

GENERAL NOTES

A. PROCEDURES SHOWN HEREIN MAY BE ADAPTED AS REQUIRED TO FACILITATE THE USE OF BOX CARS EQUIPPED WITH VARIOUS TYPES OF SELF-CONTAINED MECHANICAL BRACING DEVICES; HOWEVER, WALL MEMBERS (ADJUSTABLE OR FIXED) AND DOORWAY MEMBERS MUST BE LOCATED WITHIN THE TOLERANCED LIMITS OF THE SPECIFIED HEIGHTS ABOVE THE CAR FLOOR.

CAUTION: BOX CARS EQUIPPED WITH MEMBERS WHICH DO NOT MEET THE LOCATION REQUIREMENTS MUST NOT BE USED.

B. SELECTION OF RAIL CARS FOR THE TRANSPORT OF THESE ITEMS WILL BE IN ACCORDANCE WITH PARAGRAPH B.300.4, ORDM 3-4, VOL 3.

C. NOTICE: A SHIPMENT WILL BE POSITIONED IN THE RAIL CAR IN COMPLIANCE WITH THE WEIGHT DISTRIBUTION REQUIREMENTS OF THE AAR. THE NUMBER OF UNITS MAY BE ADJUSTED TO FIT THE RAIL CAR CONCERNED OR THE QUANTITY TO BE SHIPPED; HOWEVER, THE APPROVED METHODS CONTAINED HEREIN FOR FULL OR PARTIAL CARLOAD MUST BE FOLLOWED FOR BLOCKING, BRACING AND STAYING OF THESE ITEMS.

D. THE LOAD SHOWN ON PAGE 3 IS BASED ON THE M32 FIN ASSEMBLY CONTAINER IN A "DF"-TYPE BOX CAR 50'-6" LONG x 8'-5" WIDE (MINIMUM INSIDE CLEARANCE) EQUIPPED WITH ADJUSTABLE AND/OR FIXED WALL MEMBERS AND DOORWAY MEMBERS POSITIONED AT SPECIFIED HEIGHTS ABOVE THE CAR FLOOR. 6'-0" DOOR OPENING SHOWN.

E. THE LOAD SHOWN ON PAGE 4 IS BASED ON THE XM39 FIN ASSEMBLY CONTAINER IN A "DF"-TYPE BOX CAR 50'-5" LONG x 8'-11" WIDE (MINIMUM INSIDE CLEARANCE) EQUIPPED WITH ADJUSTABLE AND/OR FIXED WALL MEMBERS AND DOORWAY MEMBERS POSITIONED AT SPECIFIED HEIGHTS ABOVE THE CAR FLOOR. 6'-0" DOOR OPENING SHOWN.

F. THE TYPICAL LCL METHODS SHOWN ON PAGE 5 ARE BASED ON THE M32 FIN ASSEMBLY CONTAINER IN "DF"-TYPE BOX CARS 8'-6" WIDE (MINIMUM INSIDE CLEARANCE) EQUIPPED WITH ADJUSTABLE AND/OR FIXED WALL MEMBERS LOCATED AT SPECIFIED HEIGHTS ABOVE THE CAR FLOOR.

G. THE TYPICAL LCL METHODS SHOWN ON PAGE 6 ARE BASED ON THE XM39 FIN ASSEMBLY CONTAINER IN "DF"-TYPE BOX CARS 8'-11" WIDE (MINIMUM INSIDE CLEARANCE) EQUIPPED WITH ADJUSTABLE AND/OR FIXED WALL MEMBERS LOCATED AT SPECIFIED HEIGHTS ABOVE THE CAR FLOOR.

H. ANTI-CHAFING MATERIAL OF SUITABLE THICKNESS MUST BE USED BETWEEN CONTAINERS AND CAR SIDE WALL TO PREVENT CONTACT OF THE CONTAINERS WITH ANY EXPOSED METAL SURFACE. THE ANTI-CHAFING MATERIAL MUST BE SECURED TO PREVENT DISPLACEMENT DURING TRANSIT.

J. A "DF"-TYPE CROSS MEMBER WILL BE USED IN SUCH A MANNER THAT IT WILL NOT BE RELIED ON TO RETAIN MORE THAN 4,000 POUNDS OF LADING ON EITHER SIDE. VOIDS LENGTHWISE WITHIN THE LOAD MUST BE MINIMUM AND CROSS MEMBERS MUST BE PLACED AGAINST THE LADING AS TIGHTLY AS THE WALL MEMBER LOCKING HOLE SPACING PERMITS. LOCKING BARS (LEVER JACK) SHOULD BE USED FOR THIS PURPOSE. AN ADDITIONAL 1/2" OF ADJUSTMENT CAN BE MADE BY TURNING THE CROSS MEMBER END FOR END WHEN LOCKING PINS ARE OFF-CENTER.

