

# BENJAMIN KAAN, P.E.

## Vice President



### Summary

Benjamin (Ben) Kaan has more than 16 years of experience in structural design, project management and forensic investigation, including residential, sports, government, commercial, healthcare, industrial, and data center projects. Ben has provided structural engineering and forensic services for a wide range of projects including new construction, renovation and adaptive reuse of existing structures. He serves on both company and industry committees that drive engineering practice standards for structural design.

### Areas of Technical Expertise

- Forensic Engineering
- Erection Engineering
- Structural Engineering

### Education

- M.S., Civil Engineering, 2008, The University of Kansas
- B.S., Mechanical Engineering, 2004, Colorado School of Mines

### Registrations

- Licensed Professional Engineer in CO, MO, ND, PA, and UT

### Professional Activities

- Member, American Institute of Steel Construction
- Member, Manuals Committee, American Institute of Steel Construction
- Member, National Council for Examiners of Engineering and Surveying
- Member, Order of the Engineer
- Member, Structural Engineers Association of Colorado

### Select Project Experience

#### Forensic Engineering

**CBC Bldg 5 Precast Wall Damage**, Englewood, CO. Cause and origin assessment for concrete wall and slab failure.

**UCH PA Concrete Wall Failure**, San Antonio, TX. Damage assessment, temporary stability evaluation, and sequence of demolition and repair analysis for structural failure at building project under construction.

**Minturn Retaining Wall Failure Investigation**, Minturn, CO. Cause and origin assessment of retaining wall failure.

**Freehand Hotel Investigation**, Provo, UT. Investigation of structural condition/damage to an existing 2-story motel due to impact from a city bus.

#### Building Investigations

**AMI Stadium (formerly Jade Stadium)**, Christchurch, NZL. Investigation, damage assessment and repair feasibility study of the concrete superstructure and foundations of a 39,000-seat rugby stadium to address seismic damage due to major earthquakes in 2010 and 2011.

**Kauffman Center for the Performing Arts, Construction Failure**, Kansas City, MO. Investigation of the failure of steel members of a cable-supported glass atrium structure.

**Logiq Health Building Condition Assessment**, Loveland, CO. Structural condition assessment for the renovation of an existing 2-story, 1960-era library building from current occupancy to office occupancy with a cafe/kitchen on the ground floor.

**910 16th Street**, Denver, CO. Structural condition assessment of 1910-era, 12-story building for renovation and occupancy conversion project.

**NSGL Building B11 Condition Assessment**, Chicago, IL. Structural condition assessment of 1906-era steam plant building for a renovation and occupancy conversion project.

\*Denotes work performed with previous employer.

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### Sports and Public Assembly

**Pennsylvania State University, Pegula Ice Arena**, University Park, PA. Structural design and construction engineering for an award-winning 228,000-square-foot, 5,782-seat arena for The Pennsylvania State University's NCAA Division I men's and women's ice hockey teams.

**PPG Paints Arena**, Pittsburgh, PA. Structural design of an award-winning, 18,500-seat, 720,000-square-foot arena for the NHL Pittsburgh Penguins.

**Rogers Place**, Edmonton, Alberta, CAN. Structural design of an 18,500-seat multi-use arena for the NHL Edmonton Oilers and connected Wintergarden event space.

**UBS Arena**, Elmont, NY. Structural design of an 18,000-seat multi-use arena for the NHL New York Islanders.

**MAC Center**, Idaho Falls, ID. Structural design of an 3,000-seat multi-use arena for the city of Idaho Falls.

### Connection Design

**Barclays Center**, Brooklyn, NY. Structural design of an 18,100-seat, 675,000-square-foot multi-use arena for the NBA Brooklyn Nets.

**U.S. Bank Stadium**, Minneapolis, MN. Structural design of an 65,000-seat, 1.7 million-square foot stadium for the NFL Minnesota Vikings.

**Tocumen Airport Terminal**, Panama City, PAN. Structural design of new terminal for international airport for the Panama City.

### Erection Engineering

**Allegiant Stadium**, Paradise, NV. Erection engineering and temporary stability design during construction for an 65,000-seat stadium for the NFL Las Vegas Raiders.

**Audi Field, Erection Engineering**, Washington, DC. Erection engineering and temporary stability design during construction for an 20,000-seat stadium for the MLS DC United.

**Denver Union Station, Block A, Antero Pedestrian Bridge**, Denver, CO. Structural engineering, 3-D modeling, steel shop drawings, shipping integrity analysis and erection engineering for a 44-foot-long pedestrian bridge connecting two adjacent office buildings. The bridge was assembled off-site and erected in one piece.

**American Airlines Hangar**, Chicago, IL. Erection engineering for aircraft maintenance hanger with 528-foot long door trusses.

### Sworn Testimony

Arbitration & Deposition, RK Indus., LLC v. Majestic Commercenter Bldgs II, et al. Denver County, CO. March 21, 2023, November 29, 2022.

### Litigation

Axis KS. LLC v. DLP Lending Fund LLC, condition assessment of existing historical building to assist with bankruptcy proceedings.

Binghamton - Johnson City Joint Sewage Treatment Plant, Vestal, NY. Litigation support services regarding cause and origin of a wall collapse at a sewage treatment plant.

### Select Papers, Lectures and Publications

"Fatigue Enhancement of Welded Coverplates Using Carbon-Fiber Composites," American Society of Civil Engineers (ASCE) Structures Congress, 2008 (co-author and co-presenter)

"Fatigue Enhancement of Category E' Details in Steel Bridge Girders using CFRP Materials," Masters Thesis, University of Kansas CEAE Department, Defended December 14, 2008 (author)

"Not Your Ordinary Weekend Project," Building Dialogue, Colorado Real Estate Journal, March 2018 (co-author)

## CONTACT

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