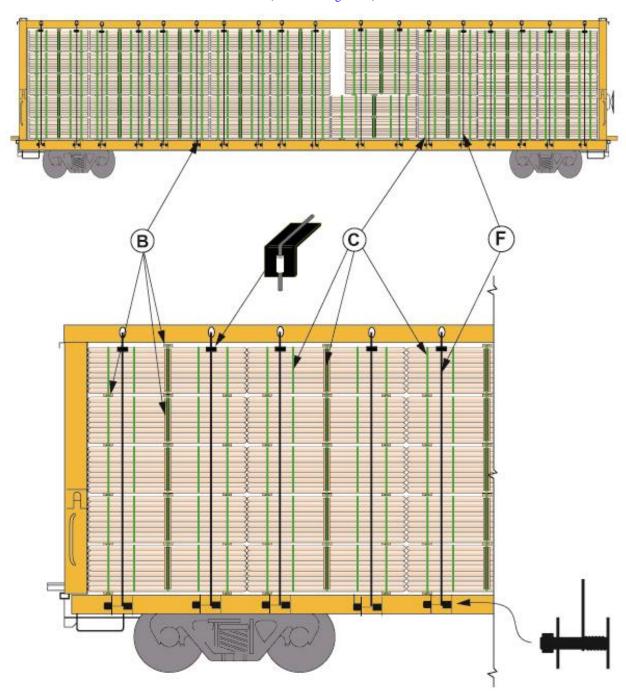


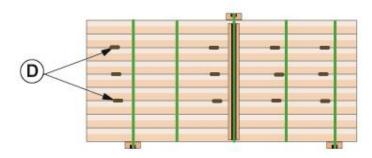
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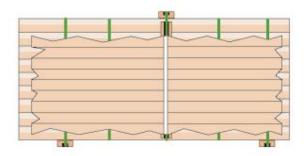


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Package and Unit Dimension

Total maximum width including dunnage 52 inches wide. Total maximum height including dunnage 36 inches high. Minimum unit length <u>84 inches</u>.

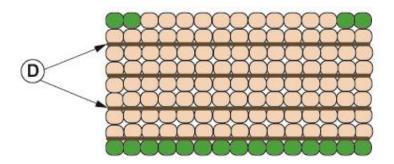


Package and Unit Make Up

Minimum package size within a unit 42"
Minimum Unit (two end to end packages) length 84 inches

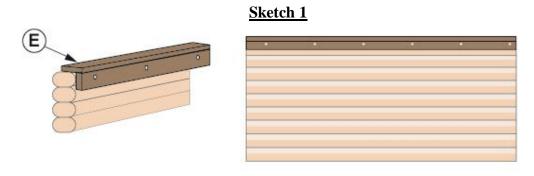


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End configuration

End configuration of unit is 15 pieces wide and a maximum of 9 pieces high Unit is made up by placing two packages onto a base of full length pallet material, also to add strength the two outside pieces in the top layer run full length as well (full length pieces marked with green)



Top corner cap

Each cap assembly to consist of two (2) pieces lumber, minimum 2 in. x 6 in.. Locate one (1) piece along the top outside edge of units (comprised of two end-to-end packages) in top layer, positioning the 4 in. width vertically. Make flush with top and ends of packages and secure to side of packages with 16-D nails spaced about every 24 inches. Locate second piece along top of packages and flush with the outside edge of the first piece forming a corner angle over unit. Secure top piece to edge of lower piece with 16-D nails spaced approximately apart as shown in drawings. (See note 6 for alternate).



