

# INSTALLATION INSTRUCTIONS EcoDense® FLOORING

## Eco Hybrid Resilient Flooring



EcoDense® Flooring is a versatile flooring system that can be installed in most areas of your home. EcoDense® Flooring can be installed on, above or below grade levels.

### **PRE-INSTALLATION CHECKLIST**

#### **SAFETY CAUTION**

**USE SAFETY GLASSES AND GLOVES WHEN CUTTING THIS PRODUCT. DURING THE CUTTING PROCESS, THIS FLOORING MAY CREATE WOOD DUST; BE SURE TO INSTALL IN A WELL-VENTILATED AREA.**

## **CAUTION: Wood Dust!**

**WARNING: Drilling, sawing, sanding or machining products containing wood can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or USE A DUSK MASK or other safeguards for personal protection. For more information go to [www.P65Warnings.ca.gov/wood](http://www.P65Warnings.ca.gov/wood).**

## **SUMMARY – PLEASE READ DETAILED INSTRUCTIONS BELOW BEFORE INSTALLING**

- Use a Dusk Mask when cutting
- Visual defects are NOT covered by the warranty – Inspect planks before installation
- room temperature of 60°F-80°F and relative humidity (RH) level of 35%-60%.
- 6 mil virgin polyethylene sheet required over concrete subfloor
- Wood subfloor must be flat and level (3/16 in for every 10 ft)
- Wood subfloor must have moisture content of less than 14%
- Do not install over carpet, padding or other floating floors
- No acclimation for residential application for flooring not exposed to extreme temperatures (outside 45°F-100°F range) during the last 24 hours
- ½" expansion gaps around perimeter and all vertical structures
- T-moulding required for hallways longer than 40ft and floors spanning greater than 50 feet in length or width

## **OWNER/INSTALLER RESPONSIBILITY**

Owner/installer should inspect the flooring for defects prior to installation and during installation (check for differences in finish, sheen, spots or marks, damage from handling and/or transportation, and other defects before installing). During installation, **DO NOT INSTALL** planks which appear to be defective.

## **THE WARRANTY DOES NOT COVER MATERIALS WITH VISIBLE DEFECTS.**

Owner/installer is responsible for the job site being structurally acceptable (see local building codes) for floating flooring installation. Owner/installer is responsible for flooring failures resulting from or related to subfloor, subsurface, job site damage or deficiencies after the flooring has been installed. Should an individual plank be doubtful as to appearance or dimension then the installer should not use this piece. Your EcoDense® Flooring supplier cannot accept responsibility for flooring installed with visible defects.

## Jobsite Condition

Manufacturer will decline responsibility for situations associated with improper installation or poor site conditions. Pouring of basement concrete floors, drywall and plasterwork, plumbing, etc. must be completed well in advance of the floor delivery. Jobsite should be in a normal living condition, i.e., room temperature of 60°F-80°F and relative humidity (RH) level of 35%-60%.

## **The floor should be thoroughly swept and free of all debris and dust.**

Have all wet trades finish and allowed to dry before installing the flooring.

## **Tools**

You will need the following tools to install this product: tapping block, pull bar, spacers, tape measure, pencil, level, hammer (preferably rubber), circular saw, saw blade with carbide tip for finish cuts, caulking gun, work gloves, **safety glasses, ear protection** and knee pads.

## **List of Materials**

You will need the following materials:

- 6-mil poly (depending on the subfloor),
- expansion spacers (1/2"),
- mouldings (Coordinating mouldings are available for your EcoDense® Flooring, contact your retailer or distributor for more information).

## Concrete Subfloor Requirements

Concrete subfloor must be cured, clean, flat and level (3/16 in for every 10 ft). Minimum moisture barrier is 6 mil (0.006 in) virgin polyethylene sheet with seams overlapping 4"-6" and taped together with a waterproof adhesive tape.

Concrete subfloor must have a moisture content of:

- Less than 5% as per Tramex Concrete Moisture Encounter or;
- Less than 3 lbs. per 1,000 square feet per 24 hours per Calcium Chloride test (ASTM F-1869) or;
- Less than 2.5% per Calcium Carbide (CM) Test (ASTM D-4944-04 modified).

Installing over wet or damp concrete should be avoided to prevent mold/mildew.

Floor flatness: Fill in low spots with self-leveler and allow for full curing and grind down higher spots.

## Wood Subfloor Requirements

Wood subfloor must be clean, flat and level (3/16 in for every 10 ft). If there are any uneven areas that exceed this, level them out in advance with a leveling paste or sand down high spots. Wood subfloor must have moisture content of less than 14%. Wood subfloor must be structurally sound. Nail or screw every 6" along joists to avoid squeaking.

## Underlayment

Your EcoDense® 1.0 flooring comes with a pre-attached 2 mm pad. No need to install an extra pad underneath.

## Existing Floor Coverings

This flooring may be installed directly on top of sheet vinyl, vinyl composite tiles (VCT), and ceramic or porcelain tile, when these items have been installed on a wooden subfloor. The subfloor and existing covering must be structurally sound and meet all the necessary flatness and moisture requirements. Never use a vapor barrier when installing over a wooden subfloor. If the previously mentioned flooring types have been installed directly on concrete, then a 6-mil vapor barrier must be installed and overlapped at least 6" along any seams. In all cases, regardless of subfloor, all types of carpet and padding (including the old glue if applicable) must be **removed**, and the normal subfloor instructions would then apply. If an existing floor covering is being removed before installation, please consult a specialist regarding the safety of handling and disposal of the existing materials before beginning.

