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ENGINEERING NEWSLETTER DEPARTMENT OF INSURANCE

NC Department of Insurance

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Building Code Council Meeting

The next NC Building Code Council Meeting will be held Monday, Dec. 12 at 9:00AM at the NC Department of Insurance, 322 Chapanoke Road, Raleigh, NC 27603 in the 1^{st} floor classroom.

The public hearing will begin no earlier than 10:00 AM.

The agenda for the meeting can be found at http://www.ncdoi.com/OSFM/Engineering/BCC/Documents/Agendas/1112.pdf

New Web Interpretations Posted

The following interpretations have been posted since the last Engineering Newsletter edition. You can find interpretations on the Engineering Website located at http://www.ncdoi.com/OSFM/Engineering/CodeServices/engineering codeservices interpretations search3.asp

Energy Code Section 101.4 Applicability of the NC Energy Conservation Code to Projects Permitted Under the NC Rehab Code

Rehab Code Section 1.2 Applicability of the NC Energy Conservation Code to Projects Permitted Under the NC Rehab Code

Note that web interpretations to the 2009 editions of the code that have current 2012 editions available are no longer being prepared. All interpretations posted are now based on the 2012 code editions.

Retirements, Replacements and Relocations in the Engineering Division

Chief Plumbing and Fuel Gas Code Consultant, Henry Webster, and Chief Mechanical and Energy Code Consultant, Janie Sutton, have retired in the last few months. They will be missed, both inside and outside the Division. The positions they left vacant have now been filled.

We are pleased to have Dan Dittman, PE, back at DOI filling the Chief Mechanical and Energy Codes Consultant position. His extension is 237 and his email address is dan.dittman@ncdoi.gov

Bill Moeller, PE, moved from the Private Plan Review Section to the Interpretations Section to become the Chief Plumbing and Fuel Gas Codes Consultant. His extension is 238 and his email address is bill.moeller@ncdoi.gov

Shane Phelps has moved from the Qualifications Board section into Manufactured Buildings. His new extension is 219; however, calls regarding Qualification Board investigations should go to Suzanne Taylor at extension 504 until his position is filled.

New Evaluation Services Documents Posted

The Evaluation Services Section has completed and posted a new Evaluation entitled "Naturally Durable Wood and Other Alternatives to Preservative Treated Wood". This evaluation, along with others previously posted, is located on the OSFM website at http://www.ncdoi.com/OSFM/Engineering/engineering evaluations.asp

In addition, two White Papers have been posted since the last newsletter edition. They are **"Fire Resistance Ratings"** and **"Fireblocking vs. Firestopping"** They are located at http://www.ncdoi.com/OSFM/Engineering/engineering wpt.asp

If you have any code related topics that you feel need more clarification than what is provided by the commentary or even construction issues you encounter that the code does not cover well or at all, please do not hesitate to contact us to get your topic on the list for research and document development. You can email your suggestions to susan.gentry@gmail.gov.

SURVEY

What's Happening in Your Jurisdiction with Spray Foam Insulation and Intumescent Coatings?

NCDOI has received anecdotal feedback from building officials and contractors on field problems with the application of intumescent coatings to spray polyurethane foam insulation (SPFI) when installed as an alternate method and material (AMM) to prescriptive thermal barriers or ignition barriers required by the North Carolina Building Code and the North Carolina Residential Code. In an effort to determine how widespread these problems are and provide better assistance to the building officials with policies on the inspection of these products and for the public on the use of these products, we are requesting that an appropriate person from your jurisdiction answer survey questions on the topic.

We have posted the survey on the web at http://www.ncdoi.com/OSFM/Engineering/Forms/Survey.aspx .

You may type your responses directly in the survey, hit "Submit" at the end, and your information will be submitted to us <u>anonymously</u>. However, if you want us to follow up with you or if you have questions or comments, there will be a place for you to provide your name, contact information, and any additional comments you have.

Thank you in advance for taking the time to respond to our survey.

