

RIGIO. RIGID CORE FLOORIING





GENERAL RULES BEFORE INSTALLATION

1. Visual inspection

Before installation, make sure that the product has been inspected for damage, defects or alterations.

Check that the colours correspond to the ordered ones, the quantities are correct and that there is no visible damage to the boxes. During installation, keep checking the Rigio floor panels for visible defects. Do not install panels that show any imperfections. We recommend that for each installation you always use materials from one production batch, because we cannot guarantee a perfect match of hues between different batches. Please note that some patterns may change for natural causes. We also recommend mixing the panels coming from one package or between packages.

2. Adequacy of installation

Rigio floor panels can be laid on concrete, cement screed, anhydride (calcium sulphate,) wood, plywood, chipboard and ceramic tiles that are fairly flat and smooth or have been properly prepared (see Preparation of the surface.)

Rigio floor panels can be used with the suitable floor heating and cooling systems.

Electrical systems, including the infra-red systems, are not recommended. unless the cables of the system are immersed in an appropriate levelling mass for at least 9 mm. Avoid direct contact of panels with the electrical heating systems. The surface temperature must never exceed 27°C. If in doubt, seek professional advice.

Rigio panels are only suitable for indoor installations.

Seasonal thermal conditions: Rigio panels can be used in most locations, including winter gardens and temperature-controlled summer houses. Maintain the temperature between $6^{\circ}C(min)$ and $35^{\circ}C(max)$ Installation is still possible, even with temperatures outside of the above this range - see note at the end of this document*.

After complete installation, the Rigio joints are waterproof. Compliance with the installation instructions will make the floor suitable for use in bathrooms, kitchens, laundry rooms and entrance areas. It is not recommended to install the panels in damp rooms, such as swimming pools and their surroundings, saunas, and rooms with built-in drains, such as shower cabins due, to the possibility of slippage.

3. Composition, structure and quality of surfaces

Knowledge of the composition and construction of the underneath surface or base provides valuable information, which allows proper verification of the permissible moisture, compressive and tensile strength of the surface. In addition, it indicates how the floor was prepared, the type of floor levelling or putty compound used, and suggests if introducing some moisture barrier may be required during the installation process. In case of ambiguity or doubt as to the quality or composition of the base surface, please contact the manufacturer or supplier of the levelling mass or putty compound.

4. National rules and standards

Conditions at the installation site should always comply with the relevant national installation regulation and standards.

PREPARATION OF SURFACE

1. Surface faults

Proper preparation of the surface will ensure trouble-free installation. This is essential for the perfect finishing effect of the Rigio panels. The appearance of the Rigio panels will be only as good as the quality of the surface, on which they are mounted. Although Rigio floor panels are ideal for renovating also not ideally level surfaces, some grater uneven spots, bumps, sudden changes of the floor level may also be visible on the finished floor. Appropriate preparation of the surface, prior to installation, is necessary.

The surface must be hard, firm, relatively flat, clean and dry, free from uneven spots and defects, and suitable for the intended use. If necessary, scrape and remove the old adhesive residues and loose or unbound levelling mass. Ensure that the surface is free of chemicals or any other contaminants.

The irregularity of the surface level must not exceed 5mm over the length of 2m (in the United Kingdom this corresponds to the surface regularity of 2 (SR2)) and the measurement must be carried out with a straight-edge or a spirit level. Rigio floor panels are able to cover the surfaces' small holes - up to 30mm wide, grout, joints, and cracks - up to 10mm wide.

Choose a suitable plywood or levelling mass to prevent sudden appearance of uneven spots on the finished floor. However, the choice of suitable materials, including plywood, putty compound or

levelling mass and any auxiliary products should depend on the intended practical use of the specific area and agreed on by the supplier of the materials and the floor installer. All materials used for flooring installations should be used in accordance with the manufacturer's recommendations and the national standards,

within the scope of the resistant floor coverings.

2. Moisture content in surface

Rigio floor panels are moisture resistant, but best practices should be implemented to avoid development of bacteria and mould underneath the floor covering.

Concrete and stone surfaces laid down directly on the ground should be fitted with an effective, moisture-resistant membrane (DPM,) in accordance with national standards for resistant floor coverings. If needed, follow the manufacturer's detailed instructions for mounting the DPM and applying levelling mass on the surface.



The moisture content in the surface should be in accordance with the local or national standards for laying down resistant floor coverings. If in doubt, seek further professional advice.

Important: Installation of floors should not commence until the installer has assessed and accepted the surface and the installation conditions.

3. Acclimation

Rigio floor panels do not require acclimation prior to installation inside regular interiors and under standard conditions, see note at the end of this document*.

