

ND WX WORST CASE SPILLAGE TEST

ND DEPARTMENT OF COMMERCE/DCS

SFN 59252 (03/18)

Name	Job#	Date	
COMBUSTION APPLIANCE ZONE (CAZ) WRT OUTSIDE TEST			
Test Steps (refer to Field Standards for details)		Test 1	Test 2
1. Ambient CO must be monitored at all times during testing. (See table on bottom.)			
2. Deactivate all combustion appliances and exhaust fans.			
3. Inspect combustion appliances and venting before test setup.			
4. Put dwelling in wintertime condition; close all exterior doors and windows.			
5. Clean/replace furnace and dryer filters.			
6. Open all interior doors with return air or exhaust fan(s) and/or dryer on other side.			
7. Close all other interior doors.			
8. Setup and adjust manometer to measure pressure of CAZ WRT outdoors.			
9. Record Baseline Pressure of CAZ WRT outdoors or run Baseline function.		Pa	Pa
10. Turn on all exhaust fans, and dryer. (Do not turn on whole house cooling fan.)		Pa	Pa
11. If furnace exists, check to see if greater depressurization exists with or without the air handler on. (If the air handler fan cannot be activated without firing furnace activate furnace and air handler and proceed).		Pa	Pa
12. Open and close CAZ door to verify where greater depressurization exists.		Pa	Pa
13. Record the position of the door to the CAZ. (circle door position)		Open/ Closed/ No Change	Open/ Closed/ No Change
14. From the above steps, enter the most negative number of the CAZ WRT outdoors.		Pa	Pa
15. Calculate and record the Net Worst-Case (Subtract the Baseline from the Worst-Case Depressurization of the CAZ ; "line 14" minus "line 9") or enter NA if using the Baseline function.			
FLUE SPILLAGE			
1. Under worst-case conditions, fire appliances individually. Begin with the smallest BTU appliance; Record spillage at 2 minutes. If vent is cold record spillage at 5 minutes. (SEE NOTES BELOW)		Spillage	Spillage
Water Heater		Yes / No	Yes / No
Furnace/Boiler		Yes / No	Yes / No
Other Appliance description:		Yes / No	Yes / No
2. If appliance fails/spills, correct problem. (i.e. makeup air, seal open returns, etc.)			
3. If dwelling has other combustion appliance zones, repeat test there.			
4. Return dwelling, exhaust fans, and combustion appliances to normal settings.			
5. Record highest ambient CO levels during spillage testing.		ppm	ppm
Ambient CO Limits			
9 - 35 ppm	Look for sources of CO, advise resident, and continue testing.		
36 – 69 ppm	Shut off all combustion appliances, ventilate, and advise resident.		

Notes: Under worst-case conditions, fire appliances individually. Always begin the smallest BTU appliance. Spillage must not exist after 2 minutes in a warm vent (i.e. water heaters, furnaces in heating mode). Spillage must not exist after 5 minutes for furnaces with cold vent (not during heating season).

Signature	Date
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