



Metro Codes

E - News for Professionals

Metropolitan Government of Nashville and Davidson County

Significant Changes to the 2006 Code Adoption and Changes

As for significant code changes between the 2000 and 2006 editions, I offer the following:

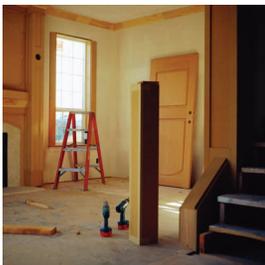
Perhaps the largest group of changes comes with the energy requirements. Chapter 11 of the IRC has been rewritten in its entirety. This was an effort by the Department of Energy at the urging of the National Association of Home Builders and others to simplify an unnecessarily complicated energy code. This was accomplished with the publication of the 2006 edition. For example: nineteen climatic zones used in the previous Model Energy Code were combined into just 6 climatic zones. Thus, there has been a lot of interpolation and rounding to produce a simplified code that is energy neutral. The insulation requirements are increased in some areas and decreased in other areas. For Nashville, TN, the insulation and energy requirements are increased, somewhat.



Since adoption of the 2000 codes, federal regulations (EPA) have pushed up the SEER rating (to 13 SEER) on heating and air conditioning equipment. SEER means Seasonal Energy Efficiency Rating. The new energy code has stepped up some other energy conservation requirements accordingly.

In residential, you will no longer be allowed to use flexible duct where the duct enters the house from a garage. Must be metal duct and there can be no openings on the garage side.

The energy code steps up insulation requirements as well as requirements for better mastics and tapes. The energy code requires increases in insulation thicknesses around ducts, when in the crawl space or attic area - outside of the building envelope and in unconditioned space. HVAC ducts must have a minimum of R-8 insulation (about 3 inches) where ducts are in unconditioned space. The prior code specified an R-6 minimum. The proposed code allows for R-6 insulation if floor trusses are used in the construction. Note: This change actually went into the 2003 edition of the IRC, and is therefore already a code requirement in communities surrounding Nashville (Franklin, Brentwood, Goodlettsville, Spring Hill, Smyrna, Murfreesboro, Hendersonville, Gallatin, Lebanon, Williamson County, Sumner County, etc.



Just as insulation requirements are increased for HVAC ducts, ceiling insulation is also increased. Windows must also be more energy efficient under the 2006 code. Garages in basements below living space will be required to be separated from the house by 5/8th's inch Type X (fire rated) gypsum board. Previously the code allowed the use of 1/2 inch regular (non-fire-rate) gyp board to accomplish adequate fire separation between garage and house.

Bedrooms can no longer have "unvented" fireplaces.

Stair geometry requirements will change, locally, to agree with the International Residential Code requirements. We've held on to some old Southern Building Code practices for far too long. We have dropped our local amendment in favor of the model code requirements with this code adoption. Dropping this local amendment brings our code into conformity and consistency with the rest of the U.S.

Crawl spaces are required to be damp proofed anywhere it is below grade. All below grade space is required to be damp proofed.

Significant Changes to the 2006 Code Adoption and Changes (continued)

(Continued from page 1)

LOCAL AMENDMENTS -

A local amendment adds a requirement for steel-reinforced residential footings. A minimum of two pieces of #4 (1/2 inch) steel reinforcement bar (rebar) is required in lower third of the concrete footing. Metro Health Dept. soil scientist's have recommended this local requirement. Reinforcement steel in residential footings is considered a fairly common construction practice and a good construction practice. Though it exceeds the minimum, model code requirements, it has been estimated that approximately 75% of all residential builders already do this as a standard construction practice. Franklin, TN and Williamson County have such local amendment. Also, an ad hoc committee [reviewing the effects of blasting damage to neighboring residences] comprised of representatives of several Metro departments (Health, Codes, Law, Planning and Fire) recommended this change in the Metro Building code, last year.



Another local amendment is for minimum water pressures. The state - mandated, minimum pressures and the locally provided minimum pressures are inconsistent with the IRC required minimums.

Care has been taken to keep the Metro Code as close as possible to the 'model' code and to propose the fewest local amendments deemed appropriate. This enables builders, architects, engineers, and businesses in other parts of Tennessee or other parts of the U.S. to more easily understand our code requirements.

Most of the local amendments proposed in these ordinances have been in our codes for a long, long time. When they are included in this ordinance, it is to simply effect their continuation - and does not represent a change. Most of the language in the ordinance is to continue current codes and practices. Many are there to clarify the model code requirements. Many are there to make them read consistently with requirements of other Metro Departments or consistently with state law. An example would be for the plumbing code to be consistent with the state health code for septic systems. Another example would be for the residential building code to be consistent with state and local requirements for water pressure.

