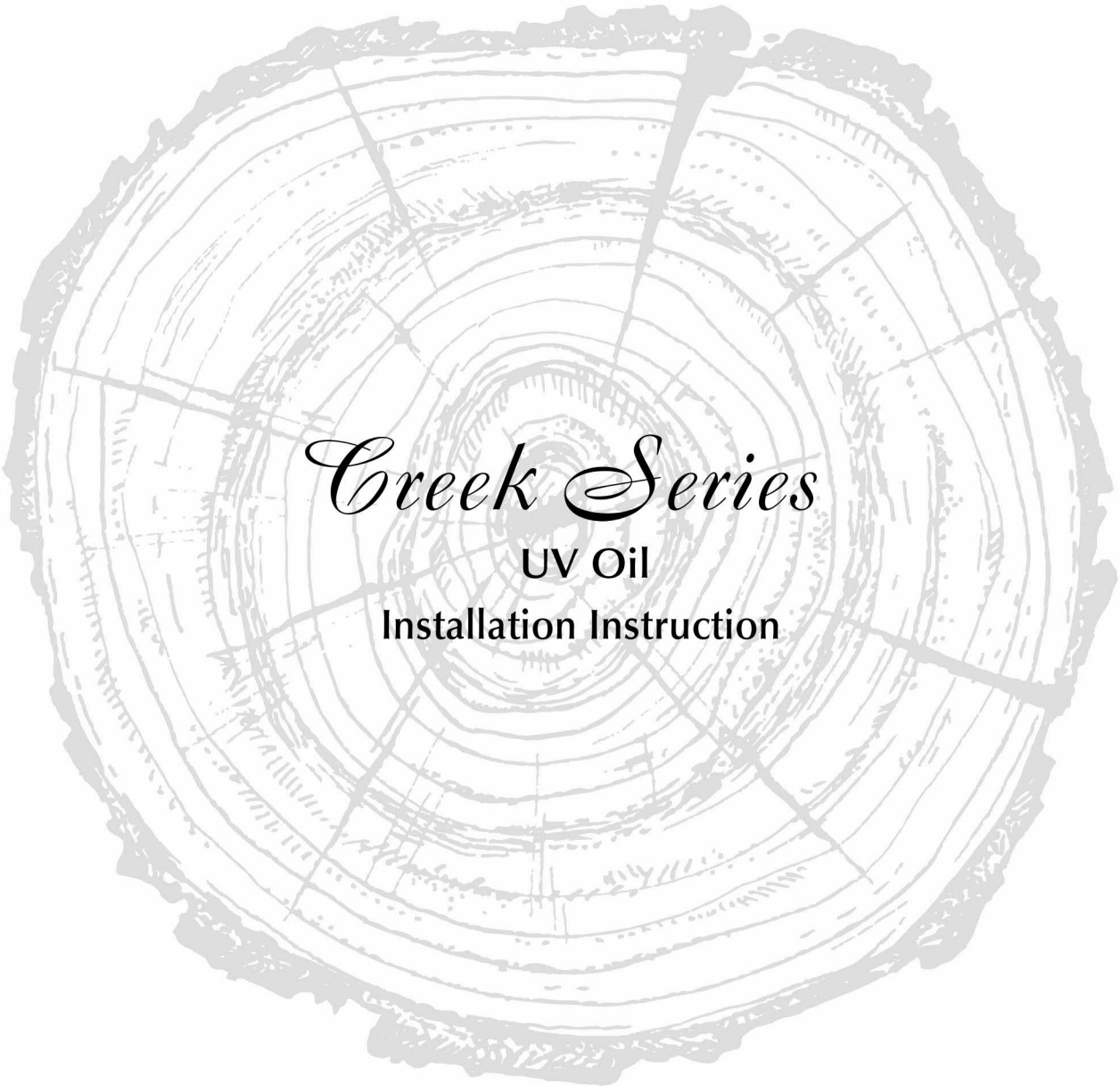
Opus Floors Canada
Creating Inspirational Flooring



# Creek Series

## UV Oil

## Installation Instruction

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Do not install until you have finished reading the following instructions.
Failure to follow the recommended maintenance procedure will nullify all warranties.

