

PROGEN® FLOATING LUXURY VINYL PLANK INSTALLATION & MAINTENANCE INSTRUCTIONS

INTRODUCTION

These instructions are written as a guide to be used when installing Tarkett Flooring. These instructions, combined with our adhesives and flooring products, create a system. Utilizing this system will ease the installation process and provide the customer with a completed product that will perform to the installation and maintenance instructions. Technical videos and tip sheets are also available. Contact Tarkett Technical Services at (800)-899-8916 with any questions.

Click here to watch instructional videos:

ProGen Luxury Vinyl Tile & Plank Installation Video (https://vimeo.com/259672654)

Installation of ProGen Flush Mount Stair Nose (https://vimeo.com/362646050)

GENERAL INFORMATION

- 1. ProGen must be stored horizontally on a sturdy base at all times.
- 2. Cartons must be stored horizontally on a sturdy base at all times.
- 3. Protect carton corners from damage.
- 4. Carefully check flooring material for any defects. Contact your supplier immediately if any defect is found.
- 5. Tarkett floors are intended for indoor use only
- 6. Room temperature shall be between 65°F and 85°F (18.3°C-29.4°C) for 48 hours before and during installation. ProGen does not require acclimation to the jobsite conditions prior to installation. Refer to SPECIAL NOTES section below
- Exposure to direct sunlight can result in ProGen fading and creates excessive heat directly on the finished flooring and surrounding structure which may result in movement. During peak sunlight exposure, the use of drapes or other window treatments are recommended.
- 8. Remove all existing transitions, quarter round, baseboard molding, or cove base prior to beginning the instalaltion.
- 9. Undercut doorway moldings to the thickness of the flooring.
- 10. Do not use foam padding under ProGen.
- 11. Tarkett ProSheet[™] Plus 3 are approved floating underlayments that can be used with ProGen.

SPECIAL NOTES

- When installing ProGen in a Residential applications with fully operational HVAC, transition moldings are not required at egress doorways or between rooms, regardless of overall size of the installation.
- ProGen may be installed in fully-enclosed spaces that do not have permanent heating and cooling systems in operation. These spaces include seasonal vacation homes, lake cabins, 3 season rooms, etc. The room temperature shall be 55° 95°F (12° 35°C) for 48 hours before and during the installation. The use of temporary temperature controls may be needed during this period. ProGen shall be installed in these spaces with a full 1/2" expansion gap at all vertical surfaces. NOTE: When installing ProGen in these applications, a transition molding must be placed at egress doorways and when installations span greater than 40' in any direction.
- When installing ProGen in Light Commercial applications, a transition molding must be placed at egress doorways and when installations span greater than 40' in any direction.

WOOD SUBSTRATES

ProGen may be installed over single floor wood construction in *residential applications only*.

Subfloor must meet the following requirements:

- 1. Wood joist or truss systems spacing must be a maximum of 16" on center. Wood or joist truss systems spacing of 16"-19.2 is acceptable for double wood layer construction
- 2. Subfloor panels must be dry, sturdy, smooth and dimensionally stable.
- 3. Subfloor panels must be 3/4" minimum thickness tongue and groove plywood or oriented strand board (OSB).
- 4. Subfloor panels must be good one side, and have a fully sanded face with a solid core (no voids).
- 5. Subfloor panels must be exterior grade or classified as Exposure I.
- 6. All suspended wood subfloors must have at least 18" of well-ventilated air space clearance above the ground. The ground under the crawl space shall be covered with 10 mil or thicker polyethylene sheeting to reduce moisture vapor transmission.

- 7. Offset subfloor panel joints by at least 16" so that four corners do not meet
- 8. Subfloor panels must be securely fastened to the joists and free from spring or deflection. Deflection shall not exceed 3/64" (1.1 mm) per per APA Product Standard 2-10 *Performance Standard for Wood-Based Structural-Use Panels*. If glue-nail procedures are required, use a solvent- free construction adhesive.
- 9. Subfloor must be level within 1/8" in 8 ft. (3.1 mm in 2.4 m). Any unevenness must be sanded down or filled with a cementitious patching compound. Any unevenness may prevent ProGen[™] from locking properly.

