

Structurally, the home is a dwelling that offers families comfort, convenience, and improved quality of life. For centuries, the American home has undergone cultural evolutions. From simple domestic abodes to grande estates, the one theme that has transcended time, social class, and wealth is the formulation of intimate memories among loved ones. Within this space, values are established, relationships are nurtured, and love resides. At Hearthwood, we believe that your home is a story. A story rooted in tradition very much like our own.

Our story begins with the invention of engineered hardwood floors. L.W. Anderson created a product out of necessity and from it's conception it's been gracing the American home ever since. For over 70-years, our family behind the Hearthwood name have been providing other families with durable and beautiful engineered hardwood flooring. Throughout four generations, we've worked hard to manufacture and improve our products and processes to a standard that Americans would be proud to implement in their home.

Choosing Hearthwood to establish your roots is the ultimate form of flattery. We want to make it easier to help you choose the perfect hardwood floor that will compliment you home and your lifestyle. That's why we've created this eBook. It's designed to give you a better understanding of the product from formation to implementation to help you make a choice that will last you a lifetime a memories.

# **UNDERSTANDING HARDWOOD FLOORING**

We appreciate putting down a new floor is an investment. Before you make your purchase, it's best to understand exactly what it is your buying. There are many different hybrids of flooring that provide the look of but are not made from real wood. We've compiled an overview to help answer some of your pressing questions to help you make an informed decision.

## **Pre-finished Engineered Wood**

Engineered is just a term to describe the construction of specific hardwood flooring. Instead of milling a solid piece, usually 3/4" thick and containing a tongue and groove milled into the sides for installation, engineered wood is made from alternating layers of thinner slices of hardwood to achieve a dimensionally stable and more indentation resistant plank.



Wood is a natural substance and has pores that will allow it to expand and contract with humidity and temperature changes. In solid wood, it is difficult to install wood planks that are over 4" wide because the expansion and contraction will cause gapping and "cupping" when the seasons change. The wider the wood, the more expansion and contraction you can expect. That's where engineered wood is beneficial.

## **Using Engineered Wood Flooring**

Engineered wood is constructed by layering wood sheets, alternating the direction of the grain so that each layer is perpendicular to the other, which is the same method used to make plywood. What this does is balance the forces of expansion and contraction to create a dimensionally stable plank, even as the humidity and temperature change with the seasons.

After the layers are assembled, the planks are milled and can be produced in many widths without sacrificing dimensional stability as long as the platform was balanced to start. With the preference for longer and wider planks coming into fashion, the sale of engineered products has exceeded solid wood in the overall market in recent years. All engineered hardwood features a real wood face, but there are differences in the materials used underneath the plank in the other layers.



# **TYPES OF HARDWOOD FLOORS**

#### All Wood Veneer Hardwood Floors

Veneer is just another word for sheet. We get wood veneer by either rotary peeling or by slicing/sawing the sheet out of the log. You get rotary peeled veneer through a process of pressing a knife blade or "lathe" against the length of the log and spinning it so that the sheets come off just like a roll of paper towels. Sliced or sawn face veneer is cut down the length of the log horizontally and can be cut in thicker faces and typically has more linear grain than rotary veneer. You would typically have sliced/sawn cut veneer only on the face layer. The other layers underneath in an all wood construction would be rotary because it is less expensive due to the higher yield per log. This still equates to a 100% wood plank.



## **Hybrid Plank With Real Wood Face**

Hybrid plank featuring composite core with real wood face are becoming more popular as they feature a combination of the best parts of both hardwood and laminate. You always want an actual wood face layer because the visual is natural and random. But laminate products contain a core material that is made from highdensity fiberboard that is a wood composite. As long as the "HDF" core is of high quality, the indentation resistance usually increases in these products, and the dimensional stability is the same as with a veneer core hardwood.

Products that look like wood but are made from a printed visual that will have pattern repeat are found in Laminate, LVT, and WPC or Rigid core. Additionally, we are seeing ceramic tile be offered in wood looks! No doubt wood is a very popular visual, but just because it says "wood-look" doesn't mean it's the real deal. And just because it says "engineered" doesn't mean it isn't 100% "real hardwood."

