILIENT FLOORING

When installing thinner gauge material next to thicker gauge materials, install thicker material first and then butt a 12" (30.5 cm) wide piece of scribing felt against the thicker material. Adhere the scribing felt to the subfloor with suitable adhesive. Use S-194 Patch, Underlayment and Embossing Leveler or S-466 Patch Strong™ to feather the edge of the scribing felt to the level of the substrate. Allow the patch to dry completely before installing the flooring. Scribing felt is not recommended to be used under the entire installation.

## PROCEDURE S-515 Adhesive

- When using tile from two or more cartons, check to be sure all pattern and lot numbers are the same to ensure proper color match. On larger installations, open several cartons and mix them as they are installed to help blend any slight shade differences from one carton to the next.
- Line off entire area to be installed. Apply the adhesive over the area, being careful not to cover the chalk lines and using the recommended trowel. You may prefer to spread and install one quarter of the room at a time.
- Allow the adhesive to set until dry-to-touch following the recommended open time. To test, press your thumb lightly on the surface of the adhesive in several places. If the surface feels slightly tacky as your thumb is drawn away and does not stick to your thumb, the adhesive is ready for the installation.



- Install the tile along the chalk lines, laying the field area first and then fitting in the border tile.
- Clean adhesive from the surface of the tile.
- Tile should not be exposed to rolling load traffic for at least 72 hours after installation to allow setting and drying of the adhesive.

NOTE: When installing tile be sure that all tile is firmly seated into the adhesive. Rolling with a 100-lb. roller will achieve the same result and is highly recommended.

### **S-1000 Flooring Adhesive for Safety Zone™ Tile, and VCT**

- S-1000 Adhesive is recommended for Safety Zone Tile (for full coverage or first 3 to 5 rows) in areas that may be exposed to frequent surface moisture and/or cooler temperatures.
- S-1000 Adhesive may also be used to install VCT in areas where concrete moisture exceeds 99% RH or is unknown (no testing required).
- S-1000 requires a porous substrate per ASTM F3191. All patching or leveling materials should be portland cement-based and suitable for high moisture applications, such as S-466 PatchStrong.
- Apply the Adhesive in no larger than 2' or 3' bands (Figure 1), to 1/2 of the area at a time so you can start the installation along the center starting line. Do not apply more adhesive than you can cover within 45 minutes. Allowing a 10-minute open time and fitting the border tile tightly will reduce tile shifting and adhesive oozing. DO NOT allow the adhesive to skin over or dry. If the adhesive skins over or dries, remove it and reapply.

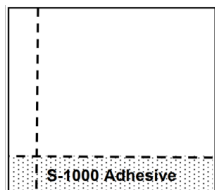


Figure 1: Adhesive Band

- Do not work on newly installed tile except to roll tile. If unavoidable, use a kneeling board.
- Begin laying tiles along the center starting line and install row by row including the cut pieces at the perimeter until 1/2 of the installation is complete. Periodically lift tiles to ensure 100% adhesive transfer, reducing open time if adhesive transfer is insufficient. Use a hand roller such as a Crain 333 or similar tool to initially embed the tile into the wet adhesive. This will allow you to regulate downward pressure, limiting adhesive bleed-up at the joints. Apply adhesive to the remaining portion of the room and complete the installation of tiles.
- Immediately remove any adhesive from the surface of the flooring using a clean, white cloth dampened with a neutral detergent and water.
- After 1 hour but before 2 hours after the tiles are installed, roll the installed tiles in both directions with a 100-lb. roller. Use a hand roller in confined areas where the large floor roller will not reach, such as under toe kicks.
- Tiles may be exposed to light foot traffic four hours post-installation. The floor can be exposed to heavy rolling traffic in 8 hours post-installation. Use pieces of hardboard or underlayment panels to protect the floor when moving heavy furniture and appliances back into the room.

### **S-319 Roll Strong™**

- A clean substrate is extremely important with the use of S-319 Roll Strong Adhesive. Thoroughly sweep and vacuum the substrate first. Damp mop to remove any remaining dust or debris. Extra attention to substrate preparation is essential for a successful installation. Failure to properly clean the substrate may result in telegraphing of debris.

