



Standard Practice for Conducting Visual Assessments for Lead Hazards in Buildings¹

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1. Scope

1.1 This practice describes procedures for conducting visual assessments in buildings to visually identify the type and location of potential lead hazards. These potential hazards are associated with deteriorated leaded paint, lead in dust, or lead in soil.

1.2 This practice addresses visual assessment procedures for four lead-hazard activities: lead risk (hazard) assessment (E 2115), clearance examination (E 2271), assessment of paint condition, and re-evaluation inspection.

1.3 Because there is considerable overlap among the requirements for these four types of lead-hazard activities, this standard first describes a generic visual assessment procedure, and then defines a specific procedure for each assessment type in terms of additions to, or deletions from, the generic procedure.

1.4 This practice does not address testing needed to confirm the presence of lead hazards.

1.5 This practice contains notes, which are explanatory and are not part of the mandatory requirements of this standard.

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 and health practices and determine the applicability of regulatory limitations prior to use.*

¹ This practice is under the jurisdiction of ASTM Committee E06 on Performance of Buildings and is the direct responsibility of Subcommittee E06.23 on Lead Hazards Associated with Buildings.

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2. Referenced Documents

2.1 ASTM Standards:²

- E 1605 Terminology Relating to Lead in Buildings
- E 1864 Practice for Evaluating Quality Systems of Organizations Engaged in Conducting Facility and Hazard Assessments to Determine the Presence and Extent of Lead in Paint, Dust, Airborne Particulate, and Soil
- E 2052 Guide for Identification and Management of Lead Hazards in Facilities
- E 2115 Guide for Conducting Lead Hazard Assessments of Residential Housing and other Properties Frequented by Children
- E 2239 Practice for Record Keeping and Record Preservation for Lead Hazard Activities
- E 2271 Practice for Clearance Examinations Following Lead Hazard Reduction Activities in Single-Family Dwellings and Child-Occupied Facilities

3. Terminology

3.1 For definitions of terms not ~~presented below~~, appearing here, refer to Terminology E 1605.

3.2 ~~Definitions of Terms Specific to This Standard:~~ Definitions:

~~3.2.1 abatement/lead dust hazard, n—any set of measures designed—a condition that might result in adverse human health effects due to eliminate permanently lead-based paint or lead-based paint hazards. lead in surface dust~~

~~3.2.1.1 Discussion—Abatement includes: (1) removal of paint and dust, the permanent enclosure—Authorities having jurisdiction may issue guidance or encapsulation of lead-based paint, promulgate requirements defining the replacement minimum mass per area content of painted surfaces or components, or the removal or permanent covering of soil, when lead-based paint hazards are present lead in such paint, dust or soil; and (2) preparation, cleanup, disposal, and post abatement clearance testing activities associated with such measures. that is considered to constitute a hazard.~~

~~3.2.2 bare soil/lead paint hazard, n—a condition that might result in adverse human health effects due to lead in deteriorated paint on all building surfaces, lead in paint on chewable surfaces, impact surfaces, or dust-producing friction surfaces.~~

~~3.2.2.1 Discussion—Levels of lead in deteriorated paint, lead in paint on chewable surfaces, dust-producing friction surfaces, and impact surfaces that might adversely effect human health may be stated in requirements promulgated by grass, sod, other live ground covers, wood chips, gravel, artificial turf or similar covering. authorities having jurisdiction.~~

~~3.2.3 clearance examination/lead soil hazard, n—a process conducted following a lead-based paint hazard reduction activity to determine condition that the hazard reduction activity is complete and that no soil-lead hazards or dust-lead hazards exist might result in the work area.~~

~~3.2.4 component, n—an element of a building identified by form, function and location.~~

~~3.2.4.1 adverse human health effects due to lead in bare soil.~~

~~3.2.3.1 Discussion—A component of a building—Authorities having jurisdiction may include exterior walls, interior room (type) walls, an interior windowsill in a bathroom, etc.~~

~~3.2.5 distinct painting history, n—an application history of paint and other surface coatings to a component issue guidance or room in a building, as indicated by its visual appearance or a record promulgate requirements defining the minimum amount of application over time.~~

~~3.2.6 dust-lead hazard, n—surface dust in a building that contains, or is presumed to contain, a mass-per-area concentration of lead equal to or exceeding limits set in regulations promulgated soil by authorities having jurisdiction.~~

~~3.2.7 friction surface, n—an interior or exterior surface that is subject to abrasion or friction, including, but not limited to, certain window, floor, and stair surfaces.~~

~~3.2.8 impact surface, n—an interior or exterior surface that is subject to damage percent by repeated sudden force, such as certain parts of doorframes.~~

~~3.2.9 lead-based paint hazard, n—lead-based paint on a building surface mass that is deteriorated or present on chewable surfaces, friction surfaces, or impact surfaces, and that might result in adverse human health effects.~~

~~3.2.9.1 Discussion—Some regulations set by authorities having jurisdiction include soil-lead hazards and dust-lead hazards in their definitions of Lead-Based Paint Hazards.~~

~~3.2.10 lead-based paint inspection, n—a surface-by-surface investigation considered to determine the presence of lead-based paint including constitute a report explaining the results of the investigation.~~

~~3.2.11 lead hazard activities, n—procedures, measures, and actions including abatement, clearance, control, inspection; maintenance, management, quality systems, reduction, and risk assessment pertaining to lead hazards in buildings.~~

~~3.2.12 soil-lead hazard, n—bare soil on the property surrounding the building that contains or is presumed to contain lead concentration equal or exceeding limits set in regulations promulgated by authorities having jurisdiction. hazard.~~

4. Significance and Use

4.1 This practice supports lead poisoning prevention activities by providing standardized procedures for conducting visual assessments.

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*, Vol 04.12, volume information, refer to the standard's Document Summary page on the ASTM website.