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# Creek Series

UV Oil - Angel & Whitestone
Installation Instruction

I

- **Important do not install until you have finished reading the following instructions.**
- **Inspection:**

  **OWNER/INSTALLER**

  OWNER/INSTALLER Visually inspect your hardwood product, once you have started to install your product you and the owner are considered to have accepted the product. Hardwood is a natural product by its nature, each Plank is a unique product characterized by its variations in grain and colour. Opus Floors are manufactured in accordance with industry standards, which permit up to 5% Defect tolerance, either manufacturing or natural. The installer assumes responsibility for final inspection and visual inspection with the customer for the product before installing.

- **Preparation:**

  Prior to installation the site should be structurally complete and enclosed. All exterior doors and windows must be installed. Any inside work (masonry, drywall, paint, etc.) must be complete and allowed adequate drying time to eliminate any unnecessary moisture within the building

  Concrete should be at least 60 days old, preferably 120 days old. Permanent HVAC (heating/air conditioning) systems must be in use and operating 14 days prior to installation, maintaining a constant room temperature between 16-27°C (60-80°F) and a relative humidity between 30-55%. The product should not be delivered to site if these environmental conditions have not been met.

  Environmental conditions are specified as pre-installation requirements and should be maintained for the life of the floor. It is the responsibility of the owner/installer to determine if the job site subfloor and conditions are environmentally and structurally acceptable for engineered wood floor installation. Check the wood moisture content of

multiple boards with a moisture meter to establish a baseline for required acclimation (40 boards for every 1000sf of flooring). Acclimation time will vary according to the geographical location and job site conditions in your area, refer to the NWFA Installation Guidelines (Appendix D & E) for the average acceptable ranges specific to each location in North America.

MC averages for Canada:

(Northern BC Coast - 9-13% MC; BC/AB/Sask/MB - 6-9% MC; ON/Southern QC - 6-11% MC; Northern QC/St. Johns - 5-9% MC; NB/NS/PEI - 8-12% MC; all require between 30-55% RH levels)

- **Subfloor:**

The installer is responsible for ensuring that the subfloor is suitable for the flooring application and properly prepared for installation. Opus engineered hardwood may be installed above, on and below grade.

**Wood:** Always check the moisture content of the substrate to make sure it meets with industry standards; the MC for wood should not exceed 12%. There should not be more than a 3% difference in MC between the flooring and the subfloor, the wood flooring should have a MC between 6-9%. Ensure the subfloor is clean, dry, structurally sound free from squeaks, protruding fasteners and debris.

Subfloor must be level to within 3/16"in 10'. Anything exceeding this tolerance or has damage/voids will need to be filled with a leveling compound approved for use under wood flooring. Inspect the subfloor carefully to confirm there is no movement, squeaks or additional fasteners required. Subfloor thickness will be determined by the joist spacing.

• 16"centers/joists – 5/8"CD Exposure 1/APA approved Plywood or ¾" CD Exposure 1/APA approved OSB.

• 16"-19.2"centers/joists – ¾"T&G CD Exposure 1/APA approved Plywood or ¾" CD Exposure 1/APA approved OSB

glued and mechanically fastened.

• 19.2"-24"centers/joists – 7/8"T&G CD Exposure 1/APA approved Plywood or 7/8" CD Exposure 1/APA approved OSB glued and mechanically fastened.

**Concrete:** Must be dry, clean, free of sealers, waxes, oil, paint, drywall compound, or other bond breaking substances. Perform a Polyfilm test. Tape down 2'x2' poly squares in several places on the floor. Wait 24-48 hours, then check for the appearance of condensation on the inside or a darkening on the concrete. If either is detected, a calcium chloride test will be required in accordance with ASTM F1869 (5lbs/24 hours/1000sf) and RH reading tested according to ASTM F2170-11 (RH 75% or less). Perform a PH Alkalinity test (6-9 PH on a 1-14 scale).

- **Pre-installation:**

Allow expansion space (equal to flooring thickness) between the wood flooring and any walls or vertical obstructions. Undercut doorjambs, casings, etc. as needed so flooring has adequate expansion space, remove baseboards. Establish a primary working line, realizing the room is not square and no wall is perfectly straight. The best appearance is usually parallel to the length of the room, but always install perpendicular to the floor joists (wood subfloors) unless the subfloor meets special qualifications.

Always rack out the entire floor before installing to avoid clustered joints or patterns, and to achieve a good colour blend. As well as joint placement, stagger end joints of boards row to row minimum of 8-10", avoiding "H"and other discernible patterns (stair case, etc.) in adjacent rows. Visibly inspect each board to ensure no visible defects or unwanted characteristics are used. Once installed, boards will be considered to have been accepted by the customer and will not be eligible for replacement.

