

The Midwest Wireman

BY ELECTRICIANS, FOR ELECTRICIANS

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Special points of Interest:

- Safety Tips & TimeSavers
- Code Updates
- 110.12
- <http://www.ibew22.org>

Those who produce should have, but we know that those who produce the most--that is, those who work hardest, and at the most difficult and most menial tasks, have the least.

Eugene Debs -
Labor Leader

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Health Insurance?

One of the gnawing problems of modern life is health insurance. Unfortunately, insurance companies are no longer willing to assume the "risk" they once did. Today they are only willing to bet on a "sure thing," your premium. With the escalating cost of health care, you can't afford to bet you or your families financial future on not having it.

Recently, two area contractors cancelled their employee insurance without any input from their employees. This action put several into situations that could ruin them financially. The benefits negotiated by Local 22, on behalf of its membership, fall under ERISA.

The **Employee Retirement Income Security Act of 1974 (ERISA)** is a federal law that sets minimum standards for most voluntarily established pension and health plans in private industry to provide protection for individuals in these plans.

ERISA requires plans to provide participants with plan information including important information about plan features and funding; provides fiduciary responsibilities for those who manage and control plan assets; requires plans to establish a grievance and appeals process for participants to get benefits from their plans; and gives participants the right to sue for benefits and breaches of fiduciary duty.

All of our benefits have oversight by Trust Committees made up of Contractor and Local Union Representatives. No one individual has control of the pension funds or health insurance plan. You can be assured that if any questionable activity were attempted, there are procedures, internal controls, protocols, checks, government regulations, etc. Your benefits are protected to the degree the law allows. They can not be cancelled without our knowledge. There are no surprises.

If you have any questions or concerns or would like more information, please contact us at 402-331-8147 and ask for a Business Representative.

UNITED WE BARGAIN, DIVIDED WE BEG

Nighmare Installations

The Mysterious Blinking Christmas Tree

I received a call from a customer whose Christmas tree lights would just come on and go off by themselves. The lights were plugged into a receptacle at the bottom of their spiral staircase.

After finding no problems in the receptacle wiring of the branch circuit serving the tree (the lights were off at this time), I decided to check other receptacles in the area for power. Finding no problems, I went back to the tree, and the lights were now on. However, they quickly went off. I thought that plugging the tester into the receptacles might have helped make the circuit so I did it one receptacle at a time. Finally, after checking the receptacles in the master bathroom the tree lights were working again. But they soon went out! Naturally, I thought the wiring problem was somewhere in the bathroom and proceeded to take out the switches and receptacles one at a time.

After checking all the connections, I finally found a motion sensor in the master bathroom walk-in closet that controlled a light fixture (which was located partially under the staircase). The load side of the sensor was not only wired to serve the light in the closet but it also fed the receptacle where the tree was plugged in. Every time someone would walk to the closet, the tree lights would come on for a limited time, and then automatically turn off. Since this was such a large house nobody could relate the two occurrences.

Q. Willimon

Send us your stories and we'll publish them. They maybe edited for spelling and form, but we can all learn from other's experiences. Send your stories to 8946 L Street Omaha, NE 68127 attention The Midwest Wireman.
22@ibew22.org

Factoids and FunnStuff

The act of doing more than what is required or expected is called "supererogation," although there are several earthier phrases often used by jealous co-workers.

A person's nose and ears continue to grow throughout his or her life.

The Sun isn't round. It is flattened on the top and the bottom.

The Hoover Dam was built to last 2,000 years. The concrete in it will not even be fully cured for another 500 years.

Butterflies taste with their hind feet.

The hypodermic needle was invented in 1853. It was initially used for giving injections of morphine as a painkiller. Physicians mistakenly believed that morphine would not be addictive if it by-passed the digestive tract.

Water is so scarce in the arid regions of China that, in the grasslands, the people never take baths, and sometimes must wash their faces in yak's milk.

Remember, They Can't Do It Without You!