4.2 This practice is intended to be used with other ASTM standards, as appropriate, for conducting lead-hazard assessments. Consult Practice E 1864 for information regarding a quality system for field activities and consult Guide E 2052 for guidance in managing lead hazards.

4.3 This practice is intended for use by individuals trained to conduct visual assessments associated with lead-hazard activities and in reporting their results. This practice is also applicable for use by others interested in visual assessment of properties for lead hazards, such as building code officials, homeowners, and insurers.

5. Requirements for Individuals Conducting Visual Assessments

5.1 Persons conducting visual assessments need a range of expertise, including the ability to identify the type, extent, and cause of coating deterioration and component deterioration, and to determine the presence of settled surface dust, debris, and bare soil. Users of visual assessment services should review their credentials and experience to determine whether they are qualified to conduct the work.

5.1.1 Visual assessments conducted as part of a lead-based paint activity within the scope of regulations promulgated by authorities having jurisdiction shall be conducted by appropriately certified or licensed individuals.

6. Materials and Supplies

6.1 *Copies of Forms*, (see Appendix X1).

6.2 *Clipboard*, for holding forms.

6.3 *Pencil And Sharpener*.

6.4 *Indelible Ink Pen or Permanent Marker*.

6.5 *Flashlight*, or other self powered portable light source, as needed, for making visual observations in low light level areas.

6.6 *Digital Camera*~~Camera~~ *(optional)*, with supporting equipment needed to create photographs that can be labeled.

7. Procedure for Conducting the Generic Visual Assessment

7.1 *General Visual Assessment Requirements*—The following requirements apply to the conduct of visual assessments:

7.1.1 *Reporting*:

7.1.1.1 Use a recording system that uniquely identifies the type and location of each hazard and each incidence of building component deterioration. At a minimum, the recording system must allow a reasonably educated person, when provided with all the records generated from a visual assessment, to determine what hazards and incidences of building component deterioration were identified and where each was found. This practice provides the individual conducting the visual assessment with the flexibility to use personal choices for some recording needs.

7.1.1.2 Examples of forms (site plans, building face sketches, floor plans, building component condition, paint/dust/debris, and grounds) for recording information are shown in Appendix X1. An example of using these forms is presented in Appendix X2.

7.1.1.3 Alternate forms are acceptable provided that they allow unique identification of all hazards and incidences of building component deterioration.

7.1.1.4 Information recorded on any particular form can be limited to only those areas where potential hazards are found. The example floor-plan shown in Appendix X2 includes detail for the living room, dining room and porch only because potential hazards were not identified in other rooms. However, the individuals conducting visual assessments are cautioned against overly sparse records when no potential hazards are found. Lack of records may be viewed as a potential indicator that portions of the assessed area were not inspected.

7.1.1.5 Use of a camera to photographically capture the structures and grounds included within the boundaries of the assessment area provides a means of complementing forms.

7.1.2 *Symbols and Codes*—Use of symbols and codes is not required but is recommended to reduce the effort needed to record building and grounds locations and observations of hazards and component deterioration. The symbols and codes, if used, shall be sufficiently defined to identify the items to which they refer. The codes provided in various sections of this standard, such as in Tables 1-3, are exemplary; others may be used depending on the needs of the person conducting the visual assessment.

7.2 *Existing Information*—Review historic lead-hazard evaluation, hazard reduction and clearance reports and other information describing on-going maintenance activities, and relevant building operations to identify changes from previous conditions and locations of renovation, remodeling, construction or abatement activity. Use this review to help define the boundaries of the assessment area.

7.3 *Multifamily Housing*—Units to be assessed shall be determined using appropriate statistical procedures.

7.4 *Boundaries of Area to Be Assessed*— In consultation with the client requesting the visual assessment, determine the boundaries of the area to be assessed.

7.5 *Walk-Through*—Walk through the area to be assessed to become familiar with the site and verify the boundaries of the area to be assessed, if the entire structure is not to be assessed. Portions of the property excluded from the visual assessment shall be documented and reported.

7.6 *Component Replacement*—In consultation with the client requesting the visual assessment, determine whether any windows or doors penetrating the exterior walls in the assessment area have been replaced. In cases where such a window or door has been replaced, the visual assessment shall include both the interior and exterior of the adjacent walls. In addition, the assessment shall

TABLE 1 Description of Paint Condition

Hazard	Hazard Code	Description	Observed Condition ^A
Deteriorated Paint or Other Coatings	paint	Deteriorated conditions include paint or other coatings that are chalking, checking, cracking, or flaking. Incidental blemishes in painted surfaces due to factors such as nail holes without cracking of surrounding paint, etc., should not be designated as deteriorated paint.	Note the condition of paint deterioration as follows: <ul style="list-style-type: none"> • $\geq 2 \text{ m}^2$ (20 ft²) on the exterior building face • $\geq 0.2 \text{ m}^2$ (2 ft²) on an interior building component, on a room by room basis • ≥ 10 percent of the total surface area of a component per unit on an exterior or interior component having small surface area. Alternatively, note if areas of paint deterioration are smaller than those described above. Do not note surfaces having no more than incidental blemishes as a hazard.
<u>Deteriorated Paint or Other Coatings</u>	<u>paint</u>	<u>Deteriorated conditions include paint or other coatings that are chalking, checking, cracking, or flaking. Incidental blemishes in painted surfaces due to factors such as nail holes without cracking of surrounding paint, and so forth, should not be designated as deteriorated paint.</u>	Note the condition of paint deterioration as follows: <ul style="list-style-type: none"> • $\geq 2 \text{ m}^2$ (20 ft²) on the exterior building face • $\geq 0.2 \text{ m}^2$ (2 ft²) on an interior building component, on a room by room basis • ≥ 10 percent of the total surface area of a component per unit on an exterior or interior component having small surface area. Alternatively, note if areas of paint deterioration are smaller than those described above. <u>Surfaces having no more than incidental blemishes need not be noted as a hazard.</u>
Deteriorated Friction Surfaces	friction	Window areas, door areas, painted stair treads and banisters, or any other observed friction surfaces displaying signs of wear due to abrasion.	Note the condition if friction surfaces display signs of wear due to abrasion. Surfaces having no more than incidental blemishes need not be noted as a hazard.
Deteriorated Impact Surfaces	impact	Surfaces that are frequently banged or bumped (impacted) which can lead to the production of small chips of paint that may be ground into dust or ingested. Potential impact surfaces include baseboards, doorjamb and outside corners of walls. Distinguish impact damage from general paint deterioration.	Note the condition if impact surfaces display localized damage attributed to impact. Surfaces having no more than incidental impact damage need not be noted as a hazard.
Deteriorated Chewable Surfaces	chew	All surfaces showing evidence of teeth marks. Chewable surfaces include windowsills, stairway spindles, painted furniture on which a child might chew or teethe.	Note the condition if chewable surfaces display evidence of teeth marks.

