

MILITARY STANDARD
RAILCAR LOADING OF HAZARDOUS MATERIALS
BOMB, 2000 LB MK 84 MOD 3 (THERMALLY PROTECTED)
IN UNIT LOAD ADAPTER MK 79 MOD 0 WITH SADDLES
FLEET ISSUE UNIT LOAD

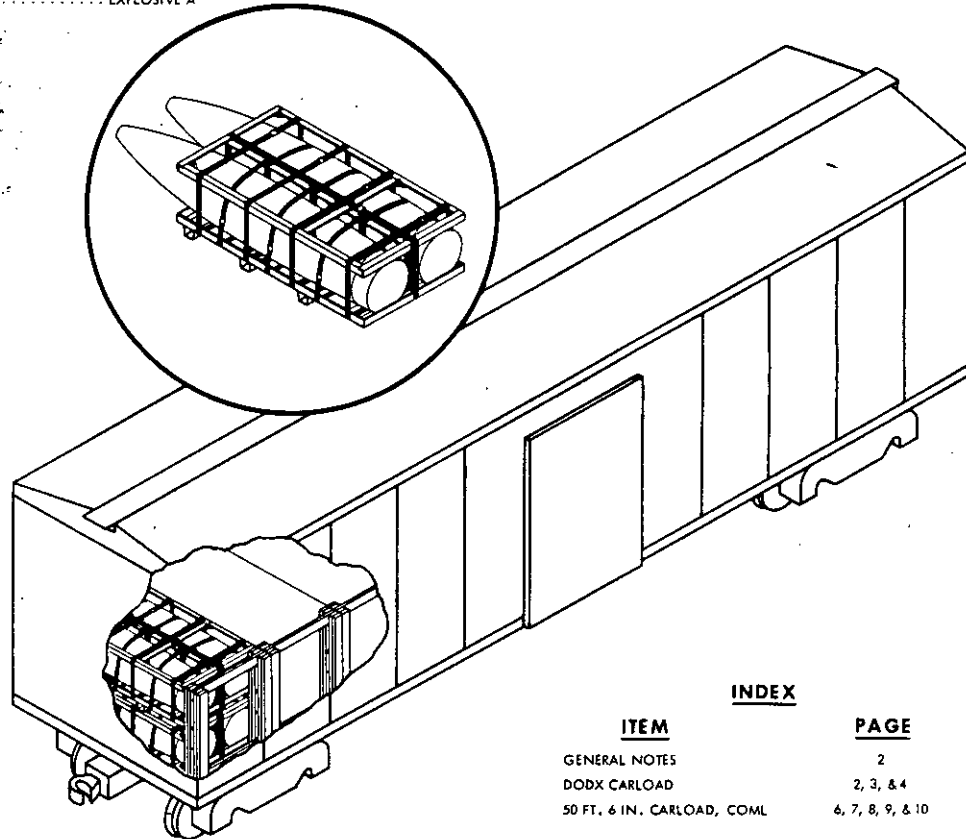
MIL-STD-1325-175
(NAVY)

14 JULY 1975

UNIT LOAD DATA

DODIC/NALC NO. 272

UNIT LOAD DRAWING WR-54/253
 WEIGHT (APPROXIMATE) 4124 LBS
 DIMENSIONS 99 L x 38 W x 24 5/8 H
 STACKING HEIGHT 23 3/8
 CUBE 53.6 CU FT
 DOT HAZARD CLASSIFICATION EXPLOSIVE A



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DODX CARLOAD	2, 3, & 4
50 FT. 6 IN. CARLOAD, COML	6, 7, 8, 9, & 10

NOTES:

- UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.
- FOR CROSS REFERENCE TO ASSOCIATED PALLETIZING, TRUCK-LOADING AND CONTAINERLOADING MILITARY STANDARDS, REFER TO INDEX TO STANDARDS MIL-HDBK-236 (NAVY).

