



NC Plumbing Code

1st Qtr. 2016 Code Answers in brown (Jan-Mar) 2nd Qtr. 2016 Code Answers in green (Apr-Jun)
3rd QTR 2016 Code Answers in blue (Jul-Sep) 4th QTR 2016 Code Answers in red (Oct-Dec)

Table of Contents

Chapter 1 Administration	Chapter 2 Definitions
Chapter 3 General Regulations	Chapter 4 Fixtures, Faucets, & Fittings
Chapter 5 Water Heaters	Chapter 6 Water Supply & Dist.
Chapter 7 Sanitary Drainage	Chapter 8 Ind./Special Waste
Chapter 9 Vents	Chapter 10 Traps, Inter. & Sep.
Chapter 11 Storm Drainage	APPENDIX A-H
Policy Statements	OTHER

101.3 - Question: Can manufacturer's recommendations be enforced by code officials?

Answer: The protection of the public's health, welfare and safety are always the first priority and intent of the plumbing code. Code requirements that are enforceable are mandated in imperative terms such as "shall", "shall be", "shall have", "must", "use (verb as a directive)", "will", "will be", "required" and "must". Code wording in passive terms such as "recommend", "recommended", "should", "would", "could", "could be", "may", "may be", "can" or "can be" can be offered as suggestions or recommendations but are not enforceable. Manufacturer's recommendations can only be enforced if their use is specifically required by the plumbing code in imperative terms.

305 - Question: If I have a solid foundation wall and core drill a hole to run a pipe through it, do I need a sleeve?

Answer: No, a core drilled hole in a solid wall would not need a sleeve provided:
1. the hole meets or exceeds the 2 pipe size diameter of the required sleeve



NC Plumbing Code

1st Qtr. 2016 Code Answers in brown (Jan-Mar) 2nd Qtr. 2016 Code Answers in green (Apr- Jun)
3rd QTR 2016 Code Answers in blue (Jul-Sep) 4th QTR 2016 Code Answers in red (Oct-Dec)

2. a protective wrap or other means is used to protect the pipe from corrosion if a metallic pipe is used

3. the space between the pipe and the cored hole is filled with caulk

305.4 - Question: Is acceptable to use concrete to fill the space between a sleeve and the pipe?

Answer: No, the concrete will not give if the sleeve is compressed. The purpose of the sleeve is to protect the pipe from damage. If the sleeve is compressed and filling material will not compress it will push into the pipe.

305.4 Sleeves. Annular spaces between sleeves and pipes shall be filled or tightly caulked in an approved manner. Annular spaces between sleeves and pipes in fire-resistance-rated assemblies shall be filled or tightly caulked in accordance with the International Building Code.

306.2.4 - Question: What are the requirements for the new tracer wire requirement on sewer lines?

Answer: The new section 306.2.4 NCPC only applies to plastic sewer piping. A tracer wire (14 AWG and listed for direct burial), shall be installed adjacent to and over the full length of the piping. The wire shall be accessible at the cleanout between the building drain and sewer. This applies to all permits issued on or after March 1, 2017.

306.2.4 - Question: Can a warning marker tape with a tracer wire be used in lieu of the 14 AWG tracer wire in the gas code?

Answer: Section 306.2.4 NCPC requires a tracer wire or other approved conductor.

To be an approved alternate, it must meet or exceed what the code requirements. The code requires 14 gauge wire approved for direct burial, these



NC Plumbing Code

1st Qtr. 2016 Code Answers in brown (Jan-Mar) 2nd Qtr. 2016 Code Answers in green (Apr-Jun)
3rd QTR 2016 Code Answers in blue (Jul-Sep) 4th QTR 2016 Code Answers in red (Oct-Dec)

ribbons only have an aluminum foil inside them. The end of the wire has to be left accessible for conductive locating, the ribbons do not provide this option as the foil interior is not accessible. Most ribbons have locating depth limits, with 6 inch on being able to be located down to 24 inches.

If the warning marker tape is manufactured for that purpose, is equivalent to the gauge wire required by code and provides conductive locating; we could approve it as an alternate.

306.2.4 - Question: Do I have to have bring the tracer wire up at each cleanout? This is causing problems for my customers when they weedeat or mow.

