

The *Electrical* CONTACTOR

THE OFFICIAL PUBLICATION OF THE FLORIDA ASSOCIATION
OF ELECTRICAL CONTRACTORS

Volume 2 Number 2
SUMMER 2006



Page 8

GROUNDING VS. BONDING

Why You Need to Know the Difference



• *Spotlight on Tri-City Electrical Contractors*

PLUS:

• *FAEC Summer Class Schedule*

• *Tallahassee Legislative Report*

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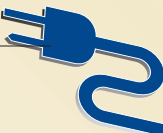
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The spring conference, held back in March at the Hard Rock Hotel & Casino in Tampa, was a terrific event!

Attendance was good, the educational programs were great, and everyone had a wonderful time at the social events. The food was second to none and attendees are still talking about how great the educational classes were. I'm pleased to announce we had a real "winner" and we're sorry if you missed it.

Back in April the DBPR sent out a letter to all license holders advising that unless you have 14 hours of CE hours, your license will NOT be renewed and you may even be fined! Remember, CE hours are specific—you can go online to the DBPR website to see exactly what credits you need and how many you already have.

To help members obtain all their CE prior to August 31st, FAEC has planned a series of educational programs beginning in June. (See class schedule on page 5.) Make note that we will be offering several technical courses to help meet the 7 CE requirements in that area. Worker's Comp and Safety are 2 additional mandatory CE's, there is a mandatory 2 CE for Alarm Dispatch Reduction, and 1 mandatory CE for Code Update that we will not be offering. However, you can take it for FREE online. Any of the Business classes will make up for the remainder of the credit hours.

The FAEC Annual Convention is being held at beautiful Hawk's Cay Resort on Duck Key which is about 20 minutes south of Marathon, FL. We have a great room rate and will have a very

impressive line-up of educational programs. Due to the many industry issues "floating" around, we will be hosting a CEO Roundtable Discussion with Dan Petro as our Moderator. Journeyman Licensing is an issue on the table as our ECLB is looking at language to introduce in the 2007 Legislative Session. Labor is always a problem and not getting any easier to find! This will be another issue addressed in October.

You've all been receiving our Legislative Alerts through the session—a major benefit of membership in FAEC—and many bills were successful this year. We were able to reduce the Statute of Repose from 15 years (the highest in the nation) to 10 years. It is a starting point to reach our ultimate goal of 5 years. Jessica Lundsford language passed which would help clean-up the problems from the original bill's passage, tort reform passed, along with other industry issues. Please be sure to read Rick's report included in this publication.

I look forward to seeing many of you this summer at our educational classes and even more of you in October at the Convention. Call me if you have any questions or need anything from our office. I urge you all to speak to a contractor who is not a current member of FAEC (membership application included herein) and get them to join.

The more contractors FAEC has as members the more strength our industry has. This year's legislative success is a testament to that!

FAEC BENEFITS OF MEMBERSHIP INCLUDE:

- A Voice in the Legislative Process through a full-time lobbyist in Tallahassee.
- An Annual "Spring Conference" & "Fall Convention" offering Continuing Education classes relative to license renewal.
- The official publication of FAEC — The "Contractor" bringing you up-to-date on association information and industry news.
- A Group Major Medical Insurance Program.
- A General Liability Insurance Program.
- An Annual Membership Directory.
- "Legislative Alerts" distributed throughout the session to keep you abreast of industry concerns.
- The opportunity to interact with fellow contractors to share industry concerns and discuss industry issues.

**Your Invitation To
Membership in FAEC!**

Join With An Elite Group...

IN *MEMORIAM*

ROBERSON, JOHN W. "ROBBY"

Age 74, MSGT, USMC, Retired, of Orlando passed away March 19, 2006. He was born on February 8, 1932 in Washington, NC. He joined the Armed Forces in 1949 and served in the Vietnam War. He served in the US Marine Presidential Squadron in Quantico, VA, and after 21 years retired in August 1971. Member VFW Post #4287. He moved to Orlando where he was with the Orange County Building Dept until 1994. He retired as Chief Electrical Inspector of Orange County. He enjoyed camping and fishing and the Florida outdoors. Survived by wife of 48 years, Joyce; son, John Roberson Jr., and daughter, Kimberlee Schoening and husband, Todd; four grandchildren, Justin, Ryan, Evan and Grace; sister, Mabel LeBlanc (John); brothers, Carl (Bernice) and Donald (Helen). Burial at FL National Cemetery at a later date with full military honors. *Published in the Orlando Sentinel on 3/21/2006*



FAEC STATE PROPOSED CLASS SCHEDULE

SUMMER 2006 (All classes held at Ivanhoe Plaza)