FSC 8140

**AUTHORIZED AND RELEASED FOR
 GENERAL USE.**

APPROVED BY BUREAU OF EXPLOSIVES

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NAVAL WEAPONS HANDLING LABORATORY
N A D EARLE, NEW JERSEY

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MIL-STD-1325-175 (NAVY)**GENERAL NOTES**

1. FOR GENERAL INFORMATION CONCERNING ORDERING, INSPECTING, AND PREPARING CARS, AND FOR DUNNAGING MATERIALS, DESIGN, AND INSTALLATION OF DUNNAGE SEE THE GENERAL DOCUMENT MIL-STD-1325 (NAVY) "RAILCAR LOADING OF HAZARDOUS MATERIALS".
2. WHEN PLANNING SHIPMENTS ORDER THE MINIMUM NUMBER OF CARS OF THE CAPACITY REQUIRED FOR THE SHIPMENT. UTILITY LOADER CARS SHALL BE SERIES DODX 28000.
3. LOADING PLANS SHOWN ARE FOR DODX UTILITY LOADER CAR WITH 50 FT 6 INCHES INSIDE LENGTH, 107 3/4 INCHES INSIDE WIDTH BETWEEN RAILS (111 INCHES INSIDE WIDTH BETWEEN SIDE WALLS), AND COMMERCIAL BOXCARS WITH 50 FT 6 INCHES INSIDE LENGTH, 110 INCHES INSIDE WIDTH.
4. THE "LOAD LIMIT" OF A CAR MUST NOT BE EXCEEDED NOR SHOULD THE RAILCAR BE LOADED SO THAT MORE THAN ONE-HALF OF THE "LOAD LIMIT" IS CARRIED BY ONE SET OF TRUCKS.
5. IF END WALLS OF CARS ARE NOT SQUARE THEY MUST BE SQUARED OFF BEFORE STARTING TO LOAD CAR.
6. THE LOAD CONSISTS OF 2000 LB MK 84 MOD 3 (THERMALLY PROTECTED) BOMBS PALLETIZED IN ACCORDANCE WITH WR-54/253.
7. THE UNIT LOADS ARE HANDLED AND LOADED WITH A SUITABLE FORK LIFT TRUCK.
8. UNLESS OTHERWISE SPECIFIED NAILING SHALL BE IN ACCORDANCE WITH MIL-STD-1325 (NAVY).
9. ALL STRAP JOINTS SHALL BE CRIMP-TYPE JOINTS MADE WITH A CRIMPING TOOL THAT DOES NOT CUT THE SEAL OR STRAP, RATHER THAN A TOOL THAT MAKES A NOTCH-TYPE JOINT. THE STRAPPING MUST BE IN ACCORDANCE WITH NAVSUP NOTICE 4642 DATED 21 APRIL 1971.
10. APPLICABLE MATERIAL SPECIFICATIONS:
 - DUNNAGE LUMBER - FED. SPEC. MM-L-751
 - NAILS - FED. SPEC. FF-N-105
 - STRAPPING - FED. SPEC QQ-S-781, TYPE I, HEAVY DUTY, CLASS A, DRY (UNLUBRICATED).
 - SEALS - FED. SPEC. QQ-S-781, STYLE III, HEAVY DUTY
11. AFTER BLOCKING AND BRACING HAS BEEN INSPECTED ATTACH SHIPPING DOCUMENTS INSIDE THE CAR IN AN ACCESSIBLE AREA, CLOSE AND SEAL BOXCAR DOORS, AND ATTACH APPLICABLE PLACARDS TO THE OUTSIDE OF CAR AS PRESCRIBED IN OP 2165 (VOL. 1).