^A Codes, such "A" and "B" can be used to record the observed conditions. The descriptions of the observed conditions are based on non-regulatory values but have been found useful in describing the relative size of the potential hazard. If codes are used, they shall be clearly documented as to their meaning.

include any horizontal surfaces and the ground beneath the replaced windows or doors.

7.7 Access to Area to Be Assessed— Determine whether all areas and surfaces to be assessed are accessible and whether movable building components such as windows and doors in the areas to be assessed are functional. Resolve, to the extent possible, problems and questions associated with access to assessment areas and functionality prior to conducting the visual assessment. Record incidences of unresolved access issues and lack of functionality that inhibit the ability to make a visual assessment of those areas or components.

7.7.1 Site-Safety Conditions—During the walk-through inspection, identify potential problems associated with site safety. Resolve, to the extent possible, such problems that may impact the assessment. Record incidences of potential site-safety conditions.

7.8 Site-Plan:

7.8.1 If the area to be assessed includes any exterior portions of a unit or structure, prepare a site-plan for use in recording findings (see the Site-Plan Form in Appendix X1).

7.8.1.1 If a pencil is used for sketching the Site-Plan Form, make the sketch permanent by overwriting it with an indelible marker.

7.8.2 Show on the Site Plan:

7.8.2.1 The relative position and shape of the buildings on the property being assessed and designate the primary structure undergoing visual assessment (see Note 1).

NOTE 1—When combined with building face sketches, the site-plan provides an unambiguous method of identifying exterior building components and site features.

7.8.2.2 The address or location of the structure, the name of the person conducting the assessment, the date of the assessment, and the approximate north compass direction.

7.8.2.3 Driveways, and play areas, the exterior walls of the buildings, a unique label for each structure, and a wall identifier to provide a point of reference for labeling exterior walls. If using the Site-Plan Form in Appendix X1, place the primary structure's

TABLE 2 Description of Interior Surfacettfed Dust, Paint Chips, and Debris

Hazard	Hazard Code	Description
General Settled Dust Accumulation	dust	Permanent horizontal surface areas having visible settled dust. Surface areas prone to dust accumulation include: <ul style="list-style-type: none"> • Window sills and troughs; • Along baseboard moldings; • Room corners; • Door thresholds and other entries; • Beneath radiators and air conditioners; • On and under the edges of carpets/ rugs/ upholstery; • Surfaces near or under those having paint hazards; and • Entryways
General Surface Dust Accumulation	dust	Permanent horizontal surface areas having visible surface dust. Surface areas prone to dust accumulation include: <ul style="list-style-type: none"> • Window sills and troughs; • Along baseboard moldings; • Room corners; • Door thresholds and other entries; • Beneath radiators and air conditioners; • On and under the edges of carpets/ rugs/ upholstery; • Surfaces near or under those having leaded paint hazards; and • Entryways
Paint Chip Accumulation	chip	Permanent horizontal surface areas having paint chips. Areas prone to paint chip accumulation include: <ul style="list-style-type: none"> • Window sills and troughs; • Along baseboard moldings; • Room corners; • Door thresholds and other entries; • Beneath radiators and air conditioners; • On and under the edges of carpets/ rugs/ upholstery; and; • Surfaces near or under those having paint hazards;
Paint Chip Accumulation	chip	Permanent horizontal surface areas having paint chips. Areas prone to paint chip accumulation include: <ul style="list-style-type: none"> • Window sills and troughs; • Along baseboard moldings; • Room corners; • Door thresholds and other entries; • Beneath radiators and air conditioners; • On and under the edges of carpets/ rugs/ upholstery; and, • Surfaces near or under those having leaded paint hazards.
Construction and Other Debris	debris	Permanent horizontal surface areas having construction or other debris.

TABLE 3 Description of Ground Conditions

Hazard	Hazard Code	Description	Observed Condition ^A
Bare Soil—Play Area	bare play	All areas of bare soil on each side of the building where children might play.	Note any observations of bare soil area as follows: <ul style="list-style-type: none"> • Greater than approximately 0.1 m² (1 ft²) • Less than approximately 0.1 m² (1 ft²)
Bare Soil—Yard	bare yard	All areas of bare soil on each side of the building, excluding children's play areas.	Note any observations of bare soil area as follows: <ul style="list-style-type: none"> • Greater than approximately 1 m² (10 ft²) • Less than approximately 1 m² (10 ft²)
Paint Chip Accumulation	chip	All ground areas having paint chips. Areas prone to paint chip accumulation include: <ul style="list-style-type: none"> • bare soil; • driplines, and, • construction debris disposal areas. 	
Construction and Other Debris	debris	All ground areas having construction or other debris.	

^A Codes, such "A" and "B" can be used to record the observed conditions. The descriptions of the observed conditions are based on non-regulatory values but have been found useful in describing the relative size of the potential hazard. If codes are used, they shall be clearly documented as to their meaning.

main entryway facing the bottom edge of the form and label the bottom edge of the form with a wall code (for example, wall A or wall 1).

