



Health and Safety Information for Missouri Home Energy Auditors

Division of Energy fact sheet

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Health and safety issues are an important part of a Home Energy Audit Program. When a health and safety hazard is detected, it is the policy of the Department of Economic Development's Division of Energy that Home Energy Auditors address the hazard. This policy is tempered by recognition that the primary goal of the audit program is energy conservation and that the department is not setting audit standards. Although balance is needed between these competing issues, the health and safety of the building, occupants, auditors and/or contractors should not be compromised by any retrofit material, technique or practice. In most cases, the best approach to limiting the health and safety risk is to minimize exposure to the hazards.

The following sections highlight areas of concern that may affect the health and safety of the workers and the clients. Refer to the BPI 1100 and 1200 Standards, the equivalent RESNET Standards and/or the NREL Standard Work Specifications for additional information.

A. Combustion Appliances

The energy audit should include the inspection of fuel distribution systems and combustion appliances for safety.

- The inspection of fuel distribution systems should be checked at the beginning of the audit process to ensure inspector and client safety before the appliances are run for testing. The fuel distribution system should be checked for gas leaks as well as any additional hazards.
- The inspection of combustion appliances for safety should be performed at all homes. The inspection of combustion appliances should include ambient indoor carbon monoxide (CO) testing, combustion appliance zone and CO testing and inspection of venting systems. Results of the tests should be acted upon appropriately according to the applicable standards.
- All homes should be inspected for the presence of CO and smoke alarms.

B. Ventilation

The energy audit should include inspection of air infiltration sources, air barriers and ventilation. Consider the house ventilation as a system, including natural air infiltration, whole-building ventilation and local exhaust ventilation. As part of the audit, the ventilation needs of the home should be evaluated.

C. Moisture

All homes should be checked for previous or existing moisture problems. Repair or remediation of moisture problems that might result in health problems for the client, damage the structure over the short- or long-term, or diminish the effectiveness of the energy efficiency measures should be addressed.

D. Hazardous Materials

Areas that contain known or suspected hazardous materials should be identified. These hazardous materials include, but are not limited to: mold, sewage effluent, potential asbestos containing materials, friable fiberglass and pests. Considerations for any hazardous materials should be made in any recommendations for energy conservation measures that may be affected by or affect the hazardous material.

E. Radon

In homes where radon may be present, precautions should be taken to reduce the likelihood of making radon issues worse. The following ten northwestern counties and one southeastern county are in the Environmental Protection Agency (EPA) Radon Zone 1 and have the highest potential for elevated levels of radon. The counties are: Andrew, Atchison, Buchanan, Cass, Clay, Clinton, Holt, Iron, Jackson, Nodaway and Platte. Visual inspection for the existence of an EPA guidelines compliant radon mitigation system should be performed.

F. Electrical Hazards

The energy audit should include the inspection and identification of obvious electrical hazards. The electrical hazards may include, but are not limited to: knob and tube wiring, damaged or exposed electrical conductors, exposed wiring junctions and improper size and type of wire. Additionally, the home should be inspected for ground fault circuit interrupter (GFCI) devices in the kitchen and bathrooms. Considerations for any electrical hazard should be made in any recommendations for energy conservation measures that may be affected by or affect the electrical hazard.

G. Additional Safety

Special precautions should be taken if the occupant of the home has respiratory ailments, allergies, is pregnant or has unique health concerns. Auditors should try to protect all clients from respirable particles, such as paint or insulation dust, during the audit process.

At a minimum, auditors should inform property owners, or occupants, of all health and safety issues, code issues or other identified issues. If there are issues that are life threatening or otherwise serious, the auditor should contact the local jurisdiction.