



UNIVERSITY OF
FLORIDA

EXTENSION

Institute of Food and Agricultural Sciences

What's Underfoot: Selection and Care of Wood Floors¹

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Wood flooring is regaining momentum and recapturing the essence of a bygone era. New methods of treatment are making wood flooring more practical for all areas of the house. Because of its timeless beauty, wood is prized more than ever in both traditional and contemporary decors. Today you can select from an incredible variety of woods — with many styles, finishes and colors. Both open-grain and close-grain woods are used in flooring. Heading the list of hard open-grain woods is oak, northern walnut, pecan, maple, and teak. Among the close-grain softwoods are Douglas fir and Southern pine. The color varies with wood type, ranging from light to dark to reddish brown.

Wood flooring has come a long way since pioneers hewed trees by hand and fitted them with pegs.

When choosing wood flooring, consider each of these points before you buy.

- C **Traffic.** How much traffic will the area receive? This may influence the type of wood floor and finish you select.
- C **Location.** What area will the floor be used in? For example, if used in the kitchen, consider the stains and greasy film from cooking and/or spills

from eating. Also, consider possible water damage from malfunctioning appliances.

- C **Comfort.** How much comfort is needed? Will you be standing or walking on the floor for long periods of time?
- C **Furnishings.** What furnishings will the flooring be used with? Wood floors are available in both formal and informal products. Color, pattern and scale should also be considered depending on the size of the area to be covered.
- C **Subflooring.** What type of subflooring do you have? Find a product that is compatible with the condition of the subfloor. Wood flooring materials appropriate for any grade level are available.
- C **Cost.** How much are you willing to pay for the flooring material?
- C **Installation.** Will a professional install the flooring, or do you want to do it yourself. Some floors are made to be self-installed, while others are best left to professionals.

1. This document is Fact Sheet FCS 3113, a series of the Department of Family, Youth and Community Sciences, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: August 2000. First published: September 1987. Reviewed: August 2000. Please visit the EDIS Web site at <http://edis.ifas.ufl.edu>
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Types of Wood Flooring

Wood floors are more practical than ever. Many are prefinished for moisture-resistance, and most are installed with adhesives rather than nails. These technological changes provide a more stable, easier-to-care-for floor that still has the beauty of natural wood.

Wood floors may be laid in strips, planks or blocks, and in a variety of patterns.

Wood Stability

Although wood flooring is more stable than ever, allow at least 1/2 inch of expansion room for every 10 feet of flooring width in home installations. Installers usually leave this space around the edge of the flooring since it will be hidden beneath baseboards or quarter round.

How the wood has been cut also affects its stability and appearance. As a rule, a board cut from a log with the growth rings at approximately right angles (edge grains) to the widest width will be more stable and resist warping better than a board cut with the growth rings nearly parallel to the widest width (flat grain).

Strip Flooring

The most common strip flooring is available in 2-1/4" x 25/32" but other widths and thicknesses are also available. Edges and ends are tongue-and-grooved for installation. Some flooring strips are square-ended. Strips come in random lengths ranging from 1 to 16 feet in length. Strip flooring can be nailed down with the nails concealed, laid with mastic, or laid over wood strips on a slab.

First-grade strip flooring can vary some in color but will have virtually no defects. Second-grade strip flooring will have some defects, and perhaps some tight knots, but can be laid without waste.

Plank Flooring

Plank floors are similar to strip floors. Widths can be as much as 24 inches, and the thickness can be nearly one inch. Plank flooring usually comes in

random widths, with the ends and sides matched and edges beveled. Some plank flooring is flat. Wood plugs of contrasting color are often inserted into the planks to simulate the wood dowels once used for floor installation in many colonial homes.

Plank floors can be solid wood or wood laminate with a central cross-ply. The wood laminate is dimensionally more stable than the solid wood. Plank floors can be installed with concealed nails or mastic.

Block Flooring

Block flooring can be made of solid wood slices; or plied veneers built up to the desired thickness — the center ply being at right angles to the outer plies for dimensional stability. These blocks can be joined in units of four, producing a 9-inch or 16-inch block. Manufacturers produce single blocks ranging from 4-1/2 inches to 10 inches square.

