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# Standard Terminology of Facility Management (Building-Related)<sup>1</sup>

This standard is issued under the fixed designation E1480; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon  $(\varepsilon)$  indicates an editorial change since the last revision or reapproval.

#### 1. Scope

- 1.1 This terminology consists of terms and definitions pertaining to the description, measurement, prediction, improvement, and management of buildings and building-related facilities, 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 meanings and explanations of technical terms, written for both the technical expert and the non-expert user.
- 1.3 This terminology is one of a group of special terminologies, subsidiary to the comprehensive Terminology E631.
- 1.4 Terms are listed in alphabetical sequence. Compound terms appear in the natural spoken order. Where definitions herein are adopted from other sources, they are copied exactly. The source is identified at the right margin following the definition and is listed in Section 2. The equivalent term in French is listed in parentheses after the English term.

## 2. Referenced Documents

2.1 ASTM Standards:<sup>2</sup>

E344 Terminology Relating to Thermometry and Hydrometry

E631 Terminology of Building Constructions

E833 Terminology of Building Economics

E1334 Practice for Rating the Serviceability of a Building or Building-Related Facility (Withdrawn 2013)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

# 3. Terminology

3.1 Definitions:

active hours—see hours of operation.

<sup>1</sup> This terminology is under the jurisdiction of ASTM Committee E06 on Performance of Buildings and is the direct responsibility of Subcommittee E06.25 on Whole Buildings and Facilities.

 ${\it adjusted \ serviceability \ score} \textbf{—} \textbf{see \ serviceability \ score}.$ 

ambient light—see **lighting**.

architectural program—see facility program.

area—see space categories.

as-built drawing—see drawing.

assignable area—see space categories.

**base building,** *n*(immeuble de base)—a general-purpose office building intended, but not yet adapted, to suit the operational requirements of a specific tenant.

Discussion—Facility management is concerned primarily with the use of office buildings as facilities. When other than office buildings are meant, the term would be modified to, for example, warehouse base building.

basement—see space categories.

brief (of a facility)—see facility program.

**building,** *n*(bâtiment) —a shelter comprising a partially or totally enclosed space, erected by means of a planned process of forming and combining materials. Compare **building construction**.

**building component,** *n* (composant de bâtiment)—a building element using industrial products that are manufactured as independent units capable of being joined with other elements. **E631** 

Discussion—Examples include an air handling unit; a cooling tower; an electrical transformer; a door.

building construction, *n* (construire de bâtiment)—(*1*) the act or process of making or forming a building by assembly or combining elements, components or systems. (2) the structure or part thereof so formed. Compare building. **E631** 

building core and service area—see space categories.

**building envelope,** *n* (enveloppe d'un immeuble)—perimeter elements of a **building**, both above and below ground, that divide the external from the internal environment.

Discussion—Commonly included are exterior walls, windows, doors, roofs, and subfloors.

building gross area—see space categories.

building occupant—see occupant.

building performance, *n* (rendement d'édifice)—the behavior in service of a construction as a whole, or of the building components. Compare **facility performance**. **E631** 

*durability*, *n*(durée) —the capability of a building, assembly, component, product, or construction to maintain serviceability

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<sup>&</sup>lt;sup>2</sup> 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

<sup>&</sup>lt;sup>3</sup> The last approved version of this historical standard is referenced on www.astm.org.

for at least a specified period of time. Compare **facility durability**. **E631** 

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

E1334

**building projection,** *n* (saillie d'un immeuble)—pilaster, convector, baseboard heating unit, radiator, or other building element located in the interior of a building wall that prevents the use of that space for furniture, equipment, circulation, or other functions.

building service area—preferred term is building core and service area. See space categories.

building space—see space categories.

**building subsystem,** *n* (sous-système d'immeuble)—complete, integrated set of parts that functions as a unit within the finished **building**. **E631** 

**building system,** *n*(système d'immeuble)—collection of equipment, facilities, and software designated to perform a specific function.

**capital cost,** n(coût en capital (frais d'immobilisations))—
costs of acquiring, substantially improving, expanding, changing the functional use of, or replacing, a **building** or **building system**.

cellar—see space categories.

circulation space—see space categories.

**classes of buildings,** *adj* (catégories d'immeubles)—buildings categorized by selected attributes concerning **facility serviceability** and performance.

combination of features, n—see **feature**—of a facility.

component—see building component.

criterion—see requirement statement.

design program—see facility performance.

