



Insulation plays an important role in your indoor swimming pool

In colder climates, blown in, blown on, spray foam, cellulose, etc.—any insulation that is air tight—is recommended. Keep in mind, when warm meets cold, you will have condensation. Materials vary immensely in their ability to conduct heat. Those that do not conduct it well are called insulators.

R-Value is the term used to indicate a material's resistance to heat or the ability to insulate. The higher the R-Value, the better the insulator. Most insulation materials work by trapping pockets of air, which is an excellent insulator. Fiberglass does this by creating air pockets between spun glass fibers, and foam insulation contains air bubbles. We generally don't recommend fiberglass insulation for a variety of reasons. Please call us to go over the various insulation methods.

Similarly, double pane windows work by trapping air between the panes. Among insulating materials, R-Values can vary widely. This is the reason it is important to purchase insulation by the R-Value AND NOT BY THE INCH. R-Values of different materials can be compared while thickness cannot. For instance, two materials rated R-11 have precisely the same insulating ability while two inches of each may not. Take fiberglass and brick as an example. To achieve R-30 with fiberglass batts requires 8½ inches, while it would take 60 inches of brick!

The chart below provides a guideline to calculate how many inches of a certain type of insulation it would take to achieve a specified R-Value:

Insulation Material	R-Value per Inch
Vermiculite	2.3
Cellulose	3.1 to 7.7
Fiberglass Batt	3.2 to 3.6
Rock Wool Batt	3.5
Polystyrene	3.6 to 5
Urethane Foam	5.5 to 6