

# Modular **Resilient** Flooring SPC Installation Guide

Interface®

## Important Notice

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A click/locking installation system allows the planks to be installed without using adhesives. It is a floating floor installation. The planks should be installed 8mm away from all vertical surfaces such as walls, cabinets, transitions, pipes, supports, etc.

It is recommended that the installation shall not begin until all other trades are completed. All substrates to receive require proper moisture and alkalinity testing.

Use only Portland-based patching and leveling compounds. Do not use gypsum-based patch (White) and/or leveling compounds. (ALAN)

**Do not install on stairs, ramps, sloping floors with floor drains or inclines. Do not install below grade.**

Product is not recommended for installation into bathrooms, kitchens, cafeterias or similar known wet areas.

When moving any type of furniture or heavy equipment, **PROTECT** the floor by covering with plywood, Masonite, or other similar material to prevent scratching or permanent damage.

Use appropriate protectors under furniture. These should be felt or other soft material specifically designed to protect the hard surface from scratches or damage to the wear layer.

Click system flooring cannot be installed over any type of carpet.

Interface recommends using floor protection after installation, such as Ram Board®. DO NOT use plastic adhesive backed protection system.

These Installation Instructions cover most installation procedures. If you run across a situation that is not addressed in this document or requires more detailed assistance, please contact the Interface Help Desk.

## Product Inspection

INSPECT PRODUCT TO BE SURE IT MEETS THE ORDER SPECIFICATIONS.

- Check all material for correct color, design, dyelot, size and that the correct quantity is available to finish job.
- Checking all material before installation can assure that the job will not be delayed.
- Complaints regarding visually identifiable manufacturing defects will not be accepted once the flooring has been laid.

The labels on each carton indicate product style, pattern, color and run number. Be sure the style, pattern, and color match the specifications for each area of your installation. Do not mix runs.

The products are warranted in accordance with Interface's Standard Product Warranty. If you do not have a copy of Interface's Standard Product Warranty and wish to obtain one, call the Interface Help Desk.

*Warning: in the event that any asbestos-containing materials or other hazardous materials are encountered during installation, you should stop the installation immediately and obtain assistance from a qualified remediation consultant or contractor prior to proceeding.*

## Storage and Handling

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### Warehousing / Transport

Ensure proper storage and transportation of product. Store flooring product in dry, clean, and ventilated indoor spaces by batch numbers; ensure the neat staking and stacking height should not exceed 1m. Double stacking of pallets in storage or during transport is not allowed. Handle with care when transporting ensuring no casting or no rough handling.

### On Site

Flooring material and adhesive must be acclimated to the installation area a minimum of 48 hours prior to installation. Unpack the material 24 hours in advance to release the stress to minimize the dimension variance. Avoid the immediate installation after unpacking.

The indoor and ground temperature should be maintained 15-30°C and the humidity should be maintained 40-75%.

Store cartons of products flat and squarely on top of one another with no more than 10 cartons high. Preferably, locate material in the "center" of the installation area (i.e., away from vents, direct sunlight, etc.). Storing cartons in direct sunlight may affect proper acclimation by inducing thermal expansion/contraction. On receipt of the product check the color, embossing, lot number and quantity of the material etc. before installation.

## Pre-Installation Visit

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Areas to receive flooring should be adequately illuminated during all phases of the installation process.

Controlled environments are critical. Fully functional HVAC systems are the best way to ensure temperature and humidity control. **Rigid Core Click should not be exposed to sudden changes in temperature and humidity.**

DO NOT install flooring products until the work area can be temperature controlled.

Rigid Core Click should not be exposed to direct sunlight for prolonged periods of time. It can result in discoloration and can cause excessive expansion.

The use of drapes or blinds is recommended during peak sunlight exposure. In specific areas and locations where sunlight exposure is expected, we recommend adhering the planks with a heat resistant adhesive.

The temperature of your job site must stay within 15°C to 30°C with relative humidity between 40% to 75% for 48 - 72 hours prior to, during, and for the life of the installation.

The minimum temperature of the substrate/subfloor should not be below 50°F prior to, during and for the life of the installation.

We recommend undercutting all door jambs/door casings 1/16" thicker than the MCT+ material where applicable.

## Concrete Moisture and Alkalinity Testing

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New concrete needs at least 90 days to dry under ideal conditions. Lightweight concrete and concrete poured above grade in metal pans take a considerably longer time to dry. Installation cannot begin until it is fully dried and in compliance with moisture and alkalinity requirements.