For Commercial and Multi-family:



SIGNIFICANT CODE CHANGES

Below is a summary of the significant code changes between the currently adopted codes and the proposed 2006 codes. While there are literally hundreds of minor changes, the ones presented below are considered to be the significant ones.

Residential sprinklering - Fire sprinklers are currently required for multi-family buildings which exceed 2 ½ stories in height. The 2006 building code requires all residential (except 1- & 2- family dwelling units and TH's built under the IRC) to be fully sprinklered.

The new fire code requires fire sprinklers to be installed in 'all' group homes.

A-2 (Restaurants with 100 or more occupant load) are required under the new code to be sprinklered or for restaurants with any floor on a level other than the level of exit discharge.

Federal regulations (EPA) pushed up the SEER rating (to 13 SEER) on heating and air equipment. SEER means Seasonal Energy Efficiency Rating. The new energy code has stepped up some other energy conservation requirements accordingly.

Energy code steps up insulation requirements as well as requirements for better mastics and tapes. The energy code requires increases in insulation thicknesses around ducts, when outside of the building envelope. The energy code may also increase U value requirements for windows.

Waterless urinals are allowed by the new plumbing code.

Bedrooms can no longer have "unvented" fireplaces.



Metropolitan Nashville Sets All-Time Building Construction Record

2006 saw Metro's biggest year in permits issued, second largest in residential permits and a whopping 25 percent increase in permits for residential additions and alterations.

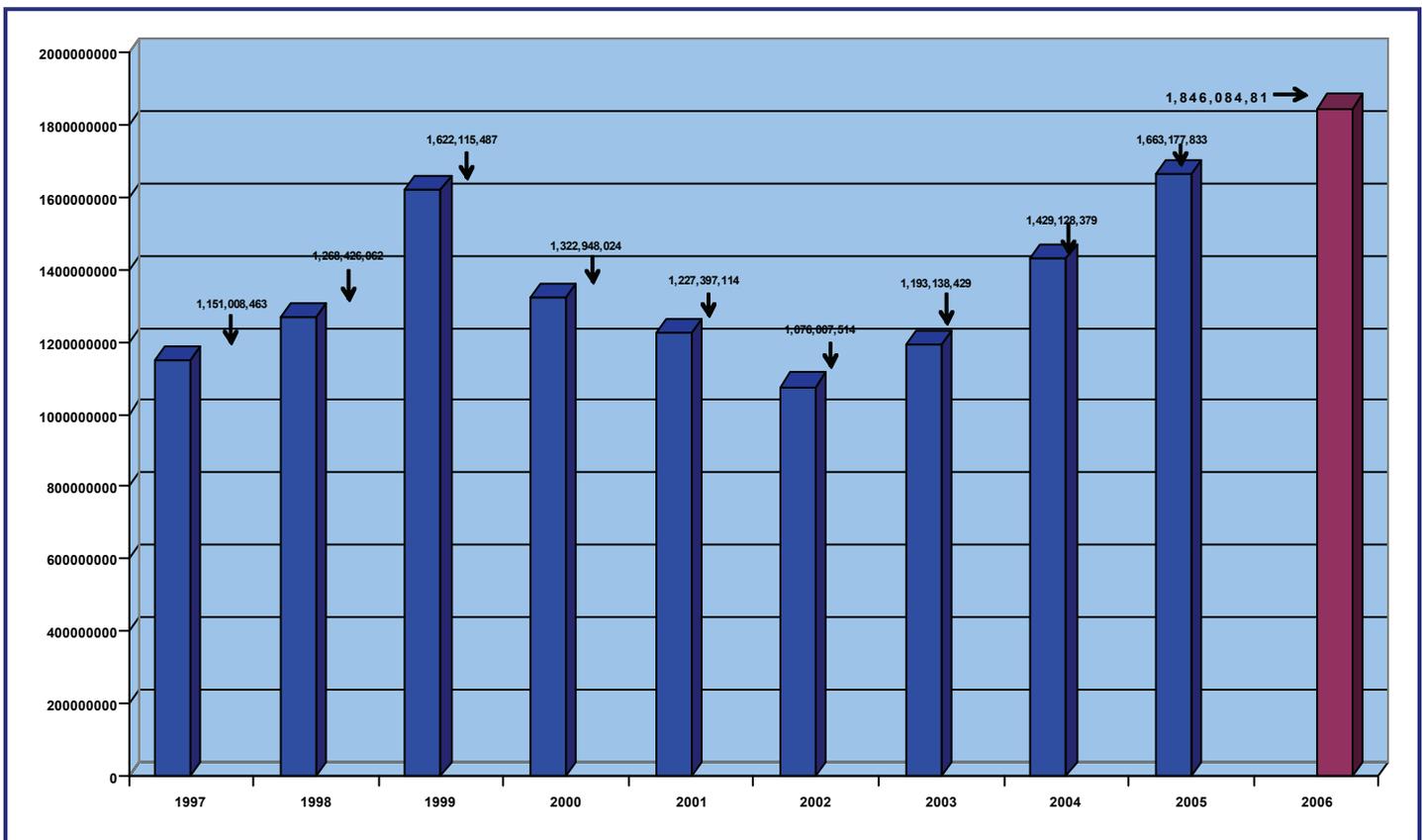
"These numbers show the vitality and strength of Nashville's economy," said Mayor Bill Purcell. "We continue to grow in a healthy way, from the new skyscrapers coming downtown to the residential communities being built across the county, to the home renovations in the city's older neighborhoods."

