

# Premium Hardwood Installation Guide

## **Recommended Tools for Installation Include:**

Markers or pens, tape measurer, chalk line, square, 6' straight edge or level, white mallet, hammer, tapping blocks, board puller, jamb saw, table saw, jig saw, miter saw, adhesive trowel (refer to Fuzion adhesive instructions), kneeling boards, drill, flooring nailer with appropriate nails for floor thickness, nail set, 2" spiral finishing nails, colour matched putty or filler, and expansion spacers or shims.

### **Recommended Adhesives:**

Premium Wood Flooring Adhesive: Fuzbond 5500, Fuzbond 5603, Fuzbond 5650 and Fuzbond 1850 T&G adhesive, Franklin 771, 811, or 821, Bostik GreenForce, BEST, or VaporLock, or Bona R851, Apac/Mapei 999/985. Adhesive Remover recommended by the manufacturer of the adhesive selected. Adhesive Trowel recommended by the manufacturer of the adhesive selected.

### **Expansion Space:**

All floors naturally expand and contract and therefore require expansion space around perimeter walls and any vertical obstructions. The expansion space should be equal to the thickness of the material being used or a minimum of 1/2".

#### **Recommended Subfloors:**

INSTALL ONLY over concrete, approved wood, plywood, or OSB subfloors. Follow flooring nailer and nail manufacturer subfloor requirements for the engineered wood flooring thickness. Particleboard subfloors are approved ONLY for floating floor installations. When nailing or gluing down a floor and for subfloors where particleboard exists, it is recommended to replace it or use a double layer subfloor system. Generally adding minimum 1/2" (12mm) plywood overtop.

# **Job Preparation:**

- Calculate the surface area required and add 5%–10% and then round up to the nearest full carton.
- Acclimatize flooring by spreading out sealed packages in room/environment where the floor will be installed at a room temperature between flooring 60°F (16°C) and 80°F (27°C) and relative humidity between 35%–55% for 48 hours. Ensure packages remain sealed/closed during acclimation and until ready to install.
- Ensure the facility is equipped with permanent or temporary HVAC systems that can maintain the temperature and humidity levels required for the wood flooring 60°F (16°C) and 80°F (27°C) and relative humidity between 35%–55%. These systems must be operational for a minimum 14 days prior to the delivery of flooring materials to properly condition the jobsite and maintain these environmental conditions before, during, and after installation.
- Do not use propane heaters for temporary heating.
- Ensure subfloor is clean, flat, sound, dry, free from any debris, movement, damage, or texture that could interfere with installation.
- If installing over a crawl space, a minimum 6-mil poly vapor barrier must be laid over all exposed dirt, and ensure the area is adequately ventilated.
- Remove any existing quarter round and undercut door jambs allowing the flooring to flow under the jamb to provide a preferred aesthetic.
- Check flooring planks for any visual defects in structure or aesthetics. Planks installed with visual defects are not covered under warranty.
- Work from at least 3 cartons at the same time to ensure randomness of pattern.

### **Subfloor Requirements:**

**Wood subfloors** must be 3/4" thick, dry and well secured with moisture content < 12%. Wood subfloors must be nailed down or screwed down every 6" along the joist to avoid squeaking. Existing





wood subfloors must be a minimum of 3/4" thick. If this is a renovation and the existing wood subfloor does not provide a clean and smooth surface, you may use a 1/4" or 3/8" wood underlayment to cover the existing subfloor and provide you with a pristine surface for installation. If installing new subfloor us 3/4" underlayment grade plywood or OSB.

Prior to and at the time of delivery, moisture testing must be conducted on both the wood subfloor and the flooring materials. The subfloor moisture content (MC) must be below 12%, and the MC of the flooring must be within 2% of the subfloor. It is recommended to take a minimum of 20 subfloor readings per 1,000 square feet (with an additional 4 readings per 100 square feet thereafter) and 40 flooring readings per 1,000 square feet (with an additional 4 readings per 100 square feet thereafter). Compare the average moisture content readings of each and ensure they are within acceptable range.

Any unusually high or low moisture readings must be identified, isolated, and properly addressed before proceeding with installation.

