

## MAINTENANCE

Columbia Engineered Hardwood Floors are very easily maintained. No wax, no mess. Use Columbia's Hardwood Floor Cleaner and specialty terry cloth flooring mop available from flooring retailers.

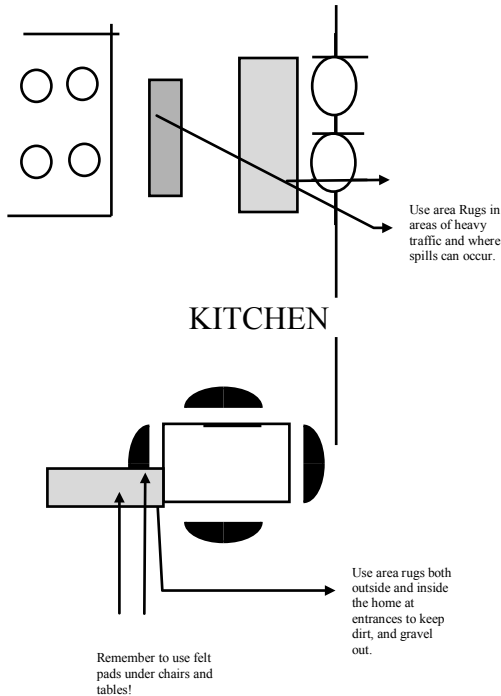
**STEP ONE:** Vacuum or sweep your floor to remove any particles that could scratch your floor.

**Warning:** Vacuums with a beater bar or power rotary brush head can damage a wood floor and never should be used.

**STEP TWO:** Apply the cleaner directly to the terry cloth flooring mop, **not** to the floor!

**STEP THREE:** Use a back and forth motion with the mop. When the terry cloth cover becomes soiled, simply replace it with a clean one. Cleaning the floor with a soiled cover could cause streaking. The covers are re-usable so simply throw the cover in the wash and dry it, as you would any towel.

## FLOOR CARE DIAGRAM



Available at your local retailer

13 easy steps to ensure satisfaction with your New Columbia Hardwood Floor

- Vacuum or sweep regularly.
- Remove spills promptly using Columbia Floor Cleaner and a clean white cloth.
- Use felt protectors under heavy pieces of furniture and chairs.
- Use protective mats at all exterior entrances. (Do not use black rubber back mats.)
- Spiked heels or shoes in need of repair can severely damage your floor.
- Never wet or damp mop your wood floors. Water can cause damage to wood flooring.
- Never use oil soaps, wax, liquid or other household products to clean your floor.
- Columbia Flooring recommends the Columbia Flooring Cleaner specifically made for our floors.
- The sun's UV rays can change the color of your floor. Rearrange furniture and rugs periodically so that your floor will age evenly.
- Keep animal nails trimmed.
- Protect your floor by using a dolly for moving furniture or appliances. Never slide or roll heavy furniture or appliances across the floor.
- Never use steam cleaners on your wood floors. This will force moisture into the wood and can cause damage to your flooring.
- Use Columbia Performance Molding.

### READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING

This engineered hardwood clic flooring contains a self-locking system which incorporates the world's finest engineered hardwoods manufactured and packaged with care to furnish a very versatile system for beautiful floors. You will want to plan your installation carefully. Columbia Engineered Hardwood Clic is manufactured in accordance with industry standards to be installed under normal living conditions. Failure to follow these instructions can cause problems.

Hardwood Flooring is a natural product. It will expand and contract with changes in the relative humidity of its environment. This is important to note because the floating installation of the product takes this into consideration. Not following these instructions can cause floor failure.

**IMPORTANT:** For a light commercial application, please go to [www.specifycolumbia.com](http://www.specifycolumbia.com) and register for your commercial warranty. The product must be maintained in accordance with Columbia Flooring's specifications for commercial installations. You must register in order to validate any warranty.

### Preparing the Site and Sub Floor

This engineered hardwood clic flooring product is installed using the floating system. The aligning and self-locking mechanism is activated when 2 pieces are lightly tapped into place. The instructions are detailed in this sheet. Engineered Hardwood Clic flooring can be installed, above, on, or below ground level. This product is not recommended for installation in full bathrooms due to the higher levels of moisture.