7.8.2.4 Labels for the remaining exterior walls of the structure. If using the Site-Plan Form in Appendix X1, label the remaining exterior walls of the structure in a clockwise sequentially increasing order. (See the example shown in Appendix X2 for a structure with 13 designated walls.)

7.8.2.5 Approximate dimensions of the structures.

7.9 *Building Face Sketches:*

7.9.1 If the area to be assessed includes any building faces (exterior sides of buildings) or portions thereof, prepare building-face

sketches for use in recording findings (see the Building-Face Sketch Form in Appendix X1 and see Note 2). An alternative to the building sketch form is to take photographs of the building-faces and process these photographs so that they can be labeled.

NOTE 2—The purpose of the building face sketch is to uniquely identify the location of exterior features, particularly windows and doors, and assign labels to these features for recording observations. Thus, a detailed building face sketch is not required.

7.9.2 If a pencil is used for preparing Building-Sketch Forms, make the sketch permanent by overwriting it with an indelible marker.

7.9.3 Show on the building-face sketches:

7.9.3.1 The address or location of the structure, the name of the person conducting the assessment, the date of the assessment, and identification of the building face as previously designated on the site-plan.

7.9.3.2 The location of each exterior window and door on the building face. Uniquely label each door and window. (See example shown in Appendix X2).

7.10 *Floor-Plans:*

7.10.1 If the area to be assessed includes interior areas, prepare a floor-plan for each floor of the unit or structure of the area to be assessed (see the Floor-Plan Form in Appendix X1 and Note 3).

7.10.2 If a pencil is used for sketching the layout on the Floor-Plan Form, make the sketch permanent by overwriting it with an indelible marker.

NOTE 3—The floor-plan shows the position and shape of rooms and the location of interior building components. It provides a means of assigning labels to building components for recording observations.

7.10.3 Show on the floor-plan:

7.10.3.1 The address or location of the structure, the name of the person conducting the visual assessment, the date of the assessment, the identification of the floor shown, and the approximate north compass direction.

7.10.3.2 The layout of all exterior and interior walls of the floor in question (for example, ground floor or 2nd floor). If using the Floor-Plan Form in Appendix X1, place the exterior wall having the main entryway facing the bottom edge of the form.

7.10.3.3 A unique name or code for each room.

7.10.3.4 A label for each interior wall for each room. For a given room, adjacent walls shall be labeled sequentially.

7.10.3.5 Labels of all exterior windows and doors as designated on the Building Face Sketch Form.

7.10.3.6 A label for each interior door and window.

7.11 *Observations:*

7.11.1 *Categories*—In conducting a generic visual assessment, observations on lead hazards within the boundaries of the area to be assessed are divided into four categories: Building Component Condition; Paint Condition; Interior-Settled Surface Dust; Paint Chips and Painted Debris; and, Ground Condition.

7.11.2 *Recording:*

7.11.2.1 Use data forms such as the Building Component Condition Data Form, the Paint/Dust/Debris Data Form, and the Ground Data Form to record observations of incidences of lead hazards and deteriorated building components. These forms are shown in Appendix X1.

7.11.2.2 When completing the data forms, use names, labels and codes designated on the site-plan, building sketches, and floor plans to identify the locations of lead hazards and incidences of component deterioration observed.

7.11.3 *Approach*—Use an approach that results in a thorough systematic inspection of all areas within the boundaries of the area to be assessed (see Note 4).

NOTE 4—The approach often spans the four categories in 7.11.1 on a room-by-room basis, although the identification of lead hazards is described in 7.11.4-7.11.7 for the four individual categories.

7.11.4 *Building Component Condition :*

7.11.4.1 Assess all exterior and interior building components within the boundaries of the area to be assessed for deterioration deemed likely to contribute to the failure of paint or other coatings. Components include siding, roofing, gutters, downspouts, soffits, fascia, windows, doors, foundation, walls, trim, and floors.

7.11.4.2 Record observations of deteriorated building components on the Building Component Condition Data Form. Note the suspected cause of each incidence of deterioration and estimated size of each localized damaged area in the comments column.

7.11.4.3 Inspect uncarpeted floors, stairs, interior windowsills and window troughs to detect roughness or pitting, or both, that is deemed to hamper dust removal during cleaning. Record on the Building Component Condition Data Form each observed incidence using an applicable code.

7.11.5 *Paint Condition:*

7.11.5.1 Assess all exterior and interior painted or coated surfaces for the presence of leaded paint hazards using the descriptions shown in Table 1.

7.11.5.2 Designate interior and exterior paint hazards on a room-by-room or building face basis, respectively.

7.11.5.3 Record observations of paint hazards on the Paint/Dust/Debris Data Form (see Note 5).

NOTE 5—The observed conditions are used for describing the degree of deteriorated paint. This distinction is primarily used for lead risk (hazard) assessments. It provides a hierarchy based on potential risk so that resources can be directed toward fixing the worst problems.

7.11.5.4 If testing or sampling is to be conducted, note these sites in the comments column of the Paint/Dust/Debris Data Form (see Note 6).

NOTE 6—When testing is performed, complete the three testing data columns of the Paint/Dust/Debris Data Form and identify the approximate location of tests on the applicable floor-plan or building-face sketch.

7.11.6 Interior-Settled Surface Dust, Paint Chips, and Painted Debris:

7.11.6.1 Assess all interior and entryway permanent horizontal surfaces for the presence of settled surface dust, paint chips and painted debris using the descriptions shown in Table 2.

7.11.6.2 Record observations of settled surface dust, paint chips and painted debris on the Paint/Dust/Debris Data Form.

7.11.6.3 If testing or sampling is to be conducted, note these sites in the comments column of the Paint/Dust/Debris Form (see Note 7).

NOTE 7—When testing is performed, complete the three testing data columns on the Paint/Dust/Debris Data Form and identify the approximate location of tests on the applicable floor-plan.

