

Engineering Design & Testing Corp. 8405 Melrose Drive | Lenexa, Kansas 66214

> phone: (913) 859-9580 email: klkirchmer@edtkc.com

# **EDUCATION**

1993Bachelor of Science in Civil EngineeringUniversity of Kansas, Lawrence, Kansas

### EXPERIENCE

# 2001Engineering Design & Testing Corp.to PresentOverland Park, Kansas

#### 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.

# 1993Black & Veatchto 2001Overland Park, Kansas

#### 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.

# **EXPERIENCE**

#### 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 preincident damage, to two concrete material silos and a prefabricated metal building.

#### Church — Kansas City, Missouri

Evaluate cause of church building collapse.

#### 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 and CERTIFICATIONS**

National Council of Examiners for Engineering and Surveying (Record #20847))

Registered Professional Engineer in Alabama (#25499)

Registered Professional Engineer in Arkansas (#13588)

Registered Professional Engineer in Colorado (#41080)

Registered Professional Engineer in Iowa (#19090)

Registered Professional Engineer in Kansas (#14925)

Registered Professional Engineer in Missouri (#E-2002004361)

Registered Professional Engineer in Nebraska (#E-10321)

Registered Professional Engineer in Oklahoma (#22710

# **PROFESSIONAL ORGANIZATIONS**

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

#### **INVITED LECTURES, WORKSHOPS AND PRESENTATIONS**

*"The Appraisal Process and the Reference Hearing for the Resolution of an Insurance Claim"*, EDT, Columbia, South Carolina, February 2013

"Hail Testing of Residential Roofing Materials", EDT, Kansas City, Missouri, February 2006

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

#### **CONTINUING EDUCATION**

- 2017 Structural Engineering Conference, University of Kansas, Lawrence, Kansas
- 2016 Geotech Conference, ASCE, Overland Park, Kansas Structural Engineering Conference, University of Kansas, Lawrence, Kansas
- 2015 Forensic Analysis of Stair Descent Falls, PDH Online, Overland Park, Kansas

- 2014 Structural Building Condition Surveys, ASCE, Overland Park, KS
- 2009 Concrete Repair Basics, American Concrete Institute, Kansas City, Kansas
- 2008 Soil Basics for Engineers, Auburn University, Lenexa, Kansas
- 2006 Hurricane Damage Evaluation Procedures, EDT, Charlotte, North Carolina
- 2004 Wood Structures I, International Code Council, Overland Park, Kansas
- 2003 Foundation Types, Distresses and Repairs, Haag Engineering Co., Oklahoma City, Oklahoma
- 2002 2000 International Building Code Wind and Snow Load Provisions, International Conference of Building Officials, Des Moines, Iowa Commercial Roofs Damage Assessment, Haag Engineering Co., Des Moines, Iowa Composition and Wood Roofs Damage Assessment, Haag Engineering Co., Des Moines, Iowa Roof Area Calculations and Inspection Techniques, Haag Engineering Co., Des Moines, Iowa