INSTALLATION GUIDE FOR PARQUET FLOORS

Installer/Owner Responsibility:
Hardwood flooring is a beautiful product of nature with inherent variations in appearance. Parquet floors are manufactured in accordance with accepted industry standards to meet high quality standards. PLEASE REFER TO YOUR PRODUCT SPECIFICATIONS FOR EXACT LIMIT DEVIATIONS (TOLERANCES).

Prior to installation, the installer and/or owner of a parquet floor assumes responsibility to carefully inspect the flooring as to grade, manufacturing, color and finish. The owner’s responsibility also applies during his/her absence from the installation site. If the flooring is not acceptable, do not install it and contact BuildDirect immediately. Once a tile has been glued, it is deemed accepted by the installer and/or owner. The manufacturer denies any responsibility for judgment errors and/or for poor installation quality of its products. The producer / BuildDirect will not be responsible for any labor, installation and other associated costs.

Tools and Accessories Needed for Nail Down Installation:
- Power Miter saw
- Tenon-saw, circular saw or handsaw
- Straightedge
- Carpenter square
- Measuring Tape
- Moisture meter (wood, concrete or both)
- Chalk line and chalk
- Level and leveling compound
- Sander
- Sandpaper
- Rubber Mallet and Tapping Block
- Pry Bar
- Filler stick and touch-up marker
- Utility knife
- Broom and dust pan
- Vacuum cleaner
- Ear plugs, safety glasses and dust mask
- Electric drill and bits
- 15 lb Asphalt Paper
- Toothed spatula

Temperature, Humidity, Storage and Handling:
Parquet flooring is a natural product, and as such will absorb moisture from the atmosphere. The installation of parquet flooring should therefore not take place if the humidity in the room exceeds 75% relative air humidity. During the installation the room temperature should be at least 18°C (64.4°F) and the temperature of the material should not be below 15°C (59°F).
Hardwood is a natural material which reacts to changes of relative humidity. It absorbs or releases humidity according to seasons. To allow for proper acclimation, the heating/air-condition system must be operational for least 14 days prior to installation and thereafter at a temperature of 65° - 75°F (20 - 22°C) to reach its desired humidity level. The relative humidity level at home should be kept between 35% - 55% (approx. 40 - 50% relative air humidity in the room) at all times prior, during and subsequent to installation. In summer, when humidity is high, hardwood absorbs the excess humidity from the air and expands. The expansion causes the lamellas of wood to push against each other. Severe humidity levels will cause cupping. These variations can be minimized with proper ventilation and dehumidifying. On the other hand, in winter, the relative humidity level at home is much lower due to the use of heating systems. The lower humidity level causes the wood to release its humidity and the lamellas to contract or shrink. In such cases it is recommended to use a humidifier to minimize extreme shrinkage effects.

Parquet flooring must be stored in a controlled environment within the above mentioned temperature and humidity. In order to meet minimum installation requirements for moisture content, materials should be delivered 72 hours prior to installation or as long as necessary for the hardwood flooring to acclimate. Acclimation within a closed carton may not be adequate due to lack of air movement.

Handle and unload with care. Store the flooring in a dry place and provide air space under cartons. Do not unload or transport flooring during wet conditions (i.e. rain, sleet or snow) because the wood will absorb moisture, which will cause it to swell. The swelling of the wood will cause problems, because eventually the wood will shrink back to its normal moisture content, and the resultant shrinkage may produce gaps in the finished flooring. Ensuring that your floor is properly acclimated is an extremely critical aspect for proper installation.

NOTE: To ensure proper installation, you should when possible always utilize a professional installer

Job Site Requirements:
The building must be completely closed in with all outside doors and windows in place. All “wet” work (such as concrete, masonry, framing members, drywall, paint, etc.) should be thoroughly dry. The wall coverings and painting should be completed before the installation of the parquet flooring. In order to avoid damage caused by moisture, make sure basements and under-floor crawl space are dry and well ventilated. Plastering and concrete work must be completely dry with a minimum of 90 days curing time. Freshly poured concrete slabs emit many gallons of moisture as water vapor, therefore no concrete should be poured after the flooring is installed.

