

# Indiana WX Gas Appliance Inspection Guide

Client: \_\_\_\_\_ Job #: \_\_\_\_\_

Address: \_\_\_\_\_ Phone: \_\_\_\_\_

**Client Interview:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Follow-Up and Comments:**  Emergency / Furnace Replacement

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Fuel Type:**  Natural Gas  L.P. Gas **Forced Air?**  Yes  No

**Furnace:**  Draft hood  Mid-efficiency (80+)  High-efficiency (90+)  Mobile Home

Other: \_\_\_\_\_ Input: \_\_\_\_\_ Btuh Location: \_\_\_\_\_

**Make and Model #:** \_\_\_\_\_ **Serial #:** \_\_\_\_\_

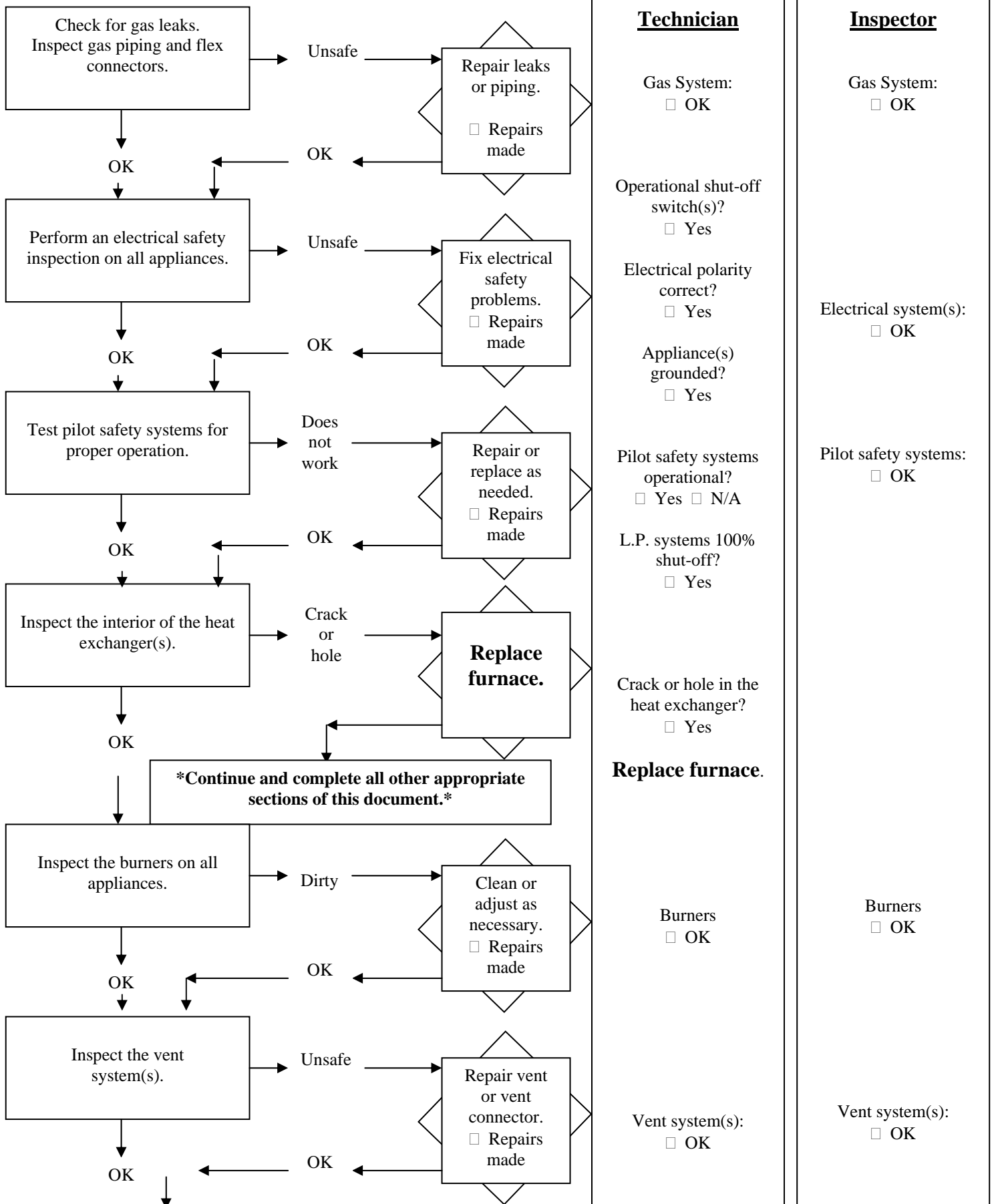
**Water Heater:**  Electric If Gas: Input: \_\_\_\_\_ Btuh Location: \_\_\_\_\_

