



State of Ohio
Weatherization Program
Standards

Section **DIAGNOSTIC TESTING
METHODS**

Subject **Gas Cook Stove Test**

SCOPE OF TESTING 1506-2.1

All cook stoves that are connected to the domestic gas supply line are to be tested.

stoves to be tested
1506-2.1a

PREPARATION FOR TESTING 1506-2.2

Zero a digital combustion analyzer or digital carbon monoxide detector in the out-of-doors, ambient air.

**zero CO testing
equipment**
1506-2.2a

Ensure that all existing pilot lights are lit.

pilot lights
1506-2.2b

Test the gas cook stove in the "as is" condition, except remove any aluminum foil (do not clean or adjust it) prior to beginning any testing.

remove foil, test "as is"
1506-2.2c

Turn on the exhaust hood or an exhaust fan prior to beginning testing.

operate exhaust fan
1506-2.2d

STOVE TOP BURNER TESTING PROCEDURES 1506-2.3

Individually test each stove top gas burner, using a digital combustion analyzer or digital CO meter. Turn on only one burner at a time.

**test burners
individually**
1506-2.3a

Turn the burner on high and hold the analyzer probe 6 to 8 inches above the flame. After two minutes, record the CO reading for that burner.

**time and
distance from flame**
1506-2.3b

Test all stove top burners. Any burner with a CO reading above 25 ppm must be cleaned, tuned or adjusted prior to beginning weatherization work.

CO action level
1506-2.3c

OVEN TESTING PROCEDURES 1506-2.4

**locate vent, remove or
perforate foil**
1506-2.4a

CEE

Locate the oven exhaust vent (normally an opening centered at the back of the stove top. Ovens with glass doors may also have a vent in the door). Look into the oven to see if the bottom of the oven is covered with aluminum foil. Caution the customer not to place foil on the bottom of the oven.

With the exhaust fan still operating, turn the oven to the broil setting. Keep the oven door closed.

**oven CO test,
ambient air**
1506-2.4b

Monitor the ambient air CO level with the combustion analyzer or CO meter during the entire test. If ambient air CO levels exceed 20 ppm during this period turn off the oven, cease oven testing, and have the oven cleaned and tuned. Do not begin weatherization work until the oven has been cleaned, tuned or adjusted, and retested.

**oven CO test,
exhaust vent**
1506-2.4c

Place the analyzer probe in the oven vent and turn on the oven. Allow it to run for 10 minutes or until the stack temperature stabilizes. If the CO level in the exhaust vent is above 100 ppm, the oven must be cleaned, tuned or adjusted. The CO level must be below 100 ppm before weatherization work can begin.

gas flex lines
1506-2.5

Inspect gas flex lines to insure that:

brass connectors
1506-2.5a

no brass range connectors are present;

2 - piece connectors
1506-2.5b

no soldered 2 - piece range connectors are present; and

date ring
1506-2.5c

no pre - 1973 date rings are present. In some cases, the date will be found on the flare nuts rather than a date ring.