

vertisolfloor

fitnice_

EXTENDED MANUAL FOR INSTALLATION: TILES

Please read the whole document before installing **vertisolfloor**. Not complying strictly with the following installation instructions will affect your warranty.

Installation must be carried out by an authorized installer.

vertisolfloor is suitable for residential and public spaces including high traffic areas.

vertisolfloor is not suitable for spaces that are permanently or frequently wet.

vertisolfloor is not intended for sports areas.

This manual is based on and according to European Standards CEN/TS 14472-4:2003-1 and CEN/TS 14472-4:2003.

BEFORE INSTALLATION — GENERAL ADVICE

- Ensure that the chosen design and color of Fitnice® Floor fulfills the requirements of the specific building or room, as well as local building regulations.
- The net floor areas plus a percentage of waste must be calculated for assessing the number of tiles required. This waste will normally be greater if the tiles are to be laid diagonally or if the surface has irregular angles or curves. In any case, material must be ordered in full boxes according to standard packaging.
- In main entrances, a doormat barrier of at least 3 meters in length must be considered in the design phase.
- Planning the overall job timeline:
 - **vertisolfloor** installation should begin only after the building is fully enclosed (when the walls, windows, doors and roofing are completed).
 - Schedule flooring installation as the final phase of the project to avoid damaging it while other work is being done on the room. If this is not possible, be sure to protect it with a plastic sheet, plywood, or cardboard.

- The installer must obtain detailed information related to the subfloor characteristics:
 - Levelness of the surface
 - Expansion joints (to avoid installing **vertisolfloor** on them)
 - Heating
 - Subfloor composition
 - Curing time of subfloor (new or refurbished)
- Take into account that **vertisolfloor** is a textile product in which slight color irregularities and weft slope are not defects.
- In the Chroma collection, gaps may be perceived due to the visual effect of the bi-colored yarns. This is not a defect of the product.

SUBFLOOR VERIFICATION AND PREPARATION

The floor on which **vertisolfloor** is to be installed must be clean, dry, smooth and without cracks and grease. It must also be of medium porosity¹, pressure resistant and free of surface moisture, not only during installation but for the entire lifetime of the product (more than 10 years).

Requirements of moisture content are established by national codes:

Standard/Country	Method	Requirement
BS 5325/ BS 5203 UK	Relative humidity in equilibrium with the subfloor	75% Maximum
NF P 62-203-1 France (Germany)	Drying in oven at 70°C	3% Maximum
AMA 98 Sweden	Relative humidity in holes	< 85%/< 80% depending on material
Ö NORM B2236-1 Germany	Concrete Moisture Test	< 2.5%/< 0.3% depending on material
CSTC 165 Spain	Concrete Moisture Test	Anhydrite < 1% Mortar < 4%

If the subfloor does not meet the specified requirements, it will have to be treated before **vertisolfloor** is installed.

Subfloor materials that are permeable to moisture must not be used (or must be removed in the case of

¹ To determine whether a surface is suitably porous, release a drop of water from a height of approximately 20 centimeters:

- If the drop is absorbed immediately, the surface is too porous
- If the drop is not absorbed at all, the surface is not porous enough (e.g., plastic or metal)
- In all other cases, the surface porosity is acceptable for the installation of the product

refurbishing) unless a waterproofing membrane is installed underneath.

vertisolfloor will not hide surface defects. Correct installation depends on the quality of the subfloor.

Materials such as wood and fiberboard are not suitable as **vertisolfloor** substrate as they will cause problems of irregularities and moisture. Wood flexibility may affect **vertisolfloor** seams. In refurbishing projects such floors should be changed, or adequately protected and leveled with self-leveling compound.

vertisolfloor cannot be installed on subfloors composed of more than one material, such as wood and concrete.

In refurbishing projects, the old floor covering must be carefully and completely removed (leaving no traces), to expose the original subfloor. Only in special cases where there is no moisture and it is possible to level the old floor surface with self-leveling compound (e.g., in the case of ceramic tile floors with no moisture) can **vertisolfloor** be installed over the original floor, after it has been suitably pretreated. **vertisolfloor** cannot be installed over old textile coverings such as wall-to-wall carpet or other vinyl floor coverings.

vertisol recommends the application of a primer to increase the adherence between the subfloor and the self-leveling compound applied to level the surface onto which **vertisolfloor** will be installed.

