



Designation: E3257 – 21

## Standard Practice for Asset Taxonomy<sup>1</sup>

This standard is issued under the fixed designation E3257; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

### 1. Scope

1.1 This practice covers a useful hierarchical arrangement of the breadth of asset types.

1.2 This taxonomy is based on the innate characteristics of the asset, not on the asset's use, cost, owner, or other factors.

1.3 Biological life forms are excluded.

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

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

### 2. Referenced Documents

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

E2135 Terminology for Property and Asset Management

E2279 Practice for Establishing the Guiding Principles of Property Asset Management

2.2 *ISO Standards:*<sup>3</sup>

ISO 55000 Asset management — Overview, principles and terminology

ISO 55001 Asset management — Management systems — Requirements

### 3. Terminology

3.1 *Definitions*—For definitions relating to property and asset management, refer to Terminology E2135.

<sup>1</sup> This practice is under the jurisdiction of ASTM Committee E53 on Asset Management and is the direct responsibility of Subcommittee E53.05 on Asset Leadership.

Current edition approved Aug. 1, 2021. Published September 2021. DOI: 10.1520/E3257-21.

<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

<sup>3</sup> Available from International Organization for Standardization (ISO), ISO Central Secretariat, Chemin de Blandonnet 8, CP 401, 1214 Vernier, Geneva, Switzerland, <https://www.iso.org>.

3.1.1 *air, n*—physical, natural resource asset that is the mixture of invisible odorless tasteless gases (such as nitrogen and oxygen) that surrounds the earth.

3.1.2 *asset, n*—item, thing, or entity that has potential or actual value to an organization. (ISO 55000)

3.1.3 *asset taxonomy, n*—the practice and science of classification of assets, including the principles that underlie such classification.

3.1.4 *classification, n*—the third level of the asset taxonomy, it includes major subdivisions of the *domain* level.

3.1.5 *conceptual assets, n*—non-physical assets pertaining to concepts or to the forming of concepts, including management control systems, perceptions, and knowledge.

3.1.6 *constructed assets, n*—physical assets that exist as a result of actions of humankind.

3.1.7 *data, n*—virtual assets consisting of factual information (such as measurements or statistics) used as a basis for reasoning, discussion, or calculation.

3.1.8 *domain, n*—the second level of the asset taxonomy, it includes major subdivisions of the *form* level.

3.1.9 *durable assets, n*—constructed assets that are able to exist for a long time without significant deterioration in quality or value.

3.1.10 *family, n*—the fifth level of the asset taxonomy, it includes subdivisions of the *order* level, and may be further subdivided into types.

3.1.11 *form, n*—the highest level of the asset taxonomy, it includes physical assets and non-physical assets.

3.1.12 *infrastructure assets, n*—durable assets that are the fundamental facilities and systems serving a country, city, or other area.

3.1.13 *knowledge, n*—conceptual assets that are the fact or condition of knowing something with familiarity gained through experience or association.

3.1.14 *land, n*—physical, natural resource asset that is any part of the earth's surface not covered by a body of water.

3.1.15 *management and control systems, n*—conceptual assets that are tools to aid management for steering an organization.