

## Job Story:

### CHALLENGE:

Insulate chilled and hot water piping in historic buildings without compromising architectural features or deadline.

### SOLUTION:

AP Armaflex® insulation provides space-efficient thermal and moisture protection that keeps insulation and piping dry for years to come.

**Project:**  
HVAC Piping Insulation for Pell Hall, Wilson Hall, Dexter Hall and Central Chilled Water Plant at Converse College

**Location:**  
Spartanburg, South Carolina

**Owner:**  
Converse College

**Mechanical Contractor:**  
Waldrop Mechanical Services –  
Spartanburg, SC

**Insulation Contractor:**  
Dean Hall Insulation –  
Spartanburg, SC

**Engineering Firm:**  
Wade Crow Engineering –  
Spartanburg, SC

**General Contractor:**  
Harper Corp., General Contractors –  
Greenville, SC



## South Carolina Contractors Insist on Armaflex for Historic Renovation at Converse College



Mechanical renovations to historic educational buildings are not for the faint of heart. Contractors usually have a narrow window of time to complete their work before the next school year begins and frequently face budget and accessibility issues along the way. Meanwhile, everyone on the construction team walks a fine line between preserving the past and implementing new technology and materials that are expected to serve the college for years to come.

Dean Hall Insulation and Waldrop Mechanical Services, a SC mechanical contracting firm, walked that very path with Converse College during a renovation to three of the Spartanburg, SC school's most prized historic buildings and energy plant.

The renovation, which was completed just before the beginning of the 2014-2015 school year, included replacement and redesign of several thousand feet of HVAC piping – much of it hidden behind plaster walls and ceilings, and above and below precious architectural treasures.

Since pipe carries water, and water tends to destroy whatever it is exposed to over time, insulation was a major concern, especially on the chilled water piping where the potential for condensation is high. To minimize any risk for having to return to the job and once again cut into the past, Waldrop Mechanical Services and Dean Hall Insulation insisted that the new piping be installed with AP Armaflex® closed-cell elastomeric foam insulation. Although there were cheaper solutions, both contractors agreed Armaflex would provide the most long-term satisfaction and reduce the chances for any moisture related callbacks.



# armacell®

“Armaflex on chilled water piping is a no brainer. You don’t grow mold on it, and you don’t have to worry about rusted pipe,” said Scott Hall, president of Dean Hall Insulation. “Ten years from now, if they decide to go into those walls again, that pipe will look just like it did the day we installed it.”

## Tight Spots, Tighter Deadlines

Hall used Armaflex on every square inch of newly installed chilled water piping at Wilson, Pell, and Dexter Halls – all of which were built in the late 19th century. Armaflex was also applied to all of the primary chilled water equipment in the central energy plant, including piping, valves and fittings.

Hall also opted for Armaflex on the branch hot water piping feeding the fan coils above the dorm rooms in Pell Hall. Built in 1891, Pell Hall is one of Converse College’s oldest architectural treasures. During renovation of the building, construction workers discovered long hidden details including bead boarding, handmade chair rails, and hand painted decorative flourishes around windows, all of which would be restored to their original beauty and intent. Working around such details was a challenge for all of the construction workers, including Hall who had to navigate insulated hot water piping through firewalls to get to the fan coil units above individual dorms.

Hall managed to keep the project on its tight schedule thanks in part to Armacell’s quick turnaround. “Armacell was shipping product down to us as fast as they could make it. They are very hands-on and are always willing to come on site for spot inspections. Not many manufacturers will do that sort of thing,” said Hall, who along with all of his workers, has completed Armacell’s training course, the Armaflex Qualified Installer Program (AQIP).

## Contractor Embraces a Challenge

Waldrop Mechanical Services, based in Spartanburg, SC, has a reputation for being able to handle the most unwieldy of projects. Scott Hall admits he would have never pursued a project like Converse College without Waldrop’s expertise with complex jobs.

“We take on some difficult work—often times work that other firms simply won’t do,” said Brandon Glover, Waldrop’s project manager at Converse College.

The company is busy with 10 to 20 similarly complex bid and spec jobs each year. They’ve learned that some products like Armaflex, which they use on 70% of their projects, can help facilitate very challenging installations. That’s a good thing, because Waldrop has effectively distinguished itself as a contractor that isn’t afraid to take on the tough jobs.

“Because of our track record with this type of work, we have developed a group of clients who have come to understand and appreciate our team’s capability, tenacity and desire to partner with them on their most difficult project endeavors,” said Bill Caldwell, President and CEO of Waldrop Mechanical Services.

Waldrop has won numerous awards for similarly challenging work on other South Carolina college renovations. In 2012, the company’s work at Wofford College in Spartanburg earned Waldrop the prestigious Associated Builders and Contractors (ABC) “Best of Class” Eagle Award, a national honor for mechanical construction on projects less than \$2 million.

The Converse College project is also up for an ABC award.



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