Before installing, all concrete floors, regardless of age, must comply with the moisture and pH requirements stated below, and must otherwise be suitable for installation as set forth herein. The moisture conditions of the concrete should be determined by use of the In Situ probe relative humidity (RH) test method. See chart for specific requirements.

Interface allows for installation under a variety of conditions depending on the type of slab and the moisture and pH test results at time of installation. For best results we recommend the pH test developed by Interface. **Please see Standard Practice for pH Testing Concrete Floors on page 13.**

Product	RH Moisture Limit	Surface pH Limit
Rigid Core Click	95% RH with ASTM F2170 Less than 3% with CM method	Between 7.0 & 9.0

There should be no visible signs of water or water marking. Concrete compromised by ground water intrusion and/or Hydrostatic Pressure are not acceptable substrates.

NOTE: Moisture and pH tests reflect only the conditions of the concrete at the time of testing. Stated moisture and pH limitations must be maintained before, during and at all times following installation to avoid installation and product failures and to preserve warranty coverage. If the concrete moisture and/or pH test results are outside of the stated allowable limits, **STOP** and **DO NOT PROCEED** with the installation. Seek further advice from Interface before proceeding.

## Product Inspection

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### Inspect product to be sure it meets the order specifications.

Check all material for correct color, design, size and that the correct quantity is available to finish job. Checking all material before installation can assure that the job will not be delayed. Complaints regarding clearly identifiable defects will not be accepted once the flooring has been laid.

The labels on each carton indicate product style, pattern, color and run number. Be sure the style, pattern, and color match the specifications for each area of your installation.

Check to confirm that you have the right quantity and correct installation method. Be sure you also have enough tiles to establish an "attic stock" for future replacements. Open all cartons to inspect for damaged or defective tiles. If you find any, call the Interface Help Desk.

Install the same lot product at the same area and catch the issue like color variance, damages through the pre-lay out and make adjustment in advance.

## Lighting

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The lighting to be used during building occupancy must be in service at the time of installation and for final inspection.

## Suggested Tools & Materials

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- Tape Measure
- Chalk Line
- Hammer
- Pull Bar
- Notched Tapping Block
- 1/4" Spacers
- Pencil
- Crosscut Power Saw
- Jig Saw
- T-Square
- Safety Glasses
- Jamb Saw
- Table Saw
- Utility Knife
- Non-Marking Rubber Mallet
- LVT (Guillotine-style) Cutter
- Circular Saw
- Oscillating Multi-Tool
- Coordinating stain, filler, silicone, or putty
- Coordinating Transition Strip or Molding



## Acceptable Subfloor Types

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- Concrete Slab/Substrate
- APA, CDX Underlayment Grade Plywood (at least 1" thick)
- Existing hardwood
- DO NOT install over hardwood flooring that has been installed directly over concrete, or wood substrate without a properly ventilated crawlspace.
- Resilient Tile (Existing VCT, VAT)
- Radiant Heated Subfloor
- Quarry Tile
- Terrazzo
- Ceramic Tile
- Poured Floors (Epoxy, Polymeric, Seamless)

## Preparing the Subfloor

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*Note: All substrates to receive flooring shall be solid, dry, clean, smooth, and structurally sound. They shall be free of dust, solvent, paint, wax, oil, grease, residual adhesive, adhesive removers, curing, sealing, hardening/parting compounds, alkaline salts, excessive carbonation/laitance, mold, mildew, and other foreign materials.*

*Note: All substrates should be flat, level, and structurally sound. They should be free of any foreign materials that would facilitate movement of the product. The responsibility of determining if the existing flooring is suitable to be installed over the top of with the product rests solely with the installer/flooring contractor on site.*

## Preparing the Subfloor (Concrete)

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**New and existing concrete subfloors should meet the guidelines of the latest edition of ACI 302 and ASTM F2170, "standard practice for preparing concrete floors to receive resilient flooring". [www.astm.org](http://www.astm.org)**

Substrates shall be smooth, structurally sound, dry, clean and free of all foreign material such as dust, wax, solvents, paint, grease, oils, old adhesive residue, curing/hardening compounds, sealers and other foreign material.

The hardness of subfloor requires more than C20 and no breaks or sandiness when scribing.

On grade slabs must have an effective vapor retarder under the slab (As per ASTM E-1745 Class B and in accordance with ACI 302-2001).

