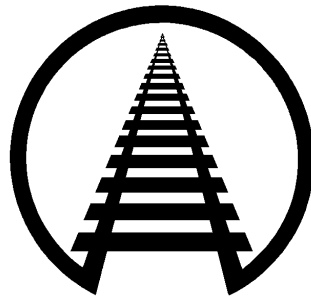


General Information Series No. 781

Wood Bins Braced by Disposable Inflatable Dunnage Bags and BIN-PAK™ or M-PAK® Lengthwise Void Fillers

(Closed Car Loading Guide Part 7, Bulk Containers, Section 6.8)

Approved by
DAMAGE PREVENTION & FREIGHT CLAIM COMMITTEE
Association of American Railroads



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GENERAL RULES

The General Rules relating to personal safety and the safe operation of trains, contained in AAR Circular Nos. 42-M and 43-G or supplements thereto, issued by the Association of American Railroads, **must be observed**.

These loading rules and/or practices apply to shipments transported in the USA, Canada and Mexico.

The loading methods in individual closed car loading publications issued by the Damage Prevention and Loading Services Section of the Association of American Railroads are minimum standards that have been evaluated and approved. These minimum standards offer practical guidelines on the subjects covered. Since these are minimum standards, it may be necessary to supplement these methods in some instances.

Securement standards in AAR closed car loading publications are intended for safe transit of the rail car from origin to destination and prevention of lading and equipment damage. These standards do not address unloading practices.

This approval may be withdrawn if the loads using these methods exhibit consistent load failure during actual shipments.

Loading and bracing methods not presently approved may receive consideration for approval and publication under Section II - Evaluation of New Loading and Bracing Methods and Materials for Closed Cars, Trailers or Containers of General Information Bulletin No. 2, "Rules and Procedures for Testing of New Loading and Bracing Methods or Materials". Submit requests to Director Damage Prevention and Loading Services, AAR/TTCI, 55500 DOT Road, Pueblo, CO 81001.

GENERAL

6.8 Wood Bins Braced by Disposable Inflatable Dunnage Bags and BIN-PAK™ or M-PAK® Lengthwise Void Fillers

6.8.1 This method is used for loading wood bins filled with tomato products in single- or double door boxcars with inside lengths of 50 ft. 6 in. to 60 ft. 9 in. Some variation may be necessary depending on the number of wood bins being loaded. The typical wood bin tested was 44 in. wide × 48 in. long × 43 in. high. The number of wood bins actually loaded will depend on weight and order requirements.

6.8.2 AAR Approved Package Banding: Use eight 5/8 in. × 0.020 in. minimum steel package bands having minimum breaking strength of 1,250 lbs. with a minimum joint strength of 938 lbs. (75% of the minimum breaking strength) or the appropriate polyester plastic bands for each wood bin. Apply four bands horizontally to unitize the bin sides. Apply four bands vertically (two in one direction and two in the other) to secure the bin to the pallet. See Figure 1. Bins are to be of sound quality and free from defects. For approved strapping, reference the appropriate Table of AAR Approved Securement Bands and Strapping, at: <http://www.aar.com/standards/OpenTop-approvals.html>

6.8.3 The height and width of all BIN-PAK or M-PAK fillers referenced in this loading method are to match the height of 2 stacked bins by the width of one bin. Do not re-use fillers that have been crushed, broken or otherwise damaged in any way that may affect their performance.

6.8.4 If necessary, use 2 in. thick small cell honeycomb panels at the ends of the car to square up bowed end walls.

6.8.5 Load wood bins, long side lengthwise to the car, in each end. Load in two rows, each row against opposite sidewalls. Load and align all wood bins corner to corner, tightly against the end walls and sidewalls. It is possible that the first few wood bins loaded in each end of the car may tend to twist during the transportation cycle. Therefore, use separators to prevent damage to the horizontal package bands between the first and second and second and third wood bins in each end of the car.

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6.8.6 Install BIN-PAK or M-PAK fillers between the bins in the fifth and sixth stacks from each end wall. Align void fillers with the last end-of-car wood bins.

6.8.7 Install one hanging honeycomb filler, per manufacturer's instructions in the center void between the top bins in each stack, centered on the bin side panel.

6.8.8 Use AAR approved 48 in. x 84 in. level 1 square airbags to fill the crosswise voids between the bins in the 2nd stack from each end wall. One sheet of fiberboard is required on each side of the pneumatic dunnage bags to serve as a buffer. Inflate each bag to 2.5 psi. Check the bags for leakage 30 minutes after inflation.

