

Viking Hardwood Flooring
Big Sky Premium Hardwood Collection
¾" (20mm) Engineered Wood Flooring
Installation Instructions * Warranty * Floor Care

IMPORTANT

**INSTALLATION OF ANY FLOORING
CONSTITUTES ACCEPTANCE OF ITS GRADE,
MILLING, COLOR AND FINISH**

**QUANTITY AND ACCURACY OF PRODUCT
ORDERED MUST BE VERIFIED AT TIME OF
DELIVERY.**

**PRODUCT CLAIMS MUST BE MADE BEFORE
INSTALLATION.**

**FLOORING MUST BE INSPECTED FOR QUALITY
OF MANUFACTURE, GRADE, COLOR AND
MOISTURE CONTENT.**

**IT IS OUR RESPONSIBILITY TO PROVIDE A DRY,
WELL MANUFACTURED PRODUCT.**

**IT IS YOUR RESPONSIBILITY TO CONFIRM THIS
BEFORE INSTALLATION.**

READ ALL OF THESE INSTRUCTIONS BEFORE BEGINNING INSTALLATION. IN ADDITION TO THESE INSTRUCTIONS, IT IS RECOMMEND THAT THE INSTALLER FOLLOW ALL INSTALLATION GUIDELINES SET FORTH BY THE NATIONAL WOOD FLOORING ASSOCIATION (WWW.NWFA.ORG). WHERE THESE INSTRUCTIONS ARE DIFFERENT FROM NWFA GUIDELINES, THIS DOCUMENT TAKES PRECEDENCE.

Installation Instructions - INSTALLATION CONSTITUTES ACCEPTANCE

PRIOR TO INSTALLATION

It is the installer's responsibility to ensure that all of these General Conditions are met prior to installation and that all specific installation instructions below for the installation method you have chosen (Glue Down, Nail Down, Nail Down with Glue Assist, Floating or Radiant Heat Systems) is followed carefully. When installed according to these instructions, Big Sky engineered wood flooring is approved for use above, on and below grade. **When installing below grade, use the Floating Floor or Glue Down method with an approved moisture vapor barrier.**

It is the installer's responsibility to inspect the flooring for proper color, grade, gloss, visible manufacturing defects, damage, or otherwise unsatisfactory appearance or condition. **Do not install damaged or visibly unsatisfactory material. Installation of any flooring constitutes acceptance.** If necessary, contact your local retailer or distributor regarding any unsatisfactory material **PRIOR TO INSTALLATION.**

If installing over radiant heat, read the 'Radiant Heat Systems' section below before finalizing product selection or beginning installation. Careful adherence to these guidelines is required for a successful installation. Viking Flooring does not approve installation of ANY flooring over electric radiant heat systems. Only hydronic (water) systems may be approved. In wood flooring installations over radiant heat, moderate surface checking, cracking (especially at the ends of boards and around knots), shrinkage, gapping between planks, and slight cupping are all to be expected and do not constitute a product defect.

NOTE: When nailing wide plank flooring to a wood subfloor, we recommend both nailing and gluing (see below under Nail Down with Glue Assist Installation Instructions for details).

GENERAL JOB SITE CONDITIONS – ALL INSTALLATION METHODS

Environmental Conditions

When wood absorbs moisture, it expands and when it expels moisture it contracts. To minimize moisture related expansion and contraction, verify the following conditions prior to installation:

- All exterior walls, windows, and doors must be in place and the building closed during temperature acclimation and installation.
- All wet work such as painting, drywall, masonry, and concrete must be completed and dry.
- Basements and crawl spaces must be dry and well ventilated. Crawl spaces must be a minimum of 18" high from the ground to the bottom of the joist. Dirt floors in crawl spaces should be covered with a 6-10 mil black plastic to reduce moisture migration. Seams should overlap and be sealed with waterproof tape. Perimeter crawl space cross ventilation should equal 1.5% of the square footage. Vents must remain open year-round.

- Permanent HVAC should be on, operational and maintained between 60-75°F with relative humidity of 35%-55% for a minimum of 7 days prior to delivery, as well as during and after installation of the flooring. Humidity levels below 35% may cause movement in the flooring, including gapping between pieces and possible cupping and cracking in the face. Use of a humidification and/or dehumidification system may be required to maintain proper humidity levels, particularly over radiant heat. **Additional special requirements apply when installing over radiant heat. See below under 'Radiant Heat Systems' for details.**

- Exterior grading should be complete and drainage should move away from the building structure with a minimum drop of 3" in 10'.