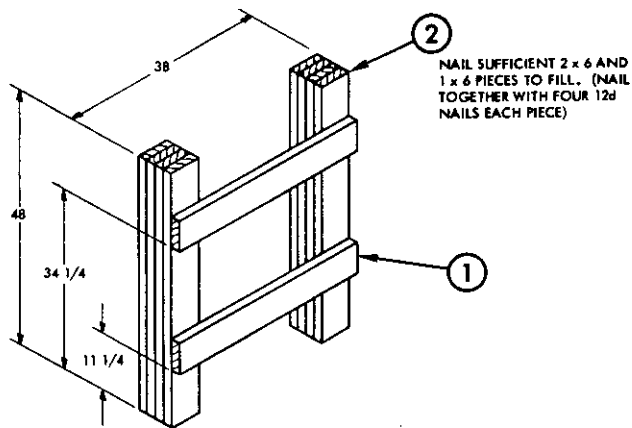
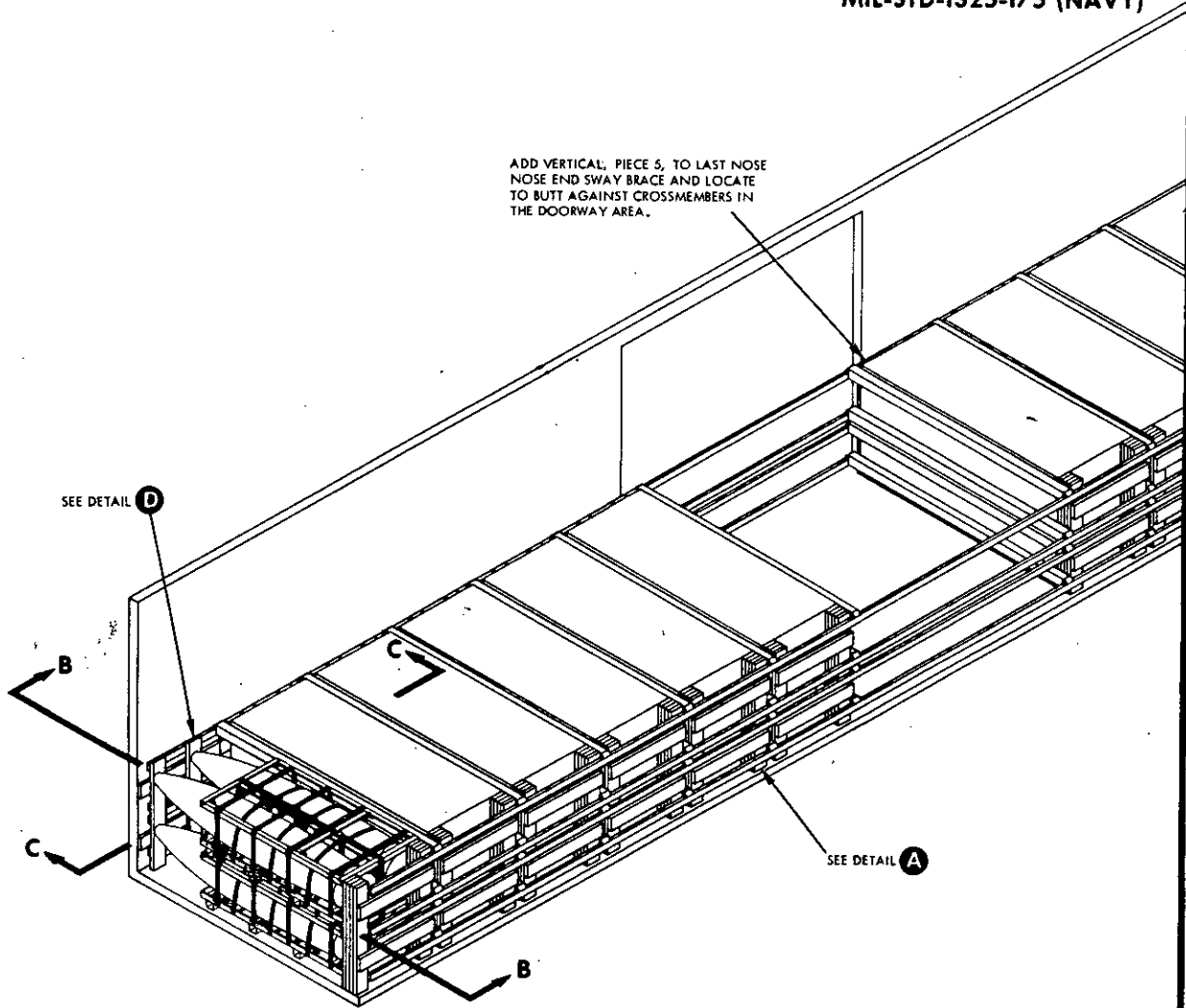
50 FT 6 IN. BOXCAR, DODX

