
GALLATIN VALLEY

FURNITURE CARPET ONE

Bozeman Montana

Wood Characteristics & Features

We are frequently asked about the type of wood used for a piece of furniture. In this section, we have outlined some terms used to describe differences in wood as well as features about common types of wood. Please note, information about the construction can be found in the Furniture Construction Section.

General Terms

- **Hardwood vs. softwood**

All wood used for furniture falls into two categories: hardwood and softwood. Hardwood tends to be more durable than softwood, but these terms actually refer to the kind of tree that produced the wood, rather than the strength of the wood itself. Hardwood trees include oak, cherry and maple. Softwood trees include cedar and pine.

- **Solid wood**

"Solid wood" means that the piece is made with solid boards, although sometimes several boards are glued together to make the wood more stable and to reduce the chance of warping. A block of wood consisting of several smaller pieces of wood glued together also is considered solid wood. This block can be carved into different furniture components such as table legs, chair backs or bedposts.

- **All wood**

"All wood" frequently describes furniture constructed using engineered wood, including plywood, particleboard or fiberboard. Fiberboard is created by breaking down wood chips into fibers and mixing these with an ultra-strong adhesive. When fused under intense heat and pressure, the resulting panel has consistent, uniform strength, is resistant to warping, cracking and splitting, and has no knots or other surface imperfections. Fiberboard is used in all categories of furniture, in many styles and price points.

- **Veneers**

Veneers are used in both "solid wood" and "all wood" construction. A veneer is a thin layer of decorative surface wood applied on top of a solid or engineered wood core. Veneering has been around since the birth of furniture construction and affords manufacturers the flexibility to match grain patterns or create intricate designs. Some of the most beautiful furniture is masterfully crafted using beautiful veneers. A great feature of veneers is its ability to resist cracking and warping in humid or dry climates.

- **Artificial laminate**

Today's technology has produced another alternative: an artificial laminate surface of plastic, foil or paper printed or engraved to look like real wood. Furnishings made this way are easier to



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produce and available at lower prices than furnishings constructed using genuine wood veneers. Also, these artificial surfaces eliminate the natural variation in color and graining found in furnishings made of solid wood or wood veneers. While some consumers prefer the consistency in a laminate surface, others favor the unique variations of natural wood.

Wood Types

- **Natural variations**

Each wood species has a natural color and its own set of physical characteristics – like flecks, knots, or wavy patterns in the grain. In addition, each piece of wood reacts differently to the various stains and finishes used in manufacturing. The beauty of buying wood furnishings is that no two pieces are exactly the same. Even among "matched" chairs in a dining set, there are variations in color and grain. Here are some general characteristics of commonly used wood species in furniture:

Acacia

- **Colors:** Yellow to dark brown
- **General:** Acacia grows across the country and can reach furniture size in 8–10 years. Because of its faster growing cycle, it is much cheaper to produce and is more price competitive than teak.
- **Properties:** A durable, heavy hard wood from fast growing trees from the Far East and South America. The thin grain, the flame design and varied color shades give furniture made from it a warm appearance. Acacia is a species of plantation wood which requires no chemical treatment and possesses the characteristics of teak wood.
- **Uses:** Acacia wood offers a country and western look, but can also be used in tropical settings.

Ash

- **Colors:** White to light brown
- **General:** Sixteen species of ash grow in the eastern United States, with white ash the largest and most commercially important.
- **Properties:** Hardwood, Ash is heavy and ring porous. It has a prominent grain that resembles oak and differs from hickory and pecan because of its white dots located in the darker summerwood. Ash burls have a twisted, interwoven figure.



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- **Uses:** Ash is widely used for structural frames and steam-bent furniture and is often less expensive than other hardwoods.

Beech

- **Colors:** Reddish brown to light
- **General:** The American beech is a single species which grows in the eastern half of the United States.
- **Properties:** Hardwood, Beech is heavy and strong with tiny pores and large, conspicuous vascular rays, similar in appearance to maple.
- **Uses:** This relatively inexpensive wood is often used for frames, and a variety of bent and turned parts. Quarter sliced and half round cut beech veneers are commonly used.

Birch

- **Colors:** Hardwood, Light brown to reddish brown to cream
- **General:** There are many species of birch, with the yellow birch being most commercially important. European birch is fine-grained, rare and expensive.
- **Properties:** Birch is heavy and close-grained.
- **Uses:** It is often rotary or flat-sliced, yielding straight, curly or wavy grain patterns. It can be stained to resemble mahogany or walnut.

Cedar

- **Colors:** Softwood, Red-brown with light streaks
- **General:** Several species of cedar grow in the southern United States, Central and South America.
- **Properties:** Cedar is a knotty, lightweight and brittle wood with aromatic and moth repelling qualities.
- **Uses:** Cedar is often used as a lining for drawers, chests, boxes and outdoor furniture. Simple cases and storage closets are also constructed from this wood.



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Cherry

- **Colors:** Light to red-brown
- **General:** Sometimes also called Fruitwood, cherry is grown in the Eastern half of the United States. The term fruitwood is also used to describe a light brown finish on other woods.
- **Uses:** Cherry veneers and solids are used in a variety of styles. Cherry has been called New England Mahogany and is often used to craft 18 th century, Colonial and French Provincial designs.
- **Notes:** Cherry wood has small pits known as "gum pits" and are a natural characteristic of this wood. Cherry wood is usually finished with a lacquer which creates a shiny appearance. When looking at this finish under a light, you'll see "swirl" marks that look like scratches. This is a normal characteristic of the lacquer finish and is not a defect.

