

Audit Event - Energy Audit Diagnostic Tests

- The MN Weatherization Field Guide- *SWS Aligned Edition* can be found in Appendix B.

- **General Tests**

- Blower Door @ 50 Pa – A pressurized blower test will be performed if a home contains vermiculite (*12.2 MN Weatherization Field Guide*)
- Attic Zonal Pressures (with respect to outside) – Optional if needed to guide air sealing activities
- Test Existing Smoke & CO Detectors – replace units that are non-functional, or over 5 years old (manufacturers date) (*1.3 MN Weatherization Field Guide*)
- Pressure Pan Test (ducts outside thermal envelope) (*8.13 MN Weatherization Field Guide*)
- Gas Range CO Tests (burners and oven) (*1.4 MN Weatherization Field Guide*)
- Gas Range Test for Fuel Leaks (accessible lines) (*8.1 MN Weatherization Field Guide*)
- Ambient CO test in kitchen and living area (*8.1 MN Weatherization Field Guide*)
- Exhaust Fan Flow Test (CFM) (*9.2 MN Weatherization Field Guide*)

- **Water Heater**

- Test for Fuel Leaks (*8.1 MN Weatherization Field Guide*)
- Water Heater Combustion Analysis/CO in Flue (*8.1 MN Weatherization Field Guide*)
 - PVC test holes must be plugged with threaded, gnarled screws to create a tight seal
- CAZ Depressurization Test (*8.1 MN Weatherization Field Guide*)
- Combustion Spillage Test (*8.1 MN Weatherization Field Guide*)
- Hot Water Temperature (*10.4 MN Weatherization Field Guide*)

- **Heating Plant**

- Test for Fuel Leaks (*8.1 MN Weatherization Field Guide*)
- Heating Plant Combustion Analysis/CO in Flue (*8.3 MN Weatherization Field Guide*)
 - PVC test holes must be plugged with threaded, gnarled screws to create a tight seal
 - When a heating system manufacturer does not allow drilling of a metal flue, use a combustion analyzer to test ambient CO at the front of the heating system cabinet and in the closest supply register.
- Test Furnace Shutoff Switch (*8.5 MN Weatherization Field Guide*)
- Heat Rise Test on Furnace (*8.3.1 MN Weatherization Field Guide*)
- CAZ Depressurization Test (*8.1 MN Weatherization Field Guide*)
- Combustion Spillage Test (*8.1 MN Weatherization Field Guide*)
- Ambient CO Test in Mechanical Room and Living Space (*8.1 MN Weatherization Field Guide*)
- Heat Exchanger Integrity - Visual Inspection (*8.7 MN Weatherization Field Guide*)
- Heat Exchanger Integrity - Oxygen Concentration Test (*8.7 #4 MN Weatherization Field Guide*)

- **Space Heater (including gas fireplaces)**

- Test for Fuel Leaks (*8.1 MN Weatherization Field Guide*)
- Combustion Analysis/CO in Flue (as feasible) (*8.4 MN Weatherization Field Guide*)
- CAZ Depressurization Test (*8.4 MN Weatherization Field Guide*)
- Combustion Spillage Test (as feasible) (*8.4 MN Weatherization Field Guide*)