DATE	CLASS	HRS.	INSTRUCTOR
6/21	ECLB#0007387 NEC Code Review	4T	Freiner - 8:00-12:00
	LUNCH		12:00-1:00 PM
	ECLB#000632 Changes & Updates to Worker's Comp	1W	Reed (with lunch)
	ECLB #0006786 Workplace Safety	1S	Reed - 1:00-2:00 PM
	ECLB#0007388 Exit Planning Process – How to Run Your Business so you can Leave it in Style	2T	Cummins - 2:00-4:00 PM
6/22	ECLB #0007390 Project Planning & Scheduling (tentative)	2B	Cornelius - 9:00-11:00 AM
	ECLB #0007621 Solid State Lighting	1T	Weiss - 11:00-12:00
	ECLB #000632 "Worker's Compensation Update"	1W	Reed - 12:00-1:00 PM
	ECLB#0007623 Sustainable Lighting	1T	Weiss - 1:00-2:00 PM
	ECLB#0007471 7 Come 11 – Improve Your Odds thru Better Contracting & Project Documentation	3B	Moorhead - 2:00-5:00 PM
7/19	ECLB #0007470 "Arc Flash"	2T	Territo - 9:00-11:00 AM
	ECLB #000786 "Workplace Safety"	1S	Watson - 11:00-12:00
	ECLB #000632 "Worker's Compensation Update"	1W	Watson - 12:00-1:00 PM
	ECLB #0007387 NEC Code Review	4T	Deberry - 1:00-5:00 PM
7/20	ECLB #0007389 "Managing Vendors & Subcontractors"	2B	Campbell - 9:00-11:00 AM
	ECLB #0007624 Lighting & Life Safety	1T	Weiss - 11:00-12:00
	ECLB #000786 Workplace Safety	1S	Watson - 12:00-1:00 PM (with lunch)
	ECLB#0007639 Architectural Lighting Controls	1T	Weiss - 1:00-2:00 PM
	ECLB #0007470 Improving Your Odds thru Better Contracting	3B	Moorhead - 2:00-5:00 PM
8/4	ECLB#0007471 "Improve Your Odds thru Better Contracting & Project Documentation	3B	Moorhead - 9:00-12:00 AM
	LUNCH		12:00-1:00 PM
	ECLB#0007279 "Alarm Dispatch Reduction"	2T	Mike Fletcher - 1:00-3:00 PM
	ECLB #0007621 Solid State Lighting	1T	Weiss - 3:00-4:00 PM
	ECLB #0007623 Sustainable Lighting	1T	Weiss - 4:00-5:00 PM

DENYING YOUR RIGHT TO WORK AS A LICENSED CONTRACTOR

By Bob Neely, Executive Director, Alarm Association of Florida, Inc.

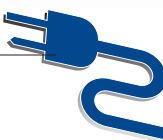
A dangerous trend has arisen within several municipal fire divisions in recent months. As budgets have tightened and as personnel have receded through attrition, incorrect decisions to farm out responsibilities for inspections and service of fire systems have been made.

Whether employing this decision as a business policy or an ordinance it clearly violates Florida law in two defined statutes. F.S. 489.516 (3) and F.S. 489.537 (3) (a) state precisely what a contractor in the Electrical or Alarm trades must provide in order to do business in Florida. No further qualifications under law may be required.

Under this third party scheme you will no longer be able to apply for a permit to install a fire alarm system; something which you may have been doing for twenty years. Overnight by fiat the local fire department now chooses who is allowed to install these systems and who is not from date certain. You no longer qualify to install even though you are properly licensed and insured. Additionally, as third party approved systems, the inspection records, maintenance and service, runner response and all associated documents are now strictly private. They may no longer be seen by the public, because the private parties under this contract keep them sealed.

I state categorically we need better fire systems, inspections, and services. We need standards to raise the bar on protecting our fire personnel, the public, and building occupants. We currently have proven programs to reduce false dispatches wherever possible. We would encourage all Florida Electrical and Alarm contractors to work closely with their local fire inspectors to solve these problems. We would also urge all fire inspectors to ask for assistance from contractors and their trade associations to improve situations as they occur. Statistically proven ordinances can be put into place to produce significant solutions.

When you are denied a permit (and you will be soon) please call your State Representative and Senator and let them know that you are being denied your ability under state license to work in Florida. The law is clear. It is time to shine a brighter light on this situation before our licensing is completely lost.



By Rick Watson

Florida Association Electrical Contractors TALLAHASSEE LEGISLATIVE REPORT

Session adjourned at 12:11am on May 6. This report focuses on recent activity as well as what each bill does and other background information. To see the language of any bill, go to www.myfloridahouse.gov and follow the prompts on the left hand side of the page.

