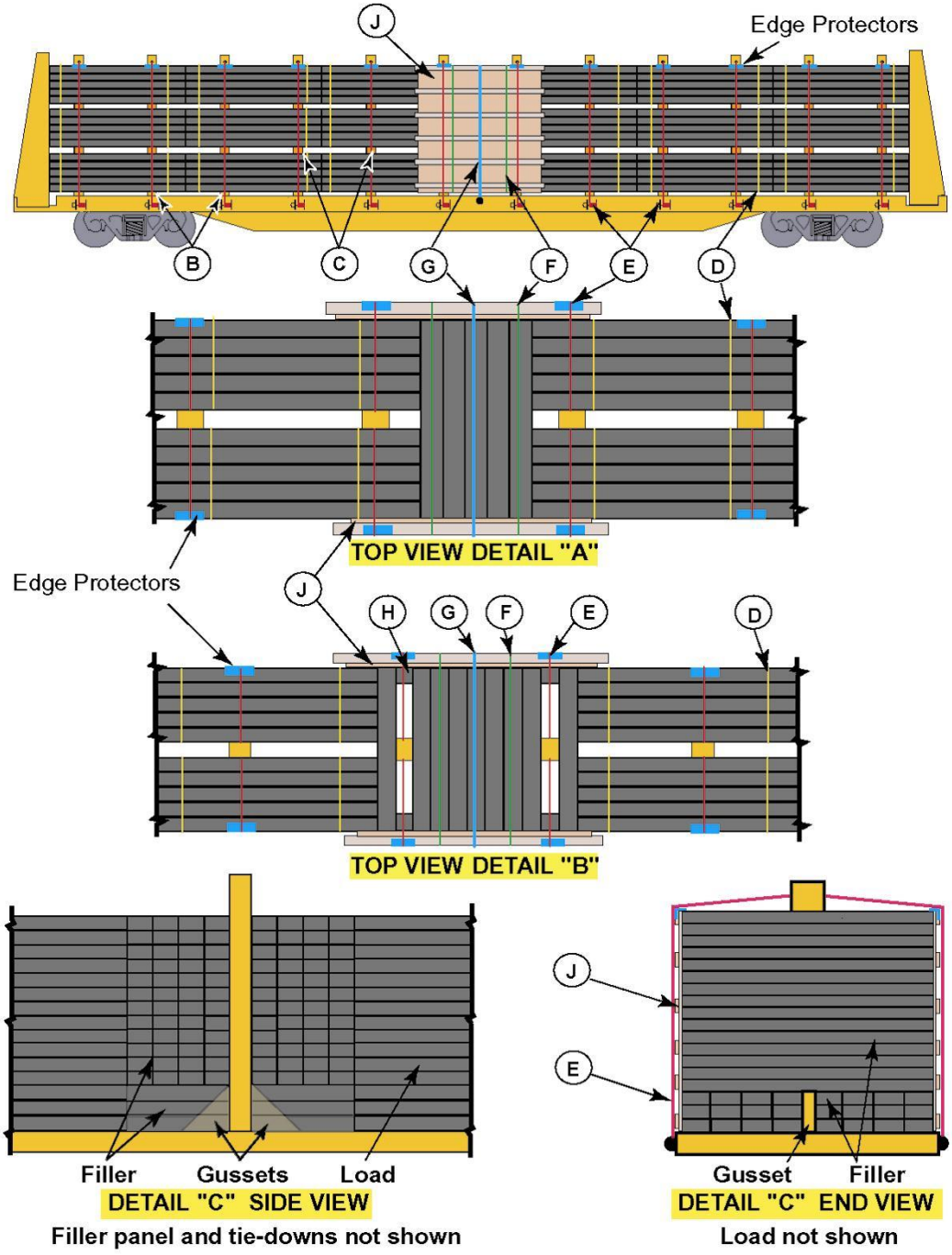
Railway Association of Canada

RAILROAD TIES, TREATED OR UNTREATED 8-FT LONG AND OVER PACKAGED-FLATCARS WITH CENTER A-FRAME, PERMANENT END BULKHEADS AND CABLE TIE-DOWN SYSTEM

RAC 15102

New 07-2003



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RAC 15102 (continued)
New 07-2003

