



Standard Terminology of Building Constructions¹

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1. Scope

1.1 This Terminology consists of terms and definitions pertaining to the subject field of buildings and building construction, and in particular, terms related to the standards generated by ASTM Committee E06 on Performance of Buildings.

1.2 The purpose of this Terminology is to provide preferred and admitted designations along with the meanings and explanations of technical concepts applied in the subject field of buildings and construction, written for both the non-expert and the expert user.

1.3 This comprehensive Terminology standard contains all ASTM standardized definitions generated in ASTM Committee E06 that are considered general in nature. Beyond this comprehensive terminology, there are also separate terminology standards that have been developed within Committee E06 by a number of technical subcommittees.

1.3.1 These separate general terminologies are created relative to specific subject fields and the terminological entries have been grouped for convenient use (see Section 2 and Appendix X1). Some terminology data contained in those other subsidiary terminology standards also appear in this comprehensive standard.

1.3.2 The following standards are separate terminologies that have been developed within specific E06 Subcommittees whose term entry lists are provided in Appendix X1:

- E833 Terminology of Building Economics
- E1480 Terminology of Facility Management (Building-Related)
- E1481 Terminology of Railing Systems and Rails for Buildings
- E1605 Terminology Relating to Lead in Buildings
- E1749 Terminology Relating to Rigid Wall Relocatable Shelters
- E2110 Terminology for Exterior Insulation and Finish Systems (EIFS)
- E2151 Terminology of Guides for Specifying and Evaluating Performance of Single Family Attached and Detached Dwellings
- E2265 Terminology for Anchors and Fasteners in Concrete and Masonry

1.4 Terms are listed in alphabetical sequence. Compound terms appear in the natural spoken order. To show the relation-

ships in certain families of concepts, groups of narrower terms and their definitions are grouped under the definition of the broader term. Each such sub-entry is listed also (*in italics*) with a cross-reference to the special class.

1.5 Certain standard definitions herein are adopted from other sources. Each is an exact copy. The source is identified at the right margin following the definition, and is listed in Section 2.

2. Referenced Documents

2.1 ASTM Standards:²

- C168 Terminology Relating to Thermal Insulation
- C755 Practice for Selection of Water Vapor Retarders for Thermal Insulation
- E73 Practice for Static Load Testing of Truss Assemblies
- E96/E96M Test Methods for Water Vapor Transmission of Materials
- E456 Terminology Relating to Quality and Statistics
- E546 Test Method for Frost/Dew Point of Sealed Insulating Glass Units
- E564 Practice for Static Load Test for Shear Resistance of Framed Walls for Buildings
- E621 Practice for Use of Metric (SI) Units in Building Design and Construction(Committee E06 Supplement to E380) (Withdrawn 2008)³
- E774 Specification for the Classification of the Durability of Sealed Insulating Glass Units (Withdrawn 2006)³
- E779 Test Method for Determining Air Leakage Rate by Fan Pressurization
- E859 Test Method for Air Erosion of Sprayed Fire-Resistive Materials (SFRMs) Applied to Structural Members
- E997 Test Method for Evaluating Glass Breakage Probability Under the Influence of Uniform Static Loads by Proof Load Testing
- E998 Test Method for Structural Performance of Glass in Windows, Curtain Walls, and Doors Under the Influence of Uniform Static Loads by Nondestructive Method

¹ This terminology is under the jurisdiction of ASTM Committee E06 on Performance of Buildings and is the direct responsibility of Subcommittee E06.94 on Terminology and Editorial.

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Those terms formerly contained in Definitions E540 – 77 are now contained in this terminology.

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.

³ The last approved version of this historical standard is referenced on www.astm.org.

E1186 Practices for Air Leakage Site Detection in Building Envelopes and Air Barrier Systems

E1334 Practice for Rating the Serviceability of a Building or Building-Related Facility (Withdrawn 2013)³

E1423 Practice for Determining Steady State Thermal Transmittance of Fenestration Systems

E1480 Terminology of Facility Management (Building-Related)

E1553 Practice for Collection of Airborne Particulate Lead During Abatement and Construction Activities (Withdrawn 2002)³

E1554/E1554M Test Methods for Determining Air Leakage of Air Distribution Systems by Fan Pressurization

E1613 Test Method for Determination of Lead by Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES), Flame Atomic Absorption Spectrometry (FAAS), or Graphite Furnace Atomic Absorption Spectrometry (GFAAS) Techniques

E1644 Practice for Hot Plate Digestion of Dust Wipe Samples for the Determination of Lead

E1645 Practice for Preparation of Dried Paint Samples by Hotplate or Microwave Digestion for Subsequent Lead Analysis

E1677 Specification for Air Barrier (AB) Material or System for Low-Rise Framed Building Walls

E1679 Practice for Setting the Requirements for the Serviceability of a Building or Building-Related Facility, and for Determining What Serviceability is Provided or Proposed

E1726 Practice for Preparation of Soil Samples by Hotplate Digestion for Subsequent Lead Analysis

E1727 Practice for Field Collection of Soil Samples for Subsequent Lead Determination (Withdrawn 2014)³

E1728 Practice for Collection of Settled Dust Samples Using Wipe Sampling Methods for Subsequent Lead Determination

E1729 Practice for Field Collection of Dried Paint Samples for Subsequent Lead Determination (Withdrawn 2014)³

E1753 Practice for Use of Qualitative Chemical Spot Test Kits for Detection of Lead in Dry Paint Films

E1775 Guide for Evaluating Performance of On-Site Extraction and Field-Portable Electrochemical or Spectrophotometric Analysis for Lead

E1783/E1783M Specification for Preformed Architectural Strip Seals for Buildings and Parking Structures

E1792 Specification for Wipe Sampling Materials for Lead in Surface Dust

E1796 Guide for Selection and Use of Liquid Coating Encapsulation Products for Leaded Paint in Buildings

E1827 Test Methods for Determining Airtightness of Buildings Using an Orifice Blower Door

E1828 Practice for Evaluating the Performance Characteristics of Qualitative Chemical Spot Test Kits for Lead in Paint (Withdrawn 2010)³

E1918 Test Method for Measuring Solar Reflectance of Horizontal and Low-Sloped Surfaces in the Field

E1925 Specification for Engineering and Design Criteria for Rigid Wall Relocatable Structures

3. Terminology

3.1 Symbols:

a—height of cantilevered shear wall, in metres (feet).

b—length of cantilevered shear wall, in metres (feet).

C—initial length of the diagonal $\sqrt{a^2 + b^2}$, in metres (feet).

δ—diagonal elongation, in millimetres (inches).

Δ—total horizontal displacement of the top of the wall measured with respect to the test apparatus, in millimetres (inches). This value includes effects due to panel rotation, translation, and shear.

E—modulus of elasticity of flange or web material, depending upon which material is held constant in a transformed section analysis, psi (or MPa)

G—shear modulus of the web material, psi (or MPa)

G'—shear stiffness of the diaphragm obtained from test (includes shear deformation factor for the connection system), lbf/in. (or N/mm)

G—shear stiffness obtained from test, in newtons per metre (pound-force per inch).

G'—global shear stiffness, includes rotation and translational displacements as well as diaphragm shear displacement.

G'_{int}—internal shear stiffness, includes only the shear displacement of the wall in calculation.

I—moment of inertia of the transformed section of the diaphragm based on webs or flanges, in.⁴ (or mm⁴)

L—total span of a simply supported diaphragm, in. (or mm)

P—concentrated load, lbf (or N)

P—concentrated load applied at the top edge of the wall at the selected reference displacement, in newtons (pound-force).

P_u—highest load level held long enough to record gage measurements, in newtons (pound-force).

R_u—maximum diaphragm reaction, lbf (or N)

S_u—ultimate shear strength of the diaphragm, lbf/ft (or N/m)

a—span length of cantilever diaphragm, in. (or mm)

b—depth of diaphragm, in. (or mm)

t—thickness of web material, in. (or mm)

w—uniform load, lbf/in. (or N/mm)

Δ_b—bending deflection of diaphragm, in. (or mm)

Δ_k—empirical expression for that portion of the diaphragm deflection contributed by the shear deformation of the connection system, in. (or mm)

Δ_s—pure shear deformation of diaphragm, in. (or mm)

Δ_{s'}—apparent total shear deformation of the diaphragm based on test (see 8.1.2.2), in. (or mm). This factor includes both

the pure shear deformation and that contributed by distortion of the connection system.

Δ_t —total deflection of diaphragm, in. (or mm)

$\Delta_{1,2}$ —deformation measured at Point 1, 2, - - -, in. (or mm)

3.2 Terms and Their Definitions:

accreditation, *n*—official authorization, approval, or recognition accorded an individual or organization based upon specific qualification.

DISCUSSION—In specific use, it is necessary to include an identification of the type, scope, and limitations of the accreditation, and by whom granted.

ACH_{50} , *n*—the ratio of the air leakage rate at 50 Pa (0.2 in. H_2O), corrected for a standard air density, to the volume of the test zone (1/h). **E1827**

acid rain—rain having a pH of less than 5.65.

DISCUSSION—The pH of distilled water in equilibrium with carbon dioxide under laboratory conditions is 5.6.

active solar energy system—See **building subsystem**.⁴

adapt—See **building modification**.

add—See **building modification**.

aged insulation value—thermal resistance (R-value) of a thermal insulation material as determined after standard conditioning to simulate service exposure.

air-change rate—air-leakage in volume units per hour divided by the building space volume with identical volume units (normally expressed as air changes per hour, ACH or ACPH). **E779**

air exfiltration—air leakage out of the building driven by negative pressure. **E1677**

negative pressure—air pressure on the outdoor side of a building envelope lower than on the indoor side. **E1677**

air-handling unit—the distribution-system fan and portion of the distribution system that is integral to the furnace, air-conditioner, or heat-pump. **E1554/E1554M**

air infiltration—air leakage into the building drive by positive pressure. **E1677**

positive pressure—air pressure on the outdoor side of a building envelope higher than on the indoor side. **E1677**

air leakage, *n*—in buildings, the passage of uncontrolled air through **cracks** or openings in the building envelope or its **components**, such as ducts, because of air pressure or temperature difference.

air leakage—the movement/flow of air through the building envelope, which is driven by either or both positive (infiltration) and negative (exfiltration) pressure differences across the envelope. **E1677**

DISCUSSION—These pressure differences are caused by wind, mechanical systems, and temperature differences (stack effect).

air-leakage graph—the graph that shows the relationship of measured air flow rates to the corresponding measured pressure differences (usually plotted on a log-log scale). **E779**

air leakage rate, Q_{env} , *n*—the total volume of air passing through the test zone envelope per unit of time (m^3/s , ft^3/min). **E1827**

air-leakage rate—the volume of air movement per unit time across the building envelope. **E779**

NOTE 1—This movement includes flow through joints, cracks, and porous surfaces, or combination thereof. The driving force for such an air leakage in service can be either mechanical pressurization and depressurization, natural wind pressures, or air temperatures differentials between the building interior and the outdoors, or combination thereof.

air leakage rate—the time rate of air flow across the air retarder. Expressed as cubic feet per minute per square foot of AR surface at a stated pressure differential across the AR expressed in inches of H_2O . (Cubic meters per second per square meter of AR surface at a pressure differential in Pascals.) **E1677**

air leakage rate—the volume of air movement per unit time across the building envelope. This movement includes flow through joints, cracks, and porous surfaces or combinations thereof. The driving force for such air leakage in buildings can be either mechanical pressurization or evacuation, natural wind pressures, or air temperature differentials between the building interior and the outdoors, or combinations thereof. **E1186**

air-leakage rate—the volume of air movement per unit time across the building envelope or the exterior envelope of the air distribution system. **E1554/E1554M**

DISCUSSION—This movement includes flow through joints, cracks, and porous surfaces, or combinations thereof. The driving forces for such air leakage in service can be mechanical pressurization and depressurization, natural wind pressures, and air temperature differentials between the building interior and the outdoors.

air leakage site—a location on the building envelope where air enters or exits the building causing air leakage to occur. **E1186**

air retarder (AR)—a material or system in building construction that is designed and installed to reduce air leakage either into or through the opaque wall. **E1677**

air sampling pump—a portable, battery-powered air pump that may be attached to a belt on a worker or to a stationary object. The pump is used to draw air through a filter holder that is placed within the personal breathing zone of a worker. Alternatively, the pump may be attached to a stationary object in order that it may be used for area sampling. **E1553**

airtightness, *n*—the degree to which a test zone envelope resists the flow of air. **E1827**

NOTE 2— ACH_{50} , air leakage rate, and effective leakage area are examples of measures of building airtightness.

alter—See **building modification**.

⁴ Boldface terms are defined in this terminology.

analysis run—a period of measurement time on a given instrument during which data is calculated from a single calibration curve (or single set of curves). Recalibration of a given instrument produces a new analysis run. **E1613**

anchor, n—a device used to connect securely a **building component** to adjoining construction, to a supporting member, or to the ground.

anchorage, n—a means of connecting securely, by using an **anchor**, a **building component** to adjoining construction, supporting member(s), or to the ground.

anchorage system—a group of interacting elements, components, and structures.

anchoring system—a group of interacting anchors and elements.

anodic stripping voltammetry—an electroanalytical technique in which the concentration of analyte metal species dissolved in solution is determined in the following manner. The analyte is first deposited (preconcentrated) electrochemically by reducing the dissolved ion in solution to immobilized metal species at a mercury electrode surface. The metal is deposited in the form of an amalgam (with Hg) at an applied potential (voltage) which is negative of the standard oxidation potential for the metal/ion redox couple. After deposition, the preconcentrated metal species is then “stripped” from the mercury electrode by applying a positive potential sweep, which causes anodic oxidation of the analyte metal species to dissolved ion. The current associated with this reoxidation is measured. The peak current is proportional to the original concentration of dissolved analyte species over a wide range of concentrations. **E1775**

apartment—See **dwelling unit**.

apartment building—See **building**.

architectural strip seal—a preformed membrane or tubular extrusion, manufactured from a fully cured elastomeric alloy, having flanges or other means of mechanically or chemically securing it. **E1783/E1783M**

area samples—air samples that are collected at various stationary sites, but not for a person; area samples are therefore to be distinguished from personal air samples. **E1553**

artifact, n—an object (as a tool, ornament, or element of a structure) showing human workmanship or modification.

