

INSPECTIONS & ZONING UPDATE

Volume 1, Issue 3

Fall 2006

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

Department of Insurance Residential Code Interpretations

Question: A garage is required to be separated from the dwelling & its attic area by 1/2"-inch gypsum board applied to the garage side. What types of openings are permitted in the gypsum board membrane & what level of protection is required?

Answer: Doors, including **attic access**, are required to be either 1-3/8-inch solid core wood, 1-3/8-inch honeycomb core steel, or 20 minute fire-resistance rated. A standard frame & hardware are acceptable.

Door glazing must be either wire glass in a metal frame or 20-minute fire resistance rated. Ducts located in the garage must be 26-gage steel and have no openings into the garage. Other penetrations (electrical, plumbing, etc.) must be fire blocked as required for top plates. Section 309.1 prohibits openings from the garage directly into a sleeping room.

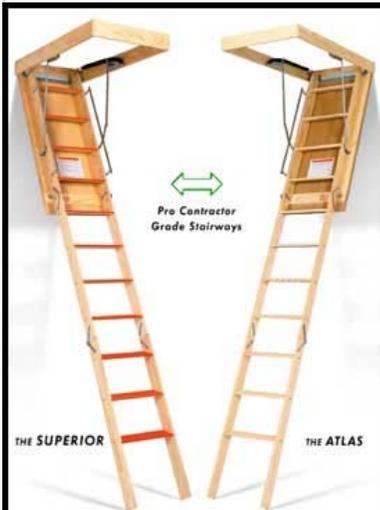
Since attic access doors do not meet the 20-minute fire resistance rating contractors should refrain from installing them in garage ceilings.

Also of interest in the 2006 NC Building Code are small commercial structures or tenant spaces of 49 occupants

or less, will not be considered assembly any longer. Per NCBC 303.1.1

"A building or tenant space used for assembly purposes by less than 50 persons shall be considered a Group B occupancy." Chapter 5, General Building Heights & Areas: Section 506.2.1 Width Limits now has a provision to allow weighted averages depending on the minimum width of the open space used in the frontage increase calculation, which provides additional increase in the size of the building. Chapter 10, Means of Egress, has been reformatted from 9 Sections to 25 Sections in an effort to make the information easier to find.

Questions relating to the operations of the Catawba County Building Services Division or Permit Centers may be directed to Armin Wallner, Chief Building Services Official at 828.465.8375 or awallner@catawbacountync.gov



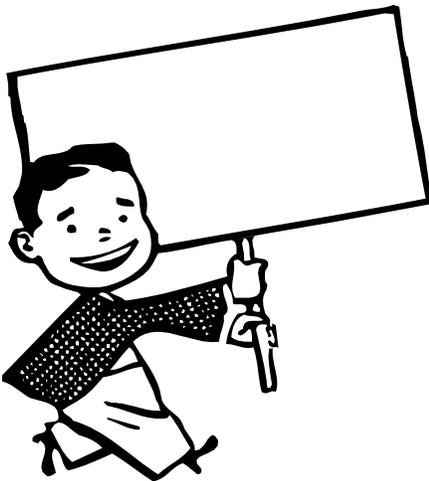
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CITY OF NEWTON PLANNING AND ZONING NEWS: Newton Sets Guidelines For Political Signs:

Of course, almost everyone is aware that election time is nearing. Political campaign signs are plentiful, especially at intersections and along highways where traffic visibility is a concern. In response to this problem, the City of Newton has established guidelines in its Zoning Ordinance.

According to the ordinance, non-illuminated political signs, not to exceed 32 square feet in area, are permitted; however, all signs should be removed within two weeks following the election to which they pertain. No permit is necessary for the placement of signs, but there are numerous locations where signs are prohibited.



Signs should not be located inside public right-of-ways. They should also not be attached to a utility pole, tree, rock, etc. Placement of any sign or object onto a utility pole is a Class 3 Misdemeanor in the State of North Carolina. Signs will not be permitted on City-owned property, with the exception of polling places only on the day of elections. Also, signs should not be placed in the sight triangle at intersections, which is a corner measured from the intersection of the right-of-ways of the adjoining streets.

Right-of-way is typically located behind the sidewalk. The strip of grass between the sidewalk and the street is located within the right-of-way. If there is no sidewalk, the right-of-way normally extends just beyond the utility poles. If no utility poles are nearby, the edge of the right-of-way is behind the ditch line. The ordinance also states that the City may remove and dispose of any sign in violation at any time without notice.

City Planner Richard Crump said the main reason for enforcement of this ordinance is safety of the citizens of Newton. If you have any sign which is in violation of the above regulation, the City would appreciate your immediate attention to correcting the matter.

“We know that political signs can become a problem for drivers, and we want to ensure that our citizens are safe,” Crump stated. “Our enforcement will focus on safety, first and foremost.”

For more information, contact the City of Newton Planning Department at 828-695-4305.

