PREPARE TO BE FLOORED.

WOOD FLOORING GENERAL PRODUCT HANDLING & INSTALLATION

QUALITY ASSURANCE

- **Installer/Builder Qualifications:** An experienced installer/builder who has completed interior and exterior projects similar in material, design and extent indicated for the project, whose work has resulted in interior and exterior installations of similar products with a record of successful in-service performance.
- **Customer Installation Qualifications:** Leave yourself ample time to adequately plan each step of your project. Proper planning and correct knowledge will yield the best results possible. If you encounter an issue regarding the installation, always consult with an installation professional or contact the National Wood Flooring Association (NWFA) at 1-800-422-4556 or www.nwfa.org.
- **Installation Qualifications:** Installation will require either architectural plans or on-site planning to determine the actual method(s) of installation to meet local building codes. Such planning and details of all projects are the responsibility of the customer or customers' agent.
- **Complexity of Projects:** Complexity of projects will vary greatly. Consult a professional installer for more information or contact the National Wood Flooring Association (NWFA) at 1-800-422-4556 or www.nwfa.org.

STORAGE AND HANDLING

- Do not install wood products until they have had adequate time to adjust to the relative humidity of the new environment (within 2-1/2% Moisture Content).
- Protect wood products from exposure to moisture and like conditions. Do not deliver wood products until after concrete, masonry, plaster, ceramic tile and similar wet work is completely cured and dried.
- Store wood products in a dry, warm, well-ventilated, weather-tight location.
- Move wood products into spaces where they will be installed at least seven to ten days before installation.

PROJECT CONDITIONS

- Conditioning: Maintain an ambient temperature between 65 and 75 degrees Fahrenheit in spaces to receive wood products for at least seven days before installation, during installation, and for at least seven days after installation. After post-installation period, maintain relative humidity and ambient temperature planned for building occupants.
- Do not install wood products until it has adjusted to the relative humidity and temperature of the space where it is to be installed.
- Moisture contents between flooring/paneling and subflooring should vary no more than 2-1/2% of one another before installation.

OWNER/INSTALLER/AGENT RESPONSIBILITY

- Reclaimed wood & stone products are a product of nature; and therefore, not perfect.
- Prior to installation of any product, the owner/installer/agent must determine that the job-site environment and the sub-surfaces involved meet or exceed all applicable standards.
- The manufacturer declines any responsibility for job failure from or associated with sub-surface, subflooring or job-site environment deficiencies.
- Use of stain, filler or putty stick for touch-up during installation should be accepted as normal procedure.
- Use of appropriate products for correcting subfloor voids should be accepted as normal industry practice.

INSTALLATION TIPS & IDEAS

- Wood flooring is one of the last jobs of any construction project.
- Make sure to have an appropriate, sturdy, stable subfloor previous to installing your new flooring at least 5/8 inch thick.
- All texturing and primer coats should be completed previous to installing wood floors.