The Regular Session of the Legislature ended in a flurry of activity. This report will give you a quick snapshot of what passed and failed. Once a bill passes both the house and sent, it is sent to the Governor. The Governor has 14 days from the receipt of bills to take action. The bills will be sent to him over the next month. A Final Legislative Report with detailed summaries will be sent in a month.

Identical bills need to be passed in both chambers for a final bill to pass. If similar bills have different language, one chamber will need to agree to the language of the other chamber. If no agreement can be reached, a Conference Committee can be appointed to resolve the differences. This procedure is rarely used except for the Appropriations Bills. If no agreement can be reached between the chambers on identical language, the bills will "die."

Here's a snapshot of how the FAEC issues fared:

PRIORITY BILLS (General Business & Construction Issues)

Jessica Lunsford Glitch Bill (HCJ-3 & SB 2280): In response to the unfortunate rape and death of a child by a sexual predator, the Legislature passed a bill last session which required all contractors on public school property to be fingerprinted and undergo a Class II Security Clearance. The bill has been a logistical nightmare for contractors on school projects. **FAEC** has been active in offering a solution which keeps sexual predators off school grounds in an effective and simpler manner. The House introduced a Proposed Committee Bill which allows contractors, in lieu of submitting fingerprints to submit an "affidavit" certifying that all employees who will be working a school site have had their driver license checked for the new "sexual predator" or sexual offender" designation on drivers licenses. The house bill is preferred. **BOTH JESSICA LUNSFORD GLITCH BILLS DIED.** The Senate passed SB 2280 on May 4th and refused to send it over to the House for action for more than 30 hours. The House passed HB 7117 at 6 PM on May 5th and immediately certified it to the Senate. The Senate refused to take up the house bill. The house bill was the preferred bill. Contractors and the School Superintendent's agreed that no bill was better than the senate bill.

Tort Reform (HB 145 & SB 2006): Top on the business agenda is the repeal of joint & several liability. The current law in Florida requires one defendant with deep pockets to pay more than his pro rata share of

damages. HB 145 passed on March 30th and was signed by the Governor on April 26th.

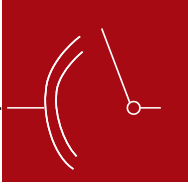
Statute of Repose (HB 1089 & SB 1940): The Statute of Repose is the timeframe in which an action may be brought against a contractor for "latent" or hidden defects in a project. Florida has the longest Statute of Repose at 15 years. **The bills reduce the statute to 10 years. HB 1089 PASSED WITH A REDUCTION IN THE STATUTUE OF REPOSE TO 10 YEARS.**

PRIORITY BILLS (Impacting Electrical Contractors)

Electrical & Alarm (HB 1351 PASSED): The bill makes minor changes in registration requirements and monitoring requirements for alarm contractors. The house bill also exempts "installation of lightning suppression devices" from regulation. The Electrical Contractors Licensing Board had attempted to send a letter to FL building officials announcing the ECLB's intent to regulate such devices. The NEC is silent on this issue and the FL Unified Building Code tracks the National Electrical Code, so is also silent on the issue. The ECLB has abandoned its intention to regulate the installation of lightning suppression devices: The proper venue for establishing regulation of the installation of these devices is through an amendment to the NEC or the FL Unified Bldg Code. This bill was amended to address the problem encountered in Miami-Dade County with fire and building officials refusing to issue permits to electrical contractors and alarm contractors unless they possess the UL certification.

Mold Remediation (HB 161 & SB 1046): These bills will be monitored for electrical contractors to confirm that a licensed electrical contractor operating within his scope of work will not be required to obtain additional licensure. The bills passed the legislature last year and were vetoed by the Governor. The regulation anticipated is not a full-blown regulation like the ECLB, but proof of competency by passing a national certification. The house bill passed its first committee on March 23rd. The bill was amended to include a similar type of registration for home inspectors. The interest in the bill for contractors is the same. No licensed contractor needs to register as a home inspector if he is operating within the scope of his license. **MOLD REMEDIATION BILL DIED.**

Home Inspectors (SB 2670): This bill will be monitored for electrical contractors to confirm that a licensed electrical contractor operating within his scope of work will not be required to obtain additional licensure. There is no house bill at this time and it is expected that the home inspectors language will be amended on the mold remediation bill (SB 161). **HOME INSPECTORS BILL DIED.**



MONITORED BILLS

A number of bills have been filed which impact construction. These bills are listed below with a brief explanation. If the bills begin to move in the process and are changed in a way unfavorable to electrical contracting, the bills may be elevated to a Priority Bill.

Building Code (SB 1774 PASSED): The bill amends the wind load requirements in the Panhandle to conform to the requirements in other parts of the state. Building code issues are always contentious and the bills were monitored for amendments. The bill is a fairly straightforward bill this year with few amendments others than those described above.

