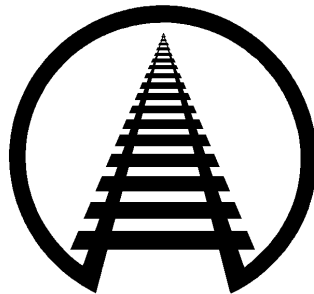


General Information Series No. 842

52 in. Diameter Roll Paper Loaded in 50 ft. Cushioned Boxcars with Plug Doors

(CCLG Part 2 (12/19); Section 6.2 (Revised); Section 7.7 (Revised);
Section 7.11.5 (Revised); Table 7.1 (Revised); Pattern 8-50-52-22-1 (New))

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



Issued
June 2020

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

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52 in. Diameter Roll Paper in 50 ft. Cushioned Boxcars with Plug Doors

The General Rules relating to personal safety and the safe operation of trains, contained in AAR Circular Nos. 42-N 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This approval may be withdrawn if the loads using these methods exhibit consistent load failure during actual shipments.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 Closed Car Loading Rules Manager, dpls@aar.com.*

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

Cars must be inspected by shipper at loading point to verify that cars are in suitable condition. Car interiors must have, but are not limited to, sound roofs, sides, floors, and endwalls; and operable, snug-fitting doors. Any exception is cause for the car to be rejected.

It is important that boxcars are clean and free from protruding nails, brads, staples, temporary anchor plates, fragments of steel strap, old blocking etc. Some projections of lining or anchor devices may require covering with sheets of corrugated fiberboard taped in place.

Referenced paragraphs may be found in the Closed Car Loading Guide (CCLG) Part 2, *Best Practices for Loading Roll Paper in Railcars*, December 2019.

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52 in. Diameter Roll Paper in 50 ft. Cushioned Boxcars with Plug Doors

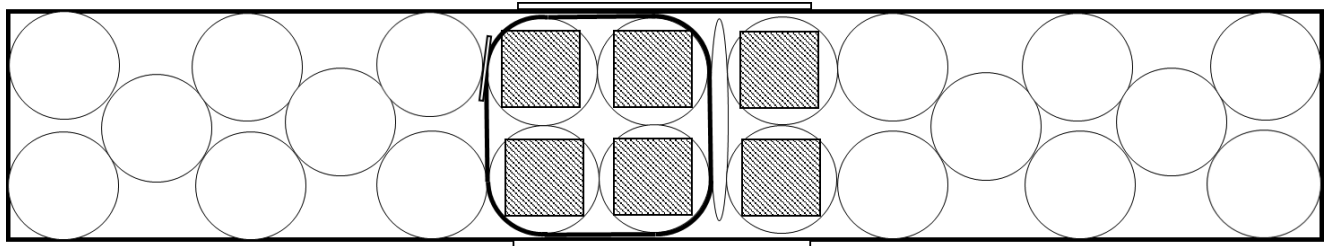
This method is only applicable to paper rolls 52 in. diameter loaded in 50 ft. long cushioned boxcars with a maximum 12 ft. doorways and may not be suitable for other paper grades or diameters.

1. Load rolls in a 2-1-2 loading pattern in each end of the boxcar.
2. Use wall liner and lengthwise void filler as needed to prevent roll damage and reduce lengthwise void in the doorway area. Use panels with a minimum crush strength of 2,250 psf. Reference CCLG Part 2, Section 5.6.2 – Lengthwise Void Filler and Section 5.6.4 – Wall Lining.
3. Doorway rolls are loaded in a six-roll inset pattern with doorpost rolls a minimum of 50% behind the doorpost.
4. Unitize four rolls with an AAR approved Type 1A Grade 5, nonmetallic strap. Use one unitizing strap per layer. If the doorway rolls are a single layer or the rolls' width/height exceed 36 in., use two straps per layer. Reference CCLG Part 2, Section 7.7.3 - Encircling Strapping, for detailed information on strap application.
5. If the doorway area is two or more layers, position a 2 mm rubber mat between each layer of the doorway stacks (six stacks). Rubber mats should cover a minimum of 50% of the surface area of the rolls. Do not use mats on the floor beneath the rolls in the doorway.
6. Use air bags installed horizontally, one per layer, but not less than 36 in. in width, of the appropriate level for the weight of the load. Air bags installed horizontally are to be 108 inches in length (or width when installed horizontally). Use buffer sheets to protect the bags from pinch points between roll layers. Inflate to 8.0 psi or per manufacturer's recommendation. Check each air bag 30 minutes after inflating and re-inflate as necessary to proper inflation pressure.

