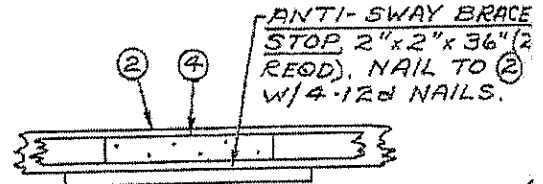


NOTE: 36 PALLET UNITS SHOWN  
GROSS WT. - 118,626 LBS.

FOR A 40'-6" CAR:  
30 PALLET UNITS  
GROSS WEIGHT - 99,064 LBS.



SEE THE PARTIAL-LAYER BRACING  
TYPE B ON PAGE 10.

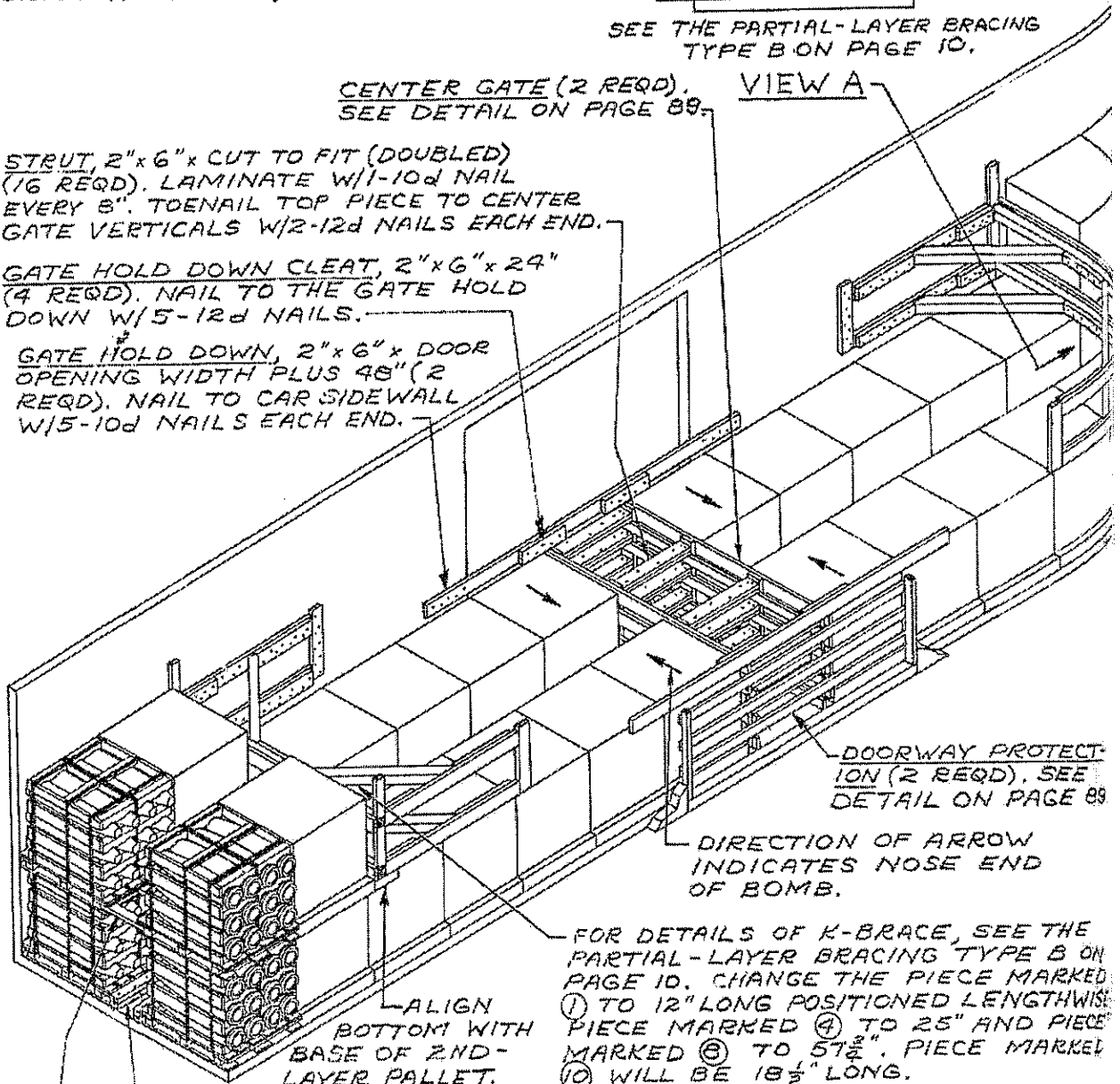
CENTER GATE (2 REQD).  
SEE DETAIL ON PAGE 89.

VIEW A

STRUT, 2"x6"x CUT TO FIT (DOUBLED)  
(76 REQD). LAMINATE W/1-10d NAIL  
EVERY 8". TOENAIL TOP PIECE TO CENTER  
GATE VERTICALS W/2-12d NAILS EACH END.

GATE HOLD DOWN CLEAT, 2"x6"x24"  
(4 REQD). NAIL TO THE GATE HOLD  
DOWN W/5-12d NAILS.

GATE HOLD DOWN, 2"x6"x DOOR  
OPENING WIDTH PLUS 48" (2  
REQD). NAIL TO CAR SIDEWALL  
W/5-10d NAILS EACH END.



DOORWAY PROTECTION (2 REQD). SEE  
DETAIL ON PAGE 89

DIRECTION OF ARROW  
INDICATES NOSE END  
OF BOMB.

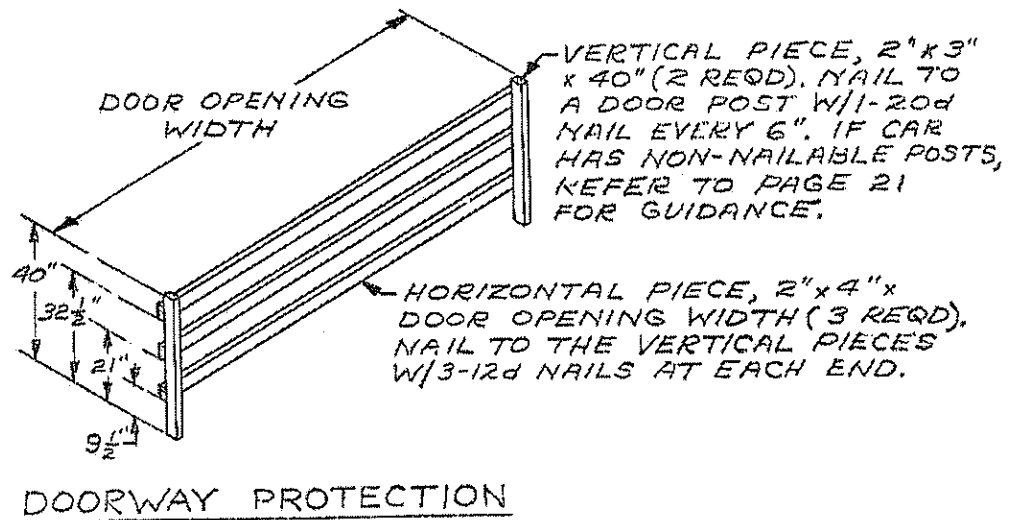
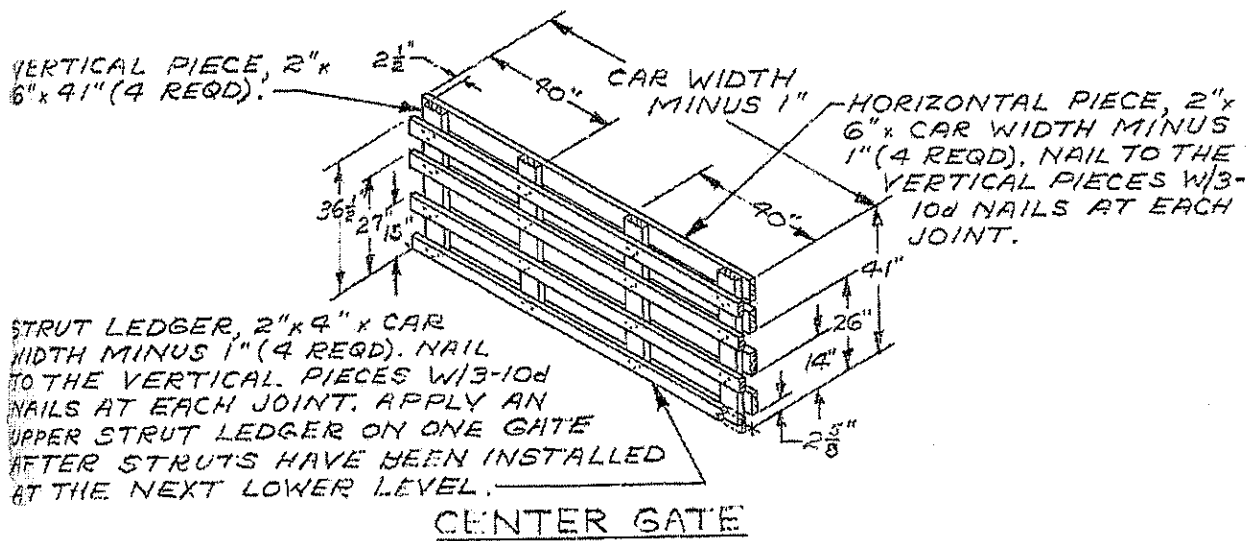
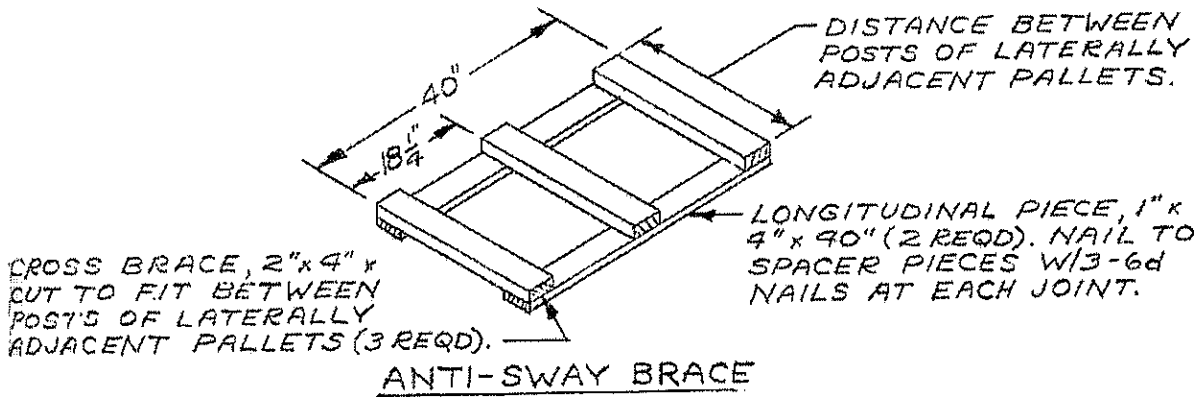
FOR DETAILS OF K-BRACE, SEE THE  
PARTIAL-LAYER BRACING TYPE B ON  
PAGE 10. CHANGE THE PIECE MARKED  
① TO 12" LONG POSITIONED LENGTHWISE.  
PIECE MARKED ④ TO 25" AND PIECE  
MARKED ③ TO 57½". PIECE MARKED  
⑩ WILL BE 18½" LONG.

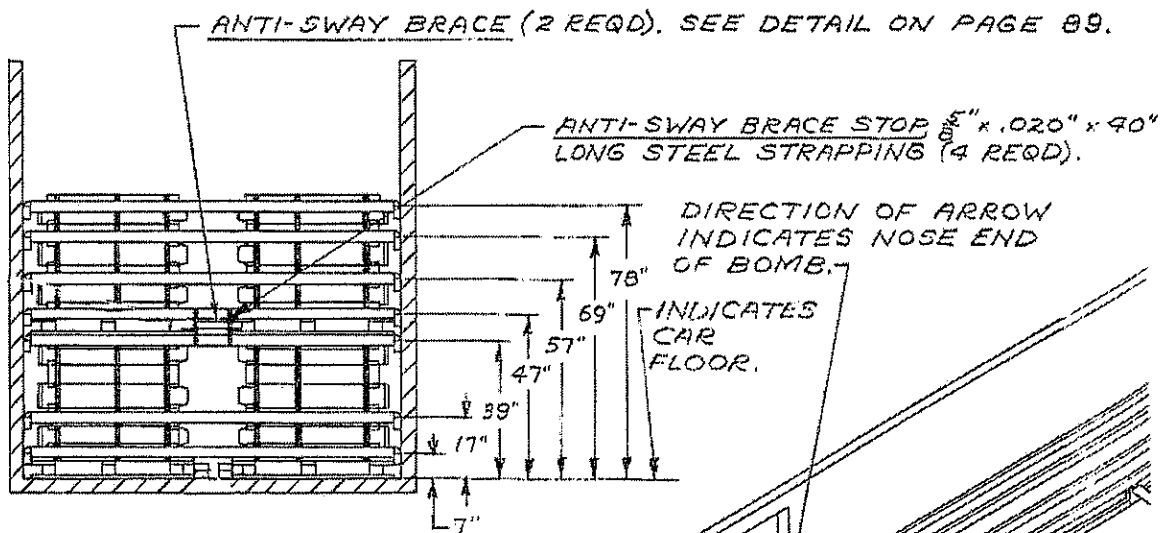
ALIGN  
BOTTOM WITH  
BASE OF 2ND-  
LAYER PALLET.

SIDE BLOCKING, 2"x4"x40" (DOUBLED).  
(28 REQD). NAIL FIRST PIECE TO CAR  
FLOOR W/5-16d NAILS. NAIL SECOND  
PIECE W/5-30d NAILS.

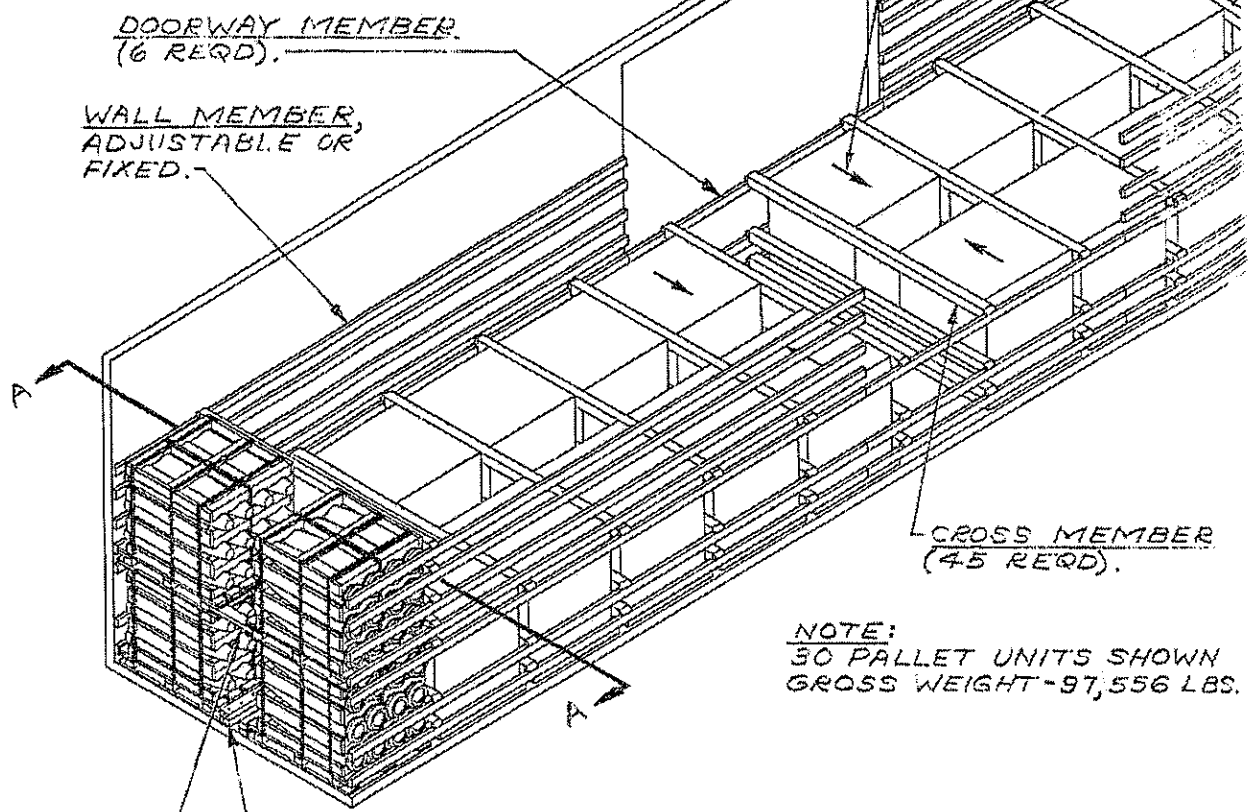
ANTI-SWAY BRACE (4 REQD). SEE  
THE DETAIL ON PAGE 89.

TYPICAL LOAD OF BOMBS, 250 LB MK81 & MODS  
(AIR FORCE UNIT LOAD PER TPO 1325-092-9498, REV H  
IN A 50'-6" LONG CONVENTIONAL BOX CAR





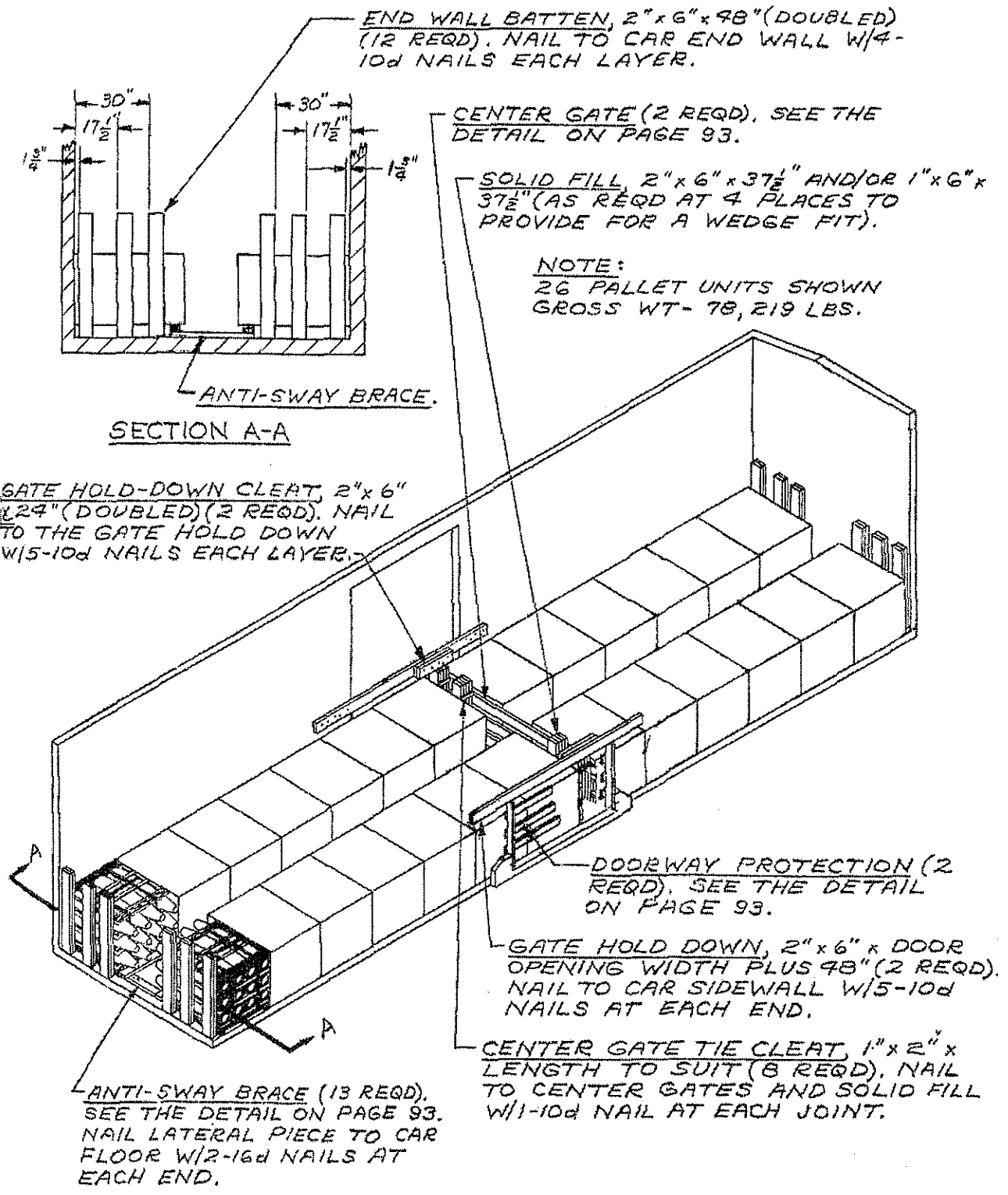
SECTION A-A



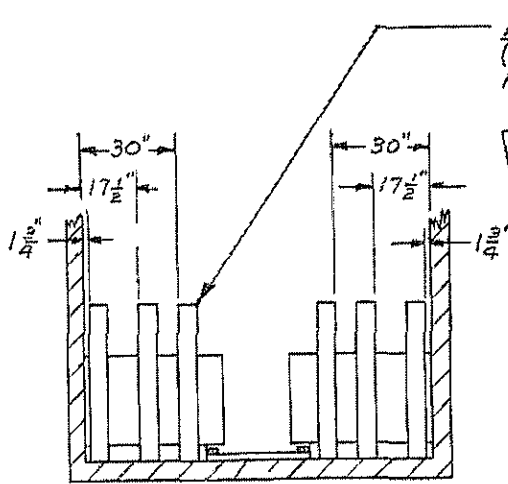
NOTE:  
30 PALLET UNITS SHOWN  
GROSS WEIGHT-97,556 LBS.

ANTI-SWAY BRACE (2 REQD). SEE DETAIL ON PAGE 89.

TYPICAL LOAD OF BOMBS, 250 LB MK81 & MODS  
(AIR FORCE UNIT LOAD PER TPO 1325-092-9498, REV H  
IN A 50'-6" LONG BOX CAR EQUIPPED WITH  
MECHANICAL BRACING DEVICES (CROSS MEMBERS)



TYPICAL LOAD OF BOMBS, 250 LB MK81 & MODS  
IN PALLET MK8 MOD 0 (FLEET ISSUE UNIT LOAD)  
IN A 40'-6" LONG CONVENTIONAL BOX CAR



SECTION A-A

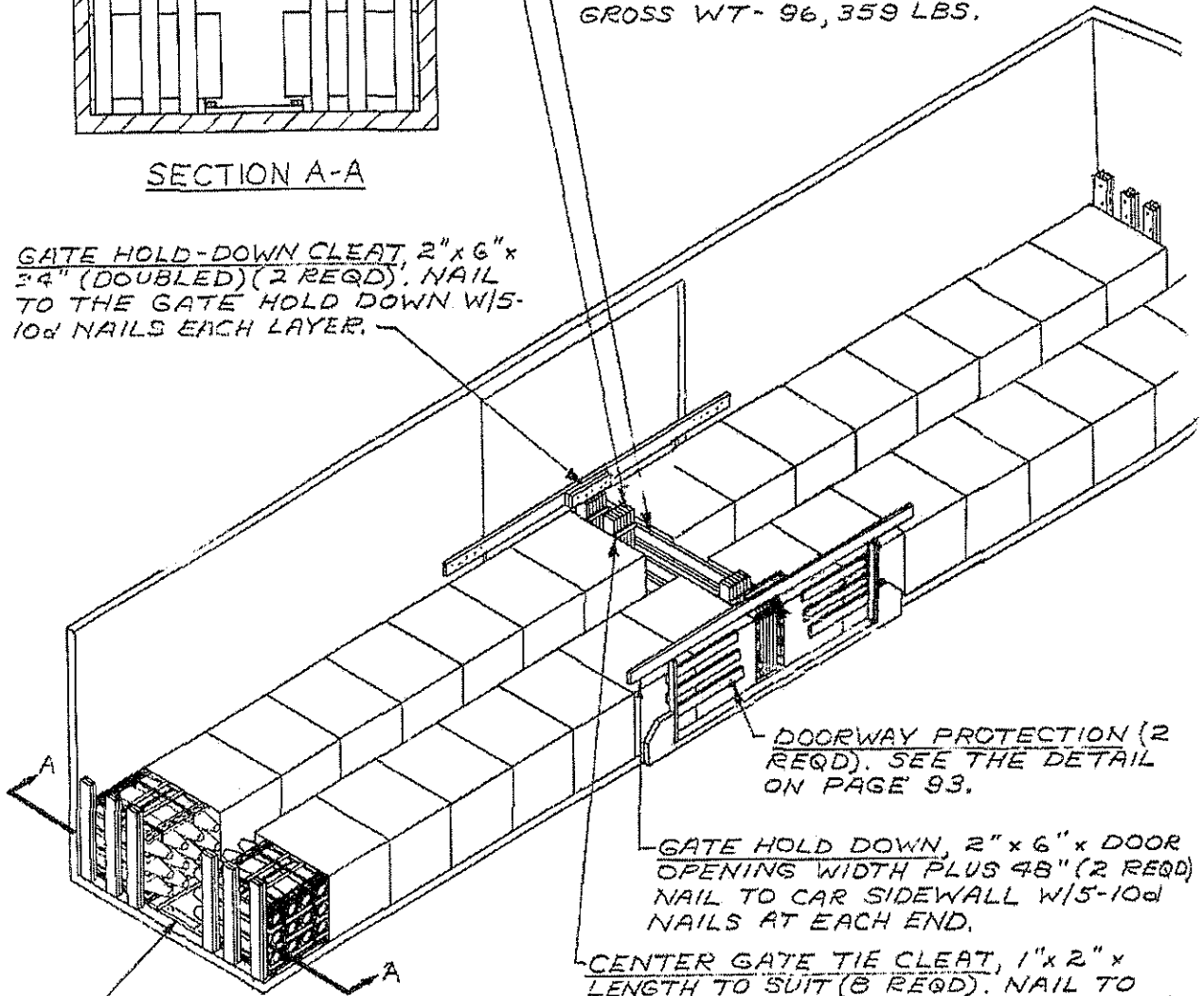
END WALL BATTEN, 2" x 6" x 98" (DOUBLED)  
(12 REQD). NAIL TO CAR END WALL W/4-  
10d NAILS EACH LAYER.

