

June 2013

ENGINEERING NEWSLETTER



NC Department of Insurance

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New Web Interpretations Posted

The following interpretations have been posted since the last Engineering Newsletter edition. The link directly to the interpretations webpage is http://www.ncdoi.com/OSFM/Engineering_and_Codes/Default.aspx?field1=Code_Interpretations&user=Code_Enforcement_Resources

Building Code

422 - Dialysis Treatment Center - Ambulatory Health Care Facility

Energy Conservation Code

501.1 - Commercial Energy Code Compliance Options-ASHRAE 90.1-2010

Special Inspections Checklist and Other Design Tools

The Engineering Division has recently posted a Special Inspections Checklist based on NCBC Chapter 17 requirements. The link to the page where the new document is located is

[http://www.ncdoi.com/OSFM/Engineering_and_Codes/Default.aspx?field1=Code_Enforcement - Design Tools&user=Code Enforcement Resources](http://www.ncdoi.com/OSFM/Engineering_and_Codes/Default.aspx?field1=Code_Enforcement_-_Design_Tools&user=Code_Enforcement_Resources)

On that same page, you will find other design tools that are useful to plan reviewers, inspectors, designers and contractors. Those include:

- Plan Review Checklist
- Plumbing Fixture Count Worksheet
- Building Code Chapter 34 Evaluation Workbook
- Building Code Summary in Word and PDF format

If you have any questions about this new Special Inspections design tool, please contact Bob Speed at bob.speed@ncdoi.gov.

Update to Span Tables for Southern Pine Dimension Lumber

We have been receiving a number of calls asking about the design values for Southern Pine Lumber that were changed recently by the Southern Pine Inspection Bureau and put into effect on June 1, 2013. These values appear to conflict with the existing prescriptive tables in the Residential Code and Building Code which are still enforceable. The Building Code Council is expected to begin consideration of the revised span tables at its September meeting.

We are aware that many engineers and industry component manufacturers have already switched to the new values. In the meantime, either the new values or the tables in the code may be allowed by the code since the new tables are more restrictive.

Please see the following link for revised tables of design values and revised span tables published by the American Wood Council, which reflect changes in design values for southern pine lumber. <http://awc.org/publications/update/designvaluechanges.html>

To provide background to the source of the new tables, the Southern Pine Inspection Bureau, as a result of routine testing, recognized that the design values prescribed by the 2009 I-codes and used in prescriptive span tables in the 2012 NC codes may not reflect the values of the products currently sold. The older values reflected a different mix of old growth timber that is not typical in new growth, farm grown timber.

If you have questions, please contact Andy Miller at andy.miller@ncdoi.gov or Melanie Butler at melanie.butler@ncdoi.gov.

Jurisdiction for Local ABC Board Owned Structures

The Engineering Division's Code Consultants recently received questions concerning who has jurisdiction for permitting and inspection of structures built by local ABC Boards. Local ABC Boards are considered local independent subdivisions of the State. Therefore, their structures should be permitted and inspected by the local AHJ for the jurisdiction where they will be built.

Counterfeit UL Labels on Photovoltaic Panels

Solar installations are "hot" right now and designers, contractors and inspectors should be aware of products that may not be approved by testing agencies as labeled. The Division was recently made aware of a particular brand of photovoltaic panels with counterfeit UL labels affixed to them. More information can be found at http://www.ul.com/global/eng/pages/newsroom/publicnotices/detail/index.jsp?cpath=/global/eng/pages/newsroom/publicnotices/detail/data/ul-warns-of-counterfeit-ul-mark-on-photovoltaic_20130415070000.xml

If you want to be notified about similar issues with counterfeit UL labels, you can subscribe to receive the alerts at <http://www.ul.com/global/eng/pages/offerings/perspectives/regulator/ultimateemail/index.jsp>

HB 88 to Clarify Lien Law Requirements

To address many of the questions that have come up on the new lien law, the General Assembly has just approved HB 88. While the Engineering Division is not the regulatory agency for the Lien law, the following points are provided for informational purposes only.

- In Sections 4, 5, and 6, the bill amends G.S. 87-14(a)(3), G.S. 153A-357(e), and G.S. 160A-417(d) to clarify that it is the owner, and not the applicant, who must live in the single-family dwelling unit being improved for it to be exempt from the requirement of designating a lien agent.
- These sections also add an exemption for improvements consisting of the construction of accessory buildings or accessory structures, e.g., detached garages or utility buildings, for which no lien agent will have to be designated in order to receive a building permit.
- Technical corrections.

The bill can be read here -

<http://ncleg.net/Sessions/2013/Bills/House/PDF/H88v4.pdf>

Questions about the lien requirement in the original law and this new legislation should be directed to your local jurisdiction's attorney or may be addressed on the <http://liensnc.com/> website.

