Indiana WX Gas Boiler Inspection Guide

Client: ____________________________________________ Job #: _____________
Address: ____________________________________________ Phone: _____________

Client Interview: ____________________________________________


Comments / Billing Information: □ Standard Inspection / Clean and Tune


Follow-Up: □ Emergency / Boiler Replacement


Fuel Type: □ Natural Gas □ L.P. Gas □ Boiler Type: □ Gravity or □ Pump
Water Heater: □ Boiler □ Gas □ Electric □ Boiler Type: □ Draft Hood Equipped □ High Efficiency
Number of Zones and Location of Thermostats: ____________________________

BTUH Input Ratings: Boiler: _________ W.H.: _________ Other (describe): ________________________

Define the CAZ (s): ____________________________

Describe Venting System (s): ____________________________

Is this the final inspection of a new boiler installation? □ Yes □ No

* Please draw a sketch on the reverse side of the last page as necessary for any descriptions *
Check for gas leaks. Inspect gas piping and flex connectors.

Perform an electrical safety inspection

Test pilot safety systems for proper operation

Inspect for water leaks inside the boiler

Inspect the vent system

*Continue and complete all other appropriate sections of this document*

Technical

Gas System:
- OK
- Repairs made

Operational shut-off switch?
- Yes

Electrical polarity correct?
- Yes

Appliance grounded?
- Yes

Pilot safety systems operational?
- Yes
- N/A

L.P. system 100% shut-off?
- Yes

Hole in a boiler section?
- Yes

Replace Boiler

Inspector

Gas System:
- OK

Electrical system:
- OK

Pilot safety systems:
- OK

Vent system:
- OK
Inspect and clean burners and boiler sections

- Dirty
  - OK

- OK

Determine if adequate combustion and ventilation air is available for CAZ 1.

- Confined space
  - OK

- OK

Determine if adequate combustion and ventilation air is available for CAZ 2.

- Confined space
  - OK

- OK

Inspect the thermostat(s) and set the heat anticipator(s)

- Measure amperage(s)
  - Repair, replace or adjust.
    - Repairs made

- OK

Water heater initial check

- Leaking
  - OK

- OK

Technician

- Boiler sections cleaned
  - OK

- Burners cleaned

Total BTUH in CAZ 1

- ________ BTUH

Volume of air needed:

- ________ Cu.Ft.

(Total BTUH divided by 20)

Volume available:

- ________ Cu.Ft.

(L x W x H)

Document methods for providing air, if needed, in the “Comments” section, including pipe and grille sizes.

- Total BTUH in CAZ 2
  - ________ BTUH

- Volume of air needed:
  - ________ Cu.Ft.

- Volume available:
  - ________ Cu.Ft.

- □ Combustion air work done by others.

- Measured amperage at the thermostat(s):
  - _____/_____/_____ Amps

- Heat anticipator reset?
  - Yes
  - No
  - N/A

- Properly installed temperature and pressure relief valve?
  - Yes

- Water temperature:
  - ________ Deg. F.

- Adjusted?
  - Yes
  - No

Inspector

- Burners and boiler sections:
  - OK

- Total amount of combustion and ventilation air provided for CAZ 1?
  - Yes

Proper amount of combustion and ventilation air provided for CAZ 2?

- Yes

- Heat anticipator setting:
  - _____/_____/_____ Amps

- N/A

- Properly installed temperature and pressure relief valve?
  - Yes

- Water temperature:
  - ________ Deg. F.

- Adjusted?
  - Yes
  - No
Inspect for evidence of any water leaks in the piping

Leaks
Repair leaks
☐ Leaks repaired
☐ Repaired

OK

Inspect for the presence and operation of a pressure gauge

Broken or missing
Add or replace as necessary
☐ Replaced

OK

System does not re-fill to correct pressure
Add or replace as necessary
☐ Added
☐ Replaced

OK

Inspect for the presence of, and test the operation of the auto-fill valve

OK

Inspect for the presence of a temperature gauge

Broken or missing
Add or replace as necessary
☐ Replaced

OK

Inspect for the presence, proper label, rating, and operation of a pressure relief valve