Wood subfloors not meeting the above requirements must be covered with 1/4" minimum thickness underlayment grade plywood. ProSheet Plus 3 may be used as a substitute, Follow all APA and manufacturer's guidelines for installing underlayment grade plywood.

Tarkett recommended underlayments include:

- APA Underlayment Grade Plywood A-C, B-C or C-C Plugged
- ACCU-PLY
- SurePly

- TECPLY
- ULAY
 - C.S.A. (CanPly) and Proboard

CONCRETE SUBSTRATES

- 1. ProGen may be installed over properly constructed and prepared on-grade, above-grade or below-grade concrete subfloors.
- 2. Concrete subfloors must be constructed as recommended by the American Concrete Institute's ACI 302.2 *Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials.*
- 3. Prepare concrete subfloors according to ASTM F710 Standard Practice for Preparation of Concrete Floors to Receive Resilient Flooring. The surface of the concrete must be dry, clean smooth and structurally sound. The slab must be swept, damp mopped and/or vacuumed to remove any dust. Any surface materials present such as loose paint, wax, grease, oil, adhesive residues, crayon, pen marking, etc., that may prevent a proper adhesion or migrate to the surface of the flooring causing discoloration, must be removed. Fill and level any cracks, construction joints, control joints, depressions, grooves or other irregularities with a high-quality, non-shrinking, latex-fortified, cementitious patching compound.
- 4. Do not install Tarkett flooring over expansion joints, or other moving joints in the substrate. These joints must be respected and should not be filled with products that are not intended for that purpose. Contact an expansion joint cover manufacturer to meet specific flooring conditions.
- 5. Moisture testing of concrete subfloors must be performed in accordance with ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride and ASTM F2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes. Do not install Access & Aloft if the values are greater than 6 lbs. /1000 ft²/24hrs per ASTM F1869 or 90 %RH per ASTM 2170. If the tests results exceed the limitations, the installation must not proceed until the problem has been corrected. Tarkett does not recommend or warrant any particular product or procedure for the remediation of high moisture in concrete substrates. There are several companies that manufacture products suitable for moisture remediation. We suggest you refer to the current ASTM F710 Standard Practice for Two Component Resin Based Membrane-Forming Moisture Mitigation Systems for Use Under Resilient Flooring Systems.

ADDITIONAL SUBFLOOR GUIDELINES

Many installations over existing floors produce satisfactory results. However their success is dependent upon the condition of the existing floor covering. Installing over existing flooring increases the possibility of indentations and telegraphing of the old floor. Note: The final decision to cover an existing floor with new flooring rests with the flooring contractor and/or installer. Tarkett will not accept responsibility for floor failures where the condition, type or improper preparation of the existing floor is the cause for the failure. When installing ProGen over an existing flooring follow the recommended guidelines below.

- 1. Minimum temperature of the substrate must be 60°F (15.6 °C). Substrate temperature should be a minimum of 5°F higher than the dew point temperature.
- 2. Ceramic, Porcelain and Natural Stone tiles must be smooth, even and well-bonded with a grout line depth less than 1/16" (0.062). If grout joint depth exceeds the maximum allowable depth, fill with Portland based patching compound following manufacturer's guidelines.
- 3. Resilient Vinyl floors must be smooth, even, non-cushioned and well-bonded to the substrate.
- 4. Strip Wood Hard Wood Floors must be smooth, even, with a maximum gap width between boards of 1/16" (0.062)
- 5. Heated flooring systems must be installed 2" below the subfloor and the operating temperature must not exceed 85°F (29.4°C). During installation, lower the radiant heated floor temperature to a minimum 65°F (18.3°C). This temperature should be maintained for at least 24 hours before, during and 48 hours after completion of the installation. Gradually increase the temperature in increments of 5° F every 24 hours but do not exceed 85°F (29.4°C).
- 6. Residual adhesives should be mechanically removed to trace amounts and encapsulated with an approved cementitious patching compound or encapsulation ProGen. Do not use chemical adhesive removers or solvents. Always follow Resilient Floor Covering Institute's (RFCI's) Recommended Work Practices for Removal of Resilient Floorcoverings. Caution: Some resilient flooring and adhesives contain "asbestos fibers" and special handling of this material is required.
- 7. Refer to ASTM F 2419 Standard Practice for Installation of Thick Poured Gypsum Concrete Underlayments and Preparation of the Surface to Receive Resilient Flooring for guidelines when pouring gypsum underlayments or preparing for use as an underlayment under Tarkett ProGen. Follow the gypsum underlayment manufacturer's recommendations for proper application and preparation.