Follow these detailed steps to prepare the substrate surface before installing **vertisolfloor**:

1. Carefully clean the surface. Use a vacuum cleaner to eliminate dirt or dust. Also eliminate any traces of grease, adhesive, or other materials that could remain.
2. Check the capacity of absorption and the moisture content of the surface to select the most suitable primer or self-leveling compound for the installation (see footnote 1).
3. Apply primer according to the surface to be treated and let it dry as indicated by the manufacturer (approximately 12 hours²).
4. Expansion joints must be respected. Fill them with an elastic material before applying self-leveling compound. **vertisolfloor** should not be installed over them.

² The indicated drying times (both for the primer and for the self-leveling compound) are relative, depending on factors such as ventilation and environmental conditions (dampness and temperature), type of surface, etc. Therefore, before applying subsequent layers it is vital to ensure that the previous layer is completely dry over the whole surface.

Construction and contraction joints, on the other hand, will not move, and can be prepared the same way as cracks.

5. Apply self-leveling compound and let it dry for the time indicated by the compound manufacturer (approximately 24 hours). Once the compound is dry, ensure that the surface is absolutely smooth and flat.



6. If there are irregularities in the surface a second layer of self-leveling compound should be applied. Wait until the first layer is dry enough to walk on with no problem before applying the second layer.

7. Before installing **vertisolfloor**, clean the leveled surface. Ensure that the layers of pretreatment are perfectly dry and the subfloor meets local moisture requirements (see the table of country standards).

Steps 2 to 5 do not apply if **vertisolfloor** is being installed on a raised metal floor. A raised wooden floor requires a coat of primer before the adhesive.

ACCLIMATIZATION, MANIPULATION, AND PREPARATION OF **vertisolfloor** TILES AND SHAPES

To ensure that the floor covering maintains its properties during installation, proper transport, storage and manipulation are required.

Boxes of **vertisolfloor** Tiles should always lie FLAT (horizontally), NEVER stand upright (vertically). Stack no more than 18 boxes high, ensuring that the edges of the boxes are perfectly aligned in order to avoid deformation of the product. The material should be stored at a room temperature of 18–22°C and relative humidity of 50–60%.

Tiles should then be acclimatized for 24 hours to the conditions in which they are going to be installed. Before installation, the installer must check the material in order to verify the following:

- Product and color agree with the purchase order.
- Quantity delivered agrees with the purchase order.
- Dimensions and aspect are correct. In case of defects or damage during transport, please contact our sales team before cutting or installing the material. vertisol will not accept claims on manipulated or installed material.

To ensure a good color match, check that all boxes to cover a specific area have the same batch number. Mix the tiles from different boxes during installation to help ensure a random arrangement of slight variations.

vertisolfloor is a woven material with some minor natural variation in color and structure between tiles.

vertisol does not accept any responsibility for defects caused by incorrect storage or handling (e.g., boxes stored vertically, or horizontally without the original packaging).

SUBFLOOR ACCLIMATIZATION

Keep the installation area at 18–25°C with a relative humidity of below 60%. For correct adhesion, the temperature of the subfloor should be 15–20°C with a moisture level lower than the maximum recommended by the national codes. These conditions must be maintained during the entire installation process.

After preparing the area, **vertisol** recommends waiting at least 24h before installing the floor covering.

If the material is installed over floors with underfloor radiant heating, special precautions are necessary:

Check that the radiant floor heating works properly before proceeding with installation.

Take into account that the minimum curing time for concrete is 21 days.

Keep the floor at 25°C for three days, and then gradually raise the temperature to the maximum temperature for four days. Repair any cracks that may have appeared, and heat again for 14 days.

- Switch off the radiant floor heating at least 48 hours before installing **vertisolfloor**, and keep it off for at least 48 hours after finishing the installation process.
- If necessary, use a different heating system to ensure adequate temperature conditions for the installation.
- After installing the floor covering, gradually increase the radiant floor heating to no more than 27°C. Temperatures higher than 27°C must also be avoided if there is piping in subfloor.

RECOMMENDED ADHESIVES

The adhesives listed below have been tested and approved for the installation of **vertisolfloor**.

