



REVOLUTIONARY INDUSTRIAL INSULATION, IMPROVING SUSTAINABILITY IN INDUSTRY

Heat-Flex Advanced Energy Barrier (AEB) is an engineering thermal insulative coating solution designed to eliminate corrosion under insulation (CUI). By replacing traditional bulky mineral-based insulation systems on storage tanks, process vessels and piping, Heat-Flex AEB provides a sustainable and efficient solution for maintaining optimal operating temperatures. Its application simplifies installation, reduces labor costs and enhances safety by minimizing worker proximity to hot surfaces. By eliminating the need for traditional insulation materials, Heat-Flex AEB significantly reduces the environmental impact and extends the lifespan of steel assets, making it a superior choice for industrial insulation needs.

BENEFITS



Eliminates CUI

- Directly applied to primed steel assets, removing the need for traditional insulation systems.
- Removes the corrosion zone between traditional insulation and the substrate, a primary cause of CUI.
- Compatible with the entire Heat-Flex CUI-Mitigation portfolio.



Sustainable and Environmentally Friendly

- Reduces the environmental footprint by eliminating the manufacturing, shipping and dry storage of traditional insulation materials.
- Extends the lifespan of steel assets, minimizing the need for steel replacement and associated environmental costs.



Superior Thermal Retention

- Process heat retention is comparable to traditional in-service insulation systems.
- Maintains consistent thermal efficiency, even in extreme environments up to 350°F (177°C), with excursions to 400°F (204°C).



Ease of Application and Maintenance

- Can be applied using commercially available spraying equipment, reducing installation time and labor costs.
- Allows for hot application, enabling continuous operations during maintenance up to 300°F (148°C).



Enhanced Safety

- Reduces burn risk for employees working in close proximity to hot assets.
- Simplifies maintenance time with on-site pre-assembly applications, reducing the need for extended permitting.



FROM SPEC TO PROTECT

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KEY HIGHLIGHTS

- **Lowest Thermal Conductivity:** Less than 0.05 W/mK, providing excellent insulation.
- **Service Temperature:** Continuous up to 350°F (177°C), with excursions to 400°F (204°C).
- **High Film Build:** Apply 150-200 mils (3810-5080 microns) DFT per coat, building to the desired thermal efficiency with multiple coats.
- **Compatibility:** Works effectively with primers like Heat-Flex 750 and Heat-Flex ACE.
- **Sustainability:** Eliminates the need for traditional insulation systems, reducing environmental impact.
- **Energy Costs:** Keeps hot things hot and cold things cold, optimizing energy use and reducing emissions.
- **Reduces Cold Wall Effect:** Smaller thermal swings across the substrate surface will reduce strain on linings.

INDUSTRY APPLICATIONS

- Storage Tanks and Vessels
- Process Piping
- Valves and Fittings
- Offshore and Onshore Facilities
- Chemical and Petrochemical Plants

UNMATCHED DISTRIBUTION AND SERVICE

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Technical Service for Optimal Applications

Our technical service team brings extensive technology and product knowledge, as well as manufacturer equipment training, to ensure proficiency throughout the entire coatings process.

THE SHERWIN-WILLIAMS DIFFERENCE

Sherwin-Williams Protective & Marine delivers world-class industry subject matter expertise, unparalleled technical and specification service, and unmatched regional commercial team support to our customers around the globe. Our broad portfolio of high-performance coatings and systems that excel at combating corrosion helps customers achieve smarter, time-tested asset protection. We serve a wide array of markets across our rapidly growing international distribution footprint, including Energy, Water & Wastewater, Bridge & Highway, Steel Fabrication, Flooring, Manufacturing & Processing, Fire Protection, Marine, Rail and Power.

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KEY PRODUCT ATTRIBUTES

- **Engineering Solution:** Not just a paint, but a high-performance engineering solution.
- **Hot Application:** Can be applied to assets operating up to 300°F (148°C).
- **Replacement for Traditional Insulation:** Eliminates the need for mineral wool and cladding systems.
- **Innovative Formulation:** Acrylic waterborne base with insulating pigmentation.
- **Easily Repaired:** Damages can be easily repaired utilizing a hand trowel application.
- **Superior Moisture Management:** Resists moisture penetration and retention, ensuring consistent thermal efficiency even during heavy rain and cleaning, with minimal water absorption and rapid water release.

SUITABLE THERMAL EFFICIENCY RANGE

