February 2008

Metro Codes

E—News For Professionals

Metropolitan Government of Nashville and Davidson County

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Storm Recovery Assistance to Macon County

The Department of Codes & Building Safety, in cooperation with the Tennessee Emergency Management Agency provided a team of volunteers to assist Macon County officials in disaster recovery. Wade Hill, Chief Plans Examiner, along with Byron Hall, Building Inspection Chief, Jeff Castleberry, Property Standards Inspection Chief, and 16 inspectors from the Building and Property Standards divisions joined with other officials and volunteers to conduct damage assessments following the devastating storms on February 5th.

One of the major challenges faced by a community hit by a significant weather event is damage assessment. An accurate and timely assessment of the condition of effected structures is critical not only for insurance and claims adjusters, but also for evaluation of the overall scope of the disaster in order to determine the level of Federal assistance the community will receive. It is also necessary to ensure the safety of the survivors and aid works who are trying to deal with the devastation. Many buildings may appear to be safe, but without a thorough assessment of their damage, a potential hazard could exist that could cause further damage and harm at any time.

Because the damage was spread over a wide area, it was important to provide this community with additional support from experienced codes inspectors to make these crucial damage assessments.

The aftermath of the tornado that touched down in Macon County.

Neighbor Helping Neighbor

Billy Fields, from the Department of Codes and Building Safety was loaned by Metro Emergency Services to Tennessee Emergency Management Agency as the volunteer resources manager for the tornado ravaged Macon County. Billy was in charge of coordinating set up of a warehouse for distributing food, household goods, and clothing for the tornado victims. In the first ten days the volunteers served 1200 people. On Saturday, February 12th, the volunteer efforts had about 1600 people working. Macon County received overwhelming support and donations. Efforts are now concentrated on rebuilding families and community.

Billy Fields, Special Assistant to the Director (far right) discuss plans with other volunteers.

"Neighbors and volunteers all working together to give their support and to help the residents of Macon County concentrate on rebuilding families and community."

ELECTRICAL LICENSE RENEWAL NOTICE

It's that time of the year again to renew you 2008-2009 Metropolitan Davidson County Electrical License.

All Electrical licenses will expire on March 31, 2008. Failure to renew your license will result in a late fee per month if unpaid. Please remember that if your license expired on March 31, 2007, your license will be considered Null and Void effective April 1, 2008.

The Electrical License renewals were mailed on February 15, 2008. Enclosed with the Notice was a Renewal Notice Application which needs to be completed and submitted with your check and/or money order. Please make your check or money order payable to *The Metropolitan Government* and please mail the Renewal Fee to:

Department of Codes & Building Safety
Metro Office Building
800 2nd Avenue South
Third Floor
P. O. Box 196300
Nashville, Tennessee 37219

If you are unsure about the status of your license, please contact Ms. Sharon Stephens in the Administrative Office at (615) 862-6598.

LICHTENBERGER ELECTED BUILDING OFFICIAL PRESIDENT

Linda Lichtenberger, Metro Codes Department Customer Service Supervisor, was recently elected President of the Middle Tennessee Code Officials Association (MTCOA).

"One of my goals as President of MTCOA is to raise the profile of our members by developing a plan to educate our friends and neighbors about what these dedicated public servants do to make our communities safe and help ensure that code departments and building officials have the tools they need to keep getting the job done," she said.

She said building code officials and inspectors are working to improve the safety and security of their communities every day.

Ms. Lichtenberger, who has more than 20 years experience in building department management and codes development, is active in the International Code Council (ICC) focusing her attention on the development of the International Property Maintenance and Zoning Codes.

Ms. Lichtenberger said "Home for a HERO Project" is very near and dear to the hearts of her fellow MTCOA members.

Codes Director and member of the Board of Directors of the International Code Council Terry Cobb swears in the new board of the MTCOA.

"MTCOA is working to raise funds and offer their support to provide a home for Sgt. Kevin Downs, who was seriously wounded while on active duty in Iraq on August 20, 2005, with a fully furnished and completed ADA-compliant home to call his own," she said with a smile. "Currently, a log home package and the land have been donated. However, all other essentials of building a home are still needed."

