

INSPECTIONS & ZONING UPDATE

Volume 2 Issue 2

Spring 2007

BUILDING CODE & ZONING NEWS FOR THE DEVELOPMENT COMMUNITY THROUGHOUT CATAWBA COUNTY

NC Building Code Councils enacts Emergency Rule effective April 5, 2007:

At the March 13, 2007 meeting of the NC Building Code Council, Council enacted an emergency rule requiring townhouse construction of 3 or more attached dwellings to utilize noncombustible soffit material. The recent Raleigh



townhouse fires brought this issue to the attention of the Council. Current methods of townhouse construction that are allowed by the NC Residential Code have demonstrated the potential to allow fire to spread along and through roof soffit areas and into attic spaces. In the specific instance of vinyl soffits, the soffit material can melt away and allow an open chase for

flames to rapidly spread into the attic space. Having non-combustible soffit material will reduce the spread of flames into the attic and adjacent units; thereby making the fire easier to control and manage.

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New 2006 NC Building Codes:

The 2006 NC One and Two Family Dwelling Code is scheduled to become effective June 1st 2007 with a 6-month transitional period. As in the past, once the code becomes available we will schedule seminars to review some of the significant changes. We will provide more information as they develop. For a preview of the adopted North Carolina residential code amendments please visit http://www.ncdoi.com/OSFM/Engineering/BCC/engineering_bcc_codes_2006_approved.aspx

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PLUMBING CODE NEWS

Plumbing Code Changes: I would like to share some code interpretations with you related to the 2006 Plumbing Code.

406.3 Waste connection. The waste from an automatic clothes washer shall **connect to a vertical branch drain of not less than 2" in diameter, or a horizontal branch drain of not less than 3" in diameter. The 2" trap in the waste connection may be used as a cleanout for both the 2" and/or the 3" branch.** (Let your building contractor know about this one when designing a home with a washing machine on a upper level.)



712.3.4.1 Sump Alarms:

Sumps that discharge by means of automatic pumping equipment shall be provided with an approved, electrically operated high water indicating alarm. A remote sensor shall activate the alarm when the fluid level exceeds a preset level that is less than the maximum capacity of the sump. The

alarm shall function to provide an **audiovisual signal to occupants within the dwelling.** Electrical power for the alarm shall be supplied through a branch circuit separate from that supplying the pump motor.

ELECTRICAL CODE NEWS

Compact Fluorescent Light Bulbs :

Question:

Is it permissible to use a compact fluorescent bulb in a recessed incandescent luminaries (fixture) to reduce the clearance from the fixture to the nearest point of storage space in a clothes closet:



Answer:

A compact fluorescent bulb installed in a surface mounted incandescent luminaries (fixture) does not make the incandescent luminaries (fixture) a fluorescent luminaries (fixture) , therefore the 12 inch minimum clearance to the storage space for a recessed incandescent luminaries (fixture) shall not be reduced to 6 inches.

Note: Determine clearance requirements based on the type of fixture not the type of bulb used.

CITY OF HICKORY FIRE PREVENTION BUREAU NEWS

Group A2 Sprinkler Requirements:

During the March meeting of the NC Building Code Council Section 903.2.1.2 of the 2006 North Carolina Fire and Building codes were amended to require an automatic sprinkler system be provided for Group A2 occupancies where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet.
2. The fire area has an occupant load of ~~100~~ 300 or more, except 100 for nightclubs.
3. The fire area is located on a floor other than the level of exit discharge.

This petition is subject to approval by the Rules Review Commission during the May 2007 commission meeting.

Group R Sprinkler Requirements:

Section 903.2.7 of the 2006 North Carolina Fire and Building codes required an automatic sprinkler system be provided throughout all buildings with a Group R fire area. The codes did exempt this requirement in Group R-3 and R-4 adult and child day care facilities.

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OSHA CODE NEWS

OSHA Requirements: Everyone that works on commercial projects is familiar with the safety requirements mandated by OSHA.



However, in the residential industry, OSHA has not been as active over the last several years. This fact is about to change as OSHA extends its influence into the residential side of the industry. For this reason, the Catawba County Building Services Department has provided access to an OSHA document explaining the safety requirements as they affect the residential job site.

The document can be found on the County Building Services web site and printed directly to your printer (<http://www.catawbacountync.gov/depts/u&e/OSHAnotice.asp>).

This document is bi-lingual with Spanish on the left hand pages and English on the right. Please understand that these requirements also apply to the building services official as well as the construction workers. If the code official arrives on the job site and finds unsafe situations that would place the code official in violation of the OSHA requirements, they may leave the job site without performing the inspection and advise the contractor that all violations must be corrected before inspections can be rescheduled. This situation could cause delays in the construction process that can be avoided by complying with the OSHA requirements. Please keep your job sites a safe place to work!

