General Information Series No. 785
(Cancels GIS 777)

Intermodal Loads Secured with Ty-Gard DS™ Barriers
ILG Method B-9 (New)

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This approval may be withdrawn if the loads using these methods exhibit consistent load failure during actual shipments.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

CAUTION: Car rocking motion caused by the lift equipment entering and/or exiting the rail car may cause unsupported packages or articles with a higher center of gravity to fall to the floor. Minimize access to the car. Exercise caution when inside a partially loaded car. Lift operators should stay on lift equipment, whenever possible, while inside a partially loaded car.

GENERAL

Ty-Gard DS has been approved as a substitute for Ty-Gard 2000 in the following loading and securement methods published in the AAR Intermodal Loading Guide.

B— Ty-Gard 2000

- ♦ **Method B-1** Drums Loaded in Two or Three Sections Secured with Ty-Gard 2000 Barriers
- ♦* **Method B-2** Mixed Load Secured with Ty-Gard 2000 Barriers
- ♦* **Method B-3** Double-Layer Load Secured with Ty-Gard 2000 Barriers in a 20 ft Container
- **Method B-4** 40 in. Diameter Roll Printing Paper Secured with Ty-Gard 2000 Barriers
- ♦* **Method B-6** Bulk Boxes Secured with Floor Blocking and Ty-Gard 2000 Barriers
- ♦ **Method B-8** Seventy-Eight to Eighty Closed-Head 55-Gallon Steel or Plastic Drums in Two Layers Secured by Ty-Gard 2000 in a 20 ft ISO Container
- **Method B-9** Intermodal Loads Secured with Ty-Gard DS Barriers

♦ Methods marked with a diamond (♦) have been recommended for hazardous materials loading by the Bureau of Explosives Steering Committee.
* Methods marked with an asterisk (*) have been tested to 8 mph.

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Use this loading method for 55-gallon steel closed-head drums in two layers in a 20 ft ISO container. Steel drums should have the W-style rolling hoop. Load drums in a modified 4-3-4 pattern for 80-drum loads.

Illustration No. 4.8A: 80 Drums Loaded in Two Layers in a 20 ft. Container

1. Load 40 drums in a modified 4-3-4 pattern in each layer for a 80 drum load. Use ½ in. thick plywood, or equivalent strength material, as a separator between each layer. The separator material runs the full width of the container and the full length of the load.

2. The following layer separators listed in Table 1 have been evaluated and found acceptable for one-time use with this loading method. These separators were tested under simulated conditions, and their acceptance may be withdrawn if loads exhibit consistent load failures. If used with hazmat loads, these panels must be compatible with the contents of the drums.

Name	Thickness	Description	Vendor
Drum Tite	3.0 mm, 3.2 mm	Eucalyptus hardboard	Lodge Lumber
Drum Sep	3.2 mm	Eucalyptus hardboard	Pasadena Skid and Pallet Inc.
Ship Tite 2	.375 in.	Corrugated (*not* for use with corrosives)	Allegheny Industrial Associates
Ship Tite 3	.625 in.	Corrugated (*not* for hazmat use)	Allegheny Industrial Associates
Ship Tite 5	3.2 mm	Corrugated	Allegheny Industrial Associates
Generic	3.0 mm	Eucalyptus hardboard	Greif
PlyVeneer®	3.0 mm	Wood veneer with a Kraft linerboard overlay	PlyVeneer Products
Tier 55	1.0 in., 0.50 in.	Corrugated	Damage Prevention Company

Table 1 – Approved Layer Separators

3. Secure the nose section of the load through the use of Ty-Gard DS barriers after the seventh stack. Secure each layer with one 24 in. wide strip of Ty-Gard DS. Attach the Ty-Gard DS to the sidewalls (per manufacturer's instructions) with an adhesive strip at least 75 in. long and at least 36 in. back from the face of the last stack in this section. When used with containers with corrugated sidewalls, follow the contour of the corrugations.

4. Tension and seal all Ty-Gard DS barriers in accordance with manufacturer's instructions. Use tape or other suitable material to maintain each barrier in position.

5. Load the remaining drums in a 4-3-4-3 pattern. Secure the rear of the load using one Ty-Gard DS barrier per layer. Attach each barrier to the sidewalls of the container (per manufacturer's instructions) with an adhesive strip at least 75 in. long and at least one stack back from the face of the load. When used in containers with corrugated sidewalls, follow the contour of the corrugations.

