

Installation for Nail- or Staple-Down Applications Only

ATTENTION: Before installation, proper inventory and inspection of all materials must be considered. It is not the responsibility of the distributor or the manufacturer for improperly inventoried items or defects after the installation process is complete. Read all instructions thoroughly before installation.

It is Capella Hardwood Floors' policy to replace any defective material prior to installation. Failure to adhere to these conditions will result in full liability of the installer/homeowner. Capella denies any responsibility of subfloor damage or frame damage due to incorrect or faulty installation procedures.

Note: New wood-type subfloors should be inspected and tested for moisture prior to installation. Most wood or plywood subfloors should not exceed 14% moisture content or there should not be any variance in excess of 4-6% in the flooring to be installed and the subfloor used for installation. These conditions may vary due to geographical locations and seasonal differences.

Job Site Environment

All job site pre-inspections should be performed before installation of hardwood flooring.

Exterior

- Gutters, downspouts, and all exterior work should be complete before installation. Grade of job site should be considered prior to installation.
- There should be a grade of at least 5% from the foundation of the home. This translates to roughly a fall of 6" in 10' away from the home.
- The main key to keeping the subfloor dry is to keep the surrounding soil dry.

Interior

- All other trades must be complete; i.e., sheetrock/plaster, stone/marble work. All tile and masonry work must be complete as well.
- HVAC must be on and running to maintain at least 60°F and between 35-55% relative humidity.
Note: Use of humidifiers and dehumidifiers may be necessary to achieve the proper relative humidity levels.

Subfloor Preparation

- Plywood subfloors should be checked for soundness and flatness. Moisture content should not exceed 14% with no more than a 4-6% variance between the subfloor and the material that is to be installed.

Note: All hardwood flooring is dried to an EMC of 6-9%. Failure to maintain the 4-6% variance can lead to dimensional stability incompatibilities.

- A 5/8" minimum thickness of plywood or OSB is an acceptable subfloor. However, 3/4" plywood is preferred. Particle board is not an acceptable subfloor.
- Plywood should be dry and installed at right angles to the existing floor joists using suitable fasteners. The end joints of the subfloor should break across different points throughout the floor. This will provide a more rigid substrate. Refer to panel manufacturer's recommendations for use as a subfloor and recommended fastening systems. (See Fig. 1B.)
- A 1" x 4" or 1" x 6" subfloor may be used, however, the boards must be dressed and dry and installed at 45° angles to the floor joists. They should be secured with the appropriate nails and by face nailing with 2 nails at each joist. (See Fig. 2B.)
- If job site geographical locations are expected to change the EMC significantly, it is the responsibility of the installer to make the proper adjustments for the variance.

Basements and Crawl Spaces

- Basements must be dry and well-ventilated. If the surrounding soil is kept dry, the basement will maintain a dry condition. Look for indicators of wet environment. Some good indicators are:
 - Water wicking up walls
 - Damp musty odor
 - Mold or mildew on walls or ceilings
- Grade of foundation is an important factor. Grade should maintain the 5% fall from the foundation as previously stated. (See Fig. 3B.)
- Crawl spaces must provide adequate ventilation. A vapor barrier of at least a 6mm polyethylene film should be used to cover the ground under the substrate.

Note: Crawl spaces without adequate ventilation and air movement are a moisture attractant. They must not contain any dead air spaces.

Installation is appropriate after all exterior and interior checklists have been followed. When installing hardwood flooring, remember, relative humidity must be between 35-55% and there should not be any more than 4-6% EMC variance between subfloor and the flooring to be installed. Temperature should be at least 60°F.

Radiant Heat Subfloors

- When installing over radiant heat, always check with the designer of the network tube flooring system. It is important to know the layout of the tubes and their positions.
- When tubing circuits are crossed over the center of the joist, make sure nail plates are in place to protect the tubes from possible puncture.
- Heating system should be running for approximately 2 weeks prior to hardwood flooring installation. After the 2-week period, the flooring system should be shut off and reach an average temperature of 70°F.
- The system should not vary more than 15 to 20 degrees between seasons. The system should also be maintained at that level.
- Flooring system should not exceed 85°F. Check with the heating system manufacturer's guidelines.
- An outside thermostat should be used to anticipate any rapid temperature changes.

