



BUILDER'S CHOICE [LVP]COMPLETE TECHNICAL GUIDE



INSTALLATION | MAINTENANCE | WARRANTY

For the most accurate and updated information please check our online version at www.my-nfp.com.





BUILDER'S CHOICE LVP INSTALLATION GUIDE



For the most up-to-date installation, maintenance, and warranty requirements, please visit www. my-nfp.com. All warranties are based on installation and maintenance guides published on our website at the time of installation.

The intended end user and the installer should have a clear understanding of expectations of the color, installation, and layout of the flooring. Carefully inspect the products before installation for any milling, dimensional, or visual defects. If the flooring supplied does not satisfy the customer, do not proceed with the install. The decision not to proceed must be made within the first 10% or 100 sq ft of the flooring boxes opened, whichever comes first. Open boxes exceeding this amount will not be eligible for return.

[01] GENERAL JOBSITE/HOME CONDITION

TO AVOID COSTLY INSTALLATION MISTAKES, ONLY INSTALL FLOORING IN ROOMS WITH ADEQUATE LIGHTING CONDITIONS.

Important: The requirements listed below are considered standard practices for the flooring industry and are required by most building codes. Following these simple guidelines will greatly extend the life of any fixture in the jobsite/home. Local building codes may vary and will prevail.

- It is the responsibility of the jobsite/homeowner's designated installer to inspect flooring
 prior to installation. Inspect every plank for inconsistency with the finish, texture, milling, color,
 graining, tongue and groove integrity and dimensions. Also check the suitability of the flooring
 product to its environment. Flooring products installed with pre-existing defects or that were
 incorrectly acclimated CANNOT be claimed after installation.
- Verify there are enough materials to complete the job with a minimum of 2% extra for future plank replacements or a minimum of one box, whichever is greater.
- Allow a minimum of 5% waste for culling, shipping damage, and on-the-job waste.

 Drainage from roofs, rain gutters, and other sources of moisture around the jobsite/home must be directed away from the site.

• If there is a crawl space, make sure there is at least an 18" clearance from the dirt to the bottom of the beams. Remove all cardboard from the concrete walls, pillars, and footings, as it will trap and hold moisture. The entire crawl space must be covered with a minimum of 6 MIL plastic (puncture resistant) with all seams overlapped 18" and fully sealed with a moisture proof tape.

- To prevent excessive moisture buildup, all crawl spaces must have a minimum of 1.5 square feet of ventilation for every 100 square feet of crawl space at the exterior of the house for cross ventilation, or an air exchanger will be needed. It may be necessary to install temperature/ humidity activated exhaust fans to create air movement in the crawl space.

 Drainage from roofs, rain gutters, and other sources of moisture around the jobsite/home must be directed away from the site.

 All exterior doors, windows, drywall, painting, and venting must be properly installed prior to the delivery of the flooring to the jobsite/home. Do not store material in exterior sheds, garages, or rooms that are not temperature controlled.

All heating and cooling systems are required to be installed and functioning for at least 14 days before the installation of the flooring begins.

• Use a hygrometer that reads temperature and RH (relative humidity) to check jobsite/home heating and cooling systems. They must be able to maintain a minimum of 35% to 85% RH and 65 to 85°F before, during, and after the flooring installation.

· Small humidifiers are not capable of properly maintaining the humidity levels in large

jobsites/homes. Local heating and cooling air service contractors can provide information for automatic humidifiers/dehumidifiers that work with the pre-existing heating and cooling systems.

• LVP Dryback is intended for interior use only and is suitable for ON or ABOVE GRADE applications.

The substrate surface temperature should never exceed 85°F.

- LVP Dryback flooring is not recommended to be installed in any area of the jobsite/home that has extreme temperature and moisture fluctuations. For example: saunas, hot tub/pool rooms, green houses, exterior porches, or garages. The manufacturer does not warrant against these types of moisture related issues or related damage under their warranty.

[02] IN-FLOOR RADIANT HEAT REQUIREMENTS (HYDRONIC SYSTEM ONLY)

Visit www.my-nfp.com for the current list of products that are approved for in-floor radiant heat. There are unique installation requirements for flooring installed over radiant heat. Prior to installation, it is the responsibility of the jobsite/homeowner's designated installer to check with the manufacturer for a current list of approved installation methods and underlayment requirements.

IN-FLOOR RADIANT HEAT SYSTEM REQUIREMENTS:

• Only flooring that is clearly marked as approved can be installed over in-floor radiant heat.

• Only hydronic in-floor radiant heat systems with failsafe capabilities, to ensure the boiler does not exceed 110°F and surface temperature does not exceed 85°F, are approved.

• Operate the in-floor radiant heat system for at least 14 days prior to the flooring being installed. All moisture in the substrate MUST be evaporated off. This will also ensure all systems are in good running condition.

 To prevent expansion and contraction issues related to the in-floor heat system, a humidity control humidifier must be installed and properly functioning one week before, during, and after the installation for the life of the floor.

• Important: Leave a 1/4" expansion gap around all walls, tubs/ shower, plumbing fixtures, exterior doors, or large Sub-Zero style refrigerators or appliances.

• The in-floor radiant heat systems CANNOT be installed directly below the flooring. The heating element must be embedded a minimum of 1/2" into the concrete, gypcrete, or installed under the wood subfloor. This will ensure the radiant heat is evenly distributed across the substrate before the heat comes into contact with the flooring.

• Set the temperature of the radiant heating system to 65°F 48 hours before, during, and 72 hours after installation. The temperature of the radiant heat floor may be gradually increased 72 hours after installation, but the surface temperature should never exceed 85°F.

• Note: For best performance, it is recommended to use TUFF GRIP PS-99 Modified Transition PSA Adhesive over subfloors with in-floor radiant heating.

IN-FLOOR RADIANT HEAT ACCLIMATION REQUIREMENTS:

• Do not deliver the flooring to the jobsite until all environmental conditions have been met.

During acclimation, do not remove the material from the box or lean boxes on walls. Only
stack the boxes squarely on top of each other, no taller than 3', and keep the stacks a minimum

of 3" apart. • Acclimate for a minimum of 48 hours in the temperature-controlled room it will be installed

Acclimate for a minimum of 48 hours in the temperature-controlled room it will be installed in.

- 48 hours prior to installation, set the temperature of the radiant heating system to 65°F. This setting must remain during install and 72 hours after installation is completed. The temperature of the radiant heat floor may be gradually increased 72 hours after installation, but the surface temperature should never exceed 85°F.

 To prevent the floor from overheating or trapping moisture, never cover the flooring before, during, or after installation with any type of non-breathable or excessively thick rugs, mats, solid surface items, plastic, or a mattress that is laid directly onto the floor. The floor must be allowed to breathe.

[03] IN-FLOOR RADIANT HEAT MOISTURE BARRIERS AND RETARDERS

 The type of moisture barrier needed is usually based on the installation method and substrate. Different types of moisture barriers produce the same end result by doing it in different ways. Check with local building codes and the manufacturer of the radiant heat systems for recommendations.

[04] GENERAL INSTALLATION SPECS

• Avoid installing flooring plank pieces less than 8" in total length against walls or on ends.



Stagger end joints no less than 8".

 Before installation begins, use a jamb saw to undercut all door casings (1/16" between door casing and top of flooring material) and vertical objects coming off the floor. To achieve the correct height, use a piece of flooring as a guide for the saw. Be sure to clean out all debris from under the jambs. This will allow the flooring to slide underneath the object for a clean, professional look.

• Contractors: When setting door casings post-installation of the flooring material, make sure there is adequate space for the flooring material to expand and contract without any hindrance. A minimum of 1/16" spacing is required.

