

Limited Product Warranty and Maintenance

This warranty is extended to the original purchaser ONLY with proof of purchase from Tyann's authorized dealer and is not transferable.

IMPORTANT: Tyann's installation and maintenance guidelines MUST be followed as a condition for this warranty to apply. Please refer to Tyann's installation and maintenance guidelines that come with your products or visit www.tyannflooring.com for the most recent installation and maintenance guidelines. It is the responsibility of the installer and/or homeowner to inspect each piece of plank prior to installation. Planks that appear to have defects or are visually unacceptable should not be installed. Tyann Flooring accepts no responsibility for any claim when planks with visible defects or irregularities have been installed.

Residential and Light Commercial Warranty

This warranty applies to Tyann LVP Flooring purchased from an authorized dealer and installed in a residential or light commercial area. Tyann warrants that its LVP flooring sold under this warranty is, at the time of sale, free from defects in material and manufacturing and that it conforms to the standard specifications for the product category. Tyann further warrants that when installed and maintained according to Tyann's installation and maintenance guidelines, the flooring will not wear through, delaminate, separate, buckle or cup as a result of manufacturing defects. If your flooring fails for any of the above reasons, Tyann will replace, at its sole option, a portion or all the flooring with new products of the same or similar style, size, color, grade, and gauge at no cost to the original purchaser so long as the original purchaser still owns the property where the flooring was installed. This warranty covers the replacement material only and excludes any labor costs. This warranty applies only to flooring maintained in normal environmental conditions, meaning that the heating and ventilating systems are working to maintain an interior humidity level between 30% to 50% and a room temperature between 65°F to 85°F year-round.

Warranty Period

Tyann LVP (Glue Down) flooring is warranted to be free from manufacturing defects for 15 years from the date of purchase in a residential application and for 5 years in a light commercial application.

Tyann Rigid Core LVP (Click On) flooring is warranted to be free from manufacturing defects for 35 years from the date of purchase in a residential application and for 15 years in a light commercial application.

Warranty Exclusions & Limitations

In addition to any limitations set forth above, the following are not covered by this Limited Warranty:

- Dissatisfaction or damages due to improper installation, improper adhesive, improper or insufficient maintenance,
- Color variations or reduction of gloss as a natural occurrence due to age and exposure to UV light or sunlight,
- Differences in color between actual products and samples, photographs or printed illustrations,
- Indentations or scratches caused by furniture, appliances, spiked shoes, cleats, pivot points (i.e., seating areas), heavy objects, wheelchairs, walkers, sand, pebbles or other abrasive materials,
- Floor installed over radiant floor heating with surface temperature over 85°F,
- Damages due to abuse, neglect, abnormal use or misuse, or unnecessary bending of the planks (e.g., bending the planks over 90 degrees), application of solvents, corrosives, or other improper cleaning or maintenance products,
- Damages due to excessive moisture from subfloor, broken or leaking plumbing or appliance, wet mopping, mold, mildew, alkali, or hydrostatic pressure,
- Damages caused by smoke, fire, floods, other casualties or natural disasters,
- Flooring installed over improperly prepared or unstable subfloor,
- Damages caused by exposure to extreme heat or sunlight,
- Discoloration or stains from overlying rugs or floor mats,
- Damages caused by vacuum cleaner beater bar,
- Products sold "as is," or products sold as irregulars, seconds or other than first quality materials.

If you feel you have a warranty claim, first contact your original flooring dealer and explain your concerns. Often, a flooring dealer can provide a simple solution to correct the situation.



Limited Product Warranty and Maintenance

Disclaimer – Terms of Use

TYANN DISCLAIMS LIABILITY FOR INCIDENTAL AND CONSEQUENTIAL DAMAGES INCLUDING DOWNTIME, LOSS OF PROFIT OR REVENUE AND DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO ITS PRODUCT. THE ABOVE REMEDIES ARE THE CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES FOR CLAIMS ON TYANN'S PRODUCT.

This warranty constitutes the entire agreement of the parties, and no waiver or amendment shall be valid unless in writing and signed by an authorized representative of Tyann Flooring. Some states do not allow the exclusion or limitation of consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may have other rights that vary from state to state. Cleaners or Compounds, Floor Wax, Vacuum with a rotating beater bar, One-step cleaner/polishes, Steam mops, Harsh scouring or buffing pads or tools.

