

North Carolina Department of Insurance
322 Chapanoke Road, Suite 200
Raleigh, NC 27603
Plumbing Ad-Hoc Committee Meeting
October 15, 2009

Members present: Chairman Al Bass, Jim Lawson, Ken Keplar, Philip Edwards, Henry Webster, Lacy Smith, Janie Sutton, and Billy Hinton

The changes below are from the 2009 International Plumbing Code. These mark-ups will be adopted for the 2012 NC Plumbing Code. Items shown in ~~STRIKEOUT~~ are to be deleted and UNDERLINED items are to be added.

Chapter 2 – DEFINITIONS

- 01.BATTERY OF FIXTURES.** Bring forward from the 2009 NC Plumbing Code.
 - 02.BRANCH INTERVAL.** Bring forward from the 2009 NC Plumbing Code.
 - 03.BUILDING DRAIN.** Bring forward from the 2009 NC Plumbing Code.
 - 04.CLOSET.** Bring forward from the 2009 NC Fuel Gas Code.
 - 05.INDIRECT WASTE RECEPTOR.** Bring forward from the 2009 NC Plumbing Code.
 - 06.LABELED.** Bring forward from the 2009 NC Plumbing Code.
 - 07.PIPE SIZES.** Bring forward from the 2009 NC Plumbing Code.
 - 08.REGISTERED DESIGN PROFESSIONAL.** Bring forward from the 2009 NC Plumbing Code to be consistent with all the other codes.
 - 09.SCUPPER.** Bring forward from the 2009 NC Plumbing Code.
 - 10.TOILET.** Bring forward from the 2009 NC Plumbing Code.
 - 11.TOILET ROOM.** Bring forward from the 2009 NC Plumbing Code.
 - 12.WATER PIPE.** Bring forward from the 2009 NC Plumbing Code.
- Water service pipe.** Bring forward from the 2009 NC Plumbing Code.

Chapter 3 – GENERAL REGULATIONS

- 01.301.3 Connections to the sanitary drainage system.** Bring forward from the 2009 NC Plumbing Code.
- 02.301.5 Pipe, tube and fitting sizes.** Bring forward from the 2009 NC Plumbing Code.
- 03.301.7 Conflicts.** Bring forward from the 2009 NC Plumbing Code.
- 04.302.1 Detrimental or dangerous materials.** Bring forward from the 2009 NC Plumbing Code.
- 05.303.1 Identification.** Bring forward from the 2009 NC Plumbing Code.
- 06.304.1 General.** Bring forward from the 2009 NC Plumbing Code. Add Appendix H back in and add the use of ‘silicone caulking’ like in the Mechanical Code.
- 07.304.3 Meter boxes.** Bring forward the **deletion** from the 2009 NC Plumbing Code.
- 08.304.4 Openings for pipes.** Bring forward from the 2009 NC Plumbing Code.
- 09.305.5 Pipes through or under footings or foundation walls.** Bring forward from the 2009 NC Plumbing Code.
- 10.305.6 Freezing.** Bring forward from the 2009 NC Plumbing Code.
- 11.305.6.1 Frost Protection.** Bring forward from the 2009 NC Plumbing Code.
- 12.305.9 Protection of components of plumbing systems.** Bring forward from the 2009 NC Plumbing Code.
- 13.307.2 Cutting, notching or bored holes.** Bring forward from the 2009 NC Plumbing Code. Remove ~~North Carolina Residential Code~~.
- 14.308.7.1 Location.** Bring forward from the 2009 NC Plumbing Code.
- 15.308.10 Stacks.** Bring forward from the 2009 NC Plumbing Code.
- 16.[B] 309.2 Flood Hazard.** Bring forward from the 2009 NC Plumbing Code but **Delete** Exception # 2 and bring forward the Exception #3 **Deletion** from the 2009 NC Plumbing Code.
- 17.310.1 Light and ventilation.** Bring forward from the 2009 NC Plumbing Code.