New AccessUpdate Newsletters Posted

The Engineering Division produces a newsletter that focuses on Accessibility code requirements and other relevant code information. The latest edition of the AccessUpdate newsletter, <u>Volume 2 Issue 5</u> and <u>Volume 2 Issue 6</u> are available now. To subscribe, go to:

www.ncdoi.com/OSFM/Engineering/CodeServices/engineering codeservices interpretation s accessibility.asp

Please note that you will not be signed up for the newsletters until you reply back to the Informational document that is sent to you confirming the subscription. Previous AccessUpdate newsletters can be found on the same webpage to bring you up to date with the earlier editions. If there are any topics you would like to see addressed in the newsletter, please send an email to Laurel.Wright@ncdoi.gov

Web Interpretations Updated for Effective 2012 Codes Posted

Pertinent web interpretations from the Building Code, Fire Prevention Code, Fuel Gas Code, Mechanical Code, and Plumbing Code 2009 editions have been updated to comply with the 2012 editions of those codes. Those codes listed represent all of the 2012 codes that are currently effective.

The 2009 web interpretations for the Administrative Code, Electrical Code, Energy Conservation Code, Rehabilitation Code, and the Residential Code will be updated and posted after the 2012 editions of those codes become effective.

<u>Free</u> 2012 NC Energy Conservation Code Training for Inspectors, Design Professionals, Home Builders, and Contractors

Free inspector training for the 2012 North Carolina Energy Conservation Code (NCECC) is being provided during January through March, 2012. <u>Design Professionals, Home Builders, and Contractors will only be allowed to attend certain designated classes noted in the schedule with an asterisk but will be free of charge.</u> These classes are being conducted by the Building & Fire Code Academy (BFCA) and are funded by a grant provided via the American Recovery & Reinvestment Act.

Registration for the classes is by electronic registration on the BFCA web site at the following web address: http://www.bfcacademy.com/catalog/index.php?cPath=145
The North Carolina Department of Insurance recommends this class for your training.

The training is offered as two days of comprehensive training. The first day addresses residential building energy conservation requirements and the second day addresses commercial building energy conservation requirements. The scope of the energy code includes the building, mechanical, electrical, and plumbing disciplines. Those holding an inspector certificate in any of these disciplines will need this training. The classes are approved for six hours of continuing education credit for inspectors for each day of class. Continuing education credits are being offered to inspectors only.

There are many technical differences between the 2012 NCECC compared to our previous 2009 NCECC. The classes will provide in-depth training on the new code to prepare the attendee to enforce the new code. The effective date for the 2012 NCECC is January 1, 2012 with a mandatory date of March 1, 2012. Code books are anticipated to be available January, 2012. A draft of the 2012 NCECC can be viewed on the DOI web site at the following web address:

http://www.ncdoi.com/OSFM/Engineering/BCC/engineering bcc codes 2012 proposed.asp

The schedule for the training is shown below. Please note that the training locations noted with an asterisk will be open to inspectors <u>and</u> also design professionals, home builders, and contractors. The training locations without an asterisk are only open to inspectors only.



2012 Dates and Cities for the Application of the 2012 NCECC Training

FINAL Schedule as of November 17, 2011

Notes:

- 1. Locations not denoted with an asterisk are open to inspectors only.
- 2. Locations denoted with an asterisk are open to inspectors, design professionals, home builders, and contractors.
- 3. All classes are free of charge.

January 5-6	Williamston
January 9-10	Greenville
January 10-11	Hickory
January 12-13	Monroe
January 17-18	Winston-Salem
January 19-20	Raleigh

Nags Head January 24-25 January 26-27 Elizabeth City Greensboro* February 7-8 February 9-10 Charlotte* Goldsboro February 21-22 February 23-24 New Bern February 28-29 Jacksonville* March 1-2 Wilmington March 6-7 Smithfield March 8-9 Raleigh* March 20-21 Franklin March 22-23 Asheville* March 27-28 Fayetteville* March 29-30 Raleigh

To register, go to <u>www.bfcacademy.com</u>, and click on "Click here to register online for North Carolina classes".

For information, call (847) 884-4969

Free 2012 NC Energy Conservation Code Training Webinars for Inspectors

<u>Free webinars for inspector training</u> for the 2012 North Carolina Energy Conservation Code (NCECC) are being provided during January, February, and March 2012. The webinars are scheduled as follows:

2012 NC Residential Energy Conservation Code provisions and associated Administrative provisions:

January 23, 2012 10:00 am - 12:00 pm January 30, 2012 10:00 am - 12:00 pm February 6, 2012 10:00 am - 12:00 pm

The three classes above, when combined, will provide the equivalent of the complete day of the residential energy conservation code class taught in the classroom setting by BFCA.

These webinars will not provide continuing education credit.

