

The background of the entire page is a close-up photograph of a light-colored wood floor, likely oak, with a prominent grain. The floor is composed of rectangular planks. Overlaid on this background is a pattern of semi-transparent circles. Some circles are solid light wood, while others are solid dark brown, creating a rhythmic, geometric pattern across the surface.

WHOOD

BY RETHINK

Flooring Installation

Oak Essence

DESIGNED BY NATURE

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GENERAL INFORMATION

FLOORING INSTALLATION, INSTALLATION BY GLUING, INSTALLATION ON SUBFLOOR, INSTALLATION ON UNDERFLOOR HEATING

You can start the installation of the wooden floorboards after finishing all construction and finishing works. Before starting the installation of flooring you should read the information about the installation and use of the flooring.

In all situation not described in the document you should immediately contact the manufacturer or salesperson in order to request information. Room must be dry and have a working ventilation system. Internal doors should be installed after flooring installation (unless the manufacturer recommends otherwise). Before starting the installation you should make a control overview of the boards. All visible defects should be signalled to the salesperson and the boards on which they occurred should be put aside and, if possible used as cut out elements. Differences in shades: Due to the natural nature of boards the warranty does not cover any possible differences in shades between pattern books, samples or catalogues and every batch of the material, as well as changes in wood tones during long utilization, resulting from natural wood maturation processes (e.g. Influence of UV rays).

Sample books available in showrooms are to show the examples of a given model of the flooring. There can occur some differences between the sample books and the goods delivered, due to: ageing of sample books, different wood grain, differences between the batches of the material, differences in wood grain mineralization, differences resulting from the environment, lighting etc. Some of our flooring models undergo very complicated treatment, e.g. heat treatment; those are modified flooring. Models like these, apart from the period of so-called "colour maturing", are also characterised by wide range of colours. Those boards, despite the differences between them, form a integral whole. During the installation of those flooring models you cannot try to pick the boards based on shade intensity. The boards should be placed on the floor in order to create one structure on the whole floor surface. During the installation the aesthetic aspect should be taken into consideration. The boards that differ significantly from the rest of the batch should be put aside, or if possible used as cut out elements in the subsequent row of the flooring.

Every order is processed individually, entirely in constant conditions for one particular client, so the differences in colours and shades result only from natural differences occurring in wood. Claims resulting from the defects and damages that should be noticed and submitted before the flooring installation, shall not be taken into consideration. In order to acclimatize the boards, the closed packaging should be left in the room where the flooring is to be installed at least for 48 hours (in winter season even up to 6 days). The packages should be put horizontally on a pallet or equal spacers. It is not recommended to keep the packages directly on the concrete floor. The damaged packaging should be resealed immediately. The flooring should be installed immediately after opening the package.

Our flooring is intended to be installed inside the building. In order to guarantee the highest quality we recommend:

a) the installation of the flooring on the grounds such as:

- ground professionally made of wood panels
- professionally made cement and anhydrite ground
- permanently fixed wooden flooring (parquet or old floorboards)

b) using the proper ground system as well as the glue from the renowned manufacturer, adapted to the type of the ground and the size of glued elements and wood species.

BOARDS INSTALLATION BY GLUING TO THE MINERAL GROUND

Before starting the flooring installation you should: using a moisture meter [CM] check the degree of the ground humidity, making a recess through the entire thickness. The material from the 1/3 of the bottom part of the ground. The humidity level cannot exceed 2% according to CM in cement ground and 0.5% in anhydrite ground. The ground should be strong, dry and even, made according to the Construction and Commissioning Requirements issued by Building Research Institute in Warsaw. During the measurement you need to make a measurement protocol confirming the results of the measurement, in the presence of an Investor or a person authorized. Any unevennesses above 2mm on the length of 2 meters. Any unevennesses above 2mm on the length of 2 meters should be removed before the installation, the evenness of the screed should be checked with a spirit level of the length of at least 2 meters. In necessary the door and the doorframes should be cut in order to adjust it to the new level of the floor. If the wooden floor will touch directly the floor made of, for example, ceramic tiles, their thickness should be taken into consideration.

Before the installation you should check if the wood humidity is as recommended. The moisture content of solid wood floors is $9\pm 2\%$ (PN-EN13226), the measurement can be made using an invasive device. The measurement should be made using a proper moisture meter, measuring at least 5 boards from different packages and assuming the mean value from the measurement.

