

KAMI FARAHMANDPOUR
PE, F-IIBEC, FNAFE, REWC, RRC, RWC, RBEC,
CCS, CCCA
Principal
kamif@btc.expert

Kami Farahmandpour is the Principal and founder of Building Technology Consultants, Inc.



REGISTRATIONS

- Licensed Professional Engineer (**PE**), Illinois, Colorado, Connecticut, District of Columbia, Florida, Iowa, Indiana, Kansas, Kentucky, Louisiana, Michigan, Missouri, Nevada, Ohio, Tennessee, Texas, Wisconsin, Wyoming
- Registered Building Envelope Consultant (**RBEC**)
 - Registered Roof Consultant (**RRC**)
 - Registered Waterproofing Consultant (**RWC**)
 - Registered Exterior Wall Consultant (**REWC**)
- Certified Construction Specifier (**CCS**)
- Certified Construction Contract Administrator (**CCCA**)

PROFESSIONAL EXPERIENCE

Kami Farahmandpour has been involved in the evaluation, testing and repair of construction materials since his graduation in 1984. Prior to establishing Building Technology Consultants, Inc., he was employed for over 11 years by Construction Technology Laboratories, Inc. (CTL) in Skokie, Illinois.

Prior to his employment at CTL, Kami Farahmandpour was employed by Chicago Concrete Consultants, Ltd. (currently Universal Construction Testing) in Highland Park, Illinois from 1987 to 1989. He worked at Engineers International, Inc. in Westmont, Illinois from 1985 to 1987.

His professional experience includes:

- Investigation of deterioration, **water leakage** issues, and construction deficiencies in **building envelopes**;
- Evaluation of **air leakage** and **moisture transport** mechanisms in building envelopes and building demising walls;
- Impact assessment of deficiencies on **building performance**;
- Assessment of building envelope systems for **building code** compliance;
- Evaluation of **concrete moisture issues** and its impact on **flooring, roofing and waterproofing**;
- **Concrete** deterioration and repair;

- Development of **repair alternatives** to address building deficiencies;
- Repair **design** and preparation of Contract Documents;
- Repair contract **bidding** assistance;
- Repair construction **contract administration** and field observations;
- Evaluation of **design** and **construction deficiencies** in new buildings;
- **Forensic investigations** and expert testimony;
- Product and material evaluations;
- Evaluation and design of **commercial kitchen and interior waterproofing** systems; and
- Building settlement and geotechnical investigations.

Kami Farahmandpour has managed over **500 projects**, many of which have involved multiple disciplines and complex **building envelope, material deterioration** and/or **water leakage** issues. His expertise is concentrated in the area of building envelope design, construction, evaluation and repair.

His expertise in **roofing systems** includes built-up, modified bitumen, single-ply, metal roofing, clay tile, slate, asphalt shingles, wood shakes, spray polyurethane foam, fiberglass, asbestos cement shingles and other synthetic materials.

His expertise in **waterproofing systems** includes rubberized asphalt, thermoplastic, polyurea, polyurethane, built-up, and various types of **green roofs** and **plaza deck** assemblies.

He also has significant experience in the evaluation and repair of **building facades**; and **cladding** and **exterior wall systems** such as windows, metal and glass curtain walls, precast and cast-in-place concrete, masonry, terra cotta, EIFS, stucco, and composite panels.

EDUCATION

Kami Farahmandpour earned a Bachelor of Science degree in engineering from Illinois Institute of Technology in 1984. His major was mechanical aerospace engineering.

Since his graduation, he has attended over 100 seminars and symposia related to construction technology, roofing, waterproofing, building envelopes, construction specification practices, building codes, and construction contract administration.

PROFESSIONAL ACTIVITIES

- **Fellow** of National Academy of Forensic Engineers (**NAFE**)
- **Chartered Member** of **IIBEC-Chicago** (formerly Chicago Area Chapter of RCI, Inc., **CAC-RCI**)
 - President, 2003 through 2004
 - Member, Strategic Planning Committee, 2009 to present
- Consultant Member and **Fellow** of **International Institute of Building Enclosure Consultants (IIBEC – formerly RCI, Inc.)**
 - Member, **Technical Advisory Committee**

