

Specification: Exterior Block Pavers

Installation, finishing, and maintenance instructions: Black Locust, Iroko, Mesquite, Pine, Redwood and Stone End Grain Pavers

Please read the entire specification before commencing with the installation.

CONDITIONING

Redwood and Mesquite Blocks are available in strips. Mesquite, Pine, Black Locust and Stonehard End Grain individual blocks are available from ³/₄" to 5" in depth. Wood blocks can be kiln-dried to 8-10% for interior application, but for exterior application they would ship at or near 20% moisture content, and suggest they be significantly wetted before installation to raise the moisture content to 25% or above. Redwood blocks can be wired together in lengths of 33" to 34" length. A groove will be added on each side of the strip to accommodate a metal spline, to be added during installation for tongue and groove construction. Standard Redwood used for exterior application is second growth heart redwood grade, structurally sound, allowing some knots, providing singly or in combination that they do not decrease structural function of the flooring. Function is primary, with appearance secondary. Individual blocks can be grooved on two sides to accommodate the same metal spline.

EXPANSION VOID

1" wide cork strips or rubber gasket material may be used against all walls or other obstructions within the installation.

Sanding the surface – optional

Filling voids or cracks – optional, but do not use silica sand.

INSTALLATION

Individual blocks and strips can be installed directly over compacted soil, stone dust, sand, or concrete, depending on the chosen specie and thickness. The Miradrain pad system, manufactured by Mirafi, Inc., Charlotte, N.C. 28224 (800.438.1855) is an effective product for dry installations of our blocks (without the use of an adhesive). The Miradrain pad allows water to drain away from below the flooring. Holes in a concrete slab below Miradrain are essential for proper drainage. Individual blocks can be T & G, and glued in place using an exterior adhesive. We recommend <u>Synthetic Surfaces, Inc.'s</u> #34 G Adhesive to bond blocks to exterior concrete. Aluminum or stainless steel spline can be added to glued-in place blocks. Aluminum spline must be used to connect all blocks for dry laying over concrete or compacted soil. When installing the aluminum spline, be sure to leave a space from time to time on each row of blocks to allow water **Specification: Exterior Block Pavers**

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to reach the bottom (base). If the spline is continuous, it would block water migration to the bottom. Water migration to the bottom is essential for it to run off. <u>All blocks and strips must be</u> <u>surrounded by a frame of wood or concrete</u>. We suggest protruding rods be strategically placed on the inside walls of the depression corresponding to the thickness of the block. The ends of the strips or sides of the blocks should be fit over the rods so that on completion of the installation the strips or blocks cannot be lifted.

APPLY OIL FINISH (Optional for Black Locust)

We recommend Woca Oil, or another VOC compliant oil finish. See <u>WoodcareUSA.com</u>. 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 ¹/₄" 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 base 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. Let the primer coat dry and harden a minimum of 48 hours.

The second and third applications are made with Woca High Solid Master Oil. This liquid may be mixed with sanding dust and forced into the voids with a sponge trowel. Buff with a red Norton (or similar) pad to remove all excess oil-oil/filler mixture. Continue buffing until an even sheen has been obtained. Coverage should approximate 140-170 sq. ft. per liter. Let this application dry and harden a minimum of 24 hours.

For the final application use a white pad with Kaswell Patina Discs under the buffer. Pour a capful of Woca High Solids Master Oil onto the hole in the white pad and start polishing to a soft patina.

Polishing the blocks until the oil does not continue to spread 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 blocks 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 surface is sealed. 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 coat, repeat the process of the previous coat.

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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

Avoid spontaneous combustion Water-soak all oily cloths after use and place outside of buildings and away from combustible materials.

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.

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CARE & MAINTENANCE FOR YOUR OIL FINISHED BLOCK PAVERS

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

For Oil Finished Paving: Lightly clean with denatured alcohol, mineral spirits, or lacquer thinner or Oil finish cleaner as needed. Re-oil by spray only, 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. Routine cleaning with a damp mop and cleaner is acceptable, providing the mop remains DAMP AND CLEAN.

NOTE: Do not apply urethane coating to any outdoor pavers.