Item	No. of Pcs.	Description
A		Vacant
B	Minimum 2 per each bottom layer package.	Bearing pieces: cars are equipped with permanent floor bearing pieces wedged 90 degrees to the A-frame.
C	Minimum 2 per package (Use optional)	Separators: lumber, minimum 2 in. x 4 in., width must be greater than height. All separators in a layer must be of equal height and in one piece. Locate each approximately 12 in. to 18 in. from each end of package. Separators may be attached to top or bottom of packages with Item E package bands.
D	2 per package.	Package bands: 1 1/4 in. × .029 in. high-tension bands. Locate each band about one-fourth-package length inward from each end of package.
E	Minimum of 14 per load	Cables: 3/8 in. dia. minimum 8,800 lbs. breaking strength. Cable assemblies must be equipped with edge protectors. Prior to tightening, there must be a minimum of 2 1/2 wraps of cable around the winch drum. When practical, all cables must be used, and must be free of kinks and tangles. Tension to be applied with the use of an 18 in. bar or ¾ in. ratchet. Cables are to be secured to A-frame in slot nearest to top of package.
F	2 per void fill	Encircling Bands: 1 1/4 in. × .029 in. high-tension bands. Locate each band about one-fourth-panel length inward from each end of filler panel encircling the void fill.
G	1 per void fill	Tie-down band: 2" band is used to secure void fill to car in addition to cable tie-downs.
H	2 per void	Vertical stabilizers: 1 tie cut to fit on each side of a post creating a void (see DETAIL" B") within a load. Vertical stabilizers should be nailed to filler panel on each side of load.
J	1 per side	Filler Panel: 5/8 in. plywood sheets reinforced with six 2x4's to cover full width and height of void. Both plywood and 2x4's must be nailed to ties.

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RAC 15102 (continued)

New 07-2003

Item	No. of Pcs.	Description
Alt B	Min. 2 per each bottom layer package 8 ft long or less. Add 1 for each additional 4 ft..	**Alternate Item B-For cars not equipped with permanent bearing pieces.** Bearing pieces: lumber of one piece, preferably rough. Width must be 2 in. greater than height and the length equal to width of bottom package. Locate approximately 18-24 in. from each end of package with remaining pieces equally spaced between.

NOTES:

1. Packages must be loaded end to end and the longitudinal void, if any, must be in center of load and kept to a minimum.

2. Should the total longitudinal void space between bulkheads exceed 24 inches but less than 84 inches, a filler assembly must be used to fill the void. The void assembly consists of treated ties loaded laterally on the deck. Plywood is attached to ties adjacent to the void fill and nailed to the ties with 3-inch common nails, six 2" x 4" pieces of lumber to be used to strengthen the plywood and nailed to the plywood and ties with 4-inch common nails. Plywood and 2x4's are banded to load with two 1 ¼ in. bands encircling the load. One 2 in. band must be used to secure void fill to car in addition to cable tie-downs. (See DETAIL" A" and DETAIL" B")

3. Voids created by center post gussets should be filled as per DETAIL "C". On each side of the gussets, ties or appropriate lumber loaded longitudinally should fill the void up to the gussets level then ties in one piece should be loaded laterally on top to fill the void between piles up to height of load.

4. Partial layers are not permitted in this diagram. If there are insufficient packages to complete the top layer, the size of the packages must be rearranged so as to fill out the layer space between the bulkheads.

5. All ties in a package must be of the same dimension.

6. Packages must not exceed 36 in. in height and 48 in. in width.

7. Packages must be placed tight against A-frame to prevent loosening of cables.

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NOTES:

8. Height of load must not exceed height of A-frame.

9. All packages in a layer must be of equal height.

10. All layers on the same side of the center partition must be of equal width.

11. Unless permission has been received from the car owner in writing, the car surfaces are to be protected from creosote contamination. Polyethylene sheeting or other suitable material may be used as an option to protect steel surface from contact with creosote. Protective material must be applied in such a fashion as to avoid displacement. Excess protective material must be removed to avoid extending beyond the car side and presenting a hazard during transit.

12. Load weight distribution must be in accordance with AAR Genera Rule 3.5.2 indicating the percentage of deck length utilized versus correspondent permissible percentage of load limit for that length, see table below.

Allowable load limit on reduced deck length utilized

Percent of deck length utilized	*100*	*75*	*50*	*25*
Percent of load limit permitted	*100*	*75*	*50*	*25*

See General Rules for further details