Quest ¾” and 5/8” Solid Installation Instructions

ATTENTION INSTALLER

Please read carefully before installing the product.

Make sure to follow our installation instructions and acclimatization recommendations before proceeding with installation. If you or your installer discover a recurring problem, or determine the waste to be excessive (over 5% of total square feet of material received), STOP MEDIATELY and call your distributor or retailer to review the problem before proceeding. Indusparquet will, at their discretion, either send replacement flooring, credit you for that portion of flooring which fails to make grade, or refund the cost of the flooring returned in full.

DO NOT INSTALL DEFECTIVE FLOORING.

You are the final judge of acceptable quality. Flooring that has been installed is deemed to be acceptable. Indusparquet shall not be responsible for costs associated with installing, finishing, and/or replacing of flooring installed with obvious defects. Indusparquet shall only be liable to replace or refund the purchase price on any portion over 5% of flooring deemed to contain efects.

Prefinished 3/4” and 5/8” Solid Nail-Down Installation Instructions

Thank you for choosing 3⁄4” or 5⁄8” Exotic Hardwood Flooring. Protect your investment; review and adhere to the flooring installation instructions.

Please note that these are instructions for the experienced hardwood flooring installer. For more detailed information on the basics of installing hardwood flooring, please contact the National Wood Flooring Association (NWFA) at 1-800-422-4556 or visit www.nwfa.org.

Installer/Owner Responsibility

Hardwood flooring is a natural product; therefore defects in the flooring can occur in the manufacturing process or naturally as a characteristic of the wood. Exotic 3⁄4” and 5⁄8” hardwood floors are manufactured within accepted industry standards, allowing for up to 5% defective product based on the original hardwood flooring purchase order. Order 5% additional flooring product above actual square footage requirements to allow for cutting and grading of material.

Prior to installation, the installer assumes all responsibility for final inspection and quality of the product. Flooring should be carefully examined for finish and quality. Do not install hardwood flooring that is unacceptable; contact seller immediately.

The installer must determine that the jobsite environment and sub-floor surfaces meet applicable construction and material industry standards. IndusParquet declines any responsibility for job failure resulting from deficiencies associated with sub-floor or job-site environment.

The installer must hold out or cut off defective flooring material during installation. Filler or putty stick may be used to correct minor flooring defects during installation and is considered a normal procedure.

Step 1: Pre-Installation

Site Inspection

Prior to installing hardwood floors, the building must be structurally and enclosed, including installation of exterior doors and windows. Concrete, masonry, drywall, and paint must also be complete, allowing adequate drying time as to not raise moisture content within the building.

HVAC systems must be fully operational at least 14 days prior to flooring installation, maintaining a consistent room temperature between 60-75 degrees Fahrenheit and relative humidity between 35-55%. This not only stabilizes the building's interior environment, but also is essential when acclimating hardwood flooring to the job-site.

Exterior grading, directing drainage away from the structure, as well as gutters and downspouts shouldalso be completed. Floors can only be installed on or above grade level and are not recommended in full bathrooms.

It is essential that basement and crawl spaces are dry. Crawl spaces must be a minimum of 24" from the ground to underside of joists. A vapor barrier must be established in crawl spaces using 6 mil polyethylene (poly) film with joints overlapped and taped.

During the final pre-installation inspection, subfloors must be checked for moisture content using the appropriate metering device for wood.

Step 2: Equalizing Hardwood Flooring

Wood is a porous material with a natural cellular structure that expands and contracts depending on the amount of relative humidity present in the surrounding atmosphere.

Equalizing moisture content to the job-site equilibrium point before installation is paramount to stabilizing movement after installation.

Handle and unload hardwood flooring with care and store within the environmentally controlled site in which it is expected to perform.

Flooring stored upon "on-grade" concrete floors should be elevated at least four inches to allow air circulation under cartons. Hardwood flooring must acclimate for as long as necessary to

meet minimum installation requirements for moisture content. Using the equilibrium moisture content chart below, determine the proper moisture content for the installation.

• Always use a moisture meter to determine where the flooring and present job-site conditions are in relation to the projected final equilibrium point taking into account seasonal changes.

• Monitor the flooring and job-site conditions as they acclimate. If the wood is neither gaining nor losing moisture, an equilibrium condition has been reached.

NOTE: Equilibrium points vary dramatically throughout the country, from the dry desert areas of the Southwest to moist areas along the Gulf of Mexico. In addition, a wide range of relative humidity can be experienced between individual job-sites within the same basic locale.