**LEVELNESS** - Concrete floors shall be flat and smooth with less than 2mm variance over any 2 mt distance.

Expansion and isolation joints in concrete are designed to allow for the expansion and contraction of the concrete. Resilient flooring products should never be installed over expansion joints. Expansion joint covers designed for use with resilient floor coverings should be used. Control joints (saw cuts) may be patched and covered with resilient once the concrete is thoroughly cured, dry and acclimated.

## Preparing the Subfloor (Gypsum-Based Underlayment)

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When installing over gypsum-based underlayment, Interface recommends that the gypsum-based product be installed at a commercial strength of 3500 psi or higher to help prevent cracking.

All gypsum-based underlayment must be properly sealed before installing MCT+. Sealing the surface of the gypcrete reduces the natural dusting of gypsum-based material.

Installing over properly applied gypsum-based underlayment will not void the Interface standard product warranty, but Interface assumes no liability for issues relating to or resulting from the use of gypsum or any other underlayment. For this reason, claims associated with the use/failure of an underlayment product should be directed to the underlayment manufacturer or the individual(s) responsible for its application.

Use only Portland-based patching and leveling compounds. Do not use gypsum-based patch (White) and/or leveling compounds.

## Preparing the Subfloor (Wood)

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Wood subfloors must be structurally sound and in compliance with local building codes.

It is recommended that your chosen APA underlayment grade panels be designed for installation under resilient flooring and carry a written warranty covering replacement of the entire flooring system.

Double-layered APA rated plywood subfloors should be a minimum 25mm total thickness with at least 480mm well ventilated air space beneath. Insulate and protect crawl spaces with a vapor retarder covering the ground?

Particleboard, chipboard, flakeboard, OSB, hardboard or similar are not recommended subfloor materials and require the additional layer of 6mm APA approved underlayment. DO NOT install over sleeper construction subfloors or wooden subfloors applied directly over concrete.

Underlayment panels can only correct minor deflection deficiencies in the subfloor while providing a smooth, sound surface on which to adhere the resilient flooring. Any failures in the performance of the underlayment panel rest solely with the panel manufacturer and not with Interface.

Interface product is not recommended directly over fire-retardant treated plywood or preservative treated plywood. The materials used to treat the plywood may cause problems with adhesive bonding. An additional layer of APA rated 6mm thick underlayment should be installed.

## Preparing the Subfloor (Strip-Plank Wood Flooring)

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Due to expansion/contraction of individual boards during seasonal changes a 6mm or thicker APA underlayment panel must be installed over these types of subfloors.

## Preparing the Subfloor (Raised Access Floors)

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There are **very specific guidelines for installing MCT+ over RAF**. When product is installed over RAF, some degree of panel telegraphing may be visible. To minimize this, the panels need to be flat and level with a maximum gap between panels of no more than 1 mm.

The difference in height between adjacent panels shall not exceed 0.75 mm. The concavity or convexity of any panel shall not exceed 0.75 mm. Also, if there are concerns about the suitability of the RAF for direct application of the product due to damage, instability, unevenness or quality issues of the RAF panels, the entire area should be overlaid with an approved rigid underlayment to limit telegraphing of the RAF through to the surface of the product.

Regardless of whether an underlayment is used, any unstable or uneven panels should be repaired or replaced. There should be no flexing or movement of the system/panels.

*Note:*

- *The application of rigid core product over RAF eliminates future accessibility of raised access floor "PANELS".*
- *Interface is not responsible for the impact that any subsequent movement of the building or subfloor may have on the installation of product itself. Also, rigid core product is not designed to be installed in register with the RAF panels. If you decide to use rigid underlayment, Interface recommends plywood and/or cementitious board, which should have a minimum thickness of 6mm and be permanently secured to the surface of the RAF by use of construction grade permanent adhesive, screws, and/or nails. The maximum gap between panels should not exceed 1 mm. Sanding and/or taping of the seams may help to limit telegraphing of the underlayment seams to the surface of the rigid core product. Ensure rigid core product does not align with the underlayment seams.*

## Preparing the Subfloor (Radiant Heated Floors)

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Radiant heated substrates must not exceed 85°F (29°C) surface temperature.

Seven days prior to installing resilient products over newly constructed radiant heated systems, make sure the radiant system has been on and operating at maximum temperature to reduce residual moisture within the concrete.

