WPC FLOORING
ENGINEERED ANGLE / TAP
FLOAT IN
INSTALLATION INSTRUCTIONS

Important / Read First
Please read and review installation instructions completely before proceeding with the installation. We recommend the installer follow all guidelines for subfloor and general installation recommendations.

For Best Visual Representation
This flooring replicates the look of a Natural product which has natural variations in color, texture and sheen/gloss. For best visual effect, shuffle planks from several cartons and do not install similar planks next to one another.

Subfloor Preparation
Before beginning installation, sub-floor levelness must be checked. It is required that sub-floors be level to within 3/16" in a 10-foot radius. This requirement applies to all types of sub-floors and all installation methods. The performance of flooring that is installed on non-conforming sub-floors will be greatly compromised and will void warranty.

Flooring Material Should be Inspected Prior To Installation
Responsibility for the suitability of WPC flooring for each individual installation cannot be assumed by the manufacturer, since the manufacturer has no control over the installer's proper application. Should an individual plank be doubtful as to appearance or dimension the installer should not use the piece.

Read Before Installing
While WPC Flooring is Moisture resistant, it's not a moisture barrier. Please follow all subfloor and environmental recommendations.

Installer/Owner Responsibility
It is the responsibility of the owner/installer to inspect the flooring. It is also the owner/installer's responsibility to ensure the jobsite conditions, plus the jobsite sub floors are environmentally and structurally acceptable prior to the beginning of installation.

Prior to installation, the owner and or installer are responsible for the final inspection of materials and is encouraged to report any deficiencies in grade, manufacture and finish directly to the seller. Should an individual piece be questionable or not meet standards, it should not be used. Materials installed with visible defects will not be covered by the warranty.

The owner and/or installer are responsible for ensuring that the proper installation conditions and appropriate sub floors meet or exceed all industry standards. Proper installation can be affected by adverse moisture, & humidity at the job site. The sub floor must be clean, flat, dry and structurally sound.

We recommend ordering 5% above the actual square footage requirements to allow for cutting and grading of material.

RADIANT HEAT
This flooring is warranted for installation over hydronic radiant heat. However, flooring is not warranted over *electric* radiant heat systems. Only hydronic systems are approved. The surface temperature of the subfloor must never exceed 85 degrees in any location. Contact the manufacturer for additional information.

Proper Site Conditions & Handling
1. The building must be complete & enclosed. It is essential that masonry, dry wall, paint and all other 'wet' work to be completed, given time to thoroughly dry as this will affect the moisture content of the jobsite.

2. The exterior grading should be complete with all gutters, downspouts and drainage directed away from the building. The crawl space must have adequate cross ventilation (equaling 1.5% of the, on grade, total sq. ft.) and a vapor barrier of 6-8 mil polyethylene film (covering 100% of the crawl space), joints overlapped and taped. There must also be a minimum of 24" from the ground to the underside of thejoists.

3. Permanent HVAC systems must be working and in operation 7 days prior to installation to stabilize the interior environment at normal living conditions and to acclimate the flooring. The HVAC must also be in operation during and after the installation to ensure a stable environment to protect the WPC floor. Ideal conditions are a temperature between 60-80 degrees Fahrenheit (15-26 degrees Celsius) and relative humidity between 35-50% at all times during and after installation. The use of a humidifier or dehumidifier may be required to maintain theseconditions.

4. WPC flooring can be installed on, above, & below grade level.

5. Take special care when transporting & unloading flooring at the job site. Store the WPC flooring in a safe dry place making sure to provide a 4" air space under cartons that are stored upon "on-grade" concrete floors. Flooring should be stored in small lots in the rooms where the installation will take place and allowed to properly acclimate/condition to the job environment.

6. Flooring should be allowed to acclimate for a minimum of 72 hours or longer until conditions are at normal living conditions and meet minimum installation requirements for moisture content.

7. Concrete sub floors must be fully cured for a minimum of60 days and dry (3lbs or less/24 hrs. 1,000 sq. ft., with a calcium chloride test) or less than 75% with relative humidity probes (in-situ testing)

9. Ensure exterior landscaping is complete and graded away from the foundation. Gutters and downspouts must be in place directing rain water away. Always store WPC flooring in a controlled environment of 60 - 80° Fahrenheit (15° - 26° Celsius) and 35% - 50% relative humidity.

Sub Floor Types & Requirements

CDX Underlayment Grade Plywood (at least ¾" thick), OSB (at least ¾"), Underlayment Grade Particleboard Overlay, Existing wood floor (glue or staple/nail down), Sheet Vinyl, Concrete slab, Resilient Tile, and Ceramic Tile.
Preferred Plywood Sub Floor: Use 4'x 8' sheets of 5/8 CDX grade Ply- wood underlayment or 23/32" OSB underlayment with joist spacing 16" on center or 19.2 on with floor truss system. If joists are spaced over 16" on center or floor truss system over 19.2" on center, an additional layer of 1/2" CDX laid diagonal or perpendicular with 1/8" spacing will be required between sheets of underlay. Underlayment Grade Particle board is approved for floating installation but not an approved subfloor for glue down applications.

Minimum Plywood Sub Flooring Requirements: 4 'x 8" sheets of 3/4" CDX grade underlayment with a maximum 19" on center joist construction. If joist system is spaced over 19" on center an additional layer of 1/2" CDX Plywood underlayment, laid diagonal or perpendicular, will be required.

* Minimum specified materials at maximum span and spacing may result in deflection, gaps, and noises.

Solid Board Sub flooring: Should be 3/4"x 5 1/2" Group 1 dense soft- woods, No.2 Common, Kiln dried less than 15% MC.