Flooring Temperature Acclimation

Store the sealed cartons in the installation area at the job site for 48 hours to adjust to room temperature and then install directly out of freshly opened cartons. Work from several cartons at the same time and shuffle boards for the best visual appearance. **Do not open cartons prior to installation.**

Subfloor Conditions

Subfloors must be:

Clean - Subfloors must be scraped clean and free of debris. Sweep and /or vacuum all debris from the subfloor. Debris on the subfloor may cause overwood and uneven surfaces in the finished floor, poor fit between planks, and poor adhesive bond in glue down installations.

Flat - Subfloors must be flat to within 3/16" over any 10' radius and 1/8" over any 6' radius. Check the flatness using a straight edge, laser line or string line. Grind, scrape, sand or shim all high or low spots. On concrete subfloors, grind all high areas and fill low areas using a quality cementitious leveling compound. Ensure that all fasteners securing the subfloor are set flush.

Dry - Check and record all moisture and temperature conditions prior to installation. Visually check the jobsite for potential moisture problems. Look for signs of water intrusion around windows and doors. Check for mold or fungus on walls and all other areas. Water intrusion may necessitate structural repairs and/or create conditions unsuitable for flooring installation.

Plywood and composite subfloors should be checked using a calibrated moisture meter. Be sure to use the correct moisture meter setting for the species being checked. Carefully follow the moisture meter manufacturer's operation instructions. Moisture readings should not exceed 10% in any location and the moisture variation between the subfloor and the flooring should not exceed 2% at time of installation.

Concrete subfloors must be fully cured, at least 60 days old, and should have a minimum of 6 mil poly film between the concrete and ground. Lightweight concrete can hold more moisture and may take longer to dry out to acceptable moisture content.

- Installations over concrete require the use of a Calcium Chloride test per ASTM F 1869, or an in-situ relative humidity test using probes inserted into holes drilled into the concrete. Test all areas where wood will be installed. The results of the Calcium Chloride tests should not exceed 3 lbs. per 24 hours per 1000 square feet, and in-situ test results should not exceed 75% RH. Carefully record all results.

- NOTE: These tests give a snapshot of moisture conditions at the time of the test, but do not reflect the permanent year-round condition of the substrate.

If gluing down on concrete that is on or below grade, it is highly recommended to use a concrete sealer approved by the manufacturer of the adhesive you have chosen, even if you believe the concrete is dry. A concrete slab on or below grade that measures dry today may become moist in the future and cause floor failure. Viking Flooring is not responsible for site related moisture issues.

- More stringent requirements regarding the dryness of the subfloor apply when installing over radiant heat. See below under 'Radiant Heat Systems' for details.

Structurally Sound -- Wood subfloors must be well fastened. Use screws every 6" and replace subfloor panels/boards as necessary to eliminate all movement and squeaking.

Acceptable subfloor types:

- CDX plywood - at least 5/8" thick for joist spacing up to 16" on center, minimum 3/4" thick for joist spacing greater than 16" on center (19.2" maximum). Plywood subfloors installed over concrete must be installed in accordance with the guidelines set forth by the National Wood Flooring Association (NWFA) – www.nwfa.org.

- OSB -- at least 3/4" thick, PS 2--92 rated or PS 1--95 rated.

-Existing hardwood flooring over a suitable subfloor as outlined above. The existing floor must be well fastened, smooth, and for glue down installations, unfinished.

- Underlayment grade particleboard (minimum 40 lb. density) - **Glue Down/Floating Floors only.**

- Concrete slab - **Glue Down/Floating Floors only.** Concrete must be at least 3000 lbs. density for glue down installations.

- Lightweight concrete (gypcrete) – **Floating Floors only.** Gluing to concrete that is less than 3000 lbs. density is NOT APPROVED. Viking Flooring provides no guarantee that lightweight concrete or gypcrete will remain structurally sound during the life of the floor. Separation of the flooring from the subfloor caused by deterioration or fracturing of the substrate will not be considered a product failure.

- Ceramic tile – **Floating Floor only.** Tile must be well adhered and flat to 3/16" over any 10' radius.

- Resilient tile & sheet vinyl - **glue down/floating floors only;** for glue down, tile/vinyl must be new and not have any urethane coating (many luxury vinyl flooring products now come with a urethane top coating).

Preparing the Perimeter

- Undercut door trim, jambs and casings to the thickness of the flooring plus any adhesive or underlayment you plan to use.

- All wood flooring expands and contracts with changes in humidity. It is essential to install the floor leaving adequate expansion space between ALL sides of the flooring and ALL vertical obstructions, including door trim, jambs, studs, plumbing, cabinets, etc. This space can be covered with base molding, quarter round or shoe molding. **Failure to provide adequate expansion space in any single location can cause damage to the entire floor. Minimum expansion space is 5/8". Additional expansion space is required for Floating Floor installations that cover a span of greater than 30 feet.**

Layout

On wood subfloors, if the subfloor is fastened to joists or trusses, the flooring should be installed perpendicular or at a 45° angle to the joists/trusses. If possible, use an outside wall as the starting wall.