- Member, **Jury of Fellows**
- Past Member of Registered **Exterior Wall Consultant Examination Development** Task Force
- Past **Chairman** (2008 through 2010) and past member (2010 through 2016) of **Education Committee**
- Major contributor for development of **Science and Technology of Exterior Walls** Course, **Masonry Exterior Walls** Course, **Concrete Exterior Walls** Course, and **Litigation Support Services** for Building Envelope Consultants
- Past Chairman of the **Building Envelope** Committee
- Coordinator of Building Envelope Symposia from 1998 through 2005
- Past member of **Code Committee**
- Past Member of **Registered Waterproofing Consultant Examination** Committee
- Past Member of **Registered Exterior Wall Consultant Examination** Committee
- Past Member of **General Knowledge Examination** Committee
- Past member of **Chicago Energy Code** Committee

- **Founding Member** of Building Envelope Institute (**BEI**)
 - Secretary and Treasurer, 2005

- **Founding Member** and **Former Treasurer**, CAC-Building Envelope Foundation NFP (**CAC-BEF**), 2013 through 2019

- Member, Sealant, Waterproofing & Restoration Institute (**SWR Institute**)
 - **Associate Director** (2006 through 2009)
 - Past Co-Chairman and current member of **Technical Resource Committee**
 - Primary author for the Curtain Wall Section of **Practical Guide for Waterproofing of Above Grade Walls**
 - Co-Author of Technical Bulletin on **Air Barriers** and **Sustainability Position Paper**
 - **Peer reviewer** of several technical publications
 - Past Member of **Alliance Committee**
 - Past Member of **Validation Committee**

- Member of American Society for Testing and Material (**ASTM**)
 - Member of Committee D08, Roofing, Waterproofing, Bituminous Materials
 - Member of Committee E06, Performance of Buildings
 - Member of Committee E58, Forensic Engineering

- Member of American Concrete Institute (**ACI**)
 - Associate Member Committees 546 “Concrete Repair”

- Member of The Masonry Society (**TMS**)

- Member of International Concrete Repair Institute (**ICRI**)

- Member of Construction Specification Institute (**CSI**)

- Professional Member of International Code Council (**ICC**)

- Member, National Roofing Contractors Association (**NRCA**)
 - Past Member of Education Resource Committee
- Member, Illinois Library Association (**ILA**)
- Member, American Architectural Manufacturers Association (**AAMA**)
- Member, Chicago Roofing Contractors Association, (**CRCA**)
- Member, American Society of Civil Engineers (**ASCE**)
- Member, National Society of Professional Engineers (**NSPE**)

PUBLICATIONS

- Farahmandpour, K. and Hodgkin, D. "**Forensic Engineering Assessment of Fault Allocation of Involved Parties in Building Enclosure Defect Cases**" International Institute of Building Enclosure Consultants, Interface Magazine, April 2020
- Farahmandpour, K. "**An Unconventional Approach to Curtain Wall Repair**" Sealant, Waterproofing & Restoration Institute, Applicator Magazine, Winter 2018 and Spring 2018.
- Farahmandpour, K. "**Why Would an Associate Member "Specify" SWR Institute's Contractor Selection Tool (CST)?**" Sealant, Waterproofing & Restoration Institute, Applicator Magazine, April, 2017.
- Farahmandpour, K., Kottra, C., and Maze. S. "**What is a Transition Study and What Value Does it Provide?**" CAI Common Interest, Summer 2016.
- Farahmandpour, K. and Reicher, P. "**Evaluating Water Leakage in Mass Masonry Walls**" RCI Interface, February, 2016.
- Farahmandpour, K. "**Forensic Investigation of Water Leakage Issues into Buildings, Recreating the Leaks Vs. Determining the Cause**" Journal of the National Academy of Forensic Engineers, Vol. 32, No. 2, December 2015.
- Farahmandpour, K. "**Conventional and Nonconventional Repair of Curtain Wall Systems**" Proceedings of the RCI Symposium on Building Envelope, November 2015.
- Hogan, L. and Farahmandpour, K. "**Roof Decks A to Z, Part V: Precast, Prestressed Concrete Tees**" RCI Interface, October, 2013.
- Farahmandpour, K. "**Are the Benefits of Vegetative Roofs Oversold?**" Midwest Roofing Contractors Association, March/April 2011.
- Farahmandpour, K. "**Reserve Studies, Their Benefits & Short Falls**" Common Interest, Official Magazine of the CAI-Illinois Chapter, Spring 2009, Vol. 14 No. 2.
- Farahmandpour, K. and Summers, J. "**Protecting the Building from Moisture: Air Barriers, Vapor Retarders and Weather-Resistive Barriers**" Sealant, Waterproofing & Restoration Institute, Applicator Magazine, Winter 2008, Volume 30 No. 4.
- Farahmandpour, K. "**Sealant, Waterproofing and Restoration Business, What does the Future Hold?**" Sealant, Waterproofing & Restoration Institute, Member Briefs, April 2008.

