



# CONNECTIONS

Western Ohio Chapter • National Electrical Contractors Association



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January, 2017

## URS *Fifteenth Annual Telethon*

The United Rehabilitation Services (URS) held their fifteenth annual telethon at WDTN TV Channel 2 studios on Sunday, December 4, 2016. The presenting sponsor this year was the Western Ohio Chapter of the National Electrical Contractors Association (NECA) and the International Brotherhood

of Electrical Workers (IBEW) Local 82. Several volunteers were on hand to take calls from donors.

This is one of the biggest fundraisers for the URS and raised over \$116,000!

Executive Director Dennis Grant was elated with the number of volunteers that participated in the telethon. This year, the URS established a payment plan for donors, thus ensuring monthly donations.

IBEW Local 82 Business Manager Greg Gust indicated that IBEW Local 82 has

everyone take the opportunity to visit the URS facility. It is humbling to see the work they do and it will win over your heart.”

A big thank you to the volunteers who fielded the phones for donations during the telethon:

Greg Gust, IBEW Local 82 and his wife Kim; and Allison Zelinskas.

For over 50 years, URS has been providing hope for families around the Miami Valley. The URS began in the 1950's as an informal support group created by parents advocating for their children with cerebral palsy. URS now

offers a wide variety of services for people with disabilities and their families including: adult daycare, adult



IBEW Local 82 Business Manager Greg Gust (left) with his wife Kim and Allison Zelinskas volunteer at the URS Telethon.



Volunteers taking calls with Mark Allen, Anchor with Channel 2.

latch key, augmentative communications, childcare, hearing aid service, physical therapy, occupational therapy, speech pathology and vocational training.

For more information visit: [ursdayton.org](http://ursdayton.org).

## Selecting an Electrical Contractor

As the owner or construction manager of a project, your objective is to hire subcontractors that can handle their portion of the work in an efficient, safe, quality minded way. You want to be confident that they can oversee their own employees and meet your budget and timeline. What you don't want is a subcontractor that you have to watch over. In selecting an Electrical Contractor, what guidelines will you use?

### Training and Education

Quality is key. Consistent, excellent workmanship can only come from a highly trained workforce. Make sure that the electricians hired by the Contractor are well trained in electrical wiring procedures, the National Electrical Code (NEC) standards, and safety precautions. The National Electrical Contractors Association (NECA) members and Associate Contractors

employ electricians that are the best trained in the industry. Each Journeyman must successfully complete five years in an extensive, state registered apprentice training program. On-going job and skill training continues throughout their career. Contractors also attend training classes, seminars, conferences and workshops that offer cutting edge technology and quality skill

development that is unmatched in the industry.

The Building and Construction Trades Department (BCTD) found that Union programs graduated about three times as many apprentices to journeyman status as did the non-union programs. Overall GPA is also higher in union programs.

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## Contractor, cont'd.

### Strength of workforce

Talk to the Contractor about the size of the company's workforce. If your job is running behind schedule, or going over budget, can the contractor increase or reduce the number of employees on the job in a timely manner? Western Ohio Chapter NECA Contractors draw from a pool of skilled labor through the International Brotherhood of Electrical Workers (IBEW) Local 82, so a ready, trained work force is always available.

### Safety

The costs to a Contractor when there is a serious accident can be tremendous. Fines by OSHA are a small part of the costs. The interruption of production on the job and the outfall of key personnel being tied up to answer legal queries can seriously damage the ability of a contractor. The American Society of Safety Engineers recently reported that the indirect cost of an incident can be up to 10 times that of the direct costs. For every \$1 invested in an effective workplace program, \$4 to \$6 may be saved as

illnesses, injuries and fatalities decline.

Most of the accidents labeled "electrically caused" are the effect of untrained or minimally trained and

*In the last year, the Western Ohio Chapter NECA and IBEW Local 82 have offered the following courses:*

- *Basic Estimating*
  - *OSHA 30*
  - *Code Calculation*
  - *Installation of Temporary Power*
- And this spring will be offering:*
- *Significant Changes to NEC 2017*
  - *Foreman training*

inexperienced persons doing Journey-level work for a Contractor. It is the training that makes the difference. Safety is no accident. NECA is committed to make electrical contracting a safer place to work. Contractors have an array of tools at their fingertips and have become leaders in construction safety that not only protects the worker and the contractor, but ultimately the customer.

