

## AFTER INSTALLATION

- Wait 24 hours for adhesive to fully cure before turning the system back on, then bring the temperature up gradually in 5° increments.
- Ensure that environmental conditions are maintained with a temperature of 65-75°F (18-24°C) and humidity at 35-55% at all times.
- Operate the radiant heating system at the lowest possible temperature required to achieve a comfortable living environment. A lower heat setting will also ensure a more even heating throughout the zone.
- Never allow the surface temperature of the radiant heated floor to exceed 82°F (28°C)
- Avoid dramatic temperature changes which can 'shock' the wood; always adjust the system gradually in 5° increments. It is recommended that a dedicated thermostat be installed to allow the temperature of the radiant heating system to be accurately controlled.
- Complete the RADIANT HEAT INSTALLATION RECORD below and store in a safe place with the installation sketch and your original purchase receipt.

## IN THE EVENT OF A CLAIM

- Contact your dealer for instructions. Do NOT remove or recover the sensors from under the floor. Sensors may only be removed by the manufacturer or their designated representative. Removal by any other person will render the sensors invalid and may void the product warranty.

## RADIANT HEAT INSTALLATION RECORD

Please complete this form in full and keep in a safe place, along with the sketch showing the sensor locations. In the event of a claim, this information must be sent to the manufacturer along with a copy of the original purchase receipt.

Customer name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Floor style: \_\_\_\_\_

Production date: \_\_\_\_\_

Date installed: \_\_\_\_\_

Dealer: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Telephone: \_\_\_\_\_

### REMEMBER:

- approved heat sensors must be installed under the floor
  - surface temperature of the floor must never exceed 28°C/82°F
- Failure to follow these instructions will void the product warranty.**

# Builders' Choice

## Engineered Hardwood Flooring

### Special Instructions for Installations Over Radiant Heat Systems

#### IMPORTANT: PLEASE READ CAREFULLY

Wood is a natural material which reacts physically to changes in environmental conditions. When exposed to excessive levels of heat, or extreme fluctuations in heat, the moisture content of wood will change, causing the wood to expand or contract. In a hardwood floor, this effect can be seen in cupping, gapping, cracking and other problems. Hardwood floors are especially susceptible to heat-related problems when installed over radiant heat systems. For this reason, such installations must be undertaken with great care and only with hardwood flooring products specifically approved for such application.

The Radiant Panel Association says:

When changing floor coverings over a radiant heating system, a radiant heating technician should always be consulted to make sure that the system is compatible, or can be made compatible, with the new floor covering that is being installed.

For example, if carpet and underlay are being replaced with hardwood flooring, it is probable that the radiant heating system will need to be operated at a much lower temperature in the zone where the hardwood has been installed. This is because hardwood flooring typically transmits heat much more efficiently than carpet and underlay. To achieve a surface temperature of 80°F on a floor covered with carpet and underlay, the radiant heat system typically needs to operate at 130-140°F. To achieve the same surface temperature on a hardwood floor, the same system would typically need to operate at only 90 – 100°F. If the temperature is left unchanged, the surface temperature of the hardwood would likely be far in excess of the manufacturer's guidelines, resulting in damage to the floor.

Older radiant heat systems can usually be modified to provide additional temperature and zone controls so that temperatures in the zone covered by the hardwood can be controlled at a level appropriate for the wood flooring while still enabling the boiler to operate efficiently. It is strongly recommended that a qualified radiant heat technician be consulted prior to installation to ensure that the heating system can be operated effectively at temperatures acceptable to both the wood flooring specification and the radiant heat system.

For complete radiant heat guidelines and other related information, radiant heat technicians are encouraged to contact the Radiant Panel Association at [www.radiantpanelassociation.org](http://www.radiantpanelassociation.org)

## CUSTOMER'S RESPONSIBILITY

It is the customer's responsibility to ensure that the radiant heating system is compatible for use with hardwood flooring. This is especially important when installing hardwood:

- over an older radiant heat system (10 years of age or more)
- in a room where the previous floor covering was carpet and underpad
- in one area of a home where several rooms are heated by radiant heat

Following the installation, the radiant heating system must be operated within strict guidelines. Even a correctly installed, approved style of flooring is subject to damage if the radiant heat system is operated at improper levels.