Describe final vent system(s): \_\_\_\_\_

\_\_\_\_\_

**Is this the final inspection of a new furnace installation?**  Yes  No If yes, then only the “CAZ Depressurization” and “5 Minute” testing sections need to be filled out. Other appropriate information will have been completed in the New Furnace Installation Inspection Form.

# Indiana WX Gas Appliance Inspection Guide



**Technician**

Gas System:  
 OK

Operational shut-off switch(s)?  
 Yes

Electrical polarity correct?  
 Yes

Appliance(s) grounded?  
 Yes

Pilot safety systems operational?  
 Yes  N/A

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

Crack or hole in the heat exchanger?  
 Yes

**Replace furnace.**

Burners  
 OK

Vent system(s):  
 OK

**Inspector**

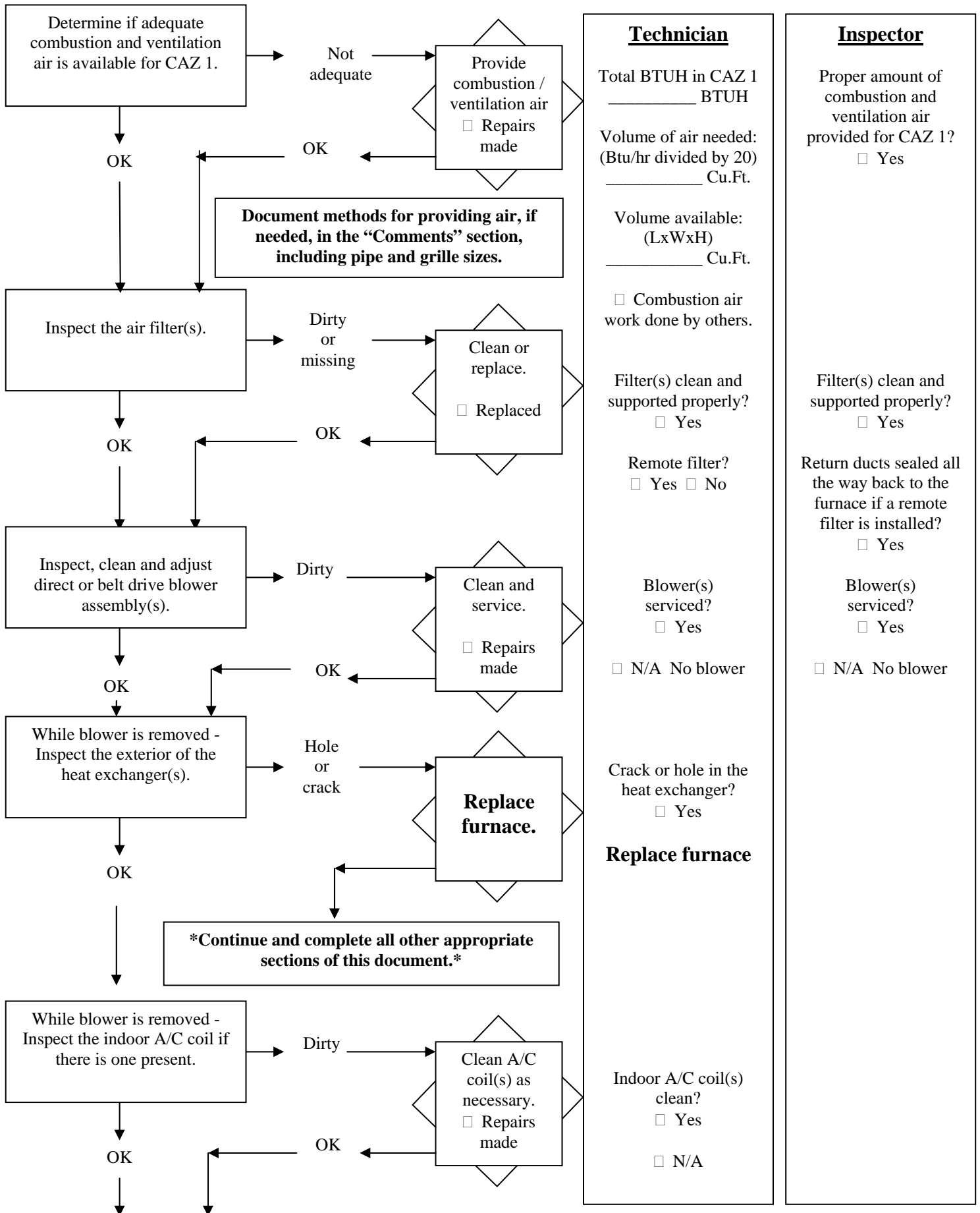
Gas System:  
 OK

Electrical system(s):  
 OK

Pilot safety systems:  
 OK

Burners  
 OK

Vent system(s):  
 OK



**Technician**

Total BTUH in CAZ 1 \_\_\_\_\_ BTUH

Volume of air needed: (Btu/hr divided by 20) \_\_\_\_\_ Cu.Ft.

Volume available: (LxWxH) \_\_\_\_\_ Cu.Ft.

