Target Audience – Engineers only

Presentation Description:

To solve complex designs effectively and efficiently, more and more structural designers are turning to Finite Element Analysis (FEA). Software companies have responded by developing FEA programs that support masonry materials. This presentation is an overview of FEA masonry assumptions, modeling masonry elements, supported loading and design codes, and the integrity of results when designing masonry components with FEA.

Learning Objectives –

- Discuss key design assumptions made within FEA and how it affects masonry
- Outline how to model masonry elements utilizing FEA methods
- List design codes supported for loading and analysis, and analysis procedures
- Relate masonry elements designed using FEA to the integrity of design results

Presenter Bio – Cathleen Jacinto, SE, PE

Cathleen has 16 years of experience in the design industry as a structural engineer. A seasoned project manager and team leader, Cathleen collaborated on a variety of building design projects while at Thornton Tomasetti and T.Y. Lin International in Chicago, Illinois. Her resume includes small to large-scale project types in healthcare, aviation, commercial, infrastructure, cultural, and steel connection design located in the U.S. and abroad.

Since joining FORSE in May 2015, Cathleen provides structural engineering design, modeling, and detailing services in collaboration with other structural engineering firms. Her solid knowledge base of various building materials, including steel, masonry, concrete, and wood contributes to FORSE's designs, seminars, and publications. She serves as a technical consultant to the Illinois Structural Masonry Coalition. One topic Cathleen highlights is structural masonry analysis and design.

Cathleen also currently holds the position of Technical Consultant with SE Solutions, LLC where she provides technical input to structural engineering webinars as well as writes technical documents that serve as resources for the practicing structural engineering community. Cathleen has a Professional Masters in Structural Engineering from the Illinois Institute of Technology and a Bachelor of Science in Civil Engineering from the University of Illinois Urbana-Champaign. She is a licensed Structural Engineer (SE) and Professional Engineer (PE) in the State of Illinois.

Request a Lunch & Learn by contacting the Masonry Advisory Council

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