Project overview
Following a major restoration undertaken between 1989 and 1992, Vertical Access was retained by Quinn Evans Architects in 2005 to investigate the condition of the materials and paint coatings at the cast iron drum and sheet metal dome of the Michigan State Capitol. Nine years later, VA was again asked by Quinn Evans Architects to perform a hands-on inspection of the dome in preparation for an exterior repair project.

Building description
The Michigan State Capitol was built between 1872 and 1878. It was designed in the Neoclassical style by Elijah Myers, who went on to design state capitols in Texas and Colorado. The main portion of the building is constructed of Berea sandstone, with an elegant egg-shaped dome rising to a height of 267 feet above ground. The pedestal and arcade of the drum are constructed of cast iron and the rest of the dome, comprising the drum, dome proper, and lantern with finial, are clad in galvanized sheet metal.

Challenges
• Gain hands-on access to all parts of the drum, dome, lantern and finial.
• Locate sources of water infiltration.

Solutions
• Used Industrial Rope Access to document conditions at all parts of the dome, minimizing disruptions to building occupants and eliminating potential impacts to the capitol grounds.
• Documented conditions using the Tablet PC Annotation System (TPAS®) with digital photographs and high-definition video.

Building owner
The State of Michigan

In collaboration with
• Quinn Evans Architects
• The Christman Company