

**ENGINEER: CIVIL/STRUCTURAL  
DESIGN AND CONSTRUCTION  
INVESTIGATIONS - CAUSATION**

**KEVIN L. KIRCHMER, P.E.**  
Engineering Design & Testing Corp.  
Post Office Box 40026  
Overland Park, Kansas 66204  
Telephone: (913) 859-9580  
klkirchmer@edtengineers.com

**EDUCATION:**

1993 Bachelor of Science, Civil Engineering  
The University of Kansas, Lawrence, Kansas

**EXPERIENCE:**

2001 **Engineering Design & Testing Corporation, Overland Park, Kansas**  
to Present Consulting Engineer. For residential, commercial and industrial structures: assessment, appraisal and umpiring services for scope of hail and/or wind damage to roof coverings; scope of structural damage due to tornado, fire, blasting, explosions, vehicle impacts, tree impacts, hurricanes; cause of moisture intrusions through roof coverings, exterior veneers, windows and foundations; scope of foundation damage due to involuntary discharges of water, settlement, ground subsidence; evaluation of construction defects and building code compliance; evaluation of failures in concrete foundations, driveways and sidewalks; depositions, trial testimony and subrogation support; cost estimates; value of loss; laboratory and field testing of construction materials; damage segregation; retaining wall failures.

1993 **Black & Veatch, Overland Park, Kansas**  
to 2001 Design Engineer. Analysis and design of concrete foundations for industrial structures and equipment, determination of wind and seismic forces, analysis and design of telecommunication tower sites on undeveloped land, existing towers, existing water tanks and building rooftops, analysis and design of fiber optic installations in metropolitan and rural areas.

**PROFESSIONAL AND HONORARY SOCIETIES AND SOCIETAL ACTIVITIES:**

American Society of Civil Engineers (ASCE), Member 2001-Present

**FIELD EXPERIENCE AND INDUSTRIAL CONSULTING ACTIVITY (PARTIAL LIST):**

**Catastrophe Activities – Midwest and Alabama**

Determine scope of structural damage to residential and commercial property due to wind, tornado or hurricane.

**Concrete Supply Facility – Hutchinson, Kansas**

Determine the scope of wind-related structural damage, including the segregation of pre-incident damage, to two concrete material silos and a prefabricated metal building.

**Church – Kansas City, Missouri**

Evaluate cause of church building collapse.

**Healthcare Center – Louisville, Kentucky**

Determine the cost difference of replacing the roof system of a 22,000 square-foot, healthcare facility with steel trusses or fire-retardant wood trusses.

**Liquid Fertilizer Plant – McPherson, Kansas**

Waste Gas Boiler Explosion - Construction and scheduling supervision of installation of new waste gas boiler and associated equipment.

**Multistory Apartment Complex – Midwest and Alabama**

Determine the scope of wind and/or hail damage to roof coverings

**Multistory Apartment Complex – Salamanca, Mexico**

Identify and evaluate deficiencies in construction, conduct on-site testing and provide technical opinions with respect to overall quality of construction.

**Scrap Metal Plant – Muskogee, Oklahoma**

Evaluate scope of explosion-related damage to residences within two miles of furnace explosion at scrap metal plant.

**Telecommunications Tower – Topeka, Kansas**

Evaluate cause of telecommunications tower collapse.

**REGISTRATIONS:**

Registered Professional Engineer in Kansas (# 14925)  
Registered Professional Engineer in Nebraska (#E-10321)  
Registered Professional Engineer in Alabama (# 25499)  
Registered Professional Engineer in Missouri (#E-2002004361)  
Registered Professional Engineer in Oklahoma (#22710)  
Registered Professional Engineer in Colorado (#41080)  
Registered Professional Engineer in Iowa (#19090)

Registered Professional Engineer in Arkansas (#13588)  
Registered Professional Engineer in Indiana (# PE10810015)

**CONTINUING EDUCATION:**

**2000 International Building Code Wind and Snow Load Provisions**

International Conference of Building Officials, January 2002, Des Moines, Iowa

**Roof Area Calculations and Inspection Techniques**

Haag Engineering Co., March 2002, Des Moines, Iowa

**Composition and Wood Roofs Damage Assessment**

Haag Engineering Co., March 2002, Des Moines, Iowa

**Commercial Roofs Damage Assessment**

Haag Engineering Co., March 2002, Des Moines, Iowa

**Foundation Types, Distresses and Repairs**

Haag Engineering Co., January 2003, Oklahoma City, Oklahoma

**Wood Structures I**

International Code Council, February 2004, Overland Park, Kansas

**Hurricane Damage Evaluation Procedures**

Engineering Design & Testing Corp, May 2006, Charlotte, North Carolina

**Soil Basics for Engineers**

Auburn University, October 2008, Lenexa, Kansas

**Concrete Repair Basics**

American Concrete Institute, February 2009, Kansas City, Kansas

**Residential Shallow Foundation Failure Case Studies**

HalfMoon LLC, September 2011, Overland Park, Kansas

**INVITED LECTURES, WORKSHOPS AND PRESENTATIONS:**

“Hail Damage to Residential and Commercial Properties”, Iowa-Nebraska Chapter of International Association of Special Investigation Units, Des Moines, Iowa, April 2002

“Hail Testing of Residential Roofing Materials”, Engineering Design & Testing Corp, Kansas City, Missouri, February 2006