
Installation Instructions 2G



(Preparation)

Subfloor requirements

Cortex floating floors can be installed in most domestic areas and in almost all commercial areas except in bathrooms, saunas and persistently wet rooms.

Cortex Floating floors can be laid on top of most hard surfaces such as resilient floor coverings, wood flooring and ceramic tiles. Soft subfloors such as carpets and similar must be removed.

The subfloor must be even, flat, dry and variations should not exceed 3mm in 2m (0.12" in 6.6 feet).

All type of concrete, wooden and ceramic surfaces must be completely dry.

Never install Cortex floating floors without using a PE moisture barrier film with a minimum thickness of 0,2mm (0.08").

Heating and/or cooling systems:

For Cortex floating floors can be laid in combination with floor heating and/or cooling systems. For the heating or cooling systems follow the instructions supplied by the system manufacturer/contractor, or contact your supplier. To avoid problems with functioning and durability during the construction phase, follow the norms and rules concerning installation.

Very important for subfloor heating systems, please take in account that the drying of a heated subfloor has to be made by turning the heating on/off with a pause before installation of the floor. After that you can begin the "heating phase".

The beginning of the heating phase in concrete subfloors is to be made not before 21 days after complete curing of the substrate. The heating phase has to begin with running temperature of 25°C (78°F) during 3 days.

The subfloor should be in place and cured for at least 60-90 days.

The temperature should then be increased each day until the maximum temperature allowed according to the manufacturer system. This maximum value should be kept for at least 72 hours and maintained for 5-7 days without turning it off. The decrease of temperature is made by reducing it gradually every day until 18°C (65°F) on the surface is achieved.

During the installation, the temperature of the surface should not exceed 18°C (65°F) and should be kept for 3 days after finishing the installation (for floating floors). Then the temperature should be increased slowly to a max. of 28°C (82°F) on the subfloor surface.

Remember that rugs or mats placed on top of the floor may function as heat accumulators and will increase the floor surface temperature more than the maximum surface.

Very important for cooling systems that floor cooling systems must be equipped with an advanced control and safety system to prevent internal condensation (dew point regulation).

To avoid damage to the floor, the supply temperature of the cooling system must not be reduced below a certain temperature, the so called dew point temperature. Lower temperatures will produce condensation in the floor and damage the floor covering (e.g. warping, distortion, swelling, gapping).

For both heating and cooling systems, make sure that the relative air humidity in the rooms during the heating or cooling season is between 35% to 65% and the temperature the subfloor (temperature underneath of the floor) between 18-28°C (65°F-82°F).

Expansion Gaps

Cortex floating floors are installed as a "floating floors", so the planks should not be fixed to the subfloor.

The skirting boards/mouldings cannot be pressed down, not restricting the movement of the floor. Also provide 5mm (0.2") expansion gaps to the walls and other fixed objects. Skirting boards/mouldings should cover minimum 7mm (0.28") of the floor.

Transitions between two rooms and asymmetrical floor areas require extra expansion gaps in floor areas superior to 100m² (1000 sqft) or with dimensions bigger than 10m (30 feet) in either direction.

(Prior to installation)

Transport, storage and acclimatization

Transport and store the cartons horizontally.

Packed tiles should be acclimatized at the job site in a dry, well-ventilated area for a minimum of 48 hours so that flooring may acclimate.

Remove tiles from packages just before starting the installation.

During storage and installation, maintain temperature and relative humidity to a level consistent with the conditions which will prevail when the building is occupied. In most cases, this means maintaining a temperature range from 18°C to 28°C (65°F to 82°F) and relative humidity range from 35% to 65%. In order to reach this climate, use heating or air conditioning in the appropriate duration of time before starting the installation.

Cortex shade variation is an inherent and attractive characteristic. To achieve the most pleasant blend of shades, shuffle the planks before installation.

Site inspection

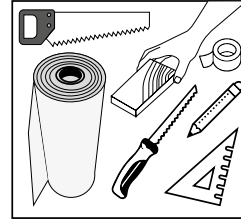
Prior to installation, please inspect the tiles in daylight for any visible faults or damage, and also check if the subfloor and site conditions are in accordance with the specifications described within these instructions.

Amorim Revestimentos cannot be held responsible for claims associated with improper subfloors, improper applications, adhesives, varnishes and the use of maintenance products not recommended, or detectable defects verifiable prior to installation.

(During installation)

In wooden subfloors we recommend installing perpendicular to existing boards.