“Side Jobs” Explained

As members of Local 22, there is a binding, written contract between the electricians and the contractors. Of the many things included in the contract, one is the clause concerning side work. It states *“Members of the local union, except those classified as employers, shall not contract for any electrical work.”*

Why is this? The long and short of it is, the contractors pay a livable wage. The whole idea that you can work 40 hours a week and have the ability to spend quality time with your family and loved ones: going to ball games, fishing, school activities, or even just sitting on the front porch, without having to do side work in order to get by is a real benefit.

When you do a side job you assume a great risk. Have you ever thought about the legal liability of a side job: licensing, bonding, and insurance. If the house or business your working on burns, and 9 out of 10 times the cause is blamed on the electrical, do you think that person is going to assume the loss when his insurance company doesn't pay because they determined the work was done illegally? If your response is yes because they are your friend, or friend of a friend, try again. Business is business.

We should do what we do best, and we should let our contractors do what they do best. Don't leverage your future on a few bucks.

Trade Tricks

“Installing box supports in a double sheetrock wall”

When installing a cut-in-box in double sheetrock, you will find that the box supports or to short to reach inside the box like they are intended to. So to make the box supports work correctly take a flat screwdriver or a small chisel and beat out the back layer of sheetrock on the top and bottom of your hole. Take out as much sheetrock that you can without effecting the front layer. Now you can insert your box supports and they will now be long enough to reach the inside of the box.

“Take the edge off of Nylon Ties”

Have you ever worked in a panel where nylon ties were used to keep the wires neat & tidy? Have you ever cut yourself on the ones that were clipped with dykes or linemans? If you answered yes, then you know how important it is to make your work safe for the next guy. An easy way to get rid of that excess part of the nylon tie and not leave any sharp edges is to use your linemans to twist it off. Put your linemans straight onto the tail (excess part) all the way up to the little square catch. Push slightly and twist the pliers several complete turns. The tail will twist off with ease and all sharp edges will be removed.



Top 2005 Code Changes...By Mike Holt. This section was reorganized with editorial changes to add clarity and uniform interpretation. (Note: Code text has been paraphrased.)

Class 1, Class 2, and Class 3 Remote-Control, Signaling, and Power-Limited Circuits 725.61 Applications of Class 2 and Class 3 Cables

The new sentence identifies the type of nonmetallic raceway containing Class 2 or Class 3 cables that is permitted in "other spaces used for environmental air." (Note: Code text has been paraphrased.)

What the Code says:

Class 2, Class 3, and PLTC cables must comply with the requirements of (A) through (H).

A) Ducts, Plenums and Other Space Used for Environmental Air. Class 2 or Class 3 cables cannot be run in ducts or plenums, even if plenum rated [725.3(B)], but plenum-rated Class 2 or Class 3 cables can be installed above a suspended ceiling or below a raised floor that is used for environmental air. Listed plenum raceways can be installed above a suspended ceiling or below a raised floor used for environmental air [300.22(C)], but only if the cables contained in these raceways are plenum-rated Type CL2P, or CL3P. (Text new to the Code is underlined.)

Behind the change: Nonplenum-rated Class 2 and Class 3 cables within electrical metallic tubing, as permitted by 300.22(C), can be installed above a suspended ceiling or below a raised floor that is used for environmental air.

Class 1, Class 2, and Class 3 Remote-Control, Signaling, and Power-Limited Circuits, Part VI. Listing Requirements 725.82 Listing and Marking of Class 2 and Class 3 Cables

New subsections were added to recognize the use of raceways designed for Class 2 and Class 3 cables. (Note: Code text has been paraphrased.)

What the Code says:

(I) Plenum Signaling Raceways. Listed plenum raceways can be installed in other environmental air spaces in accordance with 725.61(A). (Text new to the Code is underlined.)

Behind the change: Listed plenum signaling raceways must contain plenum-rated Class 2 or Class 3 cables when installed above a suspended ceiling or below a raised floor used for environmental air [725.61(A)].

Article 800 -- Communications Circuits, Part IV. Grounding Methods 800.100 Cable and Primary Protector Grounding

New FPN alerts the Code user that limiting the length of the grounding conductor for the primary protector should reduce voltages that may develop between the building's power and communications systems during a lightning event. (Note: Code text has been paraphrased.)