General Tools and Accessories recommended (all installation methods):

-Pencil -Tape Measure -Safety Glasses -Utility Knife -Moisture Meter -Hammer -Shim Wedges
 -Tapping Block -Rubber Mallet -Carpenter square -Pry bar or pull bar -Wood Filler -Scraper -Dust Mask
 -Rags -Chalk Box & Chalk -Recommended Saws: power miter saw, table saw, jamb saw.

Once all of these General Conditions are met, continue the installation using the instructions for the type(s) of installation you have chosen (Nail Down, Nail Down w/ Glue Assist, Glue Down, Floating Floor, and Radiant Heat Systems).

NAIL DOWN INSTALLATION INSTRUCTIONS

Big Sky Engineered Wood Flooring can be nailed to plywood, OSB and existing wood flooring meeting the requirements outlined above under 'Subfloor Conditions.'

IMPORTANT: FOR 9" AND WIDER FLOORS NAIL DOWN W/ GLUE ASSIST OR GLUE DOWN (FULL SPREAD ADHESIVE) INSTALLATION METHODS LISTED BELOW MUST BE USED. NAIL DOWN ONLY INSTALLATION IS NOT AN ACCEPTABLE INSTALLATION METHOD FOR 9" AND WIDER FLOORS.

For Nail Down Installations, you will need the General Tools and Accessories, plus:

- Nail set -Tack Stapler or 1" roofing nails (for felt)
- 6d Finish Nails or Pneumatic Finish Nailer with 1 1/4" to 1 1/2" fastener
- Blind Stapler/Nailer (Manual or Pneumatic) with 1 1/2" - 2" Fasteners for flooring 3/4" thick; cleats are recommended over staples (always do a test plank to verify that fasteners are seating properly and not causing dimpling in the face of the flooring before proceeding with the installation)
- Compressor with hose (if pneumatic tools are used)
- 15 lb. roofing felt, #15 hardwood floor underlayment felt, or other suitable underlayment paper

Nailing Down the Floor

1. After installing underlayment paper per the manufacturer's instructions, measure out from the starting wall the width of one flooring plank plus the appropriate expansion space for that thickness of flooring. Mark two points toward each end of the starting wall and snap a chalk line along the full length of the wall through the marks.
2. Lay the tongue side of the first row of flooring along the chalk line facing out from the starting wall. Face nail (top nail) the first row of flooring in place. Place the fasteners approximately 3/4" from the wall side (groove side) of the flooring board every 4" to 6". Continue the first row installation blind nailing every 4" to 6" along the tongue and every 2" to 3" from every end joint.
Note: Blind nailing of the first row may require the installer to use 6d finish nails or the pneumatic finish nailer along the tongue.
3. Continue the installation across the room, blind nailing every 4" to 6" and 2" to 3" from each end joint. Stagger end joints by at least 18". Avoid creating "H" patterns (where an end joint is adjacent to another end joint in the second to last row installed). Use cut pieces or starter pieces to start the subsequent row, discarding any pieces shorter than 12".
4. Trim the last row of flooring to maintain the minimum expansion space at the far wall.
5. At the far (finish) wall, it may be necessary to face nail the last 2-3 rows due to the angle of the stapler/nailer. The last row or two of flooring may need to be pulled together using a pulling bar.
6. Complete the installation by reinstalling or installing new base moldings, quarter round or shoe molding.

NAIL DOWN w/ GLUE ASSIST INSTALLATION INSTRUCTIONS

RECOMMENDED FOR 5" UP TO 8" WIDE FLOORING FOR BEST RESULTS.

FOR 9" AND WIDER FLOORING, NAIL DOWN w/ GLUE ASSIST OR GLUE DOWN (FULL SPREAD ADHESIVE) INSTALLATION METHOD IS REQUIRED.

Viking engineered wood flooring can be nailed to plywood, OSB and existing wood flooring meeting the requirements outlined above under 'Subfloor Conditions' using a glue assist method as described below. This is recommended for optimal performance and to minimize squeaking and floor movement.

For nail down with glue assist installation, you will need the General Tools and Accessories, plus:

- Adhesive: Bona, Stauf or Bostik wood flooring adhesive or equivalent quality adhesive recommended by the adhesive manufacturer for wood flooring installations.

