



Designation: E1368 – 23

Standard Practice for Visual Inspection of Asbestos Abatement Projects¹

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1. Scope

1.1 This practice covers procedures for performing visual inspections of asbestos response actions to:

1.1.1 Establish the extent of the required work before it begins;

1.1.2 Determine the progress and quality of the work and evaluate the completeness of the response action; and

1.1.3 Evaluate the cleanliness of the work area prior to final air testing for clearance (if performed), and subsequent to dismantling of critical barriers.

1.2 This practice can be used on an abatement project, or for operations and maintenance (O&M) work, performed by the building owner's staff. It can also be used in conjunction with contract documents between the building owner and other parties involved in an abatement project.

NOTE 1—Standard contract documents (such as AIA and EJCDC documents) define contractual relationships and responsibilities for projects within the construction industry. Asbestos abatement projects differ from traditional construction projects in the manner of their design and execution, as well as in the type and level of oversight required to substantiate their successful completion. Non-traditional responsibilities are given to the building owner, project designer, and abatement contractor by this practice. Furthermore, responsibilities related to project oversight, inspections, and approvals are placed upon an additional non-traditional representative of the building owner; the project monitor, as defined by this practice. All parties are cautioned that the subject authorities and corresponding responsibilities be understood, mutually agreed upon, and correspondingly addressed with appropriate modifications, if necessary, to the contract documents for a specific project.

1.3 This practice provides the following information:

1.3.1 The objectives of the visual inspection process;

1.3.2 The responsibilities and qualifications of the individuals involved in the visual inspections;

1.3.3 The schedule of visual inspection activities during an abatement project and O&M work;

1.3.4 The inspection procedures for the various types of abatement work and O&M tasks; and

1.3.5 The criteria for certifying work as complete on the basis of the visual inspections.

1.4 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.5 **Warning**—Asbestos fibers are acknowledged carcinogens. Breathing asbestos fibers can result in disease of the lungs including asbestosis, lung cancer, and mesothelioma. Precautions in this standard practice should be taken to avoid creating and breathing airborne asbestos particles from materials known or suspected to contain asbestos. See 2.2 for regulatory requirements addressing asbestos.

1.6 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.* For specific safety statements, see 12.2.

1.7 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*²

D7521 Test Method for Determination of Asbestos in Soil

D7712 Terminology for Sampling and Analysis of Asbestos

E631 Terminology of Building Constructions

E1494 Practice for Testing Physical Properties of Friable Surfacing Materials

E2356 Practice for Comprehensive Building Asbestos Surveys

E2394 Practice for Maintenance, Renovation, and Repair of Installed Asbestos Cement Products

F141 Terminology Relating to Resilient Floor Coverings

¹ This practice is under the jurisdiction of ASTM Committee D22 on Air Quality and is the direct responsibility of Subcommittee D22.07 on Sampling, Analysis, Management of Asbestos, and Other Microscopic Particles.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

2.2 Code of Federal Regulations:³

29 CFR 1910.134 Respiratory Protection Standard

29 CFR 1910.1001 Occupational Exposure to Asbestos (OSHA General Industry Standard)

29 CFR 1915.1001 Occupational Exposure to Asbestos (OSHA Shipyard Standard)

29 CFR 1926.1101 Occupational Exposure to Asbestos (OSHA Construction Standard)

29 CFR 1926 Subpart AA Confined Spaces in Construction
40 CFR Part 61 National Emission Standards for Hazardous Air Pollutants: Subpart M—Asbestos

40 CFR Part 763, Subpart E Asbestos-Containing Materials in Schools and Model Accreditation Plan. Appendix C to subpart E (EPA AHERA Regulations)

2.3 NIOSH Document:⁴

Method 7400 Asbestos and Other Fibers by PCM, NIOSH Manual of Methods (Issue 3, April 29, 2019.)

3. Terminology

3.1 Definitions—For definitions of building terms, see Terminology E631.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *asbestos-containing materials*, *n*—materials containing more than one percent asbestos.