Construction Liens (HB 1443 & SB 588): This is glitch bill to add language which was inadvertently left out of last year's bill. The bill adds language which was requested by local government. Lien bills are often amended, so these bills were monitored for adverse changes. **HB 1443 PASSED!** The bill is clean and non controversial.

Chapter 489 (HB 1367 & SB 2472, HB 1447 & SB 1112, HB 1351 & SB 1894): Chapter 489 is the Florida Statute which regulates contractors. Part I regulates building contractors and Part II regulates electrical and alarm contractors. These bills will be monitored to determine if there is any impact on electrical contractors.

HB 1367: The bill raises the owner/exemption aggregate construction cost from \$25,000 to \$75,000. All other limitations on the owner/builder remain. This bill is pushed by a legislator who is trying to address the problem of owners not being able to find contractors to make repairs after the hurricane season. **HB 1367 PASSED.**

Except for the failure of passing a Jessica Lunsford Glitch bill, it was a good year for construction in the legislature. FAEC saw an increase in funding for skilled craft training and no adverse workers compensation legislation. The Statute of Repose was decreased to 10 years and the provisions of the Notice of Defect and Right to Cure was extended to commercial construction. It has been a pleasure representing FAEC and I look forward to seeing everyone soon!

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GROUNDING VERSUS BONDING

Part 1 of 2

By Mike Holt, NEC Expert

Safe installations require an understanding of grounding and bonding terminology.

All Code references are based on the 2005 National Electrical Code.

If someone ran a contest among NEC Articles for which one suffers from the most misapplication, violation, and misinterpretation, Article 250 would easily take first place. The situation is so bad that Article 250 violations are sometimes requirements. For example, many industrial equipment manuals require violating 250.24(A)(5) as a condition of warranty. In particular, they require installing an "isolated grounding electrode." By this, they mean an electrode without a low-impedance fault-current path back to the source winding (other than through the earth itself). This creates a condition where the ground-fault current return path to the source winding (utility transformer) is on the order of several ohms rather than the fraction of an ohm an NEC-compliant installation would provide.

If you apply basic physics and basic electrical theory, you can clearly see Article 250 is right and equipment manuals that require "isolated grounding" are wrong. Other standards agree: IEEE-142 and Soares Book on Grounding use the same physics and electrical theory as Article 250. Also, IEEE-142 describes the correct way to provide isolated ground—and it is not the method many equipment manuals propose.

Article 250 isn't a "preferred design specification" (see Article 90)—it provides the minimum requirements for a safe installation. These requirements include providing paths to divert high voltage to the earth, providing low-impedance fault-current paths for overcurrent protection devices, and removing dangerous potentials between conductive building components and electrical systems.

Coming To Terms With Article 250

To correctly apply Article 250, you must understand how the NEC defines specific terms (See Sidebar).



We'll take that a step further in this Code Basics series, to help you correctly apply Article 250. Where the NEC uses the term "grounding" to mean "connecting to the earth," we add "earthing" in parentheses. Where the NEC uses the term "grounding" to mean "connecting to a conductive body for the purpose of providing a low-impedance path to the source winding," we add the term "bonding" in parentheses. We use a variation of this convention for "ground" and "grounded."

Why so much emphasis on wording? If you understand grounding—versus bonding—related terminology, you can then comply with Article 250 requirements—and produce safe installations.

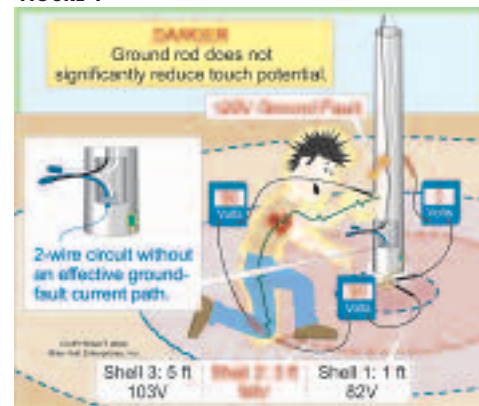
An illuminating example: We can look at an example to illustrate the importance of avoiding a common misapplication of Article 250—grounding (earthing) metal parts, rather than bonding them. This example involves ground rods and touch voltage. For this example to make sense, you need to understand three concepts: touch voltage, hazardous level, and surface voltage gradients.

1. The IEEE defines touch voltage as "the potential (voltage) difference between a bonded metallic structure and a point on the earth 3 ft from the structure."
2. NFPA 70E, Electrical Safety Requirements for Employee Workplaces, cautions that death and/or severe electric shock can occur whenever touch voltage exceeds 30V. So, the hazardous level is 30V.
3. ANSI/IEEE 142, Recommended Practice for Grounding of Industrial and Commercial Power Systems (Green Book) (4.1.1), says the resistance of the soil outward from a ground rod is equal to the sum of the series resistances of the earth shells. The shell nearest the rod has the highest resistance and each successive shell has progressively larger areas and progressively lower resistances—this layering of shells results in surface voltage gradients.