SUBFLOOR PREPARATION

Primer: PRIMER G, MAPEI
Self-leveling compound: ULTRAPLAN, MAPEI

ADHESIVES:

- | | |
|----------------------|-----------|
| - Ultrabond ECO4 LVT | MAPEI |
| - Eco V4 SP | MAPEI |
| - Multi Coll | WULFF |
| - Thomsit 188E | HENKEL |
| - SLC ECO r3 | KERAKOLL |
| - Primacola C-15 | RAYT |
| - F-44 | F-BALL |
| - Miplafix-300 | BOSTIK |
| - Miplafix-400 | BOSTIK |
| - Miplafix-800 | BOSTIK |
| - Power Elastic | BOSTIK |
| - Sadertak V6 | BOSTIK |
| - Eurocol 540 | FORBO (*) |
| - Eurocol 640 | FORBO (*) |
| (*) IMO | |

Only for **vertisolfloor** Marine

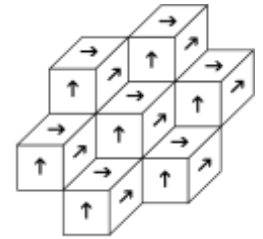
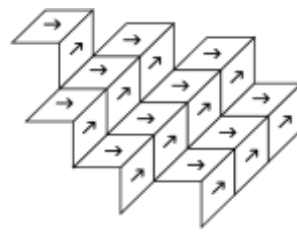
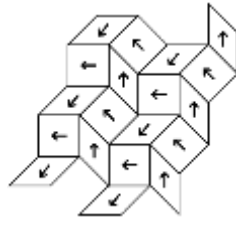
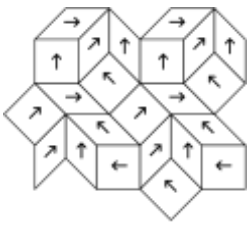
- F-81 F-BALL
- Adesilex G19 FR FAST MAPEI

NON-PERMANENT ADHESIVES (LL tiles, for raised floors) :

- | | |
|---------------------|--------|
| - Ultrabond ECO FIX | MAPEI |
| - F-41 | F-BALL |
| - Nogliss | BOSTIK |
| - WA-25 | COLLAK |
| - Thomsit T425 | HENKEL |
| - Uzin U 1000 | UZIN |
| - Eurocol 542 | FORBO |

Double-sided tape should not be used instead of adhesives recommended by **vertisol**.

Always read carefully and follow the recommendations and advice of the adhesive manufacturer.



D1 (Catalogue Pattern 3)

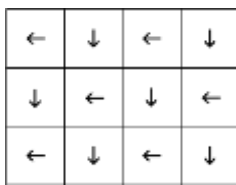
SD 1 (Catalogue pattern 1)

(Catalogue Pattern 2)

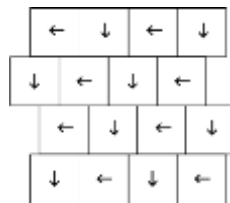
(Catalogue pattern 4)

INSTALLATION OF TILES

vertisol floor tiles (squares) must be installed in a checkerboard or staggered quarter-turn pattern. Each tile is marked on the back side with an arrow showing the direction.



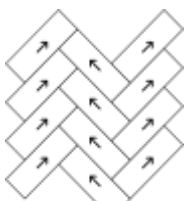
S1



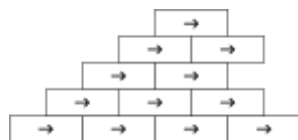
S2

If **vertisol** floor tiles are installed all in one direction, **vertisol** does not accept any claim about the visual appearance of the tiles. If a more uniform appearance is desired, we recommend installing rolls.

vertisol floor Shapes (Planks and Diamonds) can be installed in the following recommended patterns:



P1



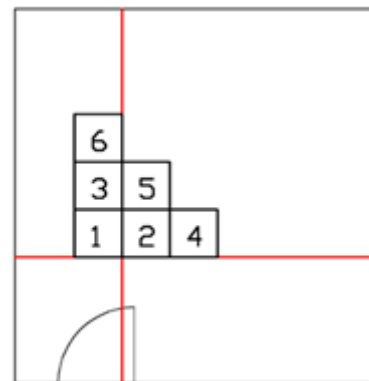
P2

Diamonds cannot be installed on raised floors.

The maximum floor area where Diamonds or Squares + Diamonds can be installed is 120 m².

Installation of permanent tiles

1) Draw two axes on the floor: the first axis should be perpendicular to the main room entrance, the second axis, perpendicular to the first one. One of the axes must be parallel to one of the main walls as shown in the diagram.



The two axes should intersect such that the following requirements are met:

- Peripheral tiles placed against walls must be larger than half a tile.
- Whole tiles should be used in special places, such as the main entrance.
- A row of tiles should be centered on the main entrance.

