

US HVAC Insulation Market Poised for Growth as Data Center Cooling Demands Surge | DataM Intelligence

US HVAC insulation market to grow 5.4% CAGR to \$3.5B by 2032, fueled by eco-materials, data center cooling needs, and stricter energy rules.

AUSTIN, TX, UNITED STATES, August 14, 2025 /EINPresswire.com/ -- US [HVAC insulation market](#) is estimated to grow at a CAGR of 5.4% during the forecast period (2025-2032) from its current value of US\$ 2.3 Billion in 2024 to reach a value of US\$ 3.5 Billion by 2032.



Sustainability, tech adoption, and data center growth are redefining the HVAC insulation landscape—offering both profit potential and a path toward a low-carbon future.”

Sai Teja Thota - Research Head

HVAC insulation plays a crucial role in reducing energy consumption, minimizing heat loss or gain and improving indoor air quality. Buildings, as stated by the US Energy Information Administration, account for 75% of the electricity and 40% of the total energy used in HVAC systems contribute a large percentage to this general figure. The utilization of advanced insulation materials, fiberglass, foam and mineral wool among others, has been

driven with the primary purpose of augmenting the performance of the system.

Download Exclusive PDF Sample Report: <https://datamintelligence.com/research-report/hvac-insulation-market?kailas>

The market is also driven by stricter government standards and regulations like IECC and ASHRAE, requiring increased energy efficiency for buildings. Besides, the Inflation Reduction Act has added rebates on efficiency and electrification worth US\$ 4.5 billion under Home Energy Performance-Based, Whole-House Rebates that include HVAC, which adds up to an effective market expansion opportunity. US HVAC insulation market is witnessing a significant shift toward sustainable and eco-friendly materials, driven by increasing environmental awareness and regulatory pressures.

Traditional insulation materials such as fiberglass are still widely used, but interest in bio-based and recycled materials, including cellulose, cotton and aerogels, is increasing. These materials

provide better thermal performance but also align with US's Paris Climate Agreement pledge to reduce net greenhouse gas emissions by 50–52 % in 2030, pledged net zero emissions by 2050.

The Environmental Protection Agency (EPA) has recently pointed out that insulation is among the best options for reducing greenhouse gas emissions. This increases demand for green insulation solutions. In commercial and residential sectors, this trend is prominent as builders and homeowners opt for insulation materials that have low global warming potential (GWP) and are recyclable.

Harnessing VRF/VRV Systems for Advanced Insulation Services

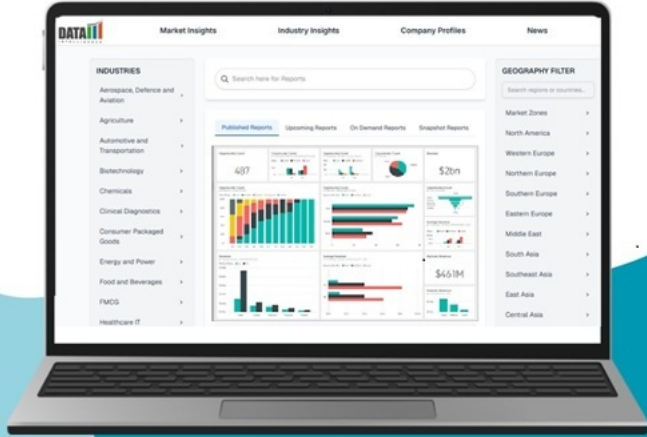
The US HVAC industry is undergoing a major transformation, fueled by the rapid adoption of Variable Refrigerant Flow (VRF) and Variable Refrigerant Volume (VRV) systems. According to the US Energy Information Administration (EIA), residential energy sales are projected to grow at an annual rate of 0.4% through 2050, primarily driven by the demand for high-efficiency heating and cooling solutions.

As both businesses and homeowners increasingly turn to advanced climate control technologies, VRF/VRV systems are gaining traction for their superior efficiency and adaptability.

Unlike traditional HVAC setups that depend on extensive ductwork, VRF/VRV systems distribute heating and cooling via refrigerant piping. This evolution reduces reliance on conventional duct insulation but simultaneously opens new opportunities for specialized insulation services. These advanced systems operate at temperature ranges comparable to refrigeration units, requiring precise, high-quality insulation to minimize energy loss, boost efficiency, and ensure optimal performance.

The economic outlook further underscores the potential. In 2023, private-sector construction spending in the US reached US\$ 1.38 trillion, with a substantial share invested in HVAC system upgrades and retrofits, creating a strong market for specialized insulation solutions tailored to VRF/VRV applications.

Download PFD Sample for Data Center Cooling Market:



The image shows a laptop displaying the DataM Insights Database interface. The interface features a sidebar with 'INDUSTRIES' and 'GEOGRAPHY FILTER' sections. The main content area displays various charts and reports, including a 'Published Reports' section with a search bar and a 'GEOGRAPHY FILTER' section with a list of regions. The DataM logo is visible in the top right corner of the interface.

Introducing the New **DataM Insights Database | Smarter, Faster Market Intelligence for Future Ready Company**

DataM Insights1

Specialized HVAC Insulation for Sustainable Data Centers

Data centers are among the most energy-intensive facilities, with cooling systems consuming 30–40% of total power. As operators shift toward advanced cooling technologies like VRF/VRV, liquid cooling, and immersion cooling to meet sustainability targets, the role of high-performance HVAC insulation has become critical. Insulation minimizes thermal leakage in refrigerant piping, chilled water lines, and containment structures, directly improving Power Usage Effectiveness (PUE) by up to 15%, lowering operational costs, and enabling efficient heat reuse projects that can feed district heating networks.

