

**General Installation
Guidelines LVT
Moduleo[®] Flex Click**



Storage & transport

Boxes should be stored and transported on a flat surface in neat stacks, always store the cartons flat and never put them upright/on-end. Do not store the boxes in very cold (less than 2°C) or very warm (more than 27°C) or damp places.

Prior to installation

Visual inspection

Please ensure the product is inspected and checked in adequate light conditions, for damage, defect or variation prior to installation. Check that the colours correspond to those ordered, the quantities are correct and there is no visible damage to the boxes. Check the LVT Moduleo® Flex Click panels during installation for any visible defects. Do not install any panels that display any imperfections. We recommend that you always use materials from a single production batch for each installation, as we cannot guarantee a shade match between different batches. Be aware that some designs have a natural variation within them. We also recommend that the product is mixed or shuffled between different boxes.

For defects that are visible prior to installation, Moduleo® will never assume responsibility for the uplift & relay costs. Installation implies acceptance.

Suitability

- LVT Moduleo® Flex Click can be laid on concrete, cementitious screed, anhydrite (calcium sulphate), timber, plywood, particleboard and ceramic tiles, raised access floors, which have been suitably prepared (see Floor Preparation).
- LVT Moduleo® Flex Click can be used with traditional water-based underfloor heating and cooling systems. See separate section on underfloor heating. The subfloor surface temperature must never exceed 27°C.
- LVT Moduleo® Flex Click is only suitable for indoor installation.

- Seasonal temperature conditions: LVT Moduleo® Flex Click can be used in indoor situations. Under all conditions, keep the temperature between 6°C (min.) and 35°C (max.). Avoid rapid temperature increases of more than 5°C per 12 hours.
- For commercial applications where roller castor chairs or heavy rolling loads are to be used we strongly recommend the use of adhered dryback or EVF. If you require any further information, please contact your Moduleo® representative.
- For installation in areas with high temperature variation (in certain cases this includes direct sunlight through glass) we recommend the use of dryback with suitable high temperature adhesive or Engineered Vinyl Flooring (EVF). If you require any further information, please contact your Moduleo® representative.

Composition, construction and quality of the subfloor

Knowledge of the composition and construction of the subfloor or base provides valuable information that allows you to correctly check the acceptable humidity, flatness, compressive and tensile strength of the subfloor. In addition, it tells you what type of floor preparation, levelling/smoothing compound, and possible moisture barrier you may need during the installation process. When there is ambiguity or doubt about the quality or composition of your subfloor, check your local installation standards and/or seek advice from your floor preparation, levelling compound manufacturer/supplier.



National regulations & standards

Site and installation conditions must always comply with the relevant national regulations and installation standards.

In case the national standard or regulation conflicts with the manufacturer's recommendation, the most stringent of the two prevails.

For installations in circumstances not covered by these instructions, please contact technical support for advice.

Subfloor preparation

Irregularities in the subfloor

Good preparation is essential for trouble-free installation. It is vital for an excellent LVT Moduleo® Flex Click finish. The appearance of LVT Moduleo® Flex Click will only be as good as the quality of the base over which it is installed. Any irregularities in the subfloor will show through the finished floor and must be suitably prepared before installation.

The subfloor must be hard, structurally sound, flat, smooth, clean and dry, as well as being free from defects and fit for purpose. When required, scrape off and remove old adhesives and loose laying levelling compound. Make sure the subfloor is free from chemical substances and other contamination.

For aesthetic reasons and to avoid stress on the locking mechanism, it is recommended that the unevenness of the subfloor is not greater than 2mm measured over a width of 200cm.

A suitable plywood/levelling compound should be selected to ensure that no irregularities show through to the surface of the finished floor. However, the selection of suitable materials, including plywood, smoothing/levelling compounds and any ancillary products, is dependent upon the occupational use of the area and must be agreed by the supplier of the preparative materials and the flooring contractor. All floor preparation materials used must be used in accordance with the manufacturer's recommendations and in accordance with the national standards for resilient floorcoverings.

