

Kate Dicks, P.E., R.R.C.

Forensic Civil/Structural Engineer
Registered Roof Consultant
Curriculum Vitae



Contact Information

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Professional Experience

Kate Dicks PE President/Engineer 2021 to present

Ms. Dicks conducts civil/structural engineering investigations to determine the cause of failures, extent of damage, and appropriate repairs. Ms. Dicks has extensive experience in analyzing commercial, industrial, and residential structures for damage and identifying design/construction deficiencies including as related to building code compliance. Relevant investigations include storm damage analyses, impact damage analyses, fire damage analyses, vibration damage analyses, hydrological analyses, trip/fall analyses, and geotechnical analyses. Engineering investigations are also performed to assist with litigation activities and Ms. Dicks has testified as an expert witness in depositions, arbitrations, and trials.

EFI Global, Inc. District Manager/Principal Engineer 2000-2021

While working at EFI Global, Ms. Dicks also conducted civil/structural engineering investigations to determine the cause of failures, extent of damage, appropriate repairs, construction/design deficiencies, and building code compliance. Ms. Dicks also served as a District Manager for the Lexington, Kentucky office and was responsible for training and mentoring engineers and reviewing others' engineering work.

Marshall Miller & Associates Division Manager of Civil & Geotechnical Projects 1997-1999

While working at Marshall Miller & Associates, Ms. Dicks conducted civil/structural engineering investigations and supervised and performed geotechnical design/construction projects, field inspections, and lab work.

Appalachian Mining and Engineering Geotechnical Engineer 1997

While working at Appalachian Mining and Engineering, Ms. Dicks served as a geotechnical engineer on mining and geotechnical engineering projects.

Education

Master of Science, Civil Engineering, Georgia Institute of Technology, Atlanta, GA, 1997

Bachelor of Science, Civil Engineering, Georgia Institute of Technology, Atlanta, GA, 1995

Licenses and Registrations

Professional Engineer, Indiana, License #PE10001081

Professional Engineer, Kentucky, License #21031

Professional Engineer, Ohio, License #64764

Professional Engineer, Tennessee, License #106305

Professional Engineer, West Virginia, License #18041

Registered Roof Consultant, IIBEC, Registration #0996

Affiliations

American Society of Civil Engineers (ASCE)

International Institute of Building Enclosure Consultants (IIBEC)

Representative Specialized Education

“Roof System Thermal and Moisture Design,” IIBEC, January 2025.

“Professional Building Consulting,” IIBEC, July 2024.

“Reroofing,” IIBEC, November 2023.

“Construction Vibrations,” ASCE, May 2022.

“Geo-Structural Investigation of Existing Structures,” ASCE, May 2022.

“Structural Building Condition Surveys,” ASCE, January 2021.

“Mitigating Effects of Corrosion and Deterioration in Construction,” ASCE, January 2021.

“Preparing and Implementing Construction Site Storm Water Pollution Prevention Plans,”
ASCE, February 2020.

"Sediment Characteristics, Sources, and Movement," ASCE, February 2020.

"Anatomy of Construction Defects," Red Vector, June 2019.

"Building Systems for Designers – Fire Safety," Red Vector, February 2019.

"Stucco in Home Building," Red Vector, January 2019.

"Designing Foundation Repairs," Red Vector, January 2019.

"Introduction to Flood Inspection," EFI Global, August 2018.

"A Guide to Indoor Air Quality," PDH Direct, February 2018.

"Causes of Distress and Deterioration of Concrete," PDH Direct, February 2018.

"Site Planning and Design," PDH Direct, February 2018.

"Maintenance and Repair of Architectural and Structural Elements of Buildings and Structures," PDH Direct, June 2017.

"Lessons from Failures of Building Envelope," ASCE, November 2016.

"Geotechnical Investigations in Karst," ASCE, November 2016.

"Diagnosis, Repair, and Restoration of Building Façades," ASCE, November 2016.

"Deciphering Building Code Provisions for Structural Renovations," ASCE, November 2016.

"Roofing – Flexible Membrane Edge and Wind Load Design," Red Vector, July 2016.

"Hurricane Damage Investigations – Wind vs. Water," Red Vector, July 2016.

"Rooftop Quality Assurance," RCI, Inc., November 2015.

"International Building Code: Fire and Smoke Resistant Assemblies," Red Vector, June 2015.

"ASCE 7-10 Snow Load Provisions" and "...Wind Loads," ASCE, June 2015.

"Underpinning and Strengthening of Foundations," ASCE, June 2015.

"Runoff Analysis," Red Vector, December 2014.

"Mold Basics and Remediation," Red Vector, July 2014.

"Investigation and Repair of Fire-Damaged Framing," ASCE, June 2014.

"Evaluating Damage and Repairing Metal Plate Connected Wood Trusses," ASCE, June 2014.

"Learning from Failures of Wood-Framed Structures," ASCE, June 2014.

"Investigation and Repair of Wood Structures," ASCE, June 2014.

"Design and Rehabilitation of Foundations on Expansive Soils," ASCE, November 2013.

