



Revised February 6, 2025

### INSTALLATION, FINISHING, & MAINTENANCE INSTRUCTIONS FOR THE FOLLOWING SPECIES:

Ash	White Oak Fumed	Bamboo Caramel
Black Cherry	White Oak	Bamboo Natural
Maple	Walnut	

### **ATTENTION INSTALLERS:**

We suggest you start a log for your project. Measure and record the moisture content of the wood block on arrival at your facility. For accurate readings probe into the side of the blocks, and not on the end grain of the blocks. Measure and record the environmental conditions in your storage area as well. Please read the following specification in its' entirety before starting the installation. With controls in place, if the temperature and humidity at the project is consistent with the specifications, deliver and record the moisture content of the flooring again. Measure and record the temperature and humidity conditions in the space daily, but at least weekly. You'll need to know this information to determine the length of acclimation needed, if any, before spreading mastic and installing blocks.

### BEFORE STARTING THE INSTALLATION

All jobsite conditions should comply with Kaswell specifications, including but not limited to humidity levels and sub-floor conditions. Be sure that our edge grain panels meet your expectations. When possible, we suggest loose-laying several square feet of flooring in the general location where they will be installed. If the visual appearance, color, sheen, or manufacturing quality does not

meet your expectations, do not proceed with the installation. The placement of Kaswell flooring into mastic for adhering purposes constitutes your acceptance of the materials.

### PRODUCT DESCRIPTION

Edge Grain panels for floors and walls are made from individual pieces of edge grain wood, factory assembled dry with tape to hold the pieces together. Standard Edge Grain lamella width .3125" per piece, thickness .39, .63 or 9", standard lamella length 6.25". Wide Slat Edge Grain lamella width 7/8" per piece, thickness 11/16". No adhesive is used to make the panels. Suitable over radiant heating systems. NOTE: There is a top and bottom to the panels. There are some defects on the bottom. Place the boxes on the floor so that you can read the label. The upper side of the panels will be the top.

### CHECK HUMIDITY

With a reliable hygrometer, sling psychrometer, or electronic monitoring device, check the humidity in the space where the flooring is to be installed. Humidity should read between 40-65% assuming a 65°-75° temperature. If humidity is not normal, postpone installation until conditions are normal.

### CONDITIONING

**Do not install unless heating, air conditioning, and humidity controls are in full operation and room conditions are normal.** All Edge Grain species are kiln-dried to 9%, +/-2%, but the panels should be allowed to adjust to your specific room conditions.

After HVAC systems are operating normally and assuming a room temperature between 65°-75°, open cartons and allow the panels to be exposed 4 days or longer to normal conditions. Do not store cartons where humidity is abnormal.

### **ACCLIMATION FOR ALL KASWELL INTERIOR WOOD FLOORING PRODUCTS**

The purpose for acclimating all interior wood flooring products is to allow the moisture content of the wood to adjust to normal conditions; the temperature and humidity that will be typical once the facility is opened, and the permanent heating, ventilating and air conditioning (HVAC) system is up and running.

Before edge grain panels are delivered, the job site must be checked to determine if it is ready. The structure should be fully enclosed, with doors and windows in place, and interior climate controls operational for at least 48 hours to stabilize the moisture conditions of the interior. Wood flooring should not be delivered until all wet-work is completed. Acclimation must include removal of panels from bundles or pallets.

If conditions are not stable, acclimation may be harmful to the installation. For example, acclimation could dry the wood too low if the humidity were too low. In so doing, you might install the wood too dry during the heating season, and have problems during the more humid months.

If you know the Equilibrium Moisture Content (EMC) of wood in your region, the wood brought to a job site might already be at the proper moisture content, and acclimation for any length of time may not be necessary. The installer should have a clear understanding of the EMC in order to determine the length of acclimation. This requires knowing and recording the moisture content of the wood at the time of delivery, and what the expected moisture content will be at equilibrium.

At equilibrium the moisture content of the wood neither gains nor loses water because it has reached equilibrium with the vapor pressure of the surrounding atmosphere. Changes in relative humidity and temperature of surrounding air cause both seasonal, long term, and daily short-term changes in the moisture content. Long-term changes are gradual as moisture slowly penetrates the wood, while short-term fluctuations influence only the wood surface. Protective coatings slow the changes in moisture content, but ultimately the wood will be in equilibrium.