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- It is recommended that any flooring planks exceeding 3 inches in width be both glued and nailed to the subfloor.
- If you are secret nailing a wide wood plank floor (i.e. where the width of the board is greater than five times the thickness of the board) consider additional fixing by nailing through the face of the plank, plugging the hole with a plug made from timber. This will give a smooth finish if you do not wish to see the nails.
- It is a wise precaution to treat all battens and existing timber joists against infestation and rot before laying your new floor.
- Remember that all wood floors will move between seasonal extremes; expanding in the summer months and shrinking in the winter months when the heating is on. This is quite normal.
- Always leave an expansion gap around the perimeter of the room. This should be 1/2 inch for small rooms and 1/2 to 3/4 inch for larger rooms. In most cases the gap will be covered by the skirting board.
- When flooring is installed it may be necessary to do a light sanding.
- Always allow flooring to acclimate (7-10 days minimum) previous to installation. Installation in summer months requires the flooring stacks to acclimate prior to installation in an air-conditioned, humidity controlled space. Do not expose flooring stacks to high humidity for at least one week before installation. Remove any wrapping from flooring for acclimation
- If laying floor onto concrete, lay down a vapor retarder such as 6 mil polyethylene film over the concrete to create a vapor barrier.
- Although flooring may start tight initially after installation, as a natural product, it will continue to absorb and release moisture. Seasonally, this natural process may cause some small cracks to develop between boards.
- If your tongue and groove floor isn't seating itself properly, use a piece of scrap flooring to protect the actual floor when tapping them together.
- Make sure the moisture content of framing members in a structure ranges between or is less than 12% to 14% (or within 2 1/2% relative humidity of the new product) before delivery.
- It is recommended to place 15 lb. asphalt saturated felt paper or a building paper with an equivalent permanence over the subfloor previous to installation (unless using a mastic acting as a partial vapor barrier in conjunction with other expectable vapor barrier options).
- Due to the varying patinas, wood grain patterns and other distinguishing characteristics that are prevalent in each individual flooring plank, make sure to lay out the flooring in a random pattern.
- On adjacent rows, stagger end joints at least 12" from each other when laying a floor. Avoid "H" joints, where two end joints parallel each other, separated by one plank.
- Try to keep as much original surface as possible.
- Test finishes, stains and wood fillers on hidden or unused pieces of wood making sure to allow full drying and a finishing coat to insure desired results.
- Using finishes containing ultraviolet inhibitor will help to prevent color changes in wood. If you wish for your wood project to continue to amber with time, it is not recommended using ultraviolet inhibitor.
- Radiant heat should never exceed 85 degrees at a wood floors surface.
- When laying a random width floor you should lay all planks in a random order. **DO NOT LAY RANDOM WIDTH FLOORING IN A PATTERN UNLESS YOU HAVE PLANNED FOR IT AHEAD OF TIME. YOU MAY END UP RUNNING SHORT ON A PARTICULAR WIDTH PLANK WITHOUT PROPER ADVANCED PLANNING.**

RECOMMENDED TOOLS & APPLICABLE MATH

INSTALLATION:

- Tape Measure or Folding Rule
- Pencil
- Broom
- Circular Saw, Jig Saw or Table Saw

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- Drill with 1/16" Drill Bit
- Chalk Line & Chalk
- Flooring Cleat Nailer or Pneumatic Nailer or Manual Floor Nailer
- Hammer
- 6-8d Finishing Nails – 1 ½" – 2" Length with 18 Gauge Minimum
- Rubber Mallet
- Moisture Meter (quality moisture meter with manufacturer's relevant species calibration figures)
- Putty Knife
- Nail Punches (countersinks)
- Glue/Adhesive

SANDING:

- Drum Sander
- Orbital Hand Sander
- Large Pad Orbital Sander (A Must for Rustic Grade Floors)
- Rags (Dusting/Cleaning, preferably lint free)

FINISHING:

- Tack Rags
- Recommended Hardwood Flooring Cleaner
- Sand Paper
- Sanders (Drum and hand)
- Finishing Product (such as polyurethane)
- Paintbrush or other applicator
- Always follow manufacturers' directions and guidelines for quantities of finish needed and follow their recommended procedures to achieve best results.

APPLICABLE MATH:

- All flooring is measured in square feet. This is the amount of lumber required to cover one square foot of area without any consideration for the thickness of the wood.
    - [Square Feet = width x length of floor/flat surface]
    - Example: A 17' x 19'6" floor or surface is 331½ square feet (17'x19.5')
- Please refer to the Workshop Math Guide for more information.

