

# WATER HEATER INSULATION R-4.5

This application is a great option to reduce the energy consumption of your customer's water heater. Not only is Reflectix® quick and easy to install, it will pay for itself in as quickly as 9 months.

### **PRODUCT DESCRIPTION**

The Reflectix<sup>®</sup> Double Reflective Insulation consists of two layers of highly reflective film (94%+) that are bonded to two tough layers of polyethylene. Two inner layers of insulating bubbles and a center layer of polyethylene provide this easy to handle product with high strength and reliability.

### **REFLECTIX® DOUBLE REFLECTIVE** INSULATION PART NUMBERS AND STOCK SIZES

- HVBP48050 (48"x 50')
- HVBP48100 (48"x 100')
- HVBP48125 (48"x 125')

### APPROVED USAGE

Residential, Commercial, Industrial and Institutional Water Heaters

### BENEFITS

- Inhibits condensation
- Non-toxic / non-carcinogenic
- Lightweight and clean
- Costs less to install
- Reflects 94% + of radiant energy

### **Double Reflective Technical Data:**

Temperature Range:	-60° to 180° F
Nominal Thickness:	5/16 inch (.312)
Weight:	0.771 oz./sq. ft.
Flame Spread Index (ASTM E 84):	Less than 25
Smoke Developed Index (ASTM E 84):	Less than 50
Mounting Method (ASTM E 2599)	
Fire Rating:	Class A/Class 1
Linear Shrinkage:	None
Reflectance (IR):	<b>9</b> 4%+
Water Vapor Transmission (ASTM E 96):	0.02
Puncture Resistance:	60 lb./in.
Mold and Mildew:	No Growth
Emittance:	Less than 0.06
Tensile Strength:	3.7 N/mm
Pliability:	No Cracking
Hot Surface Performance:	Passed (250° F)

Note: Not for use in direct contact on surface temperatures that are 180° F or greater.

**Reflectix® Duct Insulation Products** are ETL and Warnock Hersey Listed.

- Class A / Class 1 Fire Rating
- Resists growth of fungi, mold and mildew
- Does not require protective clothing or respirators to install
- Not affected by moisture or humidity
- ISO 9001:2008 certified manufacturing location



- Itch and fiber-free

# **Features** AT A GLANCE: Reflectix "No Itch"

Insulation is easy to handle and install. \_\_\_\_\_

This upgrade will pay for itself in as little as 9 months. -----

**Reduces annual energy** costs of the heater.

### WAREHOUSE **LOCATIONS:**

Markleville, IN

-----Phoenix, AZ

-----Greenville, SC

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Needham, MA -----

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### www.reflectixinc.com



## TESTING & CERTIFICATIONS

- Thermal Performance of Wall Systems ASTM C1363
- Thermal Performance of HVAC Duct System ASTM C335
- Thermal Performance of Crawl Space ASTM C1363
- Hot Surface Performance ASTM C411
- Heat Transfer (Heat Flow Up, Down, Horizontal) ASTM C1363
- Thermal Performance of Reflectix<sup>®</sup> and Fiberglass in Walls ASTM C1363
- Heat Transfer of Air-Handling Ducts with Reflectix®
- Flame Spread and Smoke Density ASTM E84
- Mounting Method ASTM E2599
- Fungus Resistance Mil-Std 810B Method 508
- Pliability Test ASTM C1224
- Sound Absorption Test ASTM C423 and ASTM E795
- Sound Transmission Loss ASTM E90 and ASTM E413
- Water Vapor Transmission ASTM E96
- Tensile Strength ASTM D751
- Emittance Testing ASTM C1371
- Thermal Performance of Water Heater Jackets
- Intertek: Surface Burning Characteristics of Building Materials ASTM E84 (Taped Joint Detail) Test Report # 3166908SAT-012
- Intertek: Surface Burning Characteristics of Building Materials ASTM E84 (Unslit) Test Report # 3166908SAT-011
- R&D Services: Resistance to the Growth of Fungi ASTM C1338 Test



Report # RD072713FR

- State of California
- State of California Licensed Insulation Manufacturer
- State of Minnesota: Filed with Minnesota Insulation Standards Program
- State of Wisconsin: Wisconsin Material Approval, Safety and Buildings Division Approval # 920088-1
- R&D Services Emittance Testing
- R&D Services: Physical Properties Sheet Width, Length, Pliability, Water Vapor Permanence and Aged Water Vapor Permanence
- R&D Services: Water Vapor Transmission Test ASTM E96 (Dessicant Method)

## **MANUFACTURER'S SUGGESTED INSTALLATION INSTRUCTIONS**

<u>Note</u>: Installation instructions and illustrated drawings are recommendations only, while proper local construction methods are the responsibility of the installer.

- Cut three 2" wide strips of the Reflectix® Double Insulation product at twice the circumference of the water heater (to be utilized as spacers).
- Attach the three strips (doubled) around the circumference of the water heater (top, bottom and middle).
- Cut the Reflectix<sup>®</sup> at a width equal to the height of the water heater. Secondly, cut the product to a length equal to the circumference measured on the outside of the spacers plus 1".
- If the water heater is taller than 48", a section of product will need to be fashioned to make up the shortage. The seam between the 48" sheet and the "extension" piece will need to be taped with a UL 181 approved tape on both sides.
- Wrap the Reflectix<sup>®</sup> around the water heater and tape the vertical seam with with a UL 181 approved tape.
- Trim product around pressure valve and cut on both sides of thermostat housing to create a flap type cover for easy access. Additionally, cut product away from the cover of the lower access panel.
- <u>Note: Electric Water Heaters</u>: Cut a circular section of the product the size of the top of the water heater. Trim to accommodate wires, pipes and relief valve. Next, tape (UL 181 Acrylic Adhesive Foil Tape) the circular (product) section to the top of the water heater. Do not use product on top of gas water heaters.

Note: Electric Water Heaters: Check to insure heater is wired to meet local codes.

<u>Note: Gas Water Heaters</u>: Do not install the insulation below the bottom of the water heater tank. This area is to allow combustion air. Do not use product on top of gas water heaters.

Note: All Water Heaters: Refer to owners or operating manual and follow any instructions provided for insulating the unit.



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