Answer: No, Section 306.2.4 states access shall be provided to the tracer wire or the tracer wire shall terminate at the cleanout between the building drain and building sewer. The drain/sewer cleanout is the only requirement for access.

403 - Question: Can a storage occupancy be constructed without restrooms facilities?

Answer: Yes, footnote "n" states "Unheated storage buildings which are used periodically are not required to have toilet rooms." Freeze protection is allowed, but the temperature cannot be more than 50 degrees, as this is the definition of conditioned space per the NCECC. There is no definition of "periodical" use; the in house interpretation is where employees don't report to the facility daily.

403 - Question: We have a project where the restrooms are going to be renovated, both the male and female at the same time. We are bringing in temporary facilities during the renovation. How many temporary facilities do we need to provide?



NC Plumbing Code

1st Qtr. 2016 Code Answers in brown (Jan-Mar) 2nd Qtr. 2016 Code Answers in green (Apr- Jun)
3rd QTR 2016 Code Answers in blue (Jul-Sep) 4th QTR 2016 Code Answers in red (Oct-Dec)

Answer: The number of temporary facilities needs to be equal to the number required of facilities that are being lost during the renovation. Provided facilities in the building may be more than the required. This would be for each sex, if separate facilities are required. Also, the handicap facilities would also need to be provided and on an accessible path.

403.1 - Question: A church is adding square footage to their fellowship hall. According to Table 403.1 they would need to add fixtures. Can they utilize the facilities in the sanctuary (separate building within 25 feet) instead of adding fixtures to accommodate additional people load per Table 403.1 footnote j, assuming sanctuary can accommodate additional load?

Answer: Under footnote j, plumbing fixtures will have to be increased when rearrangement of a space or area results in an increased occupant load and refers to urinals. Footnote (e) provides some special conditions for religious facilities. Under the adhoc committee meeting minutes on our website, footnote e for table 403.1 reads “e. The number of fixtures provided shall be based on either the capacity of the church sanctuary or the church educational building (including fellowship halls and multiple purpose rooms), whichever is larger and within 300 feet (91.44 m).”

This means that the educational building or fellowship hall could be a separate building with the required number of toilet fixtures within 300 feet based on the larger of the occupancies.

The plumbing fixtures are required to be available any time the buildings are in use. If the church decides to use the plumbing fixtures in the main building to satisfy the fixture count for the fellowship hall, or vice versa, an authorized church representative should provide a signed letter for file documentation to the code



NC Plumbing Code

1st Qtr. 2016 Code Answers in brown (Jan-Mar) 2nd Qtr. 2016 Code Answers in green (Apr- Jun)
3rd QTR 2016 Code Answers in blue (Jul-Sep) 4th QTR 2016 Code Answers in red (Oct-Dec)

official stating that the required facilities will always be available and accessible to occupants when the building is in use.

See NCDOL Interpretation

405.3.2 - Question: We are designing a 5,376 SF equipment maintenance building. We have one water closet in the building and it is in a room by itself. We have a utility sink located just outside of the water closet room. Do we need to provide a lavatory in the same room as the water closet or are we okay with the utility sink located just outside of the water closet room?

Answer: Yes, Per section 405.3.2, the required lavatory must be in the same room as the required watercloset.

405.3.2 Public lavatories. In employee and public toilet rooms, the required lavatory shall be located in the same room as the required water closet, except in Education K-5, lavatories may be provided in a common toilet room vestibule, visible from the corridor.

411.2 - Question: Is a drain required for an eyewash station?

Answer: No, section 411.2 exempts waste connections for emergency showers and eyewash stations.

411.2 Waste connection. Waste connections shall not be required for emergency showers and eyewash stations.

418 - Question: I installed several shampoo bowls in a salon, but the inspector said he could not approve the installation because the manufacturer could not provide documentation that they conformed to a standard. The standard, was for a sink; does the standard apply to a shampoo bowl?

Answer: Yes, A shampoo bowl is a sink and Section 418 applies to all sinks except Lavatories.

Sinks shall conform to ANSI Z124.6, ASME A112.19.1M, ASME A112.19.2M, ASME A112.19.3M, ASME A112.19.4M, ASME A112.19.9M, CSA B45.1, CSA B45.2, CSA B45.3 or CSA B45.4.