Different heating/air conditioning systems can also dramatically alter on-site relative humidity.

As a result, no one fixed moisture content is right for all situations, and it is up to the individual installer to establish the proper moisture content for each installation.

STEP 3: Recommended Sub-Flooring

Preferred - ¾" (19 mm) CDX Grade Plywood or ¾" (23/32) OSB PS2 Rated Underlayment with a minimum 40 lbs. density

Minimum - 5/8" CDX Grade Plywood with a minimum 40 lbs. density

DO NOT NAIL OVER PARTI CLE BOARD OR SIMILAR PRODUCTS, INCLUDING GYPCRETE.

DO NOT INSTALL THIS FLOORING OVER RADIANT HEAT FLOORING.

STEP 4: Sub-Floor Preparation

Sub-floors Must Be:

• Dry and free of wax, paint, oil, and debris. Replace any water-damaged or delaminated sub-flooring or underlayments. Scrape smooth and sweep prior to installation.

• Level/flat within 3/16" over 10" and /or 1/8" over 6". High areas or joints can be sanded flat. Low spots can be lifted to flat using shims or layers of builders felt between wood and sub-flooring during installation.

• If plywood or equivalent, sub-floor must be structurally sound prior to installation. Sub-floor must be properly secured with nails or screws every 6 inches along joists to reduce the possibility of squeaking after final installation.

• Appropriate moisture tests must be performed as outlined in the "Step 5: Testing for Moisture Content "section listed below.

Minimum thickness sub-floor material recommendations are satisfactory for 16” on center joist spacing. Thicker sub-floor recommendations will allow up to 19.2” joist spacing. When joist spacing is greater than 19.2” on center, flooring will exhibit minimum performance.

Minimum performance may result in movement, gaps, and/or noises. A second layer of sub-flooring material bringing the overall thickness to 1 - 11⁄8”, will provide optimum results when joist spacing exceeds 19.2” on center. Sub-floor panels should be spaced 1/8” apart to allow for expansion.

Hardwood flooring should, whenever possible, be installed perpendicular to flooring joists. Do not install 3⁄4” or 5⁄8” solid floors over existing gluedown wood floors or over wood floors that exceed 3¼” face size. In these applications, or when installing ¾” solid floors parallel to existing wood floors, install an additional ¼” layer of plywood to assist stabilization.

Step 5: Testing For Moisture Content

Using a quality moisture meter, measure the moisture content of both the sub-floor and the hardwood flooring. Sub-floors must not exceed 12% moisture content and the difference between sub-floor and hardwood flooring cannot exceed 4%. If sub-floors exceed this amount, an effort should be made to locate and eliminate the source of moisture before further installation. A moisture barrier is recommended; 6 mil polyethylene film minimum may be required in addition to the 15 lbs. asphalt felt. Asphalt felt is not considered a moisture barrier.

Step 6: Installing The Floor

Helpful Tips

- Remove flooring from several different cartons to maximize color and shade mixture.
- Stagger the ends of boards at least 6” in adjacent rows.
- Installation parallel to the longest wall provides best visual effect.
- Before you begin installing the hardwood floor, cover sub-floor area with 15 lbs. asphalt felt.

Doorway and Wall Preparation

Undercut or notch-out door casings 1/16” higher than the thickness of the flooring being installed to avoid difficult scribe cuts during installation. Alsoremove existing base and shoe molding as well as doorway thresholds; each can be replaced after installation is complete.

Establish Starting Point

An exterior wall is usually the straightest and best reference line to start the installation. Direction of finished flooring should be at right angles to the floor joists whenever possible. Establish a starting line by leaving a minimum ½” expansion gap around all vertical obstructions. In large spans, more spacing may be needed depending on geographical area, interior climate control, and time of the year.

Measure this distance from the starting wall (in at least two places) close to the starting wall's opposite corners. Mark these points and snap a working chalk line parallel to the starting wall allowing the required expansion space between the starting wall and the edge of the first row of flooring.

Installing the Floor

On the first row of flooring use 6d or 8d flooring nails to top nail surface of flooring and countersink (predrilling nail holes will prevent splits). Nails should hit the joist whenever possible. To ensure proper alignment of flooring, make sure the flooring along the working chalk line is straight. Allowing for a ½" minimum expansion gap is critical. Wood expands and contracts with changes in humidity. Wood will buckle and/or cup if an adequate expansion space is not provided. Always allow for expansion when making end or side cuts around vertical objects.

CAUTION: It is extremely important to use the appropriate nailer and fasteners for installation.

