



Designation: E2715 – 17

Standard Practice for Moveable Property Storage¹

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1. Scope

1.1 This practice defines the physical protection and control of moveable property in storage locations.

1.2 Generally, organizations should establish and maintain control of moveable property through means of storage in a manner that will strike a balance between cost of storage and the degree of protection necessary to mitigate the risk of loss, damage, or destruction.

1.3 This practice covers moveable property as defined in Terminology E2135.

1.4 This practice is applicable and appropriate for all moveable property-holding entities as defined in Practice E2499.

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

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

2. Referenced Documents

2.1 *ASTM Standards:*²

E2135 Terminology for Property and Asset Management

E2221 Practice for Administrative Control of Property (Withdrawn 2011)³

E2499 Practice for Classification of Asset Physical Location Information

¹ This practice is under the jurisdiction of ASTM Committee E53 on Asset Management and is the direct responsibility of Subcommittee E53.01 on Process Management.

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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.

3. Terminology

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

3.1.1 *high risk property, n*—property either regulated by law (for example, pharmaceuticals, medical supplies, firearms and ammunition, hazardous materials/waste) or in any way is potentially dangerous to public health or security.

3.1.2 *location, n*—site, locale, point, position, or coordinate where individually identified moveable property is stored in a single location (for example, rack, shelf, or enclosed area), usually in a designated, authorized storage area or other environment.

3.1.3 *protection, n*—safekeeping of moveable property in the work requirements as it relates to safety, cleanliness, handling, and maintenance to prevent damage, destruction, theft, or deterioration.

4. Significance and Use

4.1 Provide for the physical protection and control of moveable property in storage/warehouse locations, and ensure best value while avoiding undue risk.

4.2 This practice establishes a standard approach to storage and warehousing of moveable property.

4.3 It is the intent of this practice to provide guidance for an effective and efficient system in the storage of moveable property. Entities adopting this practice shall establish entity specific policies or procedures, or both, implementing this practice.

4.4 This practice is not intended to be a guide for the storage of material.

5. Storage Methodology

5.1 An entity shall determine the appropriate cost effective level of physical location information to maintain and communicate in support of the mission of the organization.

5.1.1 The storage methodology should include all moveable property regardless of ownership or the acquisition methodology used to acquire the item.

5.2 For high ceiling warehouse areas, maximizing the storage capacity by installing racking that allows multiple layers of horizontal storage should be researched for cost benefits and efficiencies.

5.3 Moveable property in a storage/warehouse location should be identified in some method to indicate ownership. Methods include labeling or marking ownership on the item(s), property bar code tagging of each item, or marking the storage bin or area and segregating by ownership, etc. Segregation of an area or rack by owner is not generally required if the moveable property items are individually marked thus ensuring that ownership is known or interpreted based upon the markings.

5.4 Moveable property is stored in an orderly manner to preclude hazards to personnel or property. Moveable property is stored so as not to obstruct access to exits.

5.5 Entities shall consider the frequency with which moveable property items will need to be accessed before assigning physical locations to that property within the warehouse/storage location. Movable property items that require frequent access shall be located in easily accessible areas in order to minimize the time spent storing/retrieving items.

5.5.1 Long term storage can be facilitated by having the property records indicate “stand-by” or “idle” or something similar.

5.5.2 Items which require recurring maintenance or calibration should be marked in the property records and personnel should ensure the maintenance is conducted on these items while in storage.

5.6 An identification marking/naming convention should be deployed to mark the locations of bins, racks, or areas inside the storage areas or buildings. It is recommended that the property records be updated to reflect these detailed locations. This is helpful for quick location during retrieval for use or inventory exercises.

5.7 An inventory management system should be deployed to track incoming and outgoing assets, and track storage locations as they occur. Such a system also will enable the entity to develop and manage performance metrics and optimal asset quantity based on demand.

5.8 Appropriate handling equipment must be utilized for the storage and movement of assets to prevent damage to the assets, the facility, and personnel.

6. Usage Protection and Preservation

6.1 The entities shall provide for:

6.1.1 Safeguarding and protecting moveable property against, fire, deterioration, effects of weather or contamination, and all other preventable environmental effects, regardless of the type of storage used, either exposed or covered. The moveable property, when required, shall be suitably prepared and packaged against elements that cause damage or deterioration, or both, while in storage (or when it leaves the storage area). Coating, tarp or stretch wrapping, or boxing are among standard methods. Many items may not require such action if deemed to not deteriorate in the storage facility identified by the appropriately trained personnel.

6.1.2 Protecting exposed metal surfaces against oxidation.

6.1.3 Protecting electrical connectors against damage, as required.

6.1.4 Efficient and effective utilization of storage space.

6.2 *Housekeeping*—All storage areas, either covered or exposed, are to be kept in a clean, neat, and orderly condition at all times. Special care shall be taken to identify and eliminate fire hazards, pallet overhang, and other practices that could be lead to personal injury or property damage or both.

6.3 *Protection from Theft or Pilferage*:

6.3.1 The designated storerooms, storage areas, and warehouses shall be limited in access to only authorized personnel, adequately enclosed, and properly secured or locked when not in use.

6.3.2 Sensitive items should receive special attention, and be more securely stored and controlled to preclude pilferage and theft.

6.4 *Fire Protection*—Proper safeguards shall be in place to be consistent with site locations and the type of moveable property being stored. These safeguard(s) include adequate, accessible, and readily available fire-fighting equipment, fire extinguishers, sprinkler systems, and alarms. Personnel should be trained in the use of basic fire-fighting equipment located within their work area. Local municipality code should be researched and followed.

6.5 *Protection from Flood or Water Damage*—All storage or warehouse areas shall meet minimum requirements to ensure that they are structurally sound and capable of withstanding the local area common climate elements. This protection also requires that moveable property not be stored directly on the ground or floor but on pallets or within bins to assure some level of water may flow underneath without touching the stored items themselves. Items specifically designed to come in direct contact with the floor such as those items with wheels, casters, mounts, and so forth will not require additional protection.

6.6 *Moveable Property Requiring Special Handling*—The entity shall comply with local, state, and federal laws and with contractual and insurance requirements for safety, storage, and security of moveable property as applicable.

6.7 *Environmental Controls*—Certain assets may require cooler storage conditions, or humidity controlled environments.

6.8 *Control*:

6.8.1 Stored moveable property shall have clear and visible identification.

6.8.1.1 The entity shall maintain a locator system for timely retrieval or movement or both.

(1) Moveable property shall arrive for storage with the appropriate internal documentation as well as requested or reissued moveable property. Records shall be maintained in a property locator system.

6.8.1.2 Documentation should be clear and accurate for audit trail purposes.

6.8.1.3 The physical location record should meet Practice E2499.

6.8.1.4 Control of moveable property should meet Practice E2221.

6.8.1.5 Limited access areas shall be locked and secured to prevent unauthorized personnel from entering area(s) without an authorized escort.