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Richard T. Kaczkowski, P.E., S.E.

Structural Engineering & Building Envelope Consulting

PROFESSIONAL EXPERIENCE

Mr. Kaczkowski has over 39 years of broad engineering experience encompassing construction problem investigation, field and laboratory testing, structural analysis and design, code compliance evaluation, project management, construction product development, and intellectual property consulting. He is licensed as a Professional or Structural Engineer in over twenty states. He serves as a member of ASTM Committees related to manufactured masonry units, roofing and waterproofing, and overall performance of buildings.

Mr. Kaczkowski's professional work experience includes the following:

11/2023 to present Unified Engineering - Aurora, Illinois Principal Consultant

Mr. Kaczkowski currently serves as a Principal at Unified Engineering, where he provides consulting services on a variety of structural and building envelope related projects.

11/2010 to 11/2023CTLGroup - Skokie, IllinoisVice President – Consulting Services

Senior Principal Engineer & Group Manager

Mr. Kaczkowski previously oversaw all consulting services at CTLGroup. While at CTLGroup, Mr. Kaczkowski led and managed a wide range of projects related to problem investigation and repair of buildings and other structures. These projects typically involved the assessment of structural problems or moisture leakage issues at roofs, exterior wall claddings, window and door systems, or foundations. Typical project scopes may have involved field investigation, laboratory and/or field testing, analysis of problem cause(s), repair design, and expert testimony as needed. Mr. Kaczkowski provided consultation to building product manufacturers related to new product development, product performance verification, building code compliance and intellectual property issues. He also served on CTLGroup's Intellectual Property Committee, which oversaw the firm's developmental initiatives and patent activity.

08/2002 to 11/2010 Packer Engineering, Inc. - Naperville, Illinois

Vice President, Construction Technology Group Sr. Director, Construction Technology Group

Mr. Kaczkowski held several positions of increasing responsibility while at Packer Engineering, eventually serving as a Vice President and responsible for managerial oversight of the Construction Technology Group. The Construction Technology Group was comprised of eight to twelve engineers, architects, and support staff members in the Naperville, IL and Ann Arbor, MI offices. The Group provided a wide range of consulting services to solve construction related problems for the legal and insurance communities, property owners / managers, and general industry. In addition to his managerial responsibilities, Mr. Kaczkowski maintained an active construction consulting practice while at Packer Engineering, which included the following:

- Investigation, field testing, evaluation, and development of repair recommendations for buildings and other construction assemblies subjected to structural distress or failure. This work included investigation of storm damage, distress from settlement, foundation failures, failures during construction, and damage from impact or vibration.
- Investigation, field testing, evaluation, and repair design for building exterior envelope systems. This work addressed brick and stone masonry, wood and vinyl sidings, exterior insulation finish systems (EIFS), direct applied exterior finish systems (DEFS), portland cement plaster stucco, commercial and residential roofing, window and door assemblies, and curtainwall systems.
- Evaluation of construction for compliance to model building code requirements and relevant industry standards.
- Consultation to building product manufacturers related to new product development, product performance verification, building code compliance and intellectual property issues.
- Development and review of Quality Control programs for manufacturing production. This work has addressed raw material specifications, in-process controls, final product testing and performance criteria, inspection and testing frequencies, procedures to be taken in the event of failure, and documentation requirements.

09/1993 to 08/2002 USG Corporation - Libertyville, Illinois

Program Manager, Construction Systems Laboratory Program Manager, Systems Evaluation Laboratory Senior Technical Staff Member / Technical Staff Member

Mr. Kaczkowski held several positions of increasing responsibility within the Research & Development Department of USG Corporation. USG Corporation was the parent company for, among others, the largest U.S. gypsum drywall manufacturer (U.S. Gypsum Co.) and a leading building materials distributor (L&W Supply). As Program Manager

of the Construction Systems Laboratory, Mr. Kaczkowski oversaw the development of building system assemblies for wall, floor, ceiling, and roof applications. The Laboratory was also responsible for the performance verification and certification testing of all USG products and systems. Mr. Kaczkowski served on USG's Patent Review Committee, which oversaw the development of internal intellectual property and evaluated competitor patents.

Mr. Kaczkowski's work experience while at USG Corporation included the following:

- Development of new wall, floor, ceiling, and roof products and building systems for residential and commercial construction. This work included prototype design development, laboratory testing, and field trials.
- Analysis and testing of wall, floor, ceiling, and roof assemblies containing USG and competitor products and systems to model building code requirements and industry standards. These evaluations encompassed a large number of interior and exterior system assemblies and considered structural, environmental, fire, acoustical, and general serviceability criteria.
- Coordinating certification testing and obtaining approval reports from model code evaluation service groups and listing agencies. This work involved considerable interface with organizations such as the International Code Council Evaluation Services Group, Underwriters Laboratories, and Factory Mutual, and similar organizations.
- Development and review of Quality Control programs to ensure that manufacturing production satisfied applicable performance criteria.
- Field investigation and evaluation of construction problems potentially related to USG products and systems.
- Analysis of USG and competitor patents and intellectual property.

06/1984 to 09/1993 Impell Corporation - Lincolnshire, Illinois

Supervising Engineer Lead Senior Engineer / Senior Engineer / Principal Engineer / Engineer II

While at Impell Corporation, Mr. Kaczkowski was responsible for the project management and the execution of work related to structural analysis and design of nuclear power plants and other industrial facilities.