NC Plumbing Code

1st Qtr. 2016 Code Answers in brown (Jan-Mar) 2nd Qtr. 2016 Code Answers in green (Apr-Jun)
3rd QTR 2016 Code Answers in blue (Jul-Sep) 4th QTR 2016 Code Answers in red (Oct-Dec)

Sinks shall be provided with waste outlets a minimum of 1 1/2 inches (38 mm) in diameter. A strainer or crossbar shall be provided to restrict the clear opening of the waste outlet.

Moveable sink systems shall comply with ASME A112.19.12.

502.5 - Question: If an electric water heater is installed in a garage and impact protection is required, who is responsible for providing the protection, the electrician or the plumber?

Answer: There is a specific requirement in the NCPC, Section 502.5, that requires protection from moving vehicles. This would be a requirement of the plumber.

502.5 Water heaters installed in garages. Water heaters having an ignition source shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the garage floor. Appliances shall be located or protected so that they are not subject to physical damage by a moving vehicle.

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

601.3 - Question: Is it the plumber's responsibility to confirm the electrical grounding was not interrupted with the replacement of the water service line?

Answer: Yes, Section 601.3 prohibits the replacement of metallic piping used for electrical grounding until another approved means of grounding is provided. A plumbing license does not authorize electrical work, a licensed electrical contractor will need to re-ground the system if the metallic water service pipe is to be replaced.

604.4.1 - Question: Do locked faculty restrooms in schools require the lavatories to have metering faucets?



NC Plumbing Code

1st Qtr. 2016 Code Answers in brown (Jan-Mar) 2nd Qtr. 2016 Code Answers in green (Apr-Jun)
3rd QTR 2016 Code Answers in blue (Jul-Sep) 4th QTR 2016 Code Answers in red (Oct-Dec)

Answer: No, Section 604.4.1 state metering faucets are required in school occupancies in student-use restrooms.

604.4.1 Lavatory faucets. Lavatory faucets shall be of the metering type when located in the following public restrooms:

1. In all occupancies in restrooms which have six or more lavatories.
2. In school occupancies in student-use restrooms.
3. In assembly occupancies in all customer or public-use restrooms.

604.4 - Question: If I have a small restaurant with less than 50 people, am I still required to provide metering faucets?

Answer: Yes, we have discussed this issue with NCDOL. In this case the occupancy would be "B" but the use is still "A". The plumbing code requirements are based on the use of the space.

604.5 - Question: Can the supply piping to a fixture be less than 1/2" on a manifolded system?

Answer: Yes, footnote "a" allows a one pipe size reduction

Where the developed length of the distribution line is 60 feet or less, and the available pressure at the meter is a minimum of 35 psi, the minimum size of an individual distribution line supplied from a manifold and installed as part of a parallel water distribution system shall be one nominal tube size smaller than the sizes indicated.

604.96 - Question: Are flush valves on water closets considered quick closing and would require a water hammer arrestor?

Answer: No, Section 604.9 provides examples of quick closing valves; clothes washer, dish washers and ice makers. These are all electric solenoid type valves.



NC Plumbing Code

1st Qtr. 2016 Code Answers in brown (Jan-Mar) 2nd Qtr. 2016 Code Answers in green (Apr-Jun)
3rd QTR 2016 Code Answers in blue (Jul-Sep) 4th QTR 2016 Code Answers in red (Oct-Dec)

Many manufacturers recommend the use of a water hammer arrestor, but we cannot enforce recommendations.

604.9 Water hammer. The flow velocity of the water distribution system shall be controlled to reduce the possibility of water hammer. A water-hammer arrestor shall be installed where quick-closing valves (example: clothes washers, dishwashers, ice makers) and metallic piping is used. The water-hammer arrestor shall not be required on any valves where plastic pipe is used for water distribution piping. Water-hammer arrestors shall be installed in accordance with the manufacturer's specifications. Water-hammer arrestors shall conform to ASSE 1010.

605.22 - Question: Where can stack expansion joints be installed on a multi-story building?

Answer: Section 605.22 only allows mechanical joints below grade, unless otherwise approved. After discussing with NCDOL, these expansion joints can be installed at the base of the stack on the first floor. This will limit the damage if they leak and at the same time absorb movement when/if the building settles or shrinks.

607.3 - Question: When is an expansion tank or device required to be installed?

