

FIBER GLASS

VS STONE WOOL

▶ Facts you should know
before you insulate.





CHOOSING THE BEST insulation

Builders and remodelers face **numerous options** when determining which insulation products to use, and often this decision can be overwhelming. There has been **much debate** in the home improvement and building materials market regarding which type of insulation provides the greatest benefit to homeowners. With our rapidly advancing world, we are constantly looking for the most efficient and safest solution to live more comfortably in our homes.

Over the years, the **most frequently used insulation material has been and continues to be fiber glass**; however, some builders and remodelers use stone wool as an alternative. Depending on the building application, location, and building code requirements, both fiber glass and stone wool can offer superior performance for homeowners. It is important for builders and remodelers to **know the difference** between fiber glass and stone wool, so they can recommend the **best solution** to their customers.



How they're **MADE** fiber glass

Fiber glass is manufactured in highly flexible blankets, batts, rolls, and loose-fill form from micron-thin strands of blown recycled glass and renewable silica sand.

CertainTeed's Sustainable Insulation™ products are made of naturally non-combustible fiber glass that consists of **rapidly renewable content, recycled glass** and a **plant-based binder** that has **no formaldehyde, harsh acrylics, dyes or unnecessary fire retardants** added.

stone wool

Much like the production of fiber glass, stone wool is made from tightly spun mineral fibers of natural stone and recycled steel, and can be produced as blankets or in loose-fill form. Its structure produces a highly dense, rigid product. Stone wool products generally **have oils added** in order to reduce dust.





How they're **INSTALLED** fiber glass

Fiber glass's low density and light weight makes **transportation and installation simple and easy**. Its use of tightly spun glass strands makes it **less dusty**, resulting in a product that is **easily handled, cut and installed**.

Fiber glass's ability to be highly compressed in packaging without degrading its effective R-value allows for **more batts per bag**. This decreases the number of bags required for installation and provides both economical and environmental benefits.

Fiber Glass Transports More Environmentally and Economically



Fiber Glass (R-15)

Stone Wool (R-15)

* In an identical delivery truck, 3 times as much fiber glass insulation can be transported than any comparable stone wool insulation product, effectively reducing the fuel costs and packaging waste.

stone wool

Stone wool products are highly dense in nature, allowing for dimensional stability and rigidity. This allows batts to be easily cut, and fit snugly into most wall cavities. However, because of its high density, **stone wool batts are much heavier than fiber glass**. This means more physical strain and time spent lifting heavier bags for the installer.

Glass Fibre Weighs Less Per Bag and Costs Less Per Square Foot



* Comparison is based on average weight and cost of an average R-15 bag of fiber glass insulation compared to a similar R-15 bag of a stone wool product.

How they **PERFORM**

fiber glass vs stone wool

Thermal Performance

Fiber glass and stone wool insulation both have the ability to provide the desired R-Value for any given space.

When properly installed, they:

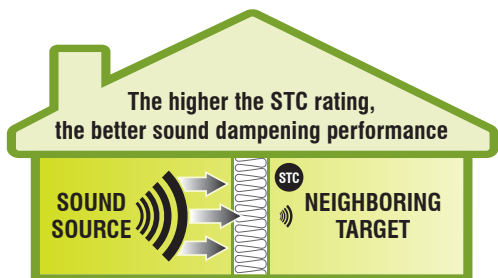
- will not settle or slump in the wall
- will maintain their thermal R-value over the lifetime of the home

In some commonly tested wall assemblies, **fiber glass provides better thermal resistance than stone wool** due to its lower thermal conductivity per density score.

Sound Performance

Fiber glass and stone wool insulation provide a high level of sound control between interior rooms from outside sources. In most commonly tested assemblies, **fiber glass batts contribute to equal or higher Sound Transmission Class (STC) ratings than stone wool products.***

Sound Transmission Class (STC) Rating of a Wall Assembly



*National Research Council of Canada (NRC) Report.

How they **PROTECT**

Both fiber glass and stone wool products meet the mandated building code requirements for air and moisture control as well as fire protection of residential and commercial building envelopes.

Property	Fiber Glass	Stone Wool
Air & Moisture Control	Restricts air and moisture infiltration	Restricts air and moisture infiltration
	Does not allow mold and mildew growth	Does not allow mold and mildew growth
Fire Protection and Control	Non-combustible and meets building code mandated standards*	Non-combustible and meets building code mandated standards

* Fiber glass is inherently non-combustible exclusive of any facing. For facing specific combustibility ratings, refer to manufacturer's spec sheet.

The Choice is Simple!

Considering all the benefits of both fiber glass and stone wool, fiber glass proves to be the most economical and reliable choice for homeowners and contractors in today's building environment. **Its light weight, flexibility and effective performance makes fiber glass the optimum choice for a better home.**





The CertainTeed DIFFERENCE

Every decision involving a new home or remodel matters, but **insulation is a choice you only get to make once to ensure a lifetime of Complete Comfort.**

Choosing from CertainTeed's full range of products means you're adding an **extra layer of protection** – one that's backed by industry-leading innovation and building science. You're installing much more than trusted, high-performance insulation. **You're installing confidence.**

Learn more about our complete line of insulation products at certainteed.com/insulation



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