
PRE-INSTALLATION PROCEDURES

JOB SITE INSPECTION

- The building should be closed in with all outside doors and windows in place. All concrete, masonry, framing members, drywall, paint and other "wet" work should be thoroughly dry.
- The wall coverings should be in place and the painting completed.
- Exterior grading should be complete with surface drainage directing water away from the building.
- Basements and open spaces must be dry and well ventilated.
- Subfloor must be checked for moisture content using the appropriate testing method.
- Permanent air conditioning and heating systems should be in place and operational. The installation site should have a consistent room temperature between 18° and 22° C and humidity of 40-60% for 3 days prior, during and until occupied, to allow for proper acclimation.

STORAGE AND HANDLING

- Handle and unload with care.
- Parquet flooring should be stored in the environment in which it is expected to perform.
- Check adhesive label if any storage limitations apply.

SUBFLOOR REQUIREMENT

SUBFLOORS MUST BE:

- **CLEAN** - Scrape, broom clean, and smooth. Free of wax, paint, oil, sealers, adhesives, curing agents and other debris.
- **LEVEL/FLAT** - Sand high areas or joints, fill low areas with a concrete leveling compound. Follow the instructions of the leveling compound manufacturer. Leveling compounds must be tested for moisture to ensure they are properly cured and within the manufacturer's specified requirements for proper installation.
- **STRUCTURALLY SOUND** - Nail or screw any loose areas that squeak. Replace any water-damaged, swollen or delaminated subflooring or underlayment. Avoid subfloor with excessive vertical movement unless they have been properly stiffened prior to the installation of the wood flooring.
- **DRY** - Check moisture content of the subfloor with a reliable moisture meter.

POSSIBLE SUBFLOOR SURFACES

- Plywood
- Concrete
- Acoustic concrete
- Cork (Acoustic)
- Vinyl, resilient tile, cork flooring
- Existing solid wood flooring
- Chipboard
- ...

NOTE ABOUT CONCRETE

The concrete must be of high compressive strength. All concrete subfloors should be tested for moisture content. Visual checks are not reliable. Test also several areas, especially near exterior walls and walls containing plumbing.

SOUND BARRIERS

Special underlay to reduce stepping sound

In blocks of residential flats, there is usually a concrete partition of approximately 250mm between floors. In such cases, VOLUNTA PARKET can offer a special underlay which together with the hardwood flooring, will reduce the penetration of stepping sound considerably.

Good insulation against stepping sound often results in higher reverberation within the room, because sound is insulated from carrying to underlying rooms.

Good acoustics in the actual room are obtained by gluing the parquet to the concrete, on condition that extra sound-proofing is installed in the ceiling joists below, to counteract the penetration of stepping-sound.

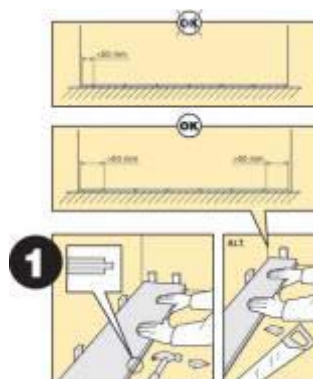
Building specifics have to be considered

In office buildings and the like, the paneled ceiling is often lowered to allow for piping, cabling etc. and this also acts as insulation against stepping-sounds.

The construction of the building, configuration, quality and dimensions are important factors and of great importance for good acoustics. Consultants and architects should therefore be consulted.

FLOATING INSTALLATION

1/ Lay the first board 8–10 mm (in a normal room) from the wall with the groove side of the board towards the wall. Insert distance wedges between the board and the wall. If the wall is particularly crooked, draw the wall contours on the first board. Saw the board to the drawn contours so that they follow the unevenness of the wall.



2/ When you finish a row, turn the board so that tongue lies against tongue and measure and then saw the board. Then turn the sawn side of the board towards the wall, glue the end joint.



3/ Carefully press the joint together using a crowbar or similar tool. Insert a wedge between the end of the board and the wall.



4/ Start the next row with the sawn board. The end joints should not be closer to each other than 50 cm. Insert distance wedges at the end of the board.