WARNING: Do not sand, dry sweep, dry scrape, drill, saw, bead blast or mechanically chip or pulverize existing resilient flooring, backing, lining felt or asphaltic "cutback" adhesive. These products may contain asbestos fibers 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.

SUBSTRATE PREPARATION

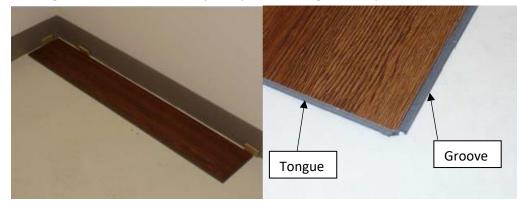
- 1. All substrates must be dry, clean, structurally sound, smooth and free from all existing adhesive residues.
- 2. The substrate must be flat within 1/8" in 8' (3.17 mm in 2.4 m).
- 3. Fill and level concrete cracks, construction joints, control joints, depressions, grooves and other irregularities. Use a latex fortified, cementitious patching compound. Follow the manufactures recommendation for preparing.
- 4. Sweep and vacuum or damp mop substrate to remove all dust and debris.
- 5. Tarkett ProSheet Plus 3 can be used if needed. Follow the detailed ProSheet Plus 3 installation instructions found at www.tarkettna.com

GETTING STARTED

- 1. Install product out of multiple cartons from matching batch numbers.
- 2. Inspect all planks for visible defects and damage before and during installation. During installation, inspect the groove area and remove any debris that may prevent proper assembly of planks. Do not install damaged planks. Tarkett will not accept responsibility for claims on flooring installed with obvious defects.
- 3. Room temperature shall be between 65° F and 85° F (18.3°C-29.4° C) for 48 hours before and during installation. ProGen does not require acclimation to the jobsite conditions prior to installation.
- 4. Remove quarter round, baseboard molding, or cove base.
- 5. Undercut doorway moldings to the thickness of the flooring.
- 6. Prepare your layout to determine direction and orientation of planks. No transitions are required when installing in Residential applications with fully operational HVAC.. NOTE: When installing ProGen in Light Commercial applications or in fully-enclosed spaces that do not have permanent heating and cooling systems in operation, a transition molding must be placed at egress doorways and when installations span greater than 40' in any direction.
- 7. Cartons must be stored horizontally at all times.
- 8. Protect carton corners from damage.
- 9. ProGen floors are floating floors and should not be adhered or nailed to the substrate. The only exception is when installing on stairs.
- **10.** Tarkett floors are intended for indoor use only.
- 11. Determine in which direction the planks will be installed. To make the room appear larger or if installing in very small rooms or hallways, it is preferable to lay the planks parallel to the longest room dimension.
- 12. Do not install permanent, fixed cabinets on planks.
- **13.** Carefully measure the room to determine squareness and also to determine the width of the last row of planks. If the width of the last row of planks is less than 2" (50 mm), excluding the tongue, the width of first row of planks will have to be cut accordingly. If the length of any cut piece at the end of any row less than 12", the first plank in the row will need to be cut accordingly.
- 14. A minimum 1/4" (6.3 mm) expansion space is required around all walls and vertical objects. Allow a 1/2" (12.7 mm) space for installations over wood substrates that may be effected by moisture or external temperature and humidity fluctuations (i.e. crawlspaces, mobile homes) or when installing in areas without permanent HVAC controls (3 season rooms, seasonal vacation homes and cabins).
- 15. Although the use of a tapping block and hammer is not required it may help with assembly on the long joints of both plank and stone designs. Make sure that the chosen tapping block is suitable for vinyl and rigid core products. Be careful not to over-tap as this can cause damage to the locking mechanisms.