SOLID FILL, 2" x 6" x 37 1/2" AND/OR 1" x 6" x 37 1/2"  
(AS REQD AT 4 PLACES TO PROVIDE FOR  
A WEDGE FIT).

CENTER GATE (2 REQD). SEE THE  
DETAIL ON PAGE 93.

NOTE:  
32 PALLET UNITS SHOWN  
GROSS WT- 96,359 LBS.

GATE HOLD-DOWN CLEAT, 2" x 6" x  
34" (DOUBLED) (2 REQD). NAIL  
TO THE GATE HOLD DOWN W/5-  
10d NAILS EACH LAYER.



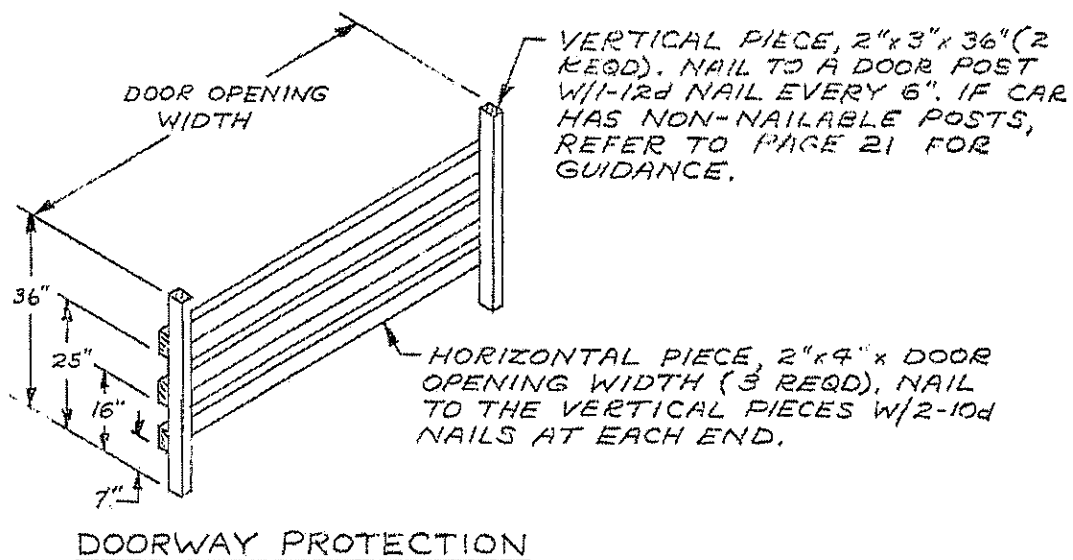
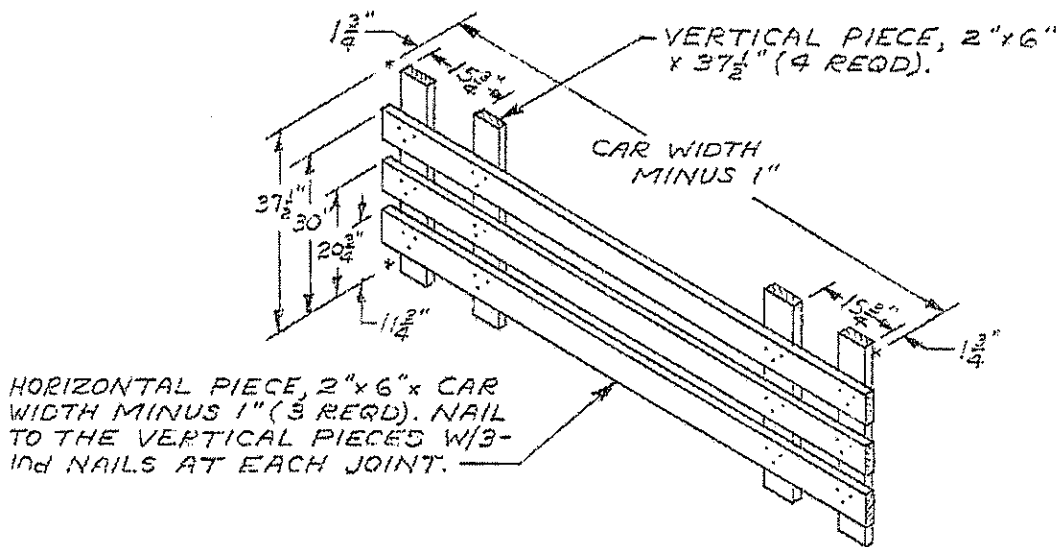
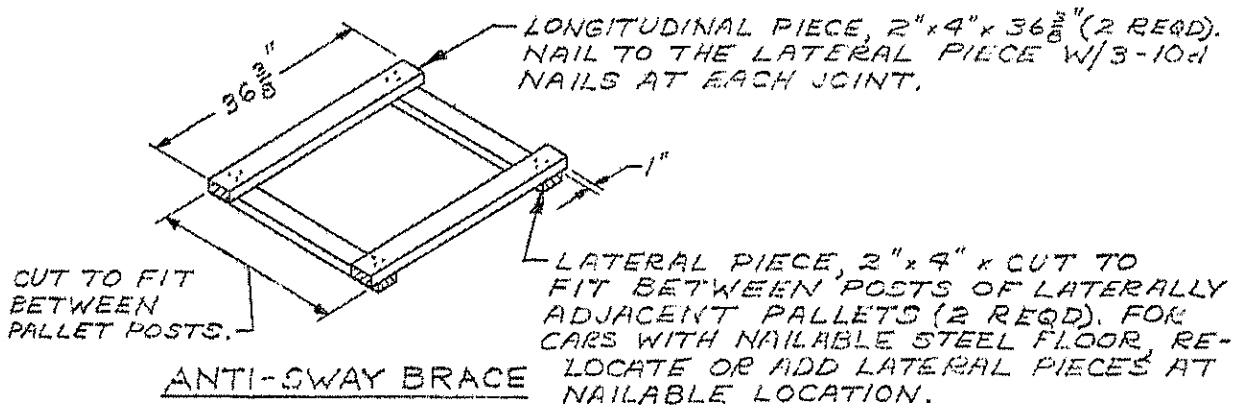
DOORWAY PROTECTION (2  
REQD). SEE THE DETAIL  
ON PAGE 93.

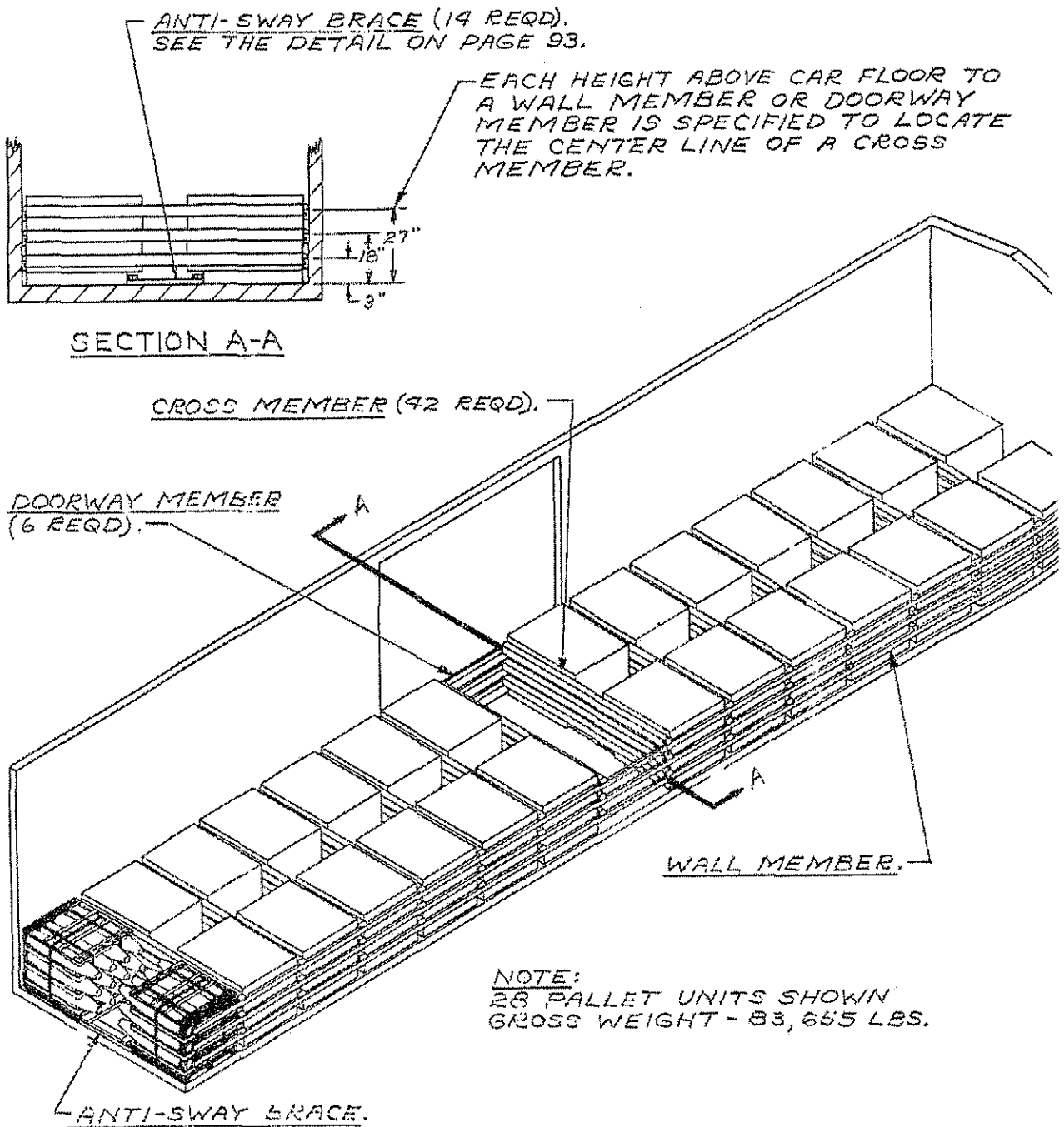
GATE HOLD DOWN, 2" x 6" x DOOR  
OPENING WIDTH PLUS 48" (2 REQD)  
NAIL TO CAR SIDEWALL W/5-10d  
NAILS AT EACH END.

CENTER GATE TIE CLEAT, 1" x 2" x  
LENGTH TO SUIT (8 REQD). NAIL TO  
CENTER GATES AND SOLID FILL W/1-  
10d NAIL AT EACH JOINT.

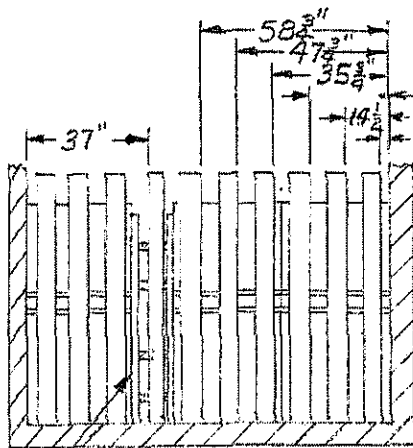
ANTI-SWAY BRACE (16 REQD).  
SEE THE DETAIL ON PAGE 93.  
NAIL LATERAL PIECE TO CAR  
FLOOR W/2-16d NAILS AT  
EACH END.

TYPICAL LOAD OF BOMBS, 250 LB MK81 & MODS  
IN PALLET MK8 MOD 0 (FLEET ISSUE UNIT LOAD)  
IN A 50'-6" LONG CONVENTIONAL BOX CAR





TYPICAL LOAD OF BOMBS, 250 LB MK81 & MODS  
IN PALLET MK8 MOD 0 (FLEET ISSUE UNIT LOAD)  
IN A 50'-6" LONG BOX CAR EQUIPPED WITH  
MECHANICAL BRACING DEVICES (CROSS MEMBERS)



SECTION A-A

ANTI-SWAY BRACE (8 REQD). SEE DETAIL ON PAGE 97.

DIRECTION OF ARROW INDICATES NOSE END OF BOMB.

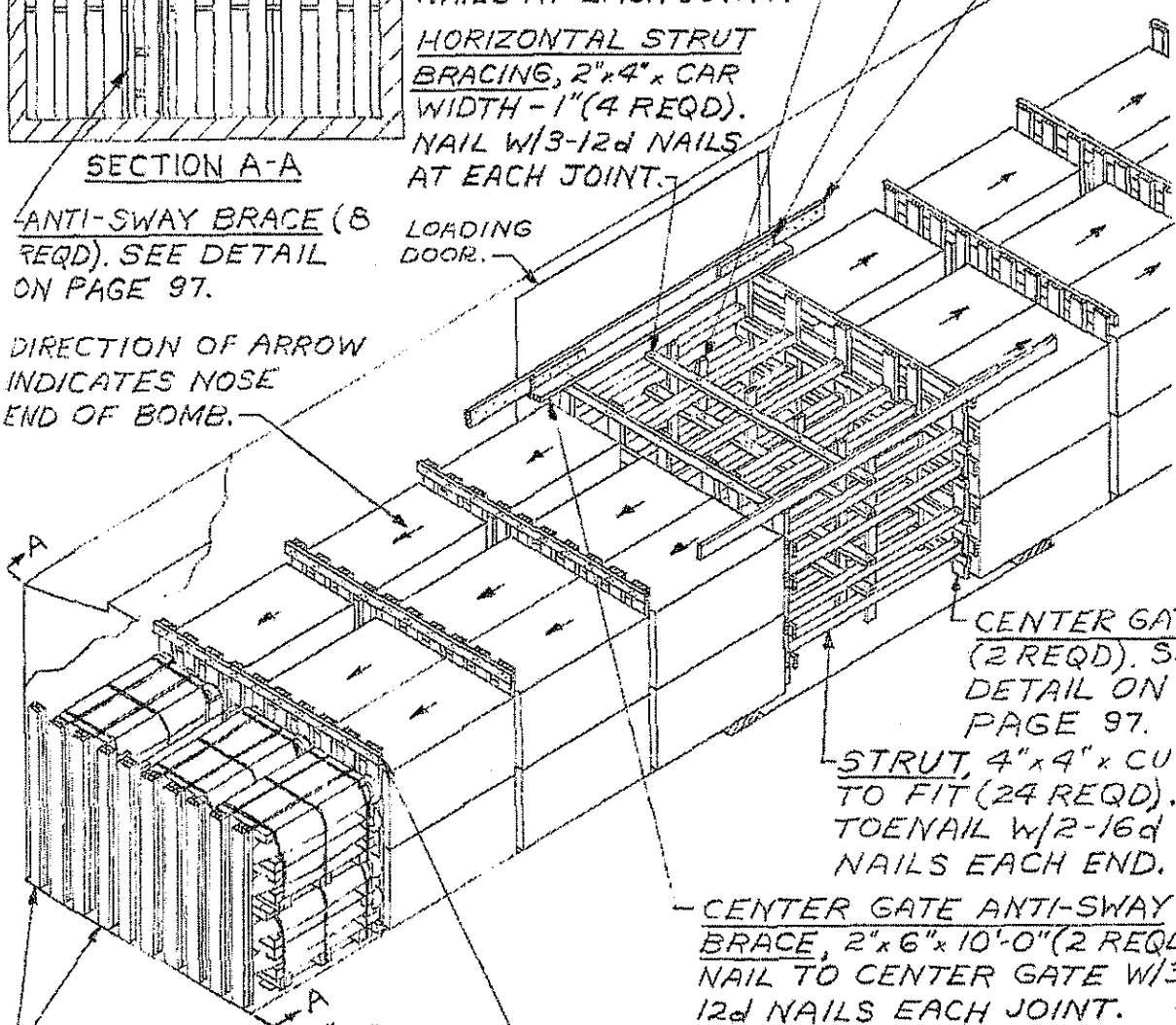
LOADING DOOR.

GATE HOLD DOWN, 2"x6"x DOOR WIDTH PLUS 24" (2 REQD). NAIL W/5-12d NAILS EACH END.

2 1/2" HOLD-DOWN CLEAT, 2"x6"x24" (4 REQD). NAIL W/5-10d NAILS.

VERTICAL STRUT BRACING, 2"x4"x66" (6 REQD). NAIL W/3-12d NAILS AT EACH JOINT.

HORIZONTAL STRUT BRACING, 2"x4"x CAR WIDTH - 1" (4 REQD). NAIL W/3-12d NAILS AT EACH JOINT.



CENTER GATE (2 REQD). SEE DETAIL ON PAGE 97.

STRUT, 4"x4"x CUT TO FIT (24 REQD). TOENAIL W/2-16d NAILS EACH END.

CENTER GATE ANTI-SWAY BRACE, 2"x6"x10'-0" (2 REQD). NAIL TO CENTER GATE W/3-12d NAILS EACH JOINT.

WALL BATTEN, 2"x4" x 72" (DOUBLED) (2 REQD). NAIL W/6-10d NAILS EACH LAYER.

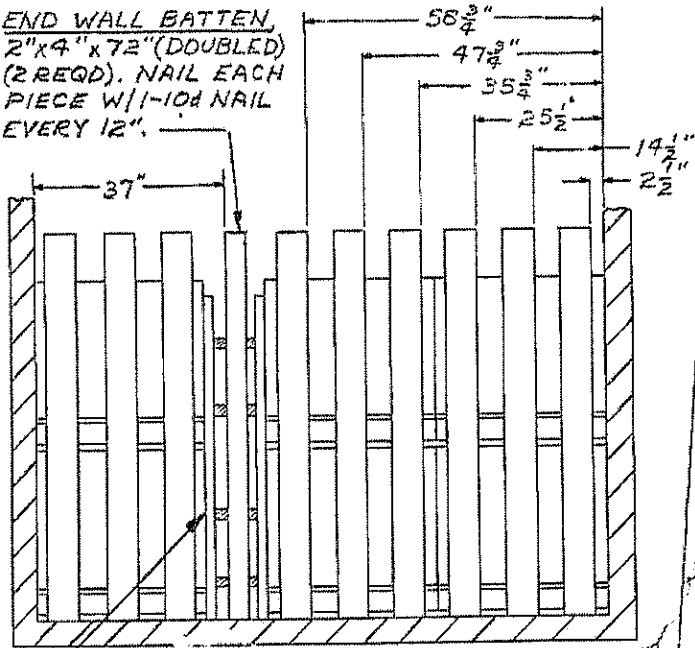
SEPARATOR GATE (6 REQD, 3 LEFT HAND AND 3 RIGHT HAND). SEE THE DETAIL ON PAGE 97.

WALL BATTEN, 2"x6"x72" (DOUBLED) (18 REQD). NAIL W/6-10d NAILS EACH LAYER.

NOTE:  
48 PALLET UNITS SHOWN  
GROSS WT. - 152,882 LBS.

TYPICAL LOAD OF BOMBS, 500 LB MK82 & MODS (AIR FORCE UNIT LOAD PER TPO 1325-294-4152 - REV R THR V) IN A 50'-6" LONG CONVENTIONAL BOX CAR

END WALL BATTEN, 2"x4"x72" (DOUBLED) (2 REQD). NAIL EACH PIECE W/1-10d NAIL EVERY 12".



SECTION A-A

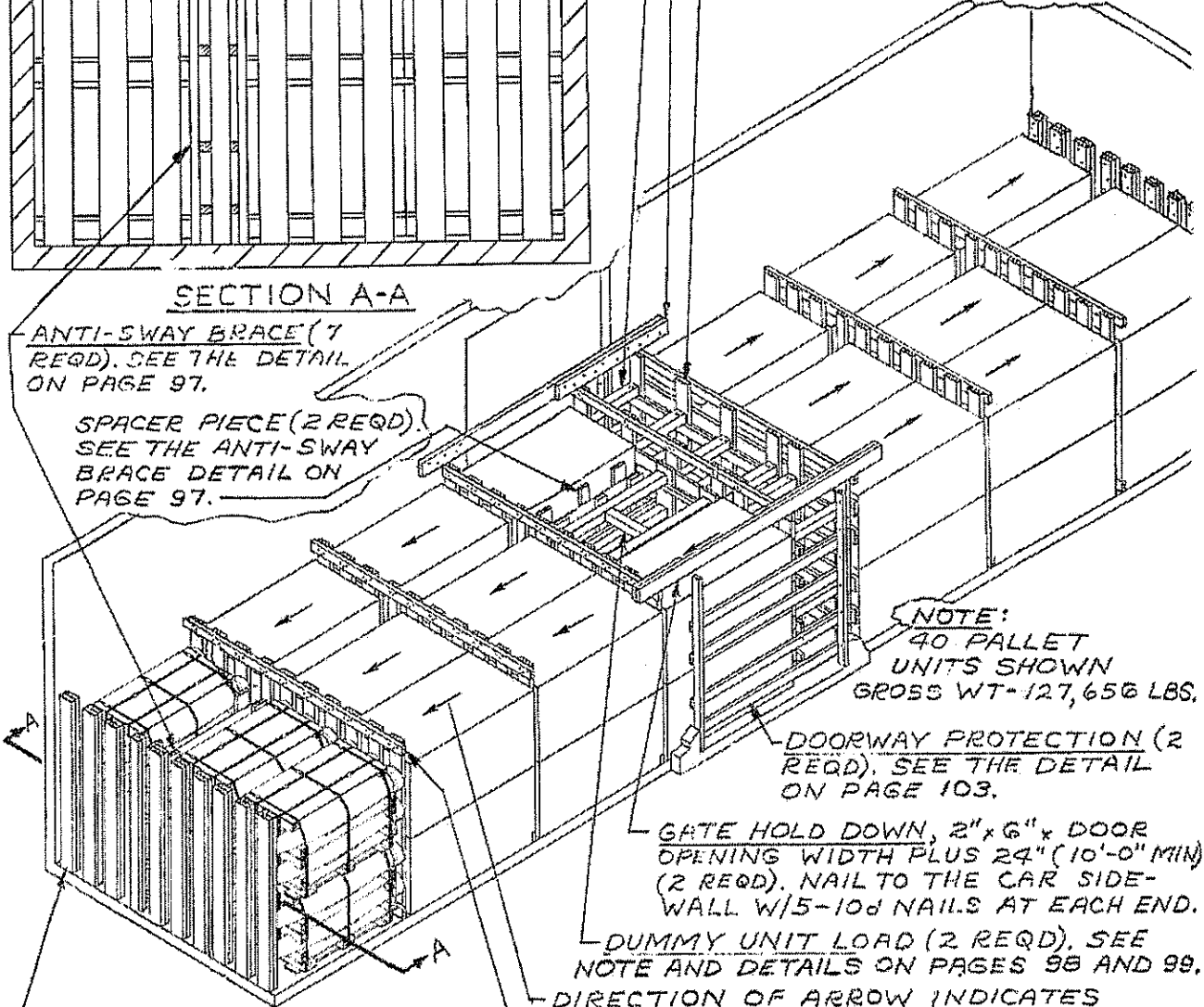
ANTI-SWAY BRACE (7 REQD). SEE THE DETAIL ON PAGE 97.

SPACER PIECE (2 REQD). SEE THE ANTI-SWAY BRACE DETAIL ON PAGE 97.

STRUT, 4"x4"x CUT TO FIT (24 REQD). TOENAIL TO THE CENTER GATES W/2-16d NAILS AT EACH END.

GATE HOLD-DOWN CLEAT, 2"x6"x 60" (2 REQD), NAIL TO THE GATE HOLD DOWN W/1-10d NAIL EVERY 6".

CENTER GATE (2 REQD, 1 LEFT HAND AND 1 RIGHT HAND). SEE THE DETAIL ON PAGE 97.



NOTE: 40 PALLET UNITS SHOWN GROSS WT-127,656 LBS.

DOORWAY PROTECTION (2 REQD). SEE THE DETAIL ON PAGE 103.

GATE HOLD DOWN, 2"x6"x DOOR OPENING WIDTH PLUS 24" (10'-0" MIN) (2 REQD). NAIL TO THE CAR SIDE-WALL W/5-10d NAILS AT EACH END.