Project H.E.R.O. stands for *Home Eliminated of Restrictions and Obstacles*, and is a volunteer-based program founded by the International Code Council Foundation and a coalition of caring and patriotic organization to help our disabled American veterans. MTCOA as a member of the ICC has reached out to the Foundation in support of this project.

In 1999 and again in 2004, she was recognized for her service by receiving the Code Official of the Year award. She is also an active member of the Tennessee Building Officials Association. In 2004, Ms. Lichtenberger was recognized for her outstanding service to the Tennessee Building Officials Association by receiving the President's Award.

She is contributing author to Building Department Administration, 3rd Edition, published by the ICC and endorsed by the International Accreditation Service, Inc.

Ms. Lichtenberger grew up in Murfreesboro. After living in Texas for several years, she returned to Middle Tennessee to be with her family. She has one son, Lee Haley of Hermitage.

She attended M.T.S.U. She holds a degree from Southwestern Paralegal Institute as a Certified Legal Assistant and has multiple Building and Code certifications from ICC.

"One of my goals as President is to raise the profile of our members by developing a plan educate our friends and neighbors about what these dedicated public servants do to make our communities safe and help ensure that code departments and building officials have the tools they need to keep getting the job done,"

Smoke Alarm Installations

STATE OF TENNESSEE
DEPARTMENT OF COMMERCE AND INSURANCE
STATE FIRE MARSHAL'S OFFICE
500 James Robertson Parkway, 3rd Floor
Nashville, Tennessee 37243-1162
615-741-2981
FAX: 741-1583

Assistant Commissioner Emmett H. Turner

January 2008

Re: Smoke Alarm Installations

The Tennessee Fire Marshal's Office strongly recommends the installation of smoke alarms in every home to provide early warning of a fire. They should be located in every sleeping room; outside of sleeping areas, such as hallways; and at least one should be on every floor, including basements.

There are two types of smoke alarms available to homeowners: ionization and photoelectric. Ionization alarms are quicker to sense a flaming, fast moving fire. An example is a trash bin with burning paper. Photoelectric alarms are quicker to sense smoldering, smoky fires. An example is a burning cigarette left on a piece of furniture or mattress.

Because both types of detectors perform better for differing conditions, and a homeowner never knows how or when a fire will start, the Tennessee Fire Marshal's Office recommends installing combination smoke alarms that utilize both types of detection.

To remain reliable, smoke alarms must be maintained by regularly changing the battery—even hardwired smoke alarms. This will prevent the battery from being removed when it begins to "chirp", putting the home at risk. The best times to change the batteries are when we "spring forward" and "fall back" for daylight savings. Alarms also need to be cleaned regularly. Follow the manufacturer's directions. Many recommend using the hose attachment of a vacuum cleaner to remove built up dust.

"Technically Speaking"

By

Jim Daly, Chief Inspector - Gas/Mechanical Division

The International Energy Conservation Code regulates the design and construction of buildings for the effective use of energy. This code is intended to provide flexibility to permit the use of innovative approaches and techniques to achieve the effective use of energy. This code is not intended to abridge safety, health or environmental requirements contained in other applicable codes or ordinances.

Article 403.3 of the 2006 International Energy Conservation Code gives requirements for mechanical system piping insulation in residential installations:

> **Mechanical system piping *capable of carrying fluids* above 105° F (41°C) or below 55°F (13°C) shall be insulated to a minimum thermal resistance of R-2.**

The requirements of IECC 403.3 are, all too often, confused with and incorrectly applied as the requirement for insulation of refrigerant piping. Insulation for refrigerant piping in residential installations must comply with Article M1411.5 of the 2006 International Residential Code for One – and Two- Dwellings:

> **Piping and fittings for *refrigerant vapor (suction) lines* shall be insulated with insulation having a thermal resistivity of at least R-4 and having external surface permeance not exceeding 0.05 [2.87ng/(s×m²· Pa] when tested in accordance with ASTM E 96.**

Requirements for heating or cooling system piping in commercial applications is given in Article 503.2.8 Piping insulation:

> **All piping serving as part of a heating or cooling system shall be thermally insulated in accordance with Table 505.2.8**

