

CASE STUDY

School Facility

Armacell's ArmaFlex® insulation passes the test on protecting water storage tanks and pump systems in a mechanical room in a brand new middle school building built on an educational campus in Ohio. Learn how easy-to-install, closed-cell foam was the correct answer to the back-to-school time constraint problem for Cascade Insulation Company. **Armacell in Action.**

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MAKING A DIFFERENCE AROUND THE WORLD

A Study of Insulating Mechanical Systems

PROJECT:

Water tanks and pumps insulation for a newly built middle school

LOCATION:

Tallmadge, Ohio

INSULATION CONTRACTOR:

Cascade Insulation Company

Carl E. Hughes, II – President

Marty Harrington – Field Superintendent

ENGINEERING FIRM:

Thorson Baker + Associates - Consulting Engineers

CHALLENGE:

Complete the summertime installation of insulation on chilled and hot water systems in a mechanical room of a new middle school facility prior to school starting in August of 2019.

SOLUTION:

ArmaFlex insulation in sheet form scored high marks and was the choice for this application due to its quick and easy installation.

Back to school time is always filled with preparation, anticipation, and fast-moving schedules. This busy period before students return to the classroom can mean tight deadlines, especially for contractors and engineers responsible for building new elementary and middle schools in the northern Ohio city of Tallmadge. The mission of Tallmadge City Schools is that all their students graduate with a viable plan for success. This district is committed to providing students with world-class opportunities and experiences that will empower and inspire toward future careers. The new facilities have unique spaces designed to facilitate 21st century learning concepts of creativity, collaboration, communication, and critical thinking. With safety also being a key factor in design, these new buildings include state-of-the-art security features to enhance the security of our students. With new concepts comes great responsibility as this middle school facility had a hard opening deadline of August 26th. Cascade Insulation Company was up to the task.

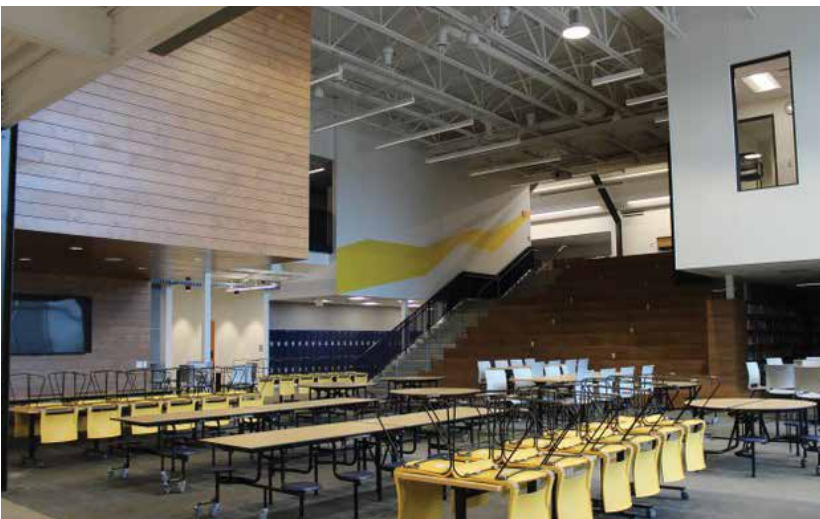
“This project held special significance for me. I have been a part of the Tallmadge community for nearly 30 years. It is a great place to raise a family, and our children attend/attended Tallmadge City Schools. I was excited to be a part of the construction team building these two new schools that will serve the children and the community for many years to come. Most of our work ends up being concealed from view above the ceilings and within the walls.

However, for this project we were able to partner a quality product with our excellent craftsmanship to showcase some of our work on the water tanks, pump bodies, and valves in the mechanical rooms,” said Carl E. Hughes, II, President at Cascade Insulation Company.

Soon Hughes and Marty Harrington, Field Superintendent, began working on their strategy to meet this strict deadline to ensure the school was ready for its new occupants. Being veteran insulation installers, Hughes and Harrington knew they needed a product that could be applied quickly without sacrificing quality or efficiency.

“I like Armacell’s entire product line better than other insulation products from competitors. The application is faster and the foam sheet’s cut edges really accept the contact adhesive well for a strong bond. Keeping a tight seal on seams and joint ends is important to the performance of the system,” explained Harrington.

The 90ft x 30ft mechanical room was built to house two large chilled water tanks and four pumps to support the occupants of the newly constructed middle school which opened in August of 2019. The need to ensure that the efficiency of the new water systems would be maintained and protected was the main focus for Cascade Insulation Company. Additional work will be performed in the mechanical rooms of the elementary school building, opening in March of 2020.



TOP OF THE CLASS

Armacell's ArmaFlex® insulation and ArmaFlex® 520 Adhesive were the correct solutions for this mechanical room project and are in a class of their own. AP ArmaFlex closed-cell foam insulation provides superior protection against thermal losses, condensation and moisture accumulation. For applications requiring fire and smoke ratings of 25/50, AP ArmaFlex FS (Flame Spread) meets ASTM E 84 at 25/50 for 1-1/2" and 2" thicknesses. Both may be used on a variety of curved or flat mechanical surfaces such as large pipe, ducts, tanks, chillers, etc. Schools, hospitals, government institutions and commercial spaces value the long-term performance and peace of mind that AP ArmaFlex lends to HVAC and mechanical piping systems.

ArmaFlex maintains its physical and thermal integrity while its moisture-resistant characteristics make it especially valuable on metal surfaces that are susceptible to condensation.

ArmaFlex 520 Adhesive is an air-drying contact adhesive that is excellent for reliably and safely joining seams and butt joints of ArmaFlex pipe and sheet insulations for line temperatures up to 220°. The adhesive may also be used to apply ArmaFlex sheet insulation to flat or curved metal surfaces that will operate at temperatures up to 180°F.

Installers take note — Using ArmaFlex and ArmaFlex 520 Adhesive was the ideal choice for insulating mechanical piping systems supporting our future generations. ■

Did you know

that there are

1,050

middle schools in Ohio
teaching almost

400,000

students annually?

For more information, please visit:

www.armacell.us

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All data and technical information are based on results achieved under typical application conditions. It is the customer's responsibility to verify if the product is suitable for the intended application. The responsibility for professional and correct installation and compliance with relevant building regulations lies with the customer. By ordering/receiving product you accept the Armacell General Terms and Conditions of Sale applicable in the region. Please request a copy if you have not received these.

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ABOUT ARMACELL

As the inventors of flexible foam for equipment insulation and a leading provider of engineered foams, Armacell develops innovative and safe thermal, acoustic and mechanical solutions that create sustainable value for its customers. Armacell's products significantly contribute to global energy efficiency making a difference around the world every day. With 3,100 employees and 24 production plants in 16 countries, the company operates two main businesses, Advanced Insulation and Engineered Foams. Armacell focuses on insulation materials for technical equipment, high-performance foams for high-tech and lightweight applications and next generation aerogel blanket technology.



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