INSTALLATION

1. Begin laying planks from the left side of the starting wall and work to the right side. The tongue side of the plank shall face the starting wall. The Tongue portion is inserted into the Groove portion of the plank. NOTE: If you have had to adjust the width of your starting row to accommodate that the width of your ending row will be a minimum of 2", you may not be starting with a full plank



2. Place 1/4" (6.3 mm) spacers between the short and long side of the planks and the wall, use 1/2" (12.7 mm) spacers for installations over wood substrates that may be effected by moisture or external temperature and humidity fluctuations (i.e. crawlspaces, mobile homes) or when installing in areas without permanent HVAC controls (3 season rooms, seasonal vacation homes and cabins).



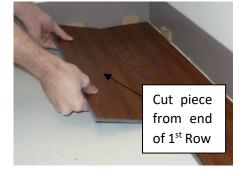
3. The end joints of the planks in the first row are assembled by inserting the tongue side into the groove side of the previous plank at a **natural angle**. Gradually lower the plank down flat until the end joint closes, insuring that the planks are perfectly aligned. Install remaining full planks in the first row.



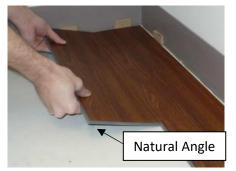
4. The last plank in the first row will need to be cut. Measure the distance between the wall and the surface of the last full plank. Subtract 1/4" (6.3 mm) or 1/2" (12.7 mm) depending on the size of the spacer used, from this measurement to allow for the spacer. If this measurement is less than 12" (20.3 cm), the length of first plank in the row must be cut. This will allow for a longer plank at the end of the row. The first and last plank in each row must be at least 12" (30.4 cm) in length. Planks are cut using a sharp utility knife and straight edge/carpenters square. Score the surface of the plank with a utility knife, and then snap the plank at the score line.



5. The remaining piece cut from the last plank in the first row may serve as the first plank in the second row provided it is at least 12" (30.4 cm) long. Always stagger end joints from row to row a minimum of 12" (30.4 cm).



6. Install the long side of the first plank of the second row. Remember to place a 1/4" (6.3 mm) or 1/2" (12.7 mm) spacer between the wall and the short side of the plank. Insert the tongue side into the groove side of the previous row at a natural angle and rotate downward until plank is flat with the substrate. You should only have to lift the plank high enough to get your fingers underneath to achieve this natural angle



7. To install the second plank in the second row. Insert the tongue side end joint into the groove side end joint of the previous plank at a natural angle. Position the long side of the plank with the tongue side slightly overlapping the groove area of the planks in the previous row. Lift the plank upward and working from the left side of the plank to the right, gently push forward until the entire plank engages into the previous row. NOTE: Use caution when installing the long side of the planks. Do not push on the planks too hard as this may distort or deform the groove. See item 15 in Getting Started to refer to the use of a tapping block and hammer. Rotate plank downward until plank is flat with the substrate. Continue installing remaining planks in the row. It is important to make sure that the first two rows are straight and square as they can affect the entire installation.



- 8. Continue working from left to right maintaining the random appearance. Planks may be installed row by row or by working multiple rows using the stair step method. Be sure to maintain proper spacing at walls and vertical obstructions
- 9. In some cases the flexibility of ProGen[™] will allow for easy positioning of the planks under door moldings and casings. In the event this cannot be done, it is necessary to remove the lip on the groove edge of the planks you are fitting to using a sharp utility knife and straight edge. This will allow you to install the plank lying flat. After the lip has been trimmed off on the planks you are fitting to, lay the plank flat on the floor. Apply a thin bead of PVA glue on top of the tongue and push the plank into position. Immediately wipe off any excess glue with a damp cloth.
- 10. When installing in front of a tub/shower place Tarkett S 860 along the front of the tub/shower. A bead of flexible, mildew-resistant, 100% siliconecaulk should be used to seal the top of the ProGen. NOTE: This must be the only place where the ProGen is fixed to the subfloor with no expansion space.