- 18.310.4 Water closet compartment.** Bring forward from the 2009 NC Plumbing Code and add IPC Exception # 3.
- 19.311.1 Temporary toilet facilities at construction sites.** Bring forward from the 2009 NC Plumbing Code.
- 20.312.1 Required tests.** The permit holder shall make the applicable tests prescribed in Sections 312.2 through 312.10 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice to the code official when the plumbing work is ready for tests. The equipment, material, power and labor necessary for the inspection and test shall be furnished by the permit holder and the permit holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests. All plumbing system piping shall be tested with either water or, ~~for piping systems other than plastic, by air.~~ After the plumbing fixtures have been set up and their traps filled with water, the entire drainage system shall be submitted to final tests. The code official shall require the removal of any cleanouts if necessary to ascertain whether the pressure has reached all parts of the system.
- 21.312.2 Drainage and vent water test.** Bring forward from the 2009 NC Plumbing Code.
- 22.312.5 Water supply system test.** Upon completion of a section of or the entire water supply system, the system, or portion completed, shall be tested and proved tight under a water pressure not less than the working pressure of the system; or, ~~for piping systems other than plastic, by an air test of not less than 50~~ 100 psi (344 kPa). This pressure shall be held for at least 15 minutes. The water utilized for tests shall be obtained from a potable source of supply. The required tests shall be performed in accordance with this section and Section 107.
- 23.312.6 Gravity sewer test.** Bring forward the **deletion** from the 2009 NC Plumbing Code.
- 24.312.7 Forced sewer test.** Bring forward the **deletion** from the 2009 NC Plumbing Code.
- 25.312.10 Inspection and testing of backflow prevention assemblies.**
Deleted.
- 26. SECTION 314 – CONDENSATE DISPOSAL** – Bring forward from the 2009 NC Plumbing Code.

Chapter 5 – WATER HEATERS – Bring forward the entire Chapter from the 2009 NC Plumbing Code with the following modifications:

- 502.7.3 Crawl space supports.** ~~In a crawl space, The support shall be a minimum of 4 x 8 x 16 inch (102 x 203 x 406 mm) a 2 inch thick solid base, 2 inch thick formed concrete, or stacked masonry units, block or brick, shall be held in place by mortar or other approved method.~~

~~Formed concrete or approved prefabricated steel units are acceptable. The water heater shall be supported not less than 2 inches above grade.~~

2. **502.7.4 Drainage.** Below-grade installations shall be provided with a natural drain or an automatic lift or sump pump. Existing installation that can be terminated outdoors must terminate outdoors. Where the installation is such that outdoor termination is impossible, indoor termination is allowable.
3. **504.6 Requirements for discharge piping.** Bring forward from the 2009 NC Plumbing Code but keep Item # 5 from the 2009 IPC.
4. **504.7.1 Pan size and drain.** The pan drain shall be not be less than 1.5 inches (38 mm) deep and shall be of sufficient size and shape to receive all dripping or condensate from the tank or water heater and shall not be obstructed by the appliance. The pan shall be drained by an indirect waste pipe having a minimum diameter of ~~0.75 inch (19 mm)~~ 1 inch (25.4 mm). Piping for safety pan drains shall be of those materials listed in Table 605.4.
5. **SECTION 505 – INSULATION** – Keep from the 2009 IPC.

Chapter 8 – INDIRECT/SPECIAL WASTE – Bring forward entire Chapter from the 2009 NC Plumbing Code.

*Future meeting dates were scheduled as follows:

- November 9th, 2009, NCDOI, Conference Room 239
- November 30th, 2009, NCDOI, Conference Room 239
- December 15th, 2009, NCDOI, Conference Room 204

The Next Scheduled Meeting. The next meeting for the Plumbing Code Ad-Hoc Committee is Monday, November 9th. This meeting will begin at 9:00AM and will be held at NCDOI in Conference Room 239.

**Plumbing Ad-Hoc Committee Meeting
November 9, 2009**

Members present: Chairman Al Bass, Jim Lawson, Ken Keplar, Philip Edwards, Henry Webster, Lacy Smith, Janie Sutton, Dale Dawson and Bill McElrath

The changes below are from the 2009 International Plumbing Code. These mark-ups will be adopted for the 2012 NC Plumbing Code. Items shown in ~~STRIKEOUT~~ are to be deleted and UNDERLINED items are to be added.

Chapter 6 – WATER SUPPLY AND DISTRIBUTION

01.602.3.1 Sources. Bring forward the **Deletion** from the 2009 NC Plumbing Code.

02.602.3.2 Minimum quantity. Deleted.

03.602.3.3 Water quality. Deleted.

04.602.3.4 Disinfection of system. Deleted.

05.602.3.5 Pumps. Deleted.

06.602.3.5.1 Pump enclosure. Deleted.

07.604.4.1 Lavatory faucets. Bring forward from the 2009 NC Plumbing Code.

08.604.5 Size of fixture supply. Keep 2009 IPC paragraph and bring the Exception forward from the 2009 NC Plumbing Code to read as follows:

09.604.9 Water hammer. Bring forward from the 2009 NC Plumbing Code and modify to read as follows:

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, etc.) 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.