6.8.9 Load the wood bins in the doorway long side crosswise to the car. Fill the remaining lengthwise void in the doorway area with AAR approved level 4 pneumatic dunnage with corrugated buffer sheets, keeping the space filled by the airbag between 4 in. to 6 in. after inflation. Fill the remaining space on each side of the boxcar with one 48 in. x 84 in. level 4 airbag. Inflate the airbag to 4.5 psi. Check inflation pressure one half hour after inflating and top off as needed to maintain 4.5 psi.

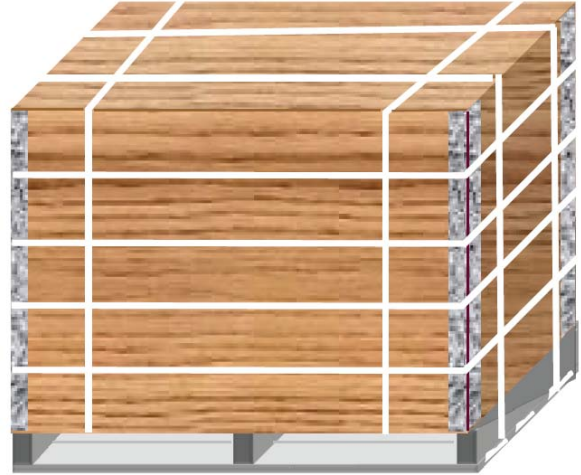


Figure 1 - Typical packaging strap application

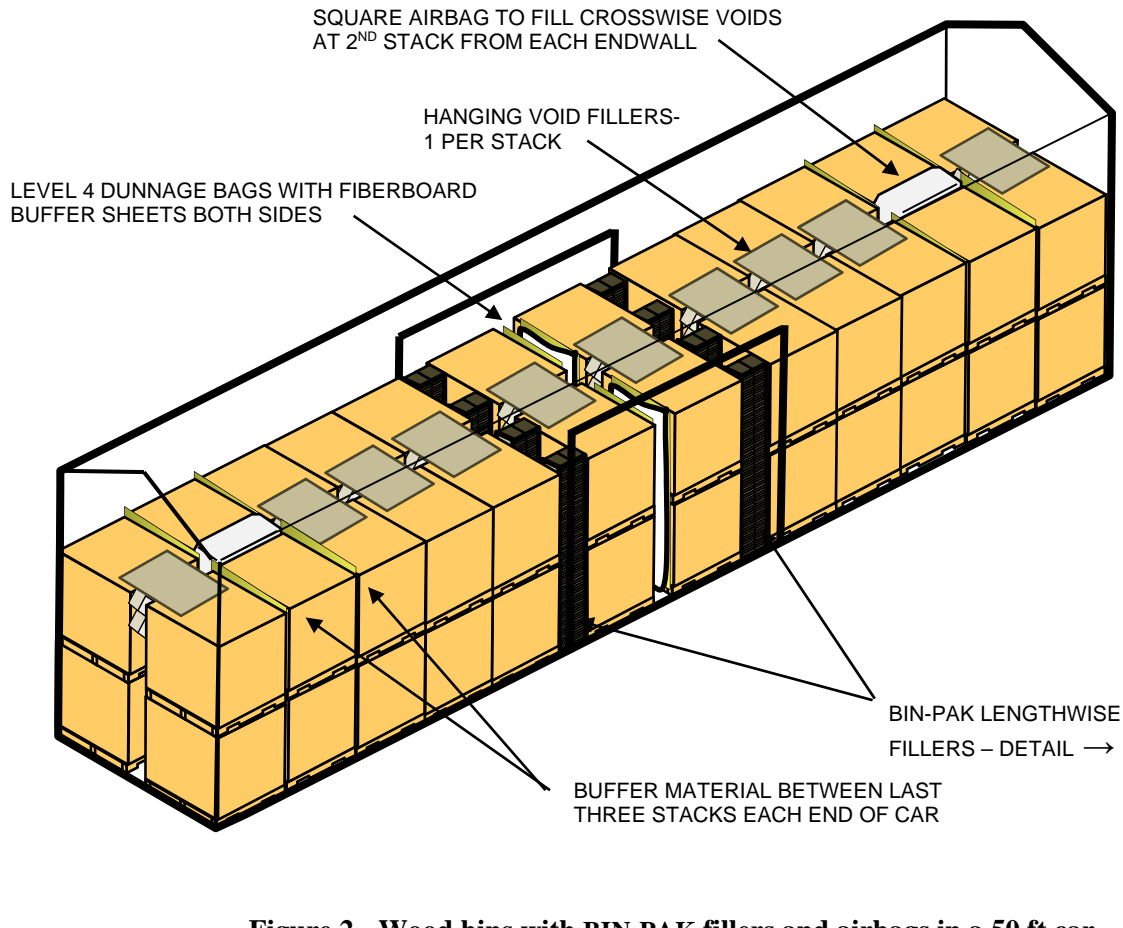


Figure 2 - Wood bins with BIN-PAK fillers and airbags in a 50 ft car

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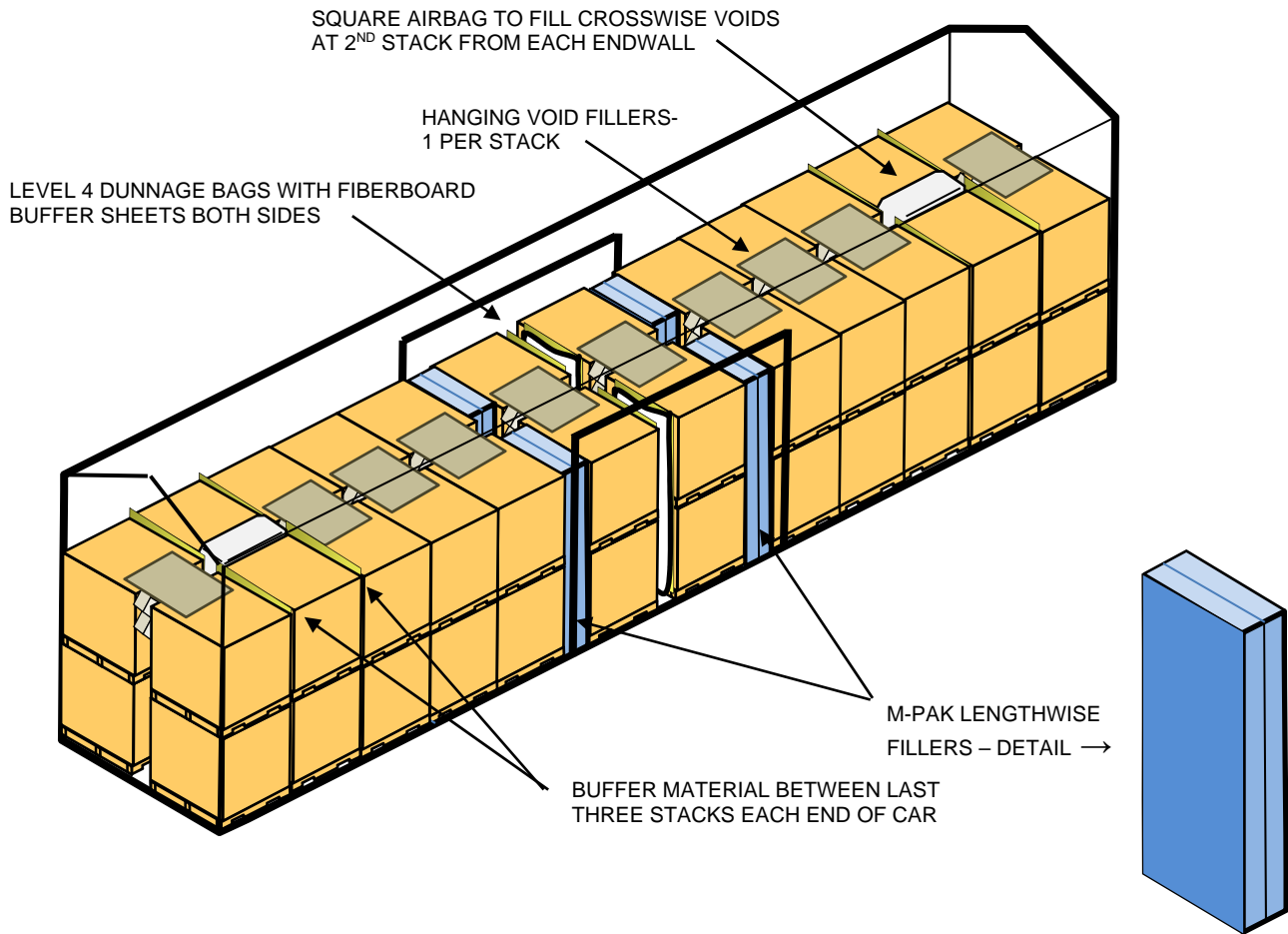


Figure 3 - Wood bins with M-PAK fillers and airbags in a 50 ft car

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Wood Bins Braced by Disposable Inflatable Dunnage Bags and BIN-PAK™ or M-PAK® Lengthwise Void Fillers