At Hearthwood, all of our products are 100% real wood and "Made in America." Our leaders have taken extra care to provide clients with a durable, beautiful American made product at a time when most are manufactured overseas. Not only is our milling factory located in Tennessee, the wood used in all of our flooring is harvested from trees right here in America. When you buy Hearthwood, you know you will be buying an "all-American" product.



# WHAT YOU CAN EXPECT FROM YOUR ESTIMATE

Choosing engineered hardwood flooring will provide you and your family with generations of durability and beauty. The endurance achieved from the use of this material is worth the investment. Adding hardwood flooring to your home, made from real wood, improves market value. Engineered hardwood flooring is available in a range of grades, finishes, textures, and species to help create a space that works for you and your family. Before you can work with the new hardwood flooring, you'll need to hire a trusted contractor.

Estimates can be confusing, and we want to make it easier to enjoy the advantageous properties of your new engineered hardwood flooring.

#### FACTORS INCLUDED IN YOUR COST ESTIMATE

## **Existing Floors/Subflooring**

The current flooring and subflooring will play a critical role in the estimate. The contractors will evaluate the removal of any existing flooring and the integrity of your subflooring. You might be able to cut costs by removing the flooring yourself, but contractors have the resources to quickly remove the floor and to dispose of the waste effectively. Subflooring needs to be in good working condition, free from moisture, warping, and cracks before the engineered hardwood can go down. It should also be flat and structurally sound. Engineered floors can be directly installed to concrete, plywood and some existing flooring. The more complicated the removal of the current floor and the preparation of the subfloor, the more expensive this portion of the quote will be. Sometimes, floating engineered wood over the existing substrate serves as a cost effective alternative to removal of the existing floor, though not all products can be installed this way.

## **Square Footage**

Typically contractors will price you per square foot. It's the most common method for calculating the final price of the materials as well as the labor. Before you receive your quote, ask if the square footage includes overage. The overage would refer to any additional materials that aren't used during the laying of the flooring, as well as additional material needed to cover the full needs of the job. Most manufacturers suggest adding 5-10% of the total project size to cover these needs.

#### **Additional Materials**

Your contractor should highlight other materials that will be needed to complete the job. Depending on the installation method this would include things such as the fasteners and connectors. Ask them to break this cost down and if it will consist of overage as well.

## **Connecting Rooms**

There is a chance that the floors will need to connect between two rooms of different height. An older home is especially susceptible to this type of characteristic. Ask your contractor to highlight any work that might need to be done to bridge the two together and include the labor in the estimate.

## **Moving Furniture/Appliances**

Some contractors will charge to move furniture and appliances. The kitchen is an excellent example. The fridge and oven need to move to get the job done effectively. Any renovation work in existing homes will require furniture to be fully moved out of the room, and sometimes will need to be stored, as well.

## **Molding**

Your molding isn't always included in the estimate but it is required on every project to cover the expansion space required between the floor and the wall, as well as between some adjoining rooms and flooring types. Stair nosing is also common and can be used in conjunction with standard flooring material to make step landings and risers. Moldings are either ordered in coordinating tone, texture and spices to the flooring or they are custom matched on site from blank trim pieces.

#### Warranties/Guarantees

We talked a little about floor warranties before. The engineered hardwood product should come with a warranty, but you'll want to ask your contractor if they supply one for their installation. Make sure to read it thoroughly before signing to avoid any opportunity for pointed fingers. Manufacturers do not warranty installation and anything installed by a contractor is considered approved - even if you deem it acceptable. They are required by manufacturers to "stop the job" as soon as they notice an issue with the material to be compliant with the warranty.

Warranties carry a lot of weight and you'll want to learn more about the different options available to you. In the next chapter, we discuss the warranties a little more in-depth to help you make an informed decision.

