

General Guidelines

Design Floors Linea



Transport & storage

Boxes should be stored and transported on a flat surface in neat stacks - always store the boxes flat and never put them upright/on-end. Do not store the boxes in very cold (less than 0° C) or very warm (more than +35° C) or humid places.

Prior to installation

Visual inspection

Please ensure the product is inspected and checked 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 Linea 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 or mechanism 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.

Suitability

- Linea can be laid on concrete, cementitious screed, anhydrite (calcium sulphate), timber, plywood, particleboard and ceramic tiles that is reasonably flat and smooth or have been suitably prepared (see Floor Preparation).
- Linea can be used with suitable underfloor heating and cooling systems. See further.
- Linea is only suitable for indoor installation.
- Seasonal temperature conditions: Linea can be used in most situations, such as temperature-controlled conservatories and holiday homes. Keep the temperature between 6° C (min.) and 35° C (max.).

Where temperatures are outside of this range, installation may still be possible, see note at the end of this document (*).

- The Linea panels are water resistant. Following the installation instructions carefully makes the floor fit for use in bathrooms, kitchens, laundry rooms and entrance areas. Mainly for reasons of slip resistance, the panels are not recommended for use in wet areas, e.g. pool areas or surrounds, saunas and rooms with build-in drains like showers.
- Linea is only suitable for residential use, not for commercial applications

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, 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 with 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.

Subfloor preparation

Irregularities in the subfloor

Good preparation is essential for a trouble-free installation. It is vital for an excellent Linea finish. The appearance of Linea will only be as good as the quality of the base over which it is installed. Although Linea is remarkably suitable for renovation of not perfectly even subfloors, some larger irregularities, steps, sudden level variations in the subfloor may show through the finished floor and must be suitably prepared before installation.

The subfloor must be hard, structurally sound, relatively flat, clean and dry, as well as being free from steps or defects and fit for the purpose intended. When required, scrape off and remove old adhesive residues and loose or de-bonded levelling compound. Make sure the subfloor is free from chemical substances and other contamination.

Unevenness of the subfloor may not be greater than 5mm measured over a length of 2m (in the UK this corresponds to Surface Regularity 2 (SR2)), measured with a suitable straight edge or level. Linea is capable of bridging small holes of up to 30 mm, grout-lines, joints and cracks of up to 10mm in the subfloor. However, avoid installing Linea short end joints over sudden deviations/undulations of 2mm or more. In this

instance we recommend to move the end joint connection 300mm away from this deviation.

A suitable plywood/levelling compound should be selected to ensure that no sudden 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

Linea is moisture resistant, however, best practice should be followed to avoid bacteria and mould growth under the floorcovering:

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. Where necessary, follow the manufacturer's detailed instructions for the installation of a surface applied DPM and the use of levelling compound. An overview of recommended manufacturers and suppliers can be provided by IVC.



The moisture content of the subfloor must be in accordance with local or national standards for the installation of resilient floorcoverings. If in doubt seek further advice.

Important: Floor installation should not begin until the installer has assessed and approved the subfloor and installation conditions.

Acclimatisation

Linea does not require acclimatisation prior to installation, in standard rooms and conditions, see note at the end of this document (*)

Unpack the Linea and check all panels in daylight for possible defects or discrepancies in colour. For defects that are visible prior to installation, IVC will never assume responsibility for the uplift & relay costs.

Temperature condition before and during installation

Standard installation instructions are valid in standard rooms and conditions, see note at the end of this document (*)

Starting installation

Underfloor heating

Linea can be used with traditional water-based underfloor heating and cooling systems (according to standard EN 1264 part 1 to 5). Electrical systems, including infrared systems, are possible as well provided that the temperature changes are gradual and evenly spread over the contact surface (e.g. by encasing electrical wiring in sufficiently thick levelling compound). The surface temperature must never exceed 27° C. If in doubt seek further advice.



Linea is also available with an integrated underlay. In this case the use of Xtrafloor underlay becomes unnecessary and the section “installation of underlay” below may be skipped.

Warranty: The use of Xtrafloor underlay is covered within our warranty. Other underlays are not recommended or warranted.

