



## Kaswell Flooring Systems

NEXT GENERATION FLOORING, LLC

*The wood block flooring specialists*

### Specification: Prefinished Strip Blocks

Revised 6/7/14

#### **Installation and maintenance instructions:**

Alder, Fibre[B]lock II, Fir, Hemlock, Oak, and Mesquite End-Grain Prefinished Strip Block Flooring, tongue and groove assembly available.

**Please read the entire specification before commencing with the installation.**

#### **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 35-50% 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.** Prefinished End Grain Blocks are available in strips  $\frac{3}{4}$ " and 1" depth, kiln-dried to 6-8%. All flooring strips must be allowed to adjust to your specific room condition. Only after HVAC systems are operating normally and assuming a room temperature between 65° and 75°, remove packaging and space strips apart so that the air reaches both top and bottom

of the strips. Allow them to acclimate for 4 days or longer. Do not store flooring where humidity is abnormal.

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

The purpose for acclimating strips 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 strips are delivered, the jobsite 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. Strips should not be delivered until all wet-work is completed.

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Acclimation must include de-palletization or removal of all individual blocks (left image), strips (right image), or panels from cartons or boxes. Acclimation will be faster if the pile is low and more spread out. Acclimation will be slower if the pile is high and less spread out.

If conditions are not “normal”, acclimation may be harmful to the installation. For example, acclimation could dry the block too low if the humidity were too low. In so doing, you might install the block 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 jobsite 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, 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 always recommend at least 2 days of acclimation prior to installation.**

**We never deliver and install block flooring on the same day.**

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. 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 the all wood flooring would be to acclimate and install at the average of the high end and the low end of the humidity spectrum, which we hope would be in the 35-50% range. We would be pleased to discuss with you length of acclimation for your particular installation.

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### **CHECK CONCRETE SUB-FLOOR**

The sub-flooring should be depressed corresponding to the depth of the block specified. 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 Single Step, or an equivalent) should be used when moisture from below is of concern. New concrete slabs must be cured (at least 50 days) and dry. Below grade installations are not recommended. Be sure the concrete sub-floor is smooth and level. Tolerance should not exceed ¼" 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 with leveling compound. 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 blocks. A test should be made with your chosen adhesive and several of our blocks before beginning the installation. Check with us about your particular condition.

### **WOOD SUB-FLOOR**

Wood Blocks 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 blocks are to be installed on an existing synthetic floor or raised computer floor system, ½" minimum plywood or hardboard underlayment should be added, glued and screwed to the synthetic surface.

### **EXPANSION VOID**

Cork strips ½" to 1-½" 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 blocks 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 blocks meet carpet or other flooring, the expansion void can be omitted. Schluter strips should be used at block edges against carpet or other adjacent flooring materials.

### **APPLYING BLOCK FLOORING MASTIC**

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. We recommend Bostik's Best, Mapei, Stauf or other urethane adhesive for all end grain strip block installations. The adhesive must not contain water. Spread the mastic at the approximate rate of 50 square feet per gallon. We suggest a 3/16" V notched trowel for standard mastic application. Replace the trowel as it wears when used over concrete. Open time for mastic should be up to 2 ½ hours, but read the adhesive label before starting. Always use with adequate ventilation. If coverage is less than 50 sq. ft. per gallon, change trowel angle and or file down trowel to a reduced depth.

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### INSTALLING BLOCKS IN STRIPS

**Parallel Pattern:** Strips are to be glued down and not to each other. Snap lines to start and maintain square-ness. Place the first strip in the corner parallel and tight to temporary lumber filler. Place adjoining strips as close as possible to next strip or block. Avoid crowding mastic between strips. Stagger the ends. Do not pound directly on block edges. Suggest a short section of a 2 x 4 on edge and snug with a mallet to avoid edge damage. Continue to snap lines to maintain square-ness. All mastic must be kept off exposed surfaces. Keep lines straight. Strip 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. Occasionally, some blocks are slightly angled within the strip. Removing blocks without cutting square to strip length can cause one end to be out of square. Unless concealed by base, fill expansion void with pre-molded cork. The lines created from individual blocks should be kept straight and parallel and an effort should be made to create a lap of at least one inch. However, blocks will vary such that maintaining a perfect lap joint will be difficult. For square blocks within strips, **DO NOT** attempt to install with rows straight in two directions. Straight lines in two directions cannot be created with square blocks in strips.

### APPLICATION OF WOCA OIL

End grain strips will be prefinished with Woca Oil on arrival, UV oil added on request. For more information about WOCA Finishes, see [WoodcareUSA.com](http://WoodcareUSA.com). After strips have been installed, you might have some slight cracks or voids between strips. They can be left this way, or filled. If filling is desired, mix Woca in the chosen color with wood flour to a soft paste, and then paste fill the entire floor using rags or a sponge trowel. Buff the surface with a soft pad to complete the installation or polish with white pads and Kaswell patina discs. We can send patina discs via UPS or FEDX at any time. The floor should appear silky, with an even look, with no oil spray or droplets visible. Pour more oil onto the floor as needed and continue polishing. Overlap work areas to ensure an even finish with no spray residue from previous passes. Oil coverage should approximate 2,000 sq. ft. per liter or less. Allow to harden in 4-6 hours.

**Allow the Woca Prefinished Strip Block flooring to cure 48 hours before placing rugs and furniture on the floor.**

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### **Optional (choose only one):**

1) Polish with a soft cloth under a buffer. Continue to spread and polish as you pass the buffer back and forth across the work area. The floor should appear silky, with an even look, with no oil spray or droplets visible. Pour more oil onto the floor as needed and continue polishing. Overlap work areas to ensure an even finish with no spray residue from previous passes. Repeat the process until the floor is finished. Coverage should approximate 1,250 sq. ft. per liter. The Master Oil will usually pre-harden in 4-6 hours. Allow the oil to cure 24 hours before placing rugs and furniture on the floor. For a fourth application, repeat the process of the previous application(s).

2) Woca Hard Oil Wax, Rubio Pure, or Osmo may also be added for more sheen.

3) Urethane finish top-coating can be applied over Woca Oil finished flooring. Consult with us when choosing a urethane finish.

**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.**

## **CARE & MAINTENANCE FOR YOUR WOOD BLOCK FLOOR**

To protect your investment, and to ensure that your KASWELL FLOORING SYSTEM maintains its beauty with years of lasting service, we offer the following recommendations for care and maintenance.

**For Oil Finished Flooring:** Lightly clean with Woca Commercial Oil Cleaner. Re-oil by spray, towel off immediately, and buff with standard buffer with soft pads. We can supply 3M pads if needed. Keep the flooring free from dirt and abrasive particles by daily sweeping or vacuuming. Use a treated flat mop or regular dust mop. Soft buffing at will. The resins in the oil will become harder over time, which will densify the wood. Wax can be added for higher gloss. Woca videos are available on request.

**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 damp 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.

### **Annual maintenance**

For Woca oil finishes, see WoodcareUSA.com. For other oil finishes after thorough cleaning, apply finishing oil lightly again, being sure penetration is 100%. Buff as usual. Disregard oiling if it does not penetrate. As the oils age, they will harden, and dry buffing will increase luster. Urethanes will require screening before re-application. Check with the chosen manufacturer for maintenance products.

### **AT A GLANCE, KASWELL’S TOP 10 MAINTENANCE STEPS:**

1. Maintain proper humidity conditions, ideally in the 35-50% range.
2. Vacuum 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. Only use damp mops. Never use wet mops.
8. 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.

**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 the blocks, 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.