Combustion air work done by others.

Filter(s) clean and supported properly?  
 Yes

Remote filter?  
 Yes  No

Blower(s) serviced?  
 Yes

N/A No blower

Crack or hole in the heat exchanger?  
 Yes

**Replace furnace**

Indoor A/C coil(s) clean?  
 Yes

N/A

**Inspector**

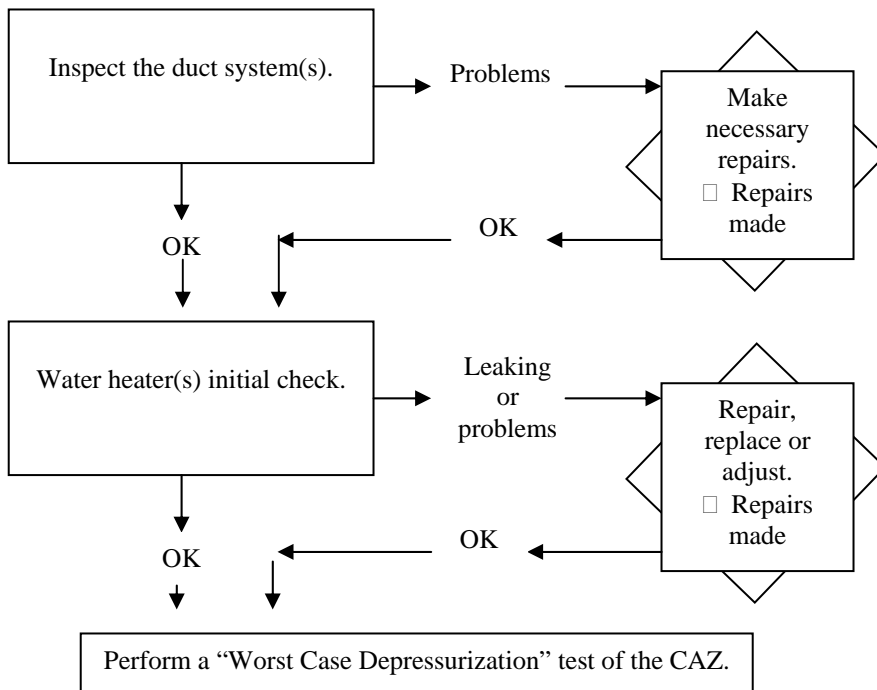
Proper amount of combustion and ventilation air provided for CAZ 1?  
 Yes

Filter(s) clean and supported properly?  
 Yes

Return ducts sealed all the way back to the furnace if a remote filter is installed?  
 Yes

Blower(s) serviced?  
 Yes

N/A No blower



**Technician**

- Any open returns?  
 Yes  No
- Ducts sealed?  
 Yes  No  
 N/A
- Duct sealing performed by others.
- Properly installed temperature and pressure relief valve(s)?  
 Yes
- Water temperature:  
 1) \_\_\_\_\_ Deg. F.  
 2) \_\_\_\_\_ Deg. F.
- Adjusted?  
 Yes  No

**Inspector**

- Any open returns?  
 No
- Ducts sealed?  
 Yes  N/A
- Properly installed temperature and pressure relief valve(s)?  
 Yes
- Water temperature:  
 1) \_\_\_\_\_ Deg. F.  
 2) \_\_\_\_\_ Deg. F.
- Adjusted?  
 Yes  No