-Adhesive remover recommended by the manufacturer of the adhesive selected

-Adhesive applicator recommended by the manufacturer of the adhesive selected

-Liquid moisture barrier compatible with flooring adhesive (recommended)

Nail Down w/ Glue Assist Notes

1. Do not use roofing felt or other underlayment paper when using adhesives. Where applicable, the use of a liquid-applied, or similar Class II vapor retarder that is compatible with the adhesive should be used to help prevent potential moisture issues in a glue-assist installation. **NEVER INSTALL FLOORING OVER A KNOWN MOISTURE CONDITION.**
2. Test the adhesive to ensure compatibility with the flooring and sub-floor before installation.
3. Nailing schedule should remain the same as a regular nail down installation. The use of adhesive is intended as a supplement, not a replacement, to the mechanical fastening method.
4. Follow all instructions and requirements recommended by the adhesive manufacturer including moisture barrier systems, temperature, humidity, ventilation, spread rate, open time, proper equipment, clean-up, and cure time.
5. Do not allow adhesive to dry on the face of the flooring.
6. The performance of the adhesive is the responsibility of the adhesive manufacturer and careful adherence to the adhesive manufacturer's installation instructions for the subfloor surface is crucial. Viking Flooring does not guarantee the adhesive bond between the subfloor and the wood flooring.

Nailing Down the Floor w/ Glue Assist

1. Measure out from the starting wall the width of one flooring plank plus the appropriate expansion space for that thickness of flooring. Mark two points toward each end of the starting wall and snap a chalk line along the full length of the wall through the marks.

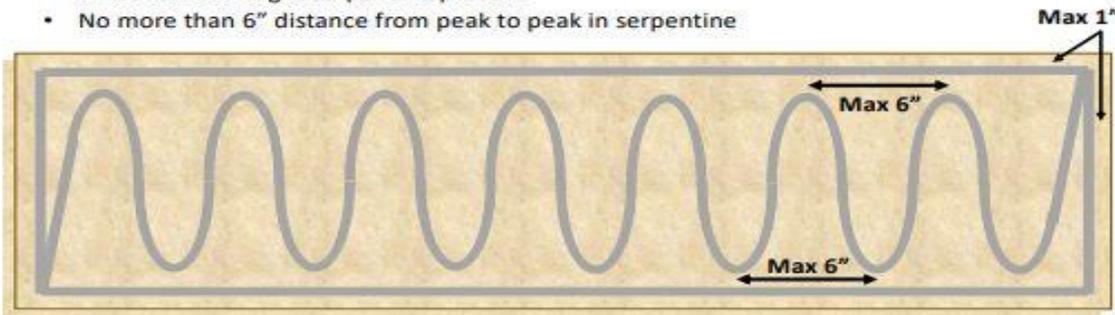
2. Lay the tongue side of the first row of flooring along the chalk line facing out from the starting wall. Face nail (top nail) the first row of flooring in place. Place the fasteners approximately 3/4" from the wall side (groove side) of the flooring board every 4" to 6". Continue the first-row installation blind nailing every 4" to 6" along the tongue and every 2" to 3" from every end joint.

Note: Blind nailing of the first row may require the installer to use 6d finish nails or the pneumatic finish nailer along the tongue.

3. In addition to nailing, apply a minimum 1/4" – 3/8" wide, uniform bead of adhesive in a serpentine pattern, or as the adhesive manufacturer recommends, to the subfloor along the center of each row of flooring, along with a perimeter bead of adhesive along all four edges. The adhesive should be applied so that it covers the entire width and length of each plank, to at least 1" of the ends and edges of each board, with no more than 6" distance from peak to peak in the serpentine pattern. See image below for reference.

'Serpentine + Perimeter' Glue Pattern for Glue Assist Nail Down Install

- Use minimum ¼" thick bead of adhesive
- Apply perimeter stripes along all four edges, within 1" of edge
- Fill center with tight serpentine pattern
- No more than 6" distance from peak to peak in serpentine



4. NOTE: The installer should either stand on the floor or apply a downward pressure to the surface of each piece of flooring as it is being nailed. This will ensure the flooring does not pull away from the subfloor causing unnecessary movement or hollow noises.

5. Work from several cartons at the same time and shuffle boards for the best visual appearance. Continue the installation across the room, blind nailing every 4" to 6" and 2" to 3" from each end joint. Stagger end joints by at least 6". Avoid creating "H" patterns (where an end joint is adjacent to another end joint in the second to last row installed). Use cut pieces or starter pieces to start the subsequent row, discarding any pieces shorter than 8".

6. Trim the last row of flooring to maintain the minimum expansion space at the far wall.

7. At the far (finish) wall, it may be necessary to face nail the last 2-3 rows due to the angle of the stapler/nailer. The last row or two of flooring may need to be pulled together using a pulling bar.

8. Complete the installation by reinstalling or installing new base moldings, quarter round or shoe molding.

GLUE DOWN (FULL SPREAD ADHESIVE) INSTALLATION INSTRUCTIONS

FOR 9" AND WIDER FLOORING, NAIL DOWN w/ GLUE ASSIST OR GLUE DOWN (FULL SPREAD ADHESIVE) INSTALLATION METHOD IS REQUIRED.

Big Sky Engineered Wood Flooring can be glued down to concrete, plywood, OSB, underlayment grade particleboard, and existing wood floors meeting the requirements outlined above under General Conditions/Subfloor Conditions. Big Sky Engineered Wood Flooring can also be glued to other surfaces: well-adhered sheet vinyl, vinyl tile, ceramic, etc., but the performance of the adhesive is the responsibility of the adhesive manufacturer and careful adherence to the adhesive manufacturer's installation instructions for that subfloor surface is crucial. Viking Flooring does not guarantee the adhesive bond between the subfloor and the wood flooring. **When installing below grade, an approved moisture vapor barrier system must be used in addition to the wood floor adhesive.**

For Glue Down Installations, you will need the General Tools and Accessories, plus:

- Adhesive: Bona or Bostik wood flooring adhesive or equivalent quality adhesive recommended by the adhesive manufacturer for wood flooring installations.
- Adhesive remover recommended by the manufacturer of the adhesive selected
- Adhesive trowel recommended by the manufacturer of the adhesive selected
- Moisture vapor barrier approved for use with the adhesive when installing below grade.

Gluing Down the Floor

1. Measure out from the starting wall the width of one flooring plank plus the appropriate expansion space for that thickness of flooring. Mark two points toward each end of the starting wall and snap a chalk line along the full length of the wall through the marks. Install backer boards as guides along the wall side of the chalk line. Anchor the backer boards in place with screws or finish nails. Over concrete subfloors anchor the backer boards with concrete screws or concrete nails. These boards will be removed later.
2. Lay the first row of flooring, but do not glue it into place. Align the tongue side of the flooring boards against the backer board. Use cut ends to start the subsequent row, discarding any pieces shorter than 12". Dry lay the next two rows of flooring in place, sliding the tongue into the groove. End joints should be staggered by at least 18". Pull the rows of flooring boards away from the backer board approximately 24" to allow for the glue to be spread.
3. Trowel spread the adhesive on the subfloor along the backer board wide enough to allow the first three rows of flooring to be installed. Follow the adhesive manufacturer's recommendations for wet lay times before proceeding to the next step.
4. Install the first row of flooring, pressing the tongue to the backer board. Slide the tongue of the next row of flooring into the groove of the first row and continue until the first three rows are done.
5. Trowel spread adhesive and continue the installation across the room. Trim the last row of flooring to maintain the minimum expansion space at the far wall. Be careful not to move the installed flooring out of position. Using knee--boards can help prevent movement. Some flooring boards may need to be tapped or pulled into place with a tapping block or pull bar.
6. Most adhesives require that the installer clean the adhesive off the flooring boards during the installation. Follow the adhesive manufacturer's recommendations for this procedure.
7. Once the room is finished, remove the backer boards from the starter row.
8. Dry lay the first row of flooring to replace the backer board. Trowel spread the adhesive on the back of the flooring boards (not on the subfloor) and install the flooring, sliding the tongue into the groove of the already installed starter row. Doorways and other openings may require installation of the flooring the same way. Slide the flooring boards under the previously cut door trims and casings.
9. Complete the installation by reinstalling or installing new base moldings.
10. Do not allow foot traffic on the floor for 24 hours after installation is complete.

FLOATING FLOOR INSTALLATION INSTRUCTIONS

Big Sky Engineered Wood Flooring can be installed as a floating floor system over almost all types of subfloors including Plywood, OSB, Existing Wood Floor, Vinyl, Vinyl Tile, and Ceramic Tile provided they are clean, flat, dry and structurally sound, meeting the requirements outlined above under 'Subfloor Conditions.'

*** When installing over a 30' span, additional expansion space is required. Use a T-molding or other trim piece to provide additional 5/8" expansion space.**

For Floating Floors, you will need the General Tools and Accessories, plus:

- Tongue and Groove Glue: Franklin Titebond III or Equivalent PVA adhesive
- Underlayment Pad: 1/8" thick Three-in-One pad (pad plus vapor barrier)
- Masking Tape: 3M Blue Tape 2080 or 2090 Long Mask
- Trim pieces if additional expansion space is required for spans greater than 30 feet