10.604.10.3 Access. Bring forward from the 2009 NC Plumbing Code.

- 11.605.3 Water service pipe.** Bring forward from the 2009 NC Plumbing Code.
- 12.605.4 Water distribution pipe.** Bring forward from the 2009 NC Plumbing Code.
- 13.TABLE 605.3 – WATER SERVICE PIPE –** Bring forward the **Copper or copper-alloy tubing** column from the 2009 NC Plumbing Code and keep the rest of the Table as the 2009 IPC.
- 14.TABLE 605.4 – WATER DISTRIBUTION PIPE -** Bring forward the **Copper or copper-alloy tubing** column and **Footnote a.** from the 2009 NC Plumbing Code and keep the rest of the Table as the 2009 IPC.
- 15.605.5 Fittings.** Bring forward from the 2009 NC Plumbing Code.
- 16.TABLE 605.5 – PIPE FITTINGS –** Keep the 2009 IPC Table and add the Polybutylene column back in:

<u>MATERIAL</u>	<u>STANDARD</u>
Polybutylene (PB) plastic	CSA B137.8; <u>ASSE 1061</u>

- 17.605.19 – 605.19.3 –** Bring forward from the 2009 NC Plumbing Code and renumber starting with **605.25.**
- 18.605.19.3 Mechanical joints.** Mechanical joints shall be installed in accordance with the manufacturer’s instructions. ~~Metallie lock rings employed with insert fittings as described in ASTM D 3309 or CAN3-B137.8M shall be installed in accordance with the manufacturer’s instructions.~~
- 19.605.22.2 Solvent cementing.** Joint surfaces shall be clean and free from moisture. A purple primer or an ultraviolet purple primer that conforms to ASTM F 656 shall be applied. When an ultraviolet primer is used the installer shall provide an ultraviolet light to the inspector to be used during the inspection. Solvent cement not purple in color and conforming to ASTM D 2564 or CSA-B137.3 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D 2855. Solvent-cement joints shall be permitted above or below ground.
- 705.8.2 and 705.14.2 Solvent cementing.** Joint surfaces shall be clean and free from moisture. A purple primer or an ultraviolet purple primer that conforms to ASTM F 656 shall be applied. When an ultraviolet primer is used the installer shall provide an ultraviolet light to the inspector to be used during the inspection. Solvent cement not purple in color and conforming to ASTM D 2564, CSA-B137.3, CSA B181.2 or CSA B182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D 2855. Solvent-cement joints shall be permitted above or below ground.
- 20.606.1 Location of full-open valves.** Bring forward from the 2009 NC Plumbing Code.

21.606.2 Location of shutoff valves. Bring forward from the 2009 NC Plumbing Code with the following modification to number 1:

1. On the fixture supply to each plumbing fixture other than bathtubs and showers ~~in one and two family residential occupancies, and other than in individual sleeping units that are provided with unit shutoff valves in hotels, motels, boarding houses and similar occupancies.~~

22.606.2.1 Buildings other than dwellings or dwelling units. Bring forward from the 2009 NC Plumbing Code.

23.606.4 Valve identification. Bring forward from the 2009 NC Plumbing Code.

24.TABLE 606.5.4 – SIZES FOR OVERFLOW PIPES FOR WATER SUPPLY TANKS - Bring forward from the 2009 NC Plumbing Code with the following modifications:

**TABLE 606.5.4
SIZES FOR OVERFLOW PIPES FOR WATER SUPPLY TANKS**

MAXIMUM CAPACITY OF WATER SUPPLY LINE TO TANK (gpm)	DIAMETER OF OVERFLOW PIPE (inches)
0-50	2
50 <u>51</u> – 150	2 ½
150 <u>151</u> – 200	3
200 <u>201</u> – 400	4
400 <u>401</u> – 700	5
700 <u>701</u> – 1,000	6
Over 1,000	8

For SI: 1 inch = 25.4 mm, 1 gallon per minute = 3.785 L/m.

25.TABLE 606.5.7 – SIZE OF DRAIN PIPES FOR WATER TANKS - Bring forward from the 2009 NC Plumbing Code with the following modifications:

**TABLE 606.5.7
SIZE OF DRAIN PIPES FOR WATER TANKS**

TANK CAPACITY (gallons)	DRAIN PIPE (inches)
Up to 750	1
751 to 1,500	1 ½
1,501 to 3,000	2
3,001 to 5,000	2 ½
5,000 <u>5,001</u> to 7,500	3
Over 7,500	4

For SI: 1 inch = 25.4 mm, 1 gallon = 3.785 L.