We are often questioned about the humidity being too high or too low. Humidity maintained above 60-70% at normal residential temperatures can adversely affect wood components. Humidity sustained at or above this level can result in an EMC of 12% or more with associated expansion.



*Acclimation of Edge Grain panels*



*Acclimation of Edge Grain panels*

Humidity maintained at or below 25-30% can adversely affect wood components and result in an EMC below 6%. This condition can cause greater than normal shrinkage with associated cracks. (Source: *Wood Handbook U.S. Department of Agriculture, Forest Products Laboratory*)

Ideal conditions for all wood flooring would be to acclimate and install at the average level of humidity in your particular facility, which should be in 35-55% range. (Source: *National Wood Flooring Association Wood Flooring Installation Guidelines and Methods, revised 05/2012, page 10, article B-1 Wood's Comfort Zone. As a general rule, with geographic exceptions, wood flooring will perform best when the interior environment is controlled to stay within a relative humidity range of 30-50%, and a temperature range of 60° to 80° F. In some climates the ideal humidity range might be higher or lower, 25-45% or 45-65%, for example.*

We would be pleased to discuss with you length of acclimation for your particular installation.

**NOTE:** We always recommend at least 2 days of acclimation prior to installation. We never deliver and install edge grain flooring on the same day.

### CHECK CONCRETE SUB-FLOOR

Edge Grain panels can be installed directly over concrete. Check with us about other subfloor materials. Concrete sub-flooring should be depressed 0.9" corresponding to the thickness of the panels. If cork or rubber underlayment is specified for added resiliency, allow for extra depth.

A vapor barrier or reliable water resistant concrete sealer (i.e. Bostik's MVP or equal) should be used when moisture from below is of concern. New slabs must be cured (at least 50 days) and dry (3lbs. or less). Below grade installations are not recommended. Check with us about your particular concrete condition. Be sure the concrete sub-floor is smooth and level. Tolerance should not exceed 3/16" on a 10 ft. straight edge in any direction. Check floor level with straight metal strip on edge, double check edges and corners. Eliminate any washboard irregularity. All rough spots or gravel protruding must be ground smooth, and low areas filled/flushed. We recommend low areas be filled with the chosen mastic, and not with a cementitious material. If tolerance is not as specified, flooring contractor shall INSIST masonry contractor make necessary corrections. Concrete should be tested for moisture content, and be no greater than 3 lbs. per 1,000 sq. ft. We recommend a bond test before spreading mastic and installing panels. A test should be made with your chosen adhesive and several of our panels before beginning the installation. Check with us about your particular condition.

### WOOD SUB-FLOOR

Edge Grain panels may be installed directly over wood or plywood sub-floors which are solid, level, and well ventilated below. There should not be any cupped area, or projecting nails. If Edge Grain panels are to be installed on an existing synthetic floor or raised computer floor system, 1/2" minimum plywood or hardboard underlayment should be added, glued and screwed to the synthetic surface. NOTE: Use only screws or screw-type nails when constructing wooden sub-flooring. Edge Grain panels can be installed over most classic warm water under-floor heating systems.

### EXPANSION VOID

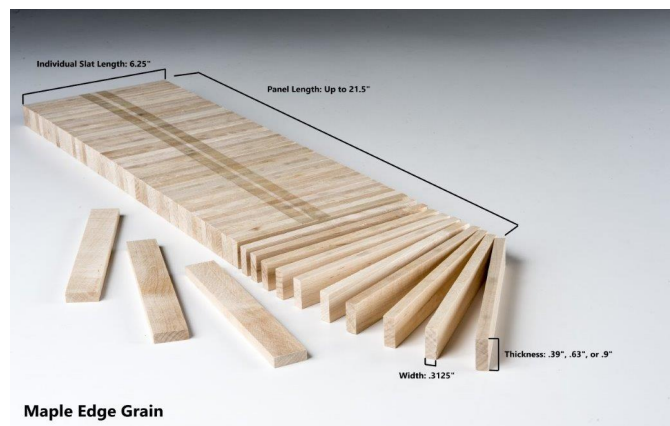
Cork strips 1/2" wide should be used against all walls and columns, unless concealed by shoe moldings or other base. Place temporary wooden strips along the walls and columns equal to the width of the void to be created. After installing panels flush to the strips, and at the end of the day remove the temporary strips, leaving a uniform void for expansion. In aisle ways and other narrow areas where panels meet carpet or other flooring, the expansion void can be omitted. Schluter strips should be used at panel edges against carpet or other adjacent flooring materials.