DISCUSSION—Examples of building element artifacts are stained glass windows and fine art finishes.

as-built, adj—pertaining to the as-constructed, **as-fabricated**, as-manufactured, or as-furnished state of a finished product relating to size, shape, materials, and finish regardless of drawings or specifications.

as-fabricated, adj—(1) of a milled metal product, pertaining to the surface appearance and texture or temper produced by the original forming process. (2) of a formed metal product, pertaining to the surface appearance of the product to removal of disfigurements caused by the forming process.

aspect, n—of serviceability, a broad component of serviceability, comprising several related topics of serviceability. **E1334**

DISCUSSION—The serviceability of a building or building-related facility can be rated on each topic for which a scale has been prepared, but not for an aspect.

aspect ratio—a ratio of long side to short side of glass plate. **E998**

attic—See **building space**.

average breaking stress (ABS)—the average maximum principal tensile stress (MPTS) at failure, representative of the glass under test. The ABS is dependent on a number of factors including geometry, time history of load, surface condition, etc. Glasses with residual surface stresses, such as heat-strengthened or fully tempered, must have their residual stresses added to the state of stress at the specified load. As defined for use in the standard, the ABS is for annealed glass. **E998**

average grade—See **grade**.

back bedding—See **windows and doors**.

back putty—See **windows and doors**.

balance—See **windows and doors**.

bar, n—a round, square, rectangular, or other polygonal solid member having a length greater than its width or thickness; and usually of rolled, drawn, or extruded metal (if of steel, having dimensions of 0.204 in. (5.2 mm) or more in thickness, and 8.0 in. (20.3 mm) or less in width).

bar-size section—a hot-rolled steel angle, channel, tee, or zee having a maximum cross-section dimension of less than (76 mm) (3.0 in.)

base substrate—a material upon which films, treatments, adhesives, sealants, membranes, and coatings are applied. The base substrate can also be considered to be the actual material of construction that the surface is attached to. This does not refer to the layers of paint under the outermost or surface layer. **E1796**

basement—See **building space**.

batch—a group of samples ($n > 2$) that are obtained in a similar environment (for example, a set of area or personal samples) and are processed together using the same reagents and equipment. **E1553**

bathroom—See **building space**.

bead—See **windows and doors**.

beadboard, n—molded **expanded polystyrene thermal insulation board**; also called **MEPS**.

beam, n—a structural member intended primarily to resist transverse forces, and subject to bending by these forces.

bearing wall—See **wall**.

bias, *n*—systematic error that contributes to the difference between a population mean of the measurements or test results and an accepted reference or true value. **E456**

bite—See **windows and doors**.

blow hole—a unintended hole or void in a metal casting resulting from entrained gases.

blower door, *n*—a fan pressurization device incorporating a controllable fan and instruments for airflow measurement and building pressure difference measurement that mounts securely in a door or other opening. **E1827**

bracket, *n*—projecting element or hardware attached to the surface of a member to support other members.

breather finish—coating system allowing the passage of water vapor.

DISCUSSION—A breather finish has **water-vapor permeance** greater than that acceptable for a **water-vapor retarder**.

builder’s model, *n*—a reference standard of quality for specific building **components**, denoting by example, the level of quality adopted by a builder.

DISCUSSION—The examples, or samples of construction materials, permit examination of quality level.

building, *n*—(1) a shelter comprising a partially or totally enclosed space, erected by means of a planned process of forming and combining materials. (2) the act or process of constructing.

apartment building—a **building** containing more than two **dwelling units** not intended for individual unit ownership.

condominium, *n*—an **apartment building**, group of townhouses, or single dwellings in which each **dwelling unit** is individually owned and each owner holds an interest in common areas. Also commonly used to denote an individual unit.

house, *n*—a **building** intended in its entirety as a **dwelling**.

split-level house—one divided vertically so that the floor level of rooms in one part is approximately midway between the levels of two successive stories in an adjoining part.

industrialized building—a **manufactured building** (preferred term).

manufactured building—a structure wholly or substantially made in a manufacturing plant for installation or assembly at the building site.

manufactured home—a **manufactured building** intended to be used as a **dwelling**.

DISCUSSION—The U.S. Department of Housing and Urban Development (HUD) defines this term as “A structure, transportable in one or more sections, which, in the traveling mode, is eight body feet or more in length, or, when erected on site, is three hundred twenty or more square feet; and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air conditioning, and electrical systems contained therein.” (42USC5402). The 1980 Housing and Community Development Act changed the term, mobile home, to manufactured home.

packaged building—Use **manufactured building** or **precut building**.

precut building—a **manufactured building** produced largely of elements cut to size in a factory and transported for assembly at the erection site.

prefabricated building—Use **manufactured building**.

building code—See **code**.

building component, *n*—a building element using industrial products that are manufactured as independent units capable of being joined with other elements.

building construction, *n*—(1) the act or process of making or forming a **building** by assembling or combining elements, **components**, or systems. (2) the structure or part thereof so formed.

closed construction—a method by which a **building**, **system**, assembly, or **component** is manufactured, in such a manner that portions cannot be readily inspected at the installation site without disassembly or destruction.

industrialized building process—the process of constructing manufactured **buildings**.

open construction—a method by which a **building**, **component**, assembly or system is manufactured in such a manner that all portions can be readily inspected on site without disassembly or destruction.

panelized construction—a building method using **panels** as major elements.

building enclosure—Use **building envelope**.

building envelope—the outer elements of a **building**, both above and below ground, that divide the external from the internal environments.

building envelope—the boundary or barrier separating the interior volume of a building from the outside environment. **E1554/E1554M**

building fabric—(1) elements, components, parts, materials, or systems of a building separately or in combination; (2) loadbearing part of a structure without windows, doors, interior or exterior finishes.

building modification—change or activity affecting the materials, structure, operations, or appearance of a building or its systems.

adapt, *v*—*in building*, to make suitable for a particular purpose by means of change or modification.

add, *v*—*in building*, to extend by means of new construction, or by enclosing an existing structure.

alter, *v*—*in building*, to make different, or to rearrange the layout.

improve, *v*—to enhance the quality or value of land or property.

maintain, *v*—to keep in working order, or to preserve from decline or failure.

modernize, *v*—*in building*, to adapt to current needs, tastes, or usage by **remodeling** or **repair**.

rebuild, *v*—to return to **building** to its previous state or condition.

reconstruct, *v*—to reproduce in the exact form and detail a **building**, structure, or **artifact** as it appeared at a specific period in time.

reconstruction, *n*—the act or process of reproducing by new construction the exact form and detail of a vanished **building**, other structure, or **artifact** as it appeared at a specific period in time.

remodel, *v*—to replace or **improve** a **building** or its parts.

repair, *v*—to replace or correct damaged or faulty **components** or **subsystems** of a **building** to **maintain** operating capability.

retrofit, *v*—*in building*, to add new materials or equipment not provided at the time of original construction.

building performance, *n*—the behavior in service of a construction as a whole, or of the **building components**.

durability, *n*—the capability of a **building**, assembly, **component**, product, or construction to maintain **serviceability** over at least a specified time.

serviceability, *n*—the capability of a **building**, assembly, **component**, product, or construction to perform the function(s) for which it is designed and used.

building permit, *n*—an authorization granted by the agency having jurisdiction to an applicant to proceed with construction on a specific project.

building preservation, *n*—measures taken to conserve, protect, rehabilitate, restore, or stabilize a building. See **preservation**.

building pressure difference, *P*, *n*—the pressure difference across the test zone envelope (Pa, in. H₂O). **E1827**

building pressure difference—the pressure difference across the building envelope, expressed in pascals (inches of water, pounds-force per square foot, or inches of mercury). **E1554/E1554M**

building space:

attic, *n*—an accessible enclosed space immediately below the roof and wholly or partly within the roof framing.

basement—a space partly below **average grade** having less than one half of its clear height (measured from floor level to ceiling level) below **average grade**.

bathroom—a room containing a bathtub or shower, or both, and usually a lavatory (wash basin) and toilet (water closet).

cellar—a space wholly or partly below **average grade** having more than one half of its clear height (measured from floor level to ceiling level) below **average grade**.

environmental chamber, *n*—an enclosed space, used for testing designed and constructed to provide control of interior atmosphere to specified conditions.

habitable space—**occupiable space** normally used for living, including such activities as sleeping, eating, and cooking.
DISCUSSION—Bath, lavatory, and toilet rooms are excluded.

half bath—a room containing a lavatory (wash basin) and a toilet (water closet).

kitchen—a space containing facilities primarily for the preparation of food.

occupiable space—space normally used by people.
DISCUSSION—Corridors, stairways, and spaces used for storage, equipment, heating, cooling, and general maintenance are excluded.

office, *n*—a place, such as a room, suite, or building, in which business, clerical, or professional activities are conducted.

open-plan workstation—office workspace for one person, not enclosed by full-height walls.

primary circulation area—portion of building area dedicated to public corridor, lobby, or atrium; or required for access to stairs, elevators, restroom facilities, or building exits.

secondary circulation area—portion of building area not defined as **primary circulation area**, but required for access to some subdivision of space, whether or not bounded by **walls**.

DISCUSSION—An example may be a circulation area within a tenant or occupant space.

story, *n*—a space excluding **attics**, **basements**, and **cellars**, between successive floor levels or between **floor** and roof.

first story—the lowermost **story** of a **building** entirely above the **average grade** (also used as a synonym for **ground floor**).

top story—the uppermost **story** of a building.

building subsystem—a complete, integrated set of parts that functions as a unit within the finished **building**. See also **cladding system**, **hard-coat system**.

solar energy system—a **building subsystem** to convert solar energy into thermal energy for space heating or cooling, water heating, or process energy.

active solar energy system—a **building subsystem** in which solar energy is collected and transferred predominantly by mechanical power not derived from solar radiation.

passive solar energy system—a **building subsystem** in which solar energy is collected and transferred predominantly by natural means, namely, conduction, convection, radiation, or evaporation.

building system—(1) group of structural or non-structural components or assemblies, or both, of a building interacting

to serve a common purpose; (2) method for fabricating or erecting an entire structure. See also **anchorage system**, **anchoring system**, **hard-coat system**, **structural system**, **exterior installation**, **finish system**.

closed system—a building system having interchangeability of only its own **subsystems**, subassemblies, and **components**.

industrialized building system—the integration of **subsystems** and **components** into an overall process, utilizing factors of production, transportation, and on-site assembly techniques.

open system—a building system, designed to have interchangeability of its **subsystems**, subassemblies, **components**, or building elements with like **subsystems**, subassemblies, **components**, or elements of other systems.

prefabricated panel system—building-panel system fabricated away from its ultimate position on a building.

DISCUSSION—One example is a system consisting of an **EIFS**, internal integral structural framing, connections, internal sealant, when required, and installation accessories.

butt joint—See **joint**.

cantilever, *n*—an overhanging portion or a member or slab projecting beyond support(s) sufficiently to induce bending and shear stresses in projecting part(s) when subjected to transverse loading including uniform, concentrated, or other load types.

capillary migration—*of water*, movement of water induced by the force of molecular attraction (surface tension) between the water and the material it contacts. Compare **rising damp**.

carbonation, *n*—*building(s)*, a process of chemical weathering whereby minerals that contain sodium oxide, calcium oxide, potassium oxide, or other basic oxides are changed to carbonates by the action of carbonic acid derived from atmospheric carbon dioxide and water.

caulk, *v*—to fill joints, **cracks**, or crevices in order to prevent the passage of air or water.

cellar—See **building space**.

cellular polystyrene, *n*—polymerized styrene resin processed to form a rigid foam having a predominately closed-cell structure making it suitable as thermal insulation.

DISCUSSION—The manufacturing process can be an expansion of foamable beads under heat and pressure within a mold, or in-situ foaming of molten resin in an extrusion mode. See also **rigid cellular polystyrene thermal insulation board**.

cement, *n*—a general term for a binding element. See specific terms such as Portland cement, Keene's cement, and adhesive cement.

certification, *n*—a written declaration that a particular product or service complies with stated criteria.

DISCUSSION—In specific use, it is necessary to include the scope and limitations of the certification; usually it is provided by the manufacturer, producer, or vendor.

cladding system, *n*—material assembly applied to a building as a non-load-bearing wall, or attached to a wall surface as a protective and ornamental covering.

clip, *n*—a small fastening device, usually of metal, designed to hold an element or **component** in place.

closed construction—See **building construction**.

closed system—See **building system**.

coating, *n*—a liquid, liquefiable, or mastic composition that, after application as a thin layer, is converted to a solid protective, or decorative, or functional adherent film.

DISCUSSION—Such coatings are one form of protective or decorative finish for building purposes. Other forms include gold leaf and metals deposited by electroplating or hot dipping.

code, *n* (in the Law)—a collection of laws (regulations, ordinances, or statutory requirements) adopted by governmental (legislative) authority.

building code, *n*—a **code** applicable to **buildings**, adopted and administered with the primary intent of protecting public health, safety, and welfare.

model code, *n*—a proposed **code** that is established within the procedural framework of a group of knowledgeable people, and is designed for adoption by governmental authority.

coefficient of variation—the ratio (decimal fraction) of the standard deviation of the maximum principal tensile stress (MPTS) at failure to the ABS. **E998**

coefficient of variation, *v*—ratio of the standard deviation of the failure load to the mean failure load. **E997**

coherent unit system—system in which relations between units contain as numerical factor only the number “one” or “unity,” because all derived units have a unity relationship to the constituent base and supplementary units.

cold joint—See **joint**.

colorimetry—an analytical technique that is similar to spectrophotometry except that ultraviolet-visible light of a single, narrow wavelength range is passed through a sample cell containing dissolved analyte, and the absorption measured. **E1775**

column, *n*—a building member, usually structural and vertical, subjected to longitudinal (axial) compression and also to lateral forces such as bending.

combination of features, *n*—*of a facility*, two or more features which, when present together in a facility, affect a level of serviceability of that facility. **E1334**

component—See **building component**.

condominium—See **building**.

connection—device or method used to fasten together two or more components of a structural system using mechanical means, welding, adhesives, or a combination of them.

DISCUSSION—connection usually implies a junction of structural members to make a safe, load-carrying system, for example, a truss. Traditionally the term **joint** has been used in place of the term **connection**.

consensus, n—substantial agreement achieved through a **consensus process**, but not necessarily unanimity.

consensus process, n—a formal procedure for reaching **consensus** that includes the elements of due process.

DISCUSSION—An example of due process requirements in a consensus procedure is found in 1.4 of the “Regulations Governing ASTM Technical Committees” (September 1982).

conservation—See **preservation**.

construction joint—See **joints**.

control joint—See **joint**.

core module—See **module**.

core sample—a fragment of a dry paint film removed from the substrate with a coring tool which is designed to remove a specified area (that is, a square centimetre) of dry paint film. **E1753**

cover plate—Synonym for **escutcheon**.

crack (building defect), *n*—a flaw consisting of complete or incomplete separation within a single element or between contiguous elements of constructions.

DISCUSSION—Occasionally the basic design, or the material characteristics, of a building element will be such that minor cracking may occur. Such cracks are not flaws or defects.

criterion, n—an established precedent, rule, measure, norm, or **code** upon which a decision may be based.

curing, n—chemical process of developing ultimate properties of a finish or other material over a specified period of time. Compare **drying**.

curtain wall—See **wall**.

delamination—separation into constituent layers. **E1925**

denier, n—the number of grams per 9000 m. **E859**

detached dwelling—See **dwelling**.

deterministic design, n—design based on the physical and mechanical properties of the materials, elements, and structures involved (compare **probabilistic design**).

DISCUSSION—In this method of design, load and resistance to load are assigned values for each particular situation as provided in the codes for given conditions. Existing variability in and range of these values, probability of failure, residual deformation, shock absorption, damping capacity, as well as load-sharing and torsional rigidity may or may not be given direct consideration. Under given conditions, deterministic design is applicable to statically and dynamically exposed, relatively rigid materials, elements, and structures; but not to those that can absorb the surge of high external forces and return to their original shape without permanent failure, or appearance of failure.

digestate—an acidified aqueous solution that results from digestion of the sample. **E1644**

digestion—the sample preparation process that will solubilize (extract) targeted analytes present in the sample and results in an acidified aqueous solution called the digestate. **E1613**

distribution-system pressure difference—the pressure difference across the exterior air-distribution envelope, expressed in pascals (inches of water, pounds-force per square foot, or inches of mercury). **E1554/E1554M**

door, n—usually swinging or sliding barrier by which an entry is closed and opened.

drainage hole—an opening in a construction provided for the escape of unwanted liquid, as in a retaining wall. Compare **vent hole, weep hole**.

drawing, n—an architectural, structural, mechanical, or electrical plan, elevation, or section indicating in isometric perspective or in axonometric perspective the detailed location, dimension, quantity, or extent of material, product, or member to be furnished. Compare **shop drawing, working drawing**.

duplicate sample—a second portion of a homogenized sample carried through sample digestion. Analysis results for these samples are used to provide information on the precision of the homogenization process. **E1726**

drying, n—process of developing, solely by evaporation of volatile ingredients, ultimate properties of a finish or other material over a specified period of time. Compare **curing**.

duplex dwelling—See **dwelling**.

dust wipe sample—a settled dust sample collected on a moistened disposable towel. **E1644**

dwelling, n—a **building** designed or occupied as the living quarters for one or more families or households.

apartment—a separate part of a **building** intended as a **dwelling unit** for an individual, family, group, or small household (also used as a synonym for **apartment building**).

detached dwelling—a **dwelling unit** standing by itself.

duplex dwelling—one of a pair of **dwelling units**, generally joined by a common floor/ceiling.

modular dwelling—a manufactured **home** consisting completely or in part of **modules**.

semi-detached dwelling—one of a group of **dwelling units** joined by a common sidewall and occasionally by a garage, carport, or similar structure.

dwelling unit—a unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation. (See also **house**.)

environmental chamber—See **building space**.

