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AVA DSGN 5G CLIC INSTALLATION & INITIAL CLEANING INSTRUCTIONS

All instructions and recommendations are based on the most recent information available. They should be followed for an ideal installation. Visit our website at www.avaflor.com or contact AVA Technical Support at 877.861.5292 for the latest information and installation instructions.

Product Handling and Site Conditions

1. Store cartons of tile and/or plank with cartons stacked one on top of the other. Do not store on end or sides, or allow cartons to bend during storage or transportation.
2. **IMPORTANT:** Deliver and acclimate all material including maintenance products to job site at 65° - 85° Fahrenheit (18° to 29° Celsius) for 48 hours prior to installation**
3. The space where flooring is to be installed shall be fully enclosed and the permanent HVAC system shall be operational prior to installing flooring. The temperature shall be 65° - 85° Fahrenheit (18° to 29° Celsius) for 48 hours before installation, during installation and for 48 hours after installation. The temperature of the space shall be kept at a minimum of 50° Fahrenheit (10° Celsius) continually after installation. *Avoid dramatic and large temperature increases.*
4. Floating solid vinyl floors should be protected from direct sunlight and not exposed to direct sunlight for extended periods of time. Excessive temperatures will cause the product to expand. AVA recommends that blinds, drapes or suitable window coverings be in use in areas of large amounts of direct sunlight exposure.
5. To prevent damage to the newly installed flooring the installation of flooring products should be after all other trades have completed their work. To further prevent damage after install until space is occupied, use of a reinforced fiber-based temporary floor protector product is strongly recommended.
6. To prevent problems staining of finished flooring and the general movement of a free-floating floor, areas to receive resilient flooring shall be permanently dry, clean, smooth, level and structurally sound. They shall be free of all contaminants, including but not limited to: dust, solvents, paint, wax, oil, grease, residual adhesive, adhesive removers, curing, sealing, hardening or parting compounds, alkaline salts, excessive carbonation or laitance, mold, mildew.

**** Improper acclimation of floating Luxury vinyl flooring may result in gapping, or buckling or joints which are difficult to engage properly. Improper locking of the mechanism may cause one or more of the following conditions in your flooring: joints to be distressed resulting in a 'peaked' appearance; delamination due to ledging; separation of joints from normal environmental temperature changes; cupping or side joint failures.**

GENERAL GUIDELINES

This information provides general guidelines for the **AVA DSGN 5G Clic** floating flooring product. All instructions and recommendations should be followed for an ideal installation.

1. Install AVA DSGN 5G Clic floating flooring only after the jobsite has been cleaned and cleared of debris that could potentially damage a finished plank installation.
2. Install flooring perpendicular to direct sunlight sources, including large windows, doors, etc.
3. Inspect your shipment of AVA products to ensure that all cartons are of the same lot / manufacturing run. Contact your material provider with any discrepancies or assistance with locating this information.
4. To minimize shade variations during the installation of AVA DSGN 5G Clic, floating flooring mix and install planks from several different cartons.
5. All subfloor/underlayment patching must be done with a non-shrinking, water-resistant portland based level/patch compound.



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6. The maximum room size suggested is limited to 30 linear feet with 5/16" spacing gap around the perimeter. AVA DSGN 5G Clic floating flooring product can grow if the temperature in the room increases by 18° F (7°C). For installations larger than 900 square feet (83.6 m²) or runs longer than 30 feet (9 meters) control joints must be installed with a minimum of 5/16" (8mm) gap between the installed molding.
7. Doorways and archways 6 feet or less in width must have a suitable "T" molding installed as control joint to allow for normal product movement between rooms. A minimum of 5/16" gap is to be allowed on either side of the installed track for the molding.
8. Do not use tapping blocks, adjustable spacers (screw type) or other tools common to hardwood and laminate flooring installation. These tools will damage the vinyl flooring and prevent proper locking of the joint mechanisms.
9. This product cannot be installed with full spread adhesives. The use of any sort of adhesive during the installation will void the product warranty.

Approved Substrates

The following are approved substrates for installation of AVA Luxury Vinyl Flooring. See the next section for proper testing and substrate preparation prior to installing your AVA floorcovering.

All substrates regardless of composition must be smooth and flat to within 3/16" (4.76mm) in 10 feet or achieve an "F32" rating by use of mechanical grinding/sanding or suitable portland based patch/level compound.