Underfloor cooling

Linea 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. Temperatures below this point will produce condensation and can therefore create a humid atmosphere behind the floor covering which may encourage mould growth etc.

1. Xtrafloor GO:

- Improved sound insulation (ΔL_w =up to 19 dB with Linea)
- Improved acoustic comfort in the room of installation (no annoying crunching noise caused by sand or other loose particles under the floorcovering)
- Suitable for underfloor heating and cooling
- Provides excellent dimensional stability

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 has an underlay suitable for your requirements.



2. Xtrafloor Silent:

- Improved sound insulation ($\Delta L_w =$ up to 21 dB with Linea)
- Suitable for underfloor heating and cooling
- Provides excellent dimensional stability



- A 0,75mm expansion gap, per linear meter of Linea is required in any direction and must be incorporated at the perimeter of the room/area in “standard rooms and conditions”, see note below the table and at the end of this document (*)

[A 1,5mm per linear meter expansion joint in any direction must be incorporated at the perimeter of the room/area in extreme rooms and conditions, see note below the table and at the end of this document (*)]

Installation of underlay

Lay the rolls butted, edge-to-edge, at a 90 angle to the laying direction of the new floorcovering. There is no need to fix one sheet to another, however for convenience this can be done but do not adhere the underlay to the subfloor, leave it floating.



Begin laying your new floor according to the fitting instructions. Do not use primer or another adhesive.

Required expansion gap

Linea is a “floating” floor. The panels should not be glued together or fixed to the subfloor.

Linear meters	Expansion gap at both sides of x mm in standard rooms and conditions (see below)	Expansion gap at both sides of x mm in extreme rooms and conditions (see below)
2	1.5	3
3	2.25	4.5
4	3	6
5	3.75	7.5
8	6	12
10	7.5	15

Standard rooms and conditions are areas with temperatures between 6 and 35° C, e.g. no direct sunlight behind glass in sun facing rooms.

Extreme rooms and conditions are areas with potential surface temperatures between 0 and 45° C, such as conservatories, non-occupied holiday homes, etc.

When installation in an “extreme room” according to above definition is done whilst the temperature is above 25° C, it is allowed to take the expansion gap of the “standard room” to avoid too large shrinking gap in colder temperatures.

For more extensive definition of standard rooms and conditions we refer to the note at the end of this document (*)

If existing skirtings are present, and you do not wish to remove them, it is possible to trim off the lower part of the skirting with a specialist trimming tool, existing on the market. E.g. Bepo multipurpose trimming saw.

Alternatively, the use of a scotia trim is recommended.

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

Linea installation, step-by-step

Recommended Tools:

- Tape Measure
- Pencil
- Straight edge or string line
- Set Square
- Heavy-Duty Utility Knife
- Nylon- or rubber hammer
- Spacers for setting the first rows straight on an uneven wall



1. The IVC EVF planks or tiles can be joined in two different ways, either tongue-in-groove or groove-under-tongue. The simplest procedure, however, is groove-under-tongue, working from left to right along the longest straight wall.
2. The IVC EVF system 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. In that case you need a combination of

groove-under-tongue and tongue in groove installation.

3. Determine the installation direction of the IVC EVF. 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 or fine tooth saw to neatly cut off the lower groove lip.
4. Begin by laying the first row in the corner of the room on your left-hand side as you are looking at the wall. Preferably, always work from left to right and with the tongue towards yourself.
5. Lay the first row in a straight line and 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 nylon or rubber hammer/mallet for connecting the head ends so that the joint fits securely.
6. Use the spacers to fill out any contour of the wall so that the panels do not move, are straight and are 100% installed and locked together correctly.
7. For the end piece of the row, 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. Large pieces can be snapped off by hand, with small cuts it might be necessary to use pliers (or alternatively a saw).
8. For the second/next row, take a new panel and decide how big the first piece must be (or use one of the left-overs from previous rows). Make sure that the end joint is at least 20 to 30 cm different to the previous row and avoid any "staircase" effect, install at random intervals.
9. 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, ensure the click mechanism is firmly locked together. Due to the very close fitting mechanism, there is an intentional tension in the connection. It may be required to knock along the long joint with the rubber or nylon hammer/mallet to correctly engage the joint.