- Do not soak or saturate the floor.
- Do not wax or refinish the rigid vinyl floor.

General LVP Protection:

- Always lift and carry furniture do not drag furniture or heavy items across the floor.
- Use wide floor protectors (furniture cups, felt pads, area rugs, etc.) under chairs, tables, and heavy objects.
- Use mats outside of entranceways to trap dirt, sand, asphalt, driveway sealer, grit, oil, etc.
- Mats placed on LVP should not have rubber or latex backing to prevent discoloration.
- Window coverings are necessary in direct sunlight, as LVP may discolor or buckle under prolonged exposure to the sun.
- Avoid the use of stiletto heels on your floor as they can cause permanent damage.
- Cover LVP flooring near fireplaces and open flame sources and near any extremely hot items

Care & Maintenance

You've invested in a beautiful new floor and we want to help you protect your investment. All floor coverings require care and maintenance to look and perform their best.

Dry & Wet Cleaning:

- Always remove dirt, grit, etc. from the floor to avoid scratching.
- Vacuum with a hard floor attachment do not use a rotary brush vacuum.
- Dry mop daily (more often if needed).
- Clean up spills immediately or risk permanent staining.
- Periodic wet cleaning is necessary to help maintain the floor's appearance. Always prevacuum or dust mop before wet cleaning. Use a microfiber mop pad with a pH neutral cleaner. Abrasive or chemical cleaners will damage the vinyl.
- Do not use Vinegar, "Mop and Shine" products, Soap Based Detergents or Oil Soaps, Abrasive

VISIT OUR WEBSITE: TYANNFLOORING.COM FOR ANY RECENT UPDATES OF WARRANTY INFORMATION.

Contact Tyann Flooring for any questions or concerns.

Tyann Flooring

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TYANN[®] LUXURY VINYL PLANK (LVP) INSTALLATION GUIDE

TABLE OF CONTENTS:

1.	TEST BEFORE STARTING INSTALLATION	 1
2.	MATERIAL STORAGE AND HANDLING	 2
3.	SUBSTRATES	 2
4.	INSTALLING PLANK PRODUCTS	 4
5.	WARRANTY	 5

1. TEST BEFORE STARTING INSTALLATION

Note: All substrates to receive moisture sensitive floor covering must be tested for moisture.

CONCRETE SUBSTRATES:

All concrete substrates should be tested for IRH (Internal Relative Humidity) according to ASTM F 2170. Calcium Chloride tests may be conducted in addition to IRH and must be performed per the latest edition of ASTM F 1869.

NEW AND EXISTING CONCRETE SUBFLOORS SHOULD MEET THE GUIDELINES OF THE LATESTEDITION OF ACI 302 AND ASTM F710, "STANDARD PRACTICE FOR PREPARING CONCRETE FLOORS TO RECEIVE RESILIENT FLOORING" AVAILABLE FROM THE AMERICAN SOCIETY FOR TESTING AND MATERIALS, 100 BARR HARBOR DRIVE, WEST CONSHOHOCKEN, PA 19428; 610-832-9585; <u>HTTP://WWW.ASTM.ORG.</u>

- a. Substratesshallbesmooth, structurally sound, permanently dry, clean and free of all foreign material such as dust, wax, solvents, paint, grease, oils, old adhesive residue, curing and hardening/curing compounds, sealers and other foreign material that might prevent adhesive bond.
- b. Concrete floors shall be flat and smooth within 1/8" in 6 feet or 3/16" in 10 feet.
- c. F-Number System: Overall values of FF 36/ FL 20 may be appropriate for resilient floor coverings.
- d. Moisture Vapor Emission Rate (MVER) Conduct either in-situ RH test (ASTM F-2170) or CaCl MVER test method (ASTM F1869) Refer to the adhesive information for the acceptable moisture limits.
- e. Concrete subfloors must have a minimum compressive strength of 3000 psi. Concrete subfloors shall not consist of lightweight concrete or gypsum.
- f. Perform Bond testing to determine compatibility of adhesive to the substrate.
- g. Porosity water drop test will help determine porosity if drop remains on the surface after 1-2 mins concrete should be considered non-porous.
- h. Working and open times of adhesives may vary based on job conditions, substrate, temperature, and humidity.
- i. Areas to receive flooring should be adequately lighted during all phases of the installation process.
- j. It is recommended that vinyl floor covering installation shall not begin until all other trades have completed.