1. THE CARLOAD CONSISTS OF 24 UNIT LOADS WHICH MUST BE LOADED AND DUNNAGED IN ACCORDANCE WITH THIS PROCEDURAL DRAWING.
2. A DETAILED DESCRIPTION AND OPERATING INSTRUCTIONS FOR THE UTILITY LOADER ARE CONTAINED IN OP 1750.
3. TO PREVENT UNUSED "DF" EQUIPMENT FROM BECOMING DISLODGED DURING TRANSIT OF DODX CARS SECURE IT AT ANY LOCATION IN THE BOXCAR WHICH WILL NOT INTERFERE WITH UNLOADING.
4. WHEN LESS THAN CARLOAD (LCL) QUANTITIES ARE REQUIRED TO BE SHIPPED IN DODX BOXCARS THE SAME PROCEDURES AND METHODS OF BLOCKING ARE APPLICABLE. ANY BAYS OR PORTION THEREOF MAY BE USED PROVIDING THE WEIGHT DISTRIBUTION REQUIREMENTS OF THE AAR ARE COMPLIED WITH, SEE MIL-STD-1325 (NAVY). EACH CROSSMEMBER WILL BE USED IN SUCH A MANNER THAT IT WILL RETAIN NOT MORE THAN 2500 LBS OF THE LADING.

5	NOSE END VERTICAL	2 x 4 x 48	2	1	3/JOINT	10d
4	NOSE END VERTICAL	2 x 6 x 48	24	SEE 3	-	-
3	NOSE END HORIZONTAL	2 x 6 x 42 1/8	24	2	3/JOINT	10d
2	BASE END VERTICAL	SEE FIELD NOTE	AS REQ'D	SEE 1	-	-
1	BASE END HORIZONTAL	2 x 6 x 38	24	4	3/JOINT	10d
PIECE NO.	DESCRIPTION	SIZE	NO. PCS REQD	NAIL TO	NUMBER	SIZE
					NAILS	
LIST OF MATERIALS AND NAILING DATA						

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ADD VERTICAL, PIECE 5, TO LAST NOSE
NOSE END SWAY BRACE AND LOCATE
TO BUTT AGAINST CROSSMEMBERS IN
THE DOORWAY AREA.



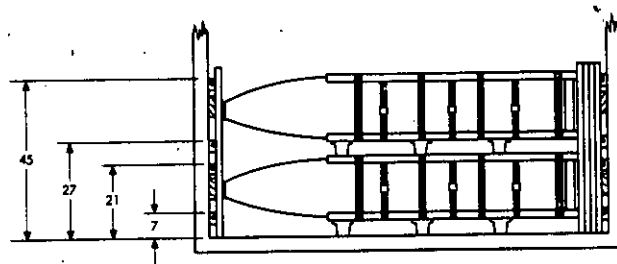
② NAIL SUFFICIENT 2 x 6 AND
1 x 6 PIECES TO FILL. (NAIL
TOGETHER WITH FOUR 12d
NAILS EACH PIECE)