- Check the exterior of the home for possible moisture problems. Does the lot grade away from the home? Do the down spouts direct the rain water away? Are the sprinklers hitting the house?
- Is the sub floor dry?
- Is the sub floor flat to 3/16" in 10' and firm?
- For wood sub floors, it is recommended that you repair any loose areas or squeaks and sand down the high spots.
- For Concrete: fill low areas with a quality floor leveling compound that has filler rated of no less than 3,000 psi (pounds per square inch).
- The installation of an engineered wood floor requires the use of Columbia Flooring 3-in-1 Foam, Radiant heated floors cannot exceed 85°F or they may cause damage to this floor.

**WARNING!** Do not sand existing resilient tile, sheet flooring, backing, or felt linings. These products may contain asbestos fibers that are not readily identifiable. Inhalation of Asbestos dust can cause Asbestosis or other serious bodily harm. Check with local, state and federal laws for handling hazardous material before attempting the removal of these floors.

### WOOD DUST

Sawing, sanding or machining wood products can produce wood dust, which can cause a flammable or explosive hazard. Wood dust may cause lung, upper respiratory tract, and eye and skin irritation. Some wood species may cause dermatitis and/or allergic respiratory effects. The International Agency for Research on Cancer (IARC) has classified wood dust as a nasal carcinogen in humans. The National Toxicology Program (NTP) has also classified wood dust as a known human carcinogen.

- Avoid dust contact with ignition source.

# columbia

## FLOORING ORIGINALS™

### ENGINEERED HARDWOOD CLIC FLOORS Float Installation

**DO NOT OPEN THE PACKAGES UNTIL THE DAY OF INSTALLATION. THE INSTALLER HAS THE FINAL INSPECTION RESPONSIBILITY TO PULL OUT AND NOT INSTALL PIECES WITH NOTICEABLE DEFECTS.**

- Sweep or vacuum dust for recovery or disposal.
- Avoid prolonged or repeated breathing wood dust in air. Approved respirators may be needed depending upon dust conditions.
- Avoid dust contact with eyes and skin. Wear gloves and safety glasses when handling and machining the product.
- **FIRST AID:** If inhaled, remove to fresh air. If irritation persists, contact a physician.

### JOBSITE CONDITIONS

Hardwood flooring is designed to perform in an environmentally controlled structure. It is the responsibility of the installer/owner to determine if the job site subfloor and job site conditions are environmentally and structurally acceptable for wood floor installation at "normal living conditions". The manufacturer declines any responsibility for wood failure resulting from or connected with subfloor, subsurface, job site conditions after hardwood flooring has been installed. All substrates must be clean, dry, structurally sound and flat.

### HUMIDITY

"Normal living conditions" are defined as having the relative humidity (air) being monitored and maintained at 35% to 55%, and the moisture content of the flooring at 6% to 9%, with a tolerance of +/- 1%. The proper use of a humidifier/de-humidifier is recommended. Wood that is too dry may "crack" or "check". Wood that is too damp will increase in width, causing "cupping" or "crowning". A moisture content that is too high may also lead to mildew in extreme conditions. These situations are job site related and not considered a manufacturing defect.

### SUBFLOOR PREPARATION AND RECOMMENDATIONS FOR ALL INSTALLATIONS

#### Concrete Subfloors

New concrete slabs require a minimum of 60 days drying time before covering them with a wood floor. (Must be fully cured)

#### Lightweight concrete

Lightweight concrete that has a dry density of 100 pounds or less per cubic foot is not suitable for engineered wood floors. Many products have been developed as self-leveling toppings or floor underlayments. These include cellular concrete, resin-reinforced cement underlayments, and gypsum-based materials. Although some of these products may have the necessary qualifications of underlayment for wood flooring installations, others do not.

To test for lightweight concrete, scrape a coin or key across the surface of the subfloor. If the surface powders easily or has a dry density of 100 pounds or less per cubic foot, do not install this Engineered Wood floor.