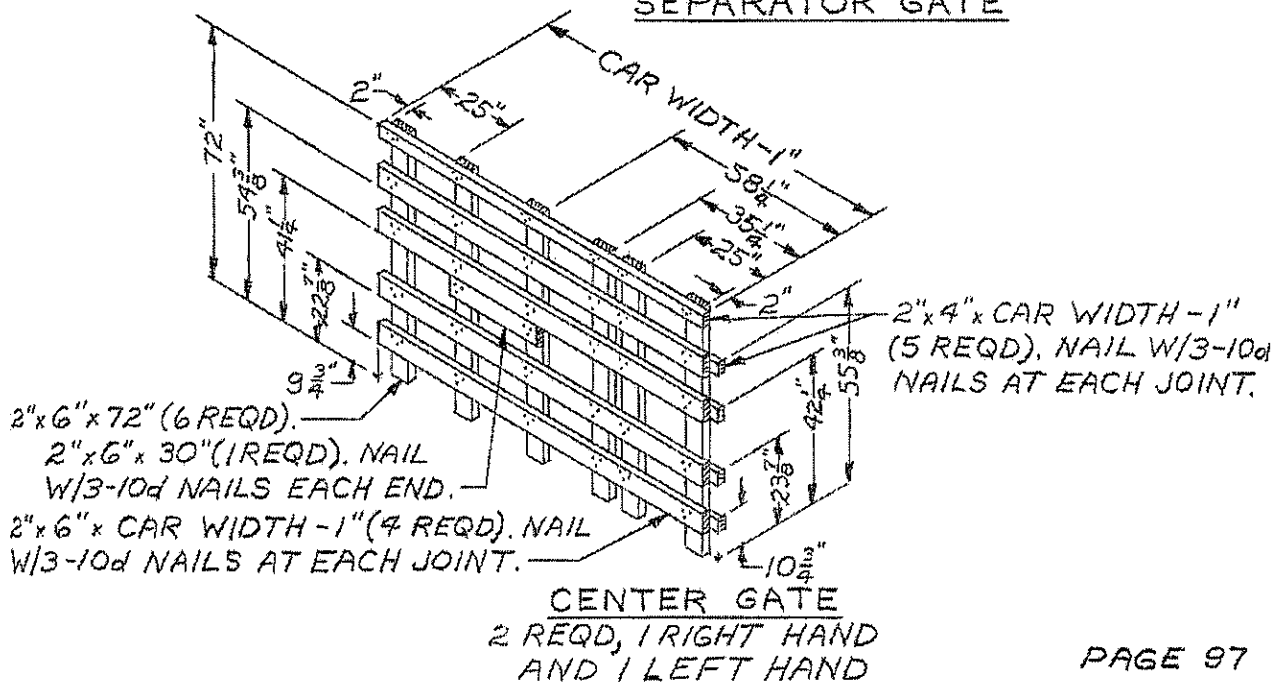
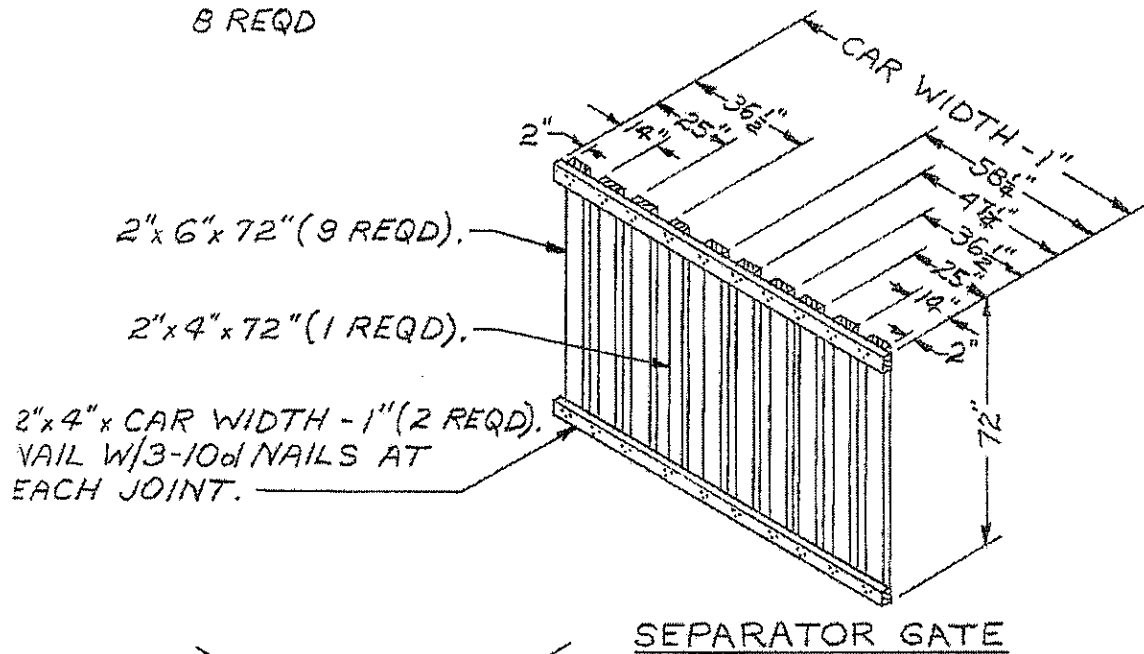
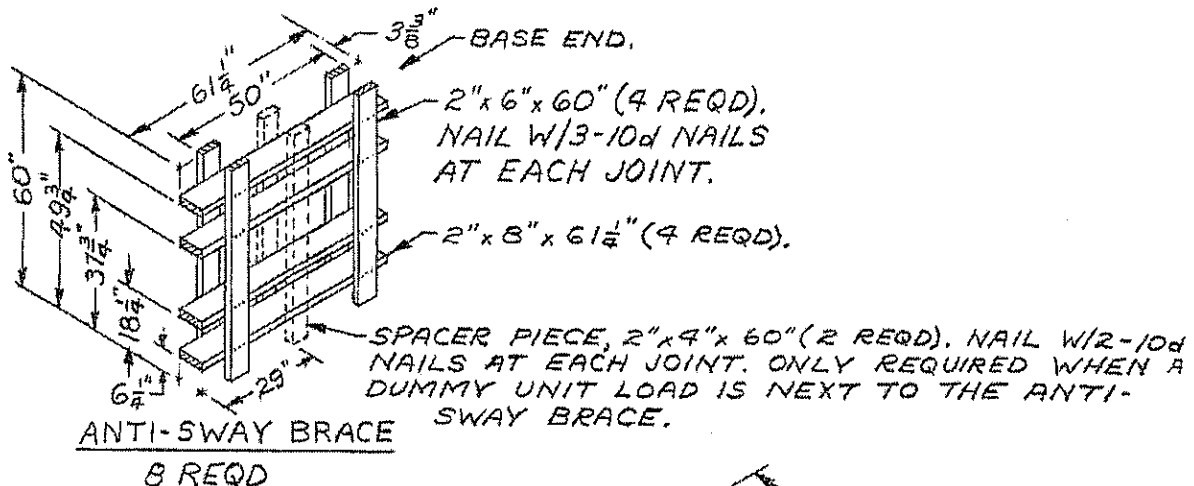
DUMMY UNIT LOAD (2 REQD). SEE NOTE AND DETAILS ON PAGES 98 AND 99.

DIRECTION OF ARROW INDICATES NOSE END OF BOMB.

SEPARATOR GATE (5 REQD, 2 RIGHT HAND AND 3 LEFT HAND). SEE THE DETAIL ON PAGE 97.

END WALL BATTEN, 2"x6"x72" (DOUBLED) (18 REQD). NAIL EACH PIECE TO THE CAR END WALL W/1-10d NAIL EVERY 12".

TYPICAL LOAD OF BOMBS, 500 LB MKB2 & MODS (AIR FORCE UNIT LOAD PER TPO 1325-294-4152, REV R THRU V) IN A 40'-6" LONG CONVENTIONAL BOX CAR



UPPER SUPPORT PIECE, 2"x4"x 33 $\frac{1}{4}$ " (2 REQD). TOENAIL TO A BUFFER STRIP W/1-10d NAIL EVERY 12".

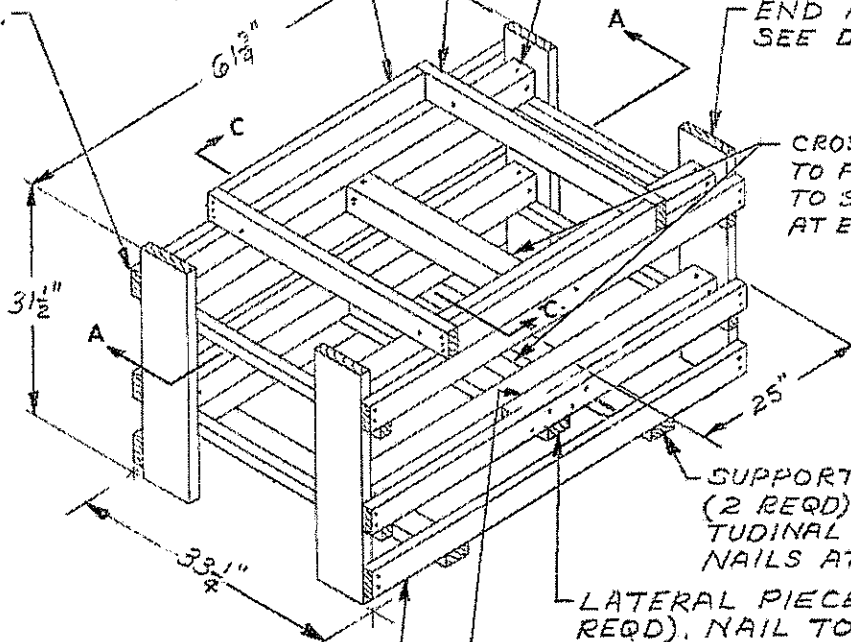
UPPER SUPPORT PIECE, 2"x4"x 38 $\frac{1}{2}$ " (2 REQD). NAIL W/2-16d NAILS AT EACH END. TOENAIL TO STRUTS W/2-10d NAILS AT EACH JOINT.

BUFFER STRIP, 2"x4"x 61 $\frac{3}{4}$ " (4 REQD). NAIL TO THE END ASSEMBLIES W/2-16d NAILS AT EACH END AND TO A SPACER PIECE W/4-16d NAILS.

STRUT, 4"x4"x 58 $\frac{1}{2}$ " (4 REQD). TOENAIL TO END ASSEMBLIES W/3-16d NAILS AT EACH END.

END ASSEMBLY (2 REQD) SEE DETAIL BELOW.

CROSS BRACE, 4"x4"x CUT TO FIT (2 REQD). TOENAIL TO STRUT W/3-16d NAILS AT EACH END.



LONGITUDINAL PIECE, 2"x4"x 61 $\frac{3}{4}$ " (2 REQD). NAIL TO THE END ASSEMBLIES W/2-16d NAILS AT EACH END.

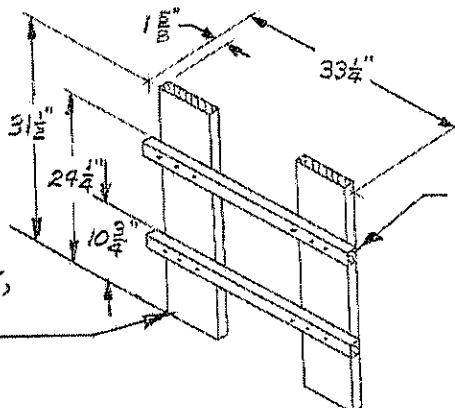
SUPPORT PIECE, 2"x4"x 33 $\frac{1}{4}$ " (2 REQD). NAIL TO LONGITUDINAL PIECE W/2-16d NAILS AT EACH END.

LATERAL PIECE, 2"x4"x 33 $\frac{1}{4}$ " (1 REQD). NAIL TO CROSS BRACE W/4 16d NAILS AND TO THE STRUTS, SPACERS AND BUFFER STRIPS W/1-16d NAIL AT EACH JOINT.

SPACER, 2"x4"x 12" (4 REQD). NAIL TO THE STRUTS W/4-10d NAILS.

DUMMY UNIT LOAD

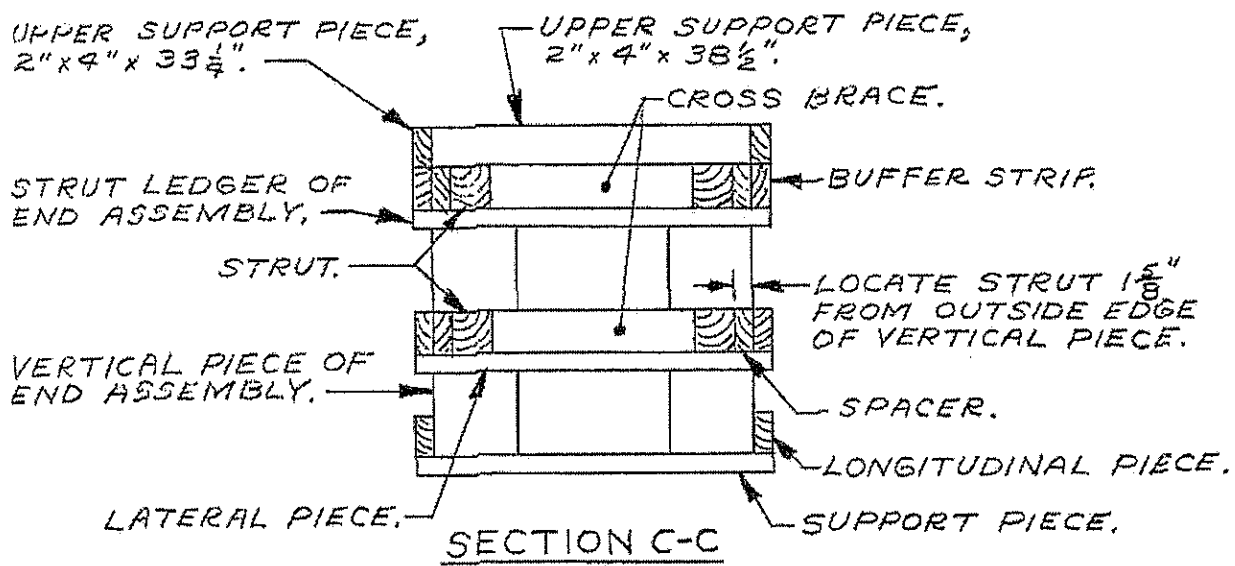
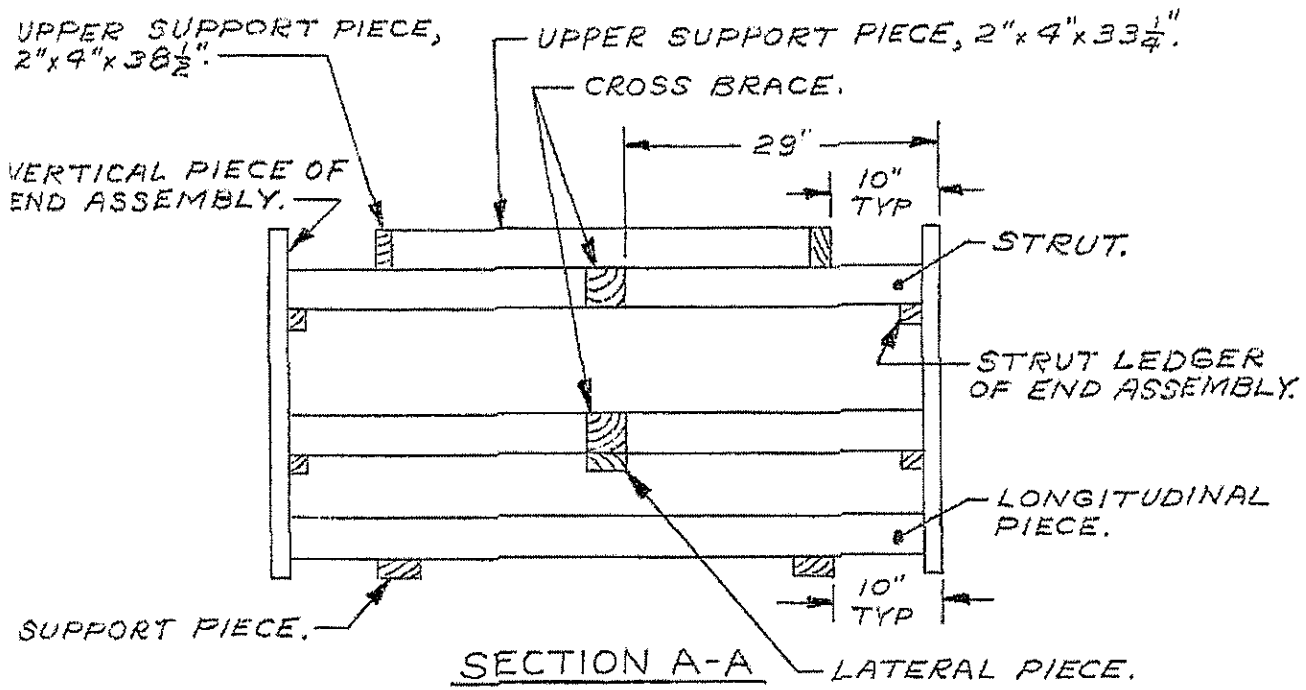
NOTE: DUMMY UNIT LOADS WILL BE USED ONLY AS NEEDED TO AVOID EXCEEDING THE LOAD LIMIT OF A CAR, OR TO SHIP A REDUCED LOAD.

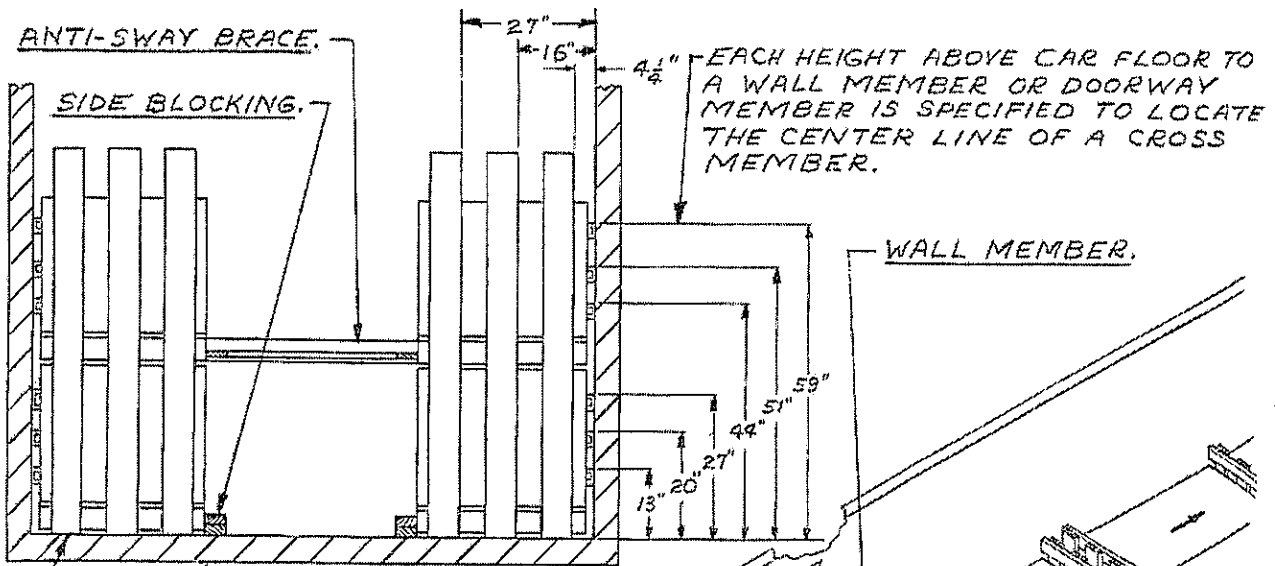


VERTICAL PIECE, 2"x8"x 31 $\frac{1}{2}$ " (2 REQD).

STRUT LEDGER, 2"x2"x 33 $\frac{1}{4}$ " (2 REQD). NAIL TO THE VERTICAL PIECES W/3-16d NAILS AT EACH JOINT. CLINCH.

END ASSEMBLY

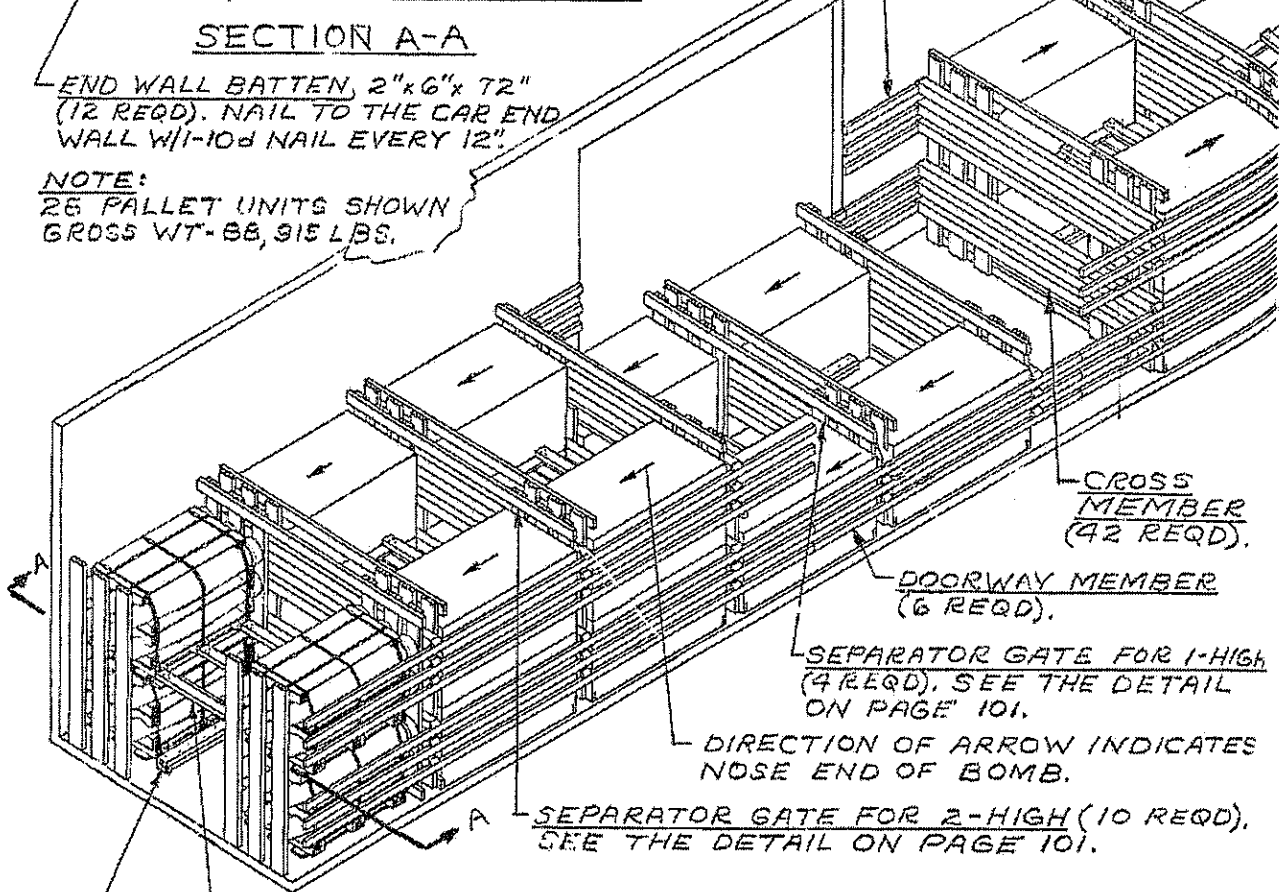




**SECTION A-A**

END WALL BATTEN, 2"x6"x72"  
(12 REQD). NAIL TO THE CAR END  
WALL W/1-10d NAIL EVERY 12".

**NOTE:**  
26 PALLET UNITS SHOWN  
GROSS WT-66,915 LBS.



SEPARATOR GATE FOR 1-HIGH  
(4 REQD). SEE THE DETAIL  
ON PAGE 101.

DIRECTION OF ARROW INDICATES  
NOSE END OF BOMB.

SEPARATOR GATE FOR 2-HIGH (10 REQD),  
SEE THE DETAIL ON PAGE 101.

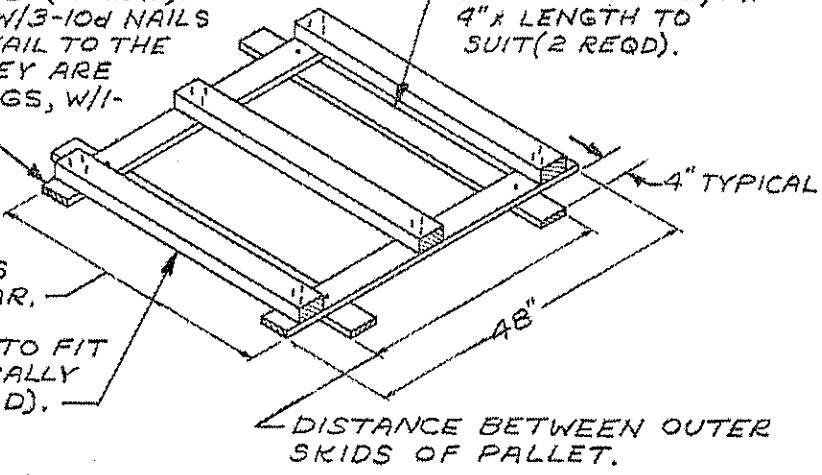
ANTI-SWAY BRACE (6 REQD). SEE  
THE DETAIL ON PAGE 101.

