Thank you for purchasing this STAINMASTER® luxury vinyl flooring product, manufactured under license by INVISTA to Novalis Innovative Flooring.

ALWAYS CHECK NovalisInnovativeFlooring.us/SupportInformation FOR THE LATEST INSTALLATION, WARRANTY AND MAINTENANCE INSTRUCTIONS. IT IS THE RESPONSIBILITY OF THE INSTALLER TO ENSURE THAT THE MOST CURRENT DOCUMENTS ARE USED DURING INSTALLATION OF STAINMASTER® LUXURY VINYL FLOORING.

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. Install flooring perpendicular to direct sunlight sources, including large windows, door walls, etc. Use of suitable window coverings during the times of most direct sunlight is strongly recommended.

3. This item should be installed in an indoor, climate-controlled location between 65°–85° F (18°–29° C). It should NEVER be installed outdoors.

4. This item must be acclimated in climate-controlled locations at 71°F for 24–48 hours before starting installation. Store cartons lying flat at all times and protect from direct sunlight during acclimation.

5. This item should only be installed after the jobsite has been cleaned and cleared of debris that could potentially damage a finished plank installation.

6. During the installation, mix and install planks from several different cartons to minimize shade variation.

7. The finished flooring installation should be protected from exposure to direct sunlight.

8. Do not use tapping blocks, adjustable spacers 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. Installation area should not be more than 1,076 square feet (100 square meters) or have runs longer than 30 feet in length without the use of suitable expansion moldings.

10. This item cannot be installed with full spread adhesives. The use of any sort of adhesive during the installation will void the product warranty.

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.

Reference Documents
The latest versions of all listed Standards, Guides and Work Practices shall be used in all cases.
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

MARCH 2017
GENERAL GUIDELINES

This information provides general guidelines for STAINMASTER® luxury vinyl Clic FD product. All instructions and recommendations should be followed for an ideal installation.

1. Install flooring perpendicular to direct sunlight sources, including large windows, doors, etc. as this will help to minimize the expansion perpendicular to the light source.

2. Install STAINMASTER® luxury vinyl Clic FD product only after the jobsite has been cleaned and cleared of debris that could potentially damage a finished plank installation.

3. Inspect your shipment of STAINMASTER® luxury vinyl Clic FD products to ensure that all cartons are of the same lot/manufacturing run. Contact your retailer with any discrepancies or assistance with locating this information.

4. To minimize shade variation during the installation of STAINMASTER® luxury vinyl Clic FD product, mix and install planks from several different cartons.

5. Acoustical underlayments must be Novalis branded products or specifically recommended by Novalis® International in writing. Use of other underlayments not specifically designated by Novalis® will result in the Mechanical Warranty being voided.

6. All subfloor/underlayment patching must be done with a non-shrinking, water-resistant Portland cement patching compound.

7. The maximum room size suggested is limited to 30 linear feet with 5/16” spacing gap around the perimeter. STAINMASTER® luxury vinyl Clic FD 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.

8. 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.

9. 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.

10. 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 STAINMASTER® luxury vinyl Clic FD product. See the next section for proper testing and substrate preparation prior to installing your STAINMASTER® luxury vinyl Clic FD product.

• All substrates regardless of composition must be smooth and flat to within 3/16” (4.76mm) or achieve an “F32” rating by use of mechanical grinding/sanding or suitable Portland cement-based patching and leveling compounds.
• APA registered underlayment, sanded face exterior grade with minimum rating of C-C plugged face
• APA registered exterior grade plywood sanded face with ratings as follows: APA A-B, A-C, B-B, B-C, C-C plugged face
• Single layer Sturd-I-Floor® (or equivalent) rated panels (minimum 23/32” thickness) with sanded face. Check for jobsite damage before using as underlayment if panels were exposed to construction traffic or weather prior to installation.
• APA Trademarked Oriented Strand Board (OSB) of minimum ¾” thickness, properly installed according to manufacturer’s and/or APA guidelines
• APA Trademarked underlayment veneer panels
• Properly prepared and well bonded existing resilient floor covering
• Cement Terrazzo, Epoxy terrazzo, ceramic tile, marble – must be properly prepared; all grouts are patched with appropriate patching compounds or leveler.
• Certain metal floors – all gaps are patched with appropriate patching compounds or leveler.
• Old adhesive residue
• Radiant heated floors where heat does not exceed 90°F (32°C)

The following are not approved substrates for installing STAINMASTER® luxury vinyl Clic FD product:

• 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
• Masonite™ or other hardboard underlayment
• 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
• Hardwood flooring
• Paint, wax, oil, grease, residual adhesive, mold, mildew, and other foreign materials that might prevent floating planks and tiles from natural movement
• Other uneven or unstable substrates.