• For an ideal finish around pipes, use rosettes in places where profiles or skirting cannot be placed.

Conditions must be between 65° to 85°F (18° to 29°C) with 35% to 85% RH for a minimum of 48 hours before, during and after installation.

 Confirm the quantity of NFP Dryback flooring and adhesive are sufficient for the area to be installed. Check material for visual defects before installation. Installation of flooring acknowledges acceptance of materials.

Make sure all surfaces to be covered are completely clean, dry, and smooth, and that all
necessary subfloor preparation has been properly completed and documented.

· Perform final acceptance inspection of substrate according to the moisture barrier system used.

 Protect adjacent work areas and finished surfaces from damage that could occur during product installation.

Dryback should be the last material installed, to prevent other trades from disrupting the installation and adhesive set-up, and to prevent damage to the floor.

 Dryback must be rolled with a 100lb roller, according to the adhesive manufacturer recommendation.

- Do not caulk the floor to any permanent or fixed object. The floor must be allowed to float freely.

[05] GENERAL SUBSTRATE CONDITIONS

REMOVAL OF EXISTING RESILIENT FLOORING:

• The manufacturer recommends following the Resilient Floor Covering guidelines for removal of existing tile and mastic. Existing resilient flooring and adhesive should be mechanically removed. The use of adhesive removers or solvents is strictly prohibited. Any mastic remover residue, including soy or citrus products, can attack and break down the new adhesive, resulting in planks releasing from the subfloor. Floor covering warranties do not cover instances where adhesive removers or solvents cause damage to the flooring or installation failure.

 All substrates must be flat and free of dust, loose particles, paint, drywall compound, and must be structurally sound.

- Sand and/or flatten the substrate to within 3/16" dip or rise in 10' or 1/8" dip or rise in 6' radius for.

 If leveling of the substrate is required, use only cement-based leveling compounds. Be sure to follow the leveling compounds manufacturer installation guidelines and make sure it is compatible with the adhesive.

 To prep or flatten the substrate you can use hand-held angle grinders with special cupped diamond grinding wheels and vacuum attachments can be rented or purchased from your local rental or home building center. This system works well with any type of substrate. Use precautions when sanding any surface. Check the substrate for any health hazards. Always wear safety equipment an approved dust mask.

 Dryback flooring can be installed over approved wood sub-floors that are ON or ABOVE GRADE and over concrete or gypcrete substrates that are ON or ABOVE GRADE.

The substrate, when walked on, must not exceed 1/4" deflection in a 6' radius, or more than a 1/16" between the floor joist. If it does, this condition must be corrected before any product installation begins. If not corrected, the subfloor will not stiffen up after the flooring is installed.
 Always check and repair any loose, delaminating, or broken substrates.

WHEN USING TUFFGRIP LSF PRIMER:

All substrates or surfaces must be level, dry, clean, smooth and structurally sound. They
shall be free of any foreign materials that might prevent proper absorption, including dust, dirt,
solvent, paint, wax, oil, grease, residual adhesive, adhesive removers, incompatible sealers,
fire-retardant chemicals, fungicides, release agents, alkaline salts, excessive carbonation,
laitance, mold, mildew, and curing, sealing, hardening or parting compounds.

The substrate, TuffGRIP LSF Primer, adhesive and flooring must be acclimated for at least 48
hours before the installation begins.

APPROVED SUBSTRATES:

Please see complete list of approved substrates on the TuffGrip LSF Primer spec sheet.

- APA underlayment grade plywood and OSB
- Association grade particleboard
- Cement backer board
- Concrete and radiant heated subfloors that do not exceed 85°F (30°C)
- · Gypsum and lightweight concrete

[06] APPROVED SUBSTRATES

PLYWOOD/OSB:

- Do not install over wood subfloors that test above 12% MC (moisture content).

Use only American Plywood Association (APA) rated underlayment grade plywood, with a
minimum grade of "BB" or "CC", and minimum ¼" thickness. Allow expansion spacing between
plywood butt joints of 1/16 or follow manufacturer's instructions. When installing underlayment,
stagger cross-joints 4' on an 8' panel (minimum 16"), lightly butt the panels, and set fasteners
flush or slightly below the surface level of the underlayment. Fill underlayment seams,
nail holes, and any indentations with an approved Portland Cement-type floor patch, allow
recommended drying time, and sand the patch until smooth. Otherwise, use manufacturer
certified poplar, birch, and spruce plywood underlayment, with a fully sanded face and exterior
glue. All dust must be COMPLETELY removed to ensure a strong adhesive bond. Vacuum or sweep
thoroughly, then apply adhesive.

• Note: If installing new wood subfloors from lumber yards, be sure to test the MC (moisture content). Typically, they have higher levels of moisture and may need to acclimate longer.

• Fix all squeaks coming from the wood subfloor prior to installation. Use wood screws, minimum of 2-1/2" lengths, fastened every 6" through the wood subfloor into the joist. Squeaks in the subfloor will not go away after the floor has been installed. Then fill all holes and voids with an approved cement based patch.

• When joists are 16" o/c or less; minimum acceptable thickness is 5/8" CDX plywood or nominal 3/4", OSB 40 LB Minimum density, T&G, with a TECO or APA certification stamp.

- When joists are 16" o/c up to 19.2" o/c; minimum acceptable thickness is 3/4" plywood or
- nominal 3/4", OSB 40 LB Minimum density, T&G, with a TECO or APA certification stamp.
- When joists are 19.2" o/c up to 24" o/c; minimum acceptable thickness is 7/8" plywood or
- nominal 1", OSB 40 LB Minimum density, T&G, with a TECO or APA certification stamp.

CURED CONCRETE/GYPCRETE:

- Cured concrete must be over 3000 PSI. Cured gypcrete must be over 2500 PSI.
- All concrete or gypcrete substrates must be cured for a minimum of 90 days before conducting moisture tests and before any flooring product is ever installed over them.

- Concrete moisture testing should be performed by ASTM F1869 Calcium Chloride Tests with levels NOT exceeding 3 LBS per 1000 ft2 for a 24-hour period, or an ASTM F2170 In-Situ relative humidity test with readings exceeding 80%.

- Gypcrete dries very fast, its recommended to use the mat test or Delmhorst #B2100 moisture meter.

• Test the concrete subfloor for alkalinity. (The pH of the floor should be between 5 and 9).

NEW CONCRETE:

• New concrete subfloors contain a high percentage of residual moisture. Allow new concrete, including lightweight and gypsum toppings, to cure for at least 90 days before conducting moisture tests. In lieu of wet curing, quite often curing agents are applied to concrete slabs to retard the escape of water during the initial curing process. Compounds left on the slab can retard the escape of free water during the drying process and eventually break down over time after the flooring is installed, affecting the integrity of the bond. Solvent-based adhesives will not adhere, and water-based adhesives will not set-up and properly cure. Note: In the event of adhesion failure, the responsibility for warranties and performance guarantees rests with the compound manufacturer and not with flooring manufacturer.

OLD CONCRETE:

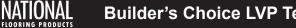
Old or existing concrete subfloors may pose more of a risk than new concrete, therefore
requiring special attention. Remove existing floor covering, all traces of old adhesives, paint, or
other contaminants by scraping, sanding, grinding, shot blasting, or scarifying the substrate.
The use of adhesive removers or solvents in the abatement or removal of existing or old
adhesives is prohibited and may void the manufacturer warranty.

POWER-TROWELED CONCRETE:

Power-troweled concrete surfaces can be very slick, relatively non-absorbent, and may
produce surface laitance. These conditions can have an adverse effect on the bond ability of
subfloor preparation materials, flooring adhesives, and therefore mechanical preparation (such
as shot blasting or scarification) is recommended. Always perform bond tests to determine
suitability.

