



Metro Codes

E—News For Professionals

Metropolitan Government of Nashville and Davidson County

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Cobb Recipient of Prestigious Fowler Award

Codes Director Recognized at Annual ICC Conference in Charlotte, NC



Owners of flood-damaged single family residential properties may be able to receive their flood repair permits online, with no visit to the Codes department required.

[Apply for Single Family Residential Flood Repair Permits](#)

Cobb Recipient of Prestigious Fowler Award

Metro Codes Director Recognized at Annual ICC Conference in Charlotte, NC



Pictured (L to R) – John LaTorra, Chairman of the ICC Awards Committee; Terrence Cobb, Recipient of the 2010 Fowler Award; and Ron Lynn, President of the ICC at the ICC's Awards Luncheon in Charlotte, NC, October 27, 2010

Terrence L. Cobb, Director of the Department of Codes and Building Safety for Nashville and Davidson County, Tenn., was presented the prestigious Bobby J. Fowler Award during the 2010 Annual Conference of the International Code Council in Charlotte, NC. The Fowler Award, which honors the memory of the first chairman of the International Code Council Board of Directors, is given to an individual whose contributions to the building safety and fire prevention industry advance the Council's goals in achieving a safer and sustainable built environment. Particular emphasis is placed on the recipient's focus beyond local or regional concerns to issues and activities that span the globe.

"Bob Fowler was really the driving force that brought us together," Cobb said of the 2003 Code Council consolidation. "I'd like to thank each of you in this industry -- this very special, underappreciated industry. (Former ICC CEO) Bill Tangye once said, 'Protecting the safety of the public in the built environment



"It has been my privilege to serve with Terry during his tenure on the ICC Board of Directors, and to know him as a peer and friend for many years," said ICC Board of Directors President Ron Lynn., Building Official for Clark County, Nevada.

is the highest form of public service.' I believe that - and I know that you believe it, as well."

Cobb, the recipient of several prestigious honors including being named Code Official of the Year by the Tennessee Building Officials Association (TBOA) and the ICC Region XIII Chapter, is a member of the Building Industry of Tennessee Hall of Fame. He is a Past President of TBOA and served on the International Code Council and Southern Building Code Congress International Boards of Directors.

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Cobb, a Certified Building Official, was the first chairman of the International Residential Code Drafting Committee and has served as a Code Development Hearing Moderator. As president of the Home Builders Association of Middle Tennessee, he led a team that set a Guinness world record for the fastest residential home built—five hours, 59 minutes and 59 seconds—that was donated to the Nashville Area Habitat for Humanity. Cobb and his department also host an annual golf tournament for charities that serve children with disabilities.

ICC Holds Final Action Hearings for International Energy Conservation Code



Terry Cobb, Director of the Department of Codes & Building Safety in Nashville, moderated the IECC hearings in October.

The Final Action Hearings for the development of the 2012 edition of the International Energy Conservation Code (IECC) were held in Charlotte, NC, October 27th - 30th in conjunction with the Annual Convention of the International Code Council (ICC).

Terry Cobb, Director of the Department of Codes & Building Safety, attended the conference and served as a Moderator during the IECC Final Action Hearings.

During four days of testimony and debate, some 337 proposed changes to the Energy Code were considered and voted upon by the ICC governmental members in attendance at the hearings. A summary of the actions, including descriptions of modifications, and the full Report of the Public Hearings will be posted in the code development section of the ICC web site at www.iccsafe.org in December, 2010.



Attendees at the ICC conference in October presented their concerns and suggestions on proposed changes to the IECC Code.

For a copy of the Final Action Report, click on the link below:

[Report of Final Action on
Proposed Code Changes](#)

The most noteworthy actions by the ICC assembly included approval a package of code changes proposed by the U.S. Department of Energy to achieve a 30 percent increase in energy savings compared to the 2006 edition of the IECC.