### APPLYING MASTIC

NOTE: Be sure flooring has been accepted before gluing in place. For older sub-floors, be sure the surface is clean and free from dirt, oil, or grease. Store mastic for 72 hours at room temperature. Spread mastic at the approximate rate of 60 square feet per gallon. We suggest a 3/16" V notched trowel for standard mastic application. Change trowel frequently, especially when used on concrete, to maintain correct coverage. Open time up to 2 1/2 hours, but read labels. Always use with adequate ventilation. If coverage is less than 60 sq. ft. per gallon, change trowel angle and or file down trowel to a reduced depth. Suggest Stauf, Bostik or Mapei 980 adhesive.

### INSTALLING PANELS/SECTIONS

Prior to installation mix panels from different pallets as there can be variation in color within. Installations can start against a straight wall, or snap lines to start in the center and work out to the walls. Cut panels so that every other panel row starts with approximately one half panel. This will help you, the installer, to keep panel rows straight and parallel. Push panels into the mastic, (including holding tape), as close to each other as possible at the panel ends and sides. Snugging only to keep rows straight and consistent.



Avoid crowding mastic between panels. Place each panel in the mastic to glue them down, and not to each other. Do not pound directly on a panel edge. We suggest a rubber mallet and a short section of a 2 x 4 placed against the last row, but not in the adhesive, to snug panels in place. Continue to snap lines during panel placement to maintain square-ness. All mastic must be kept off exposed surfaces. Panel ends will be square as received. When you reach a wall or column and need shorter lengths, be sure your end cut is exactly square to the strip length. Use a hardwood-flooring roller after installation, optional.

### SANDING

Using drum/belt sander, drum sand first with 36, then 60, then 80, then 100-grit drum paper. Drum sanding will remove holding tape. **SAVE SAWDUST FOR FILLING.** Disc sand starting with 80-grit, and then to 100-grit paper for urethane finish. Screen to 150-grit screens for oil finishes, making sure sanding is uniformly performed, and all drum lines and disc lines are removed. Vacuum clean and fill cracks with stain accepting patch compound to specified color, or a mixture of the wood flour generated and collected in the drum sander bags with the finish to be used. Be absolutely sure no liquids, such as paint, coffee, water, mud, etc. touch the flooring at this point, and keep everyone out of the room

### APPLYING URETHANE FINISH

We recommend a water-based urethane (Bona Traffic) or a solvent-based urethane (Bona Woodline Satin) on our Edge Grain flooring. Apply one or more applications of urethane finish, water-based or solvent-based. Solvent-based urethanes are preferable. Apply thin coats until the surface is uniformly sealed. Four applications of a urethane may be needed. **NOTE:** If you have any questions about finish selection or applications please contact us. You may also visit the website, [bonakemi.com](http://bonakemi.com).

We always suggest checking with us before purchasing your chosen finish.

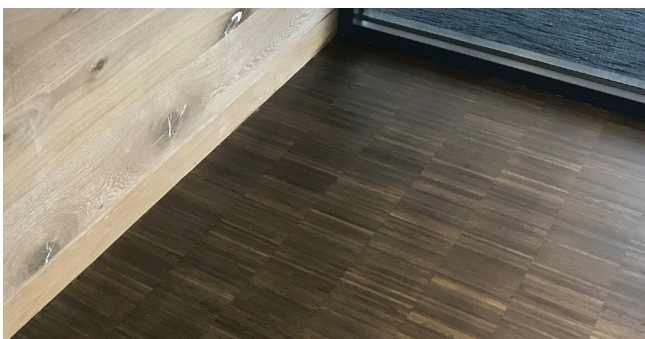
### QUESTIONS AND CONCERNS

If there are any questions or concerns, please do not hesitate to contact us before or during installation and finishing. Call or e-mail for technical support. Kaswell Flooring Systems cannot be responsible for results of installations made by others. We reserve the right to change specifications without notice.