LIGHTWEIGHT CONCRETE:

 The minimum density of lightweight concrete should be greater than 90 lbs. per cubic foot, with minimum compression strength of 2,500 psi or greater. Existing lightweight concrete or gypsum substrates may need to be primed prior to the installation of flooring. Contact the Subfloor Preparation manufacturer for recommendations, and always perform a bond test before proceeding.



IN-FLOOR HEATING:

 Radiant heating systems must be cast ½" below the surface of the concrete slab and should be operating at least 14 days before installing Dryback flooring. Set the temperature of the radiant heating system to 65°F 48 hours before, at all times during, and 72 hours after installation. The temperature of the radiant heat floor may be gradually increased 72 hours after installation, but the surface temperature should never exceed 85°F. Contact the manufacturer of your radiant heating system for further recommendations.

UNDERLAYMENT PANELS:

Underlayment for resilient flooring must be:

- Subfloor grade
- Structurally sound
- · Specifically designed and warranted for resilient flooring underlavment.
- Approved by the adhesive manufacturer as a suitable
- A minimum of ¼" (6mm) thick
- Of a smooth surface, to prevent telegraphing
- Able to resist indentations
- · Free of any substances that may cause flooring to stain

UNACCEPTABLE SUBSTRATES:

- Asphalt Tile
- Carpeting/Carpet Pad .
- Cementitious Tile Backer Boards .
- Chipboard .
- **Cushion-Back Sheet Vinyl**
- Floating Floors
- Glass Mesh Tile Boards
- Hardboard
- Hardwood .
- Hardwood Engineered Hardwood Over Concrete
- . Masonite
- OSB .
- . Parquet
- Particleboard (Unless it is not association grade) .
- Plywood Fire-Retardant
- Plvwood Knottv
- Plywood Preservative Treated / Treated .
- Rubber Tile
- Self-Stick Tile
- **Sleeper Substrates**
- Strip Wood

NATIONAL FLOORING PRODUCTS RECOMMENDS BOTH ARDEX AND SCHÖNOX SUBFLOOR PREPARATION MATERIALS FOR USE WITH DRY BACK LVP FLOORING AND PREVAIL ADHESIVES. PREVAIL ADHESIVES HAVE BEEN TESTED FOR COMPATIBILITY AND PERFORMANCE AND MUST BE USED WITH THE FOLLOWING SUBFLOOR PREPARATION PRODUCTS.

ARDEX:

- ARDEX K 15[®] Premium Self-Leveling Underlayment
- ARDEX V 1200[™] Self-Leveling Flooring Underlayment
- ARDEX FEATHER FINISH® Self-Drving, Cement-Base Finishing Underlayment
- ARDEX FORTI FINISH™ Self-Drying, Reinforced, Cement-Based Finishing Underlayment
- ARDEX MC RAPID[™] One-Coat Moisture-Control System For Concrete to Receive ARDEX Underlayment's.

SCHÖNOX:

- SCHÖNOX AP Synthetic Gypsum-Based, Self-Leveling Compound
- SCHÖNOX APF Synthetic Gypsum-Based, Fiber-reinforced, Self-leveling Compound
- SCHÖNOX ZM Cement-Based, Self-Leveling Compound
- SCHÖNOX ZM RAPID Rapid-Setting, Self-Leveling Compound
- SCHÖNOX US Cement-Based, Self-Leveling Compound SCHÖNOX EPA Two-Part, Epoxy-Based, Moisture-Mitigation System.

[07] ACCLIMATION (FOR RADIANT HEAT SEE "IN-FLOOR RADIANT HEAT ACCLIMATION REQUIREMENTS" SECTION)

- Acclimate planks (keep cartons flat), adhesive, jobsite, and subfloor to a stable condition
- between 65° to 80°F and 35% to 85% RH for a minimum of 48 hours before installation.
- Installing flooring before it has properly acclimated will greatly increase the chances of expansion and contraction issues and may make it more difficult to install in.
- Do not deliver the flooring to the jobsite until all environmental conditions have been met.
- Acclimate for a minimum of 48 hours in the temperature controlled room it will be installed.
- Never cover the flooring before, during, or after installation with any type of plastic or tar paper. It must be allowed to breathe. Use only breathable floor protective construction paper (FortiBoard) to protect the flooring.

· Propane heaters are not an approved source of heat and can give off extreme amounts of moisture. They also do not provide a reliable and consistent source of heat. In fact, for every gallon of propane or kerosene that is burned, they both will put approximately 1.1 gallons of moisture into the ambient space. The manufacturer warranty will be void if the jobsite/ home heating and cooling system were not fully operational at the time of installation

[08] EXPANSION REQUIREMENTS

• Leave the required ¼" expansion gap around all walls, tubs/shower, plumbing fixtures, large SubZero style refrigerators, exterior doors, etc.

 Once the floor installation is complete, remove all spacers that were used to maintain the expansion gap.

[09] HOW TO PROTECT THE FLOOR DURING & AFTER INSTALLATION

 After each section of flooring has been installed and thoroughly cleaned, cover the floor with a breathable construction paper (FortiBoard). Do not apply the tape directly to the surface of the flooring. It may damage the finish.

 During construction, vacuum the floor as often as it takes to keep the floor free of dirt and construction debris. Never use a beater brush.

· If drywall repairs or any type of sanding is needed, thoroughly cover the floor. These types of dust and grit can damage the floor's finish are very difficult to remove if it gets into the joints. Do not wet mop these types of dust. Always use a vacuum without a beater brush to remove any construction dust if needed.

- Before furniture goes onto the new floor, apply approved 3/16" thick heavy-duty felt pads under all furniture feet.
- Furniture with metal, hard plastic rollers or casters are NOT APPROVED for use on Dryback flooring.

 Never roll or drag anything heavy over the new floor. It will make indentations or scratches in the surface. Always use a soft-tire dolly, a carpet piece turned upside down or an air-sled when moving objects.

Never use a steam mop as the temperature exceeds the temperature allowed for Dryback.

NOTE: BE SURE TO FOLLOW ALL GUIDELINES OUTLINED IN THE ADHESIVE MANUFACTURER INSTALLATION PROVIDED. ALL BOND WARRANTIES FALL SOLELY UPON THE ADHESIVE MANUFACTURER.

IMPORTANT NOTES:

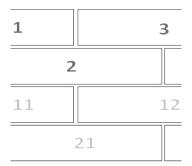
 It is required and extremely critical to start the installation from a perfectly straight line that is squared to the room it is being installed into. Failing to adhere to this requirement will result in gapping in the short or long end of the plank. This condition is absolutely not a manufacturer defect and is not warranted.

· If the installer finds the product not to be cut straight, then the installer is required to immediately stop the installation, find an acceptable solution, then proceed with the installation.

· Working off the longest straight wall, snap a chalk line parallel with the wall that is equal to the width of the wood flooring, plus enough room for the expansion gap. Use blocks of the flooring to maintain the proper expansion gap around all vertical objects coming off the floor (including walls). This will ensure a solid and straight platform to install the next rows against. Once the Dryback plank installation is complete, remove all spacers or blocks that were used to maintain the expansion gap.



NOTE:



Products should be staggered in bricklaid pattern, staggered equal to half of a plank for the first four rows, and randomly from row 5 on. Tools needed: pull bar, spacers, soft-faced hammer, and tapping block.

STEP 1

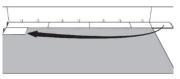
Start the first row by putting up one end of the plank at a 20° to 30° angle, then rotating downward to glue it in place. Continue laying planks to establish the first row.

NOTE:

Pay close attention to the plank edges. Avoid sliding the planks through the adhesive as it is being installed.