24 hrs. prior to installation lower the temperature to 70°F (21°C) and maintain that temperature for 48 hrs. after installation. After continuous operation of the radiant system, ensure the temperature of the surface does not exceed 85°F (29°C).

Use of an in-floor temperature sensor is recommended to avoid overheating.

## Preparing the Subfloor (Vinyl Tile & Sheet Vinyl)

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### Installing over Vinyl Tile warning:

**Existing floor covering may contain asbestos or other hazardous materials. In the event asbestoscontaining materials or other hazardous materials are encountered, you should stop the installation immediately and obtain assistance from a qualified remediation consultant or contractor prior to proceeding.**

Remove any damaged or loose vinyl tiles and replace with comparable thickness tile or patching compound.

**Levelness** - Floors shall be flat and smooth within 2mm in 2mts.

### Installing over Sheet Vinyl:

Do not install product over CUSHION sheet vinyl. Non-Cushion sheet vinyl can be installed over if stable and firmly fixed to subfloor. If vinyl is soft, heavily embossed, damaged, or loosely laid do not install over these conditions.

*NOTE: The responsibility of determining if the existing flooring is suitable to be installed over top of with resilient, rests solely with installer/ flooring contractor on site. If there is any doubt as to the suitability, the existing flooring should be removed, or an acceptable underlayment installed over it.*

## Preparing the Subfloor (Old/Existing Adhesive Residue)

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Adhesive residue must be removed using one of the following:

1. It may be mechanically removed by methods such as: sanding, grinding, bead blasting or scarifying. Encapsulate the residual with a product specifically designed for adhesive encapsulation.
2. Apply a self-leveling Portland-based underlayment over the existing adhesive. Check with the underlayment manufacturer for suitability, application instructions, and warranties.

*NOTE: Never use chemicals, solvents, or citrus adhesive removers to remove old adhesive residue. The chemical residue left in or on the substrate may affect the new flooring.*

## Dry Lay-out and Fitting

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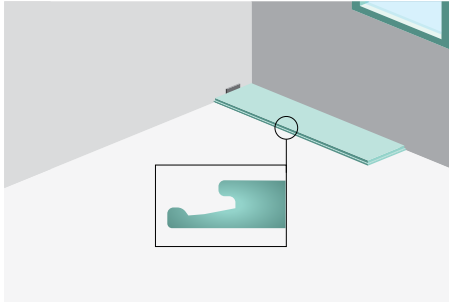
*Note: Depending on the complexity of the job lay-out, most installations will need approximately 5%-10% cutting allowances added to the square meterage of the room.*

- Before you start with the installation. It is important to determine the layout of the flooring. Proper planning and layout will prevent having narrow plank widths at the wall junctures or very short length pieces at the end of the rows.
- Start by working with several open boxes of flooring and dry lay the floor before permanently laying the floor. This will allow you to select varying patterns, textures, colors within the same dyelot to arrange them in a balanced pattern.

## Installation

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### Unilin 2G Locking System

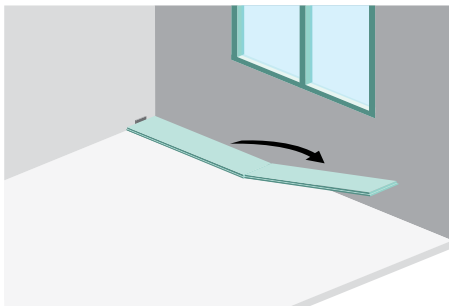


#### Start the installation of the 1st plank in 1st row.

Start installation from the left wall with 8mm to 15mm wide gap for expansion, install the 1st plank against the wall, and note the direction of the notch.

After 3 rows installation, can put aside 8mm to 15mm gap and easily install the surplus floors to the front wall.

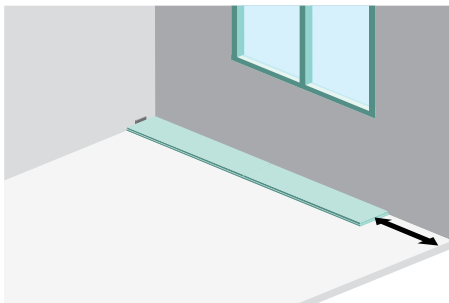
Before installation, measure the room and plan the layout first to prevent having narrow plank widths or very short length pieces at the end



#### The 2nd plank in 1st row

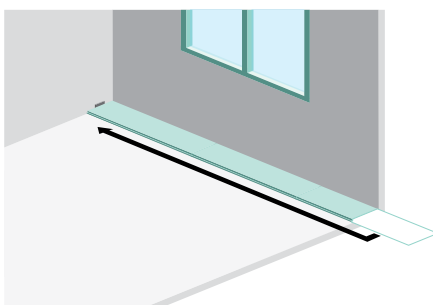
Press the short end of the next plank at an angle to the first one, and then lay down.

