# COREtec®
## the Original

# Installation Guide

**EN**

**US FLOORS®**
Manufacturer of Unique and Sustainable Floors

WWW.**CORETEC®FLOORS**.COM

**GENERAL INFORMATION:**

These installation instructions apply to COREtec® Soundcore and Pro series products only. All instructions and recommendations need to be followed correctly in order to ensure an expert installation.

COREtec® is for indoor use only.

Acclimatization of the product prior to installation is not required, however, we recommend installing COREtec® floors at an ambient temperature of 18° to 29°C, a subfloor temperature between 15° and 29°C and a product temperature of minimum 15°C.

Visually inspect all planks prior to installation and check for any irregularities or visible damage. Do not install any boards that show imperfections. Check to see if the supplied colour and quantities correspond to the colour and quantities that you have ordered. Any backorders from a different production batch can possibly have a slightly different colour nuance and complaints on this subject will not be accepted after installation.

Every COREtec® installation needs to be fitted with a free space of 6mm around the perimeter of the floor. For important remarks, see "floating installation".

Do not install COREtec® floors in areas exposed to temperatures below 0°C or above 65°C.

COREtec® floors are water and moisture resistant. Neither the boards nor the click system are negatively impacted by moisture during use or during cleaning. Excess moisture in the subfloor could, however, cause fungus or other moisture-related problems which create an unhealthy indoor environment.

COREtec® is a pad-attached product, meaning it has an integrated underlay. An additional underlay is therefore not required but is possible as long as it is no thicker than 3mm and has a minimum density of 300kg/m$^3$.

Avoid exposure to direct and intense sunlight for extended periods of time as this could result in discolouration. We recommend using curtains or sun protection in rooms with strong direct sunlight. High temperatures caused by direct and intense sunlight can result in thermal expansion and colour fading.

## SUBFLOOR INFORMATION:

COREtec® floors can be installed on the following type of subfloors: sand-cement screed – anhydrite – timber subfloors – parquet floors – hard, glued floor coverings

All types of subfloors need to be clean, flat, permanently dry and fit for purpose.
In case of a recently laid screed, please respect the drying times as specified by the manufacturer.
Remember: a proper and sound preparation of the subfloor is the key to an expert installation.

> NOTE: Where necessary, you should prepare the subfloor using the right products, i.e. products that are tailored to your specific type of subfloor, your local external conditions and your area of application. When in doubt, check with your glue and filler supplier for the correct products and application. Use these products correctly and according to the accompanying instructions.

## EVENNESS:

COREtec® has a cork underlay attached to it, which will even out smaller irregularities. The subfloor needs to be flat enough, however, and any unevenness should not be greater than 3mm over a width of 1.5m or 5mm over a width of 3 meters. In case of unevenness greater than that, either the subfloor needs to be sanded or raised until level or an extra non-compressible subfloor needs to be installed.

## WOODEN SUBFLOORS:

Do not install a COREtec® floor on a wooden subfloor if the latter is not strong enough, too rigid or unfit for the particular application.

- Basements and crawl spaces must be dry and equipped with proper ventilation.

- Any fixed wooden subfloors like plywood, OSB, particle board, subfloor boards and/or floating MDF subfloors such as Floorfix or Jumpax, need to be installed professionally and in accordance with the manufacturer's recommendations.

> NOTE: New and existing screeds need to comply with national directives and need to be fit for your specific application.

## SAND-CEMENT AND ANHYDRITE SCREED:

- Floors need to be smooth, even, permanently dry, clean and free from any contamination. All foreign materials such as dust, wax, solvents, paint, grease, oil and old glue residues need to be removed.

- New screeds need to be permanently dry. The maximum residual moisture levels allowed are:
  → Unheated cementitious screeds less than 3,0CM% - 85% RH (UK)
  → Underfloor heated cementitious screeds less than 2,5CM% - 80% RH (UK)
  → Unheated anhydrite (calcium sulphate) screeds less than 1CM%
  → Underfloor heated anhydrite (calcium sulphate) screeds less than 1CM%

- The ultimate responsibility in determining whether the screed is dry enough and fit for installation, rests with the COREtec® installer.

## UNDERFLOOR HEATING:

COREtec® can be installed on a traditional hydronic (water-based) underfloor heating or cooling system. We advise against installing on electric or infrared underfloor heating systems unless these are integrated into the screed and unless their respective suppliers have explicitly confirmed that the systems are fit for that specific application. COREtec® does not test these floor heating systems for suitability and therefore does not assume any responsibility for installation on them. Check the manufacturer's instructions for information on the suitability of the system.

## EXISTING FLOOR COVERINGS:

COREtec® floors can be installed on most existing hard floor coverings such as linoleum or homogenous PVC provided the existing floor surface is completely flat, clean, permanently dry and free from any sagging.