The U.S. Department of Energy announced the milestone decision, as follows: "The world of building energy efficiency has reached a major milestone: a 2012 International Energy Conservation Code (IECC) that will achieve a 30 percent increase in energy savings compared to its 2006 predecessor—capturing a goal pursued for the last several years by the U.S. Department of Energy (DOE) and many collaborating organizations in the energy codes community. Building Code officials from across the nation voted by overwhelming majority to pass a series of energy-saving code changes to the IECC, including DOE's flagship proposals: EC13 for residential buildings and EC147 for commercial buildings, a collaborative effort with the New Buildings Institute (NBI) and the American Institute of Architects (AIA)."

DOE continued; "It is believed that this final package of code changes will achieve the 30 percent goal in both residential and commercial buildings. This decision represents the largest, one-step efficiency increase in the history of the national model energy code."

According to DOE, the most impactful code changes achieved through these and several other DOE-supported proposals (EC 157, EC166, EC173 and others) are shown below.

Residential Changes

- A mandatory air infiltration test in all homes to ensure building envelope efficiency
- A requirement that ducts be tested to a tighter duct leakage standard
- An increase in stringency for insulation and glazing efficiency requirements
- A set of options to solve the problem of "stranding"—and therefore wasting—heated water: keeping pipes "short and skinny," or insulating them to avoid waste

- The elimination of a former duplication of model energy codes between the IECC and the International Residential Code, streamlining the process into a singular, efficient path to residential compliance

Commercial Changes

- Comprehensive revisions to IECC's Chapter 5, including the compliance option to choose between high performance lighting, high performance HVAC equipment, or onsite renewable power generation
- More efficient air leakage requirements by requiring continuous air barriers for the building envelope
- A "commissioning" requirement for HVAC systems
- Increased efficiency of the opaque thermal envelope provisions
- Increased fenestration efficiency
- Mandated automatic daylighting controls for buildings with a window-to-wall ratio over 30%
- A requirement for skylights and daylighting controls for spaces over 10,000 ft² in certain building types
- Added efficiency requirements for cooling towers
- Increased minimum efficiency requirements for certain HVAC equipment
- Increased HVAC piping insulation provisions

The 2012 Edition of the International Energy Conservation Code will be published by the ICC in 2012. The ICC anticipates that the 2012 edition of the IECC will be available in print and electronic format in the Spring of 2011. *Note: approvals are not final until the deadline for appeals to the ICC Board of Directors has passed.*

About ICC

The International Code Council (ICC) is a membership association dedicated to building and life safety, fire prevention, energy conservation and accessibility. ICC develops the codes and standards used to construct residential and commercial buildings, including homes and schools.

The International Codes, or I-Codes, published by ICC, provide minimum safeguards for people at home, at school and in the workplace. The I-Codes are a complete set of comprehensive, coordinated construction codes which benefit public safety and support the industry's need for one set of codes without regional limitations.

Fifty states and the District of Columbia have adopted the I-Codes at the state or local level.

Codes Recognized for Support of Extreme Makeover Project



Brian Sweatt, with his son Kobe, present Codes with a banner and poster signed by the staff and students of the Lighthouse Preschool. Accepting on behalf of the Codes department is Director Terry Cobb, Plans Examination Chief Wade Hill, and Assistant Director Manley Biggers.

The department of Codes & Building Safety took part in the “Extreme Makeover: Home Edition” project in September. Metro Codes provided building and trades inspectors who worked round-the-clock with the construction crew to make the required progress inspections and help keep the project on schedule. The Extreme Makeover crew chose the Lighthouse Preschool after learning about the damage it suffered as a result of the flood in May of this year. Nick-named “The Nashville Build,” in less than a weeks time what was once a pile of debris has been transformed into a set of new, modern classrooms that will help the Lighthouse School continue to serve Middle Tennessee.



Music City Center Update

The latest fact of the week taken from the Music city Center Update:

- We have poured 38,000 cubic yards of concrete to date, and our concrete subcontractor will add a second shift next week.
- The photo on the right is of a rebar column, shot from ground level looking up. Concrete will be poured around the rebar and when the form is removed, a structural column will be in place. Today we have completed 1000 such building columns.



