

Spring 2012

Continuing Education Courses

Presented by:

*The Electrical Association of
Philadelphia*

****New Jersey licensees, you *MUST* have your 34 hours of continuing education completed by *MARCH*, 2012. This includes 10 hours of Mandatory 2011 Code Changes Only Seminar.**

***Reminder... The City of Philadelphia requires that you complete 8 CEU's (Continuing Education Units) each year to comply with your licensing requirements.**



Are You Register for 2011 NEC Code Update

- Are you familiar with all of the new NEC rules?
- Do you need CEU's in order to renew your Philadelphia Master Electricians License?

This program features a state-of-the-art PowerPoint presentation that highlights the most significant changes to the 2005 National Electrical Code. Expert commentary is provided by Michal Hofkin, past President of the IAEI Benjamin Franklin Chapter and EAP member. Join us for an informative daylong seminar that will leave you with a strong understanding of what has changed in the NEC.

The material offered in this course includes some of the most misunderstood requirements of the National Electrical Code based on the field experience of certified electrical inspectors. Students will learn how to avoid the pitfalls caused by arc-fault circuit interrupters, low voltage lighting, emergency lighting, and grounding. By attending this seminar all students will be able to participate in group discussions, question and answer sessions. Upon completion of this course, students will be able to utilize the knowledge gained about these misunderstood code articles on the job in order to prevent failing an electrical inspection, and understand the changes for the NEC 2011.

CEUs:	8 hours for Philadelphia, New Jersey and Delaware
Date:	Thursday, January 26, 2012
Schedule:	7:00 a.m. – Registration 7:30 a.m. - 4:00 p.m. Course
Cost:	Member Rate - \$195 Non-Member Rate - \$250 *(include a one year membership for new member only)
Location:	The EAP Offices Plymouth Meeting, PA <i>(Directions with confirmation)</i>
Instructor:	Michal Hofkin

Required Text / Material

- NEC Code Book

About The Instructor

Michal Hofkin has been teaching NEC related material for over 17 years. Known throughout the area as an exceptional public speaker, Mr. Hofkin will not only provide you with the information that you need, but he will deliver it in a lively, upbeat format that will keep you entertained as well. He is the current Director of Training and Certification for Middle Atlantic Inspections, Inc., the Chapter Secretary for the Benjamin Franklin Chapter of the IAEI, a State of New Jersey Certified Instructor, and a professional instructor for many educational and trade-oriented institutions in the Greater Philadelphia Metropolitan Area.

RESIDENTIAL ELECTRIC SYSTEMS

Take this opportunity to become an expert on the residential wiring rules. Save money by not making mistakes when wiring a house or an addition. This course will pay for itself many times over. Learn the new rules, delete the old wives' tales and bust those myths. Come to the class if you want to find out the answers to these questions:

- Is somebody pulling my leg or do I really have to install "weather resistant" receptacles outside?
- When can I finally start using my 2008 NEC?
- Is it really a requirement to GFCI protect every duplex receptacle in the basement?
- Does every receptacle in the house have to be tamper resistant?
- Can I install a GE circuit breaker in an old Murray panel?
- What's the largest size wire ever required to be connected to the ground rod?
- What do you mean I don't have to ground to the PVC water pipe?
- Should I bond a ground wire to the metal gas line or not?
- Do I really need two electric utility meters for a solar photovoltaic system in PECO territory?
- My inspector insists on AFCI protection for the bedroom circuits. The existing bedrooms share the neutral of a multi-wire circuit, the walls are rocked, spackled and painted already. What am I to do?
- Why can't I continue to use the old style "mud flap" type of receptacle cover outdoors?

CEUs:	8 hours for Philadelphia, New Jersey and Delaware
Date:	Friday, February 10, 2012
Schedule:	7:00 a.m. – Registration 7:30 a.m. - 4:00 p.m. Course
Cost:	Member Rate - \$195 Non-Member Rate - \$250 *(include a one year membership for new member only)
Location:	The EAP Offices Plymouth Meeting, PA (Directions with confirmation)
Instructor:	Rich Van Wert



Required Text / Materials

- Bring your own copy of the 2008 or 2011 NEC.

About the Instructor

Rich has been employed in the Electrical Industry for more than 40 years. He was a Senior Electrical Inspector with Middle Department Inspection Agency and has taught full-time electrical courses for Bucks County Technical School, as well as presentations at: US Steel Fairless Works, Penn State University, the IAIE, the Electric Education Center and The Electrical Association of Philadelphia.

