



Standard Practices for Securement of Cargo in Intermodal and Unimodal Surface Transport¹

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1. Scope

1.1 These practices are intended to serve as a guide to shippers, carriers, and consignees for load planning, loading, blocking, and bracing of intermodal and unimodal cargo in surface transport. The practices are referenced to a bibliography of information concerning the above. Hazardous materials, bulk cargo, non-containerized break bulk in ocean carriage, and transport of cargo by air are not included in these practices at this time.

1.2 These practices shall apply to cargo in surface transport on flat bed, open top, box car, truck van and intermodal containers.

1.3 The practices are intended to form a framework for the safe and effective loading and unloading of cargo in intermodal and unimodal surface transport. They are not intended to provide comprehensive detail relating to specific types of cargo, but will reference to source materials wherein such detail may be found.

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 and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

D 996 Terminology of Packaging and Distribution Environments

D 4675 Guide for Selection and Use of Flat Strapping Materials

2.2 Association of American Railroads Standards:

Pamphlet No. 41 Dictionary of Standard Terms³

Circular No. 43 Rules Governing the Loading, Blocking

and Bracing of Freight in Closed Trailers and Containers for TOFC/COFC Service³

Intermodal Loading Guide for Products in Closed Trailers and Containers³

3. Terminology

3.1 *Definitions*—General definitions for the packaging and distributions environments are found in Terminology D 996.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *blocking*—restraining the movement of lading via securement to or at the floor using wood, metal, or other materials.

3.2.2 *bracing*—restraining the movement of lading via the securement above the floor using wood, metal, or other materials.

3.2.3 *break bulk*—both a verb and a descriptive noun. As a verb, means to unload and distribute a portion or all of the contents of a container or vehicle. As a noun, meaning a load in a container which is packaged individually and is sometimes not all of one type. Often used in reference to LCL (less than container load) or LTL (less than truckload).

3.2.4 *bulk cargo*—freight not in packages.

3.2.5 *cargo*—lading; the product or products being moved forward.

3.2.6 *carrier*—any common carrier, contract carrier, private carrier, or other transportation company.

3.2.7 *consignee*—the company or person to whom articles are shipped (also receiver).

3.2.8 *container*—see *intermodal container* as differing from *shipping container*.

3.2.9 *distribution cycle*—the series of transportation and warehousing events which occur during the movement of cargo from point to point; includes points of shipment, loading, discharge, deconsolidation, storage, delivery, and consignment.

3.2.10 *dunnage*—temporary material used in blocking, flooring or lining, racks, standards, strips, stakes or similar bracing, or supports not constituting a part of the carrying vehicle, used to protect and make freight secure in, or on a carrying vehicle. (See *loading* in Terminology D 996.)

3.2.11 *intermodal*—a derivative of the word “modality,” meaning “type of ”; used to describe the movement of a particular load of cargo via more than one “type of ” transport, that is, ocean, rail, and truck (see *unimodal*).

¹ These practices are under the jurisdiction of ASTM Committee D10 on Packaging and are the direct responsibility of Subcommittee D10.18 on Miscellaneous Packaging.

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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 Available from Railinc, Cary, NC.