Concrete subfloors must be fully cured for at least 60 days. The subfloor must remain dry all year round. Test for moisture using a calcium chloride test or relative humidity test. On and below grade applications are susceptible to moisture and should be tested for moisture prior to installation in several locations within the installation area. Installer should record moisture test results and leave with the owner as part of their records. Acceptable conditions for above, on and below grade applications on concrete are:

- Less than 3 lbs./1000 sq. ft./24 hrs. Calcium Chloride Test (ASTM F1869) - 3 kits for first 1,000 sq. ft. and 1 per additional 1,000 sq. ft. thereafter.
- Less than 75% RH Levels in Concrete Using Insitu Probes (ASTM F 2170) 3 tests for first 1,000 sq. ft. and 1 per every 1,000 sq. ft. thereafter.

It is critical that the concrete slab be free of contamination such as sealers, curing compounds,

waxes, oils, paint, dust, or drywall compound that may interfere with adhesive bond. Verify that the concrete subfloor meets the Concrete Surface Profile (CSP) requirements specified by the adhesive manufacturer.

#### **Subfloor Flatness:**

Flatness is critical to the performance and longevity of your wood flooring. Prior to installation, ensure the subfloor does not exceed a deviation of 1/8" over 6' feet. Any high spots must be ground down, and low areas will need to be filled with an appropriate patching compound compatible with the adhesive.

Subfloor flatness should be assessed across the entire surface of each room receiving wood flooring using a straightedge, laser level, or string line. When transitioning between rooms, the subfloor must remain within specified flatness tolerances.

# **NAIL-DOWN / STAPLE INSTALLATION INSTRUCTIONS:**

	Starting Wall						
Plank A		Plank B	Plank C				
Plank D	Plank E	P	Plank F	Plank G			
Plank H		Plank I	Plank J				

- 1. Plank Direction should be parallel to the longest wall, perpendicular to the floor joists, or in the direction of the rooms light source. If conflicting, you will need to choose the best aesthetic. Please note, if there is a span greater than 16" between floor joist you must install perpendicular to prevent weight of floor from sagging between joists. If the span exceeds 16" it is recommended to add an additional layer of ½" plywood perpendicularly to the existing subfloor. This is also recommended if the planks are being installed in the same direction of the joists.
- 2. Snap a chalk line with the width of the plank + the thickness of the floor + tongue width from the starting wall. If a 6 1/2" plank, chalk line to be snapped (6 1/2" + 3/4" + 1/8") = 7 3/8" from the starting wall. Before starting, measure the length of the room and divide by the plank width. Ensure that your last row will be at least 1/2 a





board width. You may need to adjust your first row plank width, chalk line, and first row position to achieve this result.

**Note:** On floors 7" and wider, a glue assist method of installation is required to reduce seasonal gaps and possible squeaking. Fuzion recommends the Serpentine (Wave) pattern. Use a premium adhesive, such as FuzBond 5650 (20.03 oz sausage tube). Apply the adhesive in an "S" pattern to the back of each board, covering the entire length and width. Recommended to space adhesive peaks 3" to 4" apart and 1" from the ends of the boards in a straight line for optimal performance.



Glue assist is not a substitute for mechanical fasteners; it is a supplemental technique that enhances the overall performance of your floor. It helps bond the flooring more securely to the subfloor. Fuzion Flooring will not accept claims related to issues that glue assist could have prevented, including squeaking, popping sounds, gapping, etc.

- 3. Take a full plank **(Plank A)**, align the tongue with the chalk line.
- 4. Continue assembling full planks (**Plank B, C, etc.**) until less than a full plank is required to complete the first row. Cut full plank to fit and complete first row leaving 3/4" expansion. If cut off piece is more than 12" or longer, use to start second row observing a minimum 6" stagger between end joints from row to row.

**Note:** To reduce waste always use the cut off piece from your current row to start your subsequent row. To improve aesthetics, ensure this piece is at least 12" long and allows a minimum of 6" stagger between end joints from row to row.

5. Install first row by face nailing planks. Predrill holes in plank 2" from ends and 1" from long groove side following an 8-10" nailing pattern.