## Radiant Heated Floor

This product can be installed over radiant heated floor provided that the heating element is installed into a concrete subfloor. Lower heating system to 60°F for 1 week before installation. After installation, slowly increase the temperature in increments of 10°F per hour. The finished floor surface temperature must not exceed 85° F throughout the service life of the floor. Follow installation requirements for concrete as outlined above. Using electric heating mats that are not embedded could void the warranty for your floor in case of failure.

## Wet Areas (Kitchens & Bathrooms)

Do not install in saunas, swimming pool areas and other similar extreme wet areas. Do not install outside.

Filling expansion gaps with 100% silicone sealant is recommended for wet areas to prevent water from going under your EcoDense® flooring.

## Acclimation

In normal conditions and for residential installations acclimation is not required.

However, if the cartons were exposed to temperatures outside the 45°F-100°F temperature range for longer than 2 hours during the last 24 hours than acclimation is required.

For acclimation store the flooring in the room where they are to be installed for a minimum of 24 hours, still in their packaging, and at normal living conditions, i.e., room temperature of 60°F-80°F and relative humidity (RH) level of 40%-65%, prior to beginning installation work. Store horizontally and well away from the walls.

## Expansion Gaps

Allow expansion gap of 1/2" in around the perimeter of the floor and vertical structures. Floors spanning greater than 50 ft, length or width require expansion T-moulding or larger expansion gaps. Wall openings, with or without door, might require expansion T-moulding. Door frames require special care as 1/2" expansion gaps also need to be applied around door frames.

If installed in long and narrow hallways a T-moulding is required for lengths over 40ft.

Certain pieces of heavy furniture (bookcases, pianos, ...) can hinder the expansion and contraction of the flooring. In this case consider leaving a larger expansion gap to be later covered with a thicker base board or shoe moulding.

## Helpful Considerations

- Work in a well-lit area.
- Remove all existing mouldings.
- Install flooring perpendicular to the direction of the floor joists. If possible, install the boards parallel to the direction of the light entering the room.
- Install the underlayment in the same direction that the flooring is to be installed. Tape all seams.

- Stagger end joints but avoid stair-stepping appearance by varying stagger distances between adjacent rows. Minimum stagger distance is 12 in.
- Check door clearances, making necessary adjustments before laying the floor.

EcoDense® Flooring can be both installed using the Angle-Tap or Angle-Angle installation method.

## A. ANGLE-TAP INSTALLATION METHOD.

### 1. INSTALLING THE FIRST ROW

- Begin installation from the straightest wall. If possible, install the floor perpendicular to the floor joists.
- Use a carbide-tipped circular saw blade to remove both the short and long side tongues from the plank to allow room for spacers. Do not trim the groove sides. (Figure 1) Always cut the flooring boards with the décor or face side down.
- Trim the long side tongue from each plank needed to complete the first row. Install the planks from left to right. Place 1/2 in spacers between the wall and the cut edge of the planks to ensure a 1/2 in space along the perimeter. (Figure 2)
- Adjoin the planks by using a tapping block as shown and gently tap until the planks are joined. Continue this process until the final plank for the row is needed. (Figure 3)

### 2. COMPLETING A ROW

- When cutting a plank used for completing a row be sure to allow for the proper 1/2" in gap once the plank is installed. (Figure 4)
- Use a pull bar in place of a tapping block to close the gap between the two planks to complete the row. (Figure 5) If the remainder of the cut plank is a minimum of 8 in long it may be used to start the next row.

### 3. INSTALLING THE SECOND AND REMAINING ROWS

- Begin installing the second row by angling the plank to allow the tongue to slip into the groove of the plank in row 1. (Figure 6) Maintain inward pressure (towards the previous row) while gently moving the plank up and down as you slowly push the plank to the floor. (Figures 6A & 6B) Do not force the plank to the floor if the tongue is only partially inserted into the groove. (Figure 6C)
- Install the next plank by placing it near the previous plank in the row and laying it flat to the floor while leaving a small gap (2-3 mm) between the short ends of planks D and C. (Figure 7)

- c. Once the plank is flat, use the tapping block to tap the end into a locked position. Then, placing the tapping block no closer than 8 in from either end, tap lightly along the long side to ensure the joint is fully seated and no gaps exist. (Figure 8) Note: Uneven tapping or use of excessive force may damage the joint.
- d. Continue laying the floor from left to right, as described in the previous steps. (Figure 9) Remove the short side tongue from any full planks used in starting a new row.
- e. Trim the planks to be used in the final row to the desired width while taking into consideration the necessary gap of ½" in needed between the planks and the wall. Install the final row as described in the previous steps. (Figure 10)

## 4. INSTALLING THE LAST ROW

Use the pull bar to draw the last row to fit tightly to the previous row.

## 5. FINISHING THE INSTALLATION

- Remove all spacers (Figure 11)

## 6. INSTALLATION IN KITCHENS AND BATHROOMS

- A watertight seal can be created by first filling the entire expansion perimeter, T-moulding spaces, and other open areas with ½" in compressible PE foam backer rod. Next cover the backer rod and any remaining gaps with 100% silicone sealant. DO NOT use acrylic sealants
- Prior to installing the mouldings, apply silicone sealant to the portion of the moulding or transition that will contact directly with the flooring surface.
- Install mouldings and immediately wipe away any excess silicone sealant
- Apply silicone sealant at connections to door frames, T-joint mouldings, or any other fixed objects
- Make sure when installing the mouldings not to obstruct the flooring from being able to expand or contract. Never nail mouldings into your floor or have the floor touch the sides of the mouldings.

## AFTER INSTALLATION

Dust mop or vacuum your floor to remove dust, dirt and debris