Code Council Amendments Effective June 1

The NC Building Code Council adopted the following items on March 11 and they were approved by the Rules Review Commission on May 16 with a **June 1, 2013 effective date**. Click on the link below, scroll down to the bullet titled “2012-2015 Approved Cumulative Amendments” and look on the referenced pages for the amendments.

http://www.ncdoi.com/OSFM/Engineering_and_Codes/Default.aspx?field1=Codes_-_Current_and_Past&user=State_Building_Codes

2012-2015 Approved Cumulative Amendments

2012 NC Energy Conservation Code, Tables 502.1.2, 502.2(1) & 502.2(2) and Appendix 2.2 (page 12/65)

2012 NC Residential Code, Table R302.1 (page 41/65)

2012 NC Residential Code, Table R403.1 (page 48/65)

2012 NC Residential Code, Section R408.2 (page 52/65)

2012 NCECC, 2012 NCRC, Duct Leakage to the Outside

2012 NC Energy Conservation Code, Chapter 4 (pages 1-9)

2012 NC Residential Code, Chapter 11 (pages 10-18)

There are many other amendments listed in the document with various effective dates. For example, the temporary wall bracing amendment will no longer be effective on October 1, but will be replaced by the new language that will become effective September 1.

Upcoming Building Code Council Meetings

Residential Wall Bracing

The Building Code Council amended permanent rules for the 2012 NC Residential Code, Section R602.10 at their December meeting. These rules are scheduled to go into effect on **September 1, 2013** and may be downloaded at the following link.

http://www.ncdoi.com/OSFM/Engineering_and_Codes/Documents/2012_NCBuilding_Code_amendments/R602.10%20Code%20and%20Commentary%20for%202012%20NC%20Residential%20Code%20-%20final%2003-06-13.pdf

Quarterly Meeting **Note: Day change to Tuesday**

The next NC Building Code Council Public Hearing/Meeting will be held **Tuesday**, June 11 at 9:00AM at the McKimmon Center, 1101 Gorman Street, Raleigh, NC 27603.

For the meeting agendas, click here.

http://www.ncdoi.com/OSFM/Engineering_and_Codes/Default.aspx?field1=BCC_-_Agendas&user=Building_Code_Council&sub=BCC_Meeting

New Energy Conservation Code Resource Webpage

A new "Code Enforcement – Energy Conservation Code Resources" web page has been added to the NCDOT OSFM web site to add new e-learning training resources for the 2012 North Carolina Energy Conservation Code. This page can be accessed from the "NCDOT OSFM Engineering and Codes" home page and the direct link is http://www.ncdot.com/OSFM/Engineering_and_Codes/Default.aspx?field1=Code_Enforcement_-_Energy_Conservation_Code_Resources&user=Code_Enforcement_Resources

This web page is a gateway to much training material of interest to inspectors, home builders, contractors, design professionals, and the general public. The new web page content includes the following bolded sections:

The "**Introduction**" identifies certain assurances our State Governor provided to the United States Department of Energy Secretary with respect to our energy conservation code adoption, training, and enforcement.

The "**2012 NC Energy Conservation Code Compliance Software**" identifies links to free compliance software that is available to be downloaded for demonstrating compliance with the 2012 NCECC. The USDOE has developed versions of the REScheck and COMcheck software that invoke the requirements of the 2012 NCECC once selected in their respective "Code" drop down menu. A NC specific REScheck video is included.

The "**North Carolina Code Officials Qualification Board On-Line Inspector Training Modules for the 2012 North Carolina Energy Conservation Code**" provides links to nine specific inspector certification training e-learning video modules. These modules are also recommended as a resource for designers, contractors, design professionals, and the public as well. These modules are designed for easy navigation and have been professionally prepared for your benefit providing discussion and illustration of energy conservation code requirements.

The "**Videos for 2012 NC Energy Conservation Code Training for Specific Topics**" provides links to several videos that have been prepared addressing specific requirements for the 2012 NCECC. The following training videos explain and illustrate compliance requirement topics for the 2012 NCECC:

[Air Sealing Requirements for Residential Buildings](#)

[Fiber-Glass Insulation Installation for Residential Buildings](#)

[Building Air Leakage Testing for Residential Buildings](#)

[Duct System Air Leakage Testing for Residential Buildings](#)

The "**Additional Resources of Interest**" provides links to supplementary energy conservation code training resources that have been developed by others and are highly recommended. Key contributors include:

Appalachian State University (ASU)/North Carolina Energy Efficiency Alliance (NCEEA) – ASU/NCEEA has prepared free resource materials for the 2012

NCECC including videos, power points presentations, and illustrations of key code provisions. Also available is information regarding the Energy Star Program with web pages specifically designed for home buyers, home builders, lenders, appraisers, real estate professionals, and home energy raters.

US Department of Energy (USDOE) –The USDOE Office of Energy Efficiency and Renewable Energy offers an e-learning catalog containing videos, publications, and resource guides for the IECC, the ASHRAE 90.1 Standard, REScheck software, COMcheck software, and other energy conservation code topics. The offerings from USDOE are extensive. Areas of most interest would be those items specific to the 2009 IECC, ASHRAE 90.1-2007, ASHRAE 90.1-2010, the COMcheck software, and the REScheck software.

North American Insulation Manufacturer's Association (NAIMA) - NAIMA is the trade association for North American manufacturers of fiber glass, rock wool, and slag wool insulation products. NAIMA provides from their web site an offering of videos and pictorial guides and technical resource documents for application and installation of fiber glass, rock wool and slag wool insulation products.