NOTE: IT IS RECOMMENDED THAT CROSS MEMBERS BE INSTALLED WITH EACH END ATTACHED AS NEARLY AS POSSIBLE IN "MATED" POSITIONS, AT EQUAL HEIGHTS AND AT EQUAL DISTANCES FROM END OF CAR.

K. IN A CAR EQUIPPED WITH ADJUSTABLE WALL MEMBERS, PROVIDING THE FIXED WALL MEMBERS WHICH ARE PRESENT IN SOME "ADJUSTABLE" CARS ARE NOT PROPERLY POSITIONED TO PROVIDE SIDE BEARING SURFACES BETWEEN THE CONTAINERS AND THE CAR SIDE WALLS, ADJUSTABLE WALL MEMBERS (AS REQUIRED) MUST BE INSTALLED TO PROVIDE A MINIMUM OF ONE SURFACE AREA FOR SIDE BEARING AT SOME LOCATION WITHIN THE HEIGHT OF EACH CONTAINER.

L. CAUTION: ALL BLOCKING AND BRACING COMPONENTS ("DF" MEMBERS) IN EMPTY CARS AND ALL UNUSED COMPONENTS IN LOADED CARS MUST BE "SECURED" FOR SHIPMENT --- ADJUSTABLE WALL MEMBERS TO VERTICAL WALL ATTACHMENT RAILS AND CROSS MEMBERS TO ADJUSTABLE WALL MEMBERS OR TO FIXED HORIZONTAL WALL MEMBERS OR TO DOORWAY MEMBERS AND DOORWAY MEMBERS TO DOOR POSTS. COMPONENTS ASSIGNED TO EACH CAR MUST REMAIN THEREWITH EVEN THOUGH UNUSED DURING SOME SHIPMENTS.

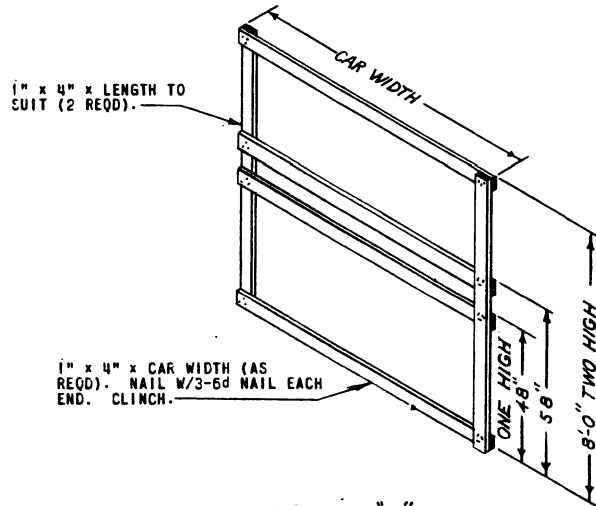
M. FOR DETAIL OF M32 FIN ASSEMBLY CONTAINER SEE DRAWING NO. B524212.
CONTAINER DIMENSIONS - 52-5/16" LONG x 29-5/16" WIDE x 51-3/4" HIGH.
GROSS WEIGHT --- 644 POUNDS (APPROX).

FOR DETAIL OF XM39 FIN ASSEMBLY CONTAINER SEE DRAWING NO. 9031178
CONTAINER DIMENSIONS - 51-1/4" LONG x 29-1/4" WIDE x 53-3/4" HIGH.
GROSS WEIGHT - 581 POUNDS (APPROX).

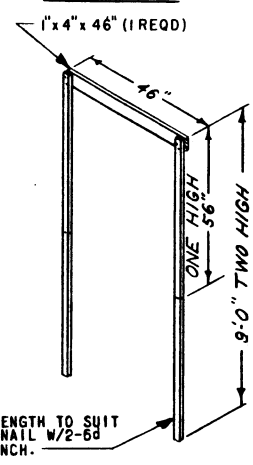
N. IT IS RECOMMENDED THAT UNITIZING STRAPS BE APPLIED PRIOR TO PLACEMENT OF CONTAINERS IN THE BOX CAR.

O. WHEN ANY STRAP IS SEALED AT AN END-OVER-END LAP JOINT, A MINIMUM OF TWO (2) SEALS WITH TWO (2) CRIMPS PER SEAL MUST BE USED.