SIDE BLOCKING, 2"x4"x98" (DOUBLED) (16 REQD). NAIL FIRST PIECE TO  
CAR FLOOR W/1-16d NAIL EVERY 6". NAIL SECOND PIECE W/1-30d EVERY 6"

TYPICAL LOAD OF BOMBS, 500 LB MK82 & MODS  
(AIR FORCE UNIT LOAD PER TPO 1325-294-4152, REV R  
THRU V) IN A 50'-6" LONG BOX CAR EQUIPPED WITH  
MECHANICAL BRACING DEVICES (CROSS MEMBERS)

LONGITUDINAL PIECE, 1" x 4" x 48" (2 REQD).  
 NAIL TO THE CROSS BRACES W/3-10d NAILS  
 AT EACH JOINT AND CLINCH. NAIL TO THE  
 SUPPORT PIECES, AFTER THEY ARE  
 INSERTED IN FORK OPENINGS, W/1-  
 6d NAIL AT EACH JOINT.

SUPPORT PIECE, 1" x  
 4" x LENGTH TO  
 SUIT (2 REQD).



DISTANCE BETWEEN SKIDS  
 OF PALLETS ACROSS THE CAR.

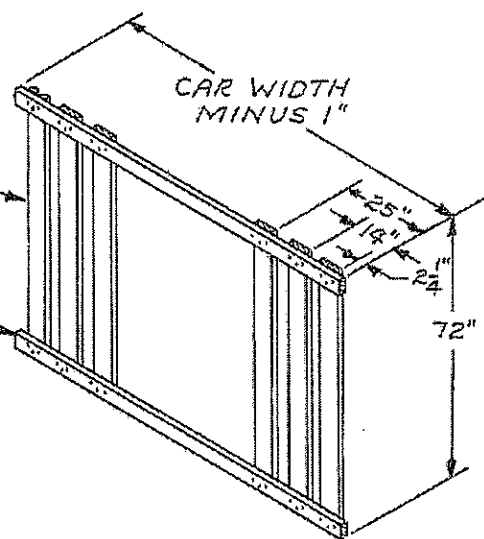
CROSS BRACE, 2" x 4" x CUT TO FIT  
 BETWEEN SKIDS OF LATERALLY  
 ADJACENT PALLETS (3 REQD).

DISTANCE BETWEEN OUTER  
 SKIDS OF PALLET.

ANTI-SWAY BRACE

VERTICAL PIECE, 2" x  
 6" x 72" (6 REQD).

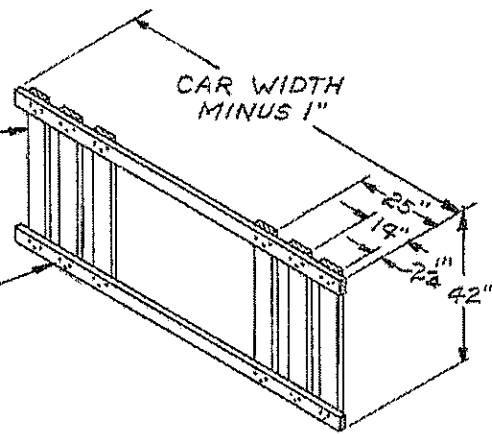
HORIZONTAL PIECE, 2" x 4" x CAR  
 WIDTH MINUS 1" (2 REQD). NAIL  
 TO THE VERTICAL PIECES W/3-  
 10d NAILS AT EACH JOINT.



SEPARATOR GATE FOR 2-HIGH

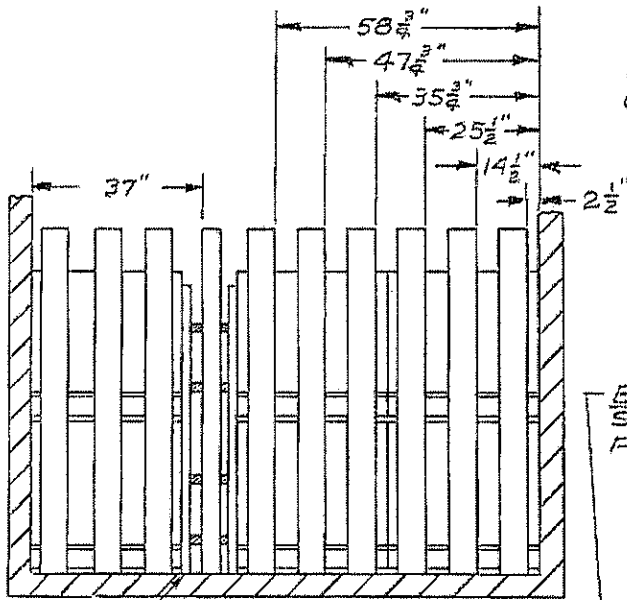
VERTICAL PIECE, 2" x  
 6" x 42" (6 REQD).

HORIZONTAL PIECE, 2" x 4" x CAR  
 WIDTH MINUS 1" (2 REQD). NAIL  
 TO THE VERTICAL PIECES W/3-  
 10d NAILS AT EACH JOINT.



SEPARATOR GATE FOR 1-HIGH

NOTE:  
 46 PALLET UNITS SHOWN  
 GROSS WEIGHT-143,979 POUNDS



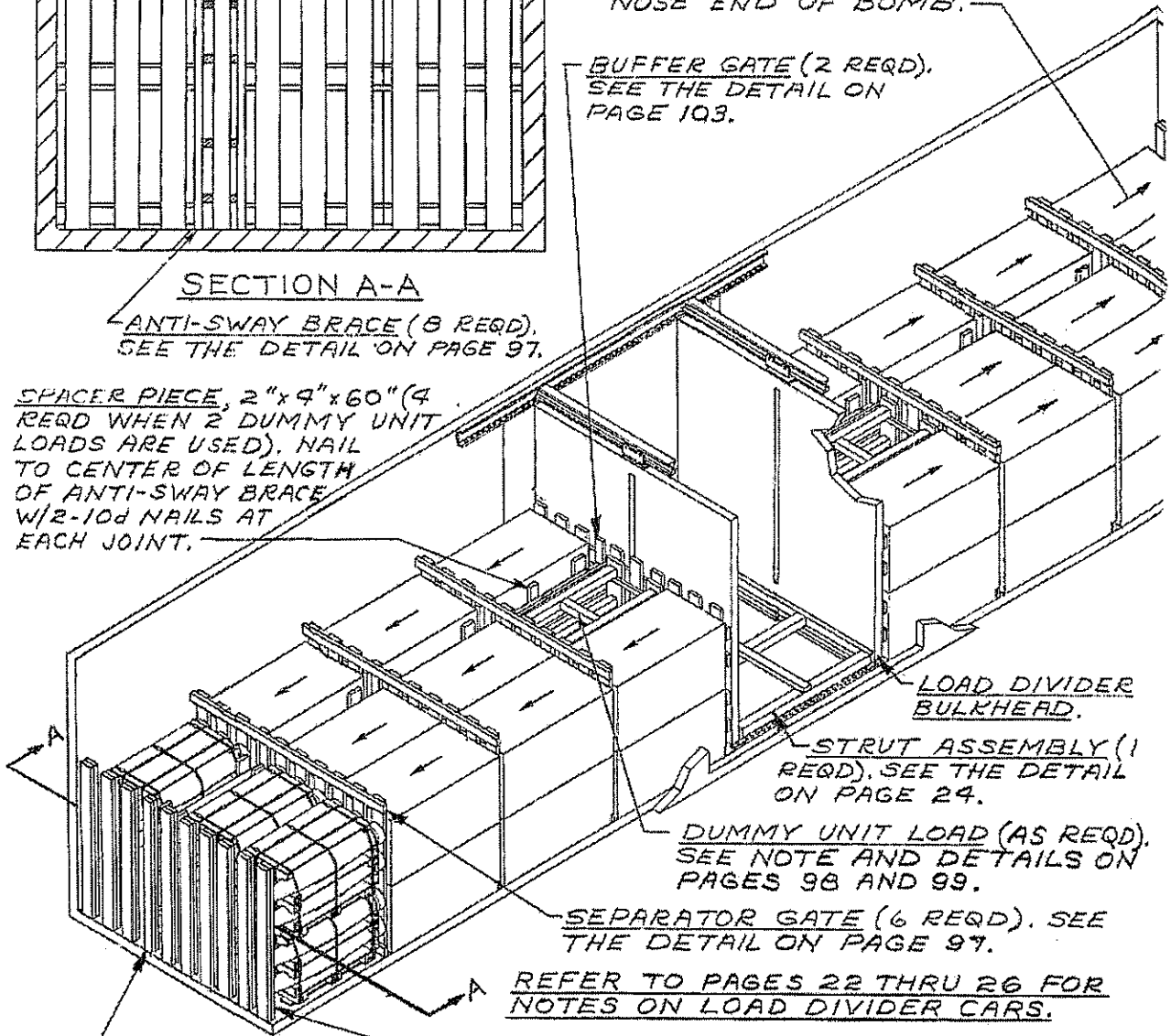
DIRECTION OF ARROW INDICATES NOSE END OF BOMBS.

BUFFER GATE (2 REQD).  
 SEE THE DETAIL ON PAGE 103.

SECTION A-A

ANTI-SWAY BRACE (8 REQD).  
 SEE THE DETAIL ON PAGE 97.

SPACER PIECE, 2"x4"x60" (4 REQD WHEN 2 DUMMY UNIT LOADS ARE USED). NAIL TO CENTER OF LENGTH OF ANTI-SWAY BRACE W/2-10d NAILS AT EACH JOINT.



LOAD DIVIDER BULKHEAD.

STRUT ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 24.

DUMMY UNIT LOAD (AS REQD). SEE NOTE AND DETAILS ON PAGES 98 AND 99.

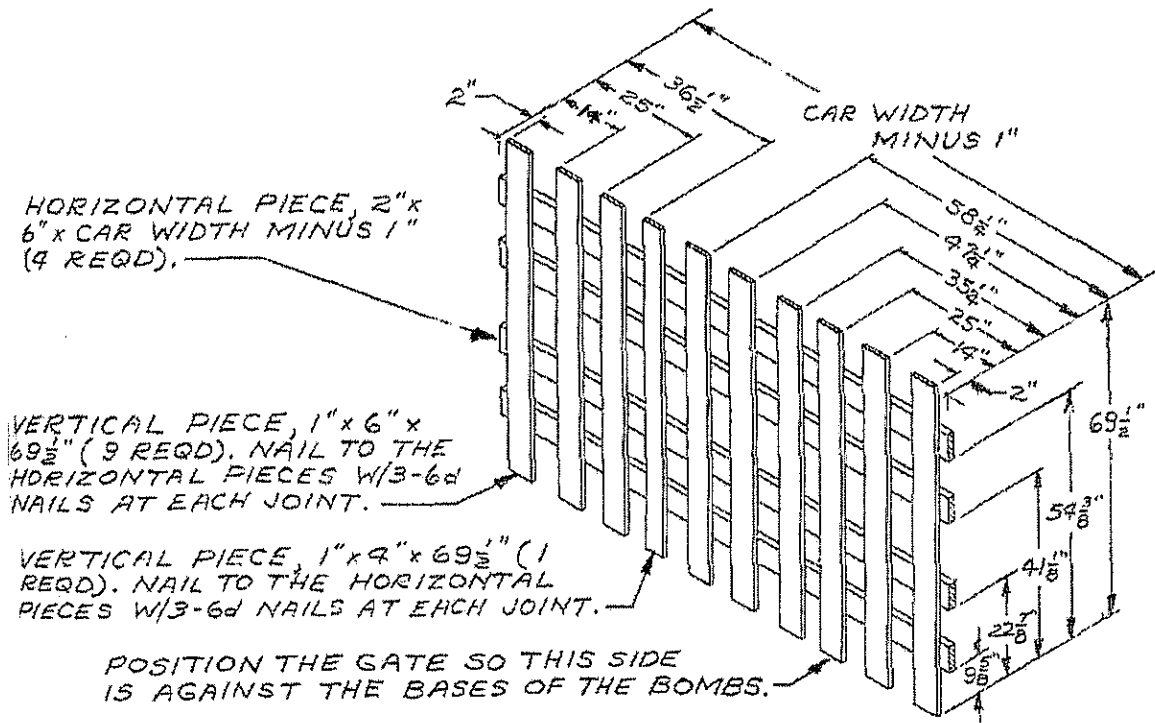
SEPARATOR GATE (6 REQD). SEE THE DETAIL ON PAGE 97.

REFER TO PAGES 22 THRU 26 FOR NOTES ON LOAD DIVIDER CARS.

END WALL BATTEN, 2"x6"x72" (DOUBLED) (18 REQD). NAIL EACH PIECE TO CAR END WALL W/1-10d NAIL EVERY 12".

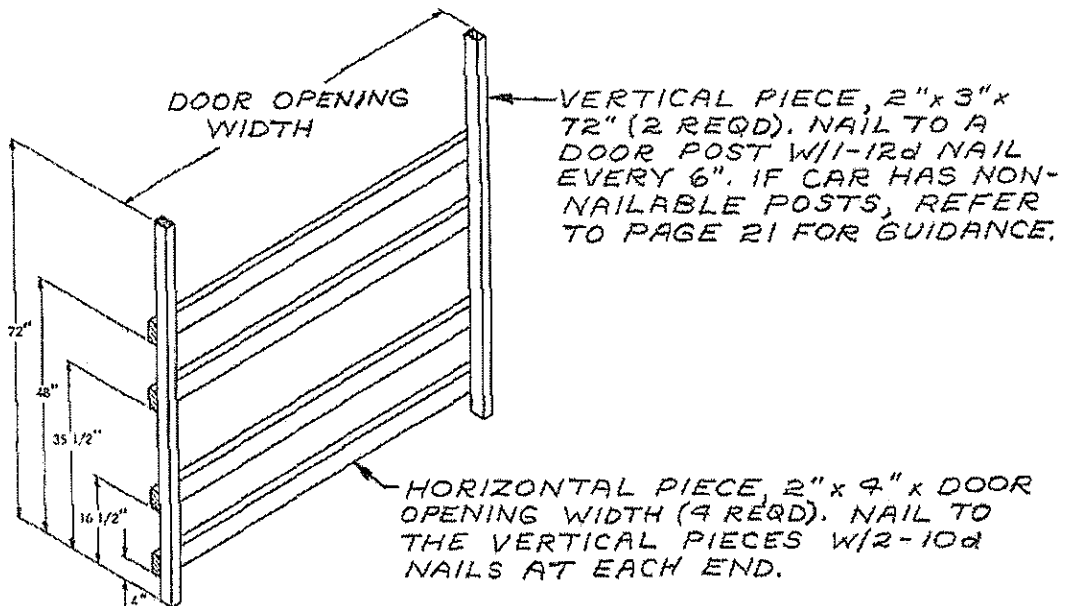
END WALL BATTEN, 2"x4"x72" (DOUBLED) (2 REQD). NAIL EACH PIECE TO CAR END WALL W/1-10d NAIL EVERY 12".

TYPICAL LOAD OF BOMBS, 500 LB MK82 & MODS (AIR FORCE UNIT LOAD PER TPO 1325-294-4152, REV R THRU V) IN A 50'-6" LONG BY 9'-2" WIDE CAR EQUIPPED WITH LOAD DIVIDERS



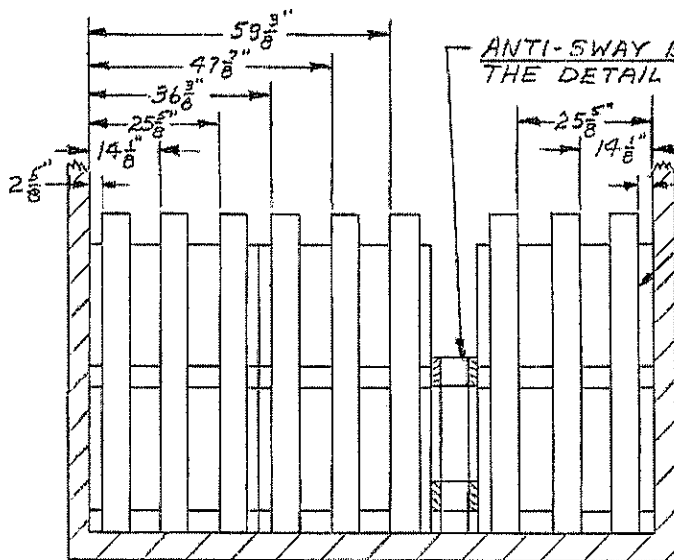
**BUFFER GATE**

2 REQD, 1 RIGHT HAND AND 1 LEFT HAND.



**DOORWAY PROTECTION**

FOR USE IN THE LOAD SHOWN ON PAGE 96.



**SECTION A-A**

ANTI-SWAY BRACE (6 REQD). SEE THE DETAIL ON PAGE 106.

**NOTE:**

36 PALLET UNITS SHOWN  
GROSS WT. - 115,545 LBS.

END WALL BATTEN, 2"x6"x60"  
(DOUBLED)(18 REQD). NAIL FIRST  
PIECE TO CAR END WALL W/1-10d  
NAIL EVERY 12", NAIL THE SECOND  
PIECE IN A LIKE MANNER.

STRUT, 4"x4"x CUT TO FIT (24 REQD).  
TOENAIL TO GATES W/2-16d NAILS  
AT EACH END.

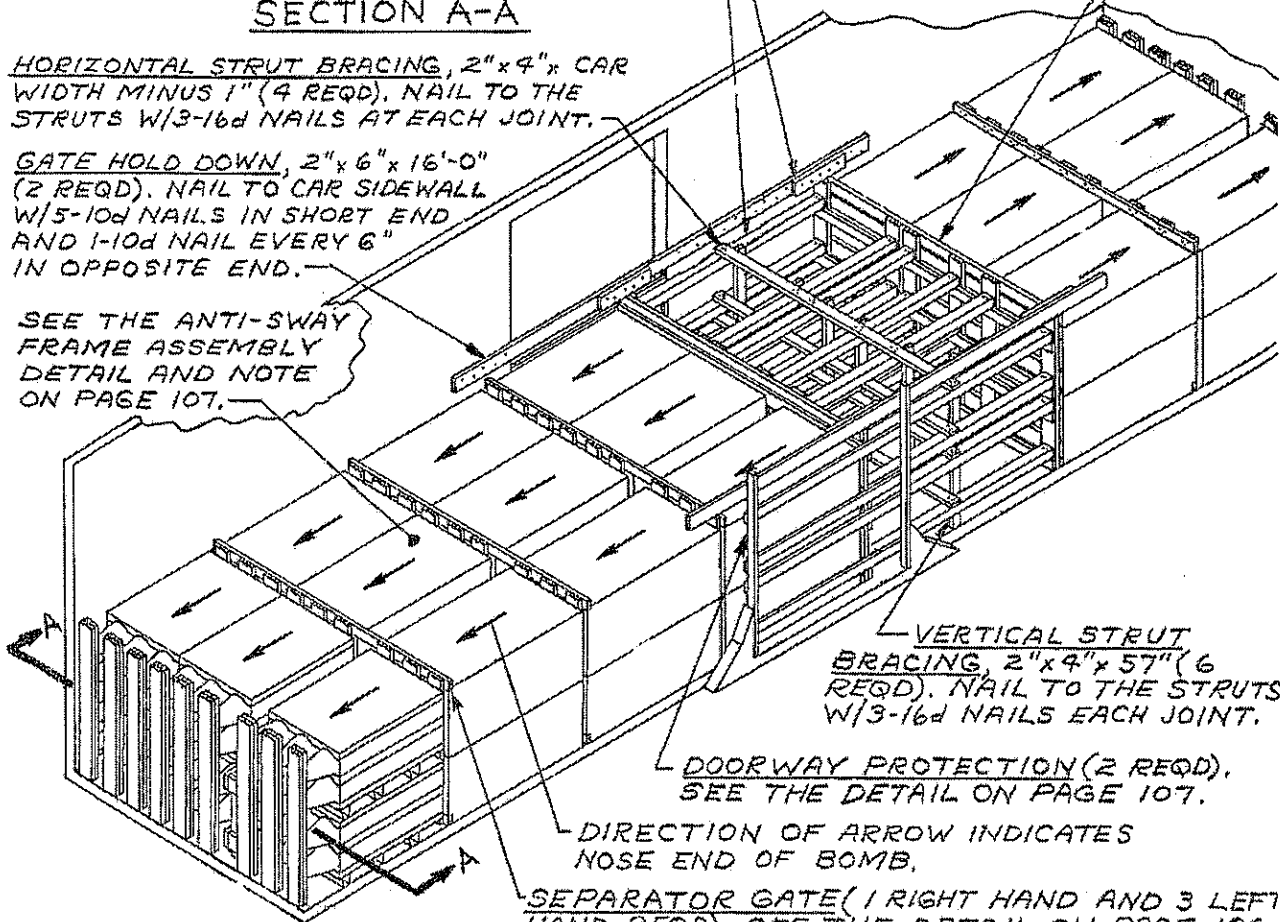
GATE HOLD-DOWN CLEAT, 2"x6"x  
24"(4 REQD). NAIL TO GATE  
HOLD DOWN W/5-10d NAILS.

CENTER GATE (2 REQD). SEE THE  
DETAIL ON PAGE 106.

HORIZONTAL STRUT BRACING, 2"x4"x CAR  
WIDTH MINUS 1" (4 REQD). NAIL TO THE  
STRUTS W/3-16d NAILS AT EACH JOINT.

GATE HOLD DOWN, 2"x6"x16'-0"  
(2 REQD). NAIL TO CAR SIDEWALL  
W/5-10d NAILS IN SHORT END  
AND 1-10d NAIL EVERY 6"  
IN OPPOSITE END.

SEE THE ANTI-SWAY  
FRAME ASSEMBLY  
DETAIL AND NOTE  
ON PAGE 107.



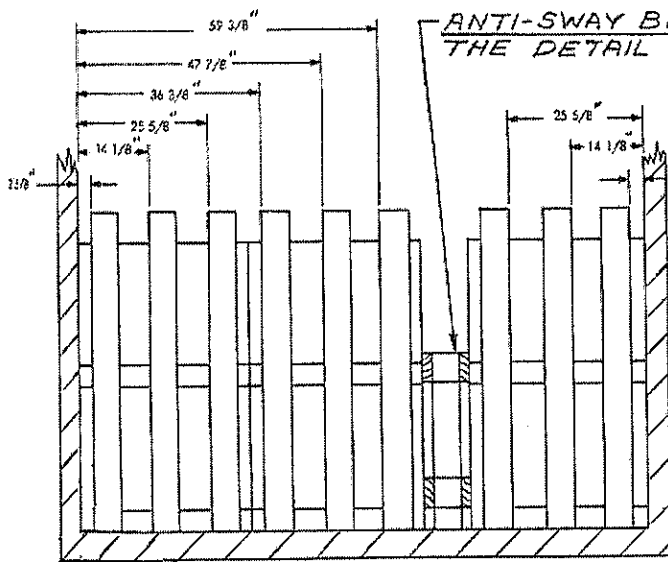
VERTICAL STRUT  
BRACING, 2"x4"x57" (6  
REQD). NAIL TO THE STRUTS  
W/3-16d NAILS EACH JOINT.

DOORWAY PROTECTION (2 REQD).  
SEE THE DETAIL ON PAGE 107.

DIRECTION OF ARROW INDICATES  
NOSE END OF BOMB.

SEPARATOR GATE (1 RIGHT HAND AND 3 LEFT  
HAND REQD). SEE THE DETAIL ON PAGE 106.

TYPICAL LOAD OF BOMBS, 500 LB MK82 & MODS  
(WITH PLASTIC NOSE PLUGS) IN PALLET MK9  
MOD 0 (FLEET ISSUE UNIT LOAD) IN A 40'-6" LONG  
CONVENTIONAL BOX CAR



ANTI-SWAY BRACE (8 REQD). SEE THE DETAIL ON PAGE 106.

SEPARATOR GATE (6 REQD, 2 RIGHT HAND AND 4 LEFT HAND), SEE THE SEPARATOR GATE DETAIL ON PAGE 106.

STRUT, 4" x 4" x CUT TO FIT (24 REQD), TOENAIL TO THE CENTER GATES W/2-16d NAILS AT EACH END.