The moisture content of the subfloor

- The moisture content of the subfloor must be in accordance with local or national standards for the installation of the relevant floor coverings.
- Unheated cementitious screeds less than 2.0CM% - 75% RH
- Underfloor heated cementitious screeds less than 1.8CM% - 75% RH
- Unheated anhydrite (calcium sulphate) screeds less than 0.5CM%
- Underfloor heated anhydrite (calcium sulphate) less than 0.3CM%

Direct-to-earth concrete and stone subfloors must have an effective Damp Proof Membrane (DPM) in accordance with the national standards for the installation of resilient floorcoverings. Follow manufacturer's detailed instructions for the installation of a surface applied DPM and the use of levelling compound. An overview of manufacturers and suppliers can be provided by Moduleo®.

The effectiveness of a surface applied DPM heavily depends on the type of product, the way of application and the site conditions. It is the responsibility of the installer to get the correct advice from the manufacturer of the DPM and to apply it in accordance with their recommendations.



Important

Floor installation should not begin until the installer has assessed and approved the subfloor and installation conditions. Building movement joints must be transposed to the LVT Moduleo® Flex Click flooring and a profile must be used.

Acclimatisation

LVT Moduleo® Flex Click must acclimatise in the room of installation, or an equivalent area for at least 24 hours prior to installation, or until such time as the product has achieved an ambient temperature: this is a minimum temperature of 18°C and a maximum of 27°C.

- Store the planks or tiles in straight piles away from heating, cooling or windows with direct intense sunlight. This is to achieve a gradual acclimatisation.

Temperature condition before installation

LVT Moduleo® Flex Click should be installed with a room temperature of between 18°C and 27°C and a subfloor temperature of above 15°C.



Installations in areas colder than recommended will influence the installation properties of LVT Moduleo® Flex Click. The planks or tiles will be less flexible, cutting will be harder and small pieces difficult to cut out. The lower the temperature, the more difficult the installation and the higher the risk of damaging the click profile. Also, the risk of excessive expansion increases with decreasing installation temperature. Installation in areas warmer than recommended increases the risk for excessive shrinking/gaps between panels.

Starting installation

Temperature conditions during and after installation

A constant temperature, fluctuating no more than 5°C per day, not below the required 18°C room temperature and 15°C subfloor temperature, should be maintained 24 hours before, during and 48 hours after installation.

Underfloor heating

LVT Moduleo® Flex Click can be used with traditional water-based underfloor heating systems (according to standard EN 1264 part 1 to 5). Wired electrical systems are not recommended unless the system is encased in a minimum of 9mm of suitable levelling compound. Direct contact with electrical wired heating systems must be avoided. The contact temperature must never exceed 27°C. If in doubt seek further advice + SEE SEPERATE FLOORHEATING INSTALLATION INSTRUCTIONS.

The underfloor heating installation must be switched off at least 24 hours prior to, and during the installation of LVT Moduleo® Flex Click. Surfaces with different floor temperatures (eg. zones with separate controllers,...) must be decoupled with an intermediate expansion joint and profile.

72 hours after installation the underfloor heating must be gradually increased by increments of 5°C per day until it reaches the standard operating temperature conditions, with a maximum operating temperature of 27°C. For the suitability of the system please check the manufacturer's instructions.

Underfloor cooling

LVT Moduleo® Flex Click can also be installed over floor cooling systems. However, the supply temperature of the cooling water must not be reduced below the dew point temperature. Always keep the temperature of the subfloor at least 3 degrees above the dewpoint. Temperatures below the dew point will produce condensation and can therefore damage the adhesive and the floor covering.

Required Expansion Gap

LVT Moduleo® Flex Click is a “floating” floor. The panels should not be glued or fixed to the subfloor. Also heavy objects or furniture can prevent the floor from floating and moving freely. For example, do not put heavy kitchen elements, wood stoves or any other heavy element which prevents free movement directly on the floor but leave an expansion gap around the element as if it were a wall (see below).

A 0,50mm expansion gap, per linear meter of LVT Moduleo® Flex Click is required in any direction and must be incorporated at the perimeter of the room/area.