The Table below lists the percentage of total resistance and the touch voltage based on a 120V fault. (See Figure 1.) As the Table shows, the voltage gradient of the earth drops off so rapidly that a person in contact with an energized object can receive a lethal shock one foot away from an energized object if the metal parts aren't bonded to an effective ground-fault current path to remove the voltage by clearing the fault.

Distance from Rod	Resistance	Touch Voltage
1 Ft (Shell 1)	68%	82V
3 Ft (Shells 1 and 2)	75%	90V
5 Ft (Shells 1, 2, and 3)	86%	103V

FIGURE 1



Because the resistance of the earth is so high, very little current will return to the power-supply winding if the earth is the only ground-fault return path. If the metal pole is only grounded (earthed) to a ground rod, then the earth is the sole ground-fault current path—in violation of 250.4(A)(5). Consequently, the circuit overcurrent protection device will not open—and metal parts will remain energized at a lethal level waiting for someone to make contact with them and the earth. Therefore, a ground rod does not lower touch voltage to a safe value for metal parts that aren't bonded to an effective ground-fault current path.

Despite these facts, the accepted grounding (earthing) practice for street lighting and traffic signaling for many parts of the United States is to use the ground rod as the only fault-current



return path. That is, the metal pole of a light fixture or traffic signal is grounded to a ground rod—but an effective ground-fault current path isn't there.

If the people involved in street lighting and traffic signaling in these locations understood the terminology of Article 250, the situation would be very different—and much safer. Sadly, this is only one example of terminology-based misapplication; there are dozens of others.

So, we can see it's important to understand the terminology. But, that means spending some time learning definitions—a task most of us don't relish. The good news is that task is not as onerous as it might seem, if you can remember the concepts of "earthing" and "bonding." In the first case, you are connecting to the earth. In the second, you are connecting to a conductive body for the purpose of providing a low-impedance path to the source winding. Many times when the NEC says "grounding," it's referring to bonding and that's unfortunate and confusing to the Code reader.

As this series progresses, you will see these terms many times. More importantly, you will encounter them in your work—where a solid understanding of grounding- and bonding-related terms will allow you to avoid mistakes such as those in the street lighting example. An old adage says, "Words cannot hurt you." When it comes to grounding and bonding, not understanding certain words can hurt everyone.

FIGURE 2

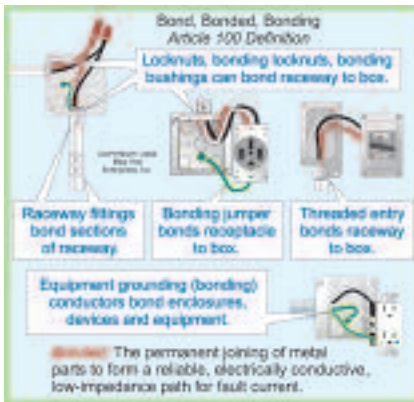


FIGURE 3

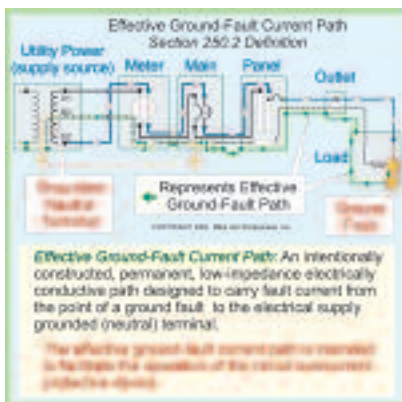
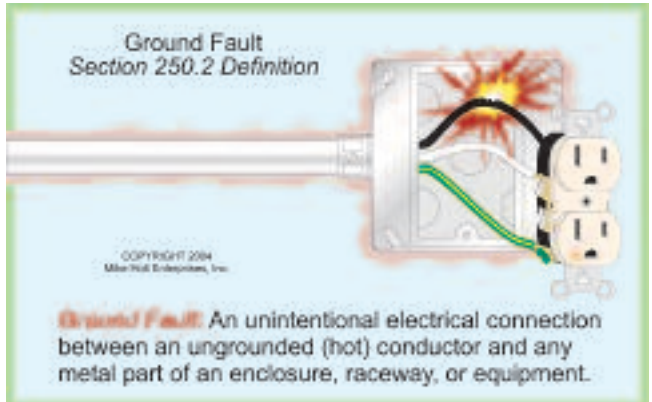


FIGURE 4



Important Terms

Bonding (Bonded). The permanent joining of metallic parts together to form an electrically conductive path. This path must have the capacity to conduct safely any fault current likely to be imposed on it (Figure 2)

Bonding Jumper. A reliable conductor sized per Article 250 to ensure electrical conductivity between metal parts of the electrical installation.