We recommend Powernail manual model 45 T&G Powernailer and relevant powercleats nails.

Powernail pneumatic model 445 Powernailer or equivalent may also be used (www.powernail.com).

Make sure to properly space nails every 8' -10' along the length of the board with a minimum of 2 fasteners per piece 2' – 3' from each end. If face width of flooring is 5' or wider, properly space nails every 4' - 6' along the length of the board. Top and/or hand nail enough rows to allow adequate spacing from wall; continue installation with a floor-nailing machine.

Continue across the room until finished; remember to provide adequate spacing for expansion gap. Once completed, install molding and trim. Thoroughly clean, sweep, and vacuum installed floor before further use. If floor is to be covered, use a breathable material such as cardboard or rosin paper. Do not cover with plastic.

Step 7: Common Sense Care

It is important to keep your hardwood floors free from dirt, water, food, grease, and other spills which can damage the floor or finish.

Periodically clean floors using a leading brand of cleaner made for prefinished hardwood floors (follow directions on bottle). Do not use ammonia or oil-based wax, polish, abrasive cleaners, or furniture cleaners. Make sure to install floor protectors under furniture, chairs or other items that may sit directly on your hardwood floor to help prevent scratches, scarring, and dents. Regularly, sweep, dust mop and/or vacuum to keep dirt and grit from dulling the shine and scratching the finish. Wipe up all spills promptly with a soft, dry, cloth. Avoid walking on floors with sharp, stiletto high heel shoes or shoes with soles in need of repair.

5/8” Solid Glue-Down Instructions

Additional Tools for Glue-Down Installation Warranted Moisture Sealer Products
The following are sealer and glue systems that offer a warranty from the manufacturer for sub-floor moisture intrusion. Quest **HIGHLY** recommends the use of these products when gluing down the 5/8” solid hardwood flooring to concrete slabs where moisture tests indicate moisture contents and emissions beyond recommended levels.

Sealers
(Sub-floor moisture intrusion warranty provided by their manufacturer)
• **Franklin Titebond 531 Epoxy Moisture Control System** used to seal the sub-floor along with the use of a Franklin Moisture Cured Urethane Adhesive. See website www.franklinflooring.com for details.
• **Bostik MVP MVP4 (Moisture Vapor Protection)** used to seal the sub-floor along with the use of a Bostik Moisture Cured Urethane Adhesive. See website www.bostik-us.com for details.
• **Sika Primer** used to seal the sub-floor along with the use of Sika T55 Adhesive. See website www.sikausa.com for details.
• **Dri Tac - MCS 7000 Concrete Moisture Control** used to seal the sub-floor along with the use of a DriTac 7600, DriTac 7500 Eco- Urethane or Easy Spread DriTac 7400. See website www.dritac.com for details.

There are many leading brand concrete sealer and glue systems that offer moisture vapor protection and warranties. Always check with the manufacturer of the sealer system to investigate what protection and warranties are offered. Remember your moisture protection warranty comes from the sealer manufacturer.

ALL PRODUCTS REQUIRE THE USE OF A MOISTURE CURED URETHANE ADHESIVE. DO NOT USE WATER BASED ADHESIVES WITH GLUE-DOWN PRODUCTS.

Other Approved Urethane-Based Adhesives that provide a BOND WARRANTY ONLY
(This bond warranty is supplied by their manufacturer. No moisture protection warranties are offered by any of the adhesive products listed below.)
• Franklin 811, Franklin 821 Premium, Tietebond Wood Flooring Adhesive, Franklin 801 Preferred
• Bostik’s Best, Bostik’s BST Urethane, EFA + or TKO
• Sika Bond T55
• DriTac 7600, DriTac 7500 Eco-Urethane or Easy Spread DriTac 7400
• Millennium Series 2010 High Performance Moisture Cured urethane Wood Adhesive
Other Tools Required for Glue-Down
• **Trowel -** Correct trowel as requested by glue manufacturer for a 5/8” solid hardwood flooring product. Always confirm with adhesive manufacturers recommendations.
• **Urethane Adhesive Cleaner -** Many of the leading glue manufacturers offer their own adhesive cleaner. Please use them. If none is available, a light application of mineral spirits to a terry cloth will help.
• **3-M Blue Tape**

DO NOT USE WATER-BASED ADHESIVES WITH THIS PRODUCT.

