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## A Floor for Every Room

Choosing flooring for the rooms in a home is one of the most important decisions a builder and home owner can make. Floors must endure much of the wear and tear in homes, and they contribute to the overall look and feel of a room. Because different rooms have different functional and aesthetic requirements, the flooring for each room must be considered separately.

Several factors must be considered when choosing flooring for a home, including the purpose of each room, the look desired, the performance required, the cost of the flooring, its durability, the maintenance required and the manufacturer's warranty.

Here's some questions to ask homeowners who must decide the type of flooring they want in their homes. What look are you trying to achieve in the room? Do you want a traditional look or a more contemporary look? Do you want the room to be cozy and inviting or more formal? What performance will you require from your floor? Is the floor in a high traffic area that will have to withstand heavy wear and tear, or is it is a spare bedroom that will get only occasional use? How long do you expect the flooring to last, and is a warranty important to you? What kind of effort will it take to maintain it? How much money are you willing to spend on each room's flooring?

With the large number of flooring options available today, it is more important than ever to weigh all of these factors and answer all of these questions before choosing the best option for each room.

## Laminates are all the rage

Laminate flooring is the newest entry in the flooring field. In fact, "There hasn't been a whole lot of change in flooring besides Pergo," says Will Biddle, project manager for builder and consumer practices surveys at the National Association of Home Builders Research Center, referring to the world's best-selling laminate floor. Pergo, which has been available in Europe for more than a decade, was introduced to the United States a few years ago and has taken the country by storm. Perstorp Flooring, the Swedish company that manufactures Pergo, says that Pergo is distributed in 30 countries and has been installed in millions of homes worldwide.

By one estimate, more than 40 companies are selling laminate flooring in the United States. Laminate flooring is quite similar to Formica countertops, but manufacturers claim it is anywhere from 10 to 25 times more durable than a countertop. Laminate flooring consists of a hard core material made of some type of fiber board. Underneath the core is a special backing material that resists moisture and provides increased stability. The top layer, or decorative wear layer, is filled with tough melamine resins to make it very dense and impervious to fading, scratches, stains, indentations, impacts (e.g., high heels) or burning with a cigarette.

Laminate flooring is made with interlocking tongues and grooves that float over an existing subfloor, which means it is not nailed or glued down to the subfloor. Specially formulated water-resistant glue is placed between the tongue and grooves of every plank to hold the planks together and to keep out moisture. It's usually possible to install a laminated floor over an existing floor, such as a vinyl or hardwood floor. The subfloor could also be a new wood subfloor or a concrete slab.

Most of the floors simulate real wood, although more designs are coming on the market, including marbles and sandstones. Laminates are easy to care for—all that's needed is vacuuming, dust mopping, and an occasional damp mopping.

Mannington, which already manufactures vinyl and wood floors, recently introduced their line of laminate floors. Mannington differentiates its line by its use of a unique ThermoComposite™ technology that doesn't use glue. Mannington says moisture or bacteria can attack the glue that holds some plastic laminates to the core, causing delamination over time. Instead of using glue, this new method forces thermal-set plastic resins all the way through the three surface layers and deep into the core.

Formica flooring also offers a laminate line in eight diverse collections, from Woodgrains, which replicates familiar and exotic grains, to Patterns, which evoke the detail found in handmade paper, woven textiles, brushed watercolor, tooled leather and polished stone.

## Vinyl is still a popular choice

Vinyl continues to be a popular choice among builders and home owners. Vinyl floors come every imaginable color, pattern and geometric design—Mannington alone offers more than 300 choices. In addition, vinyl is easy to care for, it generally stands up to normal household use, such as kitchen chairs scraping along the floor, and the wide variety of vinyl available ensures a floor for every budget.

Vinyl flooring, also referred to as resilient flooring, comes in two basic forms: sheet and tile. Sheet vinyl comes in two types: perimeter-bonded and fully adhered. Perimeter-bonded flooring was developed as a replacement product, but Congoleum recently launched a new installation system, called "Your Choice," which allows the builder to choose the method of installation. Your Choice allows retailers and flooring contractors the flexibility of deciding how to install the product based on the circumstances of the job site, conditions, consumer preference and other variables. "This new system is very popular in the Carolinas and Georgia," says Angela Matticola, director of residential marketing for the Mercerville, N.J., Congoleum Corporation. "A lot of builders have found this helpful. We have put on several clinics and have had a lot of interest."

Vinyl flooring is manufactured one of two ways: inlaid or printed. Many patterns are printed onto a foam base and then topped with a clear wear layer. This process is sometimes called photogravure, the name of the printing process used to create it. Inlaid flooring requires more care in manufacturing. Millions of vinyl chips are laid on top of a carrier sheet and fused together under intense heat and pressure. The pattern goes all the

way through to the backing. A clear wear layer tops the inlaid chips. Inlaid flooring costs more, but it generally will last longer and look better.

The quality of the wear layer determines the overall performance of a vinyl floor. The wear layer is measured in mils of thickness. One mil equals the thickness of a telephone book page, so a 10 mil wear layer would be comparable in thickness to 10 pages in the telephone book. Generally, the thicker the wear layer, the more expensive the vinyl flooring. The past decade has seen tremendous improvements in wear layers. Urethanes have become the dominant wear layer of choice.