26.607.1 Where required. Bring forward from the 2009 NC Plumbing Code.

27.607.2 Hot water supply temperature maintenance. Bring forward the **Deletion** from the 2009 NC Plumbing Code.

28.607.2.3 Recirculating pump. Bring forward the **Deletion** from the 2009 NC Plumbing Code.

29. TABLE 608.8.3 – SIZE OF PIPE IDENTIFICATION - Bring forward from the 2009 NC Plumbing Code with the following modifications:

**TABLE 608.8.3
SIZE OF PIPE IDENTIFICATION**

PIPE DIAMETER (inches)	LENGTH BACKGROUND COLOR FIELD (inches)	SIZE OF LETTERS (inches)
$\frac{3}{4}$ 3/8 to 1 1/4	8	0.5
1 1/2 to 2	8	0.75
2 1/2 to 6	12	1.25
8 to 10	24	2.5
over 10	32	3.5

For SI: 1 inch = 25.4 mm.

30.608.17 Protection of individual water supplies, 608.17.1 Well locations, TABLE 608.17.1, 608.17.2 Elevation, 608.17.3 Depth, 608.17.4 Water-tight casings, 608.17.5 Drilled or driven well casings, 608.17.6 Dug or bored well casings, 608.17.7 Cover, 608.17.8 Drainage. Bring forward the **Deletion** from the 2009 NC Plumbing Code.

31. SECTION 610 – PURGING OF POTABLE WATER SYSTEM – Bring forward from the 2009 NC Plumbing Code.

32. SECTION 613 – TEMPERATURE CONTROL DEVICES AND VALVES – Bring forward from the 2009 NC Plumbing Code.

33. SECTION 614 – PARTIAL FIRE SPRINKLER PROTECTION IN ONE- AND TWO-FAMILY DWELLINGS.

614.1 Partial fire protection.

34. SECTION 615 – FULL FIRE SPRINKLER PROTECTION IN ONE- AND TWO-FAMILY DWELLINGS

615.1 Full fire protection. Where a full fire sprinkler system is installed, it shall comply with NFPA 13D.

The Next Scheduled Meeting. The next meeting for the Plumbing Code Ad-Hoc Committee is Monday, November 30th. This meeting will begin at 9:00AM and will be held at NCDOI in Conference Room 239.

**Plumbing Ad-Hoc Committee Meeting
November 30, 2009**

Members present: Chairman Al Bass, Jim Lawson, Ken Keplar, Philip Edwards, Henry Webster, Lacy Smith, Janie Sutton, Dale Dawson and Bill McElrath

The changes below are from the 2009 International Plumbing Code. These mark-ups will be adopted for the 2012 NC Plumbing Code. Items shown in ~~STRIKEOUT~~ are to be deleted and UNDERLINED items are to be added.

CHAPTER 4 – FIXTURES, FAUCETS AND FIXTURE FITTINGS

01.403.1 Minimum number of fixtures. Bring forward from the 2009 NC Plumbing Code.

02.TABLE 403.1 – MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES. Bring forward from the 2009 NC Plumbing Code with the following amendments:

- **OCCUPANCY** > A-4 and A-5 > **FEMALE:**
1 per 40 for the first ~~1,500~~ 1,520 and 1 per 60 for the remainder
- **OCCUPANCY** > E > add footnote b.
- **OCCUPANCY** > 1-4 > Child care > add footnote b.
- **CLASSIFICATION** > Factory and Industrial > **MALE/FEMALE:**
(See OSHA 29 CFR paragraph 1910.14.1)
- **CLASSIFICATION** > Business > **DRINKING FOUNTAIN:**

15 <u>25</u> -100	1
101-250	2
251-500	3

add 1 per 500 exceeding 500
- **CLASSIFICATION** > Mercantile > **DRINKING FOUNTAIN:**

1 per <u>100</u> – 1,000	<u>1</u>
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~~1,000~~ or greater than 1,000 require 1 more for each additional 1,000
- **Footnote**
b. Toilet facilities for employees shall be separate from facilities for inmates, or patients or students.

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).

03.403.2 Separate facilities. Bring forward from the 2009 NC Plumbing Code.

04.403.3.1 Adjustments in occupant content. Bring forward from the 2009 NC Plumbing Code.

05.403.5 Location of employee toilet facilities in mercantile and assembly occupancies. – through – **403.9.5.5 Temporary modular classroom buildings.** Bring forward from the 2009 NC Plumbing Code.

06.403.5 and Exception, and 403.6.1:

300 feet (~~91 440 mm~~ 91.44 m)

07.405.3.1 Water closets, urinals, lavatories and bidets. Bring forward **Exception** from the 2009 NC Plumbing Code.

08.FIGURE 405.3.1 FIXTURE CLEARANCE. Add lavatory in bottom right hand corner of figure, with a 4 inch minimum clearance.

09.405.3.2 Public lavatories. Bring forward from the 2009 NC Plumbing Code.

10.405.4.1 Floor flanges. Modify second paragraph to read as follows:

Floor flanges of hard lead shall weigh not less than 1 pound, 9 ounces (0.7 kg) and shall be composed of lead alloy with not less than 7.75-percent antimony by weight. ~~Closet screws and bolts shall be of brass.~~ Flanges shall be secured to the building structure with corrosion-resistant screws or bolts.

