SHERWIN-WILLIAMS®

HEAT-FLEX® AEB

REVOLUTIONARY INDUSTRIAL INSULATION TO MITIGATE CONDENSATING PIPES

Heat-Flex Advanced Energy Barrier (AEB) is a high-performance thermal insulative coating engineered to address the unique challenges of the water and wastewater industry — particularly in managing condensating pipes. Heat-Flex AEB offers a modern alternative to traditional coatings by eliminating the need for bulky mineral-based insulation. When applied directly to piping systems, it forms a seamless, protective barrier that resists moisture, prevents corrosion and maintains thermal efficiency. This solution is ideal for pipes that experience a buildup of condensation, where traditional insulation can trap moisture and accelerate degradation.

BENEFITS

Eliminates CUI

- Removes the need for traditional insulation system when directly applied to primed steel assets.
- Removes the corrosion zone between traditional insulation and the substrate, a primary cause of corrosion under insulation (CUI).
- Compatible with the entire Heat-Flex CUI-Mitigation portfolio.

Sustainable and Environmentally Friendly

- Reduces 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) dry film thickness 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

UNMATCHED DISTRIBUTION AND SERVICE

Products You Need Right Now

Get the products you need with same- or next-day delivery and gain access to local inventory at more than 5,000 Company-owned distribution points in North America.

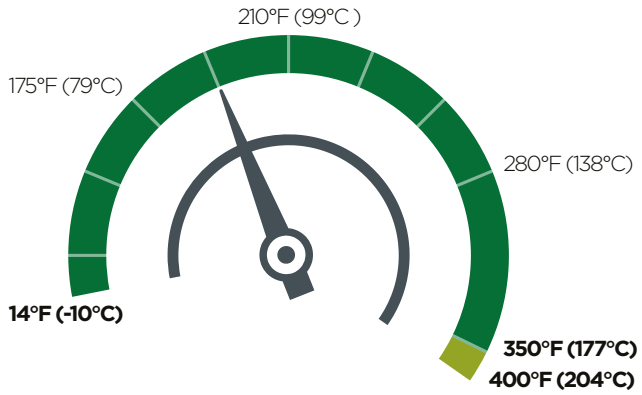
Technical Service for Optimal Applications

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

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 by 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



Use above 400°F is not recommended.

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.

North America
sherwin-williams.com/protective
swprotective@sherwin.com

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