EPS, n—expanded polystyrene. See **rigid cellular polystyrene thermal insulation board**. See also **cellular polystyrene**.

equivalent design load—a magnitude of 60-s duration uniform load selected by specifying authority to represent design loads. **E997**

expansion joint—See **joints**.

exterior air-distribution envelope—the boundary or barrier separating the interior volume of the air distribution system from the outside environment or unconditioned spaces. **E1554/E1554M**

DISCUSSION—For the purpose of these test methods, the interior volume is the deliberately conditioned space within a building, generally not including the attic space, basement space, and attached structures, unless such spaces are part of the heating and air conditioning system, such as a crawl space that acts as a plenum.

extraction—the dissolution of target analytes from a solid matrix into a liquid form. During sample digestion, target analytes are extracted (solubilized) into an acid solution. **E1644**

fabricate, *v*—to manufacture, form, construct, or assemble a product or **component**.

facility, *n*—a physical setting used to serve a specific purpose.

DISCUSSION—A facility may be within a building, or a whole building, or a building with its site and surrounding environment; or it may be a construction that is not a building. The term encompasses both the physical object and its use.

facility durability, *n*—the capability of a **facility** to maintain serviceability for a specified time.

DISCUSSION—It may be important that regular maintenance be provided as appropriate, to assist in attaining the desired durability.

facility evaluation, *n*—comparison of the qualitative and quantitative results of observations, measurements, analyses, or other tests against criteria established for a specified purpose and to a specified precision and reliability.

facility function, *n*—the purpose or activity for which the **facility** is designed, used, or required to be used.

facility management—practice of planning and managing workplaces.

DISCUSSION—Included are financial forecasting and budgeting; strategic and tactical (short term) facility planning; real estate acquisition or disposal, or both; architectural and engineering planning and design; new construction or renovation work, or both; interior space planning; workplace specifications, installation, and space management; telecommunications integration; security; maintenance and operations management of the physical plant.

facility performance, *n*—the behavior in service of a **facility** for a specified use.

DISCUSSION—The scope of this performance is of the facility as a system including its subsystems, components, and materials and their interactions such as acoustical, hydrothermal, air purity, and economic and the relative importance of each performance requirement.

facility project brief (statement of work)—document describing services to be provided by the design consultant (architect, engineer, or interior designer) for a **facility**, in detail sufficient for the design to proceed.

DISCUSSION—In included is general project information specifically related to the project, such as functional, technical, and design requirements; time plan; cost plan; and technical design data.

facility serviceability, *n*—the capability of a **facility** to perform the function(s) for which it is designed, used, or required to be used.

facility use, *n*—the functions and activities that take place in a **facility**.

facility serviceability profile, *n*—a graphic representation, usually as a bar chart, of the level of serviceability for each topic of serviceability. **E1679**

fan airflow rate, Q_{fan} , *n*—the volume of airflow through the blower door per unit of time (m^3/s , ft^3/min). **E1827**

feature, *n*—of a **facility**, a physical element of a building, building component, building subsystem, unit of furnishing or equipment, or of a location, or of an aspect of design, arrangement, form or color, which helps or hinders the satisfaction of a requirement for serviceability. **E1334**

DISCUSSION—A feature may be a physical feature or design feature, or both. For example, a particular sound absorbency in a ceiling may be adequate in a carpeted space but may be inadequate in a space with a hard floor covering.

feature, *n*—of a **facility**, a building element, building component, building subsystem, unit of furnishing or equipment, or aspects of design, arrangement, form of color, which helps or hinders the satisfaction of a requirement for serviceability. **E1334**

DISCUSSION—A feature may be a physical feature or design feature, or both. It may only have effect on meeting a requirement when some other feature is also present; for example, a wall with a specified sound transmission coefficient may only have effect on meeting a requirement when sound above a specified level is produced in an adjacent space.

combination of features, *n*—of a **facility**, features which, when present together in a facility, affect satisfying a requirement for serviceability. **E1334**

field blank—a wipe that is exposed to the same handling as field samples except that no sample is collected (no surface is actually wiped). Analysis results from field blanks provide information on the analyte background level in the wipe combined with the potential contamination experienced by samples collected within the batch resulting from handling. **E1728**

field blank—a sample that is handled in exactly the same way that field samples are handled, except that no air is drawn through it. **E1553**

field check—(1) a survey of existing conditions at a construction site (also called *field observation*). (2) verification of an existing structure and its dimensions compared with those shown on drawings (also called *field measure*).

field joint—See **joints**.

field measure—See **field check**.

fieldstone, *n*—natural building stone as found in the field.

filter holder—a plastic holder that supports the filter medium upon which airborne particulate matter is collected. **E1553**

finish, *n*—(1) the final treatment or **coating** of a surface, (2) the fine or decorative work required to make a **building** or its parts complete.

finished grade—See **grade**.

fire resistance—as applied to buildings, the property of a material or assembly to withstand fire or to give protection from it, characterized by the ability to confine a fire or to continue to perform a structural function, or both.

first floor—See **floor**.

first story—See **building space**.

fixed—See **windows and doors**.

flat, *n*—a rectangular metal bar of width greater than thickness.

floor, *n*—*in a building*, a supporting structure (generally horizontal) and constituting the bottom level of each **story**.

first floor—in a building, (1) (in the United States) the floor of a **building** that is at, or closest to, **finished grade** (also used as a synonym for **ground floor**). (2) (except in the United States) the **floor** of a **building** that is next above the **floor** at, or closest to, **finished grade**.

flooring, *n*—a material used to construct the uppermost layer of a **floor**.

sub-floor, *n*—a part of a **floor** over which one or more components may be added to complete the **floor**.

sub-flooring, *n*—the material used in constructing a **sub-floor**.

underlayment, *n*—*in flooring*, a layer of material usually placed upon the **sub-floor** that provides a smooth, even base for **flooring**.

flooring:

gross floor area—the entire area within the inside perimeter of the exterior **walls**.

DISCUSSION—Only courts and shafts not under roof are excluded.

net floor area—that part of the **gross floor area** located within **occupiable space**.

DISCUSSION—Accessory areas and thicknesses of walls are excluded.

frame—See **windows and doors**.

frost point—the temperature at which visible frost begins to deposit on the lower air space glass surface of a sealed insulating glass unit in contact with the measuring surface of the frost point apparatus. **E546**

frost state—the case where the frost point of a sealed insulating glass unit is above the test temperature specified by the purchaser or user. **E546**

gage (also *gauge*), *n*—(1) *in metal products*, a number designating a specific thickness of metal sheet, or diameter of wire, cable, or fastener shank tabulated in a standardized series, each of which represents a decimal fraction of an inch (or millimetre). (2) distance in inches (or millimetres) between adjacent lines of holes or fasteners.

galvanic corrosion—the corrosion of metallic objects in the presence of moisture, caused by electrolytic action. **E1925**

glass specimen—the glass to be tested, for example, a single pane, an insulating glass unit, laminated glass, etc. (does not include test frame). **E997**

glass specimen failure—the fracture or cracking of any glass component of a glass specimen. **E997**

glaze—See **windows and doors**.

glazing—See **windows and doors**.

glazing bead—See **windows and doors**.

glazing material—See **windows and doors**.

glazing, *n*—material instilled in a window sash, ventilator, or panel such as glass, plastic.

grade, *n*—a level or elevation of a land or water surface.

average grade—the arithmetic mean of the elevations of various ground surfaces within a stated area of **building construction**.

finished grade—the surface elevation of lawns, walks, drives, or other improved surfaces after completion of construction or grading operations.

natural grade—the elevation of the original or undisturbed surface of the ground.

sub-grade—the ground elevation established to receive an additional surfacing.

ground floor—See **floor**. (Synonym for **first floor**, **first story**.)

guideline, *n*—a written statement or outline of policy, practice, or conduct.

DISCUSSION—Guidelines may propose options to enable a user to satisfy provisions of a **code**, standard, **regulation**, or **recommendation**.

gusset, *n*—a plate used to connect two or more members or to reinforce a joint.

habitable space—See **building space**.

half bath—See **building space**.

hard-coat system—type of finish system designed to withstand increased impact loads by increasing the strength of the base coat. Also called high-impact system.

DISCUSSION—in EIF systems, the term generally is associated with PM systems.

head—See **windows and doors**.

height, *n*—*of a building*, the vertical distance measured from the **finished grade** to average level of the roof above the level of the highest **wall**.

home, *n*—a place of residence. (See also **dwelling**.)

horizontal sliding window—See **windows and doors**.

house—See **building**.

hung window—See **windows and doors**.

identification limit, *n*—for a qualitative chemical spot test kit, this is the lead content that yields a 50 % chance of either a positive or negative test result for a given sample matrix (**1**).
E1828

improve—See **building modification**.

industrialized building—See **building**.

industrialized building system—See **building system**.

initial calibration blank (ICB)—a standard solution that contains no analyte and is used for the initial calibration and zeroing instrument response.
E1613

DISCUSSION—The ICB must be matrix matched to the acid content present in sample digestates. The ICB must be measured during and after calibration. The measured value is to be less than five times the instrumental detection limit.

initial calibration verification (ICV)—a standard solution (or set of solutions) used to verify calibration standard levels; the concentration of analyte is to be near mid-range of the linear curve that is made from a stock solution having a different manufacturer or manufacturer lot identification than the calibration standards.
E1613

DISCUSSION—The ICV must be matrix matched to the acid content present in sample digestates. The ICV must be measured after calibration and before measuring any sample digestates. The measured value is to fall within ± 10 % of the known value.

instrumental detection limit (IDL)—an instrumental measurement value that is used to provide a lower concentration limit for reporting quantitative analysis data for a given instrument.
E1613

DISCUSSION—Any sample that generates a lead measurement below the IDL is reported as a less-than value using the IDL value multiplied by the appropriate dilution factors caused by preparing the sample for instrumental analysis. Typical IDLs for FAAS, ICP-AES, and GFAAS are 0.05, 0.03, and 0.002 $\mu\text{g/mL}$, respectively. However, the IDL for a given instrument must be established prior to reporting analysis data. There are a number of acceptable methods for determining the IDL for a given instrument. One method is to perform repetitive measurements of a single concentration of low-level lead standard (typically between two and five times the estimated IDL) scattered throughout an analysis run. A minimum of five repetitions is generally required to calculate the IDL. Using this method, the IDL is calculated as three times the standard deviation of the lead values ($\mu\text{g/mL}$) measured for the replicate analyses.

instrumental QC standards—these provide information on measurement performance during the instrumental analysis portion of the overall lead measurement process. They include CCBs, CCVs, ICBs, ICVs, and ICSs.
E1613

interference check standard (ICS)—a standard solution (or set of solutions) used for ICP-AES to verify an accurate analyte response in the presence of possible spectral interferences from other analytes present in samples; the concentration of analyte is to be less than 25 % of the highest calibration standard, and concentrations of the interferant will be 200 $\mu\text{g/mL}$ of aluminum, calcium, iron, and magnesium.

DISCUSSION—The ICS must be matrix matched to the acid content present in sample digestates. The ICS must be analyzed at least twice,

once before and once after all sample digestates. The measured analyte value is expected to be within ± 20 % of the known value.
E1613

interlock—See **windows and doors**.

interior pipe size (IPS)—See **iron pipe size**.

iron pipe size, IPS, *n*—the nominal inside dimension of pipe in inches (or millimetres). (Also called *interior pipe size, standard pipe size*.)

jamb—See **windows and doors**.

joint, *n*—general term. See particular joint of interest. Compare **connection**.

butt joint—a joint having the edge or end of one member matching the edge, end, or face of another member without overlap.

DISCUSSION—An edge-to-face butt joint may also be called a tee joint or an ell joint.

*cold joint, *n**—boundary between later-applied and previously-applied coatings, plaster, mortar, or concrete.

DISCUSSION—At the boundary there can be less than the desired union of materials.

construction joint—in the construction of members intended to be continuous, a predetermined, intentionally created discontinuity between or within constructions and having the ends of the discontinuous members fastened to each other to provide structural continuity.

control joint—in concrete, concrete masonry, stucco, or coating systems; a formed, sawed, or assembled joint acting to regulate the location of cracking, separation, and distress resulting from dimensional or positional change.

expansion joint—a discontinuity between two constructed elements, or **components**, allowing for differential movement (such as expansion) between them without damage.

field joint—a connection between adjoining members or parts, made at the time of installation. Compare **construction joint**.

slip joint—a joint allowing axial sliding movement of joined parts.

kitchen—See **building space**.

knowledgeable person, *n*—an individual who has technical knowledge concerning the building or facility, for example, about occupant requirements, building design, mechanical systems, operation, and maintenance.
E1679

DISCUSSION—In larger facilities, the senior person who is at a facility full time to manage its operation is unlikely to be an appropriate person to facilitate the setting of required levels of serviceability by the occupant because of that role, but he may be well qualified and appropriate to participate as a knowledgeable person in the process of rating that facility.

level, *n*—of serviceability, a number indicating the relative serviceability of a building for one topic on a predetermined range, for example, a range from 1 to 9.
E1679

light—See **windows and doors**.

lite, n—one piece of glazing (preferred term); (also spelled light) (*synonym*—pane).

lite—See **windows and doors**.

load—See **static load**.

low-sloped surfaces—surfaces with a slope smaller than 9.5°. The roofing industry has widely accepted a slope of 2:12 or less as a definition of low-sloped roofs. This corresponds to a slope of approximately 9.5° (16.7 %). **E1918**

maintain—See **building modification**.

manufactured building—See **building**.

manufactured home—See **building**.

masonry, n—construction, usually set in mortar, of natural building stone or manufactured units such as brick, concrete block, adobe, glass block, tile, manufactured stone, or gypsum block.

maximum principal tensile stress (MPTS)—a maximum calculated tensile stress based on strain gage measurements. **E998**

mechanical connection—a joining of two or more elements by means of mechanical fasteners, such as screws, bolts, or rivets but not by welding or adhesive bonding.

meeting rail—See **windows and doors**.