"Avoiding Failures of Retaining Walls," ASCE, November 2013.

"Earthwork 101," ASCE, November 2013.

"ADA Guidelines 2010," RedVector, May 2013.

"Roofing Materials – Asphalt Shingles," RedVector, May 2013.

"Hurricane Mitigation: Design and Construction Lessons," RedVector, December 2012.

"Masonry Design: Installation and Workmanship," RedVector, July 2012.

"Roof Technology and Science II," RCI, Inc., October 2011.

"Wood Design: Behavior of Structures Under Loads and Forces," RedVector, June 2011.

"Building Pathology: Roofs," RedVector, June 2011.

"Basic Wind Loads ASCE 7-10," RedVector, June 2011.

"Professional Roof Consulting," RCI, Inc., May 2010.

"Roof Technology and Science I," RCI, Inc., September 2009.

"Leak Detection for Roofs," RedVector, February 2009.

"Water Entry Prevention and Moisture Control in Buildings – Roofing Systems, Exterior Walls and Foundations," University of Wisconsin-Madison, September 2008.

"Composition Roofs Damage Assessment," Haag Engineering Co., July 2000.

Representative Deposition/Trial Testimony

Construction/Design Analysis, US District Court, Case No. 5:24-cv-00339-DCR, Mark Whaley v. Definitive Roofing & Specialty Coatings, LLC; Environmental Roofing Components, LLC, et al, representing Plaintiff, Deposition

Construction/Building Code Analysis, Commonwealth of Kentucky, Madison Circuit Court, Civil Action No. 21-CI-00470, Bluegrass Tool & Industrial, LLC v. Ewing Brown, representing Defendant, Trial

Slip/Fall Analysis, Commonwealth of Kentucky, Fayette Circuit Court, Civil Action No. 15-CI-03987, Lola Layne v. Campbell Fayette, LLC d/b/a The Campbell House, representing Defendant, Deposition

Stormwater Construction/Design Analysis, Commonwealth of Kentucky, Campbell Circuit Court, Civil Action No. 18-CI-00243, Cincinnati Ins. Co. a/s/o National Redvelopment, Inc. v. Sanitation District 1 of N. KY, et al, representing Plaintiff, Deposition

Construction/Design Analysis, Commonwealth of Kentucky, Clark Circuit Court, Civil Action No. 16-CI-00151, Everman, et al v. B&P Apartments, et al, representing Plaintiff, Deposition

Construction/Design Analysis, Commonwealth of Kentucky, Shelby Circuit Court, Civil Action No. 09-CI-00666, Cook v. Jagoe Construction, representing Defendant, Arbitration

Construction/Design Analysis, Commonwealth of Kentucky, Bourbon Circuit Court, Civil Action No. 13-CI-086, Wright Place Properties, LLC v. Watson Building, Inc., representing Defendant, Deposition

Geotechnical/Retaining Wall Analysis, Circuit Court, City of Chesapeake, Civil Action No. CL15000480-00, Michael Angotti v. Hale Bulkheading, Inc., representing Defendant, Deposition

Geotechnical/Civil Analysis, Court of Common Pleas, Hamilton County, Ohio, Civil Action No. A1101246, Newport Pavilion, LLC v. Ford Development Corporation, et al, representing Defendant, Deposition

Construction/Design Analysis, Commonwealth of Kentucky, Boyle Circuit Court, Civil Action No. 10-CI-434, Donald Sinkhorn v. State Farm, et al, representing Defendant, Trial and Deposition

Construction/Design Analysis, Commonwealth of Kentucky, Fayette Circuit Court, Civil Action No. 10-CI-574, Sanford E. Levy, LLC, et al v. Five Star Roofing Systems, Inc., representing Defendant, Trial and Deposition

Fire Damage/Repair Analysis, U.S. District Court, Eastern District of Kentucky, Lexington Division, Case No. 5:10-CV-00301-KKC, Travelers Casualty Insurance Co., et al v. Volunteers of America, et al, representing Plaintiff, Deposition

Construction/Design Analysis, U.S. District Court, Southern District of Indiana, Evansville Division, Case No. 3:09-CV-094-BLY-WGH, Folsom v. Menard, Inc., et al, representing Defendant, Deposition

Construction/Design Analysis, Commonwealth of Kentucky, Bourbon Circuit Court, Civil Action No. 13-CI-086, Wright Place Properties, LLC v. Watson Building, Inc., representing Defendant, Deposition

Courses Instructed

Building Distress Issues

Construction Defects

Earthquakes for Adjusters

Effects of Snow and Ice Loads on Roofs

Evaluating Hail and Wind Damage to Shingle Roof Coverings

Evaluating Tornado Damage to Structures

Moisture Infiltration in Foundations

Moisture Movement in Buildings

Qualitative Water Intrusion Evaluations

Role of an Investigative Engineer in the Insurance Industry

Storm vs. Intentional Damage to Shingles

Structural Assessment – Repair v. Replace

Use of SDM Data in Accident Reconstruction and Claims Handling

Vehicle Arson and Theft Insurance Fraud Detection