

- **Owner:**
The Pennsylvania State University, Altoona Campus
- **Services:**
Structural Engineering
- **Year Completed:**
2017
- **Construction Cost:**
\$2,900,000

Penn Building Renovation



The Pennsylvania State University, Altoona, PA

Stahl Sheaffer Engineering provided structural engineering services for the renovation of the Penn Building, which includes classrooms, labs, offices, and student lounges in support of the business, rail transportation engineering, and security and risk degree programs for The Pennsylvania State University. Originally constructed in 1922, the facility is a concrete frame structure with two-way span concrete floors utilizing drop panels at the support columns. Infill multi-wythe masonry within the building frame provided lateral stability as well as being the exterior building envelope. The project entailed floor plan renovations with new penetrations for mechanical and plumbing systems renovations, relocation of existing walls, new openings in masonry walls, ADA ramps within the building, repair of concrete and steel framing damaged by water infiltration, and the addition of a steel dunnage frame to support new mechanical air handling and energy recovery units on the roof. Stahl Sheaffer worked closely with the project architect to determine the most appropriate and economic location for placement of new openings and the dunnage system to take advantage of the existing structure without requiring invasive studies of the reinforcing within the concrete or the addition of steel reinforcing.