MEPS—See **rigid cellular polystyrene thermal insulation board**.

mesh-lapping—process of overlapping one piece of mesh onto another that has been applied to a surface previously.

method blank—a digestate that reflects the maximum treatment given any one sample within a sample batch except that only the sampling medium (such as a blank wipe) is initially placed into the digestion vessel. (The same reagents and processing conditions that are applied to field samples within a batch are also applied to the method blanks.) Analysis results from method blanks provide information on the level of potential contamination resulting from the laboratory and sampling medium sources that are experienced by samples processed within the batch. **E1644**

method blank—a sample, devoid of analyte, that is analyzed to determine its contribution to the total blank (background) reading. **E1645**

mobile home—Obsolete term. Use **manufactured home**. (See **building**.)

mockup, n—a section or a structure or assembly, built full-size or to scale, for the purpose of studying construction details, testing performance, judging appearance, or any combination thereof.

modernize—See **building modification**.

model code—See **code**.

modular dwelling—See **dwelling unit**.

module, n—a unit of structure based on a standard pattern of standard dimensions. (See also **modular dwelling**.)

core module—a **module** containing electrical, plumbing, heating, and related **subsystems**.

mull—See **windows and doors**.

mullion—See **windows and doors**.

munтин—See **windows and doors**.

natural grade—See **grade**.

negative load—a load that results in the indoor side of a glass specimen being the high-pressure side. **E997**

negative test—the absence of the characteristics color change within a specified time limit, usually within a few minutes. **E1753**

no-frost state—the case where the frost point of a sealed insulating glass unit is below the temperature specified by the purchaser or user. **E546**

nominal airflow rate, Q_{nom} , n—the flow rate indicated by the blower door using the manufacturer's calibration coefficients (m^3/s , ft^3/min). **E1827**

nonbearing wall—See **wall**.

non-spiked sample—a sample, devoid of analyte, that is targeted for addition of analyte but is not fortified with all target analytes prior to sample preparation.

DISCUSSION—Analysis results for this sample are used to correct for background levels in the blank medium that is used for spiked and spiked duplicate samples. **E1645**

non-spiked sample—a portion of a homogenized sample that is targeted for addition of analyte but that is not fortified (spiked) with all the lead before sample preparation. Analysis results for this sample are used to correct for background levels in soil that are used for the spiked and spiked duplicate samples. **E1726**

non-spiked sample—a blank wipe sample that was targeted for addition of analyte but was not fortified with all the target analysis before sample preparation. **E1644**

DISCUSSION—For wipe samples, a non-spiked sample is equivalent to a method blank. Analysis results for this sample are used to correct for background levels in the blank wipes used for spiked and spiked duplicate samples.

numerical value of a quantity—magnitude of a quantity expressed by the product of a number and the unit in which the quantity is measured. **E621**

“O”—See **windows and doors**.

occupant, n—of a facility, a group, department, agency or corporation, or other organization, or a part thereof, or an individual or individuals thereof, that is or will be occupying space in a particular facility. **E1334**

DISCUSSION—Persons who are authorized to be present only temporarily, or in special circumstances as those permitted to pass through during an emergency, are visitors.

occupiable space—See **building space**.

office—See **building space**.

office, n—a place, such as an open workspace, room, suite, or building, in which business, clerical, or professional activities are conducted. **E1334**

opaque wall—all exposed areas of a wall that enclose conditioned space, except openings for windows, doors and building service systems.

open construction—See **building constructions**.

open-plan workstation—See **building space**.

open system—See **building system**.

operable—See **windows and doors**.

ordinance, n—a rule or law adopted by local governmental authority.

orifice blower door, n—a blower door in which airflow rate is determined by means of the pressure drop across an orifice or nozzle. **E1827**

packaged building—See **building**.

paint chip sample—a fragment of a dry paint film removed from the substrate. **E1753**

paint collection container—a sealable rigid walled container. **E1729**

DISCUSSION—Use of a resealable plastic bag for holding and transporting dried paint samples is not recommended due to the potential losses of paint chips within the plastic bag during laboratory handling. Quantitative removal and processing of the dried paint samples by the laboratory is significantly improved through the use of sealable rigid walled containers.

paint collection tray—any clean, dry, lead-free container for use in catching paint scrapings. **E1729**

DISCUSSION—This practice describes the use of letter-size white paper for making a funnel type collection tray. However, other types of collection trays can be utilized.

painted element—a painted architectural or building component. **E1796**

pane—See **windows and doors**.

panel, n—in a building, (1) a portion of a surface flush with or recessed from, or sunk below the surrounding area, sometimes set off by distinct molding or other decorative measure. (2) a usually flat and rectangular piece of construction material made to form part of a surface (as of a **wall**, ceiling, or **floor**). (See also **windows and doors**.)

paneled construction—See **building constructions**.

passive solar energy system—See **building subsystem**.

performance curve, n—for a qualitative chemical spot test kit, this is a plot of the test kit response (positive or negative) versus the lead content in a given sample matrix as determined by quantitative analysis (2). **E1828**

DISCUSSION—The performance curve may be statistically modeled to yield qualitative test kit performance parameters for lead detection.

performance parameter—for a particular spot test kit and a particular sample matrix, this is the lead content that yields a known degree of confidence in detecting lead. **E1828**

DISCUSSION—Examples of qualitative test kit performance parameters include the identification limit and the amounts of lead in a given sample matrix yield a desired confidence (for example, 95 %) of a negative and positive test result, respectively.

performance standard, n—in building constructions, a standard that defines the required **performance** of a building material, element, **subsystem**, or **system**.

perm, n—empirical unit of **water-vapor permeance** (mass flow rate), equal to one grain (avoirdupois) of water vapor per hour flowing through one square foot of a material or construction induced by a vapor-pressure difference of one inch of mercury between the two surfaces.

DISCUSSION—This mass flow rate can be stated in other desired or convenient units. (For SI conversion, see Test Methods **E96/E96M**). A maximum value of one perm is the moisture vapor migration rate below which there is low probability of induced moisture problems in conventional buildings in climates not exceeding 5000 heating degree days (65°F base), and not so hot and humid that continual air conditioning would be required.

permanent set—See **residual deflection**.

permanent set of test frame—a load-induced permanent displacement from an original position of the test frame. **E998**

personal air samples—air samples that are collected within the personal breathing zone (PBZ) of a person. **E1553**

personal breathing zone (PBZ)—an area within approximately 6 in. of a person's face. **E1553**

pick, n—an individual filling yarn. **E859**

pipe, n—a tubular conduit for transport of fluids or finely divided solids; also, a hollow structural member or safety barrier; a hollow product of round cross section.

DISCUSSION—If of metal, its size usually is designated by its nominal inside diameter and schedule which indicates the wall thickness; or by its nominal inside diameter and its exact wall thickness. Compare **pipng, tube**.

pipng, n—a system of **pipes**.

pitch, n—an inclination or slope measured in degrees, or percent, or by the ratio of rise and run.

plate, n—a flat, rolled sheet having a width and length much greater than thickness. (If of steel, having dimensions of 0.180 in. (4.6 mm) or greater in thickness, and greater than 8.0 in. (203 mm) in width.)

DISCUSSION—Similar distinctions are made for sheet and plate in other metals. Other specific values apply to nonmetallic products.

pocket, n—an opening in a structure to accept a construction member.

positive load—a load that results in the outdoor side of a glass specimen being the high-pressure side. **E997**

positive test—the observation of the characteristic color change within a specified time limit, usually within 10 to 30 s. **E1753**

precision index of the average, *n*—the sample standard deviation divided by the square root of the number of samples. **E1827**

precut building—See **building**.

prefabricated building—See **building**.

prefabricated panel system—See **building system**.

preservation, *n*—the act or process of applying measures to sustain the existing form, integrity, or materials of a **building**, structure, or **artifact** and the existing form or vegetative cover of a cite.

conservation, *n*—management of a natural resource, structure, or **artifact** to prevent misuse, destruction, or neglect. It may include detailed characterization and recording (technical or inventory) or provenance and history and application of measures.

protection, *n*—the act or proces of applying measures designed to affect the physical condition of a **building**, structure, or **artifact** by guarding it from deterioration, loss, or attack; or, to cover or shield it from damage.

rehabilitation, *n*—*of a structure*, the act or process of returning a sructure to a state of utility through **repair** or **alteration** which makes possible an efficient contemporary use.

DISCUSSION—As applied to historic structures, it may include the preservation of those portions or features of the structure that are significant to its historical, architectural, and cultural values.

restoration, *n*—the act or process of reestablishing accurately the form and details of a structure, site, or **artifact** as it appeared at a particular period of time, by means of removal of later work or by the **reconstruction** of missing earlier work.

pressure station, *n*—a specified induced change in the building pressure difference from the initial zero-flow building pressure difference (Pa, in. H₂O). **E1827**

primary circulation area—See **building space**.

probabilistic design—design that accounts for the uncertainties due to statistical variabilities in physical and mechanical properties of the materials, elements, or structures, and in the applied loads (compare **deterministic design**).

DISCUSSION—In probabilistic design, the variable characteristics of each component are considered; and design loads and conditions may be based on specific probabilities of occurrence.

probability of failure—the probability that a glass specimen will fail when tested at a given load. General industry practice is to express the probability of failure as lights per 1000 lights. **E997**

project record—use **as-built**, the preferred term.

protection—See **preservation**.

proof load—a magnitude of uniform load at which glass specimens shall be tested. **E997**

proof load factor, *a*—the constant which, when multiplied by the equivalent design load, determines the proof load. **E997**

pyranometer—an instrument (radiometer) used to measure the total solar radiant energy incident upon a surface per unit time and unit surface area. **E1918**

quantitative analysis—an analysis run on sample digestates (or serial dilutions of sample digestates) that includes instrumental QC standards. Data from this run are used to calculate and report final lead analysis results. **E1613**

quantity—measurable attribute of a physical phenomenon. There are base units for seven quantities and supplementary units for two quantities upon which units for *all* other quantities are founded. **E621**

racking—when applied to shear walls, refers to the tendency for a wall frame to distort from rectangular to rhomboid under the action of an in-plane force applied parallel to the wall length. **E564**

rail—See **windows and doors**.

random sampling—*in statistical sampling*, the process of selecting sample units in such a way that all units under consideration have the same probability of being selected.

rater, *n*—a person having primary responsibility for organizing and conducting the rating process for a building or building-related facility. **E1334**

rating scale, *n*—*for a topic of facility serviceability*, a set of descriptions of combinations of features, in which each description has been selected to indicate a specific level of serviceability on a scale from the lowest to the highest level likely to be encountered. **E1679**

RCRA—Resource Conservation and Recovery Act of 1976.

reagent blank—a digestate that reflects the maximum treatment given any one sample within a sample batch except that it has no sample initially placed into the digestion vessel. (The same reagents and processing conditons that are applied to field samples within a batch are also applied to the reagent blank.) **E1644**

DISCUSSION—Analysis results from reagent blanks provide information on the level of potential contamination resulting from only laboratory sources that are experienced by samples processed within the batch.

rebuild—See **building modification**.

recommendation, *n*—*in building constructions*, a written suggestion for policy, practice, conduct, design, or material, implying endorsement but not requiring compliance (see **guideline**).

reconstruct—See **building modification**.

reconstruction—See **building modification**.

reference material (standard reference material) (SRM)—a material of known composition where the lead level is certified by the manufacturer. **E1645**

reflectance—a measurement technique (subset of spectrophotometry; see 3.5) in which light is reflected off of a reflecting

surface and measured by a detector. The amount of reflected light may be a function of analyte concentration.

regulation, *n*—a rule prescribing a set of conditions and requirements that have been made mandatory for those under its control, by an executive (administrative) authority.

rehabilitation—See **preservation**.

remodel—See **building modification**.

repair—See **building modification**.

requirement scale, *n*—*for a topic of facility serviceability*, a set of descriptions of requirements for serviceability in which each description has been selected to indicate a specific level of serviceability on a scale from the lowest to the highest level likely to be encountered. **E1679**

residual deflection—permanent deformation of a building element, component, or structure after complete or partial removal of applied force. Also called **permanent set** or **residual deformation**.

residual deformation—See **residual deflection**.

residual stress—an initial, state of stress on unloaded, unglazed glass resulting from manufacturing process (heat-strengthening, tempering). **E998**

restoration—See **preservation**.

retaining wall—See **wall**.

re-temper, *v*—to add more water to a hydraulic-setting compound after the initial mixing, but before partial set has occurred.

retrofit—See **building modification**.

rhodizonate spot test method—*for lead detection*, the use of a dilute solution of rhodizonate ion to test a painted surface or paint chip for the qualitative presence of lead (1).³ A color change from yellow/orange to pink or red indicates the presence of lead above the level of detection of the test kit. **E1753**

rigid cellular polystyrene thermal insulation (RCPS)—rigid thermal insulation board formed by expansion of polystyrene resin beads or granules in a closed mold (EPS), or by the expansion of polystyrene resin in an extrusion process (XPS).

DISCUSSION—Ad hoc abbreviations such as *MEPS* and *XEPS* are deprecated. The term *beadboard*, should not be used for commercial EPS.

rising damp, *n*—upward-moving moisture in a **wall** or other structure standing in water or in wet soil. (Compare: **capillary migration**, wicking).

roofing system—assembly of interacting components designed to weatherproof, and sometimes to insulate, the roof surface of a building.

round, *n*—a solid member, circular in cross section.

sample set—a group of samples (one or more). **E1645**

sampling device—a filter holder and air sampling pump assembly used to collect airborne particulate lead on a filter. The filter holder houses a cellulose ester membrane filter, through which air is drawn by using an air sampling pump; the filter holder is connected to the pump by tubing. **E1553**

sampling location—a specific area within a sampling site that is subjected to sample collection. Multiple sampling locations are commonly designated for a single sampling site. **E1728**

sampling site—a local geographical area that contains the sampling locations. A sampling site is generally limited to an area that is easily covered by walking. **E1728**

sash—See **windows and doors**.

sealed insulating glass—See **windows and doors**.

sealed insulating glass unit—a preassembled unit, comprising sealed panes of glass separated by dehydrated space(s), intended for vision areas of buildings. The unit is normally used for windows, window walls, picture windows, sliding doors, patio doors, or other types of windows or doors. **E774**

secondary circulation area—See **building space**.

semi-detached dwelling—See **dwelling**.

semiquantitative screen—an analysis run that is performed on highly diluted sample digestates for the purpose of determining the approximate analyte level in the digest. This analysis run is generally performed without inserting instrumental QC standards except for calibration standards. Data from this run are used for determining serial dilution requirements for sample digestates to keep them within the linear range of the instrument. **E1613**

setting, *n*—process by which, after application, a liquid (wet-state) material changes to a serviceable condition by **curing** or **drying**.

DISCUSSION—Generally, **curing** implies a chemical reaction, while **drying** implies evaporation of volatile constituents.

serial dilution—a method of producing a less-concentrated solution through one or more consecutive dilution steps. A dilution step for a standard or sample is performed by volumetrically placing a small aliquot of higher concentrated solution into a volumetric flask and diluting to volume with water containing the same acid levels as those found in original sample digestates. **E1613**

serviceability—see *facility serviceability*. **E1679**

sheet, *n*—a thin, flat, rolled metal product having mill or cut edges. (If of steel, having dimensions of less than 0.229 in. (5.8 mm) thickness, and greater than 12.0 in. (305 mm) width and length.)

DISCUSSION—Similar distinctions are made for sheet and plate in other metals. Other specific values apply to nonmetallic products.

shear wall—structural subassembly that acts as a cantilever/diaphragm to transfer horizontal building loads to the foundation in the form of horizontal shear and an overturning moment. **E564**

shop drawing—a drawing prepared by the fabricator based on a **working drawing** and used in a shop or on a site for assembly.