8-50-52 50 ft Car—52 in. Diameter Rolls

Load Plan Number	Car Size	Floor Spots	Securement	Paragraph Reference Number
8-50-52-22-1	50'6" x 9'6"	22	Strapping with Horizontal Dunnage Bags	5.6 Void Fillers 6.2 - Horizontal Airbags 7.7 – Encircling Roll Strapping

8-50-52-22-1 52 in. Diameter 50-6 x 9-6 Railcar Strapping with Horizontal Dunnage Bags 22 Floor Spots



Suitable Door Types	Doorway Protection	Maximum Door Width (ft)	Suitable Draft Gear Type
Single plug	7.7 – Encircling Roll Strapping	12	Cushion Underframe

Reference paragraph 5.6 – Void Fillers, 6.2 - Horizontal Airbags, 7.7 - Encircling Roll Strapping

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Section 6.2 Horizontal Airbags (Revised)

6.2.3. Airbags installed horizontally should be at least 6 in. greater than twice the roll diameter in height (or width when installed horizontally).

Note: When airbags are installed horizontally for 52 in. diameter rolls, they are to be 108 inches in length (or width when installed horizontally). See loading pattern 8-50-52-22-1.

Section 7.7 Encircling Roll Strapping (Revised)

7.7.3 Encircling Straps with Rubber Matting Between Layers

7.7.3.1 Encircling strapping may be applied in the following loading patterns:

- 40 in. to 52 in. diameter roll paper in 50 ft. cushioned boxcars having maximum 12 ft. doorways
- 42 in. diameter roll paper in 60 ft. cushioned boxcars having maximum 12 ft. doorways
- 45 in. to 51 in. diameter roll paper in 60 ft. cushioned boxcars having maximum 16 ft. doorways
- 6-roll or 8-roll inset loading methods with horizontal airbags.

7.7.4 X-Banding

7.7.4.1 X-banding may be applied in the following loading patterns:

- 40 in. to 52 in. diameter roll paper in 50 ft. cushioned boxcars having maximum 12 ft. doorways
- 42 in. diameter roll paper in 60 ft. cushioned boxcars having maximum 12 ft. doorways
- 45 in. to 51 in. diameter roll paper in 60 ft. cushioned boxcars having maximum 16 ft. doorways
- 6-roll or 8-roll inset loading methods with horizontal airbags.

7.7.5 Figure-8 Banding

7.7.5.1 Figure-8 banding may be applied in the following loading patterns:

- 40 in. to 52 in. diameter roll paper in 50 ft. cushioned boxcars having maximum 12 ft. doorways
- 42 in. diameter roll paper in 60 ft. cushioned boxcars having maximum 12 ft. doorways
- 45 in. to 51 in. diameter roll paper in 60 ft. cushioned boxcars having maximum 16 ft. doorways
- 6-roll or 8-roll inset loading methods with horizontal airbags.

7.11.5 Rubber Mats – Between Layers (Revised)

7.11.5.2 Rubber mats applied between layers for roll diameter 42 in. to 52 in. should cover a minimum 50% of the surface area of the rolls. Do not use rubber mats on the floor beneath the rolls in the doorway for these roll diameters. Reference section 7.7.3 for information unitizing straps.

Table 7.1

Roll Diameter	Doorway Area	Paper Type	Boxcar	Underframe	Max Door Size	Rubber Mat Application	Loading Notes
52	Multi-layer	Roll paper	50 ft	Cushioned	12 ft plug door	Between layers	Unitizing strapping required

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52 in. Diameter Roll Paper in 50 ft. Cushioned Boxcars with Plug Doors

