A-Tech Flooring® Rigid Vinyl flooring Installation Guide

Tools and Materials Needed to Lay Rigid Vinyl Flooring

Safety glasses
Mitre saw
Straight edge
Chalk-line
Tape measure
Pry-bar
Saw
Spacers

Note: Rigid Vinyl Flooring should only be installed after all the other trades have finished and the jobsite has been cleared of any / all debris that could damage a finished plank installation.

Basics:

- Acclimate the flooring and the rooms to be installed for 48 hours at a constant temperature between 65° and 85°F (18.33° and 29.44°C) before, during, and maintained after installation.
- Inspect flooring for damage, defects, or shading issues before installation; claims for visual defects will not be accepted after cutting and/or installed.
- Mix and install planks from several different cartons during installation to ensure a random appearance.
- If you wish to install over a radiant heating system consult with the manufacturer of your radiant heating system to ensure that it is compatible with Rigid Vinyl flooring. Temperature must never exceed 79°F and changes in temperature settings must be gradual. Rapid temperature changes and/or excessive heat may damage the flooring and/or the finish. It is the responsibility of installer/owner to confirm the suitability of the radiant heating system for use with this product. Any damage to the floor caused by the radiant heating system will not be covered by the product warranty.
- A-Tech Flooring® Rigid Vinyl floor is rated for indoor use only within the required temperature range, do not install outdoors.
- Leave 3/8" for expansion around the entire perimeter of the flooring.
- Flooring should be protected from direct exposure to sunlight.
- Do not secure individual planks to the subfloor as it is designed to be a floating floor.
- Do not install cabinets on top of Rigid Vinyl flooring.
- Separate all rooms and any floors over 40ft x 40ft using T-molding.

- Carpet staples or adhesive residue must be removed to ensure proper installation.

Measure the length and width of your room. If the room has alcoves or offsets, measure these separately. This will give you the square footage of the room. Purchase a minimum of 5% extra to cover mistakes, trimming and for future needs or replacement. Most installations require about 5% overage.

Subfloor Requirements

Planks can be installed over a variety of subfloor surfaces including concrete on all grade levels, wood, and many existing hard surface floors.

All sub-floors must be clean, flat (smooth) and dry prior to installation, regardless of installation method. Floors installed over non-flat subfloors may squeak and/or deflect when walked on. Do not install planks over floors that are sloped for drainage. Sweep or vacuum your subfloor immediately prior to installation ensuring there is no debris or grit, as it may interfere with installation. All subfloors must be flat, high or low areas exceeding 3/16" in 10'must be corrected.

Note: Rigid Vinyl Flooring is 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 flooring to prevent the growth of unhealthy mold and mildew.

- **Concrete Subfloors**. Planks can be installed over concrete on all grade levels if a proper moisture barrier is used. A minimum six mil polyethylene moisture barrier must be used with concrete subfloors. Please note it is the person installing the floor and/or the homeowner's responsibility to ensure any moisture or alkalinity issues are resolved before installing the floor. Concrete subfloors must be fully cured, at least 60 days old. Most concrete subfloors are not flat (smooth) and must be leveled before installation. In all cases, verify the subfloor using a 10' long straightedge to locate high and low areas, low areas should be filled with a self-leveling compound. Holes and cracks in the cement should be patched, and expansion joints should be filled with a latex patching compound.

- **Wood Subfloors:** 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 covered with a suitable vapor barrier.

If installing over a crawl space, a minimum six mil polyethylene moisture barrier must be used. The subfloor should be flat within 3/16 inch (4.76mm) in a 10 foot (3.05m) radius.

Note: Avoid subfloors with excessive vertical movement or deflection because subfloor movement may cause the locking mechanism to wear down, or even break. 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 boards with excessive vertical movement or deflection before installation of the flooring material.

- **Existing Flooring:** WPC planks can be installed over a variety of finished floors including single layer resilient sheet flooring/ tile, ceramic, marble, and terrazzo. The surface must be in good condition and show no signs of excessive moisture conditions. Grout joints and heavy embossing in tile or vinyl must be leveled, so they are flush with the flooring surface. Additionally, the tile may require several skim coats to achieve a flat surface. Carpet, heavily cushioned vinyl floors or vinyl floors consisting of multiple layers are **NOT** a suitable subfloor for installation.

  Note: Before removing any existing resilient flooring or tiles, please consult with flooring professional to determine if asbestos abatement is necessary to avoid exposure.

Step-by-Step Instructions for Installing Rigid Vinyl Flooring

Work from several open boxes of flooring and “dry lay” the floor before permanently laying the floor. This will allow you to select the varying grains & colors and to arrange them in a harmonious pattern. Remember, it is the installers’ responsibility to determine the expectations of what the finished floor will look like with the end user first and then to cull out pieces that do not meet those expectations.

Prior to installation, inspect planks in daylight for visible faults/damage. Check if subfloor/site conditions comply with the specifications described in these instructions. If you are not satisfied, do not install, and contact your supplier.