TEMPERATURE - AMBIENT:

- a. Controlled environments are critical. Fully functional HVAC systems are the bestway to ensure temperature and humidity control.
 - **DO NOT** install vinyl flooring products until the work area can be temperature controlled.
 - The permanent HVAC system turned on and set to a minimum of 65°F (20°C) or a maximum of 85°F, for a minimum of 7 days prior to, during, and after installation. Once the installation is complete the temperature should not exceed 85°F.

Concrete floors must be tested per the latest edition of ASTM F 710.

- PH reading must not exceed 9.0.
- Readings below 5.0 and in excess of 9.0 affect resilient flooring and adhesives negatively.
- Rinsing the surface with clear water may lower alkalinity.

NOTE: IT MAY NOT BE THE FLOOR COVERING INSTALLER'S RESPONSIBILITY TO CONDUCT THESE TESTS. IT IS, HOWEVER, THE FLOOR COVERING INSTALLER'S RESPONSIBILITY TO MAKE SURE THESE TESTS HAVE BEEN CONDUCTED, AND THAT THE RESULTS ARE ACCEPTABLE PRIOR TO INSTALLING THE FLOOR COVERING. WHEN MOIST URE TESTS ARE CONDUCTED, IT INDICATES THE CONDITIONS ONLY AT THE TIME OF THE TESTS.

2. MATERIAL STORAGE AND HANDLING:

- a. Flooring material and adhesive must be acclimated to the installation area for a minimum of 48 hours prior to installation.
- b. Store cartons of plank products flat and squarely on top of one another. Plank products should be stacked no more than 6 high and allow for airflow around stacks when un-palletized. Preferably, locate material in the "center" of the installation area (i.e. away from vents, direct sunlight, etc.). Storing cartons in direct sunlight may affect proper acclimation by inducing thermal expansion/contraction.
- c. When palletizing on a jobsite vinyl plank need to be stacked 2 rows high side by side with no airspace between. Then quarter turned for 2 rows side by side, not to exceed 12 boxes high. A5/8" or thicker plywood must also be placed on the pallet first.
- d. Do not stack pallet's 2 high unless utilizing a 1" thick plywood in between pallets.

3. SUBSTRATES:

Note: All substrates to receive resilient flooring shall be dry, clean, smooth and structurally sound. They shall be free of dust, solvent, paint, wax, oil, grease, residual adhesive, adhesive removers, curing, sealing, hardening/parting compounds, alkaline salts, excessive carbonation/laitance, mold, mildew, and other foreign materials that might prevent the adhesive from bonding.

WOOD SUBSTRATES:

Wood subfloors must be structurally sound and in compliance with local building codes.

- a. Double-Layered APA rated plywood subfloors should be a minimum 1" total thickness, with at least 18" well-ventilated air space beneath.
- b. Chip board, OSB, particleboard, construction grade plywood are generally not acceptable substrates add a layer of APA underlayment grade plywood that is dimensionally stable, non-staining, with a smooth fully sanded face.
- c. Insulate and protect crawl spaces with a vapor barrier covering the ground.
- d. DO NOT install over sleeper construction subfloors or wood subfloors applied directly over concrete.
- e. Underlayment panels can only correct minor deficiencies in the sub-floor while providing a smooth, sound surface on which to adhere the resilient flooring.
- f. Any failures in the performance of the underlayment grade panels are the responsibility of the manufacturer of such panels and not with Tyann Flooring.
- g. It is recommended that your chosen APA underlayment grade panels be designed for installation under resilient flooring, and carry a written warranty covering replacement of the entire flooring system.
- h. Tyann LVP is not recommended directly over fire-retardant treated plywood or preservative treated plywood.
- i. The materials used to treat the plywood may cause problems with adhesive bonding. An additional layer of APA rated 1/4" thick underlayment should be installed.
- j. Always follow the underlayment manufacturer's installation instructions.

CONCRETE:

 $New or existing \ concrete \ subfloors \ must \ meet \ the \ guidelines \ of \ the \ latest \ edition \ of \ ACI \ 302 \ and \ ASTMF \ 710, \ ``Standard \ Practice \ for \ Preparing \ and \$

Concrete Floors to Receive Resilient Flooring".