11.405.6 Plumbing in mental health centers. Bring forward **DELETION** from the 2009 NC Plumbing Code.

12.405.8 Slip joint connections. Bring forward from the 2009 NC Plumbing Code.

13.406.3 Waste connection. Bring forward from the 2009 NC Plumbing Code with the following modifications:

The waste from an automatic clothes washer shall connect to a vertical ~~branch~~ drain of not less than 2 inches (51 mm) in diameter, or a horizontal ~~branch~~ drain of not less than 3 inches (76 mm) in diameter. The 2-inch (51 mm) trap in the waste connection may be used as a cleanout for both the 2-inch (51 mm) and the 3-inch (76 mm) ~~branch~~ drain. Automatic clothes washers that discharge by gravity shall be permitted to drain to a waste receptor or an approved trench drain.

14.408.3 Bidet water temperature. Bring forward **DELETION** from the 2009 NC Plumbing Code.

15.410.1 Approval. Keep the 2009 IPC and modify as follows:

Drinking fountains shall conform to ASME A112.19.1M, ASME A112.19.2M or ASME A112.19.9M and water coolers shall conform to ARI 1010. Drinking fountains and water coolers shall conform to NSF 61, Section 9. Where water is served in restaurants, night clubs, taverns, or bars, drinking fountains shall not be required. ~~In other occupancies, where drinking fountains are required, bottled water dispensers shall be permitted to be substituted for not more than 50 percent of the required drinking fountains.~~

16.412.5 Location. Bring forward from the 2009 NC Plumbing Code.

17.412.6 Trap primers. Bring forward from the 2009 NC Plumbing Code.

18.414.2 Waste connection. Keep the 2009 IPC and modify as follows:

Garbage can washers shall be trapped separately. The receptacle receiving the waste from the washer shall have a removable basket or strainer to prevent the discharge of ~~large~~ particles ½ inch or larger into the drainage system.

19.416.5 Tempered water for public hand-washing facilities. Bring forward **DELETION** from the 2009 NC Plumbing Code.

20.417.3 Shower waste outlet. Bring forward from the 2009 NC Plumbing Code.

21.417.4 Shower compartments. Bring forward from the 2009 NC Plumbing Code.

22.417.4.2 Access. Bring forward **DELETION** from the 2009 NC Plumbing Code.

23.417.5.2 Shower lining. Bring forward from the 2009 NC Plumbing Code and add the following sentence to the end of the paragraph:

Lining shall be installed per manufacturer's instructions.

*Keep **Exception #2** from 2009 IPC.

24.419.1 Approval. Bring forward from the 2009 NC Plumbing Code and add **Exception #4** to read as follows:

4. Water supply shall be provided for future connection.

25.[B] 419.3 Surrounding material. Deleted.

26.421.5 Access to pump. Access shall be provided to circulation pumps in accordance with the fixture or pump manufacturer's installation instructions. Where the manufacturer's instructions do not specify the location and minimum size of field-fabricated access openings, a 12-inch by 12-inch (305 mm by 305 mm) minimum sized opening shall be installed

to provide access to the circulation pump. Where pumps are located more than 2 feet (609 mm) from the access opening, an 18-inch by 18-inch (457mm by 457 mm) minimum sized opening shall be installed. A door or panel shall be permitted to close the opening. In all cases, the access opening shall be unobstructed and of the size necessary to permit the removal and replacement of the circulation pump. A minimum clearance of 21 inches is required in front of the access door.

27.424.3 Individual shower valves. Bring forward from the 2009 NC Plumbing Code.

28.424.5 Bathtub and whirlpool bathtub valves. Bring forward from the 2009 NC Plumbing Code.

29.425.1 Flushing devices required. Bring forward from the 2009 NC Plumbing Code.

CHAPTER 8 – INDIRECT/SPECIAL WASTE

01.802.1.7 Commercial dishwashing machines. The discharge from a commercial dishwashing machine shall be through an air gap ~~or air break~~ into a standpipe or waste receptor in accordance with Section 802.2.1.

The Next Scheduled Meeting. The next meeting for the Plumbing Code Ad-Hoc Committee is Tuesday, December 15th. This meeting will begin at 9:00AM and will be held at NCDOI in Conference Room 239.

**Plumbing Ad-Hoc Committee Meeting
December 15, 2009**

Members present: Chairman Al Bass, Jim Lawson, Ken Keplar, Philip Edwards, Henry Webster, Lacy Smith, Janie Sutton, Dale Dawson and Bill McElrath

The changes below are from the 2009 International Plumbing Code. These mark-ups will be adopted for the 2012 NC Plumbing Code. Items shown in ~~STRIKEOUT~~ are to be deleted and UNDERLINED items are to be added.

