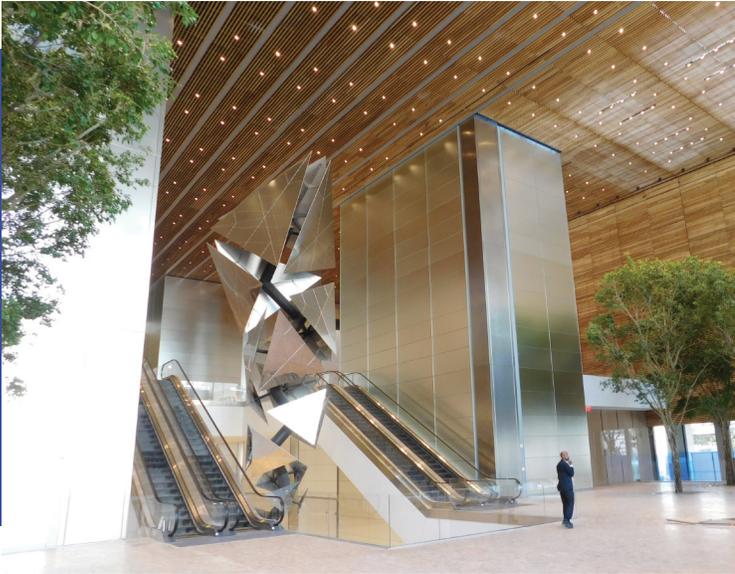




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“NACC certification made us drill down into every process in our business. The results of our rebuild process allowed us to notice a serious clear issue far enough in advance that changes could be instituted at no cost or schedule impact.”

- Terry Webb, President  
Eureka Metal & Glass Services, Inc.

images courtesy Foster + Partners

## NACC Case Study:

# COMCAST TECHNOLOGY CENTER

### Philadelphia, PA

NACC Certified Glazier  
Eureka Metal & Glass Services, Inc. | Philadelphia, Pa.

### Team

**Design Architect:** Foster + Partners  
**Architect of Record:** Kendall/Heaton Associates  
**GC:** LF Driscoll, A Structure Tone Company  
**Cleated Glass Fabricator:** McGrory Glass  
**Glass Engineer of Record:** Eckersley O’Callaghan

### Timeline

Summer 2016 - Summer 2018

### About Eureka

Eureka Metal & Glass Services, Inc. is one of Philadelphia’s premier commercial glazing sub-contractors. Having been in business for over 60 years, the company continues to build upon a reputation of success. *Eureka attained NACC certification in 2015.*

### Introduction

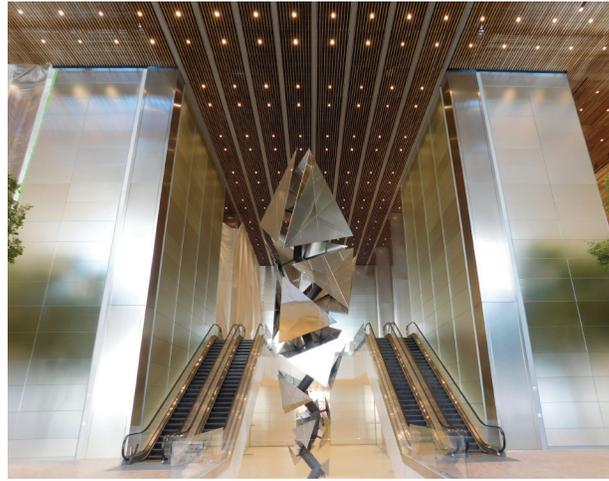
The new Comcast Innovation Center towers 60 stories above Center City, Philadelphia. At 1,121 feet, it’s the city’s tallest building. The project, which is scheduled to open later this year, is significant not only for its height. It also features smart building controls to make it one of the most energy efficient in the region with anticipated LEED Platinum certification.

### About NACC

The North American Contractor Certification Program provides architectural glass and metal contractors with certification recognition through a professionally administered, third-party assessment, as a means of creating a baseline for competency and adherence to industry-accepted guidelines.

### NACC: Preventive Action

The Comcast tower’s five-story glass-enclosed atrium lobby contains a winter garden with 30-foot-tall tropical trees. The lobby podium incorporates 2,700 nine-by-three-foot decorative glass wall panels. Eureka Metal & Glass Services, Inc. performed the installation – and claims its NACC certification helped the team identify a manufacturing design limitation and find a solution. Eureka President Terry Webb explained that certification forced his team to look at every process and identify



*Left: glass installation (image courtesy Eureka); center and right: completed lobby*

paperwork and electronic controls to document evidence of appropriate outcomes. “We realized that it’s much easier to do a deep dive well before a job starts or bid date approaches,” he said. “We evolved the company to identify future risks over the horizon rather than right in front of us.”

The NACC Certification Program helps contractors create, implement, and improve aspects of their practices. By focusing on systems, procedures, and processes, it is the program’s mission to help contractors take proactive approaches to their projects. Eureka’s preventive actions resulted in a higher quality, more efficient finished project at Comcast.

## New Cleats

As designed, the Comcast lobby’s decorative glass installation would have required removal of up to 18 pieces each time a single panel needed to be replaced for cleaning or repair. Eureka spotted the issue well before installation.

NACC provides requirements to promote a safe working environment and adherence to OSHA requirements. Project reviews and safety Corrective And Protective Actions (CAPA) by designated safety personnel are encouraged BEFORE a job begins, in order to identify, document, and address project and site-specific safety requirements. Due to these measures, the cleat issue was brought back from the field to management, where it was solved.

Working in collaboration with McGrory Glass and glazing engineer Eckersley O’Callaghan, Eureka developed and modeled a cleat that would change the install and replacement processes. The new, deeper cleat allows installation of a panel with glass in place above and/or below. The panel can be pulled out while still retaining enough engagement to satisfy engineering needs. The glass pushes back straight against the

wall and then slides down 1/8 inch to lock into position. The communication and collaboration within Eureka was a result of staying up to date with OSHA requirements. With this practice, Eureka performed root cause analysis, making the initial issue solvable. This process allowed a problem to be recognized before developing into a more serious challenge.

## Safety

At Comcast, the oversize glass panels needed to be installed up to 80 feet off the ground. A high reach from below or a hoist from above were non-starters due to floor strength. Just as with the cleat issue, the Eureka team relied on its NACC processes to examine its ability to install safely. Eureka and LF Driscoll devised a solution, where a central platform up to 75 feet tall had walking surfaces ringing the scaffold every 7 feet vertically. This allowed every piece of glass to be set from a top “dance floor” to locations as far as 70 feet below. Almost surgical in precision, glass was sometimes lowered between gaps of 12 inches between the scaffolding and wall. This methodology reduced falls and increased install speed.

## Smart Solutions

The NACC certification process caused Eureka to anticipate problems and identify solutions in advance - regarding both efficiency and safety. Certified contractors are encouraged to pause and rebuild a process or rethink a design - and their quality management system provides them with evidence to document concerns.

“To achieve NACC certification, we needed to acknowledge our shortcomings and then make changes in the way we think and act,” explained Webb. “At Comcast, the same approaches we learned from NACC resulted in the development of smart solutions that were incorporated into the system design.”