II

- **Glue Assist Installation:**

To minimize the occurrence of squeaking, Opus recommends installation for all wide plank flooring. Failure to follow glue assisted installation, and glue butt end joints with a non-crystallizing T&G adhesive (e.g. Roberts 1406, DriTac 8100, Deccobond 18, or similar) and a floating elastomeric flooring adhesive (e.g. Bostick EFA+, Sikabond Construction Adhesive, Mapei Ecobond 905, or similar), may result in squeaking or other such noises. Opus will not be responsible for squeaking, as this is not a product defect, and is not covered under Opus' product warranty. Unless your floor is completely level, and has zero deflection, some noise can be expected, not maintaining required humidity levels, and moisture content in your wood can also contribute to these issues.

• Apply an elastomeric adhesive directly to the underside of each board.

• Apply a 1/4" bead parallel to each end, in a serpentine pattern down the length of the board, keeping glue 1" from the edges of the board.

• Carefully set the board in place (to avoid getting glue on other surfaces) then nail in as normal.

• Clean up any excess glue immediately.

• Apply non-crystallizing glue in a continuous bead to the groove side of the board.

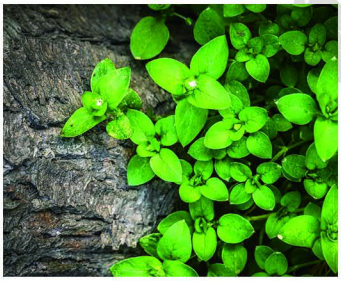
• A white rubber mallet and tapping block can be used as needed to ensure the joints fit tightly together. Never use a hammer directly on the tongue and groove joints as damage to the joint may result.

• Clean up excess glue immediately according to glue manufacturer's instructions.

- **Installation with Cleats/Staples:**

• Install a layer of #15 building felt overlapping the seams 4".

• Fasten a backer board of minimum 1/2" plywood to establish straight working lines. Backer boards should be secured to the



subfloor and carefully aligned with the primary line.
• Use flooring fasteners designed for engineered flooring (staples—minimum 1" long, maximum 3/8 crown, or cleats 1" to 1-1/4").

• Air pressure and tool settings should allow the fastener to seat properly in the nail channel, not split the wood, and not "dimple" the face (usually 80-85 PSI), always test the nailer on a scrap piece to ensure proper settings are used. Special footer plates are available for flooring nailers to protect factory finished flooring from damage.

• Fastening schedule should be every 3-4"(staples) or 4-6" (cleats), with a fastener 1-2" from each end, minimum two fasteners per piece. DO NOT USE TOOLS OR FASTENERS DESIGNED FOR 3/4" SOLID HARDWOOD FLOORING.

• Face nail only as required with 1" (4d) finish nails or cleats, 1/2" from the groove, pre-drilling the nail holes to prevent splitting.
Face nails should be countersunk and filled.

- **Adhesive Installation:**
  Many quality adhesives are available that are compatible with Opus Floors engineered hardwood flooring. Refer to the adhesive container label regarding storage, proper ventilation, trowel notch size/pattern, spread rate, open time, safety procedures & equipment, cleanup and cure time. Avoid allowing adhesive residue to contact the surface of the flooring, make sure to cleanup any adhesive before it cures. Some adhesive manufacturers recommend products/methods for removing adhesive residue; others may not. The installer is responsible for removing any residue.
- **Floating Installation:**
  Opus Floors engineered flooring may be floated over a structurally sound subfloor (as per above), using a quality tongue & groove glue (must remain elastic when cured) applied in a continuous bead along the bottom of the grooves. A quality floating floor underlayment should be used such as Opus' 3mm IXPE Underlayment. Expansion spacing

equal to the thickness of the floor must be left around the perimeter and to all vertical obstacles. The substrate must be level and not have any deflection within industry standard (as per above).

Subfloor flatness is critical to the success of a floating floor, any movement in the floor can lead to gapping/joint separation, squeaking/similar noises, and product failure. Unless your floor is completely level, and has zero deflection, some noise can be expected, not maintaining required humidity levels, and moisture content in your wood can also contribute to these issues. Please refer to the subfloor section for these requirements.

- **Radiant Heat Installation:**

With radiant heat, the heat source is directly beneath the flooring, so the flooring may dry out faster than a similar floor in a home with a conventional heating system. Wood flooring can be installed over radiant heat as long as you understand radiant heat and how it can impact wood flooring, what precautions to take, and what type of wood flooring to use.