The moisture content of the wood layered flooring (moisture content of the top layer) 5-9% at the time of leaving the manufacturer facility. The only proper method of the measurement of moisture content in the layered flooring elements is defined in EN13183-1 as it is a drying and weighing method (PN-EN 13489). Due to the problems with conducting a proper measurement in the place of the installation, we recommend making the measurement of several boards from different packages. Due to the difficulty of the measurement, the manufacturer confirms that all layered boards leaving the manufacturing facility have a proper moisture content. If necessary you should contact the manufacturer.

Before starting gluing you have to check the hardness and resistance of the ground [recommended resistance at the tear-up test using a Pressomess device is $\geq 25\text{kN}$], in case of weak ground, dusty, you have to use a polyurethane primer.

During the installation of wooden floorboards we recommend using - due to its excellent binding properties - two-component polyurethane or polyurethane-epoxy adhesive. The adhesive should be used according to the instruction provided by the manufacturer on the packaging. The adhesive should be applied evenly on the ground using a notched finishing trowel, according to the recommendation of the adhesive manufacturer as well. The proper application of the adhesive is necessary in order to ensure the proper holding force. You should not apply the adhesive on the surface bigger than the one that could be covered with boards within a minimal time in which the adhesive dries. The adhesive is always applied on the surface of the ground. The drying time may vary depending on the conditions in the given room. The boards should be installed directly on the applied layer of the adhesive. Every board should be pressed towards the adhesive layer and moved. The adhesive emerging on the surface of the flooring should be removed immediately using the cleaning product recommended by the adhesive manufacturer. The boards' installation should be made along the longer wall of the room. It is recommended to start the installation from the wall where the entrance door to the room is placed. During the installation of the first row of the flooring you have to remember to leave an expansion gap between the floor and the wall. This gap should have 15 mm. The first board should be laid in a way that the groove would be placed on the wall side. If necessary you should use the mounting strips in order to tighten the boards. The last board in the row should be cut with taking into consideration an expansion gap. The first row of the boards can be burdened during the time of adhesive drying using the proper burden, e.g. a container with the adhesive or packages with the boards.

The next row of the boards should be started with the board left from the cut. The joints of shorter boards in adjacent rows should be shifted in respect to each other by at least from 150 to 200 mm in order to obtain the higher resistance of the flooring. Boards cutting should be made from the useful surface, to avoid the damage to the surface. You should preserve the expansion gap of 15mm towards all elements permanently fixed, such as: walls, terracotta, doorstep, central heating pipes etc. In case of flooring covering several rooms, you should separate them using expansion gaps and doorsteps etc. between rooms.

The same solution is applied in the rooms of complicated shape (L, H, T, F, U letter shape). While laying the flooring in the big room that is wider than 7 linear meters and longer than 10 linear meters, you have to apply additional expansion gaps, dividing the rooms into smaller surfaces. Before laying the last row of boards you have to measure them accurately. If they are too wide, you have to cut every board from the last row to the appropriate size (taking into consideration an expansion gap). The board is cut with saw to the desired width, along the marked line. In order to the floor set evenly on the ground and acquire a moisture content evenly (according to the manufacturer instruction), you have to leave the room empty for 24 to 48 hours. When the adhesive is dry you should remove expansion wedges and install the skirting boards.

We recommend installing the skirting boards directly to the walls with the assembly adhesive and/or mounting pins.

INSTALLATION REQUIRING NAILS ON THE WOODEN GROUND

Floorboards may be fixed with nails directly to the properly prepared wooden ground. If existing wooden floorboards are stable and flat enough, new floorboards may be laid directly on them, perpendicularly to the direction in which the previous boards were laid. If the new boards are laid in the same direction as the old ones, you have to fix sheets of plywood (at least 6mm thick) to the existing ground, leaving the expansion gaps of 15mm between the sheets. If the existing wooden ground is not sufficiently level, you have to level it with e.g. waterproof plywood. Laying the flooring on the concrete ground, you should first put a layer of construction foil of 0.2 mm and then separated sheets of waterproof plywood of 18 to 24 mm and only then fix the actual flooring with the nails.

