



Designation: E3026 – 23^{ε1}

Standard Guide for Readily Observable Moisture Affected Materials and Conditions Conducive to Elevated Moisture in Commercial Buildings: Limited Moisture Assessment Process¹

This standard is issued under the fixed designation E3026; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

^{ε1} NOTE—Editorial corrections were made to the title and Tables X1.1 and X2.1 in April 2023.

1. Scope

1.1 *Purpose*—The purpose of this *guide*² is to define good commercial practice for conducting a *limited survey* for *readily observable moisture affected materials* and conditions conducive to elevated moisture in a *commercial building* related to *commercial real estate transaction* or *commercial real estate management* by conducting: a *walk-through survey*, document reviews, and *interviews* as outlined within this *guide*. This *guide* is intended to provide a practical means for the limited identification of *moisture affected materials* and *physical deficiencies conducive to elevated moisture* caused by water infiltration through the *building envelope* or substructure or generated within the *subject building* as a result of processes or mechanical systems, excluding *de minimis conditions*. This *guide* is to allow a *user* to assess general *moisture* concerns, as well as the potential need for further assessment or other actions that may be appropriate that are beyond the scope of this *guide*. For purposes of this *guide*, the initialism “LMA” or “*Limited Moisture Assessment*” is used interchangeably with this *guide*’s full title.

1.2 *Purpose Limitations*—While a *LMA* may be used to survey for readily identifiable *moisture affected materials* and *physical deficiencies conducive to elevated moisture*, the *LMA* is not designed to serve as a *comprehensive survey* for the presence of *moisture affected materials* and *physical deficiencies conducive to elevated moisture* in all or most areas in a *commercial building*. It is not intended to reduce or eliminate the risks that elevated moisture may pose to the *subject building* or its occupants.

1.3 *Considerations Beyond This Scope*—The use of this *guide* is limited to the scope set forth in this section. Section 12

of this *guide* identifies, for informational purposes, certain physical conditions (not an all-inclusive list) that may exist at a *subject property* and certain activities or procedures (not an all-inclusive list) that are beyond the scope of this *guide* but may warrant consideration by *users*. The need to investigate any such conditions in the *provider*’s scope of services should be evaluated based upon, among other factors, the nature of the *subject property* and the reason for conducting the *LMA*. The scope of such further investigation or testing services should be agreed upon between the *user* and the *provider* as additional services, which are beyond the scope of this *guide*, prior to initiation of the *LMA* process. The responsibility to initiate work beyond the scope of this *guide* lies with the *user*.

1.3.1 Sampling for suspect *fungi* and other forms of *biological growth* is a non-scope consideration under this *guide*.

1.3.2 Sampling or otherwise measuring for *moisture* is a non-scope consideration under this *guide*.

1.4 *Organization of the Guide*—This *guide* has 13 sections and two appendices. Section 1 defines the Scope. Section 2 is Referenced Documents. Section 3 is Terminology. Section 4 defines the Significance and Use of this *guide*. Section 5 describes User Responsibilities. Sections 6 through 11 provide guidelines for the main body of the *report*, including the scope of the *walk-through survey* and preparation of the *report*. Section 12 identifies Out of Scope Considerations. Section 13 lists keywords for Internet reference. Appendix X1 provides the *user* with a suggested Interview Checklist, and Appendix X2 provides the *user* with a suggested Field Checklist.

1.5 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.

1.6 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.

¹ This guide is under the jurisdiction of ASTM Committee E50 on Environmental Assessment, Risk Management and Corrective Action and is the direct responsibility of Subcommittee E50.02 on Real Estate Assessment and Management.

Current edition approved March 15, 2023. Published April 2023. Originally approved in 2015. Last previous edition approved in 2015 as E3026–15. DOI: 10.1520/E3026–23E01

² Whenever terms defined in Section 3 are used in this guide, they are in *italics*.

2. Referenced Documents

2.1 ASTM Standards:³

D7338 Guide for Assessment Of Fungal Growth in Buildings

E631 Terminology of Building Constructions

E1527 Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process

E1528 Practice for Limited Environmental Due Diligence: Transaction Screen Process

E2018 Guide for Property Condition Assessments: Baseline Property Condition Assessment Process

3. Terminology

3.1 This section provides definitions, descriptions of terms, and a list of acronyms for many of the words used in this *guide*. The terms are an integral part of the *guide* and are critical to an understanding of the *guide* and its use.