Before Installation (Subfloor)

- Subfloor should be clean and dry. Substrate should also be free of any foreign materials (paint, adhesives, etc.).
Note: Failure to remove any paints, oils, or any other foreign matter can result in an unlevel flooring installation.
- Subfloor should be flat to within 3/16" deflection within a 10' radius.
- Proper nailing of subfloor must be considered for a good installation. Failure to ensure the security of the subfloor can result in an uneven installation.
- Installation of 15-lb. felt paper should be considered normal installation procedure over plywood subfloors.

Installation of Flooring

- Flooring should be installed at right angles to existing joist system when at all possible, and to the longest dimension of the room.

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- If the flooring must be installed parallel to existing joists, an additional layer of 1/2" sheathing should be applied over the existing 3/4" subfloor at 45° angles to that subfloor. Failure to do so can result in improper hold strength in the fasteners, as well as deflection and weakening of the hardwood flooring. (See Fig. 4B.)

Note: Around the perimeters of the room, allow expansion space for seasonal changes. It is considered normal for the thickness of the material installed to be equal to the correct amount of expansion space between the wall and the first or last run of flooring installed. (See Fig. 5B.)

- Installation should take place out of several different boxes at the same time.
- The first row should be installed along the chalk line that was used as reference point and either blind-nailed or face-nailed and countersunk.
- Installation for either stapling or nailing should be arranged so that the tongue is facing the area that is to be installed. The installation should be groove into tongue.
- Always stagger the end joints of the flooring that are adjacent to each other. The offset should be so that the end joints are at least 4-6" from each other adjacently. Failure to do so will cause weak spots within the flooring system as well as being aesthetically unappealing. (See Fig. 6B.)
- Nailing schedule for engineered flooring should be every 6-9" and every 6" for plank flooring. A fastener should be applied at least 1-3" from the end joint.

- When using pneumatic nailing devices, check the fastener to ensure the tongue of the flooring is not severed during installation. A psi range from 70 to 80 is desirable but will vary with type. Be sure to follow the manufacturer's recommendations for fasteners.

Final Installation Tips and Notes

- Wood is a natural product and variance in color and shade should be considered normal.
- Do not install any product with visible defects. Notify your distributor immediately so the product can be replaced.
- If product is unfinished, do not finish until adhesive has completely cured.
- The use of putty or stain-repairing sticks should be considered part of normal installation.
- If installation is to take place over an existing underlayment; i.e., vinyl or asbestos, please check with the manufacturer of the adhesives used before applying. Existing vinyl floors must be secured by the full-spread adhesive installation method. It is recommended that vinyl floors be thoroughly cleaned and lightly sanded to ensure good adhesion.
- Check nailers and staplers to make sure that base plates do not damage the finish.
- Square the room using a 3' x 4' x 5' method (Pythagorean theorem) or any division thereof. Flooring should be squared to the room and not to the existing walls.