SI—The International System of Units (abbreviation for “le Système International d’Unités”) as defined by the General Conference on Weights and Measures (CGPM)—based upon seven base units, two supplementary units, and derived units, which together form a coherent system. **E621**

sill—See **windows and doors**.

single zone, n—a space in which the pressure differences between any two places, as indicated on a manometer, differ by no more than 2.5 Pa (0.01 in. H₂O) during fan pressurization at a building pressure difference of 50 Pa (0.2 in. H₂O) and by no more than 5 % of the highest building pressure difference achieved. **E1827**

sleeve, n—(1) in concrete, masonry, or other construction, a tubular section of sheet metal or other material placed to provide a pocket or opening for the insertion of a railing or other member. (2) an internal or external tubular splice between abutting sections of **pipe, tubing**, or similar members.

sliding glass door—See **windows and doors**.

slip joint—See **joint**.

slope, n—See **pitch**.

soil collection container—a container for holding and transporting the soil sample from the field to the laboratory. A sealable rigid walled container or a resealable plastic bag can be used. The internal volume must be sufficient to hold the entire collected sample. **E1727**

solar energy—the radiant energy originating from the sun. Approximately 99 % of solar energy lies between wavelengths of 0.3 to 3.5 μm. **E1918**

solar energy system—See **building subsystem**.

solar flux—for these measurements, the direct and diffuse radiation from the sun received at ground level over the solar spectrum, expressed in watts per square metre. **E1918**

solar reflectance—the fraction of solar flux reflected by a surface. **E1918**

special tools—tools other than common hand tools or those designed specifically for use with a delivered product. **E1925**

specification, n—precise statement of a set of requirements to be satisfied by a material, product, system, or service.

DISCUSSION—It is desirable that the requirements, together with their limits, should be expressed numerically in appropriate units. **E1480**
E631

specifying authority—professional(s) responsible for determining and furnishing information required to perform the test. **E997**

specimen thermal conductance, C_s—the time rate of heat flow through a unit area of a specimen (window or door), induced by a unit temperature difference between the specimen surfaces. It is calculated as follows:

$$C_s = 1/(1/U_s - 1/h_1 - 1/h_{II}) \quad (1)$$

where:

C_s = thermal conductance of specimen (surface to surface), W/(m² · K) [Btu/(ft² · h · °F)],

U_s = thermal transmittance of specimen (air to air under test conditions), W/(m² · K) [Btu/ft² · h · °F],

h₁ = surface conductance, room side, W/(m² · K) [Btu/(ft² · h · °F)], and

h_{II} = surface conductance, weather side, W/(m² · K) [Btu/(ft² · h · °F)].

DISCUSSION—The test specimen thermal conductance is an approximate value calculated from the measured thermal transmission, U_s, and the calculated room-side, h₁, and weather-side, h_{II}, surface conductances. When testing inhomogeneous test specimens, the test specimen surface temperatures and surface conductances will not be exactly the same as those obtained using the calibration transfer standard. Consequently, the surface conductances obtained using the calibration transfer standard cannot be defined unambiguously; hence the test specimen conductance cannot be defined and measured. For inhomogeneous test specimens, only the thermal transmittance, U_s, can be defined and measured. It is therefore essential to test with surface conductances as close as possible to the conventionally accepted values for building design. Likewise, it would be desirable to have a surround panel that closely duplicates the actual wall where the fenestration system would be installed. However, this is not feasible due to the wide variety of fenestration opening designs and constructions. Furthermore, for high-resistance fenestration systems installed in fenestration opening designs and constructions with thermal bridges, the large relative amount of heat transfer through the thermal bridge will cause the relatively small amount of heat transfer through the fenestration system to have an error which is greater than desirable. As a result, the calculation of a specimen thermal conductance or resistance (surface to surface) from a measured thermal transmittance and the calculated surface conductances is not part of the basic measurement procedure. The purpose of this procedure is to arrive at a U_{ST} value that includes standard film coefficients combined with the specimen thermal conductance, C_s. In this manner, it becomes easier to compare the thermal transmission of various fenestration systems. **E1423**

specimen thermal resistance, R_c—the mean temperature difference, at equilibrium, between two defined surfaces of a material or construction that induces a unit heat flow rate through unit area. It is calculated as follows:

$$R_c = 1/U_s - 1/h_1 - 1/h_{II} \quad (2)$$

where:

R_c = surface to surface thermal resistance of specimen, m² · K/W (ft² · h · °F/Btu).

E1423

specimen thermal transmittance, U_s (sometimes called overall coefficient of heat transfer)—the heat transmission in unit time through unit area of a specimen and its boundary air films, induced by unit temperature difference between the environments on each side. It is calculated as follows when

$$t_{b2} = t_{II} (\pm 0.5^\circ C) \text{ and } t_{b1} = t_I (\pm 0.5^\circ C) \quad (3)$$

where:

- t_{b1} = baffle surface temperature, room side, K or °C (°F),
 t_{b2} = baffle surface temperature, weather side, K or °C (°F),
 t_I = temperature of room side air, °C (°F), and
 t_{II} = temperature of weather side air, °C (°F).

$$U_s = Q_s/A_s \cdot (t_I - t_{II}) \quad (4)$$

where:

- A_s = projected area of specimen (same as open area in surround panel), m² (ft²), and
 Q_s = time rate of heat flow through the specimen, W (Btu/h).

The transmittance of the specimen can be calculated from the thermal conductance and the surface conductances as follows:

$$1/U_s = 1/h_I + 1/C_s + 1/h_{II} \quad (5)$$

where the values of h_I and h_{II} are calculated using the appropriate equations in 3.1.4. **E1423**

spectrophotometry—an analytical technique in which a spectrum of analyte species is obtained and used to determine the analyte concentration in the following manner. Light is directed onto or through analyte species, and the absorption of this light across a range of wavelengths is measured by a detector. The amount of absorbed light is a function of the concentration of analyte species.

spiked sample and spiked duplicate sample—a sample portion (split from an original sample) that is spiked with a known amount of analyte. Two portions of a homogenized sample that were targeted for addition of analyte and are fortified with all the target analytes before preparation. Analysis results for these samples are used to provide information on the precision and bias of the overall analysis process. **E1613**

spiked sample and spiked duplicate sample—a spiked sample (or spiked duplicate sample) is a blank wipe that is spiked with a known amount of analyte before preparation. **E1644**

DISCUSSION—Analysis results for these samples are used to provide information on accuracy and precision of the overall analysis process.

spiked sample or spiked duplicate sample—a blank medium that contains no purposely added analyte to which a known amount of analyte is added before preparation. **E1645**

DISCUSSION—Analysis results for these samples are used to provide information on the precision and accuracy of the overall process.

spiked sample and spiked duplicate sample—each is a portion of a single homogenized sample to which the same known amount of analyte is added (spiked) before sample digestion. Analysis results for these samples are used to provide information on accuracy and precision of the overall analysis process. **E1726**

splice plate—a plate used for fastening and joining members. See also **gusset**.

split-level house—See **building**.

spot test—the application of reagent solution to a prepared dry paint film sample, paint chip, paint powder, or painted

surface and the subsequent observation for the presence or absence of the characteristic color change. **E1753**

square, n—an equal-sided rectangular **bar** or **tube** having sharp or slightly rounded edges.

stair, n—an uninterrupted series of level steps, or connecting flights of steps, extending between two or more **floors** or landings.

stairway, n—See **stair**.

standard pipe size—See **iron pipe size**.

static load—a load or series of loads that are supported by or are applied to a structure so gradually that forces caused by change in momentum of the load and structural elements can be neglected and all parts of the system at any instant are essentially in equilibrium. **E73**

static load, n—an imposed stationary force that is constant in magnitude, direction, and sense.

stiffener, n—a reinforcing member designed to limit or prevent the deformation of an attaching member.

stile—See **windows and doors**.

story—See **building space**.

strength, n—resistance to external force or load or generation of internal strain, expressed in terms of units of force, lbf, pounds force (N, newtons).

DISCUSSION—Strength is the resistance to tensile, compressive, or shear force, or a combination of these; as compared to stress that is expressed in terms of force per unit area.

ultimate strength, n—maximum resistance to applied force, load, or stress that a material, member, component, or assembly of a structure can withstand without failure.

DISCUSSION—Sometimes referred to as ultimate load, maximum load, or maximum strength. Ultimate strength is expressed in terms of ultimate load resisted, that is, in units of force; as compared to ultimate stress that is expressed in terms of units of force per unit area.

strip, n—a flat, thin member, much longer than wide, having width greater than thickness (if of steel, having dimensions of 0.229 in. (5.8 mm) or less thickness and 12.0 (305 mm) or less width).

structural integrity—for the purpose of this specification, it is the ability of the AR to maintain air leakage performance after exposure to elevated positive and negative pressure (see 5.1.2 for performance).

structural system—a combination of load supporting and transmitting construction elements or **components** of an assembly or **building** including connections.

structural test, n—determination of one or more values for load, stress, and deflection characteristics of a material or assembly.

DISCUSSION—Typical test loads simulate wind load, or seismic load, or gravity load.

sub-floor—See **floor**.

sub-flooring—See **floor**.

sub-grade—See **grade**.

subsurface layers—layers of material that may exist on a base substrate and which are underneath the outermost layer, or surface, on a base substrate. **E1796**

subsystem—See **building subsystem**.

sulfide spot test method—*for lead detection*, the use of a dilute solution of sulfide ion to test a painted surface or paint chip for the qualitative presence of lead (2). A color change from clear to grey or black indicates the presence of lead above the level of detection of the spot test. **E1753**

surface—the outermost layer of material on a base substrate facing the inspector or occupants. **E1796**

surface conductance, h—(often called surface or film coefficient)—the time rate of heat flow from a unit area of a surface to its surroundings, induced by a unit temperature difference between the surface and the environment. Subscripts are used to differentiate between room-side (1 or I) and weather-side (2 or II) surface conductances (see Fig. 1). Due to radiation effects, the room-side or weather-side temperatures (t_1 and t_{1I} , respectively), or both, can differ from the respective room-side or weather-side baffle temperatures (t_{b1} and t_{bII} , respectively). If there is a difference of more than $\pm 0.5^\circ\text{C}$ ($\pm 1.0^\circ\text{F}$), either on the room side or the weather side, the radiation effects must be accounted for to maintain accuracy in the calculated surface conductances. The room-side and weather-side surface conductances are calculated as follows:

When

$$t_1 = t_{b1} (\pm 0.5^\circ\text{C}), \quad (6)$$

$$h_1 = q_s / (t_1 - t_1)$$

where:

t_1 = temperature of specimen room-side surface, K or $^\circ\text{C}$ ($^\circ\text{F}$), and

q_s = heat flux through the specimen, W/m^2 [$\text{Btu}/(\text{h} \cdot \text{ft}^2)$].

When

$$t_1 \neq t_{b1}, \quad (7)$$

$$h_1 = (q_{r1} + q_{c1}) / (t_1 - t_1)$$

where:

q_{r1} = net radiative heat flux to the room side of the specimen, W/m^2 [$\text{Btu}/(\text{hr} \cdot \text{ft}^2)$], and

q_{c1} = convective heat flux to the room side of the specimen, W/m^2 [$\text{Btu}/(\text{h} \cdot \text{ft}^2)$].

When

$$t_{II} = t_{b2} (\pm 0.5^\circ\text{C}), \quad (8)$$

$$h_{II} = q_s / (t_2 - t_{II})$$

where:

t_2 = temperature of specimen weather-side surface, K or $^\circ\text{C}$ ($^\circ\text{F}$).

When

$$t_{II} \neq t_{b2}, \quad (9)$$

$$h_{II} = (q_{r2} + q_{c2}) / (t_2 - t_{II})$$

where:

q_{r2} = net radiative heat flux from the weather side of the specimen, W/m^2 [$\text{Btu}/(\text{h} \cdot \text{ft}^2)$], and

q_{c2} = convective heat flux from the weather side of the specimen, W/m^2 [$\text{Btu}/(\text{h} \cdot \text{ft}^2)$]. **E1423**

temper, v—in hydraulic-setting compounds, to bring to a usable state by mixing in or adding water.

template, n—(1) a pattern used as a guide in fabricating elements. (2) a precise, detailed pattern or layout to provide essential fabrication details.

test kit—equipment (for example, a cutting tool, adsorbent applicators, if necessary) and chemicals (for example, sulfide or rhodizonate spot test reagents and any extraction solutions needed) assembled for use during spot testing for lead. **E1753**

test pressure difference—the actual pressure difference across the building envelope, expressed in pascals (inches of water or pounds-force per square foot or inches of mercury). **E779**

tolerance, n—the allowable deviation from a value or standard; especially the total range of variation permitted in maintenance a specified dimension in machining, fabricating, or constructing a member or assembly.

top story—See **building space**.

topic, n—*of serviceability*, a part of the serviceability of a facility for which a paried set of requirements and rating scales can be prepared. **E1679**

DISCUSSION—At any level of serviceability, a topic can be expressed in two ways: a statement of a requirement in the normal language of occupants or owners; and a statement in technical performance language describing the combination of features that meet that requirement. Each statement is a translation of the other. Taken together, several related topics typically comprise one aspect of serviceability.

truss—a coplanar system of structural elements joined together at their ends usually to construct a series of triangles that form a stable beam-like framework. **E73**

tube, n—a tubular conduit for transport of fluids or finely divided solids; also, a hollow structural member; a hollow product of round or other cross section.

DISCUSSION—A tube is designated by (1) its exact outside diameter, and (2) its exact wall thickness which may be described in gage numbers or other units. An exception exists for copper tubes as used in the plumbing industry which are designated by the nominal size, which for 2-in. diameter or less approximates the inside diameter; while the exact outside diameter is 0.125 in. (3.2 mm) larger than the nominal size. Compare **tubing, pipe**.

tubing, n—a system of **tubes**.

µg—microgram.

ULPA filter—ultra-low-penetration air filter.

ultimate strength—See **strength**.

unconditioned space—any space that is not intentionally heated or cooled for human occupancy, including attics, crawlspaces, unfinished basements, attached structures (such as a garage), or any space completely outside the building envelope (for example, rooftop ductwork on small commercial buildings). **E1554/E1554M**

underlayment—See **floor**.

unit—reference value of a given quantity as defined by CGPM Resolution or ISO Standards. There is *only one* unit for each quantity in SI. **E621**

unit—the smallest single portion of material received in any one lot (for example, a single roll of material).

uplift—the vertical displacement measured at the loaded end stud with respect to the test apparatus. **E564**

utility core—Use **core module**.

vapor retarder—a material or system that adequately impedes the transmission of water vapor under specified conditions.

DISCUSSION—For practical purposes it is assumed that the permeance of a vapor retarder will not exceed one perm in inch-pound units (57.4 ng/(s·m²·Pa)), although at present this value may only be appropriate for residential construction. For certain other types of construction the permeance must be lower.

vent hole—an opening for the escape of gases of relief of pressure, often required in fabricated, immersion-coated, or hot-dip galvanized steel members. Compare **drainage hole**, **weep hole**.

ventilator—See **windows and doors**.

wall, n—a part of a **building** that divides spaces vertically.

bearing wall—a **wall** supporting a vertical load in addition to its own weight.

curtain wall—a **nonbearing** exterior **wall**, secured to and supported by the structural members of the **building**.

nonbearing wall—a **wall** that does not support a vertical load other than its own weight.

retaining wall—a **wall** not enclosing portions of a **building**, designed to resist the lateral displacement of soil or other material.

water leakage—penetration of water onto the exterior plane of framing or cavity insulation under specified conditions of air pressure difference across the AR during a test period. **E1677**

water-repellant, n—a material or treatment for surfaces to provide resistance to penetration by water.

water resistance—the capability of a material or system to retard water leakage. **E1677**

water vapor barrier—Use **water-vapor retarder**, the preferred term.

water vapor diffusion—the process by which water vapor spreads or moves through permeable materials caused by a difference in water vapor pressure. **E1677**

water-vapor permeance—time rate of water-vapor transmission through unit area of a flat material or construction induced by unit vapor-pressure difference between two specified surfaces, under specified temperature and humidity conditions. See **perm**. **C168**

water-vapor retarder, n—material or system that impedes the transmission of water vapor under specified conditions.

