GENERAL INFORMATION

All recommendations and instructions should be followed in order to ensure a successful installation.

- Prior to installation, ensure that the style, color and construction are correct and approved by the customer.
- Visually inspect product from different production lots for slight variations. Slight variations in gloss may be visible with mixed lots.
- Inspect all planks before installation to ensure there are no damaged or defective planks. The manufacturer will not be responsible for any costs associated with the installation of visibly damaged or defective products.
- Store all cartons of flooring on a flat surface in neat stacks in order to prevent warping. Boxes should never be stored on their sides.
- This product should be installed after all other trades (with exception of baseboard installation) have completed work, in order to prevent damage to the product.
- Cabinets should not be installed on top of the flooring. If it is necessary to install cabinets
 or an island on top of the flooring, then a relief cut should be made around the edge of the
 cabinet and/or island using an oscillation saw. This is to establish a proper expansion as
 outlined in the installation instructions.

SUBFLOOR INFORMATION

Ensure that the subfloor is suitable for installation, including being free from cracks and high or low areas which may affect the performance of the flooring. All necessary corrections should be made before installation begins:

- Carpet, needle felt, cushion vinyl, laminate and floating hardwood should be removed before installation.
- Subfloors should be flat, dry, and free of dirt and other materials, including mold, mildew, oils or other chemicals, and it must be structurally sound.
- Any loose area of the subfloor must be secured before installation of flooring.
- The subfloor must be flat within 5 mm (3/16") per 3.05 m (10') radius or 3 mm (1/8") per 1.8 m (6') radius.
- Expansion joints or seams should be level with the surrounding areas to prevent telegraphing.

WARNING: DO NOT REMOVE OLD RESILIENT FLOORING. THESE PRODUCTS MAY CONTAIN EITHER ASBESTOS FIBERS OR CRYSTALLINE SILICA, WHICH CAN BE HARMFUL TO YOUR HEALTH.

WOOD SUBFLOORS

- Wood subfloors must be a minimum of 19 mm (3/4") thick APA approved grade tongue and groove plywood or 18 mm (23/32") OSB. All other subfloors, including pressboard, particleboard, chipboard and wafer board, etc. must be structurally sound, free from defects, and installed per their manufacturer's recommendations. All subfloors must be flat and provide adequate rigidity with deflection not exceeding 1.2 mm (3/64"). If the flooring does not meet these requirements, one may consider adding a layer of 6 mm (1/4") thick APA rated underlayment. Underlayment boards should be stapled according to manufacturer's recommendations. This type of underlayment should also be installed over any fire-retardant treated or preservative treated plywood.
- Do not install flooring over wood subfloors which are directly on top of concrete or on top of dimensional lumber and plywood. ASTM F1482 provides additional information regarding panel underlayment recommendations.
- If installation is over a crawl space, it must be properly ventilated. Unless local building codes differ, the perimeter venting should be 1.5% of the total square footage of the crawl space. Crawl space clearance from the ground to the bottom of the joist should be a minimum of 457 mm (18"). Moisture content should not exceed 12% and a minimum of 6 mil vapor barrier covering all exposed soil must be used.

CONCRETE SUBFLOORS

- A 6-mil poly moisture barrier is required to be installed over concrete slabs to prevent moisture vapor emissions from coming up through joint and potentially damaging the floor and joint locking mechanism.
- Concrete floors should be prepared according to the following Standards:
 o ACI 302.1R-15 Guide to Concrete Floor Construction.
 o ASTM F710 Preparing Concrete Floors to Receive Resilient Flooring.

- The compressive strength of the concrete should be a minimum of 3500 psi.
- Concrete floors must be cured for 60 days prior to the installation of the flooring.
- The concrete must be clean and dry with no visible moisture, and should be properly tested and meet the following requirements before installation:
- o The maximum moisture emission rate should not exceed 3.62 kg/92.9 m^2 (8 lbs/1000 $ft^2)$ per ASTM 1869.
- o Internal relative humidity should not exceed 90% per ASTM F2170.
- o The pH level of concrete should be between 7-10.
- o If the concrete does not meet the requirements above, moisture mitigation should be done before installation of the flooring.
- Lightweight aggregate concretes may be used, but the recommendations and guarantees are the responsibility of the lightweight concrete manufacturer. All applicable testing is required and must be passed before installation.
- Moisture tests indicate the conditions only at the time of the test. As an added measure, if past moisture mitigation has been done, or if it is suspected that excessive moisture or hydrostatic pressure has been present in the past or could be in the future, it is recommended that a layer of 6 mil polyethylene film be installed between the concrete and the flooring. The film should be overlapped 100 mm (4"), taped at the seams, and should run up the wall 50 mm (2") where it can be covered by wall base.
- Test results should be maintained by the entity conducting the test. It is the installer's
 responsibility to ensure the moisture content is correct, and the subfloor is level and free of
 damage before installation.