IMPORTANT:

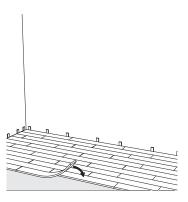
- All Dryback flooring MUST be rolled with a minimum 100 lb roller immediately after and again throughout the installation. Use a hand roller for areas unreachable with the 100lb. roller. Be sure to follow the adhesive manufacturer recommended floor rolling instructions.



STEP 2

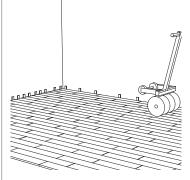
Use a cut piece to start the second row. NOTE: End joint spacing must be at least 8" for all adjacent rows.





STEP 3

Planks should be fitted tight against one another on all four sides



STEP 4

Once planks have been installed, use a floor roller to ensure proper bonding with substrate. Rolling should be performed during the working time of the adhesive (see adhesive manufacturer's instructions).

NOTE: (LIFTING CORNERS OR EDGES)

- If any part of the plank is peaking or is not bonding to the substrate, you may need to use a heat gun and carefully warm the plank as you press and roll the material into this adhesive. Be sure to use heavy flat weight to hold the material down into the adhesive to ensure a secure bond.

BE SURE TO REMOVE ALL SPACERS BEFORE INSTALLATION OF BASEBOARDS.

IMPORTANT:

· Remove all residual adhesive immediately to avoid finish damage.

CAREAND MAINTENANCE GUIDE

Please thoroughly review all care and maintenance guides before the new flooring is cleaned. Using the wrong type of floor cleaner can severely damage the floor's finish. These guides can be found online at www.my-nfp.com

GENERAL MAINTENANCE:

The predominant cause of damage to a floor's finish is abrasion from dirt and grit. It is
important to use walk off mats at entrances and doorways and non-staining floor protectors
under heavy furniture, chairs, and tables.

 Visit www.rugpadusa.com for rug cushions. Use rugs that are made specifically for vinyl floors. Shake them out regularly. Place rugs in any area where water is in use, such as sinks or a pet's water dish.

• To prevent the floor from overheating or trapping moisture, never cover the flooring before, during, or after installation with any type of non-breathable or excessively thick rugs, mats, solid surface items, plastic, or a mattress that is laid directly onto the floor. It must be allowed to breathe.

- Always apply heavy-duty felt furniture pads (at least 3/16") to all furniture feet.
- Metal and hard plastic casters are not approved for use on Dryback floors and may void your warranty.
- Over time, floors may begin to lose their brilliance and require an application of floor polish.
 Frequency and location will depend on the traffic the floor undergoes. A good quality floor polish like"Hilway Direct" can provide up to a year of protection in high traffic areas. Please visit www.hilway.com for information.
- Oil or petroleum-based products can stain flooring surfaces. Do not track asphalt-driveway sealer, motor oil, wood stains, or similar products onto the vinyl floor covering.
- Any flooring may become slippery when wet. Immediately wipe up wet areas from spills and be careful walking on any newly cleaned floor while it is wet.
- · Never use a steam mop as temperatures exceeds the temperature allowed for Dryback

PET GUIDE:

Protecting the beauty of your floor can be easy, even with pets. Follow these simple guidelines to keep your flooring in good condition while having indoor pets.

- Clip your pet's nails regularly. If you can hear the nails clicking on the floor, they need to be trimmed.



- Wipe up any pet waste/vomit as quickly as possible. These accidents, if not properly cleaned up and/or left for long periods of time, are harsh and can damage the finish.
- It is recommended to use natural fiber rugs or a riser to keep water bowls off the floor.
- If your pets are hyper and like to run and slide across the floor, it is recommended to place rugs in these areas to protect the floor

APPROVED CLEANING METHODS:

- Vacuum (WITHOUT BEATER BRUSH), dry mop, or sweep your floor at least once a week or more if needed. Do not let sand, dirt, or grit build up. It will act like sandpaper and abrade and dull the finish. ZEP Neutral pH Floor Cleaner applied with microfiber pads with a terry cloth cover is the recommended way to clean your floor. The best method of removing dirt and grit is vacuuming with a soft brush attachment on your vacuum.

 After all dirt and grit particles have been removed (using a vacuum, dry mop, or broom) lightly spray a mist of the cleaner over a 4' x 6' area of your floor or directly on the cleaning cloth. Thoroughly clean the floor surface and dry if needed. Finish one area before moving onto the next. Repeat the process until the floor is clean. When the ZEP cleaning cloth becomes soiled, rinse with water, thoroughly wringing out the cloth. Once the cleaning cloth becomes excessively soiled, launder and reuse. Excessively soiled cleaning cloths will cause streaking and can abrade the floor. Cleaning LVP flooring with any type of wood polishes, Murphy's Oil Soap, Mop & Glo, furniture polishes, acidic

cleaners (ammonia/bleach) will damage the finish and will void the manufacturer warranties.
 Always follow the installation and maintenance located on our website.

DO NOT USE A VACUUM WITH A BEATER BRUSH.DO NOT USE RUBBER BACKED OR NON-VENTILATED RUGS. THESE TYPES OF RUGS CAN TRAP MOISTURE OR STAIN THE FINISH AND CAN SEVERELY DAMAGE THE FLOOR.

BUILDER'S CHOICE LVP LIMITED-LIFETIME WARRANTY INFORMATION

National Flooring Products Dryback has a manufacturer residential limited lifetime structural warranty and limited lifetime warranty. Some clearly marked products are approved for 10 year light commercial limited warranty.

WHO IS COVERED?

- All warranties outlined in this Limited Warranty are given solely to the original retail purchaser (end-user) of the product. For the warranty to take effect, the flooring must be paid for in full, installed and maintained correctly, and was only used for its intended purpose.
- Dry Back products purchased online from internet retailers are not covered under this warranty, since there is no way to validate the handling, storage, shipping, installation, or sales practices of the source.
- Starting February 1st, 2020, all new National Flooring Products' installations must be registered online within 60 days in order to file a claim

REGISTER AT WWW.MY-NFP.COM UNDER THE "REGISTER MY FLOOR" TAB

WHAT IS COVERED?

• The limited warranties are subject to the Dryback flooring applications, limitations, disclaimers, and exclusions described below and are effective for floors purchased after February 1st, 2020. All warranties begin from the date of retail purchase.

- Moldings (materials ONLY) are covered under this limited warranty for 1 year from date of installation.

TERMS OF MANUFACTURE WARRANTY

- Warranty durations and types will vary depending on the flooring products purchased. Please see the specific warranty found on every sample label or www.my-nfp.com for warranty duration. All warranty claims must be received in writing. The term of warranty is based on the receipt date of the purchase. All credits or replacement material will be arranged by the manufacturer.

RESIDENTIAL USE (LIMITED 25 YEAR WARRANTY)

Year 1: Repair or replacement of faulty material with labor up to maximum labor rate outlined below, if
professionally installed by a licensed installer, and all installation requirements were fully met.

• Year 2: Repair or replacement of faulty material with 50% of labor up to maximum labor rate outlined below, if professionally installed by a licensed installer, and all installation requirements were fully met.

• Years 3-4: Repair or replacement of faulty material with 25% of labor up to maximum labor rate outlined below, if professionally installed by a licensed installer, and all installation requirements were fully met. Labor is not covered after 4 years.

Years 5+: Repair or replacement of faulty material only, if professionally installed, and all
installation requirements were fully met. The percentage covered will be prorated after the 4th
year. For example, for a professionally installed product, that is covered by a Limited Lifetime
warranty, the manufacturer will repair or replace 5/25th (or 80%) of the defective material only.