Unpack the Rigio floor panels and check them in daylight for any defects or colour discrepancies. In case of the defects that are visible prior to installation, the Manufacturer shall never be liable for the costs related to laying down the panels or their transportation.

4. Temperature before and during installation

Standard installation instructions are valid for standard interiors and conditions, see note at the end of this document*.

5. Floor heating

Rigio floor panels can be used with traditional water-based floor heating and cooling systems (according to the standard EN1264, sections 1 to 5.) Electrical systems are not recommended, unless the manufacturer or installer of the UFH system guarantees, that the surface temperature never exceeds 27°C, its increase will be gradual or progressive, but the temperature will never rise suddenly or quickly.

Note: Infra-red electrical systems require special attention, since they heat up immediately and can transmit the heat to very specific parts or layers of a floor covering, which might lead to unpredictable developments associated with a potential risk of fire. If in doubt, seek further professional advice.

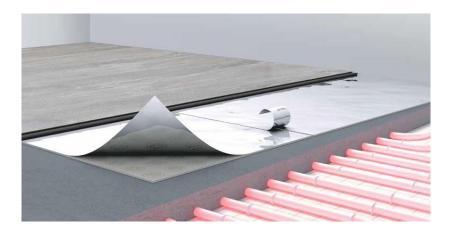
6. Floor cooling

The Rigio floor panels can also be installed on floor cooling systems. However, the cooling water supply temperature must not fall below the dew point. The temperature below this point will cause condensation and may accumulate moisture under the floor covering, which may aid development of mould development, etc.

7. Recommended underlay

Proper placement of the underlay is a paramount factor. Whether an excellent acoustic insulation is required, solutions ensuring the surface is resistant to harsh conditions or just a water-based surface, the Max Pod Alu Extreme underlay is the foundation, which will satisfy all these requirements.

It is the best acoustic underlay (silences a floor) currently available on the market – it is the only heavy underlay with the patented RWS Barrier technology. Ideal for use with floor heating and for heavy-duty floors. Max-Pod Alu Extreme by 69% better evens out local uneven spots than popular quartz mats.



INSTALLATION

1. Expansion gap is required

Rigio floor panels form a "floating" floor.

In all directions there should be planned an expansion gap of 0.75mm per one running metre of the Rigio floor, and then kept around the perimeter of the room or area in "standard interiors and conditions", see note below and at the end of this document*.

Expansion gaps of 1.5mm per running metre in each direction shall be provided around the perimeter of a room or area in "extreme interiors and conditions', see note below the table and at the end of this document*.

Running metres	Expansion gap on both sides x mm standard interiors and conditions (see below)	Expansion gap on both sides x mm in extreme interiors 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 interiors and conditions mean the indoor spaces with temperatures from 6 to 35°C, e.g. without direct sunlight or behind a solar control glass.

Extreme rooms and conditions are areas with potential surface temperatures between 0 and 60°C, such as winter gardens, uninhabited summer houses, etc. During the installation in an "extreme space," as defined above, at temperatures above 25°C, it is permissible to keep the same expansion gap as in a "standard space," to avoid excessive gap at lower temperatures.

For more detailed information about the standard interiors and conditions, please refer to the note at the end of this document*.

In the case of mounting the skirting boards, which should not be removed, it is possible to cut off the lower part of the skirting board, using a specialized trimming tool available on the market.

2. Recommended tools

In order to ensure a smooth installation work, a basic set of tools must be acquired.

It should include:

- measuring tape
- pencil
- Straight-edge or string
- set square
- punching tool
- sturdy tool knife
- nylon or rubber hammer
- spacers for lining up first rows straight on an uneven wall



3. Installation methods

Rigio floor panels allow you to choose the spot where to start installation. There should be planned the simplest method for installation of a floor covering. Here we will explain the installation process for the right-handed people, who will carry out installation from left to right. The installation can also be carried out in the opposite direction. Rigio panels should be installed using the angle-to-angle method, in two different ways:

Method A

Position the end joint of the panel to be mounted at an angle of 20° to 30° in relation to the end joint of the already mount ed panel. Carefully place the panel approx. 5mm from the long joint, then raise the panel by 25°, while applying pressure. The panel will slide in and will be locked in place. You can insert the tongue inside the groove or slide on the groove on the tongue. The most popular and the simplest method is to place the tongue inside the groove. Set the panels in rows.

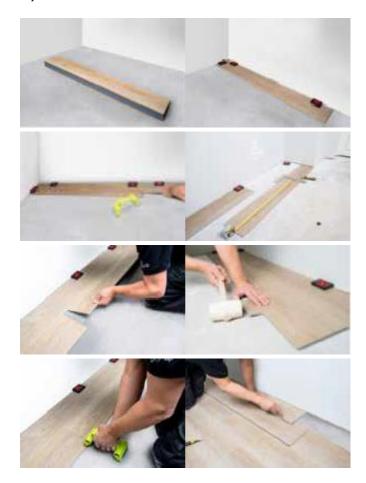
Method B

Rigio panels allow you punch in the long edges of the panels without having to lift them. A special punching tool must be used for this method. The panels should not be joined with a single punch. To avoid damages, you must punch in the panels gradually. Set the panels in rows.