Effective Ground-Fault Current Path. An intentionally constructed, permanent, low-impedance conductive path designed to carry fault current from the point of a ground fault on a wiring system to the electrical supply source winding (Figure 3).

Equipment Grounding (Bonding) Conductor. The low-impedance fault-current path used to connect the noncurrent-carrying metal parts of equipment, raceways, and other enclosures to the grounded (neutral) conductor and equipment grounding (bonding) conductor at service equipment or at the source of a separately derived system.

Ground Fault. An unintentional connection between an ungrounded conductor and earth or metallic parts of enclosures, raceways, or equipment (Figure 4)

Ground-Fault Current Path. An electrically conductive path from a ground fault to the source winding. The NEC uses the phrase "Ground-Fault Current Path," but fault current isn't traveling to the earth—it's traveling to the source winding of the power supply.

Grounded (Earthed). Connected to earth.

Grounding (Earthing) Conductor. A conductor used to connect equipment to a grounding (earthing) electrode.

Grounding (Earthing) Electrode. A device that establishes an electrical connection to the earth.

Grounding (Earthing) Electrode Conductor. The conductor used to connect the grounding (earthing) electrode(s) to the equipment grounding (bonding) conductor, to the grounded (neutral) conductor in accordance with 250.142.

Main Bonding Jumper. A conductor, screw, or strap that bonds the equipment grounding (bonding) conductor (service disconnecting means) to the grounded (neutral) conductor in accordance with 250.24(B). For more details, see 250.24(A)(4), 250.28, and 408.3(C).

Solidly Grounded. The intentional electrical connection of one system terminal to the equipment grounding (bonding) conductor per 250.30(A)(1).

System Bonding Jumper. The conductor, screw or strap that bonds the equipment grounding (bonding) conductor (metal parts of a separately derived system) to one of the system conductors or terminal per 250.30(A)(1).

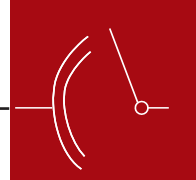
Note: The grounding and bonding requirements contained in this column apply to solidly grounded systems that operate at not more than 600V (such as 120/240V, 120/208V, and 277/480V).



THANKS!

TO EVERYONE FOR A WONDERFUL
FAEC SPRING CONFERENCE!





PRESIDENT'S MESSAGE

By Mike Freiner, Amber Electric

A Special Message To Our Future Leaders

The old folks are tired and ready to step aside and let our up and coming shining stars take the wheel.

FAEC has been instrumental in molding the future of our industry in the State of Florida for many years and must continue to do so. It is essential that this organization continues to move forward. Our founding fathers and long time members are more than willing to serve as mentors to our up and coming industry leaders. Remember there is power in numbers and influence in knowledge and awareness. Look around you.

The most successful companies in town are associated with at least one industry association. They consider membership an asset not a deficit. I encourage you all to look toward your futures. Take care of today but don't forget about tomorrow.

Without vision there probably won't be a tomorrow.

The world is changing and you must stay on top of these changes so your businesses can adjust accordingly. FAEC can provide you with the necessary avenues to stay in touch with our industry. If you don't take the initiative to protect your own well being, I can assure you, no one else will.

There are three types of people in this world:

- People who make things happen,
- People who watch things happen
- And people who wonder what the heck happened!

Which one do you want to be?

Wishing you success always,
- Mike

FAEC/AEC/CF 2006 CALENDAR OF EVENTS

OCTOBER 5 - 7
FAEC State Convention
Hawk's Cay, FL

OCTOBER 14
FAEC/CF Casino Night
Ivanhoe Plaza Hotel
60 S. Ivanhoe Blvd.
Orlando, FL.

Details will be announced at a later date.

Committee Reports

Program Committee - Mike Freiner, Chairman

The Programs Committee had 2 general membership luncheons so far this year. One in February and one in March. The topics covered were The Academy of Construction Technologies, better known as the ACT Program, presented by Jamie Fugate, the Director of FEAT and Union Activity in Florida, presented by Mike Cornelius of Tri-City.

Budget & Finance Committee Mike Freiner, Chairman

The Budget and Finance Committee unveiled the Industry Trustee Sponsorship Program. This program was designed to offer affiliate member a one time annual sponsorship in lieu of individual donations throughout the year. The first mailing went out the second week in March.

Best Practices Committees Dean Byerts, Residential Chairman; Blake Ferguson, Jr., Commercial Chairman

The Best Practices Committees met in late March to set their Goals and Objectives for the 2006 calendar year. We are changing the focus of these committees to be more beneficial to all our members. Further details will be available soon.

