



Kaswell Flooring Systems

NEXT GENERATION FLOORING, LLC

The wood block flooring specialists

Specification: Master Natural Finish-WOCA

Revised 2/17/14

Installation, finishing, and maintenance instructions:

Alder; Ash; Birch; Butternut; Cerisewood; Cherry; Chestnut; Elm; Fir; Hemlock; Hickory; Hornbeam; Kaleidowood; Maple; Mesquite; Red Oak; White Oak; Parquet Fumed Oak; Parquet Natural Oak; Pine; Plytype; Redwood; Sandlewood; Teak; Walnut; Walnut Burl
Wood Block Flooring

CONDITIONING

Blocks are available as individual blocks, in strips or on panels. Individual blocks are available from ½" to 4" in depth. Blocks in strips (prefinished or unfinished) are available from ½" to 3" in depth. Blocks on panels (prefinished) are available in ½" depth. Most individual blocks are kiln dried to 10-12%. Most strips and panels are dried to 8-10%. All blocks must be allowed to acclimate or adjust to your specific room condition. Only after HVAC systems are operating normally and assuming a room temperature between 65 and 75 degrees, then break the palletized strips and open-stack them so that both top and bottom is exposed, or scatter individual blocks in a loose pile in the room where the flooring will be installed, or open cartons of panels and spread panels. Do not store individual blocks, strips, or panels where humidity is abnormal. For additional information regarding (length of) acclimation, please review our "Acclimation" page on our website at kaswell.com, or call us to discuss your particular conditions. **Acclimate minimum** 2 days.

DO NOT INSTALL UNLESS HEATING, AIR CONDITIONING, AND HUMIDITY CONTROLS ARE IN FULL OPERATION AND ROOM CONDITIONS ARE NORMAL.

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 equal) should be used when moisture from below is of concern. New slabs must be cured (at least 50 days) and dry. Below grade installations are not recommended. Check with us about your particular condition.

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CHECK HUMIDITY

With reliable hygrometer, sling psychrometer, or electronic monitoring device, check the humidity, which should read between 35% and 50% assuming a 65 to 75 degree temperature. If humidity is not normal, postpone installation until conditions are normal.

CONCRETE SUB-FLOOR

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.

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. Cork strips will not be needed if the perimeter space is concealed by base shoe molding. 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 all mastic/adhesive for 72 hours at room temperature. **For individual blocks and strips:** Use a 3/16" V notched trowel. If the coverage is less than 50 sq. ft. per gallon, change trowel angle or file down trowel to reduced depth. For all species with the exception of treated pine blocks we suggest Bostik's Best urethane adhesive or Mapei Ultrabond 9800. For treated pine blocks use Kaswell S2705 White Adhesive. Adhesive open time up to 2-1/2 hours, but read mastic labels. Always use with adequate ventilation. **For panel blocks:** Apply mastic with caulking gun to each hole in the membrane below, then place the panel on to the sub-floor.

INSTALLING INDIVIDUAL BLOCKS

Be sure blocks are well mixed before beginning installation. If blocks are not mixed, some clustering may result where several blocks from the same log may be installed next to each other and might appear in a cluster as a different color section than the surrounding pieces. So, be sure to mix them when they are scattered loose on arrival, and continue to mix them during installation. Blocks are to be glued down, and NOT TO EACH OTHER. Working to straight lines, or from a straight wall, spread mastic the entire length of the laying line, then place blocks in the desired pattern. We suggest blocks be spaced apart slightly, allowing for some later growth, and so the flooring will look and feel like individually placed blocks.

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.

INSTALLING BLOCKS IN PANELS

Be sure panels are well mixed before beginning installation. If panels are not mixed some clustering may result. Continue to mix panels. Place panels with mastic on to sub-flooring, maintaining square-ness. Place the first panel in a corner parallel and tight to a temporary lumber filler. Precision manufacturing will allow placement of adjoining panels as close as possible to the next panel. The lines created from each panel must be kept straight and parallel, and an effort should be made to create a lap of at least 3-4 blocks. Straight lines in two directions cannot be created with square blocks on membrane. We suggest rolling the surface with a 70-100 lb. wood floor roller during installation.

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SANDING AND FILLING

For individual blocks or unfinished strips, use a drum or belt sander, first with 60 grit, then 80, then 100-grit drum paper. **SAVE SAWDUST FOR FILLING.** Disc Sand with 100-grit paper, 120- and 180-grit screens, making sure sanding is uniformly performed, and all drum lines and disc lines are removed. Vacuum clean. For individual blocks, strips and panels, fill the cracks with a stain accepting patch compound to specified color, granulated cork, or a mixture of the wood flour generated, and the finish to be used. ****Be absolutely sure no liquids (i.e. paint, coffee, water, mud, etc.) touch the flooring at this point, and keep everyone out of the room until the surface is protected.** If there is a time lag between sanding and finishing, resin spots might appear in some species. They will disappear once finished.