In addition, should a single wall or run be longer than 15 linear meters, then a 5mm expansion gap should be allowed within the floor surface in the middle of the room.

2 m	➔	1 mm
3 m	➔	1.5 mm
4 m	➔	2 mm
5 m	➔	2.5 mm
8 m	➔	4 mm
10 m	➔	5 mm

It is recommended that an expansion gap is left between doorways, especially where there are temperature differences between different areas. Special care must be taken to avoid hot-spots or isolated areas of prolonged exposure to direct sunlight through unprotected glass, in front of a wood burner, other direct heat source, etc. these will not fall under the definition of ambient room temperature, variation or condition. It is recommended that the floorcovering is shaded from direct sunlight and otherwise protected from any direct heat source that increases the temperature in a localised area.

For smart solutions to cover the expansion gaps, see ‘Finishing Your Floor’

Installation methods

LVT Moduleo® Flex Click can generally be installed with the following methods:

- Fully looselaid directly on the subfloor
- Fully looselaid over an underlay

For alternative installation methods, not included in this overview, always seek technical advice from Moduleo®.

For any exceptional conditions which require specific adhesive selection, please contact the Technical Service team of Moduleo®.

Recommended underlay

Installing the correct underlay is paramount. Whether you require excellent sound control, a solution in a heavy-duty environment or a base for general purposes, Xtrafloor®/Moduleo®/SmartFinish® has an underlay suitable for your requirements. Always use an underlay that has been tested and approved by Moduleo® to be used with the floorcovering. Moduleo® rejects all responsibility in cases of non-approved combinations.

Looselaid underlay

Xtrafloor®/Moduleo®/SmartFinish® Power: Residential use

- Improved sound insulation.
- Smooth top surface to allow the flooring to expand and contract freely, and to slow down the passage of moisture vapor.
- Suitable for underfloor heating and cooling.
- Provides excellent dimensional stability.
- Not suitable for roller castor chairs or heavy duty use.
- Temperature of the subfloor during installation must be between 15°C and 27°C! It is of utmost importance to monitor and record these conditions during the whole period of installation. Keep the records as proof of installation conditions.
- Xtrafloor®/Moduleo®/SmartFinish® Power can smooth out small irregularities of a maximum 5mm wide. This allows for installation over existing floor coverings, such as linoleum, compact PVC floors and wooden floorboards or ceramic tiles (without stepping across the joints), with limited or no telegraphing of the subfloor irregularities.



Xtrafloor®/Moduleo®/SmartFinish® Flex Pro

- Improved sound insulation
- Release foil and pressure sensitive adhesive film for quick and easy installation.
- Suitable for underfloor heating and cooling.
- Provides excellent dimensional stability.

Xtrafloor®/Moduleo®/SmartFinish® Flex Pro can smooth out small irregularities of a maximum 3mm wide. This allows for installation over existing floor coverings, such as linoleum, compact PVC floors and wooden floorboards or ceramic tiles (without stepping across the joints), with limited or no telegraphing of the subfloor irregularities. For installation over ceramic tiles with joints wider than 3mm, Moduleo FloorPrep can be used to smoothen the tile joints.

Xtrafloor®/Moduleo®/SmartFinish® Flex Pro needs to be installed on floors with A MINIMUM SURFACE TEMPERATURE OF 18°C DURING INSTALLATION. It is of utmost importance to monitor and record these conditions during the whole period of installation. Keep the records as proof of installation conditions.

LVT Moduleo® Flex Click installed on Xtrafloor®/Moduleo®/SmartFinish® Flex Pro is a “floating” floor. See the section “required expansion gap” above for more information about the expansion gap. For smart solutions to cover the expansion gap, see ‘finishing your floor’.



Installation of looselaid underlay

Lay the sheets butted, edge-to-edge, at a 90° angle to the laying direction of the new floorcovering. Xtrafloor®/Moduleo®/SmartFinish® underlays are to be laid printed side up (where applicable). There is no need to fix one sheet to another. Now begin laying your new floor according to the fitting instructions. Do not use adhesive without prior discussion with the technical services of Moduleo®.