Rich Van Wert is President of Benjamin Franklin Chapter of the International Association of Electrical Inspectors (IAIE), Commonwealth of Pennsylvania UCC Inspector, City of Philadelphia Electrical Inspector and State of New Jersey Approved Instructor No. 359.

Electric Vehicle Supply Equipment (EVSE)



- What is it? What is it for? and Who needs it?
- Where is the EVSE required/allowed to be installed.
- What is the difference between Level 1, 2 and 3 chargers??
- Is there really a height limitation when installing a vehicle charger?
- I heard that the electrician must provide a ventilation fan when installing EVSE. Is this true?
- Must I install GFCI protection for the EVSE?
- How do I size the conductors that will supply the EVSE?
- How do I size the over current protection for the EVSE supply conductors?

All attendees will get a good education on what is expected. These systems are not to be installed by amateurs nor homeowners who are not electricians. Make your reservation early because this program will sell out.

Date: Friday, February 10, 2012
Schedule: 11:30 a.m. – 4:00 p.m.
Cost: Member Rate - \$95
Non-Member Rate - \$95
Location: The EAP Offices
Plymouth Meeting, PA
(*Directions with confirmation*)
Instructor: Rich Van Wert

About the Instructor

Rich has been employed in the Electrical Industry for more than 40 years. He was a Senior Electrical Inspector with Middle Department Inspection Agency and has taught full-time electrical courses for Bucks County Technical School, as well as presentations at: US Steel Fairless Works, Penn State University, the IAIE, the Electric Education Center and The Electrical Association of Philadelphia.

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COMMERCIAL ELECTRIC WIRE SYSTEMS



There were many new rule changes in the NEC over the last two Code cycles. Are you on top of all of them? Tune up your Commercial Electric knowledge and keep yourself ahead of the pack by attending this class. Get your questions answered by an expert.

- Do I really need AFCI breakers in a commercial installation?
- Hear there are new GFCI rules. What are they?
- What is the latest on installing non-metallic sheathed cable (Romex) in commercial building? Is it even allowed?
- What are the new marking requirements for home runs and branch circuits?
- Why can't I continue to use black and white MC conductors to tie in my 277V lighting circuits?
- Is BX still used?
- Can you please straighten me out on whether or not I need GFCI protection for every receptacle in a commercial kitchen? What is the definition of a kitchen this Code cycle?
- Am I required to install only circuit breakers with handle ties when sharing a neutral? I thought that was a residential rule only.
- Can you explain the Tap Rule to me and is it true that I cannot use 500 kcmil conductors to feed a 400 A MCB panel on the load side of the transformer?
- I hear a lot about Solar Photovoltaic systems. Can you enlighten me?
- I am on my first commercial job and someone is trying to tell me that if I ground the service to building steel I don't have to drive a ground rod. Is this true?
- You are telling me that I need "nail plates" on metal studs?
- Roof top conductors in conduit have to be extra derated now? Where does it say that in the NEC?
- The Electrical Inspector is insisting that I install a fused disconnect and won't allow a circuit breaker in an enclosure to serve as a disconnect. Is he right?

Learn the rules and save yourself a lot of time and money. Come to this one day seminar on Commercial Electric. Place yourself and your company at the head of the pack. Let someone else make the expensive mistakes. The money you save by learning the rules. It will pay for the course fee many times over.

CEUs:	8 hours for Philadelphia, New Jersey and Delaware
Date:	Friday, March 9, 2012
Schedule:	7:00 a.m. – Registration 7:30 a.m. - 4:00 p.m. Course
Cost:	Member Rate - \$195 Non-Member Rate - \$250 *(include a one year membership for new member only)
Location:	The EAP Offices Plymouth Meeting, PA <i>(Directions with confirmation)</i>
Instructor:	Rich Van Wert

Required Text / Materials

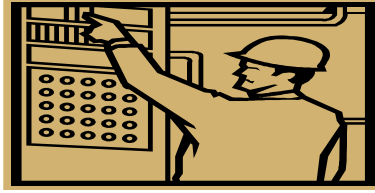
- Bring your own copy of the 2008 or 2011 NEC.

