

## CUSTOMER

**Eric Posey**

## LOCATION

**UA Local 440, Indianapolis, IN**

## AUTODESK PROGRAM

**Membership Training Provider Program**

## SOFTWARE

**AutoCAD®**  
**Autodesk® BIM 360**  
**Autodesk® Fabrication CADmep™**  
**Autodesk® Navisworks® Manage**  
**Autodesk® Point Layout**  
**Autodesk® Revit®**  
**Autodesk® Revit® MEP**  
**Autodesk® ReCap™ Pro**

“I have definitely bought in 100 percent to our BIM process. We were involved with 2D CAD for several years. Then a few years ago, we landed a large hospital project that required full-blown BIM. It didn't take long for me to realize the value in having tech-savvy, motivated plumber/pipefitters involved with the BIM process. You can really see their willingness and eagerness to produce a high-quality BIM model and installation drawings for their counterparts in the field. Our team of detailers now have a clear understanding of both field conditions and best installation practices, and they go the extra mile to ensure that they are producing drawings that are clear and concise. These guys are outstanding!”

**MATT THUER**  
 PRESIDENT, GREINER BROTHERS, INC.

# MEET ERIC: HE SWITCHED COLLEGE FOR A UA LOCAL 440 APPRENTICESHIP

## Autodesk Membership Training Provider Program for Trade Skills Unions and Union-Affiliated Training Organizations



Erik Lambrecht (left) viewing the latest Revit model in virtual reality with Eric Posey (right)

Eric Posey spent the summer of 2002 as a trainee in the United Association's (UA) Joint Apprenticeship Training Center at Local 440 in Indianapolis representing Plumbers, Steamfitters, and HVAC Service Technicians before attending Indiana University–Purdue University Indianapolis on an academic scholarship to pursue a degree in computer engineering. But after a couple of semesters and a great deal of soul searching, Eric realized he wasn't on the right path for his future, and he decided to leave college and return to UA Local 440 as a trainee.

With school on hold, Eric sat down with a detailer at UA Local 440 who showed him some mechanical rooms that had been modeled and spooled using 3D software. These room designs merged hands-on work, engineering skills, and technology—and Eric was hooked. He made a decision to pursue his desire to become a detailer and trainer.

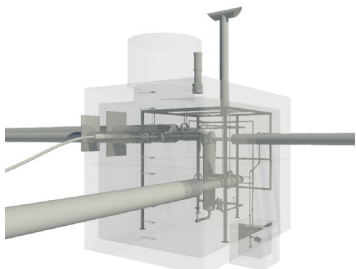
While his friends at Purdue entered more costly higher education programs, Eric was accepted into the UA Local 440 apprenticeship program. He worked for Greiner Brothers Inc. mechanical contractors while attending skilled union trade classes, paid for by his union membership. “My only real expense was books, which cost about \$150 per semester. Meanwhile, my friends were racking up huge college tuition debt.”

The Director of Training for Local 440 - Don Bough, applied to the Autodesk® Membership Training Provider Program (the “Program”). The Program, which aims to support skilled trade organizations in their efforts to train, test, and certify their student members, is a collaboration between Autodesk and the national leadership of major North American trade unions and personnel who manage their membership training programs.

The Program offers numerous benefits to union training centers, including a cost-effective annual subscription to Autodesk® software products, access to Autodesk's Instructor Development tools, the ability for union instructors to become Autodesk Certified Instructors, and much more. It also enhances Building Information Modeling (BIM) and CAD training at current sites, while offering enhanced training initiatives with Autodesk technology at a new location. With the support of Autodesk's regional Distributors, the Program promotes training services and product certification to skilled trade organizations while encouraging the use of Autodesk's learning resources. These resources include: learning materials, services and technologies, as well as certification-prep exam courseware.

When Eric's apprenticeship began in 2004, the UA Local 440 only taught Introduction to AutoCAD Level 1, and that was only accessible to fifth-year apprentices and journeymen. In 2009, after completion of Level 1 at UA Local 440, where he excelled, Eric moved on to coursework in Level 2, and then Level 3 via the UA's online course offerings.

