



View of the revitalized Michigan Central Station (photo courtesy of Helmut Ziewers)

# Ford Converts Historic Train Depot into a Transportation Hub

International Masonry Institute trains craftworkers for the project

**M**ichigan Central Station is making a comeback as a new state-of-the-art research hub for the Ford Motor Company. The historic depot in Detroit, MI, USA, is being retrofitted as the site of the latest technological advances in transportation. The grand Beaux Arts-style station was a symbol of progress when it opened in 1913. The main waiting room welcomed visitors with marble floors, 68 ft (21 m) Corinthian columns, and Guastavino tile vaults divided by coffered arches.

However, after World War II, Detroit's other transportation claim-to-fame—cars—changed the fate of the terminal. The interstate highway system and the rise in car ownership contributed to rail's obsolescence across the United States. Left in partial use and then abandoned for decades, the once glorious station became an infamous symbol of Detroit's decline.

That's all changing. Ford Motor purchased the depot in 2018 as the centerpiece of its Corktown Campus, which will focus on creating autonomous and electric vehicles. When

complete, the 1.2 million ft<sup>2</sup> (111,500 m<sup>2</sup>) campus will include offices, retail space, housing, parks, and community places. It's expected to bring 5000 new jobs to the Corktown neighborhood of the city.

"I'm very excited to be a part of the team that will keep this beautiful structure standing for the next 100 years. One day, my grandchildren will be able to enjoy it," said Michael Hipes, Bricklayers and Allied Craftworkers (BAC) Local 2 Michigan member. He worked as a foreman at Michigan Central Station for BAC signatory contractor Leidal & Hart, who is performing structural repairs to the topside of the Guastavino vaults, along with other masonry repairs throughout the building. Signatories Grunwell-Cashero and Graciano Corporation also teamed up to replace, cut out, and tuckpoint the exposed side of the Guastavino tile.

Ford, Construction Manager Christman Brinker, and design firm Quinn Evans Architects knew they had to turn to highly skilled, trained labor for a project of this scope and significance.



**Guastavino tile restoration training at the BAC Metro Detroit Training Center** (photos courtesy of IMI and Noah Morrison)



**Before and after views of the Guastavino tile vaults at Michigan Central Station**

In particular, the Guastavino tiles posed a unique challenge. Though Guastavino’s tile arch system was first introduced in the United States in 1885, architects, engineers, and builders today still marvel at how they’re constructed. That’s because it’s a self-supporting, compression-only vault system.

“It’s amazing to see how this system works,” said Hipes. “It feels like we’re putting tiles in thin air, and they just stay.”

Hipes and his crew members attended a special 2-day training session at the BAC’s Metro Detroit Training Center to prepare to work on the project. The program, facilitated by the International Masonry Institute (IMI), International Masonry Training and Education Foundation (IMTEF), and local training staff, provided historical, classroom, and hands-on training on Guastavino tile arches. Many of the craftworkers on the Michigan Central Station also have IMI’s Historic Masonry Preservation Certificate (HMPC).

“IMI and IMTEF are in a unique position to provide project-specific training for specialized restoration treatments,” said Roy J. Ingrassia, IMI National Director of Industry Development. “By bringing together technical and craft professionals, we enhanced the understanding and appreciation of these older vaulting systems. Training like this elevates the level of craft on projects to better meet the design team’s expectations.”

Guastavino vault specialist Kent Diebolt, Fellow of the Association of Preservation Technology (FAPT) and Founding Partner at Vertical Access, who lent his expertise for the training, agreed.

“IMI is an amazing partner from top to bottom. The workers on this project are highly motivated, incredibly smart, and committed to learning a new aspect of their craft. Their skill level is quite high,” said Diebolt.

“I’m always open to learning something new. It’s a different experience than anything I’ve done before—getting to work on these old vaults,” said Anthony Barnes, BAC Local 2 Michigan brick apprentice and former Job Corps graduate. “Detroit is my home. I love being able to work here. This project is another under my belt that I get to be a part of.”

“It’s my dream to work on this project,” said Dale Kasanko, BAC Local 2 Michigan journeyman restoration specialist. “It’s one of the most elite in the country, as far as I’m concerned. I’ve driven by it my whole life. As soon as I found out Ford bought it, I was hoping very much to be on this project, and now I get to say I am.”

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### **Project Credits**

**Craftworkers:** Bricklayers and Allied Craftworkers (BAC) Local 2 Michigan

**BAC Contractors:** Leidal & Hart, Grunwell-Cashero, and Graciano Corporation

**General Contractor:** Christman Constructors

**A/E Firms:** Quinn Evans Architects and Robert Silman Associates