P. PROCEDURES SHOWN HEREIN ARE ALSO APPLICABLE FOR THE SHIPMENT OF EMPTY CONTAINERS.



DETAIL "A"



DETAIL "B"

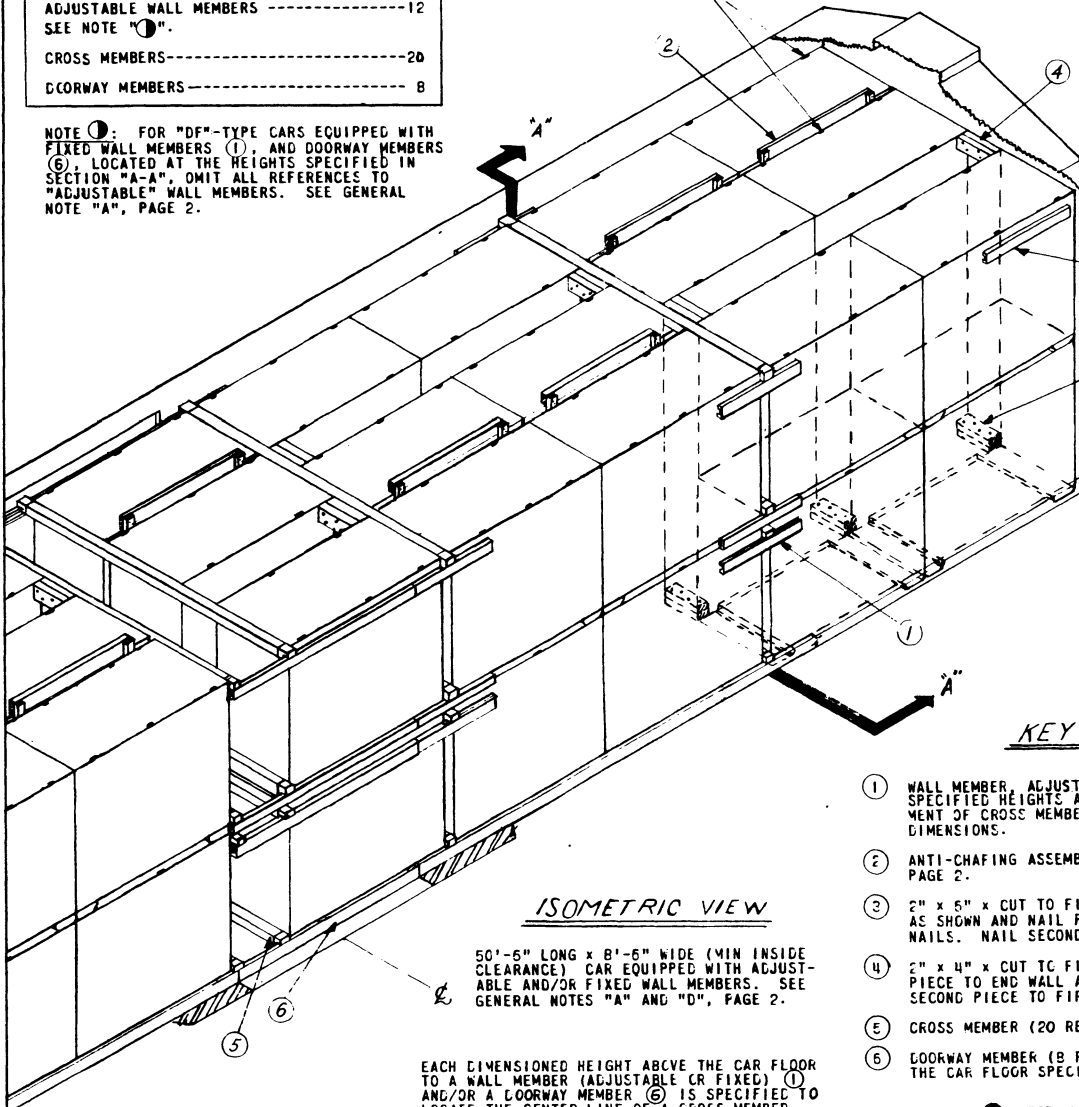
MATERIAL SPECIFICATIONS

- LUMBER: SEE PARAGRAPH B400, ORDM 3-4, VOL 3.
- NAILS: COMMON, CEMENT COATED, FED SPEC FF-N-105.
ALT: ANNULAR-RING TYPE NAIL OF SAME SIZE.
- STRAPPING, STEEL: TYPE 1, CLASS "A" OR "C", FED SPEC QQ-S-781.
FOR FSN SEE 58-38-100.

CAR EQUIPMENT REQUIRED	
ADJUSTABLE WALL MEMBERS -----	12
SEE NOTE "C".	
CROSS MEMBERS-----	20
DOORWAY MEMBERS-----	8

NOTE "C": FOR "DF"-TYPE CARS EQUIPPED WITH FIXED WALL MEMBERS (1), AND DOORWAY MEMBERS (6), LOCATED AT THE HEIGHTS SPECIFIED IN SECTION "A-A", OMIT ALL REFERENCES TO "ADJUSTABLE" WALL MEMBERS. SEE GENERAL NOTE "A", PAGE 2.

CONTAINER HINGES. POSITION OUTSIDE CONTAINERS WITH HINGES TOWARD CAR SIDE WALL. POSITION CENTER CONTAINER WITH HINGES TOWARD ADJACENT CONTAINER.



ISOMETRIC VIEW

50'-5" LONG x 8'-6" WIDE (MIN INSIDE CLEARANCE) CAR EQUIPPED WITH ADJUSTABLE AND/OR FIXED WALL MEMBERS. SEE GENERAL NOTES "A" AND "D", PAGE 2.

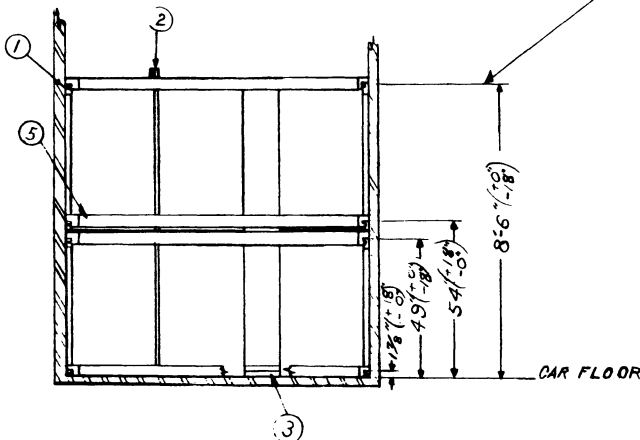
EACH DIMENSIONED HEIGHT ABOVE THE CAR FLOOR TO A WALL MEMBER (ADJUSTABLE OR FIXED) (1) AND/OR A DOORWAY MEMBER (6) IS SPECIFIED TO LOCATE THE CENTER LINE OF A CROSS MEMBER.

SEE GENERAL NOTE "K", PAGE 2.

KEY NUMBERS

- ① WALL MEMBER, ADJUSTABLE OR FIXED, MUST BE LOCATED AT SPECIFIED HEIGHTS ABOVE CAR FLOOR TO PROVIDE ALIGNMENT OF CROSS MEMBERS (5). SEE SECTION "A-A", FOR DIMENSIONS.
- ② ANTI-CHAFING ASSEMBLY (9 REQD). SEE DETAIL "B", PAGE 2.
- ③ 2" x 5" x CUT TO FIT (DOUBLED) (14 REQD). POSITION AS SHOWN AND NAIL FIRST PIECE TO CAR FLOOR W/4-16d NAILS. NAIL SECOND PIECE TO FIRST IN LIKE MANNER.
- ④ 2" x 4" x CUT TO FIT (DOUBLED) (9 REQD). NAIL FIRST PIECE TO END WALL AND/OR (5) W/4-10d NAILS. NAIL SECOND PIECE TO FIRST IN LIKE MANNER. SEE NOTE "C".
- ⑤ CROSS MEMBER (20 REQD). SEE GENERAL NOTE "J", PAGE 2.
- ⑥ DOORWAY MEMBER (8 REQD). POSITION AT HEIGHTS ABOVE THE CAR FLOOR SPECIFIED IN SECTION "A-A".

NOTE "C": FOR ALL METAL CROSS MEMBERS, THE FIRST PIECE MAY BE WIRE TIED TO THE CROSS MEMBER WITH NO. 8 GAGE BLACK ANNEALED WIRE.



SECTION "A-A"

BILL OF MATERIAL		
LUMBER	LINEAL FEET	BCARD FEET
1" x 2"	162	28
1" x 4"	35	12
2" x 4"	20	14
2" x 6"	32	32
NAILS	NO. REQD	POUNDS
6d (2")	36	1/4
10d (3")	72	1-1/4
16d (3 1/2")	112	2-1/2

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CONTAINER, M32 FINS-----	54-----	34,776 LBS
DUNNAGE-----	-----	220 LBS
		TOTAL WEIGHT---34,996 LBS (APPROX)

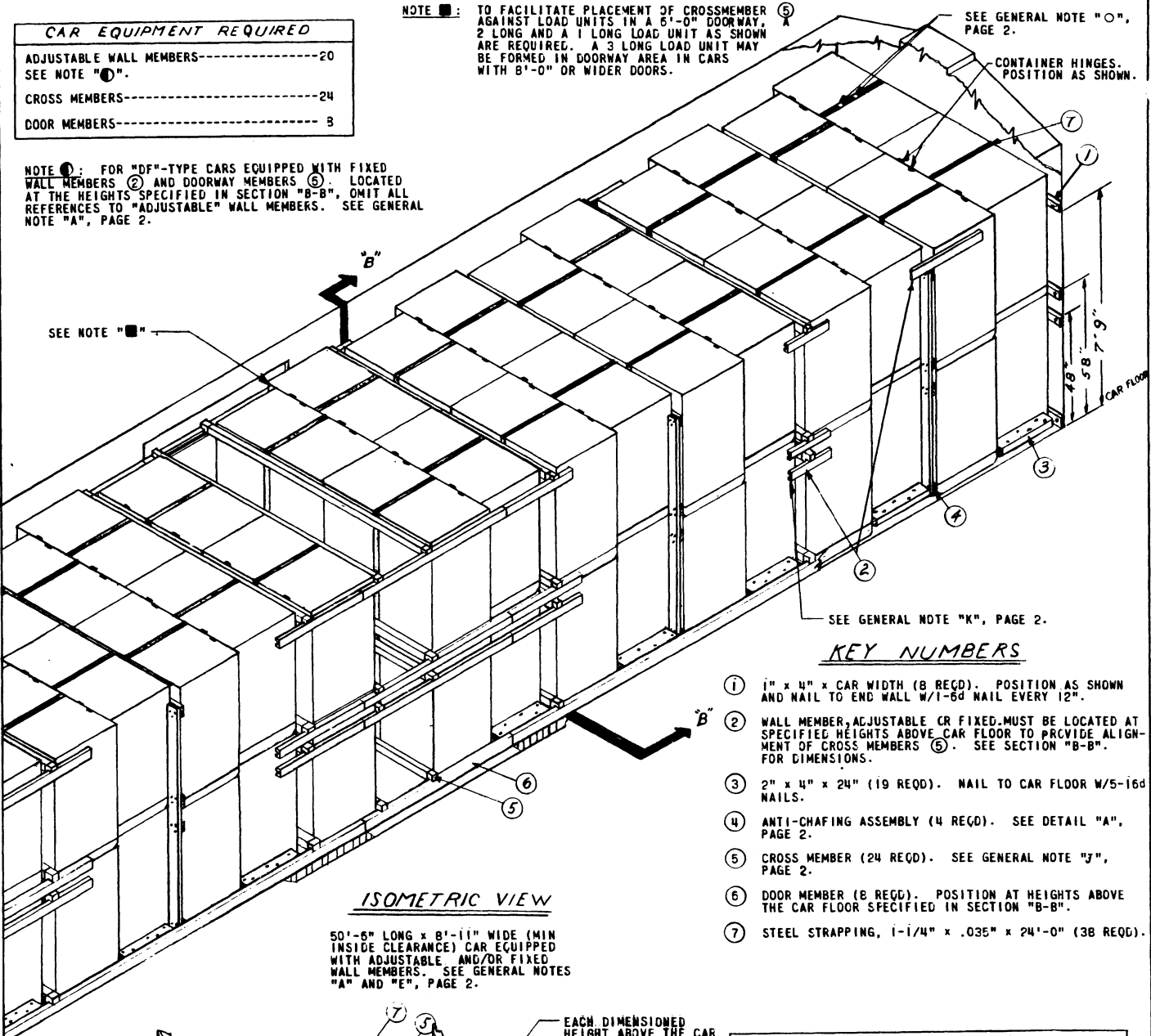
M32 FIN ASSEMBLY
DF-TYPE CAR WITH ADJUSTABLE AND/OR FIXED WALL MEMBERS

CAR EQUIPMENT REQUIRED	
ADJUSTABLE WALL MEMBERS-----	20
SEE NOTE "D".	
CROSS MEMBERS-----	24
DOOR MEMBERS-----	8

NOTE ■: TO FACILITATE PLACEMENT OF CROSSMEMBER (5) AGAINST LOAD UNITS IN A 6'-0" DOORWAY, 2' LONG AND A 1' LONG LOAD UNIT AS SHOWN ARE REQUIRED. A 3' LONG LOAD UNIT MAY BE FORMED IN DOORWAY AREA IN CARS WITH 8'-0" OR WIDER DOORS.

SEE GENERAL NOTE "O", PAGE 2.

NOTE ①: FOR "DF"-TYPE CARS EQUIPPED WITH FIXED WALL MEMBERS (2) AND DOORWAY MEMBERS (6). LOCATED AT THE HEIGHTS SPECIFIED IN SECTION "B-B", OMIT ALL REFERENCES TO "ADJUSTABLE" WALL MEMBERS. SEE GENERAL NOTE "A", PAGE 2.

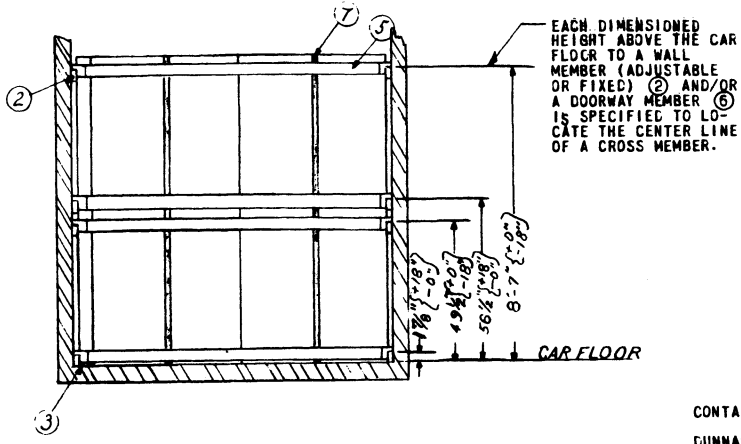


KEY NUMBERS

- ① 1" x 4" x CAR WIDTH (8 REQD). POSITION AS SHOWN AND NAIL TO END WALL W/1-6d NAIL EVERY 12".
- ② WALL MEMBER, ADJUSTABLE OR FIXED, MUST BE LOCATED AT SPECIFIED HEIGHTS ABOVE CAR FLOOR TO PROVIDE ALIGNMENT OF CROSS MEMBERS (5). SEE SECTION "B-B". FOR DIMENSIONS.
- ③ 2" x 4" x 24" (19 REQD). NAIL TO CAR FLOOR W/5-16d NAILS.
- ④ ANTI-CHAFING ASSEMBLY (4 REQD). SEE DETAIL "A", PAGE 2.
- ⑤ CROSS MEMBER (24 REQD). SEE GENERAL NOTE "J", PAGE 2.
- ⑥ DOOR MEMBER (8 REQD). POSITION AT HEIGHTS ABOVE THE CAR FLOOR SPECIFIED IN SECTION "B-B".
- ⑦ STEEL STRAPPING, 1-1/4" x .035" x 24'-0" (38 REQD).

ISOMETRIC VIEW

50'-6" LONG x 8'-11" WIDE (MIN INSIDE CLEARANCE) CAR EQUIPPED WITH ADJUSTABLE AND/OR FIXED WALL MEMBERS. SEE GENERAL NOTES "A" AND "E", PAGE 2.



SECTION "B-B"

BILL OF MATERIAL		
LUMBER	LINEAL FEET	BOARD FEET
1" x 4"	279	93
2" x 4"	38	26
NAILS		NO. REQD
6d (2")	358	2-1/4
16d (3-1/2")	95	2-1/4
STRAPPING, STEEL, 1-1/4" x .035" --912' REQD--		131 LBS

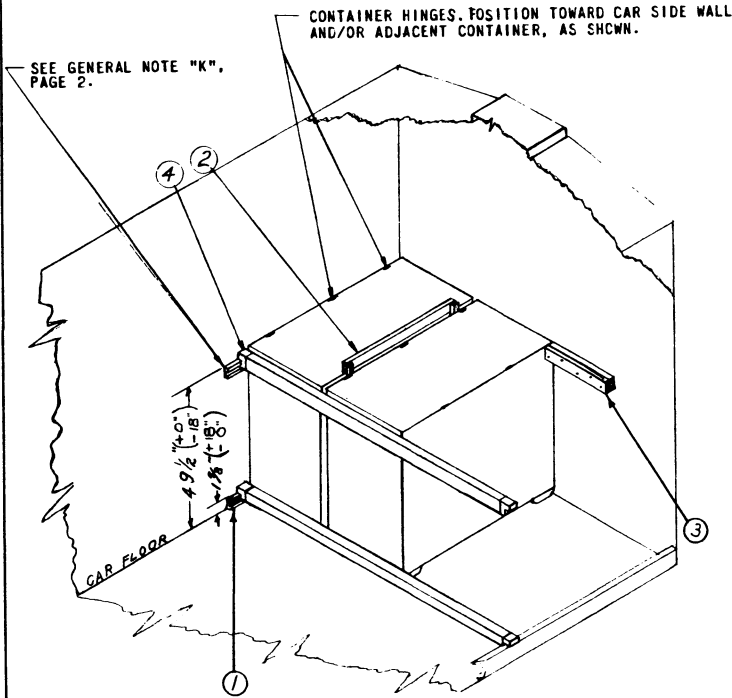
LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CONTAINER, XM39 FINS---	76-----	44,156 LBS
DUNNAGE-----		434 LBS
TOTAL WEIGHT----		44,590 LBS (APPROX)

XM39 FIN ASSEMBLY
"DF"-TYPE CAR WITH ADJUSTABLE AND/OR FIXED WALL MEMBERS

KEY NUMBERS

- ① WALL MEMBERS, ADJUSTABLE OR FIXED. MUST BE LOCATED AT SPECIFIED HEIGHTS ABOVE CAR FLOOR TO PROVIDE ALIGNMENT OF CROSS MEMBERS ④.
- ② ANTI-CHAFING ASSEMBLY (1 REQD). SEE DETAIL "B", PAGE 2.
- ③ 2" x 4" x 24" (DOUBLED) (1 REQD). NAIL FIRST PIECE TO END WALL W/5-10d NAILS. NAIL SECOND PIECE TO FIRST IN LIKE MANNER.
- ④ CROSS MEMBERS (2 REQD). SEE GENERAL NOTE "J", PAGE 2.

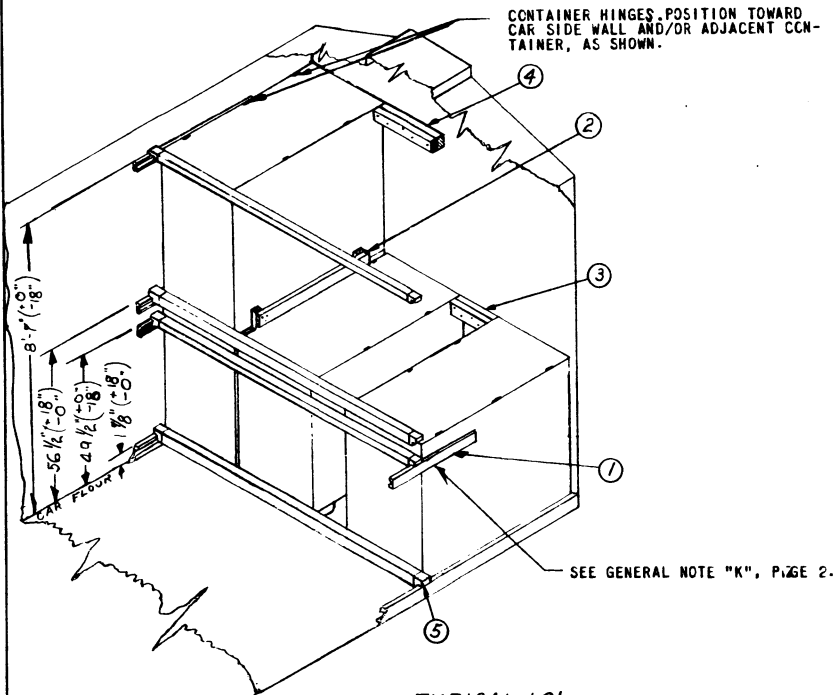


TYPICAL LCL

SEE GENERAL NOTES "A" AND "F", PAGE 2.

KEY NUMBERS

- ① WALL MEMBERS, ADJUSTABLE OR FIXED. MUST BE LOCATED AT SPECIFIED HEIGHTS ABOVE CAR FLOOR TO PROVIDE ALIGNMENT OF CROSS MEMBER ⑤.
- ② ANTI-CHAFING ASSEMBLY (1 REQD). SEE DETAIL "B", PAGE 2.
- ③ 2" x 4" x CUT TO FIT (DOUBLED) (1 REQD). NAIL FIRST PIECE TO END WALL W/4-10d NAILS. NAIL SECOND PIECE TO FIRST IN LIKE MANNER.
- ④ 2" x 4" x 24" (DOUBLED) (1 REQD). NAIL FIRST PIECE TO END WALL W/5-10d NAILS. NAIL SECOND PIECE TO FIRST IN LIKE MANNER.
- ⑤ CROSS MEMBERS (4 REQD). SEE GENERAL NOTE "J", PAGE 2.

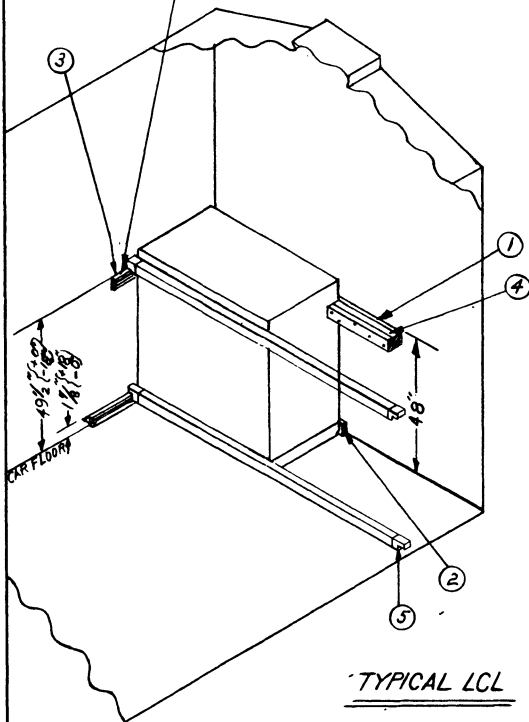


TYPICAL LCL

SEE GENERAL NOTES "A" AND "F", PAGE 2.

TYPICAL LCL METHODS, M32 FIN ASSEMBLY

SEE GENERAL NOTE "K", PAGE 2.



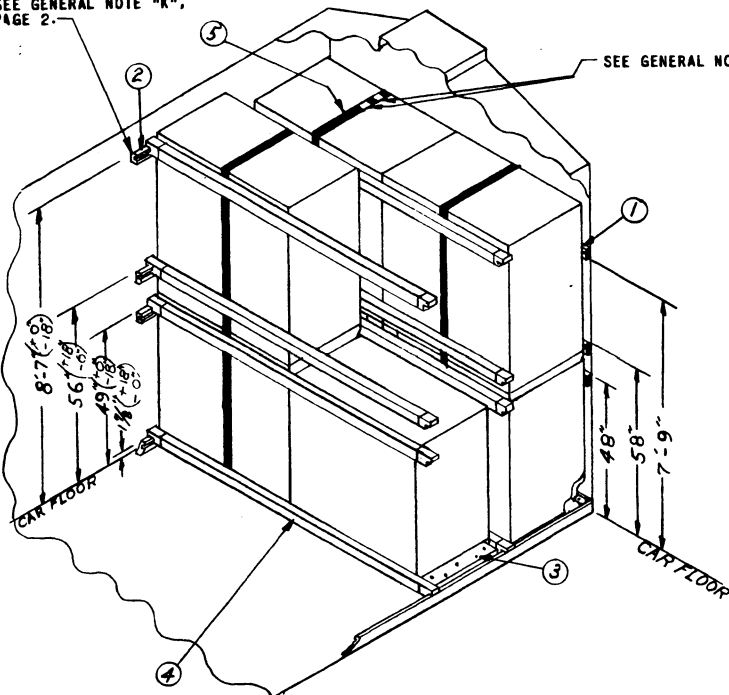
TYPICAL LCL

SEE GENERAL NOTES "A" AND "G", PAGE 2.

KEY NUMBERS

- ① 1" x 4" x 5'-4" (1 REQD). POSITION AS SHOWN AND NAIL TO END WALL W/1-6d NAIL EVERY 12".
- ② 1" x 4" x 52" (1 REQD). POSITION AS SHOWN AND NAIL TO END WALL W/1-6d NAIL EVERY 12".
- ③ WALL MEMBER, ADJUSTABLE OR FIXED. MUST BE LOCATED AT SPECIFIED HEIGHTS ABOVE CAR FLOOR TO PROVIDE ALIGNMENT OF CRCS MEMBERS ⑤.
- ④ 2" x 4" x 24" (DOUBLED) (1 REQD). POSITION AS SHOWN AND NAIL FIRST PIECE TO ① W/5-10d NAILS. NAIL SECOND PIECE TO FIRST IN LIKE MANNER.
- ⑤ CROSS MEMBER (2 REQD). SEE GENERAL NOTE "J", PAGE 2.

SEE GENERAL NOTE "K", PAGE 2.



TYPICAL LCL

SEE GENERAL NOTES "A" AND "G", PAGE 2.

SEE GENERAL NOTE "O", PAGE 2.

KEY NUMBERS

- ① 1" x 4" x CAR WIDTH (4 REQD). POSITION AS SHOWN AND NAIL TO END WALL W/1-6d NAIL EVERY 12".
- ② WALL MEMBER, ADJUSTABLE OR FIXED. MUST BE LOCATED AT SPECIFIED HEIGHTS ABOVE CAR FLOOR TO PROVIDE ALIGNMENT OF CROSS MEMBERS ④.
- ③ 2" x 4" x 24" (2 REQD). NAIL TO CAR FLOOR W/5-16d NAILS.
- ④ CROSS MEMBER (8 REQD). SEE GENERAL NOTE "J", PAGE 2.
- ⑤ STEEL STRAPPING, 1-1/4" x .035" x 24'-0" (3 REQD).

TYPICAL LCL METHODS, XM39 FIN ASSEMBLY