### **drawing**, n(dessin)—

record set drawing (as-built drawing), n(dessin de l'ouvrage fini (dessin d'après exécution))—construction drawing revised to show changes made during the construction process, usually based on marked-up prints, drawings, and other data furnished by the contractor.

working drawing, n(dessin d'exécution)—detail drawing, usually produced by a draftsperson under direction of an architect, engineer, or other designer showing the form, quantity, and relationship of construction elements and materials and indicating their location, identification, grades, dimensions, and connections.

durability—see building performance.

**dwelling**, *n*(logement)—**building** designed or occupied as the living quarters for one or more families or households. **E631** 

**engineering economics,** *n* (économie du génie)—application of engineering, mathematical, and economic techniques to the economic evaluation of engineering alternatives. **E833** 

**evaluate,** v(évaluer (installations))—(a facility) to assess the capability of a facility to perform the function(s) for which it is designed, used, or required to be used.

DISCUSSION—Facility evaluation includes the assessment of **facility performance** in use. *Facility evaluation* is a general term, which incorporates a range of methods and levels of precision.

evaluation—see facility evaluation.

**fabric,** n(édifice)—of a building, all the elements, components, parts, and materials of a building, at any scale and of any age.

*historic fabric, n*(édifice historique)—those portions of the building fabric that have historic significance. **E1334** 

**facility**, *n*(facilité)—a physical setting used to serve a specific purpose. **E1334** 

Discussion—A facility may be within a building, or a whole building, or a building plus 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. Compare **building**.

**facility durability**, *n*—(durée de facilité)— *of a facility*, the capability of a facility to maintain serviceability for at least a specified period of time. Compare **durability**—*of a building*. **E1334** 

**facility evaluation,** *n*—comparison of the qualitative and quantitative results of judgments, observations, measurements, analyses, or other tests against performance criteria established for a specified purpose, and to a specified precision and reliability. (see also **requirement statement**.) Compare **rating process**.

**facility-in-service,** *n* (installation en service)—facility as completed and operational; for example, an occupied **building** or a road in service.

**facility operator,** *n* (exploitant d'installations)—organization or agency having a contract with the owner or investor to operate a facility.

Discussion—The facility operator assumes responsibility after completion of the implementation phase and during and after the commissioning phase.

**facility performance,** *n* (rendement d'installations)—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. **E631** 

facility program, n (programme d'installations)—

design program,n(programme de conception)—(design brief) document specifying what facilities will be provided to the occupants, and confirming to the owner the requirements for the facility.

functional program, n (programme fonctionnel—document that specifies functional facility servicability requirements of **occupants** and owner.

Discussion—It is normally prepared by the occupants or owner, or their consultant.

project brief, n(exposé de projet)—document describing the required **facility serviceability** in detail sufficient for the project to proceed.

**facility project brief (statement of work),** *n* (exposé de projet d'installations (exposé de travaux))—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—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. **E631** 

facility servicability, *n* (fonctionnalité d'installations)— capability of a facility to perform the function(s) for which it is designed, used, or required to be used. **E631** 

**facility serviceability profile,** *n*(profil de fonctionnalité d'installations)—graphic display, usually as a bar chart, of the set of **rating scores** for aspects of the serviceability of a facility.

Discussion—Used to summarize the functional capability of a facility for selected aspects of serviceability.

**facility use,** *n*(utilisation d'installations)—functions and activities that take place in a facility. **E631** 

**feasibility study**, *n* (**étude de faisabilité**)—study of a planned scheme or development, the practicality of its achievement, and its projected financial outcome.

**feature,** *n*(élément caractéristique)—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(éléments caractéristiques combiné)—of a facility, features which, when present together in a facility, affect satisfying a requirement for serviceability.

E1334

**fit-up,** *n*(aménagement)—alterations and improvements to the **base building** and to the **building systems** including demolition, where required, to prepare the accommodation for occupancy.

**floor,** *n*(plancher)—(in a building) supporting structure (generally horizontal) and constituting the bottom level of each story. **E631** 

**floor area,** n(superficie de plancher)—

gross floor area(superficie brute de plancher)—entire area within the inside perimeter of the exterior walls.

Discussion—Only courts and shafts not under the roof are excluded.

E631

*net floor area*(superficie nette de plancher)—that part of the **gross floor area** located within occupiable space.