EXISTING RESILIENT FLOORS

Installation over existing resilient floors is acceptable under the following conditions:

- The existing sheet good flooring is a single layer, and it does not have a cushion backing.
 The existing sheet good flooring is installed with a full-spread adhesive and is still properly secured.
- The existing installed product is still in good condition with any loose material removed and any voids filled with floor fill.

CERAMIC TILE, MARBLE, TERAZZO OR QUARRY TILE

Installation over existing tiles such as the ones listed above, or similar products is acceptable under the following conditions:

- The tiles are level with all cracks and chips repaired and all grout joints larger than 6 mm (1/4") filled in order to prevent telegraphing through the product.
- Irregular surfaces must be ground or abraded.
- The floor must be clean and dry.

RADIANT HEATED FLOORS

Vinyl floating floors can be installed over hydronic or electric radiant heat systems under the following conditions:

- The heat system must be operational and run for a minimum of 2 weeks prior to the installation.
- The temperature of the system should be set at 18°C (65°F) three days before installation and should be gradually increased in daily increments of 2°C (5°F) to reach the desired temperature.
- The maximum floor surface temperature must not exceed 29°C (85°F).
- There must be a minimum of 12 mm (1/2") between the heating system and the flooring product.
- All radiant heat floor manufacturer's instructions must be properly followed.
- Electric heat cables or mats must be encapsulated in a cementitious leveling compound or thin-set mortar that meets the moisture level and PH requirements listed above.
- Electric heat systems should have separate sensors and temperature controls in each room.

CABINS AND THREE SEASON PORCHES

Vinyl flooring can be used in these settings under these conditions:

- The room must have windows that can be closed. Vinyl flooring should not be installed in screen only rooms.
- Avoid exposure to direct sunlight for extended periods of time. Use blinds or shades to minimize direct sunlight in peak sunlight hours.

INSTALLATION

RECOMMENDED TOOLS AND MATERIALS

Utility knife and replacement blades, Measuring tape, T-Square, Straight edge, Pencil/ marker, Spacers, Rubber mallet, Tapping block,

Table saw or jigsaw, Safety glasses/goggles, Dust mask, Floor patch (if necessary)

BEFORE STARTING THE INSTALL

- Measure the room to determine the width of the last row of planks. If the width is less than 8 mm (3"), the width of the first row of planks should be cut accordingly.
- Remove all existing trim before the installation of the product. As this is a floating floor, nails should never be used during the installation of SPC planks. Care should be taken to ensure that no nails penetrate the flooring when the trim is put back on.
- In order to ensure good blending of the pattern and best overall look, open multiple boxes at the same time and sort the planks by visual inspection before they are installed.
- It is recommended that during the installation that a periodic visual inspection be done to make sure there is a good mix of plank patterns.

INSTALLATION

First Row

Start in a corner by placing the first plank with the tongue side facing the wall. Use spacers around the perimeter of the room, as well as against any fixed objects, to maintain a minimum 8 mm (5/16") expansion space for rooms up to 15 m (50') in either direction and a minimum 12 mm (1/2") expansion space for rooms up to 30 m (100') in either direction. The expansion space accounts for the normal movement of the floor. A T-Molding must be used for commercial spaces measuring greater than 30 m (100') in either direction. If the flooring is installed in areas falling outside the normal room temperature range, a T-Molding is required every 7.62 m (25'). Diagram 1.

NOTE: This spacing must also be maintained between the floor and all vertical surfaces, including cabinets, posts, partitions, door jambs and door tracks. If it is not possible to maintain this expansion space in doorways or between rooms, transition strips should be used. Failure to do so may cause buckling or gapping.

