

I. GENERAL INFORMATION

These installation guidelines apply to the COREtec Stone Angle-Tap products only. All instructions and recommendations should be followed for a satisfactory installation.

- The floor covering should be stored and installed in a climate controlled location with an ambient temperature range between 55° - 85°F - 13°-29°C or average temp. of 70 degrees (21.1°). If product is stored in temperatures outside this range prior to installation it is recommended to acclimate the material for 48 hours prior to installation.
- Post installation ambient room temperatures should be maintained between 55° - 85° F.
- Avoid exposure to direct sunlight for prolonged periods, doing so may result in discoloration. During peak sunlight hours, the use of drapes or blinds is recommended. Excess temperature due to direct sunlight can result in thermal expansion.
- Regardless of new construction or remodeling projects, keep flooring stored in rooms that are not being worked in and only install product after all other trades have completed work that could damage the flooring.
- If cabinets are to be installed on top of the flooring (including islands), that area of material must be fully adhered to the subfloor (including an additional 2' beyond the cabinets and islands).
- To minimize shade variation, mix and install planks from several cartons.
- Inspect all planks for damage before installing. If you have any concerns about the product fit or finish, call Shaw Information Services at 1-800-441-7429. Claims will not be accepted for flooring that has been cut to size and/or installed.
- Use cementitious patching and leveling compounds that meet or exceed maximum moisture level and pH requirements. Use of gypsum-based patching and/or leveling compounds which contain Portland or high alumina cement and meet or exceed the compressive strength of 3,000 psi are acceptable.
- Installation - Floating or Glue down - installed on, above, or below grade.
- Cut outside whenever possible to minimize airborne contaminants that may become embedded in the grain.
- When cutting inside, dust collection bags should be clean and in place.
- Always wear adequate eye protection and safety masks.
- Required perimeter expansion spacing for Floating or Glue Down installation is as follows:
For areas less than 2500 sq ft, use 1/4" gap
For areas larger than 2500 sq ft. use 1/2" gap.
- This flooring is waterproof and reliably secures the flooring panels on all four sides. However, excessive moisture in the subfloor could promote mold, mildew, and other moisture related issues like the trapping of moisture emissions under the flooring, which may contribute to an unhealthy indoor environment.
- Additional layer of 6 mil poly film or equal vapor retarder with a perm rating of .1 or less may be used as an additional layer of protection.
- Crumb rubber underlayments are not an acceptable option for use with resilient floor coverings due to performance issues resulting from chemical incompatibilities.

Tools: Tape Measure, Utility Knife, Saw (masonry blades are recommended), Guillotine style flooring cutter, Tapping Block or Rubber Mallet, Pull Bar, ¼" Spacers, T-Square, Safety Glasses, Broom or Vacuum and, if necessary, tools for subfloor repair.

II. SUBFLOOR INFORMATION

All subfloors must be clean, flat, dry and structurally sound. The correct preparation of the subfloor is a major part of a successful installation. Subfloor must be flat – 3/16" in 10' or 1/8" in 6'.

Underlayments – Product has an attached pad, an additional underlayment is not recommended.

CAUTION: Some types of nails, such as common steel nails, may cause discoloration of the vinyl floor covering. Recommendations for attaching underlayment panels are not included. Solvent based construction adhesives are known to stain vinyl floor coverings. All responsibility for discoloration problems caused by the use of the above mentioned products is not the responsibility of Shaw, but rests with the installer and the underlayment panel manufacture.

A. Wood Subfloors

Do not install material over wood subfloors that lay directly on concrete or over dimensional lumber or plywood used over concrete. Refer to ASTM F1482 for panel underlayment recommendations.

1. Do not apply sheet plastic over wood subfloors.
2. Basements and crawl spaces must be dry. Use of a 6 mil black polyethylene is required to cover 100% of the crawl space earth. Crawl space clearance from ground to underside of joist is to be no less than 18" and perimeter vent spacing should be equal to 1.5% of the total square footage of the crawl space area to provide cross ventilation. Where necessary, local regulations prevail.
3. **DO NOT** install over sleeper construction subfloors or wood subfloors applied directly over concrete.
4. All other subfloors - Plywood, OSB, chipboard, wafer board, etc. must be structurally sound and must be installed following their manufacturer's recommendations. Local building codes may only establish minimum requirements of the flooring system and

5. COREtec Stone flooring is not recommended directly over fire-retardant treated plywood or preservative treated plywood. An additional layer of APA rated 1/4" thick underlayment should be installed.