LIGHT COMMERCIAL USE (BUILDER'S CHOICE LIMITED 10 YEAR WARRANTY)

• Year 1: Repair or replacement of faulty material with labor up to maximum labor rate, if professionally installed by a licensed installer, and all installation requirements were fully met.

• Year 2: Repair or replacement of faulty material with 50% of labor up to maximum labor rate, if professionally installed by a licensed installer, and all installation requirements were fully met.

• Years 3-4: Repair or replacement of faulty material only, if professionally installed, and all installation requirements were fully met. Labor is not covered after 4 years.

Years 5-10: Repair or replacement of faulty material only, if professionally installed and all
installation requirements were fully met. The percentage covered will be prorated after the 4th
year. For example, for a professionally installed product, that is covered by a Limited 7-year
warranty, the manufacturer will repair or replace 5/10th (or 50%) of the defective product only.

FINISH

• We warrant to the original retail purchaser that the wear layer on the surface of the flooring planks will not wear through or separate from the core under approved residential or commercial use, when maintained in accordance with the recommended installation and maintenance guidelines for the length of the warranty (ex. 3-year, 25-year, lifetime). "Wear layer" is defined by the total thickness of the top 20 mil protective layer. "Wear through," is defined as a complete loss of this finish wear layer, so that the printed décor film itself is affected and exceeds 2% of the installed area. Gloss reduction, indentation, scratches, and/or dull appearance are not considered a product defect or surface wear. The Dryback care and maintenance guidelines provided online at www.my-nfp.com are not intended to be an exclusive list. Please note, floors with a high gloss finish will tend to show scratches and dents more easily. These types of wear are considered normal.

STRUCTURAL

- We warrant to the original retail purchaser that the flooring in its original manufactured condition will be free from defects in lamination and assembly for the warranty period. This warranty is non-transferable.

QUALITY ASSURANCE

The manufacturer warrants to the registered purchaser of our flooring products that the floor
will meet the manufacturer quality standards. The intended end user and the installer should
have a clear understanding of expectations of the color, installation, and layout. Carefully
inspect the products before installation for any milling, dimensional, or visual defects. Since
Builder's Choice Dryback is imitating a natural product, there will be natural variations in color,
tone, texture, and graining that are not covered by this warranty. Flooring color variations or
darkening are a natural occurrence and may be due to exposure to sunlight or natural aging. The
samples may not always exactly match the actual flooring received. Inherent variations in grain
or color are not considered as manufacturing defects. This pre-installation warranty expires
upon installation.

WHAT ARE THE CONSUMER'S RESPONSIBILITIES UNDER THIS WARRANTY?

 You must register your new floor at www.my-nfp.com within the first 60 days after installation. The manufacturer may request proof of pre-installation moisture documentation from you



when submitting a claim under this warranty. The manufacturer strongly advocates the use of licensed, experienced installers for best results. If using a professional wood flooring licensed installer, you may be asked for the name and license number when submitting a claim.

The installer must thoroughly inspect every flooring plank in each carton before permanent
installation. The manufacturer is not responsible for any labor or damages incurred by delivery
delays, flooring product not matching the samples, wrong product installed, dye lot (mismatch),
installation, or jobsite conditions. The installer/owner is the final inspector and assumes the
responsibility to determine if the product is correct and acceptable before installation begins.

• To ensure repairs can be made in the future, it is required a minimum of 2% or one whole box (whichever is greater) of the floor be kept in unopened boxes in a temperature-controlled room. This 2% or the one box can be used by the manufacture for plank replacement as needed.

- The flooring must have been installed in accordance with all manufacturer installation guidelines.

 A minimum of 5% extra material should have been added for waste factor to the actual footage needed as allowance for product culling, cutting, waste, and mismanagement.

Maintenance must be properly performed as needed in accordance with the manufacturer care and maintenance

 Damage caused from excessive moisture coming from any source that exceeds the substrate/ subfloar maximum maintum contact loads at high a manifesturer in this guide.

subfloor maximum moisture content levels set by the manufacturer in this guide.
 Motorized wheeled objects or wheelchairs Exceeding total 300 pounds of rolling weight,

which are not covered under the terms of this warranty.

 Floors damaged or adhesive breakdown caused by subfloor moisture or water damage, including without limitation, due to broken or leaking water pipes, ground moisture, flooding, EXTREME wet mopping spills, steam mopping, damage, or unapproved cleaning agents.

WHAT IS THE MANUFACTURER'S RESPONSIBILITY UNDER THIS WARRANTY

 PRE-INSTALLATION - Should the material be doubtful as to grade, manufacturing, texture, color, graining, dye lot, excessive shipping damage, factory finish, those defective materials shall not be more than 5% of total. If the manufacturing defects exceed 5%, the manufacturer will supply additional material for replacement and cover standard shipping fees to the retailer.

If any of the covered events occur within the warranty period, the manufacturer will furnish another comparable flooring that it manufactures (of similar pricing, specifications, and quality) for either the repair or the replacement flooring material of the defective area, at the manufacturer's sole discretion. Dryback floors that were installed correctly will be eligible for labor cost reimbursement up to a maximum of \$2.99 per square foot of the installed area. If the floors were installed using TuffGrip PS-99, the manufacturer will reimburse an additional \$0.50 per square foot if permitted and all installation specifications were met. If the floors were installed incorrectly by a non-licensed installer, the manufacturer assumes no responsibility for any labor cost associated with such repairs or replacement. In the event that we are unable to correct the problem after a reasonable number of attempts, or if the replacement or repairs fail in the same manner a second time, we will refund the wholesale portion of the purchase price for the section of failed flooring.

 These warranties do not cover removal or replacement of cabinets, electrical fixtures, plumbing fixtures, handrails, transitions, moldings, furniture, or any other fixtures of the jobsite/home. These are the exclusive remedies under this warranty if a defect or other warranted condition occurs. We reserve the right to verify any claims or defects by inspection and have samples removed for technical analysis.

LIMITED PETPROOF WARRANTY DOES NOT COVER?

· Any urine, feces, or vomit stains other than pets.

WHAT IS NOT COVERED UNDER THIS WARRANTY?

- Damage caused by fire, flooding, and other natural disasters.
- Damage caused by negligence, accidents, misuse, abuse, or man-made disasters.
- Damage caused by vacuum cleaner beater brush or hard heads.
- Damage caused by appliances, furniture, and casters.
- Damage caused by cutting from sharp objects, tape, adhesive, or burns.

 Damage caused by the use of NON-APPROVED cleaning products or methods such as: wax, wood polish, alkaline products, any abrasives, wet or steam mopping, etc.

- Construction or installation related damage. (Examples: chips, dents, scratches, etc.)
- · Reduction in gloss, scratches, or indentation due to sand, pebbles, other abrasives, pets,
- insects, construction traffic, or failure to maintain the floor as required.
- Reduction in gloss or any finish distortion from removing any adhesives or chemicals.
- Mold or mildew growth from over cleaning, steam mops, leaking pipes or any other water

sources.

- Color, shade, or texture variations between samples or replacement flooring and the actual material.

 Product warping, buckling, cupping related to any water related occurrence (floods or extreme wet mopping).

• Fading or color change due to UV rays from direct sunlight.

 Deficiencies related to subfloor/floor joist assemblies, subfloor preparation materials, and fasteners including, but not limited to, uneven subfloor surfaces, floor deflection, or voids in the subfloor.

· Noises (squeaking, popping, crackling, etc.) associated with subfloor movement.

 Naturally occurring characteristics such as variations in the printed layer/film, graining, color, mineral streaks, and knots.

- Seasonal gapping caused by natural expansion and contraction resulting in separation between boards, or damage caused by low or excessive humidity.