 To attach your second plank, lower and lock the end tongue of the second plank into the end groove of the first plank. Line up edges carefully to ensure a close and tight fit. Using a rubber mallet, **lightly** tap the top of the end joints where the first and second planks lock together. The planks should lay flat to the floor. **Diagram 2.** Repeat this procedure for each subsequent plank in the first row. Continue connecting the first row until you reach the last full plank.

WARNING: FAILURE TO PROPERLY LINE UP THE END JOINT AND ATTEMPTING TO FORCE IT IN WHILE OUT OF ALIGNMENT WILL RESULT IN PERMANENT DAMAGE TO THE END JOINT.

- Fit the last plank by rotating the plank 180° with the pattern side upward and placing it beside the first row of planks with its end up against the far wall. Line a ruler up across the end of the last full plank and across this new plank. Draw a line across the new plank with a pencil and cut with a saw. **Diagram 3.**
- Rotate the plank 180° so that it is back to its original orientation. Lower and lock its end tongue into the end groove of the last full plank. Lightly tap the top of the end joints with a rubber mallet until the planks are flat on the floor.

Next Row

• You will begin the next row with the off-cut piece from the previous row to stagger the pattern. Pieces should be a minimum of 203 mm (8") long and joint offset should be at least 305 mm (12"). Cut pieces should be no less than 76 mm (3") in width. Adjust layout for a balanced look. **Diagram 4.**

- To start your second row, tilt and push the new plank's side tongue into the side groove of the very first plank. When lowered, the plank will click into place. Using a tapping block and rubber mallet, lightly tap the long side of the new plank to lock it with the planks of the first row. The planks should lay flat to the floor. **Diagram 5.**
- Attach the second plank of the new row first on the long side. Tilt and push plank into place, making sure edges are lined up. Lower plank to the floor. Using a tapping block and rubber mallet, lightly tap the long side of the new plank to lock it into place. Next, lightly tap down on the top of the end joints with a rubber mallet to lock them together. Continue laying remaining planks in this manner.

Last Row

• To fit the last row, lay a plank on top of the previous row with its the tongue to the wall. Lay a ruler across the plank so that it is lined up with the side of the planks of the previous row and draw a line across the new plank with a pencil. Don't forget to allow room for spacers. Cut the plank with a saw and attach into position. **Diagram 6**.

Door Frames and Heating Vents

- Door frames and heating vents also require expansion room. First cut the plank to the correct length. Then place the cut plank next to its actual position and use a ruler to measure the areas to be cut out and mark them. Cut out the marked points allowing the necessary expansion distance on each side. **Diagram 7.**
- You can trim for door frames by turning a plank upside down and using a handsaw to cut away (undercut) the necessary height so that planks slide easily under the frames.
 Diagram 8.
- Remove the spacers once the floor is completely installed.

DISASSEMBLY

To disassemble the floor, tilt an entire row up and disconnect it from the previous row. Then disconnect each plank by sliding it out horizontally.

CARE AND MAINTENANCE

PREVENTIVE CARE

- Use felt pads under heavy furniture, chairs and tables.
- A protective hard floor chair mat should be used on any area where furniture with castors (such as an office chair) will be used.
- Use mats at entry areas and clean on a regular basis. Mats should have a non-staining back.
- Avoid exposure to direct sunlight for prolonged periods of time. Use drapes or blinds to minimize direct sunlight during peak sunlight hours.
- Water leakage over or around the outer edges of the flooring can damage a wood subfloor, so clean up water as soon as possible.
- When moving heavy furniture, use protective boards or appropriate furniture movers designed for use over hard surface flooring.
- Save a few planks in case of accidental damage. Planks can be replaced or repaired by a flooring professional.
- If other trades are in the work area, a floor protector is highly recommended to prevent damage.
- High heels and pets with unclipped nails can scratch or damage a floor's finish.

CLEANING YOUR FLOOR

- Sweep regularly to remove surface grit and dust. Use a damp cloth or mop to clean up any dirt or footprints. Avoid using excessive water to clean the floor. CAUTION: Planks are slippery when wet.
- Use a pH-neutral cleaner, rinse the floor thoroughly and allow to dry.
- Never use wax, polish, abrasive cleaners or scouring agents as they may dull or distort the finish.