DETAIL A
BASE END SWAY BRACE
12 REQ'D

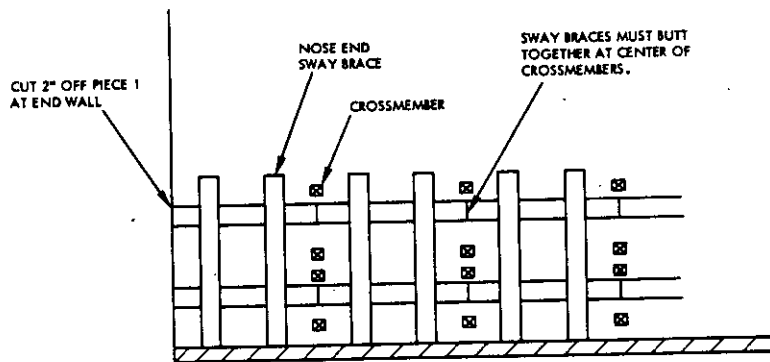
CARLOAD DATA

NUMBER OF UNIT LOADS	24
NUMBER OF CROSSMEMBERS REQ'D	48
LOAD WEIGHT (APPROXIMATE)	98,976 LBS
DUNNAGE WEIGHT (APPROXIMATE)	1,568 LBS
CARLOAD WEIGHT (APPROXIMATE)	100,544 LBS

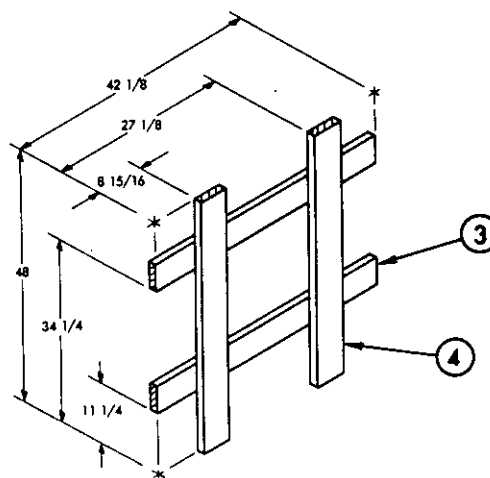
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SECTION B-B
SHOWING LOCATIONS OF WALL MEMBERS USED FOR CROSSMEMBERS



SECTION C-C
(SHOWN WITH UNIT LOAD & WALL MEMBERS REMOVED FOR CLARITY)



