

Technical Bulletin :

Understanding Oxidation
and Color changes in
Hardwood Floors



Understanding Oxidation and Color changes in Hardwood Floors

This document outlines the primary causes of color changes in hardwood floors over time and provides insights into the factors that accelerate or slow down these variations.

Oxidation (Patina)

Hardwood floors, whether light or dark, naturally undergo color changes as they age. Oxidation, which occurs when oxygen in the air reacts with the organic components of wood, is one of the primary causes. This process is accelerated by exposure to light (artificial and natural), moisture, heat and air. As a result, some types of wood, particularly lighter species, may develop a yellowish hue, while darker woods tend to deepen in tone.

For example, Maple and White Oak, yellow over time (more obvious with light or unstained wood), while FX (reactive stains) can darken and tend to eventually lighten. The initial appearance of newly installed hardwood may contrast sharply with the same floor after months or years of oxidation.

The Aging Progression

Wood contains substances such as lignin and cellulose, which help define its original color. These components react to light and heat, triggering changes in appearance. The protective finish on a hardwood floor helps slow these changes but cannot prevent them entirely.

In addition to oxidation, photochemical exposure plays a significant role. UV light from the sun can cause "sunbleaching" or fading, especially in areas exposed to intense direct sunlight. Regular use of UV-blocking curtains or window films can help mitigate this effect.

Humidity and Chemicals

Changes in humidity can also affect hardwood floors. Excessive moisture can darken wood, while dry conditions may cause lightening or yellowing. Additionally, improper use of cleaning products, especially those containing ammonia or other harsh chemicals, can lead to discoloration. It's essential to use cleaning agents specifically designed for hardwood.

Limited Discoloration

If portions of the floor are covered with carpets or furniture, they will age at a slower rate. The uncovered sections, exposed to light, will change color more quickly. Once the covered areas are revealed, they may gradually catch up in color over time, though the difference may never disappear completely.

Prevention and Maintenance

While it's impossible to halt the natural aging process of hardwood floors, proper care can slow it down:

- Use UV-blocking window treatments to reduce sun exposure.
- Maintain a stable indoor humidity level to prevent moisture-related changes.
- Regularly clean and maintain the protective finish on the floor.

Tip: Periodically move rugs or furniture to allow even exposure to light and prevent stark contrast in floor color over time.

Obligation

It is important to set clear expectations about the natural changes that occur in hardwood floors due to oxidation and aging. Manufacturers, such as Preverco Hardwood Flooring, are not liable for these changes, as they are a normal part of the wood's lifecycle.

For any further questions on this subject, please contact your local sales representatives, Preverco authorised dealer or write us an email to preverco@preverco.com

Your PREVERCO technical team