

The Kährs logo is displayed in white text on a red square background. The word "Kährs" is written in a bold, sans-serif font, with a registered trademark symbol (®) to the upper right of the letter 's'.

WOODLOC® 5S FLOAT-IN INSTALLATION INSTRUCTIONS

Applicable to:

Kährs 15mm Original Collection 5/8”

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A dark grey shield-shaped icon containing text and a padlock symbol. The text is white and reads: "PROTECT YOUR INVESTMENT! Maintain your warranty: Only use Kährs branded underlayments, moldings, cleaning supplies, and accessories." Below the text is a white padlock symbol.

PROTECT YOUR INVESTMENT!

Maintain your warranty:
Only use Kährs branded
underlayments,
moldings, cleaning
supplies, and
accessories.



Note: These directions are based on industry standards and best practices. Warranty coverage may be lost due to failure to strictly follow all installation instructions and recommendations and/or the use of improper materials or tools. For complete warranty information visit www.kahrs.com or call 1-800-800-5247.

READ ALL INSTRUCTIONS CAREFULLY!

THANK YOU FOR CHOOSING KÄHRS FLOORING!

Owner/Installer responsibility

The installer and customer must both ensure the product meets their expectations regarding appearance, quality, and grade prior to installation. The installer must use reasonable selectivity and set aside or cut off pieces with deficiencies, whatever the cause. Should an individual piece be doubtful as to grade, manufacture, or factory finish, the installer should not use the board.

Prior to installation of Kährs flooring, the installer must ensure that the jobsite and subfloor meet the requirements of these instructions. Flooring failure resulting from unsatisfactory jobsite and/or subfloor conditions is not covered under warranty.

Any decision not to proceed must occur within the first 10% or 100 square feet of flooring installed, whichever is less. Once installed, any board is considered as having been accepted by the installer and owner, even if owner is absent at the time of installation. Please see *Kährs Wood Floor Guarantee document* for more information.

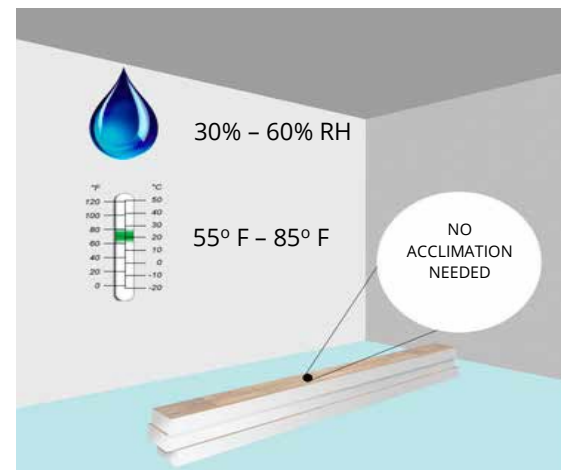
Owner must maintain the flooring in accordance with Kährs Wood Floor Care guidelines, including maintaining recommended temperature and relative humidity levels year-round.

Always store the hardwood flooring in dry conditions and do not open the cartons until just before installation.

JOBSITE CONDITIONS

Interior Conditions

- Kährs products must be installed only in a climate-controlled environment, with doors and windows installed and operational HVAC system.
- Wood flooring should be one of the last items installed for any new construction or remodel project. All work involving water or moisture should be completed before flooring installation.
- **Relative Humidity** at the job site must be, and remain, in the range of **30% - 60%**. Temperature setting must be, and remain, in normal operating range of **55°F - 85°F**. Test and record (photograph) RH readings in each area where Kährs products will be installed.
- Warning - humidity levels below 30% will likely cause movement in the flooring, including possible dry cupping, face checking and gapping between planks.



Exterior conditions

- Carefully inspect the outside surroundings for improper drainage and predictable or obvious sources of moisture. The yard should be graded (at least 6" in 10 ft.) to slope away from the foundation. Be sure that gutters and eaves sufficiently prevent rain from penetrating the foundation.
- Under the house: In homes with crawl space or pier-beam foundations, foundation vents must provide cross-ventilation with no dead air space. Vents should be located throughout the foundation with opening area equal to 1.5% of the square-foot area within the crawl space. If excessive moisture exists underneath the house, you must lay a 6-mil black polyethylene moisture barrier on the ground in the crawl space below the installation area.
- Basement should be free of all moisture and be weather tight. Relative Humidity of basements should not be more than 10% higher than the upper floors.
- Exterior site/structure issues are NOT the responsibility of the flooring contractor/installer or Kährs.