2) Place the first tile at the Intersection of the two axes, and continue placing tiles in the order shown by numbers in the diagram.

Frequently check the alignment between tiles.

Make sure the tiles are perfectly flush with adjacent tiles on all sides.

Failure to follow the installation sequence shown can result in a gradual and cumulative squaring error generating gaps at the seams that are not due to defective tiles.

Be aware that removing tiles after they have been installed with permanent adhesive will affect their dimensions, and it will not be possible to reinstall them.

Follow the manufacturer's guidelines for applying the adhesive to the floor, and for drying time. It is very important not to leave any part of the floor without adhesive. If using a water-based acrylic adhesive, it is not necessary to apply glue onto the **vertisol** floor tiles.

Press every seam between tiles with a small pressure roller.



3) After the center of the floor area has been covered, install tiles around the perimeter.

- Place a second tile perfectly aligned on top of the last tile installed before the gap.
- Place a third tile over the second, and slide it to be flush against the wall as a guide.
- Run a cutter along the edge of the guide tile to mark the tile to be cut.
- Remove the guide tile and make a clean cut through the marked tile (in red in the diagram)
- Apply adhesive to the floor surface and fit it into place.



4) When installation is complete, use a 50-kg pressure roller (see photo) over the entire floor, starting from the

center and rolling out towards the perimeter. For projects with more than one room, use the roller after each room is finished, before starting on the next room.

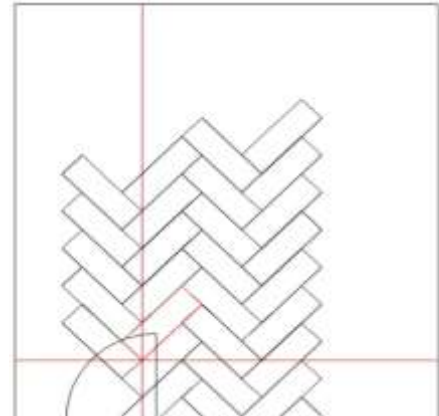


Avoid walking on tiles during the installation process. **vertisol** recommends walking on wooden planks placed over installed tiles to prevent the tiles from moving before the adhesive has dried completely.

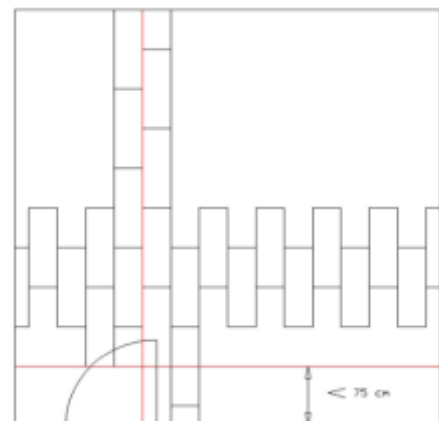
Installation of PLANKS

Draw two axes on the floor: the first axis should be perpendicular to the main room entrance, the second axis, perpendicular to the first one as shown in the diagram. This second axis should be less than 75 cm from the wall.

Start installation of the Planks patterns by placing a tile at the intersection of the two axes, and continue according to following diagrams:



Planks 1



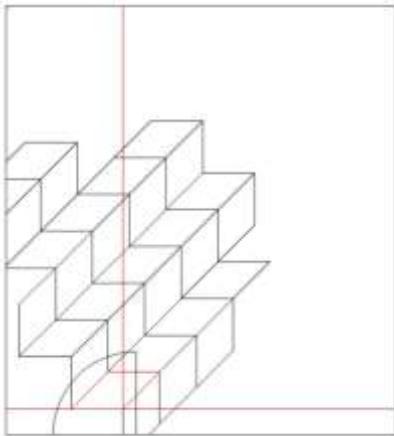
Planks 2

Continue with step 2 of the square Tiles installation.

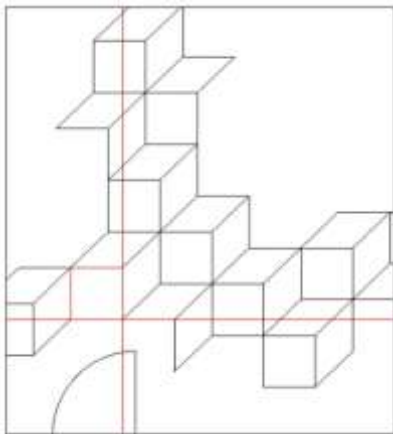
installation of DIAMONDS and SQUARES + DIAMONDS

Draw two axes on the room floor: the first axis should be perpendicular to the main room entrance, the second axis, perpendicular to the first one as shown in the diagram.

