

YASSER KORANY, Ph.D., P.E., P.Eng., LEED AP, PMP, DFE, FCSCE



Expert Witness & Consulting Forensic Engineer

**KSI Engineering** | *Certified Forensic Experts*<sup>®</sup>

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## ACADEMIC CREDENTIALS

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**Ph.D.**, Structural Engineering, 2005  
McMaster University, Hamilton, Ontario

**M.Sc.**, Environmental Engineering, 1999  
The American University in Cairo

**M.Sc.**, Materials Engineering, 1996  
The American University in Cairo

**B.Sc.**, Civil Engineering, 1988  
Cairo University, Giza, Egypt

## PROFESSIONAL REGISTRATIONS & DESIGNATIONS

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Board-Certified Senior Member, National Academy of Forensic Engineers (NAFE), since 2022

Project Management Professional, Project Management Institute (PMI), since 2019

Designated Consulting Engineer in Ontario, Professional Engineers Ontario (PEO), since 2017

Registered Professional Engineer in British Columbia, EGBC License# 42834, since 2015

Registered Professional Engineer in Michigan, USA, MI License# 6201062055, since 2014

Designated LEED Accredited Professional, Canada Green Building Council, since 2009

Registered Professional Engineer in Alberta, APEGA License# 93556, since 2008

Registered Professional Engineer in Ontario, PEO License# 100037649, since 2001

## AREAS OF EXPERTISE

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Dr. Korany is a respected construction litigation expert and a sought-after consulting forensic engineer who specializes in investigating structural collapses and building envelope failures. He served as an expert witness for both plaintiffs and defendants and prepared expert reports following the rules of civil procedure on behalf of property owners, contractors, and engineers. His strong reputation as a truth seeker made KSI Engineering one of the most trusted firms for major and complex losses. Dr. Korany's practice spans more than 35 years and he has performed over 1,000 forensic investigations to date. He investigated the failure of structures as large as construction tower cranes and wind turbines, and as small as magnetic door lock devices. He also utilizes his expertise in geo-structural engineering to investigate foundations, retaining and shoring walls, swimming pools, small dams, and buried structures. Throughout his career, Dr. Korany has relied upon his unique combination of laboratory and field experience to identify the root cause of damage for institutional, commercial, and parking facilities.

## DISTINCTIONS & RECOGNITIONS

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Fellow of the Canadian Society for Civil Engineering, 2024  
Outstanding Paper Award, The Masonry Society Journal, USA, 2023  
Outstanding Paper Award, The Masonry Society Journal, USA, 2019  
Faculty of Engineering Teaching Award, University of Alberta, 2011  
Inaugural Endowed Research Chair, University of Alberta, 2008-2014  
Best Paper Award, 10<sup>th</sup> Canadian Masonry Symposium, Banff, Alberta, 2005  
NSERC Postdoctoral Fellowship, Missouri University of Science & Technology, 2005  
German Academic Exchange Services (DAAD) Research Scholarship, June 2003  
Ontario Graduate Scholarship in Science & Technology, 2003  
James and Helen Harvey Research Scholarship, McMaster University, 2002  
W.A. Miller– Materials and Manufacturing Ontario PhD Scholarship, 2001

## PROFESSIONAL EXPERIENCE

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Founding Principal | **KSI Engineering** | since July 2022  
20 Ostrovsky Rd, Vaughan, Ontario

KSI Engineering is an expert witness and consulting forensic engineering firm with a focus on major and complex structural investigations including building enclosures and non-building structures. Responsible for the strategic direction, business development, and the daily operations of the business. Provide senior level supervision to a group of independent contractors and freelancers. Investigate construction disputes, standard of care, professional and product liability cases. Prepare expert reports and testify in court as an expert witness.

Founding Practice Lead | Structural Forensics | **Origin & Cause Inc.** | January 2015–July 2022  
120 Watline Ave, Mississauga, Ontario

Founded and expanded Origin and Cause Structural Forensics practice. Responsible for the strategic planning and all operations of the practice including proposal writing, budget estimate, equipment acquisition, business development, personnel training, and technical oversight. Conducted high level failure analysis investigations to law firms in support of litigation. Provided expert witness testimony in courts when required. Prepared technical reports, structural designs, and recommendations to restore buildings damaged by factors such as fire, snow overload, corrosion, strong wind, and soil movement.

Professor of Structural Engineering | **University of Alberta** | July 2008–December 2014  
Department of Civil and Environmental Engineering, Edmonton, Alberta

Taught structural analysis and design and building envelope courses at the undergraduate and graduate levels. Managed a large group of research trainees working on multiple projects. Supervised research projects on precast concrete rain-screen cladding systems, lateral resistance of masonry infilled RC and steel frames, structural reliability of loadbearing members, and rehabilitation of building envelopes for energy efficiency. Contributed the development of building codes and standards as a voting member of several technical committees.

Forensic Engineering Consultant [private practice] | July 2008–December 2014  
Edmonton, Alberta

Provided consultancy services to government agencies like the Canadian Construction Materials Centre as well as to large and specialized engineering firms in post-damage structural assessment due to design/construction errors, excessive loading, or fire, and in the evaluation of deteriorated building envelope systems due to water leakage, condensation, and corrosion.

Structural Diagnostics Team Lead | **Walter P Moore** | July 2006–June 2008  
920 Main St., Kansas City, MO & 300 S. Orange Ave., Orlando, FL, USA

Performed a wide range of structural and building envelope rehabilitation designs and investigative projects including structural failures, repair of deteriorated buildings, corrosion management, structural condition assessment, and construction litigation.

