

Jeffrey P. Hunt, Ph.D., P.E.
Senior Engineer

Professional Profile

Dr. Jeffrey Hunt is a Senior Engineer in Exponent's Buildings and Structures practice, where he specializes in engineering analysis of complex structures, performance-based earthquake engineering, and evaluation of the safety associated with architectural components in buildings such as curtain walls and window systems. He also has experience with structural reliability theory and its application to nonstructural components.

Dr. Hunt's educational background includes study of structural analysis, design of steel, concrete and timber structures, and earthquake engineering. He was a visiting researcher at the Institute for Lightweight Structures and Conceptual Design at the University of Stuttgart, Germany, where he studied the analysis and design of lightweight and spatial structures.

Prior to joining Exponent, Dr. Hunt was a researcher at the University of California, Berkeley, where he focused on the seismic response of precast concrete cladding systems, including how cladding systems and facades can influence the global seismic response of multistory buildings. He developed fragility curves for the damage states of various cladding components, and performed repair cost analysis of the cladding systems using a probabilistic performance-based approach.

Academic Credentials and Professional Honors

Ph.D., Civil and Environmental Engineering, University of California, Berkeley, 2010
M.S., Civil and Environmental Engineering, University of California, Berkeley, 2005
B.S., Architectural Engineering, University of Texas, Austin (high honors), 2004

Fulbright Scholar, Universität Stuttgart, Germany, 2006–2007
IASS Hangai Prize, 2008

Licenses and Certifications

Registered Professional Civil Engineer, California, #C79454

Languages

German – Conversational

Publications

Hunt J, Stojadinovic B. Seismic performance assessment and probabilistic repair cost analysis of precast concrete cladding systems for multistory buildings. PEER Report No. 2010/110, Pacific Earthquake Engineering Research Center (PEER), University of California, Berkeley, November 2010.

Hunt J, Stojadinovic B. Repair cost analysis of multistory buildings with precast concrete cladding. Proceedings, 9th US National and 10th Canadian Conference on Earthquake Engineering, Toronto, Canada, July 25–29, 2010.

Hunt J. Seismic performance assessment and probabilistic repair cost analysis of precast concrete cladding systems for multistory buildings. Doctoral Dissertation, Structural Engineering, Mechanics and Materials, Department of Civil and Environmental Engineering, University of California, Berkeley, CA, Spring 2010.

Hunt J, Haase W, Sobek W. A design tool for spatial tree structures. Journal of the International Association for Shell and Spatial Structures 2009; 50(1):3–10.

Hunt J, Haase W, Sobek W. Designing adaptive spatial structures. Journal of the International Association for Shell and Spatial Structures 2008; 49(3):167–173.

Hunt J, Stojadinovic B. Nonlinear dynamic model for seismic analysis of non-structural cladding. Proceedings, 14th World Conference on Earthquake Engineering, Beijing, China, October 12–17, 2008.

Hunt J, Stojadinovic B, McMullin K. Modeling the effect of non-structural cladding in buildings. Proceedings, 6th Annual NEES Meeting, The Value of Earthquake Engineering Research, Portland, OR, June 18–20, 2008.

Presentations

Hunt J. Seismic performance assessment of three precast cladding designs using the PEER PBEE repair cost methodology. SEMM Seminar, Department of Civil and Environmental Engineering, UC Berkeley, Berkeley, CA, September 20, 2010.

Hunt J. Repair cost analysis of multistory buildings with precast concrete cladding. 9th US National and 10th Canadian Conference on Earthquake Engineering, Toronto, Canada, July 25–29, 2010.

Hunt J. Designing adaptive spatial structures. Symposium IASS-2008, Shell and Spatial Structures: New Materials and Technologies, New Designs and Innovations – A Sustainable Approach to Architectural and Structural Design, Acapulco, Mexico, October 27–31.

Hunt J. Nonlinear dynamic model for seismic analysis of non-structural cladding. 14th World Conference on Earthquake Engineering, Beijing, China, October 12–17, 2008.

Hunt J. Modeling the effect of non-structural cladding in buildings. 6th Annual NEES Meeting, The Value of Earthquake Engineering Research, Portland, OR, June 18–20, 2008.

Professional Affiliations

- Structural Engineers Association of Northern California (associate member)
- Earthquake Engineering Research Institute (member)