4. Step by step installation

- Ensure that the panels are properly mixed, to avoid placing too many similar (light or dark) panels side by side. For best visual effect, it is best to position the floorboards towards the longest wall and parallel to the direction of light.
- Before installation, carefully measure the length and width of the interior, to plan the exact layout for a balanced appearance of the floor. This is very important when laying down typical tile decorations. This way the last row of the panels will not be too narrow. Should the last row be narrower than 40mm, the installation will be easier, if the panels in the first are cut length wise.
- First, cut or saw off the tongue on both long and short sides.
- Lay down the panel with the cut-off sides towards the walls. Using spacers, fill in any wall contour so that the panels cannot move, are straight and are 100% installed and properly fastened.

- Ensure that the panel end joints in two subsequent rows are never aligned. Always make sure that the joints miss each other by at least 30cm and avoid the "stairs" effect by randomly using the cut off parts, not always in the next row. In the case of the last panel, measure it in such a way as to maintain the required expansion gap. Do not place the panel tight to the wall. Cut off the selected item and adjust the end panel in the same way as the preceding panels. When cutting a panel with a tool knife, make sure that the abrasive layer is cut before breaking the panel apart.
- Position the end joint of the panel to be mounted at an angle of 20° to 30° in relation to the end joint of the already mounted panel. Carefully place the panel approx. 5mm from the long joint, then raise the panel by 25°, while applying pressure. The panel will slide in and will be locked in place. Some panels may need to be punched to close the gap.
- In places where installing Rigio panels with the use of a punching tool is too difficult (e.g. next to a wall,) they can be joined with a pusher and a hammer.
- After installing enough rows, you can easily continue the installation as follows: Place an unopened package of panels on the already installed rows to put the load on them and ensure they do not move. Change position and snap the short side of the panel into the previous panel.
- Then place BOTH hands close to the joint and pull the long side of the board towards you. The panels will connect with a click.
- To adjust the last row of panels, you usually need to trim them. This should be done as follows: place the panel on the preceding row with its groove towards a wall, place the next panel turned around towards the edge of the wall, and mark the panel underneath. Cut the panel to size and adjust the last row.
- The panels should also be adjusted separately to the jambs and heating pipes, in order to maintain a gap allowing movement. First cut the panel to the appropriate length, then place the panel next to the given object and draw the correct mounting. Then cut the panel to size. The jambs can also be sawn (cut) to size and, if necessary, the Rigio floor panels may be properly installed underneath the jambs.



FLOOR MAINTENANCE

Appropriate maintenance procedures will help to maintain the good appearance and prolong the life cycle of the Rigio flooring. The frequency of maintenance tasks will depend on the intensity and type of a traffic, degree of dirt, colour and type of a floor.

Important

Almost all floors will over time change their colour due to UV radiation. This should be avoided by using shades or sunscreens when the sun is very bright.

Rubber or latex mats, furniture feet, etc., should be avoided, as they may leave stains. Rubber and latex wheels or washers under furniture also must not be used (we recommend the use of "W" type wheels, in accordance with EN 12529 standard.)

Protect floors from scratches by the feet of furniture using wide, freely moving wheels, skids, rollers or felt pads. Furniture washers must be placed under heavy objects or equipment to prevent dents in a floor.

Mechanical damage to the floor covering caused by heavy overloads, moving furniture or objects is not covered by the warranty.

Do not allow cigarettes, matches or other heated objects to come into contact with flooring, as this will cause permanent damage.

* Manufacturer considers the following as standard interiors and conditions: Minimum temperature during transportation and storage: 0 °C Minimum temperature during installation: +6°C Minimum temperature during use: +6°C Maximum temperature during transportation and storage: +35°C Maximum temperature during installation: +35°C Maximum temperature during use: 35°C Acclimation period: none Room size without expansion joints: length from wall to wall max 16m Manufacturer considers the following as extreme interiors and conditions: Minimum temperature during transportation and storage: 0°C Minimum

Minimum temperature during transportation and storage: 0°C Minimum temperature during installation: +6°C Minimum temperature during use: +0°C Maximum temperature during transportation and storage: +35 °C Maximum temperature during installation: +35°C Maximum temperature during use: +60°C Acclimation period: 12 hours if the temperature difference between the warehouse and the installation site is greater than 20°C Room

size without expansion joints: length from wall to wall max 8m