

CITY OF ONEONTA

FURNACE, BOILER, AND SPACE HEATER INSPECTION FORM

Note that the heating system inspection requirement is not complete until heating inspection reports for ALL UNITS in the building have been received by the Code Enforcement Office. (One heating unit per form; number of forms much match number of heating units.

**** The inspection procedures include measuring for fuel gas and carbon monoxide (CO) and will require the use of a combustible gas detector (CGD) and a CO detector. ****

Property Owner: _____

Property Address: _____

Licensee Name: _____

Inspector Name: _____

Inspection Date: _____

Number of Units in Building: _____

Furnace: _____

Boiler: _____

Space Heater: _____

Unit Location: _____

Occupant and Inspector Safety

Immediately upon entering the building, a sample of the ambient atmosphere should be taken.

1. The CO detector indicates a carbon monoxide level of 70 ppm or greater. The inspector should immediately notify the occupant of the need for themselves and any building occupant to evacuate; the inspector shall immediately evacuate and call 911.
2. Where the CO detector indicates a reading between 30 ppm and 70 ppm. The inspector should advise the occupant that high CO levels have been found and recommend that all possible sources of CO should be turned off immediately and windows and doors opened. Where it appears that the source of CO is a permanently installed appliance, advise the occupant to keep the appliance off and have the appliance serviced by a qualified servicing agent.
3. Where CO detector indicates CO below 30 ppm the inspection can continue.
4. The CGD indicates a combustible gas level of 20% LEL or greater. The inspector should immediately notify the occupant of the need for themselves and any building occupant to evacuate; the inspector shall immediately evacuate and call 911.
5. The CGD indicates a combustible gas level below 20% LEL, the inspection can continue.

Gas Piping and Connection Inspection

PASS	FAIL
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1. Leak Checks

(conduct a test for gas leakage using either a non-corrosive leak detection solution or a CGD confirmed with a leak detection solution)

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2. Appliance Connector

Is the appliance connection type compliant?

Inspect flexible appliance connections to determine if they are free of cracks, corrosion and signs of damage.

3. Piping Support

Is it adequately supported?

Any improperly capped pipe openings?

4. Bonding

Is the electrical bonding of gas piping compliant?

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5. Vent System Size and Installation

Is the venting system size and installation compliant?

Is venting free of blockage, restriction, leakage, corrosion and deficiencies?

(inspect any interior and exterior combustion air openings and any connected combustion air ducts to determine that there is no blockage, restriction, corrosion or damage)

6. Direct Vent Appliances

Are air supply ducts and pipes securely fastened?

Is combustion air source located in the outdoors or to areas that freely communicate with the outdoors?

7. Clearances to Combustibles

Is area free of rags, paper or other combustibles?

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6. Appliance Components

Are burners and crossovers free of blockage and corrosion?

Do hoses have any cracks, splits, corrosion or loose connections?

Are there repairs needed?

Any modifications that override controls or safety systems?

Is electrical connection in compliance with National Electric Code?

General Appliance Operation

YES	NO
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Initial Startup. (Adjust thermostate to start appliance.)

Burning Properly?

Main Burner Ignition satisfactory?

Flame Appearance

Proper Color and proper appearance?

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Appliance Shutdown. (Adjust thermostate to shutdown appliance.)

Does appliance shut down?

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Appliance-Specific Inspections

Forced Air Furnaces:

- 1. OFF. Verify that an air filter is installed and that it is not excessively blocked with dust.
- 2. OFF. Inspect visible portions of the furnace combustion chamber for cracks, ruptures, holes and corrosion. A heat exchanger leakage test should be conducted.
- 3. ON. Verify both the limit control and the fan control are operating properly. Limit control operation can be checked by blocking the circulating air inlet or temporarily disconnecting the electrical supply to the blower motor and determining that the limit control acts to shut off the main burner gas.
- 4. ON. Verify that the blower compartment door is properly installed and can be properly re-secured if opened. Verify that the blower compartment door safety switch operates properly.
- 5. ON. Check for flame disturbance before and after blower comes on which can indicate heat exchanger leaks.
- 6. ON. Measure the CO in the vent after 5 minutes of main burner operation. The CO should not exceed threshold in Table D.6.

Boilers:

- 1. OFF and ON. Inspect for evidence of water leaks around boiler and connected piping.
- 2. ON. Verify that the water pumps are in operating condition. Test low water cutoffs, automatic feed controls, pressure and temperature limit controls, and relief valves in accordance with the manufacturer's recommendations to determine that they are in operating condition.
- 3. ON. Measure the CO in the vent after 5 minutes of main burner operation. The CO should not exceed threshold in Table D.6.

Vented Room Heaters:

- 1. OFF. For built-in room heaters and wall furnaces, inspect that the burner compartment is free of lint and debris.
- 2. OFF. Inspect that furnishings and combustible building components are not blocking the heater.
- 3. ON. Measure the CO in the vent after 5 minutes of main burner operation. The CO should not exceed threshold in Table D.6.

*****If this form is not completed in full correctly, it may be deemed invalid. *****

PASS

FAIL

Inspectors Signature: _____

