

SEPTEMBER 2014 MEETING

Wednesday, September 10, 2014 (2.0 PDH)

TECHNICAL PROGRAM

Advancements in Adhesive Anchor Technology: HY200 SAFE SET™ Technology

Speaker: [Kacey L. Cortner](#), Senior Technical Consultant, Hilti

Ms. Cortner attended and graduated Oklahoma State University in May of 2003 with Bachelor's degrees in Civil Engineering & Construction Management. After college she spent a year traveling around the United States and Europe before joining the HILTI team in the spring of 2004. Hilti relocated her to Orlando, FL as a Hilti Center Representative, where the job assignment allowed her to experience day to day hands on customer interaction better familiarizing her with the commercial construction industry. This provided an extensive breadth of knowledge across anchoring and fastening applications as it relates to all types of commercial construction.

In January of 2006, she was promoted again requiring her to relocate to the engineering department at Hilti's North American Headquarters in Tulsa, Oklahoma as a Technical Service Engineer. She became a key resource for technical and specified construction applications, test standards, building codes and approvals throughout the U.S. while working with other members within the design community at the national level. In 2007 she promoted to Regional Technical Consultant for the Houston Metro Area and East Texas. As a Regional Technical Consultant, She provides continuing education seminars and on-site training to the design and inspection communities and organizations as well as supporting, training and testing with the local direct sales team on site.

In 2011 she promoted to Senior Technical Consultant, where she has gained responsibility in mentoring and developing her peers locally and across the nation. Currently, Ms. Cortner is studying for a Master's Degree in Business Administration.

PRESENTATION SUMMARY

To an audience of about 85, Kacey L. Cortner, Senior Technical Consultant, shared her expertise in Hilti's commercial anchoring and fastening procedures and products. Kacey presented information on typical applications on post-installed anchors. The applications included structural anchor bolts, rebar dowels, replacing missing or damaged cast-in-place anchor bolts, and fastening metal fixtures to concrete or masonry.

Kacey discussed both mechanical anchors and adhesive anchors and focused primarily on the advantages of adhesive anchors, including greater flexibility, suitable for multiple applications, variable embedments, high load capacities, and smaller edge distances and spacings. Kacey pointed out that the vast majority of documented failures using adhesive fasteners were due primarily to improper installation methods, most notably not cleaning the hole prior to installing the adhesive.

For this reason, HILTI has invented Safe Set™ technology that reduces the probability of failure due to holes that have not been cleaned. Safe Set™ Technology is the term used to indicate that an adhesive anchor is approved for installation using Hilti's innovative non-cleaning or self-cleaning systems. Hilti's non-cleaning installation solution includes the use of HIT-Z Anchor Rods. Using this method, dust can be left in the anchor hole without impacting holding values. The Self-cleaning installation is designed to be simple. The installer uses a HILTI Hollow Drill Bit to drill the anchor hole with a VC 20/40 Vacuum Cleaner attachment. Using this method, the dust is sucked out of the hole during the drilling process, thereby eliminating the need for further cleaning. Both the self-cleaning and non-cleaning installation methods are included in the ICC-ES approval for HIT-HY 200.

HILTI provides both anchor capacity tables and design software for use with their products. Other resources including technical data, approvals, sample specifications and CAD details are available from HILTI.



To download a copy of Kasey Cortner's presentation slides, click [here](#).

