

# ND FURNACE FIELD INSPECTION

NORTH DAKOTA DEPARTMENT OF COMMERCE  
DIVISION OF COMMUNITY SERVICES  
SFN 59497 (05/23)

## State of North Dakota Weatherization Assistance Program Heating System Clean, Tune, and Inspection Form

Job #	Name	Phone	
Address	City	State	ZIP Code
Fuel Type	Outdoor Temperature	Input	Owner/Renter
Heating System Type	Rated Heat Rise	Output	Date

	Pre-test	Post-test		Pre-test	Post-test
Gas leaks	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Open air returns	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Venting problems	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Missing main shutoff	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Carbon indicators	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Asbestos	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
			Heat exchanger check	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Anticipator	Measured:		Set at:	Reset:	
Cycling on high limit	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Oil system smoke test		
Fan on (15 sec)/off temp	_____/____	_____/____	Draft, breech		
Spillage/backdraft	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Draft, overfire		
Steady State Heatrise	Pre _____ - _____ = _____		Steady State Heatrise	Post _____ - _____ = _____	
Carbon monoxide	Pre _____ ppm	Post _____ ppm	High limit temp		
Check filter	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Clean heat exchanger	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Cleaned blower	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Check belt	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Blower amp. draw	<input type="checkbox"/> Yes <input type="checkbox"/> No ____	<input type="checkbox"/> Yes <input type="checkbox"/> No ____	A-coil dirty	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Net stack temp			O2% or CO2%		
Efficiency %			Run final furnace cycle	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Duct problems:					

H2O Type	<input type="checkbox"/> Electric	<input type="checkbox"/> Gas	Oven Type	<input type="checkbox"/> Electric	<input type="checkbox"/> Gas
H2O heater CO	ppm	ppm	Oven CO		
H2O heater Draft	ppm	ppm	Ambient CO	ppm	ppm

<input type="checkbox"/> At the time of this inspection, this heating system was operating properly.
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<input type="checkbox"/> Comments/Warning
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Technician Signature	Date
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Client Signature:
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Combustion Test Analysis Guidelines			
Heating Unit Type	Oxygen (O2)	Net Stack Temp	Smoke Test
<b>Gas</b>	4-9 percent		
Atmospheric	4-9 percent	300-600 °F	NA
Fan-assisted	See man. Info.	300-480 °F	NA
Condensing	4-9 percent	See man. Info.	NA
Standard Power Burner		300-650 °F	NA
<b>Oil (No. 1 &amp; 2)</b>			
Oil gun burner	4-9 percent	325-600 °F	1 or less
Flame Retention burner	4-7 percent	325-600 °F	1 or less

Acceptable Draft Test Ranges	
Outside Temperature (degree F)	Minimum Draft Pressure (Pa)
<10	-2.5
10-90	(Outside Temperature ÷ 40) – 2.75
>90	-0.5

**— CO Thresholds for Fossil-Fuel Fired Combustion Appliances —**

Appliance	Threshold Limit
Central Furnace (all categories)	400 ppm air free
Boiler	400 ppm air free
Floor Furnace	400 ppm air free
Gravity Furnace	400 ppm air free
Wall Furnace (BIV)	200 ppm air free
Wall Furnace (Direct Vent)	400 ppm air free
Vented Room Heater	200 ppm air free
Water Heater	200 ppm air free
Oven/Broiler	225 ppm as measured
Clothes Dryer	400 ppm air free
Refrigerator	25 ppm as measured
Gas Log (gas fireplace)	25 ppm as measured in vent
Gas Log (installed in wood burning fireplace)	400 ppm air free in firebox