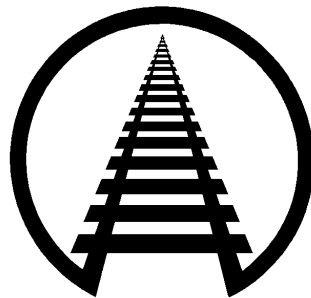


General Information Series No. 799

46 in. to 57 in. Diameter Roll Paper on End Using Rubber Mats

**(Revised Intermodal Loading Guide Method E-21)
(Cancels GIS 757)**

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



Issued
December 2018

Published by
Association of American Railroads/TTCI
Damage Prevention and Loading Services
55500 DOT Road
Pueblo, CO 81001

(Printed in U.S.A.)
© 2018

General Information Series No. 799

46 in. to 57 in. Diameter Roll Paper on End Using Rubber Mats

(Revised Intermodal Loading Guide Method E-21)

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This approval may be withdrawn if the loads using these methods exhibit consistent load failure during actual shipments.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: Trailer/container rocking motion caused by the lift equipment entering and/or exiting may cause unsupported packages or articles with a higher center of gravity to fall to the floor. Minimize access to the trailer or container. Exercise caution when inside a partially loaded trailer or container. Lift operators should stay on lift equipment, whenever possible, while inside a partially loaded trailer or container.

GENERAL

Use these loading methods for 46 in. to 57 in. diameter roll paper loaded on end in a 1-1 offset pattern in a trailer or container for intermodal service. This method was originally tested in a 100 in. inside width container with roll widths (height) of 63 in., 72 in., and 94 in., representing 8 roll, 7 roll, and 6 roll load patterns respectively. Use side wall fillers to maintain a 1-1 offset pattern.

Any changes to dunnage material or their quantity must be either tested and approved by the carrying railroads or undergo AAR testing.

Plan the load to equalize the weight on each side of the trailer or container. Because roll weights vary, this will require attention to pre-planning. A balanced load is required for the stability and success of this loading method. Loads with an odd number of rolls have the first roll centered against the front end wall with fillers on both sides of sufficient size and strength to prevent lateral roll movement.

NOTE: Due to the nature of this concept, some edge and/or header damage could occur due to roll rocking. If this is objectionable, do not use this loading and bracing method.

For all methods depicted, the rubber mats must extend a minimum of 6" beyond the nose of the last roll in both directions.

General Information Series No. 799

46 in. to 57 in. Diameter Roll Paper on End Using Rubber Mats

(Revised Intermodal Loading Guide Method E-21)

Figure 4.31 through Figure 4.33:

1. Only the following rubber mats have been evaluated and found acceptable for this loading method:

Name	Thickness	Description	Vendor
TransMat™ 6900	2 mm	20 in. wide rolls	AIA Down River, an ITW company
TransMat™ 6900	2 mm	24 in. wide rolls	AIA Down River, an ITW company

Specifications for this rubber mat is in Appendix D of the Intermodal Loading Guide.

2. Divide the load into two sections, each containing approximately half of the load. Use the six-, seven-, or eight-roll pattern depicted in Figures 4.31 through 4.33. The width of the rolls is to be at least 6 in. less than the inside height of the trailer/container.
3. Load the first section in a 1-1 offset pattern starting at the nose using closed cell honeycomb filler panels or other suitable filler along both side walls to initiate and maintain the 1-1 offset pattern. Place fillers, with 1,500 lb. minimum crush strength, on edge between the sidewall and each of the rolls. Thickness of filler is dependent on trailer inside width and actual roll diameter. Use industrial tape or other means to keep fillers in position. Fillers must extend at least 2 ft. beyond where the roll makes contact in either direction. If using multiple void fillers in tandem, unitize them to restrict independent movement.
4. When three rolls are loaded in the nose section of a 7 roll load, load the first roll so it is centered in the trailer against the nose. Place void fillers 2 in. x (void width) x 42 in. corrugated fiberboard with a 1,500 lb. minimum crush strength, on both sides of the first roll and the side walls. If using multiple void fillers in tandem, unitize them to restrict independent movement. (See Figure 4.32).
5. For rolls greater than 72 in. in width, use a minimum of 5 in. deep by 22 in. wide by 60 in. tall fillers between the first roll loaded and the nose of the trailer or container. Use industrial tape or other means to keep fillers in position.
6. Load the second section also in a 1-1 offset pattern split from the first to provide proper lengthwise weight distribution. The rearmost roll in this section should be at least 3 ft. from the doors when loading is completed.
7. Load each roll on 20 in. or 24 in. wide mats centered under each roll and extending a minimum of 6 in. beyond the nose of the roll in both directions. Do not secure the mats to the trailer floor.