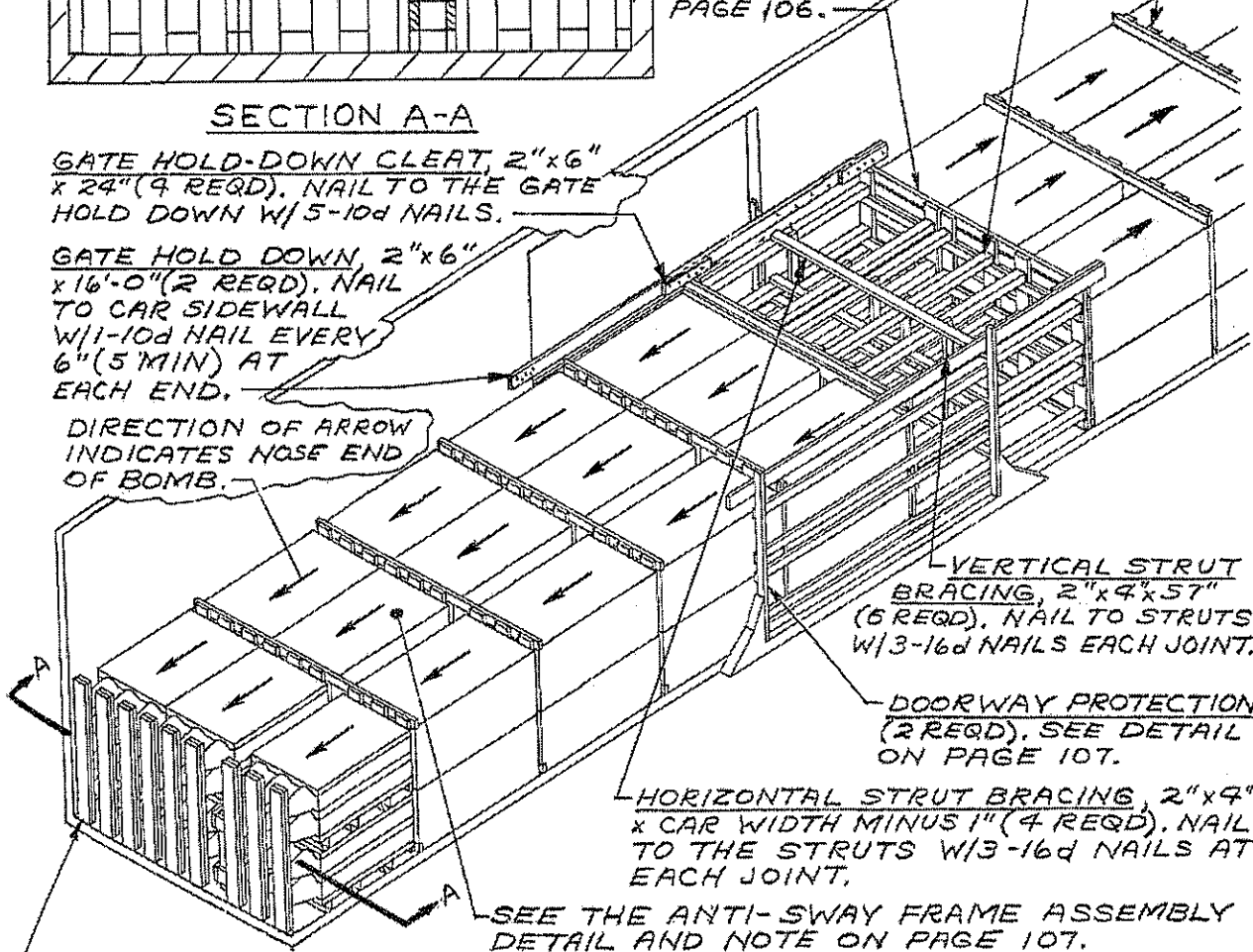
CENTER GATE (2 REQD, 1 RIGHT HAND AND 1 LEFT HAND), SEE DETAIL ON PAGE 106.

**SECTION A-A**

GATE HOLD-DOWN CLEAT, 2" x 6" x 24" (4 REQD), NAIL TO THE GATE HOLD DOWN W/5-10d NAILS.

GATE HOLD DOWN, 2" x 6" x 16'-0" (2 REQD), NAIL TO CAR SIDEWALL W/1-10d NAIL EVERY 6" (5 MIN) AT EACH END.

DIRECTION OF ARROW INDICATES NOSE END OF BOMB.



VERTICAL STRUT BRACING, 2" x 4" x 57" (6 REQD), NAIL TO STRUTS W/3-16d NAILS EACH JOINT.

DOORWAY PROTECTION (2 REQD), SEE DETAIL ON PAGE 107.

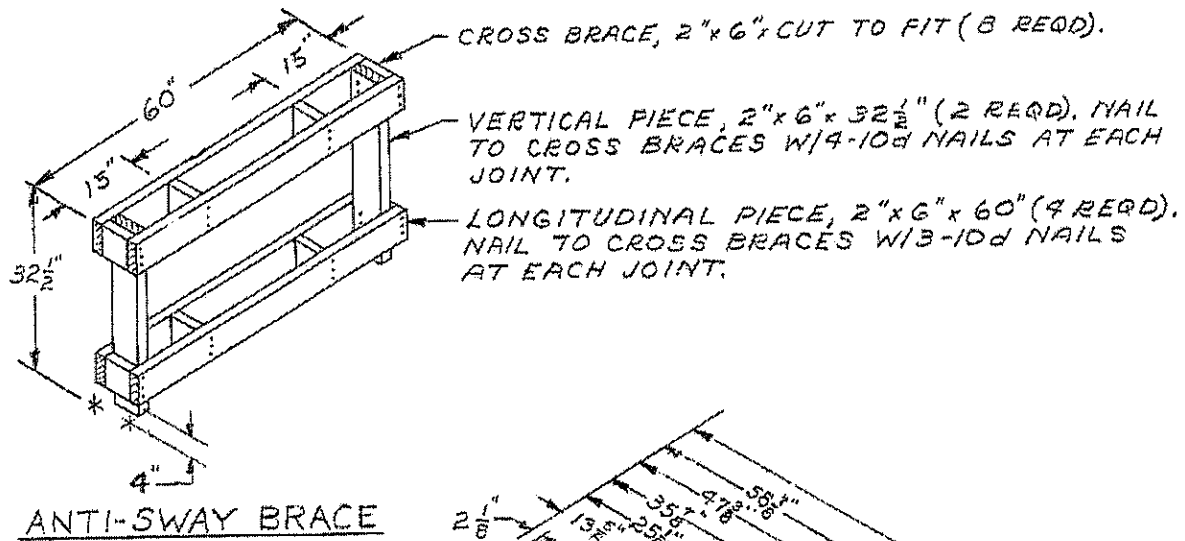
HORIZONTAL STRUT BRACING, 2" x 4" x CAR WIDTH MINUS 1" (4 REQD), NAIL TO THE STRUTS W/3-16d NAILS AT EACH JOINT.

SEE THE ANTI-SWAY FRAME ASSEMBLY DETAIL AND NOTE ON PAGE 107.

END WALL BATTEN, 2" x 6" x 60" (DOUBLED) (18 REQD), NAIL EACH LAYER TO CAR END WALL W/5-10d NAILS.

NOTE:  
48 PALLET UNITS SHOWN  
GROSS WT-153,330 LBS.

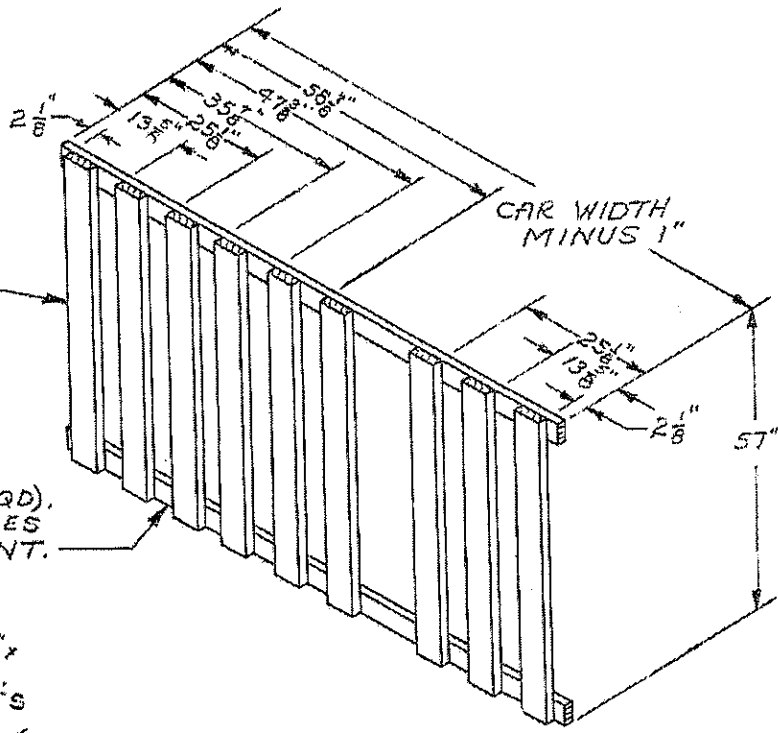
TYPICAL LOAD OF BOMBS, 500 LB MK82 & MODS (WITH PLASTIC NOSE PLUGS) IN PALLET MK9 MOD 0 (FLEET ISSUE UNIT LOAD) IN A 50'-6" LONG BY 9'-2" WIDE CONVENTIONAL BOX CAR



VERTICAL PIECE, 2"x6"x 57" (9 REQD).

HORIZONTAL PIECE, 2"x4"x CAR WIDTH MINUS 1" (2 REQD). NAIL TO THE VERTICAL PIECES W/3-10d NAILS AT EACH JOINT.

TOP HORIZONTAL PIECE, 2"x9"x CAR WIDTH MINUS 1" (1 REQD). NAIL TO THE VERTICAL PIECES W/3-10d NAILS EACH JOINT.



SEPARATOR GATE

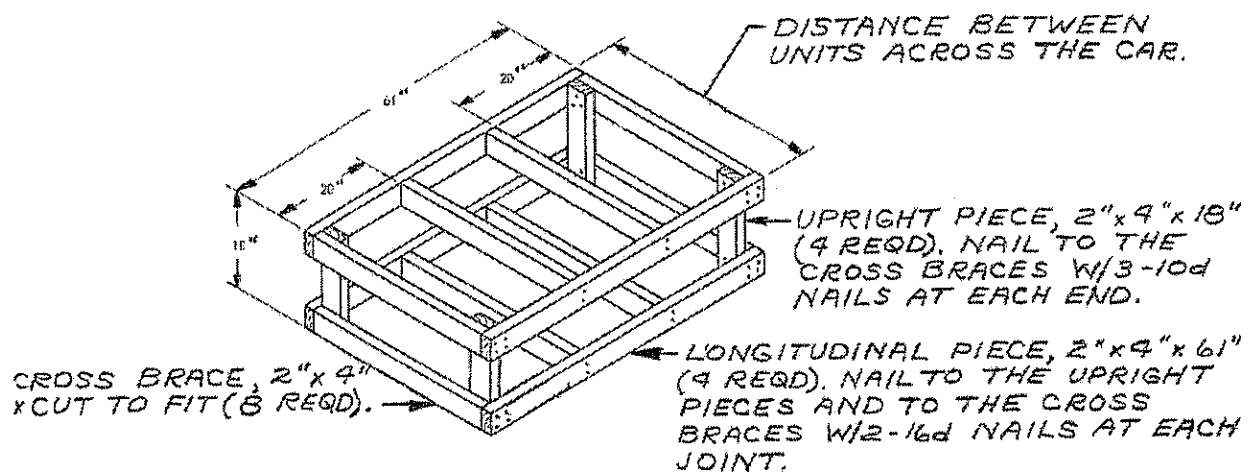
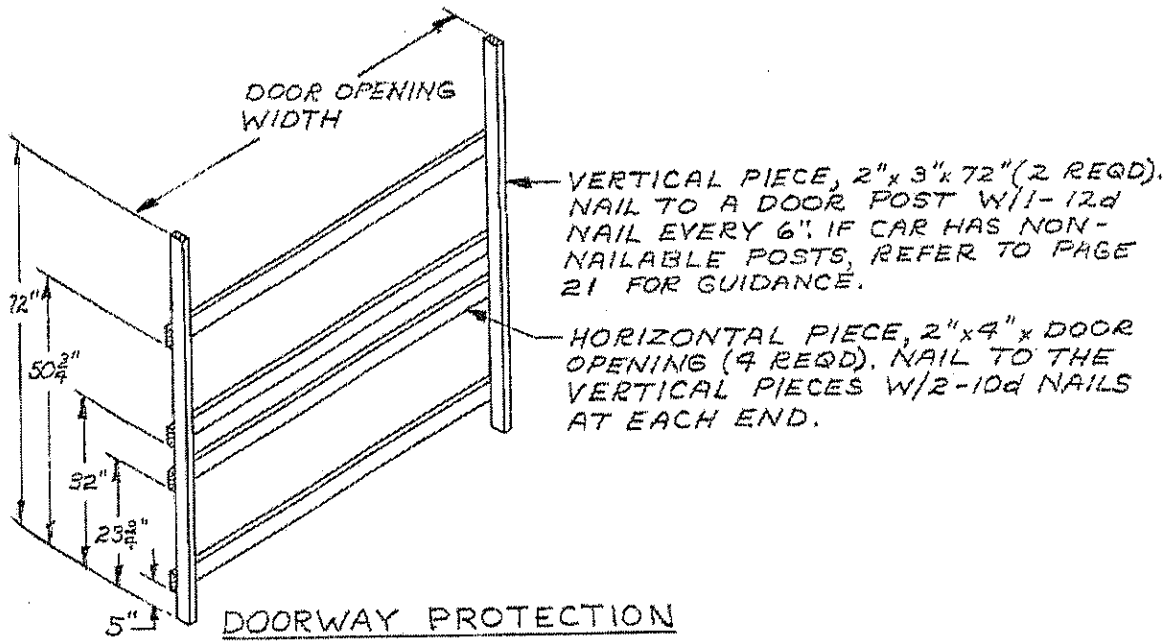
STRUT LEDGER, 2"x4"x CAR WIDTH MINUS 1" (4 REQD). NAIL TO VERTICAL PIECES W/3-10d NAILS AT EACH JOINT.

VERTICAL PIECE, 2"x6"x 60" (6 REQD).

HORIZONTAL PIECE, 2"x6"x CAR WIDTH MINUS 1" (4 REQD). NAIL TO THE VERTICAL PIECES W/3-10d NAILS AT EACH JOINT.

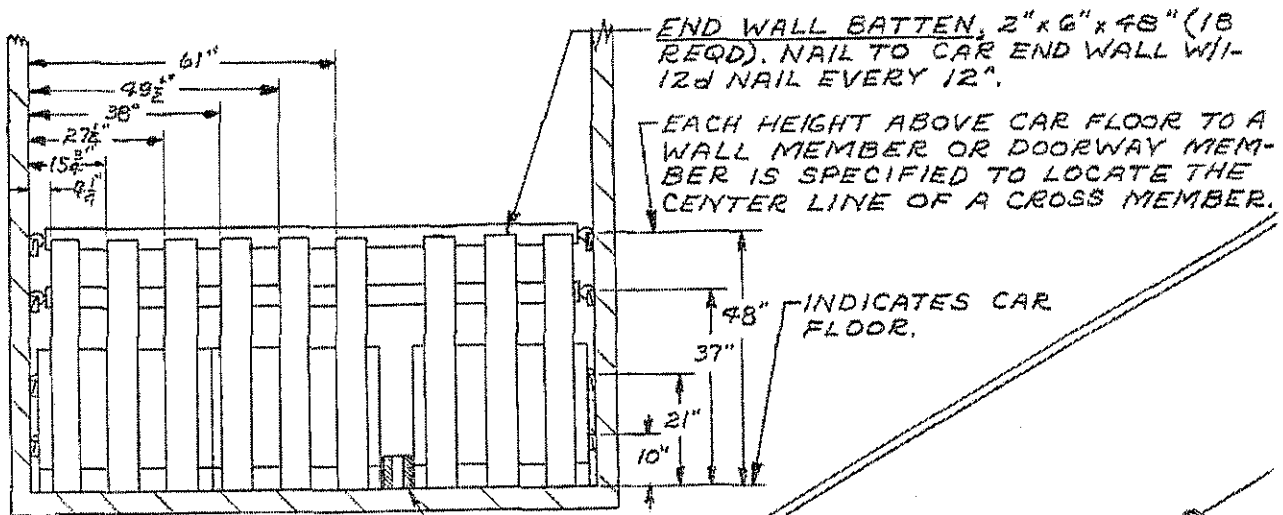
CENTER GATE

2 REQD, 1 RIGHT HAND AND 1 LEFT HAND.



ANTI-SWAY FRAME ASSEMBLY

NOTE: ANTI-SWAY FRAME ASSEMBLIES MAY BE USED IN THE PLACE OF A COMPLETE ROW OF PALLET UNITS TO ADJUST A LOAD QUANTITY. FOR INSTANCE, 40 UNITS CAN BE LOADED IN A 50'-6" CAR OR 30 UNITS CAN BE LOADED IN A 40'-6" CAR BY USING THESE ASSEMBLIES. TO ADJUST A LOAD BY LESS THAN A COMPLETE ROW, INSTALL DUMMY UNIT LOADS IN THE PLACE OF OMITTED PALLET UNITS. SEE THE DUMMY UNIT LOAD DETAILS ON PAGES 112 AND 113.

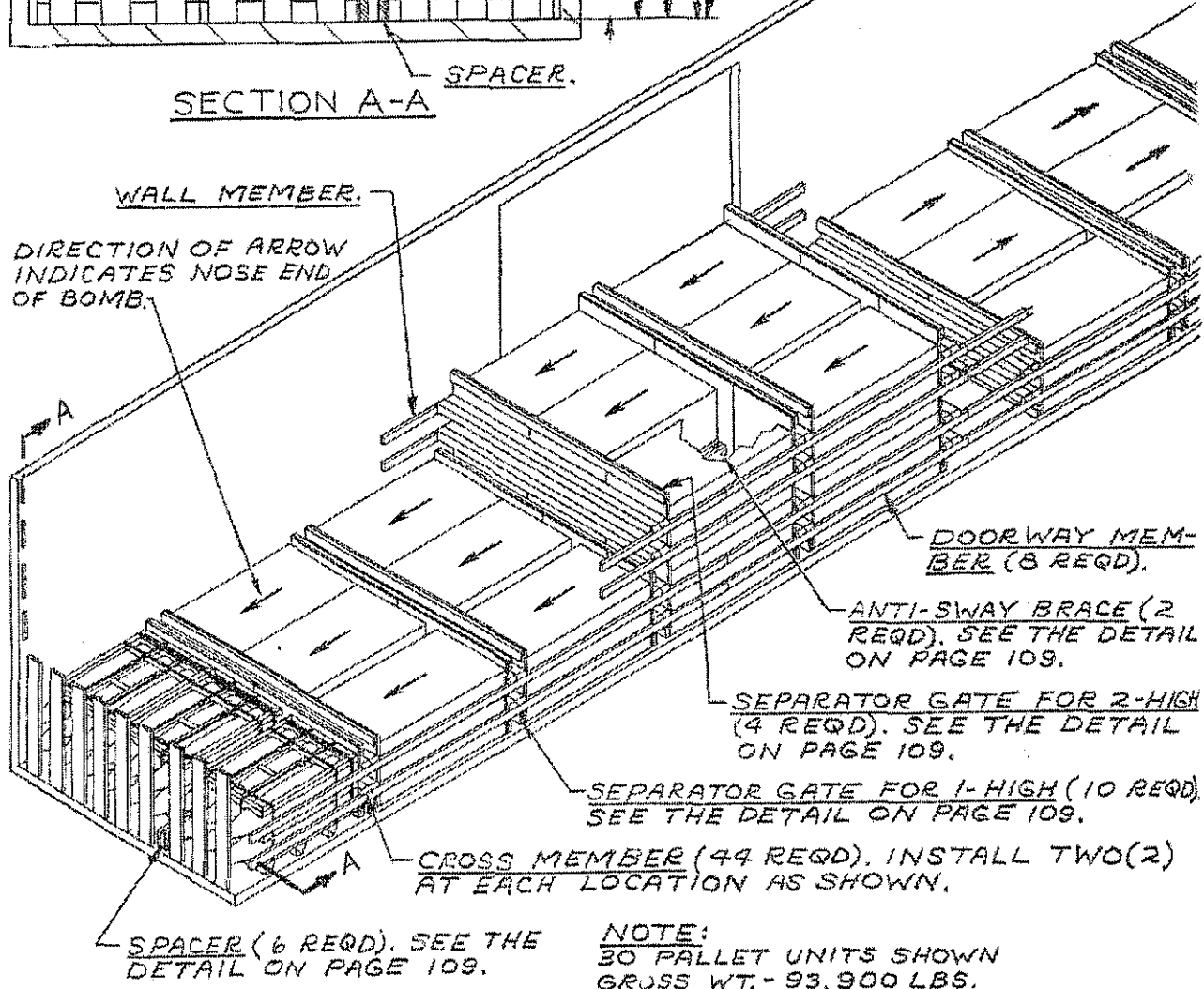


END WALL BATTEN, 2" x 6" x 48" (18 REQD). NAIL TO CAR END WALL W/ 12d NAIL EVERY 12".

EACH HEIGHT ABOVE CAR FLOOR TO A WALL MEMBER OR DOORWAY MEMBER IS SPECIFIED TO LOCATE THE CENTER LINE OF A CROSS MEMBER.

48" INDICATES CAR FLOOR.

SECTION A-A  
SPACER.



WALL MEMBER.

DIRECTION OF ARROW INDICATES NOSE END OF BOMB.

DOORWAY MEMBER (8 REQD).

ANTI-SWAY BRACE (2 REQD). SEE THE DETAIL ON PAGE 109.

SEPARATOR GATE FOR 2-HIGH (4 REQD). SEE THE DETAIL ON PAGE 109.

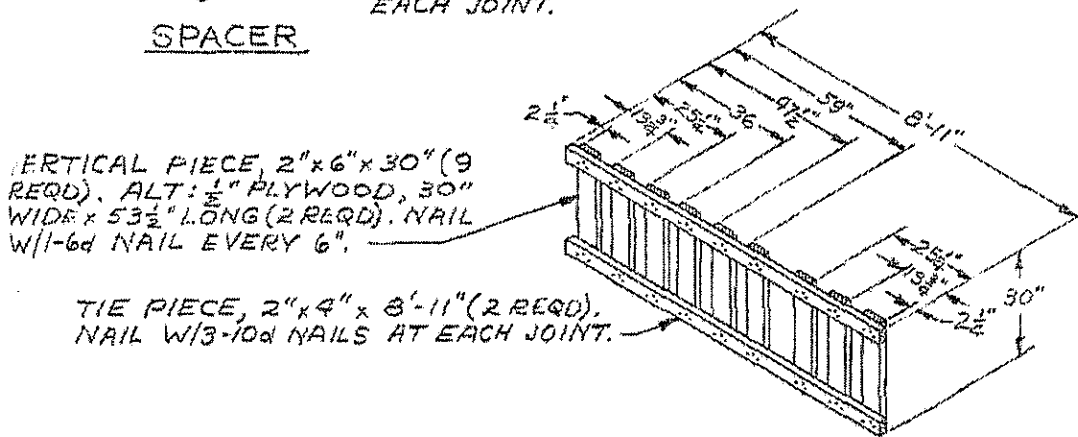
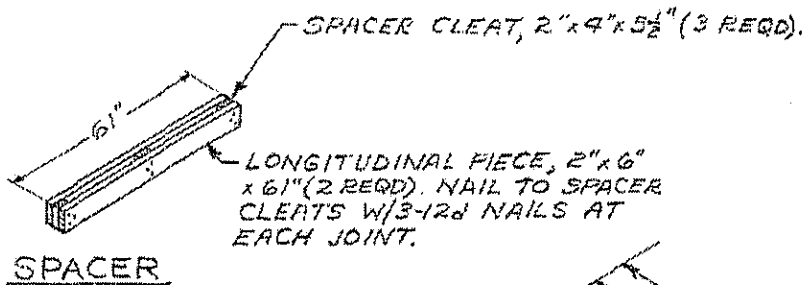
SEPARATOR GATE FOR 1-HIGH (10 REQD). SEE THE DETAIL ON PAGE 109.

CROSS MEMBER (44 REQD). INSTALL TWO (2) AT EACH LOCATION AS SHOWN.

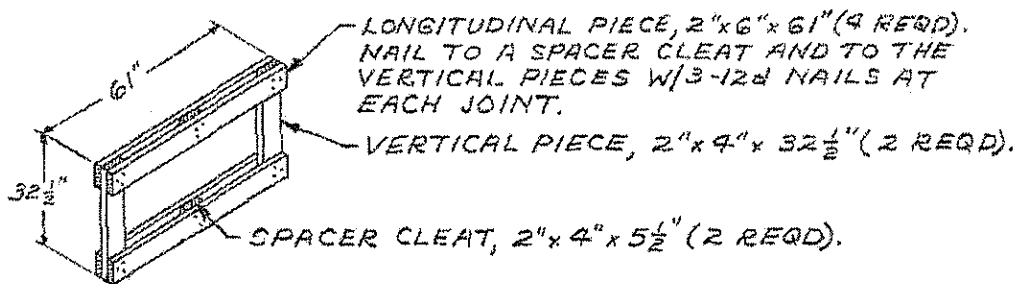
SPACER (6 REQD). SEE THE DETAIL ON PAGE 109.

NOTE:  
30 PALLET UNITS SHOWN  
GROSS WT. - 93,900 LBS.

