

# Hardwood Flooring/Humidity Addendum

Wood flooring is a natural product that responds to humidity variations by expanding and contracting. Sometimes these changes may be noticeable. During warm and humid summers wood expands. During dry weather wood contracts. This seasonal movement is normal for wood flooring.

## **In Winter Time**

In the winter time when homes are heated and the air is dry, wood flooring gives up some of its moisture and contracts as a result. When this happens, thin gaps can appear between planks. This is normal, and a homeowner should be prepared for it to occur. Once indoor heating is turned off in the spring and humidity levels rise again, most of the gaps will close up.

To avoid these separations, try to control and monitor air humidity levels during the dry season by using a furnace humidifier. Optimal humidity level falls in 40-60% range. As long as humidity does not fall lower than 45%, gaps will be unlikely to appear between the planks. Installing a simple humidity meter will allow you to monitor and control humidity levels in your home all year round.

## **In Summer Time**

During warm and humid summers when indoor humidity can rise up to 90%, the opposite occurs. Wood absorbs moisture from the air and expands as a result. Even just a few days of exposure to high humidity can cause wood flooring to cup. When a wooden board cups, its edges are higher than its center. Cupping can also happen when spilled water is absorbed by the wood. Once cupping has occurred, it takes a while for the wood to restore its internal moisture and flatten out.

When extensive moisture or humidity causes the wood to expand significantly, adjoining boards start pressing against each other. In extreme cases, this increased pressure can cause the affected boards to lose their structural integrity and crack. To avoid cupping, keep indoor humidity level in your home or job site (prior to hardwood installation) within 40-60% range. Never allow indoor humidity to rise over 60%. Maintain optimal humidity levels by keeping air conditioner or dehumidifier running during hot humid summer weather.

## **Cupping**

The first thing to do once you notice cupping in your hardwood is to identify and eliminate the moisture source. The problem can be a plumbing leak in the basement, flooding, or indoor humidity level may need to be

adjusted. Once the moisture source is eliminated, cupping usually will return to its normal condition.

If cupping is moderate, the floor may improve on its own as it dries over time. If cupping is excessive, floor may need to be sanded and refinished. Be certain that the floor has thoroughly dried before sanding it. If sanded before internal moisture has returned to normal levels, crowning will occur. When a board crowns, its center will appear higher than its edges.

### **Moisture and Exotic Wood Species**

Flooring manufactured from exotic wood species is more demanding than flooring made from domestic woods. For this reason, a set of additional requirements has to be met when installing and maintaining an exotic hardwood floor. Indoor air humidity level must be in the range of 50-70%.

In order to meet these requirements, use an air humidifier during the dry season, heat the room or use AC to maintain acceptable humidity during humid summers. We recommend buying a combined digital temperature/moisture meter in order to monitor indoor conditions all year round.

### **Warranty**

The builder or seller does not warranty hardwood flooring against damages, cupping, or cracking, directly or indirectly cause by humidity. It is the homeowner's responsibility to regulate all humidity levels with in the home.

### **Care and Maintenance**

Harwood floors can last a lifetime with the property care and maintenance. Here are some helpful tips:

- Wipe up all spills immediately
- Vacuum or sweep often as needed. Do not use vacuums with hard heads or beater bars
- Keeps animal nails trimmed to prevent scratching
- Avoid rolling heavy appliances or furniture without the use of necessary protection or appliance lifts.
- Use protective pads/feet under any furniture legs that comes in contact with the hardwood flooring.
- DO NOT use ammonia based, detergents, bleach, abrasive, or harsh chemicals for cleaning. Consult professional advice for cleaning recommendations.