Hickory

- **Colors:** White to tan to reddish brown
- **General:** There are fifteen species of hickory in the eastern United States (including Pecan), eight of which are commercially important. .
- **Properties:** Hardwood, One of the heaviest and hardest woods available. Very tough and resilient wood. Pecan, a type of hickory, has a very close grain without much figure.
- **Uses:** Hickory is often used for structural parts, especially where strength and thinness are required. Decorative hickory veneers are also commonly used. Often used in rustic furniture.

Mahogany

- **Colors:** Reddish brown
- **General:** Also known as Honduras Mahogany, this tropical hardwood is indigenous to South America, Central America and Africa. There are many different grades and species sold



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under this name and they vary widely in quality and price. Mahogany that comes from the Caribbean is generally thought of as the hardest, strongest and best quality. Furniture quality Mahogany is now grown on plantations to stop the depletion of rainforests.

- **Properties:** Hardwood, known for its strength, mahogany has a uniform pore structure and poorly defined annual rings and may display stripe, ribbon, broken stripe, rope, ripple, mottle, fiddle back or blister figures. Crotch mahogany figures are widely used and greatly valued. Mahogany is an excellent wood for carving and finishes.
- **Uses:** Used extensively in the crafting of Georgian, Empire and Federal furniture. It is also used in styles from Victorian to contemporary.

Maple

- **Colors:** Light tan or cream to a light reddish-brown
- **General:** There are 115 species of maple. Only five commercially important species grow in the U.S. Two of the five are hard rock maple and sugar maple.
- **Properties:** Maple is so hard and resistant to shocks that it is often used for bowling alley floors. Its evenly sized pores give the wood a fine texture and even grain. Maple that has a curly grain is often used for violin backs (the pattern formed is known as a fiddle-back figure). Burls, leaf figure, and bird's-eye figures found in maple are used extensively for veneers. The bird's eye figure in maple is said to be the result of stunted growth and is quite rare.
- **Uses:** Maple is used extensively for American colonial furniture, especially in medium and lower priced categories. It can also be stained to simulate cherry wood, which it resembles.

Meranti

- **Colors:** Light red, dark red, yellow, and white
- **General:** A species of Shorea wood, is an important emergent tree of the tropical forests of Asia. One of the most commonly imported woods in the United States
- **Properties:** The wood is light to medium weight and has a courser texture than that of mahogany. Meranti is a hardwood that is very resistant to dryer climates.
- **Uses:** Widely used for light construction and more importantly for veneers.

Oak

- **Colors:** White or red



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- **General:** Oak is the most widely used hardwood. There are more than 60 species of oak grown in the U.S., which can be separated into two basic varieties; white and red. The red variety is also known as black oak as a reference to its bark.
- **Properties:** Hardwood, Oak is a heavy, strong wood. It is ring porous, due to the fact that more and larger conductive vessels are laid down early in the summer, rather than later. Prominent rings and large pores give oak a coarse texture and prominent grain. Oak also has conspicuous vascular rays which can be seen as "flakes" in quarter sawed oak lumber.
- **Uses:** Oak is the most popular wood used to craft American and English country designs. It is also used for Gothic and William & Mary reproductions, as well as many transitional and contemporary pieces.

Pine

- **Colors:** White or pale yellow
- **General:** Pine is softwood which grows in most areas of the Northern Hemisphere. There are more than 100 species worldwide.
- **Properties:** Softwood, Pine is lightweight, straight grained and lacks figure. It resists shrinking and swelling. Knotty pine is often used for decorative effect.
- **Uses:** Pine is often used for country or provincial furniture. Pickled, whitened, painted and oil finishes are often used on this wood.

Rattan

- **Colors:** Light tan
- **General:** Any of several climbing Asian palms whose stems grow to great lengths.
- **Properties:** Softwood, The rattan pole is round (1/4 to 2 inch diameter), solid and strong. It can be bent into many shapes or cut into the core material used for wicker work.
- **Uses:** Whole rattan poles, and smaller diameter core materials are often used to make casual dining, bedroom and upholstered furniture.

Sheesham

- **Colors:** Colors range from a dark brown similar to American black walnut to a lighter golden brown color.
- **General:** A member of the rosewood family found in India.



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- **Properties:** Durable foliage wood with thin flamed graining patterns and varied color shades. This wood is heavy, hard, and dense with high bending and crushing strengths, medium shock resistance.
- **Uses:** Sheesham wood is relatively inexpensive to teak, easy to carve, and turns well for furniture manufacturing.

Teak

- **Colors:** Yellow to dark brown
- **General:** True teak is indigenous to Southeast Asia, but similar wood species also grow in Africa.
- **Properties:** Hardwood, Teak is extremely heavy, strong and durable. Often strongly figured, teak may show straight grain, mottled or fiddle back figures.
- **Uses:** It carves well, but because of its high value, is often used as a veneer. Scandinavian modern, and oriental furniture styles are often crafted of teak as is much outdoor furniture.

Walnut

- **Colors:** Light to dark chocolate brown
- **General:** Walnut is one of the most versatile and popular cabinet making woods. Its many varieties grow in Europe, the United States and Asia.
- **Properties:** Walnut is strong, hard and durable, without being excessively heavy. It has excellent woodworking qualities, and takes finishes well. The wood has a straight grain in the trunk. Wavy grain is present toward the roots, and walnut stumps are often dug out and used as a source of highly figured veneer. Large burls are common. Walnut solids and veneers show a wide range of figures, including strips, burls, mottles, crotches, curls and butts. European walnut is lighter in color and slightly finer in texture than American black walnut, but otherwise comparable.
- **Uses:** Walnut is used in all types of fine cabinet work, especially 18th century reproductions.

