Understanding Resilience through a Musical Analogy

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ABSTRACT

This presentation will provide easy-to-understand explanations for the science behind earthquakes, seismic design, and why different buildings can have dramatically different responses to the same earthquake. Attendees may be surprised to learn about how many parallels can be drawn between music and the seemingly abstract science behind earthquake engineering. There will also be a discussion on the different construction techniques that can be used to make buildings more resilient.

Speaker Bio

Ramon Gilsanz founded Gilsanz Murray Steficek in 1991 with Philip Murray and Gary Steficek; the firm is headquartered in New York City. The firm’s three offices with multidisciplinary staff specialize in architecturally compelling and high quality structural engineering design services and provide building envelope consulting, roofing and waterproofing and engineering for art installations among many other services.

Ramon has participated on five post-earthquake investigative teams since 2010, traveling to impacted foreign countries to investigate earthquake preparedness and recovery as well as seismic code issues. Closer to home, he has participated in hurricane Sandy recovery efforts, including the NYC DOB building assessment efforts and the Urban Green Council's Building Resiliency Task Force (BRTF) to improve citywide infrastructure and building resiliency. Ramon also led the WTC7 collapse analysis on the national ASCE-FEMA building performance assessment team investigating the World Trade Center attack.

Ramon actively contributes to the structural engineering industry through leading or participating in several professional societies and committees. These include the ASCE 7-16 Minimum Design Loads for Buildings and Other Structures committee, American Concrete Institute (ACI) committee, and the AISC committee on specifications.