



Published for members of NECA, Western Ohio Chapter • IBEW Local 82 • Miami Valley Business Community

July, 2022

ESI's Innovation Center the future of prefab

he concept of prefabrication has been with us for decades.

Manufacturing facilities use assembly lines to build the same item over and over. Components for automobiles, refrigerators, dishwashers... all assembled in one facility and shipped out the door, ready to use. Electrical construction has adapted the same concept in prefabrication of essential items used in everyday job sites, like electrical room panels and transformers. electrical conduit bending, duct banks, and more.

Industrywide, the prefabrication of products and processes has proven to be a popular way for electrical contractors to reduce labor costs, optimize their workforce during a time of skilled labor shortages, and



ESI's Innovation Center

help ensure that projects get completed on time. Utilizing prefab helps maintain a competitive, cost-efficient edge in the industry and to eliminate waste on projects as much as possible.

In its most basic form, the

model for industrialized construction breaks out a large facility into primary components that can be manufactured offsite independent of the weather and brought to the location for

final assembly in a fraction of the time required for a traditional building. These modules can consist of combinations of relatively complex single and multi-trade assemblies for mechanical, electrical, and plumbing (MEP) equipment. This model compresses the job-site schedule, because while the amount of manpower required is similar to what it would be in the field, you're installing a completed section of the building far faster and reducing crew sizes.

Locally, ESI Electrical Contractors created the ESI Innovation Center, which is focused on prefabrication with safety, quality and productivity as their cornerstones. ESI fabricates bus duct with assembly instructions and entire electrical rooms which can be shipped and installed onsite. Performing this work away from the job site means they

Cont'd.pg. 2

Graduates include:

Inside Wiremen: Connor

Journeymen Graduates 2022

Speakers included Dayton Mayor Jeffrey Mims Jr. and State Representative Willis Blackshear Jr.

Atkinson, Matthew

Jacob Evans,

Borchers, Sky Byers,

Christopher Hampton,

Joshua Lewis, Brendan

Lolacono, Mark Lytle, Jr.,

Michael Martin, Zachary

Mason, Cody Maury,

Garrett Sayers, Dominic

Scott Ransbottom,

Installer Technicians: Garrett

Camden and Wvatt Nace.

Smith and Jonathon

Stambaugh.

Carlos Hopkins Jr..

Zachary Jennings,

The Dayton JATC Technical Training Center for Electrical Apprentices graduated another class of Journeymen in May 5, 2022 including 17 Inside Wiremen and 2 Installer Technicians.

Apprenticeship programs consists of a combination of on-the-job training (earning while you learn) and classroom instruction, for which college credit is available.

The Dayton JATC Technical Training Center offers apprenticeships in two fields: Inside Wireman and Teledata Installer Technician.



The top graduate this year for Inside Wireman was Dominic Smith, completing the program with an average of 94.4%. And the top graduate for Installer Technician was Garrett Camden with an average of 87.8%.

ESI. cont'd

work more efficiently and can meet more aggressive deadlines. Additionally, prefabrication is a safer way to work because it limits exposure to hazardous activities on the job site, such as the number of times an employee goes up and down in a lift to fit a part.

ESI fabricates a wide variety of assemblies that can be built and stored ahead of schedule. Following is a list of just some of their products.

• Underground feeder

conduit stub-ups

• Duct banks

• Branch and feeder conduit racks

• Wire spools

- Complete in-wall rough-in kits
- Long-span fixtures
- Pendants, whips and support cables for industrial and garage fixtures
- MC cable branch circuiting for lighting
- Pre-cut and terminated MC lengths
- Lighting junction boxes with support rod assembly and support plates
- Lighting fixtures palletized by area, whips and lamps installed

• Electrical room panels and transformers

- Electrical conduit bending
- Low-voltage stub-ups
- Strut trapeze supports for conduit racks



• Junction boxes with flex whip for ceiling devices

Sixty-five of their prefabricated electrical assemblies are UL listed. The certification means UL has tested representative samples of each product and determined that they meet specific, defined requirements. According to UL's records, ESI is one of approximately 50 electrical contractors in the U.S. with this listing.