- Use a 2" spiral finishing nail as your drill bit. Hammer 2" spiral finishing nails into predrilled holes and countersink using nail set. Fill nail heads with matching/coordinated filler.
- 6. Toe nail first row into the tongue using the appropriate flooring nailer and nails for your engineered wood flooring thickness. If nailer cannot be used due to proximity to starting wall you, will need to predrill 45° holes at top of the tongue 2" from the end of the board and following an 8-10" nailing pattern. Use a hammer and 2" spiral finishing nails. Set nail heads using a nail set ensuring the tongue and groove fit will not be obstructed.
  - 7. If cutoff piece from Step 4 is 12" or longer, use to start second row while observing a 6" minimum stagger between end joints between rows. Start your second row with this plank, (Plank D), inserting the groove into the tongue of Plank A. Use flooring nailer to toe nail Plank D into place. Continue to complete first row by inserting plank long side grooves into tongues of first row and then toe nailing the second row planks. Ensure there are no gaps at side and end joints before nailing.
- 8. Repeat Step 7 until room is complete. Be sure to observe expansion space around any vertical obstructions and room perimeter. You will reach a point where the end wall will obstruct the use of a flooring nailer. These final rows will require toe nailing by predrilling into the tongue at a 45° angle and nailing with 2" spiral finishing nails. Make sure to countersink nails using nail punch so the nails do not obstruct the tongue and groove fit.
- 9. The final row may require width to be cut to fit. Always ensure expansion is observed when cutting boards for the last row.
- 10. The final row will require face nailing. Predrill holes 2" from the board ends and 1" from the long side tongue and following an 8-10" nailing pattern. Use 2" spiral finishing nails to nail into place. Countersink finishing nails using nail set. Use coordinated filler to hide nail heads.
- 11. Cover expansion spaces with baseboard and quarter round as required.





# Recommended Fasteners and Scheduling for Nail-Down Installation:

- For products up to 3" wide and ½" thick, use 20gauge 1" staples or 18-gauge staples 1" or longer.
- For products 5" wide or more, use 18-gauge staples that are at least 1-1/4" long.
- For <sup>3</sup>/<sub>4</sub>" thick engineered planks, use a standard
   <sup>3</sup>/<sub>4</sub>" solid wood flooring nailer or stapler with the recommended fasteners.
- Follow the nailing schedule: 1" to 3" from the ends and 6" to 8" in the field.
- Set the compressor to 80–85 PSI to start, adjusting as needed to avoid overdriving or damaging the tongue. Always test fastener depth on a scrap piece first to ensure it seats flush in the nail pocket. Improper stapling can cause squeaks—adjust tool settings for proper penetration and secure fit.

## **FULL GLUE DOWN INSTALLATION INSTRUCTIONS:**

	Starting Wall					
	Work area					
Row 1	Plank A		Plank B	Plank C		
Row 2	Plank D	Plank E	Plank F	Plank G		
Row 3	Plank H		Plank I	Plank J		

- 1. Plank Direction should be parallel to the longest wall or in the direction of the rooms light source. If conflicting, you will need to choose the best aesthetic. Please note, if there is a span greater than 16" between floor joist you must install perpendicular to prevent the weight of floor from sagging between joists. If the span exceeds 16" it is recommended to add an additional layer of ½" plywood perpendicularly to the existing subfloor. This is also recommended if the planks are being installed in the same direction of the joists.
- 2. Create a "work area" by snapping a chalk line in same direction as the planks to be installed. The work area should be at least 30" from the starting wall and a multiple of the plank width plus the thickness of the plank for expansion less the tongue width. *Example*, if the plank is 3/4" x 6 1/2" and the tongue width is 1/8", then the work area should be 32 1/2" (5 x 6 1/2") + 3/4"

- expansion, less 1/8" tongue width = 33 1/8". Snap a chalk line at 33 1/8" from the starting wall. Before starting, measure the length of the room and divide by the plank width. Ensure that your last row will be at least 1/2 a board width. You may need to adjust your chalk line and first row position to achieve this result.
- 3. Follow Fuzion Wood Flooring adhesive instructions with regard to trowel size, spread rate, work time, rolling requirements and anything else that could impact installation.
- 4. While in the work area, spread adhesive taking care not to apply adhesive to the work area. You are spreading adhesive for the rows starting with Planks A, D, and H. Remember to observe adhesive work times.

**Note:** To assist in keeping your first row in alignment, you may use a straight edge that you can temporarily affix to the subfloor by nailing or glueing into place on the chalk line. Dimensional lumber can be used in this regard. Ensure that it is straight and that you will be able to remove without damaging the subfloor.

- 5. Take a full plank (**Plank A**), align the tongue with the chalk line facing the work area. Place on the adhesive but do not press into the adhesive yet.
- 6. Continue assembling full planks (Plank B, C, etc.) with tongue on the chalk line facing the work area until less than a full plank is required to complete the first row. Do not press any planks into the adhesive until the first row is complete and aligned with long side tongues on chalk line facing the work area. Cut full plank to fit and complete first row leaving 3/4" expansion. Keep cut off piece to start the second row. Always ensure there are no gaps or height differences between planks. You can now press the entire row into the adhesive taking care to keep the row's tongue aligned with the chalk line facing the work area.