SUBFLOOR REQUIREMENTS

Moisture and testing

The installer must confirm subfloor moisture conditions are suitable before installing any hardwood floor.

Wood subfloor moisture must read under **12%** and differential between boards and subfloor must be less than 4%.

Concrete subfloor must be fully cured and at least 60 days old. Evaluate several areas, especially near exterior walls and walls containing plumbing. Document and keep all results.

Acceptable test methods for concrete subfloor moisture content include:

- TRAMEX Concrete Moisture Encounter Meter: Moisture readings should not exceed **4.5** on the upper scale. Concrete Moisture Meters give qualitative reading results-not quantitative ones. These results are a quick way to determine if the further testing is needed.

Note: The following tests are required in residential/commercial applications. Either or both tests are acceptable.

- Calcium Chloride Test (ASTM F 1869): The maximum moisture transfer must not exceed **3 lbs./1000 ft²** in 24 hrs. (2lbs./1000 ft² for Radiant Heat installations).

- **RH** Levels in Concrete Using In-situ Probes (ASTM F 2170) should not exceed **75%**.

Preparation and specifications

A floor can only be as good as the subfloor allows. All subfloors must be **clean, structurally sound, dry, and flat**. Address any movement, delamination, squeaks/noise, water damage, physical damage, etc. prior to install. Use vacuum cleaner to remove any debris and dirt.

Subfloor flatness is different from 'level'. Level is typically not necessary, but it is extremely important to level the subfloor to achieve the **flatness** of an **1/8" in an 8' radius**. Check this by using the edge of a Kährs plank to find any high or low spots. Sand or grind high areas or joints. Fill low areas with a latex additive cementitious leveling compound of 3,000-PSI minimum compressive strength patch and underlayment. For more information how to correct subfloor flatness, see NAWFA Installation Guidelines.

Note: Subfloor deflection and movement are the main cause of squeaking floors. If subfloor deflection exists measures must be taken to correct. Check NAWFA guidelines for joist spacing and plywood thickness.

All Kährs wood products installed over wood subfloors, lightweight or standard density concrete subfloors, or other existing floors with the float-in method must have Kährs ECO+, COMBO or QuietStride underlayment. QuietStride does not come with vapor barrier built-in, add 6mil polyethylene film for installations over concrete slab.

Ceramic tile, resilient tile and sheet vinyl must be well-bonded to subfloor, in good condition, clean and flat.

Never install a new wood floor over an existing floating floor or carpet pad.

Please refer to 'NAWFA Wood Flooring Installation Guide' for more information on subfloor types and recommendations.

For installations over subfloors with Radiant Heat, please refer to '*Kährs Radiant Heat Special instructions*' guide at www.kahrs.com

ATTENTION INSTALLERS

Sawing, sanding, and machining wood products can produce wood dust that can cause respiratory, eye and skin irritation. The International Agency for Research on Cancer (IARC) has classified wood dust as a carcinogen in humans. Drilling, cutting, and grinding of concrete generates concrete dust, containing crystalline silica, a substance known to cause cancer, birth defects, or other reproductive harm.

Precautionary Measures: If power tools are used, they should be equipped with a dust collector. If high dust levels are encountered, use an appropriate NIOSH-designated dust mask. Avoid dust contact with eye and skin.

First Aid Measures in Case of Irritation: In case of irritation, flush eyes or skin with water for at least 15 minutes.



UNDERLAYMENTS

Kährs ECO+ Underlayment with Vapor Bloc

Install Kährs ECO+ underlayment with the film side up and in the same direction that the flooring is to be installed. ECO+ is an approved underlayment for Radiant Heat applications.

- Be sure the sub-floor is clean and dry.
- Roll out one section of the Eco+ with Vapor Bloc parallel to the wall and in the same direction as you plan to install the wood flooring. The product will roll out with the Vapor Bloc film up and the foam side down to the sub-floor.
- Next install the wood planks atop the underlayment in accordance with the specific installation instructions for that product. Be sure that you can still see the edge of the underlayment so that you can properly line up the next roll.
- Install the next section of underlayment, butting the foam underlayment seams together. Remove the release film and press the overlapping Vapor Bloc film into the pre-applied adhesive, making certain the film is securely bonded to the adjacent section of underlayment. Repeat the above steps until the installation is complete.

