



High purity aluminum outer shell Patented heat-welded construction Polyethylene closed-cell foam core Engineered to release water vapor In a space thinner than a pancake, you can dramatically improve a home's energy efficiency. Using the same reflective technology that protects NASA astronauts from the sun's searing heat, ESP Low-E® Insulating Housewrap blocks 97% of radiant heat transfer through the walls - saving enough energy to pay for the upgrade in 3 years or less.

#### Siding Replacement

Energy efficiency and lowering heating and cooling costs are top priorities for American homeowners. Home improvement contractors can meet that demand with ESP Low-E® Housewrap. With ESP Low-E®, an ordinary residing job whether wood, vinyl, steel or fiber cement - becomes an energy-saving improvement that qualifies for Energy Tax Credits.

#### **New construction**

You can meet tough standards for more energy-efficient construction without dramatically increasing your cost. Use conventional two-by-four framing and insulation but upgrade to ESP Low-E<sup>®</sup> Insulating Housewrap for performance comparable to expensive six-inch wall systems.







## Housewrap Showdown

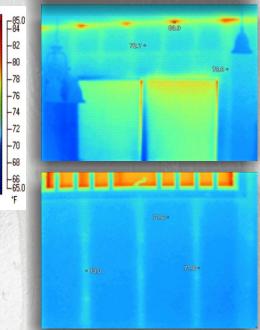
### House protected by ESP Low-E<sup>®</sup> Reflective Insulation Housewrap

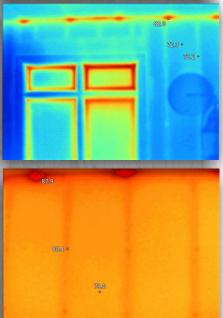
# House with conventional housewrap





Two Illinois homes built only 25 yards apart are virtually identical - with one key difference. One was built with ESP Low-E® Reflective Insulation Housewrap, the other with traditional house wrap.





On an 85° summer day, the northfacing interior walls of both homes were photographed from inside with a heat-measuring infrared camera. The images showed that ,very little summer heat penetrated either of the properly-insulated walls.

The walls on the south side, where the sun shone directly on the house walls, told a different story. The wall protected by ESP Low-E® all but stopped radiant heat transfer. The wall with traditional house wrap showed dramatic heat gain, absorbing heat and radiating it through the fiberglass insulation.

After I2 months, the homeowners compared energy bills. The ESP Low-E<sup>®</sup> homeowner had saved more than \$250 compared to his neighbor. For most homeowners, the additional cost of upgrading to ESP Low-E<sup>®</sup> is matched by energy savings within three years - even faster if energy costs continue to rise.

PRODUCT CODES: 4PFNS, 5PFNS, 6PFNS PRODUCT DIMENSIONS & DESCRIPTION:\*\* Single-sided aluminum foil with scrim product laminated to ¼" (nom. thickness) polyethylene foam WIDTH: 48", 60", or 72" with overlapping flange LENGTH: 125', 100', 84'

Core Resistance R-VALUE: R-1.03

System R-Value: R-4\*

PERM RATING ASTM E-96: 7 or 40 grams/(day-m<sup>2</sup>)

WATER RESISTANCE: ASTM D779 - 9hrs

FLAME AND SMOKE: ASTM E-84

FLAME < 25 SMOKE DEVELOPED <50

\*Horizontal heat flow: vinyl siding with 0.375 inch reflective airspace, ESP LOW-E $^{\circ}$ HouseWrap attached to nominal  $\frac{1}{2}$  inch wood sheathing.

Report from Geo Science available upon request.

\*\*for actual dimensions of this roll see attached label with manufacturer's lot number

ESP Low-E® Reflective Insulation Housewrap combines the benefits of a weather-resistant barrier with increased thermal performance. It's light, safe and easy to cut with a utility knife. It can be fastened with staples like an ordinary house wrap and stands up to rough handling.

<u>WARNING:</u> Although ESP LOW-E® Insulation Products are all fire tested to ASTM standards; it is recommended that they or any insulation material should not be exposed to open flame or other ignition sources of sufficient intensity during shipment, storage or installation.

<u>Caution:</u> Aluminum is an Electrical Conductor. Please use caution when working around electrical sources including overhead power lines.