As a condition of the product warranty, the manufacturer requires that all installations of Builders' Choice hardwood flooring over radiant heat systems be performed according to the following instructions:

- the wood flooring product being installed is specifically approved by the manufacturer for use over radiant heat systems
- the product is installed by professional hardwood installers strictly in accordance with manufacturer's installation instructions and in the method approved for the product
- approved heat sensors (available from the manufacturer) are installed under the floor in accordance with the manufacturer's instructions (see below)
- the radiant heating system is operated at all times within the guidelines specified in the manufacturer's care instructions
- surface temperature of the floor never exceeds 28°C/82°F

Failure to install the flooring to these specifications will void the product warranty.

**NOTE: THE MANUFACTURER RESERVES THE RIGHT TO WITHHOLD THE PRODUCT WARRANTY IF THE MANUFACTURER DEEMS INSTALLATION CONDITIONS ARE UNSUITABLE FOR SATISFACTORY PERFORMANCE OF THE PRODUCT.**

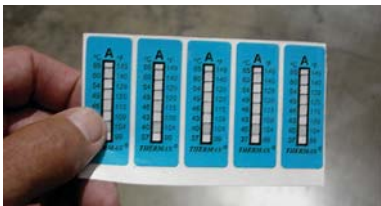
## SPECIAL REQUIREMENTS - BEFORE INSTALLATION

Ensure that the radiant heat system:

- is in full working order and has been fully tested and running for a minimum of two weeks prior to installation
- is equipped with temperature controls in the zone where the hardwood is to be installed
- is turned off in the installation zone for the duration of the installation period

## SPECIAL REQUIREMENTS - DURING INSTALLATION

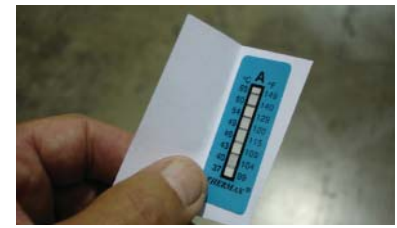
In addition to the procedures described in the installation instructions, approved heat sensors (available from your Builders' Choice dealer) must be installed under the flooring. In the event of floor damage, these sensors will be used to determine whether excessive heat levels were applied to the floor. A minimum of 5 sensors must be placed per 1000 square feet of flooring installed. Space them evenly around the installation area. Sensors must be installed as follows:



## SENSOR PLACEMENT FOR FLOATING FLOOR INSTALLATION

Note: sensors should be placed directly onto subfloor surface after subfloor preparation is complete, prior to installing vapor barrier or underlay.

- 1) Wrap sensor in plain paper.
- 2) Fold a 48" length of duct tape in half lengthwise, enclosing the wrapped sensor at one end. Ensure duct tape completely encloses the sensor. Make note of the sensor's position in the duct tape strip; sensors must be installed face down.
- 3) Lay sensor strips on subfloor so sensors are face down. Position strips so that they run perpendicular to the wall and the sensor is approximately 45" out from the wall. (Leave 2-3" of tape extending up the wall; it will be covered by the flooring & molding). To aid recovery, position strips so tabs are near electrical outlets.
- 4) Sketch a diagram of the room showing sensor location. Keep it in a safe place with your product receipt and warranty. In the event of a claim, a copy of this diagram must be given to the manufacturer.
- 6) Proceed with installation according to manufacturer's instructions.



## SENSOR PLACEMENT FOR GLUE DOWN INSTALLATION

Note: sensors should be placed directly onto subfloor surface after subfloor preparation is complete, prior to installing vapor barrier or underlay.

- 1) Wrap sensor in plain paper and place on subfloor approximately 45" out from the wall. (To aid recovery, position sensor directly opposite an electrical outlet.) Ensure sensor is face down.
- 2) Place a dime next to the sensor on the subfloor. (It will be used to locate the sensor magnetically.)
- 3) Secure sensor and coin in place with duct tape. Ensure duct tape completely covers the sensor and the coin.
- 4) Sketch a diagram of the room showing sensor location. Keep it in a safe place with your product receipt and warranty. In the event of a claim, a copy of this diagram must be given to the manufacturer.
- 5) Proceed with installation according to manufacturer's instructions.

NOTE: if installing sensors in a hallway or any area smaller than 8 feet across, position sensors in the middle of the area, not 45" out from the wall.