Kährs QuietStride 2.0

When installing over a concrete subfloor, a Class I impermeable vapor retarder is always recommended under the QuietStride acoustical underlayment.

QuietStride with 6 mil polyethylene plastic is approved for float-in Radiant Heat applications.

- First install 6 mil polyethylene plastic loose-laid, seams overlapped 8". Run plastic up the wall 2" (trim excess after installation, before installing trim). Loose-lay QuietStride on top of plastic, wall to wall, and butt all seams together.
- No vapor retarder is necessary when installing over a conditioned basement or other space maintained at the same temperature and humidity as the space where Kährs flooring is being installed.

Kährs COMBO-System Underlayment

Combo-System Underlayment is also approved for Radiant Heat applications.

The width of a row of Combo-System Underlayment is comprised of 40" of underlayment plus an 8" overlap flap. The overlap flap guards the flooring from moisture at the seams, where the rows of underlayment are laid side by side. The overlap flap has a peel and stick strip to aid the installation process.

- Layout 1st row of underlayment (logo side down, blue side up) with the overlap flap facing the starting wall. Allow the underlayment to wrap up the wall, on the ends, approx. 2".
- Reach under and grab the overlap flap and pull it up so it lies against the starting wall. Trim this overlap flap back to leave approx. 2" of plastic up the wall.
- Lay 2nd row of underlayment flush to first. Make sure the overlap flap is next to 1st row, and the ends wrap up the walls. (If flooring installation has already begun, make sure to stop the flooring approx. 8 inches from the side of the underlayment to allow for the installation of the overlap flap.)
- Again, reach under and grab the overlap flap. Pull the flap up and fold it back to expose the peel and stick strip. Remove the white protective cover from the adhesive strip. Lay overlap flap across the 1st row of underlayment and press into place. Do NOT overlap underlayment. Overlap flap only.
- Cover the entire floor area and run the underlayment up the perimeter walls approximately 2". This provides a secure enclosure for the flooring. After the floor is installed and before the installation of the baseboards, the excess underlayment should be trimmed to the height of the floor surface.

Important: Kährs does not guarantee the performance of any non-Kährs branded underlayment.



INSTALLATION PREPARATION

For subfloor and environmental specifications see **Jobsite Conditions / Subfloor Requirements** section or visit www.kahrs.com

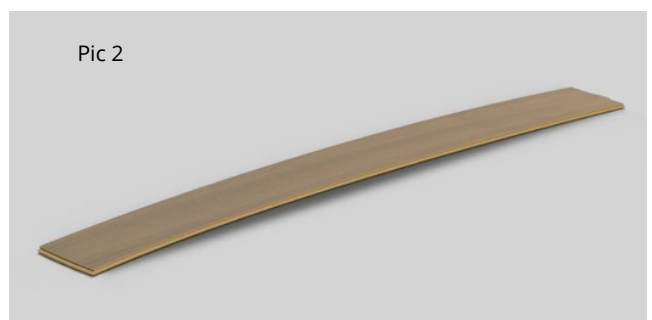
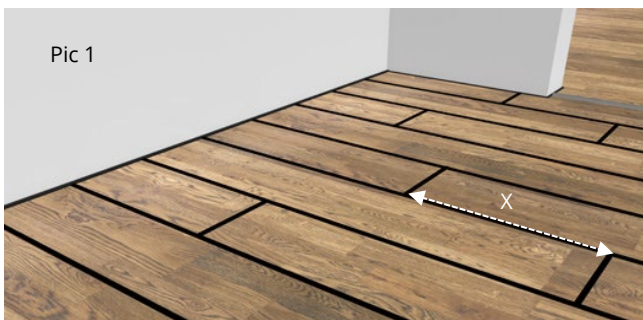
- *Do not open packages* until ready to begin installation!
Inspect boards as you go. Kährs flooring is sealed at the factory with a 7% moisture content. Opening cartons to acclimate the flooring (as with some solid strip flooring) could result in a difficult installation.
- It is installers responsibility to be aware of the grade, Relative Humidity of the room, and Moisture Content of the subfloor. You should check that each plank is free of damage or manufacturing defects. Any unusable boards should be set aside for later replacement.
- When possible, preselect and set aside boards that blend best with all horizontally mounted moldings (reducer/stair nose etc.) This will assure a uniform final appearance. Install these boards adjoining the moldings.
- Always install the floor from several cartons at the same time to ensure good color and shade mixture.
- Cut door jambs after subfloor leveling is completed.
- Do not use rubber mallets or hammers on the finished edge of the floors.
- Kährs Flooring is approved for installations in ½ bathrooms only (no bathrooms including showers or bathtubs).

