Shopping for wood furniture? Selecting high-quality wood chairs and benches can be baffling. There are many different styles, materials, and construction techniques from which you can select. To make a good selection, obtain as much information as possible. These questions should help you make a good decision.

- WHAT’S ON THE MARKET?
- WHAT’S QUALITY CONSTRUCTION?
- WHAT’S A QUALITY FINISH?
- WHAT’S ON THE LABEL?
- WHAT’S ON THE WARRANTY?

WHAT’S ON THE MARKET?

Wood is one of the most popular materials used to make chairs and benches because of its rich appearance, durability, and ease of construction. Wood furniture can be divided into solid and veneer (see Figure 12.1, Wood Construction). Most chairs are made of solid wood. You may, however, find chair backs and aprons made out of veneer plywood. Plywood is used for strength and to eliminate warpage, splitting, expansion, and contraction.

All woods can be divided into deciduous and coniferous. There is some relationship between the hardness of the wood and the type of tree the wood comes from. In most cases deciduous trees consist of harder wood than coniferous trees, but not always. Deciduous simply refers to all leaf bearing trees such as teak, walnut, oak, maple, mahogany, cherry, and birch. Coniferous refers to cone-bearing trees such as pine, fir, redwood, and cedar. Most high-quality wooden furniture is made of deciduous trees. Generally, wood from coniferous trees are used for the less expensive furniture. However, some high-quality furniture is now being made out of coniferous trees such as pine. While furniture made out of pine may be high quality, it is still more subject to scratches and dents than harder woods.
The most common hardwoods used to construct chairs are ash, beech, birch, cherry, mahogany, maple, oak, pecan, poplar, teak, and walnut. The most common softwoods used to construct furniture are cedar, pine, and redwood. Characteristics of these woods are the following:

**Ash.** The characteristics of ash are pleasant contrasting color when stained, distinct straight grain with open pores, toughness, heavy weight, hardness, and good shock resistance. Ash is often used in constructing bentwood chairs.

**Beech.** The characteristics of beech are hardness, greater strength, good shock resistance, and conspicuous wood rays with tiny and virtually invisible wood pores. Beech is used for curved parts of furniture and in Scandinavian type furniture.

**Birch.** The characteristics of birch are hardness, weight, greater strength, beautiful natural finish, small wood pores, and good shock resistance. Birch is used for structural and exposed parts of furniture and veneers. It is also used as a substitute for mahogany and walnut.

**Cherry.** The characteristics of cherry are moderate hardness, greater strength, durability, good shock and wear resistance, rich color, and straight grain with small individual pores. Cherry is often used as a veneer and for Provincial and Early American Furniture.

**Mahogany.** The characteristics of mahogany are even texture, medium hardness, greater strength, heavy weight, easy to carve, beautiful finish, and predominate grain pattern with open wood pores. Mahogany is used for veneers and carved wood pieces. It is also an inexpensive wood that can be stained to look like more expensive woods.

**Maple.** The characteristics of maple are heavy weight, hardness, greater strength, good shock resistance, and straight grain with tiny wood pores. Maple is often used in bench tops. The grain of maple is not very beautiful, unless it is bird’s eye maple.

**Oak.** The characteristics of oak are heavy weight, hardness, greater strength, durability, carvability, wearability, and striking grain pattern when stained. Oak is often used for paneling, veneers, and solid wood furniture.

**Pecan.** The characteristics of pecan are its greater weight, closed wood pores, contrasting grain color when stained, hardness, and strength. Pecan is used for furniture and wall paneling.

**Poplar.** The characteristics of poplar are its closed wood pores, even staining, durability, and greater strength. Poplar is often used inside of upholstered and wood furniture.

**Teak.** The characteristics of teak are heavy weight, expensive, greater strength, oiliness, and toughness. Teak is often used in paneling and furniture. Teak is often found in Oriental furniture.

**Walnut.** The characteristics of walnut are hardness, greater strength, great stability, expensive, heaviness, durability, carvability, and good shock resistance. Walnut is used for veneers, paneling, and solid furniture.

**Cedar.** Cedar is knotty, highly aromatic, moderately hard, brittle, resistant to decay, light weight, holds paint, and (red cedar) repellent to moths. Cedar is used for unfinished and outdoor furniture. Red cedar is used for lining drawers and chests.

**Pine.** Pine is soft, light weight, easy to work, less strength, and holds paint and varnishes well. Western pine is a little harder than the other varieties of pine. Pine is used for cabinets, unfinished furniture, outdoor furniture, and some high-quality furniture.