To avoid narrow plank widths or short plank lengths near the walls/doors, it is important to do some preplanning. Using the width of the room, calculate how many full boards will fit into the area and how much space remains that will need to be covered by partial planks.

Remove wall-base and undercut door jambs.

Installation should begin with a corner (right hand side) and proceed from the wall with the tongue facing out away from the wall. Allow a minimum gap of 3/8" for subfloor movement or product expansion, which should be covered by accessories.

When laying the first row in a straight line interlock the long ends by inserting the tongue into the grooves at an angle of about 15º – 20º then folding the plank so that the short end from one plank fits on top of the next plank. Continue installing in a sequential manner.

Make sure the seams between the planks are tight. You will feel and hear the click when locking the planks together to create a tight seam. There should be no gap visible between planks. Use a tapping block and hammer to make sure the tongue and groove engage properly together. If your seam appears not to be tight, you should immediately pull apart the planks and reinstall. Slowly lift the top plank away from the bottom plank and simply reinstall.

When installing WPC/SPC, it is strongly suggested to stagger the rows so that the short edge seams are not in a straight uniform line. We advise the staggered rows. (Minimum 12").

To start the second row with the plank in proportion. Measure and mark the plank, then using a straight edge and utility knife, score the plank and snap. Interlock the plank tightly against the first row (long side) again at a 15º – 20º angle and folding down so the short end of one plank fits onto the next plank.

Start the third row with the plank cut at appropriate length. Continue this pattern for the remainder of the rows to be installed. Always place the cut end of the first plank against the wall

Fitting around irregular objects is not a problem. Simply make a pattern out of heavy paper to fit around pipes or irregular objects. Place the pattern upon the plank and trace. Cut along trace lines using a utility knife or heavy-duty scissors, and lay plank. Be sure to leave a minimum of 3/8''expansion space around all fixed objects, floor vents and doorframes.

Note: Maintain 3/8" expansion gap around room perimeter. Areas over 60' long or 30' wide need transition pieces. Non-square rooms must have expansion or transition gaps separating them. All door openings must have an expansion gap between rooms.

Bathrooms: When WPC/SPC planks are installed in a bathroom the flooring can be laid under the toilet only if the floor is separated from adjacent rooms with a doorway threshold, and padding is not used. Otherwise, the flooring should be installed around the toilet

leaving a 1/8" (3.175mm) expansion space. Use 100% silicone caulking to fill the expansion space in the tub, shower and all wet areas to help prevent surface water seepage under the floor.

Pipes: In rows where there is a pipe or other vertical object through the subfloor, make sure the object lines up exactly where two boards will meet on the short ends. Take care to measure carefully before cutting, so the two boards end at the middle of the object. Use a drill or hole bit that is the diameter of the pipe or object, plus 1/2 inch (12.7mm) for expansion/contraction. Click the two short sides of the boards together, then drill the hole centered on the joint between the boards as shown. Now you can separate the two boards and install as normal.

Installing under a door jamb: Installation under moldings (such as door jambs) may require that the top lip of the groove on the end be reduced in size. Using a small plane or knife plane, carefully shave off the edge of the groove. After the groove edge has been trimmed, place the board in place and tighten with a pull bar to test for fit. The installer must be sure that the required expansion gap has been maintained and the flooring is not pinched. If fit is not correct, re-trim as necessary. Place a bead of wood glue on the bottom lip of the groove. Insert the tongue into the groove and tighten the fit with a pull bar. Hold the board in place with painters tape until glue is dry. Do not use masking tape or duct tape as they may damage the floor finish.

Inspect your work, as it will cost you more if you have to come back to do a repair later. Install baseboard. Install transitions as needed.

Protect your floor from scratches by using felt pads on chair legs or furniture feet. Plastic rollers/castors can damage your flooring; if necessary try to replace with softer rubber wheels/castors. When moving heavy items like refrigerators, use at least two sheets of 1/4" Masonite or plywood while moving (sliding the appliance from one sheet to the next) to protect the flooring against scratching and denting.

Dust mop or vacuum your floor to remove any dirt or debris. It is suggested that you buff the floor with lamb's wool pads in order to remove any loose splinters, residues, foot prints, etc…

Repairs

In the unlikely event that a plank is damaged for whatever reason, the simplest method is to disconnect the planks 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 that are not close to the perimeter, you may have to remove the damaged planks 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 (25.4mm) strip attached to the adjacent planks.
2. Carefully cut back from the four corners of the plank to the inside edges in space left by the cutout plank.
3. Remove the plank edges carefully from of the adjacent planks making sure the tongues and grooves of the adjacent planks are not damaged.
4. Using a sharp utility knife, remove the tongue strip on both the long and short ends of the replacement plank. Also, remove the groove strip of the short end of the replacement plank.
5. Place two-sided carpet tape with one-half under the sides of the adjacent planks 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, as it should NOT be taped to the subfloor.
6. 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. Use a hand roller to further secure the tape.