DETAIL D
NOSE END SWAY BRACE
12* REQ'D

* SEE SECTION C-C FOR ADJUSTMENT
OF PIECE 1 FOR END WALL BAYS

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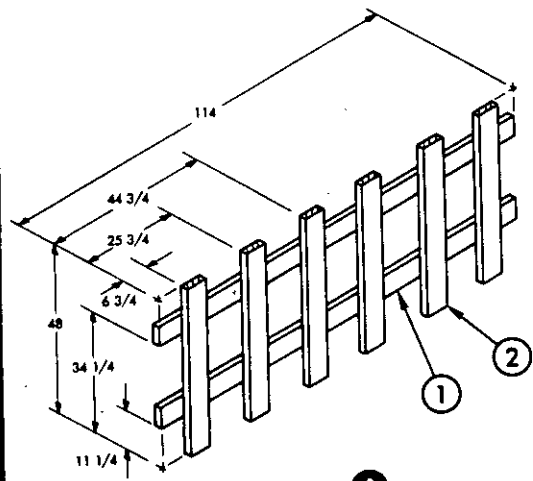
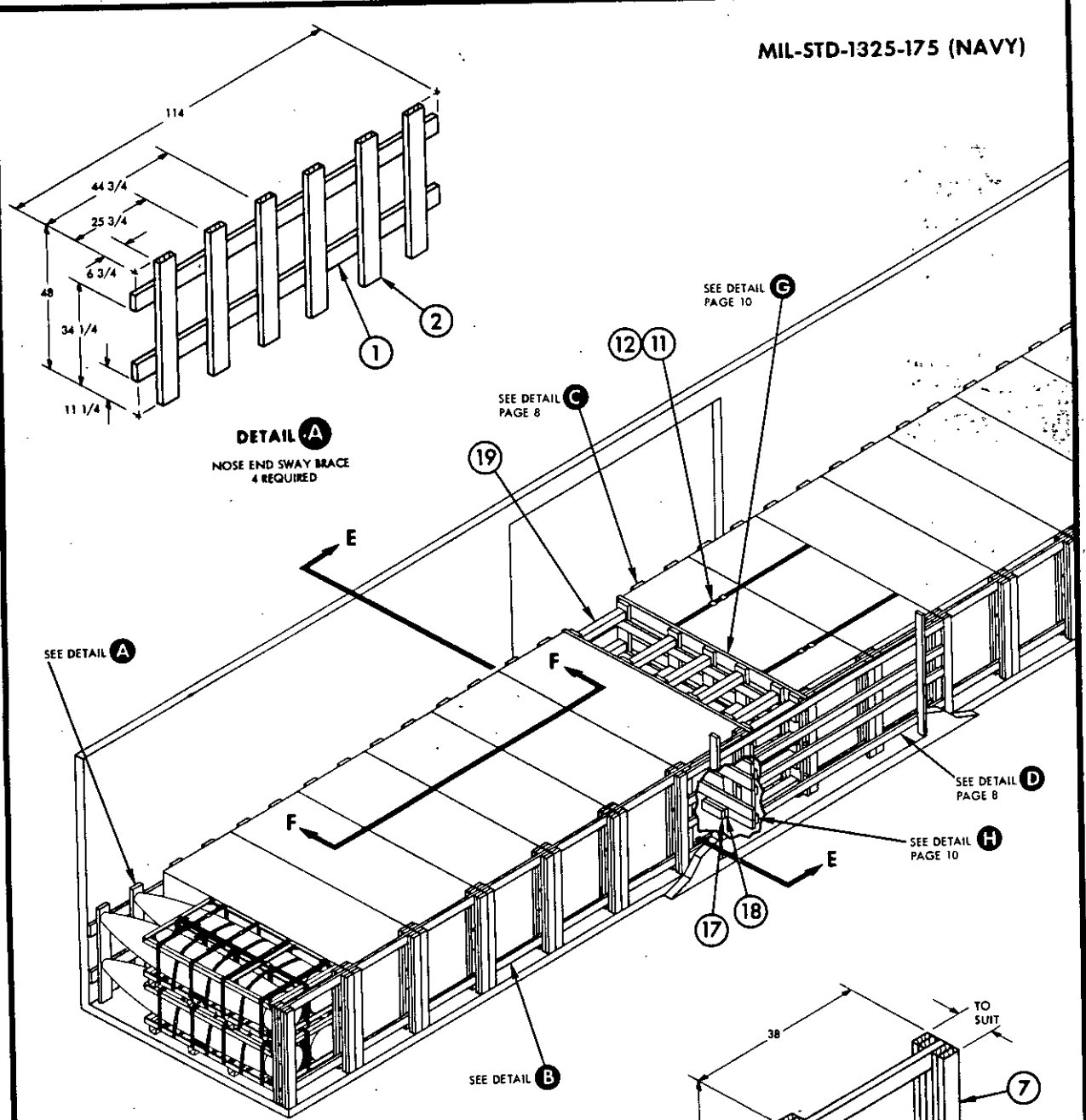
50 FT 6 IN. BOXCAR, COMMERCIAL