- a. On or below-grade slabs must have an effective vapor retarder directly under the slab.
- b. Wet curing 7 days is the preferred method for curing new concrete.
- c. Curing compounds (DONOTUSE). If present, they can interfere with the bond of the adhesive to the concrete. Seek assistance from a substrate manufacturer if curing agents are detected.
- d. Remove curing compounds 28 days after placement, so concrete can begin drying.
- e. Concrete floors shall be flat and smooth within 1/8" in 6 feet or 3/16" in 10 feet.
- f. F-Number System: Overall values of FF 36/ FL 20 may be appropriate for resilient floor coverings.

Note: PerformBondtestingtodeterminecompatibility of adhesive to the substrate. Expansion joints in concrete are designed to allow for the expansion and contraction of the concrete. Resilient flooring products should never be installed over expansion joints. Expansion joint covers designed for use with resilient flooring should be used. Control joints (saw cuts) may be patched and covered with resilient flooring once the concrete is thoroughly cured, dry and acclimated.

LIGHTWEIGHT CONCRETE

All recommendations and guarantees as to the suitability and performance of light weight concrete under resilient flooring are the responsibility of the light weight concrete manufacturer. The installer of the light weight product may be required to be authorized or certified by the manufacturer. Correct on-site mixing ratios and properly functioning pumping equipment are critical. To ensure proper mixture, slump testing is recommended.

- a. Lightweightaggregateconcreteshaving densities greater than 90 lbs. percubic foot may be acceptable under resilient flooring.
- b. Concretes labs with heavy static and/ordynamic loads should be designed with higher strengths and densities to support such loads.
- c. Surface must be permanently dry, clean, and smooth, free of all dust, and structurally sound.
- d. Perform Bond testing to determine compatibility of adhesive to the substrate.

Radiant Heat: Hydronic Only

Radiant heated substrates must not exceed 85°F (29°C) surface temperature.

- a. Seven days prior to installing resilient products over newly constructed radiant heated systems, make sure the radiant system has been on and operating at maximum temperature to reduce residual moisture within the concrete.
- b. Threedayspriortoinstallation, lower the temperature to 65°F. 24 hours after installation, gradually increase the temperature in increments of 5°F to avoid over heating.
- c. After continuous operation of the radiant system, ensure the surface of the floor does not exceed 85°F (29°C)
- d. Use of an in-floor temperature sensor is recommended to avoid overheating.

WARNING! DO NOT SAND, DRY SWEEP, DRY SCRAPE, DRILL, SAW, BEADBLAST OR MECHANICALLY CHIP OR PULVERIZE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC "CUTBACK" ADHESIVES OR OTHER ADHESIVES. These products may contain either asbestos fibers and/or crystalline silica. Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm. Unless positively certain that the product is a non-asbestos-containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content and may govern the removal and disposal of material. See current edition of the Resilient Floor Covering Institute (RFCI) publication Recommended Work Practices for Removal of Resilient Floor Coverings for detailed information and instructions on removing all resilient covering structures. For current information go to www.rfci.com

RESILIENT FLOOR COVERING:

- a. Must be single layered, non-cushion backed, fully adhered, and smooth.
- b. Show no signs of moisture or alkalinity.
- c. Waxes, polishes, grease, grime, and oil must be removed.
- d. Cuts, cracks, gouges, dents and other irregularities in the existing floor covering must be repaired or replaced.
- e. Embossing leveler is recommended to aid in proper bonding and to prevent telegraphing.
- f. Do not install over rubber-based substrates.

NOTE: THE RESPONSIBILITY OF DETERMINING IF THE EXISTING FLOORING IS SUITABLE FOR INSTALLING RESILIENT FLOORING OVER THE TOP THEREOF

RESTS SOLELY WITH INSTALLER/FLOORING CONTRACTOR ON SITE. IF THERE IS ANY DOUBT AS TO SUITABILITY, THE EXISTING FLOORING SHOULD BE REMOVED, OR AN ACCEPTABLE UNDERLAYMENT INSTALLED OVER IT. INSTALLATIONS OVER EXISTING RESILIENT FLOORING MAYBE MORE SUSCEPTIBLE TO INDENTATION. REFER TO THE ABOVE WARNING BEFORE REMOVING ANY RESILIENT FLOORING.

Old Adhesive Residue:

- a. If the adhesive residue is a sphalt-based (cut-back), or any other type of adhesive is present, it must be dealt with in one of two ways:
 - 1. It may be mechanically removed such as: bead blasting or scarifying.
 - 2. Aself-levelingunderlaymentmaybeappliedoverit. Checkwithasubstratemanufacturerforsuitability, application instructions, and warranties.
- b. Never use solvents or citrus adhesive removers to remove old adhesive residue. Solvent residue left in/on the sub-floor may affect the new adhesive and floor covering.

