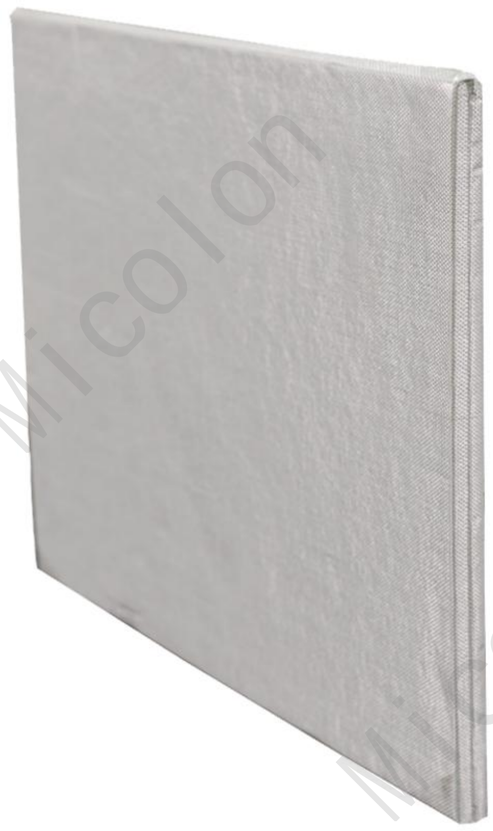
Building Insulation Panel

Building insulation panel is formed by vacuuming and encapsulating its main raw materials, core, film and getter into high-barrier film pouch. It is a high-efficiency thermal insulation material combining microporous technology and vacuum technology, with low thermal conductivity. Meanwhile, VIP keeps long-term stable performance due to the high barrier properties of the film material against water and gas, and the ability of the desiccant to capture trace gases that permeate. It can provide customers with professional solutions and services for home insulation.



Glass Fiber: The thermal insulation material with SiO2 as the main body is prepared into glass fiber with a diameter of 6~9μm by high temperature drawing, and the core sheet is made by chopped dry hot pressing process.

Film: It is composed of metal evaporation, aluminum foil layer, high temperature resistant glass fiber mesh cloth and other multi-layer materials, and has excellent resistance to water and gas.

Getter & Desiccant: CaO is the main water absorbing material, and metal compounds with gas-absorbing ability are mixed at the same time.

Features and Benefits

- Low thermal conductivity. Excellent thermal resistance. Providing longer holding time
- 100% performance test
- Good compression resistance
  Low expansion rate after puncture
- Customizable product size and shape
- High heat and cold resistance, −40℃~90℃
  Short-term thermal shock can reach 130℃
- Green and pollution-free

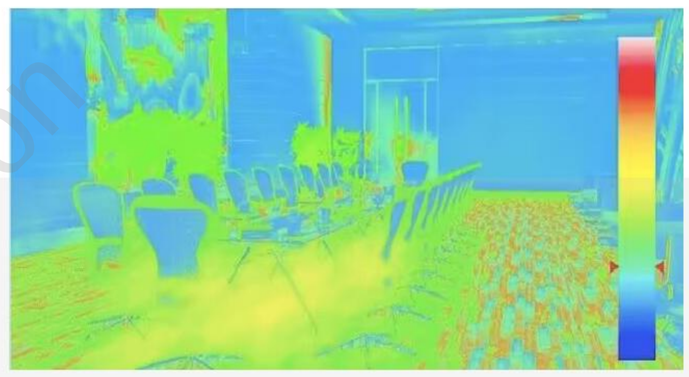
Building insulation panel is the most advanced and efficient insulation material in the world. Compared with traditional insulation materials, the thermal conductivity is greatly reduced, and it has excellent performance in the scene of blocking cold and heat exchange, mainly used in building exterior walls, interior walls, roofs, floors, etc. Creat energy-saving living spaces, enjoy a green and eco-friendly future.

Building Exterior Walls | Building Interior Walls | Building Interior Roofs

Display

Temperature Comparison

Before Installation



After Installation

Properties

VIP Core Material	Hot-pressed Chopped Glass Fiber
VIP Thermal Conductivity (mW/(m • K))	＜5.0
R-Value(㎡ • K/W) Thickness=25mm	＞5.0
U-Value(W/㎡ • K) Thickness=25mm	＜0.2
Density of Core(kg/m³)	360±10%
Puncture Strength(N)	≥18
Tensile Strength Perpendicular to The Direction of The Board Surface(kPa)	≥80
Dimensional Stability(%)	L/W: ≤ 0.5 / T: ≤ 3
Compressive Strength(kPa)	≥100
Surface Water Absorption(g/㎡)	≤100
Expansion Rate Perpendicular to The Board Surface After Puncture(%)	≤10
Durability (30 Cycles)	Thermal conductivity ≤5 mW/(M • K) / Tensile strength perpendicular to the board surface ≥80 kPa
Temperature Range(℃)	−40~90
Optimal Storage Condition(℃)	23±5＜50%RH
Specific Heat Capacity(KJ/kg • ℃)	0.8
Maximum Size: W*L(mm)	880*1600
Minimum Size: W*L(mm)	100*100
VIP Thickness(mm)	5~50
VIP Tolerance(mm)	L/W: ±5mm T: ±1.5mm

* K/R/U Value is the initial value, there will be corresponding deterioration over time for VIP particularity.
* VIP can be glued when required, 180° peeling force>50N/25mm.
* We can paste protective or cushioning materials on points, surfaces or the entire VIP that need enhanced protection to meet the needs of special environments.
* Size and shape can be customized.
* Tolerances are for reference, more stringent requirements can be made upon request.