General Information Series Publications

- 744** Double Layer Load Secured with Cordstrap® Barriers in a 20-ft Container (ILG Method I-4) (7/15)
- 745** Nonhazardous Loads Secured with Cordstrap® Barriers in 40-ft Containers (ILG Method I-5) (2/16)
- 749** 50 in. Diameter Roll Paperboard in 50 ft. Cushioned Boxcars with Horizontal Airbags (8/16)
- 750** Double Layer Loads of 55 Gallon Closed Head Steel Drums Secured with Cordstrap® Barriers in a 20-ft Container (Intermodal Loading Guide Method I-4HM) (8/16)
- 752** Large Diameter Paper Rolls in 60 ft. Cushioned Boxcars with Anchored Straps (10/16)
- 753** 60 in. Diameter Roll Paperboard in 60 ft. Boxcars with Doorway Stacks on Risers (10/16)
- 754** Wood Bins Braced by Disposable Inflatable Dunnage Bags and Lengthwise Fillers (CCLG Part 7, Section 6.3 Revised 10/16)
- 755** 55-Gallon Steel Drums on Pallets Secured with Cordstrap® Barriers in 40-ft ISO Containers (Nonhazardous Materials only) (Intermodal Loading Guide Method I-6) (new 11/16)
- 757** 46 in. to 57 in. Diameter Roll Paper on End Using Rubber Mats (Revised Intermodal Loading Guide Method E-21) (1/17)
- 758** 58 in. Diameter Roll Pulpboard with an Incomplete Second Layer Loaded On End (Former Pamphlet No. 39, Method 11) (2/17)
- 759** Revision to Paragraph 2.5, Distribution of Weight Crosswise in Cars, CCLG Part 10, Primary Metals (2/17)
- 760** Incomplete Layers of Plywood Secured in Boxcars with Nonmetallic Straps, CCLG Part 3, Plywood (2/17)
- 761** 37 in. Diameter Plastic Stretch Wrapped Kraft Rolls Loaded in a Single Layer in 60 ft. Cushioned Boxcars Using Rubber Mats and Lengthwise Filler Panels (3/17)
- 763** Roll Paperboard in Boxcars with Doorway Stacks on Risers and Rubber Mats (6/17)(Cancels GIS 762)
- 764** Non-metallic Strap Substitution for Steel Strap as Doorway Protection in Boxcars (Cancels GIS 756) (06/17)
- 765** Wood Bins Braced by Disposable Inflatable Dunnage Bags and Shock-Gard® Lengthwise Void Fillers (7/17)
- 766** 45 in. Diameter Roll Paper in 60 ft. Cushioned Boxcars with Double Plug Doors (8/17)
- 768** Gearboxes Mounted on Sleds in 20 ft. Long ISO Containers (9/17)
- 769** 42 in. Diameter Roll Paper in 60 ft. Cushioned Boxcars Using Rubber Mats and Airbags (CCLG Part 2, 8.3.2.6)(9/17)
- 770** 48 in. Diameter Roll Paper in 50 ft. Cushioned Boxcars Using Horizontal Airbags (CCLG, Part 2, Section 8) (9/17)
- 771** 50 in. Diameter Roll Paper in 50 ft. Cushioned Boxcars Using Sidewall Fillers and Horizontal Airbags (CCLG, Part 2, Sections 5.6.10 & 8.2.4.4 Revised)(10/17)
- 772** 81 in. Diameter Roll Paperboard in 50 ft. Standard Draft Gear Boxcars with Sliding Doors (CCLG Part 2, Section 8.2.8.1) (10/17)
- 773** 42 in. Diameter Roll Paper in 50 ft. Cushioned Boxcars with 12 ft. Doors (CCLG Part 2, Section 8.2.2.5) (12/17)
- 774** 48 in. Diameter Roll Paper in 60 ft. Cushioned Boxcars with 16 ft. Double Doors (CCLG Part 2, Section 8.3.4.5) (12/17)
- 775** 54 in. Diameter Paperboard on End Using Rubber Mats (New Intermodal Loading Guide Method E-22)(January 2018)
- 776** 45 in. Diameter Roll Paper in 50 ft. Cushioned Boxcars with 12 ft. Doors (CCLG Part 2, Section 8.2.3.8) (2/18)
- 777** Double Layer Loads of 76-55 Gallon Drums Secured with Ty-Gard DS™ Barriers in 20-ft Containers (Intermodal Loading Guide Method B-9)(3/18)
- 778** Split Loads of 58 in. Diameter Roll Pulpboard on End Using Rubber Mats when Stowed in Trailers Having Large Metal Plates Approximately 9 ft. in Length at the Nose (Intermodal Loading Guide Method E-22)(3/18)
- 779** Double Layer Load Secured with Cordstrap® Barriers in a 20-ft Container (ILG Method I-4HM) (3/18) Cancels GIS 744
- 780** Loads Secured with Cordstrap® Barriers in 40-ft Containers (ILG Method I-5HM) (3/18) Cancels GIS 745
- 781** Wood Bins Braced by Disposable Inflatable Dunnage Bags and BIN-PAK™ or M-PAK® Lengthwise Void Fillers (4/18)