<b><u>Set-Up</u></b>	<b><u>Technician</u></b>	<b><u>Inspector</u></b>
<b>Heating appliances and water heater off?</b> (Note: Testing performed with a cool vent)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
<b>Furnace filter clean or removed?</b> (Note: Blower must be able to move air)	<input type="checkbox"/> Yes <input type="checkbox"/> N/A	<input type="checkbox"/> Yes
<b>All exterior windows and doors closed?</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
<b>Fireplace or wood stove dampers closed?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> N/A	<input type="checkbox"/> Yes
<b>Clothes dryer/all exhaust fans operating?</b> (Note: Clean clothes dryer lint trap) (Note: Do not operate whole house exhaust fans) (Note: This includes power attic vent fans)	<input type="checkbox"/> Yes <input type="checkbox"/> N/A	<input type="checkbox"/> Yes
<b>All interior doors closed?</b> (Note: Do not close doors to rooms that contain JUST an exhaust fan and no supply register) (Note: Use smoke or a manometer to check door position you are unsure about)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
<b>All supply registers open?</b> (Note: Close supply registers in the CAZ)	<input type="checkbox"/> Yes <input type="checkbox"/> N/A	<input type="checkbox"/> Yes
<b>Is a blower door being used to exhaust 300 CFM per usable fireplace?</b>	<input type="checkbox"/> N/A <input type="checkbox"/> Yes	<input type="checkbox"/> Yes

“Worst Case” set-up complete?  
 Yes

“Worst Case” set-up complete?  
 Yes

**“Worst Case” CAZ Depressurization Test** Technician

Gauge set-up to measure CAZ WRT outside?  Yes  
 Is there a door from the interior to the CAZ?  Yes  No

**CAZ door:**

Open Closed

Furnace **Fan OFF**      \_\_\_\_\_ Pa      \_\_\_\_\_ Pa  
 Furnace **Fan ON**      \_\_\_\_\_ Pa      \_\_\_\_\_ Pa

**Set up the CAZ in “Worst Case” conditions for testing.**

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

**Test the lowest Btu/hr input appliance first.**

Usually this will be a water heater. This provision applies to all appliances that share combustion air. **Concept:** Test the lowest Btu/hr appliance under the conditions which are least likely to allow it to function properly.

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

(Monitor ambient CO!)

Technician Initial Test

Fire the water heater.

Was initial flow established in the vent? (5 sec.)  Yes  No  
 Spillage? (Should disappear within two minutes)  Yes  No  
 Draft pressure after not less than five minutes: \_\_\_\_\_ Pa **or** \_\_\_\_\_ “ W.C.  
 Carbon monoxide after five minutes: \_\_\_\_\_ / \_\_\_\_\_ PPM  
 Repairs made

(Note: Leave the water heater fired for re-test purposes)

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

(Monitor ambient CO!)

Technician Initial Test

Fire the heating appliance.

Was initial flow established in the vent? (5 sec.)  Yes  No  
 Spillage? (Should disappear within two minutes)  Yes  No  
 Did the heating appliance operation cause spillage or a reduction in draft at any other appliance it shares combustion air with?  Yes  No  
 N/A      Draft re-test: \_\_\_\_\_ Pa **or** \_\_\_\_\_ “ W.C.  
 Flame interference after the blower came on?  Yes  No  
 Draft pressure after five minutes: \_\_\_\_\_ Pa **or** \_\_\_\_\_ “ W.C.  
 Carbon monoxide after five minutes: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ PPM  
 Heating temperature rise after five minutes: S \_\_\_\_\_ - R \_\_\_\_\_ = \_\_\_\_\_ Deg. F.

Flame interference - Replace furnace       Repairs made - CO/Draft

Technician

“Worst Case” depressurization measurement of the CAZ.

\_\_\_\_\_ Pa

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:** Flow established?  
 Yes

Spillage?  
 No

W.H. draft re-test:  
 \_\_\_\_\_ Pa / \_\_\_\_\_ “ W.C.

Draft pressure:  
 \_\_\_\_\_ Pa / \_\_\_\_\_ “ W.C.

