# HARDWOOD FLOOR - Install Prep

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FLOORS

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# **General Acclimation/Conditioning Guidelines**

<u>Acclimation:</u> The process of adjusting (conditioning) the moisture content of wood flooring to the environment in which it is expected to perform.

<u>Equilibrium Moisture Content:</u> The moisture content of wood when in equilibrium with its environment. When wood is neither gaining nor losing moisture, equilibrium moisture content (EMC) has been reached.

<u>Expansion Space</u>: A space equal to the thickness of the floor should be left around the perimeter of the room. If the floor is a solid 3/4" product, the space should be 3/4".

Most recommendations state that the materials need to acclimate from a minimum of 3 days up to no given maximum. While it takes time to acclimate a product, the most important aspect is that the materials reach a moisture content that is in equilibrium with its expected use. Acclimate the materials as long as necessary to accomplish this task, taking the necessary moisture readings to indicate when the materials have reached the proper moisture content and when no further changes occur. As a general rule, with geographic exceptions, wood flooring will perform best when the interior environment is controlled to stay within a relative humidity range of 30 to 50 percent and a temperature range of 60° to 80° Fahrenheit.

#### **Installation Guidelines**

Manufacture specific installation guidelines will be included with your materials. It is imperative that you follow their guidelines to maintain manufacture warranties. Below are some general guidelines, that may differ from your specific instructions.

### Staple/Nail-Down Method

- -Installation parallel to the longest wall is recommended for best visual effects, however, the floor should be installed perpendicular to the flooring joists, or perpendicular to the solid subfloor boards.
- -With frame construction, mark location of joists on perimeter walls so that starting runs and finishing runs, which require face nailing, can be nailed into joists.
- -When %" solid flooring is laid parallel with the floor joists, or when solid flooring is less than %" thickness, add a layer of minimum %" (15/32") CD Exposure 1 (CDX) plywood underlayment to the existing subfloor.
- -Pre-plan the floor by counting the number of planks (in width) that it will take to complete the floor. Avoid finishing out with a rip narrower than 2". Plan to start the first row with a partial board, ripping it to the necessary width to avoid a narrow rip on the final wall.

## Installing Vapor Retarder

- -Before installing the floor, use a vapor retarder. Some examples of acceptable vapor retarders over wood subfloors include:
- o An asphalt laminated paper meeting UU-B-790a, Grade B, Type I, Style 1a.
- o Asphalt-saturated kraft paper or #15 or #30 felt that meets ASTM Standard D4869 standards.
- o Cover the subfloor with a good grade of #2 vapor retarders. Extend the felt/building paper completely to the walls and fasten the felt to the subfloor.

These installation guidelines are based on the National Wood Flooring Association (NWFA) Installation Guidelines (updated Sept, 2012). These guidelines by NWFA are regularly reviewed by a committee of industry experts, offering industry-accepted standards for hardwood flooring techniques. Follow NWFA Installation Guidelines if any of the instructions in this manual differ or conflict from the former. Contact your local distributor if you need a copy of the guidelines.