## RESOLVE

## Installation Information

These installation specifications are for RESOLVE SPC. All recommendations are based on the most recent available information. All instructions and recommendations must be followed for a satisfactory installation.

RESOLVE SPC comes with an attached underlayment pad for easy installation and is installed as a glueless floating floor. The planks lock together to provide a tight water-resistant seam, can be installed over most floor surfaces, and are suitable for both residential and light commercial interior applications.

## General Information

- Although acclimation is not specifically required, best installation practice recommends that the product be installed close to intended occupied service temperature, generally a target of $70^{\circ} \mathrm{F}\left(21^{\circ} \mathrm{C}\right)$, but at least between $55^{\circ} \mathrm{F}\left(13^{\circ} \mathrm{C}\right)$ and $100^{\circ} \mathrm{F}\left(38^{\circ} \mathrm{C}\right)$.
- RESOLVE SPC is not recommended where the floor might experience temperature extremes beyond $32^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right)$ or greater than $125^{\circ} \mathrm{F}\left(52^{\circ} \mathrm{C}\right)$. Occupied use temperature range is assumed to be between $55^{\circ}\left(13^{\circ} \mathrm{C}\right)$ and $100^{\circ} \mathrm{F}\left(38^{\circ} \mathrm{C}\right)$.

1. Flooring should be transported and stored in a neatly stacked fashion on a smooth, flat surface.
2. RESOLVE is recommended for seasonal homes and three season rooms. Installer must leave at least $3 / 8^{\prime \prime}$ expansion around all fixed vertical objects.
3. RESOLVE is not recommended for installs that experience temperature extremes beyond $32^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right)$ or greater than $125^{\circ} \mathrm{F}\left(52^{\circ} \mathrm{C}\right)$.
4. Although acclimation is not generally required, best practice recommends the floor be installed close to intended occupied temperature. Rooms to be installed should be between $65^{\circ}$ and $85^{\circ} \mathrm{F}\left(18.33^{\circ}\right.$ and $29.44^{\circ} \mathrm{C}$ ) for 48 hours before and during installation. Acclimation is required if the flooring has been exposed to extreme temperatures just prior to installation.
5. RESOLVE should only be installed after other trades have finished and the jobsite has been cleaned and cleared of debris that could potentially damage a finished plank installation.
6. Inspect flooring for damage, defects, or shading issues before installation; claims for visual defects will not be accepted after cutting and or installation.
7. Mix and install planks and tiles from several different cartons during installation to achieve desirable plank/tile variation. Only use one run-number (production lot) on a particular job.
8. The humidity and temperature of a room can vary due to differences between the seasons. Consequently, your SPC floor must be able to expand and contract in all directions. This expansion can amount to 2 mm per meter ( $1 / 12 \mathrm{in}$. per 3.28 ft .), so the greater the surface area, the greater the room for expansion required. To allow for this variation, an $8-12 \mathrm{~mm}(3 / 8 \mathrm{in} .-1 / 2 \mathrm{in}$.) expansion gap is provided at all walls. A gap must also be provided around pipes or at thresholds or obstacles. For rooms
up to 25 ft . ( 7.6 m ) wide and 40 ft . (12.2m) long, allow between $3 / 8 \mathrm{in}$. and $1 / 2 \mathrm{in}$. ( $8 \mathrm{~mm}-12 \mathrm{~mm}$ ) for expansion along each wall. For rooms over 25 ft . ( 7.6 m ) wide or over 40 ft . ( 12.2 m ) long, an additional expansion joint must be inserted. Expansion joints are also required in doorways, and between adjoining rooms or areas where adjacent flooring is installed. Use a T-molding to cover the expansion joint. Even though the SPC plank was engineered as a floating application, it can also be glued.
9. Flooring should be protected from prolonged direct exposure to sunlight.
10. Underfloor heating is possible with warm water heating systems. The temperature of the floor surface must not exceed 85 F at any point in time.

## PLEASE READ PRIOR TO INSTALLATION

RESOLVE is the newest generation of high-quality SPC luxury vinyl flooring, with a rigid core, ensuring a strong click joint. It can be installed in a fraction of time compared to ceramic tiles, traditional luxury glue down vinyl tiles, or wooden floors. RESOLVE vinyl flooring is warm-to-the-touch, and absorbs more sound than wood, laminate, and ceramic tile flooring.