### **Wood Warranties**

Warranties are important because they protect your investment. As you shop around for different wood flooring you're going to come across a few different options. A whole host of terms and conditions will apply and range in years from 10 to lifetime. It's a lot of industry and legal jargon designed to guard your new floor as you and your family begin to use and enjoy it in your home. But with all the information available, we wanted to simplify what is important.

## **Overall Warranty**

Overall warranties are divided up into residential and commercial categories, depending on the intended applications. Since residential use is not as high traffic or taxing as commercial use—though some moms, dads, and pet owners might disagree!—a residential warranty is typically extended for a much longer timeframe. It is not unusual to see residential-use warranties of 20 to 50 years, well beyond the typical shelf life of hardwood-floor designs.

## **Structural Warranty**

The structural type of warranty guarantees the product won't delaminate (with layers separating from each other) and typically covers a lifetime because that sort of deterioration is deemed a manufacturing defect.

## **Lifetime Warranty**

When you see one of these lifetime warranties, you have to ask yourself, "Whose lifetime are we talking about here?" The fact is almost all warranties are "nontransferrable." In which case, "lifetime" really means "for the amount of time you personally live in this house."

## **Finish Warranty**

For this one, a finish warranty concerns possible wear-through of the liquid coating on top of the wood. Clear coat, when properly applied, will protect the stain color on the wood underneath. A finish warranty typically refers to incidents of over 5% of installed flooring materials showing finish having worn off and stain color starting to wear. For prefinished flooring, anything with appropriately applied aluminum oxide will last a very long time—decades at the least.

## **Wood Wear Layer Warranty**

Wood wear layer warranty is coverage referring to the actual wood's surface, more common in site-finished flooring where there is no aluminum oxide in the urethane. Aluminum oxide reinforced urethanes are very effective in preventing wear-through of the finish, so you never walk directly on the surface of the wood. Solid hardwoods are more typical in site-finished applications, and the number of sandings you can get is important because there is no aluminum oxide particle in the finish applied on site. This creates a need to sand and refinish more often, therefore dictating the estimated life of the floor.



## **Radiant Heat Warranty**

A radiant heat warranty means the wood flooring being installed can stand up to the stresses of radiant heated subfloors. Sudden swings in temperature and humidity can be damaging to hardwood in general, so heated subfloors put more stress on wood flooring products than other substrates. Certain hardwood species, constructions, and finishes are better suited for these conditions; however, specific parameters for installation and use still have to be satisfied.

## **Hearthwood Flooring**

One area of the quote you won't have to worry about when installing prefinished engineered hardwood flooring is for your finishes. Hearthwood flooring includes a scratch resistant protective finish made from urethane that is reinforced with aluminum oxide. The range of colors, textures and species offered on hearthwoodfloors.com will work in any design, so be sure to check our digital catalog for inspiration on your next project.

#### Hardwood Floors for You and Your Pet

At Hearthwood, we are self-proclaimed animal lovers and couldn't imagine our home without our beloved pets. These furry friends are just as important to the family as any other member. But, choosing a hardwood flooring doesn't have to come between you and your pet. Engineered wood is much more dimensionally stable than a solid floor and can work to your benefit. You can find engineered hardwood in a range of grades, finishes, and textures to create the right mix of properties that can withstand the energy your beloved pet produces.

# SELECTING THE RIGHT TYPE OF HARDWOOD FLOOR

The first thing is selecting the right floor based on the activity level and habits of your pets.

#### **Midtone Colors**

Products that are too light or too dark will show more wear. When light-colored wood gets scratched, dirt can settle into the scratches and will show up as dark lines on a light surface. In the same respect, a dark finish will show the light color of the natural wood when scratched. It's the same with countertops. I have white in my house, and they drive me CRAZY because they show every little stain, but black ones aren't much better. Midtones are timeless and do the best job hiding any wear that will occur over time.

#### **Low Gloss**

Very shiny wood floors may look "clean" at first, but they will act as a mirror, highlighting wear and imperfections. Choosing low sheen wood floors are much more low maintenance and have the bonus of looking more natural.

