Project Overview

HISTORIC MASONRY BUILDING STRENGTHENED
WITH GLASS AND CARBON FRP

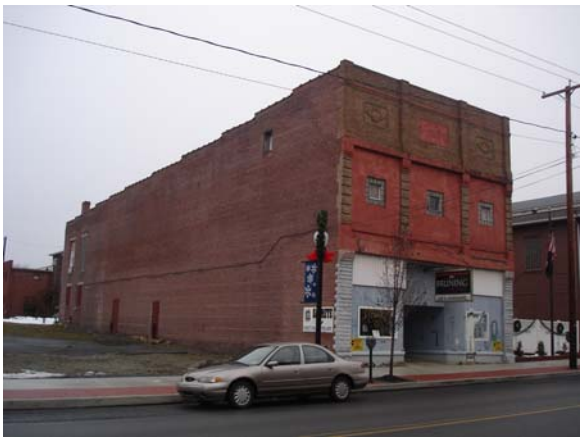
Name: 219 High Street
Type: Historic Masonry Building
Location: Ebensburg, PA
Completed: November 2007

PROBLEM

The un-reinforced masonry (URM) walls of a historic building in downtown Ebensburg required shear strengthening in order to comply with updated codes for wind and earthquake design.

SOLUTION

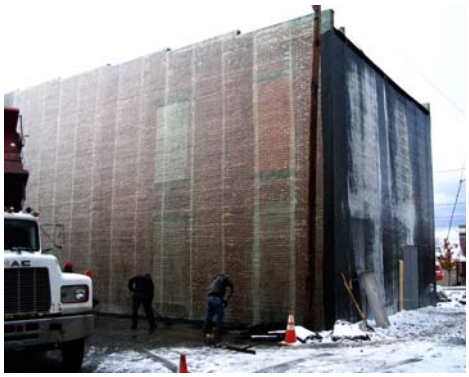
QuakeWrap® FRP Strengthening System was selected to provide the required reinforcement. QuakeWrap, Inc. engineered the FRP retrofit solution using composite biaxial glass fabrics to increase the shear capacity of URM walls.



Technical Highlights

- 11,000 ft^2 of URM wall were converted to shear walls.
- The URM walls were strengthened and waterproofed in a single operation.

o 9,700 ft^2 of QuakeWrap® glass fabric and 1300 ft^2 of QuakeWrap® carbon fabric were used.



Credits

Engineering and Materials: QuakeWrap, Inc., Tucson, AZ
FRP Installation Contractor: FRP Construction, LLC., Tucson, AZ.
General Contractor: L. Robert Kimball and Associates, Ebensburg, PA