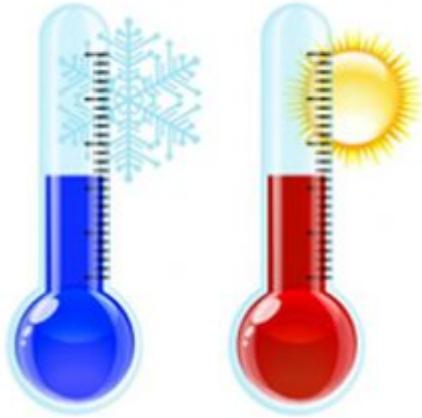


# What Level of R-Value Should My Garage Door Have?

The main purpose of your garage is to provide some degree of shelter for your vehicles. Most of us use it for extra storage space too. However, the majority of us also have other requirements for the ideal garage. We don't want it leech out the heat we pay for during the winter. It's also nice to know that your garage door is helping you be environmentally friendly too.



While there are many ways to measure whether or not you're hitting these goals, an industry standard that is helpful for this reason is known as R-value. While most of you probably aren't familiar with it, we can explain its importance quickly.

## What Is R-Value?

Simply put, R-value is the standard for measuring the thermal resistance of various construction materials. For example, it measures the amount of thermal conductivity (cold or heat) that is able to pass through a wall. Therefore, the higher a material's R-value, the better it will be for providing insulation.

## The Two Basics Types of Insulation

There are two basic types of insulation on the market: [polystyrene](#) and [polyurethane](#). The latter is the superior material of the two as it provides much better thermal resistance and, thus, has a higher R-value. Furthermore, it adheres to the walls of garage doors with ease, yet is also flexible and strong, which makes it much sturdier.

Aside from garage doors, this material has become a popular choice for the entrances of homes and even automobile bumpers.

Polystyrene is used for a variety of different reasons. You can find it in many disposable coffee cups and as the protective material that is leveraged for packaging. When used for garage doors, polystyrene goes between its two steel walls. For two-layer garage doors, the material is bonded to the back of the steel wall.

# What to Consider When It Comes to Insulation

It's easy to make your decision about garage door materials based solely on their insulation abilities. However, you also want to consider things like the weatherproofing system and thermal bridges used. High-quality weather-stripping should be inserted between sections as well, especially the kind that stays flexible in cold environments.

## What R-Value You Need

There are a couple of things to consider when choosing the right R-value for your home. First, is your garage attached or detached? If it's detached and insulated, go with an R-value of 10 or above. If it's not, an R-value of six will be fine.

If your garage is attached, it's probably already insulated too, so you'll want an R-value of at least 12. You'll also need to take a close look at how it's otherwise able to deal with colder temperatures.

## R-Values and Heating Your Garage

In some cases, the R-value of your garage door may be high enough that you don't need to worry about heating it. This is usually an R-value of 16, but it ultimately depends on where you live. If temperatures get below freezing in your area, your garage should be heated a little. Those of you who use your garage regularly for doing projects or playing with your kids will most likely also want to keep it heated just for the sake of comfort.

There is also heat that comes from your car's engine, which will keep the garage above 32 °F (0 °C). Whenever you open the door from your home to your attached garage, heat is transferred as well.

Finally, if your home is located in an environment that gets hot and humid several times a year, having a door with an R-value greater than 16 will keep your home protected from this heat and reduce your AC bill.