### **Texture**

Texture is your friend. The reclaimed wood trends of today are extremely forgiving for households with pets. Choosing styles with surface textures like scraping or wire brushing will act as camouflage for dents and scratches.

### **Natural Grain**

The same principle as above holds true with the grain of the wood. Different species feature a different "pattern" from the growth rings. Maple has very little character and graining, while oak and hickory can have a lot in a more natural or rustic grade. Not only do knots and grain signal that the material is authentically natural, but they also hide wear and keep your eye from going straight to an imperfection in the floor.

# THE BEST FINISH FOR YOUR HARDWOOD FLOOR

Now that you have selected floors that are the most forgiving, you are 80% through the process of having a successful hardwood installation in your petfriendly home. Ensuring the beauty of the floor is directly related to how you maintain them. Here are our expert dos and don'ts for cleaning and preserving hardwood floors:

**Do:** Avoid throwing the tennis ball inside if your pet has long nails. This one is pretty obvious, but even with the advanced finishes, you can see scratches and nicks in the seams of the plank where the nails will pull chunks of the wood up from the beveled edge.

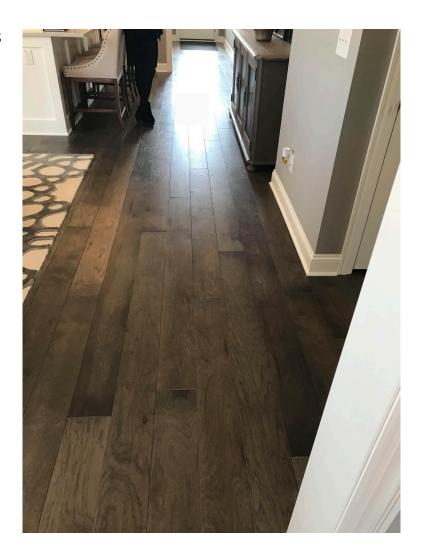
**Do:** Clean up "accidents" immediately. Wood is like a sponge and will absorb moisture. Not doing so will cause water damage and hurt the finish.

Don't: Wet mop! Avoid doing this even if you don't have pets. Letting water sit for long periods on the wood will cause water damage that usually looks like blackened edges and splits at the end of the boards near the joint. The best cleaners are wet Swiffers or other cleaners that have an evaporative property that dries quickly.

**Do:** Invest in touch up pens that can be used to recolor areas of damage. Wood is meant to be worn, so these imperfections don't ruin the product just like leather handbags aren't ruined when they show wear from use.

INSIDER TIP: Most quality wood floors that are "pre-finished," meaning they have the stain and top coat applied in a factory instead of after installation, contain Aluminum Oxide. This is a naturally occurring element that looks like salt and is the same particle that makes sand paper rough. It is just under diamonds on the hardness scale "MOH" and is used to create a barrier to protect the wood layer.

Choosing the right textures and finishes is just the beginning. The construction of the engineered hardwood flooring should be a major factor into your purchase decision. It will play a role in how your floor will wear over time.



# **COMPARING HARDWOODS**

Wood is our passion. For over four generations, we've worked hard to manufacture and develop a product that profits from beauty and longevity. What we've come to love most about the wood used in our products are the different properties of each one. Just like members of a family, they display uniquely different characteristics. They have their different strengths and are equally charismatic. But which type of wood works best for your application? With so many species to choose from, we decided to take a closer look at their properties to help you decide.

#### White Oak

White oak has a long-standing tradition in American history. The wood was used in the production of many ships throughout the 1700s, and instrumental in reconstructing the vessels moving to and from the "new world". These all-American ships not only transported people but improved the exporting trade that was beginning to emerge. It was also used to make barrels for rum and molasses. Later it the 1800's it started to work its way into American homes in the form of furniture and flooring. Now we see it being commonly used in the staves that make up red wine and whiskey barrels - something we know a thing or two about in Tennessee!