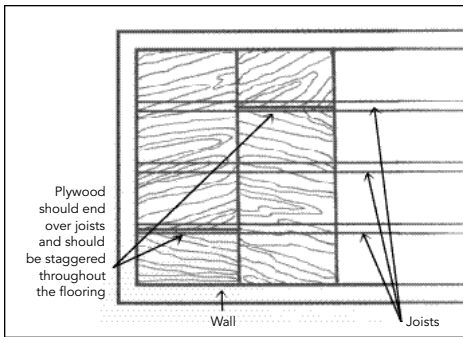


Fig. 1B

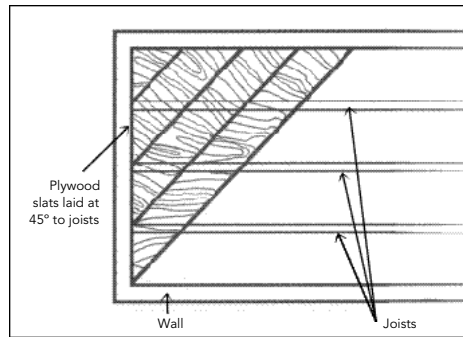


Fig. 2B

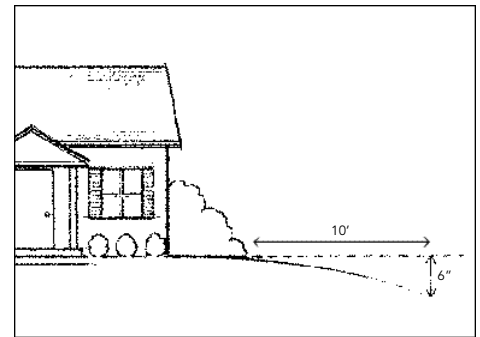


Fig. 3B

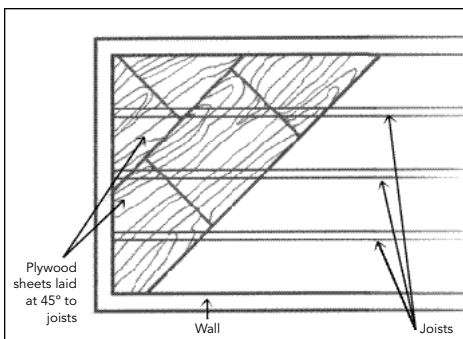


Fig. 4B

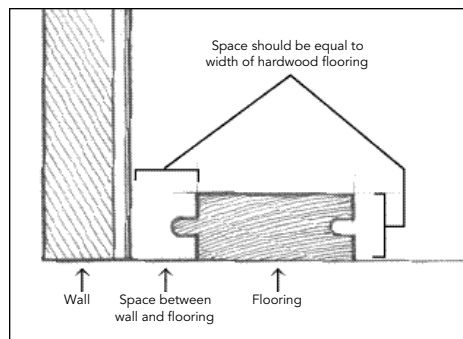


Fig. 5B

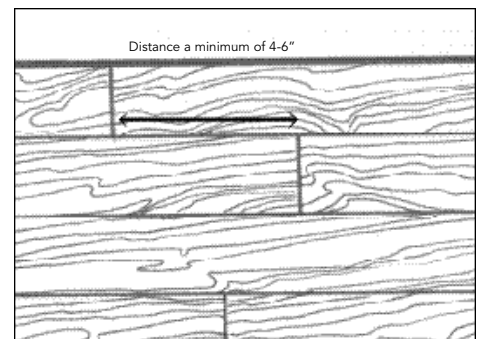
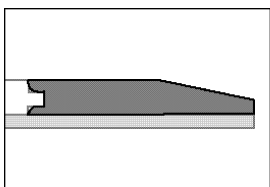


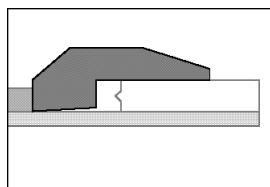
Fig. 6B

Mouldings and Trim

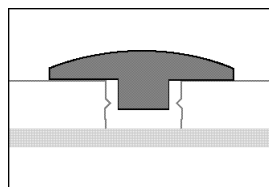
Capella mouldings and trim are available in every finish and every species we offer.



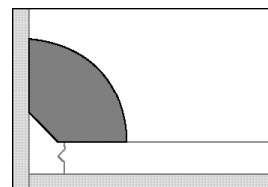
Reducer Strip



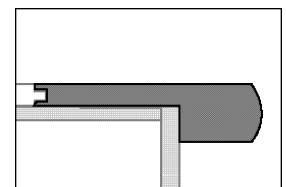
Baby Threshold



T-Moulding



Quarter-Round



Stair-Nosing