Parquet

Popular parquet flooring is block flooring made of short strips of wood laid in geometrical patterns. The most common patterns are herringbone and basket weave. Parquet is available in the standard dry back, and the new cushioned foam-backing. Foam-backed parquet improves noise control and walking comfort and serves as a moisture barrier and insulator. It is wise to walk on a foam-backed parquet floor before making a selection.

Wood Veneers

A thin layer of hardwood is veneered, or glued to a less expensive wood, such as parquet squares or prefabricated planks. Hardware veneer is placed under a surface of vinyl sheeting that protects it from moisture, wear and household chemicals. The veneer is backed to assure a permanent, moisture-free bond to almost any subfloor. It should be maintained the same as vinyl. Veneer flooring is also available unfinished.

Finishes

Wood flooring is available in both unfinished and prefinished material. Wood floors can be left natural, stained, oiled, bleached, or finished by painting and

stenciling. Two of the most popular floor finishes are penetrating sealers and surface finishes.

Penetrating Sealers

Flooring manufacturers recommend penetrating sealers for most residential floors. The sealer soaks into the wood pores and hardens to seal the floor against dirt and certain stains. The low-gloss satin finish wears only as the wood wears and will not chip or crack. If the finish is scratched, it can easily be repaired by applying a little of the sealer to the clean damaged section. The new application will blend into the old without lap marks or the other signs of repair. Penetrating finishes may be oil or an oil/resin finish. Allow the final coat to dry thoroughly before moving furniture back into the room.

Surface Finishes

After they are used for a while, surface finishes will show traffic patterns, scratching and marring. As the surface coating wears away or becomes damaged, recoating becomes necessary. This means cleaning, sanding and possibly stripping before the new finish can be applied. Surface finishes are usually glossier than penetrating sealers.

- C **Polyurethane.** Blends of synthetic resins, plasticizers and other film-forming agents produce an extremely durable surface that is moisture-resistant. They are a good choice for kitchens, commercial applications and other areas exposed to stains, spills and high traffic. The oil-modified polyurethanes are recommended for non-professionals and the moisture-cured polyurethanes, because they are extremely difficult to apply, are recommended for professionals.
- C **Varnish.** Use varnish manufactured for flooring, as it is more durable than regular varnish. Varnish resists stains and spots and produces a glossy finish of good durability. It does show scratches and worn spots, which are difficult to patch without showing lines between the old and the new finish.

- C **Shellac.** Shellac gives high gloss and does not darken with age as quickly as varnish. Shellac is easy to apply, dries fast, and is somewhat resistant to water and other staining agents, but will spot if not wiped up promptly. The surface chips easily, but repairs can be made by sanding the chipped or worn area and touching up with new shellac, called "feathering" the finish into the surrounding area. It must be waxed to protect the finish.
- C **Lacquer.** Provides a glossy finish similar to varnish, worn spots can be retouched since the new lacquer dissolves the old and blends in. Lacquer is difficult to apply since it dries quickly leaving lap marks.
- C **Paint.** Floors that are worn or in poor condition can be painted with dark enamel or any good-quality enamel or epoxy paint. A tough protective coating of polyurethane will add to the wear life. Special effects include splatter-painted floors, faux marble finishes, sponged colors, and plaids and patterns from traditional to contemporary styles. Stencil and original designs can be created with stains and paints.

Installation

Wood flooring is available for installation at any grade level. Because moisture can damage wood unless it is properly designed, select the proper wood flooring for the area of intended use. Crawl spaces and concrete slabs can cause moisture to accumulate in wood unless a moisture barrier is used. Crawl spaces should also be vented.

The wide variety of products and constantly changing technology make it important to discuss your particular floor situation with the dealer and installer before buying. Also, carefully read the product information prepared by the manufacturer (Table 1).

Table 1.

REMOVING STAINS	
STAIN	CLEANING AGENTS
Alcohol	Ammonia, liquid or paste wax, silver polish
Chewing gum, crayon	Ice, drycleaning fluid
Cigarette burns	Steel wool, soap, water
Heel marks	Steel wool, detergent, drycleaning fluid
Dark spots, ink urine	Steel wool, mineral spirits, sandpaper, oxalic acid, water
Milk, food	Detergent, drycleaning fluid
Mold	Drycleaning fluid
Oil, grease	Detergent, hydrogen peroxide, ammonia
Water rings	Steel wool, mineral spirits, sandpaper