#### White Oak Identification

The trees that are used to harvest white oak can reach an average height of 100 ft with a diameter of roughly 3-4 feet. These trees can be found in almost every part of the U.S., but we utilize northern oak trees which are harder and have a lighter color than southern white oaks. White oak is very popular due to it's lighter natural coloring, which, not surprising, is less red than red oak. There is color variation across the veneer however, and some boards are more pink than others. When cut using a sliced or sawn technique, the appearance of the grain is very linear or "straight," and when cut by a rotary peeling technique it can have more wide/flat grain, or what the industry calls "cathedrals."

#### **Using White Oak in Design**

White oak is on trend due to the variety of stain colors available, straight grain and contemporary appearance. It is harder than red oak for improved indentation resistance and also very versatile for staining and texturing. At hearthwood, we have more white oak offerings than any other specie. If you love the look of reclaimed wood, Dynamic Earth features dramatic color variation and hand crafted texturing for an authentic look. For more contemporary interiors, Au Naturelle and Controlled Chaos have a light texture and versatile stains for every design need.

## **Hickory**

In North America, there are roughly 16 species of hickory. Although, the lumber industry doesn't take time to distinguish between them. Historically, hickory is well-known for its strength and has been used in the production of objects that relied on this durable characteristic like ladder rungs, wagon wheels, and handles for tools. You can also find this material used in sports accessories the composition making up skis, tennis rackets, hockey sticks and most notably the baseball bat.

#### **Hickory Identification**

As previously mentioned, hickory is notoriously strong which also means its weighty. When dried it can count for around 50lbs per cubic foot. The grain is varied, featuring light clean boards as well as gorgeous rustic character boards with knots and mineral streaks. Hickory is primarily found in the Southern region, and they can grow around 120 feet in height.

#### **Using Hickory in Design**

There are few other woods available that match hickory's strength and durability which ranks highest on the janka hardness rating of American tree species used in flooring. As a flooring material, it's strength is great for high-traffic areas of the home because it's excellent at resisting impact and stress. In addition to it's hardy characteristics, hickory is also gorgeous. Boards can be light and blond or can graded out for a lot of character in order to give a more rustic or natural appearance. It's truly one of a kind. Pure Heart from Tall Timbers is hickory in its highest most authentic form. The collection is natural without a stain and graded for the most character. The result lends itself to a beautiful rustic finish that brings the best of the outdoors inside your home.

## Maple

Maple has existed in North America for hundreds of years. For centuries maple has been harvested for its sweet syrup, but its inherent strength means it was also used inside the home to make desks, workbenches, and butcher blocks. Throughout history, it also had small roles in medicinal products like cough medicines and tonics. This dense wood was also harvested tom make cabinets and flooring.

#### **Maple Identification**

Maple has a light grain appearance that can vary from straight to curly pattern. The texture is fine and uniform. The sapwood is white and very clean in appearance. You'll find that most maple is free from "defects"; like knots, though we like to include them into our products so you know it is the real deal and not a faux wood copy. Maple grows primarily in the northern part of the US and in Canada and trees grows to roughly 100 feet tall. At Hearthwood we work from only domestically sourced Maple that is selected for its beauty and durability.

#### **Using Maple in Design**

Quite often the wood is used for fine furniture and cabinetry. The uniqueness of maple's patterns provides an opportunity to enhance interior design using a neutral backdrop. As a flooring material, it's one of the highest quality based on durability alone as it is also very indentation resistant. The grain pattern of maple is typically very quiet, offering a subtle and neutral visual and more contemporary looks. Lower glosses are now more commonly used on Maple, though high shine maple with no knots was a popular look for a long time.

Stones River from the Tennessee Trails collection blends the beauty and durability of maple into a smooth floor that compliments both traditional and modern designs while lessening the appearance of scratches and wear.

Home is where your story begins and we at Hearthwood want to help you make it memorable. Whether designing a new one or adding updates, our floors are crafted for generations by generations of industry experts focused on serving the community and country. We use raw American materials, made in America for American families.

For more information about our products or to get a free sample, visit us at www.HearthwoodFloors.com