1. THE CARLOAD CONSISTS OF 30 UNIT LOADS WHICH MUST BE LOADED AND DUNNAGED IN ACCORDANCE WITH THIS PROCEDURAL DRAWING.
2. WHEN LESS THAN CARLOAD (LCL) QUANTITIES ARE REQUIRED TO BE SHIPPED IN COMMERCIAL BOXCARS AND A PARTIAL LAYER RESULTS, IN BOXCARS WITH WOOD SIDEWALLS, THE PARTIAL LAYER OF LADING SHALL BE BRACED BY MEANS OF END BRACING AND/OR PARTIAL LAYER BRACING CONSTRUCTED IN ACCORDANCE WITH WR-52/100. SELECT THE TYPE OF BRACE TO COMPLY WITH THE WEIGHT OF THE UNITS TO BE RETAINED. THE CENTER GATE HEIGHT SHOULD BE ADJUSTED AS REQUIRED. THE WEIGHT DISTRIBUTION REQUIREMENTS OF THE AAR MUST BE COMPLIED WITH, SEE MIL-STD-1325 (NAVY).
3. THE LOADS AS SHOWN ARE BASED ON CARS WHICH HAVE 10 FT WIDE DOORWAY OPENINGS AND ARE EQUIPPED WITH CONVENTIONAL SLIDING TYPE DOORS. THE DEPICTED PROCEDURES AND METHODS OF BLOCKING ARE APPLICABLE TO BOXCARS EQUIPPED WITH CONVENTIONAL SLIDING TYPE DOORS OTHER THAN 10 FT WIDE PROVIDING THE LENGTH OF PIECES 3 AND 10 ARE ADJUSTED AS REQUIRED TO SUIT THE PARTICULAR DOORWAY OPENING.
4. THE DEPICTED PROCEDURES AND METHODS OF BLOCKING ARE ALSO APPLICABLE TO BOXCARS EQUIPPED WITH PLUG TYPE DOORS. SECURELY CLOSE DOORS AND WIRE TOGETHER WITH A STRONG FLEXIBLE STEEL WIRE INSERTED THROUGH THE HOLES IN THE DOOR LATCH ASSEMBLY ONE OR MORE TIMES AND THE WIRE ENDS TWISTED TOGETHER.
5. WHEN BOXCARS OTHER THAN 9 FT 2 IN. WIDE ARE USED, THE BASE END SWAY BRACE VERTICALS (PIECE 7) MUST BE INCREASED OR DECREASED AS NECESSARY FOR A TIGHT LOAD ACROSS THE CAR.

* DOUBLED 2 x 4's CUT TO SUIT AND FIELD POSITIONED TO FIT UNDER BOTTOM FRAME AND BETWEEN SKIDS OF THE LOWER UNIT LOAD.

19	STRUT	4 x 4 x WEDGE FIT	24	14	2 PER JOINT	16d
18	CENTER GATE HOLD DOWN*	2 x 4 x TO SUIT	4	17	4	10d
17	CENTER GATE HOLD DOWN*	2 x 4 x TO SUIT	4	16	4	10d
16	CENTER GATE FILLER	2 x 4 x CAR WIDTH -1	2	14	3 PER JOINT	10d
15	CENTER GATE STRUT CLEAT	2 x 4 x CAR WIDTH -1	8	14	3 PER JOINT	10d
14	CENTER GATE VERTICAL	2 x 6 x 54	12	SEE 13, 15, 16	-	-
13	CENTER GATE HORIZONTAL	2 x 6 x CAR WIDTH -1	8	14	3 PER JOINT	10d
12	SEAL	1 1/4	4	-	-	-
11	STRAP	1 1/4 x .035 x 22 FT	2	-	-	-
10	HORIZONTAL DOORWAY MEMBER	2 x 4 x 12 FT 4	4	9	2 PER JOINT	10d
9	VERTICAL DOORWAY MEMBER	2 x 4 x 60	2	SEE 10	-	-
8	SWAY BRACE FILLER	2 x 4 x 9	30	7	3	10d
7	SWAY BRACE VERTICAL	2 x 4 x 48	AS REQ D	6 7	2 PER JOINT 3	10d 10d
6	SWAY BRACE HORIZONTAL	2 x 4 x 38	30	SEE 7	-	-
5	TIE PIECE	2 x 6 x 12	4	1, 3	2 PER JOINT	10d
4	DOORWAY SWAY BRACE VERTICAL	2 x 6 x 48	6	3	3 PER JOINT	10d
3	DOORWAY SWAY BRACE HORIZONTAL	2 x 6 x 12 FT 4	2	SEE 4	-	-
2	SWAY BRACE VERTICAL	2 x 6 x 48	24	1	3 PER JOINT	10d
1	SWAY BRACE HORIZONTAL	2 x 6 x 114	8	SEE 2	-	-
PIECE NO.	DESCRIPTION	SIZE	NO. PCS REQD	NAIL TO	NUMBER	SIZE
						NAILS
LIST OF MATERIALS AND NAILING DATA						

