Hardwood Flooring Terms

**Above Grade:** Any surface that is above the level of the surrounding ground.

**Abrasion:** Refers to the act of wearing away at a hardwood floor finish, thereby damaging the wood

**Acclimation:** Refers to the hardwood’s adjustment to the environment it is in, in terms of moisture and humidity.

**Acrylic Impregnated:** Acrylic monomers are injected into the cell structure of the wood to increase hardness, then finished with a wear layer over the wood.

**Acrylic Urethane:** Slightly different chemical composition than Polyurethane, with similar benefits.

**Aluminum Oxide:** Added to the wear layer of a urethane finish for increased abrasion resistance. Popular on better grade wood floors.

**Below Grade:** Any surface that is below the level of the surrounding ground.

**Better:** A quality of flooring that has small knots and light dark graining.

**Beveled Edge:** Hardwood boards with a distinctive groove in them, as seen in informal and country decor. With today’s urethane finishes, these edges can be completely sealed, making these floors easy to clean.

**Blind Nailing:** Refers to the process of forcing nails into the grooves of tongue and groove flooring planks. The nail is put in at a 45 degree angle and made flush by using an electric flooring hammer because most types of wood flooring, including bamboo, are too hard to be nailed together by hand.

**Buckle:** When humidity is high, wood expands and gaps disappear. In situations of too much moisture, wood may cup, or “buckle.”

**Burl:** Refers to a swirl or twist in the grain of the wood that generally happens close to a knot, but does not contain a knot.

**Ceramic Finish:** Refers to a more advances finishing technology using ceramics to increase the abrasion resistance of the hardwood.

**Clear:** A quality of flooring that has no visual blemishes or knots. Expensive.

**Conversion-Varnish Sealers:** Refers to a type of sealer that is acid curing and resistant to stain and spotting.

**Cross-ply Construction:** A technique where wood plies are stacked on top of each other in opposing directions. The result is a wood floor that is dimensionally stable and less affected by moisture. Allows the plies to counteract each other, thus prohibiting the plank from shrinking or expanding under humid conditions. These floors can be installed over concrete and/or below grade.

**Crowning:** Refers to a type of warping where the center is higher than the sides.
**Cupping:** Warping with a concave condition; the center is lower than the sides.

**Cure:** The action of allowing the finish to completely dry and reach its fullest hardness potential. Different finishes will cure at different rates.

**Delamination:** The separation of layers in an engineered wood floor, through failure within the adhesive or between plies. Also between layers of stain and/or coating.

**Dimensional Stability:** The ability of the hardwood to retain its dimensions throughout its lifetime, avoiding warping, swelling and contracting in response to moisture and changes in temperature and humidity. High dimensional stability means the floor does not significantly warp, shrink or expand due to environmental changes.

**Distressed Hardwood Flooring:** Refers to the intentional scratching, scraping and/or gouging of a flooring surface to create an antique look. This is accomplished either through hand scraping or by machine. Floors that are distressed by hand will be unique – no two floors will be alike. Floors distressed by machine will likely have a repetition of pattern which may take away from the natural look of the floor. This flooring will add seasoned character to an interior and can easily hide finger marks and scratches, which is an excellent choice for high traffic areas.

**Durability:** The ability of the wood species or finish to withstand the conditions or destructive agents with which it comes in contact in actual usage, without an appreciable change in appearance or other important properties.

**Eased Edge:** Some manufacturers add this slightly beveled edge to both the length and end joints of their hardwood planks. This helps hide minor irregularities, including uneven plank heights. Also called “micro-beveled edge.”

**Edge Gaps:** Distance to the wall, which has to be observed when laying hardwood flooring. The so-called elasticity joint ensures that the floor can contract or extract when climatic changes occur. The distance to the wall should be minimum 8 mm which should also be observed when heating pipes, door frames, or pillars etc. are involved.

**Edge Type:** Refers to the edge of the sides of the strips or planks. Square edge has squared edges. Beveled, eased, micro beveled and micro beveled edges have a “v”-shaped groove which help to hide imperfections in the subfloor as well as slight differences in plank thicknesses.

**Emission Classification:** A term, which is very often used in product information. E1 means that the formaldehyde emission limit decreed by law of 0.1 ppm (= 0.12 mg/m3 air) is observed.