- Above, on or below grade concrete without hydrostatic pressure, excess moisture or alkalinity; must be fully cured and dry, free from curing compounds, sealers, etc.
- Above or on grade lightweight concrete, properly prepared and without hydrostatic pressure, excess moisture or alkalinity
- Above or on grade Gypsum concrete surfaces, properly prepared and sealed, and without hydrostatic pressure, excess moisture or alkalinity
- APA registered underlayment, sanded face exterior grade with minimum rating of B-C plugged face
- APA registered exterior grade plywood sanded face with a rating of B-C or better, with a sanded and plugged face
- APA Approved / Rated OSB panels, minimum 23/32" thickness, properly installed. Must follow AVA installation instructions for OSB installations and only use Novalis T-226 adhesive (direct-glue and loose lay only); contact AVA Technical Support for guidelines.
- Properly prepared and well bonded existing resilient floor covering, single layer only
- Cement Terrazzo, ceramic tile, marble – see adhesive for proper preparation
- Certain metal floors may require use of a 2-part epoxy; contact AVA Technical support for assistance.
- Old adhesive residue
- Radiant heated floors where heat does not exceed 85°F (29°C)
- Acoustical sound control underlayments branded or specifically recommended in writing by Novalis International.

The following are not approved substrates for installing AVA Vinyl Flooring:

- Epoxy terrazzo
- Rubber, cork or asphalt tiles
- Textured or cushion backed resilient flooring
- "Sleeper" floor systems
- Plywood floors that have been installed directly over a concrete slab
- Luan, particle or chip boards, CCA (pressure treated), oil treated or other coated plywood
- CDX or other plywood with knots or open defects
- Underlayment made of pine or other soft woods
- Masonite™ or other hardboard underlayment
- Hardwood flooring



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- Paint, wax, oil, grease, residual adhesive, mold, mildew, and other foreign materials that might prevent adhesive bond
- Other uneven or unstable substrates.

Substrate Preparation

All substrates must be properly prepared and tested according to the following guidelines.

1. Concrete Subfloors

- a. Shall be in accordance with ASTM F710 (latest version) Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.
- b. All patching and leveling is to be in accordance with ASTM F2678 (latest version) Standard Practice for Preparing Panel Underlayments, Thick Poured Gypsum Concrete Underlayments, Thick Poured Lightweight Cellular Concrete Underlayments, and Concrete Subfloors with Underlayment Patching Compounds to Receive Resilient Flooring.
- c. Concrete slab construction shall be in accordance with industry standards for specification related to concrete mix design, curing methods and drying times to prevent moisture problems.
- d. On-grade and below-grade slabs should be installed with a suitable vapor retarder directly underneath the concrete slab.
- e. New concrete shall be properly cured and dried prior to the installation of floor covering. Curing agents, surface hardeners and other membranes or compounds shall be mechanically removed immediately after initial cure to allow the slab to properly dry before installation. Approximately 30 days per 1" of slab thickness.
- f. All concrete substrates, regardless of grade or age of slab, must be properly tested using one of the methods outlined below for warranty to apply. Acceptable test method is ASTM F 2170 In Situ Relative Humidity. Testing shall be conducted according to the test method and instructions of the manufacturer of the testing equipment.
- g. Concrete Alkalinity / pH Test shall be performed when the test site is at the same temperature and humidity expected during normal use; or at a temperature of 65° - 80°F (18° - 26° C) and 45% - 50% humidity for minimum 48 hours prior to testing. Using distilled water, place drops of water to form a small puddle approximately 1" in diameter. Wait 60 seconds, and then dip a portion of the pH paper into the water. Acceptable pH levels of the concrete are between 5 & 9 when compared to the color chart provided in the test kit.
- h. Concrete surface porosity shall be tested prior to application of adhesives. Surface porosity testing shall be conducted according to ASTM standards or adhesive manufacturer's guidelines. If no such guideline exists, an application of a few drops of clean, potable water shall be placed on the surface of the concrete in an area the approximate size of a dime or 5/8". If the water is absorbed within 1 minute then the surface shall be deemed to be porous. If the water beads or is not absorbed then the slab shall be treated as non-porous.
- i. Concrete Slab Preparation
 - i. Concrete slabs shall be clean prior to installing floor coverings. Remove all sealers, curing agents and compounds, grease, oil, adhesive removers, old adhesive residue, dirt, paint, etc. to ensure a clean bond surface for the adhesives.
 - ii. Concrete floors shall be smooth and level to prevent irregularities, roughness or other defects from telegraphing through the new resilient flooring. The surface of the slab shall be flat to within 3/16" in 10 feet. Slopes shall be less than 1/16" in 2 feet. Uneven areas should be mechanically ground to smoothness.
 - iii. Cracks, depressions or other similar irregularities should be leveled using a suitable Portland cement based patching compound. Follow the patch manufacturer's instructions regarding mixing and applications.
 - iv. Overly porous, dusty, flaky or soft concrete surfaces are not suitable for resilient floor coverings. It may be necessary to mechanically remove the top layer concrete in such cases and/or these surfaces may need to be primed and covered with a cement based underlayment compound. Follow the patching or leveling compound manufacturer's instructions regarding preparation of the



