

# Worst Case Depressurization and Combustion

## First Measure Ambient CO Before and during Testing

<u>First Set Appliances in Pilot or Off position</u>	Main body	CAZ 1	CAZ 2	CAZ 3	√
Measure the base Pressure (5) 5 sec Intervals )					
<b>Establish Worst Case:</b> Turn on dryer and all exhaust Fans (Except whole house fan) check door position					
<b>Turn on air handler:</b> With fans running Re check door positions that make the caz zone more negative					
<b>Worst case:</b> Negative Pressure					
Measure (calculate) the net change in pressure from the caz to outside correcting for base pressure					
<b>Measure:</b> Worst case spillage.		Appliance zone 1 Pass/Fail	Appliance zone 2 Pass/Fail	Appliance zone 3 Pass/Fail	Pass/ FAIL
<b>Check:</b> draft pressure ( record)		Pascals	Pascals	Pascals	Outside temp
<b>Check:</b> CO at steady state		ppm	ppm	ppm	

If spillage/Draft Fails under worst case turn of appliance allow to vent/flu to cool. Retest in natural conditions

## Test Combustion Appliance(s) in Natural Conditions

<b>Measure:</b> spillage.		Appliance zone1 Pass/Fail	Appliance zone 2 Pass/Fail	Appliance zone 3 Pass/Fail	Pass/ FAIL
<b>Check:</b> draft pressure ( record)		Pascals	Pascals	Pascals	Outside temp
<b>Check:</b> CO at steady state		ppm	ppm	ppm	

## Acceptable Draft Test Ranges

Outside Temperature (degree F)	Minimum Draft Pressure Standard (pa)
<10	-2.5
10—90	(T <sub>out</sub> 40)—2.75
>90	-0.5

## CAZ Depressurization Limits

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

**Reset: water Heater and Furnace to customers settings before leaving job**

**Notes:**