

**DECEMBER 9, 2020**

Wednesday, December 9, 2020  
5:00 pm (1.0 PDH)

# Capabilities



Hurricane Ike;  
underwater for  
40 hours;  
cleaned with  
soap and water



Carlos Garza  
Sports Park,  
Hurricane Harvey



Seven Springs Elem. Sch.  
Hurricanes Ike & Harvey

Structural Brick can withstand high winds and windblown debris

## **PRESENTATION**

5:00 pm (1.0 PDH)

Title : **Resiliency of Reinforced Hollow Structural Clay Unit Masonry Construction**

Speaker : Mr. Steven Judd, SE w/ Interstate Brick/H.C. Muddox

Mr. Judd graduated from the University of Colorado - Boulder, with a BSCE and immediately started practicing structural engineering at KKBNA, a consulting civil and structural engineering firm in Denver. Through one acquisition and three changes of venue over 35+ years, with a heavy emphasis on design and construction of building cladding, Mr. Judd is presently the Technical Director for Interstate Brick and HC Muddox, premier brick manufacturers, part of the Clay Group of Pacific Coast Building Products. Steven is a licensed Structural Engineer in Utah, and a licensed Civil and Structural Engineer in California. He participates on committees with American Society for Testing and Materials (ASTM), The Masonry Society (TMS), Western States Clay Products Association (WSCPA) -Technical Chairperson, and audits activities of the Masonry Alliance for Codes and Standards (MACS), National Storm Shelter Association (NSSA) Design Practices Committee, and Western States Structural Masonry Coalition (WS2MC). Steven has been involved with structural clay masonry design for over 30 years and holds 2 patents for light-gauge cold-formed steel framing system hardware used to accommodate bi-directional story drift for exterior wall framing at building corners.

**ABSTRACT** : Resiliency is generally thought of in terms of a human characteristic the ability to recover or bounce back from a destabilizing event or events. Destabilizing events come in all shapes and forms, including, natural disasters, human caused disasters, and personal tragedies. Some events can be planned for and some cannot. Personal resiliency and, by inference, community resiliency can be enhanced by the built environment, by having

durable and robust infrastructure. Life in the pre-event world can return quicker to normalcy, or a new normalcy, after a destabilizing event like earthquakes, hurricanes, tornadoes, wildfires, floods, tidal surges, tsunamis, active shooters, and, explosions, to name a few, if the built environment remains intact and useable. Constructing durable and robust structures is one area that can positively augment personal and community resilience. Structural brick is one of those materials that, by its nature, can be used to build durable and robust structures, proven through controlled testing and surviving actual destabilizing events. This presentation will inform the participant of the physical properties of structural brick, will show testing performed to establish the durability of structural brick and uses on structural brick.