SURFACE/SITE PREPARATION:

MOISTURE:

- Check the job site conditions before delivery and make sure the flooring will not be exposed to extended periods of high humidity or moisture.
- The ground surface grade or slope should direct water away from the building.
- Basements and crawl spaces must be dry and well ventilated. In joist construction with no basement, outside cross ventilation through vents or other openings on the foundation walls must be provided with no dead air areas.
- The building should be closed in with outside windows and doors in place. All concrete, masonry, sheet rock and framing members, etc. should be thoroughly dry before flooring is delivered to the job site.
- In warm months the building needs to be well ventilated. During the winter months, heating should be maintained near the occupancy levels at least 5 to 7 days before the flooring is delivered and until sanding and finishing are complete.
- Because materials used to provide energy efficient structures trap moisture in the residence or commercial space, it may be necessary to delay delivery and installation of flooring to allow the

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excess moisture to evaporate that was trapped during construction. The average moisture content of framing members and subflooring should be below 12%-14% (or within 2 1/2% relative humidity of the product) before delivery of the flooring. Moisture contents above 12%-14% can cause moisture related problems.

- When job site conditions are appropriate, have the flooring delivered and broken up into small lots and stored in the rooms where it will be installed. Allow 7 to 10 days or more for the flooring to become acclimated to job site conditions.
- If flooring is packaged, open or remove packaging for acclimation. Do not cover the flooring with any covering that may reduce air flow and inhibit acclimation. If covering the flooring is necessary, use cloth tarps, construction grade paper or cardboard.
- From the time flooring is delivered and until occupancy, temperature and humidity should be maintained at or near occupancy levels. After occupancy, continue to control the environment. Extended times (more than 1 month) without HVAC controls can promote elevated moisture conditions which can adversely affect flooring.
- Protect flooring from excessive heat. Flooring installed over heating plants or non-insulated heating ducts may develop cracks unless protected from the source of heat. Use a double layer of 15lb, or a single layer of 30lb asphalt felt/building paper, or 1/2" standard insulation board between joists under the flooring in these areas. Insulation used over heating plants should be non-flammable.

SOURCES OF MOISTURE:

- Most homes with problems of excess moisture have wet basements or crawl spaces. Some researchers have estimated that as much as ten times the normal moisture production in a house can be contributed by a wet crawl space.
- To keep basements and crawl spaces dry, make sure the lot is graded correctly and that the soil in contact with the foundation is kept dry. Every crawl space must have a ground cover sheet or membrane, usually of 6mil thick polyethylene that is not susceptible to damage by fungi, which covers all of the exposed soil.
- Grade and smooth the ground before installing the ground cover.
- The edges of the ground cover should turn up onto the walls of the crawl space at least 4 to 6 inches. Where more than one piece of the polyethylene is needed, lap the edges 4 to 6 inches. Sealing is not necessary.
- Hold the polyethylene ground cover in place against the wall with sand or bricks.
- Crawl spaces should be inspected regularly (after every heavy rain, for example) to ensure water does not collect on top of the ground cover.

TESTING FOR MOISTURE CONTENT:

- Use a quality moisture meter to measure the moisture content of both the subfloor and the flooring. Subfloors must not exceed 12% moisture content. The difference between subfloor and flooring cannot exceed 2-1/2%
- If subfloors exceed 12% moisture, an effort needs to be made to locate and eliminate the source of moisture before further installation. A moisture barrier (StrateStuff Safeguard is recommended; 6 mil polyethylene film minimum) may be required in addition to the 15 lbs. asphalt felt. Asphalt felt is not considered a moisture barrier, rather a vapor retarder.

INSTALLATIONS OVER A CONCRETE SLAB:

- Flooring can be installed successfully over a slab that is on-grade or above grade. Below-grade installations are not recommended.
- The slab must be constructed properly (dry and flat with a trowel finish). Look for puddles and moisture spots on the surface of the slab.
- New concrete is heavy with moisture, an inherent enemy of wood. Proper on-grade slab construction requires a vapor retarder such a 6mil polyethylene film between the gravel fill and the

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slab. While this prevents moisture entry through the slab, this membrane also retards curing of the slab. Always test for dryness, even if the slab has been in place for over two years.

- Slabs younger than 60-days are generally too wet for flooring installation and need longer curing times to be ready for flooring.

