STATE OF MAINE
WEATHERIZATION ASSISTANCE PROGRAM

MAINE ENERGY AUDIT FIELD FORM

Name:	Phone:
Address:	Town:
Directions and Special Problems:	
Audited by:	Inspected by:
Date:	Date:
Building Type:	Comments:

Occupied Building, Ft^2 =	Occupied, Conditioned Volume, Ft^3 =
Building Age =	Building Condition:

Yearly Fuel Consumption, Quantity or Dollars, Primary System = Secondary System =

Btu/Ft^2/DD Primary Fuel = (Note: Exclude Domestic Hot Water Energy)

Btu/Ft^2/DD Secondary Fuel = (Note: Exclude Domestic Hot Water Energy) Degree Days =

Total Btu/Ft^2/DD =	Comments:

POLLUTION/MOISTURE ASSESSMENT

CLIENT	MOISTURE		MOLD/MILDEW/COND.	OTHER HAZARDS
Smokers	Dirt Floor	Sill Rot	Crawlspace	Lead Paint
Fatigue	Standing Water	Kitchen Vent	Basement	Asbestos
Asthma	Sump Pump	Bathroom Vent	Bathroom	Radon
Dehumidifier	Water Staining	Roof Leaks	Kitchen	Unsafe Wiring
Bronchitis	Efflorescence	Gutters	Attic	Carbon Monoxide
Humidifier	Firewood	Plumbing Leaks	Windows	Unvented
Flu Symptoms	Clothes Drying	Humidifier Use	Closets	Combustion
Other	Dryer Not Vented	Aquarium	Ceiling	Other
Other	Unvented Space Heater	Other	Walls	Other
Other	Other	Other	Other	Other

Is there a need for mechanical ventilation?

Comments:

BLOWER DOOR TEST DATA - BUILDING TIGHTNESS LIMITS

Blower Door Test Location:	**BTL** (Building Tightness Limit) = CFM_{50}
Blower Door Configuration: Open Ring A Ring B Ring C	Stories = No. of Occupants =
Test Conditions:	Wind Shielding Factor = N Value =
Initial Test: CFM_{50} = Date: Tester:	**BTLa Procedure**
Final Test: CFM_{50} = Date: Tester:	Flow Exponent = ___
Total CFM_{50} Reduction =	Weather Factor = ___
Major Leakage Sites/Problems:	Bldg. Height = ___
	Story Height = ___
	Occupant Count = ___
	1. ELA = _____
	2. EqLA = _____
	3. CFMnat= _____
	4. ACHnat = _____
	5. CFMnat/Occ _____
	6. ELAmin = _____
	7. CF Mmin _____
	8. Vent. CFM _____

ACCEPTABLE DRAFT PRESSURES FOR ATMOSPHERIC APPLIANCES

Outside Temp.	Breech Draft Pressure
Below 20°F	-5.0 Pascals (-0.02" W.G.)
20°F to 40°F	-4.0 Pascals (-0.016" W.G.)
40°F to 60°F	-3.0 Pascals (-0.012" W.G.)
60°F to 80°F	-2.0 Pascals (-0.008" W.G.)
Above 80°F	-1.0 Pascals (-0.004" W.G.)

ACCEPTABLE DRAFT PRESSURES FOR APPLIANCES W/ BAROMETRIC DAMPERS

Overfire: -5 Pa (-0.02" W.G.)

Breech: -10 Pa to -15 Pa (-0.04" to -0.06" W.G.)

BUILDING DEPRESSURIZATION CHART

For Pre-Wx use this chart or DTL in ZipTest Pro, TI-86

Chart Equation: $CFM = (CFM_{50/50}^{0.65})(\text{Pressure Difference}^{0.65})$

COMBUSTION APPLIANCES

PRIMARY HEATING

Type:		
Fuel:		
	Before	After
Draft, O.F.		
Draft, Breech		
Smoke		
O_2 or CO_2		
CO <50 ppm		
Net Temp.		
S.S. Eff. %		
Chimney	OK or Bad	OK or Bad
Comb. Air		
Comments:		

SECONDARY HEATING

Type:		
Fuel:		
	Before	After
Draft, O.F.		
Draft, Breech		
Smoke		
O_2 or CO_2		
CO <50 ppm		
Net Temp.		
S.S. Eff. %		
Chimney	OK or Bad	OK or Bad
Comb. Air		
Comments:		