TTL Engineering to Conduct Special Inspections of Music City Center

On May 1, 2007, the Department of Codes and Building Safety began enforcing the provisions of the 2006 International Building Code (IBC). In the past our enforcement of Chapter 17, Structural Tests and Special Inspections, was primarily limited to applying the requirements of this chapter to special or unique construction work and not routine work. That is no longer the case. Now Chapter 17 is being fully enforced as intended.

The provisions of Chapter 17 are now applied to all projects which require the services of Architects and Engineers licensed by the State of Tennessee.

At the time an application for a building permit is made and the stamped A/E plans and specifications are submitted to the department for review, it will be required that the responsible design professional (RDP) shall include with his plan submission their Statement of Special Inspections as required by 1704 and 1705 of the 2006 IBC. In this statement the RDP would identify the special inspections to be done on this particular project and the agencies, individuals or companies that the RDP has selected to make the special inspections and the reports and frequency of reports to be provided by the Special Inspections during construction.

TTL, an Engineering firm specializing in geotechnical, analytical, materials, and environmental services has been selected to perform special inspections on the concrete and steel being used in the construction of the Music City Center. Geo Sciences Design Group was a Nashville based company that merged with TTL in 2007. the company has over 15 years of experience providing engineering services in Nashville.

Daniel D. Terranova, P.E., a vice President with TTL, described the special inspection process his company would be using to evaluate the concrete and steel on this project. "The special inspections are required by the code, but they also provide a means for the client to verify the quality and accuracy of the ma-

terials he's receiving." TTL has conducted over 3,000 tests on the concrete being used on the building project. This represents roughly one-third of the concrete required for the project.

"Our tests insure the concrete meets the requirements for strength and is of the proper consistency as called for on the plans," Terranova said. "For each pour, five concrete cylinders are made and are housed in a special room that keeps the samples at 100% humidity. The samples are then subjected to pressure tests at 3, 7 and 28 day intervals."

According to Mr. Terranova, there have been very few issues as a result of the inspection process. If a sample fails to pass at the 28 day mark, a fifth sample is tested at 56 days. "If that sample fails, we would have to go on-site to obtain another sample to determine the cause and recommend a course of action if necessary."

As part of the inspection process, the Special Inspectors provide reports to the department as specified in the RDP's Statement of Special Inspections and is accepted by the plans examination section. Upon completion of the project, the department requires that the RDP provide a Certificate of Compliance as per Chapter 17.

TTL expects take over 6,000 additional samples as part of their special Inspections of the concrete at the Music City Center. After the concrete work is done, the company will begin its inspections of the steel that will be used on the project.

"We have already begun preparation work for this phase of the project. We have visited the production facility where the steel is being fabricated to evaluate their process and we will continue monitor the production of the steel and will conduct tests of the steel, the welds and fasteners once it arrives and is erected on-site," Terranova said. TTL will continue to have inspectors on-site full time once the steel work begins.



Daniel D. Terranova, P.E., Vice President with TTL, holds a sample that has successfully passed the pressure stress test.



An array of concrete cylinders that are concrete samples awaiting testing. Five cylinders are created for each section of concrete. These are tested over a series of days to verify the concrete's strength and conformity with the design specifications.



Once the samples have been poured, the concrete cylinders are placed in a special room that maintains the samples at 100% humidity.



This machine subjects each sample to a pressure stress test to determine the strength of the sample.

Cranes and Derricks in Construction

The U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) released a historic new standard, addressing the use of cranes and derricks in construction and replacing a decades old standard. The significant number of fatalities associated with the use of cranes and derricks in construction and the considerable technological advances in equipment since the publication of the old rule, issued in 1971, led the Labor Department to undertake this rulemaking.