Answer: An expansion device (tank, valve, etc.) shall be installed in a residential or commercial building when a storage-type water heater is installed in the water distribution system with a backflow prevention device installed in the water supply line. Also, an expansion device shall be installed on a water heater replacement when a backflow prevention device is installed in the water supply line. This requirement for an expansion device shall apply to a manufactured home. An expansion device is not required for a tankless water heater.
See attached NCDOL Interpretation



NC Plumbing Code

1st Qtr. 2016 Code Answers in brown (Jan-Mar) 2nd Qtr. 2016 Code Answers in green (Apr- Jun)
3rd QTR 2016 Code Answers in blue (Jul-Sep) 4th QTR 2016 Code Answers in red (Oct-Dec)

608.16.1 - Question: Is it allowable to use a backflow preventer that conforms to ASSE 1032 for carbonated beverage dispensers?

Answer: No, while the ASSE 1032 backflow devices are marketed for carbonated beverage dispensers, the code only recognizes the ASSE 1022 standard.

608.1 - Question: Is backflow protection required when connecting a fire hydrant line to a domestic water supply?

Answer: Yes. Fire hydrant lines, lawn irrigation and fire sprinkler lines are considered contaminated or questionable lines and would require backflow protection when they connect to potable water or “combo” (both potable and fire combined) lines.

701.9 - Question: I am designing a warehouse for a food distributor. They want to install a restroom in the rear corner of the building for their employees, but it will have to be pumped overhead back to the front of the building. Would this be acceptable.

Answer: No, Section 701.9 prohibits soil or waste piping from being installed above food storage.

701.9 Drainage piping in food service areas. Exposed soil or waste piping shall not be installed above any working, storage or eating surfaces in food service establishments.

710.1 - Question: Footnote "d" on T710.1(2) states you can have no more than 3 water closets and is referenced on the 3 inch pipe. The footnote is only referenced in the branch and interval column, can you have more than 3 water closets on a 3 inch stack.

Answer: Yes, the footnote only applies to the branch drain and the discharge into any single branch interval. The restriction of 3 water closets does not apply to the overall stack.



NC Plumbing Code

1st Qtr. 2016 Code Answers in brown (Jan-Mar) 2nd Qtr. 2016 Code Answers in green (Apr-Jun)
3rd QTR 2016 Code Answers in blue (Jul-Sep) 4th QTR 2016 Code Answers in red (Oct-Dec)

712.2 - Question: Are cleanouts required on sump pump discharge piping?

Answer: Yes, Section 712.2 requires a checkvalve, full open valve and a cleanout. 712.2 Fittings required. A check valve and a full open valve, and cleanout located on the discharge side of the check valve shall be installed in the pump or ejector discharge piping between the pump or ejector and the gravity drainage system. Access shall be provided to such valves. Such valves shall be located above the sump cover required by Section 712.1 or, where the discharge pipe from the ejector is below grade, the valves shall be accessibly located outside the sump below grade in an access pit with a removable access cover.

713.9 - Question: If a bedpan washer is part of a watercloset, does it need its own vent and primer?

Answer: No, even though these are branded as bedpan washers, they are nothing more than a faucet over the watercloset. These are used to rinse out the bedpan and empty it into the watercloset to be disposed of.

715.6 - Question: When is a backwater valve required on a hub drain or floor drain installed in a crawl space?

Answer: Section 715.6 requires a check valve or back-water valve on all hub and floor drains installed in a crawl space. This section was adopted by the BCC and effective Jan 1, 2017. The way it is written, the elevation of the next manhole has no bearing; if a hub or floor drain is in the crawl space, it must have a back-water valve.

910.2 - Question: If a waste stack must be offset, when does it need to be re-vented?

Answer: Section 910.2 prohibits offsets between the lowest and highest fixture drain connection in a waste stack. It is possible to have multiple waste stacks. If



NC Plumbing Code

1st Qtr. 2016 Code Answers in brown (Jan-Mar) 2nd Qtr. 2016 Code Answers in green (Apr-Jun)
3rd QTR 2016 Code Answers in blue (Jul-Sep) 4th QTR 2016 Code Answers in red (Oct-Dec)

an offset must be made, then a new stack would be created below the offset and this stack must have it's own vent, the same as the upper waste stack

911.1 - Question: Can a fixture that has an individual vent connect vertically to section of a branch drain that is being circuit vented?