Layout And Expansion

- Never attach any permanent object through the flooring, affixing it to the subfloor. Kitchen cabinets with heavy countertops should never be installed on top of the floating wood. A floating floor must be free to expand and contract in all directions. Installation of cabinets on top of a floating floor does not invalidate Kährs Guarantee, but if such floor require repair under warranty, Kährs will not be responsible for removing/replacing the cabinets.
- Maximum connected area dimensions for a 5G floating floor are **80 ft.** across the width and **160 ft.** lengthwise. Connected area is defined as all areas connected without a break. Kährs requires to break the area with a T-molding only when the connected area exceeds the defined dimensions above.
- Kährs requires 1/16" of expansion space for every 3' of Connected Area Width or 9' of connected area Length. This expansion space must be left around all walls, doors, and obstructions. Minimum expansion requirement is 1/2".

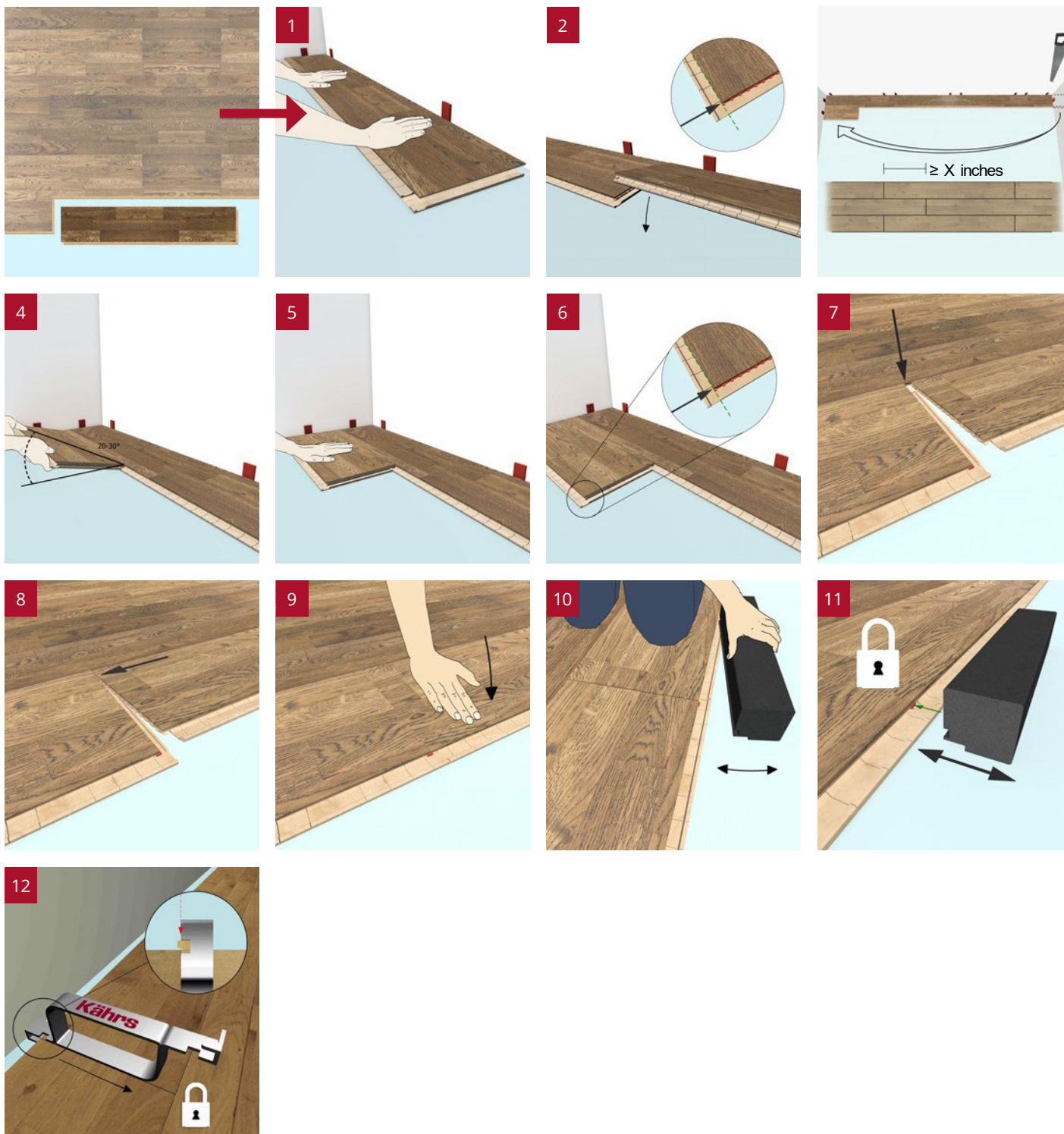
Required Expansion Reference Chart			
Connected Area WIDTH	Required Expansion Space*	Connected Area LENGTH	Required Expansion Space*
Up to 24'	1/2"	Up to 72'	1/2"
24' -40'	3/4"	72' to 120'	3/4"
40' -80'	3/4" - 1 5/8"	120' to 160'	1 1/8"

