Exponent
Failure Analysis Associates®

Exponent
420 Lexington Avenue
Suite 1740
New York, NY 10170

telephone 212-895-8100
facsimile 212-895-8199
www.exponent.com

David B. Peraza, P.E.
Principal Engineer

Professional Profile

Mr. David B. Peraza is a Principal Engineer in Exponent's Buildings and Structures practice. He has over 30 years of broad structural engineering experience including investigations of major collapses, analysis of existing structures, diagnosis of design and construction problems, condition assessments, design of remedial and stabilization measures for distressed buildings, design for renovation projects, and the analysis of unusual structures. His projects have included office buildings, high-rise residential structures, building façades, cranes, parking structures, pre-engineered buildings, industrial facilities, temporary structures during construction, cranes, bridges, and waterfront structures.

Following the 9/11 terrorist attacks on the World Trade Center, Mr. Peraza led the emergency engineering response for the City of New York, which continued around the clock for nearly nine months and included the coordination of 39 engineering sub-consultant firms. He has led several high-profile structural collapse investigations including L'Ambiance Plaza, the Four Times Square Hoist Collapse, and the Miller Park crane accident.

Prior to joining Exponent, Mr. Peraza was Vice President with the LZA Technology division of The Thornton-Tomasetti Group.

Academic Credentials and Professional Honors

M.S.C.E., University of Cincinnati, 1986
B.S.C.E., Ohio Northern University, 1977

Licenses and Registrations

Registered Professional Engineer: New York, #082864; Connecticut,#24771; Ohio, #46862; Florida, #64521; Delaware, #14505; North Carolina, #032227; New Jersey, GE-046372, Rhode Island, #8602, Pennsylvania, #PE074422; Texas #PE102533; New Hampshire, #13243; Massachusetts, #48872; Mississippi, #20227; Land Surveyor, Ohio #6836

Professional Committees

- ASCE/SEI 37 standard: "Design Loads for Structures During Construction."
- ASCE/SEI 7 standard "Minimum Design Loads for Buildings and Other Structures."
- ASCE Technical Council on Forensic Engineering: Executive Committee and Committee of Dissemination of Failure Information
- SEAoNY (Structural Engineers Association of New York) Underpinning Task Force

Book Chapters

Peraza DB. The first steps after a failure. Chapter 5. In: Forensic Structural Engineering Handbook, 2nd Edition, McGraw-Hill, 2009.

Buildings. Chapter 6. In: Structural Condition Assessment, Wiley, 2005.

Peraza DB. The first steps after a failure. Chapter 4. In: Forensic Structural Engineering Handbook, McGraw-Hill, 2000.

Publications and Presentations

Peraza DB. Co-presenter. The Adjacent Building Challenge to new construction projects in New York City. Sponsored by the Real Estate Board of New York, New York, NY, June 29, 2010.

Peraza DB. The case for failures. The Forensic Engineering Symposium, Metropolitan Section of the American Society of Civil Engineers, Cooper Union, New York, NY, June 29, 2010.

Peraza DB. Co-presenter. Forensic structural engineering: Practices and failures. Presented to The New York City Department of Design and Construction, Long Island City, NY, March 18, 2010.

Peraza DB. Steel framing—Performance lessons from forensic investigations. Symposium Aging Buildings: Designing for Longevity, by Architectural Engineering Institute, New York, NY, December 9, 2009.

Peraza DB. Special problems with composite multiwythe masonry walls. Presentation and paper, Proceedings of ASCE Fifth Forensic Congress, Washington DC, November 2009.

Peraza DB, Travis J. Crane Safety—an Industry in Flux. Presentation and paper, Proceedings of ASCE Fifth Forensic Congress, Washington DC, November 2009.

Peraza DB. Co-presented 1 ½ day seminar and workshop on Structural Forensic Engineering. Organized by ETEK (Cypriot engineering board), Cyprus, Greece, May 8–9, 2009.

Peraza DB, Wisniewski B. Evaluation of building with severe impact damage: The Banker's Trust building. Proceedings, ASCE Structures Congress, Vancouver, BC, April 2008.

Peraza DB. Mechanisms of façade deterioration and failure. Presented at Façade Forensic Workshop as part of Architectural Engineering Institute (ASCE) Conference, Denver, CO, April 2008.

Peraza DB. Undermining and underpinning: Suggestions for minimizing damage to adjacent buildings during construction. Forum Article in Journal of Performance of Constructed Facilities, 2008.

Peraza DB. Avoiding structural failures during construction—Part 2. Structure Magazine, Copper Creek, Reedsburg, WI, February 2008.