WARNING: SKIM COATING OVER OLD ADHESIVE IS NOT RECOMMENDED. THE ADHESIVE MAY BREAK DOWN AND COULD LEAD TO FAILURE. THE OLD ADHESIVE MAY NOT ALLOW THE RESILIENT FLOORING TO RETAIN ITS DIMENSIONAL STABILITY, POSSIBLY LEADING TO UNNECESSARY INDENTATIONS. SOME SOLVENT BASED 'CUT-BACK' ASPHALT-BASED ADHESIVES MAY CONTAIN ASBESTOS FIBERS THAT ARE NOT READILY IDENTIFIABLE. DO NOT USE POWER DEVICES, WHICH CAN CREATE ASBESTOS DUST IN REMOVING THESE ADHESIVES. THE INHALATION OF ASBESTOS DUST MAY CAUSE ASBESTOSIS OR OTHER SERIOUS BODILY HARM.

4. INSTALLING VINYL PLANK PRODUCTS

General:

- a. Ensure that moisture tests have been conducted and that the results do not exceed the acceptable moisture limit for the adhesive used.
- b. PH of concrete sub-floor needs to be between 5 and 9.
- c. The permanent HVAC system is turned on and set to a minimum of 65°F (20°C)) or a maximum of 85°F, for a minimum of 72 hours prior to, during and after installation. After the installation, the maximum temperature should not exceed 85°F.
- d. Do not stack more than 5 cartons high.
- $e. \quad Flooring material and adhesive must be acclimated to the installation area for a minimum of 48 hours prior to installation.$
- f. Use appropriate trowel size regarding substrate porosity.
- g. Materialshould always be visually inspected prior to installation. Any material installed with visual defects will not be considered a legitimate claim as it pertains to labor cost.
- h. Do not bend the planks more than 90 degrees in any direction. Fractures, breakages, and other damages caused by bending the planks more than 90 degrees are excluded from warranty claims.
- i. Ensure that all recommendations for sub-floor and jobsite conditions are met prior to beginning the installation. Directional designs are optional, however, once the installation is started, you have accepted those conditions.

LAYOUT AND INSTALLATION GENERAL RULES:

- a. Tyann plank Install using conventional plankinstallation techniques.
- b. Carefully determine where to begin plank installation.
- c. It is customary to center rooms and hallways, so borders are not less than half a plank.
- d. Working out of multiple boxes at a time is recommended.
- e. In hallways and small spaces, it may be simpler to work lengthwise from one end using a center reference line as a guide.
- f. Make sure cut edges are always against the wall.

NOTE: Recommended to use floor protection after installation. DO NOT use a plastic adhesive based protection system.

INSTALLATION FOR VINYL PLANKS:

Layout of the Room:



- a. Find the center point of the room. Strike a line.
- b. Obtain a true 90' angle by using a carpenter's square.
- c. Strike a second line which will divide the room into four equal parts.
- d. Measure the distance from the center to the wall, parallel to the direction of the plank.

e. Divide the measurement by the width of the plank. If less than half remains as the border plank, adjust the point to compensate. This will give a larger border along the wall and reduce the chance of having to cut a small sliver of flooring to place along the wall.

Layout of the Plank:

	First plank	
A		В



- a. Carefully place the first piece of plank at the junction of the chalk lines.
- b. Continue to lay the plank, making sure each plank flush against the chalk line and tight against the adjoining plank.
- c. Make sure the plank is well seated into the adhesive paying special attention, to the edges. Layrow by row, or in a pyramid fashion as shown below.

Pyramid fashion	
A	В

Row by row fashion				
A	В			

Fitting the Border:

- a. Measure the distance from the last plank in the row to the wall.
- b. Mark the plank and cut it against the mark.
- c. Lay the plank in place, making sure that the cut edge is against the wall.

Fitting Around Irregular Objects:

- a. Make a pattern out of heavy paper to fit around pipes and other irregularities.
- b. Place the pattern on the plank, trace cutting along the trace lines.

IMPORTANT: All flooring must be rolled with a minimum 100-lb roller after installation. Use a hand roller in areas not reached with a 100-lb. roller.