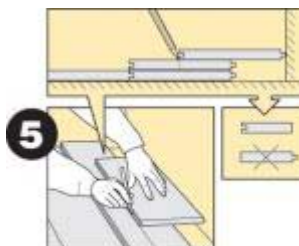
Row after row is done in the same way. Glue the tongues upper surface, press and hammer together. If there is under-floor heating, glue both upper and lower surfaces of the tongue double gluing. Never hammer the tongue or groove directly, use a block of wood. Completely glue end and longitudinal joints. Use glue only recommended by professional installer. N.B. the first two boards must lie perfectly straight. Check this with a chalk line.



5/ The last board usually has to be sawn down its length.

Lay the last board directly over the next to last board. Take a short piece of another board, turn the tongue towards the wall and draw the contour of the wall onto the last board. Thereafter, saw the board following the drawn line.

Press in the last board with the help of a crowbar. Protect the wall with a piece of wood. N.B. If you have to saw off a large part of the last row against the wall, it would be more attractive to cut the boards of the first and last rows the same amount. Always check the width of the room before you start laying the boards.

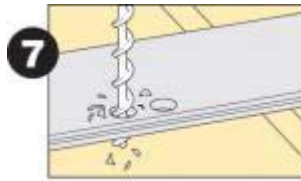


6/ Door architraves: Lay a loose piece of board against the architrave and saw as shown in the illustration. The floor is then slid under the architrave.

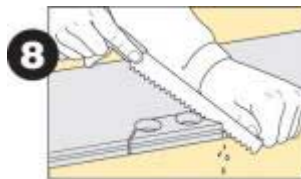


7/ Heating pipes:

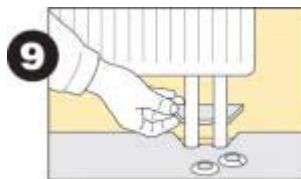
Drill a hole 2mm larger than the diameter of the pipe.



8/ Along the edge of the board: Saw out the back piece with a jig-saw. Angle the saw approx.45 degrees. Also saw with a 45 degree and glue to the holes. Check the fit of the back piece.



9/ Once the board is in place, glue the sawn out back piece. Squeeze this into place with a wedge and cover the holes around the pipe with plastic collars. On the end of a board: The same procedure but cut the board here straight over the holes with the saw at an angle of 45 degrees. Columns or similar: Cut out the necessary shape by sawing across the board and by chiseling out the waste, lengthwise.



10/ Skirting boards: Press the skirting board down with a piece of board whilst you attach the skirting board to the wall. The skirting board should not be pressed against the floor so hard that locking occurs. Door openings: In door openings the floor should be fitted with an expansion joint, taking into account the different movements in the floors. The expansion joint can be covered with a strip of wood or metal. After laying the floor, the wedges can be removed and the skirting boards can be fitted.

**NOTE.**

If further work is to be carried out in the room, the flooring should be covered with hardboard, paper or similar, in order to avoid damage. It must be a material that "breaths".

DO NOT STICK ANY ADHESIVE, GLUEY MATERIALS, SUCH AS SCOTCH TAPE, DUCK TAPE, ETC., DIRECTLY ON INSTALLED FLOORING. THIS CAN CAUSE DAMAGES, ESPECIALLY ON THERMO TREATED FLOORING, FOR WHICH SELLER DOES NOT HOLD RESPONSIBILITY.



GLUING INSTALLATION

- Most of the Volunta Parket Flooring is suitable as a floating floor. However, if you want to reduce, for example, the stamping sound or install larger uniform surfaces, the Volunta Parket flooring can also be glued to the subfloor. When using this installation method, please take into consideration the insulation requirements of impact sounds.
- Gluing the hardwood flooring to the subfloor is a more demanding installation method and it is recommended that it should be done by a professional.
- Hardwood flooring absorbs impact sounds of approximately 11 dB ΔL_w when glued directly onto the subfloor, or approximately 13 dB ΔL_w when glued onto a 2-mm cork layer stuck to the subfloor.