TESTING CONCRETE FOR EXCESSIVE MOISTURE:

- NOTE: Make tests in several areas of each room on both old and new slabs. When tests indicate too much moisture in the slab, do not install hardwood floors. For a moist slab, wait until it dries naturally, or accelerate drying with heat and ventilation, then test again.
- **Calcium Chloride Test**. Place one quarter of a teaspoon of dry (anhydrous) Calcium Chloride crystals inside a 3-inch diameter putty ring on the slab and cover with a glass so the crystals are completely sealed off from any air. If the crystals dissolve within 12 hours the slab has too high of a moisture content for flooring installation.

CONCRETE SLAB PREPARATION:

- The slab must be sound and flat.
- To prepare the slab, grind off any high spots, fill low spots. Clean up grease, oil and other contaminants, and sweep clean.
- If the slab is "mealy" and excessively dusty, it may not be of proper strength and stability.

CONCRETE SLAB CONSTRUCTION:

- Plank flooring and related products should be protected from moisture migration through a slab. Proper on grade or above grade construction requires that a vapor retarder be in place beneath the slab. ALWAYS perform appropriate moisture tests to determine suitability of the slab before delivering wood products.
- Install a 4-inch base course of washed gravel or crushed rock under the slab. Place a vapor retarder such a 6-mol polyethylene film between the base course and the slab.
- Also, a vapor retarder equivalent to 4- or 6-mil polyethylene should ALWAYS be installed on top of the slab to further protect the wood products.

WOOD FLOORING OVER A RADIANT HEATED CONCRETE SLABS

- Flooring is an insulator and may require higher water temperatures for a radiant heat system. Also, an outside thermostat is recommended to anticipate rapid temperature changes. Boiler water temperature must be controlled to keep it to a maximum of 125 degrees. This will limit the temperature of the slab surface to about 85 degrees, an acceptable level for most mastics adhesives.
- The flooring is installed as in any other slab project, except do not fasten plywood to concrete with either nails or power-actuated fasteners. Turn on the heating system 4-5 days prior to the delivery of the flooring to the job. The heat will drive extra or excess moisture out of the slab. Note: Check mastic manufacturer's specifications for suitability of use over radiant heat.
- Radiant heat should never exceed 85 degrees at a wood floors surface.

WOOD FLOORING OVER RADIANT HEATED FLOOR JOIST/WOOD SUBFLOOR (ABOVE GRADE)

- Flooring is an insulator and may require higher water temperatures for a radiant heat system. Also an outside thermostat is recommended to anticipate raped temperature changes. Boiler water temperature must be controlled to keep it to a maximum of 125 degrees. This will limit the temperature of the slab surface to about 85 degrees, an expectable level for most mastics.
- Radiant heat should never exceed 85 degrees at a wood floors surface.

A VAPOR RETARDER IS NECESSARY:

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- The term "vapor barrier" has been commonly used to indicate materials which impede moisture movement. Most of these materials permit the passage of small amounts of moisture; therefore the term "vapor barrier" is not totally accurate and "vapor retarder" is more appropriate).
- The MOST frequent cause of moisture problems in a new home is moisture trapped within the structure during construction and/or a continuing source of excess moisture from the basement, crawl space, or slab. These moisture sources can cause problems with wood flooring. A properly placed vapor retarder can prevent or reduce problem moisture from entering the home.

LAYING HARDWOOD FLOORING OVER A CONCRETE SUBFLOOR:

- Subfloors must be fully dried out with a maximum moisture content of 5% and must contain an effective damp proof membrane (refer to vapor barriers above).
- For a *"belt and braces"* job, lay building paper on the concrete as an additional vapor barrier.
- Battens should be screwed and counter sunk onto the concrete.
- Centers should measure no more than 12 inches.
- Minimum thickness of battens should be 1 inch (3/4 inch is possible if the nailing is driven at 30 degrees). Normal batten width is 1 ¾ inch.
- Thermal insulation is improved by laying insulation between battens.