WATER HEATER

Type:		
	Before	After
CO ppm		
Draft		
Temp. Set.		
Vented		
Comb. Air		
Comments:		

GAS OVEN/RANGE

Condition:		
	Before	After
CO Oven		
CO Burners		
Vented		
Ambient CO		
Comments: *Unvented Oven/Burners, 15 ppm or less*		

GAS CLOTHES DRYER

	Before	After
Vented		
CO ppm		
Comb. Air		
Comments:		

FIREPLACE

	Before	After
Used?		
Chimney		
Damper		
Comb. Air		
Comments:		

AIR-EXHAUST DEVICES

DEVICE	CFM	VENT FD
Kitchen (100)		
Bath 1 (50)		
Bath 2 (50)		
Cntrl. Vac. (150)		
Cntrl. Vent		
Attic Fan		
Whole-Hse. Fan		
Dryer (180)		
Fireplace (400)		
Woodstove		
Other		
TOTAL		
Need for ventilation?		

BACKDRAFT TESTING

- ***CAZ/Outdoor should be -5 Pa or more***
- ***Use chart at top to assist w/ Pre-Wx***

	Pre-Wx	***Post-***
Outdoor Temp.	°F	°F
CAZ Door	Opn/Cls d	Opn/Cl od
Appliance 1:		
Spillage		
CAZ Depress.		
Appliance 2:		
Spillage		
CAZ Depress.		
Appliance 3:		
Spillage		
CAZ Depress.		

Building Assessment

ATTIC/CEILING

INSULATION					SERIES LEAKAGE TESTS		
Location	Area	Type	Pre - R	Added R		Before Wx	After Wx
					House/Zone)P_1		
					Zone/Outside)P_1		
					Hole Added	H/Z or Z/O	H/Z or Z/O
					Hole Size, in2 or Door Open CFM_{50}		
					House/Zone)P_2		
					Zone/Outside)P_2		
					CFM_{50} House/Zone		
					CFM_{50} Zone/Outside		
					CFM_{50} Total Path		
Ventilation:					Notes:		

WALLS

INSULATION					SERIES LEAKAGE TESTS		
Location	Area	Type	Pre - R	Added R		Before Wx	After Wx
					House/Zone)P_1		
					Zone/Outside)P_1		
					Hole Added	H/Z or Z/O	H/Z or Z/O
					Hole Size, in2 or Door Open CFM_{50}		
					House/Zone)P_2		
					Zone/Outside)P_2		
					CFM_{50} House/Zone		
					CFM_{50} Zone/Outside		
					CFM_{50} Total Path		
Siding Type:					Notes:		

BASEMENT/CRAWLSPACE

INSULATION					SERIES LEAKAGE TESTS		
Location	Area	Type	Pre - R	Added R		Before Wx	After Wx
					House/Zone)P_1		
					Zone/Outside)P_1		
					Hole Added	H/Z or Z/O	H/Z or Z/O
					Hole Size, in2 or Door Open CFM_{50}		
					House/Zone)P_2		
					Zone/Outside)P_2		
					CFM_{50} House/Zone		
					CFM_{50} Zone/Outside		
					CFM_{50} Total Path		

DUCTWORK ASSESSMENT

	Before Wx	After Wx
DOMINANT DUCT LEAK; Main Body WRT Outside, Air Handler On		
MASTER BEDROOM DOOR CLOSED, Main Body WRT Outside, Air Handler On		
ALL INTERIOR DOORS CLOSED, Main Body WRT Outside, Air Handler On		
FIREPLACE/WOODSTOVE ZONE (FPWSZ), FPWSZ WRT Outside, Air Handler On		

PRESSURE IN EACH CLOSED ROOM, Room WRT Mainbody, Air Handler On

#	Room	Before	After	#	Room	Before	After
1				9			
2				10			
3				11			
4				12			
5				13			
6				14			
7				15			
8				16			

If a room is more than 3 Pascals or less than -3 Pascals, consider pressure relief.