Peraza DB. Avoiding structural failures during construction—Part 1. Structure Magazine, Copper Creek, Reedsburg, WI, November 2007.

Peraza DB. Presented the masonry portion of "Sticks and Bricks." ABA Construction Forum, Los Angeles November 2007.

Peraza DB. The first steps after a failure. Proceedings of ASCE Structures Congress, in Long Beach CA. May 2007.

Peraza DB. Structural condition assessments: Challenges and solutions. Speaker at Construction Safety Week, sponsored by NYC Department of Buildings and SEAoNY, May 3, 2007.

Presented two hour seminar "Avoiding Failures During Construction" at four venues:

- NYC Department of Design and Construction, June 21, 2007
- NYC School Construction Authority, July 17, 2007
- NYC Department of Buildings, October 26, 2007
- ASCE Metropolitan Section meeting, November 29, 2007

Peraza DB. Getting to the bottom of underpinning. Structure Magazine, Copper Creek, Reedsburg, WI, December 2006

Peraza DB. Strategies for structural condition assessments of damaged buildings. Structure Magazine, Copper Creek, Reedsburg, WI, August 2006.

Peraza DB. Raising the playing field-quality in the constructed facility. Catastrophe Risk Management, April 2006, London, UK.

Peraza DB. Condition assessment of buildings. Proceedings, SEI Structures Congress, American Society of Civil Engineers, St. Louis, MO, May 2006.

Peraza DB, Ratay R. Structural condition assessments—The good, the bad, the ugly. Structural Engineers Coalition of Connecticut, New Haven, CT, March 15, 2006.

Peraza DB. Condition assessment of structures following an event. ASCE Met Section Construction Group Winter Seminar, "Engineering for Disasters: Prevention and Recovery," New York, NY, March 6, 2006.

Peraza DB, Mendoca D, Stefan P. Innovation, risk, and reward at ground zero. Proceedings, SEI Structures Congress, New York, NY, American Society of Civil Engineers, April 2005.

Peraza DB. First steps after a failure. Proceedings, SEI Structures Congress, American Society of Civil Engineers, New York, NY, April 2005.

Peraza DB. Evaluation of damaged buildings. Lecture, presented to NYC Department of Buildings, March 2005.

Peraza DB, Zallen RM. Engineering considerations for lift-slab construction. American Society of Civil Engineers, Reston, VA, 2004.

Peraza DB. Preservation of perishable evidence. The Owner's Construction Super Conference, San Francisco, CA, December 12, 2003.

Peraza DB. Engineering response to World Trade Center Disaster. Keynote Speech, presented at AGC-DOT Conference, Saratoga Springs, NY, December 2002.

Peraza DB. Twin Tower performance. Presented at AGC-DOT, Saratoga Springs, NY, December 2002.

Peraza DB. Lessons from recent collapses of metal buildings. Presented at Cold-formed Steel Structures 2000, 15th International Specialty Conference, St. Louis, MO, October 2000.

Peraza DB. Practical solutions to building envelope problems. Neocon 99 World's Trade Fair, Chicago, IL, June 1999.

Peraza DB. Recycling of historic piers revitalizes Manhattan waterfront. ASCE 1997 Spring Seminar, "Just Structures," New York, NY, May 1997.

Peraza DB. Metal deck collapse: Professional liability during construction. ASCE Annual Convention and Exposition, Minneapolis, MN, October 1997.

Peraza DB. Lift-slab construction: Engineering considerations. ASCE Annual Convention and Exposition, Minneapolis, MN, October 1997.

Peraza DB. Lessons from failures II. ASCE Annual Convention and Exposition, Moderator, 1994.

Peraza DB. Assessment of cinder concrete slab construction. Presented at ACI Spring Convention, San Francisco, CA, 1994.

Peraza DB. Investigation of the L'Ambiance Plaza building collapse. ASCE Journal of Performance of Constructed Facilities, November 1992.

Peraza DB. Hartford Coliseum collapse in retrospect. Presented at ASCE Structural Engineering Congress, Chicago, IL, September 1985.

Editorships and Editorial Review Boards

- J*ournal of Performance of Constructed Facilities* (American Society of Civil Engineers)

Prior Academic Appointments

- Adjunct Instructor, Manhattan College, College of Civil Engineering, Graduate Program
- Adjunct Instructor, New York Institute of Technology "Structures for Architects"

Peer Reviewer

- Journal of Performance of Constructed Facilities (American Society of Civil Engineers)

Professional Affiliations

- American Society of Civil Engineers—ASCE
- American Concrete Institute
- Precast/Prestressed Concrete Institute
- Structural Engineer's Association of New York