Coretec





General information

These installation instructions apply to Coretec® Sound Core®, Pro Core® and Mineral Core®. All instructions and recommendations need to be followed correctly in order to ensure an expert installation and for our warranty to apply. Installation videos are available on our website but watching these does not replace reading these installation instructions. Please visit the Coretec® website to make sure you have the most up to date installation instructions and to have access to additional guidelines (care guide, underfloor heating, additional underlay, etc.).

Australia and New Zealand have specific rules, please consult the dedicated annex to this installation guide.



 $\label{eq:coretec} \textbf{Coretec}^{\circ} \text{ floors are suitable for indoor installation only.}$



Acclimatisation of the product prior to installation is not required, however, Coretec® floors need to be installed in a climate controlled environment at an ambient temperature of 18°C to 29°C, a subfloor temperature between 15°C and 29°C and a product temperature of minimum 15°C.



Visually inspect all boards 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. Color variations can be part of a design, check the full decor on our website, a physical sample or a display board may not show all the variations.



www.coretecfloors.com



View installation video here

Installation Playlist



Every Coretec® installation needs to be fitted with an expansion gap of minimum 6 mm around the perimeter of the floor. For details, see "floating installation".



Do not install Coretec $^{\circ}$ floors in areas exposed to temperatures below 0 $^{\circ}$ C and above 65 $^{\circ}$ C.



Coretec® floors are water and moisture proof. However, excessive moisture in the subfloor could promote mold, mildew and other moisture health related issues. Hydric pressure from a wet subfloor could impact the product and lead to cupping.



Coretec® is a pad-attached product, meaning it has an integrated underlay. Adding an additional underlay is therefore not required but is possible as long as it follows our guideline for additional underlay.



Avoid exposure to direct and intense sunlight for extended periods of time as this could result in discolouration (due to UV rays) and in thermal expansion. It is necessary to use curtains or sun protection in rooms with strong direct sunlight.

Subfloor information

Coretec® floors are approved to be installed on the following type of subfloors: sand-cement screed, anhydrite screeds, timber subfloors, parquet floors, hard glued floor coverings and tile floors.

All types of subfloors need to be clean, flat, permanently dry and fit for purpose with no risk of sagging. In case of a recently laid screed, please measure the subfloor moisture content before installation to make sure it is dry. Remember: a proper and sound preparation of the subfloor is the key to an expert installation.

NOTE: The fire class of the product corresponds to Coretec® being installed on a sand-cement screed. Check your local regulations if you need to install on top of an existing floor covering or an underlay.

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 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 and irregularities

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 3 mm over a width of 1.5 m or 5 mm over a width of 3 m (Sound Core® and Pro Core®) or 3 mm over a width of 3 m (Mineral Core®). You can install Coretec® over gaps and grouts that are not wider than 5 mm and not deeper than 4 mm. Tiles can be designed with an irregular top surface and/or height differences, above requirements still need to be respected. In case of unevenness or larger irregularities, the subfloor either needs to be sanded or raised until level.

NOTE: Unevenness and irregularities of the subfloor can have an effect on acoustics. Floor levelling is advised for maximizing impact sound reduction and acoustics performance.

Sand-cement and anhydrite screed

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

- New or old subfloors need to be smooth, even, <u>permanently</u> 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. The maximum residual moisture levels allowed are:
 - \rightarrow Unheated cementitious screeds: \leq 2.5% CM (75% RH for UK)
 - → Underfloor heated cementitious screeds: ≤ 1.5% CM
 - → Unheated anhydrite (calcium sulphate) screeds: ≤ 0.5% CM (75% RH for UK)
 - \rightarrow Underfloor heated anhydrite (calcium sulphate) screeds: \leq 0.3% CM
- The ultimate responsibility in determining whether the screed is dry
 enough and fit for installation, rests with the Coretec® installer.
 As a reminder, the calcium carbide method is the reference.

Wooden subfloors

Do not install a Coretec® floor on a wooden subfloor if the floor batten is not strong enough 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 and presents no risk of sagging.

Existing floor coverings

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

- Installation on hard floating floors such as laminate, click PVC or floating parquet flooring is not permitted.
- Installation on soft floor coverings such as carpets is not permitted.