About the Instructor

Rich has been employed in the Electrical Industry for more than 40 years. He was a Senior Electrical Inspector with Middle Department Inspection Agency and has taught full-time electrical courses for Bucks County Technical School, as well as presentations at: US Steel Fairless Works, Penn State University, the IAEI, the Electric Education Center and The Electrical Association of Philadelphia.

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HVAC INSTALLATION & NEC RULES



NEC Electric Rules and the HVAC Contractor

Is it okay to put a 14/2 non-metallic sheathed cable (Romex) on a 25 A OCPD (circuit breaker/fuse)?
Can I install non-metallic sheathed cable in liquidtight conduit going from the disconnect switch to the outdoor unit of a split system?
How do I size the branch circuit for the oil burner?
Is an emergency shutoff switch required for both oil and gas burners?
Is it true that the black pipe gas line has to be bonded to the grounding electrode system?
What is a grounding electrode system and what does "bonded" mean?
What are the rules for placement of the HVAC disconnect switches for rooftop units vs. grade-access residential units.
Is the installer required to provide a luminaire for service personnel at the rooftop unit location or just at indoor locations?
Can I install a GE circuit breaker in a Crouse Hinds panel?
Is it okay to run the Class 2 T-wire in the same liquidtight raceway as the Class 1 THWN conductors?
Is it NEC Code-compliant to direct wire the condensate pump into the fuse block of the indoor unit?
Is the HVAC unit considered a "continuous load". If yes, just what does that mean to the installer?
When is it required that a disconnect switch be installed right at the HVAC unit and when is it not?
The supply house will usually ask me if I want a two pole thermostat or a single pole thermostat for the same 240 volt heating unit. I always take the single pole because it is less expensive. As the installer, am I doing the right thing?
What is "derating" all about?

If you need to know the answers to any of these questions be sure to sign up and sign up early for this invitation-only HVAC Installers' one day training program. Space is limited. Be sure to bring a copy of the 2008 or 2011 NEC with you.

CEUs: 8 hours for Philadelphia, New Jersey and Delaware
Date: Tuesday, April 24, 2012
Schedule: 7:00 a.m. – Registration
7:30 a.m. - 4:00 p.m. Course
Cost: Member Rate - \$195
Non-Member Rate - \$250 *(include a one year membership for new member only)
Location: The EAP Offices
Plymouth Meeting, PA
(Directions with confirmation)
Instructor: Rich Van Wert

Required Text / Materials

– Bring your own copy of the 2008 or 2011 NEC.

About the Instructor

Rich has been employed in the Electrical Industry for more than 40 years. He was a Senior Electrical Inspector with Middle Department Inspection Agency and has taught full-time electrical courses for Bucks County Technical School, as well as presentations at: US Steel Fairless Works, Penn State University, the IAEL, the Electric Education Center and The Electrical Association of Philadelphia.

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The Electrical Association of Philadelphia
Spring 2012 Educational Opportunities

Registration Form

On - Line Registration is available – www.eap.org

Name(s): _____

Company: _____

Address: _____

City, State, Zip: _____

Phone: _____ Fax: _____ Email: _____



Please check the seminar(s) you wish to attend:

<u>Seminar</u>	<u>DATE</u>	<u>EAP MEMBER FEE</u>	<u>NON-MEMBER FEE</u>
<input type="checkbox"/> 2011 NEC Code Update	January 26	\$195	\$250
<input type="checkbox"/> Residential Electric	February 10	\$195	\$250
<input type="checkbox"/> Electric Vehicle Supply Equipment	March 2	\$95	\$95
<input type="checkbox"/> Commercial Electric	March 9	\$195	\$250
<input type="checkbox"/> HVAC Installation & NEC Rules	April 24	\$195	\$250

Credit Card # _____ VISA MC A/E DC

Expiration Date: _____ CVV2 Code: _____

Name on Card: _____ Signature: _____

- Full course descriptions and on-line registration/payment may be found at www.eap.org.
- Make checks payable to: The Electrical Association of Philadelphia or "EAP". **Payment is required at time of registration to reserve your spot.**
- All courses are held at The EAP Offices. Directions will be sent with confirmations.

Please return this form and payment to **The Electrical Association of Philadelphia**

527 Plymouth Road, Suite 408
Plymouth Meeting, PA 19462
Fax – (610) 825-1603
If you have any questions please call Lisa
(610) 825-1600, ext. 14, or email lisa@eap.org



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