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## Knauf Insulation is Effective Isolation

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**Annotation:** The role of energy-saving modern building materials in modern construction is great, one of which is KNAUF insulation material. KNAUF isolation is recommended for use in residential, preschool, school and healthcare facilities.

**Keywords:** Knauf-Insulation, thermal insulation, energy-saving, fire resistance, waterproof, Plot, Apartment, Kottedj.

### Introduction

Knauf-Insurance is one of the fastest-growing and most respected companies in the market of thermal insulation materials. By offering a wide range of thermal insulation materials to consumers, Knauf-Insurance can meet the growing demand for energy efficiency, fire safety and acoustic comfort in new and existing residential and commercial buildings, and industrial facilities. strives. Together with its construction partners, representatives of scientific and government agencies, Knauf-Insurance is working to reduce the gap between the energy efficiency of buildings and their real performance.

### The main part

This company is part of the KNAUF family of companies, which manufactures building materials and building systems.

**Thermal insulation.** Due to the structure of the material and the properties of the fibres, KNAUF insulation mineral wool products have low weight and high thermal insulation properties. This characteristic is a key indicator of any thermal insulation material and is necessary to calculate the thermal resistance of building structures. [1-5]

**Energy-saving.** The use of mineral wool thermal insulation materials leads to a reduction in heating costs. The reduction in energy consumption leads to a reduction in the cost of heating or cooling the rooms inside the buildings. The value of thermal insulation then justifies itself in a short time.

**Possibility of high sound insulation.** Mineral wool KNAUF thermal insulation has high sound insulation ability due to its fibrous structure. The fibers of the material, which are tightly connected, absorb the energy of sound waves in the entire frequency range.

**Fire resistance.** The basis of mineral wool products are non-combustible natural components (basalt or glass fiber).

**Waterproof feature.** KNAUF technology used in the production of mineral wool materials provides water-resistant properties. Moisture penetration into the material is significantly reduced, thereby increasing the stability of the thermal insulation properties. [6-15]

**The strength of the layers.** KNAUF insulation Thermal insulation materials with special technology for forming mineral wool carpet, in addition to good adhesion properties, ensure the integrity of the structure due to the strong bonding of the fibres to each other, which determines the strength of the layers.

**Vapour permeability.** The fibrous structure of KNAUF insulation thermal insulation materials ensures high permeability to water vapour. Due to this important feature of thermal insulation - "breathing" - water vapour leaves the room freely, passes through the building materials and insulation layer, allowing to maintain a comfortable humidity regime for buildings and people.

**Environmental cleanliness of thermal insulation.** KNAUF insulation products are made of modern equipment from the high-tech production of natural materials. The products undergo all necessary toxicological and radiological tests.

**"KNAUFissiqlik" heaters are characterized by 3 solutions: "Dalahovli", "Khonadon" and "Kottedj".**

**"Dalahovli"** - The ceilings and floors in our rooms for summer kitchens, utility blocks and other buildings on this plot of land will be built with products produced in the form of rolls for thermal insulation. [16-30]

**"Apartments"** - They are products made of convenient plates for insulating roofs, walls and floors. This insulation is created according to the popular and proven technology "3D-elasticity" and easily fits into its components, as well as from the range of materials that eliminate the state of "cold bridge".

**"Cottage"** - It is the hottest and most innovative solution for homes where the homeowner is used to choosing the best solutions, but it is still an affordable material. Created using this three-in-one technology, this non-combustible elastic insulation is a very good material to fully protect your home from cold and noise. In addition, it has excellent water-resistant properties. " KNAUFissiklik Kottedj "is recommended for insulation of sloping roofs, and walls for sound insulation of rooms. Depending on the wishes of the consumer, there is also a choice of the heater in the form of plates or rolls. [30-43]

## Conclusion

Mineral wool KNAUF thermal insulationNatural heaters are an environmentally safe material. Many construction and decoration craftsmen use mineral wool insulation materials from the KNAUF insulation company because the work is very convenient and reliable. Insulation materials are harmless during transport and installation, do not penetrate the body, do not have a chemical odour, and the level of dust is less effective during both breathing and operation. The efficiency of use of the material is at least 50 years. So, KNAUF insulation can be widely used in residential, preschool, school and healthcare facilities.

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