# **Inspections Newsletter**

Fall 2017 Issue

### Replacement of Receptacle Outlets By John Thompson

Building materials that homes are constructed with have changed a lot over the years. Everything from the wood the walls are constructed with to the plumbing pipes that carry our drinking water and all of the wiring that we use to supply all of our technology devices in our homes have seen many improvements over the years. The one that I want to discuss in this article is the wiring that supplies electricity throughout our buildings.



Up until the late 1960's the National Electrical Code did not require that receptacle outlets be grounding type receptacles. These grounding type receptacles require a third wire to be installed in the cable assembly to connect to the equipment grounding terminal for the purpose of grounding any equipment plugged into the receptacle.

Prior to the requirement of grounding type receptacle outlets, non-grounding type receptacles were installed in many houses and buildings. The wiring method originally installed for these non-grounding type receptacles only contained 2 conductors so there was no equipment grounding conductor installed.

When receptacle outlets need to be replaced, whether because they are old and worn out, broken, or maybe just replacing them with a different color, what is the correct way to replace them that complies with the National Electrical Code? The NEC gives us 4 options for replacing non-grounding type receptacles.

Option 1-The simplest and easiest way to replace non-grounding type receptacles is to replace them with another non-grounding type receptacle. The problem with this is that you can't plug in a piece of equipment that has a grounding type plug on it.

Option 2- If it is possible to install a conductor in the receptacle outlet box and connect it to the service grounding system per 250.130(C), then it is allowed to install a grounding type receptacle outlet and connect this conductor to the grounding terminal on the receptacle.

Option 3 - Article 406.4(D)(b) states "A non-grounding type receptacle shall be permitted to be replaced with a ground-fault circuit interrupter type of receptacle. These receptacles shall be marked 'No Equipment Ground' and no equipment grounding conductor shall be connected to the GFCI receptacle."

Option 4-Article 406.4(D)(c) states "A non-grounding type receptacle shall be permitted to be replaced with a grounding type receptacle where supplied through a ground-fault circuit interrupter. Grounding type receptacles supplied through a GFCI shall be marked 'GFCI protected' and 'No Equipment Ground.' An equipment grounding conductor shall not be connected between the grounding type receptacles."

Note: A jumper should never be installed from the neutral conductor and an equipment grounding terminal on a receptacle. This is a direct code violation and creates a hazardous situation.

#### TID BITS:

# Unclog a Toilet With Dish Soap

#### By Carlos Valderrama

If the toilet plunger doesn't seem to be doing the trick, try this solution before you reach for the snake. Squirt about 1/2 cup of liquid soap in and let it sit for a while. The liquid soap reduces friction and will often allow the contents of the bowl to slide on through.

# Through-Penetration Firestop Systems

#### **By David Cockran**

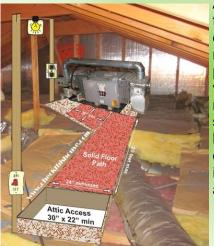
"Firestop Systems are the mechanical combination of materials in a controlled tested and rated system which restores walls and floors breached by mechanical, electrical, and structural services to their specified fire rated condition. Penetrating items include pipes, conduits, ducts, cables and wiring. Test methods, classifications and listings are developed and implemented by independent laboratories and organizations such as ASTM and Underwriters Laboratories." Special care must be taken to install these systems in accordance with the product and thickness as required by the tested assembly. Any deviations from the tested assembly could jeopardize the integrity of the system and render it in effective.

### Virginia Mechanical Code

By Richard Phelps

306.1 Access and Service Space for HVAC Equipment

Access for maintenance and replacement



Appliances shall be accessible for inspection, service, repair and replacement without disabling the function of a fire-resistance-rated assembly or removing permanent construction, other appliances, venting system or any other piping or ducts not connected to the appliance being inspected, serviced, repaired or replaced. A level working space at least 30 inches deep and 30 inches wide shall be provided in front of the control side to service the appliance.

#### **ANNOUNCEMENT:**

The City of Danville Inspections Office would like to announce that Mike LaPrade, the Plumbing/Cross Connection Inspector has accepted a position with the American Backflow Prevention Association (ABPA) as District 2 Director. Now you can all stop cheering Mike is not leaving the Inspections Division for a

new position.



The ABPA in an International Association and District 2 area covers Pittsylvania County, north to Bath County and ex-

tends west to Lee County Virginia.

They are focused on training, education and the promotion of the Cross connection industry. They offer certification programs, training seminars and product information also technical support for its membership. Mike would like to personally invite you to visit the web site at <a href="https://www.abpa.org">www.abpa.org</a>. The Virginia membership is \$25.00 annually and the benefits far exceed the membership fees. National membership is also available. The ABPA will be hosting a Conference on Nov 16. 2017 In Chesterfield, Virginia with many vendors at this event. The event will have free Calibration services and a raffle for a brand new backflow device test kit valued at approximately \$1800.00. All the particular information will be posted on the ABPA Web page and the Inspections office will post more information as it becomes available.