Frequently Asked Questions

- **When will the rule be effective?** November 8, 2010.
- **Is every requirement of the rule effective at the same time?** No. While most of the requirements in the new rule are effective 90 days after publication in the Federal Register, which occurred on August 9, 2010, there are certain provisions that have delayed effective dates ranging from 1 year to 4 years from the effective date of the rule.
- **Where can I find a copy of the rule?** The rule is available at http://www.osha.gov/FedReg_osha_pdf/FED20100809.pdf or at <http://edocket.access.gpo.gov/2010/pdf/2010-17818.pdf>.
- **How will this rule improve worker safety on construction sites with cranes and derricks?** This new standard will comprehensively address key hazards related to cranes and derricks on construction worksite, including the four main causes of worker death and injury: electrocution, crushed by parts of the equipment, struck-by the equipment/load, and falls. Some of the significant requirements in this new rule include: a pre-erection inspection of tower crane parts; use of synthetic slings in accordance with the manufacturer's instructions during assembly/disassembly work; assessment of ground conditions; qualification or certification of crane operators; procedures for working in the vicinity of power lines. It is anticipated that this final standard will prevent 22 fatalities and 175 non-fatal injuries each year.
- **How is the final rule different from the rule proposed October 9, 2008?** Several provisions have been changed or modified from the proposed rule. These changes include:
 - Employers must comply with local and state operator licensing requirements when they meet the minimum criteria specified § 1926.1427.
 - The clarification that employers must pay for certification or qualification of their currently uncertified or unqualified operators.
 - A clarification that written certification tests may be administered in any language understood by the operator candidate.
 - When employers with employees qualified for power transmission and distribution are working in accordance with § 1910.269, that employer will be considered in compliance with this final rule's requirements for working around power lines.
 - Employers must use a qualified rigger for rigging operations during assembly/disassembly.
 - Employers must perform a pre-erection inspection of tower cranes.
- **When will compliance assistance materials be available to the public?** OSHA has posted a preliminary fact sheet and this FAQ and anticipates having fact sheets and other material available soon. These materials will be posted on this website as they become available.
- **Does the final rule require crane operators to be qualified or certified?** Yes. This final rule requires operators of most types of cranes to be qualified or certified under one of the methods set forth in § 1926.1427. Employers have up to four years to ensure that their operators are qualified or certified, unless they are operating in a state or city that has operator requirements.
- **Does the final rule allow cities or states to have their own licensing or certification program for crane operators?** Yes; however, that city or state's requirements must meet the minimum criteria that is set forth in this rule at § 1926.1427.
- **Does the final rule require riggers to be certified?** No, riggers are not required to be certified. However, riggers must be a qualified person for the performance of specified hoisting activities such as during assembly/disassembly work and those that require employees to be in the fall zone to handle a load. The rigger would be considered qualified through possession of a recognized degree, certificate, or professional standing; or by extensive knowledge, training, and experience, successfully demonstrating the ability to solve/resolve problems related to rigging work and related activities.
- **Does the final rule require signal persons to be certified?** No, signal persons do not have to be certified. However, the employer of a signal person must ensure that the signal person is qualified. This qualification must be done by a qualified evaluator, which may be a third party or an employee of the signal person's employer. The evaluator must demonstrate that he or she can accurately assess whether an individual meets the qualification requirements specified by this final rule for signal persons.
- **How does this new rule affect those states that administer their own OSHA-approved safety and health plan?** State Plans must have job safety and health standards that are "at least as effective as" comparable federal standards. State Plans have the option to promulgate more stringent standards or standards covering hazards not addressed by federal standards.
- **How was this rule developed?** OSHA's Advisory Committee on Construction Safety and Health (ACCSH) established a workgroup to develop recommended changes to the requirements in Subpart N for cranes and derricks. ACCSH then recommended that the Agency use negotiated rulemaking to develop a new rule. The Cranes and Derricks Negotiated Rulemaking Committee (C-DAC) was established and provided a consensus draft document to the Agency. OSHA used this document to develop the proposed rule. After reviewing public comments on that proposed rule and information received during four days of public hearings, OSHA developed this final rule.
- **What interests were represented on the C-DAC committee?** The 23 C-DAC members represented a wide variety of interests. These included crane and derrick manufacturers, suppliers, owners, leasing companies, construction companies that use cranes and derricks, general contractors, labor organizations representing construction employees who operate and work with cranes, electric utilities, the insurance industry and government.

Fire Safety Tips from the Department of Codes & Building Safety

1. Install Smoke Detectors.

Smoke detectors save lives! Working smoke detectors can alert you to a fire in your home in time for you to safely escape, even if you are sleeping. Install smoke detectors on every level of your home, including the basement, and outside each sleeping area. If you sleep with the door closed, install one inside your sleeping area as well.