NOTE: Do not use rubber mats if torn or otherwise damaged.

8. Use Type 1A, Grade 4 nonmetallic strap for unitizing each section. For 3 roll sections where the first roll is centered at the front end wall, unitize only the second and third rolls. For roll widths 63 in. or less, unitize each section with one strap located approximately 12 in. below the top of the rolls; for roll widths 64 in. to 72 in., use 2 straps located 12 in. and 20 in. below the top of the rolls; for roll widths greater than 72 in., use 3 straps located 12 in., 20 in., and 28 in. below the top of the rolls. Use the correct buckle in accordance with manufacturer's instructions (see Intermodal Loading Guide paragraph 3.6 for approved polyester cord strapping). Tension and seal straps using proper tensioning and sealing tools. Use strap hangers or tape attached to the rolls to maintain proper strap alignment.

CAUTION: Ensure that the floor of the trailer is not overloaded when loading wide rolls. The load may not exceed 2,500 lb./linear ft. lengthwise of the trailer for any 1 ft. section.

General Information Series No. 799

46 in. to 57 in. Diameter Roll Paper on End Using Rubber Mats

(Revised Intermodal Loading Guide Method E-21)

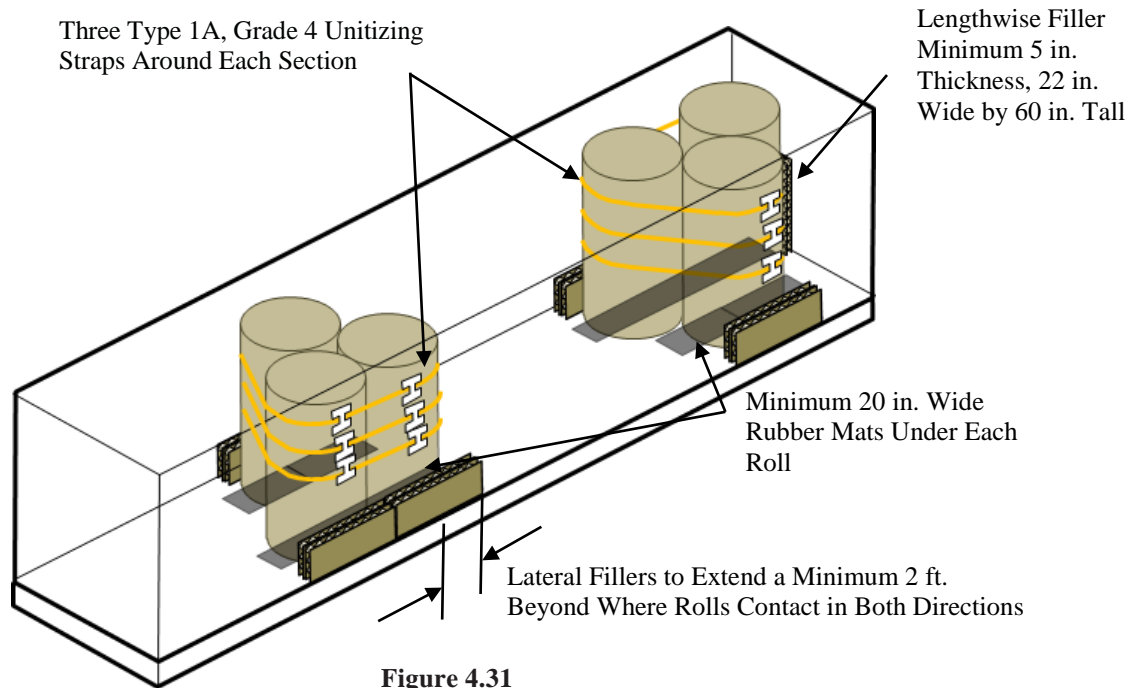


Figure 4.31
Method E-21

6 Roll Load Pattern (for Rolls Greater Than 72 in. Wide)

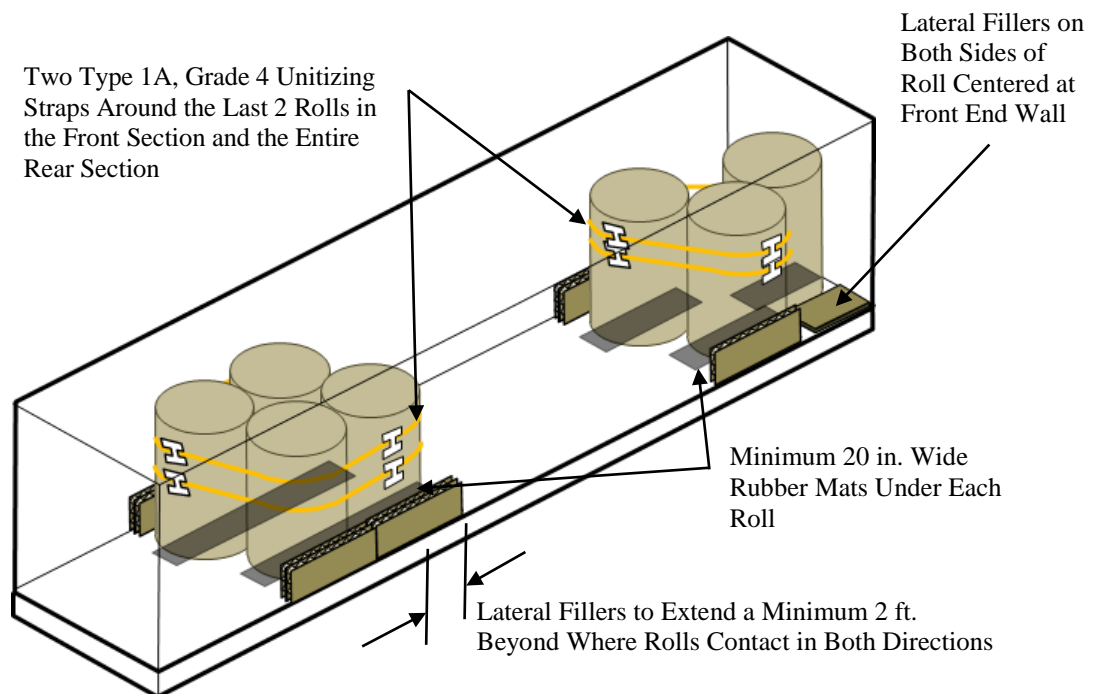


Figure 4.32
Method E-21

7 Roll Load Pattern (for Rolls Between 63 in. and 72 in. Wide)

General Information Series No. 799

46 in. to 57 in. Diameter Roll Paper on End Using Rubber Mats

(Revised Intermodal Loading Guide Method E-21)