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concrete surface, priming, mixing of the product, thickness of application and drying time for resilient floor covering installation.

- v. Expansion joints, isolation joints, control joints or other moving joints in the concrete slab shall not be filled with patching compound or covered with resilient flooring.

2. Gypsum and Lightweight Cellular Concrete Substrates

Gypsum and lightweight concrete subfloors and substrates should in accordance with the listed standard. Unprimed gypsum surfaces may have a dusty surface and a very open, porous surface, which will lead to an adhesion bond failure if not properly sealed and treated. It is the responsibility of the installation contractor to obtain verification from the general contractor, architect, owner or party responsible for the site that the gypsum was properly sealed with the gypsum manufacturer's recommended sealer. If this data is not available conduct testing according to the appropriate ASTM Test Method for Gypsum Surfaces.

- a. Gypsum surfaces shall be in accordance with and properly prepared according to the appropriate ASTM specifications as listed in the above Reference Section.
- b. All patching and leveling is to be in accordance with ASTM F2678 (latest version) Standard Practice for Preparing Panel Underlayments, Thick Poured Gypsum Concrete Underlayments, Thick Poured Lightweight Cellular Concrete Underlayments, and Concrete Subfloors with Underlayment Patching Compounds to Receive Resilient Flooring.

Conduct a surface porosity test to ensure that the surface is properly sealed. If the water is quickly absorbed stop the installation and contact AVA Technical Services at 877.861.5292 or sales@avaflor.com.

- c. Check moisture content of the gypsum substrate via the appropriate method according to the ASTM Standards listed above. Moisture content of the subfloor/substrate shall not exceed the adhesive requirements or 75% RH or 3 lbs./1,000 sqft./24 hrs. MVER. When using the D4263 Test Method no discoloration of the surface should be found.
- d. All patching compounds shall be recommended for use with gypsum, gypcrete or lightweight cellular concrete surfaces by the patching compound manufacturer. Follow the manufacturer's instructions regarding mixing, use and application.
- e. All gypsum surfaces must be properly primed according to the gypsum manufacturer's instructions; or where applicable follow the instructions of the adhesive manufacturer if there is no recommendation from the gypsum manufacturer.

3. Wood Subfloors

- a. A combination of wood subfloor and panel underlayment construction shall be a minimum of 1" in total thickness.
- b. There shall be at least 18" of well-ventilated air space beneath all wood subfloors. Crawl spaces shall be insulated and protected by a suitable vapor barrier.
- c. Wood subfloors installed directly on concrete or over "sleeper" joist systems are not acceptable for use under AVA Luxury Vinyl Flooring.
- d. Panels designed as suitable underlayment shall be at a minimum ¼" in thickness, dimensionally stable, fully sanded face to eliminate grain texture or show through, have a written manufacturer's warranty and installation instructions and be free of substances such as ink, fillers and resins which may lead to staining of the resilient flooring.
- e. Panels shall be installed according to manufacturer's instructions regarding stapling pattern, sanding and filling of joints, and acclimation to installed environment.
- f. Novalis will not cover or accept responsibility for the following:
 - i. Telegraphing from joints (ridge or valley), grain, or texture of underlayment
 - ii. Discoloration of finished flooring due to materials used for filling of voids and defects in the face of the underlayment
- g. Unacceptable substrates shall be covered using a ¼" or thicker panel underlayment recommended for commercial use.