Kaswell Flooring Systems suggests a block moisture content of 20% or higher for exterior installations that will be subjected to typical amounts of rain or snow. Unless advised otherwise, Kaswell will not dry the stock before fabrication into blocks. For dry areas, blocks should be ordered at 15% or less. In place shrinkage can be filled with granulated cork, Bostik Flexible fillers, or Kafka granite fines. Kaswell Flooring Systems suggests that pavers be maintained with elevated moisture content either via rain-water or periodically via hose to combat shrinkage. By purchasing this product, you acknowledges that minor shrinkage and separation of wood is normal and shall not be considered a defect under this warranty.

Notwithstanding the foregoing, for any unique environment such as deserts, dry areas, high humidity locations, or tropical climates, it is strongly recommended to consult with Kaswell Flooring Systems to determine the suitability of the product in the proposed project environment.

Maintenance is very important. Please call or e-mail us regarding your flooring and your needs.

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KASWELL LIMITED WARRANTY

Seller warrants for a period of two (2) years from date of delivery that Kaswell exterior block pavers are free from defects in material, provided the Kaswell exterior block pavers are installed according to the specifications provided by Kaswell in its Exterior Block Specifications (revised 6/7/2014), and used under normal conditions as outlined in said Exterior Block Specifications (revised 6/7/2014), except as modified herein. If Seller finds that any block does not comply with this warranty, Seller shall (i) repair the defect; (ii) provide replacement block(s); or (iii) refund the purchase price at Seller's sole discretion.

Kaswell Flooring Systems suggests block moisture content of 20% or higher for exterior installations that will be subjected to typical amounts of rain or snow. Unless advised otherwise, Kaswell will not dry the stock before fabrication into blocks for exterior use. For dry climate areas, blocks should be ordered at 15% moisture content maximum. In place shrinkage can be filled with granulated cork, Bostik Flexible fillers, or Kafka granite fines. Kaswell Flooring Systems suggests that black locust pavers be maintained at elevated moisture content levels, either via rain water or regular hosed water applications to combat shrinkage. By purchasing this product, you acknowledge that shrinkage and separation of wood is normal and shall not be considered a defect under this warranty.

Notwithstanding the foregoing, for any unique environment such as deserts, dry areas, high humidity locations, or tropical climates, it is strongly recommended to consult with Kaswell Flooring Systems to determine the suitability of the product in the proposed project environment. Failure to do so shall void this Warranty.

This warranty does not apply to failure of, damage to, or deterioration (including without limitation texture or color change) of the Kaswell exterior block pavers from: (i) faulty subsurface preparation; (ii) failure due to settling or degradation of the subsurface; (iii) failure due to standing water or improper drainage; (iv) improper installations or applications not in accordance with Kaswell Exterior Block Specifications (revised 6/7/2014),; (v) fading or weathering due to environmental affects; (vi) materials provided by or actions of any person other than Seller; (vii) events of force majeure, including storms, floods, hurricanes, earthquakes, fires, lightning, tornadoes, or other acts of god; (viii) vandalism, civil unrest or other accidental or intentional events; (ix) contact with chemicals not suited for Kaswell exterior block pavers, or other contaminant; or (x) normal wear and tear.

In addition, any labor associated with the removal and/or replacement of blocks is not included in this Warranty.

Any claim must be submitted, in writing, along with proof of purchase and continued property ownership, to the Seller at its office located at 60 Pleasant Street, Unit 7A, Ashland, Massachusetts 01721, prior to the expiration of the two (2) year warranty period. If Seller determines that the claim is in accordance with this Warranty, Seller will either repair the defect, provide replacement block(s) or refund the purchase price. The choice of remedy is in the sole discretion of the Seller. In the event Seller elects to repair or replace any defective product, the owner shall provide Seller with reasonable access to the product and provide reasonable assistance to the Seller at no charge to the Seller. If the remedy is replacement, Seller will use best efforts to match color, size and form from Seller's then existing product line.

This Warranty does not cover the cost of replacement or removal of defective product or surrounding product, including labor costs.

This Warranty shall be the sole and exclusive remedy for any breach of warranty claim by the owner. Seller shall have no liability to any person for incidental, consequential or special damages of any kind.

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.