Xtrafloor®/Moduleo®/SmartFinish® Acoustic Comfort: superior sound insulation (for residential use only)

- Improved sound insulation.
- Suited for underfloor heating and cooling (see temperature guidelines above).
- Not suitable for roller castor chairs or heavy duty use.
- Designed for temperature controlled areas : not suitable for areas with exposure to extended periods of direct sunlight (e.g. sun-facing rooms behind large expansies of glass) or excessive fluctuations in temperature. Temperature on the surface should not exceed 35°C, and never below 15°C.
- Temperature of the subfloor during installation must be between 15°C and 27°C! It is of utmost importance to monitor and record these conditions during the whole period of installation. Keep the records as proof of installation conditions.

Warranty: the use of the appropriate Xtrafloor®/Moduleo®/SmartFinish® underlay is covered within our warranty. Other underlays are not recommended or warranted.



Installation step by step

Recommended tools

- Tape measure
- Pencil
- Chalk line/laser line to ensure the installation starts/remains straight
- Set square
- Utility knife
- Xtrafloor®/Moduleo®/SmartFinish® roller or any other appropriate hand roller to connect the short click joint
- Recoil- or rubber hammer (only to tap in the long side, not to be used on the short click connection)
- Tapping block (can be made out of a cut-out piece of the flooring)
- Spacers for maintaining the expansion gap along the wall and to ensure a straight installation



The LVT Moduleo® Flex Click system panels can be joined in two different ways, either tongue-in-groove or groove-under-tongue.

The advantage of the LVT Moduleo® Flex Click system is that it allows you to choose your own starting position. You can start in the middle of the room/area and work to both sides, or start at the wall and work your way in.

Step 1: Determine the installation direction of the LVT Moduleo® Flex Click floor. Measure the room carefully to determine whether the first row of panels needs to be narrowed. If not, the lower groove lip of the first row of panels needs to be removed. Use a utility knife to neatly cut off the lower groove lip.

Step 2: Lay the first row in a straight line and LVT Moduleo® Flex Click the head ends together. Put the short side of the profile into the head end of the previous panel and press the panel downwards. It is recommended to use a hand roller for connecting the head ends so that the joint fits securely. Be careful when using a rubber mallet for this operation, as it may damage the click profile permanently! We advise to use the Xtrafloor®/Moduleo®/SmartFinish® roller.

Step 3: Use the spacers to fill out the contour of the wall with the required expansion gap so that the panels do not move.

Step 4: For the last piece, measure the last plank so that the required expansion gap is maintained. Do not lay the panel completely tight to the wall. Cut away the marked piece and fit the end panel in the same way as the previous panels. When cutting the panel with a utility knife, make sure that you cut through the wear layer before breaking the panel.

Step 5: For an attractive and natural appearance, we do not advise to use the piece left over from row 1 as the first piece in the following row, install at random intervals. Otherwise this creates a so called “staircase effect”.

Step 6: For the second/next row, take a new panel and decide how big the first piece must be (or use one of the leftovers from previous rows). Make sure that the front seam is at least 20-30 cm different from the previous rows.

Step 7: Fit the second row as you did for the first: start on the left hand side and slide the groove of the panel under an angle of about 25° over the tongue of the previous row, clicking the groove into the tongue by laying down the panel while pushing it firmly against the first row. Along the long edge, it is advisable to use a recoil or rubber hammer and tapping block, or a cut piece of panel profile to tap the panels tightly together and to ensure the LVT Moduleo® Flex Click mechanism is firmly locked.

Step 8: Next, fit the second panel by sliding the groove under, at an angle of 25°, into the tongue of the previous row. Position the left corner of the head end against the previous panel and then drop the short side of the profile into the head end of the previous panel, push downward and press into place using a hand roller. Repeat until you reach the end of the row. Do not hammer the end joints into place.

Step 9: Repeat steps 6 to 8 until all rows are complete, and only the last row needs to be placed.

Step 10: To fit the last row of panels you will usually need to narrow them. Do this as follows: lay a panel on top of the previous row with the groove towards the wall, lay another panel upside down up to the edge of the wall and mark the panel underneath. Cut the panel to size and fit the last row.

