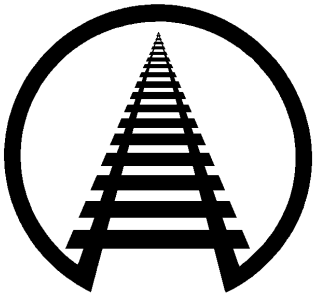
General Information Series No. 849

72 in. Diameter Roll Paper Loaded in 60 ft. Cushioned Boxcars with 16 ft. Double Plug Doors Secured with Double-S Straps

(CCLG Part 2 (12/19): 6.3.7.5. (Revised); 7.9.4 (Revised); Pattern 8-60-72-12-2 (Revised))

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



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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This approval may be withdrawn if the loads using these methods exhibit consistent load failure during actual shipments.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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This method is only applicable to 72 in. diameter paper rolls loaded in 60 ft. long cushioned boxcars with 16 ft. double plug doors. Most paper shipped via rail is wrapped or the outer plies are considered the protective wrap. With this loading pattern and securement method damage may occur to the outer plies or roll wrap.

6.3.7.5 Blocking Rolls (CCLG Part 2 – Revised)

6.3.7.5.1 72 in. & 79 in. diameter rolls may be blocked by 6 in. blocking if the follow conditions are met. See Figure 1.

- Rolls are loaded in a 60 ft. cushioned boxcar with double plug doors.
- Doorway rolls are secured using the Double-S strap load securement method. Refer to paragraph 7.9.4 & 7.9.5
- The incomplete layer is loaded in both ends of the cars with the blocking rolls in the middle or doorway area of the boxcar for 72 in. roll paper.
- The incomplete layer is loaded in both ends of the cars with the single layer in the middle or doorway area of the boxcar for 79 in. roll paper.
- Risers must be 55 in. x 55 in. square pads with 6 inches of height with a crush strength of 9,000 lb/ft^2. Risers must be applied as a single riser and cannot be stacked in the doorway area. For riser application refer to paragraph 5.7 “Risers”.

7.9.4 Anchored Double-S Straps: 72 in. Diameter Rolls in a 60 ft. Cushioned Boxcar with 16 ft. Double Plug Doors (CCLG Part 2 - Revised)

7.9.4.1 Load rolls in a 1-1 offset loading method though the boxcar. Load rolls tight with three points of contact with either the endwalls, sidewalls, or other roll stacks.

7.9.4.2 Rolls may be multi-stacked in the ends of the boxcar and in the doorway area of the boxcar. Incomplete layers must be blocked by a minimum of 6 inches. Refer to paragraph 6.3.7.5 “Blocking Rolls” for additional information.

7.9.4.3 To assist in maintaining roll paper stack alignment and to help prevent roll override and roll edge damage, it is recommended to use risers or different roll heights to break the strata line. Use appropriate size risers or different roll heights at floor spots midway between the ends of the car and doorway area. See paragraph 5.7.12 “Breaking the Strata Line”.

7.9.4.4 Rolls loaded at the doorpost floor spot must contact the doorpost or sidewall and be loaded as far into the boxcar as the pattern allows.

7.9.4.5 Ensure doorway rolls are not contacting either door and are loaded centered in the railcar. Doorway rolls must contact the rolls at the doorpost, but a void may exist between the two doorway rolls. Doorway rolls must have the same number of layers and have similar roll stack heights to correctly apply the Double-S strapping.

7.9.4.6 Each Double-S strap is applied as one continuous strap thru diagonally opposite front and back doorway anchors that creates an S-pattern between the two doorway rolls. Straps should be threaded through doorpost anchors that are the same height above the floor at both anchor points. Space straps vertically at approximately equal intervals as anchor positions permit.

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7.9.4.7 If doorway rolls are a single layer, apply four AAR approved Type 1A, Grade 5 nonmetallic straps. in a Double-S configuration. See Figure 1.

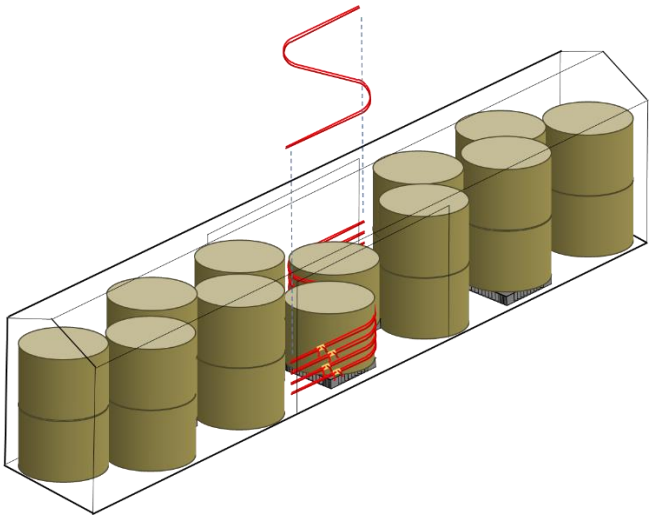

Figure 1
Double-S strapping – single layer in the doorway

7.9.4.8 If doorway rolls are multiple layers, apply three straps per layer of AAR approved Type 1A, Grade 5 nonmetallic straps in a Double-S configuration. See Figure 2. Doorway areas with double layer rolls will have a total of six straps and doorway areas with triple layer rolls will have a total of nine straps. For the top roll layer ensure that the top and middle strap are applied to contact the upper 50% of the roll height.

