

The Museum of the American Revolution Philadelphia, PA



PROJECT OVERVIEW

Universal Concrete Products erected approximately 320 precast wall panels for the exterior of the museum, totaling 50,500 square feet. The panels are brick and limestone clad. Features of the building's exterior include several large recessed, brick arches and unique limestone cornices and accents.

Because of the size and ornate nature of the limestone cornices, Universal had to use specialized pin connections that could support the weight of the large cornices, which were also precast.

"With the Museum of the American Revolution project, architectural precast concrete not only offered design flexibility for architectural expression, but it also contributes to the durability, sustainability, energy efficiency and safety of the building. At the same time, the plasticity of precast concrete allowed us to achieve a high level of design detail and character for the building that couldn't be matched by other materials due to cost," shared Hydock.

For many projects, particularly the museum project, the use of precast panels over conventional masonry also contributes to the speed of construction. Hand-laid materials typically require scaffolding and bracing for installation and project completion. Because of the recessed arches on the museum exterior, an even longer amount of time would have been required to complete hand-laid stonework. Precast panels allowed the work to be done much more efficiently without the need for scaffolding and bracing.

"Simply put, using precast concrete allowed this project to run more efficiently. It was a small site to work within. The less construction elements you need to get the project done – especially on a small site – the faster the job will get completed. That was certainly the case with the museum project. And working very early on and in a collaborative fashion with the owner, architect and engineer helped make this project a great success."