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Item	No. of Pcs.	Description				
A		Vacant				
В	4 per unit	Grooved dunnage: lumber 2x3in. place two on the base, one on the outside face and one on the top unit. Top and side dunnage are placed at the point where the two packages in the unit meet. To be secured to unit by item C below.				
С	5 per unit	Package ties or unit bands; steel or polyester strapping with a minimum breaking strength of 1275 lbs. One band encircling the centre of the unit where the packages meet with two additional spaced evenly on either side of center of the unit.				
D	Min 2 required every second layer of package	Stickers lumber 1/8 in. thick length equal to width of packages. They must be of uniform thickness throughout.				
E	1 Cap per unit Sketch 1	Top corner cap: lumber 2 in. X 6 in. length equal to length of unit package. Each cap assembly to consist of two pieces, locate one piece along the top outside edge of one unit in top layer, positioning the 6-in. width vertically. Make flush with top and ends of packages and secure to side of packages with 16-D nails spaced about every 12 in. Locate second piece along top of packages and flush with the outside edge of the first piece, forming a corner angle over unit. Secure top piece to edge of lower piece with 16-D nails spaced approximately 24 in. apart as shown in drawings. Any top-layer package that is not fully protected by two Item D cables must be part of unit comprised of two packages, each protected by Item E. See Sketch 1. If unable to maintain two cables due to unit length, then corner caps must be applied. To facilitate the corner caps units will have to be rotated 180 degrees so that the side dunnage faces inboard. If face dunnage comes in contact with A Frame, then the side dunnage will have to be removed and unit re-strapped to hold the top dunnage in place. (See note 6 for alternate).				



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Item	No. of Pcs.	Description				
F	Min. 2 per top unit.	Tie Down Cables: 3/8 in. diameter, minimum of 8,800 lbs. breaking strength. Cable assemblies must be equipped with edge protectors. Prior to tightening, there must be a minimum of 2½ wraps of cable around the winch drum. 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 top package. If unable to maintain two cables on each top unit, due to unit length then corner caps Item E must be applied.				
Alt. F	Min. 2 per top unit.	Web tie-down: polyester webbing, 4 in. wide with a minimum breaking strength of 20,000 lbs. The web must be routed through the web guide closest to the top of the load, over the load, and then to the fixed winch on the side sill. The winch directly in line with the top-mounted anchor must be used. Thread at least 6 in. of webbing through the slot in the winch mandrel. Prior to tightening, there must be a minimum of 2 wraps of webbing around the winch mandrel. The strap is to be tensioned by the effort of one person using a winch bar 30 in. to 40 in. long. When practical, all straps must be used. If unable to maintain two web straps on each top unit, due to unit length then corner caps Item E must be applied.				

Notes and Additional Requirements:

- 1. Voids, if any, must not exceed 18 inches and placed as close as possible to center of load.
- 2. Load configuration is intended for riserless style center A Frame bulkhead flat cars with cushioned under frame only.



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- 3. This figure is intended for packaged lumber of 42 inches and greater made in to units of no less than 84 inches, when placed in the top layer, could result in less than two Item D cables or Alt D web straps protecting the unit. When less than two cables/web straps protect a top unit, top corner caps as per Item E must be applied.
- 4. To facilitate the application of corner caps to top units when required. Units will have to be rotated 180 degrees so that the side dunnage faces inboard. If side dunnage comes in contact with A Frame, then the side dunnage will have to be removed and unit re-strapped to hold the top dunnage in place.
- 5. Finished packages must have sides and ends square and must be composed of pieces of uniform length, width and thickness.
- 6. In lieu of item E "top corner caps" top packages that do not accommodate two Item F cables, Item E maybe substituted by one approved Type 1A Grade 7 strap with ladder buckle style encircling packages on both sides of center beam. Strap to be position one foot from the ends packages they are unitizing. (See detail C).
- 7. Packages must be placed tight against A-frame to prevent loosening of cables in transit.
- 8. Packages must not exceed 36 inches in height including dunnage. All packages in same layer must be of equal height.
- 9. Bottom units must not overhang the car deck by more than one half the width of the outside board in bottom packages.
- 10. Width of units not to exceed 52 in. wide including side dunnage.
- 11. Height of load must not exceed height of A-frame.
- 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.

13. 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



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DETAIL C