4. Existing Resilient Flooring

- a. When installing AVA Luxury Vinyl Flooring over existing resilient floors, the existing flooring must be:
 - i. Single layer only and firmly bonded to the substrate
 - ii. Thoroughly stripped of all wax, floor finish, dirt and other contaminants that may affect adhesive bond



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- iii. Flat and smooth with no curling edges or loose seams
 - iv. Must not be of a cushion back, floating, or perimeter bonded floor
 - b. Novalis is not responsible for problems leading to or from indentations, telegraphing of old floor or adhesion release of old floor after the AVA Luxury Vinyl Flooring is installed.
5. Old Adhesives
- a. Adhesive residue shall be properly prepared prior to the installation of AVA Luxury Vinyl Flooring. It is recommended that mechanical scraping or grinding be used as a primary means of removing old adhesive residue.
 - b. Residues include, but are not limited to carpet, vinyl, VCT, and or wood flooring adhesives.
 - c. Black cutback/asphalt adhesives shall be scraped by hand to remove any loose patches, trowel ridges and puddles so that only a thin residue layer remains. This layer shall then be properly covered using a Portland based patching compound properly mixed with the manufacturer's recommended latex/acrylic additive.
 - d. If chemical/liquid adhesive removers are utilized, the manufacturer's recommended instructions for cleaning after use of the remover shall be followed fully. Novalis is not responsible for any adhesive failures, indentation, bubbling, or delamination of new flooring due to improper cleaning of residue left from liquid adhesive removers.

WARNING!

DO NOT SAND, DRY SWEEP, BEADBLAST, SHOTBLAST OR USE ANY OTHER MECHANICAL MEANS TO PULVERIZE EXISTING TILE FLOORING, BACKING, LINING FELT, ASPHALTIC "CUT-BACK" OR ANY OTHER ADHESIVES. THESE 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 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.

6. Other substrates
- a. Cement terrazzo and metal floors may be suitable for installation and need to be properly prepared for adhesion. Most will need to be prepared with a suitable Portland-based cement patching compound, see manufacturer's recommendations for use and preparation of subfloor.
 - i. Ceramic, porcelain, marble and granite tiles are suitable as substrates provided the tiles are properly bonded with intact grout joints and free of cracks, and the surface of tile and grout joints is free from sealers, coatings, dirt and contaminants.
 - ii. Properly prepare the surface of tiles by grinding any high areas and using a suitable Portland-based leveling compound and primer to fill in all low areas. Follow leveling compound manufacturer's recommendations for surface preparation and application of product.
 - b. The following are not suitable substrates for installation of AVA Luxury Vinyl Flooring: rubber, cork, or asphalt tiles; epoxy terrazzo flooring; stained or painted concrete and any other material covered in the sections above and listed as unsuitable.
 - c. Unsuitable substrates should be covered with an approved ¼" wood underlayment or suitable Portland-based cement leveler or patching compound. Always follow the manufacturer's recommended practices when covering an existing substrate.

Installing AVA DSGN 5G Clic Floating Flooring

Description

AVA DSGN 5G Clic floating flooring is designed with an angle/drop mechanism with a secure locking clip, which is installed differently than the traditional angle/angle installed floating flooring. The 5G flooring requires that the top or long sides be installed first by engaging the joint at a shallow angle (25°) and then slide the piece to line up the short or right side drop lock mechanism. The end joints with the 5G drop mechanism should be carefully placed with the top side lightly touching the adjoining tile/plank. After engaging the top/long side joint at a shallow angle, the end/side joint can be firmly pressed into place until it „clicks“.



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NOTE: The 5G drop lock joints cannot be 'lifted' or angled apart when removing or repositioning a plank or tile. To remove a plank or tile, first disengage the top/long angle joint by lifting at a slight angle while pulling the complete rows away from each other. Then simply 'slide' the drop joint apart along the floor. Failure to slide this joint apart will damage the drop lock mechanism and prevent proper re-installation of the affected plank or tile.