**Redwood.** Redwood is light weight, moderately hard, stable, very strong, and resistant to decay, rot, and weather. Redwood is used for outdoor furniture and unfinished furniture.
WHAT'S QUALITY CONSTRUCTION?

Quality is mainly determined by two characteristics: method of joining parts of the wood chair and sturdiness of the chair. All joinings are glued together. For quality, the joints should be tight without any glue showing.

Joints. How various parts of a wooden chair or bench is put together are very important to durability and appearance. Wood chairs or benches are put together using one or more of the following methods: tongue and groove, rabbeted and butted, mortise and tenon, doweled, corner blocked, screwed, glued, bolted, and stapled.

The mortise and tenon consists of a socket and projection made of two different pieces of wood. The projection fits into the socket making the joint. This type of joint is used to join the chair frame and legs to the seat and is very strong (see Figure 12.2, Wooden Joints).

The doweled joint consists of a wooden pin that fits into a hole drilled in the wood. Many dowels used in the construction of chairs and benches are compressed. Once glued, the compressed dowel swells inside the joint. The compressed doweled joint, which is often used to join chair rungs and arms to the seat, is stronger than the mortise and tenon joint.

The tongue and groove joint consists of a lip and groove that extends the length of two boards. The tongue and groove is used to join the pieces of the chair seat.

Rabbeted and butted joints are sometimes used for inexpensive furniture. The rabbeted joint has a groove cut from the edge of one piece with the end of the other piece joined to the cut out space. A butted joint consists of two boards placed at right angles, glued and stapled. Sometimes rabbeted or butted joints are used with screws or bolts and boards for reinforcement, which can be sturdy construction.

Screws are preferred over staples because screws do not work loose the way staples do. In higher-quality furniture, screws are counter sunk, with wood plugs used to hide screw heads. The screws on the underside of the chair or bench do not need to be covered.

Bolts used to join different pieces of wood furniture should be self-locking. If bolts are used, they should be hidden from sight. Bolts are durable, if they do not work loose.

Corner-blocked joints add strength where rigidity is important. They are placed on the underside of the chair or bench in each of the four corners. The better quality corner blocks are dadoed into the chair frame and screwed. Dadoed corner blocks mean that the reinforcement wood pieces interlock with the seat frame. The less expensive chairs have corner blocks glued into the chair frame rather than dadoed.
The cheapest joining used for chairs and benches is stapling. Problems with staples are that they work loose and rust. Staples are generally used to hold the pieces of wood together until the glue dries.

**Sturdiness.** Trying to determine sturdiness is very important when selecting wood chairs and benches. This is because sturdiness is a good indicator of how long a chair or bench will last. The following are some features to look for when trying to get an indication of sturdiness.

- The outside rungs or posts on each side of the chair back should project all the way through the seat to the under side of the seat. This feature makes the rungs or posts less likely to break off.
- The number of posts or spindles that are glued into the chair seat are an indication of chair back sturdiness. Generally the more the posts and spindles going into the seat, the greater the strength of the chair back. An example of a weak chair is the ladder back chair, which has only two posts for back support (see Figure 12.3, Chair Back Sturdiness).
- The chair legs should have stretcher bars and rungs. Both are found attached to the legs to make the legs stronger. Some chairs have other types of leg reinforcement such as additional pieces of wood joining the tops of the legs. In addition, some furniture styles, such as French Provincial, do not have any type of reinforcement and are therefore more fragile.
- Vinyl or rubber tips should cover the ends of the legs to protect the floor. The leg tip should be smooth to avoid damage to the floor. Metal used on the tip may rust and scratch a hard-surface floor.
- When you put pressure on the chair or bench frame, does it make a lot of noise. If it does, it may fall apart in a short time.
- Push on the legs of the chair or bench. Do they feel secure?
- If the seat is upholstered, can it be removed for reupholster. Check under the seat to see how easily it can be removed.
- When you sit in the chair and sway back and forth, does the chair wobble, tip, or creak. Does it feel sturdy and is it level with the floor?
- If the chair or bench is a rocker, make sure there are no sharp points on the runners.

**WHAT’S A QUALITY FINISH?**

A quality finish involves three main steps: sanding, staining, and finishing. If any one of these steps is not done properly, the finish does not look as good as it should.

**Sanding.** The manufacturer may do a good job of staining, finishing, and polishing, but if the beginning surface has any trace of roughness, not enough sanding, or sanding across the wood grain, the stain and finish will only emphasize all the bad points. Areas not sanded properly absorb more stain.

To check for adequate sanding, look at the finish from different angles with the light reflecting onto the wood surface. Is the finish blotchy or cloudy in some areas or does it have
dark lines running across the grain? If the wood surface is blotchy, cloudy, or has dark lines running across the grain, the wood surface may not have been sanded smooth before staining.