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However, in November 2006, Section 903.2.7 of the 2003 International Building Code and the 2003 International Fire Code that was adopted as part of the 2006 North Carolina code set was deferred to the legislature by rulemaking procedures. Until the legislature determines the final code outcome, the NC Building Code Council elected to revert the requirements back to the 2002 edition.

Please keep in mind that the final ruling and date of implementation of the final ruling will not be left to the local jurisdiction, but will be decided upon by the legislature. You can obtain current information pertaining to the status of Section 903.2.7 from the NC Department of Insurance's web site. The address of their site is http://www.ncdoi.com/OSFM/Engineering/engineering_home.asp

MECHANICAL CODE NEWS

Bonding of Corrugated Stainless Steel Tubing (Gas lines) Systems:

Recently this Division received requests regarding our policy for bonding CSST systems.



The main concern is whether we enforce National Electric Code Article 250-104 (B) or the Manufacturers Installation instructions.

Technical bulletins for Gastite, Wardflex and Trac pipe, require the gas piping system to be bonded in accordance with Article 250-66 of the NEC instead of Article 250-104(B). This division will take the position of enforcing the manufacturer's installation instructions to include the written text in paragraphs (A), (B), & (C) of Article 250-66. Therefore the bonding conductor need not be larger than required by text or table of Article 250-66.

Under normal conditions the bonding conductor used to bond the Corrugated Stainless Steel Tubing system will be equivalent in size to the grounding electrode conductor at-

tached to the grounding electrode of the building or structure served.

Bonding of the CSST systems shall be installed by a NC licensed electrician. If the installation does not have an active electrical permit than a licensed electrician shall secure an electrical permit for the installation from this office.

Window U Values & Duct Insulation R Values:

Question: Beginning January 1, 2007 regarding one and two family dwellings and town-

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COUNTY PERMIT CENTER NEWS

Permits Issued from January 2007 through March 2007:

The Catawba County Permit Center issued a total of 2497 permits in the last quarter,



with a total cost of construction of \$87,131,546. There were 177 new single-family dwelling permits issued during this same time period. A few of the larger projects were: Villas of Northview, Extended Stay Facility at Gateway Hotel, Abernethy Laurals Community Center addition, Von Drehle Corp. addition, and Ross Dress for Less.

E-Connect with Apply and Pay Online: In the recent past, it was announced that E-Connect was expected to be operational in the month of January 2007. However, due to personnel changes in both the Catawba County Technology Department and the County Permit Center, this date has been delayed until June 2007.

The first phase of the system will allow applications to be submitted online for subcontractors (Electrical, Plumbing and Mechanical Contractors) where a building permit has already been issued and all fees have already been collected. The second phase will allow the applicant to submit applications and fee payments for small projects that do not require plan review (electrical service changes, mechanical change outs, etc.). Customers wishing to use this system will be issued a user name and password that will allow access to the system.

CATAWBA COUNTY EROSION CONTROL NEWS

Storm-water Phase II Rules in effect July 1, 2007:



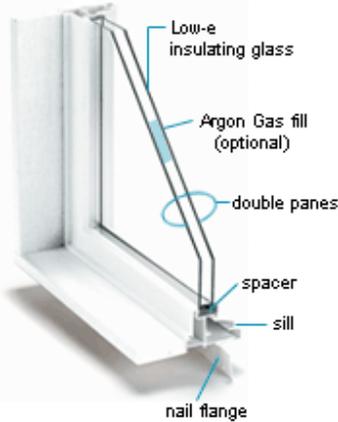
On July 1, 2007, federal storm-water Post-Construction regulations will be in effect for all of Catawba County.

All disturbances over one acre (with exceptions for agriculture and forestry) will be required to submit storm-water plans for approval. Low Density Development, development that

includes less than 24% Built Upon Area (BUA), will be required to use vegetative conveyances to the maximum extent practicable. For High Density Development, projects with greater than 24% BUA, engineered measures will be required to control and treat the first inch of rainfall with runoff draw down time a minimum of 48 hours. For more details, please refer to the DENR storm-water site: www.ncphase2sw.org or call the Utilities & Engineering office (828) 465-8161.

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houses, are the window U value and SHGC (Solar Heat Gain Coefficient) requirements and the duct insulation requirements found in the 2007 NC Energy Code mandatory or may I continue to use the provisions found in Chapter 11 of the 2002 NC Residential Code for One and Two Family Dwellings and Townhouses?