2012 NC Commercial Energy Conservation Code provisions:

February 27, 2012 10:00 am - 12:00 pm

March 5, 2012 10:00 am - 12:00 pm March 12, 2012 10:00 am - 12:00 pm

2012 NC Codes Errata

With the release of the 2012 NC Building Codes, you may discover errors in the documents. If you discover an error, we would like to invite you to share it with our staff as we verify and document these discrepancies. We will then forward them to ICC or post them on our web site dependent upon whether the correction is related to the base document or the NC amendments.

Please submit your corrections to the following contacts:

Carl Martin Building <u>carl.martin@ncdoi.gov</u>

David Conner Residential <u>david.connor@ncdoi.gov</u>

Richard Strickland Fire richard.strickland@ncdoi.gov

Bill Moeller Plumbing & Fuel Gas bill.moeller@ncdoi.gov

Dan Dittman Mechanical & Energy <u>dan.dittman@ncdoi.gov</u>

Ron Chilton Electrical <u>ron.chilton@ncdoi.gov</u>

Mike Page Administrative <u>mike.page@ncdoi.gov</u>

Laurel Wright Accessibility laurel.wright@ncdoi.gov

Current ICC Errata are posted at http://www.iccsafe.org/cs/codes/Pages/errata.aspx

Job Opportunities

Beginning with this edition of the Engineering Newsletter, there will be space dedicated to any available code enforcement positions we are aware of that are still open for applications at the time the Newsletter is posted. Currently, the Newsletter is published about every other month. If you wish to publicize a position that is open for applications in your jurisdiction, please send it to Samantha.Ewens@ncdoi.gov.

Current Job Opportunity

Mechanical Inspector

City of Fayetteville, NC Closes 12/16/11

http://www.ci.fayetteville.nc.us/human_resource_development/employment.aspx

Lessons Learned

This series of articles is intended to offer suggestions about how to avoid complaints similar to those made to the Qualifications Board Staff against NC Building Officials in the past. Although based on actual investigations, the articles will not include names or locations.

Take One Last Look (Volume 3)

This is the last of the "Take one last look series". We have described driving up to the house, walking around it, looking under it, and now are ready to go into it. This is where the owner's complaints usually start. There is dissatisfaction with finishes, hardwoods, cabinets, appliances, etc. All of these are actually issues between the contractor and owner and don't really involve the Building Official.

Other issues that probably were not present at the time of final inspection but have come to the homeowner's attention include water intrusion, mold (always a "killer" - mold), cracks in sheetrock and uneven flooring. These issues are rarely listed as a valid complaint item in an investigation report; however, the causes of these issues are usually code violations.

Easy to spot indoor violations include:

- 1. No dishwasher disconnects.
- 2. Kitchen sink and peninsula counter electrical outlet absent or spacing incorrect.
- 3. Required GFI's and arc fault protection not present.
- 4. Stair treads not uniform and stairway headroom insufficient.
- 5. Guardrails not able to withstand load.
- 6. Glass in hazardous locations not safety/tempered glazing.
- 7. Attic insulation incomplete.
- 8. HVAC duct making wild restrictive turns.
- 9. Electrical wiring not secured.
- 10.Roof framing different from truss layout plan, missing straps, bad rafter connections. If the framing is installed such that it is impossible to tell what is supporting what with a glance, take the time to investigate further.

Again, take one last careful look before signing off on the final inspection. This could prevent an investigation against you and save your inspection department from potential negative media coverage resulting in a loss of trust and respect in the jurisdiction.

This series of articles has listed forty (40) violations found consistently in houses all across the state, over and over again. Most important within these lists are structural integrity, life safety, and the ability of the structure to withstand the elements over time.

Remember – the Code is considered only a MINIMUM to which a structure is built. There is no room to cut corners; there is no room for an "I'll let it go this time" attitude. Protect the public and yourself – take one last look.

North Carolina Mechanical Inspectors Association Announce 2012 NCMIA WORKSHOPS

The Officers and Directors of the North Carolina Mechanical Inspectors Association are pleased to announce that five workshops will be conducted this year. Attendance at any one of these workshops will provide six hours of continuing education credit for the North Carolina Mechanical Code Inspector certificate as required by the North Carolina Code Officials Qualification Board.

The Workshop will address Changes in the 2012 Fuel Gas Code, the mechanical provisions of the 2012 Energy Code, & DOI Interpretations as applied to the 2012 Mechanical & Fuel Gas Codes

A six hour workshop highlighting and explaining these changes will be held at five different locations throughout the State.

