Case Study: Raisings

Steve Lawrence, Macdonald & Lawrence Timber Framing

This workshop provides guidance (intermediate and advanced levels) on best practices when planning and executing frame raisings.

The presentation will be conversational and will provide participants with the opportunity to explore various aspects of the work presented. A summary period at the end will distill learning into take-home segments that can be recalled and used in your workplace. The distilled learning will be available as a handout.

Learning objectives:
- Logistical planning
- Hand raising lift planning
- Managing schedules
- Health and safety risk assessment, planning, documentation
- Coordinating public participation and ensuring safety
- Helicopter lifts: prep and practice
- Crew management
- Complex lift planning: center of gravity, load control, multiple cranes
- Commercial jobsites: playing well with large GCs

Case study projects

TFG Raleighvallen Pavillon, 2005, Suriname
Harris Barn Restoration, 2012, Delta, B.C.

TAG Whistler Ziplines, 2013, Whistler, B.C.

TFG Pemberton Barn, 2014, Pemberton, B.C.
About Steve Lawrence

Steve has timber-framed in the U.K. and Canada since 1990. He serves as a current director of the Timber Framers Guild and has served as a director of the U.K. Carpenters’ Fellowship and is also a member of the Industrial Roped Access Trade Association (IRATA). Projects he has worked on have received a good dozen awards, for sustainability, cultural heritage, design, and restoration.

Steve has published articles in journals for the TFG and the CF on projects, safety, design, and oak grading, and has lectured at conferences and courses since 1992. He has also been involved in a number of broadcast presentations for both the BBC and WGBH in Boston.

He worked for 15 years at Carpenter Oak & Woodland in the U.K. and Scotland, and currently he is principal, chief operating office of Macdonald & Lawrence Timber Framing, in Mill Bay, B.C.
Adhesive Anchor Installer Training

Tom Haanen, Haanen Construction, LLC

As a result of the ceiling failure in the Boston Big Dig tunnel in 2006, the current International Building Code requires that those who install adhesive anchors horizontally or vertically overhead are required to have American Concrete Institute/Concrete Reinforcing Steel Institute (ACI-CRSI) Adhesive Anchor Installer certification or the equivalent. The code does not require certification of installers for vertical down installation, but this is requirement often misinterpreted by special inspectors. Unfortunately, CRSI training certification through the Construction Specifications Institute (CSI) can cost over $900.

In 2015, instructor Tom Haanen was certified by the ACI-CRSI as a Certified Adhesive Anchor Installer. This ATP Adhesive Anchor Installer training is based on Tom’s CSI-CRSI Adhesive Anchor Installer Certification training.

Learning objectives:

- Understand the requirements for anchor performance as specified in the MPII or Manufacturer’s Published Installation Instructions (MPII). This is important.
- Discuss equipment required for proper installation according to the MPII. What’s proper and what doesn’t cut it.
- Hands-on installation of adhesive anchors: what to do, what to pay attention to, what can go wrong, and how to deal with it.
- Communicating with special inspectors, engineers, and other jobsite personnel (roundtable discussion).
- Overview of post-installed anchors including recommendations for specific applications, hands-on, and open discussion: Everything You Ever Wanted to Know about Anchors but Were Afraid to Ask.

About Tom Haanen

Tom has been an active Timber Framers Guild member since 2006, a member of the leadership team on two Guild projects, a volunteer at many other Guild projects, and an active participant in Guild apprentice training.

He retired in October 2015 from long-time employer Hilti and opened Haanen Construction, LLC. During his tenure with Hilti, Tom supervised anchor testing, evaluated test results, managed ICC-ES Evaluation Report projects, and wrote the technical manuals used by structural engineers.

Tom currently lives in Tulsa, Okla. He is a registered professional engineer and a graduate of Rensselaer Polytechnic Institute with a B.S. in Mechanical Engineering.