NOTE: If you install Coretee® on top of an existing floor, you might need to saw the bottom of the doors to prevent the doors from damaging the floor.

Installation equipment

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

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

NOTE: Cutting Mineral Core® produces more dust and will require diamond coated discs if you use a circular saw for cutting.

A "guillotine" can be used as well.

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, even in partial areas.

Every floating installation needs to be fitted with a free space (expansion gap) around the perimeter of the floor, along all walls, frames (doors, windows, etc.) and objects:

- 6 mm minimum for areas less than 200 m²
- 12 mm minimum for areas between 200 m² and 400 m²
- for areas bigger than 400 m² or rows longer than 20 linear meters, a transition gap (including the proper expansion gap) is necessary

If you use underfloor heating, an additional rule applies:

- 6 mm minimum for rows up to 10 linear meters
- 12 mm minimum for rows from 10 to 20 linear meters
- for rows longer than 20 linear meters, a transition gap (including the proper expansion gap) is necessary

Conservatory

When installing in or near a conservatory, glass ceiling, large floor-to-ceiling windows and/or direct and intense sunlight, the free space along the perimeter needs to be 12 mm. A glue down installation can be considered using an appropriate glue. Please keep in mind the product installation and post-installation allowed temperatures.

NOTE: In case of significant temperature differences between rooms, we recommend using transition gaps.

Sealing the edges

The required expansion gap around the perimeter of the floor, along walls, frames and objects, should NEVER be sealed, as this can affect the integrity of the installation. It is, however, allowed to use sealant on the junction between the skirting board (cover skirting board) and the Coretec® floor as the seal is not strong enough there to prevent possible movement.

Forbidden

Approved





Fixed construction and heavy loads mounted on the floor

Fixed constructions (kitchen furniture, kitchen islands, wood stoves, etc.) or heavy furniture (piano, bookcase, wine fridge, etc.) could prevent the floor from moving freely.

One fixed construction or heavy furniture is allowed only for areas lower than 100 m² or 10 linear meters and if the opposite expansion gap is free and increased to 12 mm.

If there are several fixed construction and heavy furniture in a room, transitions gaps need to be used or additional expansion gaps need to be created. Gluing down the floor on the full area can also be considered.

Underfloor heating

Please refer to the "Coretec" Underfloor Heating Guidelines" for detailed information.

Wet Areas

Coretec® can be used in wet areas such as bathrooms however it cannot be used as shower trays or shower walls. Bear in mind that a wet floor can be more slippery, we recommend to use appropriate shower mats.

Glue down installation

Coretec® was designed to be installed following the floating installation method. A glue down installation is possible, but "hybrid" installation (with part of the installation floating, part glued) is not. If an area needs to be glued down, a transition gap needs to be used to separate it from a floating area.

Installation

General:

Coretec® boards can be joined in two different ways: either tongue-ingroove or groove-under-tongue. The most commonly used method is tongue-in-groove. Installation is the same for boards and tiles. Herringbone, however, has an A board and a B board.

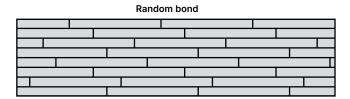
Proportionate distribution:

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 boards. It is therefore not necessary to start with a full width board 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.

The minimum size of a board or tile installed after it is cut should be 20 mm. A herringbone pattern needs to be measured out from the centre or the main sight of the room.

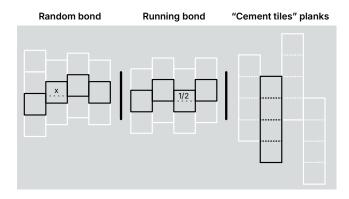
Boards:

Boards 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 an efficient way. As a general rule, the minimum distance between the short end joints is at least 25 cm.



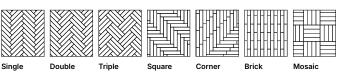
Tiles

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 is at least 30% of the length of a tile.



Herringbone:

Herringbone boards can be installed in several different patterns. A herringbone pattern needs to be aligned and centred 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 for this, for example to highlight a specific view from the entrance, the hallway or the doorway to another room.