Missing or inoperable
Add or replace as necessary
☐ Replaced

OK

Technician

Piping leaking?
☐ Yes ☐ No

Repairs made?
☐ Yes ☐ No

☐ Leak repairs performed by others

Pressure gauge working properly?
☐ Yes ☐ No

______ PSI

Auto-fill working?
☐ Yes

Temperature gauge present?
☐ Yes

Relief valve operational?
☐ Yes ☐ No

List ratings:
________ BTUH
________ PSIG

Inspector

Water leaks in piping:
☐ OK

Pressure gauge working properly?
☐ Yes

______ PSI

Auto-fill working?
☐ Yes

Temperature gauge present?
☐ Yes

Relief valve operational?
☐ Yes

List ratings:
________ BTUH
________ PSIG
* Perform a “Worst Case Depressurization” test of the CAZ *

**Set-Up**

- Boiler and water heater off? □ Yes □ No
- All exterior windows and doors closed? □ Yes □ No
- Fireplace or wood stove dampers closed? □ Yes □ No
- Clothes dryer and all exhaust fans operating? □ Yes □ No
  (Do not operate whole house exhaust fans)
- Doors to rooms with no exhaust fans closed? □ Yes □ No
- Blower door being used to simulate 300 CFM fireplace flow? □ N/A □ Yes □ No

**“Worst Case” CAZ Depressurization Test**

- Is there a door from the interior to the CAZ? □ Yes □ No
- CAZ pressure WRT outside / CAZ door to interior open. □ Yes □ No
- CAZ pressure WRT outside / CAZ door to interior closed. □ Yes □ No

Set up the CAZ under “Worst Case” depressurization conditions before testing the combustion appliances.

**Technician**

- Expansion tank operational: □ Yes □ Replaced
- Pump serviced and functional: □ Yes

**Inspector**

- Expansion tank operational: □ Yes
- Pump serviced and functional: □ Yes

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**“Worst Case” set-up complete?**

□ Yes

**Final “Worst Case” depressurization measurement of the CAZ:**

□□□□□ Pa
**Note:** Initial combustion safety testing must be completed. If it is found that the appliances will not work under “Worst Case” conditions, then continue testing and repair under “normal operating conditions” and document in the “Follow-up” section of this guide.

Perform Safety testing on the gas appliances in the appropriate order.

**Important:** Test the lowest BTUH appliance in the CAZ first

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**Water Heater “5 Minute” Test Procedure**

**Technician Initial Test**

- Fire the water heater.
- Was initial flow established in the vent? □ Yes □ No
- Was there spillage after two minutes? □ Yes □ No

Draft pressure after five minutes: _____ Pa or _____ “W.C.

Carbon monoxide after five minutes: _______ / _______ PPM

□ N/A □ Repairs made

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**Heating Appliance “5 Minute” Test Procedure**

**Technician Initial Test**

- Fire the heating appliance.
- Was initial flow established in the vent? □ Yes □ No
- Was there spillage after two minutes? □ Yes □ No

Draft pressure after five minutes: _____ Pa or _____ “W.C.

Carbon monoxide after five minutes: _______ / _______ / _______ / _______ PPM

□ Flame roll-out/incorrectly cleaned □ Repairs made

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**Technician**

- □ Not tested under “Worst Case” conditions

- Outdoor air temp: _______ Deg. F.

- **Water heater:** Able to establish flow in vent? □ Yes
  
  Spillage? □ No
  
  Draft pressure: ___ Pa / ___ “W.C.

- Carbon monoxide: _______ / _______ PPM

- **Heating appliance:** Able to establish flow in vent? □ Yes
  
  Spillage? □ No
  
  Draft pressure: ___ Pa / ___ “W.C.

- Carbon monoxide: _______ / _______ PPM

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**Inspector**

- □ Not tested under “Worst Case” conditions

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- Carbon monoxide: _______ / _______ PPM

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- Carbon monoxide: _______ / _______ PPM

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Optional: Clocking the gas meter

Dial used: _______ Ft. Seconds for four revolutions: _______ Seconds
Average seconds for one revolution: _______ Seconds Cubic feet per hour (from chart): _______ Cubic Ft.
Cubic feet per hour X _______ (local BTUH content/cubic foot) = ____________ BTUH measured input rate
Nameplate input: _____________ BTUH

Technician: ___________________________ Date: _______
Final Inspector: ___________________________ Date: _______
Agency reviewer: ___________________________ Date: _______

Additional comments: ____________________________________________________________________
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