Step 1: Pre-Installation

Site Inspection

Prior to installing hardwood floors, the building must be structurally complete and enclosed, including installation of exterior doors and windows. Concrete, masonry, drywall, and paint must also be complete, allowing adequate drying time as to not raise moisture content within the building.

HVAC systems must be fully operational at least 14 days prior to flooring installation, maintaining a consistent room temperature between 60-75 degrees Fahrenheit and relative humidity between 35-55%. This not only stabilizes the building's interior environment, but also is essential when acclimating hardwood flooring to the job-site.

Maintaining a controlled environment is paramount to the performance of the product.

Exterior grading, directing drainage away from the structure, as well as gutters and down-spouts should also be completed. Floors can only be installed on or above grade level and are not recommended in full bathrooms.

Crawl spaces must be addressed.

It is essential that basements and crawl spaces are dry. Crawl spaces must be a minimum of 24" from the ground to underside of joists.

A vapor barrier must be established in crawl spaces using 6 mil polyethylene (poly) film with joints overlapped and taped.

During the final pre-installation inspection, sub-floors must be checked for moisture content using the appropriate metering device for wood and/or concrete.

Step 2: Equalizing Hardwood Flooring

Wood is a porous material with a natural cellular structure that expands and contracts depending on the amount of relative humidity present in the surrounding atmosphere.

Equalizing moisture content to the job-site equilibrium point before installation is paramount to stabilizing movement after installation.

Handle and unload hardwood flooring with care and store within the environmentally controlled site in which it is expected to perform. Flooring stored upon "on-grade" concrete floors should be elevated at least four inches to allow air circulation under cartons.

Hardwood flooring must acclimate for as long as necessary to meet minimum installation requirements for moisture content. Using the equilibrium moisture content chart below, determine the proper moisture content for the installation. Always use a moisture meter to determine where the flooring and present job-site conditions are in relation to the projected final equilibrium point taking into account seasonal changes.

NOTE: Equilibrium points vary dramatically throughout the country, from the dry desert areas of the Southwest to moist areas along the Gulf of Mexico. In addition, a wide range of relative humidity can be experienced between individual job-sites within the same basic locale.

Different heating/air conditioning systems can also dramatically alter on-site relative humidity.

As a result, no one fixed moisture content is right for all situations, and it is up to the individual installer to establish the proper moisture content

for each installation.

Step 3: Recommended Sub-Flooring Installations
Concrete Slabs: Glue-down
Acoustic Concrete: Glue-down
Plywood: Staple, glue-down (do not staple over particle board or similar product)
Resilient Tile Or Sheet Vinyl: Staple, glue-down
Cork: Glue-down
Ceramic, Terrazzo, Slate Or Marble: Glue-down
Note: See step 4 for detailed sub-floor preparation.

DO NOT INSTALL THIS PRODUCT OVER RADIANT HEAT FLOORING

Step 4: Sub-Floor Preparation
All Sub-floors Must Be:
• Dry and free of wax, paint, oil, and debris. Replace any water-damaged or delaminated sub-flooring or underlayments. Scrape smooth and sweep prior to installation.
• Level/flat within 3/16" over 10' and/or 1/8" over 6'. If sub-floor is concrete and a leveling compound is needed, use the leveling compound recommended by the concrete sealer moisture barrier manufacturer.
Follow the manufacturer's recommendation for applying the leveling compound. Any area containing the leveling compound must be completely dry before proceeding with the installation of the sealer. If sub-floor is plywood or equivalent, high areas or joints can be sanded flat. Low spots can be lifted to flat using shims or layers of builders felt between wood and sub-flooring during installation.
• If plywood or equivalent, sub-floor must be structurally sound prior to installation. Sub-floor must be properly secured with nails or screws every 6 inches along joists to reduce the possibility of squeaking after final installation.
• Appropriate moisture tests must be performed as outlined in the "Step 5: Testing for Moisture Content" section listed below.

Step 5: Testing For Moisture Content
For Wood and Other Sub-Floors Types
Using a quality moisture meter, measure the moisture content of both the sub-floor and the hardwood flooring. **Sub-floors must not exceed 12% moisture content and the difference between sub-floor and hardwood flooring cannot exceed 4%.** If sub-floors exceed this amount, an effort should be made to locate and eliminate the source of moisture before further installation.

For Concrete Sub-Floors
Concrete sub-floors should always be checked for moisture content prior to the installation of wood flooring. Please note that these tests do not guarantee a dry concrete slab year round. The two most common moisture tests include:

• **Calcium Chloride Test –** Calcium chloride tests can be found in flooring retail stores or retail websites on the internet such as www.taylortools.com or www.moisturetestkit.com 1-888-216-TEST (8378).