7.11.7 Ground Area:

7.11.7.1 Assess the site grounds for bare soil, paint chips, and debris using the descriptions given in Table 3. Take note that in Table 3 a distinction is made between the bare soil in children’s play areas and bare soil in yards.

7.11.7.2 Record observations of bare soil, paint chips, or debris on the Ground Data Form.

7.11.7.3 Record the approximate locations of bare soil areas on the site-plan.

7.11.7.4 If testing or sampling is to be conducted, note these sites in the comments column of the Ground Data Form (see Note 8).

NOTE 8—When testing is performed, complete the two testing data columns of the Ground Data Form and identify the approximate location of the tests on the site-plan.

8. Procedures Specific to Various Visual Assessment Applications

8.1 Visual assessments are generally conducted as part of one of four lead-hazard activities. The paragraphs that follow address specific requirements for visual assessment for each of these four activities:

8.2 *Lead Risk (Hazard) Assessments*— Complete all requirements of the generic visual assessment in Section 7 including the following additional requirements.

8.2.1 Record on the applicable site-plan and floor-plans the areas deemed most likely to be frequented by children.

8.2.2 For each paint hazard observed (see 7.11.5), note its suspected cause in the comments column of the Paint/Dust/Debris Data Form.

8.3 *Clearance Examinations*—Complete requirements of the generic visual assessment in Section 7 omitting the requirement in 7.11.4 on Building Component Condition.

8.4 *Assessment of Paint Condition*— For non-abatement activities that require only a visual assessment of leaded paint hazards, complete the requirements of the generic visual assessment omitting the requirements of 7.11.6 on Interior-Settled Surface Dust, Paint Chips and Painted Debris and 7.11.7 on Ground Areas.

8.5 *Re-evaluation Inspection*—For re-evaluation inspections following lead-hazard activities, complete all requirements of the generic visual assessment in Section 7 (see Note 9).

NOTE 9—Re-evaluation is conducted on a scheduled periodic basis to evaluate the on-going effectiveness of non-abatement hazard control measures. Even though findings from an initial lead risk (hazard) assessment indicate that no ~~lead-based paint~~ lead hazards are present, re-evaluation assessments may be appropriate because lead hazards may develop over time.

9. Record Keeping

9.1 Records of visual assessment activities shall be kept in accordance with Practice E 2239 and shall include as a minimum:

9.1.1 The visual assessment report.

9.1.2 Records generated during the conduct of the visual assessment including but not limited to: a description of the assessed area, all forms; records containing field data; observations; miscellaneous notes; and photographs and tapes.

9.1.3 Information regarding any hazard reduction maintenance activity that was performed including but not limited to: the start and completion dates of any hazard reduction or maintenance activities; and the name and address of each firm or organization conducting the hazard reduction or maintenance activity.

10. Report

10.1 A report of the visual assessment shall be prepared and include at a minimum the following:

10.1.1 Project name, name and address of client, and relationship of the client to the property (owner, buyer, tenant, lender, insurer, etc.) ~~and so forth~~.

10.1.2 The date and time of the visual assessment.

10.1.3 The name of person conducting the assessment and the name of the employing company/agency.

10.1.4 The certifications and training documentation of all staff involved with the visual assessment.

10.1.5 The location of the assessed facility and the nature of property assessed (home, apartment, commercial structure, etc.) and so forth) and a description of the assessed area.

10.1.6 A summary of the observations, as appropriate for the assessment type, each incidence of lead hazards including the type, location and description. Also, as appropriate for the assessment type the suspected cause of paint deterioration.

10.1.7 A summary of the observations, as appropriate for the assessment type, each incidence of deteriorated building component including the location and suspected cause of deterioration.

11. Keywords

11.1 building; clearance examination; deteriorated paint; hazard assessment; lead; risk assessment; visual assessment

APPENDIXES

(Nonmandatory Information)

X1. DATA RECORDING FORMS

X1.1 Scope

X1.1.1 This appendix contains forms suitable for use in visual assessments of lead hazards in buildings and incidences of building component deterioration. These forms include:

- X1.1.1.1 Site Plan Form,
- X1.1.1.2 Building Face Sketch Form,
- X1.1.1.3 Floor Plan Form,
- X1.1.1.4 Building Component Condition Data Form,
- X1.1.1.5 Paint/Dust/Debris Data Form, and
- X1.1.1.6 Ground Data Form.

X2. EXAMPLE USE OF DATA RECORDING FORMS

X2.1 Scope

X2.1.1 This example demonstrates the use of the forms presented in Appendix X1 for Visual Assessment. The forms include the Site-Plan Form, Building Sketch Form, Floor-Plan Form, Building Component Condition Data Form, Paint/Dust/Debris Data Form and Ground Data Form.

X2.2 Description of Example

X2.2.1 This example shows data recording for the conduct of a visual assessment as part of a lead risk (hazard) assessment for a hypothetical single family home. All of the data that would normally be collected for a visual assessment are not shown. Rather, only one example of each form is presented.

X2.2.2 The following supplemental information is provided to aid in understanding the data recorded in this hypothetical assessment example:

X2.2.2.1 A listing of the codes and their definitions as shown in Table X2.1.

X2.2.2.2 Information describing the assessment.

(1) A certified risk assessor conducted this hypothetical assessment. The assessor used various testing equipment to accomplish the testing requirements for conduct of the lead hazard assessment (not needed for all types of visual assessment applications).

(2) The assessor used a number of standard codes to simplify data recording and attached a list of these standard codes to the data records (shown in this example).

(3) The assessed area included the home and the property out to fence lines on the sides and back and to the street in front.

(4) Although the entire assessed area was inspected, visual assessment findings were found only in the following general areas:

(a) Specific locations on the front East side of the home.

(b) Specific locations in the yard surrounding the home.

(c) Specific locations on the front porch (PO), the dining room (DR) and the living room (LR).