Concrete: WPC Floors can be laid on concrete provided an appropriate sub floor and moisture barriers are installed over concrete.
1. Make sure concrete is flat, dry, structurally sound and clean.
2. Floor should be flat to within 3/16" in 10'.
3. Substrate should be flattened to tolerance.
4. Always use a 6-mil poly moisture barrier when installing over concrete (Floating installation).
5. If a concrete sub floor is lightweight (less than 100 lb.) rule of thumb: Draw a nail across the top of concrete and if it leaves an indentation, it is probably lightweight concrete and cannot be installed using the glue down method. With light weight concrete you must float the WPC flooring.

Moisture testing for material and wood subfloors:

Using a pin-style meter, test subfloor for moisture content. The moisture content of the subfloor not to exceed 11%. Crawl spaces must be cross-ventilated (1.5% of the total sq. ft.). 6-8 mil black poly covering 100% of the ground and a minimum of 24" from the ground to the bottom of the joists.

Test concrete for moisture using one of the following methods:

Calcium chloride test: Follow test manufacturer's directions, performing 3 tests for the first 1,000 s/f and one additional test for every subsequent 1,000 s/f. Moisture emission rate should not exceed 3 lbs. per 1,000 s/f.

Insitu test: Relative humidity probes should read 75% relative humidity or less in all areas.

For further information on moisture testing, follow the guidelines published by the National Wood Flooring Association, www.nwfa.org.

Additional Sub Floor Notes

Sub floor surface must be clean, level, structurally sound, and dry. Manufacturer will not be responsible for any product failure due to poor sub floor conditions or materials. Unsound or damaged sections should be repaired or replaced.

Sub floor surface should be scraped or sanded clean and made flat prior to installation. The surface must also be free of any wax, dirt, paint, oil, grease, sealers, curing compounds and other debris. Sand or grind high spots and fill low spots with an approved floor patch compound.

It is very important to nail or screw any area of loose or moving sub floor that will cause squeaks. Manufacturer recommends the use of nails or screws with panels fastened every 12 inches along the joists or intermediate supports to ensure soundness of floor when complete.

Sub Floor Inspection and Room Preparation

Sub floor must be completely dry. If installing over new concrete slab, allow 60 days or more to dry thoroughly. The installer must test the concrete using recommended testing methods and levels.

Sub floor must be free of any paint, oil, greases, dirt, sealers, curing agents, dust and other residues.

If installing over existing vinyl floor, make sure vinyl is free of waxes, polishes, and is secured to the sub floor and that the underlying sub floor meets sub floor conditions.

Screw down all creaking and loose sub flooring.
Remove doors and existing baseboards, quarter rounds and thresholds.

Door frames and other wooden obstacles should be sawed off at the bottom to allow enough room for the underlayment and planks to slide under.

General Installation Requirements

All wet trades such as tiling, drywall, painting etc. must be completed before hardwood is installed or delivered to the site.

1. Evaluate job-site and sub floor condition to ensure proper installation environment.

2. Read the product instructions thoroughly.

3. The completed floor is only as good as the sub floor, and the installer.

4. Allow for an expansion space of 1/2" around all vertical obstructions.

5. Should a piece be doubtful due to manufacturing, color, finishing, grade or having a visual defect, do not install it. Cut it for the wall line or place it in a closet. Work out of multiple cartons for a random appearance.

Tools & Accessories

Broom/Vacuum	Razor Knife
Ear Plugs and Glasses	Pencil
Vapor Retarder	Tapping Block
Underlayment Pad	Rubber Mallet
Tape Measure	Chalk Line
Dust Mask	Moisture Meter

Floating Installation

Note: For floating Installation, sub-floor must be flat to within 3/16" in a 10-foot radius.
Underlayment pad such as Floor Muffler Ultraseal must be used to be warranty compliant. Not to exceed 1/16" thickness.

1. Starting from the LEFT with the tongue facing the wall, carefully place the first board in place. Use spacers along the wall allowing required expansion gap (3/8" or 10 mm).

2. Align the next piece by overlapping the end of the first board so that the joint is tight when the board lays flat. A slight tap with a tapping block may be necessary to complete the interlock. Some slight adjustment of the board may be necessary to assure a tight fit. Place spacers against wall to restrain movement and maintain expansion gap.

3. Continue in this manner until reaching the final plank in the first row.

4. Cut the final board piece to length allowing for the required expansion gap.

5. Place spacers against wall to restrain movement and maintain expansion gap.

Continuing The Installation:

1. Begin the second row with the cut piece from the first row. If the cut piece is shorter than 8" (20 cm), do not use it. Instead, begin with a new board that is at least 8" in length and allows 8" between the end joints on the adjacent planks.

2. Position the first board in place by angling it up slightly, pushing forward and interlocking the side tongue. Slide the board to the left as necessary to align the edges of the end joint.

3. Carefully push the board down until the tongue and groove lock together on the side and ends.

4. A slight tap with a tapping block may be necessary to complete the interlock. 5. Restrain the movement of the board by inserting a spacer in the expansion gap at the end of the board.

6. Install the remaining boards and rows in the same manner.

7. Cut the last board to size allowing for the required expansion gap. Place spacers against wall to restrain movement and maintain expansion gap. If necessary, complete the tight fit by tapping the board into place with a pull bar. 8. Whenever practical, use cut pieces from previous rows as the starter board to reduce waste. 9. Maintain 8" spacing between end joints after the first four rows for best appearance

INSTALLING FINAL ROW:

1. The last row may need to be cut lengthwise (ripped).

2. Place the last row of planks to be fit no top of the last row of installed planks. Use a piece of plank as a scribe to trace the contour of the wall.

3. Mark where the board will be cut. If the fit of the wall is simple and straight, simply measure for the correct fit and cut.

4. After boards are cut, position planks and tighten the fit using the pull bar.