Discussion—Accessory areas and thicknesses of walls are excluded.

E631

**function**, *n*(fonction)—the action for which a person or thing is specially fitted or used or for which a thing exists. **E1334**; **Webster's New Collegiate Dictionary** (1980)

**functional,** *adj*(fonctionnel)—performing or able to perform a regular function; designed or developed chiefly from the point of view of use. **E1334**; **Webster's New Collegiate Dictionary** (1980)

**functionality,** *adj*(fonctionnalité)—being suitable for a particular use or function.

functional program—see facility program.

functional requirement, n—see serviceability requirement. function performance, n—see facility serviceability.

glare—see **lighting**.

gross floor area—see floor area.

guide for rating, *n* (guide d'évaluation)—a document which explains how to rate the serviceability of an existing or planned facility for a specific purpose. A guide identifies typical requirements and provides a rating scale for comparison with the relevant combinations of features present in the facility.

E1334

historic fabric—see fabric.

**hours of operation,** *n* (heures d'exploitation)—

active hours, n(heures d'activité)—times when a facility is normally fully occupied and operational.

*silent hours, n*(heures d'inactivité)—period when a facility is essentially unoccupied and only security and building operations staff are present.

transitional hours, n (heures de transition)—times in the morning after the first workers normally arrive, until a facility is fully operational, and in the evening from the end of normal work until the occupants have left.

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

**importance factor,** *n* (coefficient d'importance)—*of a facility requirement*, a numerical indication of the relative importance of a requirement for serviceability, expressed on a scale of 0 to 9, with 0 being not related, 1 being relevant but least important, and 9 being most important.

Discussion—The scale of 0 to 9 has been selected for rating relative importance of requirements and for rating each combination of features. This does not imply that a scale of 0 to 9 should necessarily be used for purposes other than preparing a rating of serviceability of facilities. For example, this would not necessarily apply to questionnaires used in general survey research about the built environment.

lease (bail)—contract between the owner of real property (lessor) and another party (lessee) for the possession and use of the property for a specified term in return for rent or other income.

## lighting (éclairage)—

ambient light(lumière ambiante)—surrounding light, such as that reaching an object in a room from all light sources in the room.

glare(éblouissement)—effect of brightness or brightness differences within the visual field sufficiently high to cause annoyance, discomfort, or loss of visual performance.

task lighting(éclairage (de travail) localisé)—localized lighting system consisting of a functional arrangement of luminaires to accommodate the specific visual task or work area needs.

**maintainability** (entretenabilité)—capability of a system or facility to be maintained to a specified level of **reliability**, at a specified measure of cost or economy.

net assignable area—see space categories.

net floor area—see floor area.

net programmable area—see space categories.

**occupancy,** *n*(occupation)—discouraged term, to be used only in connection with building codes, where the term refers to the number of occupants in a space, or other specific classification of use.

**occupancy instrument (OI)** (accord d'occupation (AO))—agreement between a prospective or current occupant and the manager or owner of a facility concerning occupancy in that facility.

**occupant** (occupant)—(1) Department, agency, corporation, or other organization, or a part thereof, that is or will be occupying space in a particular facility. (2) Individual or family living in a housing **dwelling**.

building occupant(occupant d'un immeuble)—one who has certain rights to, possession of, or control over the premises occupied, such as **tenant** or owner.

overall serviceability score—see serviceability score.

performance—see building performance. (see also facility
performance)

performance criterion, of a facility—see requirement statement.

performance test method of a facility—see requirement statement.

**physical protection** (protection physique)—barriers that will delay or deter someone attempting unauthorized physical access to assets at a specific location.

Discussion—(1) These barriers may be physical, such as walls or locked doors, possibly monitored by technical systems; or they may be provided by persons with specific responsibility for physical security, such as guards or authorized personnel of the organizational unit working at the location, or both. (2) Physical protection is an aspect of physical security.

**portfolio** (portefeuille)—group of securities, buildings, or other properties held by an individual or institutional investor.

primary circulation area—see space categories.

**project** (projet)—resources and activities used to achieve a specific set of objectives within a specified time schedule.

project brief—see facility program.

**rating process,** n(processus d'évaluation)—the process of determining the serviceability of a facility for a specified purpose.

