

**Contact info**

630.819.5476 D

630.325.6160 O

773.844.0788 M

skflock@rrj.com



Sarah K. Flock

NCARB, BECxP, CxA+BE

Principal

About Sarah

Sarah Flock is a licensed Architect and Vice President of Raths, Raths & Johnson responsible for oversight and consultation on projects involving architectural design, material and system application, building diagnostics, and forensics. She has over 20 years of architectural experience which has included investigation, design review of building enclosures and assemblies, enclosure commissioning, construction administration, field testing, and repair design. She specializes in water leakage investigations and resolution, as well as heat, air and moisture migration, including condensation formation. She has knowledge and expertise in various computer modeling programs for enclosure evaluations, including THERM and WUFI, as well as other types of simulation software.

Her forensic experience, industry knowledge, and expertise include a wide range of building types, materials, and systems, including, but not limited to, roofing systems, fenestration systems, metal panels, stucco, wood, fiber cement and vinyl siding, and exterior insulation and finish systems (EIFS). With her extensive building enclosure knowledge, she has provided litigation support, technical consultation, and served as an expert witness on related failures. She is a frequent industry speaker and author on topics related to water leakage, condensation, as well as preconstruction and repair considerations.

Education

Master of Architecture: Management, 2001
University of Illinois at Urbana-Champaign

Bachelor of Science in Architectural Studies, 1999
University of Illinois at Urbana-Champaign

Licensure | Certifications

Architect GA, IL, IN, IA, ME, MD, MI, MN, MO, NC, NY, OH,
PA, SC, and WI

National Council of Architectural Registrations Boards
(NCARB) Certificate Holder

Construction Documents Technologist (CDT)

Building Enclosure Commissioning Process Provider (BECxP)

Commissioning Authority + Building Enclosure (CxA+BE)

Certified Third-Party EIFS Inspector

NFRC Trained in THERM and WINDOW

Health Care Construction Certificate (HCC)

Completed courses in Advanced WUFI and ASHRAE
training regarding energy compliance standards

Professional Affiliations

Air Barrier Association of America (ABAA)

Executive Committee, Co-Chair
Co-Chair, Research Committee of ABAA

AIA Chicago and Illinois Chapters, Member

Building Enclosures Council-Chicago

Past Chairperson (2014-2016)
Chairperson (2012-2014)
Vice Chair (2010-2012)

American Society of Healthcare Engineering (ASHE)

Construction Specifications Institute (CSI)

Exterior Design Institute (EDI)

ASTM International

Committee E06.55.09 Standard Practice for
Building Enclosure Commissioning
Committee E06.55.10 Building Commissioning
Certifications and Training
Committee E06.41 Moisture Modeling



Sarah K. Flock

NCARB, BECxP, CxA+BE
Principal

Honors & Awards

The Construction Specifier magazine
Specifier Article of the Year Award, 2019

Air Barrier Association of America, Committee Chair
Award, May 2018

International Institute of Building Enclosure Consultants
(IIBEC), Richard M. Horowitz Award Winner
Best Article in Interface, 2013

Precast/Prestressed Concrete Institute (PCI)

Publications

"Role of Air Barriers in Mitigating Disease Transmission," The Construction Specifier, S.K. Flock and A. Dunlap, January 2021.

"Put Penetrations to the Test: The Effect of Cladding Attachments on Air and Water Barriers," The Construction Specifier, S.K. Flock and A. Dunlap, July 2018 | Specifier Article of the Year Award Winner

"Understanding Performance at Air, Water Barrier Penetrations," Durability + Design News, S.K. Flock and A. Dunlap, April 4, 2018

"Understanding Heat, Air, and Moisture Control: The Gaps Between Design and Performance," The Construction Specifier, S.K. Flock and C.M. Ceja, May 2016

"Inhibiting Condensation, Understanding Communication Between Spaces, Environment, and People," Medical Construction & Design, S.K. Flock and A.L. Baird, January/February 2016

"Roof Design and Preconstruction Considerations for Heat, Air, and Vapor Control," IIBEC Interface, Technical Journal of IIBEC, S.K. Flock and G.D. Hall, September 2012

"Interior Metal Components and the Thermal Performance of Window Frames," Journal of Testing and Evaluation, Vol. 39, No. 3, S.K. Flock and G.D. Hall, ASTM International, West Conshohocken, PA, May 2011

"The Complexities of Specifying and Detailing Air Barrier Systems," The Construction Specifier, S.K. Flock and G.D. Hall, April 2011

"In Situ Moisture Testing of Building Products as a Predictor of Actual Conditions," Proceedings of the BEST1 Conference, G.D. Hall and S.K. Flock, June 10, 2008

"Installation Details and Condensation Performance", RRJ Insight Issue No. 23, R.J. Kudder, D.K. Johnson, and S.K. Flock, August 2006

"Importance of Condensation Control in Cold Climate Wall Assemblies", RRJ Insight Issue No. 23, R.J. Kudder, D.K. Johnson, and S.K. Flock, August 2006

"Effect of Installation Details on the Condensation Performance of Window Frames," Committee on Performance and Durability of Window-Walls Interface, ASTM STP 1484, R.J. Kudder, S.K. Babich (Flock) and D.K. Johnson, ASTM International, West Conshohocken, PA, 2004