Subfloor preparation

- Technically, the most functional subfloor is a construction plate attached on top of a supporting structure, for example, 9 mm plywood. The sheets are installed at an angle of 45° from the laying direction of the hardwood board.
On concrete subfloors, and especially on subfloors above a damp space, consider the maximum humidity (80% RH or 2.5 weight %) and the surface grinding (= cement glue off, fine mineral aggregate to show) required by the surface strength requirement (1.5 N/mm²), strength category of concrete K30.
Casein-free screeds are recommended. To make sure that the screed sticks and forms a strong surface, use the additives recommended by the manufacturer. The required evenness of the ground is 3 mm/2000, no dents are allowed.

Installation

- Start laying the hardwood floor in a normal fashion in the direction of the long wall, the walking direction or towards the incoming light. With this installation method, an expansion gap of 5 mm will suffice for fixed structures and penetrations. Expansion joints (about 5 mm) are recommended for areas between separate rooms or on uniform surfaces of over 12 m crosswise. Cover the expansion joint with an appropriate skirting. To make the start of the installation easier, secure the start row with wedges or when necessary, shape it according to the wall line. The overlap of adjacent board ends must be a minimum of 50 cm.
- Start by applying the glue on the subfloor alongside the boards in an area of one or two rows of boards at a time, using a tongued trowel of 4 – 5 mm that is slightly narrower than the hardwood board.
- Install the first two pre-shaped rows by gluing them to each other from the tongue, lift up the plate according to figure and start applying the glue. Place the plate on the layer of glue and check the straightness of the line. Let the glue dry for approximately 30 min and continue the installation in the normal fashion.
- First, place the boards as close to each other as possible, the end tongue first. Place the boards in the tongue with a shaped striking block. After this, place them onto the layer of glue. Be careful not to stain the surface of the hardwood flooring with the glue.
- It is advisable to let the first rows of boards settle for approximately 30 min before continuing the gluing. Make sure no excess glue is applied in

the tongue, because it prevents tight installation. Remove any glue stains while fresh with, for example, white spirit.

- Continue installation by fitting the boards in advance. Consider the limitations of time required for the glue to set, particularly when working with penetrations and the last row of boards.
- If the board is longitudinally curved or arched, you can cut the ground veneer from a couple of points at an angle of approximately 45°. In this way, the board settles better on the glue surface lengthwise. If some point is loose from the gluing, especially at the start or against the end walls or, for example, because of deviations on the ground, you can use a weight until the glue is dry.
- Protect the floor with clean, porous cardboard during the other finishing tasks. A pre-finished hardwood floor does not need any surface treatment, as the boards are finished at the factory.
- Recommended installation glues are solvent-free polyurethane glues. The total consumption of glue is approximately 1 litre/2 m², but it is recommended to follow instruction of glue producer. For concrete floors in particular, make sure that the glue is suitable for the hardwood flooring. Products intended for gluing the tongues in a hardwood board are not suitable.

NOTE.

If further work is to be carried out in the room, the flooring should be covered with hardboard, paper or similar, in order to avoid damage. It must be a material that "breaths".

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INSTALLER / OWNER RESPONSIBILITY

Beautiful hardwood floors are a product of nature and therefore, not perfect. Our wood floors are manufactured in accordance with accepted industry standards, which permit a defect tolerance not to exceed 5%. The defects may be of a manufacturing or natural type.

- The installer assumes all responsibility for final inspection of product quality. This inspection of all flooring should be done before installation. Carefully examine flooring for color, finish and quality before installing it. If material is not acceptable, do not install it and contact your installer or us immediately.
- Prior to installation of any hardwood-flooring product, the installer must determine that the job-site environment and the sub-surfaces involved meet or exceed all applicable standards and recommendations of the construction and materials industries. These instructions recommend that the construction and subfloor be dry, solid and flat. The manufacturer declines any responsibility for job failure resulting from or associated with sub-surface or job-site environment deficiencies.
- Prior to installation, the installer/owner has final inspection responsibility as to grade, manufacture and factory finish. The installer must use reasonable selectivity and hold out or cut off pieces with defects, whatever the cause.
- Use of stain, filler or putty stick for defect correction during installation should be accepted as normal procedure.
- When flooring is ordered, 5% to 7% must be added to the actual square footage needed for cutting and grading allowance.
- Should an individual piece be doubtful as to grade, manufacture or factory finish, the installer should not use the piece.
- Use of appropriate products for correcting subfloor voids should be accepted as a normal industry practice.