SUBFLOOR INFORMATION

Although STAINMASTER® luxury vinyl Clic FD product is designed to be a “floating” floor installation, proper preparation of the subfloor is still a major part of a successful installation. Roughness or unevenness of the subfloor may telegraph through the new STAINMASTER® luxury vinyl Clic FD product, resulting in an unsightly surface and cause excessive wear on high spots.
Substrate Preparation

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

1. Concrete Subfloors

Although STAINMASTER® luxury vinyl Clic FD product is not susceptible to damage from moisture, excessive subfloor moisture is an ideal breeding ground for mold, mildew and fungus-all of which can contribute to an unhealthy indoor living environment.

a. Concrete slab construction shall be in accordance to industry standards for specification related to concrete mix design, curing methods and drying times to prevent moisture problems.

b. On-grade and below-grade slabs should be installed with a suitable vapor retarder directly underneath the concrete slab.

c. 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.

d. 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 the ASTM F 2170 In Situ Relative Humidity. Testing shall be conducted according to the relevant ASTM documentation and instructions of the manufacturer of the testing equipment. Consult Novalis® adhesive technical bulletins for acceptable RH % levels.

e. Concrete Alkalinity/pH Test shall be conducted in accordance with ASTM standards and instructions provided by the adhesive manufacturer. Acceptable level of pH in the substrate is 7.

f. Concrete Slab Preparation

i. Concrete slabs shall be clean and smooth 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.

iii. Uneven areas should be mechanically ground to smoothness.

iv. 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.

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

vi. 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.

vii. Use of vapor barriers is allowed under NovaClic™ FD as long as proper ventilating space is allowed around the perimeter of the room for moisture and vapors to escape the substrate.

2. Wood Subfloors

a. All wood and wood composition panels are suitable for use under STAINMASTER® luxury vinyl Clic FD product providing
they are smooth, flat, structurally sound and free of deflection.

b. A combination of wood subfloor and panel underlayment construction shall be a minimum of 1” in total thickness.
c. 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.

d. Wood subfloors installed directly on concrete or over “sleeper” joist systems are not acceptable for use under STAINMASTER® luxury vinyl Clic FD product.
   i. 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, and have a written manufacturer’s warranty and installation instructions
   ii. Panels shall also be free of substances such as ink, fillers and resins which may lead to staining of the resilient flooring, and have all knots, voids and defects properly plugged and sanded.

e. Panels shall be installed according to manufacturer’s instructions regarding stapling pattern, sanding and filling of joints, and acclimation to installed environment.
   i. Novalis® will not cover or accept responsibility for joint telegraphing, either as a “ridge” or “valley”; grain or texture telegraphing; discoloration of finished flooring due to materials used for filling of voids and defects in the face of the underlayment
   f. Unacceptable substrates shall be covered using a ¼” or thicker panel underlayment recommended for commercial use. Follow underlayment manufacturer’s installation instructions fully.

3. Existing Resilient Flooring
   a. When installing STAINMASTER® luxury vinyl Clic FD product over existing resilient floors, the existing flooring must be:
      i. Single layer only
      ii. Thoroughly stripped of all wax, floor finish, dirt and other contaminants that may affect adhesive bond
      iii. Be firmly bonded to the substrate
      iv. Flat and smooth with no curling edges or loose seams
      v. Dry and free from excessive moisture. All concrete floors shall be tested for moisture regardless of age or grade level. Do not assume that an existing floor is free of moisture related issues. Conduct testing per Section 1.d above.
      vi. 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 STAINMASTER® luxury vinyl Clic FD product is installed.

4. Old Adhesives
   a. Adhesive residue shall be properly prepared prior to the installation of STAINMASTER® luxury vinyl Clic FD product. 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.

5. Other substrates

a. Cement terrazzo, epoxy terrazzo flooring, stained or painted concrete 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. Contact Novalis® Tech Support at 866-NOVALIS or stainmasterlvtinfo@novalis-intl.com for these installations.

b. Ceramic, porcelain, marble and granite tiles are suitable as substrates when the following conditions are met:
   i. Tiles must be properly bonded with intact grout joints and free of cracks
   ii. Surface of tile and grout joints should be free from sealers, coatings, dirt and contaminants.
   iii. 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.

c. The following are not suitable substrates for installation of STAINMASTER® luxury vinyl Clic FD product: rubber, cork, or asphalt tiles; and any other material covered in the sections above and listed as unsuitable.

d. 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 STAINMASTER® luxury vinyl Clic FD flooring**

STAINMASTER® luxury vinyl Clic FD floating flooring is designed with an angle/drop mechanism. The angle/drop flooring requires that the top or long sides be installed first by engaging the joint at a shallow angle while lining up the short or right side drop lock mechanism. Once the joint is engage firmly press the plank down to lock this joint. The end joints with the 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’.

**NOTE:** The drop lock joints cannot be ‘lifted’ or angled apart when removing or repositioning a plank or tile. Do remove a plank or tile; first disengage the top/long angle joint at a slight angle.
angle while pulling the products 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. STAINMASTER® luxury vinyl Clic FD product is designed to be installed as a “floating” floor. Do not secure individual planks to the subfloor with mechanical fasteners or adhesives. Always undercut all doorjambs. Do not install cabinets or kitchen islands on top of STAINMASTER® luxury vinyl Clic FD product.
   