B. Concrete Subfloors

- Floors shall be smooth, permanently dry, clean, and free all foreign material such as dust, wax, solvents, paint, grease, oils, and old adhesive residue. The surface must be hard and dense, and free from powder or flaking.
- If the adhesive residue is asphalt-based (cut-back), or any other type of adhesive is present, it must be removed by industry accepted methods such as mechanical removal or wet scraping.
- If a chemical abatement has been performed, use Shaw Surface Prep EXT to remove any residual chemicals present. Once Shaw Surface Prep EXT has been properly cleaned and removed, apply one coat of Shaw MRP for additional protection.
- Adhesive removal through the use of solvents or citrus adhesive removers is not recommended. Solvent residue left in or on the subfloor may affect the new adhesive and floor covering.

WARNING! DO NOT SAND, DRY SWEEP, DRY SCRAPE, DRILL, SAW, BEAD BLAST OR MECHANICALLY CHIP OR PULVERISE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC " CUT BACK" ADHESIVES OR OTHER ADHESIVES.

These products may contain either asbestos fibers and/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 and may govern the removal and disposal of material. See current edition of the Resilient Floor Covering Institute (RFCI) publication Recommended Work Practices for Removal of Resilient Floor Coverings for detailed information and instructions on removing all resilient covering structures. For current information go to www.rfci.com.

- Concrete slabs must be dry with no visible moisture.
- Required Moisture Testing - maximum moisture level per ASTM 1869 CaCl is 8 lbs. and ASTM 2170 In-situ Relative Humidity 90% per 1000 sq.ft. in 24 hours.
- Do not install over concrete with a history of high moisture or hydrostatic conditions.
- pH level of concrete should be between 6-10
- The final responsibility for determining if the concrete is dry enough for installation of the flooring lies with the floor covering installer.

Radiant Heating: Radiant-heated subfloor systems can be concrete, wood or a combination of both. The heating systems components must have a minimum of 1/2" separation from the flooring product. The system must be on and operational for at least 2 weeks prior to installation to reduce residual moisture. Three days prior to installation lower the temperature to 65 degrees, after installation gradually increase the temperature in increments of 5° F to avoid overheating. Maximum operating temperature should never exceed 85°F. Use of an in-floor temperature sensor is recommended to avoid overheating. Contact the manufacturer of your radiant heating system for further recommendations.

- *Electric Radiant Floors:* consist of electric cables (or) mats of electrically conductive materials mounted on the subfloor below the floor covering. Mesh systems are typically embedded in thin-set. When embedding the system components, use cementitious patching and leveling compounds that meet or exceed Shaw's maximum moisture level and pH requirements. Use of gypsum-based patching and/or leveling compounds which contain Portland or high alumina cement and meet or exceed the compressive strength of 3,000 psi are acceptable.
- *Hydronic Radiant Floors:* pump heated water from a boiler through tubing laid in a pattern under the flooring. Typically installed in channels under a wooden subfloor (or) imbedded in concrete slabs. Requires the installer follow a specific nailing pattern to avoid penetration of the heat system.

WARNING Drilling, sawing, sanding or machining wood products can expose you to wood dust a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to <https://www.p65warnings.ca.gov/products/wood-dust>

C. Existing Floor Coverings

- COREtec Stone flooring can be installed over most existing hard-surface floor coverings, provided that the existing floor surface is clean, flat dry and structurally sound.
- Existing sheet vinyl floors should not be heavily cushioned and not exceed more than one layer in thickness. Soft underlayment and soft substrates will compromise the product's locking ability as well as diminish its indentation resistance.
- Installation is NOT allowed over any type of carpet.
- Do NOT install over wood floors adhered to concrete.