## Hardwood makes a comeback

"Hardwood flooring is making a comeback," says the NAHB Research Center's Biddle. "People like the look, and it's very durable. Now that carpet's been around for 40 years, people want to go back to the traditional look." In addition to the distinctive look of a wood floor, other benefits are that wood floors last for generations and are energy efficient because they act as a natural insulator. Wood floors come in solid and laminated versions and in three basic styles: strip, plank and parquet tile.

A traditional wood floor is made of ¾" tongue and grooved solid oak strips. The width of each strip is generally 2½", and lengths range from one to seven feet. Solid oak floors have a square or beveled edge. Nowadays most come finished with a tough urethane top coat, although unfinished varieties are available. Solid wood floors can only be nailed over suspended wood sub floors; they cannot be glued or floated. In addition, a ¾" expansion gap must be left around the perimeter of the room to allow for the wood's natural expansion across the width of the planks.

Manufacturers are developing new techniques to make hardwood flooring. Engineered wood, or laminated hardwood, is made by bonding layers of veneer and lumber with an adhesive, with each ply running in the opposite direction. This "cross-ply" construction gives the flooring more dimensionally stability-because the wood's natural growth direction is changed, expansion and contraction is drastically reduced. It is not necessary to leave an expansion gap around the perimeter of a room when installing most engineered floors. Like solid oak, this flooring is available finished and unfinished, with a square or beveled edge. One difference is that these products are ideal for glue-down or floating installation. Another difference is that they are generally available in more thicknesses and widths, but the lengths generally do not exceed four feet.

B.A. Mullican Lumber & Manufacturing Company, located in Maryville, Tenn., produces Appalachian hardwood floors made of eight species and quartered oak and herringbone slats. Warren Spradlin, a spokesman for Mullican, says there's a difference between wood flooring and laminates. "If you want a hardwood floor, you won't be happy with a laminate," he says. "It does not look like wood; it has a print pattern, and it doesn't look natural. It's not indestructible, and you can't sand out scratches. With hardwood floors, you can sand out scratches." Spradlin says Mullican's products are of superior quality. "Our quality control is among the best in the nation. We continually

check and recheck from the beginning to the end of the manufacturing process. When you're dealing with Mullican, you're dealing with consistent quality."

## Carpet holds its own

In a 1996 survey by the National Association of Home Builders, *What Today's Home Buyers Want*, wall-to-wall carpet was preferred by the vast majority in the living room (75 percent), family room (73 percent), bedrooms (89 percent) and hallways (64 percent). Carpet absorbs sounds and hence cuts down on noise, provides natural insulating qualities and provides a cushioning layer of comfort underfoot.

Kathryn Sellers, director of public relations for the Carpet and Rug Institute, the national trade association representing the carpet and rug industry and headquartered in Dalton, Georgia, says "The industry is trying to make people aware of the value of carpet. People keep coming back to carpet for its comfort. In fact, the rooms where people live, like the family or living room, are almost always carpeted." Sellers cites two trends in carpeting today: textures and patterns. "We see a trend of using much more textured carpets. Another trend is the use of more patterns. Pattern has always been used as a serviceable product, like in hotels." Sellers says people are bringing those patterns, which include florals and geometrics, into their homes.

Carpet is available in three styles: cut pile, loop pile and cut and loop pile. In cut pile, the loops are cut, leaving individual yarn tufts. This is one of today's most popular constructions; examples of this style include velvets and saxonomies. Cut piles come in many varieties, making them suitable for almost every area of the house. In the loop pile style, the carpet loops are not cut or sheared. This style generally offers long-lasting wear for high-traffic areas. Today's popular berbers are loop pile. Cut and loop pile provides a variety of surface textures, including sculptured effects. This style provides soil-hiding qualities.

The Carpet and Rug Institute says that roughly 97 percent of all carpet is produced using synthetic fibers, which are designed to feature style, easy maintenance and outstanding value. Synthetic fibers include nylon, olefin (polypropylene), polyester and acrylic. Wool is somewhat more expensive than synthetic fibers, but it is noted for its luxury and performance.

## Ceramic tile gains in popularity

Ceramic tile, long popular in the southwest, is gaining popularity as a flooring material throughout the United States. Today, numerous manufacturers make literally hundreds of styles and colors of tiles. Ceramic tile is simply a mixture of various clays and other minerals that have been shaped and fired under high temperatures. Ceramic tile is long lasting and easy to maintain, although the grout must be maintained properly. Ceramic tile is an extremely hard surface, and china and glass will likely break if dropped on it.

Many manufacturers are offering different sizes of ceramic tiles. Brenda Agee, product manager for Esquire ceramic tile, based in Clarksville, Tenn., says, "Today, there is a wide variety of sizes and shapes to lend enormous versatility to the use of ceramic tile.

Until recently, floor tile was most commonly sold in 8" x 8" squares. Now you see floor tile available in 12" x 12" squares and also in grand 16" x 16" formats, and moving toward even large geometric shapes for increased design capability." Manufacturers are also coordinating wall and floor tiles with decorative accent tiles and strips that allow for custom designs.

Irene Steelman, a spokesperson for Esquire, says, "Homeowners are very interested in natural material. A design trend is bringing the outside in. With ceramic tile, it's easy to achieve that look. Also, real stone and marble are popular. Ceramic tile offers a way to get that look at an affordable price."

Regardless of the flooring chosen for different rooms in a home, proper care and maintenance are crucial. With the right planning and informed decision-making, the flooring in homes can be beautiful, durable and affordable.