

# The Energy Guardian® R-20 Standard Pull Down Ladder Cover



**The Energy Guardian® R-20 Pull-Down Ladder Cover** insulates and seals attic pull down ladders of virtually all sizes while providing easy access to the attic for the homeowner. The unit is installed in the attic and creates a cavity for the ladder to fold into when the ladder is not in use. When assembled, the kit has the following outside dimensions: 14.75" H x 33" W x 61" L (inside dimension are 10" H x 27" W x 55" L).

## Uses

**The Energy Guardian® R-20 Pull Down Ladder Kit** acts like an exterior door, closing the gap in the building thermal barrier created by attic stair units in existing as well as newly constructed residential housing, causing reduced energy costs in both hot and cold weather.

The product is designed to cover any attic ladder in open spaced attics. For attics with truss roofed construction, refer to The Energy Guardian® Truss Pull Down Ladder Kit.

When properly installed, the system will stop a major source of energy loss in both hot and cold weather, improve the comfort of the home, save on both heating and cooling costs and eliminate a major cause of ice damming and mold.

## Product Attributes

**The Energy Guardian® R-20 Standard Pull Down Ladder Kit** is a system made of high density expanded polystyrene. This material is safe, emits virtually no off gassing and provides increased insulating value as the outside temperature decreases. (See table on reverse) The Kit has an R-20 insulating value. An alternative model is available to increase the R-Value to R-38 or higher in order to meet any local requirements.

The patented design of the Kit provides several important advantages:

- As an assembled system, it meets all requirements of the 2009 & 2012 editions of the International Energy Conservation Code (IECC), International Residential Code (IRC) and other Federal and State mandates. It contains both the high insulating value and durable air seal needed to stop the energy loss due to the attic access.
- The separate frame provides the required wood or equivalent protective barrier.
- The lid contains a depending section that fits into the frame to help ensure an air-tight seal. This innovative design provides a more effective and very durable solution. It replaces legacy sealing and securing methods such as straps, gasketing and zippers.
- 10 inches of clearance to accommodate the folded ladder
- Lightweight lid for use by all ages
- Fast, easy installation
- The kits are made in the USA



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## Product Ratings

**The Energy Guardian® R-20 Pull-Down Ladder Cover** is made of expanded polystyrene which has been manufactured and tested in accordance with ASTM C578. A U-factor x Area (UA) Calculation results in an R-Value of R-20 for the The Energy Guardian Pull-Down Ladder Cover (see Note 1 Below for more information).

In ASTM E84 tests, the material had a Flame Spread Rating of less than 25 and Smoke Developed Rating of less than 450. The product meets the 2009 and 2012 IECC and IRC Code requirements for attic access openings. It can also be used to meet the requirements for attic entrances in the Department of Energy's 2013 Standard Work Specification and the ENERGY STAR® Version 3 Inspection Checklist (specifically, the Thermal Enclosure System Rater Checklist).

Temperature	Thermal Resistance (R-Value)
at 75 ° F	R-20
at 40 ° F	R-21

NOTE 1: Using a UA Calculation, The Energy Guardian Pull-Down Ladder Cover was determined to have an R-Value of R-20 at 75 ° F. Using another industry standard, the average thickness of The Energy Guardian Pull-Down Ladder Cover, it would have an R-Value of R-27 at 75° F. ESS has chosen to use the lesser of these two values when representing its product. Additional R-Value that could be gained using surface film, trapped air and the thermal resistance of the pull down ladder assembly itself were not taken into account in either of the above calculations.

## Warranties

ESS Energy Products, Inc. warrants that it will replace without charge The Energy Guardian® Pull Down Ladder Kit that is not merchantable because of defects in material or workmanship for a period of 20 years from the date of purchase. This warranty is valid only if the Kit has been installed according to the written instructions provided by ESS Energy Products, Inc. and the warranty card is received by ESS Energy Products, Inc. within 30 days of the date of purchase. The warranty is void if the unit has been damaged due to accident, vandalism, misuse, abuse, or natural catastrophe such as fire, or acts of God. ESS Energy Products, Inc. shall not be liable for damages in excess of the purchase price. This is the sole and exclusive remedy and liability for defects or failure of this product. **THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, WRITTEN OR ORAL, STATUTORY, EXPRESSED OR IMPLIED.**

## What You Should Know About R-Values

R means resistance to heat flow. The higher the R-value, the greater the insulating power. Compare insulation R-values before you buy. To get the marked R-value, it is essential that this insulation be installed properly.

There are other factors to consider. The amount of insulation you need depends mainly on the climate you live in. Also, your fuel savings from insulation will depend upon the climate, the type and size of your house, the amount of insulation already in your house, and your fuel use patterns and family size. If you buy too much insulation, it will cost you more than what you'll save on fuel.