5. LIMITED WARRANTY

For complete warranty information, please call – Tyann Flooring 1 800.644.9691 or visit www.tyannflooring.com.

Tyann[®] LVP Click On Installation Guide

PRODUCT USE & RESPONSIBILITIES				
SITE PREPARATION				
	Newly Constructed Home	2		
	Existing Home	3		
	Unheated Environment	3		
	Radiant Heat Systems	3		
	Sub-floor Preparation	4		
INSTALLATION		5		

CAUTION! PLEASE READ THESE INSTRUCTIONS COMPLETELY BEFORE BEGINNING THE INSTALLATION.

PRODUCT USE

Tyann Luxury Vinyl Plank (LVP) (Click On) is designed for easy, click-on installation, and can be installed (1) in rooms on, above or below ground level; (2) over plywood, OSB or concrete subfloors; (3) directly over most existing hard surface flooring; or (4) over radiant heating systems.

This product is not recommended for residential or light commercial applications that are exposed to rolling casters, moveable racks, wheeled displays, power or manual wheelchairs, etc. These applications would void the product's limited warranty. Please cover your LVP flooring with area rugs or apply furniture pads or felt pads so that such furniture or equipment does not directly contact your LVP flooring.

INSTALLER'S / OWNER'S RESPONSIBILITY

Tyann LVP is manufactured to the highest standards of product quality, but occasional manufacturing defects may occur in the product. It is the sole and joint responsibility of the installer and owner to conduct a quality inspection of all pieces of Tyann flooring before installation. Any pieces of flooring that appear to contain a manufacturing defect should not be installed. Flooring that has been installed will be deemed to have been inspected and accepted by the installer and owner, even if the owner is not present at the time of installation. If defects are found, please contact your dealer. It is the sole responsibility of the flooring installer to ensure that the job site, subfloor, installation, and materials meet or exceed all applicable industry standards. Tyann accepts no responsibility for problems arising from incorrect or improper site preparation or installation procedures.

LVP is a waterproof product, but it is not a vapor barrier. Crawl spaces still need adequate ventilation and exposed earth must be covered by 6mil poly vapor barrier (min. 12" overlapped joints). Concrete slabs must be cured and dry (min. 60 days old) with no evidence of moisture.

SITE PREPARATION

INSTALLATION IN NEWLY CONSTRUCTED HOME

Installation of flooring is one of the last jobs of a new home construction. Prior to installing a LVP floor, ensure that:

- the building is completely enclosed with all outside doors and windows in place and securable, including a door from an attached garage to house interior,
- all concrete, masonry, plastering, drywall, texturing, painting and other wet work is complete and thoroughly cured and dry,
- all floor mounted cabinetry (including kitchen islands, bathroom vanities, etc.) is installed and secured,
- basements and crawl spaces are dry, crawl spaces must have no standing water, crawl spaces must also have a vapor barrier and adequate ventilation in accordance with local building codes,
- gutters and downspouts are in place, directing water away from the building,
- a temperature range of 65 85° F (18 29° C) should be maintained before, during and after installation (This floor is not sensitive to changes in humidity, but can be affected to extreme swings in temperature),
- subfloor is properly prepared for installation,
- if installing over a radiant heat system, ensure that the system is in full working order and has been fully tested and running for a minimum of two weeks prior to installation. The system should be turned off for 24 hours prior to installation in the installation zone.

INSTALLATION IN EXISTING HOME (RENOVATION)

Installation in an existing home must meet the same conditions as a new home. If it is part of a larger remodeling project, ensure that all wet work (painting, wallpapering, texturing, etc.) is completed and thoroughly dry before commencing flooring installation. In addition:

- remove all furniture, artwork and other valuables from installation area,
- remove baseboards and moldings,
- undercut door casings (use a piece of the flooring as a depth gauge),
- remove existing flooring, if necessary,
- if installing over a radiant heat system, it is strongly recommended that a radiant heat technician be consulted prior to installation to ensure that the heating system can be operated effectively at temperatures acceptable to the LVP flooring. The system should be turned off for 24 hours prior to installation in the installation zone,
- all floor mounted cabinetry (including kitchen islands, bathroom vanities, etc.) is installed and secured.

Special consideration should be given when installing near heat sources such as fireplaces & stoves to avoid overheating the surface of the floor in the immediate area. Failure to do so can lead to the floor buckling or lifting up from the subfloor and void the product's limited warranty.