III. INSTALLATION

Installation of 6 mil Poly Film Underlayment is recommended for floating applications only.

For use over concrete substrates - seams **MUST** be taped.
Optional over wood substrates – do **NOT** tape seams.

- Begin at the starting wall. Roll underlayment out parallel to the starting wall and allow the poly film to run 2 inches up the wall.
- After the flooring has been installed trim back the poly film from the wall.
- Roll the next course of poly film parallel to the first run and overlap a minimum of 4 inches. Smooth out any wrinkles or creases in the poly film. Use clear tape to tape the seams together when installed over concrete substrates.
- Continue to install the flooring over top of the poly film taking care not to damage the poly film.

Note: Do not cover the entire area of the substrate to prevent damage or present a slip hazard. Roll the poly film out one row at a time.

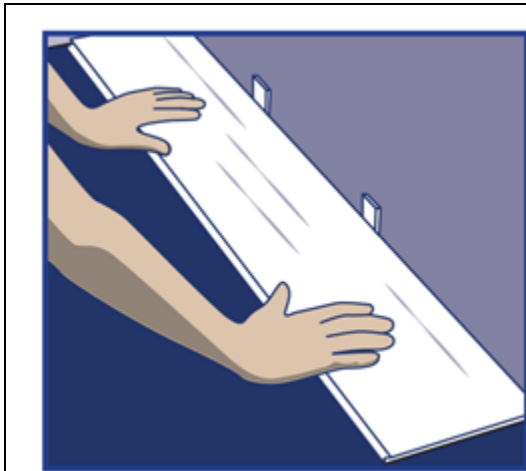
Floating Installation

COREtec Stone flooring is designed to be installed utilizing the floating method. Never secure the planks to the subfloor when using the floating installation method. Proper expansion space (1/4"), 6mm is required. Undercut all doorjamb. Do not fasten wall moldings and or transition strips to the planks.

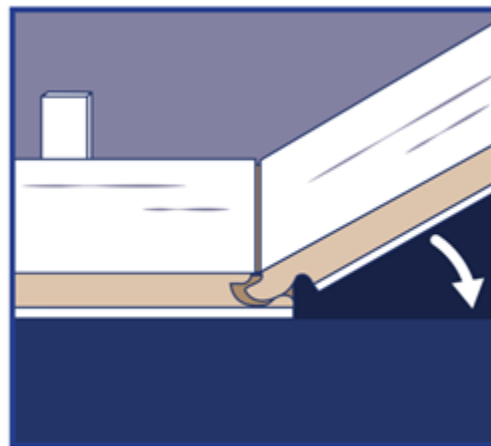
Glue Down Installation: Install on, above and below grade. COREtec Stone flooring is approved for glue down installation over approved wood and concrete substrates. Follow adhesive label instructions for proper trowel and required temperature for the adhesive. Maintain 1/4" (6mm) perimeter expansion space. Refer to adhesive label for moisture limits of the adhesive.

Recommended Adhesive(s): Shaw 1500, Shaw 70 (or equivalent/comparable adhesive) using 3/16" x 1/4" x 1/2" V-notched trowel. If alternative adhesives are used, a bond test should be performed to ensure compatibility.

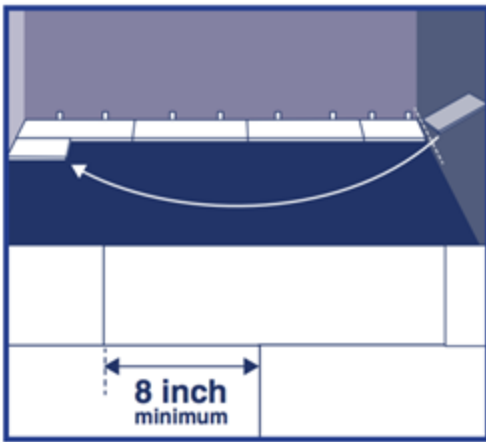
Tile patterns must be installed in a staggered (offset) brick pattern. Minimum 1/3 offset, 1/2 offset is preferred.