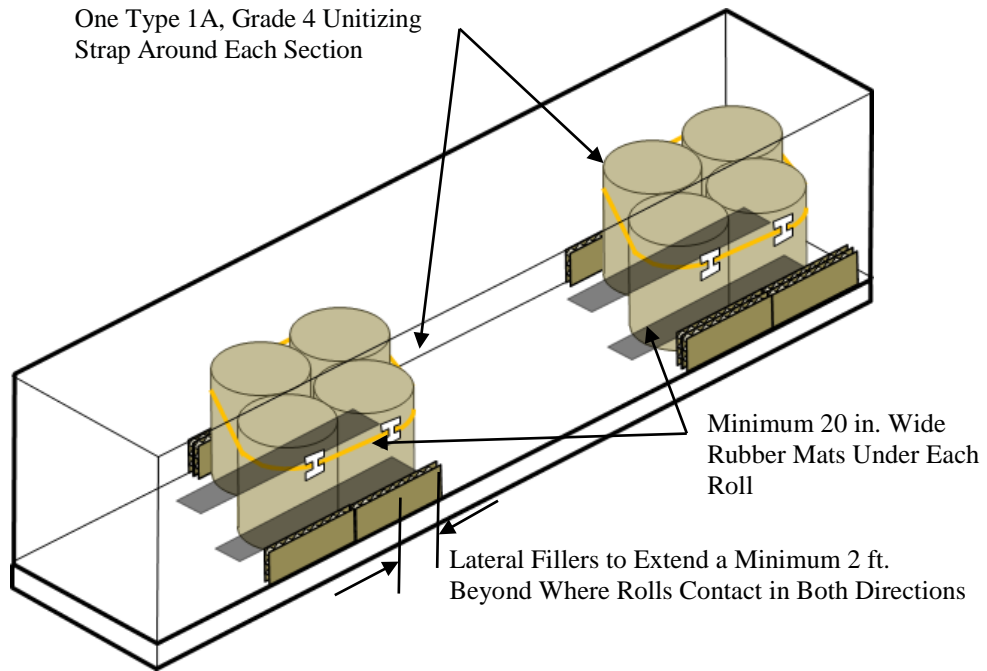


Figure 4.33

Method E-21

8 Roll Load Pattern (for Rolls Less Than 63 in. Wide)

General Information Series No. 799

46 in. to 57 in. Diameter Roll Paper on End Using Rubber Mats

(Revised Intermodal Loading Guide Method E-21)

General Information Series Publications

- 740 Doorway Protection for Baled paper in Boxcars (11/14)
- 749 50 in. Diameter Roll Paperboard in 50 ft. Cushioned Boxcars with Horizontal Airbags (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)
- 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)
- 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-23) (3/18)
- 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 Cased Goods Secured by S.A.M. D.I.D. Bags (Intermodal Loading Guide Method F-4 New) (5/18)
- 786 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) (6/18)
- 787 Universal Storage Containers Loaded in 53 ft. Intermodal Containers (ILG Method H-15 New) (6/18)
- 788 60 in. Diameter Roll Paperboard in 60 ft. Cushioned Boxcars with 12 ft. Wide Plug Doors (CCLG Part 2, 8.3.7.2) (6/18)
- 790 58 in. Diameter Roll Paperboard in 50 ft. Cushioned Boxcars with 12 ft. Wide Plug Doors (CCLG Part 2, 8.2.5.8 Revised) (6/18)
- 791 DRUM-PAK® Dunnage for Open Head Drums in Cushioned Boxcars (CCLG Part 7, Section 6.9) (6/18)
- 792 Double Layer Loads of Hazardous or Nonhazardous Materials Secured with Cordstrap® Barriers in a 20-ft Container (ILG Method I-4) (7/18) (Cancels GIS 779)
- 793 Hazardous or Nonhazardous Loads Secured with Cordstrap® Barriers in 40-ft Containers (ILG Method I-5HM) (8/18) (Cancels GIS 780)
- 794 Peat Moss, Bagged or Baled, in Cushioned Boxcars (CCLG Part 8, Section 6.6, New) (8/18)
- 795 Coiled Metal on Platforms/Skids in Boxcars (CCLT Part 9, Section 3.2, New) (8/18)
- 796 58 in. Diameter Roll Pulpboard with an Incomplete Layer (CCLG Part 2, Section 5.8 New) (8/18)
- 797 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 (ILG Method E-19, Revised) (11/18)
- 798 Intermodal Loads Secured with TyGard DS™ (Intermodal Loading Guide Method B-9) (11/18)
- 799 46 in. to 57 in. Diameter Roll Paper on End Using Rubber Mats (Revised Intermodal Loading Guide Method E-21) (12/18)