



All instruction and recommendations are based on the most recent information available. They should be followed for an ideal installation. Visit our website at www.novafloor.us or contact Novalis Technical Support at 866-Novalis 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 24 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 65° Fahrenheit (18° Celsius) continually after installation. Avoid dramatic and large temperature increases.
- 4. Loose lay vinyl floors should be protected from direct sunlight and not exposed to direct sunlight for extended periods of time. Novalis recommends that blinds, drapes or suitable window coverings be in use in areas of large amounts of direct sunlight exposure. Novalis also recommends use of full-pattern of adhesive in these areas of installation.
- 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.

GENERAL GUIDELINES

This information provides general guidelines for the Novalis® Birkdale™ NovaLay™ flooring product. All instructions and recommendations should be followed for an ideal installation.

- 1. Install Novalis Birkdale NovaLay 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 Novalis products to ensure that all cartons are of the same lot / manufacturing run. Contact your Distributor with any discrepancies or assistance with locating this information.
- 4. To minimize shade variation during the installation of Novalis Birkdale NovaLay flooring mix and install planks from several different cartons.
- 5. All subfloor/underlayment patching must be done with a non-shrinking, water-resistant Portland cement patching compound.
- 6. Doorways and archways must have a suitable "T" molding installed to protect the exposed edges of the flooring. Use of a 9" band of adhesive in all entryways is recommended to keep flooring from movement.
- 7. Adhesives used with this product must be branded by Novalis International and be an acrylic base.
- 8. Novalis Loose Lay flooring is to be installed in a perimeter fashion with Novalis NFA-300 spray adhesive or NFAT226 full spread adhesive. A band of adhesive equal to the width of one (1) row of tile or plank should be placed around the perimeter of the room.

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- 9. **Commercial** applications should utilize and additional "X" pattern of adhesive from corner to corner.
- 10. **Heavy Commercial applications** or areas subjected to heavy traffic, rolling loads, etc. should be installed in a full-spread adhesive application.
- 11. For larger areas or runs greater than 20 feet (6 meters) it is recommended to section the area into equal 10-12' sections and utilize the perimeter-X pattern for the adhesive.

Approved Substrates

The following are approved substrates for installation of Novalis Birkdale. See the next section for proper testing and substrate preparation prior to installing your Novalis floorcovering.

- All substrates regardless of composition <u>must</u> be smooth and flat to within 1/8" (3.18mm) or achieve an "F50" 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 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 Rated 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- must be properly prepared with embossing leveler
- Radiant heated floors where heat does not exceed 85°F (29°C)

The following are not approved substrates for installing Novalis Birkdale NovaLay flooring:

- 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, OSB, 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 NovaLay planks and tiles from natural movement
- Other uneven or unstable substrates.

SUBFLOOR INFORMATION

Although Novalis Birkdale NovaLay flooring is designed to be a "loose-lay" floor installation, proper preparation of the subfloor is still a major part of a successful installation. Roughness or unevenness of the

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subfloor may telegraph through the new Novalis Birkdale NovaLay flooring, 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 Novalis Birkdale NovaLay flooring 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. Use of a suitable vapor barrier is recommended.
- 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. Concrete substrates should be properly prepared according to ASTM F710-11, *Preparing Concrete Floors to Receive Resilient Flooring*.
- e. 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.
- f. 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.
- g. 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 2-3 minutes 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.

2. Wood Subfloors

- a. All wood substrates shall be prepared according to ASTM F1482-04 *Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring*.
- b. All wood panels for use under Novalis Birkdale NovaLay flooring must be smooth, flat, structurally sound and free of deflection.
- c. A combination of wood subfloor and panel underlayment construction shall be a minimum of 1" in total thickness.
- d. 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.
- e. Wood subfloors installed directly on concrete or over "sleeper" joist systems are not acceptable for use under Novalis Resilient Flooring.
- f. 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.

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- g. Panels shall be installed according to manufacturer's instructions regarding stapling pattern, sanding and filling of joints, and acclimation to installed environment.
- h. 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
- i. 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 Novalis Birkdale NovaLay flooring 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, NovaLay, 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 Novalis Luxury vinyl is installed.