Floating the Floor

1. If installing over underlayment pad plus a separate layer of polyfilm, install the 6 mil polyfilm first, taping all seams with waterproof tape, and then install the pad. Roll out the first run of pad from wall to wall parallel to the starter wall. On the installed pad mark two points toward each end of the starting wall and chalk a line the full length of the wall through the marks. This is the starter line.
2. Lay the first row of flooring using only long boards. The first flooring board and the last flooring board in this row should be a minimum of 12" long and cut to provide the appropriate expansion space on each end. Apply a 1/8" continuous bead of T&G glue on the bottom side of the groove of each end joint. Align the tongue side of the starter row along the chalk line and engage the end joints together. Use shims along the long wall and at both ends of the row to keep the floor in place and maintain the right expansion space.
3. Lay the second and third row of flooring boards. End joints should be separated by a minimum of 18" from the adjacent row. Spread a 1/8" bead of T&G glue along the bottom side of the long groove and each end joint groove on the second row of flooring. Engage the groove side of the second row with the tongue of the starter row. Engage the end joints at the same time, aligning them and cutting at the end of each row to allow for appropriate expansion space. Discard any pieces shorter than 12". Continue this procedure for the third row. These three rows must be aligned straight to ensure that the rest of the installation remains straight. Tape the first three rows together using the recommended masking tape to keep rows straight and joints tight during the rest of the installation. If flooring boards do not easily engage together, use a tapping block or pull--bar.
4. Continue using the same procedure. Use masking tape as needed to keep the boards together and rows straight. Avoid working off the installed flooring as much as possible to prevent breakage of the glue joint.
5. Remove all masking tape before leaving the jobsite each day.
6. Complete the installation by reinstalling or installing new base moldings.
7. Do not allow foot traffic on the floor for 24 hours after installation is complete.

RADIANT HEAT SYSTEMS**Big Sky Engineered Wood Flooring is approved for use over hydronic radiant heat:**

In all installations over radiant heat, all of the following requirements and instructions must be adhered to:

- The radiant heat system must be hydronic (using warm water). **Big Sky Engineered Wood Flooring is not approved for use over electric radiant floor heat systems.**
- The heat system must be designed for wood flooring and have an outside temperature sensor and in-floor direct contact temperature sensors.
- The system controller must be designed for wood flooring and have a temperature control mechanism that will not allow the surface temperature of the subfloor to exceed 82°F.
- The system must be kept on and within 15°F of normal operating temperature AT ALL TIMES.
- For concrete subfloors, conduct and document Calcium Chloride Tests per ASTM F1869. Test results must not exceed **2.0 lbs.** per 1000 square feet per 24 hours.
- For wood subfloors, use a pin type meter to document the moisture content of the subfloor. Moisture readings should not exceed **8%** in any location and readings for the subfloor must be within 2% of the flooring at the time of installation.
- Relative humidity at the jobsite must be maintained between 35% and 55% at all times. Problems caused by failure to maintain proper humidity levels do not constitute a product defect.

- The radiant heat system must be on and operating at normal output a minimum of 14 days prior to the start of the installation.
- Wood flooring must be delivered to the jobsite and acclimated to room temperature in sealed cartons 48 hours prior to the start of the installation.
- Temperature in the installation area must be controlled between 60°F and 80°F at all times.
- Maximum surface temperature of the wood flooring can never exceed 82°F.
- Excessive heat, rapid heating, and/or failure to maintain humidity levels between 35% and 55% may cause cracking, cupping and other forms of failure and is not a product defect.
- NOTE: in wood flooring installations over radiant heat, moderate surface checking, cracking (especially at the ends of boards and around knots), shrinkage, gapping between planks, and slight cupping are all to be expected and do not constitute a product defect. Once these instructions and requirements are met, continue the installation by following the instructions for your specific installation method as outlined above.

Care & Maintenance

- Flooring should be one of the last items installed in a project. In order to protect the floors while other trades are finishing their work prior to final cleanup and turnover to the owner, use a breathable protective covering. Do not use Red Rosin paper, as it may discolor the finish, and do not use polyfilm or other non-breathing coverings as they can cause the floor to become damaged from humidity buildup. Clean the floor thoroughly before laying the covering to ensure that no debris is trapped underneath. Tape pieces of protective covering together but do not tape them to the wood flooring.
- Place walk off mats at all entrances to help collect dirt and debris that could damage or dull the flooring finish.
- Install felt floor protectors underneath all furniture.
- Do not allow people to wear spiked or high heels on the floor, which will damage even the hardest wood floors and finishes.
- Pet claws should always be properly trimmed.
- Work boots and shoes that may have pebbles lodged in the soles should be removed prior to entering. For best results, always remove shoes immediately before walking on the floor.
- Sweep or vacuum frequently.
- All mats or rugs should be cleaned on a regular basis. They should also be moved occasionally to allow natural color changes caused by light to occur evenly in all areas.
- **Never use a steam cleaner / mop on your floor.**
- Never wet mop your floor, and always clean up spills and standing water as soon as possible. With water or any other cleaning agent, be sure to thoroughly ring out the applicator or mop prior to applying it to the floor. A damp mop is fine if the moisture is limited to an amount that will evaporate almost immediately. Moisture that is allowed to seep into the seams between the planks may cause damage to your flooring. Do not allow soiled mats or rugs to stay on the floor as they can trap moisture on the surface.

