

# **Key Points of Installation**

## **Controlled Climate Conditions**

Modern flooring is designed for interior use in controlled climate conditions. It is important that normal room conditions are maintained at all times.

Remedy: Make sure windows and doors are installed prior to installation. Make sure there is a functional HVAC system up and operating, prior to, during and after installation. If your area has limited climate control, choose a flooring product that is less affected by climate conditions.

# Mix Products & Visually Inspect

For most flooring products it is important to work out of several cartons at a time. This helps avoid excessive pattern repeat. Visually inspect installed material from different angles in suitable lighting.

Remedy: Work out of several cartons, mix product, and inspect in suitable lighting.

#### Floor Finishes

All hardwood flooring will scratch. Modern floor finishes are tough and durable, but any floor can scratch. There are some comparative ASTM tests that help to compare one product to another.

Remedy: Manage expectations. Qualify the customer. If they have several large dogs and they live indoors, if might be best to qualify their expectations.

## Floor Movement

Too much vertical movement puts stress on the flooring that can result in failure.

Remedy: Not much can be done at time of installation other than plywood underlayment.

# **Key Points of Installation**

## Floor Flatness

Most flooring products have specific tolerances to floor flatness. A simple straightedge is the front line for defense. Look for depressions and humps. This unevenness can result in movement at the seams. Movement can result in flooring gapping and uneven surfaces.

Remedy: Check for floor flatness. Use a straightedge, string or laser. Grind down high spots, fill in low spots.

### **Acclimation**

Acclimation is bringing the products being installed up to the temperature of the environment that they are going to be installed in. Going from hot to cold, or cold to hot conditions can, and usually does, result in product failures.

Remedy: Make sure jobsite climate conditions are controlled, and that material is stored in the climate for the period of time it takes to adjust to that climate. Choose products less susceptible to climate changes.

## **Moisture**

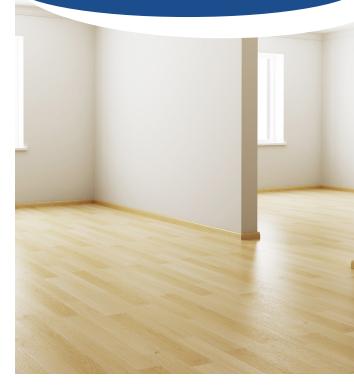
Many floorcovering products are affected by subfloor moisture. From loss of adhesive bond to edges curling up. Excessive moisture must be reduced. This can include moisture from the substrate and topical moisture.

Remedy: Test by checking the crawl space for plastic sheeting. Use a 6mil poly sheet under the flooring. Choose a floorcovering less susceptible. Moisture testing is available to assist in determining substrate moisture on the job site. T&A Supply recommends a professional flooring contractor conduct all moisture testing.

This general information is provided by







#### **Wood Is A Natural Material**

Wood is a natural product and subject to dimensional changes due to changing climates. Understanding these changes is paramount to a successful installation and a satisfied consumer.

Engineered hardwood is durable and stable, but it is

not immune to changing climate conditions.

The information contained in this brochure is intended to be used for points of discussion.

PLEASE ALWAYS READ INSTALLATION INSTRUCTIONS. THIS PAMPHLET IS NOT A REPLACEMENT FOR MANUFACTURER INSTALLATION INSTRUCTIONS.

## Glue Down Installation

## **Adhesive**

It is critical that you use a premium grade adhesive designed for engineered hardwood. There are several different types of adhesive. Modified Silane, Urethane, and Solvent Based. It is up to the flooring installer to choose the correct adhesive for the application.

Recommended Adhesive for TAS Hardwood: Taylor Ridgeline... 100% RH Moisture/Sound Reduction Taylor Ironwood .. 90% RH Moisture/Sound Reduction

# **Substrate Porosity**

It is critical that you determine if the substrate is porous or non-porous. Then choose an approproate adhesive.