Sarah K. Flock

NCARB, BECxP, CxA+BE
Principal

Presentations

"Challenges and Solutions for Projecting Façade Elements" presentation, BEC Chicago, Chicago, Illinois, S.K. Flock, E.O. Cassin, S. Black, February 11, 2022

"Understanding the Interfaces between Delegated Design Specifications and Testing" presentation, BEC Detroit, Detroit, Michigan, October 19, 2021

"The Interrelationship of HVAC, Enclosures, and Indoor Air Quality" presentation, Wagdy Anis Symposium, Boston, MA, S.K. Flock, A. Dunlap, D. McJacobsen, and G. Karidis, September 22, 2021

"Pull Adhesion Test Method" Workshop and "Affecting Air and Water Barrier Effectiveness; Fixing the Fasteners?" presentation, 2019 ASHRAE Buildings XIV International Conference, Clearwater Beach, FL, December 8-9, 2019

"Updates on Air Barrier Association of America (ABAA) Research Initiatives and Impacts on Specifications of AWBs," CSI Chicago Chapter Meeting, Chicago, IL, November 19, 2019

"Building Enclosure Design and Repair Considerations for Healthcare Facilities," Midwest Healthcare Engineering Conference, Indianapolis, IN, S.K. Flock and P.E. Reicher, November 12, 2019

"Put Penetrations to the Test: A Review of the History, Current Trends and Research for Attachments with WRBs," CSI Chicago Chapter Roundtable Discussion, Chicago, IL, May 8, 2019

"Patient Comfort in Health Care Facilities: Building Enclosure Design and Repair Considerations," HESNI Annual Conference, Naperville, IL, P.E. Reicher and S.K. Flock, May 3, 2019

"Research of Air/Water Leakage Fasteners Through the Air Barriers," Air Barrier Association of America Conference & Trade Show, Norfolk, VA, S.K. Flock and A. Dunlap, March 26, 2019

"Field Quality Assurance Testing for Air Barriers," a joint event of the Air Barrier Association of America, International Masonry Institute, and Building Enclosure Council-Chicago, Addison, IL, P.E. Reicher and S.K. Flock, October 18, 2018

"Window Condensation Problems: Why Now?" IIBEC Chicago Area Chapter, Annual Meeting & Program, Oak Brook, IL, S.K. Flock and R.J. Kudder, January 17, 2018

"Top 15 Hot Button Roofing Issues," IIBEC Chicago Area Chapter, Fall Meeting & Program, Glen Ellyn, IL, C.M. Ceja, P.E. Reicher, S.K. Flock, and A.L. Baird, November 10, 2017

"Top 15 Hot Button Roofing Issues and Why Every General Contractor Should Know About Them," American Contractors Insurance Group (ACIG), Risk Management Workshop, Barrington, IL, C.M. Ceja, P.E. Reicher, S.K. Flock and A.L. Baird, October 12, 2017

"Building and Envelope Commissioning Challenges and Solutions for Construction Projects," Construction Owners Association of America, Illinois Chapter, Spring Workshop, Chicago, IL, Panelist, April 12, 2017

"Measuring Water Resistance, Test Methods and Conditions of Acceptance," Buildings XII Conference, Clearwater Beach, FL, December 4, 2016

"Roof / Wall Considerations for Heat, Air, and Moisture Control," IIBEC Chicago Area Chapter, Annual Meeting & Program, Oak Brook, IL, S.K. Flock and C.M. Ceja, January 20, 2016

"Thermal Bridging and Moisture Control in Building Enclosures," Association of Licensed Architects (ALA), Educational Program, Glenview, IL, K.M. Lies, S.K. Flock, and R.J. Kudder, March 31, 2015



Sarah K. Flock

NCARB, BECxP, CxA+BE
Principal

Presentations cont.

"Roof Design and Preconstruction Considerations for Heat, Air, and Vapor Control," Building Enclosure Council of Chicago," Chicago, IL, S.K. Flock and G.D. Hall, January 2013

"The Construction Expert's Toolbox," Society of Illinois Construction Attorneys, Ethics for Legal Counsel and Neutrals and the ADR Process, Chicago, IL, K.R. Hoigard and S.K. Flock, April 16, 2013

"Interior Metal Components and the Thermal Performance of Window Frames," ASTM International Symposium, San Antonio, TX, S.K. Flock and G.D. Hall, October 2010

"A Review of Moisture Migration and Heat Transfer in Buildings," Association of Licensed Architects (ALA), Architecture Conference and Product Show, Oakbrook Terrace, IL, G.D. Hall and S.K. Flock, 2009

"Design Considerations for the Prevention of Condensation Formation," The Construction Specifications Institute, Chicago Chapter Roundtable, Chicago, IL, G.D. Hall and S.K. Flock, September 10, 2008

"In Situ Moisture Testing of Building Products as a Predictor of Actual Conditions," BEST1 Conference, Minneapolis, MN, G.D. Hall and S.K. Flock, June 10, 2008

"What is WUFI?" CSI Chicago Chapter Roundtable Discussion, Chicago, IL, G.D. Hall and S.K. Flock, April 12, 2006

"Effects of Installation Details on the Condensation Performance of Window Frames," Committee on Performance and Durability of Window-Walls Interface, ASTM International Symposium, Salt Lake City, UT, April 18, 2004