**Note:** To reduce waste always use the cut off piece from your current row to start your subsequent row. To improve aesthetics, ensure this piece is at least 12" long and allows a



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- minimum of 6" stagger between end joints from row to row.
- 7. Use the cut off piece (**Plank D**). Start your second row with this plank, inserting the tongue into the groove of Plank A and press the plank into the adhesive. Take care not to get any adhesive into the grooves when assembling as this will cause gaps between boards (known as "snowplowing"). Also, when inserting **Plank D** into **Plank A**, take care not to push row one out of alignment. Continue to complete the first three rows. Wait 1-2 hours for the adhesive to set for the first three rows providing a solid base from which to proceed.
- After the adhesive for the first three rows has set, repeat Steps 6-7 until room is complete. Be sure to leave expansion around any vertical obstructions and room perimeter.
   Note: At some point you will be required to position yourself on newly installed flooring to

**Note:** At some point you will be required to position yourself on newly installed flooring to reach and install subsequent rows. To avoid separating newly installed planks, use a "kneeling board" to disperse your weight and pressure. A kneeling board is used to disperse weight and pressure points that cause separation on freshly installed glue down planks. To make a kneeling board you can use 1/8" plywood or heavy corrugated cardboard. Using either material, cut to make two pieces 3' x 3'.

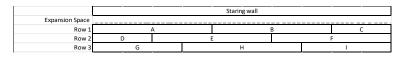
9. When fitting the last row, you may need to cut the boards width to fit and complete the row. Be sure to account for expansion between the last row and finishing wall.

**Note:** If you used a straight edge for alignment as referenced above, remove it now.

- 10. Spread adhesive in the work area and install planks to complete room installation. You will now be installing the grooves into the tongues. Take care not to pick up adhesive in the grooves as this will cause gaps between boards.
- 11. Follow Fuzion Wood Flooring adhesive manufacturer's instructions with regard to any rolling requirements, trowel selection, and time to restrict traffic on the newly installed floor.

12. After 24 hours cover expansion spaces with baseboard, quarter round, or other molding as required.

### FLOATING INSTALLATION - GLUE TOGETHER:



**IMPORTANT:** Only Engineered Hardwood Flooring with 4" or more width is approved for floating installations.

- 1. Install Fuzion underlay approved for your Fuzion engineered wood plank flooring installation. Plank Direction should be parallel to the longest wall, or in the direction of the rooms light source. If these are conflicting, you will need to choose the best aesthetic. Please note if the floor joist span is greater than 16" then the floor should be laid perpendicular to the floor joists to prevent sagging between joists from the weight of the floor. If the span exceeds 16" it is recommended to add an additional layer of ½" plywood perpendicularly to the existing subfloor. This is also recommended if the planks are being installed in the same direction of the joists.
- 2. Snap a chalk line with the width of the plank plus the thickness of the floor plus the tongue width from the starting wall. If a 3/4" x 6 1/2" plank, chalk line to be snapped (6 1/2" + 3/4" + 1/8") = 7 3/8" from the starting wall. 1/8" is added for the tongue with and for this product 3/4" is the expansion space to be observed. Use spacers/shims to ensure this expansion is observed where the floor meets a wall or any vertical obstructions.

**Note:** If the room is greater than 30' in width or length, field expansion with be required through the use of a T mold or other field expansion molding. Expansion space must also be left at doorways. Before starting, measure the length of the room and divide by the plank width. Ensure that your last row will be at least 1/2 a board width. You may need to cut your first row of planks widthwise to achieve this result.

3. Install plank starting in the top left corner of the room and work from left to right with the groove





facing the starter wall. Select your longest and straightest boards for the first row. Remember to observe 3/4" expansion around the perimeter. You will need to cut the last board to fit and finish the first row. Remember expansion when cutting this board. Keep the cut off piece handy as you will use it to start the second row.

Note: To reduce waste and achieve a random plank visual effect always use the cut off piece.

**Note:** To reduce waste and achieve a random plank visual effect always use the cut off piece from your current row to start your subsequent row. To improve aesthetics, ensure this piece is at least 12" long and allows a minimum of 6" stagger between end joints and from row to row.

