Traditional and exotic woods
from around the world
Floating Floor Instructions


#### Abstract

General Notes Inspect all materials carefully before installation. Warranties do not cover materials with visible defects once they are installed. It is the responsibility of the installer/owner to determine if the jobsite conditions are environmentally acceptable and that the sub-floor system is acceptable for the installation of wood flooring. Cala Flooring ${ }^{\text {TM }}$ declines any responsibility for wood floor failures or problems associated with or resulting from sub-floor/sub-surface structural or environmental deficiencies or jobsite damage after the hardwood flooring has been installed.


TOOLS \& ACCESSORIES NEEDED

| Broom | Pencil | Safety glasses |
| :--- | :--- | :---: |
| Tape measure | Carpenter square | Hammer or rubber mallet |
| Utility knife | Moisture meter (wood, concrete or both) |  |
| Hand saw, table saw, circular saw or band saw | Wood filler |  |
| Nylon tapping blocks-Solid or undercut profiles  <br> NIOSH-designated dust mask  <br> Floating floor adhesive  <br> Moisture retardant (if necessary)  <br> $l$ $\quad$ Moldings as needed cell foam underlayment |  |  |

Preferred adhesive-Titebond Tongue and groove adhesive
I. SITE CONDITIONS: Wood is hydroscopic and will absorb or expel moisture based on environmental conditions. Cala Flooring ${ }^{\text {TM }}$ is $100 \%$ hardwood and is more dimensionally stable due to the multi-ply construction but it is not immune to dimensional changes. For the best results we recommend that the flooring be stored in the controlled environment in which it will be installed for 5-7 days prior to installation.
A. The building should be closed in with all outside doors and windows in place. The wall coverings should be in place and the painting completed except for the final coat on the base molding. If possible, delay installation of base molding until flooring installation is complete. All concrete, masonry, framing members, drywall, paint and other "wet" work should be thoroughly dry. Basements and crawl spaces must be dry and well ventilated.
B. Exterior grading should be complete. To direct flow away from the structure grading should offer a minimum drop of $3^{\prime \prime}$ in $10^{\prime}$. Do not obstruct the drainage with landscaping materials. All gutters and downspouts should be in place.
C. Crawl spaces must be a minimum of $18^{\prime \prime}(46 \mathrm{~cm})$ from the ground to underside of joists. A ground cover of 6-20 mil black polyethylene film should be installed as a vapor barrier with joints lapped and sealed with moisture resistant tape. 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.
NOTE: Unvented crawlspaces are acceptable when following qualified local regulations.
D. Permanent air conditioning and heating systems should be in place and operational. The installation site should have a consistent room temperature of $60-80^{\circ} \mathrm{F}\left(16-27^{\circ} \mathrm{C}\right)$ and humidity of $35-55 \%$ for 14 days prior, during and until occupied.
E. Cala Flooring ${ }^{\text {TM }}$ may be installed below, on or above grade. Cala Flooring ${ }^{\text {TM }}$ is not recommended for applications in areas where excessive humidity is present such as full baths, hot tub enclosures or wine cellars.
II. SUB-FLOOR REQUIREMENTS: The following minimum standards must be met before beginning the application of any Cala Flooring ${ }^{\text {TM }}$ product. The sub-floor must meet the following minimum requirements. See additional requirements specific to the installation method.
A. LEVEL/FLAT - within $3 / 16^{\prime \prime}$ in $10^{\prime}(5 \mathrm{~mm}$ in 3 m$)$ and/or $1 / 8^{\prime \prime}$ in $6^{\prime}(3 \mathrm{~mm}$ in 2 m).
B. CLEAN - Free of debris, loose materials or materials that may release with age.
C. DRY - Check and document moisture content of the sub-floor using the appropriate moisture test. Concrete sub-floors must be a minimum of 30 days old before testing begins. Concrete must not exceed 4.5 using a Tramex Moisture Encounter meter or $3 \# 24 \mathrm{hr} / 1000 \mathrm{ft}^{2}$. Wood sub-floors must not exceed $12 \%$ and there must be no more than $4 \%$ difference between the flooring and the wood sub-flooring material.
D. STRUCTURALLY SOUND -

1. Wood sub-floors: Nail or screw any areas that are loose or squeak. Wood panels should have an adequate fastening pattern, glued and /screwed or nailed as system requires using the acceptable fastener and pattern. Typical: $6^{\prime \prime}(15 \mathrm{~cm})$ along bearing edges and $12^{\prime \prime}(31 \mathrm{~cm})$ along intermediate supports. Flatten any swollen or raised edges as necessary by sanding or scraping. Replace any water-damaged, swollen or delaminated sub-flooring or underlayments. Flooring performs best when there is little horizontal or vertical movement of the sub-floor. Avoid subfloors with excessive deflection or vertical movement. Best results occur when the sub-floor has a minimum thickness of $3 / 4^{\prime \prime}$.

