Engineered Parquet Installation Instructions

Please read all instructions carefully before attempting installation. Improper installation may void the warranty.

INSTALLER AND 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 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, stiff 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, at least 10% 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.

PRE-INSTALLATION

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 except for the final coat on the base molding. When possible, delay installation of base molding until flooring installation is complete.
- Exterior grading should be complete with surface drainage directing water away from the building. All gutters and downspouts should be in place.
- Solid oak parquet may be installed on or above grade level only. Do not install in full bathrooms.
- Basements and crawl spaces must be dry and well ventilated.
- Crawl space must be a minimum of 24" (600 mm) from the ground to underside of joists. A ground cover of 6-8 mil black polyethylene film is essential as a vapor barrier with joints lapped six inches and taped. The crawl space should have perimeter venting equal to a minimum of 1.5% of the crawl space square footage. These vents should be properly located to foster cross ventilation.
- Subfloor must be checked for moisture content using the appropriate testing method. Wooden subfloor moisture reading must not exceed 12% and differential between the flooring and subfloor must be less than 4%.

Permanent air conditioning and heating systems should be in place and operational. The installation site should have a consistent room temperature of 65-75° F and humidity of 40-60% for 14 days prior, during and until occupied, to allow for proper acclimation.

Storage and Handling

Handle and unload with care. Store in a dry place being sure to provide at least a four-inch air space under cartons which are stored upon "on-grade" concrete floors. Flooring should not be delivered until the building has been closed in with windows and doors in place and until cement work, plastering and all other "wet" work is completed and dry. Concrete should be at least 60 days old. Solid oak parquet flooring should be stored in the environment in which it is expected to perform. Air conditioning/heating systems should be in place and in operation at least 14 days prior, during and after installation of the flooring. Check adhesive label for storage limitations.

SUBFLOORS

If installing over inadequate, existing plywood subfloor consider installing plywood underlayment over existing subfloor. Standard 4' X 8' plywood sheet should be cut in four pieces and screwed to subfloor leaving small gap between the sheets to allow for expansion.

Subfloor must be:

- **CLEAN:** Scrape, broom clean, and smooth. Free of wax, paint, oil, sealers, adhesives, curing agents and other debris.
- **LEVEL/FLAT:** Within 3/16" in 10' and/or 1/8" in 6'. Sand high areas or joints, fill low areas (no more than 1/8" at a time) with a cementitious leveling compound or milk additive latex patch of 3,000 PSI minimum compressive strength. 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.

Recommended Subfloor Surfaces:

- **Preferred:** 23/32" AdvanTech® flooring
- **Preferred:** 3/4" (19 mm) CDX grade plywood
- 3/4" (23/32") OSB PS2 rated underlayment
- MINIMUM: 5/8" CDX grade plywood
- Concrete slabs
- Ceramic, terrazzo, slate and marble
- Acoustic concrete
- Cork (Acoustic)
- Vinyl, resilient tile, cork flooring
- Metal
- Existing solid wood flooring
- 3/4" chip, waferboard, particle board

CONCRETE SLABS

Engineered parquet flooring can be glued directly to concrete. If using Concrete sealer - it has to be from the same manufacturer as the adhesive. The concrete must be of high compressive strength. All concrete subfloors should be tested for moisture content. Visual checks are not reliable.

Acceptable test methods for subfloor moisture content include:

NOTE: *Test several areas, especially near exterior walls and walls containing plumbing.*

- **A 3% Phenolphthalein in Anhydrous Alcohol Solution:** chip the concrete at least 3/4" deep (do not apply directly to the concrete surface) and apply several drops of the solution to the chipped area. If any color change occurs, further testing is required.
- **Calcium Chloride Test:** the maximum moisture transfer must not exceed 3 lbs./1000 square feet with this test.
- **Tramex Concrete Moisture Encounter Meter:** moisture readings should not exceed 4.5 on the upper scale.

NOTE: *a "dry" slab, as defined by these tests can be wet at other times of the year. These tests do not guarantee a dry slab. All concrete slabs should have a minimum of 6 mil poly film moisture barrier between the ground and the concrete.*

WOOD SUBFLOORS

- **Plywood:** Must be APA grade rated sheathing or CDX minimum.
- **Oriented Strand Board (OSB):** Must be PS2 rated installed sealed side down.
- **Particleboard:** Must be a minimum 40-LB density, stamped underlayment grade and 3/4" thick.
- Make sure existing floor or subfloor is dry and well nailed or screwed down every 6" along each joist to avoid squeaking or popping before the floor is installed. The wood subfloor must not exceed 12% moisture content. Measure moisture content of both subfloor and wood flooring to determine proper moisture content with a reliable wood moisture meter. The difference between the moisture content of the wood subfloor and the wood flooring must not exceed 4%. Optimum performance of hardwood floor covering products occurs when there is no horizontal or vertical movement of the subfloor.
- All underlayment panels should be spaced 1/8" - 1/4" apart to insure adequate expansion space. This can be achieved by using a circular saw set at the depth of the underlayment and cutting around the perimeter of the panel. Do not install over existing glue-down wood floors. Do not install over nailed floors that exceed 3-4" in width. Wide width floors must be overlaid with plywood. When installing over existing wood floors parallel with the flooring, it may be necessary to install an additional 1/4" layer of plywood to stabilize the flooring or install the wood floor at right angles.