Safety

Everything they do in the Innovation Center is something they don't have to do in the field. That reduces the number of hours employees spend working in the field amid potentially hazardous site conditions. Building a conduit rack in the shop at floor level is much safer and easier than building it up in the air on a congested job site. Prefabrication reduces stress caused by unexpected problems and time constraints, allowing their employees to maintain their focus on safety.

Quality

ESI's product and installation methods allow them to maintain company- and project-wide standards for materials. Consistent

methods mean fewer errors. They also perform forced planning and components pretesting before installation. They label their prefabricated products, giving future maintenance personnel an advantage when troubleshooting or making additions.

Productivity

ESI's Innovation Center team uses manufacturing methods to produce individual assemblies, with special tooling and increased production goals. Field installation time is reduced because a greater part of the work is completed in the shop.

Accurate design and documentation help them do it right the first time in a safe, climate-controlled area with

tools and materials at hand. This reduces distractions and work stoppage, increasing efficiency.

Prefabricated assemblies can be built and stored ahead of schedule. Workstations are permanent and don't have to be set up each day. And more trash is confined to

the shop area, where it is easily recycled.

For more information about the ESI Innovation Center, please visit esielectrical.com.

Employee Appreciation Lunch at ESI

There are clear links between employee appreciation and its impact on employee engagement and productivity. Therefore, it's important for leaders to be able to bring out the best in their workers and a little appreciation goes a long way.

To show their appreciation for the excellent work performed by the employees in the electrical industry, the Labor Management Cooperation Committee (LMCC) made up of members from the Western Ohio Chapter of the National Electrical Contractors Association (NECA) and the International Brotherhood of Electrical Workers (IBEW) Local 82 are continuing to provide lunches to workers at various jobsites throughout the Dayton area.

On July 7, 60 lunches were distributed to the workers at the ESI Innovation Center. The dedication of these workers is essential to the growth of the Miami Valley and the success of the NECA Contractors in Dayton.





CONNECTIONS

July, 2022

Your comments, suggestions and questions are welcome! Contact the Western Ohio Chapter - NECA.

website: www.wocneca.com phone: 937-299-0384



Why is there a shortage of *Electricians*?

ike many economic issues, the electrician shortage is the result of a mismatch between supply and demand. On the supply side, not enough younger electricians are entering the industry as experienced electricians are retiring. On the demand side, more electricians will be needed to meet the everincreasing electricity needs of our nation. From a big-picture perspective, there are three main causes behind the shortage.

1. Experienced electricians are retiring faster than ever. The first cause behind the electrician shortage is experienced electricians leaving the industry. While many of these retirements are part of the normal cycle of employment, some are premature departures. The COVID-19 pandemic accelerated retirement timelines for Baby Boomers across all industries.

2. Not enough new

electricians are entering the industry. Electricians leaving the industry wouldn't be an issue if new electricians were rising up to replace them. Unfortunately, they aren't. One *is increasing*. But striking an potential reason for this change is that younger generations aren't as interested in skilled labor. Only 16.7% of high school and college students say they want to work in construction compared to 76.5% who want to work in technology. Instead of attending a trade school or finding an apprenticeship, young adults are enrolling in two- or four-year colleges and universities.

The pandemic had an interesting effect on students' career ambitions, however. In a survey published in February 2021, 25 percent of Gen Z

teenagers said they were more likely to attend a career and technical education school due to their experience with COVID-19. 3. Demand for electricians equilibrium between retirements and new hires isn't the answer, either. We need more new electricians than the number that are leaving. Electrical work is a growing field. According to the U.S. Bureau of Labor Statistics, electrician jobs are expected to grow by 9.1% from 2020 to 2030. The increase in demand is largely driven by an increase in devices, buildings and vehicles that rely on electricity. From 2022 to 2030, total electricity consumption in the U.S. is expected to grow by 12.4%.