Education Committee - Joe Bell, Chairman

If the unthinkable happens on your jobsite, will your employees be prepared? Did you know that CPR and First Aid certifications need to be renewed every two years? A CPR Certification was held April 20 at Mid Florida Tech and a First Aid class is scheduled for June, 2006.

Legislative Committee Ken Cross, Co-Chairman

The Legislative Committee works closely with Rick Watson on issues that affect Electrical Contractors. Their main focus this year has been the Jessica Lunsford Act, concentrating on the importance of a

statewide database that all school districts can use in certifying construction workers for school jobsites.

Membership Committee - Joe Bell, Chairman

The Membership Committee is calling a few potential members each week. They are letting them know the benefits of becoming FAEC members and inviting them as personal guests, to the monthly luncheons.

Community Service Committee Dave Morris, Chairman

Our Community Service Committee reports giving back to the community can be fun! We are proposing using money from the Dunk Tank and Basketball Throw along with selling Raffle Tickets at the BBQ to be donated to the Safe House in Seminole County and a Food Bank to be designated around Thanksgiving. I welcome anyone interested in serving on this committee to please contact me.

FEAT Goes To Tallahassee

Every March, at the beginning of the legislative session, apprenticeship programs from around the state descend on Tallahassee. Even if there are no pending apprenticeship bills, we still need to remind legislators of the benefits that apprenticeship provides.

Rick Watson, FAEC lobbyist, worked closely with the apprenticeship community to develop "talking points" that included:

- On a state-wide basis, 4 out of 5 young adults enter the workforce without a college degree

- A disproportionate amount of post-secondary State education dollars is dedicated to college programs that train a minority of our youth
- During the apprentices' entire training period, they are employed and contributing to Florida's economy
- A large number of our students who fail in the traditional school systems are succeeding and enjoying good paying jobs because of apprenticeship

FEAT's primary function is educating apprentices, but sometimes we need to "educate" legislators, too.

FAEC/CF Program Committee Report

Each month, FAEC holds a luncheon program on a current industry topic. Mike Freiner, Chair of this year's Program Committee is planning a great year of relevant topics for us. February's luncheon was on, "Labor Shortage - ACT Now!"

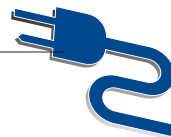
Couldn't make the meeting? Here's what you missed:

- Many of our experienced electricians are "baby-boomers" and they're starting to retire
- The number of workers entering the workforce to replace them is not even 1/2 of those that are leaving
- In 1992, local contractors saw this future problem and started the Academy of Construction Technologies (ACT)

- ACT Preapprentices who enter the FEAT Program typically have double the retention rate of Apprentices who were not in the ACT Program

Every organization depends on contractor support to thrive and to be effective. As you make your decision to join ACT this year, or renew your membership, ask yourself this question, "What am I doing to attract my future workforce?"

The Health Care, IT, Hotel Management and Automotive Industries all have career programs in our public schools. We can sit by and hope new workers will magically appear in the future, or we can be part of the solution. **ACT Now!**





Tri-City ELECTRICAL CONTRACTORS, INC.

"For decades, our company has provided an unmatched level of personal attention, professional experience, timely performance and genuine value that have become Florida's construction industry standard for excellence."

– Jack A. Olmstead, President



Tri-City Electrical Contractors, Inc., the successor company to the original founded in 1958, has been in continuous business for over 45 years. The company's five regional divisions are located in Altamonte Springs, Fort Myers, Jupiter, Ocala and Tampa, with a satellite office located in Sarasota.

Annual revenues for 2005 totaled approximately \$137 million. The company's many landmark projects include Gaylord Palms (Opryland Hotel), Grande Lakes-Orlando Ritz-Carlton, Orange County Convention Center, the Orange County Courthouse and the Rosen Plaza Hotel in Orlando, the Ritz-Carlton Naples, Sarasota-Bradenton Airport, Legends Field in Tampa, and numerous others.

Known for unmatched design/build capabilities, the company routinely delivers substantial cost savings to customers through its engineering expertise, CADD capabilities, and project review. Along with computerized estimating and job cost control procedures, the company maintains strong relationships with the vendor and supplier community. Like no other, Tri-City offers a diversity of experience for Florida's burgeoning growth, with precision-skilled electricians experienced in commercial, institutional, industrial, multi-family projects, and more. Based on sound business management and best practices, Tri-City provides vast bonding capacity and human resources to projects of all sizes.

As President, Jack Olmstead has over 25 years of operations management experience in the electrical construction industry, and served as Senior District Vice President for Tri-City's Tampa and Fort Myers Divisions. His outstanding management experience in commercial, industrial, instrumentation and controls, and institutional projects have added greatly to the company's success. Charles "Chuck" McFarland, Senior Vice President and CFO, has over 30 years experience in

providing construction-related financial and administrative management expertise.