Carbon monoxide:  
 \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ PPM

Temperature rise:  
 \_\_\_\_\_ Deg. F.  
 N/A

Inspector

Fan Off:  
 Open \_\_\_\_\_ Pa  
 Closed \_\_\_\_\_ Pa

Fan On:  
 Open \_\_\_\_\_ Pa  
 Closed \_\_\_\_\_ Pa

Final “Worst Case” depressurization measurement of the CAZ.  
 \_\_\_\_\_ Pa

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:** Flow established?  
 Yes

Spillage?  
 No

W.H. draft re-test:  
 \_\_\_\_\_ Pa / \_\_\_\_\_ “ W.C.

Draft pressure:  
 \_\_\_\_\_ Pa / \_\_\_\_\_ “ W.C.

Carbon monoxide:  
 \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ PPM

Temperature rise:  
 \_\_\_\_\_ Deg. F.  
 N/A



## Additional Appliance or Additional CAZ

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

**Document methods for providing air, if needed, in the "Comments" section on page 1 - Include pipe and grille sizes.**

CAZ 2	<u>Set-Up</u>	<u>Technician</u>	<u>Inspector</u>
Heating appliances and water heater off?		<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Furnace filter clean or removed?		<input type="checkbox"/> Yes <input type="checkbox"/> N/A	<input type="checkbox"/> Yes
All exterior windows and doors closed?		<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Fireplace or wood stove dampers closed?		<input type="checkbox"/> Yes <input type="checkbox"/> N/A	<input type="checkbox"/> Yes
Clothes dryer and all exhaust fans operating?		<input type="checkbox"/> Yes <input type="checkbox"/> N/A	<input type="checkbox"/> Yes
All interior doors closed?		<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
All supply registers open?		<input type="checkbox"/> Yes <input type="checkbox"/> N/A	<input type="checkbox"/> Yes
Is a blower door being used to exhaust 300 CFM per usable fireplace	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes

<u>"Worst Case" CAZ Depressurization Test</u>	<u>Technician</u>
Gauge set-up to measure CAZ WRT outside?	<input type="checkbox"/> Yes
Is there a door from the interior to the CAZ?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>CAZ door:</b>	
<u>Open</u>	<u>Closed</u>
Furnace <b>Fan OFF</b> _____ Pa	_____ Pa
Furnace <b>Fan ON</b> _____ Pa	_____ Pa

<u>Additional Appliance "5 Minute" Test Procedure</u>	<u>Technician Initial Test</u>
Type of appliance: _____	
Fire the appliance.	
Was initial flow established in the vent? (5 sec.)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Spillage? (Should disappear within two minutes)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Flame interference after the blower came on?	<input type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No
Draft pressure after five minutes: _____ Pa <b>or</b> _____ " W.C.	
Carbon monoxide after five minutes: _____ / _____ / _____ / _____ / _____ PPM	
Temperature rise after five minutes: <input type="checkbox"/> N/A S _____ - R _____ = _____ Deg. F.	
<input type="checkbox"/> Flame interference / Bad furnace	<input type="checkbox"/> Repairs made

<u>Technician</u>
Total BTUH in CAZ 2 _____ BTUH
Volume of air needed: _____ Cu.Ft.
Volume available: _____ Cu.Ft.
<input type="checkbox"/> Combustion air work done by others
"Worst Case" set-up complete? <input type="checkbox"/> Yes
"Worst Case" depressurization measurement of CAZ 2 _____ Pa
<b>Additional appliance:</b> Able to establish flow? <input type="checkbox"/> Yes
Spillage? <input type="checkbox"/> No
Draft pressure: ____ Pa / ____ " W.C.
Carbon monoxide: ____ / ____ / ____ / ____ ____ / ____ / PPM
Temperature rise: ____ Deg. F. <input type="checkbox"/> N/A

<u>Inspector</u>
Proper amount of combustion and ventilation air provided for CAZ 2? <input type="checkbox"/> Yes
"Worst Case" set-up complete? <input type="checkbox"/> Yes
 <u>Inspector</u>  
Fan Off:  Open _____ Pa Closed _____ Pa
Fan On:  Open _____ Pa Closed _____ Pa
Final "Worst Case" depressurization measurement of CAZ 2 _____ Pa
<b>Additional appliance:</b> Able to establish flow? <input type="checkbox"/> Yes
Spillage? <input type="checkbox"/> No
Draft pressure: ____ Pa / ____ " W.C.
Carbon monoxide: ____ / ____ / ____ / ____ ____ / ____ / PPM
Temperature rise: ____ Deg. F. <input type="checkbox"/> N/A