Use a moisture meter to check the plywood (subfloor) moisture content. Delay the installation if the moisture content of the plywood (sub-floor) exceeds 12%. Concrete flooring moisture must be max. 2%. Using the moisture meter, check the moisture content of the parquet flooring to ensure that it is within the acceptable moisture range of 7% to 11%. The installer and/or owner have full responsibility for moisture testing the wood or concrete subfloor and the parquet flooring prior to installation. Failure to adhere to this may result in the warranty being voided.

Required SubFloor Surfaces and Conditions:
Parquet flooring may be set on old wood floors if the floor is smooth and even. All old paint, lacquer, wax or oil must be removed and the best way to do so is with a floor sander.
Parquet flooring can be installed on any suitable subfloor such as concrete, cement and anhydrite screeds, poured asphalt floors, and plywood panels.
When checking for moisture content in the subfloor, measure in several different regions along the subfloor. Multiple readings will provide you with a better idea of the overall moisture level.

Bonding the installation on other subfloors is possible under certain circumstances. Existent elastic and textile coverings are not suitable subfloors and need to be completely removed prior to installation.

Note: particle board or other similar type products are not suitable subfloors.

Subflooring must be clean, smooth and free of wax, paint, oil, sealers, adhesives, curing agents and other debris. Subflooring must be straight, strong, free from cracks, flat and leveled. Make sure to properly sand high areas or joints. Flatten low spots with layers of builders felt, plywood or shims (not leveling compounds). Subflooring must be structurally sound. Nail or screw any loose areas that squeak. Replace any damaged, swollen or delaminated subflooring. Subflooring must be completely dry and meet with moisture content requirements and should always be carefully inspected and checked before installing parquet.

Subfloor preparation is a critical step prior to installation of your new floor. Parquet flooring is only as good as what is underneath it and cannot level out any unevenness or undulation in the subfloor. Laminated rosin paper or construction paper acts as a moisture retarder and may be used to reduce movement caused by changes in subfloor moisture. Therefore it may reduce cupping and warping. It may also reduce sound transfer, and to prevent noise caused by minor irregularities and debris.

This parquet is suitable for use in combination with floor heating. However, particular attention should be paid to the installation instructions when doing so.

**General Instructions Prior to Installation:**

- An additional 5% - 10% flooring must be added to the actual square footage needed for cutting and grading allowances. A professional installer is best qualified to estimate the exact waste factor.
- Parquet flooring should be installed from several cartons at the same time to ensure good color and shade mixture.
- Remove any existing base molding, other moldings, door sills and old floor covering where applicable. Using a hand saw, undercut the bottom of door frames 8 mm (0.315 inch) to slide the parquet beneath.
- Do not use flooring pieces with obvious defects. It is the installer’s/owner’s responsibility to ensure that the conditions of the flooring are acceptable prior to installation. The manufacturer declines any responsibility for flooring which is installed with obvious defects and/or flooring which is installed under improper jobsite conditions.
- Parquet floor boxes have to be handled carefully to avoid causing any damage to the parquet.
- Expansion gaps of 3/4" (20 mm) are required between flooring and all walls in room.
- After preparing the subfloor it is time to make the lay out. Determine a starting wall. When possible, always begin the layout from the straightest wall, which usually tends to be an outside wall. Measure the center points on two opposite walls and drive a small nail into each wall and stretch a chalk line between them. With a carpenter square determine if the lines form a true 90° angle.
This must be done correctly so that the tiles will form a grid perfectly centered in the room. Any deviation from a 90° angle will be compounded as tiles are set along a line that leads away from the center point.

• The next step is to lay a test row of tiles along the line in one quarter section of the room. Do not set the tiles in adhesive. Then work along the other line of the quadrant. If you are satisfied with the result, you are ready to lay and set the blocks with adhesive. Remove the dry-set tiles and check the chalk lines for visibility.

