Fiberglass and Mineral Wool Facts for DIYers

What You Need to Know

More and more homeowners are tackling simple home renovation projects, like air sealing and adding insulation to their attics to boost their home's energy efficiency. Since nine out of 10 homes are under-insulated,¹ this is a job that most homeowners should consider, especially since they can receive a tax credit of up to \$1,200 per year through 2032 for doing energy efficiency retrofits.²

Roughly 70 percent of homes today are insulated with fiberglass or mineral wool (also known as rock wool or slag wool) insulation products, and they are great options for retrofits. However, many do-it-yourself (DIY) homeowners may have questions about the safety of fiberglass and mineral wool insulation products.

This guide addresses the questions a DIYer may have about the health and safety of fiberglass and mineral wool insulation products.

¹ Jonathan I. Levy, et al., "Carbon reductions and health co-benefits from US residential energy efficiency measures," *Environ. Res. Lett.*, 11 (2016) 034017.

² IRS, Home energy tax credits, <u>https://www.irs.gov/credits-deductions/home-energy-tax-credits</u>



Fiberglass and mineral wool insulation products consist of man-made vitreous fibers and are safe to manufacture, fabricate, install, and use when recommended work practices are followed. These products are the most thoroughly researched insulation materials on the market today.

The public health record of fiberglass³ and mineral wool⁴ insulation is based on an extensive body of fiber research validated by such authorities as the International Agency for Research on Cancer ("IARC"), the U.S. National Toxicology Program ("NTP"), California's Office of Environmental Health Hazard Assessment ("OEHHA"), Health Canada, the U.S. Agency for Toxic Substances and Disease Registry ("ATSDR"), and the U.S. National Academy of Sciences.

³ https://insulationinstitute.org/wp-content/uploads/2016/02/N040-Healthand-Safety-Facts-for-Fiber-Glass.pdf

⁴ https://insulationinstitute.org/wp-content/uploads/2016/02/Facts-63.pdf



Many fiberglass and mineral wool home insulation products have achieved GREENGUARD or GREENGUARD Gold certification.

GREENGUARD certification helps manufacturers make and market products low in chemical emissions that contribute to healthy indoor air quality. These products are scientifically tested and proven to meet some of the most rigorous third-party standards, and they reduce the risk of exposure to volatile organic compounds ("VOCs"). Third-party testing gives consumers the confidence to select products that have minimal impact on the indoor environment.

Tip: You can search for what products receive GREENGUARD AND GREENGUARD GOLD and other health and sustainability certifications for free at <u>spot.ul.com</u>.



Fiberglass and mineral wool insulation products are safe to manufacture, install, and use when recommended <u>work practices</u> are followed. The North American Insulation Manufacturers Association ("NAIMA") operates a Product Stewardship Program⁵ that includes a living database of exposure data for a vast array of work tasks and product categories. Maintained by Arizona State University, this database includes more than 19,000 data points and was approved by the Occupational Safety and Health Administration ("OSHA") as part of the fiberglass insulation industry's original Health and Safety Partnership Program.

Proper Protections to Avoid Skin Irritation

Unlike other insulation products, fiberglass and mineral wool insulation products do not require full-face supplied air respirators and chemical protective clothing to install. Fiberglass and mineral wool insulations are not regulated as an irritant by OSHA. However, fiberglass and mineral wool insulation products may cause temporary skin irritation without proper protections, but the irritation is mechanical, not chemical.

For more information on safety during installation, review the Product Stewardship Program <u>guidance</u>.

Tip: NAIMA recommends that DIYers wear proper attire while installing insulation. This includes work gloves, protective eye wear, long sleeves, long pants, and closed-toed shoes. A head cover is recommended, especially when working with materials overhead.

Conclusion

Safety is of utmost importance when it comes to your home and the products within it, so it's essential to choose those products wisely.

Fiberglass and mineral wool insulation products are time-tested, third-party-verified products that can help you maintain good indoor air quality, improve your home's comfort, and reduce your utility costs. So, if you choose to do it yourself, you can feel confident using fiberglass insulation.

For more information on installing fiberglass or mineral wool insulation safely as a DIYer, see the North American Insulation Manufacturers Association's ceiling and attic installation <u>guidance</u>. Additional information is also available on the U.S. Environmental Protection Agency's <u>website</u>.

⁵ NAIMA worked with OSHA to create the Health and Safety Partnership Program ("HSPP"), a comprehensive stewardship program that included work practices, training materials, a recommended permissible exposure limit ("PEL"), and an exposure database. The program lasted for eight years and involved annual reporting to OSHA. Upon completion of the HSPP, the program was converted into the NAIMA Product Stewardship Program.

Insulation Institute

NAIMA is the association for North American manufacturers of fiber glass, rock wool, and slag wool insulation products. Its role is to promote energy efficiency and environmental preservation through the use of fiber glass, rock wool, and slag wool insulation, and to encourage the safe production and use of these materials. Through the Insulation Institute[™], we leverage the collective insulation expertise of our organization and our members to empower homeowners and professionals to make informed insulation choices. Our mission is to enable a more comfortable, energy-efficient and sustainable future through insulation — and we are constantly working with building professionals, homeowners, government agencies, and public interest, energy and environmental groups to realize that vision.

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