Also, to ensure the safety of the Contractor's

work, be sure to request their Experience Modification Rating (EMR). All Contractors with workers' compensation insurance have an ERM calculated by a rating bureau that ranks them, based on their safety record, in relation to their peers. The benchmark for the EMR is 1.00, and a better-than-average safety record is indicated by an EMR that is less than 1.00.

If a Contractor is unwilling to reveal their EMR, it's a good indication that they are not proud of it.

### Drug Free Workplace

The liability and loss of production that comes with drug and alcohol abuse can easily be avoided by using a contractor that has a drug testing program in effect. Local chapters of the IBEW and NECA members have a program that includes testing of management and workers.

Typically, early positive drug test rates average about 7 percent, but drop to between 1.5 and 2 percent after a testing policy is initiated. And think about this, contractors that don't have a drug testing program become a safe harbor for those who are using.

### Competence of Management

In today's ever-changing marketplace, there are strategies used by NECA contractors that help you meet opportunities in a highly technical environment. They partner with you to make your business a success. Work doesn't stop with basic electrical needs but continues with on-going energy management technologies, voice/data systems, and integration of new web-based programs..

*Since 1901, NECA has been at the forefront in training, research, technology, and standards development. For a NECA Contractor in the Miami Valley, visit [www.wocneca.org](http://www.wocneca.org) which provides a listing of reputable electrical contractors.*

## Trends

Several trends are taking place in the electrical industry, bringing new technology to every project which can help to reduce cost, reduce waste and lower the overall budget.

### Building Information

**Modeling (BIM)** is becoming a necessity with more owner interest in technology. BIM is a digital representation of physical and functional characteristics of a facility and

offers more consistent, more accurate, and less time-consuming project document generation. Traditional building design was largely reliant upon two-dimensional technical drawings (plans, elevations, sections, etc.). BIM extends this beyond 3D, augmenting the three primary spatial dimensions (width, height and depth) with time as the fourth dimension (4D) and cost as the fifth (5D). For the professionals involved in a project, BIM enables a virtual information model to be

handed from the design team (architects, landscape architects, surveyors, civil, structural and building services engineers, etc.) to the main contractor and subcontractors and then on to the owner/operator; each professional adds discipline-specific data to the single shared model. This reduces information losses that traditionally occurred when a new team takes 'ownership' of the project, and provides more extensive information to owners of complex structures.

**Green building** will continue to grow in commercial and residential sectors. The growing trend in both sectors is driven not just by a desire to

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

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# APPS for the electrical industry

Head down, palm up. That's how we're choosing to engage with information technology nowadays, our eyes fixed — transfixed some would say — on smartphones and other mobile digital devices not just for fun and diversion, but for productive reasons, too.

Electrical professionals are joining the wireless mobile fray, e-mailing, texting, navigating the web, and using the ubiquitous apps that deliver quick answers, manage and customize information consumption, and hasten communication. Now, with information at their fingertips, electrical pros at all levels are armed with even more powerful on-demand IT capabilities. Tasks that used to demand laborious hand calculations or time-consuming diversions to consult hefty code books — and the conveyance of information via face-to-face meetings, phone conversations, and e-mails that are becoming the equivalent of smoke signals as expeditious means of communication — are being sped up and simplified.

Software Applications, particularly mobile apps, have

changed construction project planning and management for electrical and structured wiring systems. In mid-2016, Statista, based in Hamburg, Germany, reported there were 2.2 million apps for Android users and 2 million available from the iTunes Store with more apps becoming available every day. Paid mobile app downloads in 2016 are predicted to reach \$13.49 billion.)

For electrical markets, there are multiple apps for tools and equipment, accessing and sharing information, managing assets, and programming and monitoring integrated building systems from anywhere using a smartphone. For example, Honeywell's next-generation AlarmNet 360 management platform enables remote security programming. Cloud-hosted access means

there is no software to load or maintain.

## Toolbox time-savers

Electrical contractors are sending more workers into the field and arming more project designers with mobile devices that amount



to another tool in the toolbox.