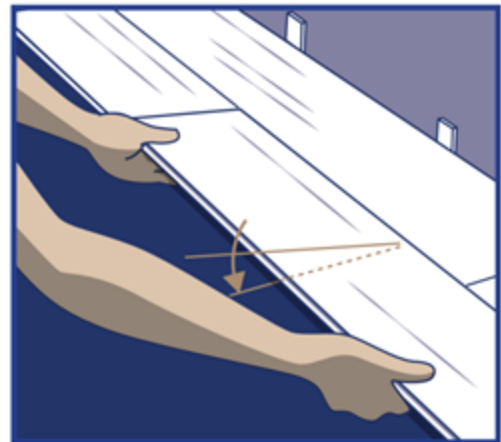
Step 1: Begin installation working from left to right. Insert spacers at ends and edges where planks meet wall.



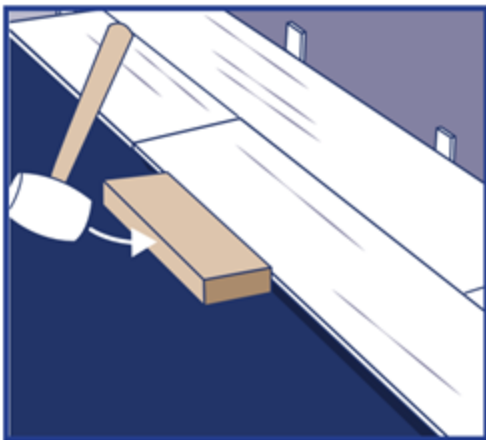
Step 2: Lock short end of plank by inserting tongue into groove at an angle and drop in place. Continue to end of first row.



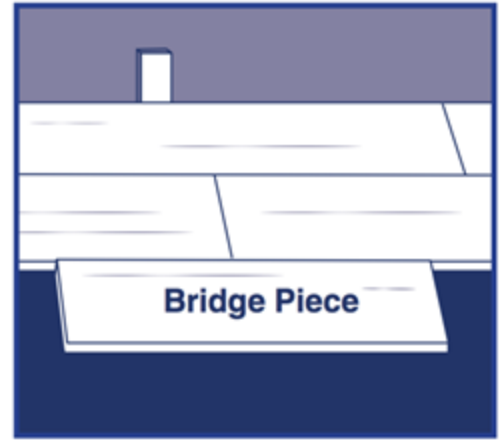
Step 3: Use leftover plank from first row as starter for second row. There must be at least 20cm between plank end joints on adjacent rows. FOR TILE INSTALLATIONS: The distance between end joints should be equal to 30cm for proper appearance.



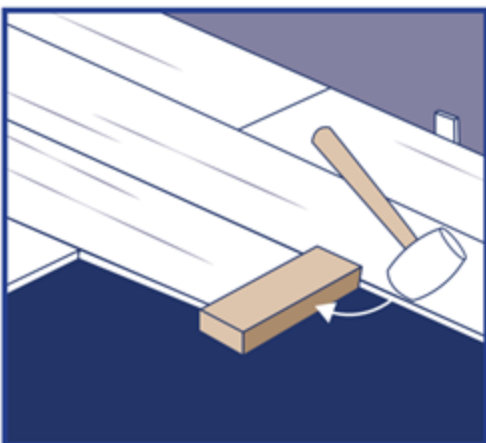
Step 4: Lock long edge of plank by inserting tongue into groove at an angle and drop in place. Slide plank toward end of previously installed plank until the tongue just touches the groove.



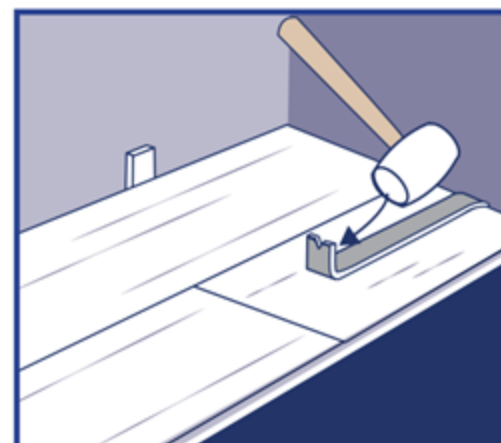
Step 5: IMPORTANT! Use hammer and tapping block to tap long edge of plank to ensure a tight fit. ANY GAPPING CAN COMPROMISE THE LOCKING SYSTEM!