1. General

- a. AVA DSGN 5G Clic floating flooring is designed to be installed as a “floating” floor. Do not secure individual planks or tiles to the subfloor with mechanical fasteners or adhesives. Always undercut all doorjambes. Do not install cabinets or kitchen islands on top of AVA DSGN 5G Clic floating floors.
- b. Use of a small, soft bristle brush to clean the joints prior to locking will ensure that there is no debris which will cause stressing or failure of the joint after interlocking the pieces together.
- c. Use care when installing wall moldings and transition strips to not fasten through AVA DSGN 5G Clic floating flooring planks or tiles.
- d. When using more than one carton, make sure that the cartons are all the run number. Different runs may have variations in color, texture or gloss so they should not be mixed in the same room.
- e. AVA plank simulates wood planks, and can be installed in the same pattern as a wood plank floor in a random pattern, staggered design. Planks are best in appearance when lying parallel to the longest walls in the room.
- f. AVA products can be cut using a tile cutter or a utility knife. Keep knife blades sharp for easy, accurate and safe cuts. Fit tiles to walls, columns, door jambes, etc. using the same methods other floor tiles; overlap, pattern scribe, wall scribe and free hand.
- g. If it is necessary to heat the tiles to achieve a cut, heat slightly from the back only with minimal heat setting (a standard hair dryer will produce enough heat). Carefully make cuts with a sharp utility knife on the heated pieces.

2. Layout

- a. Install flooring perpendicular to direct sunlight sources, including large windows, doors, etc.
- b. It is important to balance the layout of the plank and tile format. Proper planning and layout will prevent narrow piece widths at wall junctures. Determine layout to prevent having less than a half the width or very short length pieces.
- c. Determine the center of the room by measuring each end wall and marking the center of the wall. Chalk a line across the points and measure to determine the center point. At a right angle to the chalk line, using the center point, chalk another line out to the other walls.
- d. Be sure to allow for a 5/16” spacing along all walls when determining your starting plank width. On rooms greater than 900 ft² (83.6 m²) or runs longer than 30 feet (9 meters) control joints with a suitable T-molding must be installed with a minimum of 5/16” (8mm) gap between the sides of the t-molding.
- e. Dry lay a section of plank from the center line to one wall to determine that the pattern is centered and fit. Border cuts should be measured and should not be less than half the width of a plank. If the cut row falls under these conditions, adjust the first row at the center line to make the centerline match the centerline of the row of planks.

3. Installing AVA DSGN 5G Clic Floating vinyl flooring

- a. Tiles can be cut using a vinyl/ VCT tile cutter or using a utility knife with heavy-duty blades by scoring and snapping tiles carefully along the score line. Use a steel straight edge for cutting tile along the length with a utility knife.
- b. Determine if the starter row will need to cut from the instructions above under 3.Layout. It will be necessary to cut off the unsupported tongue on the edges placed against the wall so that a clean, solid edge is toward the wall.



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- c. A small, soft bristle brush is recommended to be used to clean the joints of each piece before attempting to lock them together.
 - d. From the top, left corner of the room put the first plank in place so both the head and side seam grooves are exposed. Planks are to be installed from left to right. Cut off the tongue on the long side of each piece in the first row with a utility knife.
 - e. Install the second piece in the first row by laying the short-end tongue onto the previously installed piece short-end groove. Fasten the piece together by firmly pressing down with your thumb along the seam to lock the planks together. This will engage the 5G locking clip into the piece you just placed; you will hear and feel the pieces lock together as the locking tab engages in the joint. Use of a soft, white No. 2 rubber mallet is also recommended to vertically engage the joint.
 - f. Continue in this manner for the rest of the first row. The last piece in the row should be cut to length while maintaining the 5/16" (8mm) expansion space along the perimeter of the room.
 - g. Cut a piece in half of the lengths to start the second row or use the cutoff from the previous row, keeping in mind the length requirements above. Install the first piece in the second row by inserting the long side tongue into the groove of the piece in the first row at a low angle (25°) to the installed piece. Then firmly lower the plank while maintaining a slight pressure towards the installed piece. The pieces should fit snugly together and lay flat. **Ensure that expansion space is kept along this wall.**
 - h. To install the remaining planks in the second row, first align the long edge tongue into the groove of the previous row at a shallow angle. Slide the piece to the left until the piece meets the previously installed piece.
 - i. Firmly lower the piece while maintaining a slight pressure towards the installed piece. The pieces should fit snugly together and lay flat. Engage the short edge joint as in #2 and #4 above.
 - j. Work across the length of the room installing pieces in the second row. It is critical to keep these first two rows straight and square, as they are the "foundation" for the rest of the installation. Check for squareness and straightness often while installing the floor.
 - k. Use of several 5/16" (8mm) spacer blocks along the first wall will ensure the proper spacing is achieved and that floor does not „walk" back towards the wall during installation.
 - l. Continue installing flooring, being certain to maintain a random appearance (planks) or the pattern (tiles) and offset end seams by at least 6". Maintain a 5/16" (8mm) expansion gap at all fixed vertical surfaces. Check to be certain all planks are fully engaged; if slight gapping is noticed or the pieces will not lay flat, simply disengage the long/top side joint and then carefully slide the short/end joint apart. **Do not pull up on this joint as it will damage the locking mechanism!** Reinstall the piece.
4. Finishing the installation
 - a. When fitting around obstacles or into irregular spaces, AVA DSGN 5G Clic floating flooring can be cut easily and cleanly using a utility knife with a sharp blade. It is often beneficial to make a cardboard template of the area and transfer this pattern to the plank.
 - b. Protect all exposed edges of the AVA DSGN 5G Clic floating flooring by installing wall molding and/or transition strips. Use caution to prevent the fasteners from securing the planks to the subfloor. Maintain a gap between all moldings and the top surface of the flooring of .01" (.28mm) or the width of card stock.
 - c. Protect the finished AVA DSGN 5G Clic floating flooring installation from exposure to direct sunlight.

