## **DENALI HARDWOOD FLOORS RADIANT HEAT GUIDELINES 12/1/23**

Radiant Heat/underfloor heating has become a popular method to efficiently and evenly heat homes. Many types of floor coverings perform well over these systems, including hardwood, but, because hardwood is a natural product, care must be taken to ensure a successful and long-lasting installation. Installing Denali hardwood flooring over a non-approved system, or not following recommended procedures can result in gaps/separation between the boards, as well as potentially causing the boards to check or split. We recommend closely adhering to the following guidelines:

- 1. Recommended products: Engineered floors with face veneer no thicker than 4mm only, solid floors are not approved.
- 2. Species: Oak, Maple, and Birch are the only species we recommend for over radiant heat systems. Hickory is not approved.
- 3. Installations are approved only over Hydronic systems; not over electric systems due to their tendency to concentrate heat in limited areas near the electrical wires.
- 4. A high-quality system should be used that assures even distribution of heat and no more than a 3-degree temperature variation within a 24" radius.
- 5. The Hydronic system needs to be turned on for a minimum period of 5 days before the installation of the floor.
- 6. Flooring should be acclimated in the home in unopened cartons for at least 72 hours before installation.
- 7. The subfloor surface temperature as well as the finished floor surface temperature must never exceed 85 degrees.
- 8. Floors should be installed using glue down or floating methods only; no mechanical fastening is recommended.
- 9. At the beginning of a heating season, the radiant heat system should be slowly brought up to temperature over a several-day period.
- 10. Additional humidification may be required to maintain the environment within the National Wood Flooring Association's recommended relative humidity range of 35-55%.