- Floors installed in rooms with extreme direct sunlight or external heat sources where the surface temperature of the floor drops below 65°F or exceeds 85°F.
- Floors damaged from in-floor radiant heat, from the use of rugs, mats, or mattresses laid directly on the floor, or any solid surface item that causes the floor to overheat.

 Floors installed over substrates with excessive moisture (MC/RH), and/or installed without an approved moisture barrier/retarder.

• Floors installed with NON-APPROVED adhesives. All bond and moisture related warranties come solely from the manufacturer of the adhesive and moisture retarders. The manufacturer of the flooring is not liable for bonding or moisture related warranted failures.

- Floors installed with NON-APPROVED underlayment or padding. All padding, vapor barriers, and underlayment must be specifically approved for use under our Dryback floors.
- Floors installed over in-floor radiant heating systems that were not approved. The in-floor radiant heating system must meet all requirements specified in the Builder's Choice Dryback manufacturer installation guidelines. Gapping between boards may occur on any plank flooring installed over an in-floor radiant heating system and is not considered a defect.

 Floor damage caused by in-floor heating element not embedded minimum of 1/2" into the substrate.

 The warranty does not apply to products designated as "BARGAIN," "CABIN GRADE," "SECONDS," "CLOSEOUT," "DISCONTINUED," OR "NON-STANDARD." SUCH PRODUCTS ARE SOLD "AS IS."

COMMERCIAL INSTALLATIONS, UNLESS OTHERWISE NOTATED PRE-INSTALLATION. APPROVED COMMERCIAL INSTALLATION TYPES ARE AS FOLLOWS:

SCHOOLS

- Training & Meeting Room, Common Area.

MEDICAL FACILITY:

- · Storage Room, Waiting Room, Patient Room,
- Examination Room

RETAIL:

- Product Display Area, Boutique, Sales Floor, Showroom,
- Hair Salon (excluding damages to finish caused by chemicals)

HOTELS:

- Conference/Meeting Rooms, Bathrooms

OFFICES BUILDINGS:

Office, Conference/Meeting Room, Showroom, Dining Room, Break Room, Hallways

EXCLUSIONS FROM THIS WARRANTY INCLUDE

- YOUR EXCLUSIVE REMEDY AND MANUFACTURER'S SOLE LIABILITY OF ANY CLAIM, WHETHER IN TORT, CONTRACT, OR BREACH OF WARRANTY, SHALL BE LIMITED TO THE REPAIR, REPLACEMENT, OR REFUND OF THE APPLICABLE PURCHASE PRICE OF THE DEFECTIVE GOODS AS SPECIFIED HEREIN. IN NO EVENT AND FOR NO CAUSE WHATSOEVER, INCLUDING ANY BREACH OR DEFAULT BY NEGLIGENCE, SHALL MANUFACTURER HAVE ANY OTHER LIABILITY (INCLUDING WITHOUT LIMITATION INCIDENTAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES) OR ANY MONETARY LIABILITY TO YOU IN EXCESS OF THE CONTRACT PRICE OR PRICES OF THE PERTINENT PRODUCTS IN QUESTION.

• FOR CERTAIN PRODUCTS, ANY OR ALL DISPUTES ARISING OUT OF MANUFACTURER'S TUFFCORE FLOORING PRODUCTS OR THIS WARRANTY SHALL BE SUBJECT TO MANDATORY AND BINDING ARBITRATION IN LOS ANGELES, CALIFORNIA, PURSUANT TO THE RULES OF AMERICAN ARBITRATION ASSOCIATION. ANY TRIALS BY JURY ARE EXPRESSLY WAIVED.

• THIS WARRANTY DOES NOT APPLY TO DISCONTINUED ITEMS, CLOSE OUT ITEMS, OR ITEMS SOLD



"AS IS." ALL SUCH PRODUCTS ARE SOLD "AS IS" AND SHALL NOT HAVE ANY WARRANTY OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, ANY EXPRESS WARRANTIES, IMPLIED WARRANTIES, WARRANTIES OF MERCHANTABILITY (EXPRESS OR IMPLIED), WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE (EXPRESS OR IMPLIED), OR ANY OTHER WARRANTIES REQUIRED BY LAW OR FACT.
SOME JURISDICTIONS DO NOT ALLOW EXCLUSION OR LIMITATIONS OF INCIDENTAL OR CONSE-QUENTIAL DAMAGES OR LIMITATIONS ON HOW LONG IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. THESE WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION.
NO RETAILER, DISTRIBUTOR, MANUFACTURER, EMPLOYEE, OR SALES AGENT REPRESENTATIVE HAS THE AUTHORITY TO ALTER THE OBLIGATIONS, LIMITATIONS, DISCLAIMER, OR EXCLUSIONS UNDER ANY OF OUR WARRANTIES. WE EXCLUDE AND WILL NOT BE LIABLE FOR OR PAY INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES UNDER OUR WARRANTIES. MEANING ANY LOSS, EXPENSE, OR DAMAGE OTHER THAN TO THE FLOORING ITSELF THAT MAY RESULT FROM A DEFECT IN THE FLOORING. OUR LIMITED WARRANTIES FOR THE PRODUCT PURCHASED.

WHAT SHOULD THE CONSUMER DO IF THERE IS AN ISSUE WITH THEIR TUFFCORE FLOOR?

In the event of a claim, please contact the retailer where the flooring products were purchased. The retailer will fill out all claim forms and notify National Flooring Products. Claims may take up to 60 days to process. A National Flooring Products representative will contact the homeowner to schedule any inspections and repair work if the manufacturer deems the claim is warranted. This could include but may not be limited to hiring a Certified Inspector. Certified Inspectors are independent of any mills, distributors, dealers, or cleaning companies to give an unbiased evaluation of any floor conditions. If an inspector deems the floors claim warranted, they will typically give a remedy on how to fix the floor. The manufacturer will strongly consider the inspector's suggestion or remedy. Please keep all your product registration, pre-installation, and post-installation receipts including but not limited to your sales receipt, pre-installation moisture test, photos, installer's name, phone number, and license number. Information regarding the claimed defect, date, and proof of purchase must be provided

PRODUCT DISCLAIMER

Real wood flooring is a natural product with resulting variations in graining, hardness, color, tone, sheen levels, and texture. Dryback products are made to look like wood flooring and are manufactured to resemble natural products with the same variations in graining, color, tone, sheen levels, and texture. National Flooring Products has attempted to the best of its ability to provide reliable representation of all of its products and their features but cannot be held liable for these variations. National Flooring Products has provided pictures as a courtesy to our customers and due to the nature of photography and digital representations we cannot guarantee that the physical product will look exactly like the pictures, or the images contained within the website or on any printed media. It is recommended to obtain an actual sample of the product prior to ordering. It is the customer's responsibility to inspect all flooring prior to installation for any visible natural variations or pre-installation manufacturer defects. Installations of the flooring with any visible defects constitutes acceptance of these defects and cannot be claimed under any warranty after installation. All warranties are provided solely by the manufacturer of the product, not all products are manufactured by National Flooring Products. In the event of a claim, the National Flooring Products customer service team will assist the customer, but it is ultimately between the customer and the manufacturer to resolve. All transitions, vents, stair treads, and risers have a one-year finish manufacturer warranty from the date of purchase. Any transitions, vents, or special items that are installed or altered in any way are not eligible for return or credit. All sales of special-order items are final.