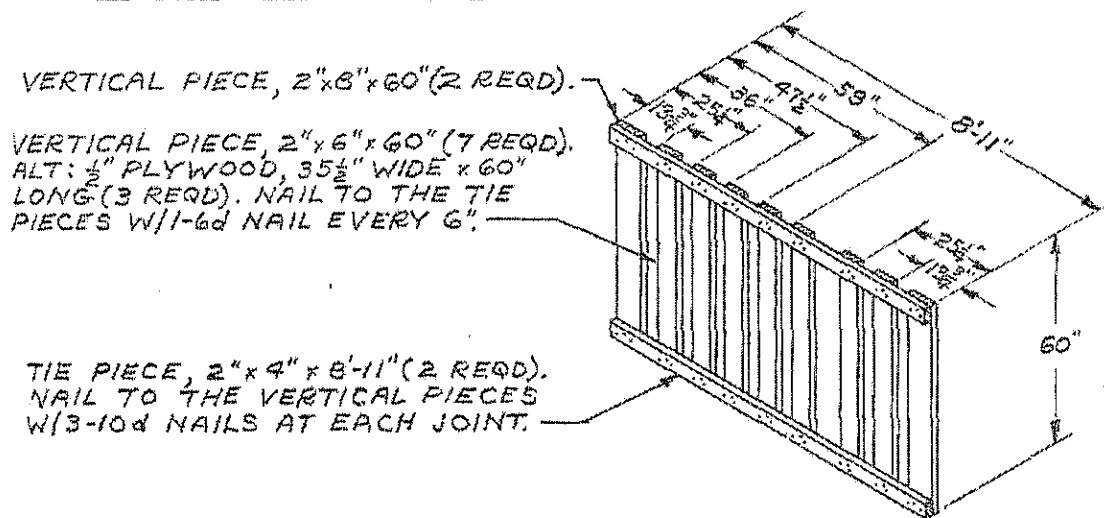
TYPICAL LOAD OF BOMBS, 500 LB MK82 & MODS (WITH PLASTIC NOSE PLUGS) IN PALLET MK9 MOD 0 (FLEET ISSUE UNIT LOAD) IN A 50'-6" LONG BOX CAR EQUIPPED WITH MECHANICAL BRACING DEVICES (CROSS MEMBERS)



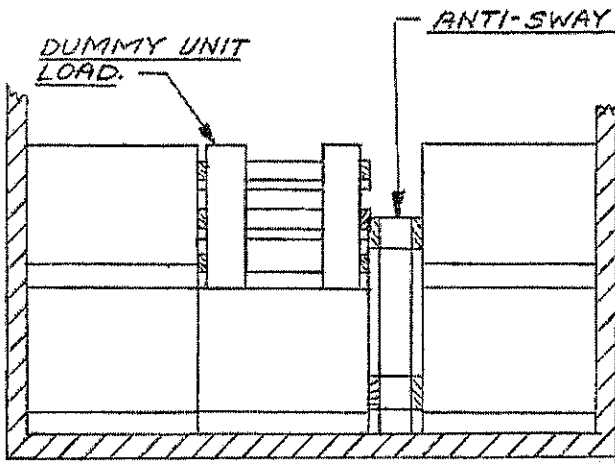
SEPARATOR GATE FOR 1-HIGH



ANTI-SWAY BRACE



SEPARATOR GATE FOR 2-HIGH



SECTION B-B

LOAD DIVIDER BULKHEAD.

BUFFER GATE (2 REQD). SEE THE DETAIL ON PAGE 111.

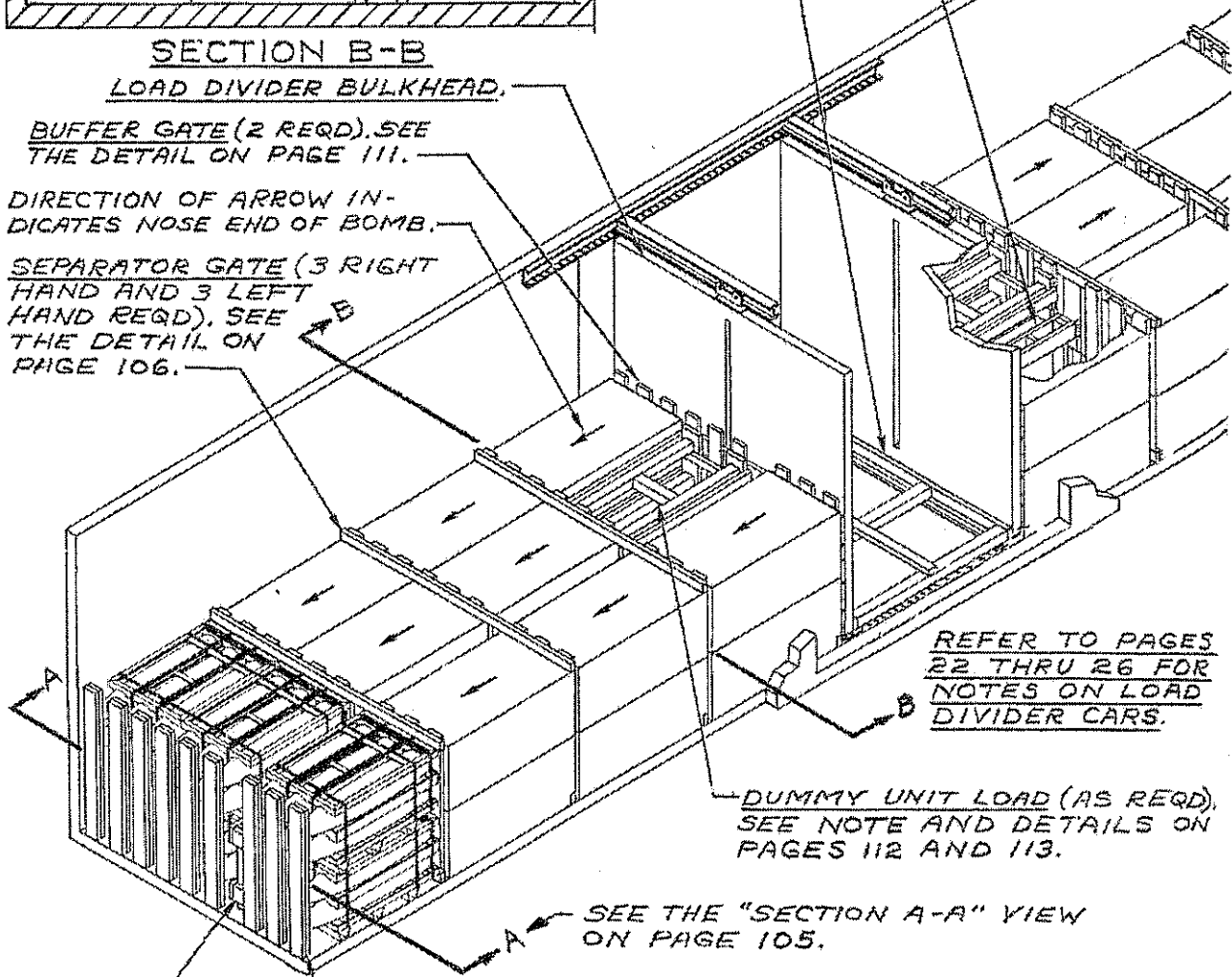
DIRECTION OF ARROW INDICATES NOSE END OF BOMB.

SEPARATOR GATE (3 RIGHT HAND AND 3 LEFT HAND REQD), SEE THE DETAIL ON PAGE 106.

NOTE:  
46 PALLET UNITS SHOWN  
GROSS WT - 146,053 LBS.

STRUT ASSEMBLY (1 REQD). SEE THE DETAILS ON PAGE 24.

ANTI-SWAY BRACE.



REFER TO PAGES 22 THRU 26 FOR NOTES ON LOAD DIVIDER CARS.

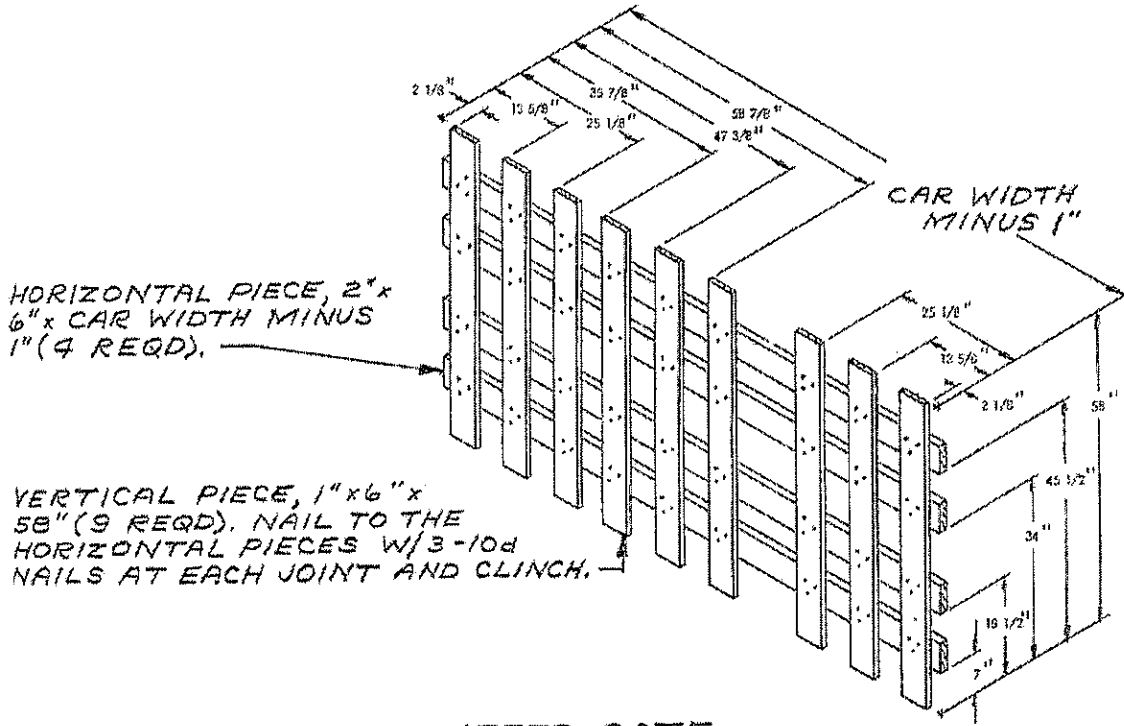
DUMMY UNIT LOAD (AS REQD). SEE NOTE AND DETAILS ON PAGES 112 AND 113.

SEE THE "SECTION A-A" VIEW ON PAGE 105.

END WALL BATTEN, 2"x6"x60" (DOUBLED) (18 REQD). NAIL FIRST PIECE TO CAR END WALL W/1-10d NAIL EVERY 12". NAIL SECOND PIECE IN A LIKE MANNER.

ANTI-SWAY BRACE (8 REQD). SEE THE DETAIL ON PAGE 106.

TYPICAL LOAD OF BOMBS, 500 LB MK82 & MODS (WITH PLASTIC NOSE PLUGS) IN PALLET MK 9 MOD 0 (FLEET ISSUE UNIT LOAD) IN A 50'-6" LONG BY 9'-2" WIDE CAR EQUIPPED WITH LOAD DIVIDERS



BUFFER GATE

2 REQD, 1 RIGHT HAND  
AND 1 LEFT HAND.

UPPER SUPPORT PIECE, 2"x4" x 34<sup>3</sup>/<sub>8</sub>" (2 REQD). TOENAIL TO A BUFFER STRIP W/1-10d NAIL EVERY 12".

BUFFER STRIP, 2"x4" x 61<sup>7</sup>/<sub>8</sub>" (4 REQD). NAIL TO THE END ASSEMBLIES W/2-16d NAILS AT EACH END AND TO A SPACER PIECE W/4-16d NAILS.

UPPER SUPPORT PIECE, 2"x4" x 33<sup>3</sup>/<sub>8</sub>" (2 REQD), NAIL W/2-16d NAILS AT EACH END. TOENAIL TO THE STRUTS W/2-10d NAILS AT EACH JOINT, EACH SIDE.

STRUT, 4"x4" x 58<sup>5</sup>/<sub>8</sub>" (4 REQD). TOENAIL TO END ASSEMBLIES W/3-16d NAILS AT EACH END.

END ASSEMBLY (2 REQD) SEE DETAIL BELOW. NAIL TO STRUTS W/2-16d NAILS EACH.

CROSS BRACE, 4"x4" x 4" CUT TO FIT (2 REQD). TOENAIL TO THE STRUTS W/3-16d NAILS AT EACH END.

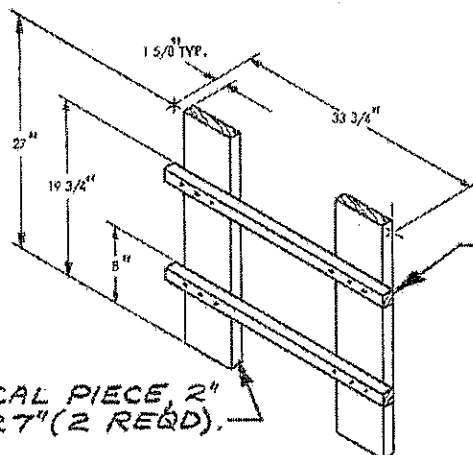
SUPPORT PIECE, 2"x4" x 33<sup>3</sup>/<sub>8</sub>" (2 REQD). NAIL TO THE LONGITUDINAL PIECES W/2-16d NAILS AT EACH END.

LATERAL PIECE, 2"x4" x 33<sup>3</sup>/<sub>8</sub>" (1 REQD). NAIL TO CROSS BRACE W/4-16d NAILS AND TO STRUTS, SPACERS AND BUFFER STRIPS W/1-16d NAIL AT EACH JOINT.

SPACER, 2"x4" x 12" (4 REQD), NAIL TO THE STRUTS W/4-10d NAILS,

LONGITUDINAL PIECE, 2"x4" x 61<sup>7</sup>/<sub>8</sub>" (2 REQD). NAIL TO THE END ASSEMBLIES W/2-16d NAILS AT EACH END.

### DUMMY UNIT LOAD

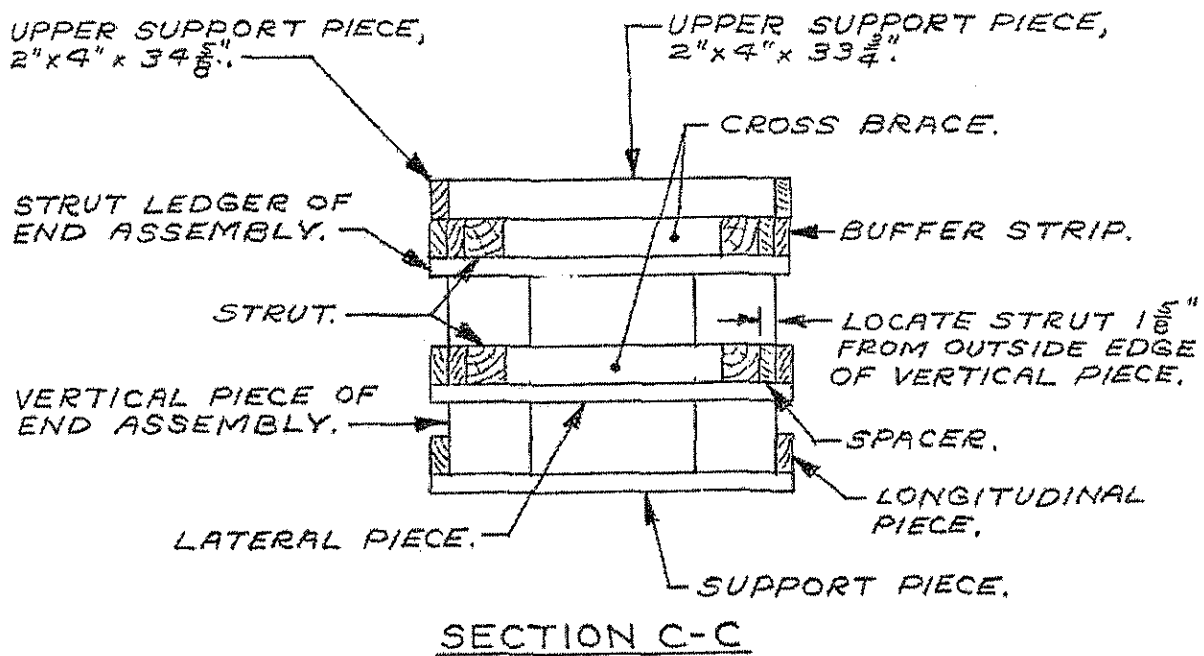
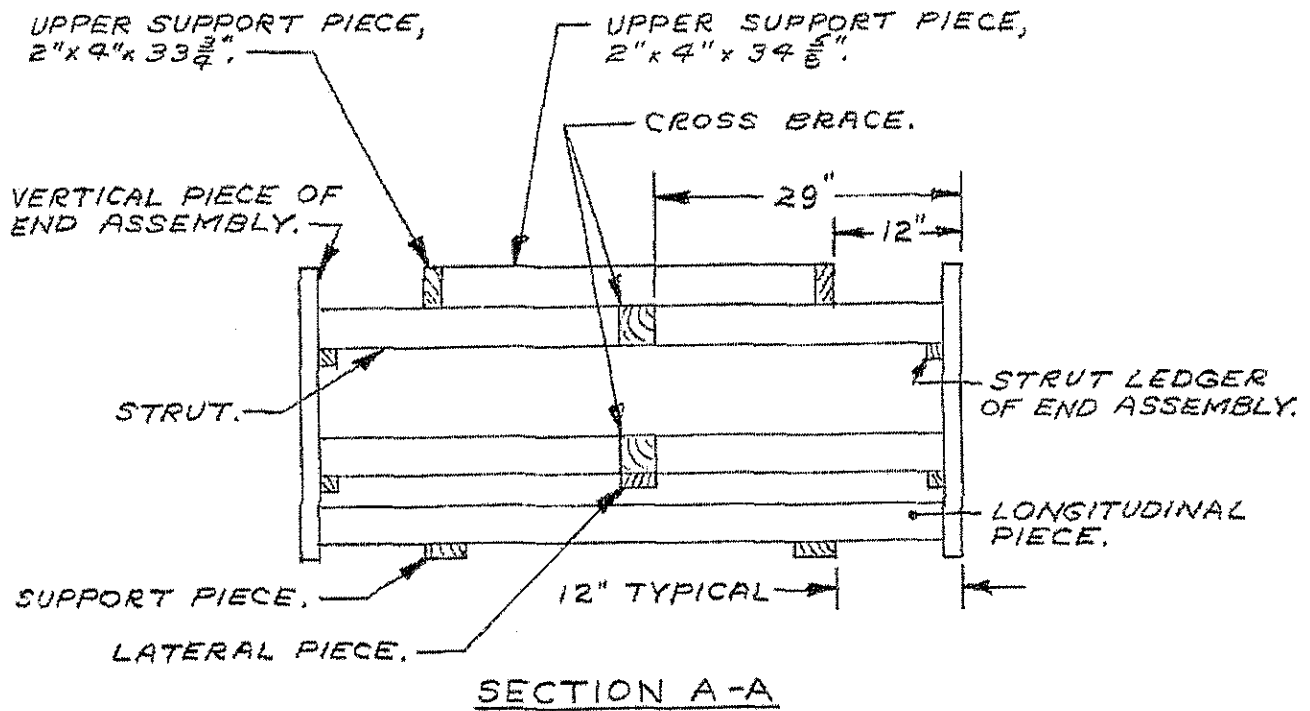


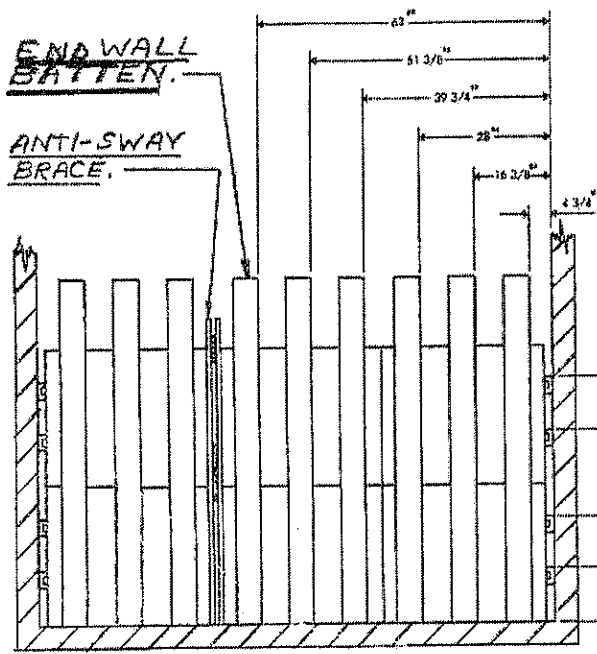
VERTICAL PIECE, 2" x 8" x 27" (2 REQD).

NOTE: DUMMY UNIT LOADS WILL BE USED ONLY AS NEEDED TO AVOID EXCEEDING THE LOAD LIMIT OF A CAR, OR TO SHIP A REDUCED LOAD.

STRUT LEDGER, 2"x2" x 33<sup>3</sup>/<sub>8</sub>" (2 REQD). NAIL TO THE VERTICAL PIECES W/3-16d NAILS AT EACH JOINT AND CLINCH.

### END ASSEMBLY





EACH HEIGHT ABOVE CAR FLOOR TO A WALL MEMBER OR DOORWAY MEMBER IS SPECIFIED TO LOCATE THE CENTER LINE OF A CROSS MEMBER.

DIRECTION OF ARROW INDICATES NOSE END OF BOMB.

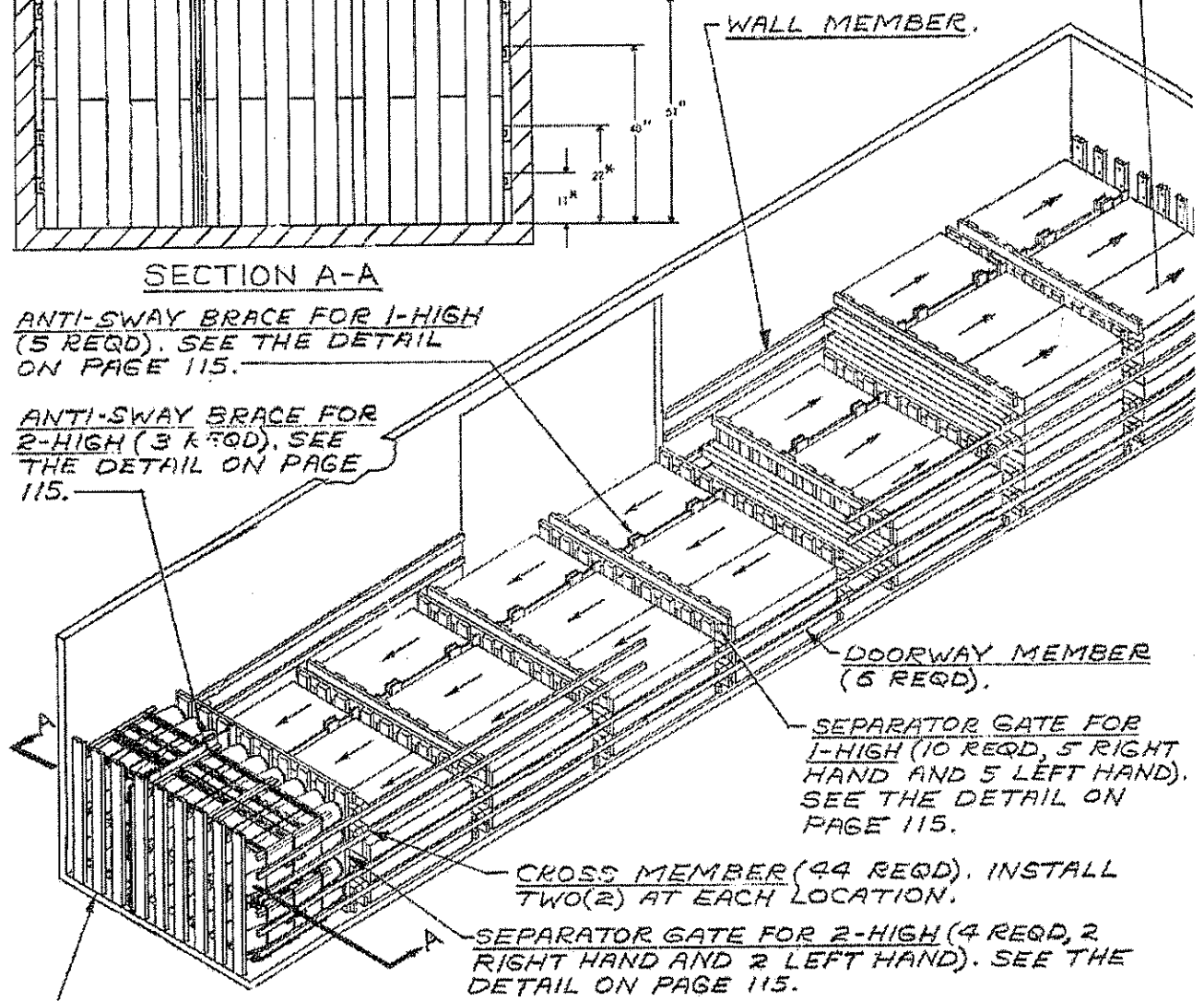
\* INDICATES LOCATION FOR DOORWAY MEMBERS.

WALL MEMBER.

SECTION A-A

ANTI-SWAY BRACE FOR 1-HIGH (5 REQ'D). SEE THE DETAIL ON PAGE 115.

ANTI-SWAY BRACE FOR 2-HIGH (3 REQ'D). SEE THE DETAIL ON PAGE 115.



DOORWAY MEMBER (5 REQ'D).

SEPARATOR GATE FOR 1-HIGH (10 REQ'D, 5 RIGHT HAND AND 5 LEFT HAND). SEE THE DETAIL ON PAGE 115.

CROSS MEMBER (44 REQ'D). INSTALL TWO(2) AT EACH LOCATION.

