

Township of North Dundas – Building Services – Policy			
Subject:	Testing of Plumbing Systems	Policy No.:	BS25-001
Effective Date:	09 January 2025	Replaces:	None
Approved by:	Preston Stronach, <i>Chief Building Official</i>	Type of Policy:	Internal/External

Purpose

This policy outlines the required information and documentation necessary to satisfy the testing requirements for plumbing systems as outlined in the Ontario Building Code (OBC).

Scope

This policy applies to all individuals and entities requiring testing of plumbing systems and may, upon approval by the Chief Building Official, be accepted in-lieu of required visual inspection of required tests of plumbing systems.

Definitions

Words in *italics* retain the same definition as listed in the OBC.

Required Plumbing Tests

In accordance with the OBC, the following list represents the required testing to be completed prior to covering plumbing systems (see Appendix A for a full description of each heading):

7.3.6. Testing of Drainage or Venting Systems

- 7.3.6.1. Tests and Inspection of Drainage or Venting Systems
- 7.3.6.2. Tests of Pipes in Drainage Systems
- 7.3.6.3. Tests of Venting Systems
- 7.3.6.4. Water Pressure Tests
- 7.3.6.5. Air Pressure Tests
- 7.3.6.6. Final Tests
- 7.3.6.7. Ball Tests

7.3.7. Testing of Potable Water Systems

- 7.3.7.1. Application of Tests
- 7.3.7.2. Pressure Tests of Potable Water Systems
- 7.3.7.3. Water Pressure Tests

Certificate In-lieu of Observation of Testing

In an effort to provide greater flexibility in construction scheduling, avoid unnecessary reinspection's, and prevent conflicting requirements between plumbing codes and the OBC, the certificate may be submitted to the Chief Building Official to be used in-lieu of an inspector physically observing a test on site. The certificate will only be valid when certified by a licensed plumber.

Licensed Plumber

A licensed plumber is one that is registered, and in good standing with Skilled Trades Ontario. Verification that a plumber is licensed will be conducted prior to the acceptance of a certificate.

Submission of Certificate

Certificates will be required to be submitted prior to covering. If plumbing systems are covered prior to a certificate being submitted, the Chief Building Official may require the plumbing systems to be uncovered and retested in the presence of a building inspector.

APPENDIX A

7.3.6. Testing of Drainage or Venting Systems

7.3.6.1. Tests and Inspection of Drainage or Venting Systems

- (1) Except in the case of an external *leader*, after a section of a *drainage system* or a *venting system* has been roughed in, and before any *fixture* is installed or piping is covered, a water pressure test or an air pressure test shall be conducted.
- (2) After every *fixture* is installed and before any part of the *drainage system* or *venting system* is placed in operation, a final test shall be carried out when requested by the chief *building* official.
- (3) Where a prefabricated system is assembled off the *building* site in such a manner that it cannot be inspected and tested on site, off-site inspections and tests shall be conducted.
- (4) Where a prefabricated system is installed as part of a *drainage system* or *venting system*, all other plumbing work shall be tested and inspected and a final test shall be carried out on the complete system when requested.
- (5) A ball test shall be carried out on a *sanitary building drain*, *sanitary building sewer*, *storm building drain* and a *storm building sewer* buried underground.
- (6) A *sewer lateral extension* need not be tested and inspected if the *sewer lateral extension* was *constructed*, tested and inspected at the time of the installation of the public sewer.

7.3.6.2. Tests of Pipes in Drainage Systems

- (1) Pipes in a *drainage system*, except an external *leader* or *fixture outlet pipe*, shall be capable of withstanding without leakage a water pressure test, air pressure test and final test.

7.3.6.3. Tests of Venting Systems

- (1) *Venting systems* shall be capable of withstanding without leakage a water pressure test, air pressure test and final test.

7.3.6.4. Water Pressure Tests

- (1) A water pressure test shall consist in applying a water column of at least 3 m to all joints.
- (2) In making a water pressure test
 - (a) every opening except the highest shall be tightly closed with a testing plug or a screw cap, and

(b) the system or the section shall be kept filled with water for 15min.