- Existing hard floating floors such as laminate, click PVC or floating parquet flooring are best removed. Installing on floating floors, soft underlays or soft subfloors can have a negative impact on the closing capacity of the COREtec® floor.

- Installation on soft floor coverings such as carpets is not permitted. Installation on needle felt carpet is possible after consultation with your COREtec® partner.

## INSTALLATION:

Always make sure you have the necessary personal protection. Use appropriate working clothes with kneepads, safety shoes, safety goggles, gloves and hearing protection.

Required tools: vacuum cleaner or broom, measuring tape, pencil, straight blade and/or concave blade, laminate cutter, jig saw, adjustable spacers, rubber hammer, pull iron and, if necessary, tools for repairing the subfloor.

## FLOATING INSTALLATION:

COREtec® floors are designed to be installed as floating floors. You should therefore NEVER fix the boards onto the subfloor below when using the floating installation method.

Every floating installation needs to be fitted with a free space of 6mm around the perimeter of the floor, along all walls, frames and objects. Wooden frames can be sawed out so that COREtec® sits _freely_ underneath the frame.

For areas bigger than 400m², we recommend working with a 12mm expansion gap around the perimeter of the room. In addition, should a single wall or stretch of the room be longer than 20 linear meters, then an additional expansion joint of minimum 6mm needs to be incorporated within the floor surface.

Depending on the total surface of the installation and on the local climatic conditions, you should adapt the free space (expansion gap) in such a way that the COREtec® floor is never too set and tight.

## GREENHOUSE:

When installing in or near a greenhouse, glass ceiling, large windows down to the floor and/or direct and intense sunlight, the free space along the perimeter needs to be increased from 6mm to 12mm. The floor can possibly be glued locally.

> NOTE: In case of significant temperature differences between rooms, we recommend using dilatation profiles.

## ! FIXED CONSTRUCTION MOUNTED ON THE FLOOR:

When mounting a fixed construction such as a kitchen or a closet onto a floating COREtec® floor, you should make sure that:

1. This is only at one single point in the installation.
   - If the floor is fixed at several different points and can no longer move freely in case of fluctuating temperatures, this can negatively impact the installation and its life expectancy.
   - If several fixed constructions need to be mounted in connecting spaces, you will need to use dilatation profiles between the different rooms.

2. Make sure you respect the free space along all walls, frames and objects. You can finish the gap with a floor strip or a skirting board.

## SEALING THE EDGES:

The required 6mm free space around the perimeter of the floor, along walls, frames and objects, should not be sealed. Using sealing kit on the expansion gap actually prevents the floor from moving freely in case of fluctuating temperatures. It is, however, allowed to use sealing kit on the junction between the skirting board (cover skirting board) and the COREtec® floor as the sealing is not strong enough there to prevent possible movement

## ORDER OF INSTALLATION:

### General:
COREtec® boards can be joined in two different ways: either tongue-in-groove or groove-under-tongue. The most commonly used method is tongue-in-groove. For planks and tiles, all boards are equal, the Herringbone, however, has an A board (left) and a B board (right).
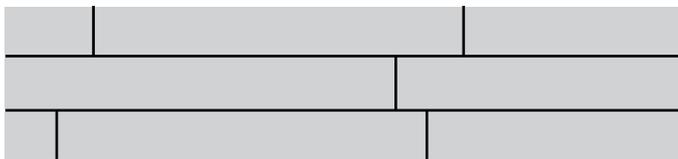
### Proportionate distribution:
Always make sure you have a proportionate distribution between the left and the right side of the main room of the installation when it comes to the width of the planks. It is therefore not self-evident that you start with a full width plank or tile alongside the wall. It is possible that you need to cut part of the width of the first row in order to obtain a more proportionate distribution between the left and the right side of the room. A herringbone pattern, however, needs to be measured out from the centre or the main sight of the room.

### Planks:
Planks are best installed in random order, meaning that the distance between the short end joints of the boards does not form a distinguishable pattern. To make sure that there is no distinguishable pattern, you need to work with the cut off pieces in a creative and efficient way. As a general rule, the minimum distance between the short end joints needs to be equal to or greater than the width of a plank.
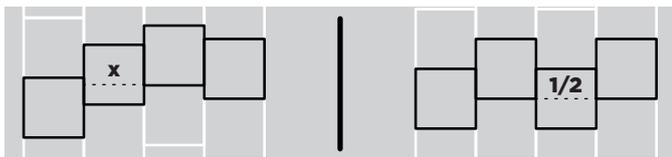
Random bond