4. Old Adhesives

- Adhesive residue shall be properly prepared prior to the installation of Novalis 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 TIEL 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 TRAC T 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.

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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 techsupport@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 Portlandbased 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 Novalis LV Flooring: 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 Birkdale NovaLay Loose Lay Luxury Vinyl Flooring

1. General

- a. When using more than one carton, make sure that the cartons are all the same run / lot number. Different lots may have a variation in color, texture or gloss so they should not be mixed in the same room. Contact your distributor before installing product from differing runs or lots.
- b. Birkdale plank simulates wood planks, and can be installed in the same pattern as a wood plank floor in a random pattern, staggered design, diagonally or other design.
- c. Planks are best in appearance when lying parallel to the longest walls in the room.
- d. Novalis products can be cut using a tile cutter or a utility knife. Keep knife blades sharp for easy, accurate and safe cuts. Fit planks to walls, columns, door jambs, etc. using the same methods other floor tiles; overlap, pattern scribe, wall scribe and free hand.
- e. When working on top of loose lay flooring during the installation, be sure to not disturb tiles and planks that have already been laid. If a piece does become dislodged simply peel it up and reinstall; use of a scrap piece as a tapping block can help readjust disturbed tiles and planks also.
- f. If it is necessary to heat the planks 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 plank.
- 2. Novalis trowel-grade adhesive installation method
 - a. Novalis adhesives are designed to be used on most interior installations over most concrete and wood substrates, and other approved substrates that are properly prepared and leveled. A complete guide to Novalis adhesives can be found at www.novafloor.us.
 - b. Some commercial applications and special substrates a two-part epoxy or urethane adhesive is recommended. Typical applications for these types of adhesives are wet areas, floors subjected to heavy point loads and/or rolling loads, and floors that will be exposed to extreme temperature changes or extreme temperatures. Contact Novalis Technical Support at 866-NOVALIS or techsupport@novalis-intl.com for proper adhesives and installation procedures.





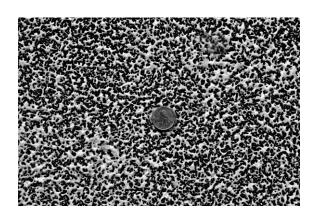
- c. If it is determined that a non-Novalis adhesive is to be used on an installation, Novalis recommends a written warranty be obtained by the adhesive manufacturer warranting this specific installation with their products.
- d. Porous substrate installation, NFA-T226 trowelable adhesive
 - 1. Requires a trowel notch of $1/16" \times 1/32" \times 1/32"$ u-notch be used. The adhesive should be allowed to dry to the touch sufficient to prevent slippage. Loss of adhesion can result if the flooring is not installed within the working time of the adhesive
- e. Non-porous installation, NFA-T226 trowelable adhesive
 - Requires a trowel notch of 1/16" x 1/32" x 1/32" U-be used. Allow the
 adhesive to dry to the touch with no transfer of adhesive to the finger
 (approximately 20-30 minutes) and install the LV plank within 60
 minutes.

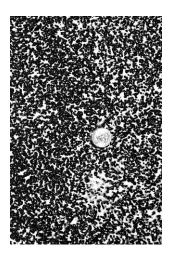


- f. Do not install flooring into wet adhesives on non-porous substrates.
- 3. Novalis aerosol spray grade adhesive method
 - a. NFA-S300 spray adhesive can be used on porous and non-porous substrates. Non-porous substrates may require a lighter application of adhesive and should be tested in a small area before beginning installation.
 - b. Spray pattern should be enough that one 22 oz. can produces spread rate of 150 ft² for a permanent application and 185 ft² for a pressure sensitive application.
 - c. To apply S300 adhesive, shake can well before using and point can downwards towards the floor. Press the side of the nozzle tip as you slowly walk back and forth; do not use a sweeping motion. Clean up all drips and be sure to achieve full coverage when installing luxury vinyl products with S300 adhesive.
 - d. Allow the adhesive to dry completely to the touch with no transfer to fingers. Open time will vary according to spray pattern, substrate and ambient conditions.
 - e. Working time should not exceed 4 hours; be cautious as to how large of an area is sprayed.
 - f. Consult the instructions on the can or the NFA-S300 Technical Data Sheet which can be found at www.novafloor.us for more information.