APPLY OIL FINISH

We recommend using Woca Oil, sold per liter, or some other VOC compliant oil finish. See WoodcareUSA.com. After blocks have been sanded to 180-grit, apply the first coat of oil. The first application should be Woca Master Oil, and is considered the primer coat. Its role is to act as a base for the subsequent oil applications. Choose your starting area and pour the oil into a paint tray. Spread the oil with a ¼" nap paint roller and extension pole. Roll the oil as if you are painting the floor. Continue to spread oil until finished. Do not buff the oil into the floor, as this forces too much oil into the floor and the oil will be too deep, which may cause later bleed back and prolonged drying. When finished, rest your roller in the paint tray or on cardboard. Coverage should approximate 130-170 sq. ft. per liter. Best to let the primer coat dry and harden a minimum of 48 hours.

The second application is made with Woca High Solid Master Oil. The Woca HS Master Oil is first mixed with the sanding dust that you accumulated in the drum sander bag during the drum sanding. This filler mixture can be forced into the voids with a sponge trowel or just rags, then buffed clean with a towel to remove excess. Then Woca HS Master Oil should be buffed into the floor with Kaswell Green discs and 3M White pads until an even sheen has been obtained. Without the green discs you will not achieve optimum results. Coverage should approximate 140-170 sq. ft. per liter. Let this application dry and harden a minimum of 24 hours before commencing with the third and fourth applications.

For a third application, use a 3M white pad (or similar) under the buffer, without Green discs. Pour a capful of Woca Master Oil into the hole of the white pad, or use a soft cloth, and start polishing. 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).

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Woca Oils are Volatile Organic Compound FREE. In 2007, new regulations were introduced in the European Union regarding VOC levels in coating materials. All Woca products fulfill these regulations. We feel that this is an important step in the protection of our working and living environment. Woca VOC free oils have the following features:

- Positive influence on the working area and living environment. Improvement of product characteristics and application methods. No effect on indoor-air quality.
- Woca products are certified by independent laboratories, the German Institute for Biological Building Materials, and are in accordance with DIN-Norm 53-160. Woca WoodCare Denmark products meet or exceed the most stringent US standards for volatile organic compounds.

WOCA LEED RATING

Woca is a plant-based non-emitting finish, which complies with South Coast Air Quality Management standards and always qualifies for the following LEED credits.

| Environmental Feature | Leed Credit | Lead Points |
|-------------------------------------|-------------------------------------------|-------------|
| Rapidly Renewable Materials | Materials and Resources (MR) Credit 6 | 1 |
| Low-Emitting Adhesives and Sealants | Indoor Environmental Quality (EQ) Cr. 4.2 | 1 |

APPLY URETHANE FINISH

Apply one or more applications of urethane finish, solvent-based or water-based. Solvent-based urethanes are preferable, but water base urethanes can also be applied. Check with the chosen manufacturer for more details. Four applications of a urethane may be needed. Apply thin coats until the surface is uniformly sealed.

AVOID SPONTANEOUS COMBUSTION

Water-soak all oily cloths after use and place outside of buildings and away from combustible materials. After Oil Finish application(s) are complete, the surface can be top coated with Urethane. If urethane is applied, no future oilings can ever be made unless stripping back with sanding machines.

MAINTENANCE FOR OIL FINISHED BLOCK FLOORING

See WoodcareUSA.com or ask for our maintenance guide for Woca Oil Finished block flooring.

MAINTENANCE FOR URETHANE FINISHED BLOCK FLOORING

Damp mop or sweep daily. Screen, and recoat as needed. Dry buff with a soft pad and/or vacuum or sweep with chemically treated mop. Damp mop, providing and only providing mops are always wrung close to dry. Absolutely no puddles or soaking whatsoever.

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ANNUALLY

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.

NOTE: There are many excellent finishes for wood flooring. The choice is many times made according to the experience of the workmen, but in all cases the finishes should be commercial or industrial brand. Coverage rates on finishes will vary depending on the wood specie. And so, we suggest checking with us before purchasing your chosen finish.

Call or e-mail for technical support before, during, or after installation.

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 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. See attached Woca videos.

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.

Maintenance is very important. Call or e-mail us to discuss your current maintenance materials and procedures.

We reserve the right to change specifications without notice.

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Kaswell Flooring Limited | Warranty for Wood Block Flooring

Seller warrants for a period of two years from the date of delivery of the blocks that the blocks are free from defects, which make the blocks not fit for the 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 blocks, 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, alteration or repair by a person other than the Seller, 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.

All pricing is subject to change without notice.

Special orders are non-cancelable and non-refundable and will not be ordered until a signed confirmation has been received.

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