

Installation on Radiant Heating Systems



System Compatibility

Allinwood® engineered hardwood flooring is fully compatible with radiant heating systems, both hydronic (water-based) and electric. Its multi-layer construction provides outstanding dimensional stability, allowing safe installation where traditional solid wood would risk excessive movement, gapping, or warping.

Thermal Performance and Limitations

For optimal results and longevity:

- The subfloor surface temperature must never exceed 27 °C (80 °F).
- The temperature increase should be gradual — not exceeding 2–3 °C (5 °F) per day when turning the system on or off.
- Maintain relative humidity between 35–55 % to preserve wood balance and minimize shrinkage or checking.

Recommended Adhesives for Radiant Heat Installations

Use only flexible, high-quality adhesives specifically formulated for heated substrates. We strongly recommend silane-based (MS polymer) adhesives, which remain elastic under temperature fluctuations and ensure long-term bond integrity, and are VOC-Free.

They bond well to both concrete and plywood substrates without releasing solvents.

Why silane adhesives are ideal:

- Remain elastic under heat cycles.
- Allow natural wood movement without delamination.
- No isocyanates or solvents (VOC-Free).
- Compatible with most radiant floor heating systems.

Professional products:

- SikaBond®-T55 / T54 FC / T52 FC – high-performance MS polymer adhesive designed for radiant and wood subfloors.
- Bona Quantum / Quantum T – silane adhesive with hard-elastic properties, excellent for heated floors.
- UZIN MK 200 / MK 250 – premium European silane polymer with low emissions (EC1 Plus, M1).
- Stauf SPU-570 / PUK 455 – elastic silane adhesive designed for high-temperature environments.
- Wakol MS 260 / MS 262 – highly flexible MS polymer adhesive, EC1 Plus rated.

Important Considerations

Radiant heat significantly accelerates the natural aging process of any wood flooring. Over time, exposure to continuous warmth can:

- Dry out adhesives faster, reducing elasticity and bond life.
- Soften or dull the surface finish more quickly due to heat and low humidity.
- Increase moisture loss, leading to minor hairline surface checks if humidity control is neglected.

To minimize these effects:

- Use VOC-Free, European-certified adhesives and coatings supplied or approved by Allinwood®.
- Allow full acclimation of flooring to room conditions before installation.
- Run the radiant system at normal operating temperature for at least 7 days before installation to stabilize the substrate.
- After installation, do not shock-heat the system; increase temperature gradually.

Allinwood® Engineered Hardwood is the ideal choice for radiant heating systems — combining luxury, comfort, and technical performance. With correct installation practices, flexible silane adhesive, and consistent climate control, it will provide decades of reliable, elegant service.

 1405 Timber Dr Suite A, Elgin IL 60123

 info@allinwoodusa.com

 +1 9-ALLINWOOD
+1(925)546-9663

WWW.ALLINWOODUSA.COM



@ALLINWOODUSA