• **Tramex Concrete Moisture Encounter Meter –** (www.tramexltd.com). Check with moisture sealer manufacturer to confirm what tests are required to initiate moisture sealer warranty.

Step 6: Moisture Barrier Systems

The following moisture barrier systems are recommended. They carry a warranty from their manufacturer.

Franklin
www.franklinflooring.com Tech Services: 1-800-669-4583
Bostik-Findley
www.bostik-us.com Tech Services: 1-800-523-6530
Sika Primer
www.sikausa.com Tech Services: 1-800-933-SIKA
Dri Tac
www.dritac.com Tech Services: 1-800-394-9310

Please see the above websites and product labels and literature for full details. The above sealer systems may require some form of testing of the concrete sub-floor (i.e. Calcium Chloride Test). PLEASE REMEMBER THAT YOUR WARRANTY AGAINST MOISTURE VAPOR TRANSMISSION COMES FROM THE MANUFACTURER OF THE SEALER. Before use of any of these sealer/adhesive systems please check with their manufacturer regarding limitations warranties and installation instructions.

Step 7: Installing The Floor

Helpful Tips

• Remove flooring from several different cartons to maximize color and shade mixture.
• Stagger the ends of boards at least 6” in adjacent rows. For floating application, stagger seams 12” to 15”. No two end joints should be within three rows of each other.
• Installation parallel to the longest wall provides best visual effect.

Doorway and Wall Preparation

Undercut or notch-out door casings 1/16” higher than the thickness of the flooring being installed to avoid difficult scribe cuts during installation. Also remove existing base and shoe molding as well as doorway thresholds; each can be replaced after installation is complete.

Establish Starting Point

An exterior wall is usually the straightest and best reference line to start the installation. Establish a starting line by leaving a minimum 1/2” expansion gap around all vertical obstructions.
Measure this distance from the starting wall (in at least two places) close to the starting wall’s opposite corners. Mark these points and snap a working chalk line parallel to the starting wall allowing the required expansion space between the starting wall and the edge of the first row of flooring.

Installing The Floor: Glue-Down Installation

Apply recommended urethane adhesive with a adhesive manufacturers recommended trowel. Follow manufacturer’s recommendations for the application of the adhesive. **DO NOT USE A WATER-BASED ADHESIVE WITH THIS HARDWOOD FLOORING PRODUCT.**

When installing boards, avoid sliding materials through adhesive when placing them in position. Engage the end joint first, as close as possible to side tongue-and-groove, and fit boards together. Check for a tight fit between all edges and ends of each board. Occasionally lift a board to check for adequate adhesive transfer. Stagger the ends of boards at least 6” in adjacent rows creating a stair-step pattern.

3-M Blue Tape should be used to hold planks tightly together and reduce minor shifting of floors during installation. **Remove all adhesive from the surface of the flooring with urethane adhesive remover or mineral spirits as you go. Adhesive is very difficult to remove from prefinished hardwood floors if allowed to dry and may damage finish on flooring.** All adhesive must be removed from flooring surfaces prior to applying 3-M Blue Tape. Remove 3-M Blue Tape within 24 hours.

Allowing for a 1/2” minimum expansion gap around all vertical obstructions is critical. Wood expands and contracts with changes in humidity. Wood will buckle and/or cup if an adequate expansion space is not provided. Always allow for expansion when making end or side cuts around vertical objects. Continue across the room until finished. Remember to provide adequate spacing for expansion gap. Once completed, install molding and trim. Thoroughly clean, sweep, and vacuum installed floor before further use. If floor is to be covered, use a breathable material such as cardboard or rosin paper. Do not cover with plastic.

Step 8: Common Sense Care

It is important to keep your hardwood floors free from dirt, water, food, grease, and other spills which can damage the floor or finish.

Periodically clean floors using a leading brand of cleaner made for prefinished hardwood floors (follow directions on bottle). Do not use ammonia or oil-based wax, polish, abrasive cleaners, or furniture cleaners. Make sure to install floor protectors under furniture, chairs or other items that may sit directly on your hardwood floor to help prevent scratches, scarring, and dents. Regularly, sweep, dust mop and/or vacuum to keep dirt and grit from dulling the shine and scratching the finish. Wipe all spills promptly with a soft, dry cloth. Avoid walking on floors with sharp, stiletto high heel shoes or shoes with soles in need of repair.

CONGRATULATIONS on your new Quest hardwood floor!