LAYING HARDWOOD FLOORING OVER GROUND FLOOR JOISTS:

- Reclaimed wood flooring should never be nailed directly to joists over a ventilated ground floor void. Over time, flooring will absorb airborne moisture from the ventilation and will swell.
- It is recommend that plywood of at least 5/8 inch is laid first followed by a sheet vapor barrier (not polyethylene) and then your reclaimed antique hardwood floor.
- If laying flooring parallel with floor joists add either an additional layer of minimum ½" (15/32") CDX plywood underlayment to the existing subfloor or brace between two joists with 2"x 6" or wider boards every 24" minimum. Again, make sure the subfloor is within 2 1/2% moisture content of the floor before installing.
- For a new home with wood joist construction after the roof, windows and doors are installed; place a polyethylene film over the crawl space earth as soon as possible. Please refer to the Moisture and Sources of Moisture Sections on the previous pages.
- Cover the earth 100%, overlap sheets, turn up at foundation walls and weight down to avoid dislocation.

THE SUBFLOOR:

Almost all cracks and squeaks can be directly traced to an inadequate subfloor. A floor is only as sturdy as its base, or subfloor. A plank subfloor should be at least 6" wide boards installed diagonally to the joists. When installing a plywood subfloor, 3/4" exterior grade is recommended if your finished flooring is 3/4" thick. For 1/2" flooring, an additional layer of 1/2" plywood on top of the 3/4" subfloor is recommended. Fastening the subfloor to the joists with screws as opposed to nails is highly recommended for long term life of the subfloor and, subsequently, the floor on top. If wood flooring is to be installed over a concrete subfloor, check for wetness by taping down a square yard of plastic for 72 hours to see if condensation forms or by conducting a Calcium Chloride Test (mentioned previously). Once dry, you can install a joist system or a grid of pressure-treated lumber (screed system) over the concrete slab. Align the edges with the joists for strength and stagger adjacent rows four feet. You can cut the plywood into 4' squares to create a smaller area over which each panel can move. Nail every six inches along each joist with 8D or larger nails. You can use adhesive before nailing to further reduce movement and possible squeaks. A combination of gluing flooring to the subfloor followed by nailing is recommended for any floor plank exceeding 3 inches in width. If a sleeper (or screed) system is installed over a concrete slab, dry pressure treated 2x4s are preferred. These should be 18" to 4' in length and staggered on centers with an air gap on all overlap joints. Lay them perpendicular to the direction of the flooring and secure them with T-nails staggered side-to-side 4" to 6" apart. Leave expansion joints of at least 1/8 inch between each panel, section, or board of the subfloor. Research has shown that two or three years after a floor is installed, the subfloor will measure 2-3% higher moisture content than the floor itself. This is due to the subfloor having less access to heating and air conditioning than the floor, and will expand slightly from the additional moisture. Use a 6' to 10'

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straightedge to check the subfloor for high and low areas. Sand any high spot so the subfloor is as flat as possible. After the subfloor has been deemed level, put down 30 pound felt paper carefully; butt-edged, not overlapped. Felt paper reduces the chance of squeaks and helps circulation around the floorboards.

STEP BY STEP NAIL DOWN INSTALLATION:
(All ½", ¾" and thicker flooring installation)

Preparing Doorways and Walls
Undercut or notch-out door casings 1/16" higher than the thickness of the flooring being installed to avoid difficult scribe cuts during installation. Also, remove existing base and shoe mouldings as well as doorway thresholds; mouldings can be replaced after completing installation.

Establishing A Start Point
An exterior wall is usually the straightest and best reference line to start an installation. The direction of the flooring should be at right angles to the floor joists whenever possible; note that most installers require a waiver for guarantees if the floor is installed parallel with joists. Establish a starting line by leaving a minimum 1/2" expansion gap around all vertical obstructions (1/2" for smaller rooms, 1/2" to 3/4" for larger rooms). In large spans, more spacing may be needed, depending on geographical area, interior climate control, and time of year. Measure this distance from the starting wall (in at least two places) close to the starting wall's opposite corners. Mark these points and snap a working chalk line parallel to the starting wall, allowing the required expansion space between the starting wall and the edge of the first row of flooring.

