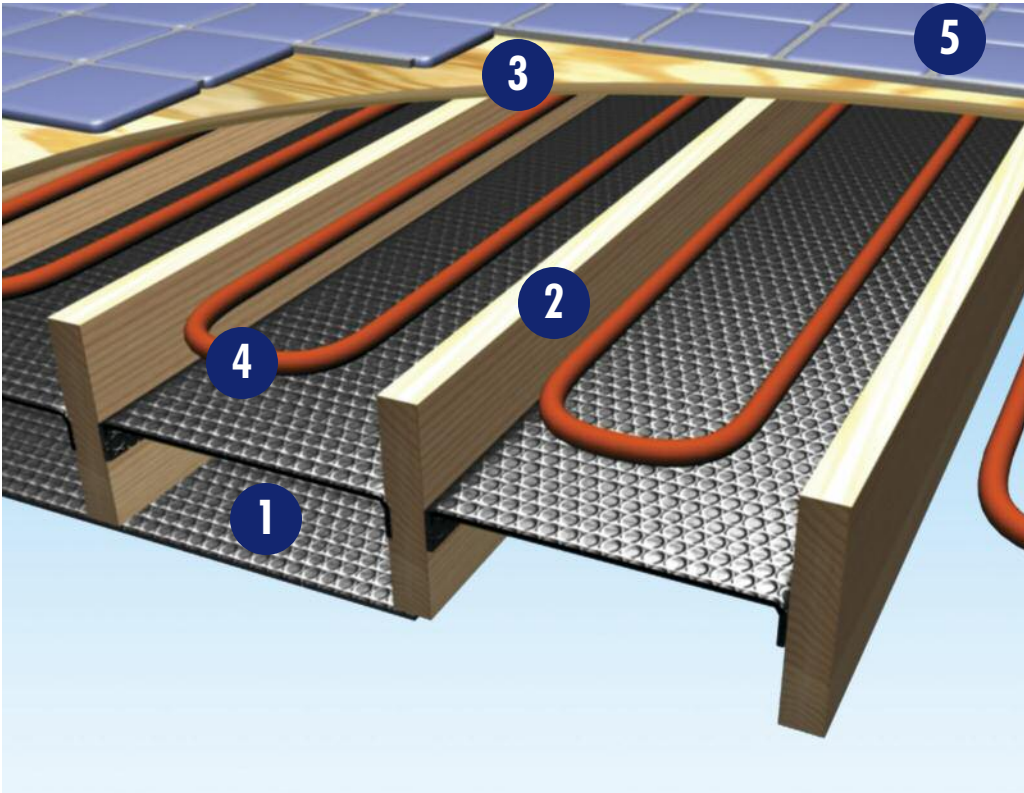


DIY Radiant Floor - Wood Joists | (R-21)

Up to R-21 and a Radiant Reflector (Maximum Benefit Application) Reflectix® Installation Instructions



1. Reflectix® Insulation
2. Floor Joists
3. Existing Subfloor
4. Radiant Floor Tubing
5. New Floor

Tools Required:

- Safety Glasses
- Staple Gun
- Tape Measure
- Utility Knife/Scissors

Recommended Products: Reflective/Bubble/Bubble/Reflective - Roll: BP48025 (48"x 25')
Staple Tab, Reflective/Bubble/Bubble/Reflective - Roll: ST16025 (16"x 25')

Installation Instructions: (There are 5 methods with varying levels of benefit)

Note: For all methods, inspect the structural integrity of the sub-floor and make any needed repairs before installing Reflectix®.

1. Product (Double Layer) Installed to Underside and Inside of Floor Joist - R-21 and a Radiant Reflector

- Begin at one end of the house. Insert the first course of Reflectix® half way up into the joist cavity and staple (at approximately 3" to 4" intervals) the edge of the product to the side of the joist. The goal is to split the joist cavity into two approximately equal enclosed air spaces.
- Continue with the second course of product at one end of a joist cavity (after the first course has been installed) and secure the product "end" with staples to the sub-floor or band board. Proceed down the joists by stapling each edge (or middle of the Reflective/Bubble/Bubble/Reflective 48" wide product) to the face of each joist. Staple the product at intervals of approximately 3" to 4". Enclose the entire joist run(s).