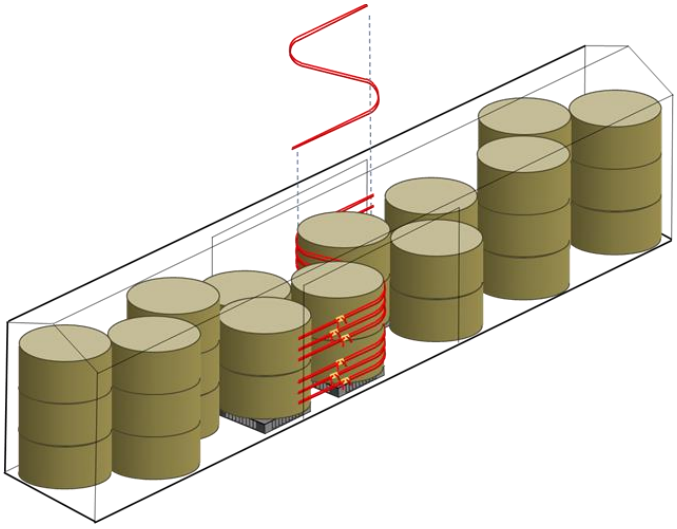

Figure 2
Double-S strapping – multiple layers in the doorway

7.9.4.9 Connect straps using a ladder buckle in accordance with the manufacturer's instructions. Straps must be fully tensioned using the correct tensioning tools per manufacturer's instructions. It is recommended to use a pneumatic or battery powered tension device.

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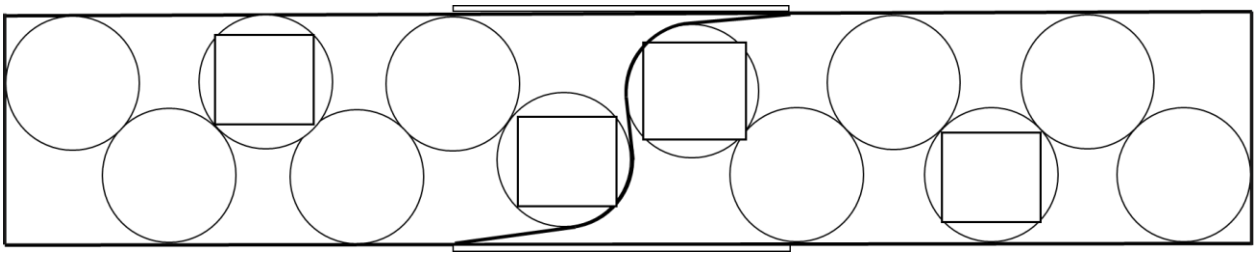
7.9.4.10 Straps hangers must be applied to the doorway rolls to maintain strap alignment on the rolls.

8-60-72 60 ft Car—72 in. Diameter Rolls

Load Plan Number	Car Size	Floor Spots	Securement	Paragraph Reference Number
8-60-72-12-2	60’9” x 9’6”	12	Anchored S-strap	6.3.7.5, 7.9.4

8-60-72-12-2 72 in. Diameter 60-9 x 9-6 Railcar Double-S Straps 12 Floor Spots



Suitable Door Types	Doorway Protection	Maximum Door Width (ft)	Suitable Draft Gear Type
Double Plug	7.9	16	Cushion Underframe

Reference paragraph 6.3.7.5, 7.9.4

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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)
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 Stopak 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)
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 HLASH 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)
843 Doorway Protection for Baled Paper and Wood Pulp Products in Boxcars (CCLG Part 8) (7/20)

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844 46 in. Diameter Roll Paper Loaded in 50 ft. Cushioned Boxcars with Plug Doors. (CCLG Part 2) (7/20)
845 Roll Paper in Boxcars with Doorway Rolls on Risers and Rubber Mats (CCLG Part 2) (7/20)
846 Securing Incomplete Layers of Paper Rolls (CCLG Part 2) (7/20)
847 50 in. Diameter Roll Paper in 50 ft. Boxcars – 21 & 22 Floor Spots (CCLG Part 2) (7/20)
848 Securing Incomplete Layers of Paper Rolls (CCLG Part 2) (7/20)
849 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) (7/20)