NSERC Research Associate | **University of Missouri** | June 2005–June 2006  
Missouri, Rolla, USA

Joined the Center for Repair of Buildings & Bridges with Composites (RB<sup>2</sup>C) at the University of Missouri which pioneered research in the application of Advanced Composite Materials (ACM) in structural rehabilitation. Involved in projects related to the evaluation of existing buildings, structural repair using ACM, and the development of methodologies to control the progressive collapse of structures.

Senior Structural Engineer | **Quartek Group Inc.** | July 2003–May 2005  
360 York Rd., Niagara-on-the-Lake, Ontario

Performed structural assessments and analyses and prepared technical reports on the condition of existing buildings in the Niagara region covering a wide range of structural materials & forms and different types of building enclosures.

## REPRESENTATIVE INVESTIGATIONS

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- Elite Engineering ats Corcon Construction, *Steel Building Collapse Litigation*, Erin, ON, 2023
- Toronto Auditor General, *Building Code Compliance Investigation*, Toronto, ON, 2023
- RN Design & Crystal Glen ats Cianccio, *Condensation & Mould Growth Litigation*, King City, ON, 2023
- Meridian Construction ats Aegis Living, *Flat Roof Leakage Litigation*, Collingwood, ON, 2022
- Magine & Worsley ats Belo Investments, *Damage from Adjacent Construction Litigation*, Toronto, ON, 2022
- RoofMart ats Toronto District School Board, *Flat Roof Fire Litigation*, Toronto, ON, 2022
- City of Sudbury vs GCCE & Architecture 49, *Underground Parking Waterproofing Litigation*, Sudbury, ON, 2022
- Circon ats Chabad, *Foundation Blind Waterproofing Litigation*, Toronto, ON, 2022
- MarcAntonio vs City of Toronto, *Vibration Damage Litigation*, Toronto, ON, 2021
- Anto Custom Homes vs Merzarian, *Renovation Construction Litigation*, Toronto, ON, 2021
- Batchewana First Nation, *Wind Turbine Tower Collapse Investigation*, Sault Ste Marie, ON, 2021
- Perzia GeoSolutions ats CrossLinx. *Slope Failure Investigation*, Toronto, ON, 2020
- Lisa Cook & Georgia Pottage vs the Farris, *Swimming Pool Failure Litigation*, Aurora, ON, 2020
- Conseil Scolaire Viamonde vs Stevenson Insulation, *Leaking Building Envelope Litigation*, Toronto, ON, 2019
- John's Leisurescapes ats Zygalko, *Swimming Pool Damage Litigation*, Alliston, ON, 2019
- TD Insurance, *Commercial Building Roof Collapse under Snow Investigation*, Sudbury, ON, 2019
- MCI Design-Build, *Industrial Steel Frame Building Failure Investigation*, London, ON, 2018
- Dan Ricker vs Dufferin Mutual, *Latent Structural Defects Litigation*, Canfield, ON, 2017
- Jason Lawson vs Lee Mather, *Latent Structural Defects Litigation*, Ottawa, ON, 2017
- Calloway Real Estate ats Miller, *Trip and Fall Litigation*, Halton Hills, ON, 2016
- TD Insurance, *Building Collapse Investigation*, Toronto, ON, 2016
- Gravenhurst Pharmacy vs Fowler Construction, *Building Collapse Litigation*, Gravenhurst, ON, 2015
- Germania ats Rawn, *Mould Growth Litigation*, Oro-Medonto, ON, 2015
- Verin ats Chicopee Craftsmen, *Renovation Construction Litigation*, Cambridge, ON, 2015

## THOUGHT LEADERSHIP

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- Assessment of the vulnerability of low-human-occupancy farm buildings to wind damage. *CSCE Structures Speciality Conference*, June 2024, Niagara Falls, ON, co-authored with N. Goudarzi and A. Jamshidi.
- Who's responsible? A guide to who is on the hook when construction projects go wrong. *Canadian Underwriter*, February/March 2024.
- Determining liability in the structural failures of prefabricated residential inground swimming pools. *Without Prejudice*, January 2024, co-authored with W. Morris.
- Documentation and disclosure of expert witness draft opinions and reports. Art of Practice, *JUST Magazine*, Ontario Bar Association, February 2023, co-authored with W. Morris.
- Standard of care in conducting general reviews of construction. *Construction and Infrastructure Law Section*, Ontario Bar Association, November 2022, co-authored with J. Figliomeni.
- Why did these historic masonry buildings fail. *ASCE 9<sup>th</sup> Forensic Engineering Congress*, Denver, CO, USA, November 2022, co-authored with N. Goudarzi.
- Emergency shoring: rules of thumb and common mistakes. *Webinar*, March, 2021, co-presented with N. Goudarzi.
- What to look for when adjusting large losses. *Webinar for Ontario Mutual Insurance Association (OMIA)*, September, 2021, co-presented with M. Sherif.
- Fire separations and fire walls simplified. *Structural Forensics Group Technical Note*, December 2020, co-authored with B. McFadgen.

## PROFESSIONAL AFFILIATIONS

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National Academy of Forensic Engineers (NAFE)  
American Concrete Institute (ACI)  
American Society of Civil Engineers (ASCE)  
International Concrete Repair Institute (ICRI)  
Structural Engineering Institute (SEI)  
The Masonry Society (TMS)  
Canadian Society for Civil Engineering (CSCE)  
Canadian Standards Association (CSA)  
Canada Green Building Council (CaGBC)

## TECHNICAL REVIEWS

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ACI Structural Journal  
ASCE Journal of Structural Engineering  
ASCE Journal of Composites for Construction  
ELSEVIER's Construction and Building Materials Journal  
The Masonry Society Journal  
Canadian Journal of Civil Engineering