Concrete Subfloors must be dry, smooth (level within 3/16" in a 10 foot. Radius - 1/8" in 6') and free of structural defects. Hand scrape or sand with a 20-grit #3-1/2 open face paper to remove loose, flaky concrete. Grinding high spots in concrete is recommended over using filling compounds. However if a leveling/finishing compound is used, it must be of a Portland base compound (min. 3,000 p.s.i.) with a high compressive strength. Concrete must be free of paint, oil, existing adhesives, wax, grease, dirt, sealers, and curing compounds. These may be removed chemically or mechanically, but do not use solvent-based strippers under any circumstances. The use of residual solvents can prohibit the satisfactory bond of flooring adhesives. It is important to ensure a proper bond between the adhesive and the concrete, and planks or strips. Columbia hardwood flooring may be installed on grade, above grade, as well as below grade where moisture conditions do not exist.

**To ensure a long lasting bond, make sure that the perimeter of the foundation has adequate drainage and vapor barrier.**

### Wood Subfloors

Wood Subfloors need to be well nailed or secured with screws. Nails should be ring shanks and screws need to be counter sunk. The wood subfloor needs to be structurally sound (meaning subfloors without loose boards, vinyl or tile). They should not exceed 12% moisture prior to

installation. If the sub-floor is single layer, less than 3/4" thick, add a single cross layer for strength and stability (minimum 3/8" thick for a total 1 1/8" thickness). This is to reduce the possibility of squeaking. Wood sub-floors must be free of paint, oil, existing adhesives, wax, grease, dirt and urethane, varnish etc. Underlayment grade OSB (performance rated) is also a suitable subfloor. Particleboard is not an acceptable subfloor for staple or nail down installation, but can be used as a subfloor in glue down installations. When installing over existing wood flooring, install at right angles to the existing floor.

### Subfloor moisture check

On and below grade applications are susceptible to moisture and should be tested for moisture prior to installation in several locations within the installation area. Acceptable conditions for above, on, and below grade applications are:  
Less than 3lbs./1000 sq. ft./24 hrs. on a calcium chloride test.  
No greater than a reading of 4.5% on a Tramex Concrete Moisture Encounter (moisture meter).  
Wood Substrates must have a moisture reading of less than 12% when using a moisture meter.  
To correct any subfloor problems concerning moisture, either wait until the subfloor dries to meet specifications or use an appropriate moisture barrier. For more information concerning moisture conditions, contact Columbia's technical service department.

### Subfloors other than wood or concrete

**Note:** Perimeter glued resilient vinyl and rubber tiles are unacceptable underlayments and must be removed.

Terrazzo, tile and any other hard surfaces that are dry, structurally sound and level, as described above, are suitable as a subfloor for this Engineered hardwood flooring installation. As above, the surface must be sound, tight and free of paint, oil, existing adhesives, wax, grease and dirt. Terrazzo and ceramic tile must be sanded to assure adhesion.

**WARNING!** Do not sand existing resilient tile, sheet flooring, backing, or felt linings. These products may contain asbestos fibers that are not readily identifiable. Inhalation of Asbestos dust can cause Asbestosis or other serious bodily harm. Check with local, state and federal laws for handling hazardous material before attempting the removal of these floors.

### Radiant Heated Subfloors

Before installing over a radiant heated floor turn off heat and wait until the floor has reached room temperature (70°F-75°F). After installing the floor, gradually return the heat to the previous setting.

**Note:** When radiant heat is installed in concrete, mortar beds, or gypsum cement, it is very important to operate the heating system until these are completely dry before you install your wood flooring on top. (This can take several weeks. Be patient.) Operate the heating system until the humidity in the structure stabilizes to the average level expected for the area in which the wood floor will be installed. Then allow wood to acclimate to this humidity level before installation. This will minimize dimensional changes due to moisture. For more information on Radiant Heated Subfloors go to [www.NOFMA.org](http://www.NOFMA.org)

**Caution:** The subfloor surface must never exceed 85o F. in temperature.

### PREPARATION

Remove all moldings and wall-base and undercut all door casings with a hand or power jam saw using a scrap piece of flooring as a guide.