Answer: No, section 911.1 states a maximum of eight fixtures may be connected to a branch drain and circuit vented, but it also states that each fixture drain shall connect horizontally to the branch being circuit vented.

The principle of circuit venting is that the flow of the drainage never exceeds a half-full flow condition. The air for venting the fixtures circulates in the top half of the horizontal branch drain pipe. Connecting a fixture in the vertical position will disrupt the air flow in the top half of the pipe, even if the fixture is individually vented.

912.4.3 - Question: 5. Where does the 24 inch vertical start on a floor sink? The top of the floorsink or the outlet where the tail starts.

Answer: Section 912.4.3 NCPC states the vertical distance from the fixture or drain outlet to the trap weir will not exceed 24 inches. It would start at the outlet of the floorsink.

912.4.3 The design of the system shall ensure that the vertical distance from fixture or drain outlet to trap weir does not exceed 24 inches (610 mm). Long runs shall be provided with additional relief vents located at intervals of not more than 100 feet (30 480 mm) to equalize pressure in the system.

1003.1 - Question: What section of the Code requires a “fish scale” interceptor?

Answer: Section 1003.1 NCPC states:

1003.1 Where required. Interceptors and separators shall be provided to prevent the discharge of oil, grease, sand and other substances harmful or hazardous to



NC Plumbing Code

1st Qtr. 2016 Code Answers in brown (Jan-Mar) 2nd Qtr. 2016 Code Answers in green (Apr- Jun)
3rd QTR 2016 Code Answers in blue (Jul-Sep) 4th QTR 2016 Code Answers in red (Oct-Dec)

the building drainage system, the public sewer, the private sewage disposal system or the sewage treatment plant or processes.

The scraping of fish scales into a sink can cause premature stoppages and therefore a hazard. A manufactured/approved solids or scale interceptor shall be installed whenever fish scale cleaning will deposit waste into the drainage system.

1003.4 - Question: Would a stereo install bay in a Big Box Store, require oil/water separators?

Answer: No, Only engine/transmission repair and oil change establishments where there are floor drains subject to an oily environment. Occupancies without oil and/or bays without drains would not require a separator.

1003.4 - Question: Are alarms required for oil separators?

Answer: No, there are no requirements in the code for an alarm on an oil separator. There are several add on alarms available on the market and the designer may require it as part of their design.

We do have a local interpretation, if the oil separator utilizes a storage tank, an alarm is required for the storage tank.

1107 - Question: Is it permissible to use a secondary scupper drain to run gas piping or conduit onto the roof?

Answer: No, while the code does not directly address this situation. Any piping or conduit ran through the scupper would provide potential for debris to accumulate and block the scupper.



NC Plumbing Code

1st Qtr. 2016 Code Answers in brown (Jan-Mar) 2nd Qtr. 2016 Code Answers in green (Apr-Jun)
3rd QTR 2016 Code Answers in blue (Jul-Sep) 4th QTR 2016 Code Answers in red (Oct-Dec)

Policy - Question: I have hose bibbs in an open parking deck, I was turned down and told I need to have an engineer provide a detail on how they are to be protected from freezing. Where is this in the code?

Answer: The code does not address water lines outside above grade. Insulation does not prevent lines from freezing, it only slows the process. Mecklenburg County Code Enforcement has an interpretation for water lines above grade and outside.

The options are:

1. Use of a listed heat tape/trace providing protection from the frost line to the point of termination above grade or where the pipe enters the structure.
2. Provide a listed enclosure to prevent freezing
3. Provide a sealed engineer's letter providing details on how to protect the pipe.

Policy - Question: Are toilet flanges required to be installed during the rough inspection?

Answer: No, while many contractors have them installed during the rough inspection, some do not. Some use this for their stand pipe to perform the water test. Others want to wait as the final decision on the flooring has not been made.

Policy - Question: Can a floor drain used to drain a pool go to storm if the pool is a saltwater pool?

Answer: No, pool drains and backwash are not allowed to go to storm.

Policy - Question: Does Charlotte Water require expansion tanks to be installed when the water service pipe is replaced?

Answer: No, we have spoken to Charlotte Water and there is no requirement for an expansion tank with a water service replacement. The installation of a PRV



NC Plumbing Code

1st Qtr. 2016 Code Answers in brown (Jan-Mar) 2nd Qtr. 2016 Code Answers in green (Apr-Jun)
3rd QTR 2016 Code Answers in blue (Jul-Sep) 4th QTR 2016 Code Answers in red (Oct-Dec)

during the replacement of a water service line would trigger the requirement for an expansion device.