- Seal seams with Reflectix® Foil Tape to create a vapor/moisture barrier.
- Repeat for each joist that contains the Radiant Floor System.

2. Product Installed to Underside of Floor Joist - R-16 and a Radiant Reflector

- Begin at one end of a joist cavity (that contains the Radiant Floor System) and install the product “end” with staples to the sub-floor or band board. Proceed down the joists by stapling each edge (or middle of the Reflective/Bubble/Bubble/Reflective 48” wide product) to the face of each joist. Staple at intervals of approximately 3” to 4”. Enclose the entire joist run(s).
- Seal seams with Reflectix® Foil Tape to create a vapor/moisture barrier.
- Repeat for each joist that contains the Radiant Floor System.

3. Product Installed Inside the Joist Cavity - Diminished R-Value / Radiant Reflector

- It is possible to install the Reflectix® inside the joist cavity (utilizing the Reflective/Bubble/Bubble/Reflective, Staple Tab product).
- Start at one end of the house. Tuck the Reflectix® into the joist cavity.
- Each edge of the product has a 3/4” staple tab. Determine the depth inside the cavity that the product is to be installed and attach the product with staples (through the tab) at approximately 3” to 4” intervals. Repeat on opposite joist.
- The less air space between the product and the sub-floor, the lower the R-Value (although reflectivity will be maintained).

Examples of benefits based on air space width above product:

- 0.5” air space = R-2.7
- 0.75” air space = R-4.6
- 3.5” air space = R-8.2

4. Product Installed Inside the Joist Cavity with Mass Insulation Below - Diminished R-Value / Radiant Reflector

- It is possible to install the Reflectix® inside the joist cavity above a Mass Insulation Batt.
- Utilize Reflective/Bubble/Bubble/Reflective, Staple Tab product Method specified in #3.
- Refer to R-Values in Method #3 to determine benefit gain in your system.

5. Product Installed Inside the Joist Cavity with Mass Insulation Above R-2.7 with a 0.5” Enclosed Air Space or R-4.6 with a 0.75” Enclosed Air Space

- Reflectix® can be installed below the Mass Insulation Batt.
- Refer to Method #3 for installation procedure, air space options and resulting R-Values.
- Finish with an interior panel below the Reflectix® (typical when finishing a basement).

Review These Important Safety Guidelines Prior to Installation:

- **ALWAYS** check local building codes before installing Reflectix®.
- **ALWAYS** check the area you are insulating and make any needed repairs. Any worn wiring should be replaced before you begin installing Reflectix®.
- **ALWAYS** make sure work areas are well ventilated and well lighted.
- **ALWAYS** use eye protection when operating a staple gun.
- **ALWAYS** use caution and common sense when using a staple gun. Be aware of where electrical wiring is located. Stapling into a wire can cause severe shock or death. **NEVER** staple into electrical wiring.
- **ALWAYS** be careful when working with large pieces of Reflectix® on windy days.
- When installing Reflectix® on bright sunny days, it is best to wear sun glasses.
- Do not work in areas such as attics when temperatures are too hot.
- Visit our website at www.reflectixinc.com for additional product and installation information.

Please Note:

The intention of these Installation Instructions and 3-D renderings are for the sole purpose of illustrating the correct location and relative position of the Reflectix® products in specific building assemblies. The correct construction methods and techniques are the responsibility of the installer or contractor. The methods outlined are recommendations on location of the Reflectix® products as a guideline. There are no claims on the part of Reflectix, Inc. that these building assemblies are finite standards or meet building code requirements (as they can vary by region).

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