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DETAIL A
NOSE END SWAY BRACE
4 REQUIRED

SEE DETAIL
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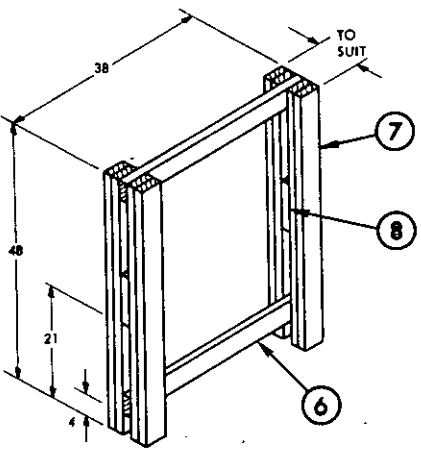
SEE DETAIL
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SEE DETAIL A

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SEE DETAIL B

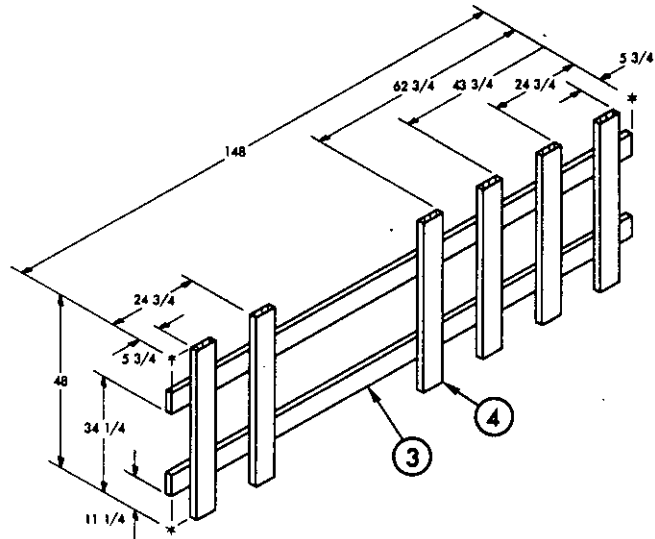


DETAIL B
BASE END SWAY BRACE
15 REQUIRED

CARLOAD DATA

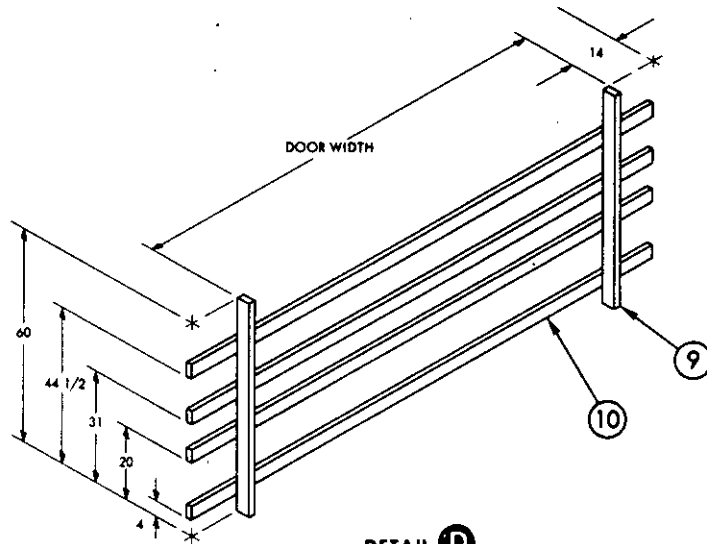
NUMBER OF UNIT LOADS	30
LOAD WEIGHT (APPROXIMATE)	123, 720 LBS
DUNNAGE WEIGHT (APPROXIMATE)	2, 183 LBS
CARLOAD WEIGHT (APPROXIMATE)	125, 903 LBS

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DETAIL C

NOSE END DOORWAY SWAY BRACE
1 REQUIRED



DETAIL D

BASE END DOORWAY PROTECTION
1 REQUIRED