GENERAL DISCLAIMER

National Flooring Products has attempted to the best of its ability to provide accurate information on all marketing media and informational documents. To our knowledge, the information contained within the website and all published documents are correct. By exploring and using this information, you agree not to hold National Flooring Products liable for using this information. National Flooring Products shall in no way be held liable for any damages resulting from, coming out of, or in relation to the use of the information. Pictures and related documents may contain technical inaccuracies or typographical errors. National Flooring Products reserves the right to make changes, additions, and removal of any documents, information, or graphics in this website at any time without notice. All information provided on this website is copyrighted and may not be reproduced without written consent. © 2024



APPROVED FLOORING TYPES

RESILIENT: Linoluem, **Modular** (LVP, LVT, woven, rigid core [dryback], SVT, VCT, VET), **Rubber** (crumb, sheet, tile), **Sheet** (fiberglass, heterogeneous, homogeneous), **Stair Treads** (rubber, vinyl) **CARPET: Broadloom** (6-ft vinyl-backed, Action-Back, jute-back, double-stick - carpet-to-cushion & cushion-to-substrate, hot-melt-backed, HP-& vinyl-backed, non-vinyl-backed patterned, polyurethane, rubber-backed, unitary & unitary Action-Back, woven-backed), **Modular** (hard-backed, soft-backed, walk-off) **WOOD: Cork** (cork-backed hard surface, underlayment)

THIS PRODUCT DOES NOT OFFER MOISTURE PROTECTION

APPROVED SUBSTRATES & SURFACES

- APA underlayment grade plywood and OSB
- Association grade particleboard
- Cement backer board
- Cementitious and anhydrite screeds
- Concrete and radiant heated subfloors that do not exceed 85°F (30°C)
- Existing well-bonded non-cushion-backed vinyl, tile and sheet flooring
- Fully secured cork underlayments
- Gypsum and lightweight concrete (primed with a universal primer)
- Terrazzo (properly prepared with all waxes and surface finishes removed)

SUBSTRATE TESTING

RH - 99% [ASTM F2170] pH - 5-12 [ASTM F710] MVER - 12 lbs [ASTM F1869]

PRECAUTIONARY NOTE:

• This product does not form a moisture vapor barrier and will not protect flooring from moisture damage.

SUBSTRATE & SURFACE PREPARATION

Follow flooring manufacturer's guidelines. Substrate must be prepared per ASTM F710 standards including, but not limited to the following:

- Concrete floors must be dry, clean, smooth and structurally sound. They shall be free of any foreign materials that might prevent adhesive bond, including dust, dirt, solvent, paint, wax, oil, grease, contaminants from sweeping compounds, residual adhesive, adhesive removers, incompatible sealers, fire-retardant chemicals, fungicides, release agents, alkaline salts, excessive carbonation, laitance, mold, mildew, and curing, sealing, hardening or parting compounds.
- Fill all surface cracks, grooves, depressions, control joints and non-moving joints with moisture resistant patching and selfleveling compounds, allow to fully cure and correct high spots before applying adhesive.
- The substrate, adhesive and flooring must be acclimated in an enclosed building with the HVAC operational at service temperature, between 60-95°F (15-35°C), and between 30-65% relative humidity, for at least 72 hours prior to, during, and permanently after installation.
- When installing over radiant heated subfloors, turn the heat off for 24 hours before, during and after installation. Failure to turn the heat off may result in shortened working time of the adhesive. When turning radiant heat back on, raise it incrementally, not to exceed a change of more than 5 degrees per hour to a maximum of 85°F (29°C).

PRECAUTIONARY NOTES:

• Concrete must be placed in strict accordance with applicable standards and specifications. An intact moisture vapor retarder must be present below the concrete (see ASTM E1745), must be fully cured (at least 45 days), without hydrostatic pressure, without pressurized liquid from any source, and free of surface alkaline salt crystallization.

APPLICATION INSTRUCTIONS

Follow flooring manufacturer's guidelines for layout, design and any special precautions for installation.

- **1.** Spread adhesive using required tools.
- **2.** Install flooring per instructions below dependent upon desired application (flash and working times dependent upon temperature and humidity).







- Dry-set, PSA (porous and non-porous substrates)
 - Wait 30-60 minutes after adhesive is spread to allow flash off. Adhesive will darken to visually cue installer.
 Working time ~12 hours.
- Semi-wet set (porous substrates only)
 - Wait 20-30 minutes after adhesive is spread to allow it to skin over
 - Working time ~20-30 minutes.
- For sheet vinyl, back-roll the adhesive with an adhesive saturated roller to smooth out the trowel ridges.
- 3. Roll and cross roll floor with 75-100 lb roller at the end of the installation to ensure proper adhesive transfer.
- Sheet goods roll from center toward perimeter to expel trapped air.
- Check flooring after 2 hours and roll again if necessary.

PRECAUTIONARY NOTES:

- Although this is a high-moisture tolerant adhesive, it does not form a moisture vapor barrier and will not protect flooring from moisture damage.
- Wait 24 hours before heat welding sheet goods.
- Wait 72 hours before wet mopping, or stripping/finishing the floor.
- Reseal lid when not in use to protect product.

REQUIRED TOOLS AND COVERAGE

*Trowel dimensions are width X depth X spacing. Coverage is approximate and may vary depending on porosity of substrate and the angle at which the trowel is held.

FLOORING TYPES	TOOL* (IMAGES NOT TO SCALE)		ESTIMATED COVERAGE		
BOND ONLY					
RESILIENT: Modular (LVP/LVT [non-porous], SVT, VCT, VET), Sheet (heterogeneous/homogeneous [non-porous]), Stair Treads (rubber/vinyl [non-porous]) CARPET: Modular (hard- backed/soft-backed [non-porous])	1/16" x 1/32" x 1/32" U Notch		220-260 ft²/gal		
RESILIENT: Linoleum, Modular (LVP/LVT [porous], woven, rigid core [dryback]) Rubber (crumb, sheet, tile), Sheet (heterogeneous/homogeneous [porous]), Stair Treads (rubber/ vinyl [porous]) CARPET: Broadloom (6-ft vinyl-backed, double- stick-cushion-to-substrate) Modular (hard-backed/soft-backed [porous], walk-off) WOOD: Cork (cork-backed hard surface, underlayment)	1/16" x 1/16" x 1/16" Sq Notch		150-180 ft²/gal		
CARPET: Broadloom (Action-Bac, jute-back, hot-melt-backed, HP & vinyl-backed, non-vinyl-backed patterned polyurethane, rubber- backed, unitary Action-Bac)	1/8" x 1/8" x 1/16" V Notch		90-120 ft²/gal		
CARPET: Broadloom (double-stick - carpet-to-cushion, unitary, woven-backed)	1/8" x 1/8" x 1/16" U Notch		50-65 ft²/gal		
RESILIENT: Sheet (fiberglass) CARPET: Modular (hard-backed)	3/8" Short Nap Paint Roller	l	Up to 350 ft²/gal		

*It is the sole responsibility of the contractor/installer to determine the proper porosity of the subfloor, apply the correct amount of adhesive for the job conditions and ensure that all instructions, procedures and practices are strictly adhered to.









CLEANING INSTRUCTIONS

While product is still wet: Use a damp cloth and water to remove.

While product is still soft: Use denatured alcohol, mineral spirits, or an adhesive remover/stripper. Always check compatibility on a piece of scrap flooring.

STORAGE

This product should be stored at temperatures between 50-90°F (15-32°C). While this product is freeze-thaw stable, it is necessary to protect it from freezing. Freeze/thaw stable to 10°F (-12°C).

CAUTION

DO NOT take internally. If swallowed, DO NOT induce vomiting. Call a physician immediately. KEEP OUT OF REACH OF CHILDREN.

WARRANTY INFORMATION

For warranty information, call Technical Services at 877-238-3225, visit us on the web at www.my-nfp.com or e-mail us at customerservice@nationalflooringproducts.com. Flooring manufacturer's and National Flooring Products written pre-installation and installation instructions must be strictly followed or the National Flooring Products warranty will be void.