Metal Building Manufacturers Association (MBMA) - The MBMA is the trade association for manufacturers of metal buildings. MBMA promotes the design and construction of metal building systems in the low-rise, non-residential building marketplace. MBMA has contributed to the design community by producing technical publications to assist in the proper design and specification of metal building and roofing systems. Of special interest is the publication "Energy Design Guide for Metal Building Systems" which is available for sale from their web site.

We recommend that you visit this new web page and make use of the resources that have been prepared for you. These resources are available for viewing at a time of your choosing and convenience.

From the Q-Board:

Renewals 2013

The renewals period for Inspection Certifications has begun! In keeping with our new on-line business model, you are now able to log-in and pay renewal fees directly at: <https://apps.ncdoi.net/f?p=114:1:0> Because you have the ability to log in to our on-line system you will be required to print your own renewal bill. **We will no longer be mailing invoices to jurisdictions.**

The renewal fee for each Standard and Limited Certificate is \$10.00. There is a \$4.00 late fee per certificate for payments not received by July 1, 2013. Where the fees are \$24.00 or \$38.00, our records indicate that payment was not received for the previous one or two years. No fees are required for probationary certificates.

PLEASE REMEMBER: To complete the renewal process, six hours of continuing education must be completed for each active limited or standard certificate per renewal year in each technical area. An individual possessing both an active limited and standard certificate valid for the same area will only be required to complete six hours. Certificates without continuing education credits will be suspended until completion of the required training. Courses may be completed up to and including June 30, but you will need to log in as soon as that course is credited and pay renewal fees to avoid a late fee.

The following instructions to help you navigate our on-line system for renewals have been posted in the blue box on this page: [Certification Tools](#)

- How to Print an Invoice and Pay Renewal Fees
- How to Verify CE Credits

If you've tried the instructions and are lost, staff is here to help. Please either send us an email with any questions at QBoard.Support@ncdoi.gov or call us at 919-661-5880 and ask for a QBoard staff member. We have attempted to make the process as intuitive as possible, but if you have problems or suggestions, please feel free to let us know.

New Qualifications Board Staff Members

The Qualifications Board Staff is happy to announce two new additions.

Natalie Pollard will replace Celestine Phil as our new Education Coordinator. Natalie has been with the Department of Insurance since 2003, most recently as an administrator with the Fire Safe Cigarettes and Pyrotechnic Certification Programs. Additionally, Natalie brings a love of teaching and an excitement to work on continued development of our training programs. Natalie can be reached at Natalie.Pollard@ncdoi.gov or at 919-661-5880 ext. 259.

Helen DiPietro will fulfill a new role within the Qualifications Board staff as our technical consultant. Helen has been with the Department of Insurance since 2000, most recently as a Code Consultant with the Evaluation Services Section. Trained as an architect, Helen holds Standard Level III Inspection Certificates in Building, Fire, Mechanical, and Plumbing trades. Helen's background in Codes will be used to help us refine and improve the standard course offerings, provide consistency in review for the continuing education courses, and also provide technical assistance for exam development. Helen can be reached at Helen.DiPietro@ncdoi.gov or at 919-661-5880 ext. 241.

Upcoming Seminars and Workshops

- NCSU is holding a workshop entitled Photovoltaic OnSite Workshop for code Officials on June 13 at the OSFM classroom in Raleigh. The cost is \$20 per person and is approved by the Q-Board for:
 - 2 hours for Building **OR**
 - 8 hours for Electrical **OR**
 - 8 hours for Fire Prevention **OR**
 - 4 hours for Mechanical

Seating is limited. For more information and to register, go to <http://go.ncsu.edu/ahjtraining>

- The Appalachian Energy Center is having a workshop on the 2012 NC Energy Code on June 21 in Boone, NC. It is approved for 7 Building o4 3 Mechanical. For registration information, click here - <http://energy.appstate.edu/workshops/258>
- The NC Mechanical Inspector's Association Continuing Education Seminars will be conducted as follows:

Burlington, NC June 12th

For registration information, go to the January issue of the COCO newsletter at http://www.ncdoi.com/OSFM/Engineering_and_Codes/Documents/Code_Enforcement_Resources/Newsletters/2013%2001~January%202013%20COCO%20NEWSLETTER_.pdf

- The NC Plumbing Inspector's Association has planned its 2013 CEU Workshops.

June 18 5353 N. Virginia Dare Trail Kitty Hawk, NC
October 17 128 E. Front St. Burlington, NC

For registration information go to the January Issue of the COCO Newsletter at http://www.ncdoi.com/OSFM/Engineering_and_Codes/Documents/Code_Enforcement_Resources/Newsletters/2013%2001~January%202013%20COCO%20NEWSLETTER_.pdf

Engineering Division Staff Contacts

The contact information for staff in the Engineering Division is located on the web at http://www.ncdoi.com/OSFM/Engineering_and_Codes.aspx#Directory . You will need to scroll down just below the Engineering Newsletter Links.

There is a brief description of the duties of each staff person to assist you in determining who best to contact.