Acoustic & Thermal Blanket Systems

Custom Insulation Blankets Save Energy and Improve Work Conditions





The Carrier Thermal and Acoustic Blanket System delivers excellent solutions for mechanical rooms.

Leading-Edge Equipment Insulation

Heating, Ventilating and Air Conditioning (HVAC) and ancillary building system equipment generate both sound and heat. If not properly controlled, both these conditions can disturb and reduce the productivity of occupants. Additionally, expensive energy is commonly wasted through equipment heat loss.

Carrier now offers a simple and highly effective solution to these problems — the Carrier Acoustic and Thermal Blanket System — a custom-designed insulation system that can be quickly installed, removed and re-installed as needed.

Acoustic Blanket System

The Acoustic blanket attenuates irritating and harmful sound. This self-contained, economical solution effectively lowers equipment sound levels in mechanical rooms and adjacent areas, providing better workplace conditions and improving staff and occupant satisfaction. The Acoustic Blanket System is especially effective at reducing high-frequency sound...the type found most disturbing.

Thermal Blanket System

The Thermal blanket insulates hot surfaces to reduce energy loss. The Carrier Thermal Blanket System controls radiant thermal energy loss from a wide range of building system equipment such as steam/process piping assemblies and rotary machinery. It improves steam plant efficiency by lowering ambient temperatures in mechanical rooms and associated work areas. By installing it on key heating system components, thermal blankets generate immediate energy savings with attractive payback. Unlike traditional insulation, Carrier Acoustic and Thermal Blanket Systems can cut removal and reinstallation time from hours to minutes, and provide reliable acoustic and thermal insulation, even in hard-to-fit problem areas.

Blanket System Features:

- CAD-designed, custom-fitted blankets ensure precise fit and maximum efficiency
- Modular construction is easily removed and replaced during equipment maintenance
- Durable, chemical and high-temperature resistant ideal for any industrial environment
- Weatherproof jacketing allows for both indoor or outdoor installations

Blanket System Benefits:

- Cost-effective way to control radiant thermal energy loss
- Lower energy consumption and reduced operating cost
- Reduce mechanical room sound levels to comfortable levels
- Reusable material cuts maintenance costs and material disposal
- Energy savings with quick payback

Acoustic and Thermal Blanket Systems

Acoustic Blanket System

- Vibration-resistant
- Ideal for asbestos replacement
- High density needled fiberglass filler for sound absorption
- Blanket pieces are removable, reusable and feature a stainless steel wire-twist fastening system
- Custom-fitted for water & aircooled chillers, ejectors, gear box casings, pump,

motor & compressor housings, exhaust ducting, pressure reducing valves and all rotary equipment

Carrier Acoustic Blanket Performance*

Sound Reduction at Various Test Frequencies (dBA)



*With the listed Noise Reductions measured in the A-Weighting, the total Noise Reduction from the 107 dBA loudspeaker level over a 100-5000 Hz frequency band would be: 20.8 dBA for 1" Thickness and 29.5 dBA for 2" Thickness.

Installation & Warranty

Carrier coordinates the initial installation of your blanket system and guarantees the fit of each blanket with an optional ten year warranty.



Thermal Blanket System

- Individually fitted to match gate valves, pressure reducing valves, flanges, strainers, steam traps, heat exchanger heads, boiler heads, PRV stations, condensate pumps, steam turbines and similar equipment
- Can accommodate ambient temperatures up to 1,100°F
- Wide range of designs for high-chloride high humidity and



potentially flooded environments

Carrier Thermal Blanket Performance*

Surface Temperatures at Various Blanket Thicknesses (deg F)



*Heat loss calculations are based on a 70°F ambient temperature, using a flat surface condition.

By effectively addressing many common concerns found in mechanical rooms — such as ambient noise levels, heat loss and safety — The Carrier Acoustic and Thermal Blanket System delivers an excellent solution for any application.

For more information about Carrier Acoustic and Thermal Blanket Systems, contact your local Carrier representative.

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