INSTALLATION IN UNHEATED ENVIRONMENTS

Tyann LVP can be installed in homes and cottages that will remain closed and unheated during the winter season provided the following criteria are met:

- the subfloor MUST be flat to within 3/16" over a 10ft span.
- at the time of installation the temperature of the area where the floor is being installed is a minimum of 50°F (10°C).
- the flooring has been brought into the rooms where it is to be installed to acclimate to room temperature for a minimum of 48 hours. The cartons are to be stored flat and level.
- while living on the floor, a temperature range of 65 85° F (18 29° C) is maintained.

When shutting off the heat in the building for the winter season, steps should be taken to avoid walking on the floor once the temperature is allowed to drop below 50°F (10°C). Failure to do so can result in damage to the locking mechanism of the floor. When floors are brought back into service after having been exposed to temperatures below freezing, they should be returned to a minimum temperature of 50°F (10°C) for at least 72 hours prior to being walked on.

RADIANT HEAT SYSTEMS

Tyann LVP floors are suitable for installation over compatible in-floor radiant heat systems.

It is the homeowner's responsibility to determine if the radiant heat system being considered is compatible for use under the floor being installed. We recommend that the homeowner contact the system manufacturer and get written confirmation that the system is approved for use with LVP flooring and under what operating conditions.

Prior to installation, ensure that the radiant heat system is in full working order and has been fully tested and running for a minimum of two weeks. The system should be turned off for 24 hours prior to installation in the installation zone.

After installation, we recommend that the surface temperature of the floor never be allowed to exceed 85°F (29°C) and that changes in temperature be moderated in increments of 5°F (2°C) to avoid "shocking" the floor.

Where possible, we recommend the use of a data logger to monitor and record temperature and humidity conditions. This provides a record of the environmental conditions and may also help take preventive measures where conditions are outside of recommended levels.

SUBFLOOR PREPARATION

Tyann LVP flooring is waterproof but to ensure the health and safety of your home, it is strongly recommended to eliminate all sources of moisture before commencing installation.

The installer and customer are jointly and solely responsible for ensuring that the subfloor is suitable for the flooring application and properly prepared for installation.

All subfloors must be clean, dry, structurally sound and flat to within 3/16" over a 10ft span. When floating over preexisting floors such as ceramic tile, all grout-lines must be levelled with a suitable bonding-filler and inspected for proper adhesion. This will help minimize any "telegraphing" from the floor below.

Wood/Plywood Subfloors must be tested for moisture content according to NWFA guidelines and the subfloor moisture content should not exceed 12%. Subfloors must meet local building code requirements (US: minimum 3/4" T&G plywood or 23/32" T&G OSB. Canada: minimum 5/8" T&G plywood or 3/4" T&G OSB). They must be secure to the joists and free of squeaks, bounce between floor joists, and protruding fasteners.

Concrete subfloors must be fully cured (minimum 30 days) and have been tested for moisture content using the ASTM F2170 – RH Probe Test standard; the maximum allowable limit of relative humidity within the slab is 85% or,

ASTM F1869 – Calcium Chloride Test: the moisture vapor emissions rate (MVER) should not exceed 3lbs / 1000 sq/ft per 24 hours.

If these conditions cannot be met, further curing will be required.

Gypsum-based concrete (e.g. Gypcrete) subfloors must meet concrete manufacturer's recommendations for dry, cured conditions.

Tyann LVP and LVT flooring is not affected by moisture from above, however there may be other factors that contribute to moisture related challenges. To mitigate current or future moisture related issues when installing over a cement-based substrate, the use of a class 1 vapor barrier is advised. There are several products on the market that may work to mitigate moisture and include liquid roll-on and sheet type products. Ultimately, we do not warranty moisture related damage from below, so it is imperative that any moisture related issues are mitigated prior to flooring installation.

Prior to flooring installation, ensure that the radiant heat system is in full working order and has been fully tested and running for a minimum of two weeks prior to installation. The system should be turned off for 24 hours prior to installation in the installation zone.

ACCLIMATION

Before installation, make sure that the flooring is at the same temperature as the installation site. Depending on the time of year, this may take 24-48 hours for the flooring to become balanced to the installation site's interior temperature.

UNDERLAYMENT

Tyann LVP floors have an "attached pad" or integral underlayment, so a separate underlay is not required when installing these products. Any additional acoustic membrane being considered for use under this floor must be a rigid type approved by Tyann. Use of additional underlayment not approved for these products will void the product warranty. For more information, please contact us at <u>sales@tyannmaterials.com</u>.