7.3.6.5. Air Pressure Tests

(1) Air pressure tests shall be conducted in accordance with the manufacturer's instructions for each piping material, and

(a) air shall be forced into the system until a pressure of 35 kPa is created, and

(b) this pressure shall be maintained for at least 15 min without a drop in pressure. (See [Note A-7.3.6.5.\(1\)](#))

7.3.6.6. Final Tests

(1) Where a final test is made,

(a) every *trap* shall be filled with water,

(b) the bottom of the system being tested shall terminate at a *building trap*, test plug or cap,

(c) except as provided in Sentence (2), smoke from smoke-generating machines shall be forced into the system,

(d) when the smoke appears from all roof terminals they shall be closed, and

(e) a pressure equivalent to a 25 mm water column shall be maintained for 15 min without the addition of more smoke.

(2) The smoke referred to in Clauses (1)(c) and (d) may be omitted provided the roof terminals are closed and the system is subjected to an air pressure equivalent to a 25 mm water column maintained for 15 min without the addition of more air.

7.3.6.7. Ball Tests

(1) Where a ball test is made, a hard ball dense enough not to float shall be rolled through the pipe.

(2) The diameter of the ball shall be not less than

(a) 50 mm where the *size* of the pipe is NPS 3 or more, or

(b) 25 mm where the *size* of the pipe is less than NPS 3.

7.3.7. Testing of Potable Water Systems

7.3.7.1. Application of Tests

(1) After a section of a *potable water system* has been completed, and before it is placed in operation, a water pressure test or an air pressure test shall be conducted.

(2) A pressure test may be applied to each section of the system or to the system as a whole.

(3) Where a prefabricated system is assembled off the *building* site in such a manner that it cannot be inspected and tested on site, off-site inspections and pressure tests shall be conducted.

(4) Where a prefabricated system is installed as part of a *water system*

(a) all other plumbing work shall be tested and inspected, and

(b) the complete system shall be pressure tested when requested.

7.3.7.2. Pressure Tests of Potable Water Systems

(1) Every *potable water system* shall be capable of,

(a) withstanding without leakage a water pressure that is at least 1000 kPa (~145 psi) for at least 1 h, or

(b) withstanding for at least 2 h without a drop in pressure an air pressure that is at least 700 kPa (~101.5 psi).

7.3.7.3. Water Pressure Tests

(1) Where a water pressure test is made, all air shall be expelled from the system before *fixture* control valves or faucets are closed.

(2) *Potable* water shall be used to test a *potable water system*.

CERTIFICATE OF COMPLIANCE

Submitted to: **Building Services
Township of North Dundas
636 St. Lawrence Street
Winchester ON, PO Box 489
K0C 2K0**

OFFICE USE ONLY

Date Received:

Received by:

Plumbing Contractor Details

Contractor Name	
Company Name	
Company Phone No.	
Company Email Address	
Immediate Supervisor (if applicable)	
Supervisor Contact No. (if applicable)	

Details of Plumbing Work

Project Address	
-----------------	--

Brief description of work (*plumbing works performed including location on permit plans*)

Certificate Details (select all that apply)**Drain, Waste, Vent (DWV) System**

Piping	<input type="checkbox"/> ABS	<input type="checkbox"/> PVC	<input type="checkbox"/> Other (specify):	
Test	<input type="checkbox"/> Water	<input type="checkbox"/> Air	<input type="checkbox"/> Ball	<input type="checkbox"/> Final
	<input type="checkbox"/> Other (specify):			
Test Time	Start:		End:	
Test Date				

Potable Water System

Piping	<input type="checkbox"/> Copper	<input type="checkbox"/> PEX	<input type="checkbox"/> Other (specify):	
Test	<input type="checkbox"/> Water	<input type="checkbox"/> Air	<input type="checkbox"/> Other (specify):	
Test Time	Start:		End:	
Test Date				

I certify that testing of the plumbing works complies with the relevant provisions of the Ontario Building Code in effect at the time of construction.

License No.	
Date	
Signature	

Disclaimer: This certificate is not to be construed as certifying that all plumbing work performed is in conformance with the applicable codes at the time of construction. This certificate may only be used to provide reasonable assurance to the Authority Having Jurisdiction (AHJ) that testing of the plumbing work was in accordance with the relevant sections of the Ontario Building Code in effect at the time of construction.