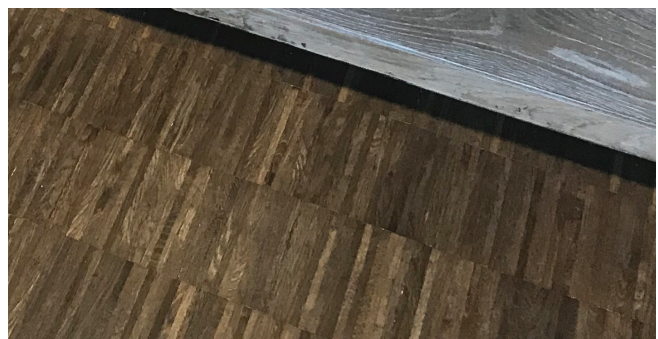
## KASWELL FLOORING

### Top 10 maintenance tips:

1. Maintain proper humidity conditions, ideally in the 35-55% range.
2. Vacuum lightly or sweep daily to remove sand and grit.
3. Apply carpet or felt protection to chair legs.
4. Wipe spills promptly.
5. Use walk off mats at entrance doors.
6. Reapply finish at the appropriate time.
7. For urethane finish:  
Use damp mops. Never use wet mops.
8. For urethane finish:  
Avoid using wax or oil soap products.
9. Use only maintenance products furnished and recommended by the finish manufacturer.
10. Call or e-mail Kaswell regarding your flooring.



Edge Grain Fumed White Oak with urethane finish



Edge Grain Walnut with urethane finish

## URETHANE FINISHING INSTRUCTIONS

Urethane finishes are applied by several standard applicators; including brush, T-Bar, lambs wool, sponge squeegee, roller, and paint pad. There are many solvent-based and water-based urethane finishes to choose from, and we recommend the finish manufacture's application instructions be followed. Product choice can affect the applicator choice. Since viscosity, drying time, and general workability will vary from one product to another, we always suggest worker participation in the decisions for finish and applicator choice. We believe the best applicator for solvent based urethanes is lambs wool. And, we believe the best applicator for water-based urethane, (both the sealer and finish), is first a roller or Paint Pad applicator. We recommend at least 3 applications be made over our end grain products (1 application sealer, and 2-3 applications of finish).

It is always best to minimize the number of applications spread over the joints. Keeping the joints between blocks flexible should be the goal during the finish process. And so, we recommend the first several applications be made before filling, so that only the block surface is sealed. After the initial applications are applied and dried, then fill the joints with the chosen filler. Ask us for a copy of our *Floor Filling Products and Procedures-Commercial* article. After the joints are filled, then lightly screen to clean the surface of excess filler. Screening also prepares the existing initial applications to receive the final application(s). Sweep and tack rag the surface to remove the urethane dust from screening. Then apply one or two applications of finish over the blocks and joints. For more detail information please contact a Kaswell Representative.

## CARE & MAINTENANCE FOR URETHANE FINISHED FLOORING

Keep the surface free from dirt and abrasive particles by daily sweeping, using a treated flat mop or regular dust mop. Under no circumstances should water be permitted to remain on the flooring more than 10 minutes, either from spills or from washing. Routine cleaning is best accomplished with a mist mop. Be sure no puddles are created or left on the surface. Soft steel wool buffing and waxing can be added. However, if waxes are used, they will make future re-coating with urethane more difficult. An acrylic "after market" product can be used to "dress up" the surface. To refinish with the same urethane used originally will first require screening by rotary disc type sanding machine. Tack-rag dust and recoat. For additional information contact your water-based urethane manufacturer.

## **KASWELL LIMITED WARRANTY**

Seller warrants for a period of two years from date of delivery that Kaswell flooring is free from defects, which makes the flooring not fit for use for which they are normally intended. Seller's only obligation during this warranty period is, at its sole option, to either repair, replace, refund or credit the purchase price of the flooring, or part thereof, found to be so defective. At the conclusion of this warranty period, Seller shall be under no further obligation whatsoever. This warranty is void in the event of negligence, abuse, abnormal usage, misuse, accidents, improper installation, improper maintenance, or any circumstances or conduct beyond the control of the Seller, most particularly job-site conditions. Seller is not liable for consequential damages arising out of or in connection with the sale or use of Kaswell wood flooring including, but not limited to, all labor and/or material charges or loss of income or profit relating to the goods in any way whatsoever.

## **CONDITIONS OF SALE**

All pricing is per sq. ft. or surface measure with no milling or cutting waste figured.

All orders are subject to availability of stock for prompt delivery.

Special orders are non-cancelable and non-refundable.

A 15% restocking and handling charge is applicable on all authorized returns.