CHAPTER 7 – SANITARY DRAINAGE

13.701.2 Sewer required. Bring forward from the 2009 NC Plumbing Code.

14.701.4 Sewage treatment. Bring forward from the 2009 NC Plumbing Code.

15.701.5 Damage to drainage system or public sewer. Bring forward from the 2009 NC Plumbing Code.

16.701.8 Engineered systems. Bring forward **DELETION** from the 2009 NC Plumbing Code.

17.TABLE 702.2 – UNDERGROUND BUILDING DRAINAGE AND VENT PIPE
Keep the 2009 IPC and modify as follows:

- Under the **MATERIAL** column -
Copper or copper-alloy tubing
(Type K; or L, ~~M or DWV~~)

18.TABLE 702.4 – PIPE FITTINGS

Keep the 2009 IPC and modify as follows:

- Under the **MATERIAL** column -
Polyvinyl chloride (PVC) plastic in IPS diameters
ASTM D 2665; ASTM F 1866 (10 inches diameter and larger)

19.703.2 Drainage pipe in filled ground. Bring forward from the 2009 NC Plumbing Code.

20.704.5 Dead ends. Bring forward from the 2009 NC Plumbing Code.

21.TABLE 706.3 – FITTINGS FOR CHANGE IN DIRECTION – Bring forward from the 2009 NC Plumbing Code.

- e. This fitting shall only be permitted to be used as the first fitting directly behind the fixture for drains 2 inches and smaller, except clothes washers.

22.706.3 Installation of fittings. Bring forward from the 2009 NC Plumbing Code.

23.708.1 Scope. This section shall govern the size, location, installation and maintenance of gravity drainage pipe cleanouts.

24.708.3.2 Gravity building sewers. Title change.

25.708.3.3 Changes of direction. Bring forward from the 2009 NC Plumbing Code.

26.708.3.5 Building drain and building sewer junction. Bring forward from the 2009 NC Plumbing Code.

27.708.7 Minimum size. Bring forward from the 2009 NC Plumbing Code

28.708.10 Location. Bring forward from the 2009 NC Plumbing Code with the following modifications:

1. "P" traps connected to the drainage piping with slip joints or ground joint connections. ~~A water closet may be used as the cleanout for the water closet branch only.~~
5. Test tees or cleanouts in a vertical pipe, ~~above the flood level rim of the fixtures that the horizontal pipe serves.~~

TABLE 709.1 – DRAINAGE FIXTURE UNITS FOR FIXTURES AND GROUPS - Keep the 2009 IPC and modify as follows:

- In the **FIXTURE TYPE** column:

- Bathroom group as defined in Section 202 (1.6 gpf water closet) ^{f.i}
- Kitchen sink, domestic with food waste grinder and/or dishwasher ⁱ
- Shower (based on the total flow rate through showerheads and body sprays) – **MINIMUM SIZE OF TRAP** column – ~~1½~~ 2

- **Footnotes:**

- i. Same as (i.) in 2009 NC Plumbing Code.
- j. Same as (h.) in 2009 NC Plumbing Code.

29.TABLE 710.1(1) – BUILDING DRAINS AND SEWERS – Bring forward from the 2009 NC Plumbing Code.

30. TABLE 710.1(2) – HORIZONTAL FIXTURE BRANCHES AND STACKS –

Bring forward from the 2009 NC Plumbing Code.

31. 712.2 Valves 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.

32. 712.3.3 Discharge piping. Discharge piping and fittings shall be constructed of *approved pressure rated* materials.

33. 712.3.4.1 Sump alarms. Bring forward from the 2009 NC Plumbing Code.

34. 712.4 Sewage pumps and sewage ejectors. Bring forward from the 2009 NC Plumbing Code.

35. SECTION 714 – COMPUTERIZED DRAINAGE DESIGN – Bring forward **DELETION** from the 2009 NC Plumbing Code.

The Next Scheduled Meeting. The next meeting for the Plumbing Code Ad-Hoc Committee is Thursday, January 14th. This meeting will begin at 9:00AM and will be held at NCDOI in Conference Room 239.

**Plumbing Ad-Hoc Committee Meeting
January 14, 2010**

Members present: Chairman Al Bass, Henry Webster, Jim Lawson, Ken Keplar, Philip Edwards, Lacy Smith, and Dale Dawson

The changes below are from the 2009 International Plumbing Code. These mark-ups will be adopted for the 2012 NC Plumbing Code. Items shown in ~~STRIKEOUT~~ are to be deleted and UNDERLINED items are to be added.

