Village of Broadview

Procedures for cross-connection or backflow device installations within a building:

1. Obtain the results of the most current cross connection survey completed by the Village of Broadview. This report will indicate changes or upgrades required. Submit a copy with the application.
2. Determine who will perform the required work. A state of Illinois Licensed Plumber is required to obtain the permit and to perform the work. Provide a copy of the 055- license with the application.
3. If there is work required on the fire sprinkler system, that work must be performed by an Illinois Licensed Sprinkler Contractor. The sprinkler contractor cannot perform the work on any backflow device.
4. Fill out the application for a backflow device installation permit. If there are multiple devices, file the additional sheet(s) for each additional device.
5. The application shall include catalog cut sheets for each backflow device being installed.
6. Indicate the required expansion tanks for all water heaters.
7. Indicate the area of discharge and approved receptor for any backflow device.
8. Changes to the fire protection system made necessary by this work shall be approved by the Broadview Fire Department.
9. The permit application shall be reviewed for compliance with all municipal, state and federal code requirements. Any deficiencies on the application or information submitted will require correction and resubmittal.
10. When the submittal is approved and the indicated fees paid, the permit will be issued. The application and supporting documentation, when approved, shall constitute the required Letter of Intent and the plan review.
11. When all work is complete, call for a final inspection and testing of all cross connection devices. All testable backflow devices within a building shall be scheduled and tested on the same day. The Village backflow device tester shall test each new and existing testable device.
12. If the building has a fire sprinkler system and an upgraded backflow device is being installed, see the separate page of additional information required to be submitted with that application

Village of Broadview

APPLICATION for BACKFLOW DEVICE INSTALLATION PERMIT

Application Date: _____

Permit Number: _____

Company: _____

Contact telephone Number: _____

Installation address: _____

Specific building address, not mailing address, billing address or home office

Plumber responsible for this work (NAME): _____

Plumbing Contractor Registration Number (055-): _____

Principal's License Number (058-/PL) : _____

Plumber's e-mail address: _____

Device to be installed: _____

Type _____

Size _____

Manufacturer and Model _____

Orientation or Pattern _____

Device to be installed on (system or equipment)*: _____

*e.g. fire protection, lawn irrigation system, process piping, sanitation system, dialysis, other equipment

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Fire sprinkler hydraulic calculations or flow data for pipe schedule systems provided by:

Name: _____

Credential: _____

Company: _____

Phone Number: _____

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1. The permit shall be issued when the fire sprinkler system hydraulic calculations have been approved, the installation plan and device specifications have been approved and the permit fee calculated and paid. Work may begin at any time following issuance of the permit. This application and the supporting documentation when approved shall constitute the required Letter of Intent and the plan review.
2. The plumbing contractor shall make the Manufacturer's Installation Instructions available at the job site at the time of all inspections beginning the first day of work.
3. The plumbing contractor shall contact the plumbing inspector at least 24 hours prior to the start of work to notify the Village of the start date.
4. The plumbing contractor shall call for an inspection and testing of all devices when all work is complete. All testing for multiple devices at one address shall be performed on the same day.
5. If the project has multiple new devices at the same address, complete the additional sheets.
6. Fees established are based on the information submitted. Additional work found in the field or re-inspections will require additional incurred fees.

Village of Broadview

APPLICATION for BACKFLOW DEVICE INSTALLATION PERMIT

Installation address:

Additional Device to be installed: ____________________

Type ____________________

Size ____________________

Manufacturer and Model ____________________

Orientation or Pattern ____________________

Device to be installed on (system or equipment)*: ____________________

*e.g. fire protection, lawn irrigation system, process piping, sanitation system, dialysis, other equipment

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Additional Device to be installed: ____________________

Type ____________________

Size ____________________

Manufacturer and Model ____________________

Orientation or Pattern ____________________

Device to be installed on (system or equipment)*: ____________________

*e.g. fire protection, lawn irrigation system, process piping, sanitation system, dialysis, other equipment

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Additional Device to be installed: ____________________

Type ____________________

Size ____________________

Manufacturer and Model ____________________

Orientation or Pattern ____________________

Device to be installed on (system or equipment)*: ____________________

*e.g. fire protection, lawn irrigation system, process piping, sanitation system, dialysis, other equipment

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Additional Device to be installed: ____________________

Type ____________________

Size ____________________

Manufacturer and Model ____________________

Orientation or Pattern ____________________

Device to be installed on (system or equipment)*: ____________________

*e.g. fire protection, lawn irrigation system, process piping, sanitation system, dialysis, other equipment

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Village of Broadview

BACKFLOW DEVICE INSTALLATION PERMIT FIRE SPRINKLER INFORMATION

Installation address:

One of the following will be required based on the existing fire sprinkler system design.

1. Existing sprinkler system can absorb the additional friction loss and comply submit the following:
   a. List of hazard classifications in the building;
   b. Hydraulic design criteria used in the building;
   c. Catalog cut sheet for the new backflow device showing the friction loss based on the on the system flows;
   d. Existing hydraulic calculations with the line showing the loss for the existing cross connection device and
   e. Calculation showing the impact with the new cross connection device.
2. Existing system will be out of compliance with a new cross connection device submit the following:
   a. List of hazard classifications in the building;
   b. Hydraulic design criteria used in the building;
   c. Revised sprinkler plan showing the changes to the sprinkler system;
   d. Revised hydraulic calculations showing the changes to the sprinkler system;
   e. Current water flow information.
   f. An inspection of the system changes will be required by the Fire Department.
3. Existing building has a pipe schedule system submit the following a only or b
   a. Submit complete hydraulic calculations for the existing system and a set of sprinkler plans. All information required to verify the accuracy of the sprinkler calculations have to be submitted.
   b. Submit the following with a calculation showing the pipe schedule is in:
      1. Compliance with NFPA13;
      2. Current water flow information
      3. Hazard classification/s of the building;
      4. Height above grade for the highest sprinkler;
      5. Catalog cut of the new cross connection device showing applicable friction loss;
      6. Calculation showing the residual pressure at the highest sprinkler with the waterflow and pressures from NFPA13.

Village of Broadview

BACKFLOW DEVICE INSTALLATION PERMIT FIRE SPRINKLER INFORMATION

Installation address:

Available Water Pressure(City and/or Fire Pump*)

Static Pressure: _____

Residual Pressure:_____

Flow: _____

Test Date: _____

Friction Loss Information

Elevation of the highest sprinkler: _____(ft) x .433(psi/ft) = _____(psi)

Friction loss for new backflow device**. +_____(psi) = _____(psi total loss)

Available Residual Pressure Total psi loss Remaining residual pressure

_____ - _____ = _____

Minimum Residual Pressure Required

Occupancy Classification

Light hazard_____15psi

Ordinary hazard _____ 20psi

*Provide annual test report for the fire pump

**Provide specification material for new backflow device