**Engineered:** One of the three common types of hardwood floor (the others are Solid and Longstrip Plank). Generally made with 2, 3, or 5 thin sheets or plies of wood, laminated together to form a single plank. Most can be nailed, stapled or glued down, or floated over a variety of subfloors, including some existing flooring.

**Expansion:** Changes in dimension due to swelling and contracting of the flooring as a result of moisture.

**Expansion Gap:** Area of perimeter left to account for expansion.

**Expansion Spacing:** The amount of space left at the baseboard to allow for expansion.
**Equilibrium Moisture Content (EMC):** The moisture content at which wood neither gains nor loses moisture when surrounded by air at a given relative humidity and temperature.

**Face Nail:** Refers to a nailing technique that secures flooring to the sub-flooring by using nails perpendicular to the surface of the floor.

**Fiberboard:** A broad generic term inclusive of sheet materials of widely varying densities manufactured of refined or partially refined wood or other vegetable fibers. Bonding agents and other materials may be added to increase strength, resistance to moisture, fire or decay, or to improve some other property.

**Fiber Saturation Point:** The stage in drying or wetting wood at which the cell walls are saturated with water and the cell cavities are free from water. It's usually taken as approximately 30 percent moisture content, based on over-dry weight.

**Finish:** Refers to the wax based or urethane coating over hardwood flooring.

**Finish in Place:** The term given to unfinished hardwood floors that are installed onsite, sanded and finished with an application of 2 to 3 coats of urethane that is brushed or mopped on. May be screened and recoated to rejuvenate the finish and revitalize the floor's natural beauty.

**Floating Floor Installation:** With this method of installation, hardwood floors are not mechanically fastened to any part of the subfloor. Instead, a thin pad is placed between the wood and the subfloor and a recommended wood glue is applied in the tongue and groove of each plank. This technique protects against moisture, reduces noise, feels softer and provides for some additional "R" value. Some Engineered floors and all Longstrip floors can be floated.

**Gloss Level:** Refers to the reflection from the finish. Standard gloss levels are satin or matte, semi-gloss and high gloss.

**Glue Down:** The process in which hardwood floor is adhered to a subfloor using a recommended mastic or adhesive, spread on with the proper sized trowel. Engineered wood floors and parquets are typically glued down, while solid strip and plank floors are nailed or stapled.

**Glueless Click-Lock:** Refers to a very easy do-it-yourself installation of engineered hardwood flooring. No glue is required to install the floor because everything “clicks” and “locks” into place.

**Grade:** Refers to the appearance of wood used to create the flooring, usually based on the number of visible knots and mineral streaks.

**Grain:** Refers to the alignment of the fibers in the wood, which designates the pattern seen on the flooring.

**Graining:** Each species of wood has its own unique texture, color and graining, determined by the way it was cut.

**Hand Scraped Hardwood:** Historically, floors were hand scraped on site to make the floors flat. Today’s hand scraping is usually done at the factory to give the floor an antique or vintage look. A truly hand scraped floor will be unique – no two hand scraped floors will look the same.

**Hand Sculpted Hardwood:** Similar to hand scraped hardwood, but a less distressed result.
**Hardness**: That property of the wood species or dried film of finishing material that causes it to withstand denting or being marked when pressure is exerted on its surface by an outside object or force.

**Hardwood**: Generally, one of the botanical groups of deciduous trees that have broad leaves, in contrast to the conifers or softwoods. The term has no reference to the actual hardness of the wood.

**Heartwood**: The wood extending from the pith to the sapwood, the cells of which no longer participate in the life processes of a tree. It is usually darker than sapwood.

**High-Density Fiberboard (HDF)**: A type of core board used to make engineered hardwood. It provides more dimensional stability than plywood. It is made by compressing fibers of wood chips with an adhesive or binder at a high temperature.

**Humidity**: The amount of water vapor in the air.

**Hygrometer**: Device used to measure relative humidity.

**Impact Resistance**: The ability of a flooring material to resist fracture or damage from a falling object is termed as its impact resistance.

**Installation Methods**: Refers to the methods used to install hardwood flooring. Options include: nail down, glue down, staple down, and floating.