CHAPTER 9 – VENTS

01.901.2.1 Venting required. Every trap and trapped fixture shall be vented in accordance with one of the venting methods specified in this chapter. All fixtures discharging downstream from a water closet shall be individually vented except as provided in Section 911.

02.901.3 Chemical waste vent system. The vent system for a chemical waste system shall be independent of the sanitary vent system and shall terminate separately through the roof to the open air, and not less than 6 inches above roof or parapet.

03.901.6 Engineered systems. Bring forward **DELETION** from the 2009 NC Plumbing Code.

04.903.1 Stack required. Every building in which plumbing is installed shall have at least one stack the size of which is not less than one-half of the required ~~size~~ diameter of the building drain, and not less than 2 inches (51 mm) in diameter. Such stack shall run undiminished in size and as directly as possible from the building drain through to the open air or to a vent header that extends to the open air.

05.903.3 Vent termination. Bring forward from the 2009 NC Plumbing Code.

06.904.1 Roof extension. All open vent pipes that extend through a roof shall be terminated at least 6 inches (152 mm) above the roof, except where the roof is ~~accessible by the public or the building tenants~~ used by the public or by tenants for any purpose, the vent extensions shall be run at least 7 feet (2134 mm) above the roof.

07.904.5 Location of vent terminal. An open vent terminal from a drainage system shall not be located directly beneath any door, openable window, or other air intake opening of the building or of an adjacent building or property line, and any such vent terminal shall not be within 10 feet (3048 mm) horizontally of such an opening unless it is at least 2 feet (610 mm) above the top of such opening.

- 08.904.6 Extension through the wall.** Bring forward from the 2009 NC Plumbing Code.
- 09.905.4 Vertical rise of vent.** Bring forward from the 2009 NC Plumbing Code.
- 10.906.1 Distance of trap from vent.** Bring forward from the 2009 NC Plumbing Code.
- 11.908.3 Connection at different levels.** Bring forward from the 2009 NC Plumbing Code.
- 12.SECTION 909 – WET VENTING** - Bring forward from the 2009 NC Plumbing Code.
- 13.TABLE 908.3** needs to read like **TABLE 909.3**.
- 14.SECTION 912 – COMBINATION WASTE AND VENT SYSTEM.** Bring forward from the 2009 NC Plumbing Code.
- 15.913.2 Vent connection.** Bring forward from the 2009 NC Plumbing Code.
- 16.916.5.1 Sewage pumps and sewage ejectors other than pneumatic.**
Drainage piping below sewer level shall be vented in a similar manner to that of a gravity system. Building sump vent sizes for sumps with sewage pumps or sewage ejectors, other than pneumatic, shall be determined in accordance with Table 916.5.1. An open vent terminal from a drainage system shall not be located directly beneath any door, openable window, or other air intake opening of the building or of an adjacent building or property line, and any such vent terminal shall not be within 10 feet (3048 mm) horizontally of such an opening unless it is at least 2 feet (610 mm) above the top of such opening.
- 17.SECTION 917 – AIR ADMITTANCE VALVES.** Bring forward from the 2009 NC Plumbing Code.
- 18.SECTION 918 – ENGINEERED VENT SYSTEMS** - Bring forward **DELETION** from the 2009 NC Plumbing Code.
- 19.SECTION 919 – COMPUTERIZED VENT DESIGN** - Bring forward **DELETION** from the 2009 NC Plumbing Code.
- 20.SECTION 920 – SINGLE STACK PLUMBING SYSTEMS** - Bring forward from the 2009 NC Plumbing Code.

**Plumbing Ad-Hoc Committee Meeting
January 14, 2010**

Members present: Chairman Al Bass, Henry Webster, Jim Lawson, Ken Keplar, Phillip Edwards, Lacy Smith, and Dale Dawson

Abridged Plumbing Code for Residential

Chapter 1 – SCOPE AND ADMINISTRATION

01.101.1 Title. These regulations shall be known as the *North Carolina Plumbing Code* as adopted by the North Carolina Building Code Council on [Date], to be effective [Date]. References to the *International Codes* shall mean the North Carolina Codes. The North Carolina amendments to the *International Codes* are underlined.