- Farahmandpour, K. and Summers, J. "**Understanding Air Barriers, Vapor Retarders and Weather-Resistive Barriers**" CSI Change Order Magazine, November/December 2007, Volume 54 No. 12.
- Farahmandpour, K. and Summers, J. "**Air Barriers, Vapor Retarders and Weather-Resistive Barriers: Are They All The Same?**" Masonry Magazine, The Voice of the Masonry Industry, July, 2007, Volume 46 No. 7.
- Summers, J. and Farahmandpour, K. "**Flushing Out Flashing Basics**" Masonry Magazine, The Voice of the Masonry Industry, April, 2007, Volume 46 No. 4.
- Farahmandpour, K. "**Plaza Deck, Roofing and Garden Roof Assemblies: What is the Difference?**" Change Order, A Publication of the Chicago Chapter CSI, November, 2006, Volume 54 No. 3.
- Farahmandpour, K. "**Facing the Challenges of Plaza Deck Waterproofing Rehabilitation**" RCI Interface, August, 2006.
- Farahmandpour, K. "**Does a Traffic-Bearing Membrane Constitute a Proper Waterproofing System Over Occupied Spaces?**" RCI Interface, February 2006.
- Farahmandpour, K. and Summers, J. "**Essential Elements of Durable Exterior Masonry Walls**" RCI Interface, May 2005.
- Farahmandpour, K. "**Rehabilitating Plaza Deck Waterproofing Systems**" Proceedings of the 2005 Symposium on Building Envelope Technology.
- Farahmandpour, K. "**Choosing a Plaza Deck Assembly,**" RCI Interface, June/July 2005.
- Farahmandpour, K. "**There's No Substitute for Experience**" Traditional Building Magazine, November/December 2004 Issue.
- Summers, J. and Farahmandpour, K. "**Factors that Diminish the Sustainability of Masonry Walls**" Proceedings of The 2004 Symposium on Building Envelope Technology.
- Farahmandpour, K. and Youngerman, J. "**Reserve Studies: Their Benefits and Shortfalls**" ACTHA News Update, April 2004
- Farahmandpour, K. "**Value Engineering of Traditional Clay Tile Dome Roofs, Lessons Learned,**" RCI Interface, January 2004.
- Farahmandpour, K. and Waterston, W. "**Implementation of Energy Conservation Codes and Their Impact on the Roofing Industry**" Change Order, a Publication of the Chicago Chapter CSI, October 2003, Volume 51 No. 2.
- Farahmandpour, K. "**Value Engineering of Traditional Clay Tile Dome Roofs, Lessons Learned,**" Proceedings of the RCI Symposium on Building Envelope Technology, Dallas, TX, 2003.
- Farahmandpour, K. "**Considerations for Repair of Concrete Building Facades,**" RCI Interface, March 2003.
- Farahmandpour, K. "**Failure Mechanisms in Liquid-Applied Waterproofing Membranes,**" Proceedings of 12th International Roofing and Waterproofing Conference.
- Farahmandpour, K. and Waterston, W. "**Implementation of Energy Conservation Codes and Their Impact on Roof Consultants,**" RCI Interface, September 2002.
- Farahmandpour, K., Jennings, V., Willems, T., and Davis, A. "**Evaluation Techniques for Concrete Building Envelope Components,**" RCI Interface, March 2002.
- Farahmandpour, K. and Willems T. "**Evaluation of Liquid-Applied Waterproofing Systems: Case Histories,**" RCI Interface, October 2001.

- Farahmandpour, K. "**How Dry Should Concrete Decks Be...For Application of Liquid-Applied Waterproofing Membranes?**" RCI Interface, October 2001.
- Farahmandpour, K. "**Repair of Concrete Building Envelope Components,**" RCI Building Envelope Symposium, Denver, CO, 2001.
- Farahmandpour, K., Jennings, V., Willems, T., and Davis, A. "**Evaluation Techniques for Concrete Building Envelope Components,**" RCI Building Envelope Symposium, Seattle, WA, 2000.
- Farahmandpour, K. and Willems, T. "**Evaluation of Liquid-Applied Waterproofing Systems – Case Histories,**" RCI Building Envelope Symposium, Cincinnati, OH and Seattle, WA, 2000.
- VanGeem, M., Farahmandpour, K., and Gajda, J. "**Case Histories of Building Material Problems Caused by Condensation at an Enclosed Swimming Pool and an Enclosed Ice Rink,**" ASHRAE Thermal VII Conference.
- Farahmandpour, K. "**Rehabilitation of the Playground at Cook County Juvenile Detention Center, a Waterproofing Challenge,**" RCI Building Envelope Symposium, Chicago, IL, and Oakland, CA, 1998.
- Seegebrecht, G. Farahmandpour, K., and Gebler, S. "**Concrete Repair or Replacement Requires a Thorough Evaluation,**" New York Construction News, October 31, 1994.
- Farahmandpour, K., and Dubovoy, V.S. "**Accelerated Field Test Method for Water Penetration of Masonry,**" Proceedings of Conference on Nondestructive Evaluation of Civil Structures and Materials, October 1990.