3.2.1.1 *miscellaneous materials*, *n*—material, other than surfacing material and thermal system insulation, on interior and exterior structural, mechanical, electrical, or architectural components, and surfaces; miscellaneous material includes but is not limited to ceiling tiles, gaskets, floor coverings and mastics, wallboard joint compound, roofing materials, and cementitious products.

3.2.1.2 *surfacing material*, *n*—material that is sprayed, troweled-on, or otherwise applied to interior and exterior structural and architectural surfaces; surfacing material includes acoustical plaster on ceilings, fireproofing on structural members, textured paint and exterior stucco, and other materials applied to surfaces for acoustical, decorative, fireproofing, and other purposes.

3.2.1.3 *thermal system insulation*, *n*—material which is applied to interior and exterior mechanical components to reduce heat gain or loss; thermal system insulation includes insulation on pipes, fittings, boilers, breeching, tanks, ducts, and other mechanical components.

3.2.2 *building asbestos survey*, *n*—an activity to determine the presence, location, condition, and quantity of asbestos-containing materials in a building or facility, or on the property containing the building or facility.

3.2.3 *clean room*, *n*—an uncontaminated room having facilities for the storage of employees' street clothing and uncontaminated materials and equipment.

3.2.4 *competent person*, *n*—one who is capable of identifying existing asbestos hazards in the workplace and who has the authority to take prompt corrective measures to eliminate them.

3.2.5 *contract documents*, *n*—the specifications, drawings, terms and conditions, general provisions, and other components of the agreement between the building owner and the contractor.

3.2.6 *crawl space*, *n*—an accessible area that may have a dirt floor, usually with low head room.

3.2.7 *critical barriers*, *n*—one or more layers of rigidly-supported plastic sheeting sealed over all openings into an asbestos work area (with the exception of make-up air provisions and means of entry and exit), designed to prevent airborne asbestos fibers or asbestos-contaminated water from migrating to an adjacent area.

3.2.8 *decontamination area*, *n*—an enclosed area adjacent and connected to the regulated area and consisting of an equipment room, shower area, and clean room, which is used for the decontamination of workers, materials, and equipment contaminated with asbestos.

3.2.9 *dust and debris*, *n*—visible particles, fragments, or chunks of material, large enough to have settled in the work area by virtue of their weight, that are presumed to have originated from the material abated by the response action, or from a fiber release episode.

3.2.10 *encapsulant*, *n*—for friable asbestos-containing materials, a material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent release of fibers; the word *encapsulant* should not be used in contract documents when referring to post-removal treatment of abated surfaces and components; the proper term is *sealer*, as defined in 3.2.25.

3.2.10.1 *bridging encapsulant*, *n*—an encapsulant that forms a discrete layer on the surface of an in-situ asbestos matrix.

3.2.10.2 *penetrating encapsulant*, *n*—an encapsulant that is absorbed by an in-situ asbestos matrix without leaving a discrete surface layer.

3.2.11 *enclosure*, *n*—(1) a rigid, air-tight barrier constructed around an asbestos-covered component or structural element to protect the asbestos material from impact and to contain any release of asbestos fibers; or (2) a space, within which asbestos abatement operations are performed, whose limits are defined by rigid or non-rigid barriers for the purpose of controlling access and limiting fiber escape.

3.2.12 *fiber release episode*, *n*—uncontrolled or unintentional disturbance of asbestos-containing materials which results in the generation of dust and debris.

3.2.13 *friable material*, *n*—material, that when dry, is easily crumbled or powdered by moderate hand pressure.

3.2.14 *glovebag*, *n*—a 6-mil minimum thickness transparent polyethylene plastic bag with inward projecting long-sleeved gloves, designed to enclose an object from which an asbestos-containing material is to be removed.

3.2.15 *high efficiency particulate air (HEPA) filter*, *n*—the final stage filter on a negative pressure ventilation device (see

³ Available from U.S. Government Printing Office Superintendent of Documents, 732 N. Capitol St., NW, Mail Stop: SDE, Washington, DC 20401, <http://www.access.gpo.gov>.

⁴ Available from Centers for Disease Control and Prevention (CDC), 1600 Clifton Rd., Atlanta, GA 30329-4027, <http://www.cdc.gov>.