Step 11: Doorjambs and heating pipes also need to be individually fitted. First cut the panel to the right length, then place the panel next to the object and draw the correct fitting. Next, cut the panel to size. Doorjambs can also be sawn (undercut) to size if necessary. The LVT Moduleo® Flex Click design floor can then be neatly installed underneath.

NOTE: LVT Moduleo® Flex Click is meant to be a floating floor system and must not be restricted in any way, e.g. permanently fixing, fixtures and fittings through the floor covering, or very heavy objects which restrict movement.

For smart solutions to cover the expansion gaps, see 'Finishing your floor'

Finishing your floor

Xtrafloor®/Moduleo®/SmartFinish® offers a range of smart flooring solutions for your finishing needs. The offer combines unique functionality with style: a hardwearing solution that ensures smooth transitions at all times.

How to finish your floor at a wall

Xtrafloor®/Moduleo®/SmartFinish® standard skirting in matching designs

- The identical connection for your LVT Moduleo® Flex Click floor
- Water-resistant
- Wear-resistant
- Perfect water-resistant corner solution as the HDF carrier does not come into contact with cleaning water



Xtrafloor®/Moduleo®/SmartFinish® paintable skirtings: style by choice

- Unique water-resistant material



Xtrafloor®/Moduleo®/SmartFinish® end profile

- Sleek aluminium profile for a minimalistic design that lends a smart and modern look



How to cover the expansion gap within the floor surface, for runs longer than 20m

Xtrafloor®/Moduleo®/SmartFinish® T-profile

- Sleek aluminium profile on a strong aluminium base for a minimalistic design that lends a smart and modern look
- Durable and easy solution to cover the gap between 2 adjacent floors at the same level



How to connect your floor with higher or lower level floor surfaces

Xtrafloor®/Moduleo®/SmartFinish® Adapter profile

- Sleek aluminium profile on a strong aluminium base for a minimalistic design that lends a smart and modern look
- Connect the floor with lower floor surfaces, with a height difference up to 6mm
- Also suitable to make the transition between 2 different types of floorcovering (e.g. Carpet)

How to finish your stairs in the same material as the floor (residential use only)

Xtrafloor®/Moduleo®/SmartFinish® stairnosing

- Sleek aluminium profile for a minimalistic design that lends a smart and modern look
- Inner and outer corner stair nosing for LVT LVT Moduleo® Flex Click

Note: LVT Moduleo® Flex Click design floor must be adhered to the treads and risers on stairs.



Maintaining your floor

See separate maintenance instructions



For specific installation instructions on Xtrafloor®/
Moduleo®/SmartFinish® see www.moduleo.com

Important part from the warranty:

- Almost all flooring will vary in colour over time when exposed to UV light. Avoid this by using curtains or blinds when the sun is very bright. PVC also has a tendency to yellow in the dark. The combined effect can cause covered areas (under furniture, under permanently closed doors, etc.) to differ in colour compared to non-covered areas. This is a characteristic of all PVC floorcoverings and is excluded in our warranty conditions.
- The aforementioned temperature limitations are valid for ambient temperatures. Local surface areas that are hotter than the adjacent areas (so called hot spots) are not considered as ambient heating and are not warranted.
- Avoid rubber or latex backed mats as they may leave stains. Rubber and latex castors or protection caps under furniture must not be used (we advise the use of castors type 'W' in accordance with EN 12529).
- In case of loose lay installation, damage of the vinyl flooring caused by heavy overload, rolling loads or sliding activities is excluded in our warranty conditions.
- Do not allow cigarettes, matches and other very hot items to contact the floor as this causes permanent damage.
- Important: Cleaning or maintenance may only take place if the floor is correctly installed and there are no visible imperfections.
- This document was issued on (see at the end of this document) and supercedes all previous versions, at the same time it is superceded as soon as a new version is published. For the latest version please always check www.moduleo.com. The original English version is always leading.
- In case of conflict between these installation instructions and the local technical standards/legislation, the most stringent of the two prevails.

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