

# General Guidelines

## Moduleo LayRed



### 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 LayRed 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.

#### Suitability

- LayRed 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).
- LayRed can be used with traditional water-based underfloor heating and cooling systems. Electrical systems, including infrared systems, are not recommended unless the system is encased in a minimum of 9mm of suitable levelling compound. Direct contact with electrical heating systems must be avoided. The surface temperature must never exceed 27°C. If in doubt seek further advice.
- LayRed is only suitable for indoor installation.
- Seasonal temperature conditions: LayRed 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 LayRed joints are water resistant after installation. Following the installation instructions carefully makes the floor fit for use in bathrooms, kitchens, laundry rooms and entrance areas. 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.

## 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 LayRed finish. The appearance of LayRed will only be as good as the quality of the base over which it is installed. Although LayRed 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. LayRed is capable of bridging small holes of up to 30 mm, grout-lines, joints and cracks of up to 10mm in the subfloor.

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

LayRed 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**

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

Unpack the LayRed 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**

LayRed can be used with traditional water-based underfloor heating and cooling systems (according to standard EN 1264 part 1 to 5). Electrical systems are not recommended unless the UFH system manufacturer/installer can guarantee that the surface temperature will not exceed 27°C and that any temperature increase is gradual/progressive and not a sudden or immediate increase.

**Note:** Electrical systems based on infra-red require particular attention, they heat up immediately and can heat up very specific parts/layers of the floorcovering, which leads to unpredictable behaviour with a potential fire-risk. If in doubt seek further advice.

### **Underfloor cooling**

LayRed 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.

### **Required expansion gap**

- LayRed is a "floating" floor. The panels should not be glued together or fixed to the subfloor.
- A 0,75mm expansion gap, per linear meter of LayRed is required in any direction and must be incorporated at the perimeter of the room/area in "standard rooms and conditions", see note 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 below and note at the end of this document (\*)]

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 60°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 Xtrafloor Scotia Trim is recommended.

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

## LayRed installation, step-by-step

### Recommended Tools:

- Tape Measure
- Pencil
- Straight edge or string line
- Set Square (we recommend the specially designed Xtrafloor cutting aid)
- Tapping block
- Heavy-Duty Utility Knife
- Nylon- or rubber hammer
- Spacers for setting the first rows straight on an uneven wall



With LayRed panels you can choose where you want to begin. Think about what the easiest way will be to install the floorcovering. Here, we will explain the installation for right-handed people, installing from left to right. You can work in the other direction if preferred.

The LayRed panels are installed in the angle/angle method can be installed in two different ways:

### Method A:

Position the end-joint of the panel to be installed at an angle of 20° to 30° to the end joint of the panel already installed. Carefully drop the panel down approximately 5mm short along the long-joint and then lift the panel to 25° at the same time exert pressure. The panel

will slide and click into place. You can either insert the tongue into the groove, or the groove on to the tongue. The tongue in groove method is the most common and easiest way. Lay the panels in rows.



**Method B:**

With LayRed you can also tap the long-edges of the panels into each other without lifting. For this method you must use the special Xtrafloor tapping block. The panels should not be joined with a single tap. To avoid damaging the panels you must tap them together gradually. Lay the panels in rows.

Make sure the panels are mixed sufficiently when you install them, so that you do not end up with too many similar, light or dark panels next to each other. To obtain the best visual effect, it is best to fit the floorboards in the direction of the longest wall and parallel to the incidence of light.

Before starting, carefully measure the length and the width of the room to plan a precise layout to achieve a balanced appearance of the floor. This is very important when installing typical tile decors. This will ensure also you won't end up with the last row being too narrow. If the last row would be less than 40mm, the installation will be easier if you cut down the panels of the first row in the length.



Firstly, cut/saw off the tongue on both the long and the short sides.



Put the panel with cut-off sides against the walls. Use the spacers to fill out the contour of the wall so that the panels do not move, are straight and are 100% installed and locked together correctly.



Ensure that the end joints of the panels in two successive rows are never in line. Always ensure that the joints are staggered by at least 30 cm and avoid a “staircase effect” by using your cut-off pieces randomly and not always for your next row. For the last piece, measure the last panel so that the required expansion gap is maintained. Do not lay the panel 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.



Position the end joint of panel to be installed at an angle of 20° to 30° to the end joint of the panel already installed. Carefully drop the panel down approximately 5mm short along the long-joint and then lift the panel to 25° at the same time exert pressure. The panel will slide and click into place. Some panels may need to be tapped-in to close the gap. Use the Xtrafloor tapping block.

In places where it is too difficult to install the LayRed panels with the tapping block (e.g. against the wall), you can tap them together using the pull-bar and a hammer.

Once enough rows are installed, it is easy to continue the installation as follows: Put an unopened pack of panels on the already installed rows to weigh it down and stop movement. Switch your position and click the short side of the panel in the previous panel.

Now place your BOTH hands close to the joint and pull the long side of the plank towards you. The panels will now click together.



To fit the last row of panels you will usually need to cut them in. 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.

Doorjambes and heating pipes also need to be individually fitted, maintaining a movement gap. 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. Doorjambes can also be sawn (undercut) to size if necessary, the LayRed can them be neatly installed underneath.

⇒ 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.



- 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 LayRed

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



## 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

⇒ For specific installation instructions on Xtrafloor skirting, profiles and nosing, please consult [www.Xtrafloor.com](http://www.Xtrafloor.com)

## Maintaining Your Floor

Appropriate maintenance procedures will help to preserve the appearance and will extend the life of a LayRed 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](http://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 Moduleo 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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