Chapter 2 – DEFINITIONS

- Leave as is

Chapter 3 – GENERAL REGULATIONS

01.307.3 Penetrations of floor/ceiling assemblies and fire-resistance-rated assemblies. OMIT

02.308.2 Piping seismic supports. OMIT

03.SECTION 310 – WASHROOM AND TOILET ROOM REQUIREMENTS – OMIT

Chapter 4 – FIXTURES, FAUCETS AND FIXTURE FITTINGS

01.TABLE 403.1 – MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES – Keep only the following line:

- **Classification** – Residential/**OCCUPANCY** – R-3/**DESCRIPTION** – One- and two-family dwellings

- Keep Footnote **a.**

02.403.1.1 Fixture calculations through 403.4.1 Directional signage.
OMIT

03. SECTION 404 – ACCESSIBLE PLUMBING FACILITIES – OMIT

04. FIGURE 405.3.1 – FIXTURE CLEARANCE – OMIT

05. 405.3.2 Public lavatories. OMIT

06. 405.6 Plumbing in mental health centers. OMIT

07. SECTION 411 – EMERGENCY SHOWERS AND EYEWASH STATIONS – OMIT

08. 412.4 Public laundries and central washing facilities. OMIT

09. 413.3 Commercial food waste grinder waste outlets. OMIT

10. SECTION 414 – GARBAGE CAN WASHERS OMIT

11. 416.4 Moveable lavatory systems. OMIT

12. 416.5 Tempered water for public hand-washing facilities. OMIT

13. SECTION 419 – URINALS – OMIT

14. 420.2 Water closets for public or employee toilet facilities. OMIT

15. 420.3 Water closet seats. Water closets shall be equipped with seats of smooth, nonabsorbent material. ~~All seats of water closets provided for public or employee toilet facilities shall be of the hinged open front type. Integral water closet seats shall be of the same material as the fixture.~~ Water closet seats shall be sized for the water closet bowl type.

16. SECTION 422 – HEALTH CARE FIXTURES AND EQUIPMENT – OMIT

17. 424.4 Multiple (gang) showers. OMIT

18. SECTION 426 – MANUAL FOOD AND BEVERAGE DISPENSING EQUIPMENT – OMIT

19. SECTION 427 – FLOOR SINKS – OMIT

CHAPTER 5 – WATER HEATERS

01. 502.4 Seismic supports. OMIT

CHAPTER 6 – WATER SUPPLY AND DISTRIBUTION

01. 604.4.1 Lavatory faucets. OMIT (from NC)???

02.606.1 Location of full-open valves. OMIT Item numbers 1, 4, and 5

03.608.3.1 Special equipment, water supply protection. OMIT

04.608.13.9 Chemical dispenser backflow devices. OMIT

05.608.16.1 Beverage dispensers. OMIT

06.608.16.9 Dental pump equipment. OMIT

07.608.16.10 Coffee machines and noncarbonated beverage dispensers.
OMIT

08.608.17.1 Well locations. OMIT

09.SECTION 609 – HEALTH CARE PLUMBING – OMIT

CHAPTER 7 – SANITARY DRAINAGE

01.702.5 Chemical waste system. OMIT

02.705.11 Borosilicate glass joints. OMIT

03.705.19.6 Borosilicate glass to other materials. OMIT

04.705.19.7 Stainless steel drainage systems to other materials. OMIT

05.710.1.1 Horizontal stack offsets. OMIT

06.710.1.2 Vertical stack offsets. OMIT

**07.SECTION 711 – OFFSETS IN DRAINAGE PIPING IN BUILDINGS OF FIVE
STORIES OR MORE – OMIT**

08.SECTION 713 – HEALTH CARE PLUMBING – OMIT

09.SECTION 714 – COMPUTERIZED DRAINAGE DESIGN – OMIT

CHAPTER 8 – INDIRECT/SPECIAL WASTE

****Keep 802.1.6 Domestic dishwashing machines. and 802.4 Standpipes.**
and OMIT the rest of Chapter 8

CHAPTER 9 – VENTS

01.901.3 Chemical waste vent system. OMIT

02.901.6 Engineered systems. OMIT

03.903.2 Vent stack required. OMIT

04.903.5 Vent headers. OMIT

05.SECTION 912 – COMBINATION DRAIN AND VENT SYSTEM – OMIT

06.SECTION 914 – RELIEF VENTS—STACKS OF MORE THAN 10 BRANCH INTERVALS – OMIT

07.SECTION 915 – VENTS FOR STACK OFFSETS – OMIT

08.916.1 Size of stack vents and vent stacks. OMIT

09.TABLE 916.1 – SIZE AND DEVELOPED LENGTH OF STACK VENTS AND VENT STACKS – OMIT

10.SECTION 917 – AIR ADMITTANCE VALVES – OMIT

11.SECTION 918 – ENGINEERED VENT SYSTEMS – OMIT

12.SECTION 919 – COMPUTERIZED VENT DESIGN – OMIT

CHAPTER 10 – TRAPS, INTERCEPTORS AND SEPARATORS

01.SECTION 1003 – INTERCEPTORS AND SEPARATORS – OMIT

CHAPTER 11 – STORM DRAINAGE – OMIT

CHAPTER 12 – SPECIAL PIPING AND STORAGE SYSTEMS – OMIT