Instructions for the Submission of Backflow Prevention Plans

1. A site plan sketch must be provided that shows:
   a. Utilities
   b. Property lines (approximate)

   The sketch must show the approximate length of the service line from the main to the meter, the relative location of the meter and the backflow device as well as any laterals off of the main service line in the vicinity of the meter.

2. The plans for the device being installed. These plans must be stamped by either a Professional Engineer, licensed in NYS or an Architect registered in NYS. If the installation is 2 inches or less, the KWD has a set of generic plans that are suitable for use with most typical installations.

3. The application (DOH-347) must be completed and signed by the owner. The KWD will complete the following items on the application: 11, 13, and 14. All other boxes on the application should be completed before the application is submitted to the KWD for review.

4. The application fee of $100 must accompany submission. This fee will cover the initial review of the submission by the Department as well the review of a single re-submission, should that be required. If further submissions are required beyond that, an additional fee of $50 will be required for each review thereafter.

Number of sets required:
- 3 sets
Additional Information for Owners:

- Once the plans are reviewed, and approved by the Water Department, they will be forwarded to the Ulster County Health Department (UCHD) for their review.
- If acceptable, the UCHD will issue a Certificate of Approval.
- Once the Certificate of Approval has been received, the customer may proceed with the installation of the backflow device. All work must be done by a master plumber licensed by the City of Kingston. If the customer chooses to proceed with the installation before the UCHD issues the Certificate of Approval, the customer does so at their own risk and is liable for any changes that the UCHD may require.
- Within 45 days of the installation, the initial test on the device must be performed. This test will be performed by the Water Department at no charge to the customer and may be scheduled by calling the Water Department at 331-0175.
- 10 NYCRR Section 5-1.31 stipulates that all devices must be tested annually by a Certified Backflow Tester. A copy of the inspection and test must be forwarded to the Kingston Water Department for this requirement to be satisfied.
- As a courtesy, the KWD will notify the owner of the need to have the annual test performed on the device during the month preceding the test date. If the work is not performed by the required date, a $50.00 fine will be assessed. A 2nd notice will be issued informing the owner that the test is past due and that they have 15 days to have the work completed or face termination of service. If the work is still not performed on the date of the termination, a second $50 fine will be assessed and the service terminated.
- If you have questions regarding the application, please call the Water Department at 331-0175.
NOTES:
1. SEE GENERAL NOTES.
2. PROVIDE PIPE SUPPORTS AS REQUIRED.

KINGSTON WATER DEPARTMENT
PLANS AND SPECIFICATIONS
FOR THE INSTALLATION OF REDUCED PRESSURE TYPE BACKFLOW PREVENTERS
(FOR SERVICES 2" OR LESS)

Unauthorised alteration or addition to a plan bearing a licensed engineer's seal is a violation of section 7209, subdivision 2, of the New York State Education Law.
NOTES:
1. SEE GENERAL NOTES.
2. PROVIDE PIPE SUPPORTS AS REQUIRED.

KINGSTON WATER DEPARTMENT
PLANS AND SPECIFICATIONS
FOR THE INSTALLATION OF REDUCED PRESSURE TYPE
BACKFLOW PREVENTERS
(FOR SERVICES 2" OR LESS)

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ABOVE GROUND INSTALLATION
(SHOWN WITH AND WITHOUT FLOW METER)

NOTES:
1. SEE GENERAL NOTES.
2. PROVIDE PIPE SUPPORTS AS REQUIRED.
3. PROVIDE HEATING & LIGHTING FOR ENCLOSURE.
4. BACKFLOW PREVENTER MAY BE INSTALLED IN BUILDING OR IN PROTECTIVE ENCLOSURE.

KINGSTON WATER DEPARTMENT
PLANS AND SPECIFICATIONS
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(FOR SERVICES 2" OR LESS)

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**LEAD FREE\textsuperscript{®}**

**Series LF009**

**Reduced Pressure Zone Assemblies**

Sizes: $\frac{1}{4}$" - 3" (8 - 80mm)

Series LF009 Reduced Pressure Zone Assemblies are designed to protect potable water supplies in accordance with national plumbing codes and water authority requirements. This series can be used in a variety of installations, including the prevention of health hazard cross-connections in piping systems or for containment at the service line entrance. The LF009 features Lead Free\textsuperscript{®} construction to comply with Lead Free\textsuperscript{®} installation requirements.

This series features two in-line, independent check valves, captured springs and replaceable check seats with an intermediate relief valve. Its compact modular design facilitates easy maintenance and assembly access. Sizes $\frac{1}{4}$" - 1" (8 - 25mm) shutoffs have tee handles.

