



# Installation Guide

## Fortress

### # VALINGE 2G RIGID CORE (SPC) LUXURY VINYL INSTALLATION/PROTECTION/MAINTENANCE INSTRUCTIONS

Before you begin the installation, inspect the flooring material carefully for any obvious defects. Ensure you have the correct color, pattern, quantity, and that all the material is of the same production number. Beginning the installation means that you have accepted the conditions. It is essential that all subfloors be rigid, smooth, flat, level, permanently dry, and free of all foreign materials. Subfloor preparation should be done with the permanent HVAC set at a minimum of 65F degrees (18C). The suitability of the subfloor is the responsibility of the installer.

NOTE - THIS FLOOR IS NOT SUITABLE FOR MOTORIZED WHEELCHAIRS. DO NOT INSTALL IF POWERED WHEELCHAIRS ARE TO BE USED.

### ## SUBFLOORS

\*\*All subfloors must be flat to within 3/16-inches in 10-feet.

#### ### Wood

Wood floors shall be smooth, level, and free of cracks or other issues that will weaken the integrity of the wood floor. Otherwise, an APA approved underlayment will be required. The floor must be rigid, free from movement and have at least 18 inches of well-ventilated air space below.

#### ### Underlayment

Underlayment panels are used to correct deficiencies in the subfloor and to provide a smooth, sound surface on which to adhere the resilient flooring. APA underlayment grade plywood, minimum 1/4 inch thickness, with fully sanded face is the preferred panel. Underlayment panels such as Multiply or Sureply are recommended. The underlayment should be installed with dispersion type staples placed every 4 to 6 inches in the field and every 2 to 3 inches along the seams. Sanding is a preferred method for smoothing joints. The American Plywood Association offers other acceptable guidelines for proper wooden subfloor installation. The above mentioned is not considered the only procedure for a successful installation. Always install and fasten underlayment panels according to the manufacturer recommendations. Regardless of which underlayment is used, failures in the performance of any Flooring2 product due to the underlayment, or lack of, are not covered by the Flooring2 warranty.

#### ### Concrete Floors

Concrete floors shall be smooth, rigid, flat, level, permanently dry, clean and free of all foreign material. Imperfections such as chips, spalls, cracks and/or corrective leveling should be repaired with cementitious based patching and/or underlayment materials. The surface of the concrete should be flat to within 3/16-inches in 10-feet.

### ## Patching Materials

It is recommended to use a cement based compound usually with polymer additive. This type of patch will not promote mildew growth, has much higher psi strength and better adhesion properties to the subfloor. Flooring2 recommends only the use of cementitious base patching and leveling compounds. Only use the highest quality materials. Many failures have been directly attributed to the use of gypsum based toppings, leveling and patching compounds because of poor indentation resistance, poor resistance to mold and mildew and separation of the product within itself. Regardless of which patching or leveling compound is used, any failures in the performance of the compound or flooring due to the compound is the responsibility of the compound manufacturer and installer, not Flooring2.

## ## Old Adhesive Residue

If a residue is asphaltic (cut-back) or 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 diamond grinding. Confirm there is no asbestos present before using this method.
2. A self-leveling cementitious underlayment may be applied over it. Check with the underlayment manufacturer for suitability, application instructions and warranties.

Never use solvents or citrus adhesive removers to remove old adhesive residue. Residue left within the subfloor may damage the new floor covering.

### ### WARNING!

Warning regarding complete adhesive removal: some solvent-based cut-back Asphaltic adhesives may contain asbestos fibers that are not readily identifiable. Do not use power devices, which create asbestos dust in removing these adhesives. The inhalation of asbestos dust may cause asbestosis or other serious bodily harm. Smoking greatly increases the risk of serious bodily harm.

## ## Existing Resilient Floors

Flooring2 Rigid Core Flooring may be installed over a single layer of resilient flooring such as VAT, VCT and sheet vinyl. Note: The responsibility of determining if the existing flooring or subfloor is suitable to be installed over rests solely with the installer and flooring contractor.

## ## Radiant Heated Floors

Flooring2 Rigid Core flooring may be installed over Hydronic or "water-based" radiant heated floors provided the operating temperature does not exceed 81F degrees (27C). The room temperature must be maintained at a minimum of 65F degrees (18C) for 48 hours prior to, during and after installation, after which the temperature of the radiant heating system can be increased up to but not more than 81F degrees (27C).

## ## Moisture Testing

It is the responsibility of the installer to determine if the subfloor and-or crawl space is acceptable for installation. In the event there is a potential concern for moisture, the appropriate measures should be taken. Rigid Core flooring can be affected by constant moisture below the flooring. A moisture barrier may be necessary. There is also concern for mold growing in high moisture areas.