PRESENTATIONS/EDUCATIONAL EXPERIENCE

Kami Farahmandpour has served as speaker at **over 140 seminars, courses, and symposia** on topics related to the evaluation and repair of concrete structures, waterproofing systems, roofing systems, building envelope components, building codes, and moisture related issues. From 1992 to 2000 he was a regular speaker at several Portland Cement Association seminars on concrete evaluation and repair. From 2005 through 2008, he was a **faculty at Lormann Education Services**, and from 2011 through present, he has served as a faculty in continuing education courses at **University of Wisconsin in Madison**. In the past, he has served as a regular speaker at **IIBEC's** (formerly **RCI, Inc.**) building envelope symposia and education classes on various topics including roofing, waterproofing and building facades. His other speaking engagements have included presentations at **SWR Institute**, International Roofing Expo, **Chicago Chapter of CSI**, and many other events.

In addition, Mr. Farahmandpour has developed and presented several workshops, courses and presentations to various groups including University of Wisconsin in Madison, Association of Licensed Architects, IIBEC (formerly RCI, Inc.), The Illinois Society of Construction Attorneys, SWR Institute, Association of Facility Engineers, The Community Association Institute, The Chicago Roofing Contractors Association, Construction Specifications Institute, Midwest Roofing Contractors Association, National Organization of Minority Architects, and Idaho National Engineering Laboratories. These presentations have been focused on various aspects of the building envelope construction, building codes, new trends in building envelope technology, and construction administration.

EXPERT TESTIMONY

Kami Farahmandpour is a Fellow of National Academy of Forensic Engineers. He has served as an expert witness on several cases involving construction and/or design defects with a particular emphasis on building envelope performance, moisture issues, and parking garages. His expert testimony experience includes trial, arbitration, and depositions. He has participated in several alternate dispute resolution proceedings such as mediations to help communicate complex technical issues in simple terms.

PATENTS

- **US Patent Number 10370891** for an adjustable door threshold device
- **US Patent Number 10060138** for a cladding attachment device that accommodates multi-directional in-plane differential movement between the cladding and back-up wall
- **US Patent Number 9540804** for a cladding attachment strip having load-carrying capability for horizontal applications and suitable for continuous insulation applications
- **US Patent Number 9010064** for a masonry tie having a shaft grip section for embedding in a masonry wall and a back plate for connecting to a backup wall
- **US Patent Number 9181713** for a siding attachment system consisting of vertically oriented base and attachment members
- **US Patent Number 9260855** for a masonry tie having a shaft grip section for embedding in a masonry wall and a mounting passage extending through the shaft for connecting to a masonry backup wall
- **US Patent Number 9353515** for a masonry tie having a shaft end with a masonry anchor aperture and a mounting passage extending through the shaft for connecting a masonry backup wall
- **US Patent Number 9347214** for a masonry tie having a shaft end with a masonry anchor aperture and a back plate for connecting to a backup wall
- **US Patent Number 9447584** for a cladding attachment device having two mounting flanges suitable for continuous insulation applications
- **US Patent Number 9932740** for a cladding attachment accessory having full in-place movement capability

AWARDS

- **Distinguished Service Award**, IIBEC-Chicago (formerly Chicago Area Chapter of RCI, CAC-RCI) for long-term commitment and service, and exceptional leadership characteristics; January 16, 2019
- Third Place **Large Roofing/Waterproofing/Exterior Wall Construction Project Document Award** for Curtain Wall Renovations at AGL Resources Building in Naperville, Illinois; IIBEC (formerly RCI, Inc.), 2016
- **Outstanding Educator Award**, IIBEC (formerly RCI, Inc.), 2013

