

Jim Long
Commissioner of Insurance
State Fire Marshal




MANUFACTURED BUILDING DIVISION

MEMORANDUM

DATE: July 21, 2004

TO: North Carolina Manufactured Home Manufacturers, Dealers, Set-Up Contractors,
Local Inspection Departments, and Other Interested Parties

FROM: C. Patrick Walker, P.E. 
Deputy Commissioner -- Manufactured Building Division

RE: State of North Carolina Regulations for Manufactured Homes, 2002 Edition
Revision to Plumbing Section 3.13.3.7 -- Testing

Attached is the completely revised **Section 3.13.3.7 – Testing**, of the *State of North Carolina Regulations for Manufactured Homes, 2002 Edition*. Background information concerning the necessity for the revisions is also provided.

The proposed revisions were submitted to Commissioner Jim Long for approval on July 1, 2004, and were signed by him on July 8, 2004.

The effective date of the revised Section 3.13.3.7 is September 1, 2004.

Please *cross out* the existing **Section 3.13.3.7** (on page 65 of the *Regulations*), and insert the attached.

attachment

State of North Carolina Regulations for Manufactured Housing 2004 Edition

Code Revision: Revised Plumbing Test Requirements

Approval Date: July 8, 2004

Effective Date: September 1, 2004

Background Information:

New testing/inspection procedures were devised for the field installed plumbing systems of manufactured homes when the new State of North Carolina Regulations for Manufactured Homes -2004 Edition was written. The new testing procedures were different that the current State Plumbing Code requirements and as such did not meet the current plumbing testing requirements indicated in the State Plumbing Code. General Statute 87-21(c1) contains a plumbing licensing exception which allows employees of manufactured housing dealers and manufactured housing set-up contractors to install on-site plumbing without being a licensed plumber provided the installation is installed *in accordance with the State Plumbing Code*. The North Carolina State Plumbing Board informed the Manufactured Building Division that it is their interpretation that the plumbing testing requirements in the new regulations for manufactured housing DO NOT meet the State Plumbing Code as required in General Statute 87-21(c1) and as a result, the plumbing licensing exception for dealer and set-up contractor employees is no longer valid. It was decided to revise the testing requirements for manufactured homes to match the requirements in the State Plumbing Code thereby enabling the plumbing licensing exception for employees of dealers and set-up contractors to once again be valid. Representatives from the North Carolina State Plumbing Board and the North Carolina Manufactured Housing Institute have agreed to the following attached Code revisions.

Delete the Current Section 3.13.3.7 and Replace with the Following:

3.13.3.7 TESTING

3.13.3.7.1 DWV System Testing

As required by Federal Standards, the factory installed portion of the drainage, waste, and vent (DWV) system has been tested at the manufacturing facility by one of the following methods: a water test, an air test, or a flood level test. The *SITE-INSTALLED PORTION* of the DWV system for all homes shall also be tested at the site. All homes, whether NEW or USED, shall have the *SITE-INSTALLED PORTION* of the DWV system tested at the site in accordance with **Section 3.13.3.7.1.1**.

3.13.3.7.1.1 Test for Site-Installed Portion of DWV System

The *SITE-INSTALLED PORTION* of the DWV system shall be tested by EITHER

a. A water test in which the *SITE-INSTALLED PORTION* is subject to a head of water not less than 3 feet above the highest site-completed fitting. The 3 foot head of water shall be kept in the system for at least 15 minutes before inspection starts.

OR

b. An air test in which the *SITE-INSTALLED PORTION* of the DWV system shall be subjected to an air test by a method suitable to the local code official. The air test shall be made by forcing air into the system until there is a uniform gauge pressure of 5 pounds per square inch. This pressure shall be held for a test period of at least 15 minutes.

3.13.3.7.1.2 Fixture Test

As required by Federal Standards, factory installed plumbing fixtures and connections have been tested prior to leaving the manufacturing facility. No additional testing of fixtures is required at the site unless there is evidence of physical damage.

3.13.3.7.2 Water Distribution System Testing

As required by Federal Standards, the factory installed water distribution system has been tested prior to leaving the manufacturing facility. The *SITE-INSTALLED PORTION* of the water distribution system shall be tested at the site. All homes, whether NEW or USED, shall have the *SITE-INSTALLED PORTION* of the water distribution system tested at the site by the method specified in **Section 3.13.3.7.2.1**.