E1334

rating scale (échelle d'évaluation)—(for an aspect of facility serviceability) set of descriptions of combinations of features, in which each combination has been selected to

indicate a specific level of serviceability on a scale from the lowest to the highest level likely to be encountered.

rating score (résultat d'évaluation)—result (expressed as a number) of finding the combination of features described in a specified rating scale (for one aspect of serviceability) that matches most closely the attributes present in a facility.

record set drawing—see drawing.

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

E631

**reliability,** *n*(fiabilité)—the probability of performing without failure a specified function under normal conditions for a specified period of time. **E344** 

**requirement statement** (enoncé de boisons)—for a facility, the serviceability requirements for a facility, together with applicable performance criteria, performance test methods, and optional explanatory comments.

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

E 621

performance criterion, n(critére de rendement)—a quantitative statement of the level of performance needed to satisfy a serviceability requirement.

E1334

Discussion—This may be expressed as a threshold value, a range, or a point value.

performance test method, n (méthode d'essai de rendement)—a method of determining whether the performance of a facility is in accordance with a specified performance criterion.

E1334

serviceability requirement, n(besoin de fontionalité)—for a facility, a qualitative statement of the serviceability required from a facility.

Discussion—Examples include: smoke control for life safety; removal of heat from computer equipment; relocation of workplaces in rapidly changing organizations; resistance to insect damage; maintenance of the temperature within a specified range at a specified location; acoustical, visual, thermal, and air quality performance.

score, n—see serviceability score.

secondary circulation area—see space categories.

serviceability, n—see facility serviceability. (see also building performance.)

serviceability requirement—see requirement statement.

**serviceability requirements profile (SRP)** (profit de besoins génériques de fonctionnalite (PBGF))—listing of the levels of serviceability (capability to perform, including quality) required in a facility.

shop drawing—see drawing.

silent hours—see hours of operation.

space categories, n (catégories de locaux) (see also floor area)—

assignable area, n (zone assignable)—floor areas of a facility assigned to or available for assignment to occupant groups of functions, including interior walls, building columns, and building projections, and excluding circulation.

Discussion—Assignable area includes the area of all enclosed rooms, open work areas, and other support spaces. It does not include the areas of circulation or exterior walls. Assignable area can be measured for buildings, **floors**, departmental areas, individual rooms, or work areas. Assignable area is measured to the center of all interior walls and to the inside finished surface of the outer building walls. In open plan workspace, it is measured to the center of furniture panels. If assignable area has been measured to exclude the areas of columns, interior walls, or building projections, note the exception to the practice with an appropriate qualifying phrase as follows: (1) assignable area without columns, (2) assignable area without building projections, or (3) assignable area without columns or building projections.

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

E631

building core and service area, n(noyau d'un immeuble et aire de service)—**floor area** of a facility necessary for the general operation of a building that is not available for general occupancy, including: **primary circulation areas**, mechanical, electrical, telephone, and custodial rooms serving individual floors; toilet rooms, building lobbies and atria, stairways, elevators, vertical shafts and chases, loading docks; and also central, mechanical, electrical, telephone, and custodial spaces and penthouses, but excluding interstitial area.

Discussion—Building core and service area is measured to the center of all interior walls except in the following cases: where a stair, elevator, vertical shaft or chase adjoins a mechanical room, electrical room, custodial room, toilet room, building lobby, or primary circulation; the area of the wall should be included in the area of the stair, elevator, vertical shaft, or chase. Where a building core or service area space adjoins a space designated as usable area, the area of the wall should be included in the building core or service area space. An alternative method of classifying building core and service areas may be used, which is not compatible with ANSI Z65.1: measure to the center of interior walls for all spaces. The use of this alternative method should be noted when reporting area measurements. Toilet rooms that are accessible to all of the occupants on a floor of a building or that serve the general public should be classified as building core and service areas. A toilet room that is accessible only from a private office, or that is not available to all occupants on a floor, would be classified as a private toilet room and included in usable area for the tenant or occupant that it serves.

building gross area, n (superficie brute d'un immeuble)—sum of the floor areas of a building included within the outside face of outer building walls for all stories.