Laying down parquet:

• Purchase a high-quality adhesive made for parquet flooring because other adhesives may not be strong enough.
• Apply a primer to the subfloor so as to avoid possible adhesive failure at a later date.
• Whenever using a new or unfamiliar adhesive, carefully read through its technical datasheet for instructions on the proper use of the adhesive (mixing ratio, setting time, trowel type etc.)
• Note the open or setting time (the time you have to work the adhesive before it dries on the floor) and spread only as much adhesive as you are confident you can cover with flooring within the setting time of the adhesive
• Always make sure that your room is adequately ventilated when applying adhesive.
• Angle the notched adhesive trowel at about 45 degrees, and spread out the adhesive along one chalk line. Start at the intersection of two perpendicular lines and work toward the wall, using the chalk line as a guide. Always apply the adhesive evenly, since too much or not enough adhesive may have an adverse effect on the gluing quality or adhesion (improper application may also lead to swelling). Recheck the angle once again, using the carpenter square. If you are just a little out of alignment, realign the first tile into the square position. Every tile in the room will be set from this key point. If possible, avoid sliding the tiles. Connect the edges and simply “drop” the tile into the adhesive. Having laid two or three tiles, tap them with the rubber mallet (a regular hammer with a block of wood as a buffer block will do) to bed the tiles. The first 5 to 6 tiles will determine the alignment for the complete floor. Despite all caution, some adhesive is bound to ooze up from the subfloor and smear the face of the tiles. This adhesive should be removed immediately using a specialized adhesive remover.
• To make border cuts, align a tile (2) over the last one that you set (1). Then place a third tile (3) over those two, pushing it about 3/4” away from the baseboard or wall surface. You can put a wood spacer of that width between the the wall and the top tile. It is necessary to leave this space for the natural expansion and contraction of wood. Cover this gap with molding. Use the top tile as a guide to mark the middle tile. Saw along the mark with a backsaw. Use the top tile as the piece to place in the border. Cut through the top of the tile. If the fill gap is very small, disassemble a tile and use just pieces of the board. You can further fit the pieces with a block plane.
• Using a tile for a guide, mark how much of the doorjamb must be removed to allow the tile to fit under it, when you come to this point. Then trim the bottom of the jamb with a saw accordingly.
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Sanding:

After the parquet has dried (24-72 hours after installation, depending on the type of adhesive) the floor can sanded. Since mosaic parquet flooring is made up of small lamellas that are arranged as blocks rotated by 90° in a pattern, wood grain is oriented in two perpendicular directions. Consequently it is recommended that the first (1) and second (2) sanding is done diagonally at a 45° angle. Use #40 grit sand paper for the 1st sanding. After each sanding, the room must be vacuumed to remove all saw dust. Once the sanding procedure is over, the sanding machine’s dust bags must be emptied. Please note that saw dust in combined with flooring oil or oil-based sealants may be fire hazardous. Exercise caution with all possible sources of sparks (e.g. sanding over a nail) as they also present a fire hazard.

Recommend proper sanding with belt-sander (professional grade with ongoing belt, not sheets) starting with grit #40 to remove the old finish, and then finish off with #80 grit. Use the produced saw-dust mixed with a wood-filler to fill any gaps.

After you have finished laying the floor, (or a section of it), go over the floor with a 100-150 pound floor roller. If you don’t have or can’t rent a roller, using a standard kitchen rolling pin with all your weight will work. This must be done within four hours after the adhesive was originally spread. This will ensure proper adhering. Any excess adhesive should be cleaned up immediately after laying.

Complete the Installation:

• After completion of the installation, vacuum thoroughly and clean the floor with an appropriate wood flooring cleaner using a soft, cloth mop. Wipe the surface clean to remove loose dirt or soil. Using any non-recommended cleaner may damage your floor and result in any warranty being voided
• Reinstall base and/or quarter round moldings. Nail the moldings into the wall, (not the floor).
• If required, install transition pieces, such as reducers, T-moldings and stair nosing.
• Keep several spare boards from the installation for future repairs. Protect these from uncontrolled moisture movement by wrapping them in plastic foil.
• Walking on the floor should be avoided during the first few hours after installation and for as long as recommended by the manufacturer of the finish.

**General tips:**
• Intense sunlight can cause natural changes in the color shading (lightening up or darkening) of the wood.
• In order to avoid heavy soiling of the parquet, it is recommended to use entrance carpets and floor covering to walk over.
• We strongly recommend the application of felt pads under all chairs and table legs, and castor cups underneath roller castors in order to avoid excessive scratching of the surface finish.
• The use of a transparent plastic mat where office chairs are used can help avoiding local abrasion.

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