3.2 Definitions:

3.2.1 **ABS Piping**, *n*—Acrylonitrile Butadiene Styrene (ABS) piping is a type of black, plastic piping used primarily in drain and vent line applications.

3.2.1.1 **Discussion**—Certain brands of ABS piping manufactured between 1985-1988 are prone to cracking and failure. Other instances of ABS pipe fatigue and failure at joints due to improper installation and maintenance have resulted in the piping being banned in some jurisdictions.

3.2.2 **actual knowledge**, *n*—the knowledge actually possessed by an individual who is a real person, rather than an entity. *Actual knowledge* is to be distinguished from constructive knowledge that is knowledge imputed to an individual or entity.

3.2.3 **architect**, *n*—designation reserved by law for a person professionally qualified, examined, and registered by the appropriate governmental board having jurisdiction, to provide architectural services including, but not limited to, analysis of project requirements and conditions, development of project design, production of construction drawings and specifications, and administration of construction contracts.

3.2.4 **biological growth**, *n*—visible *moisture*-related growths such as algae, *fungi*, lichens, mosses, bacteria, and higher plants. The term may also be considered to include references to mold, mildew, mushrooms, or any plant matter.

3.2.5 **building envelope**, *n*—the outer elements of a building, both above and below ground, which divide the external from the internal environments. Commonly included are exterior walls, windows, doors, roofs and subfloors. **E631**

3.2.6 **building system**, *n*—interacting or independent *components* or assemblies, which form single integrated units, that comprise a building and its site work, including, but not limited to, structural frame, roofing, exterior walls, plumbing, HVAC, electrical, and so forth.

3.2.7 **commercial building**, *n*—structure except a dwelling or structure with four or less *dwelling units* exclusively for residential use. This term includes, but is not limited to, structures used for industrial, retail, office, hospitality, agriculture, other commercial, medical, or educational purposes; *property* used for residential purposes that has more than four residential *dwelling units*; and structures with four or less *dwelling units* for residential use when it has a commercial function, as in the operation of such dwellings for profit.

3.2.8 **commercial real estate**, *n*—improved real *property* except a dwelling or *property* with four or less *dwelling units* exclusively used for residential use. This term includes, but is not limited to, improved real *property* used for: industrial, retail, office, hospitality, agriculture, medical, educational, or other commercial purposes; and residential purposes provided that there are more than four residential *dwelling units*; and *property* with four or less *dwelling units* for residential use when it has a commercial function, as in the operation of such dwellings for profit.

3.2.9 **commercial real estate management**, *v*—for purposes of this *guide*, this term means actions taken either in response to a reported or *observed* condition, or for preventive or planning purposes, by parties having a management interest (for example, as landlord, *property* manager, *owner*, investor, tenant, and so forth) in improved *commercial real estate*.

3.2.10 **commercial real estate transaction**, *n*—for purposes of this *guide*, this term means a transfer of title to (for example, sales/acquisition) or possession (for example, lease) of improved real *property*, or the receipt of a security interest, mortgage, or the placing of a lien on improved *commercial real estate* (for example, lending) excepting individual dwellings.

3.2.11 **component**, *n*—a portion of a *building system*, piece of equipment, or building element.

3.2.12 **comprehensive**, *adj*—complete, thorough, entire, methodical, and detailed.

3.2.13 **dangerous or adverse condition**, *n*—conditions that may pose a threat or possible injury to the *field observer* and which may require the use of special protective clothing, safety equipment, access equipment, or other precautionary measures. **E2018**

3.2.14 **deferred maintenance**, *n*—physical deficiencies that could have been remedied with routine maintenance, normal operating maintenance, and so forth, excluding *de minimis conditions* that generally do not present a material physical deficiency to the *subject property*. **E2018**

3.2.15 **de minimis condition**, *n*—a physical deficiency that is not material to the conclusions of the report. **E2018**

3.2.16 **dismantling**, *v*—to take apart, move, or remove any *component*, device, or piece of equipment that is bolted, screwed, held in-place (mechanically or by gravity), secured, assembled, or fastened by other means. **E2018**

3.2.17 **due diligence**, *n*—the process of inquiring into the characteristics of a parcel of *commercial real estate*, usually in connection with a *commercial real estate transaction*. The degree, scope, and kind of *due diligence* vary for different properties and differing purposes of the *user*.

³ 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.