



Industry in Depth

Design You Can Walk All Over: The Fashionable and Functional Floor

Sponsored by Wilsonart Commercial Flooring

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lastic laminate is one of the most ubiquitous materials of the 20th century — and one of the most misunderstood. The truth is, laminate is one of the most cost-effective and durable new materials that’s been available over the past 50 years.

Because of advancements in design aesthetics, laminate flooring now is the fastest-growing flooring category worldwide. High-pressure laminate

(HPL) flooring offers a plethora of design options, which can unleash the raw creativity of the design process. These options have the potential of

precious natural resources — or their client’s budget — as laminate floors offer a cost-effective alternative to these expensive floor coverings.

The reason laminate flooring works so well with well-designed spaces is because new flooring designs are created by experienced designers through a process that involves extensive trend analysis in both commercial and residential markets. It begins by understanding global color and textural trends from fashion, economic and historical standpoints. Identifying new materials that are being used in buildings, furnishings and residential interior design is key. Scoping out new colors and types of wood helps flooring designers conceive the designs that will enhance the interior’s scheme. The increased use of natural, exotic and aged woods with

turning the floor into a “fifth wall” that not only frames interior design schemes, but also can become an additional display area.

TODAY’S FLOORING PRODUCTS

Today, we can hardly imagine life on bare, unfinished floors. Yet, until the early 20th century, most people lived and worked on wooden floorboards. Textile floor coverings and intricately finished wood or ornate

ceramic floors were a privilege of wealth. Today, polished exotic wood or marble floors serve as a modern signature of success. Recent technological advancements in photographic reproduction and the improvements in lifelike textures have made it possible for manufacturers to reproduce the look of exotic woods or marble. Design professionals can indulge their creative whims without exhausting

MSNBC replaced its original Wilsonart flooring, which survived eight years of heavy abuse, with Wilsonart Commercial Flooring's *Burled Maple* and *Maple Blush* patterns.

unique characteristics, metallic products, glass, acrylics and cleaner colors have led to the development of a new series of wood designs.

Recently conceived wood visuals include *Santao Rosewood*, *Natural Anagre*, *Dragon Cherry*, *Pacific Birch*, *Hawaiian Bamboo*, teak, hickory and beech. Shades range from natural finishes and red-hued finishes, to antique and weathered looks such as barn wood and antique heart pine. The addition of surface texture has become increasingly important, resulting in the addition of distressed and hand-scraped finishes.

Stone visuals also are increasingly prevalent in the pattern mix. Marble, slate, limestone and sandstone are available from most manufacturers, and grouted tile looks are especially popular thanks to the low level of maintenance required compared to hard-to-clean grout joints in ceramic or porcelain tile.

WHY HIGH-PRESSURE LAMINATE?

In addition to being extremely fashionable and affordable, HPL products are extremely functional for both residential and commercial use. They last longer, wear better



and require less maintenance than many other flooring choices. Though most people know what laminate flooring looks like, they don't know what is under the surface and what makes it so durable. The unique construction and manufacturing method make commercial-grade laminate flooring stronger than steel (gram for gram) and more than 10 times more durable than the HPL that is used on most countertops.

Laminate flooring is available in either direct pressure or high pressure. Direct-pressure laminates (DPL) are produced using lower temperatures and pressures than HPL. They also have a much thinner mil thickness than HPL. The wear layer of a typical DPL flooring product is approximately 6 mil

thick. For this reason, DPL products are less resistant and can indent if you drop a heavy object on the floor. Because of this, DPL flooring products are typically recommended for residential applications. In contrast to DPL's average wear layer of 6 mil, a commercial-grade HPL has a thickness of up to 45 mil. This makes it more impact-resistant than DPL.

So what's in HPL that makes it so strong? HPL flooring is composed of multiple layers of paper and core material, which have been saturated with resins. The layers have been fused together with temperatures approaching 350 degrees Fahrenheit and pressures exceeding 1,400 pounds per square inch.

The important top layer is known as the high-performance

wear layer. This is the layer that protects the floor from scratches, stains and fading. The wear layer includes aluminum oxide particles and melamine resin. The melamine protects the floor against staining and fading and allows easy cleaning because it's impervious to almost anything that can stain the flooring. The aluminum oxide makes the wear layer extremely hard. It increases wear resistance and protects the floor against scratches and scuffs caused by heavy foot traffic.

Other layers include the decorative sheet, *Kraft* paper, core material and the balancing layer. These layers are the reason why HPL flooring stands up in high-traffic multi-family dwellings or commercial settings such as retail, executive space, hospitality, education and healthcare facilities. In nearly all cases, HPL floors are stronger and harder than natural flooring materials such as wood, stone and ceramic tiles.