Types of wood flooring that are best suited-for radiant heat subfloor are products that possess improved dimensional stability such as:

• Engineered wood flooring is more dimensionally stable than solid wood flooring.

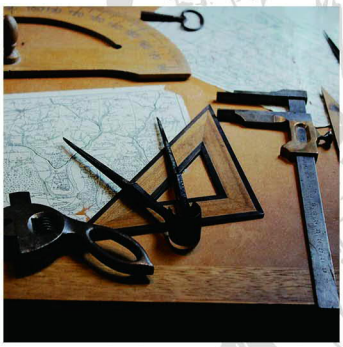
• Certain species are known for their inherent dimensional stability such as North American oak, American cherry, American walnut and others. Denser species such as maple and Brazilian cherry are less stable.

• Quarter sawn and rift-sawn wood flooring is more dimensionally stable in width than plain sawn wood flooring.

• Narrow boards are more dimensionally stable than wide boards.

- **General Radiant Heat Installation Guidelines:**

• To minimize the effect that rapid changes in temperature will



have on the moisture content of the wood floor, it is recommended that an outside thermostat be installed. If one is not present, suggest to your customer that this should be considered. Unlike conventional heating systems, which switch on as needed, radiant systems work most effectively and with less trauma to the wood floor if the heating process is gradual, based on small incremental increases in relation to the outside temperature.

- Subfloors should have proper moisture tests conducted according to industry requirements, listed above under subfloor section.
- The essential requirement in proper applications of wood flooring over radiant heated systems is to avoid penetration of the heating element. Radiant-heated subfloor systems can be concrete, wood or a combination of both. The type of subfloor as described in the previous chapters determines subfloor preparation.
- If the subfloor is concrete and it has cured, turn the heat on, regardless of season, and leave it on for at least 5-6 days to drive out residual moisture before installation of the wood flooring. Some installation systems, particularly glue-down applications, require the heat to be reduced or even turned off before installation of the flooring begins, so the adhesive does not cure excessively.
- With water-heated radiant-heat systems, a pressure test must be performed and documented by a qualified plumber or the system installer prior to beginning the installation of the wood flooring.
- If flooring materials that conduct heat at different rates are on the same circuit or heating zone, check with the HVAC mechanical engineer before proceeding.
- Radiant heat is dry heat. A humidification system is necessary to maintain wood flooring in its comfort zone.
- Install over approved subfloor as listed under subfloor section.
- Use an adhesive approved by the manufacturer.
- The heating system must be turned off before installation.

• The maximum allowable subfloor surface temperature is 29°C (85°F).

• Expect some heating season shrinkage.

The following installation and subfloor systems can be used successfully over radiant heat:

• Glue-down, engineered or solid parquet
• Floating engineered
• Direct-nail, solid wood or engineered wood flooring to wood subfloor
• Solid T&G floor direct-nail to sleepers
• Single layer of plywood on sleepers
• Double plywood floating subfloor
• Loose-lay single layer of ¾" plywood cut in 16" planks staggered with ½" gap between laid perpendicular to wood direction.

- **Direct Nail to Wood Subfloor with Radiant Heat:**

• Install over approved subfloor (refer to subfloor section above for details).
• Always check for subfloor moisture (refer to subfloor section above for details on moisture requirements and moisture testing).
• Wood must be properly acclimated to normal living conditions.
• Be sure fasteners are not so long as to penetrate heating elements.
• Maximum subfloor surface temperature 29°C (85°F).

- **Floating Installation with Radiant Heat:**

• Install over approved subfloor (refer to subfloor section above for details).

• A 6 mil or better polyethylene vapor retarder should be installed over concrete subfloors. In some cases, this may be part of the flooring underlayment.

• A foam or resilient underlayment such as Opus' 3mm IXPE Underlayment must be installed prior to application of the

wood flooring.
• Make sure to use the proper adhesives for the application, always read the label to ensure the correct product is used.
• Maximum subfloor surface temperature 29°C (85°F).

- **Storage, Handling and Care:**

**Storage and Handling:**
• Carry and transport Creek flat at all times. Do not carry cartons without use of a carry board. Store on a flat and level surface. Stack squarely, no more than 15 cartons high. Do not store or turn on edges.
• Store in a dry, temperature controlled environment out of direct sunlight. Maintain temperatures between 65°F (18°C) and 85°F (29°C) at all times. Floorboard expands and contracts with changes in temperature. Ensure the flooring temperature is not above 29°C or below 18°C at the time of installation.