FINISHING THE INSTALLATION

- 1. After all planks have been installed, remove spacers from perimeter of room.
- 2. Install transition moldings. Do not fasten any moldings through the ProGen.
- 3. Pre-drill and install quarter round or baseboard molding. Molding must be sufficient size to cover the 1/4" (6.3 mm) or 1/2' (12.7 mm) expansion space. Do not fasten moldings through the flooring. Fasten into the wall.
- 4. Use plywood to cover the top of the flooring when moving heavy furniture or appliances into position.
- 5. Use proper floor protectors under the legs of furniture.
- 6. Post installation temperature in HVAC controlled applications with a 1/4" (6.3 mm) spacing at all vertical surfaces must be maintained between 55° F and 95° F (12° Cand 35° C). Ideal ambient relative humidity is between 35% and 70%. Areas without permanent HVAC controls with a ½" expansion gap may return to typical room temperature

INSTALLING ON STAIRS

1. Stair Preparation

- **a.** Stair and Riser must be clean, smooth, and structurally sound.
- b. Remove all existing coverings on the stair and riser. If necessary, remove any staples, nails, fasteners, or adhesives. Do not use chemical adhesive removers or solvents. Always follow Resilient Floor Covering Institute's (RFCI's) Recommended Work Practicesfor Removal of Resilient Floorcoverings. Caution: Some resilient flooring products and adhesives contain "asbestos fibers" and special handling of this material is required.
- c. Remove all surface coatings from the stair and riser.

Caution: Certain paints may contain lead. Exposure to excessive amounts of lead dust presents a health hazard. Refer to applicable federal, state, and local laws and *Lead-Based Paint Interim Guidelines for hazard Identification and Abatement in Public and Indian Housing* (Sept. 1990) or subsequent editions published by the U.S. Department of Housing and Urban Development regarding: appropriate methods for identifying lead-based paint and removing such paint; and (2) any licensing, certification, and training requirements for persons performing lead abatement work.

- d. The riser must be flush with the stair, it may be necessary to add an additional piece of wood to the riser. Or in the case of abullnose or rounded step nose, the nose must be trimmed flush to the riser portion of the step below. **Photo 1**
- e. Sweep and vacuum each stair and riser to remove all dirt and debris. Smooth or fill any voids with a cementitious patching compound.

2. Installation

- a. Starting at the top step, measure and cut the flush mount nosing to fit. Photo 2
- Measure the riser and cut the plank to fit, with a sharp utility knife remove the groove and tongue. If the height of the riser requires, assemble two planks to fit the dimensions (place the seam at the top of the riser). Riser material <u>must</u> be cut flush with the tread surface.
 Photos 3-5
- c. Dry fit the riser material in place to check measurements, scrap material may be used to ensure proper height. Photo 6
- d. With the riser material in place, set the flush mount nosing on the step, square and tight to the riser material; using a pencil mark thestep surface where the ProGen will be flush to the molding. Set materials aside. **Photos 7-8**
- e. Measure from the flush mount mark (step 4) to the back of the step. If the depth of the tread requires, assemble two planks to fit the dimensions (place the seam to the back of the step). The groove side of the plank must be to the front of the step. Photos 9-10
- f. Remove the lip of the groove using a sharp utility knife. Photo 11
- g. Dry fit and mark all materials prior to gluing to ensure proper fit and assembly.
- h. Apply Tarkett Q bond One[™] or Tarkett 959 Vinyl Tile and Plank Adhesive[™] using 1/32" x 1/16" x 1/32" U notch trowel to the riser and tread portion of the step. Be sure not to glue over the mark previously made on the tread surface (Step 4). Allow the adhesive tobecome tacky with some transfer to the finger when lightly touched. **NOTE: Do not allow the adhesive to completely dry**. Photos **12-13**
- i. Place the ProGen into the adhesive and roll with a three section hand roller to ensure bond. Photos 14-15
- j. On the non-design side of the nosing, lightly abrade the surface with sand paper. With a clean cloth dampen with denatured alcoholand wipe the back to remove the dust from the back of the molding to improve adhesion. (Follow the manufacturer's precautions when using denatured alcohol.) Photos 16-17
- k. Using a premium construction adhesive suitable for PVC and Plastics, apply to the exposed step using an "S" pattern, and fill ineach loop of the "S". Photo 18
- I. Carefully fit the flush mount nose into place. Photo 19
- m. For added safety, secure the flush mount nose to the step with finishing nails. Countersink the nails and fill with a color matchingcaulk. Photo 20
- n. Repeat the process for the remaining steps.
- o. If the direction of installation at upper hallways and landings are perpendicular to the step edge, it may be necessary to utilize theshim provided to turn the flush mount into an overlap stair nose.
 - i. Adhere the shim to the back of the stair nose using a super glue type product suitable for plastics (please follow all of the manufacturer's recommendations for application), and align the shim with the back edge of the bonding surface of the stair nose.
 - ii. Repeat steps j. m.



