

# WOODLOC® 5S/5G GLUE DOWN INSTALLATION INSTRUCTIONS

Applicable to:

**ALL PRODUCTS** 

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 <a href="https://www.kahrs.com">www.kahrs.com</a> 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.

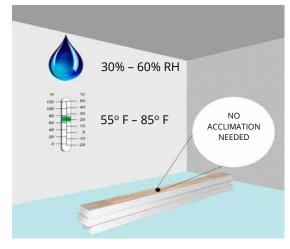
Owner must maintain the flooring in accordance with Kährs Wood Floor Care guidelines, including maintaining recommended temperature and relative humidity levels year-round.

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 ft $^2$  in 24 hrs. (2lbs./1000 ft $^2$  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 NWFA 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 NWFA guidelines for joist spacing and plywood thickness.

Please refer to 'NWFA 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 <a href="https://www.kahrs.com">www.kahrs.com</a>

# Techniques

Kährs flooring can be directly glued to concrete or wood subfloors on or above the ground level. If Acoustical Membrane is needed, use Kährs ECO (no moisture barrier) or QuietStride products.

Installing Kährs floors with the Glue down method requires no expansion breaks in the floor and is not limited in size. A 1/2" gap at perimeter walls is recommended to allow engagement of last boards.

#### Adhesive Tape on Kährs Floors

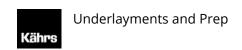
The use of adhesive tape on any Kährs floor for any reason (i.e., to fasten temporary protection) is not recommended and is not covered in our warranty.

#### **WARNING! INSTALLERS**

WARNING: Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to <a href="https://www.P65Warnings.ca.gov/wood">www.P65Warnings.ca.gov/wood</a>.

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 QuietStride or Eco (no moisture barrier)

<u>Direct Glue-Down</u>: Install QuietStride or Eco (no moisture barrier attached) wall to wall, butt all seams together (do not tape seams), directly adhering to subfloor with a premium multi-purpose adhesive. Fully adhere Kährs flooring to underlayment using premium wood adhesive and trowel.

*Note:* an approved concrete sealer must be used if calcium chloride test exceeds 3lbs or in situ RH test exceeds 75% RH as recommended by the manufacturer of that product.

<u>Direct Glue-Down over "float-in" underlayment (Quietstride only)</u>: First install 6 mil polyethylene plastic loose-laid, seams over-lapped 8". Run plastic up wall 2" (trim excess after installation, before installing trim). Loose-lay QuietStride on top of plastic, wall to wall, butt all seams together (do not tape seams). Fully adhere Kährs flooring to underlayment using premium wood adhesive and trowel.

*Note:* an approved concrete sealer must be used if calcium chloride test exceeds 3lbs. or in situ RH test exceeds 75%RH as recommended by the manufacturer of that product.

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

#### **GLUE DOWN INSTALLATION of Woodloc® 5S/5G**

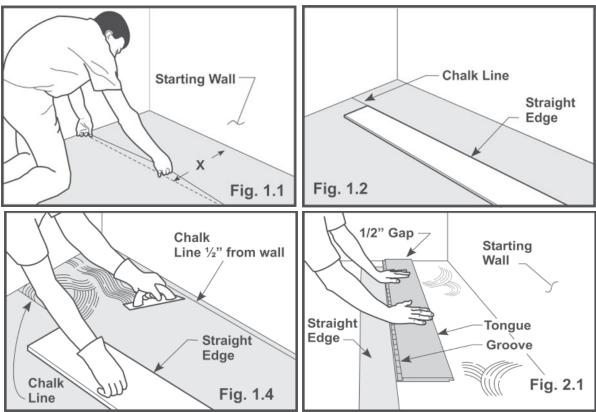
For subfloor and environmental specifications see Jobsite Conditions / Subfloor Requirements section or visit <a href="https://www.kahrs.com">www.kahrs.com</a>

#### **Important Installation Notes**

- <u>Do not open packages</u> until ready to begin installation! Inspect boards as you go. Kährs flooring is sealed at the factory with a moisture content of 7%. 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 and casings after subfloor leveling is completed to avoid difficult scribe cuts.
- 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).
- See Jobsite/Subfloor Preparation section and follow all requirements before installation.
- Read Woodloc® 5G and 5S Float-In instructions to familiarize yourself with proper end joint locking techniques.
- Vacuum subfloor thoroughly.
- Recommendations for adhesives should come directly from the adhesive manufacturer of your choice. Kährs
  recommends choosing a high quality hardwood flooring adhesive. Follow the adhesive manufacturer's instructions
  for proper use of the adhesive, application methods, flash-time, working-time, warranties etc.

