



EDUCATION

- The University of Texas at Austin
 - Bachelor of Science, Architectural Engineering, 2010
 - Master of Science, Civil Engineering, 2012

PRACTICE AREAS

- Petrography
- Laboratory Evaluations
- Construction Materials
- Masonry
- EIFS, Stucco, Plaster
- Historic Preservation

REGISTRATIONS

- Professional Engineer in OH

PROFESSIONAL AFFILIATIONS

- American Concrete Institute (ACI)
- ASTM International (ASTM)
- Society of Concrete Petrographers (SCP)

TECHNICAL COMMITTEES

- ACI 221 - Aggregates
- ACI 232 - Fly Ash in Concrete
- ACI 523 - Cellular Concrete

CONTACT

kkruise@wje.com
216.642.2300
www.wje.com

EXPERIENCE

Since joining WJE, Karla Kruse has specialized in the evaluation and characterization of building materials. Ms. Kruse's focus is investigating the cause of distress in construction materials. Her work in WJE's Cleveland materials laboratory focuses on the petrographic examination of concrete, mortars, grouts, stucco, plaster, natural stone, manufactured stone, brick, and other construction materials. She also conducts field evaluations, such as evaluating distress in concrete slabs and pavements and in coating systems on floor slabs, swimming pools, parking garages, and water treatment plants. Ms. Kruse's field experience also includes the investigation of stone cladding panels, terra cotta facades, EIFS and stucco systems, and terrazzo. These field evaluations often grade into laboratory testing.

As a graduate student, Ms. Kruse specialized in the characterization of cementitious materials and the evaluation of durability concerns in hardened concrete.

REPRESENTATIVE PROJECTS

Petrography

- Carvins Cove Dam - Roanoke, VA: Examination of deteriorated concrete due to alkali-silica reaction
- Blue Racer Natrium Plant - Natrium, WV: Examination of fire-damaged concrete
- Multistory Office Building - Stamford, CT: Examination of precast concrete panels
- Ahuja Medical Center - Beachwood, OH: Investigation of lightweight cellular concrete
- Colorado Springs Airport - CO: Investigate d-cracking in pavement
- Dallas/Fort Worth International Airport - Dallas, TX: Examination of concrete apron
- MH47 Apron - Fort Campbell, KY: Examination of low-strength concrete
- Yale University Sterling Memorial Library - New Haven, CT: Examination of brick masonry
- Yale University Welsh Hall - New Haven, CT: Examination of stone masonry
- Eaton House - Dublin, Ireland: Examination of stone proposed for use as building facade
- Denso Facility - Livonia, MI: Examination of a pigmented metallic shake

Laboratory Evaluations

- Washington Dulles Airport - Washington, D.C.: Evaluation of failed terrazzo flooring systems
- Ahuja Medical Center - Beachwood, OH: Investigation of terra cotta rain screen panels
- Ohio State University, McCorkle Aquatic Pavilion - Columbus, OH: Investigation of delaminated ceramic pool tiles
- Gilmore Academy Natatorium - Gates Mills, OH: Investigation of pool coating blisters
- InfoCision Stadium - Akron, OH: Investigation of rail post pocket grout
- Manufacturing Facility - Solon, OH: Investigation of static dissipative floor coating failure
- Providence Point - Scott Township, PA: Examination of aggregate base course

EIFS, Stucco, Plaster

- Homewood Suites - Beachwood, OH: Investigation of delaminated EIFS
- Hollywood Casino - Toledo, OH: Investigation of delaminated EIFS
- Apartment Complex - Plano, TX: Evaluation of failed stucco
- Condominium Complex - Atlanta, GA: Examination of EIFS repairs over stucco cladding
- Ohio State University, Faculty Club - Columbus, OH: Investigation of failed ceiling plaster

Historic Preservation

- Edison Monument Tower - Menlo Park, New Jersey: Investigation of concrete repairs
- Union Theological Seminary - New York, New York: Examination of cast stone spires
- Washington National Cathedral - Washington, D.C.: Examination of mortar
- Perry's Victory and International Peace Memorial - Put-In-Bay, Ohio: Observations of efflorescence cleaning and mortar repointing