"The requirements of IECC 403.3 are, all too often, confused with and incorrectly applied as the requirement for insulations of refrigerant piping. Insulation for refrigerant piping in residential installations must comply with Article M1411.5 of the 2006 International Residential Code for One and Two Dwellings:

TABLE 503.2.8
MINIMUM PIPE INSULATION[a]
(thickness in inches)

FLUID	NOMINAL PIPE DIAMETER	
	≤1.5"	> 1.5"
Steam	$1^1/_2$	3
Hot water	1	2
Chilled water, brine or refrigerant	1	$1^1/_2$

For SI: 1 inch = 25.4 mm, British thermal unit per inch/h · ft^2 · °F = W per 25 mm/K · m^2

a. Based on insulation having a conductivity (k) not exceeding 0.27 Btu per inch/h · ft^2 · °F.

Continued on page 6

"Technically Speaking"

By

Jim Daly, Chief Inspector - Gas/Mechanical Division *(continued)*

Continued from page 5

Exceptions:

1. Factory-installed piping within HVAC equipment tested and rated in accordance with a test procedure referenced by this code.

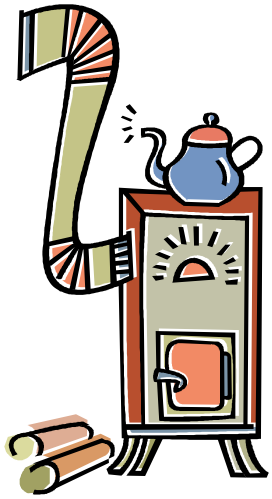
2. Piping that conveys fluids that have a design operating temperature range between 55º F (13ºC) and 105ºF (41ºC).

3. Piping that conveys fluids that not been heated or cooled through the use of fossil fuels or electric power.

4. Runout piping not exceeding 4 feet (1219 mm) in length and 1 inch (25 mm) in diameter between the control valve and the HVAC coil.

The requirements of Table 503.2.8 would apply to commercial and multi-unit residential construction while the requirements of Article M1411.5 would be applicable only to one and two family dwellings.

"Heat losses during mechanical fluid distribution impact building energy use both in energy required to make up for the lost heat and in the additional load that can be placed on the space cooling system if the heat is released to air - conditioned. These losses can be effectively limited by insulating the mechanical system piping that conveys fluids at extreme temperatures." (From the ICC Commentary on the 2006 International Energy Conservation Code).



Employee Highlights

Walter Morgan

Walter Morgan likens his job as a zoning examiner as that of an "air traffic controller."

He said when it comes to his desk, he has to consider all aspects of the request and then begin the process to move it through the system.

"Its our job to get them from point A to point B, helping them to get what they need while answering questions along the way," said the 21 year veteran of the Codes and Building Safety Department.

Morgan enjoys his job because helping people get what they need is important, but he said there are some challenges at times.

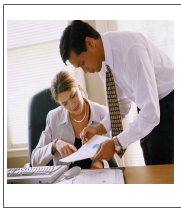
When considering a permit, all aspects of the request has to be considered from the actual land use as described in the Metro Code of Law to various required set-backs to overlays and other potential restrictions as required under the law.

"It is tough because there are many rules and many layers which sometimes have to be considered," he said.

Morgan grew up in East Nashville attending Stratford High School. A 1986 graduate of David Lipscomb University, he and his wife Deanna (they will celebrate their one year anniversary on Feb. 17, 2008) spend as much time as possible doing what they love… camping.

"I guess we average taking a camping trip once every six or seven weeks. Our favorite spot is in the mountains near Townsend. There is something very peaceful about a campfire. It is a great escape from the city," he said with a grin.

A Mason and a Shriner (he is a member of the Jere Baxter Lodge), Morgan and his wife keep busy with community work especially at the Rivergate Church of Christ where he drives a church bus.



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
Plans Examination Chief , 862-6520

For information regarding accessibility, please contact Manley Biggers at (615) 862-6521 or fax (615) 862-6499. He can also be reached at manley.biggers@nashville.gov

Department of Codes & Building Safety

Metro Office Building
800 2nd Ave., South
Nashville, TN 37210
615-862-6590 / Fax 862-6593

Mayor—Karl F. Dean

Director—Terrence Cobb

Office Hours: Mon-Fri / 7:30-4:00