DISCUSSION—See Practice **C755** for guidance on acceptable limits.

weather sealer—form of coating applied to the outer surface of a construction to augment its weather resistance.

weep hole, n—a small hole allowing drainage of fluid. Compare **drainage hole**, **vent hole**.

window—See **windows and doors**.

windows and doors:

back bedding—a **bead** of sealant, glazing compound, or putty, applied between the face of glass and the **frame** containing it.

back putty—Use **back bedding**.

balance, n—a mechanism used in hung window assemblies to provide mechanical assistance in raising the operable **sash** and providing a means of holding the **sash** in the open position.

bead, n—*in glazing, (1)* a strip of metal or wood used around the periphery of a **pane** of glass to secure it in place (also referred to as a “stop”). *(2)* a strip of sealant, glazing compound, or putty.

bite, n—the distance that the surround member (rail or stile) overlaps the **glazing**.

fixed, adj—describing a **sash**, **panel**, or **glazing** designed not to be opened (antonym: **operable**).

frame, n—an assembly of structural members that surrounds and supports the **sash**, **ventilators**, doors, **panels**, or **glazing** that is installed into an opening in a **building envelope** or **wall**.

glaze, v—to install **glazing**.

glazing, n—a material installed in a **sash**, **ventilator**, or **panel** such as glass, plastic, etc.

glazing bead, n—a **glazing material** used in a **sash**, **ventilator**, **panel**, **window** or door assembly that retains the glazing.

glazing material, n—the **components** used to install **glazing** into its surrounding edge members, such as gaskets, sealants, glazing retainers, etc.

head, n—an upper horizontal member of a **window** or door **frame**.

horizontal sliding window, n—a window assembly in which the operable **sash(es)** moves horizontally in the plane of the **window**.

hung window, n—window assembly in which the operable **sash(es)** moves vertically in the plane of the **window** and having a balance(s) to aid in the operation of the sash.

Windows may be single, double, or triple hung depending on the number of **operable sash(es)**.

interlock, *n*—a set of **meeting rails** or meeting **stiles** that contains a provision for each of the **rails** or **stiles** to physically engage one another over their entire length.

jamb, *n*—a vertical member of a **window** or door **frame**.

light, *n*—Use **lite**.

lite, *n*—one piece of **glazing** (preferred term) (also spelled light) (synonym: pane)

meeting rail, *n*—a **rail** that overlaps another rail.

mull, *v*—to join or connect **frame** members of **windows** or doors; or a **frame** member to a **mullion**.

mullion, *n*—a member used between **windows** or doors as a means of connection, which may or may not be structural.

muntin, *n*—a member used between **lites** of **glazing** within a **sash**, **ventilator**, or **panel**.

“*O*”—in window and door design, a designation used to indicate a **fixed sash**, **panel**, or **lite**.

operable, *adj*—describing a **sash**, **ventilator**, or **panel** designed to be opened and closed (antonym: **fixed**).

pane, *n*—See **lite**.

panel, *n*—an assembly of one or more **lites** of **glazing**, encompassed by surrounding edge members, which when **operable**, slides horizontally in the plane of a sliding door.

rail, *n*—a horizontal surrounding edge member of a **sash**, **ventilator**, or **panel**.

sash, *n*—an assembly of one or more **lites** of **glazing**, encompassed by surrounding edge members, which when **operable**, slides in the plane of the **window**.

DISCUSSION—In the wood window industry, the term “sash” is used regardless of the mode of operation.

sealed insulating glass, *n*—an assembly of two or more **lites** separated by a dehydrated gaseous space(s), the entire assembly being sealed to resist passage of water vapor or gas.

sill, *n*—a lower horizontal member of a **window** or sliding door **frame**.

sliding glass door, *n*—a door assembly in which the **operable panel(s)** moves horizontally in the plane of the door.

stile, *n*—a vertical surrounding edge member of a **sash**, **ventilator**, or **panel**.

ventilator, *n*—an assembly of one or more **lites** encompassed by surrounding edge members, that operates in a manner other than sliding in the plane of the **window**.

DISCUSSION—In the wood window industry, this term is not normally used; the parts of the window described are denoted as “sash.”

window, *n*—an assembly consisting of a surrounding **frame** and one or more **sashes**, **ventilators**, or fixed **lites** of glass, or a combination of these, designed to be installed in a **wall** opening for the purpose of admitting light or air, or both.

“*X*”—in window and door design, a designation used to indicate an **operable sash**, **ventilator**, or **panel**.

wipe, *n*—a disposable, porous paper (cellulosic) towellette that is moistened with a wetting agent. **E1792**

DISCUSSION—The towellette is used to collect a sample of settled dust on a smooth, hard surface for subsequent lead analysis.

wipe—disposable twoelettes moistened with a wetting agent. These towellettes are used for cleaning sampling equipment. Wipe brands or sources selected for use shall contain insignificant background lead levels. **E1792**

DISCUSSION—Laboratory analysis on replicate blank wipes should be used to determine background lead levels prior to use in the field. Brands of wipes that contain aloe should be avoided due to increased potential of significant background lead in these wipes. Brands of wipes that contain lanolin should also be avoided due to potential increased laboratory processing difficulties that have been reported with such wipes. Background lead levels less than 5 µg per wipe are considered insignificant for most investigative purposes.

wipe—disposable towellettes moistened with a wetting agent (see 2.1.5.1 and 2.1.5.2). These towellettes are used to collect the sample and to clean sampling equipment. Wipe brands or sources selected for use shall not contain significant background lead levels (see 2.1.5.1.) Wipe brands or sources selected for use shall be of adequate width and thickness to perform the collection procedure (see 2.1.5.2).

DISCUSSION—Laboratory analysis on replicate blank wipes should be used to determine background lead levels prior to use in the field. Brands of wipes that contain aloe should be avoided due to increased potential of significant background lead in these wipes. Background lead levels less than 5 µg per wipe are considered insignificant for most investigative purposes.

DISCUSSION—A thin wipe having dimensions of approximately 15 by 15 cm is recommended. Use of multiple or extra-thick wipes can cause problems with laboratory analysis activities. Use of wipes with smaller dimensions may not be capable of holding settled dust contained within the sampling area.

wipe sampling kit—a sealable rigid walled container with 50 mL minimum volume (see 2.1.6.1). The kit must also include a separate container of clean uncontaminated wipes for use in collecting samples. One container of bulk packed wipes is typically used for collection of multiple samples. **E1728**

DISCUSSION—Use a resealable plastic bag for holding and transporting the settled dust wipe sample is not recommended due to the potential losses of settled dust within the plastic bag during laboratory handling. Quantitative removal and processing of the settled dust wipe sample by the laboratory is significantly improved through the use of sealable rigid walled containers.

working drawing—a detail drawing, usually produced by a draftsman under direction of an architect, engineer, or other designer showing form, quantity, and relationship of construction elements and materials; indicating their location, identification, grades, dimensions, and connections. Compare **shop drawing**.

XEPS—see **rigid cellular polystyrene thermal insulation board**.

yield stress, *n*—limit to internal force developed by application of external force or load or generation of internal strain to a material, member, connection component, or assembly beyond which a marked increase in the rate of deformation occurs without an increase in load; expressed in terms of units of force per unit area, psi, pounds force per square inch (Mpa, megapascals).

DISCUSSION—When the initial rate of force is non-linear, an agreed-on convention shall apply. Sometimes incorrectly referred to as *yield strength* and as *ultimate strength*.

APPENDIXES

(Nonmandatory Information)

X1. TERM LISTS

X1.1. Scope

X1.1.1 This appendix section of term lists is provided as a resource and a convenience to aid in providing references to sources of terms and definitions from other general subject terminologies developed by different subcommittees of ASTM E06. The term lists have been compiled from the text of the different terminology standards listed herein.

NOTE X1.1—Some terms are listed more than once.

X1.2. Referenced Documents

X1.2.1 *ASTM Standards*.²

- B547 Specification for Aluminum and Aluminum-Alloy Formed and Arc-Welded Round Tube
- C274 Terminology of Structural Sandwich Constructions
- C460 Terminology for Asbestos-Cement (Withdrawn 2001)³
- C859 Terminology Relating to Nuclear Materials
- D16 Terminology for Paint, Related Coatings, Materials, and Applications
- D123 Terminology Relating to Textiles
- D661 Test Method for Evaluating Degree of Cracking of Exterior Paints
- D772 Test Method for Evaluating Degree of Flaking (Scaling) of Exterior Paints
- D883 Terminology Relating to Plastics
- D907 Terminology of Adhesives
- D1356 Terminology Relating to Sampling and Analysis of Atmospheres
- D1566 Terminology Relating to Rubber
- D2864 Terminology Relating to Electrical Insulating Liquids and Gases
- D4214 Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films
- D4538 Terminology Relating to Protective Coating and Lining Work for Power Generation Facilities
- E344 Terminology Relating to Thermometry and Hydrometry
- E833 Terminology of Building Economics
- E874 Practice for Adhesive Bonding of Aluminum Facings to Nonmetallic Honeycomb Core for Shelter Panels
- E1227 Terminology for Chemical Analysis of Metals (Withdrawn 1991)³
- E1481 Terminology of Railing Systems and Rails for Buildings
- E1605 Terminology Relating to Lead in Buildings
- E1699 Practice for Performing Value Engineering (VE)/ Value Analysis (VA) of Projects, Products and Processes
- E1749 Terminology Relating to Rigid Wall Relocatable Shelters
- E1908 Guide for Sample Selection of Debris Waste from a Building Renovation or Lead Abatement Project for Toxicity Characteristic Leaching Procedure (TCLP) Testing

- for Leachable Lead (Pb)
- E1979 Practice for Ultrasonic Extraction of Paint, Dust, Soil, and Air Samples for Subsequent Determination of Lead
- E2052 Guide for Evaluation, Management, and Control of Lead Hazards in Facilities (Withdrawn 2008)³
- E2110 Terminology for Exterior Insulation and Finish Systems (EIFS)
- E2115 Guide for Conducting Lead Hazard Assessments of Dwellings and of Other Child-Occupied Facilities (Withdrawn 2015)³
- E2151 Terminology of Guides for Specifying and Evaluating Performance of Single Family Attached and Detached Dwellings
- E2239 Practice for Record Keeping and Record Preservation for Lead Hazard Activities
- E2255 Practice for Conducting Visual Assessments for Lead Hazards in Buildings (Withdrawn 2013)³
- E2265 Terminology for Anchors and Fasteners in Concrete and Masonry
- E2271 Practice for Clearance Examinations Following Lead Hazard Reduction Activities in Dwellings, and in Other Child-Occupied Facilities
- F412 Terminology Relating to Plastic Piping Systems
- F1156 Terminology Relating to Product Counterfeit Protection Systems (Withdrawn 2001)³
- G15 Terminology Relating to Corrosion and Corrosion Testing (Withdrawn 2010)³
- G40 Terminology Relating to Wear and Erosion
- X1.2.2 *EPA Document*.⁵
- 40 CFR 745.223 Lead; Identification of Dangerous Levels of Lead

X1.3 Terminology E833

X1.3.1 The following list provides the preferred and admitted terms related to building economics established by ASTM International Committee E06.81 on Building Economics, at the time of the designated publication. For specific definitions for these general concepts, see the latest edition of Terminology E833.

- adjusted internal rate-of-return (AIRR), *n*
- allowance, *n*—*in construction design planning and estimating*
- annual value, *n*
- annual worth, *n*
- annually recurring costs, *n*
- base date, *n*

⁵ Available from United States Environmental Protection Agency (EPA), William Jefferson Clinton Bldg., 1200 Pennsylvania Ave., NW, Washington, DC 20004, <http://www.epa.gov>.

- base time, *n*
- baseline labor hour budget, *n*
- baseline plan, *n*
- benefit-cost analysis, *n*
- benefit-to-cost ratio (BCR), *n* (Syn: *benefit-cost ratio*)
- break even analysis, *n*
- building decision, *n*
- building economics, *n*
- building system, *n*
- capital cost, *n*
- cash flow, *n*
- certainty equivalent technique, *n*
- code of accounts, *n*
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), *n*
- condition index
- constant dollars, *n*
- construction contingency, *n*
- construction documents, *n*
- contingency, *n*—*in construction design planning and estimating*
- control signal, *n*
- cost analysis, *n*
- cost effective, *adj*
- cost limitations, *n*
- cost model, *n*
- cost overruns, *n*
- cost professional, *n*
- current dollars, *n*
- current replacement value, *n*
- deactivation, *n*
- decision analysis, *n*
- decommissioning, *n*
- decontamination, *n*
- design contingency, *n*
- design development, *n*
- design program, *n*
- desires, *n*
- differential price escalation rate, *n*
- discount factor, *n*
- discounting, *n*
- discount rate, *n*
- economic evaluation methods, *n*
- economic life, *n*
- element, *n*—*in construction planning, design, specification, estimating, and cost analysis*
- elemental cost analysis, *n*—*in construction planning, design, specification, estimating, and cost analysis*
- elemental cost summary, *n*—*in construction planning, design, specification, estimating, and cost analysis*
- engineering economics, *n*
- equivalent uniform annual value, *n*
- ex situ treatment, *n*
- field requirements, *n*—*in construction design planning, and estimating*
- financial management rate-of-return (FMRR), *n*
- first cost, *n*
- function, *n*
- function analysis, *n*
- function, basic, *n*
- functional element, *n*—*in construction planning, design, specification, estimating, and cost analysis*
- future value, *n*
- future worth, *n*
- general overhead, *n*
- group element, *n*—*in construction planning, design, specification, estimating, and cost analysis*
- hazardous waste, *n*
- in situ treatment, *n*
- incremental cost (benefit), *n*
- inflation, *n*
- initial cost, *n*
- initial investment cost, *n*
- internal rate of return (IRR), *n*
- investment cost, *n*
- labor productivity reference point, *n*
- life cycle, *n*
- life-cycle cost (LLC) method, *n*
- maintenance, *n*
- maintenance and repair cost, *n*
- major group element, *n*—*in construction planning, design, specification, estimating, and cost analysis*
- marginal cost (benefit), *n*
- MasterFormat, *n*
- mathematical/analytical (M/A) technique, *n*
- mean-variance criterion, *n*
- minimum acceptable rate of return, *n*
- modified internal rate of return (MIRR), *n*
- needs, *n*
- net benefits (savings), *n*
- nominal discount rate, *n*
- non-installation hours, *n*
- observed percent complete, *n*
- office overhead, *n*—*in construction design planning, and estimating*
- operating cost, *n*
- opportunity cost of capital, *n*
- overall rate of return (ORR), *n*
- owner, *n*
- parameter quantity, *n*—*in construction planning, design, specification, estimating, and cost analysis*
- payback method, *n*
- payback (PB) period, *n*
- portfolio analysis, *n*
- present value, *n*
- present value factor, *n*
- present worth, *n*
- present worth factor, *n*
- productivity differential, *n*
- program, *n*
- radioactive waste, *n*
- rate of return, *n*
- real discount rate, *n*
- real dollars, *n*
- reconciliation, *n*
- remediation, *n*

replacement cost, *n*
 resale value, *n*
 reserve, *n*—*in construction design planning, and estimating*
 Resource Conservation and Recovery Act (RCRA), *n*
 retrofit, *n*
 risk-adjusted discount rate (RADR), *n*
 risk analysis, *n*
 risk attitude, *n*
 risk averse (RA), *n*
 risk exposure, *n*
 risk neutral (RN), *n*
 risk taking (RT), *n*
 salvage value, *n*
 savings-to-investment ratio (SIR), *n*
 schematic design, *n*
 sensitivity analysis, *n*
 simple payback (SPB) period, *n*
 stakeholders, *n*
 study period, *n*
 sub-element, *n*—*in construction planning, design, specification, estimating, and cost analysis*
 sunk cost, *n*
 surveillance and long-term monitoring (SLTM), *n*
 surveillance and maintenance, *n*
 system productivity, *n*
 target cost, *n*
 task outline, *n*
 time horizon, *n*
 time value of money, *n*
 toxic waste, *n*
 uncertainty, *n*
 UNIFORMAT II *UII*, *n*
 useful life, *n*
 user, *n*
 utility function, *n*
 value, *n*
 value analysis, (VA), *n*
 value analysis team leader (VATL), *n*
 value engineering (VE), *n*
 value methodology, *n*, SOURCE **E1699**
 work breakdown structure (WBS), *n*
 workshop effort, *n*
 worth, *n*