Cleaning

- Clean the floor regularly with Viking Premium Floor Cleaner only or equivalent floor cleaner approved for use on urethane finishes. Do not use waxes, oils, oil soaps, or petroleum-based cleaners under any circumstances. Avoid store bought cleaners; purchase cleaning products appropriate for your hardwood floor from the store you purchased your flooring from.
- When it becomes necessary to refinish the floor, we recommend consulting the store where you purchased your flooring or a qualified hardwood flooring sand and finish contractor. We recommend water based coating and re-coating systems from Basic Coatings, Bona and Glitsa.

Viking Big Sky Engineered Wood Flooring – Limited Warranty

- Limited 50 Year Residential Wear Warranty
- Limited 3 Year Light Commercial Wear Warranty
- Professional Sanding Guarantee
- Limited Lifetime Structural Guarantee

Viking Internet Policy

VIKING PRODUCTS PURCHASED OVER THE INTERNET ARE NOT COVERED BY THE MANUFACTURER WARRANTY.

VIKING STRONGLY RECOMMENDS ALL VIKING FLOORING BE PURCHASED THROUGH A LOCAL VIKING FLOORING DEALER.

Viking Flooring will not honor warranty claims for products purchased over the Internet. It is important that customers buying Viking flooring products have access to full service, local Viking dealers. In addition, to maintain the validity of the warranty, Viking Flooring requires the dealer who sold the floor to service any claims.

Viking Flooring Warranty

Viking Flooring's warranty commitment is to provide quality hardwood flooring that is free from manufacturing defects for the lifetime of the product. Viking Flooring warrants to the original purchaser that, under normal residential conditions and with proper maintenance as described in Viking floor care instructions, the surface wear layer on Big Sky Engineered Wood Flooring will not wear through to bare wood over an area consisting of 5% or more of the total installed area, or separate from the wood for a period of 50 years from the original date of purchase.

Viking Flooring further warrants that, under normal Light Commercial conditions and with proper maintenance as described in Viking floor care instructions, the surface wear layer on Big Sky Engineered Wood Flooring will not wear through to bare wood over an area consisting of 5% or more of the total installed area, or separate from the wood for a period of 3 years from the original date of purchase.

Wear through is defined as exposing bare wood. Light Commercial areas are defined as approved, interior, non-industrial applications without immediate access to street traffic, with light to moderate traffic and infrequent liquid spills, and do not include food preparation, food service or public dining areas, areas where people form lines such as in front of cash registers, areas where furniture is frequently moved such as auditoriums, or high traffic areas such as classrooms and near elevator doors. Light commercial applications must be approved before installation in writing by Viking Flooring for the light commercial warranty to be valid. This warranty may not be transferred or reassigned from the original purchaser.

Gloss reduction is not considered wear through and is not covered under this warranty. These warranties are given only to the original retail purchaser of the flooring. No warranties are transferable. Viking Flooring reserves the right to verify and inspect any and all warranty claims. Warranty claims may be investigated and inspected by company personnel and/or NWFA Certified Hardwood Flooring Inspectors at our option. Some defect claims may require the removal of samples for analysis. Responsibility for

replacement costs of materials will be determined after cause and analysis is made. Viking Flooring will repair and/or replace any material deemed defective at our option.

Professional Sanding Guarantee

Viking Flooring warrants to you (the original purchaser) that the covered products listed may be professionally sanded and refinished the number of times as specified below if proper sanding and refinishing procedures are followed as specified by the National Wood Flooring Association (www.nwfa.org). Sanding voids all Viking wear warranties.

- ¾” engineered = 3 times

Customer Responsibilities:

- Customer must retain the original sales receipt.
- Customer must follow the installation instructions provided.
- Customer must follow proper maintenance and floor care procedures, using proper maintenance and floor care products, as described under floor care.
- **Hardwood flooring is a natural product. Wood expands and contracts according to humidity and moisture conditions. It is very important that the job site be thoroughly acclimated to a controlled environment before any flooring is installed.**

Installer Responsibilities: INSTALLATION CONSTITUTES ACCEPTANCE

- Carefully follow the flooring installation Instructions.
- Verify that installation and/or site conditions are adequate for the installation and ensure that humidity and temperature conditions are maintained before and during acclimation and installation.
- Verify that the subfloor is clean, dry, flat, and structurally sound per the requirements listed in the installation instructions.
- Verify that the flooring has been properly acclimated to temperature.
- Check the flooring for manufacturing defects and/or visible damage. The installer is the final grader of the flooring product. Installation of a floor is considered acceptance of the floor by the installer for color, grade, milling and finish. Once installed the product is not warranted for any claims regarding appearance. Verify prior to installation that any hardwood flooring that will be installed has been manufactured within acceptable tolerances and is visually satisfactory to the end user. If in doubt, do not install. It is the installer's responsibility to stop the installation within 100 SF or 10% of the flooring boxes opened, whichever is less.

