

VIP Vacuum Insulated Panels

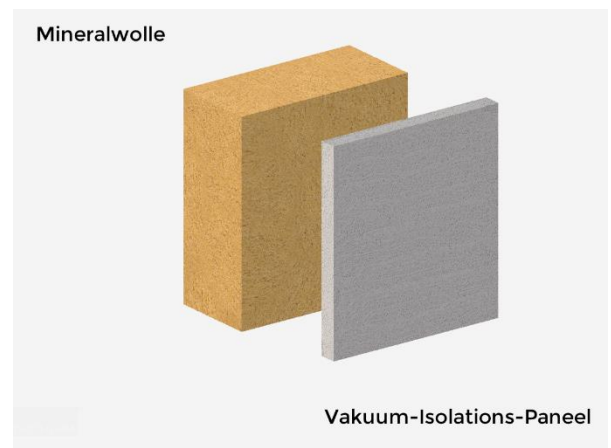
Space-saving high-performance insulation system with extremely low thermal conductivity for various uses in industry and in construction.

Core consisting primarily of micro porous silicic acid enveloped in a gas-tight composite film and sealed air-tight in a vacuum.



Advantages:

- ▶ Extremely low thermal conductivity of 0.0035 – 0.007 0.007 W/(m·K)
- ▶ Requires minimal space, enabling advantageous and remarkable constructions
- ▶ Insulating performance up to eight times better than conventional insulation materials
- ▶ Broad temperature range of – 50° to + 90° C (depending on the enveloping film)
- ▶ Made-to-measure molded panels produced with recesses or curves
- ▶ Ecological product with a long service life of up to 50 years (depending on the application)



Mineral wool

Vacuum insulated panel

Possible Areas of Use

Wherever conventional insulation requires too much space, e.g. refrigerators and freezers, household appliances, medical engineering, laboratory devices, facilities engineering, hot water tanks, containers, vehicle bodies, shipping and warehouse containers, plant construction and engineering, new buildings, and renovations

We select the right VIP to match your own specific requirements and assist you throughout the planning and development process. From prototype to cost-efficient series production, we always stand by you.

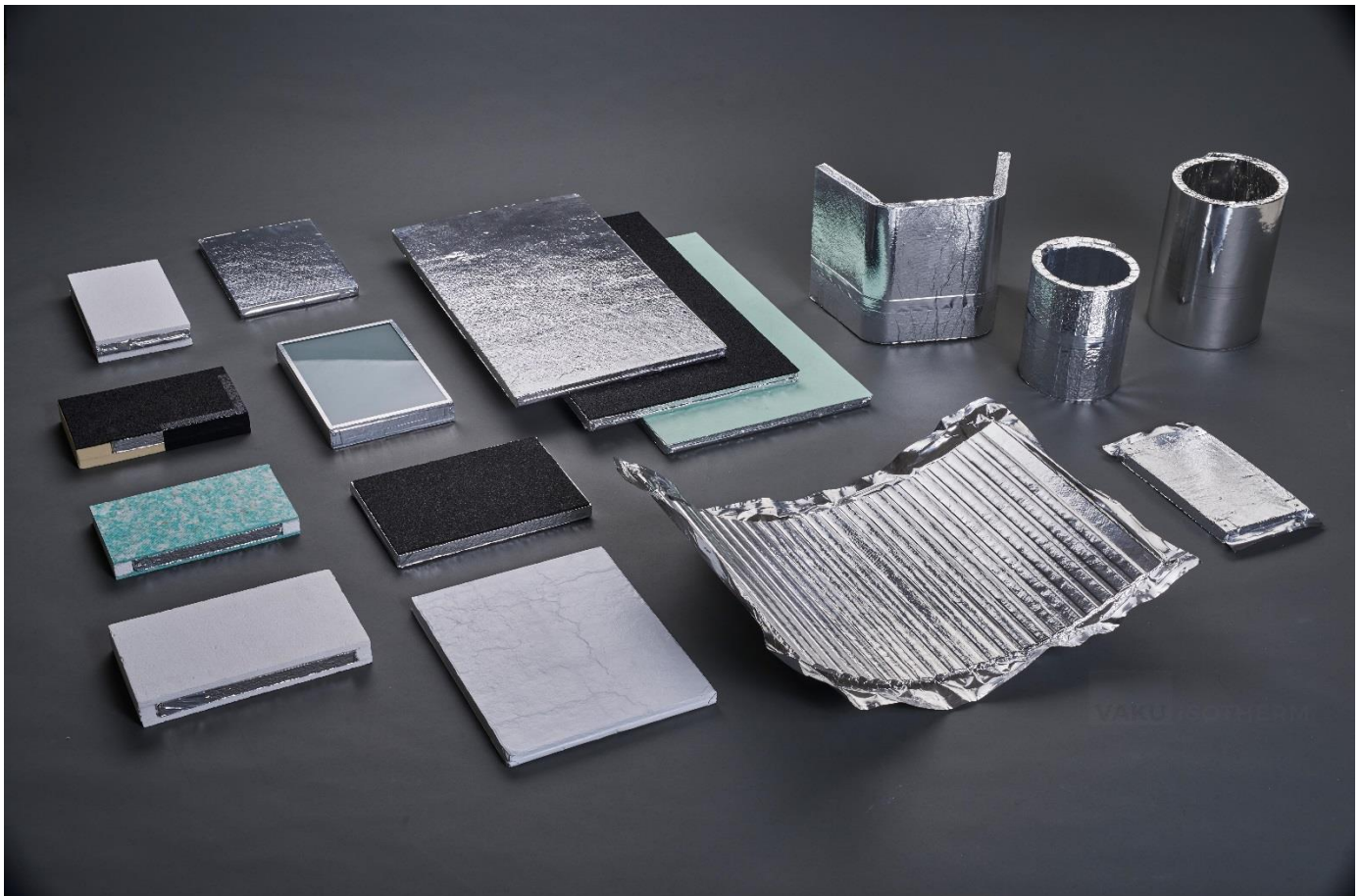
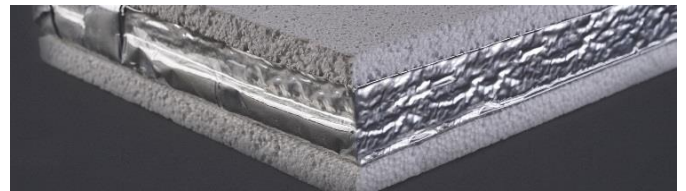
Processing Information

The plastic multi-layered film in the VIP elements must not be damaged by drilling, cutting, milling, nailing, screwing, hitting against sharp edges, etc. Damage to the film increases the internal pressure within the panels and causes them to lose their vacuum and their very good thermal insulating properties. The thermal conductivity in aerated state is about 0.020 W/(m·K).

Structure of a vacuum insulated panel:
 Gas-tight and water-tight film sealed
 Protective end fleece envelope
 Precompressed slab of micro porous silicic acid



The panels can also be produced as multi-layered products with different cover layers depending on the area of use:



As per the manufacturer, the core is not a hazardous substance pursuant to Directive 91/155/EEC. It releases no hazardous products of decomposition and does not pose a health hazard to human beings according to current knowledge.

All the information in this printed document corresponds to the latest findings and the state of the art as well as the valid laws, standards and regulations in their currently known version. They are intended to provide advice to the best of our knowledge but are not legally binding. For the rest, our general terms and conditions of business and offers apply. Jan. 2018