### Large Room Installation

Due to the relative humidity and temperature fluctuations throughout North America, we recommend always allowing for a 1/2" expansion gap at the walls around the entire perimeter of the floor and against all immovable objects. Any continuous flooring installation in excess of 40 feet will require an additional expansion gap. This can be accomplished by adding to the 1/2" gap at the wall and in cases with over 40 feet continuous flooring lay, adding expansion through the center of the floor with a "T" mold.

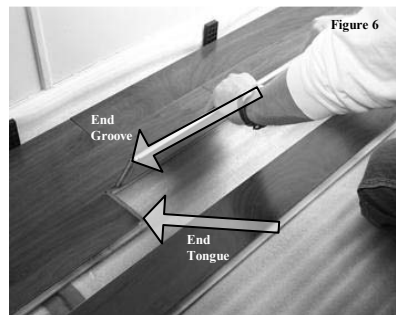
### Preparing the Jobsite

- Before installing any engineered hardwood clic flooring, central heat or air conditioning should be operating for 14 days. Engineered hardwood clic flooring should always be stored in a flat position. The homes relative humidity should remain between 35% - 55% year round. Do not open packages until the day you are ready to begin installation. This prevents the Tongue and Groove System (T&G) from potentially absorbing too much moisture and causing a tight fit.
- Remove existing moldings.
- Undercut door jams with hand or jamb saw to allow for ease of installation and 1/2" expansion space in all directions. (Figure 1)

One advantage in installing Columbia Hardwood Engineered Clic Flooring is that it makes the task of cutting door jams a quick and easy one

- When you have the board in place, lower the board while pushing in until board locks in place. The boards should lock into place at this point. (Figure 7)

Your initial rows, if you are not against a firm starting structure, may seem more difficult to engage than the proceeding.



#### Installing the last plank in the row

- The last plank will be cut to size and include the 1/2" expansion.
- Slide the end tongue into the end groove, lower to 45° angle, align side tongue and groove into place, and lock into place
  - Then secure with wedges or shims

#### Installing the Last Row

The last row in most cases will need to be cut length wise in order to fit. The cut of the board has to compensate for uneven walls and the necessary 1/2" expansion space so scribing is needed.

- Measure the gap, allowing for the 1/2" expansion space, transfer the measurement onto the plank, scribe the contour on to the board and cut along the line.
- Place the pull bar between the tongue of each piece in the last row, and using a hammer lightly tap each piece of the last row to ensure a tight fit. (Figure 8)



Figure 7



Figure 5



Figure 8

#### The Completed Job

Now that the floor is fully installed, the following must be mentioned to address long term expectations and provide satisfaction with your investment.

#### Hardwood flooring will scratch and dent

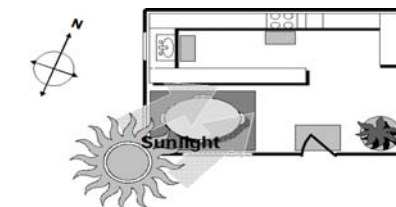
With today's active lifestyles it is important to note that hardwood flooring can, and will, scratch and dent. See Protecting Your Hardwood Wood Floor Helpful Hints. Should an accident occur it can be refinished to provide a lifetime of service. In order to prevent excessive abuse the use of strategically placed mats and area rugs as well as floor protectors on chair and table legs are a must.

#### Regular maintenance is simple

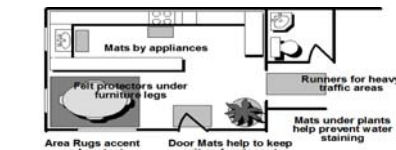
Maintaining a hardwood floor is not as hard as it seems. Keeping it swept and vacuumed is the number one step to preventing excessive wear. Keeping granular dirt off the floor will prevent abrasive wear. Regular cleaning with approved hardwood flooring cleaners keeps the floor from staining and appearing cloudy. An approved cleaner is simply one that does not require a damp mopping. Usually it is a simple spray cleaner that is wiped off after application. These cleaners are designed to evaporate away quickly.

