

State of North Dakota Weatherization Assistance Program Diagnostic Field Form

Name:			Job#			Date:							
BLOWER DOOR TEST DATA & BLOWER DOOR GUIDED AIR SEALING (WCEG)													
Test Conditions:			Baseline pressure: Pa			Door Opening Used:							
Test		CFM₅₀				CEG/100 CFM₅₀ = \$							
Initial Test				No. in Crew		Minutes		CFM ₅₀ Reduction	Cost / 100 CFM ₅₀				
Test 1													
Test 2													
Test 3													
Test 4													
Test 5													
Final Test						Building Tightness Limit =							
ZONE PRESSURE TESTING (ZPT)													
Zone:		Test 1		Test 2		Zone:		Test 1	Test 2				
House/Zone, P ₁						House/Zone, P ₁							
Zone/Outside, P ₁						Zone/Outside, P ₁							
Hole Added		H/Z or Z/O		H/Z or Z/O		Hole Added		H/Z or Z/O	H/Z or Z/O				
Hole in ² or Door-Open CFM ₅₀						Hole in ² or Door-Open CFM ₅₀							
House/Zone, P ₂						House/Zone, P ₂							
Zone/Outside, P ₂						Zone/Outside, P ₂							
CFM ₅₀ House/Zone						CFM ₅₀ House/Zone							
CFM ₅₀ Zone/Outside						CFM ₅₀ Zone/Outside							
CFM ₅₀ Total Path						CFM ₅₀ Total Path							
DUCTWORK LEAKAGE/AIR HANDLER ASSESSMENT													
Room-to-Room Pressure Testing						Duct Leakage to Outdoors (Test at 25 Pascals Positive)							
#	Room	Test	#	Room	Test			Test 1	Test 2				
1			6			Test pressure		Pa	Pa				
2			7			Flow ring used (circle one)		Open, 1, 2, 3	Open, 1, 2, 3				
3			8			Fan pressure		Pa	Pa				
4			9			Fan flow (leakage to outdoors)		CFM	CFM				
5			10			Inches ² leakage to outdoors		in ²	in ²				
<small>If a room is more than 3 Pascals different from main body of house, relieve pressure. 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, relieve pressure.</small>						CFM leakage as percentage of conditioned floor area		%	%				
PRESSURE PAN TESTING AND LEAKAGE ASSESSMENT									Pressure Pan Multipliers, M*				
#	Room	M*	Test 1	M*	Test 2	#	Room	M*	Test 1	M*	Test 2	House/ Zone Pressure	Pressure Pan Multiplier
1						8							
2						9						45	1.1
3						10						40	1.25
4						11						35	1.42
5						12						30	1.66
6						13						25	2.0
7						14						20	2.5
												15	3.5
												10	5.0
												5	10.0

Duct Leakage Standards (refer to Field Standards for details):

Mobile Homes:

- 1) If belly return, convert to living space return system.
- 2) For living-space return, if sum of adjusted pressure pan readings is 3 or less, check furnace/plenum joint and all boots. Seal if necessary.
- 3) For living-space return, if sum of adjusted pressure pan readings is between 3 and 5, do above and check and repair any crossover ducts. Reduce sum of adjusted pressure pan readings to 3 or less.
- 4) For living-space return, if sum of adjusted pressure pan readings is more than 5, do above and implement duct blower guided duct repair and sealing. Goal is to reduce duct leakage to the outdoors, as measured with duct blower and blower door, to 10 percent of floor area.

Site-Built Homes, Including Manufactured Housing:

- 1) For ducts located in unconditioned spaces: a) use duct blower to determine duct leakage to outdoors; b) repair, seal, and insulate ducts to at least R-8; c) Goal is to reduce duct leakage to the outdoors, as measured with duct blower and blower door, to 10 percent of floor area.
- 2) For ducts located in conditioned spaces: a) try to convert alter space so that it is conditioned; b) always repair disconnected ducts; c) preferred to seal and insulate space envelope rather than ducts; d) perform zone pressure diagnostics on space (house-to-zone pressure should be 20 Pascals or less).