### Features

- Single access cover and modular check construction for ease of maintenance
- Top entry - all internals immediately accessible
- Captured springs for safe maintenance
- Internal relief valve for reduced installation clearances
- Replaceable seats for economical repair
- Lead Free\textsuperscript{®} cast copper silicon alloy body construction for durability
- $\frac{1}{4}$" - 2" (8 - 50mm)
- Fused epoxy coated cast iron body 2½" and 3" (65 and 80mm)
- Ball valve test cocks — screwdriver slotted $\frac{1}{4}$" - 2" (8 - 50mm)
- Large body passages provide low pressure drop
- Compact, space saving design
- No special tools required for servicing

### Specifications

A Reduced Pressure Zone Assembly shall be installed at each potential health hazard location to prevent backflow due to backsplophage and/or backpressure. The assembly shall consist of an internal pressure differential relief valve located in a zone between two positive seating check modules with captured springs and silicone seat discs. Seats and seat discs shall be replaceable in both check modules and the relief valve. There shall be no threads or screws in the waterway exposed to line fluids. Service of all internal components shall be through a single access cover secured with stainless steel bolts. Body and shutoffs shall be constructed using Lead Free\textsuperscript{®} cast copper silicon alloy materials. Lead Free\textsuperscript{®} reduced pressure zone assembly shall comply with state codes and standards, where applicable, requiring reduced lead content.

The assembly shall also include two resilient seated isolation valves, four resilient seated test cocks and an air gap drain fitting. The assembly shall meet the requirements of: USC, ASSE Std. 1013, AMWA Std. C511; CSA B64.4. Shall be a Watts Series LF009.

### Now Available

WattsBox Insulated Enclosures.

For more information, send for literature ES-WB.

---

**WATTS®**

*Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.*
Available Models: ¼" – 2" (8 – 50mm)

Suffix:
- GT – quarter-turn ball valves
- S – strainer
- LF – without shut-off valves
- PC – internal polymer coating

Prefix:
- U – union connections

Available Models: 2 ¼" – 3" (65 – 80mm)

Suffix:
- NFS – non-rising stem resilient seated gate valves
- OSY – UL/FM outside stem and yoke resilient seated gate valves
- S-FDA – FDA epoxy coated strainer
- QT-FDA – FDA epoxy coated quarter-turn ball valves
- LF – without shut-off valves

Note: The installation of a drain line is recommended. When installing a drain line, an air gap is necessary (see ES-AG).

Materials: ¼" – 2" (8 – 50mm)

Materials: 2 ¼" and 3" (65 – 80mm)
- FDA approved Epoxy coated cast iron unibody with plastic seats
- Relief valve with stainless steel seat and trim
- Lead Free cast copper silicon alloy body ball valve test cocks

Pressure / Temperature

Sizes ¼" – 2" (6 – 50mm) Suitable for supply pressure up to 175 psi (12 bar). Water temperature: 33°F – 160°F (0.5° – 75°C).

Sizes 2 ¼" and 3" (65 and 80mm) are suitable for supply pressures up to 175 psi (12.1 bar) and water temperature at 110°F (43°C) continuous, 140°F (60°C) intermittent.

Standards

USC
ASSE No. 1013
AWWA C511
CSA B64.4
IAPMO File No. 1563.

Approvals

ASSE, AWWA, CSA, IAPMO

Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California. Approval models CT, FC, NFS, CEY.

UL Classified
2 ¼" and 3" (65 and 80mm) with OSY gate valves.
¾" – 2" (20-50mm) without shut-off valves (-LF) (except LF009M3LF)

Air Gaps and Elbows

<table>
<thead>
<tr>
<th>MODEL</th>
<th>OUTFIT</th>
<th>OUTFIT</th>
<th>A</th>
<th>A</th>
<th>B</th>
<th>B</th>
<th>WEIGHT</th>
</tr>
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<tbody>
<tr>
<td>for 900, 909 and 903 sizes</td>
<td>in.</td>
<td>in.</td>
<td>in.</td>
<td>mm</td>
<td>in.</td>
<td>mm</td>
<td>lb.</td>
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<td>903AGA</td>
<td>½&quot;-¾&quot;</td>
<td>009</td>
<td>½</td>
<td>13</td>
<td>2¾</td>
<td>60</td>
<td>3¾</td>
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<tr>
<td>903AGC</td>
<td>¾&quot;-1&quot;</td>
<td>O09M</td>
<td>1</td>
<td>25</td>
<td>3¾</td>
<td>83</td>
<td>4¾</td>
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<tr>
<td>903AGF</td>
<td>1¼&quot;-2&quot;</td>
<td>O09M1</td>
<td>2</td>
<td>51</td>
<td>4¾</td>
<td>111</td>
<td>6¾</td>
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<tr>
<td>903AGK</td>
<td>4&quot;-8&quot;</td>
<td>O909</td>
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<td>76</td>
<td>6¾</td>
<td>182</td>
<td>9¾</td>
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<tr>
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<td>8&quot;-10&quot;</td>
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<td>102</td>
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<td>187</td>
<td>11¾</td>
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<tr>
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<td>½&quot;-¾&quot;</td>
<td>009</td>
<td>½</td>
<td>13</td>
<td>2¾</td>
<td>60</td>
<td>3¾</td>
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<td>O09M1</td>
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<td>40</td>
<td>2¾</td>
<td>60</td>
<td>3¾</td>
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<tr>
<td>909ELH</td>
<td>2¼&quot;-3&quot;</td>
<td>O09M9</td>
<td>2²½</td>
<td>63</td>
<td>3¼</td>
<td>92</td>
<td>3¾</td>
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* Vertical
Dimensions and Weight: \( \frac{1}{4}'' - 2'' (8 - 50\text{mm}) \) LF009