Answer:

The provisions of Chapter 11 of the 2002 NC Residential Code for One and Two Family Dwellings and Townhouses may continue to be used for as long as that code remains effective. The effective date will be at least through May 31st, 2007. The new 2006 NC Residential Code for One and Two Family Dwellings and Townhouses is planned to be effective June 1, 2007. Because the 2002 NC Residential Code, Chapter 11 in particular, remains in effect until May 31, 2007 and the 2006 NC Energy Code became effective July 1, 2006, we have a period of overlapping requirements between the two codes. This allows that a choice by the owner, designer, etc., be made between using either set of codes through November 30th 2007(6-month grace period) at which time the 2002 NC Residential Code expires. The choice will need to be brought to the attention of the inspection department so that they can inspect to the proper edition of code requirements selected. Regarding windows, low-e would be required by the 2006 NC Energy Code for one and two family dwellings and townhouses, but not by the 2002 NC Residential Code Chapter 11. The requirements are dependent on the compliance path selected. Likewise, duct insulation requirements are also dependent on the compliance path selected. The 2002 NC Residential Code requires R5 insulation for duct work installed in unconditioned areas and R8 insulation for duct work installed on the exterior of buildings. The 2006 NC Energy Code requires duct work in Zone 8 to be insulated in accordance with Table 503.3.3.3:

**TABLE 503.3.3.3
MINIMUM DUCT INSULATION^a**

ZONE	ANNUAL HEATING DEGREE DAYS	INSULATION R-VALUE (h · ft ² · °F.)/Btu ^d			
		Ducts in unconditioned attics or outside building		Ducts in unconditioned basements, crawl spaces, garages, and other unconditioned spaces ^c	
		Supply	Return	Supply	Return ^b
1-3	< 1,500	8	4	4	0
4-7	1,500 to 3,500	8	4	6	2
8-14	3,501 to 7,500	8	4	8	2
15-17	> 7,500	11	6	11	2

For SI: °C= [(°F)-32]/1.8, 1 (h·ft²·°F)/Btu= 0.176 (m²·K)/W, 1 foot= 304.5 mm.

- a. Insulation R-values shown are for the insulation as installed and do not include film resistance. The required minimum R-values do not consider water vapor transmission and condensation. Where control of condensation is required, additional insulation, vapor retarders or both shall be provided to limit vapor transmission and condensation. For ducts that are designed to convey both heated and cooled air, duct insulation shall be as required by the most restrictive condition. Where exterior walls are used as plenums, wall insulation shall be as required by the most restrictive condition of this section.
- b. Insulation on return ducts in basements is not required.
- c. Unconditioned spaces include ventilated crawl spaces and framed cavities in those floors, wall and ceiling assemblies which separate conditioned space from unconditioned space or outside air, and are insulated on the side facing away from the condition space.
- d. Insulation resistance measured on a horizontal plane in accordance with ASTM C 518, at a mean temperature of 75°F.

Local Government Contacts

Catawba County Planning & Zoning

Ph. 828-465-8380 / Fax 828-465-8484

Catawba County Building Services Safety Inspections

Ph. 828-466-5130 / Fax 828-322-6814

Catawba County Fire Marshall

Ph. 828-465-8230 / Fax 828-464-4820

Catawba County Environmental Health

Ph. 828-465-8270 / Fax 828-465-8276

Catawba County Erosion Control

Ph. 828-465-8161

Catawba County Permit Centers

Ph. 828-465-8399

Fax 828-465-8962 *Newton* / Fax 828-322-6814 *Hickory*

City of Claremont Zoning

Ph. 828-459-7009 / Fax 828-459-0596

City of Claremont Fire Department

Ph. 828-459-9296

City of Conover Zoning

Ph. 828-464-1191 / Fax 828-465-5177

City of Conover Fire

Ph. 828-464-1295 / Fax 828-464-1253

City of Hickory DAC/Zoning

Ph. 828-323-7556 / Fax 828-323-7474

City of Hickory Fire

Ph. 828-322-7522 / Fax 828-323-7476

City of Newton Zoning

Ph. 828-465-7400 / Fax 828-465-7412

City of Newton Fire

Ph. 828-695-4284 / Fax 828-465-7453

Town of Catawba Zoning

Ph. 828-241-2215 \ Fax 828-241-9968

Town of Catawba Fire Inspections

Contact County Fire Marshal's Office

Town of Longview Zoning

Ph. 828-322-3921 / Fax 828-322-1567

Town of Longview Fire Inspections

Contact County Fire Marshal's Office

Town of Maiden Zoning

Ph. 828-428-5007 / Fax 828-428-5017

Town of Maiden Fire Inspections

Contact County Fire Marshal's Office



CATAWBA COUNTY GOVERNMENT

Building Services Division

100-A SW Blvd

PO Box 389

Newton, NC 28658-0389

For additional information regarding building codes and services in Catawba County please visit the Catawba County website at <http://www.catawbacountync.gov/depts/u&e/building.asp>

For additional assistance please contact the following personal:

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828.217.1091 or Awallner@catawbacountync.gov

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