CITY OF HICKORY FIRE PREVENTION BUREAU NEWS

2006 NC Fire & Building Code

One significant change that has occurred in the 2006 NC Fire & Building Code pertains to when an automatic sprinkler system is required to be installed in a building. Section 903.2.1.2 of the 2006 edition requires that an automatic sprinkler system be provided when one of three conditions exist in an A-2 Occupancy (banquet halls, night clubs, restaurants, and taverns/bars). Although two of the conditions did not change from the 2002 edition, the one condition that has changed is noteworthy.

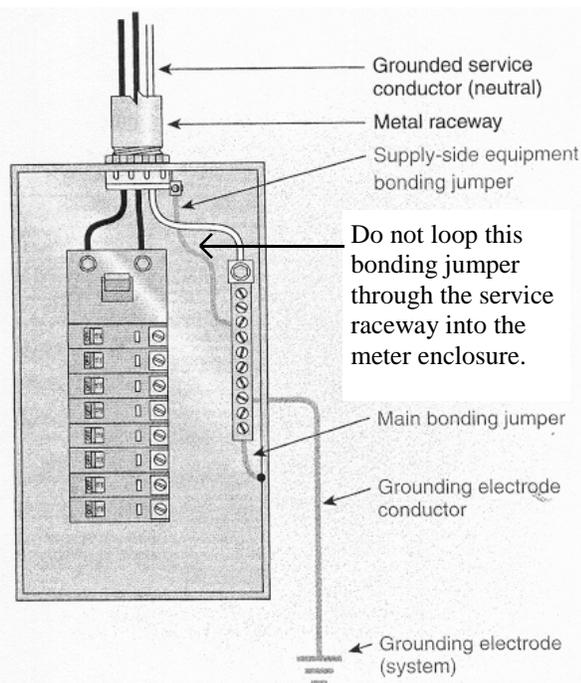


The condition that changed in Section 903.2.1.2 of the 2006 edition requires an automatic sprinkler system to be installed when the fire area has an occupant load of **100** or more. The 2002 edition required an automatic sprinkler system to be installed when the fire area had an occupant load of **300** or more.

There is a proposal in the works to amend Section 903.2.1.2 to read **300** or more. However, until the NC Building Code Council approves amending Section 903.2.1.2 of the 2006 NC Fire & Building Code and establishes an effective date, the local jurisdictions have to enforce the condition for an occupant load of **100** or more.

ELECTRICAL CODE NEWS:

Parallel Neutrals at Service Equipment



Article 250.92 requires the non-current carrying metal parts of service raceways to be effectively bonded together. On occasion metal raceways will be installed between the utility meter base and the electrical contractors service equipment. Normally the inspector will encounter the use of listed devices such as approved bushings with bonding jumpers that effectively bond the metal raceway to the grounded meter enclosure and grounded service panel. Occasionally the bonding jumper is looped through the metal raceway, this continuous bonding conductor now provides a parallel path with the grounded conductor (neutral conductor). This installation is in violation of Article 250.6 which prohibits
(Continued on Page 6, Electrical Code News)

COMMERCIAL PLAN REVIEW NEWS

Signs: “Signs, signs, everywhere there’s signs...” as the song goes and so does The North Carolina Building Code. Signage has always been part of the codes. In the Building Code, signs are required for certain doors, elevators, exits, and stairs to name a few. The National Electrical Code may use signage to identify panels, disconnects, or hazardous locations. Of all the codes, the Accessibility code has the most sign requirements. There is a whole chapter, Chapter 18, that identifies all of the sign locations required and lists every aspect of an approved signs components. Size, color, wording, & mounting height must be done according to specifications.



Daily we rely on signage to direct everywhere we travel within a building. Without it, we most likely would walk around lost, confused, and find ourselves in the wrong place. In an emergency, how would we find safe refuge or know where to exit the building?

Commercial plans submitted and approved thru Plan Review only identify a small fraction of signage required by code. Because of this, it’s very important that the contractor is aware of all signage required by code and installs it correctly before receiving a final inspection.