Coverage patterns: 150 ft² (A quarter is shown in the picture for reference only)

185 ft²









4. Layout

- a. Determine the center of the room and dry lay a section of tile/plank from the center line to one wall to determine that the pattern is centered and fit. Measure the border cuts along the wall and compare to the following criteria. If necessary adjust the first row at the centerline to meet either the plank or tile
- b. 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.
- c. Tiles should not be less than 6" in length or width. Avoid small pieces in border areas and adjust the center to achieve the proper pattern
- d. Tiles are designed to be laid in any fashion with the most popular being point-to-point and ashlar patterns. All tile sizes and patterns look best when the layout is balanced in the installed room.

5. Installation of flooring

Spread adhesives using the proper trowel notch; more adhesive is not a good thing with LV products.

- a. Before spreading adhesive, strike a parallel chalk line to the centerline of the length of the room approximately 2' to 3' from the wall. Actual position is to be determined by the layout of the planks, ensure that the pattern is followed from your initial starting point determined in the dry layout performed earlier. If necessary, re-lay part of the pattern from centerline starting point to determine the exact measurement of the parallel line.
- b. After determining the starting point, apply adhesive in a band 18" along the starter wall and down the side walls, keeping in mind the open time for the adhesive on the side walls. Allow to tack up. Some slippage of the plank/tile may occur with a "wet" method. Be careful to follow layout lines and allow adhesive to set before rolling.
- c. Begin laying the first row of flooring into the adhesive, keeping an 1/8" gap along all vertical surfaces. Lay the flooring by tightly butting the edges of the pieces together, making sure that the runs are parallel to your centerline or layout lines. Work toward the first wall from your starting line into the band of adhesive.
- d. Once your starter rows are secure and the flooring planks/tiles are tightly butted together, continue applying adhesive along the perimeter of the adjacent walls so that enough flooring can be placed within the working time of the adhesive. Novalis recommends an additional "X" pattern be placed corner-to-corner in the room for commercial applications.
- e. Start laying the next rows by continuing the pattern and tightly butting all joints together. A scrap piece of flooring can be used to lightly tap the pieces into the previous row.
- f. Continue in this manner spreading only enough adhesive along the perimeter and the center "X" pattern that can be safely installed within the working time of the adhesive.
- g. Be sure to stagger all end joints by at least 6" or the width of one plank. Vary the length of your planks during installation to ensure that end joints are not bunched and a randomness is achieved in the pattern.
- h. During installation, roll the areas of the floor that are utilizing adhesive with a 3-section 100 lb. roller to ensure proper transference of adhesive to the plank backing.

After Installation

- 1. Be sure planks are set, flat and have tight edges. Re-roll the entire installation along the perimeter and any area where adhesive is used with a 3-section 100 lb. roller to ensure all planks are properly set into the adhesive. If necessary, weigh down any loose planks overnight to ensure bond. Adhesive can be carefully reactivated using a heat gun after drying to re-install planks.
- 2. Clean adhesive residue from the face of the flooring following these directions:

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- a. Wet adhesive residue on the surface of the planks can be cleaned with a clean, white cloth **dampened** with warm, soapy water. Do not use excess water as this can seep between the seams of planks and lead to an adhesion failure!
- b. Dry adhesive residue can be cleaned with mineral spirits or denatured alcohol and a clean cloth in a sparingly manner. Carefully follow the directions on the mineral spirits container. Please note: Please note:
- c. Aerosol spray adhesives can be cleaned up when wet with soap and water on a clean cloth. Dried spray adhesive may require use of a solvent.
- d. Do not pour soapy water, mineral spirits or denatured alcohol directly on the Birkdale Luxury Vinyl Flooring.
- e. If working with epoxy or urethane adhesives you must clean these up while wet according to the adhesive manufacturer's instructions, which can be generally found on the container label.
- 3. NovaFloor adhesives should be cured according to the following guidelines:
 - a. It is important to allow the adhesive to set before accepting any foot traffic for a minimum of 12 to 24 hours. Failure to adhere to this guideline may result in shifting of planks, oozing of adhesive through seams or permanent indentations.
 - b. Do not allow heavy loads, rolling traffic, furniture or fixtures on the floor for 24-48 hours after installation.
 - c. Novalis is not responsible nor will warrant our products in the event that this is not properly followed.
 - d. Proper rolling of floors during and after installation is a must on Luxury Vinyl products. Use a 3-section, 100 pound roller to set flooring into the adhesives.
- 4. In the event that the Birkdale Luxury Vinyl Flooring is not the last portion of the construction project, the floor must be protected from construction traffic and damage. Wait 24 hours and utilize a reinforced fiber protective board or a heavy kraft paper (min. 60 lbs.) and cover the floor. Failure to wait 24 hours before covering can impact adhesive curing.
- 5. Initial maintenance
 - a. Wait 7 days after installation is completed and 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 dry.
- 6. 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 a 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.
- 7. 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 Novalis floor, be sure the mats have a non-staining back. Rubber mats are also not recommended over Novalis 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.





STATEMENT OF WARRANTY

General Terms:

This warranty document covers products manufactured and applied in a residential, light commercial and heavy commercial settings. For products used in commercial applications, please refer to Technical Bulletin NFT_PS002 Commercial Use Guide and NFW-CW01 Commercial Product Warranty for further information. Novalis International reserves the right to classify each installation regarding use according to this published bulletin.

Novalis reserves the right to repair any floor and/or obtain the services of a professional to conduct repairs or replace flooring.

Novalis branded vinyl products when installed in any area, regardless of use designation, must be professionally installed by a certified flooring contractor to validate this warranty. No exclusions or exceptions will be made to this clause.

Self-adhesive, D.I.Y products, closeouts, seconds and cash-n-carry sales are not covered under this warranty.

Product	Residential	Light Commercial	Heavy Commercial
Lyndon	10 years	3 years	
Casa	Lifetime	10 years	5 years
Casa Clic	Lifetime	10 years	
Kempten	20 years	6 years	
Birkdale	Lifetime		10 Years
Hartsfield	Lifetime		10 years

Warranty Periods for NovaFloor Products:

Manufacturing Defect Warranty:

Novalis International warrants that the NovaFloor Collection of solid vinyl planks and tiles will be free from manufacturing defects for a period of 1 (one) year from the date of purchase. If such defect occurs, upon verification of the defect by Novalis, Novalis will authorize repair or replacement of the affected area of installed flooring. Labor reimbursement will be according to approved and reasonable labor charges and must be submitted to Novalis in writing for validation.

Wear Warranty:

Novalis International warrants that the installed product will not wear through to the printed film layer, stain or fade under normal household use for a period of time as defined in Table A above. Wear through is defined herein that the wear layer is sufficiently depleted or compromised so that the printed film layer is damaged, altered or affected from normal use. Stains and fading must be sufficient that the affected area of flooring is permanently discolored from normal household use and cleaning.

Residential Wear Warranty Provisions:

- Novalis will supply new material of the same color, design, and grade, if available; if unavailable or discontinued, Novalis reserves the right to select and supply similar Novalis materials. After corrective action is taken on an existing defect, you will continue to receive warranty coverage for the remaining period of your original warranty.
- One replacement floor only will be made for the wear out, fading and staining. Claimants who received settlement may not claim again and no additional replacement floors will be supplied.
- Alternatively, a refund of up to 100% of the original cost of the material. The percentage of the original cost refundable depends on the amount of time elapsed since the date of purchase:
 - o Within 1-2 years 100%