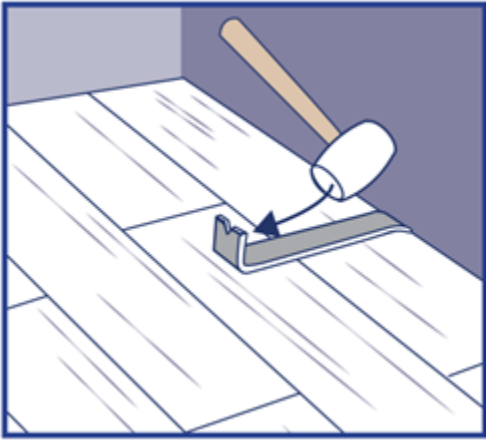
Step 6: Attach a scrap piece of floor to bridge the gap between ends of planks.



Step 7: Tap end of plank with hammer and tapping block to lock ends of planks together. Remove bridge and continue towards wall until installing the final plank in the row. BE SURE TO TAP ON EDGE OF VINYL SO AS NOT TO DAMAGE LOCKING PROFILE.

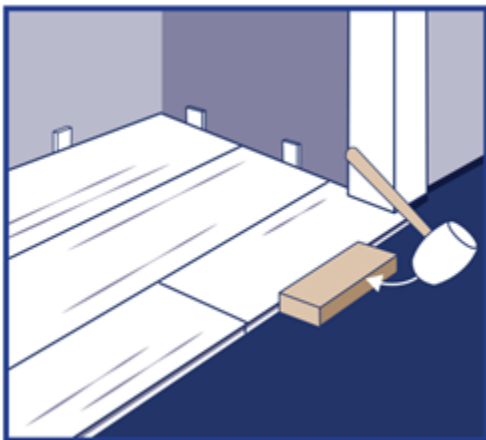


Step 8: Use hammer and pull bar to lock final piece in row. Insert spacer at end of row. Continue installation to final row.

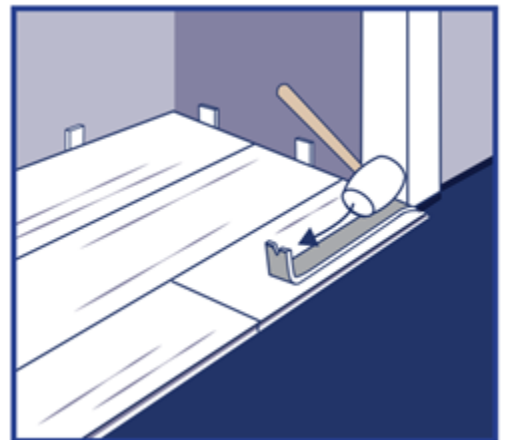


Step 9: Use hammer and pull bar to lock long edges of planks on final row.

Installing underneath door jambs:



Step 1: Undercut space under door jamb to allow plank to slide freely. Tap long edge with hammer and tapping block to lock long edge.



Step 2: Use hammer and pull bar to lock short end of plank.

Completion

1. Protect all exposed edges of the flooring by installing wall molding and/or transition strips. Make sure that no plank will be secured in any way to the subfloor.
2. In areas subjected to surface water exposure allow 24 hours for adhesive to cure, reinstall any plumbing fixtures and seal the perimeter of the floor and other vertical surfaces with a waterproof silicone caulk. For additional details refer to the following instructions:
3. [Installation of Resilient Plank & Tile in Areas Exposed to Surface Water](#)
4. Adhering tape to the surface of your resilient flooring could damage the surface. **Do not** use tape to secure floor protection directly to the floor during construction or renovation. Instead, adhere tape to the material used to protect the floor and secure it to the base molding along the wall. A material such as ram board can also be used to protect your flooring.
5. Protect the finished flooring from exposure to direct sunlight to reduce fading and thermal expansion.