Photo 1

Photo 2

Photo 3



Photo 4



Photo 7



Photo 8



Photo 9



Photo 10



Photo 11



Photo12



Photo 13



Photo 14



Photo 15



Photo 16



Photo 19





Photo 20



Photo 18

MAINTENANCE

- Maintain post installation temperature between 55° F and 100 ° F (12.7 ° C and 37.8 ° C). Maintain relative humidity between 40-70%.
- Check furniture to be sure the legs are equipped with proper rests and are of sufficient size with a minimum bearing surface of 1" square (or 1 1/8" diameter per 50-75lbs.) to prevent permanent indentations. Polished metal or non-staining, smooth plastic are recommended. Do not use felt pads.
- Use extreme caution when moving heavy furniture or appliance across the flooring. The use of plywood or hardwood panels to slide the furniture or appliances is recommended.
- Narrow-heeled shoes can damage the flooring causing permanent indentation that is not covered by the warranty.
- Light daily sweeping or vacuuming will help maintain the floors original gloss by removing any grit particles, which can affect the normal gloss. Sweep and / or vacuum (without a beater bar) any dirt or debris that can abrade or scratch the floor. Use a soft brush, dust mop, or vacuum with the beater bar turned off.
- Wipe up spills promptly and thoroughly with a clean, damp cloth. Spills are easier to remove if wiped up immediately.
- When necessary, wash the floor with a neutral pH floor cleaner such as Tarkett SureShine® Cleaner, or ammonia diluted in water (1/4 c. to 1 gallon of water). Apply cleaning solution with a damp mop. Do not saturate the floor.
- Use non-staining walk-off mats at outside entrances to prevent dirt and debris from being tracked onto the floor. Discoloration of the flooring may occur from rubber backings and dyes used in floor mats and rugs. Consult the rug manufacturer to ensure their products are compatible with vinyl flooring.
- As with other household furnishings, repeated exposure to direct sunlight may cause bleaching, fading or discoloration. When possible, close drapes or blinds during peak sunlight hours to block direct sunlight.

PLANK REPLACEMENT

Refer to complete Rigid Core Plank Replacement instructions for further information.

- 1. Using a straight edge clearly mark the damaged plank.at the center approximately one inch from the edge of the adjoining planks.
- 2. Using a circular saw, use attic stock to set the blade to the thickness of the plank.
- 3. Carefully, cut the plank along the mark. Take care not to damage the adjacent plank. <u>CAUTION: wear the appropriate eye protection</u>, respiratory equipment and be certain that the safety guards are in place and operational
- 4. Carefully remove the center of the damaged plank.
- 5. Using a power drill with a 1/8" bit, drill from each corner back to the inside edge. Space the holes approximately 1/16".
- 6. Using a sharp chisel or lino knife, cut through the drill holes.
- 7. Carefully remove the edges of the cut plank. Do not damage adjoining planks.
- 8. Prepare the replacement plank by removing the tongue and groove on each short side and by removing the groove on the long side.
- 9. Using Tarkett S 875 Floating Seam Tape, place a piece so it is centered under each adjoining plank.
- **10.** Remove the release liner on the tape on all sides.
- 11. Place a bead of PVA adhesive (similar to Elmer's Glue All) on the top of the tongue of the adjacent plank, long and short side. Wipe of the excess with a damp rag
- 12. Position the replacement plank by inserting the tongue of the long side into the groove of the adjoining plank.
- **13.** Rotate the plank downward into position.
- 14. Roll seam edges with a hand roller to ensure proper contact with floating seam tape.
- **15.** Wipe off excess PVA adhesive with a rag dampened with water.

Tarkett North America

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