X1.4 Terminology E1480

X1.4.1 The following list provides the preferred terms, admitted terms, and additional terminological data related to facility management established by ASTM International Committee E06.25 on Whole Buildings and Facilities, at the time of the designated publication. For specific definitions for these general concepts and related data, see the latest edition of Terminology **E1480**, except as noted otherwise relative to the referenced SOURCE.

active hours
 adjusted serviceability score
 ambient light
 architectural program
 area

as-built drawing
 assignable area
 base building, *n*
 basement, SOURCE E631
 brief (of a facility)
 building, *n*, SOURCE E631
 building component, *n*, SOURCE E631
 building construction, *n*, SOURCE E631
 building core and service area
 building envelope, *n*
 building gross area
 building occupant
 building performance, *n*, SOURCE E631
 building projection, *n*
 building service area
 building space
 building subsystem, *n*, SOURCE E631
 building system, *n*
 capital cost, *n*, SOURCE **E833**
 cellar (cave), *n*, SOURCE E631
 circulation space
 classes of buildings, *adj*
 combination of features, *n*
 component
 criterion, SOURCE E631
 design program
 durability, SOURCE E631
 dwelling, *n*, SOURCE E631
 engineering economics, *n*, SOURCE **E833**
 evaluate, *v*
 evaluation
 fabric, *n*
 facility, *n*, SOURCE E631
 facility durability, *n*, SOURCE E631
 facility evaluation, *n*, SOURCE E631
 facility-in-service, *n*
 facility operator, *n*
 facility performance, *n*, SOURCE E631
 facility program, *n*
 facility project brief (statement of work), *n*, SOURCE E631
 facility serviceability, *n*, SOURCE E631
 facility serviceability profile, *n*
 facility use, *n*, SOURCE E631
 feasibility study, *n*
 feature, *n*, SOURCE **E1334**
 fit-up, *n*
 floor, SOURCE E631
 function, *n*
 functional, *adj*
 functionality, *adj*
 functional program, *n*
 functional requirement, *n*
 function performance, *n*
 glare
 gross floor area, SOURCE E631
 guide for rating, *n*
 historic fabric

house, *n*, SOURCE E631
 importance factor, *n*
 lease (bail)
 maintainability
 net assignable area
 net floor area, SOURCE E631
 net programmable area
 occupancy, *n*
 occupancy instrument (OI)
 occupant
 overall serviceability score
 performance
 performance criterion, of a facility
 performance test method, of a facility
 physical protection, *n*
 portfolio
 primary circulation area
 project
 project brief, *n*
 rating process, *n*
 rating scale
 rating score
 record set drawing
 regulation, *n*, SOURCE E631
 reliability, *n*, SOURCE E344
 requirement statement, *n*, for a facility
 score, *n*
 secondary circulation area
 serviceability, *n*, SOURCE E631
 serviceability requirement, *n*
 serviceability requirements profile (SRP)
 shop drawing
 silent hours
 silent hours, *n*
 specification, *n*, SOURCE E631
 support space
 system—of a building
 task lighting
 technical performance
 tenant
 test (performance test of a facility)
 transitional hours, *n*
 typical serviceability score
 usable area
 use—of a facility
 visitor
 working drawing
 workplace
 workspace
 workstation

X1.5 Terminology E1481

X1.5.1 The following list provides the preferred terms, admitted terms, and additional terminological data related to railing systems and rails for buildings established by ASTM International Committee E06.56 on Performance of Railing Systems and Glass for Floors and Stairs, at the time of the designated publication. For specific definitions for these gen-

eral concepts and related data, see the latest edition of Terminology E1481, except as noted otherwise relative to the referenced SOURCE.

baluster, baluster bar, *n*
 baluster casting
 baluster railing system
 balustrade, *n*
 bottom rail
 building, *n*, SOURCE E631
 cap, *n*
 cap rail
 collar, *n*, SOURCE E631
 cover flange, SOURCE E631
 cover plate
 cover ring
 drop cap, SOURCE E631
 easement, *n*
 escutcheon, *n*
 expanded metal
 finial, *n*, SOURCE E631
 flange, *n*
 grab bar, SOURCE E631
 grab rail, SOURCE E631
 guardrail system
 handgrip, *n*, SOURCE E631
 handrail, *n*
 handrail bracket, SOURCE E631
 handrail height, SOURCE
 infill, *n*
 infill area
 intermediate rail
 kick plate
 lamb's tongue
 lateral scroll, SOURCE E631
 mid rail, *n*
 miter ending
 newel, *n*
 ogee, *n*, SOURCE E631
 panel, *n*
 picket, *n*
 pineapple, *n*, SOURCE E631
 pipe, *n*
 pipe railing system
 post, *n*, SOURCE E631
 queue-rail system
 rail, *n*
 rail cap, SOURCE E631
 railing, *n*, SOURCE E631
 railing return
 railing system
 railing-system penetration limitation, SOURCE E631
 ramp-rail system
 screen, *n*
 scroll, *n*
 side mount
 spindle, *n*
 stair-rail system
 toe board

toe plate, SOURCE E631
top rail, SOURCE E631
traffic-rail system, SOURCE E631
transfer-rail system, SOURCE E631
tube/tubing
urn, *n*
volute, *n*, SOURCE E631
wall bracket
wall clip
wall flange
wall handrail
wall rail, SOURCE E631
wall railing return
wire fabric
wire mesh

X1.6 Terminology E1605

X1.6.1 The following list provides the preferred terms, admitted terms, and additional terminological data related to lead in buildings established by ASTM International Committee E06.23 on Lead Hazards Associated with Buildings, at the time of the designated publication. For specific definitions for these general concepts and related data, see the latest edition of Terminology E1605, except as noted otherwise relative to the referenced SOURCE.

abrasion resistance (coatings)
accessible surface
accreditation, *n*, SOURCE E631
accuracy, *n*
action level, *n*
administrative controls
administrative removal
analyte, *n*
anodic stripping voltammetry
Apparent Lead Concentration (ALC)
atomic absorption, SOURCE D2864
baluster (picket), *n*, SOURCE E631
bare soil, *n*, SOURCE E2255
baseboard, *n*
batch, SOURCE E1726
bias, *n*, SOURCE E456
biological monitoring
blank sample
blood-lead level (blood level)
calibration curve
calibration standard, SOURCE E1613
certification, SOURCE HUD Guidelines
Certified Reference Material (CRM), SOURCE E1644
chalking, *n*, SOURCE D4214
checking (coatings), *n*
chewable surface
child-occupied facility
chipping resistance (coatings), SOURCE D16
clearance area, *n*, SOURCE E2271
clearance examination, *n*
clearance level, *n*
coating, *n*, SOURCE D16
Code of Federal Regulations (CFR)
common area, *n*, SOURCE 40 CFR 745.223

competence, *n*, SOURCE E2239
component, *n*, E631 (building component)
component (of the waste), SOURCE E1908
component replacement (building)
concentration, *n*
conformity, *n*, SOURCE E2239
containment, *n*
continuing calibration blank, SOURCE E1613
continuing calibration verification, SOURCE E1613
coring, SOURCE E1727
cracking (coatings), *n*, SOURCE D661
data collection objective
delamination, *n*, SOURCE D4538/D907
deleading
detection limit
deteriorated paint
digestate
digestion
discipline, *n*
dust-lead hazard, *n*
dust-wipe sample, SOURCE E1644
dwelling unit, SOURCE E631
EBL
elevated blood lead level (EBL)
encapsulation, *n*
enclosure, *n*
engineering controls
evaluation, *n*, SOURCE E2239
ex situ
extraction, *n*, SOURCE E1979
facility, *n*
field blank
field operation laboratory
fixed-site laboratory
flaking (scaling), *n*, SOURCE D772
friction surface, *n*, SOURCE E2255
glazing, *n*, SOURCE E631
hazardous waste
heat gun
HEPA filter
high-efficiency particulate air (HEPA) filter
impact surface, *n*, SOURCE E2255
industrial hygienist
initial calibration blank, SOURCE E1613
initial calibration verification
in situ
instrumental detection limit, SOURCE E1613
instrumental QC standard, SOURCE E1613
interference check standard, *n*, SOURCE E1613
interim controls, SOURCE 40 CFR 745.223
lead-based paint, *n*
lead-based paint activities, SOURCE 40 CFR 745.223
lead-based paint inspection, *n*, SOURCE E2255
lead-containing paint, *n*
leaded dust hazard, *n*
leaded paint
leaded paint characterization, SOURCE E2052
leaded paint hazard, *n*

- leaded soil, *n*
- leaded soil hazard, *n*
- lead-free (deprecated)
- lead hazard, *n*
- lead hazard activities, *n*, SOURCE **E2255**
- lead hazard assessment, SOURCE **E2115**
- lead hazard control
- lead hazard management, SOURCE **E2052**
- lead hazard reduction, *n*, SOURCE **E2271**
- lead hazard screen, SOURCE 40 CFR 745.223
- lead paint (deprecated)
- lead screen (deprecated)
- maintenance, *n*, SOURCE **E2052**
- mass concentration, SOURCE **G40**
- mass loading
- matrix
- matrix effect
- MD
- mean (value)
- medical removal (of workers)
- measurement, *n*, SOURCE **D123**
- method detection limit, SOURCE **E1613**
- molding, *n*
- monitoring, *n*
- multi-family dwelling, *n*, SOURCE 40 CFR 745.223
- National Lead Laboratory Accreditation Program (NLLAP)
- needle gun
- nonconformity, *n*, SOURCE **E2239**
- non-spiked sample
- objective evidence, *n*, SOURCE **E2239**
- observation, *n*, SOURCE **E2239**
- painted debris, *n*, SOURCE **E2271**
- painting history, *n*
- paint-lead hazard, *n*
- patch test
- Permissible Exposure Limit
- personal air sample
- personal protective equipment
- precision
- procedure, *n*, SOURCE **E2239**
- professional judgement, *n*
- quality system
- quantitation limit, SOURCE **E1613**
- random sample, *n*, SOURCE **E2271**
- random sampling, SOURCE **C859**
- range, *n*
- reading, *n*, SOURCE **E1227**
- read-through, *n*
- reagent, SOURCE **F1156**
- recognized laboratory
- record, *n*, SOURCE **E2239**
- reevaluation
- reference material
- remodel, *v*, SOURCE **E631**
- repair, *v*, SOURCE **E631**
- reporting limit, *n*
- representative sample
- requirement, *n*, SOURCE **E2239**
- residential dwelling, SOURCE 40 CFR 745.223
- risk assessment, SOURCE 40 CFR 745.223
- risk assessment screen (deprecated)
- risk assessor, certified
- risk screen (deprecated)
- room equivalent, *n*, SOURCE **E2271**
- sample, *n*
- sample of the waste, *n*, SOURCE **E1908**
- sampling location, *n*, SOURCE **E1728**
- sampling site, *n*, SOURCE **E2271**
- sampling site, *n*, SOURCE **E1728**
- sampling template (dust), *n*
- sash, *n*
- scaling
- SEL
- settled dust, *n*, SOURCE **E2271**
- small quantity
- sodium rhodizonate method
- sodium sulfide method
- soil-lead hazard, *n*, SOURCE **E2255**
- specimen
- spot test, *n*, SOURCE **E1753**
- spot test kit, *n*, SOURCE **E1753**
- standard deviation (in statistics)
- substandard dwelling
- substrate
- substrate equivalent lead concentration (SEL)
- surface dust, *n*
- test, *n*
- test specimen
- toxicity characteristic leaching procedure (TCLP)
- traceability, *n*
- treatment
- TSP
- unit
- verification
- vinyl composition tile, *n*, SOURCE **E1792**
- visual inspection for clearance testing, SOURCE 40 CFR 745.223
- visual inspection for risk assessment, SOURCE 40 CFR 745.223
- waste, *n*, SOURCE **E1908**
- waste stream, *n*, SOURCE **E1908**
- wet scraping, *n*
- window sash, SOURCE **E631**
- window stool
- wipe, *n*, SOURCE **E1792**
- work area, *n*
- X-ray fluorescence instrument, *n*

X1.7 Terminology E1749

X1.7.1 The following list provides the preferred terms, admitted terms, and additional terminological data related to rigid wall relocatable shelters established by ASTM International Committee E06.53 on Materials and Processes for Durable Rigid Wall Relocatable Structures, at the time of the

designated publication. For specific definitions for these general concepts and related data, see the latest edition of Terminology **E1749**, except as noted otherwise relative to the referenced SOURCE.

absolute sealing
 accelerated test
 adhesive, SOURCE **D907**
 adhesive working life, SOURCE **D907**
 alclad sheet and plate, SOURCE **B547**
 angle ply
 anisotropic
 A-stage
 autoclave
 autoclave molding
 bag molding
 balanced laminate
 batch
 beam shear
 bleeder cloth
 block
 block flow
 breakout
 breather
 bridging
 brittleness
 broadgoods
 bruch coat
 B-stage
 burn rate
 button sample
 carrier
 catalyst
 caul
 CBR
 chemical resistance, SOURCE **F412**
 CIAP
 climbing drum peel test
 close out
 cocuring
 cold setting adhesive, SOURCE **D907**
 collimate
 compacting
 composite material
 compressive strength
 conduit
 contact adhesive
 contact (pressure) adhesive
 contact pressure
 controlled flow
 core, SOURCE **C274**
 core compressive modulus
 core shear
 core shear modulus
 core splice adhesive
 core stabilization
 crazing
 C-stage, SOURCE **D907**
 cure, SOURCE **D883**
 debulking
 degradation
 delamination, SOURCE **D883**
 density, SOURCE **C460**
 destructive test
 dry strength
 durability
 ECA
 edge closures
 edgewise compressive strength
 electromagnetic interference
 electromagnetic pulse
 EMI
 EMP
 environmentally controlled area
 excessive corrosion
 expandable shelters
 exotherm
 facing
 fairing
 faying surface
 faying surface seal
 feathering
 fiber content
 fiber orientation
 filament
 filamentary composites
 fillet seal
 film weight
 flame resistance, SOURCE **D123**
 flash
 floating roller peel test
 foam core
 foamed adhesive
 forest products laboratory etch
 FPL etch
 fungus resistance
 fuzz balls
 gage pressure, SOURCE **D1356**
 galvanic corrosion, SOURCE **G15**
 gouge, SOURCE **E874**
 hard edge
 hard points
 heat sealing adhesive tape
 highly expandable shelters
 HOBE
 honeycomb before expansion
 honeycomb core
 honeycomb sandwich panel
 hot pressing
 hygroscopic
 injection seal
 integrally mold
 interference seal
 interference seal
 interlaminar
 isotropic
 joggle

knockdown shelters
 laminate, SOURCE **D883**
 large area shelters
 lay-up
 leak exit
 leak path
 leak source
 lot
 mandrel
 markoff
 mat
 matrix
 mold form
 net molded edge
 node
 nominal pressure
 nominal temperature
 nondestructive test
 nonexpandable shelters
 nonmetallic honeycomb core
 normalize
 oil canning
 orthotropic
 P2 etch
 peel ply
 plate shear
 post cure, SOURCE **D1566**
 pot-life
 prebleeding
 prefit
 prepack seal
 prepreg
 pressure sensitive adhesive
 primary seal
 primer
 pultrusion
 resin batch
 resin content
 resite
 resitol
 resol
 REX hardness
 sag flow test
 sandwich panel
 serim
 seal
 seal plane
 sealant working life
 secondary bonding
 secondary seal
 self-sealing fastener
 separator cloth
 sheet
 shelf life
 shielding effectiveness
 Shore A hardness
 skin
 slump

stacking sequence
 storage life, SOURCE **D907**
 sulfochromate etch
 supported film adhesive
 surface preparation, SOURCE **D907**
 symmetrical laminate
 tap test
 tape temper
 thermoplastic
 thermoset
 thixotropy
 tooling
 unit, SOURCE **E631**
 unsupported film adhesive
 vacuum bag molding
 VOC
 void
 volatile organic compound
 volatility
 water migration resistance
 wet-installed fastener
 wet strength