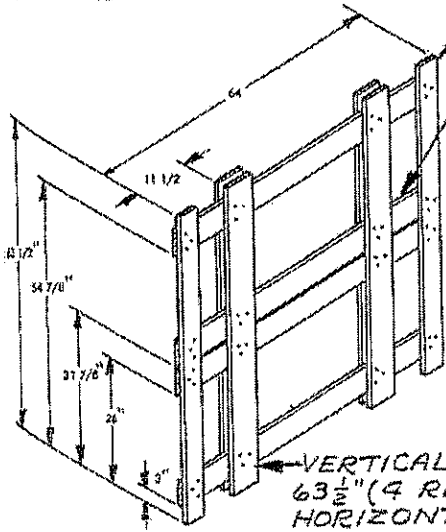
SEPARATOR GATE FOR 2-HIGH (4 REQ'D, 2 RIGHT HAND AND 2 LEFT HAND). SEE THE DETAIL ON PAGE 115.

END WALL BATTEN, 2"x 6"x 72" (18 REQ'D). NAIL TO CAR END WALL W/1-10d NAIL EVERY 12", SEE "SECTION A-A".

NOTE: 33 PALLET UNITS SHOWN GROSS WT.-104,261 LBS.

TYPICAL LOAD OF BOMBS, 500 LB MK82 & MODS, THERMALLY PROTECTED, ON PALLET MHU-122/E (FLEET ISSUE UNIT LOAD) IN A 50'-6" LONG BY 9'-2" WIDE BOX CAR EQUIPPED WITH MECHANICAL BRACING DEVICES (CROSS MEMBERS)

STOP PIECE, 1" x 4" x 63 1/2" (2 REQD). NAIL TO THE HORIZONTAL PIECES W/3-6d NAILS AT EACH JOINT AND CLINCH.

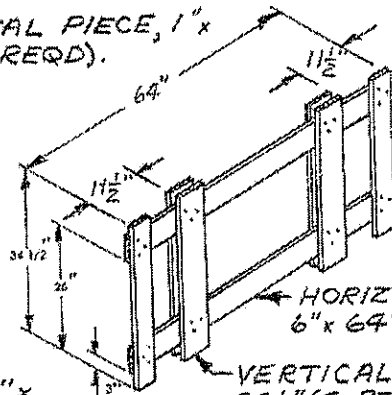


HORIZONTAL PIECE, 1" x 6" x 64" (4 REQD).

VERTICAL PIECE, 1" x 6" x 63 1/2" (4 REQD). NAIL TO THE HORIZONTAL PIECES W/3-6d NAILS AT EACH JOINT.

ANTI-SWAY BRACE FOR 2-HIGH

STOP PIECE, 1" x 4" x 34 1/2" (2 REQD). NAIL TO THE HORIZONTAL PIECES W/3-6d NAILS AT EACH JOINT AND CLINCH.

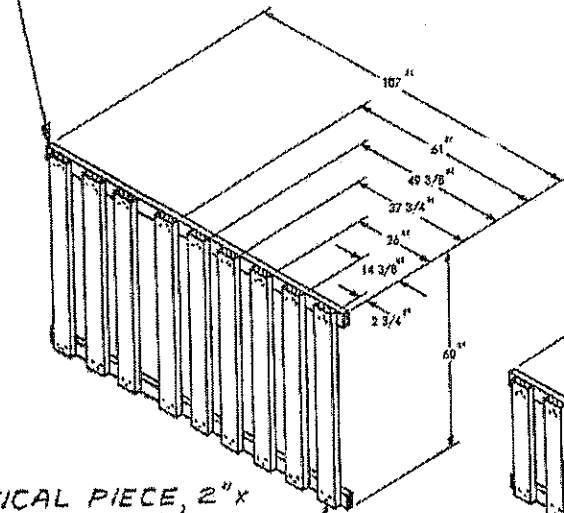


HORIZONTAL PIECE, 1" x 6" x 64" (2 REQD).

VERTICAL PIECE, 1" x 6" x 34 1/2" (4 REQD). NAIL TO THE HORIZONTAL PIECES W/3-6d NAILS AT EACH JOINT.

ANTI-SWAY BRACE FOR 1-HIGH

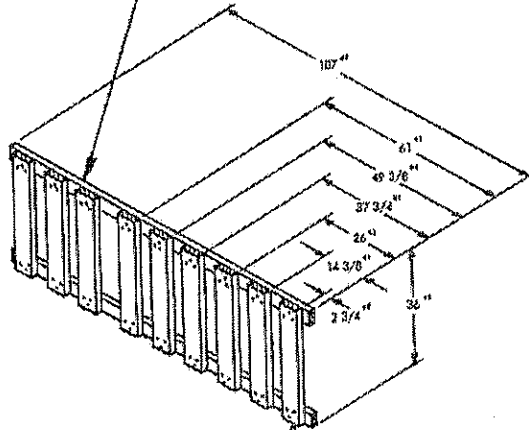
TIE PIECE, 2" x 4" x 107" (2 REQD).



VERTICAL PIECE, 2" x 6" x 60" (9 REQD). NAIL TO THE TIE PIECES W/3-10d NAILS AT EACH END.

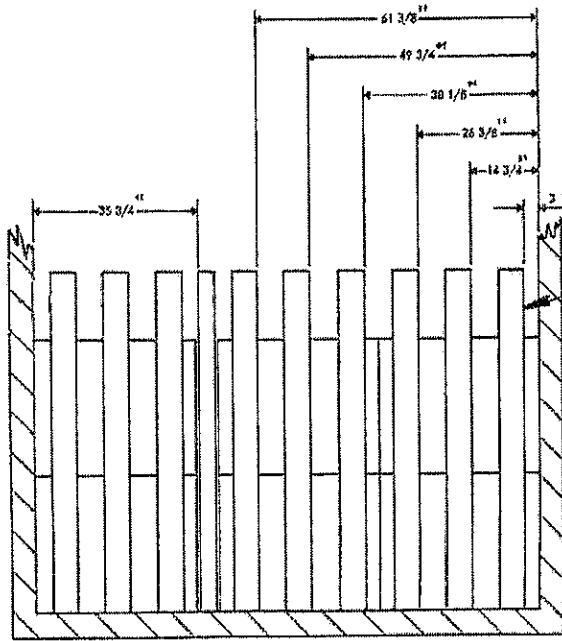
SEPARATOR GATE FOR 2-HIGH

TIE PIECE, 2" x 4" x 107" (2 REQD).



VERTICAL PIECE, 2" x 6" x 36" (9 REQD). NAIL TO THE TIE PIECES W/3-10d NAILS AT EACH END.

SEPARATOR GATE FOR 1-HIGH



**SECTION A-A**

**NOTE:**  
36 PALLET UNITS SHOWN  
GROSS WT. - 114,329 LBS.

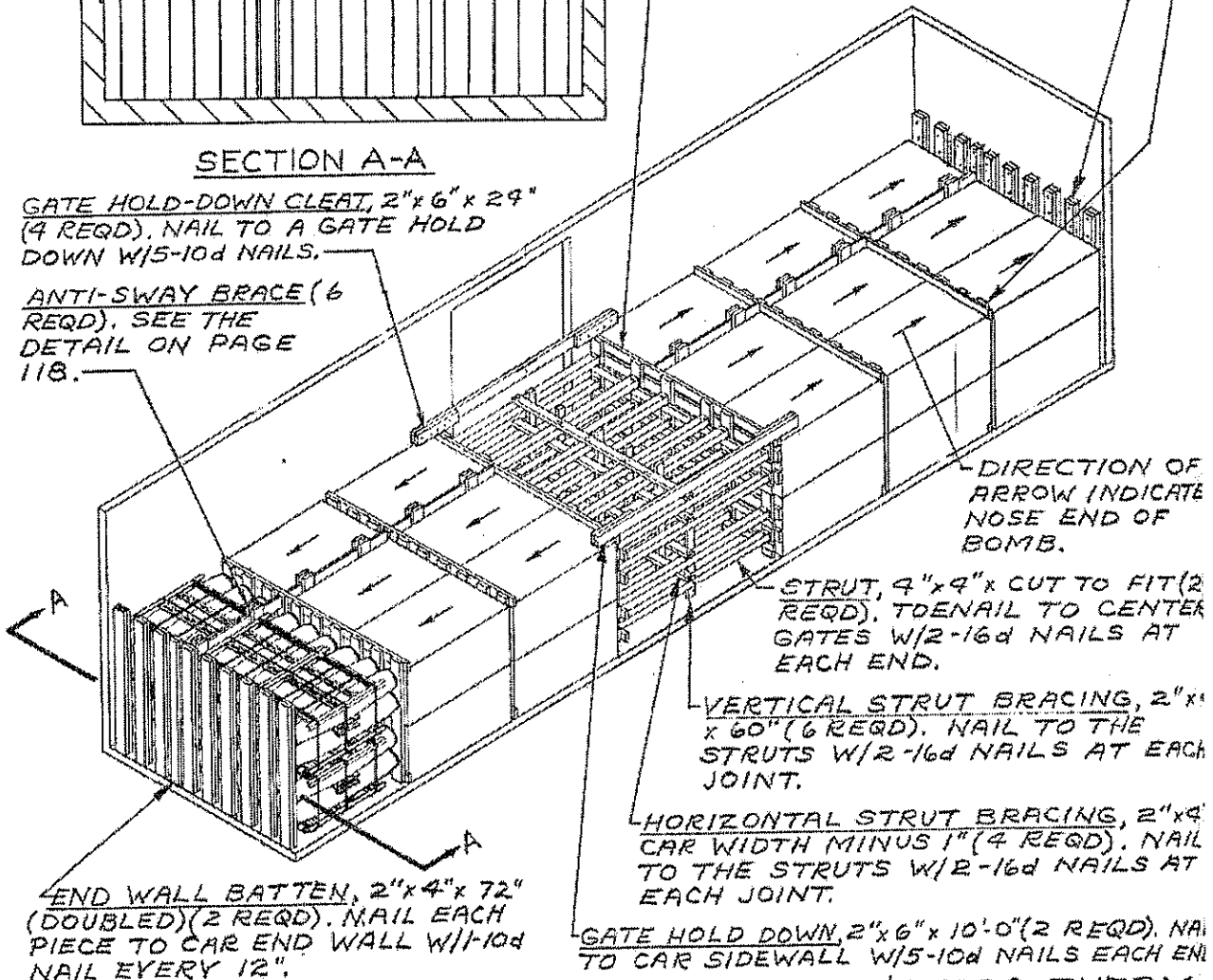
SEPARATOR GATE (4 REQD,  
2 RIGHT HAND AND 2 LEFT  
HAND). SEE DETAIL ON PAGE 122.

END WALL BATTEN, 2"x6"x72"  
(DOUBLED)(18 REQD). NAIL EACH  
PIECE TO CAR END WALL W/1-10d  
NAIL EVERY 12".

CENTER GATE (2 REQD, 1 RIGHT  
HAND AND 1 LEFT HAND). SEE  
THE DETAIL ON PAGE 118.

GATE HOLD-DOWN CLEAT, 2"x6"x29"  
(4 REQD). NAIL TO A GATE HOLD  
DOWN W/5-10d NAILS.

ANTI-SWAY BRACE (6  
REQD). SEE THE  
DETAIL ON PAGE  
118.



DIRECTION OF  
ARROW INDICATE  
NOSE END OF  
BOMB.

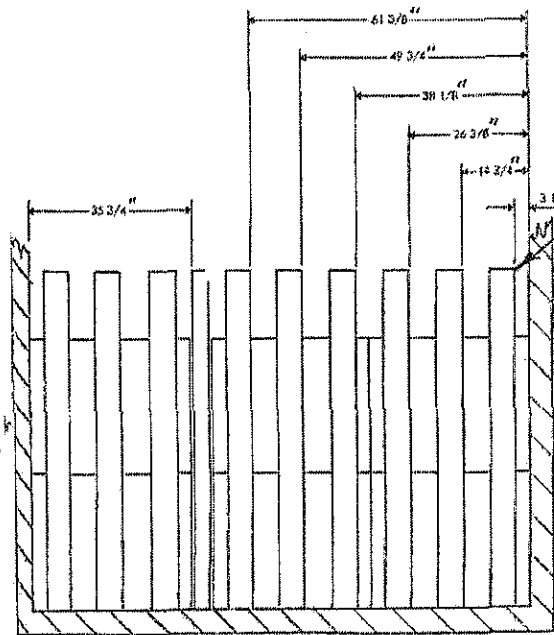
STRUT, 4"x4"x CUT TO FIT (2  
REQD). TOENAIL TO CENTER  
GATES W/2-16d NAILS AT  
EACH END.

VERTICAL STRUT BRACING, 2"x4"  
x 60" (6 REQD). NAIL TO THE  
STRUTS W/2-16d NAILS AT EACH  
JOINT.

HORIZONTAL STRUT BRACING, 2"x4"  
CAR WIDTH MINUS 1" (4 REQD). NAIL  
TO THE STRUTS W/2-16d NAILS AT  
EACH JOINT.

GATE HOLD DOWN, 2"x6"x10'-0" (2 REQD). NAIL  
TO CAR SIDEWALL W/5-10d NAILS EACH END.

TYPICAL LOAD OF BOMBS, 500 LB MK82 & MODS, THERM-  
ALLY PROTECTED, ON PALLET MHU-122/E (FLEET  
ISSUE UNIT LOAD) IN A 40'-6" LONG BY 9'-2"  
WIDE CONVENTIONAL BOX CAR



**NOTE:**  
 48 PALLET UNITS SHOWN  
 GROSS WT. - 151,912 LBS.

**END WALL BATTEN, 2"x6"x72"**  
 (DOUBLED) (16 REQD). NAIL EACH  
 PIECE TO CAR END WALL W/1-10d  
 NAIL EVERY 12".

**SEPARATOR GATE (6 REQD, 3 RIGHT  
 HAND AND 3 LEFT HAND). SEE  
 THE DETAIL ON PAGE 122.**

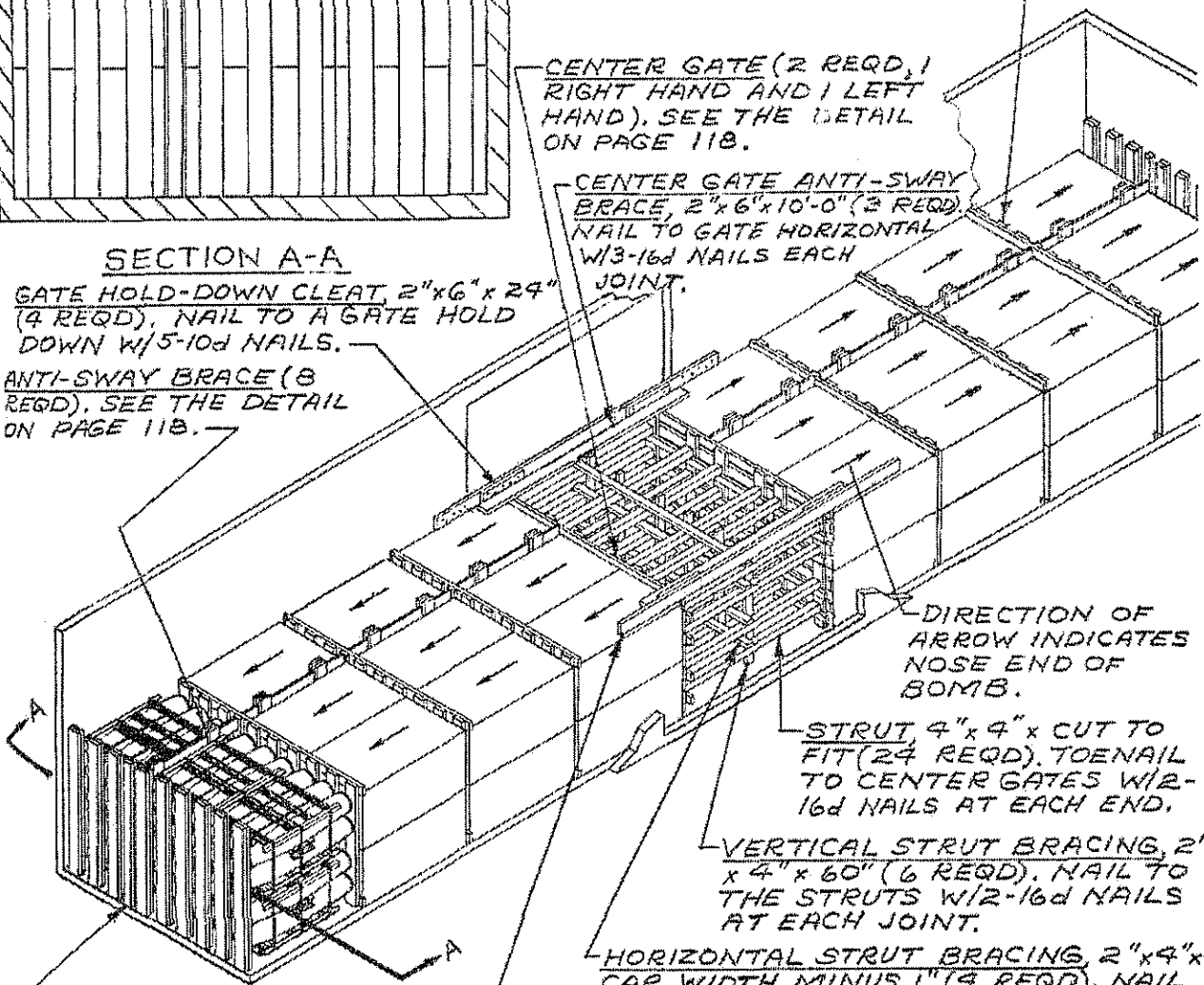
**CENTER GATE (2 REQD, 1  
 RIGHT HAND AND 1 LEFT  
 HAND). SEE THE DETAIL  
 ON PAGE 118.**

**CENTER GATE ANTI-SWAY  
 BRACE, 2"x6"x10'-0" (3 REQD).  
 NAIL TO GATE HORIZONTAL  
 W/3-16d NAILS EACH  
 JOINT.**

**SECTION A-A**

**GATE HOLD-DOWN CLEAT, 2"x6"x24"**  
 (4 REQD), NAIL TO A GATE HOLD  
 DOWN W/5-10d NAILS.

**ANTI-SWAY BRACE (8  
 REQD). SEE THE DETAIL  
 ON PAGE 118.**



**DIRECTION OF  
 ARROW INDICATES  
 NOSE END OF  
 BOMB.**

**STRUT, 4"x4"x CUT TO  
 FIT (24 REQD). TOENAIL  
 TO CENTER GATES W/2-  
 16d NAILS AT EACH END.**

**VERTICAL STRUT BRACING, 2'  
 x4"x60" (6 REQD). NAIL TO  
 THE STRUTS W/2-16d NAILS  
 AT EACH JOINT.**

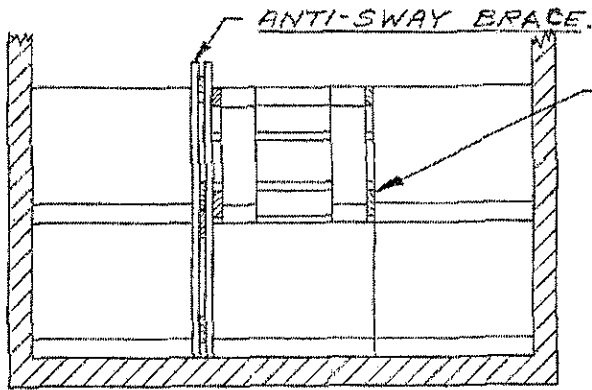
**HORIZONTAL STRUT BRACING, 2"x4"x  
 CAR WIDTH MINUS 1" (9 REQD). NAIL  
 TO THE STRUTS W/2-16d NAILS AT  
 EACH JOINT.**

**END WALL BATTEN, 2"x4"x72"**  
 (DOUBLED) (2 REQD). NAIL EACH  
 PIECE TO CAR END WALL W/1-  
 10d NAIL EVERY 12".

**GATE HOLD DOWN, 2"x6"x14'-0" (2 REQD). NAIL  
 TO CAR SIDEWALL W/5-10d NAILS EACH END.**

**TYPICAL LOAD OF BOMBS, 500 LB MKB2 & MODS, THERM-  
 ALLY PROTECTED, ON PALLET MHU-122/E (FLEET  
 ISSUE UNIT LOAD) IN A 50'-6" LONG BY 9'-2"  
 WIDE CONVENTIONAL BOX CAR**





DUMMY UNIT LOAD.

NOTE:  
46 PALLET UNITS SHOWN  
GROSS WT. - 145,281 LBS.

SEPARATOR GATE (6 REQD, 3  
RIGHT HAND AND 3 LEFT HAND).  
SEE THE DETAIL ON PAGE 122.

DIRECTION OF ARROW  
INDICATES NOSE END  
OF BOMB.

SECTION B-B

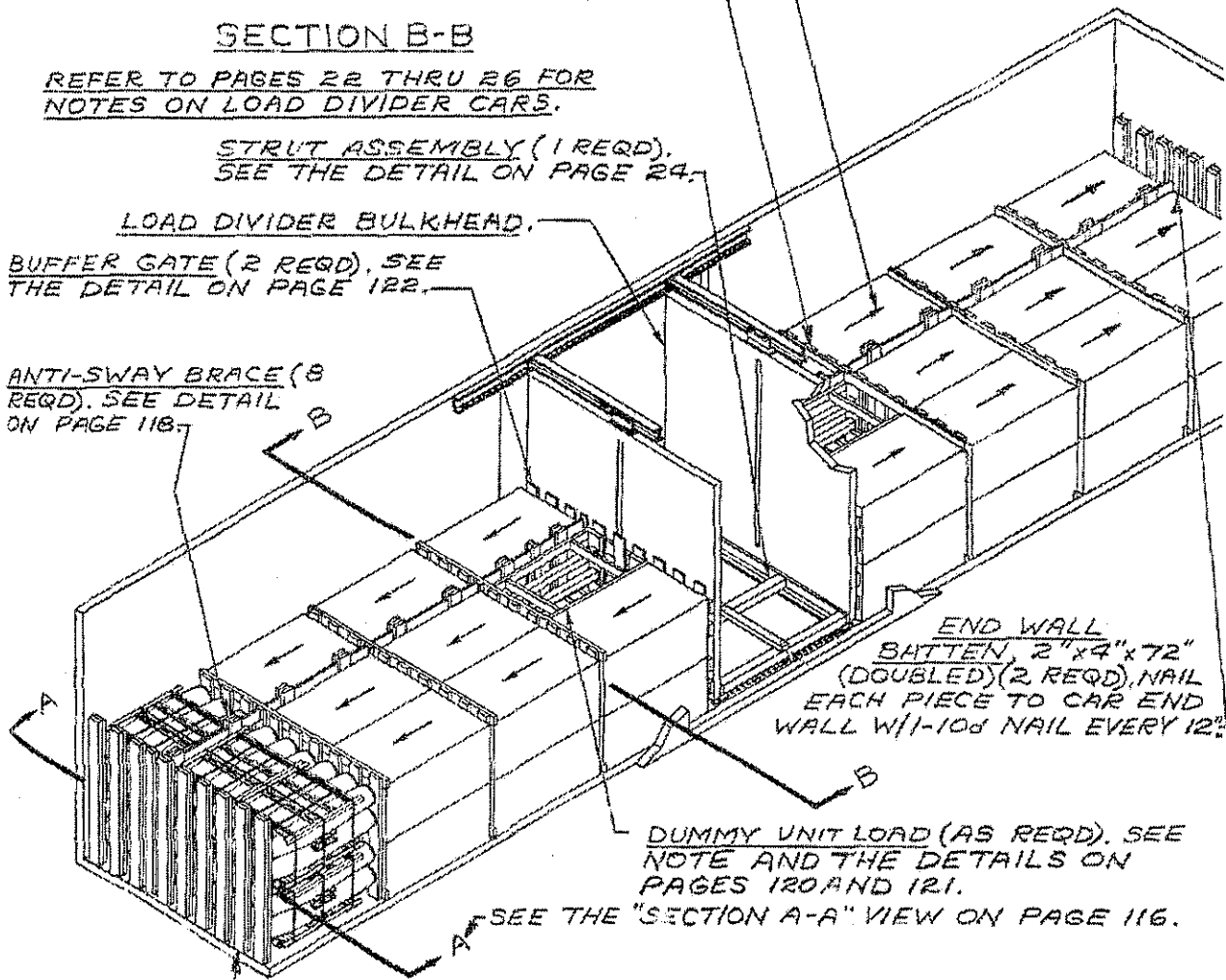
REFER TO PAGES 22 THRU 26 FOR  
NOTES ON LOAD DIVIDER CARS.

STRUT ASSEMBLY (1 REQD).  
SEE THE DETAIL ON PAGE 24.

LOAD DIVIDER BULKHEAD.

BUFFER GATE (2 REQD). SEE  
THE DETAIL ON PAGE 122.

ANTI-SWAY BRACE (8  
REQD). SEE DETAIL  
ON PAGE 118.



END WALL  
BATTEN, 2"x4"x72"  
(DOUBLED) (2 REQD). NAIL  
EACH PIECE TO CAR END  
WALL W/1-10d NAIL EVERY 12".

DUMMY UNIT LOAD (AS REQD). SEE  
NOTE AND THE DETAILS ON  
PAGES 120 AND 121.

SEE THE "SECTION A-A" VIEW ON PAGE 116.

END WALL BATTEN, 2"x6"x72" (DOUBLED) (18 REQD). NAIL  
EACH PIECE TO THE CAR END WALL W/1-10d NAIL  
EVERY 12".