Mr. Kaczkowski's work experience while at Impell Corporation included the following:

- Development and application of design criteria and project specifications for stress analysis and structural design of nuclear power plants and other industrial facilities. This work included project management and staff supervisory responsibilities.
- Analysis and design of a variety of buildings, piping, equipment, storage

tanks, cranes, foundations, and other structural elements in power plants and industrial facilities. This work included detailed linear and non-linear computer finite element analysis for static and dynamic loads, and field investigations for seismic risk assessment.

• Engineering oversight of construction activities and technical field support for resolution of installation issues, providing response to contractor questions, evaluating field change requests, and similar tasks.

ACADEMIC

M.Sc.	University of Illinois at Urbana, Illinois Civil/Structural Engineering (1984)
B.Sc.	University of Illinois at Urbana, Illinois Civil/Structural Engineering (1983)

REPRESENTATIVE CONTINUING EDUCATION SEMINARS

- Seismic Analysis & Loads for Buildings & Other Structures, ASCE
- Structural Connections to Concrete, ACI
- Designing Aluminum Structures, SEAOI
- ASCE 7-10 Wind Design, SCI
- ASCE 7-10 Seismic Design, SCI
- Technology of Adhesive Anchors, NCSEA
- 2012 I Codes, NCSEA
- Troubleshooting Concrete Construction, ACI
- Roof Technology & Science I & II, RCI
- OSHA 510, Occupational Safety & Health Requirements for Construction, OSHA
- OSHA Fall Protection for Engineers, ISPE
- OSHA Steel Erection & Rigging for Engineers, ISPE
- Structural Condition Assessments, ASCE
- Troubleshooting Concrete Floor Problems, ACI
- Supported Scaffold User/Erector, CCSC
- Suspended Scaffold User/Erector, CCSC
- Structural Provisions of the International Building Code, ICBO
- Seismic Design Provision Refresher Course, SEAOI
- Field Inspection and Seismic Evaluation Training Course, EPRI

PROFESSIONAL REGISTRATIONS AND AFFILIATIONS

REGISTRATIONS

Licensed Professional Engineer in State of Alabama, License #PE50654 Licensed Professional Engineer in State of Arkansas, License #15000 Licensed Professional Engineer in State of Florida, License #PE 73749 Licensed Professional Engineer in State of Georgia, License #PE 039063 Licensed Professional Engineer in State of Idaho, License #15719 Licensed Professional Engineer in State of Illinois, License #062-044144 Licensed Structural Engineer in State of Illinois, License #081-0004821 Licensed Professional Engineer in State of Indiana, License #PE 11200017 Licensed Professional Engineer in State of Iowa, License #P26872 Licensed Professional Engineer in State of Kentucky, License #37166 Licensed Professional Engineer in State of Massachusetts, License #57167 Licensed Professional Engineer in State of Michigan, License #6201060357 Licensed Professional Engineer in State of Minnesota, License #48973 Licensed Professional Engineer in State of Mississippi, License #19661 Licensed Professional Engineer in State of Missouri, License #2011033238 Licensed Professional Engineer in State of New Jersey, License #24GE05946800 Licensed Professional Engineer in State of New York, License #093681-1 Licensed Professional Engineer in State of N. Carolina, License #041089 Licensed Professional Engineer in State of Pennsylvania, License #PE 082730 Licensed Professional Engineer in State of S. Carolina, License #28111 Licensed Professional Engineer in State of S. Dakota, License #11654 Licensed Professional Engineer in State of Tennessee, License #116776 Licensed Professional Engineer in State of Utah, License #8692293-2202 Licensed Professional Engineer in State of Wisconsin, License #40968-6 Licensed Professional Engineer in State of Wyoming, License #14261

PROFESSIONAL AFFILIATIONS

Structural Engineers Association of Illinois

American Society for Testing and Materials Member, Committee C15, Manufactured Masonry Units Member, Committee D08, Roofing and Waterproofing Member, Committee E06, Performance of Buildings

PUBLICATIONS

Contributing Editor, **Gypsum Construction Handbook**, 5th Edition, published by USG Corporation, ©2000.

"Commonly Used Building Materials", published as Chapter 1 of **More Sticks & Bricks**, ©2018 by American Bar Association.

SAMPLE PRESENTATIONS AND TECHNICAL SEMINARS

1. "*Building Envelope and Moisture Transport*," a LORMAN Group educational seminar, presented at multiple locations.

- 2. "Field Investigative Techniques," presented to Western Loss Association, Lombard, IL.
- 3. *"Building Problems and Problem Buildings"*, presented at Property Loss Research Bureau Annual Conference, Nashville, TN.
- 4. "Construction Defects and Mold in Buildings", presented at MidAtlantic Hygiene Research Center Training Seminar, Chicago, IL.
- 5. "Construction Sites in the Urban Environment: Damages to Adjacent Structures", a LORMAN Group educational seminar, Chicago, IL.
- 6. "*Commonly Used Building Materials*" and "*Basic Engineering Concepts*", presented to the ABA Forum on Construction Law, New York, NY.
- 7. *"Forensic Investigation of Damages from Adjacent Blast or Construction Events"*, presented to the American Concrete Institute WI Chapter, Delafield, WI.

HONORS AND AWARDS

- Chi Epsilon, National Civil Engineering Honorary Society
- Tau Beta Pi, National Engineering Honor Society
- Bronze Tablet Recipient (highest academic honors), University of Illinois Urbana
- A.L. Thomas Award Recipient, University of Illinois Urbana