Tools required



Padsaw or a fine toothed handsaw, spacer blocks, pencil, set square, 0,2mm PE film and adhesive tape.

Moisture Protection

Despite its age, there is always a risk of moisture in subfloors, for that reason it is necessary to ensure that an efficient moisture barrier is installed.

Subfloors must be permanently dry on concrete subfloors without radiant heat. Consider the maximum humidity less than 75% RH or conduct calcium chloride moisture tests to ensure that moisture emission levels are less than 3lbs/1000ft²/24 hours (USA and Canada), or CM Test:

Subfloor	Maximum humidity CM% Heated	Unheated
Cement	1,5	2,0
Anhydrit	0,3	0,5

All types of concrete subfloors require insulation against moisture.

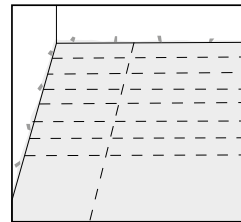
This includes types with built-in moisture barrier, ceramic, heated and covered with resilient floors.

Use a PE moisture barrier film with a minimum thickness of 0,2mm (0.08").

On ground and basement subfloors we recommend to lay 2 layers crossways for better moisture protection.

Laying

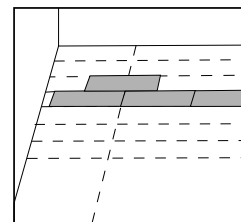
On wooden floors, we recommend laying Cortex floors crossways to the existing floor-board.



Lay the PE film, allowing at least 20cm (8") of overlap and use adhesive tape to unite.

Turn the film upwards 5cm (2") along the walls.

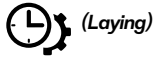
Trim after the skirting boards/mouldings are fixed to the wall.



Measure the room accurately, at right angle to the direction of the planks.

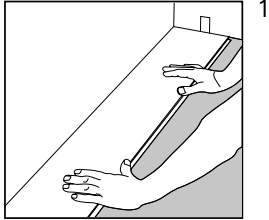
The planks in the final row should be at least 5cm (2") wide.

If necessary, the planks in the first row can be cut to a smaller size.



(First Three Rows)

The planks can be installed from all directions. Cortex 2G floors are easy to install. We recommend to start installation in the right-hand corner.

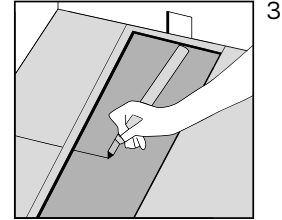


Turn the tongue side of the plank facing the wall. Maintain a gap of 5mm (0.2") on the short side.

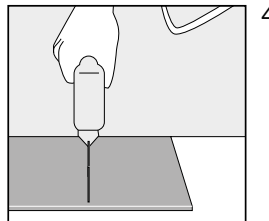


Hold the next plank against the first at an angle to the first one and lay it flat on the floor.

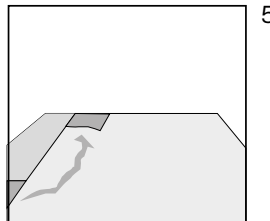
Complete the first row in the same way.



Cut the final plank of the first row to the correct length. Place the final plank face down and the short side without the locking strip towards the wall. The distance to the wall should be 5mm (0.2").

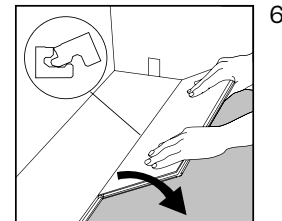


Mark where the plank is to be cut and place it on the work surface and cut to size using any kind of saw.



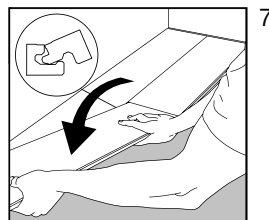
Make sure that the long sides of the planks make a straight line. Use the cut piece of the plank from the previous row to start the next one. However it must be at least 30cm (12") long. If the piece is too short, start with a new board and cut it in half.

Always ensure that the end joints are staggered at least 30cm (12"). Tiles with 605 x 445 (23-7/8" x 17-1/2"), "brick" or "half brick" installation method must be used.

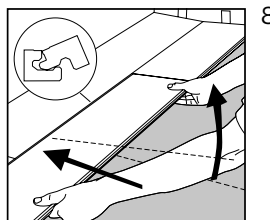


Place the first plank of the new row with the tongue side at an angle against the groove side of the plank in the previous row.

Press forward and lay it flat at the same time.