Test detectors every month, following the manufacturer's directions, and replace batteries at least once per year. Adopt the simple lifesaving habit of changing smoke alarm batteries when changing clocks back to standard time each fall.

Never "borrow" a smoke detector's battery for another use – a disabled detector can't save your life.

- and finally, smoke detectors don't last forever. Replace detectors that are more than 10 years old.

2. Plan Your Escape.

If a fire breaks out in your home, you have to get out fast! Prepare for a fire emergency by sitting down with your family and agreeing on an escape plan. Be sure that everyone knows at least two unobstructed exits – doors & windows – from every room. [If you live in an apartment building, do not include elevators in your escape plan.] Decide on a meeting place outside where everyone will meet after they escape. Have your entire household practice your escape plan twice a year.

3. Keep An Eye On Smokers.

Careless smoking is the leading cause of fire deaths in the U.S. Smoking in bed or when you are drowsy could be deadly. Provide smokers with large, deep non-tip ashtrays and soak butts with water before discarding them. Before going to bed or leaving home after someone has been smoking, check under and around cushions and upholstered furniture for smoldering cigarettes. Another idea is simply not allow smoking inside your home.

4. Cook Carefully.

Never leave cooking unattended. Keep cooking areas clear of combustibles and wear clothes with short, rolled-up or tight fitting sleeves when you cook. Turn pot handles inward on the stove where you can't bump them and children can't grab them. En-

force a "Kid-Free Zone" three feet around your kitchen stove. If grease catches fire in a pan, slide a lid over the pan to smother the flames and turn off the heat. Leave the lid on until cool.

5. Give Space Heaters Space.

Keep portable heaters and space heaters at least three feet from anything that can burn. Keep children and pets away from heaters, and never leave heaters on when you leave home or go to bed.

6. Remember: Matches & Lighters are Tools, Not Toys.

In a child's hand, matches and lighters can be deadly. Store them away and out of reach. Teach your children that matches and lighters are tools, not toys, and should be used only by adults or with adult supervision. Teach children to tell a grown-up if they find matches or lighters.

7. Post Your House Numbers.

To assist fire and emergency personnel in finding your home as quickly as possible, post your house numbers on your house and/or mailbox. The numbers should be posted on a contrasting background and be readily visible and legible from the street – a minimum of 3 inches tall. During a fire or medical emergency, 'minutes' may mean the difference between life and death.

8. Use Electricity Safely.

In an electrical appliance smokes or has an unusual smell, unplug it immediately, then have it serviced before using it again. Replace any electrical cord that is cracked or frayed. Don't overload extension cords or run them under rugs. Never use extension cords as permanent wiring. Don't tamper with your fuse box or use improper-size fuses.

9. Crawl Low Under Smoke.

During a fire, smoke and poisonous gases rise with heat. The air is cleaner near the floor. If you encounter smoke while you are escaping from a fire, use an alternate escape route.

10. Stop, Drop and Roll.

If your clothes catch fire, don't run. Stop where you are, drop to the ground, cover your face with your hands, and roll over and over to smother the flames.

Other Links for helpful information



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Codes & Building Safety**

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PASS IT ON!

Pass the word about our newsletter! We would be honored if you would share our newsletter with your colleagues and co-workers. If anyone would like to sign up to receive it themselves, they just need to send us their email, and we will be happy to "Pass it On" to them.

Terry Cobb and Wade Hill welcome your feedback on our e-newsletter. Please send your comments to [Wade Hill](mailto:wade.hill@nashville.gov), at wade.hill@nashville.gov
Plans Examination Chief , 862-6520

**Codes Hosts
Annual Golf Tournament**

The 14th Annual Metro Codes Char-ity Golf Tournament was held on October 2, 2010 at the Ted Rhodes Golf Course.

This years tournament was the most successful in the events 14 year history. Through the support of 140 sponsors and 128 golfers, \$29,000 is being donated to the Metro Employees Consolidated Charities Campaign (MECCC) for the benefit of Easter Seals Camp program and the Harris-Hillman School.