Nearly \$2 billion in building permits were issued through the Metropolitan Codes Administration during 2006 representing an all-time record for the city, according to Terry Cobb, Director of Codes and Building Safety. In 2006, \$1,846,084,816 was issued in permits, which represents an 11 percent increase over 2005. Cobb said 2005 was, at the time, an all-time record with \$1.663 billion in permits issued. There was a four percent increase in building permits in 2006 with 10,937 compared to 10,507 during 2005.

Codes Administration issued 3,498 single-family residential permits, making 2006 the second strongest year in Metro history. This was down by a mere 144 units, or three percent from the 2005 all time record of 3,642 permits. "In 2006, Nashville outperformed the state and national housing markets and we believe that Nashville will continue to outperform both the state and national housing trends," Cobb said.

He also reported that residential additions and alterations were up in 2006 compared to 2005. In 2006, Codes issued 3,469 permits for additions and alterations valued at \$166.95 million. This represented a 24.29 percent increase in the number of permits and a 38.3 percent increase in the value of the improvements. "More people appear to be purchasing homes and making renovations and alterations than in the past," Cobb said. "This appears to confirm reports from around the nation indicating a continued strong interest in home remodeling as well as 'do it yourself projects' by homeowners."

Below is a chart building permit activity in 2006 compared to the past few years.





On March 30th, Nashville.gov launches a new version of the city's award winning web site. The improved site includes easier navigation, a Google search engine and a cleaner, streamlined home page.

The new web site will make it easier for those who live, work or visit Nashville to get information. Whether you want to learn about Metro Council meetings, building permits, schools, jobs, or tourist attractions, Nashville.gov will guide you.

"Nashville.gov is a key to bringing Metro Government to the citizens of our city and to people around the world," said Mayor Bill Purcell. "The new Nashville.gov will improve access to the city and its programs and show why Nashville is a great city to live, work and raise a family."

For the past five years Nashville.gov has been recognized as one of the top 10 big city internet sites in the nation by the Center for Digital Government in its annual Digital Cities Survey. The award winning Citizen's Guide to the Budget puts information about the city's expenditures and revenues in the hands of citizens for every department. The eBid program has increased revenues for the city with the sales of surplus property.

The new home page will include better organized and more prominent links to the most often visited sites at Nashville.gov. The links will be under the categories Live, Work and Play. The Live category will include links to sites about schools, public safety and health services. The Work category will include links to sites for finding government jobs, building codes, and transportation. The Play category will include links to Metro Parks and entertainment venues.

"This has been a major undertaking by the Information Technology Services Department to revamp the entire Nashville.gov website including all 18,000 web pages on the site," said ITS Director Sandy Cole. "The new site will not only be more accessible to the public, it will also allow ITS to get information on the site more quickly and make changes more easily."

Cole credited the members of the ITS Web Team Matt Adams, Melissa Gann, Robert Rawlins, Michelle Renfro, Ashley Scott, Michael Watson & Mike Kalas for producing a newer, sleeker web site.

One of the major changes on the site, according to Cole, is the new Google search engine which will make it easier for people to find information on the site with a keyword search.

The new site will also have a more prominent calendar for information about Metro events and meetings.