- A minimum of one end joint is required in every row, regardless of width (e.g., hallways).
- Stagger the end joints randomly, at a minimum of x=18" for 15/13mm floors, x=12" for 7mm Life floors (Pic. 1)
- We aim to manufacture boards that are slightly convex lengthwise to make the floor easy to install (Pic. 2)

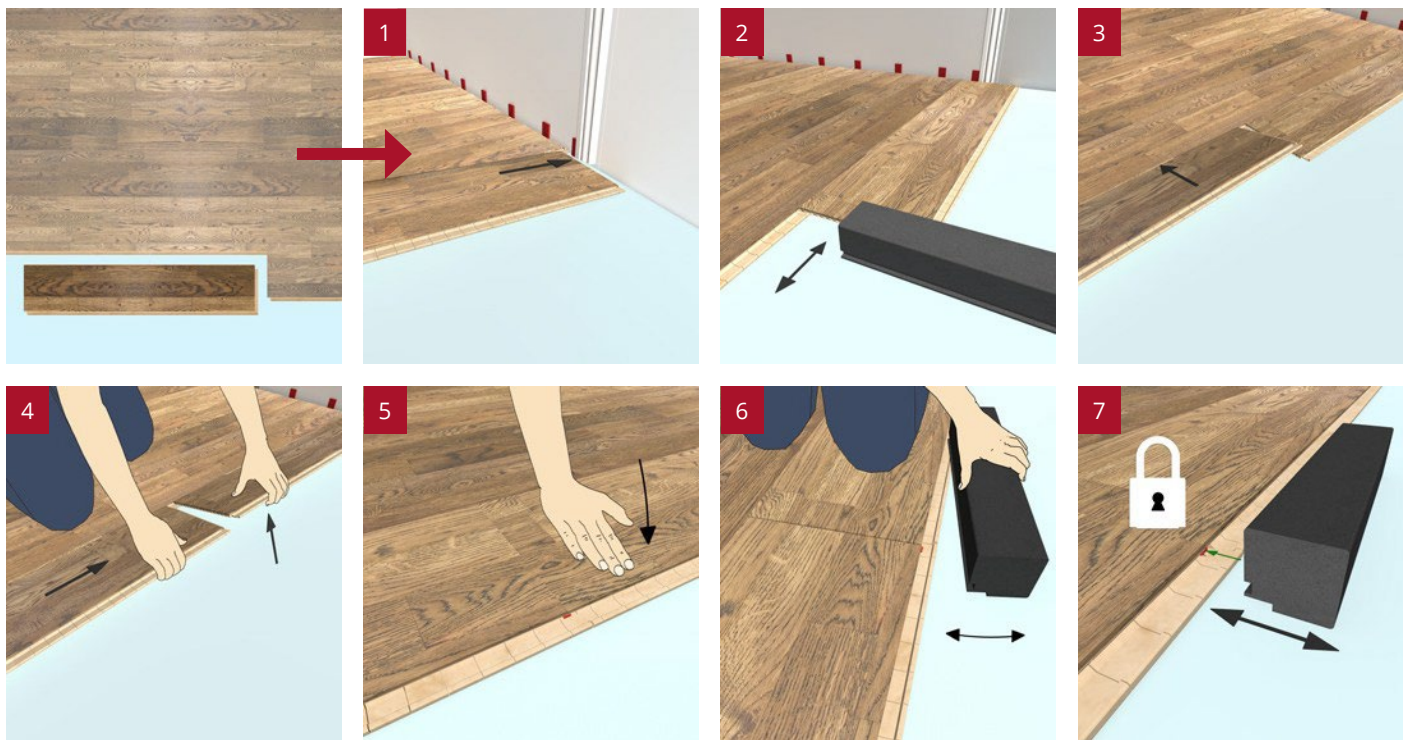