RADIANT HEATED FLOORS

- System must be operational and heated for at least 7 days prior to beginning installation.
- Turn off heat and let subfloor cool down to room temperature 3-4 hours prior to starting the job.
- Radiant heated floors must be temperature controlled or engineered for the R-rating of the floor covering product installed upon them. BEFORE installation begins, ascertain that the system is designed and controlled for wood flooring. Failure to do so may cause excessive heat damage and shrinkage. Install floor per the application instructions.
- Make sure you have at least 3/4" plywood subfloor on top of hydro pipes used for radiant heat. Preferably install two layers of plywood: 1/2" in one direction and another 1/2" in cross grain direction. Floor should be installed again in cross grain direction to the plywood below.
- After installation, turn system back on immediately to its normal room temperature setting. The subfloor surface must not exceed 85° F throughout the life of the floor.

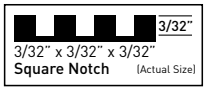
SPREADING ADHESIVE

Apply glue using trowel.

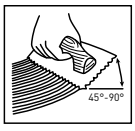
NOTE: *Clean adhesive from the surface of the floor frequently using the recommended adhesive cleaner. Use clean towel, changed frequently, to prevent haze and adhesive residue.*

Maximum Adhesive Working Times:

- **Urethane Adhesive:** 60 minutes (Always read container label before proceeding)
- **Polymeric Resin Adhesive:** 90 minutes (Always read container label before proceeding)
- Open times and curing times of ALL adhesives vary dependent upon subfloor porosity, air movement, humidity and room temperature. Urethane adhesive has a shortened work time in high humidity environments whereas polymeric resin adhesive working time will be lengthened. In areas of low humidity, open time will be longer with urethanes and shorter with polymeric resins. Adjust the amount of adhesive spread accordingly. The adhesive should not be applied if subfloor or room temperature is below 65° F (20° C).
- Spread sufficient amounts of recommended adhesive with the recommended trowel (figure to the right) in an area that can be covered in 60-90 minutes.



- Hold the trowel at a minimum 45° angle (figure to the right) firmly against the subfloor to obtain a 50-60 sq. ft. per gallon spread rate.



- When not in use, keep the adhesive container tightly closed to prevent thickening. Thickening of the adhesive will cause difficulty in spreading the adhesive.
- Proper ventilation within the room must be provided. An electric fan is helpful.
- Please follow technical specification for working time for adhesive.

Divine Flooring adhesives are the only adhesives tested and certified by Divine Flooring. Use other adhesives at your own risk. Divine Flooring does not provide warranty on subfloor separation for other adhesives.

INSTALLING PARQUET TILES

- It may help to dry lay the section of the floor first to get an idea.
- Immediately lay the floor tiles on the newly spread adhesive. **DO NOT** lay the floor tiles on dry adhesive (Always lay the floor tiles on wet adhesive). If the adhesive becomes too dry, scrape up the old adhesive and spread more. Installing on wet adhesive eliminates rolling the floor with a heavy roller. The working time for the adhesive is 60-90 minutes. Working time will vary depending on the job site conditions.

* ***IMPORTANT:*** *Stand or kneel on the subfloor during the installation to avoid shifting the tiles.*

* ***TIP:*** *Slightly slide tile diagonally about 1" back and forth to ensure good adhesive spread. Tile can be temporarily secured with finishing nails.*

- PROPER PLACEMENT OF THE FIRST FLOOR TILE IS THE KEY TO THE ENTIRE INSTALLATION. Carefully place a parquet tile at the intersection of the two chalk lines. Start at the center of the room in one of the quadrants using chalk lines and temporary boards as a guide.
- Continue laying the balance of the floor tiles along the starting quadrant. Align each floor tile squarely.
- Do not push or shove the floor tiles too strenuously as this could cause the first and second floor tiles to move. Simply realign them and proceed with the installation. Use pieces of wide blue masking tape to temporarily hold the tiles in place to avoid "floating" of the tile in still wet adhesive. This tape can removed after tiles are set.

  * ***TIP:*** *Must be Blue Tape applicable for use on wood. Tape should be removed within the hour time frame recommended by manufacturer.*
- Avoid hammering or forcing the floor tiles together as this will destroy the built-in expansion spaces and may destroy the squareness of the floor tile. You may use a rubber mallet to tap the tiles.
- After laying the floor tiles across the first starting area, trim the last floor tiles as needed to obtain the proper 1/2" expansion space next to the walls. Use a small band or saber saw for final trimming. Firmly secure each floor tile when cutting with a saber saw.
- During the installation, occasionally remove a piece of flooring from the subfloor and inspect the back for proper adhesive transfer. Adequate adhesive transfer is necessary to ensure sufficient holding strength.

COMPLETING INSTALLATION

- When the starting area has been completed, including cutting to the wall, proceed to the second laying area.
- The second laying area is quite simple as you now have sufficient floor tiles installed to resist floor tile movement.
- Again, cut the last floor tiles to allow a 1/2" expansion space from the end wall.
- Proceed by laying other areas, repeating the installation procedure of the starting area. Trim out each laying area before proceeding to the next area.
- Maintain the 1/2" expansion space around the perimeter of the room and around all fixed objects.
- Avoid pressing heavily or stepping on the recently laid floor tile as this may destroy the ridging of the adhesive and positioning of the tile.
- Allow a minimum of 36 hours drying time before moving furniture or walking on the newly laid parquet floor.

Please refer to our DIVINE Flooring website for specific instructions at: **divinefloor.com**

For more information, please contact your DIVINE Flooring Authorized Dealer or consult our website at **divinefloor.com.**

If the authorized dealer is unable to resolve your inquiry, please contact our Technical Services Department at DIVINE Flooring directly by email or phone.

DIVINE Flooring

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