TECHNICALLY SPEAKING

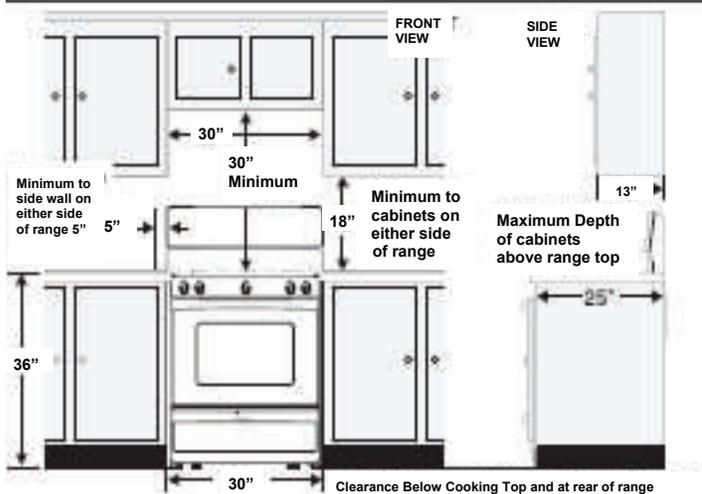
Ranges and Ovens

By Jim Daly
Gas/Mechanical Chief
Gas/Mechanical Division

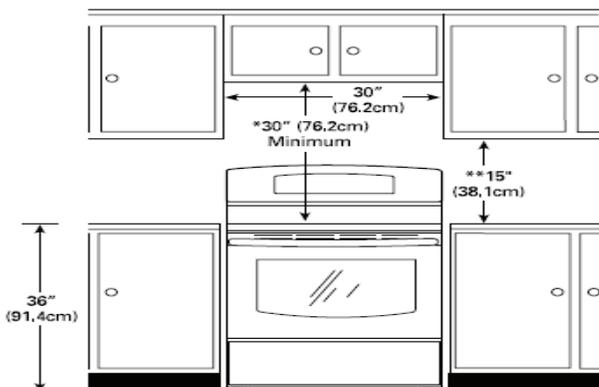
Ranges and Ovens
vertical clearances from combustibles in
residential construction

Freestanding or built in ranges shall have a vertical clearance above the cooking top of not less than 30 inches (762 mm) to unprotected combustible material. Reduced clearances are permitted in accordance with the listing and labeling of the range hoods or appliances.

This requirement is given in section M1901 of the International Residential Code for One-and-Two Family Dwellings and is frequently confused with the requirements of section M1504 which gives requirements for open top broiler units.



IMPORTANT To eliminate the risk of burns or fire by reaching over heated surface units, cabinet storage space located above the surface units should be avoided. If cabinet storage is to be provided, the risk can be reduced by installing a range hood that projects horizontally a minimum of 5 inches beyond the bottom of the cabinets.



SPECIAL INSPECTIONS

Effective May 1, 2007, the Metro Nashville Department of Codes and Building Safety will begin enforcing the provisions of the 2006 International Building, Plumbing, Mechanical/Fuel Gas and Energy Conservation Codes and the 2006 International Residential Code for 1 & 2 Family Dwellings. At this time the Metro Fire Marshal's Office will also begin enforcing the 2006 Fire Codes – NFPA 1 and NFPA 101. We currently enforce the 2002 National Electrical Code.



Architects and structural engineers should be aware that, with the adoption of the 2006 International Building Code, full compliance with all of the provisions of Chapter 17, Structural Tests and Special Inspections, will be required.



Although required by Chapter 17 of the previously adopted 2000 International Building Code we did not, as a routine policy, require the Responsible Design Professional to submit to our office the Statement of Special

Inspections with plan submittal for permit, Special Inspection Reports done during the project's construction or the Certificates of Compliance at the project's completion. For projects designed, permitted and constructed under the provisions of Chapter 17 of the 2006 IBC these Statements, Reports and Certificates will now be required along with continued compliance with all other provisions of this chapter.

Plans submitted for permit and review after May 1, 2007, shall be drawn for compliance with all of the new codes listed above as well as those other codes currently adopted. Exceptions to application of the 2006 codes to projects submitted for permit on or after May 1, 2007, will be allowed if it can be demonstrated that the architectural and engineering drawings for this project were substantially completed on May 1, 2007. In these cases, the use of the previously adopted codes will be allowed. Otherwise compliance with the newly adopted codes will be required.



For further information, call our Plans Review Division at 615-862-6540.

“LEED”

(Adapted from the United States Green Building Council Website)

What is LEED®?

The Leadership in Energy and Environmental Design (LEED) Green Building Rating System™ is the nationally accepted benchmark for the design, construction, and operation of high performance green buildings.