What the Code says:

(A) Grounding Conductor. The grounding conductor must be:

(4) Length. The grounding conductor must be as short as practicable. In one- and two-family dwellings, the grounding conductor cannot exceed 20 ft.

FPN: Limiting the length of the grounding conductors reduce differences in potential between the building's power and communications systems during lightning events.

Exception: Where it isn't practicable to limit the grounding conductor to 20 ft for one- and two-family dwellings, a separate ground rod not less than 5 ft long [800.100(B)(2)(2)] with fittings suitable for the application [800.100(C)] must be installed. The additional ground rod must be bonded to the power grounding electrode system with a minimum 6 AWG conductor [800.100(D)].

Work Smart. Work Safe

State Licensing Requirements

It can't be stressed enough how important it is for you to get your Journeyman's Electrical license. If you have the time required by the State Electrical Division of Nebraska, send your application in. They in-turn will contact your current and previous employers to verify your on-the-job work history. They are looking for 4-years date to date on-the-job training.

Contrary to popular belief, there is no such thing as a first, second, or third year Journeyman. Once you have passed the exam you are considered a Journeyman Electrician recognized by the Authority having Jurisdiction, in this case the State of Nebraska.

In an effort to end the confusion as to when an apprentice has met the qualifications to take the Nebraska State Electrical Exam, the following are the requirements straight off the State Electrical Board's Website. If you have any questions as to whether you qualify, you can contact the State of Nebraska Electrical Division directly at:

Nebraska State Electrical Division
800 S 13 Street, Ste. 109
PO Box 95066
Lincoln, NE 68509-5066
402-471-3550
Fax: 402-471-4297

<http://www.electrical.state.ne.us>

Journeyman Electrician (JA)

An applicant for a journeyman electrician license shall have at least four years experience, acceptable to the board, in the electrical trade. Registration as an apprentice electrician for those years shall, on the approval of the board, constitute evidence of such experience.

One year work experience credit will be given for completion of a two-year post-high school electrical course with a degree in electrical technology. One year work experience credit will be given for electrical experience gained in military service.

JA Examination Fee / \$60.00

JA License Fee: The fee for a license issued in an even numbered year is \$25.00, and the fee for a license issued in an odd numbered year is \$50.00.

Residential Journeyman Wireman, (RW)

An applicant for a residential journeyman electrician license shall have at least three years' experience, acceptable to the board, in the electrical trade. Registration as an apprentice electrician for those years shall, on the approval of the board, constitute evidence of such experience. The board may by rule or regulation provide for the allowance of one year of experience credit for successful completion of a two-year post-high school electrical course approved by the board. A residential journeyman electrician license shall be valid only for residential installations.

RW Examination Fee / \$60.00

THE MIDWEST WIREMAN
8946 L STREET
OMAHA, NE 68127
(402)331-8147

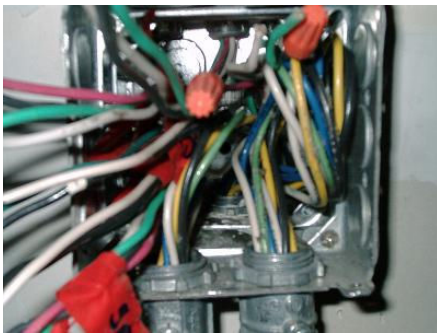
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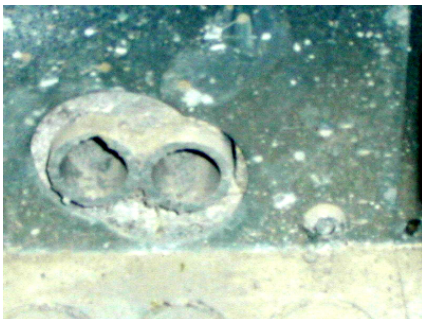
Remember, They Can't Do It Without You!

110.12Mechanical Execution of Work



These photos were recent additions to our archives of poor workmanship.

Box fill anyone?



Nothing like a good mechanical connection. This is one of many j-boxes installed on an area project.