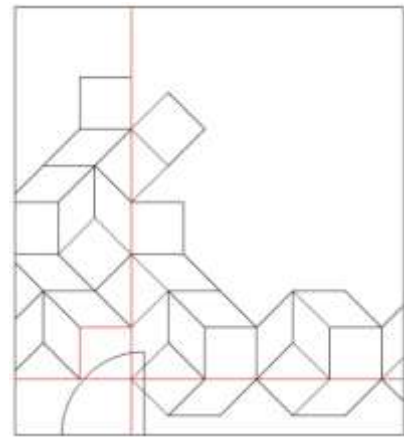
Start installation of the Diamonds and Squares + Diamonds patterns by placing a tile at the intersection of the two axes, and continue according to the following diagrams:



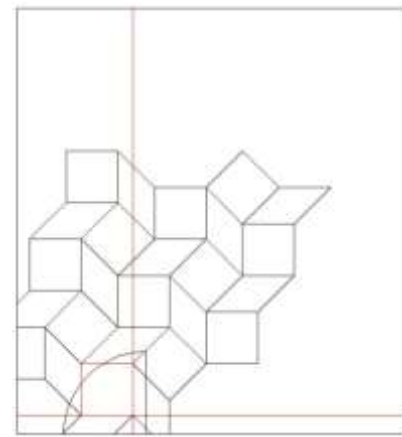
Diamonds 1



Squares + Diamonds 1



Squares + Diamonds 2



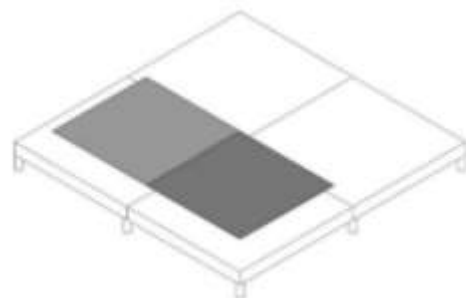
Squares + Diamonds 3

Continue with step 2 of the square Tiles installation.

Installation of LL-Tiles on a raised floor

VERY IMPORTANT: make sure each panel of the raised floor is level with the rest

1) On raised floors, **vertisol** floor Tiles should be arranged so that they are displaced a few centimeters so the seams between tiles do not line up with the seams between floor panels.



2) Follow the manufacturer's guidelines for applying the adhesive to the floor, and for drying time.

Never dilute the adhesive with water.

Tiles must not be installed before the drying time established by the adhesive manufacturer.

Press every seam between tiles with a small pressure roller.



3) After the center of the floor area has been covered, install tiles around the perimeter.

- Place a second tile perfectly aligned on top of the last tile installed before the gap.
- Place a third tile over the second, and slide it to be flush against the wall as a guide.
- Run a cutter along the edge of the guide tile to mark the tile to be cut.
- Remove the guide tile and apply adhesive to the floor surface.
- Make a clean cut through the marked tile (in red in the diagram) and fit it into place.



If it does not extend wall-to-wall, the raised floor should be fixed at the edges to prevent any displacement of the **vertisolfloor** Tiles. There should be no gaps between the floor covering and the walls. Use a floor profile if necessary.

4) When installation is complete, use a 50-kg pressure roller over the entire floor, starting from the center and rolling out towards the perimeter. For projects with more than one room, use the roller after each room is finished, before starting on the next room.

Installation on stairs

Always use **vertisolfloor** strips cut from rolls instead of tiles on stairs.

Outdoor installation

Use rolls instead of tiles for outdoor installation.

RECOMMENDATIONS AFTER INSTALLATION

Following installation, allow the adhesive to dry properly before use:

- 24 hours for any foot traffic, and 48 hours for heavy commercial traffic.
- 48 hours for placing furniture or rolling heavy objects

IMPORTANT: do not drag any heavy objects on **vertisolfloor**, as that can cause irreparable damage.

Before beginning normal use, **vertisolfloor** should be cleaned to remove any construction dust (sand, cement, or other abrasive particles). Use a vacuum cleaner, and then mop the floor with warm water and neutral soap.

Once the surface has been cleaned, cover and protect **vertisolfloor** to prevent damage during other construction work. Whenever possible, it is best to install **vertisolfloor** after all other construction work has been finished.