□ The US market is accelerating with major green data center investments. In July 2025, Blackstone is committing US\$ 25B to digital and energy infrastructure in Pennsylvania, including new sustainable data centers. Digital Realty is expanding renewable-powered campuses across multiple US states, integrating energy-efficient cooling designs.

□ On the OEM side, Danfoss is deploying heat reuse and high-efficiency cooling systems in US facilities,

□ Trane is introducing modular liquid cooling platforms tailored for AI workloads, and Johnson Controls delivers HVAC solutions that can cut data center energy use by up to 40%.

Together, these domestic investments and technology partnerships are fueling strong demand for specialized HVAC insulation in US data centers, enhancing energy efficiency, lowering operating costs, and meeting aggressive ESG targets.

According to DataM Intelligence analysis, US data center capacity is expected to grow at a CAGR of approximately 11% through 2030, specialized HVAC insulation is positioned as a key enabler of operational efficiency, carbon reduction, and regulatory compliance in the next generation of data centers.

Buy This Exclusive Report: <https://datamintelligence.com/buy-now-page?report=hvac-insulation-market>

Pricing Trends and ROI Potential of HVAC Insulation Systems in the US Market

□ HVAC insulation costs in the US vary with system size, type, brand, labor rates, and add-ons like ductwork upgrades or HEPA filtration.

□ HVAC Replacement: The average replacement cost in the US is around US\$ 7,500. Most projects typically fall between US\$ 5,000 and US\$ 12,000, while high-end custom installations which may include specialized ductwork and advanced filtration systems can cost up to US\$ 22,000.

□ Ductwork Insulation: ~33% of HVAC replacement cost; energy savings potential 20%+ annually.

□ Wall Insulation: ~32% of HVAC replacement cost; can reduce energy bills by ~20%.

In high-cost metros like New York, installation costs run 1.3x–2x the US average, and large-scale projects can cost up to 6x more due to labor premiums, complex building layouts, and regulatory compliance.

Competitive Landscape and Market Share Analysis of the US HVAC Insulation Industry

According to DataM Intelligence analysis (Base Year: 2024), the US HVAC insulation market is led by a few key players, with Owens Corning taking the largest share at 15%, followed by Saint-Gobain at 10% and other notable companies include Rockwool International, Armacell International and Knauf Group, holding around 25%, collectively.

The companies dominate the market through their diverse, energy-efficient product portfolios that cater to both residential and commercial HVAC needs, with a focus on sustainability and performance.

Despite the strong presence of these major players, nearly half of the market (50%) is made up of smaller companies, indicating a fragmented competitive landscape. This presents opportunities for niche players to innovate and cater to specific market demands, particularly in energy-efficient, sustainable and cost-effective HVAC insulation solutions.

Why This US HVAC Insulation Market Report Stands Out

- Data Center-Driven Insights: In-depth analysis of how the rapid expansion of US data centers is reshaping HVAC insulation demand, specifications, and service requirements.
- Next-Gen Material Focus: Evaluation of emerging insulation materials, including bio-based, recycled, and low-GWP options, and their adoption potential in commercial and high-tech infrastructure.
- Regulatory Advantage: Detailed coverage of US-specific energy efficiency mandates, green building codes, and incentive programs influencing insulation choices.
- Urban vs. Regional Cost Mapping: Comparative cost analysis for metropolitan hubs like New York versus regional markets, factoring in labor, permitting, and project complexity.
- Competitive Disruption Mapping: Profiles of major players alongside niche innovators specializing in high-performance insulation for advanced HVAC and VRF/VRV systems.
- ROI-Centric Approach: Quantified energy savings potential, lifecycle cost analysis, and payback periods for different insulation strategies in both retrofits and new builds.
- Strategic Growth Pathways: Actionable recommendations for tapping into growth segments, from hyperscale data centers to sustainable smart buildings.

Request for Trial Access: <https://datamintelligence.com/reports-subscription?kailas>

Here's how DataM leads the way in enabling pharma success:

- Track all your competitors in one centralized dashboard – From drug pipeline statuses to marketing strategies, track your global and regional rivals with ease.
- Competitive Intelligence – Stay ahead with detailed company profiling, SWOT analyses, and market performance tracking.

- Pipeline Analysis – Assess clinical pipeline progress across all phases, mechanism of action, and timelines to prioritize licensing or partnerships.
- Curated Industry News – Daily alerts keep teams informed about FDA updates, M&A activity, and competitor moves.
- Instant Report Access – Access the complete library of diabetes and metabolic disease market reports across geographies.
- Customizations Free of Charge – Get specific segments or competitor data added without paying extra.
- Tailored Reports – Need something niche like “GLP-1RA trends in Japan”? Just ask.
- Regional and Country-Level Insights – Get detailed views of market trends across the U.S., EU5, Japan, India, and LATAM.
- Live Import/Export Data Access – Make informed decisions using real-time trade intelligence for APIs and finished drugs.

Sai Kiran

DataM Intelligence 4market Research LLP

877-441-4866

sai.k@datamintelligence.com

Visit us on social media:

[LinkedIn](#)

[X](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/839775945>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.