INSTALLATION Woodloc 5S

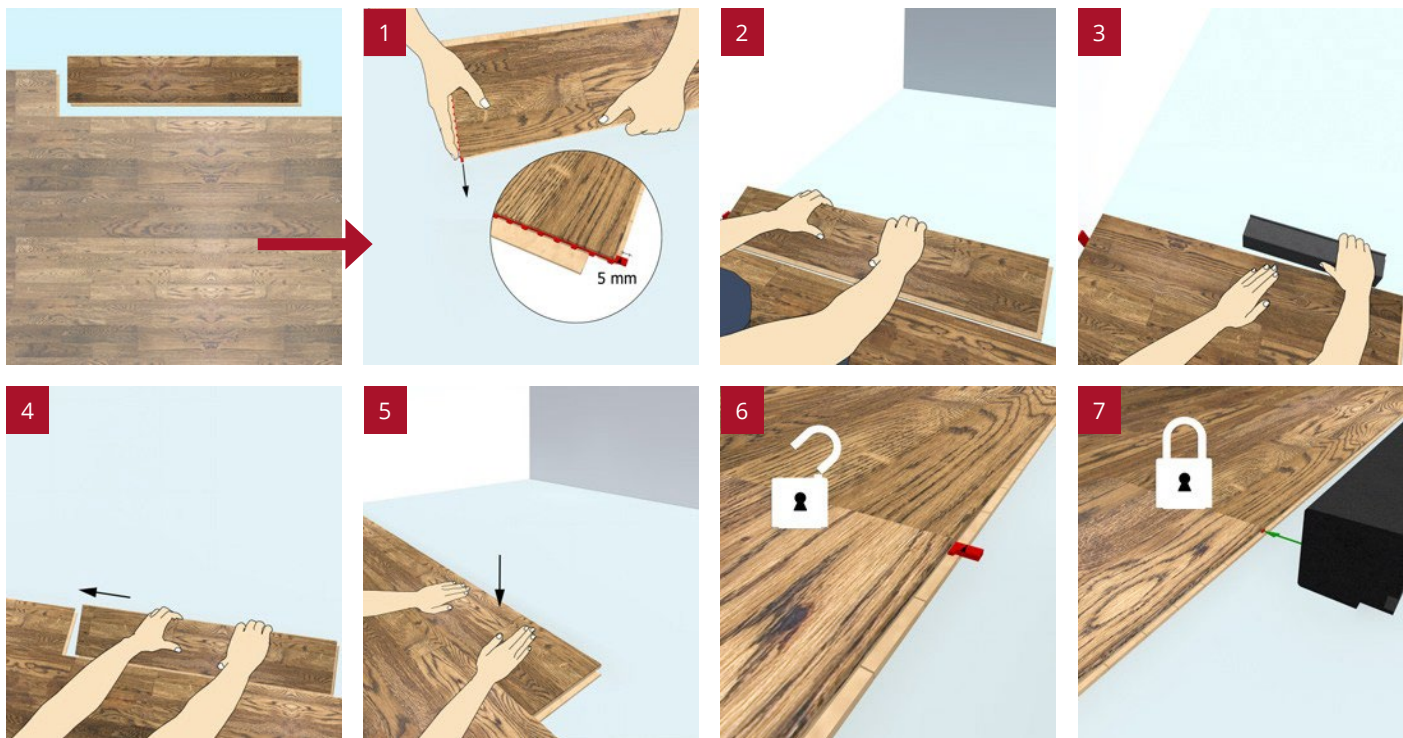
Normal Installation



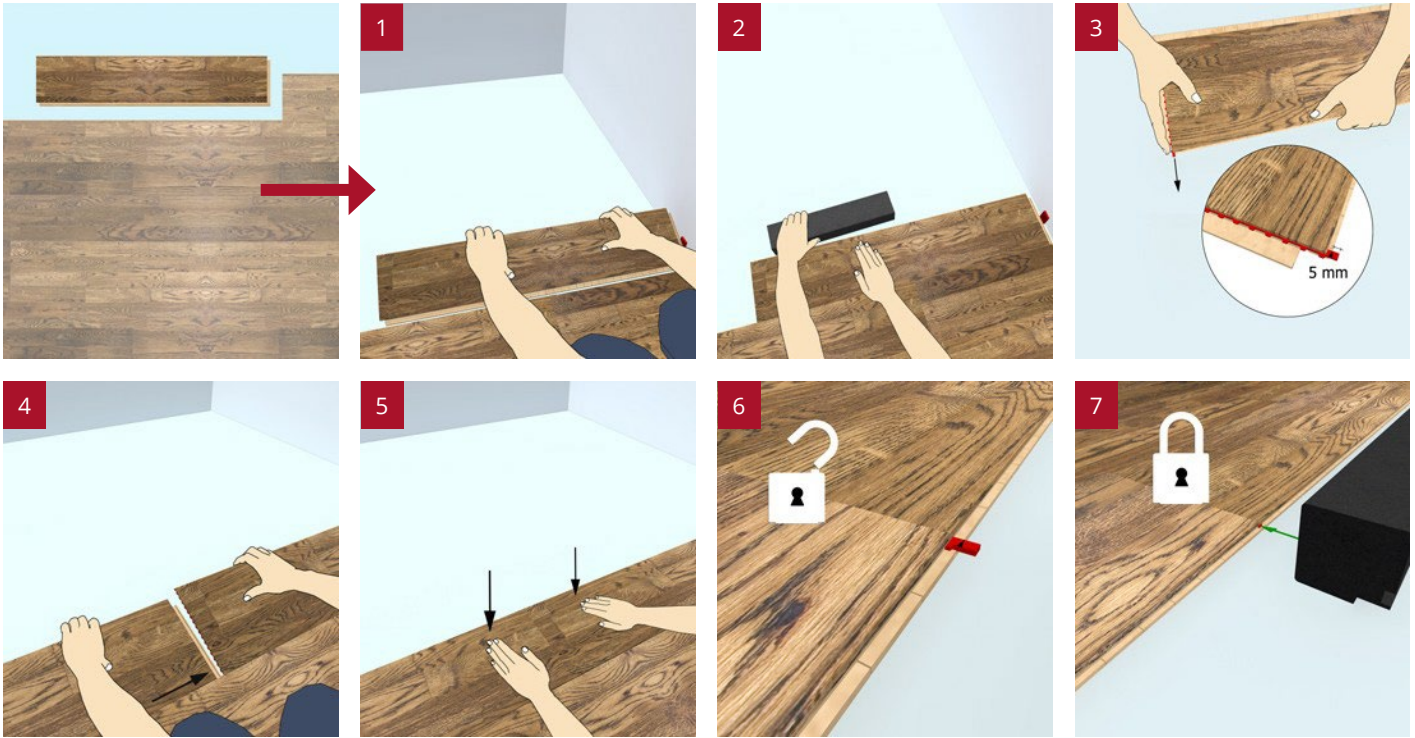
Normal Installation, Reversed Row Direction.



