SUBJECT 17

SUBJECT 17: Item (Rule) 245 – Definition of or Specifications for Crates

Re: **Item (Rule) 245 – Definition of or Specifications for Crates**

Contact: Larissa A. Franklin FCDC@nmfta.org

Proponent: Freight Classification Development Council

Quick View

The Quick View feature is not intended to replace contextual information within this document. To understand the potential impact of the recommended changes shown here, please read the full proposal.

Subject 17: Item (Rule) 245 – Definition of or Specifications for Crates

Quick View: The introductory paragraph of Item (Rule) 245 is amended to provide requirements for wood, metal, and wirebound crates to structurally support toploaded freight.

- Subsections for wood and metal crates amended accordingly

SUBJECT 17

Proposed Classification Provisions

It is proposed to amend Item 245, Definition of or Specifications for Crates, to read as follows:

ITEM 245

DEFINITION OF OR SPECIFICATIONS FOR CRATES

Crates are six-sided containers constructed of wood or metal slats or structural members with apertures between, securely nailed, bolted, screwed, riveted or welded together, of sufficient design and strength to fully enclose and protect contents so as to withstand the normal rigors of the less-than-truckload environment. Article(s) must be secured within crates and no part shall protrude. ⇉Crates must be framed to provide sufficient strength and stability to support toploaded freight of even load and weight distribution during transport, utilizing the available space above the crate, up to 96 inches, and having a density of at least 20 pounds per cubic foot.

Standard wood crates must meet the following minimum specifications:

Base: Crates must have a lift truck skid, pallet or platform of sufficient design, size and strength to ensure article(s) cannot cause any failure of structural components. Deck boards must be sufficiently close to one another, or a wood structural panel (see Note 1) may be secured on top of deck boards to adequately protect article(s) from underside damage and to prevent article(s) from falling through the deck.

Note 1—Wood structural panels (plywood or oriented strand board) shall conform to DOC PS1, DOC PS2, ANSI/APA PRP 210, CSA O325 or CSA O437*.

Sides, Ends and Tops: Crates must be constructed with an outer framework consisting of upright and horizontal members and with additional diagonal, upright and horizontal members where necessary to provide proper strength and rigidity.

⇉Crate sides, ends and tops must be constructed with slats or members sufficiently close to one another to adequately protect article(s) on the sides, ends, top and bottoms, but openings on the sides, ends and tops must not exceed 25 inches in their greatest dimension, which may be the length, width, height or diagonal measurement of the opening. See Note 2. Horizontal structural members must be placed no more than 24 inches apart.

Where present, wood structural panel(s) must be secured to frame with fasteners appropriate to prevent failure during transport.

Note 2—Lumber must be seasoned, reasonably sound, and free from cross grain and knots which would interfere with nails, bolts or screws, or knots which are greater than $^{1}/_{3}$ the width of the lumber.

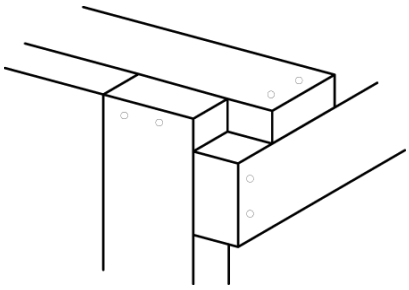
Fasteners: Framework, corners and joints must be secured with nails, bolts or screws to ensure the fastened connections are stronger than the materials being joined.

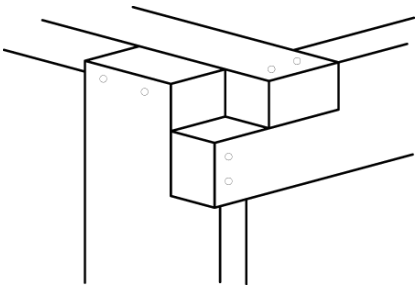
Interior Requirements: Article(s) must be secured to prevent movement during transport. Protective packing forms or other packaging materials must be used where necessary to afford adequate protection against damage to the article(s). Article(s) with legs must be suspended away from all edges of the crate by at least one inch.

SUBJECT 17

Proposed Classification Provisions—Concluded

Three-Way Locking Corners: Crates must be constructed with three-way locking corners, where members will be joined with nails, bolts or screws driven into side grain of joining members. Examples are shown below:





***References:** U.S. Department of Commerce (DOC); American National Standards Institute (ANSI); APA - The Engineered Wood Association (APA); CSA Group (CSA).

Metal crates must meet the following minimum specifications:

Base: Crates must have a metal lift truck skid, pallet or platform of sufficient design, size and strength to ensure article(s) cannot cause any failure of structural components. Deck slats must be sufficiently close to one another to prevent article(s) from falling through the deck. Article(s) must be adequately secured to a metal lift truck skid, pallet or platform that will adequately protect contents from underside damage.

Sides, Ends and Tops: Crates must be constructed with an outer framework consisting of upright and horizontal members and with additional diagonal, upright and horizontal members where necessary to provide proper strength and rigidity.

⇉Crate sides, ends and tops must be constructed with slats or members sufficiently close to one another to adequately protect article(s) on the sides, ends, tops and bottoms, but openings on sides, ends and tops must not exceed 25 inches in their greatest dimension, which may be the length, width, height or diagonal measurement of the opening. Horizontal structural members must be placed no more than 24 inches apart.

Interior Requirements: Article(s) must be secured to prevent movement during transport. Protective packaging forms or other packaging materials must be used where necessary to afford adequate protection against damage to the article(s). Article(s) with legs must be suspended away from all edges of the crate by at least one inch.

[REMAINDER OF ITEM—NO CHANGE.]

SUBJECT 17

Analysis and Conclusion

This proposal is in response to reports of wirebound crates being constructed and tendered in a manner so as to innately prevent stacking and, therefore, unable to support top-freight. The provisions for wooden and metal crates provide stipulations that require the tops to be able to provide adequate space and support for top-freight, but wirebound crates do not specifically delineate this necessity.

FCDC packaging policies state that the FCDC is to establish and maintain packaging rules and specifications as necessary to ensure that freight is adequately protected and can be handled and stowed in a manner that is reasonably safe and practicable so as to withstand the normal rigors of the less-than-truckload environment. As such, it would be consistent with classification policies to amend the introductory paragraph of Item (Rule) 245 to state, "Crates must be framed to provide sufficient strength and stability to support toploaded freight of even load and weight distribution during transport, utilizing the available space above the crate, up to 96 inches, and having a density of at least 20 pounds per cubic foot," so that this requirement applies to the three forms of authorized crates. Concurrently, this sentence would be removed from both the wooden crates and metal crates subsections.