According to the Green Building Council, LEED gives building owners and operators the tools they need to have an immediate and measurable impact on their buildings' performance. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.

LEED provides a roadmap for measuring and documenting success for every building type and phase of a building lifecycle.

Specific LEED programs include:

[New Commercial Construction and Major Renovation projects](#)
[Existing Building Operations and Maintenance](#)
[Commercial Interiors projects](#)
[Core and Shell Development projects](#)
[LEED for Homes](#)
[Neighborhood Development](#)
[Guidelines for Multiple Buildings and On-Campus Building Projects](#)
[LEED for Schools](#)
[LEED for Retail](#)



How is LEED Developed?

The LEED Rating System was created to transform the built environment to sustainability by providing the building industry with consistent, credible standards for what constitutes a green building. The rating system is developed and continuously refined via an open, consensus-based process that has made LEED the green building standard of choice for [Federal agencies and state and local governments](#) nationwide. [Click here](#) for more information on the LEED Development Process.

What is LEED Certification?

The first step to LEED certification is to [Register](#) your project. A project is a viable candidate for LEED certification if it can meet all prerequisites and achieve the minimum number of points to earn the Certified level of LEED project certification. To earn [certification](#), a building project must meet certain prerequisites and performance benchmarks ("credits") within each category. Projects are awarded Certified, Silver, Gold, or Platinum certification depending on the number of credits they achieve. This comprehensive approach is the reason LEED-certified buildings have reduced operating costs, healthier and more productive occupants, and conserve our natural resources.

Who Can Use LEED?

Everyone: Architects, real estate professionals, facility managers, engineers, interior designers, landscape architects, construction managers, lenders, government officials...

The LEED program also includes a full suite of [training workshops](#) and a [Professional Accreditation](#) program to develop and encourage green building expertise across the entire building industry.

The U.S. Green Building Council (USGBC) is the nation's foremost coalition of leaders from every sector of the building industry working to promote buildings that are environmentally responsible, profitable and healthy places to live and work. Our more than 7,500 member organizations and our network of 75 regional chapters are united to advance our mission of transforming the building industry to sustainability.

If you have any questions about the USGBC or LEED, you can contact the USGBC at 202-742-3780 or leedinfo@usgbc.org.

BOARD OF ZONING APPEALS AND PLANNING COMMISSION MOVE MEETINGS

Beginning May 10, 2007, the Board of Zoning Appeals and Metropolitan Planning Commission's regular meetings will be held at Metro Southeast at Genesco Park, 1417 Murfreesboro Road. The commission currently meets at the Howard Office Building, 700 Second Avenue South, which will close in late April for two years of renovation.



Only the location will change, the BZA will still begin at 1:00 p.m. on the 1st and 3rd Thursdays of the month. Metro Planning Commission's meetings will still begin at 4:00 p.m. on the second and fourth Thursdays of the month.



Nashville One of the 100 Best Communities for Young People

To celebrate the launch of its 10th anniversary year, the America's Promise Alliance has announced the **2007 100 Best Communities for Young People**.

America's Promise - The Alliance for Youth announced that Nashville ranks among the 100 Best Communities for Young People.

The winning communities – ranging from small towns to urban neighborhoods across America – are being celebrated for their commitment to provide healthy, safe and caring environments for young people. The 2007 100 Best Communities represent 38 states. They range in size from 810 residents to more than eight million. 42 are urban; 27 are rural; and 31 are suburban.

The 100 Best Communities for Young People competition honors outstanding efforts on behalf of young people by multiple sectors of communities. In cities, suburbs, small towns and counties across the country, this annual competition is leading communities to assess their efforts, work more effectively together for young people, and share best practices.



EMPLOYEE HIGHLIGHTS

Wade Hill, A.I.A., is graduate Of the University of Tennessee School of Architecture 1976; Tennessee Licensed Architect 1979, and Plans Examination Chief since 2001.



Prior to joining the Department Of Codes & Building Safety, Wade operated a small architectural firm emphasizing rehabilitation of existing buildings most notably "Washington Square" on Second Avenue and "Capitol Blvd Building" in downtown Nashville.

Wade serves as "Plans Examination Chief", is a member of the American Institute of Architects, is certified by the International Code Council, Inc. as a Building Code Official (BCO), and has been elected to the National Standards Committee of the SBCCI.

Wade supervises the Plan Review Section of Codes, is a member of the "Rehab Committee", represents the Codes Department during the Building/Fire/Mechanical/Electrical/Plumbing Appeals Board meetings, and is responsible for continuing education for the Codes Department.

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@plans.nashville.gov), 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 and Building Safety



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