

## **INSULATING A FINISHED ATTIC**

Insulating a "finished" attic can be a tricky project. Your decision about how to do it – or if you should do it at all – should take into consideration whether you will really save money. For example, if you install \$200 worth of insulation, but have to remove drywall and replace it at an additional cost of \$600, how long will it take to save that \$800 materials cost in your gas bill – not even including your time? Ideally, to be worthwhile, this payback factor should take no more than 3 to 5 years – and your calculations need to take into account the likelihood of rising energy prices. Of course, there are other factors to think about beyond dollars and cents, both societal and personal; in addition to broader sustainability issues, the increased comfort and long-term value that attic insulation can give your home is often harder to put a price on, and such considerations may offset a longer payback period in your situation.

Finished attics will generally fall into two types: one type is used as a bedroom or other living space, and the second type is one to which you have no access. The "room" type can be insulated in several different ways. One method is to remove whatever material is covering the ceiling and walls (drywall, paneling, or plaster and lath.) After installing fiberglass blanket insulation as you normally would, you'll need to put up new drywall or paneling on the walls and ceiling.

Another approach is to drill holes between the studs and rafters and blow in insulation from the inside of the room. The drawback to this method is that there are often wood members nailed between studs or rafters for structural support. These pieces will stop the flow of blown-in insulation without your realizing it, leaving you with uneven coverage.

Probably the best method of insulating a finished attic "room" is to blow the insulation in from the outside at the time you remove the old roof to replace it. You can usually see any crossbraces through the roof sheathing, since it doesn't fit tightly together, and you'll be able to see if you're covering all areas evenly. In addition, you won't need to patch any holes in the interior walls and ceiling, as you must do if the insulation is installed from inside the room.

In attics with no access, you need to choose an inconspicuous place (such as a closet ceiling) to cut a hole in the ceiling to make an access door. Once you have done that, you can install the type of insulation that best meets your needs.

If your attic is finished but only used for storage, then you may choose to pull up several pieces of the flooring and blow in insulation there. However, if you later wish to use the attic as living space, this approach may backfire. Insulating the roof allows the heat from the other floors to pass through to warm the attic. Insulating the attic floor, on the other hand, keeps the heat in the house below it, and leaves the attic cold. To turn an attic insulated in this way into living space, you'll need to provide another source of heat – new heating ducts, a space heater, etc. For this reason, think carefully before you decide to insulate an attic floor.

Whichever method you choose, install the insulation properly, and you'll enjoy increased comfort and energy savings for years to come.