Photosensitivity of Hardwood

Regardless of finished or unfinished, wood changes color over time due to oxidation and exposure to light. Some species darken in color over time, while others lighten. There is no set value for “color fastness” of a species, so contractors and their customers need to be aware of how much change they should expect from the species they choose. Some color change is to be expected for all species, and a drastic change can be expected for some.

Both natural sunlight and artificial lighting can change the color of a floor over time. Flooring installed in rooms with a lot of direct sunlight can be dramatically affected. This may not be evident until a rug or piece of furniture is moved. Areas of a wood floor that were covered with an area rug or furniture will not darken as quickly as an exposed area of flooring. Once the rug or furniture is moved, these areas will catch up in time to the same shade as the exposed area is.

Most all Hardwood species will change color to some degree over time. This is called patina or aging. This is mostly caused by Ultra Violet Rays (sunlight) beaming in on the furniture and bare flooring. Brazilian Cherry and American Cherry are noted for having the most color change and will turn a deep rich reddish color as they age and are exposed to light. Color change in wood flooring is a fact of life. Just like any other home furnishing from drapes or wall coverings to furniture or cabinets. The more direct the exposure to sunlight (even through low E glass) the greater or more pronounced the effect. Harsh southern exposure particularly if reflected off water or off a white reflective background will tend to intensify the overall effect. Over time, this will actually “bleach out” the colors in many types of materials including wood flooring.

How the patina or aging of the floor eventually develops will depend on many factors. The species, cut, sealer, stain, dye, finish, exposure to various forms of lighting (not just sunlight) and exposure to the particles in the air, all cause changes in color and sheen. Photosensitive species will darken with exposure to light, enhancing the natural beauty of the exotic species. As your exotic hardwood flooring matures, the species will develop an enhanced and rich depth of color that is superior to the initial out of the box installation.

Complaints can also happen when customers are expecting the color they saw on an aged sample but have a new floor that hasn't aged yet. Another issue with color change happens when most of the floor darkens except for an area of sapwood that stays a lighter color. Most woods darken with light exposure, but there are a few species that lighten with exposure such as American Walnut, Bolivian
Rosewood, and Cumaru, otherwise known as Brazilian Teak. Yellow Birch even when exposed to intense light, Yellow Birch has the advantage of showing minimal color variation. The color of most photosensitive species will stabilize 3-12 months after installation.

There is no way to prevent color change. Educate the customer when they are considering a species known to drastically change color. Be aware of the woods light sensitivity, and make the customer aware of the color the floor will actually be in time. Provide them with samples showing what the species looks like new and after aging. With some species, things may not always be as they appear. This is also an issue when covering a floor on a job site or placing area rugs in the home, some species may need only days for you to see the difference in light exposure on the floor. If a floor needs to be covered on a job site to protect it from other trades, be sure every square inch of the floor is covered.

During the first year after installation, move or rotate area rugs when cleaning to help darken floors evenly throughout your home. Over time, lighter unexposed areas will blend in with darker areas and a consistent color will be achieved within the entire room.
The most obvious difference between species is how they look. Grain patterns and character marks vary not only between wood species, but also between different grades and cuts of the wood (plainsawn, quartersawn or riftsawn). Depending on where the wood is coming from and the specie chosen, you may or may not be able to guarantee a grade, and therefore, the appearance of the floor.

**About Tim McAdoo:**

Tim is a certified instructor for Armstrong/Bruce, Avaire, Konecto and Starloc products an has been a member of the Armstrong Installation Training Team since 1984. Tim has highly developed installation skills and qualifications that have been combined over his 32 years in the floor covering industry. Tim is privy to all the latest innovations and techniques used in the installation of their products.

We are sure you will find your skills improved after attending one of his installation courses.

To view a complete list and register for one of Tim’s installation trainings, click here on the QR or visit: http://www.jjhaines.com/for-customers/installation-training/

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