NOTE: The attachment methods used for the installation of flooring ARE NOT designed to stiffen existing sub-floors. If the sub-floor has excessive deflection before installation of the flooring it unlikely to improve with the addition of Cala Flooring ${ }^{\text {TM }}$. Excessive deflection may cause premature finish wear and the floor to become noisy with age.
2. Concrete sub-floors: Remove all loose or broken concrete and fill/flatten as necessary.

## III. FLOATING INSTALLATION OF Cala Flooring ${ }^{\text {™ }}$

Cala Flooring ${ }^{\text {TM }}$ can be installed over most structurally sound sub-floors or existing flooring materials. Wood, concrete, sheet vinyl, vinyl tile, ceramic, $1 / 4{ }^{\prime \prime}$ commercial carpet (use no underlayment) are all acceptable sub-floors provided they meet the standards outlined in section II.

A: Layout:

1. Plan the layout for the best visual appearance of the finished wood floor. Measurements must be made to allow for the width of the flooring plus $1 / 2^{\prime \prime}$ expansion space that must allow for the width of the tongue. Measure across the room to identify how many ROWS of flooring will be needed. If the LAST row will require a cut board (rip) of less than $1-1 / 2^{\prime \prime}$ in width plan to adjust the floor by starting with a ripped board and account for the rip in the next measurement (step3).
2. Install the underlayment parallel to the starting wall and in the same direction that the flooring will be installed. Do not overlap joints. Underlayment should be cut flush with the walls. Tape all joints using a water resistant tape such as packing tape or duct tape. Allow no wrinkles. Tape the starting row to the floor to prevent movement. Doing so will maintain accuracy in the next step.
3. Place a mark approximately $18^{\prime \prime}$ from the corners of the starting walls the width of the flooring plus $1 / 2^{\prime \prime}$. Example: When installing $3^{\prime \prime}$ flooring place the mark approximately $18^{\prime \prime}$ from each end wall and 3 $1 / 2^{\prime \prime}$ from the starting wall. Strike a chalk through these two points the length of the room to the end walls. This line is the WORKING LINE.
B. Installation:
4. Select the longest boards available. Work from several cartons to maintain color uniformity. Lay the boards out the length of the room. Make certain that the last and final board in the row will be at least
$12^{\prime \prime}$ in length. The last UNCUT board must allow at least $12^{\prime \prime}$ between the board end and the wall. If the board in the row will need to be cut less than 12 " in length to complete the row adjust the board selection accordingly.
5. Begin installation from the RIGHT corner with the tongue facing you and the long GROOVE facing the starting wall. The short end GROOVE should be facing the end wall. Align the first board with the WORKING LINE
6. Select the second board. Place a $1 / 8^{\prime \prime}$ continuous bead of glue in the inside bottom edge of the END groove. DO NOT apply glue to the long side groove at this time Carefully interlock the joint with the first board always maintaining alignment with the WORKING LINE. Remove any excess glue from the surface with a towel dampened in warm soapy water. Use blue tape to temporarily hold the end joints together. Use wedges or waste material in the expansion gap on the side and end walls to maintain alignment with the WORKING LINE. Continue installing in this manner until the firs row is complete.
7. Measure and cut to length the final board in the row allowing $1 / 2^{\prime \prime}$ expansion between the end of the board and the end wall. Select a longer board for this cut, as the material left over will be used as a starter board later. Do not use short boards that would allow waste of $3^{\prime \prime}$ or less as this cannot be used later. Apply glue in the groove and install as above. Set the waste end aside for later use.
8. Select a new set of materials just as in step 4. If the cut-off waste from the first row was $18^{\prime \prime}$ or longer it can be used as the first board in the row. Maintain $4-6$ " spacing between the end joints of row 2 and row 1.
9. Place a continuous bead of glue along the inside bottom edge of the END groove and the same location on the side groove. Carefully align the tongue and grooves together and tighten the plank until all joints are snug. Remove any excess glue as before and temporarily hold the joints together using blue tape. Cut and install the final board in the row as in step 7.
10. Continue in this manner until the first four rows are completed. This four-row area is the base for the balance of the floor installation. Perfect alignment is essential, as any variance will worsen as the flooring proceeds further into the room. Carefully inspect for proper alignment before the glue sets. Adjust as necessary.
11. Continue with the installation as above. Best appearance occurs with $4-6$ " spacing between joints in adjacent rows and avoiding a pattern in the floor. Try to avoid aligning joints closer then four rows apart as this may eventually create a pattern. Continue using tape to hold the joints together and wedges to hold the end joints in place. DO NOT
walk on the finished floor during installation, as this will break the uncured glue joint. DO NOT roll the floor for the same reason.
12. Finish the final row by cutting the boards to fit, always allowing $1 / 2^{\prime \prime}$ expansion space. Allow no further traffic on the floor for 8 hours.
C. Completing the job
13. Remove all tape and any excess glue. Glue is very difficult to remove if dry, which is why it should be cleaned during installation.
14. Replace or install all moldings.
