

The Practice of Structural & Earthquake Engineering Today & 3 Unique Structural Engineering Projects

David A. Friedman, SE
Retired, Senior Principal, Emeritus CEO & Board Chair
Forell/Elsesser Engineers Inc.



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Host: Earthquake Engineering Research Institute
(EERI) Graduate Student Chapter, eladly@jhu.edu

Abstract

The practicing structural engineer today must not only have a broad understanding of not just structural engineering, but must be knowledgeable about architecture, M/E/P systems, construction delivery methodologies, and the construction process. All projects come with their own litany of challenges and constraints, and the structural engineer is one of the key players in achieving the optimal solution. The project's budget, the selected performance and design criteria, the architectural form, and the operating systems all affect the selection of the appropriate structural materials and lateral force resisting system. Then the analysis must get translated into a design, and the design must clearly and carefully be delineated into construction documents including plans, details, sections and technical specifications, with appropriate attention to sequencing, phasing and constructability. This all gives rise to the notion of today's structural engineer as a "Master Builder," one who can articulate their way through a complex labyrinth of form finding, criteria setting, risk evaluation, design and documentation, and construction (and hopefully not litigation). Some current projects that highlight these issues include: San Francisco City Hall, UCSF Parnassus Ray & Dagmar Dolby Regeneration Medicine Building, and UC Berkeley California Memorial Stadium.

About Our Speaker

David was a Senior Principal, Emeritus Chair of the Board of Directors President and CEO of Forell/Elsesser Engineers with over 45 years of professional practice in structural and earthquake engineering. With a specialty in seismic engineering and retrofitting of existing structures, particularly those with historic designation, David has solved numerous structural and earthquake engineering challenges during his career with Forell/Elsesser Engineers. Examples of his projects include the base isolation retrofits of San Francisco City Hall and the Asian Art Museum, the adaptive reuse and retrofit for the San Francisco Conservatory of Music, and the seismic safety corrections and remodeling of UC Berkeley's California Memorial Stadium. David is devoted to world-wide seismic risk reduction and is the current President of the Earthquake Engineering Research Institute, dedicated to learning and disseminating the lessons learned from earthquakes around the world. He is also involved in many civic, philanthropic and not-for-profit Boards including The San Francisco Foundation, SPUR, UC Berkeley Foundation and the Jewish Home of San Francisco.

More Information:

engineering.jhu.edu/case/events