Where additional height is required to match an existing floor, a rigid underlayment such as 4mm or 6mm cork, or other rigid materials such as plywood, OSB, etc. may be used under Tyann LVP floors without affecting the performance or warranty. All pre-installation preparations such as floor flatness, dryness etc. must be completed prior to installation.

STARTING WALL

Orient the installation so the LVP boards are parallel to incoming sunlight, and select your starting wall. Check it for straightness. If it is not straight, you may need to trim the edge of the first row of floor boards to match the shape of the wall. Calculate how many rows of flooring will be required for the job. You will probably have to rip down (cut

lengthwise) the final row of boards to fit. The final row must be at least half a board width wide to ensure the integrity of the joint. If it will not be half a board width, then rip down your starting row enough to make up the difference.

EXPANSION SPACE

To allow for this, leave a 3/8" (8mm) expansion space around the entire perimeter of the floor between the flooring and the walls. Also leave expansion space where the flooring will meet any vertical objects, such as stairs, pipes, door sills, tiles, cabinets etc. Have a supply of 3/8" (8mm) spacers on hand during installation.

Areas in excess of over 60ft in any direction will require a T-mold transition strip.

INSTALLATION

ANGLE/ANGLE INSTALLATION:



Continuously inspect boards during installation to ensure there are no manufacturing defects. Keep in mind that boards that have been installed will be deemed to have been inspected and accepted by the owner. Select your starting wall and check for straightness as described above. Begin at the left-hand end of the starting wall. Have a quantity of 3/8" spacers handy.

Begin with a full board. Saw off the tongue on both the long and short sides of the board, and place the board with the sawn short end against the wall on the left, and the sawn long side facing the starting wall, but set out about two feet from the starting wall. Insert a spacer at the left end of the board and nudge the board against the wall.



Take a shorter board to begin the second row, and angle in to position against board 1, fitting together the long side joint. Place a spacer at the left-hand end of the second board.

Install board 3. Hold it at angle and fit the short-side tongue into the short-side groove of board 2. Lower board 3 slightly to engage the short-side joint (or end-joint), then lift boards 2 & 3 together and move gently up and down while pressing forward until the long-side joint of board 3 locks into board 1.

Ensure that all end-joints are staggered by a minimum of 6".

Take board 4 and saw off the tongue joint on the long side only. Hold it at angle and fit the short-side tongue into the short-side groove of board 1. Lower board 4 slightly to engage the short-side joint fully with board 1, then lift boards 1 & 4 together and move gently up and down while pressing forward until the long-side joint of board 4 locks into board 3. (Kneeling on board 3 while you do this will help hold everything in place.)

Install board 5 in the same fashion as board 3. Install board 6 in the same fashion as board 4. Continue until you have completed two full rows. At the end of the row, cut boards to fit, but remember to leave expansion space at the end of the row as well.

Start rows with a variety of different lengths of boards. You can also use off cuts from previous row ends to begin new rows, as long as they are minimum 6" (15cm) in length. Remember to stagger end-joints by a minimum of 6" (15cm).

To begin the third row, hold a new board at a 30° angle and insert the long-side tongue into the long-side groove of the previous row, then lower into place. Ensure the left-hand edge is aligned with the previous row and put an expansion spacer between the left-hand end of the board and the wall.



Use the installation method described above to install the rest of the boards to complete the row. Continue installing in this manner until you have completed three or four full rows. Insert a series of expansion spacers along the starting wall and slide the assembled flooring against the starting wall.

Continue with the installation throughout the rest of the room. When you get to the final row, measure the distance to the far wall and "rip" a row of boards to fit the gap – remember to leave 3/8" (8mm) expansion space against the far wall.

To finish the job, remove the expansion spacers, and install moldings, trim and transitions. Moldings and transitions must be affixed either to the subfloor or to the wall – never to the flooring itself.

Before you move furniture onto the floor, protect your new floor by putting felt pads on all furniture and accessories. To learn more about care and maintenance of your Tyann floor, please see the Product Warranty.

If the flooring was installed over a radiant heating system, when you turn the system back on, bring the temperature of the system up gradually, in 5° increments. Never allow the surface temperature of the floor to exceed 85°F (29°C) and avoid dramatic temperature changes. Always adjust the system gradually in 5° increments.