



CLARIFICATION ON BLOWER DOOR TESTING IN THE PRESENCE OF ASBESTOS CONTAINING MATERIALS

Question: Do the BPI Standards allow blower door testing when asbestos containing materials are present?

BPI Standard Reference: **BUILDING PERFORMANCE INSTITUTE TECHNICAL STANDARDS FOR THE BUILDING ANALYST PROFESSIONAL**, v2/28/05mda, Page 1 of 17, states:

HEALTH AND SAFETY:

Where the presence of asbestos, lead, mold and/or other potentially hazardous material is known or suspected, all **relevant state and federal (EPA) guidelines must be followed to ensure technician and occupant safety**. Blower door depressurization tests may not be performed in homes *where there is a risk of asbestos becoming airborne and being drawn into the dwelling*. Respirators with filter cartridges must be worn when working in areas where exposure to airborne mold, asbestos, lead, fiberglass, or formaldehyde is a risk. (emphasis added).

Response: Although the standards do not specifically prohibit pressurization, the emphasis is on the risk of asbestos becoming airborne. Blower door activities in the presence of damaged ACM (friable asbestos) pose a risk of causing the fibers to become airborne. Both the safety of the technician and occupant are paramount. Proper precautions should be taking to avoid risk of causing asbestos particles to become airborne, thus it is recommended that no blower door activity take place where friable asbestos is present. Once the material is properly repaired, sealed, or removed by a properly licensed and qualified professional, then blower door testing may proceed.

According to the EPA website: <http://www.epa.gov/asbestos/index.html>

Asbestos is a mineral fiber that has been used commonly in a variety of building construction materials for insulation and as a fire-retardant. Because of its fiber strength and heat resistant properties, asbestos has been used for a wide range of manufactured goods, mostly in building materials (roofing shingles, ceiling and floor tiles, paper products, and asbestos cement products), friction products (automobile clutch, brake, and transmission parts), heat-resistant fabrics, packaging, gaskets, and coatings.

When asbestos-containing materials are damaged or disturbed by repair, remodeling or demolition activities, microscopic fibers become airborne and can be inhaled into the lungs, where they can cause significant health problems.

Most Common Sources of Asbestos Exposure:

Workplace exposure to people that work in industries that mine, make or use asbestos products and those living near these industries, including:

- **the construction industry (particularly building demolition and renovation activities),**
- the manufacture of asbestos products (such as textiles, friction products, insulation, and other building materials), and
- during automotive brake and clutch repair work
- **Deteriorating, damaged, or disturbed asbestos-containing products such as insulation, fireproofing, acoustical materials, and floor tiles.**

OSHA also has guidance on employee exposure. See

<http://www.osha.gov/OshDoc/data/AsbestosFacts/asbestos-factsheet.pdf>

BPI's draft standards for Quality Assurance Inspector provide additional guidance:

4.5.8 Asbestos

Inspector shall determine the potential asbestos hazard, especially in homes built after 1930 and before the 1970s. Inspector shall follow the assessment protocols in the EPA Healthy Indoor Environment Protocols for Home Energy Upgrades.

4.5.6.1 If suspected asbestos-containing material (ACM) is found, *Inspector shall not conduct a blower door test or otherwise conduct any testing that may disturb the ACM.*

4.5.6.2 If ACM is found, Inspector shall document the finding on the **Inspector Checklist** (Appendix E) and shall also document if any of the measures in the scope of work may have affected the ACM.

4.5.6.3 If ACM is damaged, the Inspector shall notify the Contractor that a professional with proper licensing and credentials must be contacted for abatement or repair.

This guidance is similar to that found in EPA's Healthy Indoor Environment Protocols for Home Energy Upgrades. http://www.epa.gov/iaq/pdfs/epa_retrofit_protocols_draft_110910.pdf

Conclusion:

Unless you have the ability to monitor and determine that particles caused to be airborne by blower door testing are below the permissible exposure limit, it is advisable not to conduct blower door testing in the presence of damaged or deteriorating ACM.

If you have any additional questions now or in the future, please do not hesitate to contact:

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