IBEW Local 82 is hiring **Electricians** and Low Voltage **Technicians!**

Whether you have experience or no experience but just an interest in the field, they want to speak with you! Plus, an experienced-based bonus of at least \$500 is awarded to new workers who complete 12 weeks employment.

Their pre-apprenticeship program trains incoming employees with a basic skill set in electrical work. From there, employees are encouraged to take classes that will enhance their capabilities. And for those who decide that this is the career they desire, they can apply to the Apprenticeship Program. To apply: Visit ibew82.org.

Dan Flohre and Jeff Runyon leaders in BICSI

professionals,

with knowledge

and experience in

leading-edge ICT

design principles,

their professional

documenting

ICSI is a professional association supporting the advancement of the

technology (ICT) profession. BICSI is recognized as the preeminent resource for ICT education, training, credentials, and certification programs which support industry installation standards, best practices, and design requirements for Voice, Data, Audio, Video, Security systems.

Dan Flohre with Kastle Technologies and Jeff Runyon with United Electric achieved the highest credential within BICSI, now recognized as Registered **Communication Distribution**

Designers or more commonly referred to as "RCDD".

The RCDD designation information and communications recognizes these individuals as elite



Dan Flohre

commitment and high standards. Registered Communications Distribution Designer is the

gold standard of all BICSI credentials.

The journey both Dan and Jeff have made to accomplish this achievement, represents Local 82, the Low Voltage program and

associated career opportunities with distinction.

Dan Flohre was in the first Local 82 apprentice class and Jeff Runyon organized in as a technician at the onset of the Low Voltage agreement.

Both held BICSI Certified Technician classification 2013. This is when the LMCC and JATC worked

together to

begin construction of the Local 82 BICSI Authorized Training Facility. Dan and Jeff chose to volunteer and pursue an additional certification. BICSI Certified Instructor.

As BICSI Certified Instructors, Dan Flohre and Jeff Runyon provided formal BICSI education to apprentices in pursuit of Installer Level II Copper & Fiber certification and

instructed

seasoned

installers to

obtain their

Technician

certification.

Maintaining

astonishing

BICSI

an



Jeff Runyon

success rate, Local 82 Low Voltage membership is now represented with over 85% "Technician-A" classified installers.





In This Issue

- ESI's Innovation Center
- Journeymen Graduation
- IBEW Now Hiring!
- Dan Flohre & Jeff Runyon



LMCC / NECA / IBEW 19th Annual Golf Outing

WHERE: Sycamore Creek Country Club Springboro, Ohio WHEN: Monday, September 26, 2022

The 19th Annual LMCC/NECA/IBEW Golf Outing will take place on Monday, September 26 at Sycamore Creek Country Club. The outing sponsors 4 Paws for Ability, an organization that trains service dogs for Veterans and children.

For registration information, please contact Cindy Tucker at cindy.tucker@att.net.



The Western Ohio Chapter -National Electrical Contractors Association Directory:

NECA Members

ASIDACO, LLC Barton Electric C & J Electric Chapel Electric Company Chapel-Romanoff Technologies ESI Electrical Contractors GEM, Inc. High Voltage Maintenance Kastle Electric Company Kastle Technologies Maxwell Lightning Protection RMF Nooter Sidney Electric Company

Sidney Electric Company Studebaker Electric Utility Instrumentation Services York Electric, Inc.

Western Ohio Chapter - NECA 3131 South Dixie Hwy. Ste. 415 Dayton, OH 45439

Associate Contractors

Capital Electric Compass Electrical Solutions Cougar Electric, Inc. Electricity, LLC Glenwood Electric Lake Erie Electric Mid City Electric

Affiliate Members NECA

Kendall Electrical Supply Graybar Electric Co., Inc. Heapy Engineering Milwaukee Tool P & R Communications Uptime Solutions