Tools and Materials Needed:

1. Utility Knife
2. Straight Edge Saw
3. Measuring Tape
4. Shears
5. $3 / 8$ Inch Spacers
6. Transition moldings and baseboards
7. Tapping Block and Pull Bar
8. Rubber Mallet

## EASY TO INSTALL - NO GLUE NEEDED

It is the duty of the person installing the floor to inspect all flooring before installation. If during inspection the installer or buyer feels the floor is the wrong color, improperly manufactured, is offgrade, or is the wrong gloss level, he/she should NOT install the flooring. Please immediately contact the retailer from which the flooring was purchased. No claims will be accepted for flooring which is visibly wrong if such flooring is installed. Installed flooring is deemed to be visibly acceptable.

## Subfloors General:

Planks and tiles can be installed over a variety of subfloor surfaces including concrete on all grade levels, wood, and many existing hard surface floors. The subfloors must be clean, smooth, flat, solid (no movement), and dry. Do not install planks and tiles over floors that are sloped for drainage. Any uneven areas greater than $3 / 16$-inch $(4.76 \mathrm{~mm})$ in a 10 -foot $(3.05 \mathrm{~m})$ radius should be leveled with a Portland cement-based patching compound. Vinyl planks and tiles are resistant to water damage, but they do not
prevent the transmission of moisture. Care should be taken to keep moisture from collecting on either side of the vinyl floor to prevent the growth of unhealthy mold and mildew.

## Concrete Subfloors:

RESOLVE can be installed over concrete of all grade levels if a proper moisture barrier is used. A minimum 6 mil polyethylene moisture barrier must be used with below and on grade concrete subfloors. Moisture vapor emissions should not exceed $5 \mathrm{lbs} . / 24$ hours per 1,000 sq. when tested with the Anhydrous Calcium Chloride Test in accordance with ASTM F 1869 or 80\% RH in accordance with ASTM F 2170 Standard Test Method for Determining Relative Humidity in Concrete Slabs using in situ Probes. Any uneven areas greater than $3 / 16$-inch $(4.76 \mathrm{~mm})$ in a 10 -foot $(3.05 \mathrm{~m})$ radius should be leveled with a Portland cement-based patching compound. Large holes and cracks in the cement should be patched, and expansion joints should be filled with a latex patching compound. Newly poured concrete floors must cure for a minimum of 90 days. Please note it is the person installing the floor and or the homeowner's responsibility to ensure any moisture or alkalinity issues are resolved prior to installation.

## Wood Subfloors:

RESOLVE can be installed over a smooth, flat, level, wood subfloor, underlayment grade plywood, and any other underlayment recommended by the manufacturer for use with a vinyl plank floor. Subfloor should be flat within $3 / 16$-inch $(4.76 \mathrm{~mm})$ in a $10-$ foot $(3.05 \mathrm{~m})$ radius. Wood subfloors must be suspended at least 18" above the ground. Adequate cross-ventilation must be provided, and the ground surface of the crawl space should be $100 \%$ covered with an 8 -mil vapor barrier.

## NOTE:

Avoid subfloors with excessive vertical movement or deflection because subfloor movement will telegraph through to the finished installation. Indications of excessive deflection are subfloor fastener release, squeaking, compromised or sectional contours such as bowing or dipping in floors and uneven flooring material. Nail or screw subfloor panels to secure pieces with excessive vertical movement or deflection prior to installation of the flooring material. Our warranties DO NOT cover any problems caused by inadequate substructures or improper installation of substructures.

## Existing Flooring:

RESOLVE SPC floor planks can be installed over a variety of finished floors including single layer resilient sheet flooring, ceramic, marble and terrazzo. The surface must be in good condition and show no signs of excessive moisture conditions. Large grout joints should be leveled so they are flush with the flooring surface. Carpet, heavily cushioned vinyl floors, or vinyl floors consisting of multiple layers are NOT a suitable subfloor for installation.

## Underlayment/Cushion:

DO NOT install this product over an additional foam underlayment or cushion as this may cause excessive deflection and movement in the floor and damage the locking system. This will void the product's warranty.

