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Technical Newsletter #28 1.0

Subject: Oxidation and color variations in hardwood floors

This newsletter presents the main reasons why hardwood floors can change color.

The phenomenon of oxidation

Whether light or dark, the color of a hardwood floor changes over time. Under the effects of light, moisture, and air, some types of wood gradually darken slightly to take on warmer tones, while others become noticeably yellower.

To better understand the phenomenon of wood oxidation, move a carpet or piece of furniture from a new floor after it has been exposed to light for a few weeks. The newly uncovered area will be lighter than the rest of the floor that had been exposed to light.

Normal aging process

Wood is composed primarily of organic materials [cellulose and lignin] and extractives. These two substances are responsible for the original color of the wood and how it changes due to light [sunlight, fluorescent light, UV light], heat, or simple aging.

Regardless of the precautions taken to preserve a floor's original appearance, the aging process is bound to lead to variations in color. It is important to stress that the floor's finish is not affected. Changes in appearance **occur in the wood itself**.

How long before changes become apparent and what types of variations can be expected? That depends on the duration and intensity of light exposure. Some changes occur quickly, while others can take weeks, months, or even years to appear.

Effects of intense light exposure

Generally speaking, exotic woods grow darker when exposed to low-intensity artificial light. However, when a floor is exposed to direct sunlight or intense artificial lighting, the wood can actually become lighter. The floor will tend to become paler due to a phenomenon commonly referred to as "sunbleaching." In conditions of severe light exposure, changes can be fast and dramatic. To protect wood floors and furniture, it is best to keep blinds closed during the day to reduce the intensity of light exposure.

Partial discoloration

If carpets are used, the area of the wood floor beneath the carpet will be paler. This lighter surface will gradually darken to more closely match the rest of the floor once exposed to light. Even though the rest of the floor surface exposed to light will also continue to change, this will occur at a slower rate. In time, the difference in color will become much less noticeable but will never disappear completely.

Responsibility

It is important to explain the factors that can influence color variations in hardwood floors. Mirage [Boa-Franc G.P.] accepts no claims regarding the variations in color that occur during the aging process.

If you have any other questions about this topic, feel free to contact our Technical Support Department.

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