Discussion—Building gross area includes basements, enclosed porches, penthouses, mechanical equipment, floors, lobbies, mezzanines, and corridors, provided they are within the outside face of the building. The areas of stairways, elevator shafts, mechanical service shafts, and ducts are to be included in building gross area for each floor through which they pass. Building gross area is measured from the outside face of exterior walls on each floor, disregarding comices, pilasters, buttresses, etc., that extend beyond the wall face. The building gross area of basement space includes the area measured to the outside face of basement or foundation walls. For enclosed open courts, enclosed light wells, enclosed atria, or other interior spaces more than one story in height, only the area on the lowest floor is included, not the void above on upper levels. Interstitial areas and unfinished attics are excluded

building service area (aire de service d'un immeuble)—use preferred term building core and service area.

*cellar*(cave)—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. **E631** 

circulation space—see primary circulation; secondary circulation.

primary circulation area (aire de circulation principale)—portion of a **building** that is a public corridor, lobby, or atrium; or is required for access by all occupants on a floor to stairs, elevators, toilet rooms, or building entrances.

secondary circulation area (aire de circulation secondaire)—portion of a **building** required for access to some subdivision of space, whether bounded by walls or not, that does not serve all **occupants** on a **floor**, and that is not defined as **primary circulation area**.

support space(locaux de soutien)—(in offices) part of **usable** area not assigned or dedicated to a specific task or function. Support space includes meeting rooms, waiting areas, storage, lounges, operational equipment (for example, computer rooms), copy areas, libraries, and similar areas.

usable area, n(superficie utilisable)—floor area of a facility assigned to, or available for assignment to, occupant groups or functions, including interior walls, building columns and projections, and secondary circulation.

Discussion—Usable area includes the areas of all enclosed rooms, open work areas, support areas, secondary circulation, and interior walls, columns, and building projections in those spaces. Usable area does not include building core and service areas or exterior wall area. Usable area can be determined for buildings, floors, and departmental areas. Usable area for a floor is measured to the inside finished surfaces of the outer building walls. From this is deducted the area for the building core and service area for that floor, and the area of enclosed shafts. When determining the usable area of the portion of a floor occupied by a department or leasehold, measure to the center of walls dividing departments or leaseholds.

workplace(poste de travail)—part of a **usable area**, intended for an individual or group to work in.

Discussion—A workplace is identified by having been assigned to, or intended for, an individual or a group or team. It may be an enclosed office; a part of an open plan office; or a combination of enclosed and open plan spaces.

workspace(aire de travail)—part of **usable area**, intended for a specific function or type of work.

DISCUSSION—A workspace is identified by the function or type of work for which it is intended. It may include workplaces, and it may include some area that is not intended for individuals or groups and therefore is not a **workplace**.

workstation(poste de travail) (aménagement ouvert)—all or part of a **workplace**, suitable for carrying out one function or type of work.

Discussion—Workstation(s) may be included in a **workplace** and in a **workspace**. The boundaries of workstations may overlap, or there may be gaps between workstations. For example, a **workplace** for an individual might include: (1) a workstation for computer work, equipped with personal computer, visual display unit, keyboard, and reference material; (2) a workstation for desk-work and reference to documents; and (3) a workstation for telephoning (the latter two workstations would likely overlap).

silent hours—see hours of operation.



**specification,** *n*(caractérisation (caractérisation technique))— 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. **E631** 

support space—see space categories. system— of a building—see building system.

task lighting—see **lighting**.

technical performance—discouraged term for performance—of a building or performance—of a facility.

E1334

**tenant** (locataire)—organization that has rights and obligations of occupancy in a facility, as specified in a lease or occupancy agreement.

Discussion—An occupant organization may also be a tenant; or, it may be a unit that is part of a larger tenant organization. Typically, the official who commits the tenant to the terms of a lease or occupancy agreement is either an occupant or a member of a larger organization of which the occupant organization is also a part.

test (performance test of a facility)—see requirement statement.

transitional hours—see hours of operation.
typical serviceability score—see serviceability score.
usable area—see space categories.
use— of a facility—see facility use.

**visitor** (visitor)—(in a facility) person present who is not an **occupant** of that facility.

Discussion—(I) This includes: personnel of other organizational units who visit; contractor personnel; cleaning and maintenance staff; and other persons who are authorized to visit the facility, such as members of the public who are authorized in the reception and public zones. (2) This also includes persons who are authorized only in special circumstances, such as those permitted to pass through during an emergency. (3) Persons who are present without authorization are intruders.

working drawing—see drawing. workplace—see space categories. workspace—see space categories. workstation—see space categories.

## 4. Keywords

4.1 building; building performance; definitions; facility; facility management; terminology

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