3.13.3.7.2.1 Pressure Test for Water Distribution System

Water distribution system tests shall be carried out as follows:

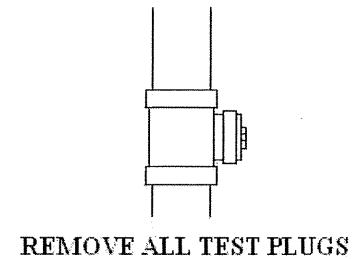
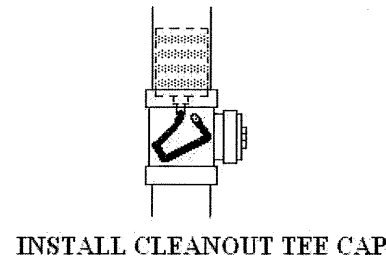
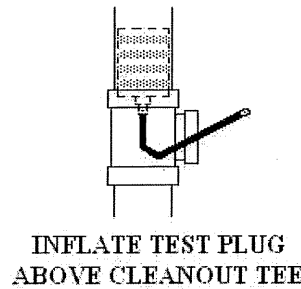
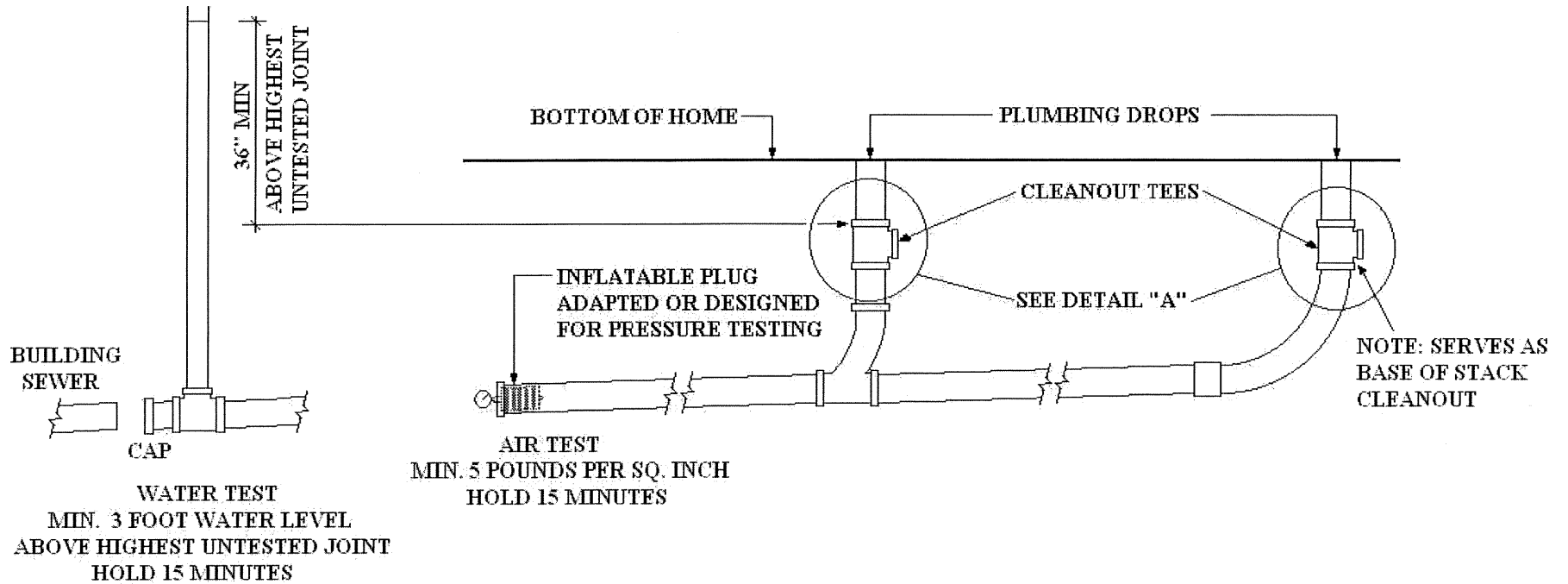
Upon completion on site of the water distribution system, the *SITE-INSTALLED PORTION* of the system shall be tested under a water pressure of not less than 100 psi or, for piping systems *other than plastic*, by an air test of not less than 100 psi. While under the required pressure, the system shall be visually inspected for leaks and proper use and installation of materials, joints, and connections in accordance with the provisions of this Code or, for situations not covered in this Code, in accordance with the **North Carolina Plumbing Code**, current edition. The water utilized for tests shall be obtained from a potable source of supply. Any occurrences of leaks or improper use or installation of materials, joints, and connections shall be corrected prior to issuing a Certificate of Occupancy for the home. Note that, for well systems, the working pressure test must be performed after electrical power has been supplied to the site. As an alternate, a generator may be utilized.

3.13.3.7.3 Completion of Testing Procedures

Completion of the test procedures given in **Sections 3.13.3.7.1.1** and **3.13.3.7.2.1** shall be considered as meeting the plumbing test requirements of this Code. If the tests in **Sections 3.13.3.7.1.1** and **3.13.3.7.2.1** are satisfactorily completed, *no additional tests shall be required by the local inspection jurisdiction*.

MANUFACTURED HOUSING DWV TEST PROCEDURES

(NOTE: THIS IS ONLY ONE METHOD TO TEST THE DWV SYSTEM. THERE MAY BE OTHER METHODS WHICH ALSO MEET THE CODE REQUIREMENTS)



DETAIL "A"

1. INSERT AND INFLATE TEST PLUGS ABOVE CLEANOUT TEES
2. INSTALL CLEANOUT TEE CAPS
3. USE EITHER WATER TEST OR AIR TEST
4. REMOVE ALL TEST PLUGS AND TEST APPARATUS
5. MAKE FINAL CONNECTION TO BUILDING SEWER