Policy - Question: Can a central vacuum system in a condo, located in a highrise, use PVC piping?

Answer: Neither the plumbing or mechanical code addresses central vacuum systems in dwelling units. After discussing with the Building CA; the code prohibits Drain, Waste and Vent pipes in a highrise from being PVC or non-metallic. The code does allow water distribution to be non-metallic piping. The difference is the water distribution is filled with water. The central vacuum lines would be no different than the DWV piping on the pumping system. Based on the intent of the code, the central vacuum piping would need to be non-metallic if located in a highrise.

Policy - Question: When is a neutralizer required for condensing appliances such as water heaters and furnaces?

Answer: CMUD's policy requires waste to be between 6 and 12 pH when entering the system. If the manufacture's data states a pH lower than 6, then a neutralizing filter is required for condensate waste discharging to the drainage system or outside the structure.

Almost all of the condensing water heaters and condensing gas furnaces researched stated that the condensate would be slightly acidic with a pH from 3 to 5. Many manufacturers recommend neutralizers, but unless it specifically requires one or states a ph level less than 6; we do not require a neutralizer.

Manufacture's Installation - Question: Is the vent port on an ASSE 1022 device required to go to a drain?



NC Plumbing Code

1st Qtr. 2016 Code Answers in brown (Jan-Mar) 2nd Qtr. 2016 Code Answers in green (Apr-Jun)
3rd QTR 2016 Code Answers in blue (Jul-Sep) 4th QTR 2016 Code Answers in red (Oct-Dec)

Answer: Yes, we have spoken to both Watts and Zurn, they both want the vent port taken to a drain with an air gap. They both state if the backflow preventer locked open, it could potentially discharge a significant amount of water.

Manufacture's Installation - Question: Where does the code required SDR 35 to be bedded in stone?

Answer: This is a requirement of the products installation instructions. Some manufactures allow stone up to 1.5 inches, coarse sand, fine sand, etc. It will really depend on the manufacturer. Every manufacturer that was researched required some kind of embedment.

Other - Question: I have a combo water/fire line. The fire line branches off before the potable water shut off to the building and goes to a backflow for the fire line. I was turned down because the material of that fire line branch was not approved for potable water, is this correct?

Answer: Yes, the entire combo line would be considered potable water, even the branch for the fire line up to the backflow device. After the backflow device for the fire line it would not be considered potable water.

Policy - Question: Can a licensed utility contractor install water service and building drain lines between the public main and the building?

Answer: Yes, North Carolina general statute 87-10 (b)(3)(a) allows public utility contractors to install water service lines and house and building sewer lines as defined in the North Carolina State Building Code.

The 2012 North Carolina Plumbing Code defines building sewer as that part of the building drainage system that extends from the end of the building drain and conveys the discharge to a public sewer, private sewer, individual sewage disposal



NC Plumbing Code

1st Qtr. 2016 Code Answers in brown (Jan-Mar) 2nd Qtr. 2016 Code Answers in green (Apr-Jun)
3rd QTR 2016 Code Answers in blue (Jul-Sep) 4th QTR 2016 Code Answers in red (Oct-Dec)

system or the point of disposal. The building drain is defined as terminating 10 feet beyond the walls of the building and conveying the drainage to the building sewer. The same code defines water service pipe as the pipe from the water main or other source of potable water supply, or from the water meter when the meter is at the public right of way to the water distribution system of the building served. The water service pipe is defined as terminating 5 feet from the outside foundation wall of the building.

Based on the above information, a licensed public utility contractor may install a building sewer to within 10 feet of the building and may install a water service pipe to within 5 feet of the foundation wall. Installation of the building sewer and water service pipe must conform to the requirements of the North Carolina Plumbing Code and a plumbing permit for the work must be obtained from the local authority having jurisdiction.

Other - Question: I am hearing Sharkbite fittings cannot be installed underground anymore, its this true?

Answer: Sharkbite, recently changed their policy on underground installation. The listing still states they can be installed underground without any special provisions. Sharkbite, has not said the fittings cannot be installed underground, but have stated if they are installed underground and the fittings are not wrapped in the recommended silicone wrap, they will not warranty them for the full 25 years.