**Staining.** A good stain can enhance the natural beauty of wood, add color and character to wood, make one wood type look like another, and make different woods look similar. To evaluate the quality of staining, check the wood surface to see if the stain is evenly applied. There should be no dark spots where there is more stain in one area than another. One side of the furniture piece should not be darker than the other, and the ends should be the same tone as the other surfaces. Sometimes additional color is added to make the furniture look old. In some cases the wood surface is actually hit with a chain to make dents and nicks. This is called distressing.

**Finishing.** Finishes range from high-gloss to low-gloss in varying qualities. A high-quality finish is satiny smooth and free of rough spots, dust specks, or bubbles. A good way to check the smoothness of a finish is to put a nylon over your hand and run it over the finish. If the nylon catches or snags, it has not been sanded or finished properly. Look for depth and richness in the finish, which comes from several light coats of finish with sanding between the coats. Inspect the finish in good light. The edges and ends of the wood piece should be coated with the top finish and free from finger marks. Make sure the filled cracks and holes are covered with the top finish. A high quality chair or bench should be finished on the back and on the underside, to reduce the chances of swelling or shrinking.

Poorly finished wood may have any one or more of these characteristics in the finish: rough, very glossy, cloudy so you can not see the wood grain, splintered edges, scratches, dents, or dust specks. Look for dull spots, which indicate that some areas of the wood were either missed or not given enough coats. In addition, a poor finish will have “teardrops” around the edges and on the up-and-down surfaces of the wood. Teardrops are formed when excess finish dries on the edges and vertical surfaces of the wood.

**WHAT’S ON THE LABEL?**

All labeling for wood furniture is voluntary. Therefore, if you do find some labeling, feel lucky. If the manufacturer decides to put a label on wood furniture, there are some rules that must be followed. The Federal Trade Commission in 1963 established Trade Practice Rules for the Household Furniture Industry. This ruling prohibits misleading and false representation of wood and wood imitation. The Commission specifies four classes of labels for wood:

1. **Genuine**—means exposed structural parts and flat surfaces are made from the wood named (this could be a walnut veneer with a label “Genuine Walnut”);
2. **Solid**—means exposed portions of both frames and panels are made of solid lumber, not veneers or plywood (this could be a label with the words “Solid Oak”);
3. **Combination**—means that two or more woods are used and both must be named on the label (this could be a gumwood frame stained to match mahogany panels, with a label “Mahogany with Gumwood Frame”); and
4. **Imitation**—means printed or painted grain pattern on hardwood, metal, plastic or lumber (this could be a label with “Imitation Oak Grain on Hardboard”).

Other words found on labels can also be misleading to the consumer. For example, just the name “Oak” or an abbreviation of walnut “Wal” does not mean real oak or walnut but means that oak or walnut stain was used on a less expensive wood. If the label says “Made in Denmark,” it means the furniture is made in Denmark, but if the label says “Danish Style,” it
means the furniture is made in the style of Danish furniture. The words “Walnut Finish” mean the wood is finished to look like walnut and does not refer to the type of wood.

**WHAT’S ON THE WARRANTY?**

You will probably never see a written warranty on wood furniture; therefore, buy from a reputable dealer. Most dealers will repair or replace manufacturers’ defects. Ask the sales clerk what the dealer’s policy is on defective furniture and get it in writing.

**✔ QUALITY CHECKLIST**

After each question, answer with a yes* or no.

1. Is the wood furniture made from a hardwood?
2. Are the joints tight fitting?
3. Are the joints glued carefully without any glue showing?
4. Are the joints either doweled, mortise and tenon, tongue and groove, bolted, or screwed, not stapled?
5. Are the corner blocks tight fitting, glued, and screwed into the frame?
6. Are the outside rungs or posts on each side of the chair back projected through the seat to the underside?
7. Do the chair legs have stretcher bars and rungs for reinforcement?
8. Are there vinyl or rubber tips on the ends of the chair legs to protect the floor?
9. Does the chair or bench feel sturdy?
10. If upholstery is used, can it be removed for reupholster?
11. Are the chair or bench legs sturdy when pressure is put on them?
12. Are the chair or bench legs level with the floor?
13. Are the stained surfaces uniform in color?
14. Is the finish satiny smooth and free of rough spots?
15. Are the edges and ends finished evenly throughout without finger marks or tear-drops?
16. Is the chair or bench finished on the back and underside?
17. If there is labeling, did you read the information?
18. Is there a warranty?

* If you answered all these questions with a yes, you can be assured of getting high-quality wood furniture.

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