X1.8 Terminology **E2110**

X1.8.1 The following list provides the preferred terms related to exterior insulation and finish systems (EIFS) established by ASTM International Committee E06.58 on Exterior Insulation and Finish Systems (EIFS), at the time of the designated publication. For specific definitions for these general concepts, see the latest edition of Terminology **E2110**.

accessories, *n*
 aesthetic joint, *n*
 aesthetic reveal, *n*
 back wrapping, *n*
 base coat, *n*
 cold joint, *n*
 cure, *v*
 drainage mat, *n*
 dry, *v*
 durability, *n*
 edge wrap, *n*
 EIFS, *n*
 EIFS-clad barrier wall assembly, *n*
 EIFS-clad drainage wall assembly, *n*
 embed, *v*
 expansion joint, *n*
 exterior insulation and finish system (EIFS), *n*
 factory mix, *n*
 flash set (quick set), *n*
 field mix, *n*
 finish coat, *n*
 framing member, *n*
 initial grab, *n*
 initial set, *n*
 integrally reinforced base coat, *n*
 lamina, *n*
 mechanical fastener, *n*
 nonmetallic reinforcing mesh, *n*
 pot life, *n*

primers, *n*
 running bond, *n*
 substrate, *n*
 surface sealer, *n*
 temper, *v*
 texture, *n*
 thermal insulation board, *n*
 weather-resistive barrier, *n*
 wet edge, *n*
 wet-state materials, *n*
 wrap, *v*

X1.9 Terminology E2151

X1.9.1 The following list provides the preferred terms related to specifying and evaluating the performance of single family attached and detached dwellings established by ASTM International Committee E06.25 on Whole Building and Facilities, at the time of the designated publication. For specific definitions for these general concepts, see the latest edition of Terminology E2151, except as noted otherwise relative to the referenced SOURCE.

attached dwelling, *n*
 commentary, *n*
 criteria, *n*
 dwelling unit, *n*, SOURCE E631
 evaluation, *n*
 objective, *n*
 performance statement, *n*
 provider, *n*
 systems integrator, *n*

X1.10 Terminology E2265

X1.10.1 The following list provides the preferred terms related to anchors and fasteners in concrete established by ASTM International Committee E06.13 on Structural Performance of Connections in Building Construction, at the time of the designated publication. For specific definitions for these general concepts, see the latest edition of Terminology E2265.

adhesive anchor
 allowable load
 anchor
 anchor loading: axial
 anchor loading: bending
 anchor loading: combined
 anchor loading: shear
 anchor spacing
 attachment
 base material
 bond failure
 cast-in-place anchor
 characteristic value
 clamping force

concrete breakout failure
 connection
 cracked concrete
 critical edge distance
 critical spacing
 cure time
 diamond core bit
 displacement
 displacement-controlled expansion anchor
 drill
 drill bit
 edge distance
 effective embedment depth
 elongation
 embedment depth
 expansion anchor
 expansion sleeve
 failure mode
 fastener
 fatigue test
 fixture
 flush installation
 follow-up expansion
 gel time
 grout
 grouted anchor
 insert
 installation torque
 linear variable differential transformer (LVDT)
 minimum spacing
 prestressing force
 pullout failure
 pull-through failure
 relaxation
 screw anchor
 seismic test
 shear test
 shock test
 slip
 spacing sleeve
 splitting failure
 standoff installation
 static load
 static test
 steel failure
 stop-drill
 tensile test
 torque-controlled adhesive-bonded anchor
 torque-controlled expansion anchor
 uncracked concrete
 undercut anchor

X2. KEYWORDS

X2.1 Scope

X2.1.1 This appendix of keywords is provided as a resource and a convenience to aid in providing index terms for standards of Committee E06. It has been compiled from the titles and text of current standards. Other appropriate keywords may be selected; such as terms listed elsewhere in this terminology standard.

NOTE X2.1—Some keywords herein are listed more than once.

X2.2 Resource List of Keywords

abatement contractor
 accelerated testing
 accelerated weathering
 acceptance testing
 accreditation
 accuracy of loading
 acoustic method
 adhesion
 adhesive bonding
 adhesive primer
 adhesives
 adjusted internal rate of return
 agencies capabilities
 agencies criteria
 agencies evaluation criteria
 agencies guidelines
 agencies testing
 air capacity
 air change rate
 air-erosion testing
 air flow calibration
 air infiltration
 air leakage
 air-leakage detection
 air-leakage measurement
 air-leakage rates
 air-leakage testing
 air-pressure difference
 air-pressure difference testing
 air-pressure differential test
 air-pressure testing
 airflow measurement
 airflow calibration
 aluminum alloy panels
 aluminum facings
 anchorage
 anchorage devices testing
 anchorage systems
 anchorage system tests
 anchorage testing
 anemometer method
 annealed glass
 architectural drawings
 asbestos abatement
 basic building module
 beams testing
 benefit/cost analysis
 benefit-to-cost ratio
 bimetallic thermometer
 bituminous roofing
 blower-door test
 bonding strength
 bond strength
 building air-change rate
 building anchors
 building assemblies data
 building components life
 building components evaluation
 building construction
 building construction materials
 building constructions data
 building construction tests
 building decisions
 building design metric practice
 building economics
 building elements
 building envelope
 building inspection
 building inspector
 building materials service life
 building neutral zone
 building owner
 building parts sizing
 buildings
 buildings connections data
 buildings definitions
 buildings drawings
 buildings investment
 buildings life cycle costs
 buildings modules
 buildings terminology
 building thermal envelope
 building systems
 building systems costs
 building systems evaluation
 built-up roofing
 canopies
 cantilever-beam test
 cantilever frame
 carports
 certainty equivalent factor
 certification
 clay flue linings
 coatings
 cohesion/adhesion testing
 comparison techniques
 complete structure loading
 compliance assurance

compression testing
 compressive load
 compressive loading
 compressive strength
 computer programs
 concentrated load
 concentrated static load
 concrete elements testing
 concrete masonry units
 concrete slabs
 connections testing
 construction terminology
 control plate tension testing
 control truss plates
 core-splice adhesive
 corrosion
 corrosion-inhibiting adhesive
 cost analysis
 cost-effectiveness of buildings
 cost evaluation
 counter flashing
 crawl spaces
 curtain walls
 cyclic static air-pressure
 cyclic static air-pressure tests

damage
 data reporting
 decks
 deflection charts
 deflection measurements
 deflection resistance
 deflections
 deglazing loads
 deglazing resistance
 density of sprayed material
 design assumptions
 destructive testing
 deterioration
 dew point/frost point
 diagonal tension testing
 diaphragm constructions
 dimensional coordination
 dimensional reference system
 doors
 doors installation
 drawings scales
 drop-bag tests
 durability
 durability evaluation
 durability performance
 durability of buildings
 duration of loading

earth covers
 economic evaluation
 economic evaluation method
 economics terminology

effective leakage area
 edge loading
 elastic modulus
 engineering data reporting
 engineering economics
 equivalent design load
 exfiltration
 exterior windows

f-number system
 facility functionality
 facility performance
 facility rating
 facility serviceability
 failure criteria
 failure endpoint
 failure tests
 fan-pressurization devices
 fan pressurization testing
 fasteners
 fastener strength
 fatigue tests
 field data gathering
 field determination
 field inspection monitoring
 field measurement
 field testing
 film adhesives
 fire-resistive materials
 flame-spread resistance
 flashing
 flatness
 flat roof testing
 flexural bond strength
 flexural tests
 floor flatness
 floor levelness
 floor panel testing
 floor profile numbers
 floors
 floor sheathing
 floor surface profiles
 floor testing
 fogging test
 formaldehyde determination
 framed floor diaphragm
 framed walls testing
 frame stiffness
 frost point
 functionality

girders testing
 glass deflection
 glass performance
 glass thickness
 glass thickness gage
 glazing
 grab rails

gravity-load testing
 honeycomb core
 honeycomb sandwich panels
 honeycomb shelter panels

impact load
 impact loading tests
 impact testing
 infiltration
 infiltration rate
 infrared analysis
 inspection evaluation
 insulated roof deck steel frame
 insulating glass units
 insulation fasteners
 internal rate of return
 investment analysis
 investments evaluation

laminates
 large chamber testing
 lawn buildings
 leak testing
 levelness
 life-cycle cost analysis
 life-cycle cost method
 life-cycle costs
 loading capability
 loading procedures
 loading resistance
 load resistance
 load resistance of glass
 load sharing
 load testing
 load transmittal
 lockers
 low-temperature flexibility

maintainability
 manufactured buildings
 manufactured housing
 manufactured structures
 masonry anchors
 masonry assemblages
 masonry assemblages tests
 masonry elements testing
 masonry mortar joints
 masonry prisms
 masonry testing
 masonry tests
 masonry ties
 measuring investment payback
 metal fascia thickness
 metal railing systems
 metric practice
 metric scales selection
 military shelters
 modified bitumen sheets

modular coordination
 modules
 modulus of elasticity
 moisture evaluation
 mortar joints
 mortar tests
 multi-glazing
 multiple-member tests

net benefits for investments
 net benefits method
 net present value method
 net savings
 nondestructive testing
 nonhabitable structures
 nonmetallic honeycomb core
 nonpermanent structures

orientation
 orifice plates
 overall performance
 overall rate of return

panel construction
 panel facings
 panel testing
 patio covers
 payback
 payback for investments
 payback method
 performance requirements
 performance test data
 performance testing
 permanent railing systems
 plastic-flow resistance
 plumbing
 powder-actuated fasteners
 pre-engineered roof structures
 preformed roof insulation
 present-value analysis
 project manager evaluation
 proof tests
 pullout resistance tests
 puncture-resistance testing

quality system assessment agencies

racking load
 railing anchorage
 railing systems
 rate of return
 rectilinear building parts
 reliability
 relocatable shelters
 relocatable structures
 repeat loadings
 repetitive loads
 replacement doors

replacement windows
 return on investment
 rigidity
 risk evaluation

Roof Decks

insulated roof deck steel frame
 steel roof deck

Roofs and Roofing

bituminous roofing
 built-up roofing
 flat roof testing
 modified bitumen sheets
 pre-engineered roof structures
 preformed roof insulation
 roof drains
 roof diaphragm
 roofing adhesives
 roofing base flashing
 roofing edge detail
 roofing equipment support
 roofing expansion joints
 roofing mechanical equipment
 roofing membrane
 roofing scuppers
 roofing systems
 roof maintenance
 roof panel testing
 roof relief vent
 roof sheathing
 roof-system assemblies
 roof systems
 roof testing

safety considerations
 sandwich panels
 savings/investment ratio
 seal durability
 sealed insulating glass
 seismic tests
 serviceability
 service-life prediction
 shear resistance
 shear resistance testing
 shear strength tests
 shear testing
 sheds
 shelter panels
 shock tests
 SI metric practice in buildings
 simple-beam diaphragm
 simple payback
 simple-span frame
 simulated load conditions
 simulated service tests
 simulated structures
 sizing building parts

sliding glass doors
 smoke-tracer method
 soil burial testing
 soil contact testing
 sprayed materials
 sprayed fire-resistive material
 sprayed materials testing
 stack flashing
 standard terminology
 static air-pressure difference
 static axial strength
 static load
 static load testing
 static shear capacity
 static tests
 steel corrosion
 steel deck deflection tests
 steel deck insulation
 steel roof decks
 steel truss plates
 storm doors
 storm sashes
 storm windows
 strain gages
 strength of anchors
 strength tests
 stress testing
 structural adequacy
 structural applications
 structural clay units
 structural film adhesives
 structural performance
 structural tests
 structural tests data
 surface preparation
 system analysis

tactical shelters
 technical staff evaluation
 tensile load
 tensile strength properties
 tensile testing
 tension testing
 terminology
 test data gathering
 vapor retarder
 wind uplift resistance

Testing

acceptance testing
 accelerated testing
 agencies testing
 air-erosion testing
 air-leakage testing
 air-pressure difference testing
 air-pressure testing
 anchorage devices testing
 anchorage testing

beams testing
 cohesion/adhesion testing
 compression testing
 concrete elements testing
 connections testing
 control plate tension testing
 field testing
 destructive testing
 diagonal tension testing
 fan pressurization testing
 field testing
 flat roof testing
 floor panel testing
 floor testing
 framed walls testing
 gravity-load testing
 girders testing
 impact testing
 large chamber testing
 leak testing
 load testing
 masonry elements testing
 masonry testing
 nondestructive testing
 panel testing
 performance testing
 puncture-resistance testing
 roof panel testing
 roof testing
 shear resistance testing
 shear testing
 soil burial testing
 soil contact testing
 sprayed materials testing
 static load testing
 stress testing
 tensile testing
 tension testing
 tracer-dilution testing
 truss assembly testing
 truss testing
 wall panel testing
 wall testing
 water-vapor transmission testing
 wear testing
 wood products testing
 testing and inspection agencies

Tests

anchorage system tests
 building construction tests
 cyclic static air-pressure tests
 drop-bag tests
 failure tests
 fatigue tests
 flexural tests
 impact loading tests
 masonry assemblages tests

masonry tests
 mortar tests
 multiple-member tests
 proof tests
 pullout resistance tests
 seismic tests
 shear strength tests
 shock tests
 simulated service tests
 static tests
 steel deck deflection tests
 strength tests
 structural tests
 truss plate tests
 ultimate load tests
 unit masonry tests
 weather-cycle tests

thermal-conductance paths
 thickness gage
 thickness of sprayed material
 third-point loading
 tracer-dilution testing
 tracer gas
 tracer-gas dilution
 tracer-gas method
 tracer-gas monitor
 transverse load
 truss assemblies
 truss assembly testing
 truss plates
 truss plate tests
 truss testing

ultimate impact load
 ultimate load tests
 ultraviolet light resistance
 uncertainty evaluation
 uniform live load
 uniform loading
 uniform static loads
 unit masonry tests
 utility buildings

validation
 vapor retarders
 ventilation
 verification of design
 visual inspection

Walls

curtain walls
 framed walls testing
 wall panel testing
 wall testing
 water-induced damage
 water leakage
 water penetration

water-vapor retarder
water-vapor transmission testing
wear testing
weather-cycle tests
wet tensile strength
wind-driven rain
wind loading
wind pressure

window assemblies
window rotary operators
windows
window sashes
windows installation
windows performance
wood-framed truss assemblies
wood products testing

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