Complete the first row in the same way.



At the end of the first row, leave an expansion gap between 8mm to 15mm against the wall and measure the length of the last plank to fit.

Cut the last panel to correct length, the recommended minimum length is two times the width of the plank.



#### 2nd row.

Position the remaining part of the first row's last plank as first plank of second row.

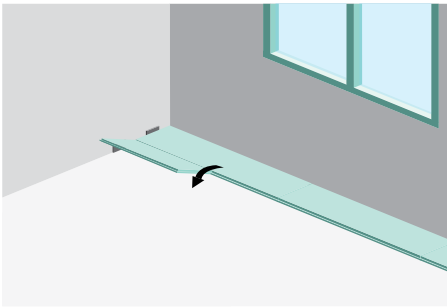
Ensure that the length is two times the width as minimum length.

Leave an expansion gap between 8mm to 15mm against the wall.



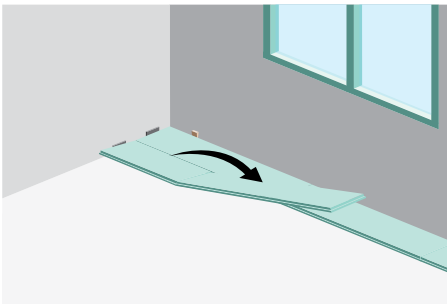
## Installation

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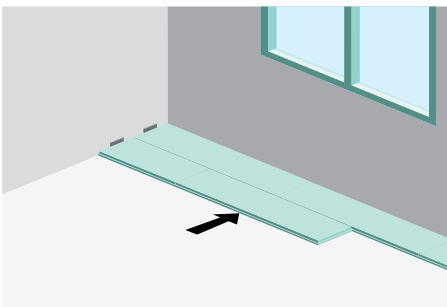
### **The 2nd floor in the 2nd row.**

Place the short end of the plank at an angle against the previous installed plank and lay it flat to the floor.



Push to slide the plank against the row in front so it aligns with the first plank. Push it down like with the first plank when the plank is positioned tightly together.

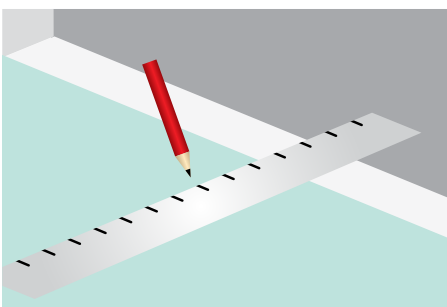
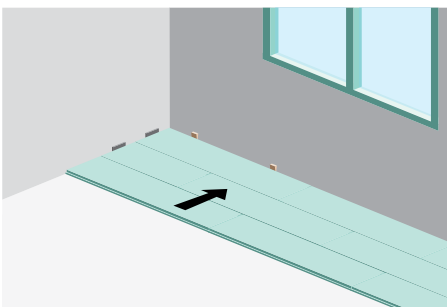
The first/previous plank can now be positioned completely down to horizontal position and if a wedge is used it can be moved to the next short end joint.



### **The installation of the floors after the 2nd-3rd row.**

Adjust the distance between the floor and front wall to allow a 8mm-15mm expansion gap.

During the whole installation process, keep the gap of the expansion gap unchanged, and remove the spacer at the expansion gap after the installation.



For irregular wall, the plank must be marked as per the outline of the wall and cut accordingly.

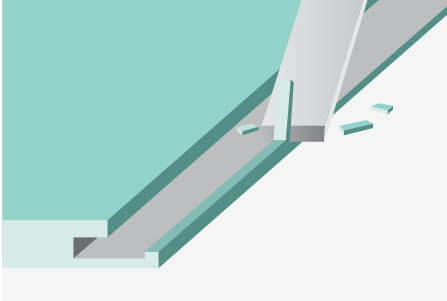
Remember to leave 8mm-15mm expansion gap between the planks and the wall.

If necessary, this method should also be used when installing the 1st row of the floor.