Installing The Floor
On the first row of flooring use 6d or 8d flooring nails to top nail the surface of flooring and countersink (pre-drilling nail holes will prevent splits). Nails need to hit joists whenever possible. To ensure the flooring is properly aligned, make sure the flooring along the working chalk line is straight. Glue and nail down wide planks, using a combination of glue and nail down installation to accomplish. In this situation, you will use urethane based mastic adhesive (felt paper is not always possible in this situation. Mastic can act as a substitute for felt paper) Again, allowing for a 1/2" minimum expansion gap is critical. Wood expands and contracts with changes in humidity. Wood will buckle and/or cup if an adequate expansion space is not provided. Always allow for expansion when making end or side cuts around vertical objects such as columns or cabinetry.

CAUTION: It is extremely important to use an appropriate nailer and fasteners for installation. We recommend Powernail® manual Model 45 T&G Powernailer and relevant powercleat nails. The Powernail® pneumatic Model 445 Powernailer or equivalent may also be used (www.powernail.com).

Make sure to properly space nails every 8" – 10" along the length of the board with a minimum of 2 fasteners per piece 2" – 3" from each end. If the face width of the flooring is 5" or wider, properly space nails every 4" – 6" along the length of the board.

Top and/or hand nail enough rows to allow adequate spacing from the wall and continue installation with a floor-nailing machine. Continue across the room until finished. Remember to provide adequate spacing for expansion gap at the end also. Once completed, install mouldings and trim. Thoroughly clean, sweep, and vacuum the floor after installation and before further use. If floor is to be covered, use cardboard, cloth tarps, rosin paper or any other material that does not inhibit air flow. Do not cover the flooring with plastic.

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STEP BY STEP GLUE DOWN INSTALLATION:
(All ½" through ¾" flooring installations only)

Apply recommended urethane adhesive with a ¼" x 1/8" x ¼" square –notch trowel (confirm this with the adhesive manufacturer). Always follow the manufacturer's recommendations for the application of the adhesive. DO NOT USE WATER-BASED ADHESIVE WITH THE HARDWOOD FLOORING PRODUCT. The first row must be installed with the edge of the groove lined up against the chalk line and the tongue facing the starting wall. Firmly seat the first row in the adhesive, as additional rows will be pushed back to this original row. To maintain a consistent expansion gap throughout the installation, cut several boards into small pieces to use as spacers between the flooring boards and wall or other object. When installing boards, avoid sliding materials through the adhesive as they are placed into position. Engage the end first, as close as possible to side tongue-and-groove, and fit boards together. Check for a tight fit between all edges and ends of each board. It is important to occasionally lift a board to check for adequate adhesive transfer. Stagger the ends of boards at least 12" in adjacent rows, creating a stair-step pattern. Avoid H Joints wherever possible. 3-M Blue Tape can be used effectively to hold the planks tightly together and reduce minor shifting of the floor boards during installation. **Remove all adhesive from the surface of the flooring with urethane adhesive remover or mineral spirits as you go.** All adhesive must be removed from flooring surfaces prior to applying 3-M Blue Tape with in 24 hours. Allowing for ½" minimum expansion gap around all vertical obstructions is critical. Wood expands and contracts with changes in humidity. Wood will buckle and/or cup if an adequate expansion space is not provided. Always allow for expansion when making end or side cuts around vertical objects. Continue across the room until finished. Remember to provide adequate spacing for expansion gap. Once completed, install moulding and trim. Thoroughly clean, sweep, and vacuum installed floor before use. If floor is to be covered, use a breathable material such as cardboard or rosin paper. Do not cover with plastic.

PREPARING THE FLOOR FOR SANDING:

- Sweep the floor clean immediately before sanding.
- Inspect the floor carefully – tighten any loose boards by face nailing with flooring cleats or 6d to 8d flooring nails, preferably into the joists
- Look for any protruding nail heads or nails not driven down below the wood's surface. Pull them out or counter-sink them with a nail set and replace any damaged or defective flooring boards (sanding exposed nails can produce sparks creating a fire hazard in the sander dust bag).