Multi:

The pattern below is the most efficient based on box configuration, other patterns will increase wastage. Check carefully before ordering.



Step by step instructions for installing boards and tiles

- First, determine the installation direction of the boards. The most commonly used installation direction is to install rows in the direction of the light.
- Secondly, 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:

- 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 (6 mm 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 subsequent board). Position the click connections 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 hammer and a tapping block (or leftover product for Sound Core® and Pro Core®) to avoid damaging the click connection during installation.
- Always use adjustable spacers to compensate any unevenness in the walls. 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 expansion gap alongside the wall. Cut, clip or saw the board and fit it in the exact same manner as you have 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 6 mm 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 subsequent board in the row in the same manner lengthwise while positioning the click connections of the short sides of the boards directly on top of each other. Use a rubber hammer and a tapping block 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 180° 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 expansion gap. Install the tailored to size pieces in the same way as the previous rows, board per board. Use a pull bar to close the click connection on the longitudinal side.
- 10. Doorposts and heating pipes need to be cut out separately. First cut the board to the correct length and width, then mark off thecorrect shape keeping in mind the required 6 mm expansion gap around objects like heating pipes. Carefully cut the board to size.
- Expansion gaps should never be sealed with silicone but can be finished by covering them with matching skirting boards or finishing trims. See the "sealing the edges" section.

NOTE: Should you need to remove a board, please do so by carefully in order not to break the click.

NOTE: Some installers prefer to use the snapping method for installation. This might result in breaking the click or/and not perfectly locked joints.

Step by step instructions for installing a herringbone pattern $% \left\{ \mathbf{r}_{i}^{\mathbf{r}_{i}}\right\} =\mathbf{r}_{i}^{\mathbf{r}_{i}}$

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 for 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 10 left and 10 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 100% 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 100% straight.

First double row

Take a A and B Coretec® board (planks are marked at their back) 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 connections 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 expansion gap 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 bar and some tapping or jiggling often does the trick and can help you to firmly close the joint.

Second and any next row

Continue installing single rows consisting of either only right boards or only left boards. For alternating rows, flip over the boards. To install the rows, 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 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 expansion gap 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.

- <u>T-molding</u>: is used to cover a transition gap or to create the transition between floor coverings of a similar height.
- <u>Reducer:</u> is used to create a transition between floor coverings of different heights (wooden floors to vinyl, vinyl composites or low pile rugs).
- <u>Thresholds:</u> is 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.
- Quarter round/scotia: is 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 board: is used to cover the expansion gap between the floor and any vertical surfaces. The skirting boards come in several possible heights.

Finishing the job - all installations

- · Sweep, vacuum or mop the floor after the installation.
- Clean the floor with Coretec® cleaning products. Please refer to the Coretec® Care Guide.
- Any unused materials are to be stored laying flat in a dry place at the owner's premises and can serve as repair pieces in case of an accident or any damage.
- Protect Coretec® from scratches when moving furniture or heavy appliances over the floor.

Floor protection during construcion works

Should any construction work be required after the installation, we recommend covering the entire floor. Use vapour permeable floor protection so as to avoid any moisture or vapour from lingering on the floor.

Daily floor protection

Protect your floor by using the right protective caps or pads on all sliding or moving furniture. Protective caps are available in almost every size and for every possible chair or furniture. Also use pads for heavy static furniture with small areas of contact with the floor to better distribute the load. Finally, do not forget to protect your floor when you move furniture or appliances, even if they have wheels.

Castor chairs

Castor chairs need to use double band W type soft wheels made for hard floors. Other chair castors may cause some damage. Please refer to our care guide for more details.

Furniture legs

Furniture legs need to be minimum 1 cm² on Sound Core® to ensure a proper weight spread. Heavy furnitures (like pianos) require protective pads.

Door mat

Use the right doormat at the entrance to avoid litter and road dirt. Sand, mineral residues and other road dirt can cause scratches on the floor. Always use doormats with a plasticizer resistant backing.

Care guide

For more information on how to take care of your Coretec® floor, please read our Care Guide.