(5) The home was found to have the following numbers of windows and doors:

(a) East side (front): 9 windows, 1 door.

(b) South side: 4 windows, 1 door.

(c) West side (back): 5 windows, 1 door.

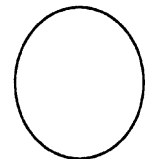
(d) North side: 4 windows, 1 door.

Site-Plan Form

Location: _____ **By:** _____ **Date:** _____
Address or location description of property *Assessor name* *mm/dd/yy*

Notes: _____

Place definition of codes below or attach a code definition page:



Use arrow and "N" to Indicate the north compass direction below:

Wall Code _____

Locate the main entryway of the primary structure facing this edge of the form

Sketch a plan for the whole site. If needed, provide details by sketching additional plans for portions of the whole site (such as the back yard). Sketch the perimeter, walls, walkways, and play areas and other details as needed. The final site drawing must be in ink. Initial sketches may be made using a pencil and written over with ink. Label each site area, as needed, using names or defined codes. Record the location of each soil sample collected for testing on this site plan. Use the names and defined code labels shown here as location descriptors on other forms.

FIG. X1.1 Site-Plan Form

Floor-Plan Form

Location: _____ By: _____ Date: _____
Address or location description of unit Assessor name mm/dd/yy

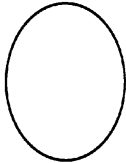
Notes: _____ Floor Shown: _____
examples: ground, basement, 2nd

Side(wall) B

Wall ____

Locate the exterior wall having the main entryway door into the structure facing this edge of the form.

Place definition of codes below or attach a code definition page:



Use arrow and "N" to Indicate the north compass direction below:

Sketch a separate floor plan for each floor of each building included in the assessment area. Sketch the location of walls, windows, doors, stairs and porches. The final site drawing must be in ink. Initial sketches may be made using a pencil and written over with ink. Label all rooms using a unique name. Label walls, as needed, using names or defined codes that are unique for given wall within a given room or room equivalent. Uniquely label each door and window. Record the approximate to-down view location of each test. Use the names and defined code labels shown here as location descriptors on other forms.

FIG. X1.3 Floor-Plan Form

TABLE X2.1 Symbol and Code Definitions
Used by John Doe
GENERAL INFORMATION

Driveways, sidewalks, and outside steps are concrete, brick or blacktop unless otherwise indicated.
 Numbers are added as suffixes to room codes as needed to uniquely identify different rooms used for the same functions (such as BR1, BR2, and BR3 to identify 3 different bedrooms).
 Cupboards are considered as part of a room and are not labeled separately.
 All paint testing was performed using XRF unless otherwise indicated.
 Type codes used are defined in Tables 1-4 of the referenced visual assessment standard.

SITE-PLAN, BUILDING FACE SKETCH & FLOOR-PLAN CODES

Site Side Codes: These are numbers used to uniquely identify a continuous external wall on the site plan of a given building at ground level. They may also be used to identify sides of other structures such as fences. When used on buildings, they are generally placed on the inside of the external walls.

Wall Codes: These are single letter codes such as A, B, C, etc used to uniquely identify a continuous wall within a given room.

Wall Codes: These are single letter codes such as A, B, C, and so forth used to uniquely identify a continuous wall within a given room.

Room Codes:

BA = Bathroom	KIT = Kitchen
BAL = Balcony	LAU = Laundry Room
BD = Bedroom	LR = Living Room
CL = Closet	PO = Porch
DR = Dining Room	ST = Stairway
FAM = Family Room	

Test Measurement Codes:

3-SCOM = indicates a single composite sample made from 3 scoop soil samples
 CD = Indicates a carded dust measurement
 ft = Feet
 in = Inches
 mg/cm² = Milligrams of lead per square centimeter of surface area
 mm = Millimetres
 S-LAB = Indicates that the sample has been or is being sent to a laboratory for analysis
 S = Indicates a location of a collected soil sample
 D = Indicates a location of a collected dust sample
 X = Indicates a location of an XRF test for lead in paint

Directional Codes: (Note: North, East, South and West are spelled out when used)

Directional Codes: (Note: North, East, South, and West are spelled out when used)

NE = Northeast
 SE = Southeast
 SW = Southwest
 NW = Northwest

Observation Codes: For deteriorated paint observations on surfaces that are not considered frictions, impact or chewable surfaces.

A = ≥ 2 m² (20 ft²) on the exterior building face, or
 ≥ 0.2 m² (2 ft²) on an interior building component, on a room by room basis, or
 ≥ 10 percent of the total surface area of a component per unit on an exterior or interior component having small surface area
 B = areas smaller that those shown above

Observation Codes: For areas of bare soil on each side of the building where children might play.

A = ≥ 0.1 m² (1 ft²)
 B = areas smaller that those shown above

Observation Codes: For areas of bare soil on each side of the building, excluding children's play areas.

A = ≥ 1 m² (10 ft²)
 B = areas smaller that those shown above

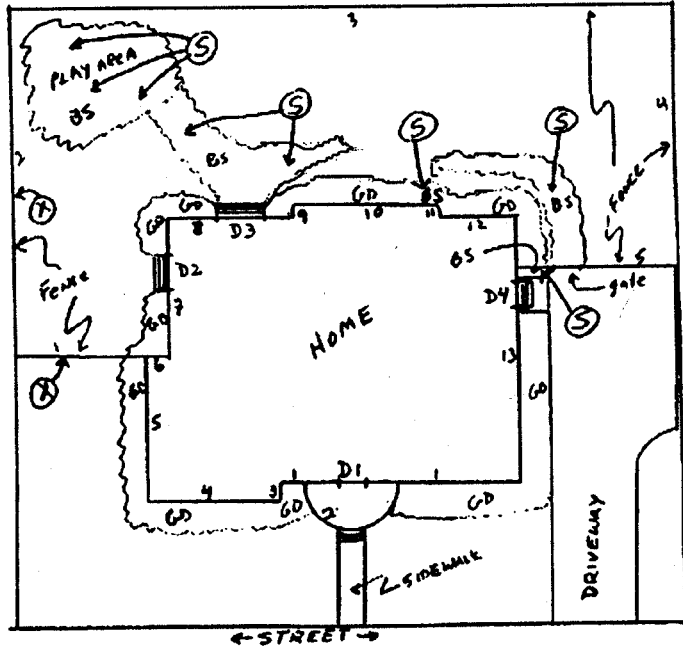
Other Codes:

" = Indicates the entry is the same as that shown directly above it
 BS = Bare soil area
 CEL = Ceiling area
 D# = Door, where # is a number used to uniquely identify the door
 est = Estimated value
 ext = Exterior area
 FLR = Floor area
 GD = Garden area containing plants or shrubs. May contain some bare soil but is generally considered heavily covered in vegetation and/or other ground cover unless otherwise indicated
 int = Interior area
 W# = Window, where # is a number used to uniquely identify the windows

Site-Plan Form

Location: 101 Nowtree Drive, Sec 5, NJ By: John Doe Date: 2/2/63
Address or location description of property Assessor name mm/dd/yy

Notes: Single Family Home, fenced grass yard, build date est. 1933



Place definition of codes below or attach a code definition page.

see attached page

HOME footprint approx.

11 x 7.6 m
(36 x 25 feet)



Use arrow and "N" to indicate the north compass direction below:

Wall Code 1

Locate the main entryway of the primary structure facing this edge of the form

Sketch a plan for the whole site. If needed, provide details by sketching additional plans for portions of the whole site (such as the back yard). Sketch the perimeter, walls, walkways, and play areas and other details as needed. The final site drawing must be in ink. Initial sketches may be made using a pencil and written over with ink. Label each site area, as needed, using names or defined codes. Record the location of each soil sample collected for testing on this site plan. Use the names and defined code labels shown here as location descriptors on other forms.

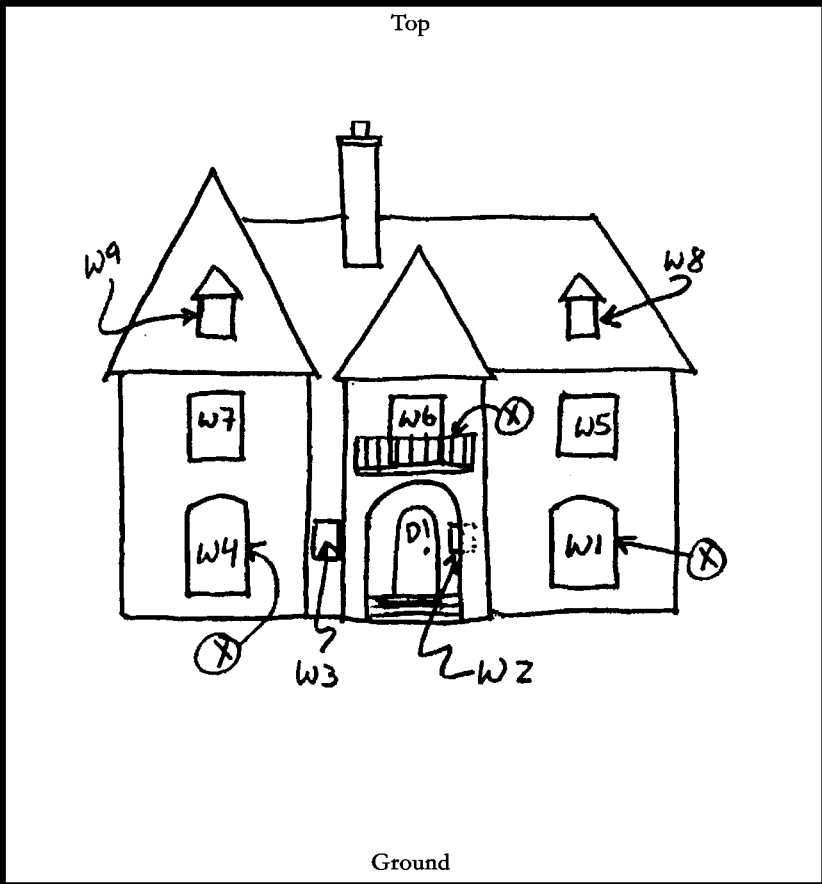
FIG. X2.1 Site-Plan Form

Building Face Sketch Form

Location: 101 Nowhere Drive, Seaside, NJ By: John Doe Date: 2/2/02
Address or location description of area Accessor name mm/dd/yy

Building and side shown: home - east side
Example, main house - west side

Notes: _____



Place a definition of codes below or attach a code definition page.