The Service and Communications Division of Tri-City Electrical Contractors, Inc. provides voice, data, video, fiber optics and LAN design, installation and maintenance, delivering certified structured cabling services with leading products, including AMP, Avaya, Krone, Leviton, and Ortronics. With experienced BICSI RCDD's, RCDD/LAN Specialists and BICSI Certified Technicians and Installers, Tri-City customers can be certain that their network cabling systems will operate at peak performance. And, from conventional electrical wiring and service, to special cabling, alarm systems and communications services, our technicians deliver superior performance 24 hours a day, 7 days a week. Our trained, experienced personnel are on-call for your specialized needs such as: wiring computers, data transmission and telecommunications, fire and security systems installation, maintenance, inspection, testing and monitoring, storm and emergency repairs, tenant upgrades, high voltage installations, and preventive maintenance. Our Service and Communications Division always gets the job done!

Whether it's Design/Build, VE, construction, installation or service, learn how Tri-City can turn on the power for you. Tri-City handles initial wiring for projects of all sizes, provides electrical maintenance, systems and service repairs, and has the experience, strength, and staff to deliver superior performance around the clock. Tri-City can handle any project from start to finish, from wire to wire locally and throughout Florida. "To do more than is expected for client, project and community." – that's Tri-City!

Tri-City Electrical Contractors, Inc. is headquartered at 430 West Drive, Altamonte Springs, FL 32714, telephone (407) 788-3500 or (800) 768-2489 toll-free.

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Ask yourself the following questions:

- *Do you have a technical question?*
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- *Want to stay current with the electrical industry via a daily newsletter?*
- *Would you like some graphics or video clips for a PowerPoint presentation?*
- *How about software for electrical calculation?*
- *Any need for online training?*
- *Do you like FREE stuff?*

If you answered yes to any of the above questions, then you must visit www.MikeHolt.com to take advantage of the many technical resources that are available to you for FREE.



"As for me and my house, we will serve the Lord [Joshua 24:15]"

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Florida Association of Electrical Contractors

Application for Membership

COMPLETE AND MAIL TO FAEC • PO BOX 180458 • CASSELBERRY, FL 32718-0458

With your Check for the proper dues amount!

Full year's dues must accompany application. Dues for second year will be prorated on applications received March 1 thru November 1.

I, _____, apply for membership in FAEC...a non-profit organization, devoted to the betterment of the Electrical Contracting Industry in the State of Florida.

Name: _____ Title: _____

Company: _____ Phone (____) _____

Address: _____ Fax: (____) _____

City St. Zip County

<h3 style="text-align: center; margin: 0;">CONTRACTOR</h3> <p style="font-size: small; margin: 0;"><i>(open to all state registered or certified electrical contractors)</i></p> <p>Dues Schedule (Check One):</p> <p><input type="checkbox"/> New Member First Year Only, \$150</p> <p><input type="checkbox"/> State Certified or Registered Electrical Contractor: \$300.00 Per Year</p> <p><input type="checkbox"/> Certified Specialty Contractor: licensed by ECLB \$200.00 Per Year</p> <p><input type="checkbox"/> Key Personnel: Any person (non-master) in the employ of an electrical contractor desiring to support the interests and efforts of the Association whose responsibilities include overseeing construction projects, estimating, purchasing, safety programming, etc. \$50.00 Per Year</p> <p><input type="checkbox"/> Non-Contractor: A master electrician not conducting electrical contracting \$50.00 Per Year</p> <p>Company Contact Name: _____</p> <p>ER or EC Number: _____</p>	<h3 style="text-align: center; margin: 0;">AFFILIATE</h3> <p style="font-size: small; margin: 0;"><i>(open to all manufacturers, distributors, suppliers, and others who wish to maintain close contact with the industry and support the goals of the association)</i></p> <p><input type="checkbox"/> New Member First Year Only, \$150</p> <p><input type="checkbox"/> Dues Schedule: \$300.00 Per Year</p> <p>In 25 words or less describe what your firm sells to electrical contracting firms, or describe your interest in relation to FAEC.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
--	--

I agree to assist, to the best of my ability, the efforts of FAEC to improve our industry and abide by the by-laws and code of ethics.

Signed: _____ Date: _____

Sponsored by: _____
Current FAEC Member

Contractor Applicants ONLY! *Please list 3 electrical material supplier references with whom you've done business with in the last 12 months.*

- | | | |
|----|---------|-------|
| 1) | Company | Phone |
| 2) | | |
| 3) | | |

The ECLB (Electrical Contractors Licensing Board) Will be contacted for pending violations against your license...Please be sure the number you are supplying is absolutely correct!





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& Brown, P.A.**

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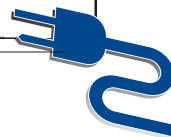
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