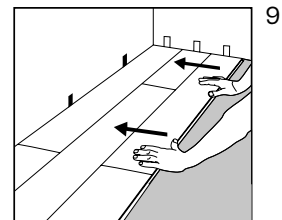


Place the short end of the plank at an angle against the previous installed plank and fold down. Ensure that the plank is positioned on the integral locking strip of the plank in the previous row.



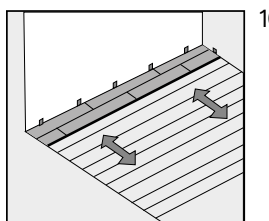
Lift the plank (together with the previous one laid in the same row) slightly up (about 30mm (1.2")), push it against the row in front and then put it down.

Tip: This movement requires some gentle adjustments on the pressing angle.



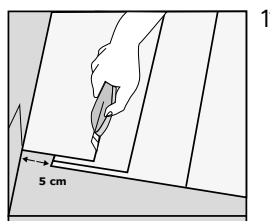
Adjust the distance to the wall to 5mm (0.2") when three rows are complete.

(Remaining Rows)



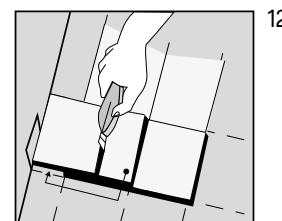
Proceed the installation as described above until reaching the opposite wall.

(Last Row)



Measure and cut the planks in the last row to the correct size.

Allow for a 5mm (0.2") distance to the wall. No plank should be less than 5cm (2") wide.

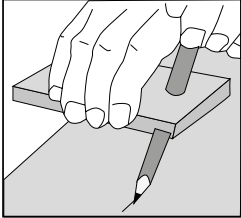


The last and first plank can be cut in the correct width. Place the last plank on top of the second to last plank. Mark the plank with the help of a piece of plank without locking the strip.

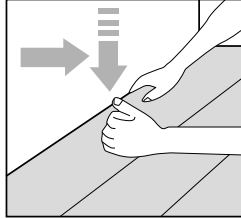
Allow for 5mm (0.2") distance to the wall for the expansion gap.

(Uneven walls)

Sometimes the first row must be cut to match an uneven wall.



Transfer the shape of the wall to the planks. Do not forget to allow 5mm (0.2") for the expansion gap.

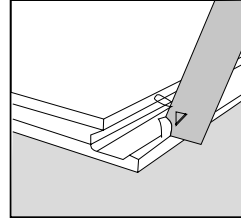


To remove the first row, lift the plank a few centimetres and tap along the joint.

Cut the planks as required.

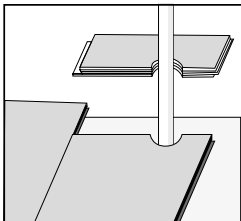
(Installation around doors, radiators and last row)

If you cannot angle the tile under (e.g. a doorframe) or low fitted radiator, you can do as the picture shows:

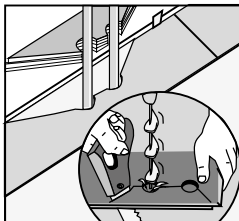


cut away the locking edge and apply Glue (PVA Glue, class D3) on the groove and install the plank

(Heating Pipes)

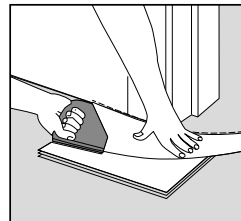


Drill the required holes in the planks, making a hole on the plank 10mm (0.4") bigger than the pipe diameter.



Cut the plank with a 45° angle towards the hole. The cut-off piece is glued in the position again. Cover the hole with a pipe sleeve.

(Door Frames)



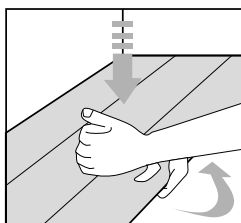
If a door frame needs to be cut, use a piece of plank to obtain the correct height.

Saw the door frame and architrave to the required height allowing for 2mm (0.08") of space to the planks.

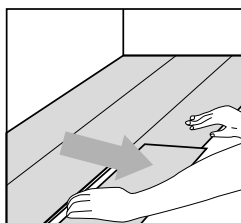
The planks can be laid from all directions. This makes easier to plan the installation e.g. around doors.

(After installation)

Removing the floor



If you wish to uninstall the floor, just lift the planks a few centimetres and tap along the joint.



The released plank can then be pulled out. Never bend connected plank backwards, as this will damage the planks.