Monroe - February 15, 2012

Morganton – March 14, 2012

Wilson – April 25, 2012

Jacksonville - May 16, 2012

Burlington – June 27, 2012

REGISTRATION: 7:30 - 8:00 AM

WORKSHOP: 8:00 AM TO 3:00 PM (ONE HOUR LUNCH BREAK)

New This Year:

The NCMA workshops have been approved by the North Carolina State Board of Examiners of Plumbing, Heating & Fire Sprinkler Contractors for continuing education credit toward license renewal in the amount of six (6) hours.

For a registration application, contact Ms. Jean Williams at 919-661-5880 ext. 260, or visit our Web site at: http://www.ncmia.com

From the Q-Board:

NC Code Officials Qualifications Board Meeting

The NCCOQB held their quarterly meeting on October 25th, 2011. Topics discussed at this meeting included: the cancellation rates of standard classes, non-technical topics available for CE credit, and Energy Code training and testing. A total of 97 Standard Certificates were issued by the Board, and 10 individuals were Pre-Qualified to receive Standard Certificates. The minutes of the October meeting will be posted on the NCDOI.com website after the Board review and approves them at their next meeting.

The next quarterly meeting of the Board will be held at 1:00 pm on January 24th, 2011 in the downstairs classroom at 322 Chapanoke Road, Raleigh.

Contact Information

The Qualifications Board is going on-line! We are currently working on updating our computer database and associated software. When complete, inspectors will be able to apply, renew, and manage their certifications on-line. Because of our improved communication abilities, we can keep you better informed. However, in order to make this new system work, we need to update your contact information.

If you have not already done so, please visit the Qualifications Board home page at http://www.ncdoi.com/OSFM/Engineering/COQB/engineering-coqb-home.asp and click on the green box on the top right of the screen labeled "CEO Email Request". On the next screen, enter one of your certificate numbers (if you have more than one certificate, just choose any one) and enter your email address. Use whatever email address is best for us to use to contact you, whether work or personal. This will also become your user ID on our new web-based system, so each inspector will need a unique address – do not enter one shared by others in your department.

Spending a few minutes now to give us your electronic contact information will ensure that you have a ready-made account when the system goes live, hopefully around the start of 2012. Thanks for your help!

Standard Code Class Cancellations

The standard Code classes, required for certification, are offered at various Community College campuses across North Carolina. Each of these Colleges has a minimum number of students required in order to actually hold a class. Lately, we are seeing more and more classes that get cancelled because not enough students are registered. There are several reasons for this – fewer new inspectors are getting certified because of the economy, more CE classes are available so current inspectors don't need to take the standard classes, and the change to electronic testing means that there are no longer clusters of students looking for classes before a quarterly exam.

Whatever the reasons, the Board and its staff are working hard to get these classes held, and you can help. If you are planning on taking a class, go ahead and register. Do not wait and show up at the door, because at that point the class may already have been cancelled. Also, do not wait until the last minute to register. Remember that Probationary Certificates are only good for two years and cannot be extended or renewed.

Do not wait until the last couple of months before your Probationary Certificate expires before signing up for a class. If you need assistance, feel free to call staff - we can suggest Colleges that have classes consistently.

Energy Code Training and Testing

Beginning March 1^{st} , 2012, the state certification exams in Building, Electrical, Plumbing, and Mechanical trades will incorporate questions on the NC Energy Conservation Code.

In anticipation of this testing change, new on-line modules are currently in development. Beginning in January 2012, when you sign up for a standard Code class, you will be directed to view a portion of these self-study modules on your own time. The materials will be hosted on the DOI network – the address will be provided when it becomes available. There will be 9 separate modules – one overall administrative module along with a residential and commercial module for each trade. The standard course instructors have all received Energy Code training and should be able to help with any questions you have after viewing the materials.

Testing and Training Updates for 2012 Codes

New editions of the Building, Fire, Mechanical, Plumbing, Fuel Gas, Residential, and Energy Codes become mandatory on March 1^{st} , 2012. On that date, the state certification exams will also be updated to reflect the new Code editions.

In anticipation of the testing updates, new course materials incorporating the new Code editions will be made available for all standard Code classes beginning in January 2012. If you know that you will be testing soon, please take note of these effective dates to ensure that you are testing and training on the same Code editions. If you have any questions about the appropriate reference materials to bring to a state exam, please contact staff.

