

## Case Study

## THE BLUE DUCT®

# Roberta A. Smith Library, Muskingum University

**Location:** New Concord, Ohio  
**General Contractor:** Lincoln Construction  
**Engineering Firm:** Heapy Engineering Installing  
**Contractor:** TP Mechanical

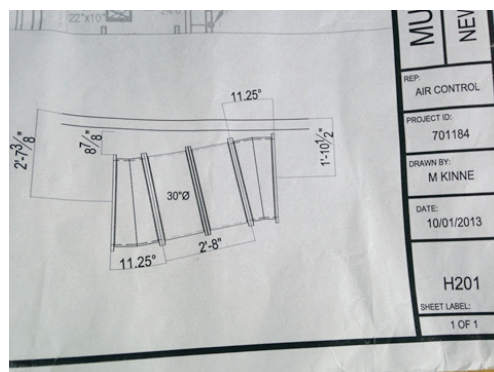
Originally built in 1969, the Roberta A. Smith Library at Muskingum University is being renovated and expanded to make use of technology advancements and to meet the needs of today's students. This development adds 15,000 square feet to the original 23,000-square-foot building. Construction is expected to be complete during the 2015-2016 school year. In addition to offering library services, the facility will feature a colloquium center, technology centers, café and lounge, classrooms, a teacher preparation learning assessment center and more.

Renovating and expanding the existing building will not only save millions of dollars, it also offers sustainability benefits. To further the environmental advantages, the library will be more energy efficient and have maximum indoor air quality by integrating The BlueDuct® underground preinsulated duct system.

The underground duct installation started with digging the trenches. Getting the elevations correct was critical to this project because The BlueDuct® penetrates the foundation wall in two locations. During elevation work, Vishal Sookhai, field-training specialist from AQC Industries arrived at the job site. The weather on the first day was rainy and around 40 degrees Fahrenheit. The temperatures on the second day were in the high 50-degree Fahrenheit range.



*Installation of the The BlueDuct preinsulated Duct System at the Roberta A. Smith Library*



*Original drawing showed an 11.25° angle. AQC engineers quickly revised the drawing for a 30° angle.*

Sookhai noticed that there was a revision made since the original drawings were created. This changed an angle in one area from 11.25° to 30°. To accommodate this modification, AQC's CAD team proposed a solution and promptly provided revised drawings while the crew was still on-site to prevent delay.

Despite this challenge, three installers, along with assistance from Sookhai, completed the installation in just two and one-half days. Since construction was two months behind schedule, the general contractor and mechanical engineer were very pleased with the progress.