# Glue-Down Installation for Woodloc® 5S/5G Step 1 - Layout

- 1.1 Using starting wall as reference, snap chalk line on subfloor at distance X from wall as shown in Fig. 1.1. To calculate X, engage two boards together (refer to Step 2.1 on locking procedure) and measure total width, including exposed groove, then add 1/2".
- 1.2 Align straight edge (Kährs board or any solid material with straight edge) with chalk line and secure to subfloor (Fig. 1.2)

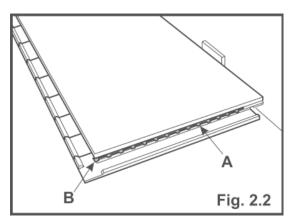


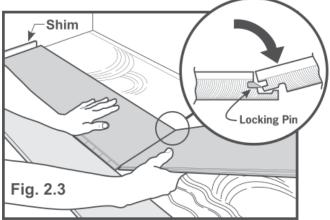
- 1.3 Measure 1/2" from starting wall and snap another chalk line (Fig. 1.4).
- 1.4 Spread adhesive in area between straight edge and second chalk line (Fig. 1.4). Use only as much adhesive as can be used during manufacturer's open time of adhesive.

# Step 2 - Installation

- 2.1 Start with tongue side facing wall and long groove side directly up against straight edge as seen in Fig. 2.1 Lay board into adhesive. Remember to allow 1/2" expansion gap at wall.
- 2.2 Kährs Woodloc® 5S employs a locking pin (A, Fig. 2.2) to engage short end of boards. Ensure locking pin is in proper alignment parallel to board edge and flush or slightly protruding(1/16" or less) from wear layer on long side of board (B, Fig. 2.2).
  - Woodloc® 5G locking pin is automatically pre-set.



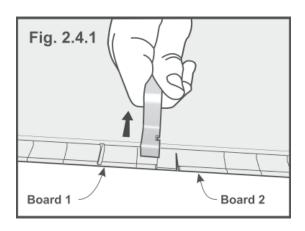


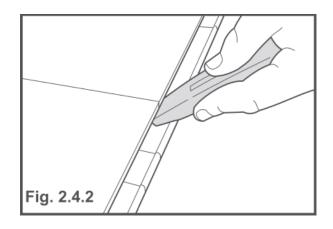


2.3 Hold second board against first board at approx. 30° angle (Fig. 2.3). If locking pin is not positioned correctly board will not engage. Lay second board flat into adhesive.

*Note:* Woodloc® 5G products have a pre-set locking pin which does not need to be engaged as noted above for Woodloc 5S products. When 5G boards are engaged properly at the end joints you will hear an audible click, this is indication that the boards are locked.

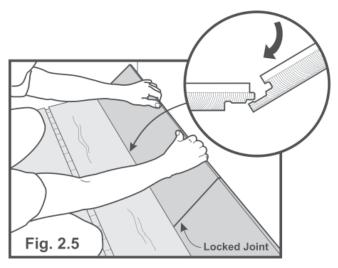
- 2.4 Engage locking pin to secure second board. Note: With glue-down installations of Woodloc® 5S, there are a few methods for engaging locking pin (note: these methods n/a for WL 5G products):
  - a) Use standard size utility knife or a flat screwdriver to engage pin as shown in Fig. 2.4.2. With knife blade in retracted position, run knife along inside of groove to push locking pin into locked position.
  - b) Alternate Method: After installation of entire first row, boards in subsequent rows will engage locking pins of previous row as they are installed. Refer to Fig. 2.5. Lay entire first row and cut end board to correct length (allow for expansion gap).

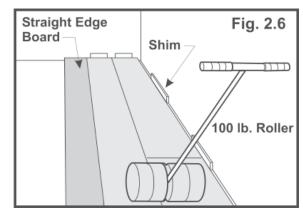




2.5 On dry, flat surface, lay out entire second row starting with cut-off piece from last board in first row, if possible. Be sure to allow for expansion gaps at both ends. Ensure end joint stagger from row to row is a minimum of 25% of boards length. Lock short side of each board as described in Steps 2.2 through 2.4. With groove side facing first row, hold entire row at approx. 20° - 30° angle and press inward, completely engaging long side joint (Fig. 2.5). Now lay entire row flat into adhesive. If necessary, use Last Board Puller to assist with engagement of long joint. If necessary, use Last Board Puller to assist with engagement of long joint.