### Tiles:
Tiles can be installed in running bond or random bond.

Random bond: install the tiles in random order, meaning that the distance between the short end joints of the boards does not form a distinguishable pattern. As a general rule, the minimum distance between the short ends needs to be equal to or greater than 30% of the length of a tile.
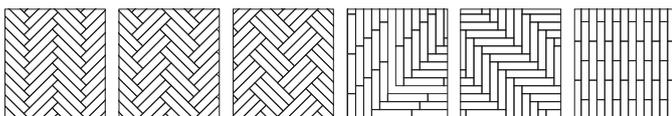
Random bond                    Running bond



Herringbone:
Herringbone planks can be installed in several different patterns:

| | | |
|---|---|---|
| Single herringbone | Triple herringbone | Brick |
| Double herringbone | Square herringbone | Corner herringbone |

A herringbone pattern needs to be aligned correctly so as to obtain a proportionate distribution, with equal fitting pieces to the left and to the right of the room. You can, however choose to make an exception on this, for example to highlight a specific view from the entrance, the hallway or the doorway to another room.



| Single Herringbone | Double Herringbone | Triple Herringbone | Corner Herringbone | Square Herringbone | Brick |
|---|---|---|---|---|---|

## STEP BY STEP INSTRUCTIONS FOR INSTALLING PLANKS AND TILES:

■ First, you need to determine the installation direction of the boards. The most commonly used installation direction is to install rows in the direction of the light.

■ Secondly, you need to determine the installation's starting point. You can start from the middle of the room, from a doorway between different spaces or alongside a wall.
→ When starting alongside the wall, check first if the width of the first row needs to be narrowed down in order to have a more proportionate distribution between the left and the right side of the room.
→ Always use adjustable spacers to compensate any unevenness in the walls. Remember: if the first rows are not level and stable enough, this will have a negative impact on the entire installation.

**An example of an installation with a wall as starting point:**

1. Place the first board of the first row in the corner of the room. Use one adjustable spacer on the short end of the board (6mm expansion gap) and put minimum two adjustable spacers on the long side.

2. Take the second board and align it perfectly with the previous board (do the same for every following board). Position the click profiles on the short sides of the boards directly above one another, then close the click joint in a careful and controlled way by means of a rubber or rebound hammer. Make sure the joint is firmly closed.

3. Use adjustable spacers to compensate for any unevenness in the wall. This will ensure that the boards are installed in a completely straight and level manner.

4. When you've arrived at the last board in the row, measure carefully how long it needs to be keeping in mind the 6mm expansion gap alongside the wall. Cut, clip or saw the board and fit it in the exact same manner as you have clipped the previous boards.

5. Install the second and any of the next rows in the same way as you have installed the first. Start with the first (shortened) board  6mm away from the wall/skirting board and carefully click the tongue into the groove. Use a rubber hammer and a tapping block (or leftover product) and carefully hit each board's long side so as to completely close the click connection on the longitudinal side.

6. Fit every next board in the row in the same manner lengthwise while positioning the short sides of the boards directly on top of each other. Use a rubber hammer to tap the click connection in a careful and controlled way until fully closed.

7. Fit the last board of the second/next row as described in step 4.

8. Repeat steps 5 to 7 until all rows have been installed except for the last one.

9. In most cases, the width of the boards in the last row will need to be trimmed down. In order to do so, please proceed as follows: take the board that needs to be trimmed down and place it directly on top of the last row that you have installed. Turn a second board upside down and place it against the wall and on top of the board that needs to be trimmed down. Mark it off on the board that needs to be trimmed. Carefully cut, clip or saw this board and all other boards of the last row to size, keeping in mind the required 6mm free space. Install the tailored to size pieces in the same way as the previous rows, board per board. Use a pull iron to close the click connection on the longitudinal side.

10. Doorposts and heating pipes need to be cut out separately. First tailor the board to the correct length and width, then mark off the correct shape keeping in mind the required 6mm expansion gap around objects like heating pipes. Carefully cut the board to size.

11. Expansion gaps should never be sealed with silicone paste but can be finished by covering them with matching skirting boards or finishing trims.

NOTE: Should you need to remove a board, please do so by carefully sliding the short ends' click joint apart.

## STEP BY STEP INSTRUCTIONS FOR INSTALLING A HERRINGBONE PATTERN:

*Example based on a single herringbone pattern and a proportionate distribution to the left and to the right of the room.*

A herringbone pattern needs to be measured out in such a way that there is a proportionate distribution with equal fitting pieces to the left and to the right of the room. You can, however, choose to make an exception on this, for example to highlight a specific view from the entrance, the hallway or the doorway to another room. To do the measuring, you can mark centre lines, reference lines and diagonal lines on the floor. Another way to measure, is by creating a section of approximately 1O left and 1O right boards clicked together. You can then slide and move the section until you are fully satisfied with the position in the room.

### MEASURING AND MARKING THE SUBFLOOR:
- Measure accurately and find the centre point of the main area of the installation.
- Measure how much the herringbone pattern needs to move in order to obtain a proportionate distribution between the left side and the right side of the room.
- Correctly mark the first reference line on the floor.
- Measure the full width of the first two herringbone rows accurately and use this to mark the second and third reference lines on the floor. This will help you make sure the installation is 1OO% straight.