Does a fireplace or woodstove draw any portion of its combustion air from a zone that is depressurized more than -3 Pascals WRT outside? *If so, pressure relieve.*		
AS FOUND PRESSURE DIFFERENCE: Set up house as you found it. Main body WRT outside, Air Handler On		
STATIC PRESSURE in Supply Plenum of System 1 of _____ Systems, Air Handler On		
DUCT DECLARATION: Type of Duct System You Predict After Repair Inside by Pressure = 1 Outside by Pressure = 2 Inside/Outside by Pressure = 3	Circle No. 1 2 3	

PRESSURE PAN TESTS, Air Handler Off, Blower Door On at _____ Pascals

#	Room	Before	After	#	Room	Before	After
1				11			
2				12			
3				13			
4				14			
5				15			
6				16			
7				17			
8				18			
9				19			
10				20			

Notes:

COMBUSTION APPLIANCE ZONE (CAZ) WORST-CASE SET-UP TEST		
FOR HOUSES WITH FURNACES		
TEST DESCRIPTION	**Before**	**After**
w Air handler fan on. w All devices that exhaust air on. w All interior doors closed. w Close the supply registers and any other closable opening in the CAZ. w If air flows from the main body of the house to a closed room, open that door. w EXCEPTION: if air flows from the CAZ to the main body of the house, open the door between the main body and the CAZ. Is this door open or closed?	Circle Answer: Door Open or Door Closed	Circle Answer: Door Open or Door Closed
w Fire the furnace, vented heaters and gas water heaters.		
w Flame roll out from any combustion appliances? Circle Answer: w If "yes," which appliance?	Yes No	Yes No
w Spillage for combustion gases for more than 30 seconds? Circle Answer: w If "yes," which appliance? w For what length of time did spillage occur?	Yes No	Yes No
ALLOW 5 MINUTES FROM INITIAL FIRING FOR WARM UP BEFORE CONTINUING TEST PROCEDURES		
w Measure pressure difference of CAZ WRT outside. *If -5 Pascals or less, e.g., -7, then pressure relief is required.*	Pascals	Pascals
w Measure water heater draft: Vent WRT CAZ. *(See page 2, top left corner)*	Pascals	Pascals
w Measure central furnace draft: Vent WRT CAZ. *(See page 2, top left corner)*	Pascals	Pascals
w Measure Carbon Monoxide		
w Water heater	ppm	ppm
w Central furnace	ppm	ppm
w Other combustion appliance	ppm	ppm
w Measure Heat Rise across the heat exchanger of the furnace. The specified range for the heat rise can be found on the name plate. *If no heat rise label can be found, temperature rise should be within a range of 40^{O}F to 80^{O}F. If the heat rise is outside of this range, then service is required.*	^{O}F	^{O}F
SPECIAL CASE: EXHAUST FAN IN THE COMBUSTION APPLIANCE ZONE: w Is the combustion appliance zone positive by either dominant duct leakage or interior door closure? Circle Answer:	Yes No	Yes No
w If "yes," then draft pressures must be more negative then air-exhausting device depressurization, or pressure relief may be needed. Is pressure relief needed?	Yes No	Yes No

Notes:

DUCT ASSESSMENT					
HOLE METHOD	Before Wx	After Wx	**MODIFIED BLOWER DOOR METHOD**	Before Wx	After Wx
† Air Handler Off			† Air Handler Off		
† Seal All Reg. and Grilles			† Remove all HVAC filters		
House/Duct)P_1			Open Reg./Grilles CFM_{50}		
Duct/Outside)P_1			† Seal All Reg. and Grilles		
Hole Added (Circle one)	H/D or D/O	H/D or D/O	Closed Reg./Grilles CFM_{50}		
Added Hole, in^2			House/Duct)P		
Hole)P			Duct/Outside)P		
House/Duct)P_2			House/Duct CFM_{50}		
Duct/Outside)P_2			Duct/Outside CFM_{50}		
House/Duct CFM_{50}			Notes:		
Duct/Outside CFM_{50}					
Notes:					

NELSON WITH TWIST METHOD	Before Wx	After Wx	**NELSON METHOD**	Before Wx	After Wx
† Air Handler On			† Air Handler On		
Supply Hole, in^2			† Seal All Reg. and Grilles		
Supply Hole)P			Average Supply)P_1		
Return Hole, in^2			Average Return)P_1		
Return Hole)P			† Add a Hole		
Average Supply)P_1			Supply Hole, in^2		
Average Return)P_1			Supply Hole)P		
† Add a Hole:			Return Hole, in^2		
Supply Hole, in^2			Return Hole)P		
Supply Hole)P			Average Supply)P_2		
Return Hole, in^2			Average Return)P_2		
Return Hole)P			Return CFM_{50}		
Average Supply)P_2			Supply CFM_{50}		
Average Return)P_2			Total CFM_{50}		
Return CFM_{50}			Notes:		
Supply CFM_{50}					
Total CFM_{50}					
Notes:					

Comments: