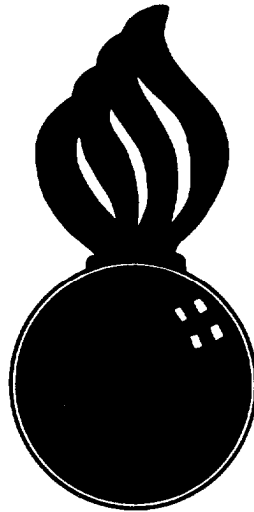


APPROVED
 BUREAU OF EXPLOSIVES
A. J. Grossmuck
 INSPECTOR
 DATE 5/10/60



LOADING AND BRACING (CL & LCL) IN BOX CARS OF M6 WARHEAD PACKED IN WOODEN CRATE

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LOADING AND BRACING (CL & LCL) IN BOX CARS OF M6 WARHEAD PACKED IN WOODEN CRATE			
DRAWN BY J.D.S.	CHECKED BY GWP	DESIGNED BY DIW / Bob	APPROVED BY <i>Paul H. T. Mahoney</i> COLONEL, ORN CORPS, U.S.A.
REVISIONS			APPROVED BY CHIEF OF THE BUREAU OF EXPLOSIVES <i>James D. Buchanan</i> SEN. CORPS, U.S.A.
			APPROVED BY CHIEF OF THE BUREAU OF EXPLOSIVES <i>[Signature]</i> SEN. CORPS, U.S.A.
ORDNANCE CORPS U.S.A.			
20 MAY 1960			
CLASS	DIVISION	DRAWING	FILE
19	48	7002	SP5CI

GENERAL NOTES

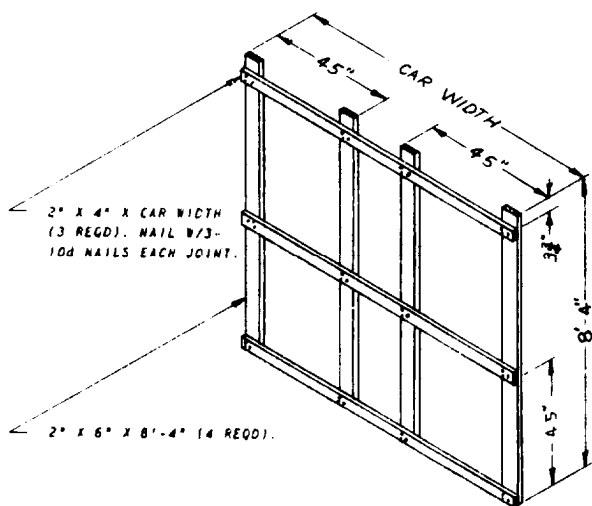
MATERIAL SPECIFICATIONS

- A. THE M6 BARHEAD IS PACKED IN CRATES HAVING APPROXIMATE DIMENSIONS OF EITHER 144" X 45" X 49 1/2" HIGH OR 140 1/2" X 44 1/2" X 50 1/2" HIGH. THIS DRAWING COVERS OUTLOADING OF THE LONGER CONTAINER. IT CAN ALSO BE USED FOR THE SHORTER CONTAINER BY ADJUSTING THE DUNNAGE AS REQUIRED.
- B. GROSS WEIGHTS OF CONTAINERS VARY. APPROXIMATE AVERAGE GROSS WEIGHT IS 3,000 LBS.
- C. DOORWAY PROTECTION IS REQUIRED FOR THIS ITEM WHEN MORE THAN 1/2 THE LENGTH OF A CONTAINER EXTENDS INTO DOORWAY AREA. NO DOORWAY PROTECTION IS REQUIRED WHEN THE SIDE OF CAR AND THE CENTER POST OF DOUBLE DOORS HOLD BOTH ENDS OF CRATE FROM SIDEWARD MOVEMENT.
- D. WHEN PLANNING SHIPMENTS, THE MINIMUM NUMBER OF CARS OF 16 AND/OR 12-UNIT CAPACITIES REQUIRED TO UTILIZE THE MAXIMUM SPACE CAPACITY OF ALL CARS SHOULD BE ORDERED. CARS WITH DOUBLE DOOR OPENINGS ARE PREFERRED.
- E. LOADS SHOWN ARE BASED ON CARS 40'-6" X 9'-2" AND 50'-6" X 9'-2", INSIDE DIMENSIONS. PRINCIPLES SHOWN HEREIN WILL BE APPLIED TO CARS OF OTHER DIMENSIONS.
- F. SUGGESTED MINIMUM DIMENSIONS OF BOX CARS USED FOR SHIPPING M6 BARHEADS:

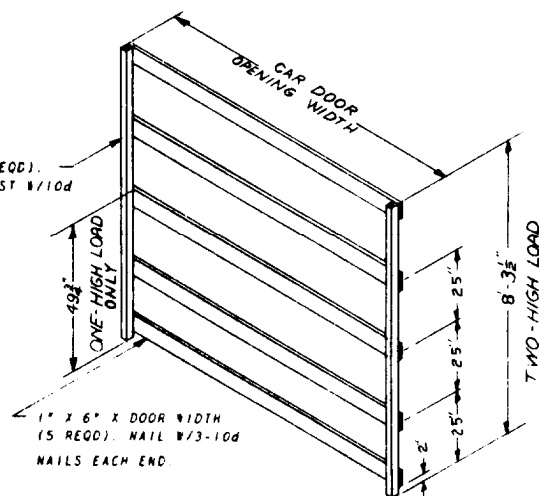
LUMBER: SEE PAR 5,400, ORDM 3-4, VOLUME 2.
 NAILS: COMMON, CEMENT COATED, FED SPEC FF-N-105.
 ALTERNATE: ANNULAR-RING TYPE NAIL OF SAME SIZE.

<u>INSIDE LENGTH</u>	<u>INSIDE WIDTH</u>	<u>DOORWAY OPENINGS</u>
40'-6" FOR 6 PER LAYER	9'-2" *	9'-0" W X 9'-6" H *
50'-6" FOR 8 PER LAYER	9'-2" *	9'-0" W X 9'-6" H *

* LARGER INSIDE WIDTH AND DOORWAY OPENINGS ARE DESIRABLE.



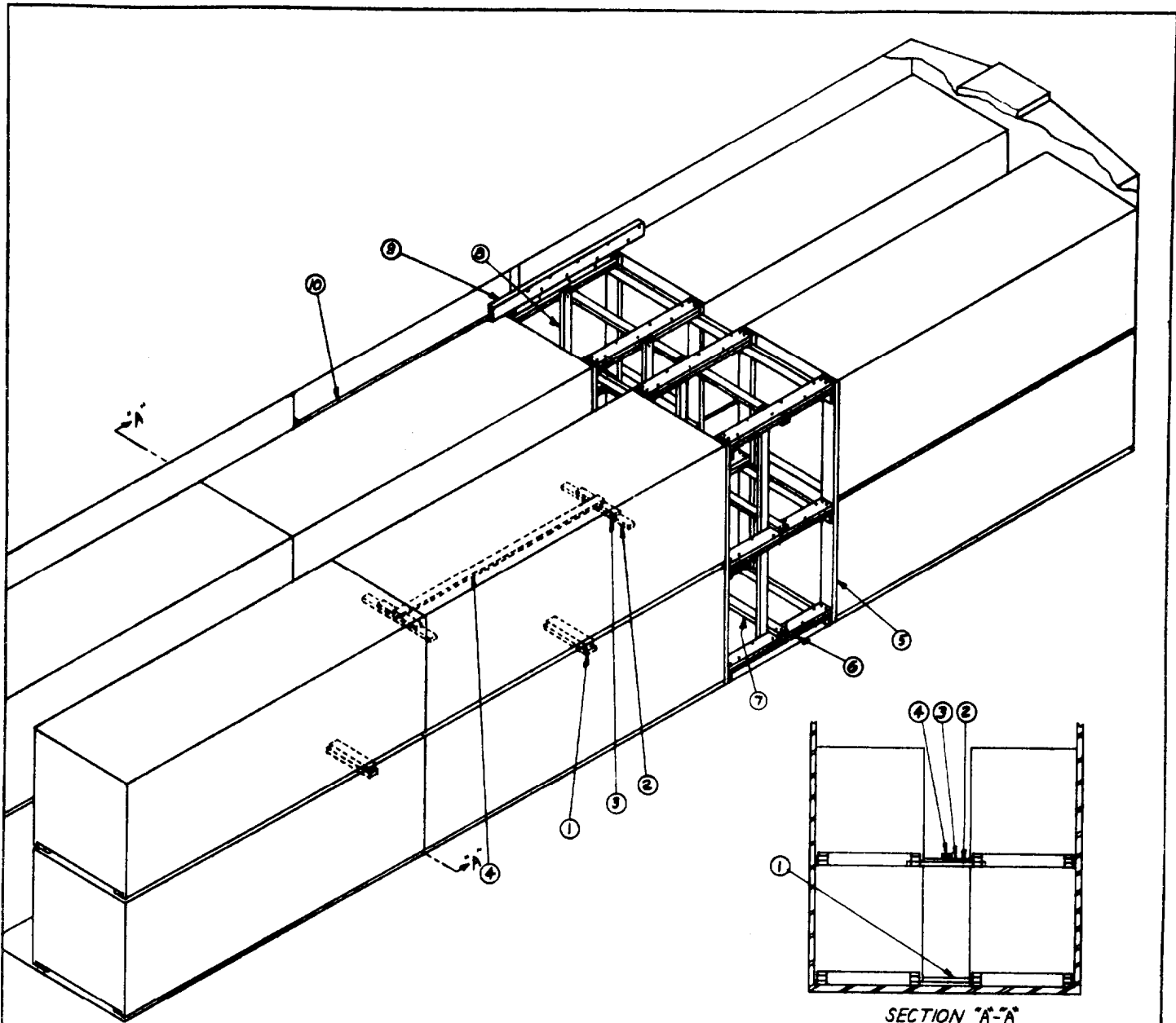
CENTER GATE DETAIL



DOORWAY PROTECTION DETAIL

TO BE NAILED IN PLACE WHEN DOOR POSTS ARE WOOD, OR ARE PROVIDED WITH NAILING CAPABILITY, WHEN VERTICAL FRAMING MEMBERS CANNOT BE NAILED TO DOOR POSTS, THEY SHOULD BE WEDGED IN PLACE, OR FIXED IN POSITION BY STEEL STRAP-PINC NAILED TO INNER CAR WALL.

DO NOT SCALE



ISOMETRIC VIEW

40'-6" X 9'-2" BOX CAR, WITH DOORWAY OPENINGS 9'-0" WIDE

BILL OF MATERIAL

LUMBER	LINEAL FEET	BOARD FEET
1" X 6"	90	45
2" X 3"	34	17
2" X 4"	189	126
2" X 6"	181	181
NAILS		
	NO. REQD	POUNDS
10d	318	5
12d	66	1 1/2
16d	48	1

LOAD AS SHOWN

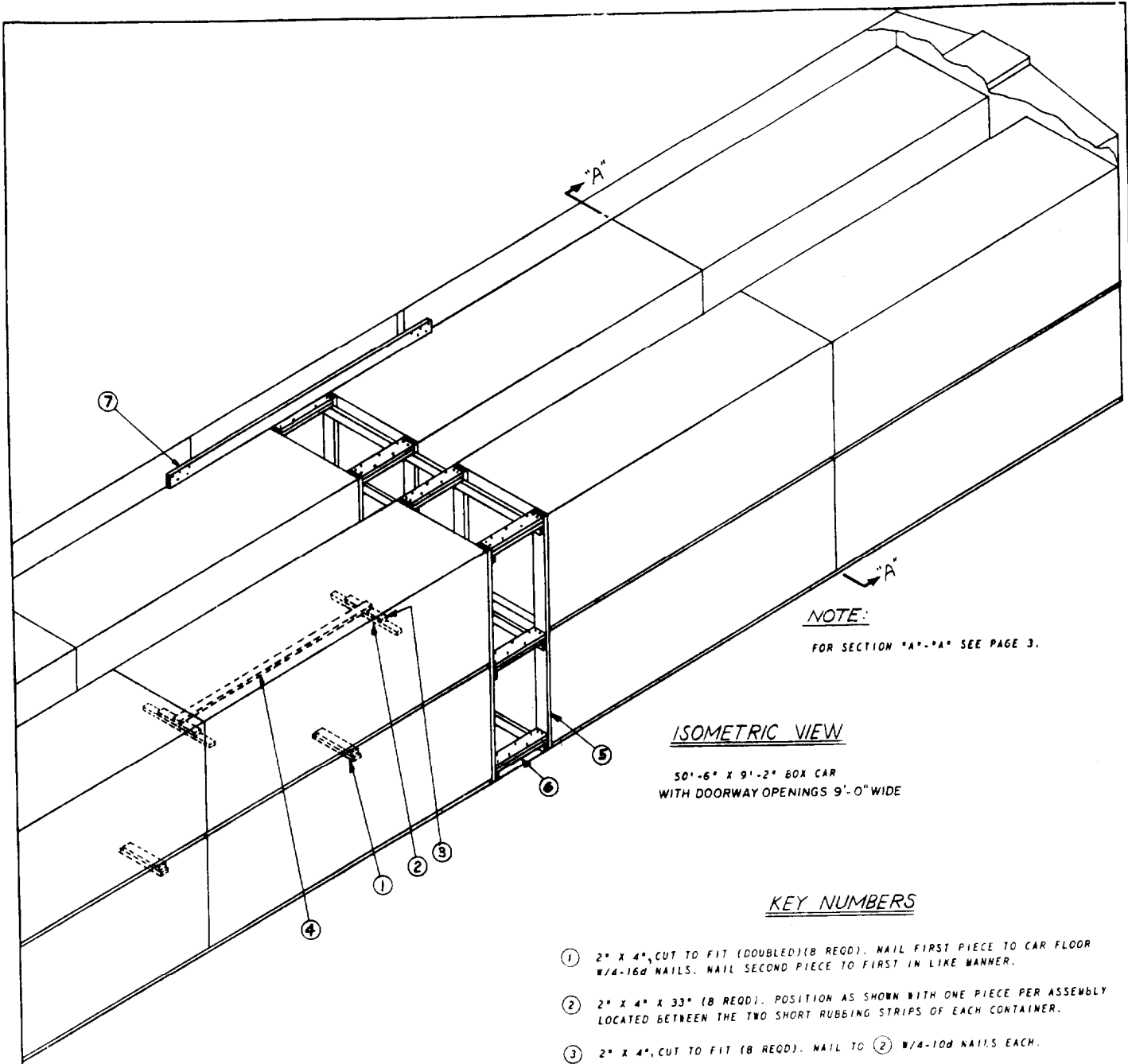
ITEM	QUANTITY	WEIGHT
CONTAINERS	12	36,000 LBS
DUNNAGE		930 LBS
TOTAL WEIGHT		36,930 LBS

SECTION "A-A"

9'-2" BOX CAR

KEY NUMBERS

- ① 2" X 4", CUT TO FIT (DOUBLED) (16 REQD). NAIL FIRST PIECE TO CAR FLOOR 1/4-16d NAILS. NAIL SECOND PIECE TO FIRST IN LIKE MANNER.
- ② 2" X 4" X 33" (6 REQD). POSITION AS SHOWN WITH ONE PIECE PER ASSEMBLY LOCATED BETWEEN THE TBC SHORT RUBBING STRIPS OF EACH CONTAINER.
- ③ 2" X 4", CUT TO FIT (16 REQD). NAIL TO ② 1/4-16d NAILS EACH.
- ④ 2" X 4" X 6'-5" (3 REQD). NAIL TO ③ 1/3-10d NAILS EACH END.
- ⑤ CENTER GATE (2 REQD). SEE DETAIL, PAGE 2.
- ⑥ STRUTS, 2" X 6", CUT TO FIT (DOUBLED) (12 REQD). LAMINATE 1/6-16d NAILS EACH. TOENAIL TO CENTER GATE UPRIGHTS 1/2-12d NAILS EACH END.
- ⑦ 2" X 4" X CAR WIDTH (3 REQD). NAIL TO ⑥ 1/3-10d NAILS EACH JOINT.
- ⑧ 2" X 4" X 8'-4" (4 REQD). NAIL TO ⑥ 1/3-10d NAILS EACH JOINT.
- ⑨ GATE HOLD DOWN, 2" X 6" X 72" (2 REQD). NAIL TO CAR WALL 1/1-12d NAIL EVERY 6".
- ⑩ DOORWAY PROTECTION (2 REQD). SEE DETAIL, PAGE 2.



NOTE:
FOR SECTION "A"-"A" SEE PAGE 3.

ISOMETRIC VIEW

50'-6" X 9'-2" BOX CAR
WITH DOORWAY OPENINGS 9'-0" WIDE

KEY NUMBERS

- ① 2" X 4", CUT TO FIT (DOUBLED) (8 REQD). NAIL FIRST PIECE TO CAR FLOOR W/4-16d NAILS. NAIL SECOND PIECE TO FIRST IN LIKE MANNER.
- ② 2" X 4" X 33" (8 REQD). POSITION AS SHOWN WITH ONE PIECE PER ASSEMBLY LOCATED BETWEEN THE TWO SHORT RUBBING STRIPS OF EACH CONTAINER.
- ③ 2" X 4", CUT TO FIT (8 REQD). NAIL TO ② W/3-10d NAILS EACH.
- ④ 2" X 4" X 8'-5" (4 REQD). NAIL TO ③ W/3-10d NAILS EACH END.
- ⑤ CENTER GATE (2 REQD). SEE DETAIL, PAGE 2.
- ⑥ STRUTS, 2" X 6", CUT TO FIT (DOUBLED) (12 REQD). LAMINATE W/5-10d NAILS EACH. TOENAIL TO CENTER GATE UPRIGHTS W/2-12d NAILS EACH END.
- ⑦ GATE HOLD DOWN, 2" X 6" X 11'-0" (2 REQD). NAIL TO CAR WALL W/5-12d NAILS EACH END.

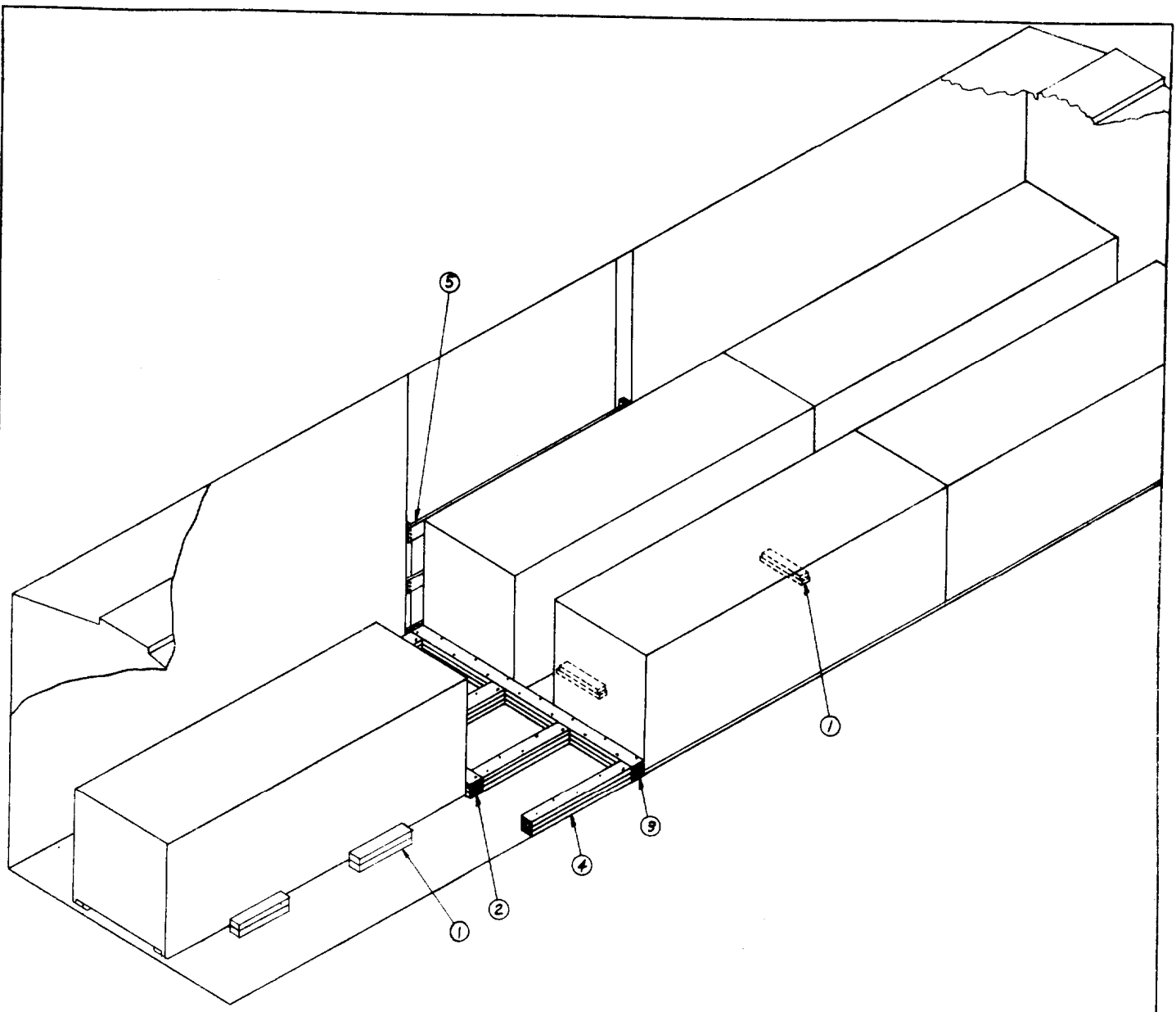
BILL OF MATERIAL

LUMBER	LINEAL FEET	BOARD FEET
2" X 4"	152	102
2" X 6"	143	143
NAILS	NO. REQD	POUNDS
10d	188	3
12d	68	1-1/4
16d	64	1-1/2

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT
CONTAINERS	16	48,000 LBS
DUNNAGE		619 LBS
TOTAL WEIGHT		48,619 LBS

DO NOT SCALE



ISOMETRIC VIEW (LCL)

40'-6" X 9'-2" BOX CAR
WITH DOORWAY OPENINGS 9'-0" WIDE

BILL OF MATERIAL

LUMBER	LINEAL FEET	BOARD FEET
1" X 6"	54	27
2" X 3"	77	9
2" X 4"	28	18
2" X 6"	83	83
NAILS	NO. REQD	POUNDS
10d	36	1/2
16d	106	2-1/4
40d	84	5

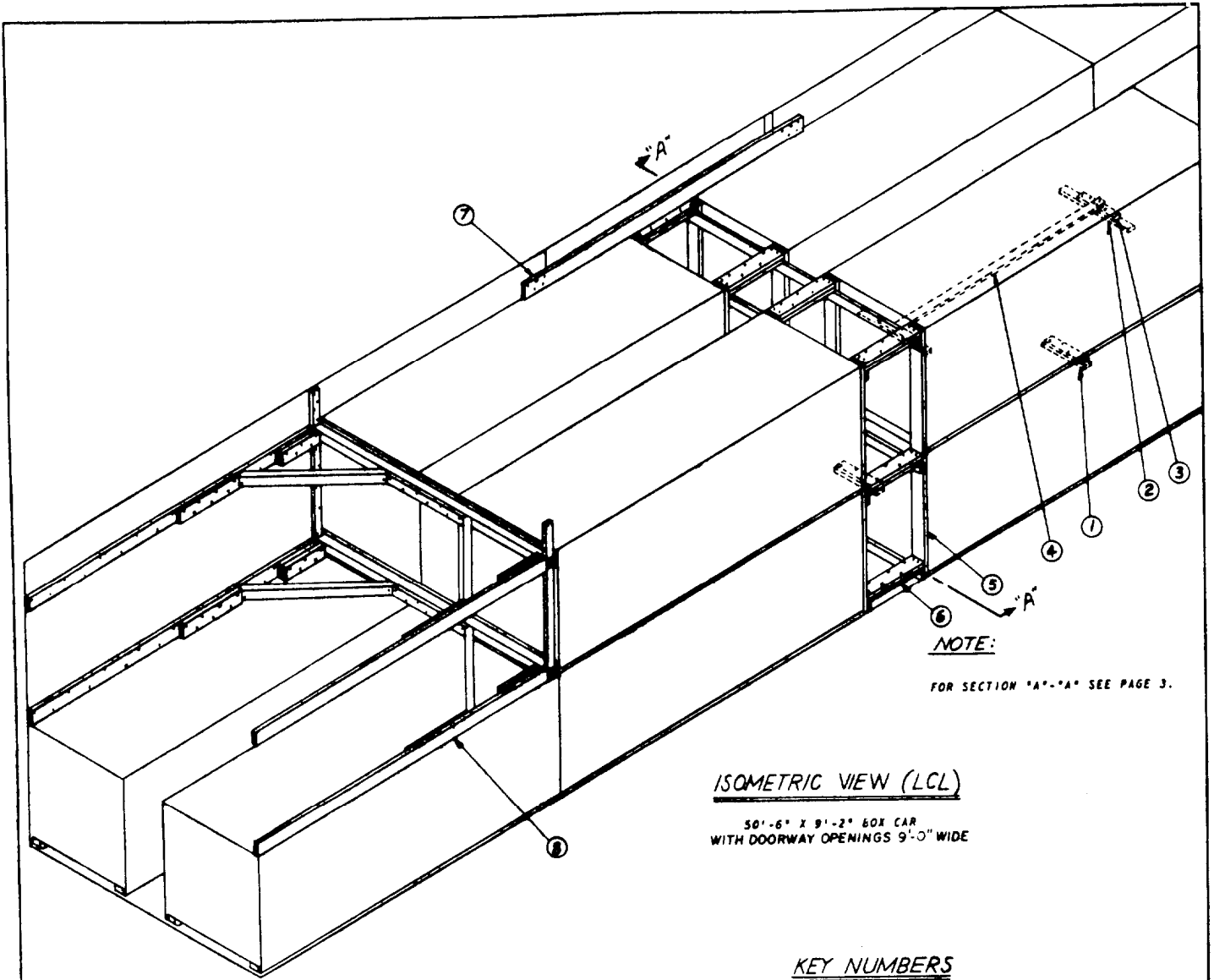
KEY NUMBERS

- ① 2" X 4", CUT TO FIT (MIN 18") DOUBLED (8 REQD). NAIL FIRST PIECE TO CAR FLOOR W/1-16d NAILS. NAIL SECOND PIECE TO FIRST IN LIKE MANNER.
- ② 2" X 6" X 48" (TRIPLED) (1 REQD). NAIL FIRST PIECE TO CAR FLOOR W/1-16d NAIL EVERY 6". NAIL EACH REMAINING PIECE W/1-40d NAIL EVERY 6".
- ③ 2" X 6" X CAR WIDTH (TRIPLED) (1 REQD). NAIL FIRST PIECE TO CAR FLOOR W/1-16d NAIL EVERY 8". NAIL EACH REMAINING PIECE W/1-40d NAIL EVERY 8".
- ④ 2" X 6", CUT TO FIT (42" MIN) TRIPLED (4 REQD). NAIL FIRST PIECE TO CAR FLOOR W/1-16d NAIL EVERY 8". NAIL EACH REMAINING PIECE W/1-40d NAIL EVERY 8".
- ⑤ DOORWAY PROTECTION (2 REQD). SEE DETAIL, PAGE 2.

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT
CONTAINERS	5	15,000 LBS
DUNNAGE		351 LBS
TOTAL WEIGHT		15,351 LBS

DO NOT SCALE



NOTE:
FOR SECTION "A"- "A" SEE PAGE 3.

ISOMETRIC VIEW (LCL)

50'-6" X 9'-2" BOX CAR
WITH DOORWAY OPENINGS 9'-0" WIDE

KEY NUMBERS

- ① 2" X 4", CUT TO FIT (DOUBLED)(8 REQD). NAIL FIRST PIECE TO CAR FLOOR W/4-16d NAILS. NAIL SECOND PIECE TO FIRST. IN LIKE MANNER.
- ② 2" X 4" X 33" (6 REQD). POSITION AS SHOWN WITH ONE PIECE PER ASSEMBLY LOCATED BETWEEN THE TWO SHORT RUBBING STRIPS OF EACH CONTAINER.
- ③ 2" X 4", CUT TO FIT (6 REQD). NAIL TO ② W/4-10d NAILS EACH.
- ④ 2" X 4" X 8'-5" (3 REQD). NAIL TO ③ W/3-10d NAILS EACH END.
- ⑤ CENTER GATE (2 REQD). SEE DETAIL, PAGE 2.
- ⑥ STRUTS, 2" X 6", CUT TO FIT (DOUBLED)(12 REQD). LAMINATE W/5-10d NAILS EACH. TOENAIL TO CENTER GATE UPRIGHTS W/2-12d NAILS EACH END.
- ⑦ GATE HOLD DOWN, 2" X 6" X 11'-0" (2 REQD). NAIL TO CAR WALL W/5-12d NAILS EACH END.
- ⑧ "A" BRACING (1 REQD). SEE DETAIL, PAGE 7.

BILL OF MATERIAL		
LUMBER	LINEAL FEET	BOARD FEET
2" X 4"	160	107
2" X 6"	229	229
4" X 4"	36	48
NAILS	NO. REQD	POUNDS
10d	216	3-1/3
12d	242	3
16d	64	1-1/2
60d	8	1

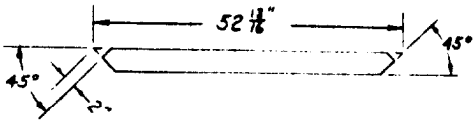
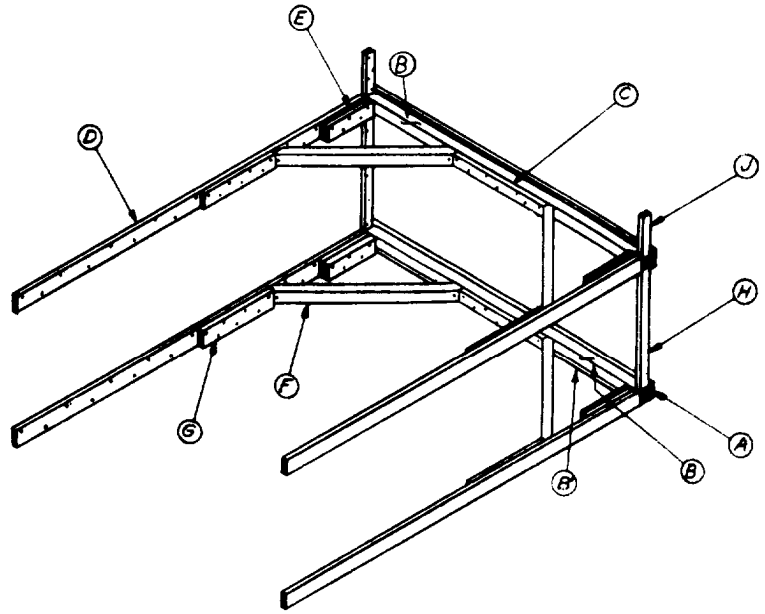
LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT
CONTAINERS	14	42,000 LBS
DUNNAGE		989 LBS
TOTAL WEIGHT		42,989 LBS

DO NOT SCALE

LUMBER AND NAILING INFORMATION

PC	LUMBER	NO REQD	NAIL TO	NAILS
A	2" X 6" X CAR WIDTH	2	B	1 10d NAIL EVERY 8"
B	4" X 4" X CAR WIDTH	2		
B'	2" X 4" X CAR WIDTH	1	BOTTOM OF LOWER B	1 10d NAIL EVERY 8"
C	2" X 4" X 36"	2	B	7 12d NAILS
D	2" X 6" EXTEND TO END OF CAR	4	CAR WALL	1 12d NAIL EVERY 8"
E	2" X 6" X 18"	8	D & E	5 12d NAILS
F	4" X 4" MATERIAL SEE DETAIL	4	B & D	1 60d NAIL EACH END
G	2" X 6" X 30"	4	D	7 12d NAILS
H	2" X 4" X 39"	2	CAR WALL	1 12d NAIL EVERY 8"
J	2" X 4" X 14" MIN	2	CAR WALL	4 12d NAILS



DETAIL OF PIECE (F)

"K" BRACING DETAIL

DO NOT SCALE