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- Within 3-5 years 50%
- The costs of professional labor within the approved labor charges put forth by Novalis International, provided
 that the labor is performed according to Novalis International guidelines and standard industry practices.
 Labor must also be provided by a certified professional flooring installer. Labor will be paid according to the
 following schedule:
 - O Within the first 2 years 100% of labor for reinstall
 - O Within years 3-5 50% of labor for reinstall

Warranty Limitations

- This warranty is not transferable.
- Manufacturing defect must be reported within 3 months from the date of purchase.
- This warranty covers only properly installed and maintained floors, according to Novalis installation guidelines and accepted industry practices.
- For products sold as "Do-It-Yourself" or cash-n-carry sales, no reimbursement for labor costs will be provided.
- Novalis excludes and will not pay for any consequential or incidental damages under this limited warranty.
- Novalis will not pay for the loss of time, inconvenience or other incidental expenses incurred during the initial
 installation and the subsequent removal and/or reinstallation of affected material, including clearing any
 items placed over the finished flooring and affected area subsequent to the original installation.
- This warranty does not cover the exclusions indicated on the package.
- Novalis reserves the right of final judgment and may refuse claims in certain instances.
- Novalis reserves the right to modify or withdraw the warranty at any time.

This warranty does not include the following:

- Installed with obvious manufacturing defects.
- Products that have not been properly acclimated according to the Novalis Installation Guidelines.
- NovaClic[™], NovaClic Fd[™] and NovaCore[®] products must not be installed over foam underlayment, with the
 exception of the NFU-100 and NFU-150 Acoustical Underlayment supplied and branded by Novalis
 International.
- NovaFloor direct glue applications requiring an acoustical underlayment will be warranted over Novalis branded underlayment only and provided that the proper Novalis adhesive is used. There is no exceptions to the use of Novalis U200 adhesive with Novalis acoustical underlayment.
- Improper installation or product not installed according to Novalis installation guidelines and accepted industry practices.
- Use of adhesives not supplied under the Novalis International brand and / or improper trowel used during installation. Workmanship errors should be addressed to the contractor who installed the floor.
- Flooring installed in areas not intended for solid vinyl plank or tile.
- Lack of maintenance or improper maintenance; dulled by soaps, detergents, harsh chemicals, dressings, onestep cleaners or wax.
- Damaged by narrow tipped heels, vacuum cleaner beater bars, burns, cigarette burns, cuts, scratches, gouges
 and indentations caused by rolling loads, caster wheels, furniture and chairs without proper floor protectors
 and furniture rests, and cuts caused by sharp objects.
- Damage caused by burns, flooding, fires and other disasters.
- Staining or changes in color caused by dyes tracked from carpet, fertilizers, coal, tar, driveway sealers, oil drippings or other similar materials; faded or discolored by sunlight or heat generation; fading or staining caused by use of rubber mats.
- Problems or damage due to moisture and/or alkalinity in sub floor; discoloration or bond release from hydrostatic pressure or excessive moisture caused by flooding, plumbing and appliance leaks and water leakage from doors.
- Mold and mildew growth caused by excessive moisture.

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- Installed over unstable, unsuitable, or improperly prepared sub floors, wet/cold floor and/or radiant-heated floor in excess of 85°F; 80°F for NovaCore™ products.
- Hazing or finish related issues caused by grout when used with Novalis groutable tiles.
- Different from samples or printed material in shade, color, glossing or embossing.

No person, representative, employee, or agent not employed by Novalis International, LTD. is authorized to modify or change the warranty statements made in this document.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

Claim Filing

To file a claim, contact your retailer or distributor (retail accounts only) to obtain the necessary paperwork. Claim documentation must be filled out in its entirety in order to be assigned a claim number and reviewed for validity. Should the claim require an inspection, you will be contacted by the independent inspector assigned to your claim for scheduling. You may also contact Novalis International direct at 866-668-2547 for further information and filing.