#### Hardwoods react to sunlight

Hardwood contains certain types of acids in their cellular structure. With exposure to sunlight these acids begin to amber. The color change is referred to as patina. The wood will reach its own natural warmth and



patina level and stop ambering. The amount of patina is directly related to the species, amount of acids and the level of sunlight. The entire floor will reach the same patina level over time. This is often noticed after a rug is removed and the floor is noticeably different in color underneath. If you remove the rug and expose the entire floor to the same amount of light, it will even out.



#### FLOOR CARE AND MAINTENANCE INFORMATION

We invite you to take a few minutes to review the information provided here to help you protect your investment.

#### Protecting & Cleaning Your Hardwood Floor

Like any flooring, engineered long strip requires a few simple steps to keep it looking beautiful. All of our finishes have a no wax UV cured urethane top coating which makes engineered hardwood clic flooring an extremely easy to care for floor. Be sure to use a cleaner (Columbia Flooring Floor Cleaner "CLE100" specifically designed for no wax/urethane coated hardwood floors.

#### Protecting Your Hardwood Floor Helpful Tips:

- Furniture legs, glides and casters can scratch and dent your floor. Use specially made felt protectors or furniture coasters to prevent scratches and dents.
- Dust and dirt tracked onto your hardwood floor acts like sandpaper to your finish. Place an entry rug at every outdoor entrance.
- Never use water to clean or mop your floor.
- Use rugs in high traffic areas.
- Domestic pets' nails can scratch and dent your floor. It is a good idea to keep your pets' nails well groomed.
- Some types of high-heeled shoes may cause indentations in wood floors. High heels worn by an average woman can exert 2,000 pounds of pressure per square inch.
- The use of oil soaps, furniture dusting spray, and liquid or paste wax products can dull your floor's finish and make further cleaning and refurbishing difficult.

#### Floor Care Suggestions

##### Regular Floor Care

- Immediately after installation, clean your new engineered long strip floor with a hardwood floor cleaner. This treatment will get your new engineered long strip floor off to the right start.
- Dust mop or vacuum your wood floor to remove any loose dirt or dust as needed. Do not use water.
- Follow instructions on the hardwood floor cleaner. Apply to a clean sponge, dry towel, or sponge mop.



Figure 1

#### Getting Started

##### Common Tools & Accessories:

- |                                  |                        |
|----------------------------------|------------------------|
| Razor Knife                      | Columbia 3-in-1 Foam   |
| Hand or Jamb saw                 | Measuring tape         |
| Power circular saw               | Pry bar or Trim puller |
| Safety glasses                   |                        |
| 1/2" Wood Wedges (spacer strips) |                        |
| Dust Mask                        | Straight edge          |
| Approved Pull Bar                | Square                 |
| Pencil                           | Moisture meter         |
| Square Edge Tapping Block        |                        |
| 10oz. Hammer                     |                        |

#### Installing Columbia Moisture resistant foam underlayment

Sweep and vacuum the sub floor and make sure it is flat, sound and dry.

- The moisture barrier (Columbia 3-in-1 Foam) should be used on all sub floors. Overlap the seams, then peel and stick in place.
- Install and run approximately 4" up each wall. Cover sub floor with 1/8" closed cell poly recommended underlayment. Roll out and lay underlayment perpendicular to the direction that the floor will be installed.
- Trim excess 6 mil plastic at walls after molding has been installed since you need to run it up the wall behind the molding.

**Note:** When installing a pre-finished wood floor be sure to blend the wood from several cartons to ensure a good grain and shading mixture through out the installation.

#### Starting Off - The First Three Rows

##### Row One:

Plank 1 should begin in the left hand corner of the room. Spacing around the wall perimeter of 1/2" can be maintained by using the Columbia Flooring wedges. The planks are laid with the tongue side facing the wall, which enables you to best work with the Columbia Engineered Clic system. The first row starts with as full a length board as possible; working from left to right will be required when installing engineered hardwood clic. Slide the end groove of the board being installed into the end tongue of the board you previously installed. Place each plank firmly against the Columbia Fitting Wedges.