6. Tension and seal all Ty-Gard DS barriers in accordance with the manufacturer's instructions. Use tape or other suitable material to maintain each barrier in position.

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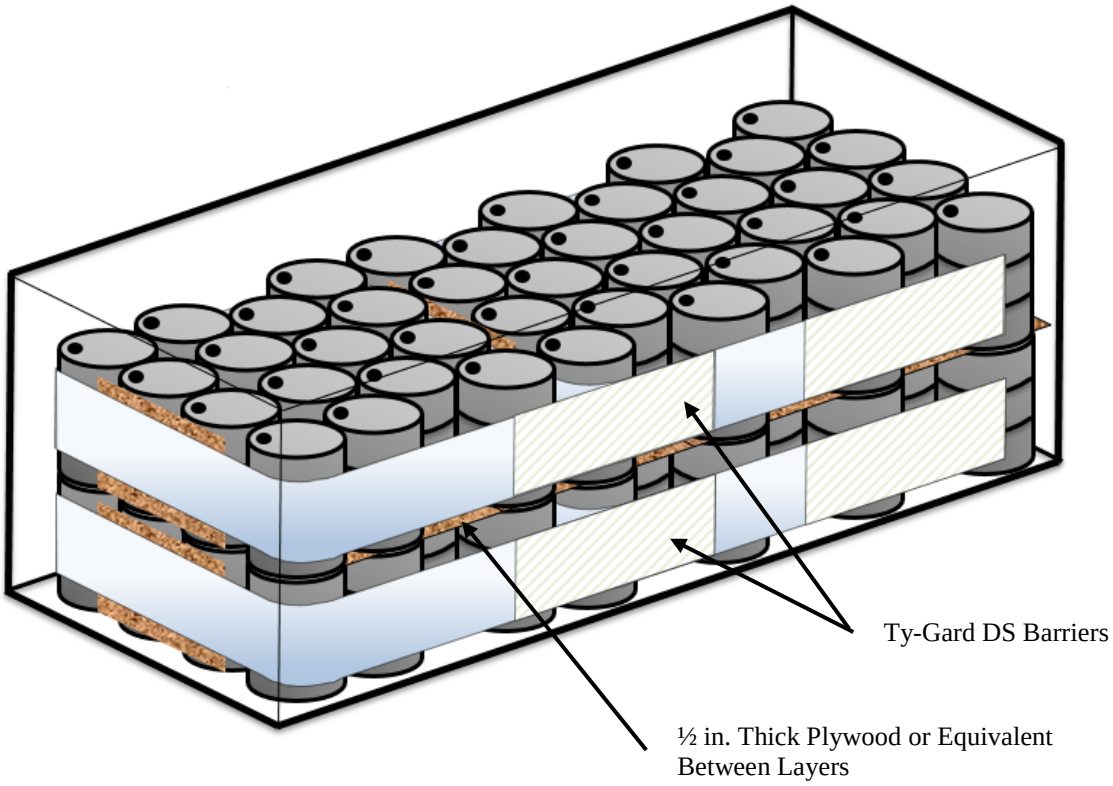

Figure 4.8A
80 Drums Loaded in Two Layers in a 20 ft. Container

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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)
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 Loads of Hazardous or Nonhazardous Materials Secured with Cordstrap® Barriers in a 20-ft Container (ILG Method I-4HM) (4/18) Cancels GIS 744
780 Hazardous or Nonhazardous Loads Secured with Cordstrap® Barriers in 40-ft Containers (ILG Method I-5HM) (4/18) Cancels GIS 745
781 Wood Bins Braced by Disposable Inflatable Dunnage Bags and BIN-PAK or M-PAK Lengthwise Void Fillers (4/18)
782 Plastic Intermediate Bulk Containers with Disposable Inflatable Dunnage Bags and Lengthwise Void Fillers – Schoeller Allibert (CCLG Part 7, Section 6.2)(4/18)
783 Cased Goods Secured by Tuff Wrap™ D.I.D. Bags (Intermodal Loading Guide Method F-4 New)(4/18)
784 Aluminum Coils on Platforms/Skids Loaded on Rubber Mats & Secured by Two Floor Anchored Web Straps & Supplemental Securement Straps (CCLG Part 9, Section 8.6) (5/18)
785 Intermodal Loads Secured with TyGard DS™ (Intermodal Loading Guide Method B-9 New)(5/18)