PRODUCT INFORMATION

	Product Classification	Firm-Set, Modified Transitional Pressure Sensitive* Adhesive	
-	Base Chemistry	Hybrid acrylic	
	Curing Method	Proprietary modified cross-linking	
	Appearance/Color	Tan	
PRODUCT	Odor	Extremely low	
CHARACTERISTICS	Consistency	Smooth, medium viscosity liquid	
	Application	Easy troweling/rolling	
	Flammability	Non-flammable	
	Freeze/Thaw	Stable to 10°F (-12°C) [3 cycles]	
	Shelf Life [Unopened Container at 70°F]	2 years	
-	Moisture Control	No	
	RH [ASTM F2170]	99%	
TESTING	рН	5-12	
	MVER [ASTM F1869]	12 lbs	
	Porosity [ASTM F3191]	N/A	
	Open Time	20-30 min (semi-wet-set)	
	Flash Time	30-60 min (PSA)	
ТІМЕ	Working Time	20-30 min (semi-wet-set); 12 hrs (PSA)	
-	Cure Time	12 hrs	
	Pot Life	N/A	
	Light Traffic	0 min (PSA), 12 hrs (Semi-wet-set)	
TRAFFIC	Heavy Traffic	24 hrs	
	Rolling Loads	48 hrs	
	STC	N/A	
ACOUSTICS*	ііс	N/A	
	Delta IIC	N/A	
	Solvents	No	
	Isocyanates	No	
	VOC Wet Applied [g/L] [SCAQMD Rule #1168]	< 11 g/L	
SUSTAINABILITY	Bio-Based Content	Yes	
	Post-Consumer Recycled Content	Yes	
	Mineral Abundant Content	Yes	
	LEED v4/4.1 Points	Contributes to low emitting materials	
	Certifications	FloorScore*, Green Label Plus*, GREENGUARD*	
	Transparency	N/A	
WARRANTY**	Duration	10-Year Performance Warranty	
	Coverage	Bond	

*IIC (delta) and STC (delta) ranges are flooring assembly specific based on third party testing and verification in a controlled environment. For any questions or further information, please contact National Flooring Products Technical at 877-238-3225. **For warranty information, view Product Warranty Certificate.





TUFFGRIP LSF PRIMER

APPROVED SUBSTRATES & SURFACES

- APA underlayment grade plywood and OSB
- Association grade particleboard
- Cement backer board
- Concrete and radiant heated subfloors that do not exceed 85°F (30°C)
- Gypsum and lightweight concrete

SUBSTRATE TESTING

RH - 75% [ASTM F2170] **pH -** NTR 5-14 **MVER -** 5 lbs [ASTM F1869] **Porosity** - CSP 1+, must pass [ASTM F3191]

SUBSTRATE AND SURFACE PREPERATION

- All substrates or surfaces must be level, dry, clean, smooth and structurally sound. They shall be free of any foreign materials that might prevent proper absorption, including dust, dirt, solvent, paint, wax, oil, grease, residual adhesive, adhesive removers, incompatible sealers, fire-retardant chemicals, fungicides, release agents, alkaline salts, excessivecarbonation, laitance, mold, mildew, and curing, sealing, hardening or parting compounds.
- The substrate or surface and TuffGRIP LSF Primer (and adhesive and flooring if applicable) must be acclimated in an enclosed building with the HVAC operational between 60-95°F, and between 30-65% relative humidity, for at least 72 hours before, during and after the installation.

PRECAUTIONARY NOTES:

- Concrete must be placed in strict accordance with applicable standards and specifications. An intact moisture vapor retarder must be present below the concrete (see ASTM E1745), must be fully cured (at least 45 days), porous (see ASTM F3191), and without hydrostatic pressure.
- Concrete must be a minimum of 2500 psi and without visible or standing water.

APPLICATION INSTRUCTIONS

Follow flooring manufacturer's guidelines for layout, design and any special precautions for installation. READY TO USE, DO NOT DILUTE.

1. Spread product using required tool.

• Cure time ~ 30-60 minutes under acceptable temperature and humidity conditions

PRECAUTIONARY NOTES:

- Allow product to fully cure (dry to the touch) before applying any adhesive over top.
- Reseal lid when not in use to protect product.

REQUIRED TOOLS AND COVERAGE

*Trowel dimensions are width X depth X spacing. Coverage is approximate and may vary depending on porosity of substrate and the angle at which the trowel is held.

FLOORING TYPES	TOOL* (IMAGES NOT TO SCALE)		ESTIMATED COVERAGE	
PRIMER ONLY				
For use under all glue-down, loose-lay, and floating floors	3/8" Short Nap Paint Roller		300-450 ft²/gal	

*It is the sole responsibility of the contractor/installer to determine the proper porosity of the subfloor, apply the correct amount of adhesive for the job conditions and ensure that all instructions, procedures and practices are strictly adhered to.





TUFFGRIP LSF PRIMER

CLEANING INSTRUCTIONS

While product is still wet: Use a dry cloth immediately to remove any excess adhesive from the surface of the wood. While product is still soft: Use a remover/stripper, denatured alcohol or mineral spirits. Always check compatibility on a piece of scrap flooring.

STORAGE

This product should be stored at temperatures between 50-90°F (15-32°C). PROTECT FROM FREEZING.

CAUTION

DO NOT take internally. If swallowed, DO NOT induce vomiting. Call a physician immediately. KEEP OUT OF REACH OF CHILDREN.

WARRANTY INFORMATION

For warranty information, call Technical Services at 877-238-3225, visit us on the web at www.my-nfp.com or e-mail us at customerservice@nationalflooringproducts.com. Flooring manufacturer's and National Flooring Products written pre-installation and installation instructions must be strictly followed or the National Flooring Products warranty will be void.





TUFFGRIP LSF PRIMER

PRODUCT INFORMATION

	Product Classification Universal Latex Primer Coating		
PRODUCT	Base Chemistry	Acrylic Latex	
	Curing Method	Evaporation	
	Appearance/Color	Milky-white	
	Odor	Extremely low	
CHARACTERISTICS	Consistency	Liquid	
	Application	Easy rolling	
	Flammability	Non-flammable	
-	Freeze/Thaw	Protect from freezing	
	Shelf Life [Unopened Container at 70°F]	2 years	
	Moisture Control	No	
	RH [ASTM F2170]	75%	
TESTING	рН	NTR 5-14	
	MVER [ASTM F1869]	5 lbs	
	Porosity [ASTM F3191]	N/A	
	Open Time	N/A	
	Flash Time	N/A	
TIME	Working Time	N/A	
	Cure Time	30-60 min	
	Pot Life	N/A	
	Light Traffic	N/A	
TRAFFIC	Heavy Traffic	N/A	
	Rolling Loads	N/A	
	STC	N/A	
ACOUSTICS*	ііс	N/A	
	Delta IIC	N/A	
	Solvents	No	
	Isocyanates	No	
	VOC Wet Applied [g/L] [SCAQMD Rule #1168]	0 g/L	
SUSTAINABILITY	Bio-Based Content	No	
	Post-Consumer Recycled Content	No	
	Mineral Abundant Content	No	
-	LEED v4/4.1 Points	Contributes to low emitting materials	
	Certifications	FloorScore [*] , Green Label Plus [*] , GREENGUARD [*]	
	Transparency	N/A	
WARRANTY**	Duration	10-Year Performance Warranty	
WARRANI I **	Coverage	Product Performance	

*IIC (delta) and STC (delta) ranges are flooring assembly specific based on third party testing and verification in a controlled environment. For any questions or further information, please contact National Flooring Products Technical at 877-238-3225.







INSTALLATION | MAINTENANCE | WARRANTY

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