

Job Story:

CHALLENGE:

Cost efficient rooftop duct insulation that provides reliable protection against condensation and energy loss, while meeting the visual requirements of the college's administration.

SOLUTION:

ArmaTuff elastomeric thermal insulation with heavy-duty 12 mil white cladding

Project:
Rooftop Duct Insulation for Allan Hancock College One-Stop Student Services Center and Administration Functions Building

Location:
Santa Maria, California

Engineering Firm:
TMAD Taylor & Gaines – Pasadena, CA

Owner:
Allan Hancock College

Architect Firm:
Steinberg Architects – Los Angeles, CA

Engineering Firm:
TMAD Taylor & Gaines – Pasadena, CA

General Contractor:
Soltek Pacific Construction – San Diego, CA

Mechanical Contractor:
American Incorporated – San Luis Obispo, CA

Distributor:
MacArthur Company – Fresno, CA



ArmaTuff® Elastomeric Thermal Insulation Exceeds Demanding Requirements of Allan Hancock College Construction Project



It wasn't enough to simply provide quality insulation for the rooftop ducts on Allan Hancock College's new 44,788 sq. ft. student services and 21,053 sq. ft. administration building.

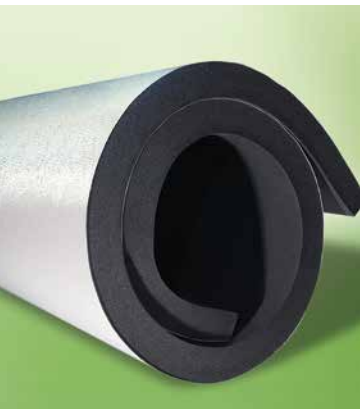
These buildings were designed to be architecturally significant, with high ceilings, seismic features and floor-to-ceiling windows that would resemble no other building on campus, or in the area. Plus, with associated on- and off-site improvements the project was targeting LEED® Silver Certification.

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An important goal of the college's administration was to ensure every aspect of the building, from the grounds to the roof, adhered to the architectural design. The rooftop duct insulation was no exception. The college required a solution that met every conceivable cost and environmental standard of the day, yet still complemented each building's design.

Exceeded All Expectations

Combining all these objectives was the job of Soltek Pacific Construction, and they had their doubts that it was achievable. These goals were quite distinct and in some cases conflicting, and most definitely something not traditionally associated with insulation. After investigating a variety of options they determined that one brand stood out at the top of the class: ArmaTuff elastomeric thermal insulation with heavy-duty 12 mil white laminate. Warren Oldfield, Project Manager for American Incorporated, was responsible for completing this project. "All of these factors were considered when we were researching our options," notes Oldfield, "and ArmaTuff exceeded every one of them."



armacell®

Among the standout features of ArmaTuff that lead to this decision was its excellent thermal attributes. Its closed cell nature offered exceptional water vapor transmission properties and its laminate added an additional vapor retarder to the system. ArmaTuff met the energy code requirements of California Title 24 and ASHRAE 90.1 for R-Values and provided UV protection for the exterior ducts. The combination of a tough aluminum cladding laminated to Armaflex® insulation ensured heavy-duty, year-round weather protection. All delivering the results American Incorporated was seeking.

Superior Cost Efficiency

ArmaTuff's one-step installation process saved time and money, making it more cost efficient than the competition. And the ArmaTuff insulation provided zero permeability, reducing the likelihood of costly replacement of moisture damaged insulation in the future. In addition, the puncture-resistant metal cladding reduces the need for repairs. "Cost wise, it was definitely in our ballpark," said Oldfield. "It was more versatile than the other options researched and the superior choice when it came to long term maintenance costs."

Attractive Visual Appearance

American Incorporated knew that efficiency and cost savings alone weren't enough. It had to visually complement the ground breaking design of these buildings. "Honestly this was my biggest concern. Insulation is not supposed to look beautiful and I thought it might not be attainable" Oldfield admitted. "Fortunately, ArmaTuff's white laminate furnished the look needed."

ArmaTuff's maintenance-free white metal surface fit perfectly into the design of the buildings, affording a clean look and feel that met the college's standard. Its white laminate with a painted composite of polymer and foil for protection against break-down due to ultraviolet radiation provides excellent resistance to chemicals, so no painting is needed in the future. In addition, because Armatuff is available in both 48" wide rolls and 36" x 48" sheets it was installed using fewer seams.

Results

The end result was efficiency and appeal on every level. ArmaTuff earned high marks from both the college and American Incorporated across the board.

Thanks to implementing Armacell's ArmaTuff insulation on their rooftop duct units, Allan Hancock College's new buildings have:

- Mold-resistant flexible elastomeric thermal insulation that prevents condensation and moisture wicking
- Resistance to UV, ozone, acid rain and most industrial pollutants
- A beautiful white embossed cladding surface that does not require painting in the future
- A limited number of seams
- Puncture-resistant metal cladding to reduce the need for repairs
- Zero permeability, eliminating costly replacement of moisture damaged insulation

If your exterior ducts, tanks, vessels, large pipes and fittings are inefficiently insulated, strained in capacity, costing you unnecessary maintenance and repair, and need a presentable look, Armacell's ArmaTuff insulation can help tailor a solution that resolves these issues and meets your requirements.

ARMACELL LLC

TEL: 1 800 866-5638

FAX: 919 304-3847

E-MAIL: info.us@armacell.com

INTERNET: www.armacell.us

