# DUCHATEAU

# Special Instructions for Installations over Radiant Heat Systems

With radiant heat, the heat source is directly beneath the flooring, so the flooring will dry out versus a similar floor in a home with a conventional heating system. Wood flooring can be installed over radiant heat as long as you understand radiant heat and how it can impact wood flooring, what precautions to take, and what type of wood flooring to use. Radiant heat is dry heat. A humidification system may be necessary to maintain wood flooring in its required comfort zone. Engineered Oak and Walnut are the only approved species.

### Moisture and Humidity – PLEASE READ BEFORE BEGINNING INSTALLATION

Duchateau cannot be held responsible for site conditions. Refer to NWFA Appendix H for complete details.

The National Wood Flooring Association http://www.nwfa.org and The Hardwood Plywood and Veneer Association http://www.hpva.org state that wood flooring performs best and will have normal movement when the interior site environment is controlled to stay within a relative humidity range of 30% - 50% and a temperature range between 60 °F -80 °F. Warranty coverage requires that these jobsite conditions MUST be maintained for 3 days before, during and after installation and for the life of the floor. The use of humidification or dehumidification in some areas may be required.

Failure to comply with these requirements may result in structural damage and void related warranties as well as cause gaps, splits, cupping and checking to become visible. Flooring formats such as wood-based composites and engineered construction while offering advantages in stability and installation options, can shrink or swell outside of these conditions and this is not considered a defect. It is recommended that a temperature and humidity data logger is placed under the floor in each room or at least in each thermostat controlled area to demonstrate that the required site conditions have been maintained at all times. In the event that a NWFA certified Inspector is called upon to make a determination about a warrantable condition, this is the only manner to determine that the appropriate site conditions have been maintained.

### Important Notes:

- Floor warranty is void if radiant heat is ever allowed to exceed 82 degrees measured on the floor.
- Hydronic based systems only
- Duchateau requires the use of a working external thermostat. It is recommended that dedicated thermostats be installed in each room to allow temperatures to be accurately controlled. Thermostats need to be properly calibrated from a qualified professional independently measuring the floor temperature and adjusting as necessary.
- Expect some heating season shrinkage, i.e. gapping or cupping
- Float or Staple Nail-Down installation over suitable wood subfloor. *See Subfloor* preparation section NWFA Guidelines. Floating only over lightweight concrete.
- Direct Glue down only when concrete has minimum compressive strength of 3,000 psi and Heating pipes are covered at least 3cm and providing the adhesive is approved for use with radiant heat. Radiant Heating pipes must be covered at least 3cm from the surface.

- Beware of "hot spots" and pay attention to rugs and cushions as they can trap heat and damage your flooring. Always determine floor temperature independent from other sources to be sure temperatures are not exceeded.
- Regardless of installation method, we do NOT recommend the use of any adhesive tape on any oil finished floor for any period of time. Failure to comply may result in damage to the finish. Subsequent damage as a result of taping is not covered by the warranty.

### Radiant Heat - Prior to the Installation of Wood Flooring:

- If the subfloor is concrete, turn the heat on to 70 degrees, regardless of season, and left at 70 degrees for at least 7 days before installation of the wood flooring. Documenting this process is required for warranty coverage.
- When in use, NEVER raise the temperature more than 2 degrees per day. Use a "set it and forget it" strategy with radiant heat even while not occupying the house.
- Make sure to acclimate/site conditions to the new wood flooring in the actual installation space(s) of the home until moisture content is within 2% or less of the subfloor moisture content and document this process.
- Just prior to installation, radiant heat should be turned off or on the lowest setting for a minimum of 24 hours.

# Radiant Heat under Plywood Sub-Floor

It is recommended to either float or staple-nail ( glue assist for either ) the Duchateau floor when installed with this type of radiant heating. If floating installation is chosen, leave expansion spacers in place for a minimum of 8 hours to allow the type D3 T&G Adhesive to cure. Do not allow foot traffic for a minimum of 8 hours and allow a minimum of 24 hours before any furniture is placed onto the hardwood flooring. If using appropriate fasteners, carefully after checking for clearance and thickness, Blind nail at a 45 degree angle into tongue. Use the appropriate fasteners for the floor and subfloor thickness combination to not contact the heating system.

### Radiant Heat - After Installation of Wood Flooring (and ongoing thereafter)

Turn the radiant heating system on again to 70 degrees and with a professional grade device measure the flooring surface temperature again and gradually increase temperature by 2 degrees per day for at least 3 days, then as needed adhering to requirements.

### **IMPORTANT NOTES**

Duchateau Hardwood Floors Installation Guidelines are intended to offer general guidance as it relates to Duchateau flooring and are NOT a replacement for a professional, certified installer. Duchateau flooring MUST be installed according to the National Wood Flooring Association's (NWFA) installation guidelines in order for the Duchateau Warranty to be valid. The most current publication of the NWFA guidelines are available to all NWFA members, and can be found at www.nwfa.org.

Your Quality Engineered Duchateau Hardwood Floor comes fully finished from the factory with our hard-wax oil system. As a result, it is not required to apply Duchateau Maintenance Oil immediately following installation, though regular oiling still applies. It is recommended, however, that you clean your floors after installation using only Duchateau Premium Floor Cleaner and Protectant and maintain the floor with Duchateau Maintenance Oil regularly or Annually.