> NOTE: Never start installing directly alongside a wall but make sure that the first two rows are installed completely free of any tension and 1OO% straight.

### FIRST DOUBLE ROW:
Take a right and a left COREtec® board and fit the tongue of the right board's short side into the groove of the left board. Then, click the second right board onto the longitudinal side of the first right board and click the second left board onto the first left board and onto the second right board. Close the click joints by hand and verify that they are firmly closed. Repeat this process until the first two rows are fully installed. They form the basis for the rest of the installation.

Check the first double row of boards and reposition them onto the lines marked on the subfloor. Make sure that the first, second and third reference lines coincide with the double herringbone row.

### END PIECES OR FITTING PIECES:
After you have installed and positioned the first two rows correctly, you will need to measure and install all short side fitting pieces. Keep into account the required free space on the perimeter of the installation. With small end pieces or fitting pieces, it is often somewhat harder to close the click connection, especially when they need to be installed groove under tongue. A small pull iron and some tapping or jiggling often does the trick and can help you to firmly close the joint.

> NOTE: COREtec® click connections can generally always be closed by hand and tapping them with a rubber hammer and a tapping block is thus not required. In the off-chance that this should be necessary, make sure you tap it very gently and carefully as hitting the click connection too hard could push the previous boards/rows causing their click connections to reopen.

### SECOND AND ANY NEXT ROW:
Continue installing single rows consisting of either only right boards or only left boards. To do this, fit the groove on the short side onto the tongue of the previous row. Lift the board slightly, then press firmly on the long side so as to close the click connection with the previously installed board. Finish every row by tailoring the necessary fitting pieces to size.

### INTERMEDIATE INSPECTION:
Make sure you thoroughly inspect the already installed boards every now and then. Verify that all click connections are firmly closed and remain closed, especially those of boards that may have shifted during the installation. Check for any imperfections that need to be addressed.

### LAST ROW:
Measure and install the fitting pieces or end pieces of the last row in the same way as you have done for the fitting pieces and end pieces of the previous rows. Measure carefully, keeping in mind the required free space around all walls, frames and objects, then cut, clip or saw the pieces to size.

### FINISHING MOLDINGS AND SKIRTING BOARDS:
The required expansion gap around walls, frames and objects can be covered with the appropriate plinths.
- T-profiles: are used to cover an expansion joint or to create the transition between floor coverings of a similar height.
- Stair nosing: is used on floor coverings that are installed on stair cases or that form a finished edge. Secure with glue and with nails/screws. Make sure you pre-dill the holes in order to avoid splitting.
- Transition profiles: are used to create a transition between floor coverings of different heights: wooden floors to vinyl, vinyl composites or low pile rugs.
- Thresholds: used to make a transition from one type of floor onto another or to create a clear line between different floor coverings – wood to carpet.
- Flooring strips/flat plinths: are used to cover the expansion gap between the floor and any vertical objects in cases where existing skirting boards are already in place around door frames and objects.
- Corner mouldings: are used to cover the expansion gap between the foot of the wall and the floor. You can also use them to create a smooth transition between the floor and the cupboards.
- Skirting boards/high plinths: are used to cover the expansion gap between the floor and any vertical surfaces. The skirting boards come in several possible heights and can be painted in the colour of your choice.

### FINISHING THE JOB – ALL INSTALLATIONS:
- Sweep, vacuum or rinse the floor after the installation
- Clean the floor with COREtec® cleaning products
- Install the floor strips, skirting boards, thresholds or T-profiles.
- Any unused materials are to be stocked in a dry place at the owner's and can serve as repair pieces in case of an accident or any external damage.
- Please use plywood or hardboard when moving heavy appliances or furniture over the floor.

### FLOOR PROTECTION DURING CONSTRUCTION WORKS:
Should any construction works be required after the installation, we recommend covering the entire floor. It is best to cover the floor completely as certain types of floors are light-sensitive, which means that colour changes could occur in non-covered parts of the floor. Use vapour permeable floor protection so as to avoid any moisture or vapour from lingering on the floor.

### PROTECTIVE CAPS:
Protect your floor by using the right protective caps on all sliding or moving furniture. 'Scratch No More' protective caps are available in almost every size and for every possible chair. Use felt caps on furniture that you occasionally need to move.

### DOOR MAT:
Use the right doormat at the entrance to avoid litter and road dirt. Sand and other road dirt can cause scratches on the floor when they get underneath any sliding or moving furniture. These scratches can be repaired but are better avoided altogether. Always use doormats with a plasticizer resistant backing.

> 6mm



> 6mm



min 20cm















> 6mm