## Rental Inspection Program By Seth Hawker

The City of Danville adopted a rental inspection program in 2008 to help reduce blight in certain areas of the city. The ordinance established 3 rental inspection districts: The North rental, South rental, and Old West End rental districts. A map of each rental district can be viewed on the City of Danville's website. Simply enter the district that you wish to view in the search box and you will be directed to the appropriate map.

Rental properties in the established districts are subject to periodic inspections to ensure that they are safe to occupy and that they are maintenance code compliant. There is an initial inspection fee of \$50.00 that must be paid prior to the inspection being performed. The inspection fee is used to defray the cost of enforcement. The owner shall then arrange a time for the inspector to perform the inspection. During the inspection, the inspector will need access to all interior rooms, attics, basements, and crawlspaces in order to perform a complete inspection of the structure. The exterior will also need to be inspected.

If the inspector doesn't find any maintenance code violations a 4-year certificate of compliance will be issued. This means that the structure will not need to be inspected again until 4 years from when the last certificate was issued. If the inspector finds maintenance code violations during any inspection, a Notice of Violation will be issued to the owner allowing the owner a certain amount of time to abate the violations (usually 30 days). The inspector will need to verify the repairs via a re-inspection. The first re-inspection is free. However, if the inspector has to make any subsequent re-inspections, there will be a fee of \$35.00 per subsequent re-inspection. If the owner complies within the allotted time, a 4-year certificate will be issued. If the inspector has to make multiple re-inspections, a 2-year certificate will be issued.

The Inspections Division will issue rental "identification" forms to every homeowner within the rental districts to help establish which houses are used for rental purposes and which ones are not. If an owner fails to notify the Inspections Division of a rental property within a rental district, appropriate legal action will take place to ensure compliance with the rental program. If you have any questions concerning the rental program, feel free to contact the Inspections Division at (434)-799-5260.

### How to handle and correct a notice of violation By Dennis J Bisson

One of the most common things people say to us is "why did you cite my house", or "who complained about my house". Anyone can complain about a property and nine times out of ten, it's usually a neighbor or the tenant that's had enough and is fed up the situation in their neighborhood or house. As a property owner you have the responsibility to ensure the public that your property is safe and up to code. Typically, we give the owner 30 days to correct a notice of violations. The first thing you should do once you've received a notice is to get in touch with the inspector. In most cases, once contact is made we can discuss the violations and set up a plan of action on correcting the code violations. As a property maintenance inspector there are a number of things that I look for when receiving a complaint on a property. Below is list of some of the steps we take when receiving a complaint:

Is someone living in the house and do they have proper utilities activated? Is it open and unsecured?
Is there chipping or flaking paint on the siding, porches or roof?
What's the condition of the gutters?
Any deteriorated and rotting wood?
Broken or open windows or doors?
Cracks and holes in the foundation?
If its winter time does it have proper heating?



## Contractor Prohibited Acts By Beth Harrington

Failure to comply with Chapter I or II of Title 54.1 of the Code of Virginia

- 2. Furnishing inaccurate or incomplete information
- 3. Failure to report disciplinary action
- 4. False or misleading advertisement
- 5. Negligence and/or incompetence
- 6. Misconduct
- 7. Improper or dishonest conduct
- 8. Fail or use a contract or to have a contract signed

by both the consumer and licensee prior to commencement of work or acceptance of payment

Contract for residential work missing required

Elements

Failure to make prompt delivery of the contract

to the customer

- 11. Failure to maintain records for five years (contracts, related documents)
- 12. Refusing or failing to provide requested documents
- 13. Failure to respond to an investigator or an agent

of the Board or providing false information to

an investigator

- 14. Abandonment
- 15. Failure to complete work
- 16. Retention or misapplication of funds

- 17. Misrepresentation
- 18. Assisting another to violate §54.1
- 19. Allowing your license to be used by another
- 20. Ostensible ownership
- 21. Bribery
- 22. Criminal conviction
- 23. Failure to report a conviction
- 24. Disciplinary action by another governing body/agency
- 25. Failure to abate a violation of the USB
- 26. Miss Utility violation
- 27. Working out of class/specialty
- 28. Failure to satisfy any judgment
- 29. Using unlicensed subs
- 30. Failure to honor warranty terms
- 31. Failure to obtain change orders
- 32. Failure to ensure adequate supervision
- 33. Failure to obtain a building permit or Inspection
- 34. Failure of a RBEA Firm to perform ener-

analyses in accordance with the EPA,

DOE

and Energy Star

35. Failure of a RBEA firm or individual from holding required liability insurance



\*The entire prohibited acts can be found in 18VAC50-22-260 (STATUTES Title 54.1, Chapter 11)

Article taken from a handout given out at a conference hosted by the Board of Contractors "Contractor Education Provider Conference"

