

PROFESSIONAL RESUME OF HARVEY A. KAGAN, SC.D., P.E.

I. General Information

Compendium:

Senior Civil and Structural Engineer

Over 40 years in the construction industry with specialization on the investigation of construction defects and failures, structural engineering, and construction project management.

Structural Investigations:

Structural Collapses of Buildings: Wood roof trusses; Pre-engineered metal buildings and steel roof systems Buildings constructed of wood, concrete, masonry and steel framing.

Buildings: Structural damage due to natural or man-made acts. Scope of fire damages. Estimates of cost to repair.

Bridges: Collapses, construction defects or performance problems

Mold cause and origin investigations

Design and construction defect investigations of buildings

Construction cost estimates

Construction worksite accident investigations

II. Professional Summary

Education:

Doctor of Science

Structural Engineering
New York University

Master of Science

Construction Management
Purdue University

Master of Science

Civil Engineering
University of Illinois

Bachelor of Science

Civil Engineering
Columbia University

Experience:

Associate, Hudson International – Engineering consultant in project management, investigation of construction defects and structural defects and failures. Projects involved commercial, industrial and residential construction.

Principal Structural Engineer, FTI Corporation – Activities included project management analysis, the investigation of structural failures and defects, the analysis of construction site accidents and the evaluation of construction claims.

President, Construction Advisory Group, Inc. – Responsibilities included consulting services in the areas of project administration, claims analysis and scheduling, and the investigation of construction defects and structural failures.

Vice President, Zetlin/Oxhandler, Inc. – Responsibilities included contract administration and project management for this design-build firm.

Senior Consultant, Hill International, Inc. – Service as a project management consultant primarily involved in the presentation and analysis of construction claims as well as the investigation of construction defects and structural failures..

Senior Consultant, Wagner-Hohns-Inglis, Inc. – Duties included the analysis and preparation of construction claims and the investigation of construction defects and structural failures..

Engineer, C.F. Braun and Company – Responsibilities included the design and analysis of structures and foundations for chemical process plants being barge transported to Alaska. The primary design consideration was dynamic loading due to sea conditions.

Engineer, United Engineers and Constructors – Principal activities included the dynamic analysis of nuclear plant buildings and containment shells to resist earthquake forces.

Structural Engineer, Grumman Aerospace Corp. – Assigned to advanced design projects such as structural optimization procedures and dynamic loads on crushable Mars landers.

Structural Test Engineer, Republic Aviation Corp. – Performed dynamic (vibration and shock) tests of entire aircraft, substructures and mechanical and electrical components. Designed special test fixtures, performed tests and issued findings in report form.

Professor of Civil Engineering, Rutgers University, New Jersey – During my 11 year association with the University, I was responsible for teaching and administering courses in construction project management, structural analysis and design, theoretical mechanics and surveying. I served as the Executive Officer, Department of Civil Engineering.

Associate Professor & Civil Engineering Program Chairman, University of Evansville, Indiana – Administered and taught courses in all areas of the Civil Engineering program.

Instructor, Purdue University, Indiana – Taught courses in the Civil Engineering Department while pursuing graduate studies in Construction Management.

III. Professional Registration and Certification

Licensed Professional Engineer – CA, FL, MD, NJ, NY, PA, VA

Life Member and Fellow, American Society of Civil Engineers

Past Chairman of the ASCE Technical Council on Forensic Engineering

Construction Arbitrator and Mediator

Member Tau Beta Pi & Chi Epsilon Engineering Honor Societies

IV. Publications

Kagan, H.A. and Kubo, G.G., Elasto-Plastic Analysis of Reinforced Plates, Journal of the Structural Division, ASCE, Vol. 94, No. ST4, pp. 943-958, April 1968.

Kagan, H.A., discussion of Second-Order Theory in Orthotropic Plates, by George Adotte, Journal of the Structural Division, ASCE, Vol. 94, No. ST5, p. 1277, May 1968.

Kagan, H.A., An Experimental Investigation of the Elasto-Plastic Behavior of Orthogonally Stiffened Plates, Bureau of Engineering Research, Rutgers University, November 1968.

Kagan, H.A., A Low Cost Double Acting Center Punch for the Mechanics of Materials Laboratory, Journal of Engineering Education, ASEE, Vol. 59, No. 10, pp. 1156-1157, June 1969.

Kagan, H.A., Experimental Behavior of Reinforced Steel Plates, Journal of the Structural Division, ASCE, Vol. 95, No. ST12, pp. 3015-3018, December 1969.

Kagan, H.A., Experimental Studies of Orthogonally Stiffened Steel Plates, Welding Journal, American Welding Society, Vol. 34, No. 12, pp. 571s-576s, December 1969.

Kagan, H.A., Experimental Studies of Orthotropic Bridge Floor Panels, Proceedings of the Specialty Conference on Steel Structures, ASCE, Columbia, MO, June 1970.

Kagan, H.A., discussion of Field Tests of Aluminum Orthotropic Bridge Deck, by Maurice L. Sharp, Journal of the Structural Division, ASCE, Vol. 96, No. ST7, pp. 1614-1616, July 1970.

Kagan, H.A., Evaluating Construction Failures, Journal of Construction Engineering and Management, ASCE, Vol. 109, No. 4, pp. 460-472, December 1983

Kagan, H.A., How Designers Can Avoid Construction Claims, Journal of Professional Issues in Engineering, Vol. 111, No. 3, pp. 100-107, July 1985.

Kagan, H.A. and VandeWater, J., Design in Jeopardy: The Expanding Legal Responsibilities of Engineers, Journal of Professional Issues in Engineering, ASCE, Vol. 112, No. 1, pp. 58-67, January 1986.

Kagan, H.A., Leary, D.J., and Pratter, G.E.K., Design Engineers' Responsibilities During Construction, Journal of Construction Engineering and Management, ASCE, Vol. 112, No. 3, pp. 394-402, September 1986.

Khare, P.S. and Kagan, H.A., A Review of American and Indian Seismic Design Codes for Bridges, Proceedings of the 8th Symposium on Earthquake Engineering, Roorkee, India, December 19-31, 1986, Vol. 1, pp. 507-513.

Kagan, H.A., Practical Quality Controlled Construction, Journal of Performance of Constructed Facilities, ASCE, Vol. 3, No. 3, pp. 191-198, August 1989.

Kagan, H.A., Common Causes of Collapse of Metal Plate Connected Wood Roof Trusses, Journal of Performance of Constructed Facilities, ASCE, Vol. 7, No. 4, pp. 225-235, November 1993.