MECHANICAL CODE NEWS

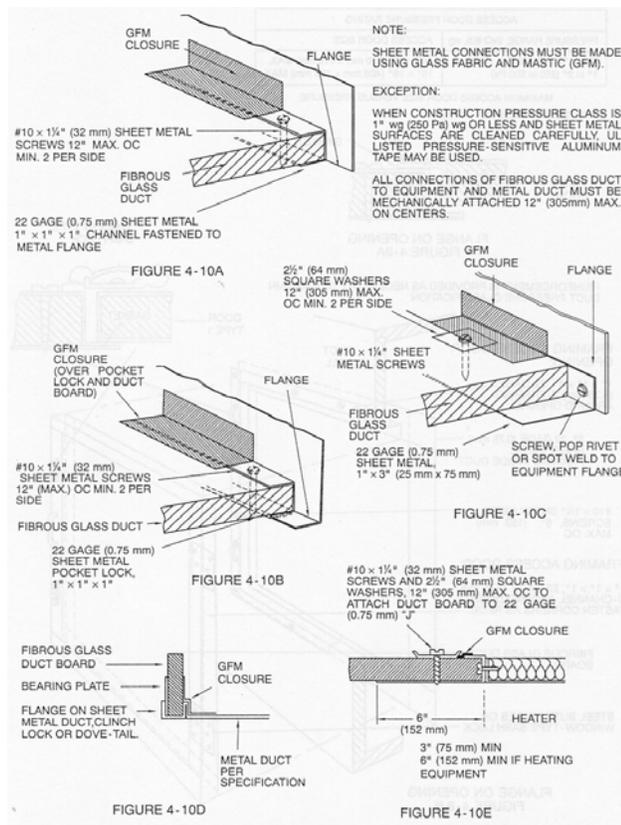
Attachment of Duct Board to Air Handler

In an effort to properly seal duct board to sheet metal and equipment enclosures the SMACNA standards provides several methods of compliance. Please see the attached diagram for several methods of attachment. Recently we have experienced a number of residential installations without any mechanical fasteners attaching the duct board to the equipment enclosures. The attachments relied only upon pressure sensitive aluminum tape.

Proper support of flexible ductwork.

Installation problems with flexible ducts

- Sag exceeds 1/2” per foot between supports
- Duct not supported at 5 foot intervals
- Numerous short radius bends
- Outside vapor barrier not sealed
- Minimum 1 1/2” wide support strapping
- Metal connectors required when splicing 2 flex ducts together
- Inside liner not wrapped w/2 wraps of UL181BFX tape & panduit strap or clamp



COUNTY PERMIT CENTER NEWS

E-Connect with Apply and Pay Online: The Catawba County Technology Department is working with the County Permit Center in an effort to release its newest E-connect feature.



Once implemented customers will have the ability to submit permit applications, conduct secure payment transactions and receive construction permits from the privacy of their home, office or wireless device.

This feature will be limited to small construction projects that do not require plan review such as alterations to plumbing, mechanical and electrical installations.

Customers wishing to utilize this feature will be issued a user name and password that will allow access to the system through the County On Line Permit Center. The Catawba County Technology department anticipates this feature to be available for public use in January 2007.

CATAWBA COUNTY EROSION CONTROL NEWS

Temporary Ground Cover

The Catawba County Soil Erosion and Sedimentation Control Ordinance mirrors the State of North Carolina's temporary ground cover requirements. Temporary ground



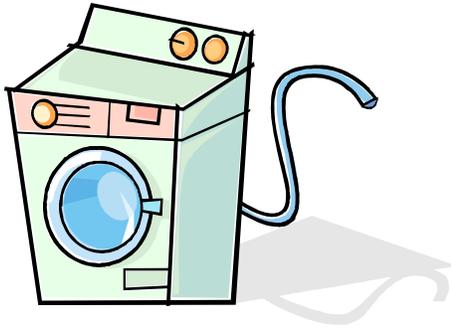
cover is referred to as "vegetative cover or other adequate erosion control device or structure". Unless otherwise specified on a previously approved erosion control plan, temporary

ground cover must be established within **21 days** of completion of any phase of grading. This means that if you've graded a road bed and are waiting to pave, even if it rains for forty days and forty nights you are required to install some sort of **TEMPORARY** ground cover on the road bed and shoulders within 21 days. Gravel sub-base can act as temporary ground cover, as long as it restrains erosion. Temporary seeding, mulch, rolled erosion control products, hydro-seeding, and straw & seed can all be temporary ground cover. Temporary ground cover is not necessarily a stand of Pinehurst-worthy grass, it is simply a way to effectively restrain erosion, as is specified under the law.

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 an upper level.)



Question: May a water heater pan drain and/or the discharge from a water heater relief valve terminate into a crawl space?

Answer: No, section 504.6.1 states the relief valve shall discharge full size to a safe place of disposal such as

within 6" of the floor, outside the building, or an indirect waste receptor. The 1996 plumbing code allowed the discharge into the crawl space, but the 2002 and the 2006 plumbing code do not allow the relief valve to discharge to the crawl space.

Question: Are water heaters installed in garages required to be elevated?

Answer: Yes, section 502.5 (2006 Plumbing Code) states, water heaters having an ignition source shall be elevated such that the source of ignition is not less than 18" above the garage floor. The ignition source would apply to both electric and gas water heaters.

Exception: Elevation of ignition source is not required for appliance that are listed as flammable vapor ignition resistant.

(Electrical Code News Continued from page 3) objectionable current on grounding paths. To remedy the situation one only has to remove the portion of the bonding conductor within the metal raceway and ensure the bonding bushing and jumper remain connected from the end of the raceway to the equipment enclosures.

Grounding & Generator Workshops

An 8 hour grounding & bonding workshop will be held in the Community Room of Stanford Park on Nov. 28th, 2006. The course will cover trouble areas related to bonding and grounding of electrical systems, how to address these problem areas and obtain facts on bonding and grounding as related to the State Electrical Code. The workshop has been approved for 8 hours of continuing education by the NC Board of Examiners for Electrical Contractors and the NC Code Officials Qualification Board. For registration information please contact Armin Wallner at (828) 217-1091 or you may register at www.nciae.org

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:

Armin Wallner, Chief Building Services Official

828.217.1091 or Awallner@catawbacountync.gov

Joel Herman, Assistant Chief Building Services Official

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