see attached page

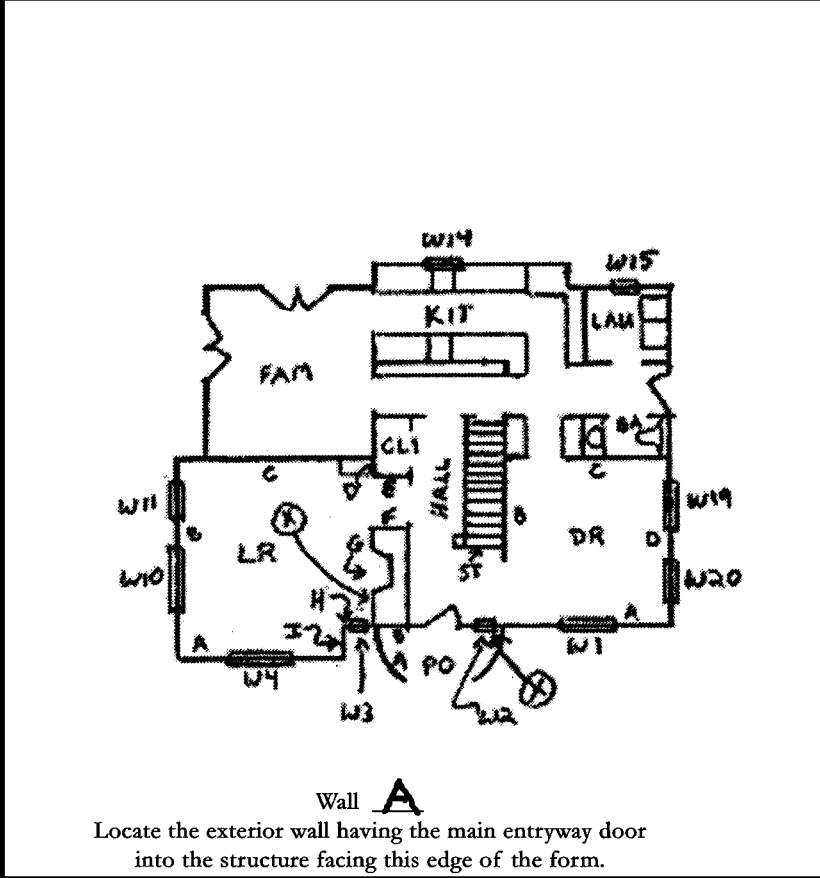
Sketch a separate building face for each side of each building included in the area to be assessed. Sketch the structural outlines of the building as needed. Sketch the location of each window and door. The final site drawing must be in ink. Initial sketches may be made using a pencil and written over with ink. Label each window and door, as needed, using names or defined codes that are unique for each door and window. Record the location of each test made on the building face. Use the names and defined code labels shown here as location descriptors on other forms.

FIG. X2.2 Building Face Sketch Form

Floor-Plan Form

Location: 101 Nowhere Drive, SeaSide, NJ By: John Doe Date: 2/2/02
Address or location description of area Accessor name mm/dd/yy

Notes: _____ Floor shown: ground floor
Examples: ground, basement, 2nd



Place a definition of codes below or attach a code definition page.

See attached page

Use arrow and "N" to indicate the north compass direction below.

Sketch a separate floor plan for each floor of each building included in the area to be assessed. Sketch the location of walls, windows, doors, stairs and porches. The final site drawing must be in ink. Initial sketches may be made using a pencil and written over with ink. Label all rooms using a unique name. Label walls, as needed, using names or codes that are unique for a given wall within a given room or room equivalent. Uniquely label each door and window. Record the approximate to-down view location of each test. Use the names and defined code labels shown here as descriptors on other forms.

FIG. X2.3 Floor-Plan Form

Building Component Condition Data Form

Location: 101 Nowhere Drive, SeaSide, NJ By: John Doe Date: 02/02/02
Address or location description *Assessor name* *mm/dd/yy*

Component Code	Unique Location Description	Suspected Cause of Deterioration	Comments
roof	North side turret above W6	wind/weather	a few missing shingles

Check here for no visible building component deterioration observed in assessed area

FIG. X2.4 Building Component Condition Data Form

Paint/Dust/Debris Data Form

Location: 101 Nowhere Drive, SeaSide, NJ By: John Doe Date: 02/02/02
Address or location description *Assessor name* *mm/dd/yy*

Hazard Code	Unique Location Description	Obs. Note	For Paint Only Suspected Cause for Paint Failure	Testing data only			Comments
				Test or Sample ID	Dust Sample Dimensions w/units (# x #)	Test Result w/units	
paint	W1, ext trim/sill/sash	A	weathering	T1		>9.9 mg/cm ²	
paint	W4, ext trim/sill/sash	A	"	T2		>9.9 mg/cm ²	
paint	BAL, ext railing	A	"	T3		0.0 mg/cm ²	
paint	Fence, side 1, -south	A	"	T4		1.8 mg/cm ²	
paint	Fence, side 2	A	"	T5		2.2 mg/cm ²	
paint	PO, wall B, right of D1, above W2	A	water damage	T6		1.0 mg/cm ²	
paint	PO, CEL, right of D1	B	"	T7		1.2 mg/cm ²	
chip	PO, FLR under W2			D1	0.3 x 0.3 m (12 x 12 in)		S-LAB
dust chip	W1, DR, int sill			D2	0.1 x 1.2 m (3 x 48 in)		S-LAB CD est <6mm
dust	DR, corner between A & D			D3	0.3 x 0.3 m (12 x 12 in)		S-LAB CD est @3mm
paint	LR, G, fireplace brick facing	B	heat	T8		5.6 mg/cm ²	

Check here for no visible deteriorated paint, settled dust, or debris observed in assessed area

FIG. X2.5 Paint/Dust/Debris Data Form

Ground Data Form

Location: 101 Nowhere Drive, SeaSide, NJ **By:** John Doe **Date:** 02/02/02
Address or location description *Assessor name* *mm/dd/yy*

Hazard Code	Unique Location Description	Obs. Note	Approximate dimensions of Bare Soil Area w/units (# x #)	Testing data only		Comments
				Test or Sample ID	Test Result w/units	
play	West side of D4 next to fence gate	A	0.1 x 0.3 m (1 x 3 ft)	S1		3-SCOM, S-LAB
yard	path worn in grass, fence gate going SW	A	0.9 x 9 m (3 x 30 ft)	S2*	X	* 1 scoop of 3-SCOM taken here, see next row
yard	path worn in grass, D3 going SW and going north	A	1.2 x 6 m + 0.9 x 9 m (4 x 20 ft + 3 x 30 ft)	S2		* 2 scoops of 3-SCOM taken here, S-LAB
play	SW corner of backyard	A	6 x 6 m (20 x 20 ft)	S3		toys at location
play	Area under bushes between W14 & W15	A	0.9 x 0.9 m (3 x 3 ft)	S4		3-SCOM, S-LAB

Check here for no bare soil observed in assessed area

FIG. X2.6 Ground Data Form

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