North Carolina State University in Raleigh, N.C. was founded in 1889 and currently enrolls close to 30,000 undergraduate students. Even from its historic beginning, this century old university has managed to remain ‘modern’ in an effort to recruit the Nation’s brightest minds.

Keeping with this trend, the Biology department recently expanded their facilities to match the rapidly increasing number of students and faculty that have joined their program. The biology department is largely housed in South Gardner Hall Laboratory Building; the location of the most recent modification on campus.

NC State University invested over $15 million on South Gardner Hall’s 100,000 square foot comprehensive renovation. Contractors ABL & Associates, LLC, were given the responsibility of renovating the laboratory space for the College of Agriculture and Life Sciences, as well as the modernization of the mechanical, electrical, lab systems, classes and office spaces.

As with any renovation, the existing systems needed to be evaluated and, if necessary, replaced. The previous chemical drainage piping system was constructed of glass. Besides being expensive, heavy, prone to breakage and difficult to install, glass systems also show the contents that run through them. This includes the ‘crud’

“I absolutely prefer PVDF to glass. It’s extremely easy to install.”

Perry Misko
Site Superintendent, ABL & Associates
build-up that occurs during years of operation. Understanding the downfall of glass, ABL's Sam Lampuri and site superintendent, Perry Misko, requested an alternative product be used in its place. Flame Retardant Polyvinylidene fluoride (FR PVDF) was determined to be a value engineered alternative to glass.

The local Plenumline distributor recommended IPEX's Plenumline™ FR-PVDF mechanical joint Acid Waste System. Meeting the stringent specifications of ASTM E84 with a flame spread rating of 5 and a smoke development classification of 35, Plenumline is suitable for use in return-air plenums and other specialized applications, such as high-temperature or extremely aggressive media. Also, Plenumline fittings utilize a unique Elastolive™ joining system ensuring unrivaled joint integrity.

Upon replacing the previously used glass lines, Misko was very satisfied. "I absolutely prefer PVDF to glass. It's extremely easy to install," he said. "Plenumline is a great product." Another ABL & Associates colleague added, "It's lighter and quicker to install than glass."

Dave Kitchen, Regional Sales Manager at IPEX, believes a shift in trends is occurring in construction with regards to thermoplastics. "We are continuing to see specialty engineered thermoplastics replace more conventional and dated-type products and materials. Plenumline is a great example of this."