SANDING A NEW STRIP OR PLANK FLOOR:

- Load the drum sander with a coarse grit to medium grit sandpaper. Place the machine along the right hand wall (unless making and angle pass), with about two-thirds of the length of the floor in front. Sand in a consistent even manner.
- Each piece of wood sands differently depending on its grain type (plain or quartered) making a completely flat surface virtually impossible.
- Since a near-occupied environment was established prior to installation, it is recommended that unfinished flooring be allowed to acclimate 1 to 3 weeks before proceeding with sanding and finishing operations. This acclimation allows the flooring to react and move as the environment dictates so that slight cracks, slightly raised edges, etc., can be sanded, filled, and finished to give the best appearance. Longer periods of exposure to job site abuse and moisture can result in future problems.
- All Rustic Grades of flooring need to be sanded lightly using a large pad orbital sander (NOT A DRUM SANDER) this will produce a floor that retains the rustic characteristics intended in the manufacturing process (use only a 100-220 grit sandpaper when finish sanding, anything coarser will damage floor surface). Drum sanders will take away too much material from the floors surface resulting in a floor that is a lot less rustic and much smoother.

STAINING/FINISHING WOOD FLOORING:

- Always follow the manufacturers recommended installation instructions for all products used.
- Once installed, let newly installed floor acclimate for 1-3 weeks before sanding and finishing.

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- Before sanding make sure all nails are counter-sunk. Sanding exposed nails can produce sparks and are a fire hazard.
- Choose the appropriate stain for your flooring, using test samples before applying the stain to the floor.
- Always experiment with finishes on a cut-off or on a section that will not be seen (all woods take various products differently).
- Clean the flooring surface thoroughly and immediately before beginning the staining process.
- Apply the stain with a brush, cloth or sponge using soft pressure on the surface, staining lightly and evenly.
- Make sure to apply stain to all areas and wipe off excess as you go.
- You may want to apply a few coats of stain (allowing drying time between each coat) depending on how well the stain takes and desired results.
- After the stain fully dries and the desired look is achieved, apply finish coats to help keep your flooring protected.
- In high traffic areas such as hallways, entryways and kitchens, a minimum of four coats of finish are recommended

After finishing is completed, temperature and humidity should continue to be maintained at near occupancy levels.

FINISH:

- UV Oil - Our most popular finish. Developed and used in Europe for decades because of it natural clean appearance and ease of maintenance. This Green product has a medium build, excellent durability and can be refinished easily without sanding.
- Natural Oil - Clean and healthy. Hand applied and air dried natural oil penetrates deep into the wood, hardening and protecting from within while allowing the wood to breathe. Natural oil has very little build and can be refinished easily without sanding.
- Hardwax Oil - Traditional European looks. Hand applied and air dried hardwax oil penetrates deep into the wood, hardening and protecting from within as well as covering the surface with a protective matte wax. Hardwax oil has a medium build and can be refinished easily without sanding.
- Water Base - Natural with pale tones. Quality German water based finish that is hand applied and air dried. This finish option allows for low to no VOC's with a medium build. Our water base finish provides superior protection while retaining the natural color tones of the wood. Water based finish does not yellow over time like polyurethane.

CARE & MAINTENANCE:

- It is essential to keep your floors free from sand, dirt, water, food, grease, and any other liquids or abrasives that can damage the floor or finish. Periodical cleaning of floors using the correct brand of wood cleaner made especially for floors is very important (always follow the manufacturers recommended instructions).
- Do not use ammonia or oil-based polish, wax, abrasive cleaners, or furniture cleaners.
- Always install floor protectors under chairs furniture, or other items that may sit directly on your floor to help prevent scratches, scarring, and dents.
- Regularly, sweep, dust mop and/or vacuum to keep dirt, sand and grit from damaging the floor and finish.
- Wipe up all spills immediately with a soft, dry cloth.
- Avoid walking on floors with sharp, stiletto high heel shoes, golfing shoes or shoes with soles in need of repair.

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