- 4. Align the long side tongues from the first row of boards on the chalk line (Planks A, B, C, or more depending on width of room). Apply Fuzion T&G adhesive to the top of the tongue and bottom of the groove of the first row and fit boards together assembling the first row. You will need to use the last board puller to close the end joint of the last board of the first row. Use delicate surface painters tape or similar to hold joints together while adhesive sets. Ensure tape does not damage floors finish. Wipe up any adhesive that has squeezed through to the surface of the boards. Remember to use spacers/ shims to observe expansion space from starting wall and on side walls to help keep boards tight while the adhesive sets.
- 5. If the cutoff piece is 12" or greater, use the cut off piece to start row two. Apply Fuzion T&G adhesive to the top side of the groove on the long side of this board, **Plank D**. Use a tapping block to tap this board into place by engaging its long side groove with the long side tongue of the first row. Be careful not to cause your first row to become unaligned during this process.
- 6. The second board of the second row, **Plank E**, will require Fuzion T&G adhesive applied to the top of the tongue and bottom of the groove on the short and long sides of the board. Tap this board into place using a tapping block to engage the long side groove with the long side tongue of the first row. Use a last board puller to engage

the short side groove with the short side tongue of the first board, **Plank D**, in the second row. Be careful not to cause your first row to become unaligned during this process. Continue this process to complete the second and third rows. Use delicate surface painters tape to hold the joints together. Ensure the first three rows are properly aligned and allow the adhesive to set for at least one to three hours or as long as required to set before proceeding.

**Note:** Do not leave painters tape on the floor for prolonged period as it could damage the floors finish. Remove after 24 hours to avoid damage.

- 7. After the first three rows are set, continue with the remainder and complete the room installation. Make sure to observe expansion around every vertical obstruction and room perimeter. You may need to cut boards, narrowing the width to complete final row of the room. Use the last board puller and tapping block as required to complete installation. Make sure to observe expansion between the final row and wall.
- 8. Keep traffic off floor for 24 hours.
- 9. After 24 hours, remove expansion spacers/shims and tape and clean surface as required. Complete job by applying T-Molds/Reducers at doorways and baseboard/quarter round to cover the expansion gap. Always affix moldings to wall or subfloor and never to the floating floor.

**Note:** A floating floor must be allowed to float and therefore moldings and/or cabinets must be affixed to the walls or subfloor directly allowing the floor to float. Furniture and appliances should < 230kg (500lbs) per item. The total weight on the floor should not exceed 19kg (40lbs) per square foot.

### **General Tips and Care**

- Sweep regularly, with a soft bristle broom.
   Vacuums with a beater bar or power rotary brush head can damage a wood floor and should never be used.
- Clean up spills and standing water as soon as possible. With Oil finished floors, water left for prolonged periods may cause water-spotting.



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- Use felt protectors under heavy pieces of furniture and chairs.
- Use protective mats at all exterior entrances. Do not use mats or area rug cushions constructed of rubber or PVC. Instead use urethane backed products.
- Spiked heels or shoes can severely damage your floor.
- Replace hard plastic, metal casters or wheels on furniture with soft rubber casters or by using a protective mat under the casters.
- Never wet mop your floor, with water or any other cleaning agent, be sure to thoroughly ring out the applicator or mop prior to applying it to the floor. A damp mop is fine as long as the moisture is limited to an amount that will evaporate almost immediately. Moisture that is allowed to seep into the seams between the planks may cause damage to your flooring.
- Protect your floors from UV exposure that can change the colour of your floor, by regularly moving furniture or area rugs and kept blinds drawn on sunny days.
- Keep animal nails trimmed.
- Protect your floor when using a dolly for moving furniture or appliances. Never slide or roll heavy furniture or appliances across the floor.
- Never use steam cleaners on your wood floors.
   This will force moisture into the wood and cause damage to your flooring.
- Use protective window coverings to protect hardwood floors from excessive heat during periods of direct sunlight.

For more information regarding care and maintenance, please refer to our warranty guidelines.

**Disclaimer:** The installer is the final inspector of the product and is responsible for assessing subfloor and job site conditions to ensure compliance with all referenced standards. If conditions or materials do not meet requirements, installation must not proceed until corrected. Installation instructions must be read thoroughly prior to starting. If the installer

identifies any grading, manufacturing, or finishing concerns that cannot be resolved by placing the board in a less visible area (i.e., closet), they must not install the material and should contact the retailer. Flooring not installed due to colour variation, appearance, length, or personal subjective standards are not considered defective. Once a board is installed, it is deemed accepted by the installer and/or homeowner, even if the homeowner is not present. The installer is fully responsible for all installed flooring.