- A roll-on application method is recommended with a medium nap (3/8" nap) roller to achieve a smooth even full-spread coating. Spread rate and drying time of the adhesive will depend on the porosity and texture of the substrates and the ambient temperature and relative humidity. **KEEP PAINT ROLLER WET!** Do not apply pressure to the roller, allow it to freely roll over the substrate. **ADHESIVE COVERAGE MUST NOT EXCEED 400 ft<sup>2</sup>/gal!** Once the coating has dried, it must be kept clean and apart from any contact with other surfaces until ready to begin the bonding process. Do not spread more adhesive than can be covered in 4 hours.
- Bond testing prior to the installation will help identify the appropriate application rate, open and working time, and any potential bonding problems to the substrate or flooring. To determine the accurate coverage rate, measure, and chalk line the substrate into grids (using the appropriate square feet of area for the adhesive application) and apply adhesive onto each measured grid area.
- Allow the adhesive to dry completely with no transfer to fingers when lightly touched. Open time will vary depending on the adhesive coverage, substrate porosity and the ambient conditions.
- Once the S-319 Roll Strong adhesive has dried, install tile as per recommended. Tile can be repositioned as necessary prior to applying pressure. After completion of the installation, roll the entire floor in both directions with 100 lb. roller to achieve a full contact bond.

NOTE: After the flooring has been rolled or pressed into place, repositioning is not possible. Normal traffic and rolling loads may be allowed as soon as the installation, finishing and clean-up are complete.

**SAFETY AND CLEAN UP:** Wet adhesive should be cleaned up immediately with soap and water on a clean cloth. Remove any dried adhesive residue with a clean, white cloth dampened with denatured alcohol.

**COVERAGE:** Rate of application depends on porosity of the substrate. Approximately 300 - 400 square feet per gallon when applied with a 3/8" Nap roller.

### **FLIP® Adhesive**

- Condition area to be installed, adhesive, and tile at 65° F (18° C) or above for 48 hours before
- Shake bottle well. Point the bottle downward and press the side of the nozzle tip.
- Walk back and forth at a steady pace. Do not use a sweeping motion.
- Use a shield to protect walls from overspray. A shield can be as simple as a piece of cardboard.
- Spray the perimeter first, then fill in the rest of the room.
- Allow adhesive to set open until dry to the touch, approximately 30 minutes. When dry to the touch, the adhesive will be tacky with no transfer to fingers.
- Wet adhesive, overspray or drips should be cleaned and smoothed immediately using a cloth moistened with soap and water. Drips can be smoothed out with spatula or flat trowel. Between uses, clean the spray tip with a clean wet cloth to prevent accumulation of dried adhesive.
- Install and fit all material within 4 hours. Working time will vary based on job conditions, substrate, temperature, and humidity.
- Roll the floor once immediately after installation with 100-lb roller.
- Remove wet adhesive residue using a clean, white cloth dampened with soapy water. Use denatured alcohol for dried adhesive residue carefully following warnings on container.
- Do not wet wash or scrub flooring for at least five days after installation.

**REMOVAL OF RESILIENT FLOOR TILE, SHEET FLOORING AND “CUTBACK” ADHESIVE**  
**RECOMMENDED WORK PRACTICES**

Instructions for removing resilient floor tile, sheet flooring and asphaltic “cutback” adhesives are not contained in this manual. Refer to the current Resilient Floor Covering Institute’s (RFCI) publication Recommended Work Practices for Removal of Resilient Floor Coverings, that addresses each in-place product type: resilient floor tile, resilient sheet flooring, asphaltic “cutback” adhesive or other adhesive.

**REGULATIONS AFFECTING THE REMOVAL OF EXISTING RESILIENT FLOOR COVERINGS**

- Various federal, state and local government agencies have regulations governing the removal of in-place asbestos-containing material. If you contemplate the removal of a resilient floor covering structure that contains (or is presumed to contain) asbestos, you must review and comply with all applicable regulations.
- Vinyl-asbestos tile and asphalt tile contain asbestos fibers, as did some asphaltic “cutback” adhesives and the backings of many sheet vinyl floorings and lining felts. The presence of the asbestos in these products is not readily identifiable.
- Unless positively certain that the product is a non-asbestos containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content.
- The Recommended Work Practices are a defined set of instructions that address the task of removing all resilient floor covering structures, whether or not they contain asbestos. When the Recommended Work Practices are followed, resilient floor covering structures that contain (or are presumed to contain) asbestos can be removed in a manner that will comply with the current Occupational Safety and Health Administration’s (OSHA) Occupational Exposure to Asbestos Standard’s Permissible Exposure Limits (PEL).
- Numerous products, devices and techniques have been introduced and/or recommended for the removal of resilient floor covering structures. Armstrong Flooring is only able to endorse the RFCI Recommended Work Practices. Before you use any other practice for the removal of an in-place resilient floor covering product that contains (or is presumed to contain) asbestos, you should determine if the practice meets all applicable regulations or standards, including those of OSHA, for occupational exposure to asbestos and that the material will be compatible with the new floor covering to be installed.
- See federal and location regulations on lead- based paint testing, safety precautions and notification requirements.

**⚠ WARNING: FOR 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.

Visit [rfci.com](http://rfci.com) to see the 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. AHF Products floor coverings and adhesives do NOT contain asbestos.