

# MAXIMUM DEPRESSURIZATION DATA SHEET

IF YOU ARE GOING TO TEST-TEST CORRECTLY!

JOB# \_\_\_\_\_

CLIENT \_\_\_\_\_

PRE-TEST

TECH	
DATE	

POST-TEST

TECH	
DATE	

LIST APPLIANCES	
APPLIANCE 1	
APPLIANCE 2	
APPLIANCE 3	
APPLIANCE 4	

## STEP A - PREPARE THE HOUSE FOR TESTING

(1) CLOSE all exterior doors and lock windows. (2) Turn OFF the HVAC system. (3) Turn OFF all exhaust appliances. (4) OPEN all interior doors. (5) CLOSE house to garage man door (will be closed for all test). (6) CLOSE all fireplace dampers (7) Record furnace filter placement during test.

FURNACE FILTER PLACEMENT	Filter In	Filter Out	Not Applicable
--------------------------	-----------	------------	----------------

FILTER IN PLACE

	PRE-TEST	POST-TEST
APPLIANCE 1		
APPLIANCE 2		
APPLIANCE 3		
APPLIANCE 4		

## STEP B - SET UP THE DIGITAL MANOMETER

(1) Run a hose from channel "A" input tap to within 3' of the combustion appliance (CAZ). (2) Run a hose from channel "A" reference tap to outdoors.

## STEP C - DETERMINE BASELINE PRESSURE

Read baseline pressure and record in box to the right.

**STEP D** - Turn HRV on high (if applicable), record manometer pressure in box to right. If pressure goes negative from baseline, HRV is acting as exhaust appliance and will be turned on high for test below, if goes positive from baseline shut off for test below.

BASELINE

	PRE-TEST	POST-TEST
APPLIANCE 1		
APPLIANCE 2		
APPLIANCE 3		
APPLIANCE 4		

HRV		
-----	--	--

## TEST 1 - EXHAUST APPLIANCES ON

(1) Turn on all exhaust appliances. (2) Set interior doors (house to garage door closed) for most negative CAZ. Start with the farthest door from the combustion appliance and work back toward the combustion appliance. Smoke each door and determine if the smoke is going away from or to the combustion appliance.

~If the smoke is going **AWAY** from the combustion appliance, **OPEN** the door.

~If the smoke is **FLOWING TO** the combustion appliance, **CLOSE** the door.

Test all doors in the same manner, all the way back to the combustion appliance. (3) Read CAZ pressure and record in box to right.

TEST 1

	PRE-TEST	POST-TEST
APPLIANCE 1		
APPLIANCE 2		
APPLIANCE 3		
APPLIANCE 4		

\*\*\* If there is **NO** furnace in the home, Skip test 2 & 3 and DOCUMENT WORST CASE CONDITION \*\*\*

## TEST 2-AIR HANDLER (FURNACE) AND EXHAUST APPLIANCES ON

(1) Turn on all exhaust appliances.

(2) Turn ON air handler.

(3) Use smoke to determine interior door positions.

(4) Read CAZ Pressure and record in box to right.

TEST 2

	PRE-TEST	POST-TEST
APPLIANCE 1		
APPLIANCE 2		
APPLIANCE 3		
APPLIANCE 4		

CONTINUED ON NEXT PAGE



### TEST 3 – AIR HANDLER (FURNACE) ON

(1) Turn all exhaust appliances OFF. (2) Turn the air handler on. (3) With interior doors open, read CAZ Pressure and record in box 3a below. (Dominant Duct Leakage Test). (4) Use smoke to determine Interior door positions. (5) Read CAZ Pressure and record in box 3b below.

TEST 3A		PRE-TEST	POST-TEST
	APPLIANCE 1		
	APPLIANCE 2		
	APPLIANCE 3		
	APPLIANCE 4		

TEST 3B		PRE-TEST	POST-TEST
	APPLIANCE 1		
	APPLIANCE 2		
	APPLIANCE 3		
	APPLIANCE 4		

### WORST CASE CONDITION

Record in box at right the worst case condition. Worst case is the MOST negative test adjusted for baseline pressure. For example, the baseline pressure is -1 pa and test 1 reads -4 pa, test 2 -7 pa, and test 3 -3pa. Worst case is the difference between baseline and test 2, which is -6 pa (-1 to -7).