Attention:

- 1) If boards are fixed with nails/screws, you should pay attention to do not damage the installations installed in the ground.
- 2) The boards of minimum thickness of 20 mm may be fixed directly on the joist or beams - with the maximum spacing of 300mm.
- 3) The first row of the boards should be laid evenly with the groove towards the wall, keeping the expansion gap. You should fix it with a nail or screw from above (spaces between of 200-300mm, minimum 2 links on one board, if possible 75mm from the end of the board). Fix in similar way on the length of those boards to an angle of 45°-50° setting a nail or screw into the tongue. In order to facilitate the work, you may use a nailer or an electronic screwdriver
- 4) You should lay the next row of the boards with the groove into the tongue and fix it with the nails or screws do the ground to an angle of 45°-50° from the groove side.
- 5) You should lay the boards from the left to the right. The boards should be always laid step-like, meshing the ends of minimum 150mm, but no more than 300mm. The last board in the row should be measured and cut leaving the expansion gap of 15mm. If possible, you should start the next row with the cut piece of the board left from the previous row.
- 6) In the last row you can measure the width of the last board by lying it next to the wall and marking the proper width. Place the board from the last row on the board from the previous row. Using the wood waste of the full width as well as expansion wedges placed next to the wall, mark on the last one row the cut line.
- 7) You have to cut the holes for the bigger pipes, columns, frames and other obstacles, leaving the proper expansion gaps, according to the instruction of gluing the board to the ground.
- 8) At the end, fix the last row of the boards similarly to the first one from the above and hid the head of the nail in the board. Fill the wholes from the nails and screws and cover them with the skirting board.

BOARDS INSTALLATION ON UNDERFLOOR HEATING

Whoood by Rethink is also the manufacturer of the layered floorboards of the width of 16mm, which are authorised to the use on underfloor heating. You have to glue the layered boards on the underfloor heating to the ground using a flexible adhesive dedicated to that purpose. In order to fully enjoy the wooden flooring on the underfloor heating, you have to meet the following requirements:

1. Set the heating for several days prior to the installation at 21°C on the surface of the ground.
2. Install in the same temperature, according to the instruction of gluing the board to the ground.

ATTENTION: The condition necessary to meet before laying the floor on the underfloor heating is preparing the report from lasting 30 days heating of the heating ground that is to be signed by a qualified installation team (the report is available at the authorised retailers). If the installation is not made immediately but later, for several days before the installation the heating has to be set at 21°C one more time and the installation has to be made at the same temperature. In order to the wood not to be warping, you need to observe the moisture content of the board during the installation, so that it would not exceed the scope of 7%-11%.

Proceedings after the installation of the flooring:

1. Leave the flooring to the slow operation of the heating system at the temperature of 21°C no less than for 48 hours. Then slowly increase the temperature until you reach the optimum temperature.
2. Do not raise the temperature above 26°C on the surface of the flooring.

ATTENTION: Regardless to the used heating system, in the room there has to be maintained a relative humidity of the air throughout the year in the scope 45-60% and the flooring temperature on the surface of the ground not higher than 26°C. The Whoood warranty does not cover the flooring that was excessively dried or heated by using higher temperatures than approved. It is allowed to install the layered board on the water underfloor heating. Suggestions and guidelines concerning the ways of the floorboards installation constitute only a part of the knowledge that a qualified person installing the flooring should possess. The information contained in this brochure are to only draw the attention of the people responsible for the installation as well as the users on the most important aspects connected to the proper installation and use of wooden flooring. The flooring should be always installed according to the flooring art and the guidelines of proper regulatory authorities. The installation as well as the use of the flooring should be made in accordance with the intended purpose of the flooring.