After Installation

1. Be sure pieces are set, flat and have tight edges.



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2. In the event that the AVA DSGN 5G Clic floating flooring is not the last portion of the construction project, the floor must be protected from construction traffic and damage. Utilize a reinforced fiber protective board or a heavy kraft paper (min. 60 lbs.) and cover the floor.
3. Initial maintenance
 - a. Thoroughly clean the floor using a neutral pH cleaner.
 - b. If necessary, a slow (175rpm) buffer can be utilized with a white, non-abrasive pad to remove heavier deposits.
 - c. Rinse the floor thoroughly and allow to completely dry.
 - d. Please note that excessive water used during cleaning can migrate through the joints of the planking to the substrate causing a wet condition under the floor. Be careful not to use too much water/solutions when cleaning your floating floor.
5. Daily and weekly maintenance
 - a. Sweep, vacuum or dust mop the floor as needed to remove dust loose dirt and grit. In high traffic areas this may be a daily or twice daily procedure. Use only vacuums that do not have bristle beater bars.
 - b. Clean liquid spills immediately to prevent the possibility of stains, slips or falls.
 - c. Damp mop the floor as needed to remove dirt and stains. Use a neutral pH cleaner and a red pad if needed to remove ground in dirt. Soft bristle brushes can also be used on flooring with embossed surfaces.
6. Preventative steps
 - a. Use mats at all entry areas to keep dirt, sand and water off of the floor. Clean the mats on a regular basis. If mats are placed directly on top of the AVA floor, be sure the mats have a non-staining back. Rubber mats are also not recommended over AVA flooring products.
 - b. Furniture shall have protective glides of at least 1" in diameter to minimize the chance of indentations or scratching to the surface of the floor. Do not use narrow chair glides! Felt pads are also excellent protection for the floor for furniture that will be frequently moved directly across the floor.
 - c. Do not move heavy furniture, appliances or fixtures directly across the floor. Use protective boards or appropriate furniture movers designed for use over hard surface flooring.
 - d. Protect the floor from direct sunlight by using appropriate window coverings.
 - e. Use chair mats at desks to protect the floor from damage due to chair legs or casters.
 - f. Periodically clean caster wheels and check for wheels that may be broken or no longer rotating. Replace damaged wheels immediately.
 - g. Avoid use of metal or razor scrapers to remove dirt, residues or other marks from flooring. This will damage the protective wear layer of the vinyl flooring.

Footnotes

¹ ASTM F 710 Standard Practice for Preparing Concrete Floors to receive Resilient Flooring

Standards for Installation

ASTM	F 710	Standard Practice for preparing Concrete floors to receive resilient flooring
ASTM	F 1482	Standard Practice for Installation and Preparation of Panel Type Underlayment's to Receive Resilient Flooring
ASTM	F 2170	Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs using In Situ Probes
ACI	302	Guide for Concrete Floor and Slab Construction
RFCI		Recommended Work Practices for Removal of Resilient Floor Coverings