**Janka Hardness Test**: The standard test for determining a wood’s hardness rating in which the force required to embed a .444 inch steel ball to half its diameter in a piece of wood is measured. The higher the number, the harder the wood. Only used as a general guideline.

**Knot**: The round, harder, typically darker cross section of a piece of wood where a branch once joined the tree trunk.

**Laquer**: A varnish that dries by solvent evaporation.

**Longstrip Plank**: One of the three common types of hardwood floor (the others are Solid and Engineered). Similar to Engineered floors in that multiple layers or plies are glued together on top of a center core that is typically a softer wood material that is also used to make the tongue and groove. The result is a board that appears to be 3 rows wide and several planks long. Comes in a wide variety of domestic and exotic hardwood species. Easy to replace if damaged.

**Manufacturing Defects**: Includes all defects or blemishes that are produced in manufacturing, such as chipped grain, torn grain, skips in dressing, hit-and-miss (a series of surfaced areas with skips between them), variation in machining, machine burn, and mismatching.

**Medium-Density Fiberboard (MDF)**: Engineered wood product made by breaking down hardwood or softwood residuals into wood fibers, often in a defibrator, combining it with wax and a resin binder, and forming panels by applying high temperature and pressure. MDF is generally denser than plywood.

**Mineral Streak**: Mineral matter left in wood by sap, usually from injury during growth.
**Moisture Content:** The amount of moisture in wood. Wood is hygroscopic, meaning it gains or loses moisture until it is in equilibrium with the humidity and temperature of the air. This is why it is important for wood flooring to acclimate before it is installed.

**Moisture Cured Urethane:** A chemical similar to solvent-based urethanes, but requires humidity (moisture) to cure. Extremely difficult to apply, has a strong odor and is best left to the professional.

**Nail Down:** Nailing cleats are used with a wood flooring nailer and a mallet to attach hardwood flooring to a subfloor. This method of installation is typically used with the 3/4" solid products, though adapters exist for thinner floors.

**Natural Stain:** A clear finish that does not color the wood, but instead allows for the natural look of the wood to show.

**NWFA:** An acronym for the National Wood Flooring Association.

**Oil-modified Urethane:** Most common finish for wood flooring, available in various gloss levels.

**Oil-Treated Finish:** An oil based finish for hardwood flooring.

**On-Grade:** At ground level.

**Particleboard:** A building material manufactured from with wood fragments, such as chips or shavings, mechanically pressed into a sheet and bonded together with resin.

**Paste Wax:** Used to finish floors before the arrival of lacquers and varnishes. Since it never dries to a hard finish, it does not provide great damage protection, but can be used as polish to keep floors shiny and reduce the appearance of scratches. It will make the surface more slippery and may help prevent further scratches as objects can slide across the surface.

**Penetrating Oil Sealers:** These oil based sealers are spread across the floor, allowing them to penetrate the surface, offering a stain and a finish to protect it. Excess is removed with a sponge or cloth. They are usually comprised of tung or linseed oil.

**Penetrating Sealers:** As with penetrating oil sealers, without the use of oil.

**Penetrating-Seal-Treated Finish:** A finish that’s been treated with a sealer, applied by penetration into the floor.

**Photo Sensitivity:** Refers to the likelihood a wood floor's color will change as it is exposed to light. The scale we use is based on a 1 to 10 scale. 1 means the floor is not very light sensitive, 10 meaning the floor is very sensitive to light.

**Pilot Hole:** A small hole drilled into a material to assist in making the larger hole the right width.

**Pin Knot:** A knot no larger than ½ inch in diameter.

**Plies:** Thin sheets of wood bonded together with adhesive to form plywood.

**Plugs:** Dowels designed to mimic the Colonial “plugged” look.

**Plywood:** Wooden material made by pressing together plies, or thin sheets of wood.
Polyurethane: A clear, durable finish applied as a wear layer over hardwood floor.

Pre-Finished Wood: Hardwood flooring that comes sanded, stained and finished at the manufacturing plant, ready for installation in your home. These products typically provide a harder, better-protected surface because several coats of urethane are applied and UV dried. Offers a wider variety of wood species and saves hours of labor and cleanup. May be screened and recoated to rejuvenate the finish and revitalize the floor’s natural beauty.