WHOOD INSTALLATION CHEMICALS - WHOOD BOND SYSTEM

We offer for the installation of the flooring adjusted in terms of parameters adhesive WHOOD BOND SYSTEM

Two-Component Polyurethane-Epoxy Adhesive

- two-component adhesive does not contain water or any solvents
- intended for gluing solid wood and layered flooring on the cement and non-absorbent grounds
- with a very long time of using after mixing the ingredients
- Intender for the use on underfloor heating

Technical Data

Appearance	- paste
Viscosity	90000-110000 (Brookfield)
Consumption	- 1000 - 1200 g/m ²
Mixing ratio	- 9:1
Durability of the mixture	- ca. 120 min.
Temperature of use	- +10 do +30°C
Bonding time to the entrance	- 1-2 days (in regular conditions)
Bonding time the grinding	- 3-7 days (in regular conditions)
Application	- notched finishing trowel no. 5
Storage period	- 6 months in the unopened original container, in the temperature +5 to +25°C
Cleaning tools	- solvent R20 before the glue binding

Preparation Of The Ground

The ground must be smooth, coherent, permanently dry (cement <2%CM, anhydrite <0,5%CM), free of grease, fissures and dust, properly prepared through grinding and dusting. Weak and dusty grounds strengthen with the primer WHOOD PRIMER SYSTEM. On non-absorbent grounds (ceramic tiles, clay tiles) use the primer Puliaggrappante. In case of cement grounds of remaining moisture content up to 5% CM it is possible to make a waterproof barrier of the primer WHOOD PRIMER SYSTEM.

Use

The product should be air-conditioned before the use to the temperature of about 20°C. Add ingredient B to the ingredient A and mix it thoroughly with an electric mixer until receiving a homogeneous paste. Mixed adhesive should be applied evenly on the ground using a notched finishing towel (no.5).

Notice

Use the appropriate personal protective equipment. Do not use with high air humidity (>75%).

Package

10 kg (9 kg ingredient A + 1 kg ingredient B)

Additional Information

Contained technical data is based on numerous laboratory experiments and use. The manufacturer is responsible for the quality of the product only if it is used according to the hereby instruction. Otherwise it is recommended to conduct necessary tests ion your own.

WHOOD INSTALLATION CHEMICALS - WHOOD PRIMER SYSTEM

We offer for the installation of the flooring adjusted in terms of parameters primer WHOOD PRIMER SYSTEM

One-Component Solvent Polyurethane Primer

- one-component solvent polyurethane primer
- Intended to preparing the ground before gluing with polyurethane and polyurethane-epoxy adhesives
- does not contain water
- perfectly penetrates into the primer
- reduces the use of the adhesive
- protects from the remaining moisture content up to 5% CM
- intended for the use on underfloor heating

Technical Data

Application method	- roller, brush
Consumption	
• strengthening of the ground	- 150 - 200 g/m ² - 300 - 500 g/m ²
• waterproof barrier Temperature of use	- from +10°C to +25°C
Storage period	- 12 months in the unopened original container, in the temperature +5 to +25°C
Drying time	- approx. 12 - 24h (temp. 23°C, humidity approx. 50 %)
Cleaning tools	- solvent R20

Use

- *Screed strengthening:* Apply the primer diluted with 50-100% solvent R20 evenly on the ground using a roller or brush. Do not leave any puddles on the surface.

- *Waterproof barrier:* Apply two layers of the primer. The first one after diluting with 50-100% of the solvent R20. For the second layer use undiluted primer WHOOD PRIMER SYSTEM and generously sprinkle with quartz sand of grading 0.2-0.8 mm After drying remove the excess of the sand. While used WHOOD PRIMER SYSTEM should have room temperature. Apply generously on the ground using a brush or roller. Leaving a thicker layer may cause foaming and significantly extend the drying time. Before you continue the work the primer has to dry entirely. The drying time depends on the temperature, air humidity, draught, ground properties and the amount of the primer applied. Gluing with the use of one- and two-component polyurethane adhesives has to be made within 36 hours. Longer interval between applying the primer and gluing may weaken the adhesion. In case of planning a longer interval between applying the primer and gluing, you have to generously sprinkle the fresh layer of WHOOD PRIMER SYSTEM with a quartz sand. After drying sweep the remaining sand and remove it.

Notice

Optimal use conditions: +10 do +25°C, ground temperature above +15°C and relative air humidity above 30% and below 75%. Low temperatures lengthen, and high ones shorten the drying time.

Unused product should be kept in a sealed package and used as soon as possible.

The product may be used to strengthen screeds with underfloor heating. The waterproof barrier can be made only on cement grounds without underfloor heating. The product is suitable for professional use only.

Before using the product read a dangerous product data sheet. While using the product use adequate personal protective equipment. While using the product air the room.

Package

One-time packaging, 5L, 10L

Additional Information

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