How to test for porosity:

Place a dime sized drop of water onto the surface. If it absorbs into the substrate, it is porous. If it beads up on top of the surface, it is non-porous.

## **Trowel**

A trowel is a metering device that is designed to place the appropriate amount of adhesive based on the adhesive manufacturers instructions. Always choose the proper trowel. Trowel notches become worn down with usage. Always re-notch or replace worn trowels.

## **Open Time**

Open time or Flash Time is critical to proper adhesive application. Each adhesive manufacturer has their own instructions regarding open time and flash time, follow their installation instructions.

## **Ventilated Areas**

Adhesive should be applied in well ventilated areas. Although most adhesives today are solvent free, they still require ventilation.

#### OSHA:

Always follow all OSHA practices, as well as Local and Federal building requirements.

## **Nail/Staple Installation**

## Staples vs. Cleats

Although it is often left to the preference of the installer, TAS Hardwood recommends 18 gauge narrow crown (1/4") from 1-1/4" to 1-1/2". 18 gauge Cleat Nails are approved but resin coated staples are preferred.

Puncturing through the subfloor:

When a staple or nail punctures through the subfloor there is a loss of holding power. Using the longest length staple without puncturing the subfloor is recommended.

## **Proper PSI**

It is critical that the proper PSI setting be established for each individual hardwood and stapler. Too low a PSI will leave staple/nail heads exposed and too high a PSI will blow through the tongue reducing holding power. Staple a few boards in a test area to determine the proper setting.

## **Fastening Pattern**

The stapling pattern is set by the wood manufacture to optimize long lasting placement and to reduce vertical movement. Always avoid an 'H' pattern staggering the end joints on a random pattern

**NWFA Standards:** 

The most common fastening pattern is the NWFA standard, every 3" to 4" in length and 1" to 2" from the end joints.

#### Flat to Floor

It is important to keep the hardwood plank laying flat to the floor. If it is not flat to the floor the fastener can blow through the tongue and hold the side joint up from the floor. This often results in squeaking floors.

Stand on the boards during installation:

One common way to keep the planks flat to the floor is to stand on them when you are fastening.

#### **Glue Assist**

To reduce movement and squeaking, assisting the fastening by gluing the floors down, is a recommended practice.

Do not use a bead of adhesive: Use a trowel to apply glue when assisting fastening. A bead of adhesive applied in a serpentine line can actually create a pivot point, causing additional movement.

# Floating Installation

#### **Adhesive**

Always use a tongue and groove adhesive on all joint edges. Follow the adhesive manufacturers installation instructions.

Recommended Adhesive:

TAS Flooring recommends Taylor #2049 T&G adhesive.

# **Underlay**

Most floating floors will require a cushion underlay. This underlay provides sound reduction and absorbs some minor subfloor irregularities.

Proper underlayment:

Always use an underlayment that is approved for your floor. A very dense underlay is best as it will restrict vertical movement.

#### **Movement**

A common reason for floating floor failure is substrate vertical movement. This vertical movement reduces the integrity of the joint and can result in cracking and noisy floors.

Always inspect for vertical movement:

There is no field test that is easy for an installer to use to determine vertical movement. It is often best to walk the project and feel for vertical movement.

## Expansion

Floating floors expand and contract monolithically. They must be allowed to freely float. This requires expansion space at 100% of vertical surfaces. The manufacturer will provide required expansion space, but for hardwood it is usually a minimum of ½". Often even one plank that does not meet minimum expansion will create a pinch point and result in floor failure. Transition T-Mold is often required between rooms and irregular shapes. Entry doors, sliding glass doors and islands are often neglected for proper expansion space.

Expansion Trim: There is trim that is specifically designed to cover the cut edges and allow the floor to freely float. Please consult the hardwood manufacturers recommendation for floor trim. Trim is often complimentary and not an exact match. It is best to review the trim with the flooring prior to installation to meet consumer expectations.