Worst Case Draft

Date_____   Outside Temp_____

Tester_____   Job Number_____

1. Winter mode, deactivate combustion appliances, interior doors open.
2. Connect hoses CAZ WRT outside, use multiple hoses if multiple CAZ.
   Measure base line pressure CAZ/Outside _____ pascal.

3. Exhaust equipment includes vented dryers, vented bath and kitchen fans, vented central vacuums, etc. This does not include heating units and hot water heaters.
4. Pressures in room can be measured by the cautious use of a smoke generator or a pressure differential gauge.
   Negative pressure in a room causes smoke to be sucked in. Leave door OPEN.

   Positive pressure in a room causes smoke to be blown out. Leave door CLOSED.

Air Handler OFF

A. Activate all exhaust equipment. Open all interior doors.
B. Individually close each interior door, record if positive or negative. (Room WRT MB)

REFER TO #5
   Room _____ + / - (circle one)
   Room _____ + / - (circle one)
   Room _____ + / - (circle one)
   Room _____ + / - (circle one)
   Room _____ + / - (circle one)
   Room _____ + / - (circle one)
   Room _____ + / - (circle one)
   Room _____ + / - (circle one)

C. Individually close each CAZ door, if negative to Main Body close door, if positive to Main Body leave open.
CAZ 1 / MB + / - (circle one)
CAZ 2 / MB + / - (circle one)

D. Individually measure and record CAZ WRT Outside pressure in pascal. Repeat for each CAZ.
CAZ 1 WRT Outside _____pascal (pa.)
minus Baseline _____ pa. = _____pa.

CAZ 2 WRT Outside _____pascal (pa.)
minus Baseline _____ pa. = _____ pa.

Air Handler ON

E. Open all interior doors, leave all exhaust equipment on, If it is necessary to activate heating unit, monitor ambient CO levels.
F. Individually close each interior door, record if positive or negative. (Room WRT MB)

REFER TO #5
   Room _____ + / - (circle one)
   Room _____ + / - (circle one)
   Room _____ + / - (circle one)
   Room _____ + / - (circle one)
   Room _____ + / - (circle one)
   Room _____ + / - (circle one)
   Room _____ + / - (circle one)
   Room _____ + / - (circle one)

G. Individually close each CAZ door, if negative to Main Body close door, if positive to Main Body leave open.
CAZ 1 / MB + / - (circle one)
CAZ 2 / MB + / - (circle one)

H. Individually measure and record CAZ WRT Outside pressure in pascal. Repeat for each CAZ.
CAZ 1 WRT Outside _____pascal (pa.)
minus Baseline _____ pa. = _____ pa.

CAZ 2 WRT Outside _____pascal (pa.)
minus Baseline _____ pa. = _____ pa.

6. Review results to determine the greatest negative pressure configuration.
7. Recreate the configuration that produced the greatest negative pressure.

8. CHOOSE ONE

Measure the actual draft of the appliances. If **multiple appliances in the CAZ enter one chimney** start with the lowest BTU, fire all units one at a time from lowest BTU to highest BTU. Acceptable draft must be established in five minutes.

H/ Unit 1 _____

H/ Unit 2 _____

H/ Unit 3_____

*When CAZ depressurization limits are exceeded under worst-case conditions according to the CAZ Depressurization Limit table, make up air or other modifications to the building shell or exhaust appliances must be included in the work

Measure the actual draft of the appliances. If **multiple appliances enter multiple vents**, test with each successive unit running, from lowest BTU to highest BTU. Acceptable draft must be established in five minutes.

H/ Unit 1 _____

H/ Unit 2 _____ & H/ Unit 1____

H/ Unit 3_____& H/ Unit 2____ H/ Unit 1____

- Test for spillage at one minute
- Is there spillage?
- YES_____
- NO_____

scope to bring depressurization within limits.

CAZ Depressurization Limits

Venting Condition	Limit (Pascals)
Orphan natural draft water heater (including outside chimneys)	-2
Natural draft boiler or furnace commonly vented with water heater	-3
Natural draft boiler /furnace with vent damper commonly vented with water heater	-5
Individual natural draft boiler or furnace	-5
Mechanically assisted draft boiler/furnace commonly vented with water heater	-5
Mechanically assisted draft boiler/furnace alone, or fan assisted DHW alone	-15
Exhausto chimney-top draft inducer(fan at chimney top);Retention head oil burner; Sealed combustion appliances;	-50

Acceptable Draft Ranges

Outside Temp. (degrees F)	Draft Pressure Standard (Pa)
<10	-2.5
10-90	Temp. Outside ÷ 40 - 2.75
>90	-0.5