WORST CASE		PRE-TEST	POST-TEST	APPLICABLE LIMIT
	APPLIANCE 1			
	APPLIANCE 2			
	APPLIANCE 3			
	APPLIANCE 4			

### HOUSE DEPRESSURIZATION LIMITS

Compare worst case pressure with depressurization limits noted below. Circle Depressurization limit that applies to the appliance being tested.

NATURAL DRAFT WATER HEATER OR FIREPLACE	NATURAL DRAFT BOILER OR FURNACE	POWER OR INDUCED DRAFT BOILER OR FURNACE	WOODSTOVE OR FIREPLACE INSERT	SEALED APPLIANCE, DIRECT VENT APPLIANCE OR TOYO STOVE / MONITOR	HIGH STATIC PRESSURE FLAME RETENTION HEAD OIL BURNER
-3 PASCAL	-5 PASCAL	-10 PASCAL	-10 PASCAL	-20 PASCAL	-20 PASCAL

\*\*\*\*\*SKIP TEST 4 & 5 IF SEALED COMBUSTION\*\*\*\*\*

### TEST 4-SPILLAGE

(1) Set house in worst case condition, assure interior doors are set correctly. (2) Turn combustion appliance on and smoke test the barometric damper or draft hood. (3) If chimney drafts within 1 minute, the combustion appliance passes the spillage test and record in table 4a, if draft is not established in one minute the combustion appliance fails the spillage test and record in table 4a. (4) IF APPLIANCE FAILS, turn heater off and all exhaust fans off. Wait 5 minutes and restart heater (all exhaust fans off). Smoke test the barometric damper or draft hood. If chimney drafts within 1 minute, record pass in table 4b, if draft is not established in one minute record fail in table 4b.

4A

SPILLAGE TEST IN WORST CASE		PRE-TEST	POST-TEST
	APPLIANCE 1		
	APPLIANCE 2		
	APPLIANCE 3		
	APPLIANCE 4		

4B

ONLY COMPLETE IF WORST CASE SPILLAGE FAILS

SPILLAGE TEST NO EXHAUST FANS ON		PRE-TEST	POST-TEST
	APPLIANCE 1		
	APPLIANCE 2		
	APPLIANCE 3		
	APPLIANCE 4		

### TEST 5- CHIMNEY DRAFT TEST

(1) Set house up in worst case condition, assure interior doors are set correctly. (2) Place input tap into chimney minimum of 6" above (downstream) the barometric damper and reference tap open to CAZ (3) After 1 minute of the heater running, record chimney draft in box below.

5A

DRAFT TEST IN WORST CASE		PRE-TEST	POST-TEST	MIN ACCT. DRAFT
	APPLIANCE 1			
	APPLIANCE 2			
	APPLIANCE 3			
	APPLIANCE 4			

5B

ONLY COMPLETE IF FAIL IN WORST CASE

DRAFT TEST NO EXHAUST FANS ON		PRE-TEST	POST-TEST	MIN ACCT. DRAFT
	APPLIANCE 1			
	APPLIANCE 2			
	APPLIANCE 3			
	APPLIANCE 4			

### MINIMUM ACCEPTABLE DRAFT

Compare chimney draft with minimum acceptable draft chart noted below. Circle minimum acceptable draft that applies to the temperature outside during the test. If outside temperature is between 10 and 90, then compute acceptable draft and document in table above.

OUTSIDE TEMPERATURE	Below 10°	10° to 90° Computed Draft (if applicable)	Above 90°
MINIMUM ACCEPTABLE DRAFT	-2.5 pa or .01" wc	(Outside temp/40)-2.75	-.5 pa or .002" wc