



Evaluating Insulation Projects

Insulation projects entail several variables. The initial purchase price for any insulation product can be boiled down to an R-value cost per square foot, with a higher R-value equating to a higher price tag.

Selecting the right insulation for the job hinges on five key points: the initial cost of the insulation material; the installation cost; the ease of installation; and what additional building components are required to achieve the installed R-value. All of these factors can be tracked, tallied, and compared in an effort to select the right insulation and installation method for your home.

Coverage and Cost

Coverage, like density, affects how efficiently any insulation performs. Leaving uninsulated gaps creates thermal leaks that may make for increased heating or cooling costs. However, achieving the required coverage, maintaining it, and gauging it are very difficult for homeowner and professional alike, particularly in a retrofit. It is nearly impossible to tell how much insulation settles in a wall or how compressed blankets and batts become. So, the ease with which an insulating material can be installed to achieve complete coverage is an important consideration for the homeowner and contractor. The more time a pro spends on the job the higher the installed cost of the insulation.

Ease and savings often combine to make blown-in application the most cost-effective option for retrofit installation, because they can usually be completed with no disruption to interior walls. Unseen framing obstructions or existing insulation might interfere with the application, however, making coverage and R-value a real wild card. Spray-in-place foam, blown-in cellulose or fiberglass application are typically performed by professionals, so the installed cost is higher. On the plus side, little or no surface repair is needed after installation, which add to the long-term energy savings.

Keep Air Out and Heat in

Other components may be needed to achieve the rated R-value, and this can affect both the installed cost and the overall efficiency of your insulation installation. Air infiltration reduces insulation efficiency, and can be blocked by housewrap or rigid foam installation. A layer of rigid foam board, with taped joints, may be applied to the exterior of the insulated wall. This layer adds R-value to the insulation while serving as an air infiltration barrier. Housewrap is commonly used in new construction and on re-siding jobs to reduce air infiltration. Again. The joints must be taped which means time, money, and increased installation cost on the contracted job.

Planning Your Project

Whether you intend to install insulation yourself or hire a contractor, make sure that you know the guaranteed minimum R-value you are looking for. Have any contractor state that installed R-value you are looking for. Have any contractor state that installed R-value as part of the bid. Also, prepare for the project by assessing what needs to be done to reduce air infiltration before installation. Include the cost of these added components and labor in your cost. Calculations. Keep in mind, too, that a tight home requires ventilation, so you may need to take another look at your bathroom and whole house ventilation strategies. Armed with all of this information, select the insulation that meets your energy efficiency, budgetary, and installation requirements. The end result will be a job well done, with energy and cost savings to tally long into the future.