## Installation

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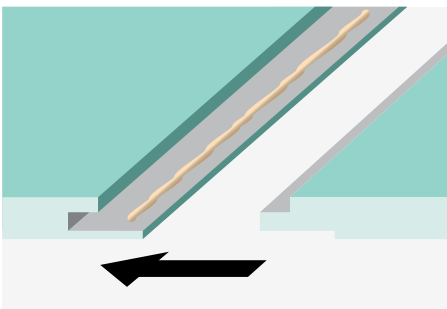
### Straight-Forward Installation



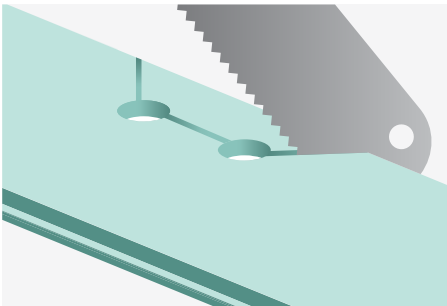
Use chisel or cutting tool to remove the locking portion of the floor, then apply the special adhesive. Install the floors together horizontally.

If necessary, place some blocks between the floor and the wall during the adhesive solidification.

The installation approach for the short edge of the floor is the same as above.

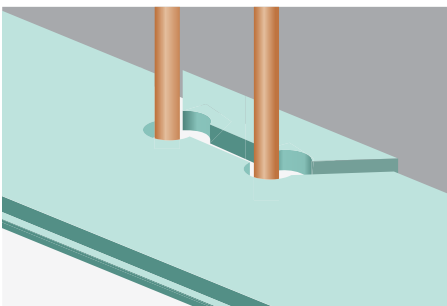


### Heat Dissipation Pipe-Cutting Method



The installation of the heat dissipating pipe is as above image, mark the center of the pipe hole on the plank, then drill holes on the floor with the diameter which is 16mm larger than the diameter of the heat dissipation pipe (for expansion gap of 8mm between plank and the pipe).

Use dicing saw to incise the floor. If necessary, apply the adhesive to bond at the cut section during the installation.



## Installation

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When installing the locking planks in the larger area than 120m<sup>2</sup> with length more than 12 meters and width more than 10 meters with a minimum 10mm expansion gap at the transition area separated by using transition strip.

The planks at the transition area must not be glued.

For areas less than 120m<sup>2</sup> an expansion gap of minimum 10mm between the plank and fixed building like wall, pillars, etc. is required.

When the planks are installed between rooms, there should be an expansion gap of minimum 10mm and separated by a transition strip.

When the planks are installed up to a fixed pipe, the diameter of the opening should be 16mm larger than the diameter of the pipe to allow for expansion gap.

The locking plank is recommended to be installed in rectangle shape site, if the installation site is complex, it must be divided by sections to avoid the uneven stress and cause the warpage and locking issues.

For heating systems, if the ground is heated by electricity, the SPC floors are not recommended.

### For water heated system

7 days prior to installation over new constructed water heated systems, make sure the heating system has been operation at maximum temperature to reduce residual moisture within the concrete.

24hrs prior to installation lower the temperature to 21°C and maintain the temperature for 48hrs after installation.

Ensure the temperature of the surface does not exceed 29°C.

## Acceptance of the floors after installation

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1. The surface should be free from issues such as glue mark, stains, chip-off edges, cracks, and broken edge etc.
2. The door should be trimmed properly, and a gap between the door and the floor should be ensured for the door to open freely.
3. The transition strip at the door should be installed and secure properly.
4. The expansion gap is proper distance away from the wall surface (8mm to 15mm), properly trimmed and free from the dirt, dust, and debris.
5. No obvious unevenness between planks ( $\leq 0.15\text{mm}$ ) and seams gap between planks ( $\leq 0.20\text{mm}$ ).
6. The planks should be firmly installed, no loosening, free from noise when walking on it.
7. The skirting is smooth and uniform and properly installed on the floor

## Protection

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After installation, clean the floor thoroughly and ensure floor is protected. If there are other installation work at the

site, please ensure that floor is covered with floor protection to avoid contamination and damage. Place a dust mat at the entrance to prevent the sand particles from entering and damaging the floor.

*Note: Rubber mats are not allowed to be installed on the top of SPC*

## Installer's Responsibility

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Interface assumes no liability for issues related to or resulting from installing out of specification, including, but not limited to recommended installation method.

Warranty for separation of planks is the responsibility of the installer.