## Planning the job:

- First, determine how you want the flooring to run. Typically for plank products, the flooring runs the length of the room. There may be exceptions since it is a matter of preference.
- To avoid narrow plank widths or short plank lengths near the walls/doors, it is important to do some pre-planning. Using the width of the room, calculate how many full pieces will fit into the area and how much space remains that will need to be covered by partial planks and tiles.
- Lay the first row of planks and tiles along a chalk line and trim to fit the wall allowing $3 / 8$-inch expansion space. If you start the first row with a full width plank, it will be necessary to trim the tongues next to the wall and then place the cut edge next to the wall. Use a utility knife and a straight edge to score the top surface of the plank and then bend it downward to separate. If the starting wall is out of square, it will be necessary to scribe the first row to match the wall, allowing the opposite side of the row to present a true square base for the rest of the floor.
- Use expansion gap spacers to keep the RESOLVE floor a minimum of $3 / 8$ inch away from the walls. You need to maintain a $3 / 8$-inch gap around all vertical obstructions including cabinetry, stone fireplaces, and around doorways. Larger installations require larger expansion space.
- Remove wall base and undercut door jambs. Do not secure individual planks to the subfloor as it is designed to be a floating floor. Do not install cabinets on top of RESOLVE floor. Transition moldings and baseboards cannot be tight to the floor but must allow the floor to move beneath them. Do not nail or screw transitions or baseboards through floating floor to the subfloor.


## Plank/tile Assembly Steps:

## Step 1. Making a taping block

Cut a piece of RESOLVE flooring down to about 3 inches by 4 inches leaving the tongue on one side. The side opposite the tongue should be flat as you will be taping this side with a rubber mallet.

## Step 2. The First Row

Start by matching the tongue of the short side of a plank with the groove of the short side of another plank. Lock the short end of the plank by inserting the tongue into the groove at an angle and drop it in place. Continue joining the short sides until you have a row of planks and tiles for the length of the room.

## Step 3. First Piece of the Second Row

You can often use the leftover piece from the end of the first row to begin the second row. This piece must be at least $10^{\prime \prime}$ long but no more than $38^{\prime \prime}$ long. Visually, the installation will look more natural if the starting planks and tiles are a variety of lengths. After installing the first row of planks and tiles, line up the first plank of the second row, so the outside end is even with the outside end of the plank in the first row. Lock the long side of the second-row plank onto the plank on the first row by inserting the tongue of the second plank/tile into the groove on the first plank while holding the plank at a 20 -degree angle from the floor. Press the second plank down flat and the tongue will lock firmly into place.

## Step 4 Second and Subsequent Planks and tiles in the Second Row

Working firstly with the short sides, align the tongue of the second plank with the groove of the first plank while keeping the long side about a quarter inch away from the first row. Then angle these two pieces up by about 20 degrees. If needed use a taping block to tap the second plank into position three times. First, where the two planks and tiles meet, second across from the joint in the previous row and third at the left side of the plank.

## Step 5 Subsequent Rows

Ensure each plank of each subsequent row has at least 10 inches of overlap; that they are fitted brickwork style. This ensures a strong fit. The end joint stagger should be no less than 10 ". Inadequate end joint stagger can weaken the floor's structural integrity, resulting in the disengagement of the plank's locking profiles.

## Step 6 Fitting the Last Row and Doorways

RESOLVE can also be installed with a pull bar or tapping block and rubber mallet or hammer in difficult areas, such as the last row, and when fitting around door trim. Use a pull bar and rubber mallet or hammer to lock the joints together in the last row. Always use a pull bar on the cut edge of the plank/tile. Factory edges can be damaged if the pull bar is used directly against the tongue or groove.

## REPAIRS

In the unlikely event that a plank/tile is damaged for whatever reason, the simplest method is to disconnect the planks and tiles carefully (protecting the tongue and groove edges) until the damaged plank can be removed. Then replace the damaged plank with a new one and re-assemble the disconnected planks. This typically works for planks that are close to the two long perimeters of a room. For damaged planks and tiles that are not close to the perimeter, you may have to remove the damaged planks and tiles and insert new pieces without the short and long end grooves.

1. Using a sharp utility knife and a straight edge, cut out the center of the damaged plank by leaving approximately 1 inch strip attached to the adjacent planks and tiles.
2. Carefully cut back from the four corners of the plank to the inside edges. Carefully remove the plank edges from the adjacent planks and tiles making sure the tongues and grooves of the adjacent planks and tiles are not damaged.
3. Using a sharp utility knife, remove the tongue strip on both the long and short ends of the replacement plank. In addition, remove the groove strip of the short end of the replacement plank.
4. Place two-sided carpet tape with one half under the sides of the adjacent planks and tiles where the tongues and the groove of the replacement plank have been removed. Only the top side release paper of the carpet tape should be removed. Leave the bottom side of the release paper in place - NOT taped to the subfloor.
5. Position the replacement plank by engaging the groove of the long side into the tongue of the adjoining plank and pushing down on the other three sides. The carpet tape will hold the replacement plank in place with its adjacent planks and tiles. Use a hand roller to further secure the tape