Apps that deliver quick answers to questions on sizing, design, product selection, critical values, Code requirements, simulations, and other key variables are finding favor with electricians.

From iBend Pipe used to figure conduit bends to Elec Ref that calculates values for typical variables

like conduit fill, feeder size, ground sizing, voltage drop to Electrical Calc that serves as a comprehensive resource needed for complex jobs, the apps are helping electricians navigate jobs more quickly and confidently. Rather than having to consult the NEC and make calculations, one can quickly activate a pertinent app, plug in values, or consult tables and have at least the shape of an answer needed to move ahead.

Apps like CamScanner, which converts digital images of handwritten paperwork to PDF documents, and Documents To Go, which enables smartphone viewing of Excel and Word files helps speed up the process of data sharing. These, combined with a smartphone digital camera, enable quick relay of information from the field.

Across the electrical construction spectrum, wireless mobile devices seem poised to play a more important day-to-day role. They won't substitute for knowledge and expertise grounded in education and real-world experience, but with communication, speed, and efficiency becoming more paramount on the business side, the mobile IT platform is clearly a jumping-off point for improving processes and outcomes.

## Trends, cont'd.

produce environmentally friendly structures, but by consumer demand, higher-quality results, and lifecycle cost savings. Today, almost every building design incorporates green principles and LEED certification will continue to expand.

**Prefab/offsite construction** methods are being incorporated because it offers

the benefits of reduced construction time, less waste, and cost savings. The benefit of improved productivity realized from modularization and prefabrication activities is borne out in McGraw-Hill's 2011 SmartMarket Report, "Prefabrication and Modularization: Increasing Productivity in the Construction Industry." In this report, 35 percent of prefabrication users reported

their project schedules were decreased by four weeks or more, 41 percent reported their project budgets were decreased by 6 percent or more, and 44 percent reported that construction site waste was decreased by 5 percent or more.

**Laser scanning** technology is gaining in popularity. An emerging technology that is having a

significant impact on the industry is laser scanning. 3-D laser scanners can create a digital reproduction of the dimensions and positions of objects in a certain space, and then turn that information into a point cloud image. The data points gathered provide more information about conditions of a project and will allow any needed changes to be made in a timelier fashion.





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[www.wocneca.org](http://www.wocneca.org)



### Team Building Night Awards Banquet

The Builders Exchange of Dayton and the Subcontractors Association of Western Ohio (SAWO) are sponsoring the **Fourteenth Annual Team Building Night** on February 9, 4-8pm at the Ponitz Center Sinclair College.

In addition to great networking opportunities, awards of excellence will be presented to leaders in the construction industry.

- BX Craftsmanship Awards
- BX Project Manager Award
- BX Architectural and Engineering Awards
- SAWO Subcontractor of the Year
- SAWO General Contractor of the Year
- SAWO Architect/Engineer of the Year
- SAWO Public Official of the Year

And many more industry recognitions.

Visit [www.bxdayton.org](http://www.bxdayton.org) for more information.

### The Western Ohio Chapter - National Electrical Contractors Association Directory:

#### NECA Members

Chapel Electric Company  
Chapel-Romanoff Technologies  
ESI Electrical Contractors  
GEM  
High Voltage Maintenance  
Kastle Electric Company  
Kastle Technologies  
Maxwell Lightning Protection  
RMF Nooter  
Sidney Electric Company  
Studebaker Electric  
Wagner Industrial Electric  
York Electric, Inc.

#### Associate Contractors

Automated Controls  
Capital Electric  
Compass Electrical Solutions  
Copp Systems Integrator  
Cougar Electric, Inc.  
Electricity, LLC  
Glenwood Electric  
Justice Electric  
Lake Erie Electric  
Mid City Electric  
Power Pro  
Power Services  
Production Electric  
Spurling Electric Co., Inc.  
Triad Electrical  
Wilson Sign Company

#### Affiliate Members NECA

Advanced Service Technologies  
Becker Electrical Supply  
FD Lawrence Electric Company  
Graybar Electric Co., Inc.  
Heapy Engineering  
Riffe & Associates  
Square D / Schneider Electric  
Uptime Solutions

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