General Information Series Publications

- 754 Wood Bins Braced by Disposable Inflatable Dunnage Bags and Lengthwise Fillers (CCLG Part 7) (10/16)
- 755 55-Gallon Steel Drums on Pallets Secured with Cordstrap® Barriers in 40-ft ISO Containers (Nonhazardous Materials only) (ILG Method I-6) (11/16)
- 759 Revision to Paragraph 2.5, Distribution of Weight Crosswise in Cars (CCLG Part 10) (2/17)
- 760 Incomplete Layers of Plywood Secured in Boxcars with Nonmetallic Straps (CCLG Part 3) (2/17)
- 765 Wood Bins Braced by Disposable Inflatable Dunnage Bags and Shock-Gard® Lengthwise Void Fillers (CCLG Part 7) (7/17)
- 768 Gearboxes Mounted on Sleds in 20 ft. Long ISO Containers (ILG Method E-23) (9/17)
- 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 (ILG Method E-23) (3/18)
- 781 Wood Bins Braced by Disposable Inflatable Dunnage Bags and BIN-PAK or M-PAK Lengthwise Void Fillers (CCLG Part 7) (4/18)
- 782 Plastic Intermediate Bulk Containers with Disposable Inflatable Dunnage Bags and Lengthwise Void Fillers – Schoeller Allibert (CCLG Part 7) (4/18)
- 783 Cased Goods Secured by Tuff Wrap™ D.I.D. Bags (ILG Method F-4) (4/18)
- 784 Cased Goods Secured by S.A.M. D.I.D. Bags (ILG Method F-4) (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) (6/18)
- 787 Universal Storage Containers Loaded in 53 ft. Intermodal Containers (ILG Method H-15) (6/18)
- 791 DRUM-PAK® Dunnage for Open Head Drums in Cushioned Boxcars (CCLG Part 7) (6/18)
- 794 Peat Moss, Bagged or Baled, in Cushioned Boxcars (CCLG Part 8) (8/18)
- 795 Coiled Metal on Platforms/Skids in Boxcars (CCLG Part 9) (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) (11/18)
- 798 Intermodal Loads Secured with TyGard DS™ (ILG Method B-9) (11/18)
- 799 46 in. to 57 in. Diameter Roll Paper on End Using Rubber Mats (ILG Method E-21) (12/18)
- 800 54 in. Diameter Paperboard on End Using Rubber Mats (ILG Method E-22) (12/18)
- 803 Stretch Film Roping of Steel Coils and Coil Loading Methods for Railroad Shipments (CCLG Part 9) (12/18)
- 810 Reinforced Longitudinal Void Fillers for Plastic, Metal or Wood Intermediate Bulk Containers with Tomato Products (CCLG Part 7) (4/19)
- 811 Plastic Intermediate Bulk Containers with Disposable Inflatable Dunnage Bags - Horen (CCLG Part 7) (6/19)
- 814 Bales of Wood Pulp in Boxcars (CCLG Part 8) (6/19)
- 815 Doorway Protection for Baled Paper and Wood Pulp Products in Boxcars (CCLG Part 8) (6/19)
- 817 Case Goods Secured by Stopack Max Blocker D.I.D Bags (ILG Method F-5) (9/19)
- 822 Palletized or Crated Auto Parts Secured by Web Strap Assemblies in 53 ft. Containers (ILG Method H-16) (9/19)
- 823 Plywood and Similar Panels Products – Loading Doorway Areas (CCLG Part 3) (10/19)
- 824 Case Goods Secured by Stopack Blocker D.I.D Bags (ILG Method F-6) (10/19)
- 825 Loading Bundled Ingots with Open Doorways (CCLG Part 10) (10/19)
- 826 Building Brick in Closed Cars – Incomplete Layer Securement – Woodpack Walls (Litco) (CCLG Part 5) (11/19)
- 827 Drum Layer Separators for Intermodal Shipments (Hazardous or Nonhazardous) (ILG Methods: B-3; B-8; B-9 (GIS 798); G-2; G-3; I-1; I-2; I-3; & I-4 (GIS 792)) (11/19)
- 828 44 in. Diameter Paper Roll in 50 ft. Cushioned Boxcars Using Horizontal Airbags (CCLG Part 2) (12/19)
- 829 39 in. Diameter Paper Rolls in 50 ft. Cushioned Boxcars Using Vertical Airbags (CCLG Part 2) (12/19)
- 830 72 in. Diameter Paper Rolls Loaded in 60 ft. Cushioned Boxcars with 16 ft. Double Plug Doors Secured with Double-S Straps (CCLG Part 2) (2/20)
- 831 Metal Intermediate Bulk Containers with Disposable Inflatable Dunnage Bags and Lengthwise Void Fillers – Goodpack USA (CCLG Part 7) (3/20)
- 832 47 in. Diameter Roll Paper Loaded in 60 ft. Cushioned Boxcar with Plug Doors. (CCLG Part 2) (4/20)
- 833 Double Layer Loads of Hazardous or Nonhazardous Materials Secured with Cordstrap® Barriers in a 20-ft Container (ILG Method I-4) (4/20)
- 834 Hazardous or Nonhazardous Loads Secured with Cordstrap® Barriers in 40-ft Containers (ILG Method I-5) (4/20)
- 835 Double Layer Loads of Nonhazardous Materials Secured with HFLASH RHS Securement System in a 20-ft Container (ILG Method I-7) (4/20)
- 836 Wood Bin Containers for Shipping Liquid or Paste Products in Boxcars (CCLG Part 7) (5/20)
- 837 54 in. Diameter Roll Paper Loaded in 50 ft. Boxcars (CCLG Part 2) (5/20)
- 838 Unitizing with Stretch Wrap or Film, Stretch Wrap Roping, Shrink Netting or Shrink Film (CCLG Part 1; CCLG Part 6) (6/20)
- 839 Contour Pad Application with Roll Paper (CCLG Part 2) (6/20)
- 840 79 in. Diameter Paper Rolls Loaded in 60 ft. Cushioned Boxcars with 16 ft. Double Plug Doors Secured with Double-S Straps (CCLG Part 2) (6/20)
- 841 60 in. Diameter Roll Paper Loaded in 60 ft. Cushioned Boxcars with 12 ft. Plug Doors (CCLG Part 2) (6/20)
- 842 52 in. Diameter Roll Paper Loaded in 50 ft. Cushioned Boxcars with Plug Doors. (CCLG Part 2) (6/20)