   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 planks / tiles together.
   
   c. Use care when installing wall moldings and transition strips to not fasten through STAINMASTER® luxury vinyl Clic FD product planks.
   
   d. When using more than one carton, make sure that the cartons are all the same dye lot. Different loss may have a variation in color, texture or gloss so they should not be mixed in the same room.
   
   e. STAINMASTER® luxury vinyl Clic FD product square tile floating products are designed to simulate real stone and tile floors and are recommended to be installed in an ashlar (brick) pattern.
   
   f. STAINMASTER® luxury vinyl Clic FD product plank simulates wood planks, and can be installed in the same pattern as a wood plank floor in a random pattern, staggered design.
   
   g. Planks are best in appearance when lying parallel to the longest walls in the room.
   
   h. STAINMASTER® luxury vinyl Clic FD product 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 jambs, etc. using the same methods other floor tiles; overlap, pattern scribe, wall scribe and free hand.
   
   i. 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 tile.

2. Layout
   a. It is important to balance the layout of the plank format. Proper planning and layout will prevent narrow plank widths at wall junctures. Determine layout to prevent having less than a half plank width or very short length pieces.
   
   b. 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.
   
   c. 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 must be installed with a minimum of 5/16” (8mm) gap between the installed t-molding.
   
   d. Dry lay a section of tile/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 or less than 6” wide for tile patterns. 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.

   i. Planks should never be less than 9 inches long or less than half of the width of the plank.
Avoid small pieces in border areas and adjust the center lines to achieve the proper pattern.

ii. Tiles should be balanced in the room with equal size cuts to the walls. The width of cut tiles should not be less than 6” inches wide by a full length of tile for either the 18” x 18” and 12” x 24” tiles.

iii. Adjust the layout on the centerlines in the room if necessary to meet the

3. Installing STAINMASTER® luxury vinyl Clic FD product flooring
STAINMASTER® luxury vinyl Clic FD product planks and tiles are best installed with a No.2 white rubber mallet or a rounded-end smooth steel seam roller. While not required, these tools will help ensure the tongue and groove are properly mated and clicked together.

a. Accurately measure the room to determine the centerline, adjust this established line to accommodate a balanced layout and then transpose this line to a comfortable width away from the starting wall (approximately 2’ to 3’ wide.) Determine if the starter row will need to cut. It will be necessary to cut off the unsupported tongue so that a clean, solid edge is toward the wall.

b. Starting in the farthest left, upper corner of the room position the first plank / tile so that both the head and side seam groove is exposed. This requires installing the product from left to right in the room.

c. Install the second plank / tile in the first row by laying the short-end tongue onto the previously installed plank / tile short-end groove. Fasten the planks / tiles together by firmly pressing down with your thumb along the seam to line up edges the planks together. Use of a soft, white No. 2 rubber mallet is recommended to fasten the tongue & groove together. You will feel the planks lock together.

d. Maintain an expansion gap of approximately 5/16” from the wall. Then cut a plank / tile in half of the length to start the second row; stagger the end seam at least 6” from the first plank. Install the first plank / tile in the second row by inserting the long side tongue into the groove of the plank / tile in the first row. This is best done with a low angle (20° to 30°) of the plank / tile.

e. Continue the first row by laying the short-edge tongues onto the previous plank short-end groove and firmly pressing the seam down with the mallet until the planks click together. Measure and cut the last plank in the row while maintaining the 5/16” spacing at the right side wall.

f. To install the remaining planks in the second row, first align the long edge tongue into the groove of the previous row while making sure the short-edge tongue is laying on the short-edge groove of the previous plank.

g. Angle the long edge tongue into the plank/tile in the row above and lock it together.

h. Firmly tap or press the short-edge tongue into the short-edge groove of the previous plank/tile.

i. Work across the length of the room installing planks/tiles along the wall in the first row and then aligning the planks/tiles in the second row. It is critical to keep these two rows straight and square, as they are the “foundation” for the rest of the installation. Check for squareness and straightness often. Use of several 5/16” 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.

j. Cut the last plank/tile in the first row to fit approximately 5/16” short of the end wall. Use the cutoff of this plank to start the third row.

k. Continue installing plank/tiles, being certain to maintain a random appearance (planks) or the pattern (tiles) and offset end seams by at least 6”. Maintain a 5/16” expansion gap at all fixed vertical surfaces. Check to be certain all planks are fully engaged; if slight gapping is noticed, simply disengage the long/top side joint and then carefully slide the short/end
joint apart. Reinstall the plank.

4. Finishing the installation
   a. When fitting around obstacles or into irregular spaces, STAINMASTER® luxury vinyl Clic FD product 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 STAINMASTER® luxury vinyl Clic FD product by installing wall molding and/or transition strips. Use caution to prevent the fasteners from securing the planks to the subfloor.
   c. Protect the finished STAINMASTER® luxury vinyl Clic FD product installation from exposure to direct sunlight.
   d. 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.

**After Installation**

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

2. In the event that the LVT piece 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 STAINMASTER® luxury vinyl Clic FD product, be sure the mats have a non-staining back. Rubber mats are also not recommended over STAINMASTER® luxury vinyl Clic FD product.
   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.