

Our **technology portfolio** in vacuum insulation delivers top insulation performance for a wide range of applications

				
Description	Perlite vacuum insulation Volcanic rock perlite, enclosed in a high-barrier film and protected by cover layers	Perlite vacuum insulation with embedded glass fibre panel Embedding secures long-term glass fibre performance	Perlite vacuum insulation (silica in exceptional cases) with embedded glass fibre panel and active cooling	Transparent vacuum glass with outstanding insulation performance Glass with high-barrier film, xenon-filled
Performance	Thermal conductivity 7 mW/m·K	Thermal conductivity 1.5 mW/m·K	Thermal conductivity 1.5 mW/m·K	U _w -value, 50 mm pane gap 0.2 W/m²·K
Temperature range	-270 to +150 °C Film-only envelope to +50 °C	-270 to +150 °C Film-only envelope to +50 °C	-30 to +43 °C	-100 to +50 °C
Maturity	High-volume production	Series development	Series development	Prototype
Applications	Refrigeration and freezing Boxes, e.g. pharma Pipes, e.g. district heating Panels and boards, e.g. building	Panels and boards with the highest insulation requirements (e.g. ULT freezer doors) and/or low weight	Refrigeration appliances with little installation space, e.g. refrigerated drawers	Façade elements Refrigerators and freezers, refrigerated furniture, cold rooms
USP	Self-supporting, cost-effective, series-proven vacuum system	Best insulation performance per unit of weight	Completely silent with minimal installation space	Transparent with top insulation performance

Note: thermal conductivity refers to the core material, U-value to the complete system