## ## Material Handling

Flooring2 Rigid Core flooring does not require any acclimation period however, it is recommended that the flooring be stored in an environment that is similar to the environment where the floor will be installed for optimal results.

## ## INSTALLATION

**\*\*Remember to pull from a minimum of 3 different cartons for best visual results. If the floor surface being installed is greater than 7000 square feet in area and/or lengths will exceed 60 lineal feet or more, use expansion moldings.**

The Valinge 2G locking system provides superior locking strength for "rigid-core" flooring.. It incorporates what is referred to as an "angle/angle" installation method. Please pay careful attention to the installation instructions.

**\*\*DO NOT ATTEMPT TO ENGAGE THE LONG SIDE OF THE PLANK OR TILE THEN TAP THE "BUTT-ENDS" TOGETHER. THIS WILL CAUSE DAMAGE TO THE INTEGRITY OF THE LOCKING SYSTEM. THE RESULT WILL BE POTENTIAL JOINT SEPARATION IN THE FUTURE LEAVING UNSIGHTLY GAPS BETWEEN THE PLANKS OR TILES.**

Remove baseboard, quarter-round and other wall base material. Under-cut door trims to allow flooring to be installed under trim and move freely. Proper layout will prevent narrow pieces along the wall. For plank installations lay the long dimension of the plank parallel with the long dimension of the room. Plank ends should be staggered randomly. Keep end joints at least 8-inches apart. Start each row with planks of varying lengths. Usually the left over piece from one row can be used as the starter piece on the next row of planks.

1. Ensure the subfloor is clean and dust free, particularly around the perimeter of the room
2. To minimize pattern repeats in the floor, always pull from at least three cartons of flooring while installing.
3. Measure the room to determine the center-line, adjust that center line in either direction to give a balanced width of plank on each side of the room. Determine the distance from your starting wall where the first row of planks will start and snap a chalk line along the starting wall.
4. If the first row is less than the full width of the plank, or if the wall is not straight, cut the first row to the needed size leaving a minimum 1/4-inch gap between the plank and the wall.
5. Lay the first row of planks with the "tongue" side toward from the wall, along the chalk line to ensure all pieces are cut to the width and length needed.
6. Starting in the corner, install the first row of planks (groove side out, tongue side toward wall) along the chalk line. The first row must be straight as it is the foundation for the rest of the installation.
7. Place spacers against the wall to maintain the proper expansion gap.
8. Working from left to right in the room, start the second row with a cut piece of a minimum of 8-inches in order to stagger the end joints. End joints should be staggered a minimum of 8-inches. Begin the second row of planks with the piece cut from the last piece in the first row. If the piece is shorter than 8-inches, cut a new plank in half and use it to begin the second row. Whenever practical, use the piece cut from the preceding row to start the next row. End joints of all boards should be staggered 8-inches or more.
9. Angle the boards up slightly, insert the tongue side into the groove side pulling the plank in tight to ensure there is no gap.
10. Install the second plank of the second row, align the end joints until tight, push the board down until the tongue and groove end joints "click" together.
11. Use the balance of the last cut from the row as the beginning piece for the next row as long as the end joints are a minimum of 8-inches apart.
12. Continue installing planks maintaining the random staggering of the end joints.
13. If small/narrow fill pieces are required it is recommended to apply a small bead of Gorilla Glue along the tongue of the small piece, use a pull bar to pull piece in tight.
14. Upon completion remove all spacer blocks, install base shoe and quarter-round to cover gap around the wall. Take care to nail the base and quarter-round to the wall and not to the flooring.

#### PROTECTION and CARE (Also see separate Care and Maintenance Brochure)

1. The single greatest cause of damage to any flooring or floor finish is abrasion from dirt and grit. Wherever possible, use walk off mats at entrances and doorways, and vacuum mats often.
2. Use non-staining floor protectors under heavy furniture and equipment.
3. Rolling wheel chairs such as office chairs must have a chair pad underneath for protection. Chairs should have clean, smooth, non-staining floor protectors. there are no nicks or burrs on the protectors. Felt protectors must be cleaned regularly to ensure there is no grit build-up. Floor protectors should be at least 1-inch in diameter and rest flat on the floor.
5. When moving heavy furniture and equipment, use strips of plywood or Masonite to roll or slide the furniture or equipment.
6. The key to successful maintenance of all flooring types is the removal of dirt and soil. Mopping with a sponge or string mop alone removes very little soil, but rather it dissolves the dirt and spreads it out evenly across the floor creating a dull, dirty film and migration into the tile joints.
7. Flooring2 recommends the use of micro-fiber mops and pads for dust mopping and scrubbing. On larger installations using an automatic scrubber or wet vacuum is the preferred way to remove soiled water and rinse water.
8. Do not use vacuum cleaner with rotating brushes or beater bars.