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.

- 11,000 ft² of URM wall were converted to shear walls.
- The URM walls were strengthened and waterproofed in a single operation.
  - 9,700 ft² of QuakeWrap® glass fabric and 1300 ft² of QuakeWrap® carbon fabric were used.

Technical Highlights

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

“The FRP Retrofit Experts”
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