10. 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. It is recommended to use a rubber hammer/mallet for connecting the head ends so that the joint fits securely.
11. Repeat steps 8 to 10 until all rows are complete, and only the last row needs to be placed.



12. 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.

13. Heating pipes or similar 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. It is recommended to use a suitable hole saw on a drill. Always use a bigger diameter saw to leave appropriate movement for the floating floor.

NOTE : IVC EVF 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.

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

Finishing your floor

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

How to cover the expansion gap to the wall

1. Xtrafloor standard skirting: the perfect transition

- The identical connection for your IVC floorcovering
- Water-resistant
- Wear-resistant
- Perfect water-resistant corner solution



2. Xtrafloor paintable skirtings: style by choice

- Unique water-resistant material
- Colour coordinate your pre-primed skirting boards & walls
- Use our renovation skirting on top of existing skirting boards



3. Xtrafloor end profile

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



How to cover the expansion gap under a large window frame or threshold

Xtrafloor end profile as recommended above



How to cover the expansion gap within the floor surface, for runs longer than 16m

Xtrafloor T-profile

- Sleek aluminium profile 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

If you want to avoid a T-profile in the middle of the floor, for runs longer than 16m, consider using skirtings thicker than the standard 12mm or add a scotia to the standard skirting, which will achieve more total thickness.



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

Xtrafloor Adaptor profile

- Sleek aluminium profile for a minimalistic design that lends a smart and modern look
- Connect the floor with lower floor surfaces, with a height difference of max. 6mm



Xtrafloor Multifunctional profile

- Sleek aluminium profile for a minimalistic design that lends a smart and modern look
- Connect the floor with any other type of higher or lower lying floor surface, with a height difference up to 12.3mm



How to finish your stairs in the same material as the floor

Xtrafloor stair nosing:

- Sleek aluminium profile for a minimalistic design that lends a smart and modern look
- Inner and outer corner stair nosing for Linea

Note: Linea must be adhered to the treads and risers on stairs



⇒ For specific installation instructions on Xtrafloor skirting, profiles and nosing, please consult www.Xtrafloor.com

Maintaining Your Floor

Appropriate maintenance procedures will help to preserve the appearance and will extend the life of a Linea floor. The frequency of maintenance will depend on the amount and type of traffic, degree of soiling, the floor colour and type.

We refer to the cleaning and maintenance recommendations and products available from www.xtrafloor.com

Important:

- Almost all flooring will vary in colour over time when exposed to UV light. Avoid this by using curtains or sunscreens when the sun is very bright.
- Avoid rubber or latex backed mats, furniture feet and the like, as they may leave stains. Also, rubber and latex castors or protection caps under furniture must not be used (we advise castors type 'W' in accordance with EN 12529).
- Protect against scratching from furniture feet by using wide, free-moving, castors, glides, rollers or felt pads. Use furniture caps under heavy items or appliances to prevent indentation.
- Mechanical damage of the floorcovering, caused by heavy overloading or sliding of

furniture/items is not covered by the warranty conditions.

- Do not allow cigarettes, matches and other very hot items to contact the floor as this causes permanent damage.

Contact your IVC representative/retailer for the warranty conditions.

(*) IVC considers standard rooms and conditions as :

Minimum temperature during transport and storage : 0° C

Minimum temperature during installation : +6° C

Minimum temperature during use : +6° C

Maximum temperature during transport and storage : +35° C

Maximum temperature during installation : +35° C

Maximum temperature during use : 35° C

Acclimatisation period : none

Room size without expansion profiles: wall to wall length maximum 16m

IVC considers extreme rooms and conditions as :

Minimum temperature during transport and storage : 0° C

Minimum temperature during installation : +6° C

Minimum temperature during use : +0° C

Maximum temperature during transport and storage : +35° C

Maximum temperature during installation : +35° C

Maximum temperature during use : +45° C

Acclimatisation period : 12 hours if the temperature difference between the storage and the installation is more than 20° C

Room size without expansion profiles: wall to wall length maximum 8m

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