IMPORTANT: Remove flooring and sundries from your vehicle immediately after transporting.

**Static or Dynamic Loads:**
• To help prevent damage from heavy static loads such as pool tables, exercise equipment, etc., or heavy dynamic (rolling) loads, use coasters and rollers/casters that dissipate concentrated weight loads. It is the furniture, appliance or equipment manufacturer's responsibility to warrant the suitability of their device or products against any damage that may occur to the flooring due to the use of their equipment.
• Use protective pads under furniture.
• If it becomes necessary to move any heavy fixtures or appliances over the flooring on casters or dollies, the flooring should be protected with 0.64cm (1/4 in) or thicker plywood, hardboard or other underlayment panels.
• Avoid exposure to direct sunlight for prolonged periods of time. Use drapes or blinds to minimize direct sunlight during peak sunlight hours.
• Use doormats at entrance ways to protect the floor from discolouring. Avoid using rubber-backed rugs, as they may stain or discolour the floor. If you have an asphalt driveway, use

a heavy-duty doormat at your main door, as chemicals in asphalt can cause flooring to yellow.
• It's good idea to save a few planks in case of accidental damage. Boards can be replaced or repaired by flooring professional.

III

- **Maintenance and Conditioning:**

Opus Hardwood floors will remain stable between 30% and 55% humidity. Less than 30% (dry or cold climates) will cause wood to contract and shrink. As a result, gaps between boards can occur, and cracking can occur in severe circumstances.As a result, gaps between boards can occur, and cracking can occur in severe circumstances.

Hardwood floors with an excess of over 55% will take on moisture and will expand and can cause overwood.

Maintaining these humidity levels will ensure that this product will perform properly and maintain its warranty. Product performance claims made resulting from low relative humidity or moisture content outside the recommended levels and/or other environmental factors beyond the control of the Manufacturer are not covered under warranty. It is the responsibility of the installer, to ensure that the floor is installed in proper conditions and meeting all requirements necessary (moisture content between 6-8%, RH between 30-55%, proper humidifier/dehumidifier, etc.) for the products success.

- **Opus UV Oil Flooring Maintenance and Warranty Information**

Please follow the guidelines listed below for maintenance and warranty information. Woca care products must be used for maintenance as they are compatible with the factory applied surface finish:

UV Oil finish have a similar finish to a mat varnish since both are hardened under UV lights. Eventually the surface coating will wear down. With a UV Oil finish, you must use the

recommended maintenance products to provide ongoing protection to the floor surface. Here are the 3 products you need to use to take care of your Creek series Whitestone and Angel UV Oil finish.


WOCA Soap Natural/White 2.5L


WOCA WOOD Cleaner 1L


WOCA Maintenance Gel 200ML

1. Immediately After Installation

Woca soap should be used to clean your floor after installation. This will help to remove dust, grit, dirt etc. Dry mopping along with the soap will also be necessary for future cleaning. This comes in 2.5 Litre can which covers 250-300m2. This can be applied simply using a rectangular/square cotton cover mop or a mop and bucket. If the flooring has gotten dirty during renovation a coat of maintenance gel may be required, please use Woca Wood Cleaner the day before the Maintenance gel is first applied.

N.B. Woca Wood Cleaner is a high strength intensive cleaner and is not for general/regular cleaning.

It should only be used as outlined above and as per step 3 below.

2. Ongoing Cleaning&Care

Ongoing regular cleaning should be carried out as needed using Woca Soap as outlined in step 1. Higher traffic areas e.g hallways, kitchen areas will require more frequent cleaning. White/Grey tone floors will require more frequent care.

3. Re-oiling&Restoring your floor

The UV Hardened Oil finish will have a similar lifespan to a varnished/lacquered floor. When the floor needs to be re-oiled, the floor should be first washed with Woca Wood Cleaner. A buffing machine with a white pad can be used for more stubborn marks/stains.

The following day a coat of Woca Maintenance gel is then applied by buffing machine and white pad. It takes 1 week for the gel to fully harden. After 1 week, please follow step 2 recommendations above for ongoing cleaning and care of your floor.

Please see the reverse of each Woca product for full usage instruction.
For natural oaks and darker wood floors, use natural finish products.
For white/grey tone floors, use white finish products.

Failure to follow the recommended maintenance procedure will nullify all warranties.