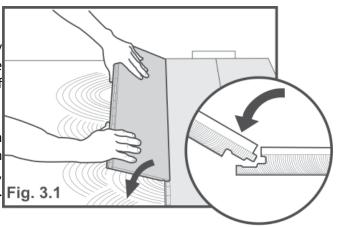




2.6 Once first two rows are installed, ensure expansion gap between walls and boards are shimmed securely. If recommended by adhesive manufacturer, roll flooring with 100# roller to ensure contact between flooring and subfloor (Fig. 2.6). Place weight (e.g., unopened cartons of boards) along perimeters until adhesive sets up. Then remove straight edge board.

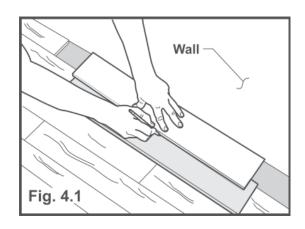
# Step 3 - Subsequent Rows

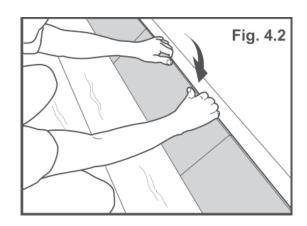
- 3.1 After starting two rows are firmly in place, apply adhesive in a "wet lay" method. Do not apply more adhesive than can be used within open time of adhesive.
- 3.2 Start each row with cut-off end of last board from previous row (Fig. 3.1). Immediately place flooring in wet adhesive and proceed with installation, engaging locking pins of each board as you proceed. Fig. 3.1



#### **Step 4 - Custom Fitting Last or First Row**

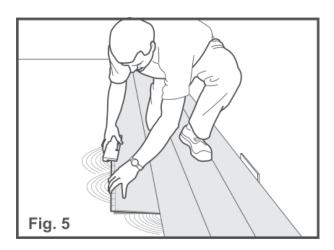
- 4.1 Since last row will generally not fit perfectly, scribe the entire row and cut to fit, allowing 1/4" (minimum) expansion gap (Fig. 4.1)
- 4.2 After sawing last (or first) row to shape, engage and lock all end joint locking pins, lift entire row and install to adjacent row (Fig. 4.2).

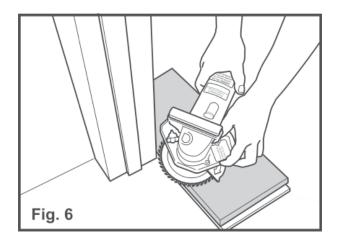




#### **Installation Tips**

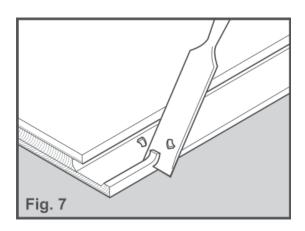
- After first three rows are laid, have one installer work on installing flooring while others spread adhesive and cut boards as needed.
- Installation of Woodloc® 5S/5G is easier while standing/working on top of already-installed flooring (Fig. 5). Working in this manner lessens the chance of accidentally transferring adhesive onto subfloor surface, thereby reducing clean-up time.

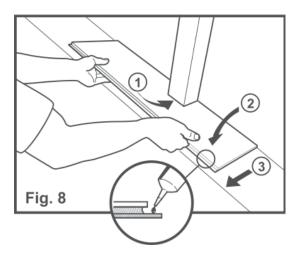




#### **Doorway Installation**

- If doorjamb (or similar) needs to be cut, use piece of board and piece of Underlayment to obtain correct height (Fig. 6). If new board needs to be tapped into place, be sure to protect edges with 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 Fig. 7, then apply Landobond adhesive and install board as shown in Fig. 8.





# AFTER INSTALLATION

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

Immediately clean any adhesive spilled on wood flooring during and right after installation.

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

Regularly vacuum or clean floor 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 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 wood floor can occur. It is important to ensure that even in empty and uninhabited spaces, 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.

Not only do wood floors thrive best with a relative humidity in this range, but also us, as humans thrive due to better indoor air quality.

#### 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 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 immediately after installation. To avoid uneven color change, carpets should not be laid on the floor during the first few months after installation of the floor.