Backward Installation

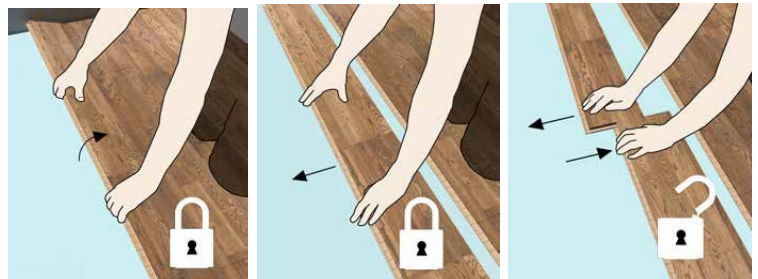


Backward Installation, Reversed Row Direction



Disengaging Boards

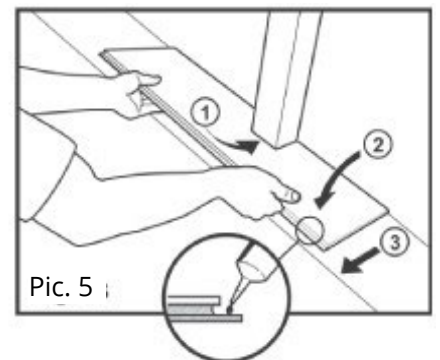
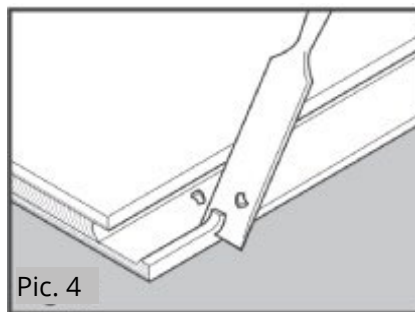
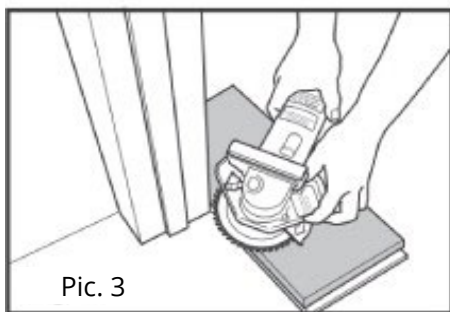
Boards can be laid from all directions if necessary. Woodloc® 5G dismantles easily. This enables easier planning for difficult installation areas. To disengage locked boards, first detach entire row and place on flat surface. Push or tap in opposite directions until boards unlock.



If doorjamb needs to be cut, use a piece of board and piece of underlayment to obtain correct height (Pic. 3).

If a new board needs to be tapped into place, be sure to protect edges with a scrap of wood before tapping with handblock.

If boards cannot be easily angled under door frame or similar, cut away locking edge as shown in Pic. 4, then apply Landobond Adhesive (or any adhesive designed to glue T&G) and install board as shown in Pic. 5





AFTER INSTALLATION

Remove expansion spacers and reinstall base and/or quarter round moldings to cover the expansion gap.

Use a soft brush vacuum attachment or soft broom to remove dust and dirt regularly during installation and upon completion. When installation is complete, vacuum the floor and clean it with Kährs Cleaner and a microfiber mop or cloth. NEVER wet mop floor.

See *Kährs Floor Care Guide & Lifetime Guarantee* for full details (available at www.kahrs.com).

Note: Oil Finish Floors must be oiled with Kährs Satin Oil immediately after installation and prior to use.

Instructions for the board replacement can be found at www.kahrs.com

Vacuum or clean floor regularly using dry dust mop or cloth, use Kährs Wood Floor Cleaner as needed. Do not use oil soap or water-emulsion, self-polishing waxes or water mixed with vinegar. NEVER wet mop floor. Place Floor Protectors on furniture legs to prevent damage. See *Kährs Floor Care Guide & Lifetime Guarantee* for full details (available at www.kahrs.com).

Relative Humidity in the room

Maintain the Relative Humidity levels within 30%-60% range to avoid unwanted climate-related damage and movements in the wood floor, e.g., cracks, gaps, noise, cupping etc. In summer you may therefore need to dehumidify the air, while in winter it may instead be necessary to increase the humidity in the air. At a too high or too low relative humidity, permanent shape changes of the wooden floor can occur. It is important that even in empty and uninhabited spaces, ensure that the temperature and humidity are correct. This is especially important when installing in connection with e.g., new constructions or major renovations.

Damage caused by failing to maintain the proper humidity levels is not manufacturing related and will void the floor's warranty.

It is not only wood floors that thrive best, but also us humans get a better indoor air with a relative humidity inside this range.

Adhesive Tape on Kährs Floors:

The use of adhesive tape on any Kährs floor for any reason is not recommended and is not covered in our warranty. After installation, if a protective cover over the floor is needed, cover the floor completely. Do not use plastic. Any protective covering should be taped, using a low-adhesion tape, to base or shoe moldings. When taping paper or sheets together, tape them to each other, not to the floor. NEVER apply tape to the finished flooring. Do not allow the floor covering to sit on the installed floor for an extended period.

Additional Finishing Coating:

For additional wear protection, a waterborne urethane finish is compatible with Kährs factory finishes. Contact Arboritec or Bona Kemi USA, Inc. for recommended products, application, and warranty information. Follow manufacturer's instructions for recoating a prefinished wood floor. Kährs does not guarantee the performance and/or durability of these products.

Color change

Wood is a natural material that gradually matures to its natural color, this change occurs fastest at first. To avoid an uneven color change, carpets should not be laid on the floor during the first months after installation of the parquet floor.



NOTES

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