- First Place **Large Roofing/Waterproofing/Exterior Wall Construction Project Document Award** for 2012 Exterior Repairs at Pointe at Lincoln Park, Chicago, Illinois; IIBEC (formerly RCI, Inc.), 2013
- Second Place **Excellence in Report Writing Award** for Exterior Facade Evaluation of Buildings B and C, Highland Park High School, Highland Park, Illinois; IIBEC (formerly RCI, Inc.), 2013
- **Presidential Citation Award**, SWR Institute, 2011
- **Trinity Project Award**, Window and Exterior Wall Rehabilitation, Hogan Building, Northwestern University, Evanston, Illinois; SWR Institute, 2011
- **Fellow of RCI Award**, IIBEC (formerly RCI, Inc.), 2010
- Second Place **Large Roofing/Waterproofing/Exterior Wall Construction Project Document Award** for Exterior Wall Re-Cladding at Itasca Community Library, Itasca, Illinois; IIBEC (formerly RCI, Inc.), 2010
- **President's Award**, IIBEC-Chicago (formerly Chicago Area Chapter of RCI, Inc.), January 2007
- **Michael DeFrancesco Award**, 2006, IIBEC (formerly RCI, Inc.), for Outstanding Efforts in Support of Building Envelope Symposia
- **Richard M. Horowitz Award**, 2005, IIBEC (formerly RCI, Inc.), for excellence in writing for RCI Interface
- Outstanding Volunteer Award, IIBEC (formerly RCI, Inc.), 2003
- Outstanding Volunteer Award, IIBEC (formerly RCI, Inc.), 1999
- Outstanding Volunteer Award, IIBEC (formerly RCI, Inc.), 1998
- Outstanding Volunteer Award, IIBEC (formerly RCI, Inc.), 1997
- Second Place **Large Roofing Project Document Award** for Roof Replacement at Richard J. Daley Library, University of Illinois at Chicago, Chicago, Illinois; Roof Consultants Institute, 1995

CERTIFICATES OF APPRECIATION

- From **IIBEC** (formerly **RCI, Inc.**) for dedication and service while serving on the REWC Exam Development Subcommittee, March 17, 2019
- Distinguished Service Award from **IIBEC-Chicago** (formerly **CAC-RCI**) for long-term commitment and service, and exceptional leadership characteristics, January 16, 2019
- From **SWRInstitute** for exemplary service presenting "Conventional and Non-Conventional Repair of Curtain Wall Systems, Fall, 2017
- From **RCI** for dedication and service while serving on the Education Committee
- From **IIBEC-Chicago** (formerly **Chicago Area Chapter of RCI, Inc. - CAC-RCI**) for presenting "RCI's Education Program: Waterproofing" at CAC-RCI Program, April 21, 2016
- From **IIBEC-Chicago** (formerly **Chicago Area Chapter of RCI, Inc. - CAC-RCI**) for presenting "Why Curtain Walls Leak, and How Are They Repaired?" at CAC-RCI Program, January 20, 2016
- From **IIBEC-Chicago** (formerly **Chicago Area Chapter of RCI, Inc. - CAC-RCI**) for presenting "3 Case Studies –Investigation of Leaks" at CAC-RCI Program, November 4, 2011

- From **Construction Specification Institute** for presenting valuable continuing education program for design and construction professionals for “Building Enclosure – Case Studies from Top to Bottom” February 22, 2011
- From **Association of Licensed Architects** (ALA) in recognition of contribution to the profession of architecture and the building industry, February 22, 2011
- From **IIBEC-Chicago** (formerly **Chicago Area Chapter of RCI, Inc., CAC-RCI**) for outstanding presentation at CAC-RCI Program “Sustainability Issues of Roofing, Waterproofing & Building Exteriors”, January, 2011
- From **IIBEC** (formerly **RCI, Inc.**) for Exam Development Task Force Contributor 2010-2011
- From **Chicago Chapter Construction Specification Institute** (CSI) for presenting valuable continuing education program for design and construction professionals: “Moisture Penetration in Masonry Veneer with Steel Back-up”, January 22, 2008
- From **IIBEC** (formerly **RCI, Inc.**) for contributions to 1997 Education Services Committee
- From **IIBEC-Chicago** (formerly **CAC-RCI**) for outstanding presentations “Basic Principles of Exterior Wall Design” and “Chicago Energy Code Update”, Region III Meeting, January 17, 2007
- From **IIBEC-Chicago** (formerly **Chicago Area Chapter of RCI, Inc., CAC-RCI**) for presenting the RCI Educational Programs Roof Technology Science I and II January 23-26, 2007
- From **Association of Licensed Architects** (ALA) in recognition of contribution to the profession of architecture and the building industry, September 28, 2004