After setting the first row and making sure you are against a firm starting point, lay out three to four rows before starting to install. (Figure 3)

Plank 2 end tongue is connected to the end groove of Plank 1. Lay the rest, plank after plank, in this manner until you have completed the first row. Cut the last plank accordingly. Please ensure that this first row is straight using the Columbia wedges to maintain proper 1/2" expansion space from the wall.

**Row Two:** A starter piece cut to a length accordingly is suggested to begin the second row. The leftover piece from the first should be considered for this starter piece to minimize waste. Align this plank and lock the side into place against the first plank in row 1. The next plank is aligned with the end joint first into the previous plank. The side of plank is then tapped lightly against the previously laid row. Continue laying in this way across the entire row. Remove the fitting wedge and press in the row of planks with a light pressure on the long side. The planks lock into each other. The square edge tapping block is needed to aid in the connection of the locking system on the long side. The planks are now laid row after row in this sequence.

##### Row Three and Remaining Rows:

This initial layout of material will allow you to check your end seams to ensure they are not too close. End joints on adjoining rows should be offset by no less than 6". Move rows if necessary to ensure that you are not showing any undesirable joint patterns. (Figure 2A. The rest of the row's end joints should be random throughout the floor. (Figure 1A)

Your first three rows are staggered ensuring that offset of previous row with end joints are no closer than 6" from one another. When the boards are being tapped in place, a non-random pyramid or stair step pattern is used to ensure the boards remain engaged through the force of the tapping. The numbered process is shown in Figure 3.



Figure 1A



Figure 2A

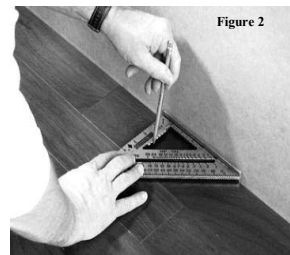


Figure 2

Often time's walls are not structurally square. Boards in the first row may need to be scribed and cut to contour the first row with the wall and to allow for 1/2" expansion. Allow 1/2" expansion space at all vertical obstructions. Use 1/2" wood wedges or short cut pieces of the 1/2" floor against the wall to hold boards true to spacing. It is important that the boards follow the wall. Scribing is used if the wall is not straight. First mark the board with a scribing tool or other tool that will allow you to follow the shape of the wall, then cut it lengthwise to follow the line. (Figure 2)

**NOTE:** Another way to achieve a firm starting point is to screw down a straight length of 1"x3" lumber, or another straight, firm material along the full length of the starter wall. This is set to the outside edge the distance of the width of your end planks plus the 1/2" expansion. You will be removing this after the rest of the floor is installed and the space filled and ripped to the size flooring.

A square edge tapping block is needed to distribute equal force across the tongue without any damage. (Figure 4) For best results, slide the tapping block along the sub floor and row, tapping lightly with hammer, using tapping strokes to engage locking system. If the planks are not going together, check to see if the boards are moving against the wall with the strikes. If so, adjust shims to firm up or use the screw down starter row method.

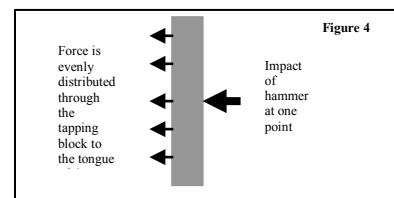


Figure 4

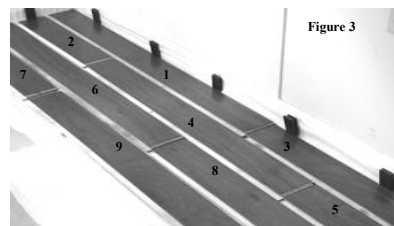


Figure 3

#### Tapping the planks together

- When tapping the boards together the following process works best:
- Using the tapping block, lightly tap each piece for the first 3-4 rows. After the first 3-4 rows, you should be able to only use tapping block every third row. Start tapping in the plank at the opposite end along the length working from left to right, making sure the plank fully engages as you progress down the length. (Figure 4)
- When end joint is slid into place on preceding board, raise the board now being installed to app. A 45° angle as while setting the side joint into place. (Figure 6)