Another reason to install laminate flooring in commercial settings: The aluminum oxide's abrasive layer can help decrease risks of slips and falls. Many manufacturers have conducted multiple studies on floor maintenance and

discovered that slipping and falling is the No. 1 cause of absence in the workplace. The No. 2 reason is a work-related injury. Over \$10 billion is spent on worker's compensation annually due to slips and falls, among other hidden costs.

From a practical standpoint, laminate flooring is versatile, easy to install and remarkably easy to maintain. HPL flooring is designed to literally "float" over any number of subfloors, such as wood, concrete or an existing floor — provided that the subfloor is thoroughly dry and level. This eliminates the cost of removing most types of flooring

BELOW: The Marina Marriott Hotel Restaurant in Fort Lauderdale, Fla., needed a floor to withstand foot traffic, sea air and salt water, so it selected Wilsonart Commercial Flooring's *Maple Blush* and *Cherry Rose* patterns.

before installation. Unlike wood floors, individual planks and squares of HPL flooring are never attached to the subfloors. Instead, they are manufactured with locking tongue and groove edges on all four sides that interlock with adjacent pieces. Underlayments are available — and recommended — to provide noise reduction and add cushion to the flooring. This allows for added support in all commercial and residential applications.

In commercial applications, where offices tend to be in buildings long-term, laminate flooring pays for itself many times over by



The MUSC Children's Hospital in Charleston, S.C., replaced its sheet vinyl floors, which did not stand up to the wear and tear of a hospital, with Wilsonart Commercial Flooring's *Hawaiian Bamboo* pattern.



providing reduced maintenance costs and increased durability. After initial installation, the minimal maintenance required by laminate flooring makes it a very cost-effective choice. When compared to carpet, the life-cycle cost remains low because it does not require daily or weekly heavy maintenance or semi-annual professional cleaning, and does not stain or show wear. The quality of laminate flooring is reliable and consistent because the product is durable.

Laminate flooring also has a great warranty. The best commercial laminate flooring is covered under warranty against wear, fade or stain for 10 years from the date of sale. Laminate flooring is a proven performer in its field. Laminate is tougher than hardwood, and it has greater longevity than vinyl. It's easy

to maintain, it reduces leg strain, and with the improvements in technology, installation time is dramatically reduced. HPL flooring requires minimal maintenance to keep it looking like new. Laminate flooring never needs waxing, polishing, refinishing, stripping or re-screening to maintain a rich, glossy appearance. Instead, daily maintenance is as simple as sweeping the floor to remove any loose dirt or debris.

From the "green" point of view, the laminate industry has made great strides in minimizing process emissions and conserving natural resources in the manufacturing process. One-hundred percent of the wood fiber in the high-density fiberboard core of most laminate flooring products is composed of byproducts from the milling of dimensional lumber and plywood. This amounts to more than 55 percent of the finished product weight. Reduction of waste and recycling also are top priorities for most companies. Factory waste is sold to other industries for use in the manufacture of various products, such as melamine dinnerware, synthetic lumber and even aquarium gravel. Laminate flooring is very practical because it's earth-friendly. Two

laminate flooring products on the market are even GreenGuard® certified.

THE FUTURE OF HPL

So what lies ahead for this fashionable yet functional product? HPL flooring will continue to dominate the commercial market with the ever-expanding portfolio of design options. Style and design will remain important in flooring selections, and new technology will make available more colors, textures and patterns. Laminate flooring will become an even bigger player in the commercial market as business owners look at the long-term costs of flooring and examine flooring life-cycle costs.

Laminate flooring has all of the elements necessary to create a fabulous design environment for upscale clients, while still meeting their low-maintenance requirements. Remember the benefits of HPL flooring the next time you need to design a space that needs to make a lasting impression.

To schedule a live, in-depth presentation of this material, contact Randy Phillips, National Sales Manager, Wilsonart Commercial Flooring, at 254.207.3237 or phillir@wilsonart.com.

Design You Can Walk All Over

Adapted as an exercise by Martha J. Stewart, IIDA Education Coordinator

exercise:

- 1) Have you ever used laminate flooring in a project? If so, briefly describe how. If not, explain why.
- 2) What is the difference between direct-pressure laminate (DPL) and high-pressure laminate (HPL)?
- 3) In your experience, which kind of laminate flooring (DPL or HPL) is used more often and why?
- 4) Name four benefits of using laminate flooring over natural materials.
- 5) What kind of impact can laminate have toward achieving sustainable goals?
- 6) How would you improve laminate flooring?

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