NOVALIS INTERNATIONAL BRANDED ADHESIVES STATEMENT OF WARRANTY

NOVALIS INTERNATIONAL flooring installation adhesives are covered by a standard performance warranty, provided that current Novalis International label and Product Data instructions have been followed, and that all substrate preparations, moisture and pH tests, and installation procedures comply with the standards set by Novalis International, applicable ASTM F-710, RFCI and the floor covering manufacturers' guidelines. Testing for concrete substrate moisture is required to be done in accordance with the latest edition of ASTM F2170, as described in the product specifications.

If these procedures and guidelines have been followed, and substrate moisture and pH test results fall into the specified ranges, a performance warranty shall apply and is as follows:

NOVALIS INTERNATIONAL LIMITED WARRANTY

If an installation failure occurs within 1 year from the date of installation as a direct result of the use of defective Novalis International adhesive, Novalis International will pay for equivalent floor covering and adhesive materials and for reasonable labor costs to repair or replace the failed portion of the installation as determined by Novalis International at its sole discretion. Novalis International specifically excludes any other warranty, express or implied, including merchantability and fitness for particular purpose extending beyond the term of this written warranty and is not liable for any other damages or losses including consequential or incidental damages. The Warranty covers only the adhesive bond and does not include responsibility for effects to the applied floor coverings due to exposure to conditions for which they were not designed.

For this warranty to be valid, Novalis International adhesive products should be used only for their stated purpose, only with products manufactured and branded by Novalis International, LTD., and within one year of their date of manufacture and be applied in accordance with Novalis' application instructions. Any other products used in conjunction with Novalis International products are required to be certified compatible with the Novalis International products.

This warranty does not cover improper installation of the floor covering material or defective floor covering material; installation problems associated with: substrate imperfections; staining due to mold, mildew or bacterial growth, or any other discoloration of the flooring; excessive moisture or pH levels (be sure to perform tests first and take corrective measures before installation); improper maintenance; differences in color between flooring products and

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samples or photographs; indentation from improper loading including high heels, spiked shoes, rolling loads, chairs or other furniture not using floor protectors; failure of the flooring to adhere to the substrate due to, for example, moisture, alkaline or hydrostatic pressure from the substrate; or inappropriate end-user activities. Claimant is required to maintain written documentation of substrate moisture and pH testing.

Novalis International will not warranty adhesives on substrates where silicates have been applied or entrained or where adhesive cleaners or removers have been applied. Warranties for defective or dimensionally unstable floor covering, substrates and underlayment are covered elsewhere in this Commercial Warranty document. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. To file a claim contact your retailer or for other information you may contact Novalis International toll free at 866-668-2547.

Other Conditions and Exclusions Not Covered by this Warranty are:

- Installations on substrates that were not properly tested and prepared as instructed.
- Problems with installations due to the use of silicates or other unapproved sealers or curing additives on the substrate.
- Installations over substrates where hydrostatic pressure exists, or moisture readings are higher than specified for adhesive product.
- Installations over substrates with a surface pH test above that specified for the adhesive product.
- Failure of claimant to have records of moisture and alkalinity testing taken prior to the installation.
- Installation failures due to outside sources of water, such as where outside grade is above substrate, moisture
 or ground water intrusion caused by faulty (or lack of) a vapor retarder under the concrete per ASTM E1745,
 sprinklers soaking ground at the building foundation, overflow drains not directed away from the foundation,
 flooding or other natural disasters or weather conditions.
- Installations taken up or replaced prior to inspection by authorized Novalis International personnel.
- Problems with floor covering installations on chemically cleaned substrates, or from the use of improper cleaning methods.
- Failure of leveling or patch compounds of any kind.
- Damage caused by expansion joints or other structural areas.

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Footnotes

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

Standards for Installation

ASTM	F /10	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

Accredited Organizations for Standard Practices

American Concrete Institute (ACI)

P.O. Box 9094

Farmington Hills, MI 48333

ASTM International
100 Barr Harbor Drive
West Conshohocken, PA, 19428-2959

www.concrete.org www.astm.org

APA – The Engineered Wood Association (APA)

Resilient Floor Covering Institute (RFCI)

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La Grange GA 30240

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