Random Length (RL): Some flooring is sold as random length, meaning that the boards are not all the same length. The shortest length and longest length are noted, and all other planks in the box are different lengths that fall between those two numbers. For example, a manufacturer may describe their flooring as random length 12"-48".

Random Width (RW): Some flooring is sold as random width, meaning the boards are not all the same width. Typically, the each box of random width flooring is comprised of boards of 3 or more different widths. This creates a more traditional looking floor. Historically, floors were laid with random width boards so as not to waste any of the wood from the log. This vintage look is easily re-created today with random width boards.

Reclaimed Wood: Wood that is salvaged from an old building or structure or from a lake or river and refinished for use in another project.

Refinish: Refers to the practice of sanding down a wood floor and finishing it again, to reduce the appearance of damage, wear, and tear. A solid wood floor can be sanded and refinished many times. However, an engineered wood floor can only be sanded and refinished if the veneer is 2mm or thicker.

Relative Humidity: Ratio of the amount of water vapor present in the air to that which the air would hold at saturation at the same temperature. It is usually considered on the basis of the weight of the vapor, but for accuracy should be considered on the basis of vapor pressures.

Sapwood: The wood near the outside of a tree. It is usually lighter in color than heartwood.

Scratch Resistance: Allows an insight how the laminate flooring will behave, when scratched. This is a very important quality criterion, which is derived from scratching the flooring with a diamond tipped instrument.

Select: A quality of flooring that has some small knots but very little dark graining.

Shellac: A resin substance secreted by female lac bugs. Used to form a cocoon, the resin comes from India and Thailand. Processed as dry flakes, it can be added to denatured alcohol to create a liquid. This liquid is then used as a food glaze or floor finish. It’s a natural option which is highly resistant to stain and odor. It is a high gloss finish.

Small Knot: A knot in the wood that is not over 1/2" in diameter.

Solid: One of the three common types of hardwood floor (the others are Engineered and Longstrip Plank). One solid piece of wood that has tongue and groove sides. Comes unfinished or pre-finished. Sensitive to moisture.

Solvent-Based Urethane Oil: Used as part of the chemical composition of a polyurethane finish.
**Sound Knot:** A knot with an exposed section which appears elongated, as a result of a cut parallel to its long axis.

**Species:** Refers to the type of wood, or the kind of tree it was harvested from. Many species are available such as oak, pine, cherry, and hazelnut.

**Spline:** Also known as “slip tongues” these are used to reverse or change the direction when installing tongue and groove hardwood flooring.

**Square Edge:** When the edges of all hardwood boards meet squarely to create a uniform, smooth surface that blends the floor together from strip to strip or plank to plank.

**Stain:** Coloration of flooring other than its natural color.

**Stain Resistance:** The degree to which a material resists permanent discoloration from exposure to household items, most notably liquids, is termed as stain resistance.

**Stapled Down:** A method of hardwood installation in which staples are used to attach the wood to the subfloor. A pneumatic gun is often used.

**Strip:** The “classic” hardwood floor with narrower board widths. Most common species are red oak, white oak, maple, cherry, white ash, hickory and pecan.

**Subfloor:** A support surface below the flooring, such as plywood or concrete.

**Surface-Sealed Finish:** A finish which also serves to seal the wood to protect it, applied directly to the surface without penetration.

**Tongue and Groove:** The joining of two hardwood boards, one having a tongue on its edge that fits into the groove in the edge of the other.

**Un-Finished Wood Floor:** Not pre-finished in a factory. Allows you to customize your floor by sanding, staining/finishing it on site. Also see “Finish in Place.”

**Urethane:** A chemical solvent used to seal and finish wood floors.

**UV Cured:** Hardwood finishes cured in a factory with Ultra Violet lights versus heat.

**Warping:** Any distortion of a piece of flooring from its true plane that may occur in seasoning.

**Water-Based Urethane:** A polyurethane finish that includes water in its chemical composition, dries clear and is non-yellowing.

**#1 Common:** A quality of oak that has some knots and some dark graining.

**#2 Common:** A quality of oak that has even more knots and dark graining.