<table>
<thead>
<tr>
<th>SIZE (IN)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>L</th>
<th>M</th>
<th>N</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \frac{1}{4}'' )</td>
<td>8</td>
<td>10</td>
<td>250</td>
<td>4%</td>
<td>117</td>
<td>3%</td>
<td>86</td>
<td>1%</td>
</tr>
<tr>
<td>( \frac{1}{2}'' )</td>
<td>10</td>
<td>10</td>
<td>250</td>
<td>4%</td>
<td>117</td>
<td>3%</td>
<td>86</td>
<td>1%</td>
</tr>
<tr>
<td>1''</td>
<td>15</td>
<td>10</td>
<td>250</td>
<td>4%</td>
<td>117</td>
<td>3%</td>
<td>86</td>
<td>1%</td>
</tr>
<tr>
<td>1( \frac{3}{4}'' )</td>
<td>20</td>
<td>10%</td>
<td>273</td>
<td>5</td>
<td>127</td>
<td>2%</td>
<td>86</td>
<td>1%</td>
</tr>
<tr>
<td>2''</td>
<td>25</td>
<td>14%</td>
<td>368</td>
<td>5%</td>
<td>140</td>
<td>3</td>
<td>26</td>
<td>2%</td>
</tr>
<tr>
<td>2( \frac{1}{2}'' )</td>
<td>32</td>
<td>17%</td>
<td>441</td>
<td>6</td>
<td>150</td>
<td>3%</td>
<td>85</td>
<td>2%</td>
</tr>
<tr>
<td>3''</td>
<td>40</td>
<td>17%</td>
<td>454</td>
<td>6</td>
<td>150</td>
<td>3%</td>
<td>85</td>
<td>2%</td>
</tr>
<tr>
<td>4''</td>
<td>50</td>
<td>21%</td>
<td>545</td>
<td>2%</td>
<td>182</td>
<td>4%</td>
<td>114</td>
<td>3%</td>
</tr>
</tbody>
</table>

†Clearance for servicing

Dimensions and Weight: \( 2\frac{1}{2}'' \) and 3'' (65 and 80mm) LF009

<table>
<thead>
<tr>
<th>STRAINER SIZE</th>
<th>DYNAMICS (APPROX.)</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>in. mm</td>
<td>in. mm</td>
<td>in. mm</td>
</tr>
<tr>
<td>2( \frac{1}{2}'' )</td>
<td>65</td>
<td>10</td>
</tr>
<tr>
<td>3''</td>
<td>80</td>
<td>10%</td>
</tr>
</tbody>
</table>

Watts G-4000 Series QT - Ball Valves
NEW YORK STATE DEPARTMENT OF HEALTH
Bureau of Public Water Supply Protection

Application for Approval of Backflow Prevention Devices

<table>
<thead>
<tr>
<th>PRINT OR TYPE ALL ENTRIES EXCEPT SIGNATURES</th>
<th>Block #</th>
<th>Lot #</th>
<th>FOR DEPARTMENT USE ONLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please completed items 1 through 12a + Block and Lot Numbers</td>
<td></td>
<td></td>
<td>Log No.</td>
</tr>
</tbody>
</table>

1. Name of Facility

2. City, Village, Town

3. County

4. Location of Facility

4a. Phone Numbers

5. Contact Person

5a. Approx. Location of Device(s)

6. Mfg. Model #

Size of Device(s)

# of Fire Services

# of Domestic Services

# of Combined Services

Total # of Services

Total # of Buildings

7. Name of Owner

Title

Phone Number

6a. Nature of works

- Initial Device Installation
- Replace Existing Device

8a. New Service

- Existing Service

8b. New Building

- Existing Building

- Major Renovation

9. Name of Design Engineer or Architect

Dennis M. Larios, P.E

KWD Pre-approve Plans

Street Address

67 Maiden Lane

City: Kingston

State: NY

Zip: 12401

10. NYS License #

58747

- PE
- RA
- Other

10a. Telephone Number(s)

Date: 04/2014

11. Water System Pressure (psi) at Point of Connection

Max

Avg

Min

12. Estimate Installation Cost

12a. Estimate Design Cost

13. Degree of Hazard

- Hazardous
- Aesthetically Objectionable

List of processes or reasons that lead to degree of hazard checked:

14. Public water supply name

Kingston Water Department

Name of supplier's designate representative

- Title
- Superintendent

Signature

Date: M D Y

Note: All applicants must be accompanied by plans, specifications, and an engineer's report describing the project in detail. The project must first be submitted to the water supplier, who will forward it to the local public health engineer. This form must be prepared in quadruplicate with four copies of all plans, specifications and descriptive literature.

DOH-347 (5/91)