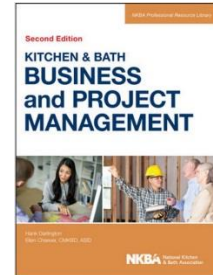




## ABOUT THE FINISH - EXCERPT TAKEN FROM “KITCHEN & BATH BUSINESS & PROJECT MANAGEMENT 2<sup>ND</sup> EDITION”

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### **Caution about Samples**

For many custom projects, a sample door is prepared for the client to approve or sign off on. Once the actual finishing process begins, the manufacturer will refer to this sample door to ensure consistency between the presented sample and the completed project. However, because of woodworking variables, differences can be expected between a finished product and an individual sample door. Consider these important factors:

- **Wood color and figure vary.** The actual project will be built from a different lumber unit from the door sample submitted; therefore, some tonal differences can occur.
- **Small samples and even a door sample will look different from a completed room.** Expect glazed finishes to vary from slightly lighter to slightly darker from the presented sample.
- **Timing is important.** If the sample reviewed is older than 30 days, the natural aging of wood and mellowing of finishes due to ultraviolet light will affect the color rendition. Typically, both wood and finishes darken with age. This is of particular importance in any white glazed finishes, which tend to mellow with age, and cherry or mahogany finishes, which dramatically darken with age.
- **Hand application is a human process.** Most important, hand-applied, artistic layered finishes will vary by the nature of their hand application. Cabinet manufacturer technicians are trained in application techniques; however, any hand-applied finish will bear the mark of the specialist, and his or her team, creating the project. Therefore, some application and appearance variations are to be expected in layered finishes.
- **Make sure you and your team are clear when discussing the names of finishes, door styles, and physical distressing techniques that the manufacturer offers.** The manufacturer might have a finish name that includes a specific distressing package. Yet another manufacturer might have a finish that you enhance by selecting one of a variety of distressing packages. Clients might not understand this and ask you for a specific style that they feel defines both finish and distressing. Look at the sample and walk through all the elements to make sure clients understand.
- **When showing the client thermal foil door samples and/or laminate door samples, discuss any concerns the manufacturer has listed in its warranty regarding possible damage to the finish should it come in contact with excessive heat.** (Some self-cleaning ovens may allow enough hot air to escape to be categorized as excessive heat.)



## ***Natural Beauty of Wood***

People have appreciated the natural beauty and versatility of wood for centuries. While certain characteristics are unique to select species, each tree—and its wood—varies in color, density, hardness, strength, grain pattern, and texture. Truly a product of its environment, a tree's growth and appearance are influenced by many factors. Just like people, no two trees are exactly alike.

This range of wood characteristics will show up in both solid and veneer materials. Make sure the client expects some color or grain characteristic variations between the actual cabinetry delivered and a sample. For those clients interested in a more repetitive wood graining, a laminate surface, rather than a real-wood product, may be more appropriate.

## ***Pricing and Availability of Wood***

Availability in the region of origin determines the starting point for pricing wood. Grading, a description of the appearance and performance characteristics of the wood, also affects the price. Quite simply, the more restrictions placed on natural characteristics, the matching required, or the higher the level of color or grain consistency specified, the higher the price. Additionally, shifts in demand throughout the world do occur, creating shortages that affect pricing.

## ***Importance of Specifications***

Veneer and solid wood grading restricts the naturally recurring characteristics of each wood species. Grading also limits color variation. Industry standards include six face grades and, within each grade, a range of appearances. The grades used are AA, A, B, C, D and E. Grade AA face appearance does not totally eliminate wood characteristics. The grading means the best quality contains the least natural characteristics. The higher the grade the more natural characteristics, with E grade permitting the greatest number of natural characteristics and repairs. A grade of matching or blending veneers is typically used on door backs.

Even with such attention to detail, wood is still a product of nature. Although certain characteristics are unique to each species, a piece of veneer produced from an individual log will have its own characteristics. This is the true beauty of wood.

## ***Color Variations***

Expect color variation within a species. Many factors influence wood color during the life of the tree, including the soil types and minerals found in the soil, along with water levels, available sunlight, and temperature.

Genetic composition also plays its part in creating variety within a species. Hardwood trees originate from seeds, root sprouts, and stump sprouts. Trees originating from seeds contain genetic variables from two parent trees, while sprouts from roots and stumps are genetically identical to the parent tree. Because of these variables, trees of the same species from one area might be quite different from trees of the same species from other areas.



## ***Natural Wood Characteristics***

Wood is a product of nature therefore it includes variations in color, grain patterns, and other characteristics including markings created by insects.

- **Bird peck.** Woodpeckers produce small holes, which are the starting point for brown to blackish mineral streaks. Bird peck is common in hickory and maple.
- **Gum spots.** Peach bark beetles and cambium miners are the main cause of gum spots. The feeding insects injure the living portion of the bark, leading to the formation of gum spots in the wood as the tree continues to grow. Also known as “pitch pockets,” gum spots are common in cherry.
- **Mineral streak.** A mineral streak or stain is a darkened or discolored wood area caused by minerals the tree extracts from the soil. Mineral streaks, also known as spalting, are a natural by-product of the rotting process caused by a vast array of stain, mold, and decayed fungi found naturally on the forest floor. Mineral streaks appear as a blackish blue, well-defined line or area running parallel with the grain. Mineral streaks are commonly found in maple and birch and sometimes in oak and cherry.
- **Pin knot.** Knots vary in size, shape, structure, and color.
- **Ray flecking.** Ray flecking is visible in hardwood species that are quarter-sawn and have rays. The rays are strips of cells that extend radially within a tree and primarily store food and transport it horizontally. Red oak and white oak are noted for this characteristic.
- **Sapwood.** The sapwood of a tree conducts water up the tree stem and may contain some living cells. Sapwood can be lighter in color than hardwood. Sapwood usually comes from the outside of the tree as compared with the heartwood.
- **Worm track.** A worm track is a small, narrow, yellowish to brown streak caused by cambium miners feeding beneath the bark from the branches to the roots. Tiny burrows are filled in by new cell growth and become embedded in the wood as the tree continues to grow. Worm tracks, also called “pith flecks,” are common in maple.

## ***Inspecting the Finish on Wood Surfaces***

Testing labs approved by the Kitchen Cabinet Manufacturers' Association (KCMA) adhere to this guideline for inspecting a finished wood surface:

Lighting shall be from an overhead white fluorescent light with bulb(s) positioned parallel to the floor and having an intensity of 75 to 100'-candles (807 to 1076 lux) on the surface. View at an eye-to-specimen distance of approximately 30–36" (762 to 914 mm) and at an angle of approximately 45 degrees. Direct sunlight or other angle light sources, which will accentuate or minimize the effect, shall be avoided.

(Kitchen and Bath Business and Project Management, 2nd Edition)

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