He self-taught while working his day job in plumbing and HVAC. “I stayed close to my contractor's ear about AutoCAD because I wanted a shot at working with it. I could just see the benefits for me, for my job, and my future.” With his CAD dreams on a back burner, Eric continued working on installations in mechanical and boiler rooms. He got a great opportunity to serve as an area foreman on the \$754M Eskenazi Hospital project in Indianapolis.



Greiner Steam Vault Pre-Fab Model

According to Eric, the greatest return on the investment of his time and talent is his ability to help his fellow union members keep pace with technology, stay relevant, and retool themselves for new careers in the trades using Autodesk products.

“That hospital job was one of the first in our jurisdiction to have a strict BIM requirement, and my contractor chose to partially outsource it.” Although Eric was not detailing on that project, he learned the importance of BIM and could see that many in the field were not yet ready for 3D modeling. He found that outsourcing the detailing could be the cause of the slow adoption of 3D modeling around him. “I was in the middle of the grumblings of the journeymen and foremen and realized why pipe trades journeymen should be detailing their own pipe!” After that job concluded, he was asked to detail, and within a few months he was the lead detailer. Greiner Brothers quickly went from outsourcing all BIM to an in-house mix of union and non-union detailers to phasing out non-union personnel altogether, moving to a complete Autodesk® Revit® software workflow. “We decided at the beginning of 2015 that we were no longer going to renew our PD3D (Trimble® PipeDesigner 3D®) licenses,” says Eric. Although the transition from legacy systems to Revit was not without its challenges, Eric has never looked back.

Eric graduated from the UA's Instructor Training Program (ITP) in 2014, and in 2015 he got his shot designing the UA's brand-new Utilizing Jobsite Technology course at ITP, where he teaches skilled craftspeople how to interact with technology as they move from the office to the field. “If one of our members is handed an iPad on the jobsite, we want them to have basic BIM 360 skills in reading digital blue prints, 3D models, layout points, and tracking punch lists and safety protocols.” Eric was also asked to help others learn to use Autodesk Revit. “I was happy to have the chance to help a fellow union member, Erik Lambrecht, create and teach the new Revit MEP course in 2016.” In 2017, Eric developed and taught the UA's new Advanced Autodesk Revit course at ITP.

Today, while continuing his full-time detailing job at Greiner Brothers, Eric trains UA technology trainers as well as rank-and-file members, including a mix of students right out of high school, young college graduates, 50-year-olds looking for a career change, and everyone in between.



Eric Posey (left) with Erik Lambrecht (right) using Oculus Rift with a UA training module



Greiner Brothers Inc. chiller plant Revit model converted into augmented reality

The Union also assists with job placement. The UA Local 440's goal is to make sure every student who comes through the training center is comfortable navigating a BIM model, extracting measurements and information from a model, and knowing what information they can ask their contractor's drafting department for in a pinch.

“Most of the students who take my courses are trying to add another skill to their arsenal and gain a better understanding of BIM.” The UA's large apprenticeship and BIM classes continue to rise in enrollment each year, preparing workers with an overview of the latest in technology on the jobsite—including fabrication, power tool technology, virtual and augmented reality, cloud and BIM 360 workflows, and jobsite gang boxes equipped for BIM.

According to Eric, the greatest return on the investment of his time and talent is his ability to help his fellow union members keep pace with technology, stay relevant in their careers, and in some cases, retool themselves for new careers in the trades using Autodesk products.

Eric's journey took him from student to practitioner to teacher. What began as a summer job before college has become a lifelong career merging his passion for technology with hands-on and real-world experience. He plans to continue working for Greiner and teaching for UA.

A Skilled Trades Organization becomes eligible for Autodesk's Membership Training Provider Program benefits after agreeing to the Program Agreement and terms, and upon authorization approval by Autodesk. [Learn more.](#)

Erik Lambrecht (UA Local 400, Appleton, Wisconsin), like Eric Posey, is one of the UA's next generation of highly technology-savvy members who are mentoring other UA trainers nationwide on BIM training programs. In addition to teaching Revit, Erik and his colleagues have begun introducing Autodesk BIM 360 into their jobsite technology training workflows, focusing on how BIM data can be used in the field.

A handful of Eric's students have gone on to become draftsmen, total station layout personnel, foremen, or superintendents on BIM projects.