Other - Question: Can a mop sink/canwash be built custom using tile and shower pan liner? If so, does it need to be tested?



NC Plumbing Code

1st Qtr. 2016 Code Answers in brown (Jan-Mar) 2nd Qtr. 2016 Code Answers in green (Apr-Jun)
3rd QTR 2016 Code Answers in blue (Jul-Sep) 4th QTR 2016 Code Answers in red (Oct-Dec)

Answer: We can find no standard for mop sinks, therefore we see no reason one cannot be constructed using the same techniques used to build custom showers. Testing would be required the same as a shower, as this would be field fabricated.

Other - Question: Are overflows required on lavatories?

Answer: No, The standards use to require them, but they were changed between 2006 and 2009.

2009 IPC Commentary

"Standards previously required lavatories to have an overflow; however, that is not currently the case. The provision of an overflow and its location is an option of the manufacturer. The reason for eliminating the overflow requirement was the lack of use, which resulted in the growth of bacteria and microorganisms."

Other - Question: Can the product, BoneDry, be used to seal the space between the pipe and a sleeve through a foundation wall?

Answer: After researching the product, there is an ICC Evaluation. The evaluation refers to the product as a membrane material, to only be installed on parged and non-parged masonry walls. In the Evaluation, it refers back to local code for penetrations. The product has not be evaluated to seal penetrations, therefore we would be unable to accept it for that use.

New Product - Question: Is it acceptable to use a Vent Stack Odor eliminator?

Answer: No, nothing has been found to show these products are listed or manufactured to a standard. The carbon filters must be changed every 1 to 5 years. If they are not changed there is a potential to block air movement into the plumbing drainage system



NC Plumbing Code

1st Qtr. 2016 Code Answers in brown (Jan-Mar) 2nd Qtr. 2016 Code Answers in green (Apr- Jun)
3rd QTR 2016 Code Answers in blue (Jul-Sep) 4th QTR 2016 Code Answers in red (Oct-Dec)

Other - Question: The seat on a water closet has to be elongated and have an open front, but can it also have a lid?

Answer: We can find nothing in the plumbing code or the ADA code that would prohibit a seat with a lid. It would add an additional challenge to a disabled person, but it would be allowed. The ADA height would be to the seat, not the lid.

1400 - Question: Can CPVC be used as a drain in a plenum?

Answer: The current listing for CPVC has it meeting the 25 flame and 50 smoke only when it is filled with water. CPVC can be used as water distribution, but not a drain, in a plenum.

Manufacture's Installation - Question: Do water softeners require an expansion tank?

Answer: Expansion devices on residences are ONLY required when a backflow device is installed in the water service that prohibits the water from expanding back into the main. Manufacturer's instructions may require devices above those required by the Code. Expansion devices shall be supported per the manufacturer's installation instructions.

Other - Question: Who looks at compressed air systems with in a building?

Answer: Compressed air systems are outside the scope of the NCPC and NCMC.

Manufacture's Installation - Question: Could you put me in the right spot in the code book where it states that 18" of copper is required on a gas water heater? We have been questioned about PEX being tied directly to an electric heater, which we know is legal, just trying to locate the verbiage in the code book



NC Plumbing Code

1st Qtr. 2016 Code Answers in brown (Jan-Mar) 2nd Qtr. 2016 Code Answers in green (Apr-Jun)
3rd QTR 2016 Code Answers in blue (Jul-Sep) 4th QTR 2016 Code Answers in red (Oct-Dec)

Answer: a. It is not in the code. Almost all manufacturers require a minimum of 12 inches of clearance above the top of the water heater to combustibles. Copper extensions have always been used to meet this requirement. So many manufacturers have that requirement it is assumed it is a code requirement. On electric water heaters, we go by what the installation instructions require. Most have a zero clearance above the top of the heater and do not prohibit connecting PEX or CPVC directly to the tank, but there are a few we have found that does. It will go back to the installation instructions.

Manufacture's Installation - Question: Are pre-formed corners required on shower pan liner installations?

Answer: This is really up to the manufacturer. We will enforce the installation instructions. A lot of manufactures recommend the use of pre-formed corners, but that is only a recommendation and not enforceable. If the installation instructions state it is a requirement, then we would enforce it.