Warranty Disclaimers - Things not covered by this warranty:

- This warranty excludes scratches, damage due to regular use, misuse, negligence, accidents, indentation due to shoe heels, damage from sand, pebbles or other abrasives, debris, pets, insects, construction traffic, or failure to maintain the floor as required
 - Failure to follow these written installation instructions
 - Gloss reduction is not considered surface wear and is not covered under this warranty
 - Lack of proper maintenance and/or lack of use of approved maintenance products, insufficient felt pad use on bottom of furniture, appliances and other household items
 - Misuse or improper alterations of the original manufactured product
 - Flooring installed in full bathrooms with a shower or tub
 - Damage caused by fire, water, flooding and other natural disasters and/or Acts of God
 - Damage caused by negligence, accidents, misuse or abuse
 - Damage caused by vacuum cleaner beater bar or hard heads
 - Damage caused by appliances, furniture, and casters
 - Damage caused by cutting from sharp objects
 - Color, shade, or texture variations between samples, printed color photography, website photography or replacement flooring and original flooring material
 - Changes in color due to exposure to air, sunlight and age
 - Noises (squeaks, etc.)
 - Naturally occurring wood characteristics such as variation in grain, mineral streaks, and knots
 - Deficiencies related to subfloor/floor joist assemblies, subfloor preparation materials and fasteners including but not limited to uneven subfloor surfaces, floor deflection, voids in the subfloor, or excessive moisture in the subfloor
 - Natural expansion and contraction resulting in separation between boards or damage caused by excessive high or low humidity
 - Cracks or separations between the flooring boards caused by expansion and contraction due to seasonal changes
 - Cupping or crowning in the flooring boards due to excessive moisture or low humidity
 - Products sold "As-Is"
 - Construction or installation related damage
 - Damage or excessive moisture content due to storage, transportation and installation is not covered under this warranty.
- Floors damaged or adhesive breakdown caused by subfloor moisture or water damage, including but not limited to broken or leaking water pipes, flooding, wet mopping spills or weather conditions
- Installation defects including installations made in violation of applicable state or local housing or building codes, or contrary to the installation instructions for this product

Color Disclaimer:

There are color and pattern variations in all wood. This is characteristic of a living tree. All wood will go through natural color changes from the effects of oxidation and ultraviolet light. This is not a product defect and is not covered by the warranty. The patterns and color variations created in a living tree are representative of nature - never repeated. Naturally occurring wood characteristics such as mineral streaks, knots, variations in grain, shade and color, are not considered defects. A newly installed floor will vary from samples or pictures shown - this variation is not covered by our warranty. Species, age, character and exposure to sunlight may cause new or replacement flooring not to match existing flooring or samples. All wood flooring will undergo natural color changes due to the effects of sunlight and/or ultraviolet light and these changes are not covered by our warranty.

Radiant Heat:

When the appropriate installation instructions are followed Big Sky Engineered Wood Flooring is approved over radiant heat if all of the requirements and installation instructions in the “Radiant Heat Systems” section of the Installation Instructions are fully met. **NOTE: in wood flooring installations over radiant heat, moderate surface checking, cracking (especially at the ends of boards and around knots), shrinkage, gapping between planks, and slight cupping are all to be expected and do not constitute a product defect.**

Warranty Exclusions:

It is the responsibility of the installer to inspect the flooring for manufacturing defects and/or visible damage prior to installation. Viking Flooring accepts no responsibility for liabilities, claims, or expenses, including labor costs, where flooring with visible defects has been installed. No retailers, sales representatives or employees have the authority to alter the obligations, limitations, or exclusions of this warranty. Viking Flooring excludes and will not be liable for or pay incidental, consequential or special damages under any warranties. This means any loss, expense, or damage other than to the flooring itself that may result from a defect in the flooring. These limited warranties constitute the only express warranties for the product purchased. To the extent permitted by law and for all non-consumer products, all warranties other than Viking Flooring limited warranties express or implied, including any warranty for merchantability or fitness for a particular purpose, are disclaimed. If any implied warranty arises under state law, any and all implied warranties (including any warranty of merchantability and fitness for a particular purpose) are limited in duration to the duration of this written warranty, to the extent allowed by law. Some jurisdictions do not allow exclusion or limitations of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply. These warranties give the customer specific legal rights, and the customer may also have other rights that vary from jurisdiction to jurisdiction.

Viking Flooring wants every customer to be happy and satisfied with their purchase. If there are claims or questions, or in the event that you are not totally satisfied with your floor, contact the retailer where you purchased the floor first. The retailer, if unable to resolve your claim, will contact Viking Flooring. If you are unable to contact the retailer where you purchased your floor, you may contact Viking Flooring in writing at the following address:

Attn: Claims Dept.
Viking Flooring
1013 Orchard St
Ferndale, MI 48220