TYPICAL LOAD OF BOMBS, 500 LB MK82 & MODS, THERM-  
ALLY PROTECTED, ON PALLET MHU-122/E (FLEET ISSUE  
UNIT LOAD) IN A 50'-6" LONG BY 9'-2" WIDE  
CAR EQUIPPED WITH LOAD DIVIDERS

NOTE: DUMMY UNIT LOADS WILL BE USED ONLY AS NEEDED TO AVOID EXCEEDING THE LOAD LIMIT OF A CAR, OR TO SHIP A REDUCED LOAD.

TOP LONGITUDINAL PIECE, 2"x4" x 59<sup>7</sup>/<sub>8</sub>" (2 REQD). NAIL TO THE END FRAMES AND TO THE TOP CROSS BRACES W/2-16d NAILS AT EACH JOINT.

TOP CROSS BRACE, 2"x4" x CUT TO FIT (2 REQD).

STRUT, 4"x4" x CUT TO FIT (4 REQD). TOENAIL TO END FRAMES W/3-16d NAILS AT EACH END.

END FRAME (1 REQD). SEE THE DETAIL ON PAGE 121.

CROSS BRACE, 2"x6" x CUT TO FIT (2 REQD).

SUPPORT PIECE, 2"x4" x 35" (2 REQD). NAIL TO THE LONGITUDINAL PIECES W/2-16d NAILS AT EACH END AND TO THE CROSS BRACE W/5-16d NAILS.

END FRAME WITH CLEAT (1 REQD). SEE THE DETAIL BELOW.

LONGITUDINAL PIECE, 2"x6" x 59<sup>7</sup>/<sub>8</sub>" (2 REQD). NAIL TO THE END FRAMES AND TO THE CROSS BRACES W/3-16d NAILS EACH JOINT.

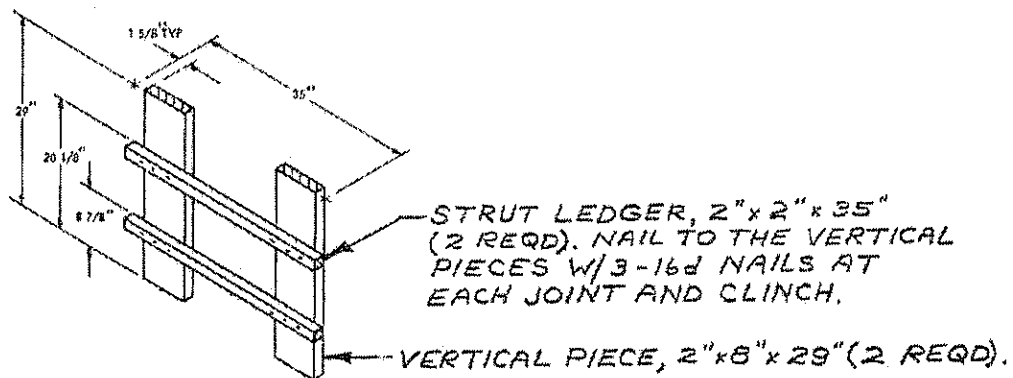
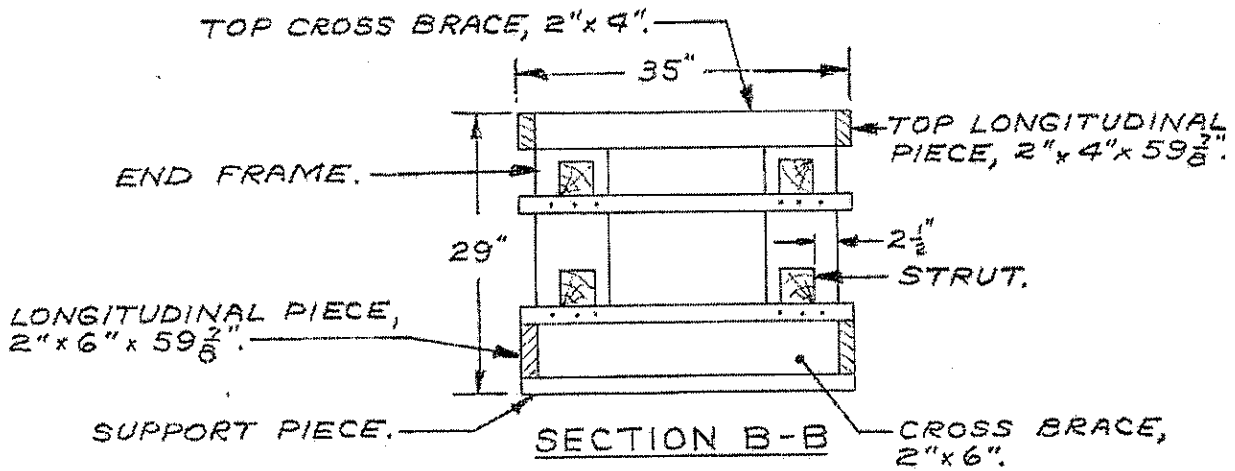
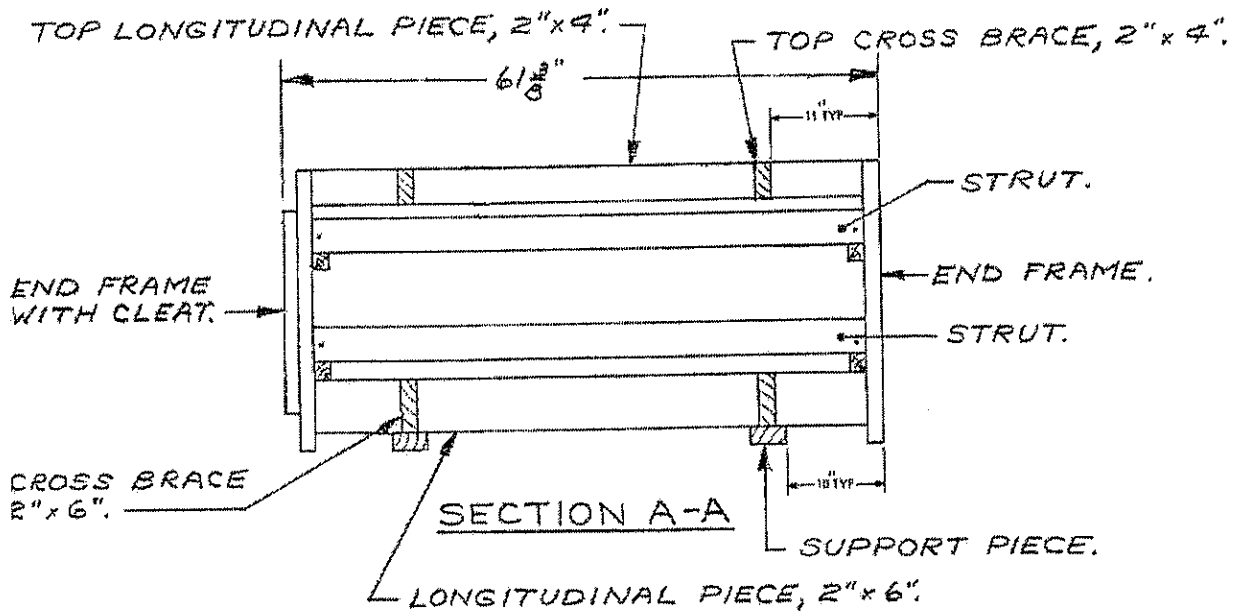
DUMMY UNIT LOAD

VERTICAL PIECE, 2"x8" x 29" (2 REQD).

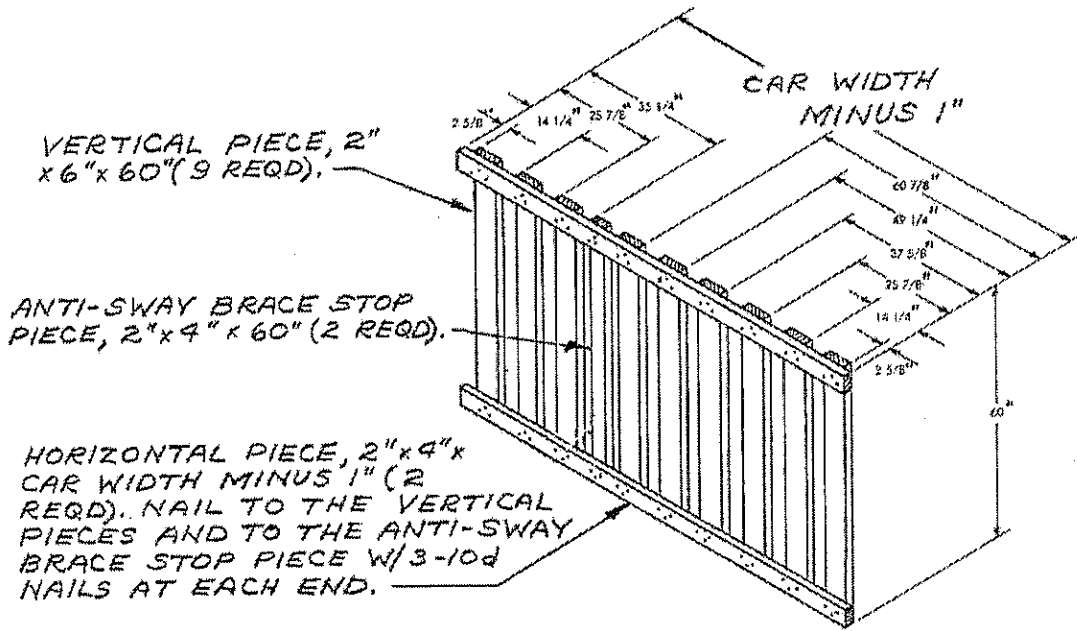
VERTICAL CLEAT, 2"x8" x 21" (2 REQD). NAIL TO THE VERTICAL PIECE W/4-10d NAILS.

STRUT LEDGER, 2"x2" x 35" (2 REQD). NAIL TO THE VERTICAL PIECES W/3-16d NAILS AT EACH JOINT AND CLINCH.

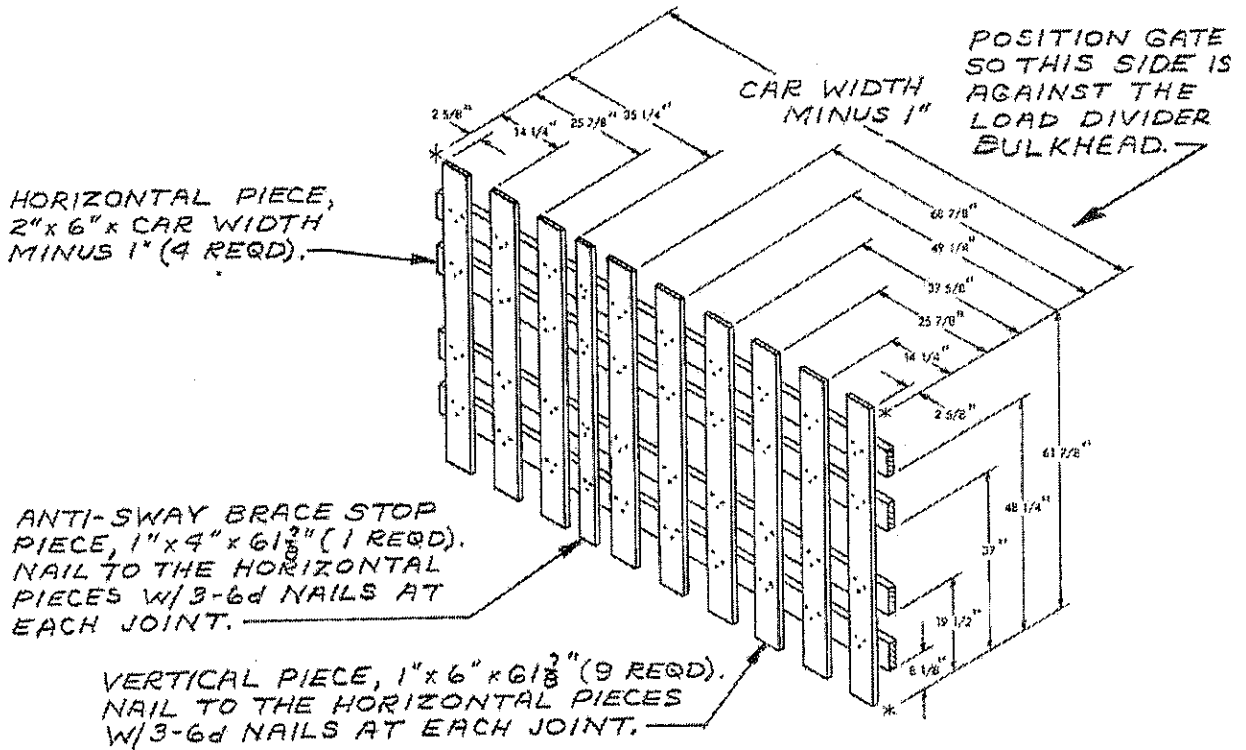
END FRAME WITH CLEAT



END FRAME



SEPARATOR GATE

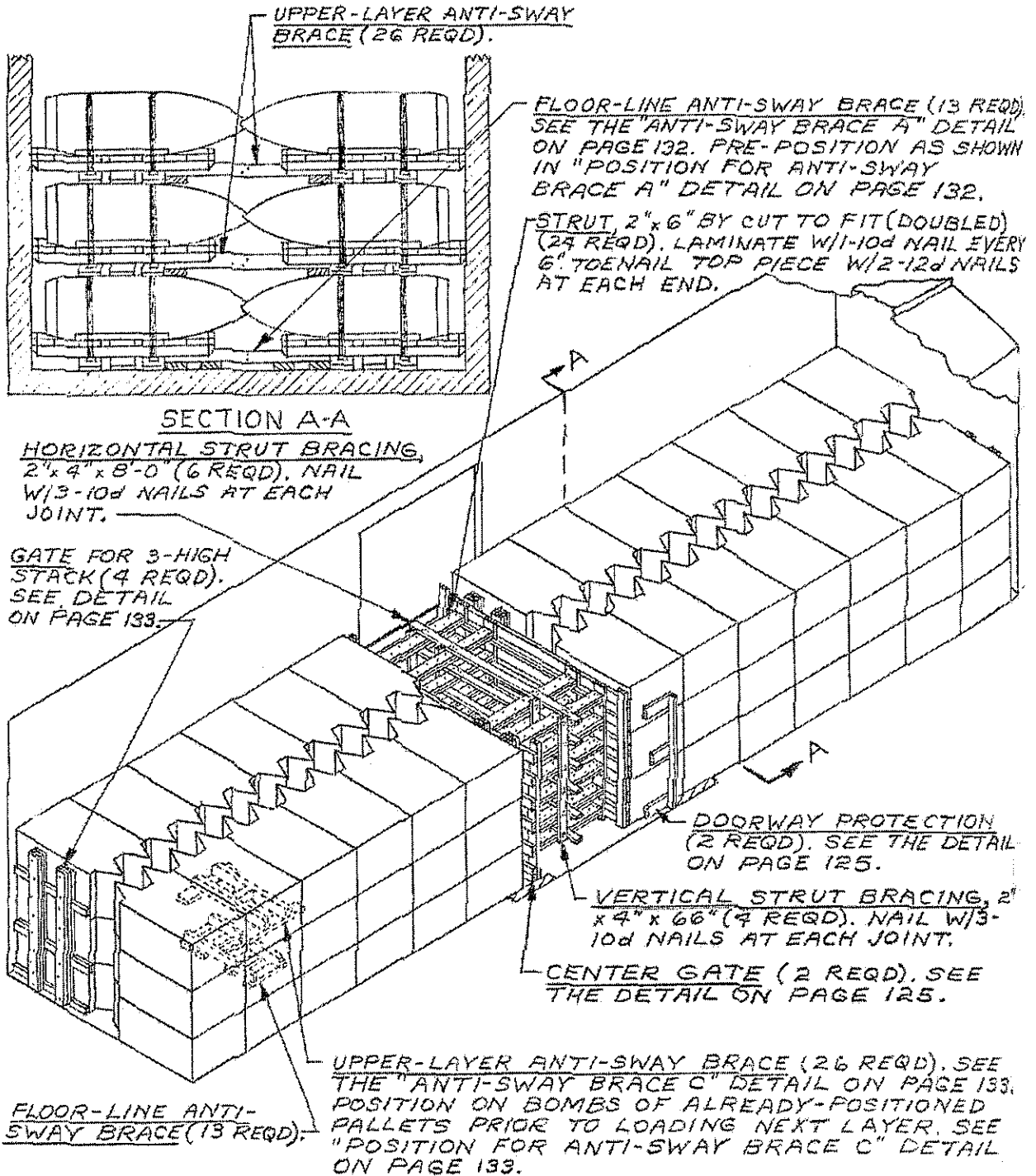


BUFFER GATE

2 REQD, 1 RIGHT HAND AND 1 LEFT HAND.

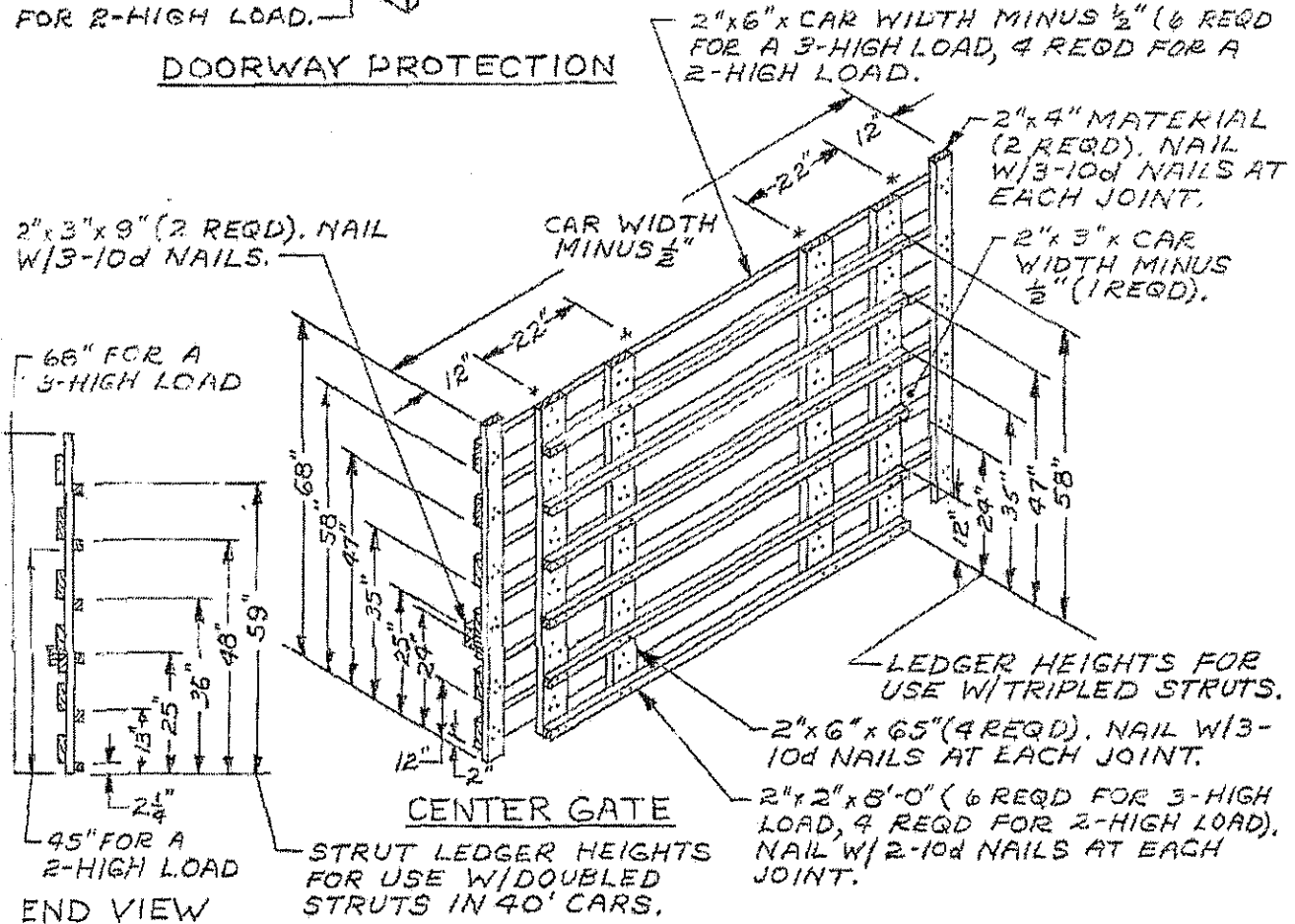
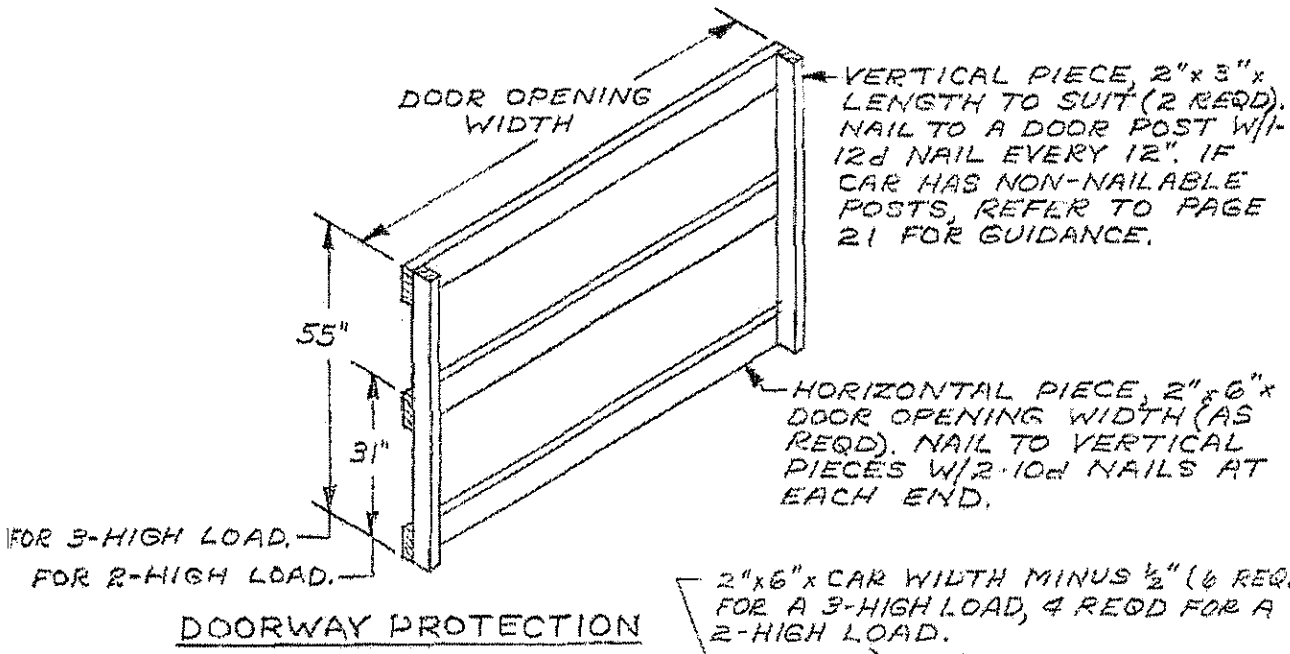
THIS PAGE INTENTIONALLY

LEFT BLANK

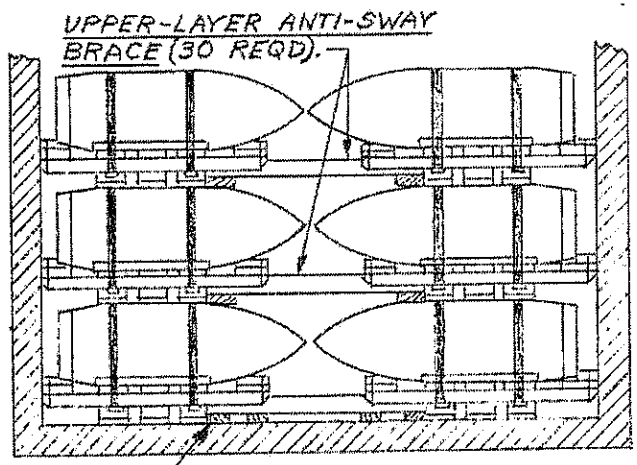


NOTE: 73 PALLET'S UNITS SHOWN  
GROSS WEIGHT - 124,730 LBS.

TYPICAL LOAD OF BOMBS, 750 LB, PALLETIZED (AIR FORCE UNIT LOAD PER TPO 1325-926-1868) IN A 40'-6" LONG BY 9'-2" WIDE OR LESS CONVENTIONAL BOX CAR



NOTE: GATE IS FOR EITHER 2 OR 3-LAYER LOADS. STRUT LEDGER HEIGHTS SHOWN BY VIEW ABOVE ARE APPLICABLE FOR A TRIPLED STRUT INSTALLATION IN 50'-6" LONG CAR. LEDGER HEIGHTS BY THE END VIEW ARE APPLICABLE FOR DOUBLED STRUTS IN 40' CARS. IF CAR HAS "PLUG" DOORS AND A PALLET EXTENDS INTO DOORWAY MORE THAN 15" PAST A DOOR POST, USE THE GATE SHOWN ON PAGES 128 AND 129 IN LIEU OF THE ABOVE.



PARTIAL-LAYER GATE (2 REQD). SEE THE DETAIL ON PAGE 127.

STRUT, 2"x6" BY CUT TO FIT (TRIPLED) (16 REQD). LAMINATE W/1-10d NAIL EVERY 6". TOENAIL TOP PIECE W/2-12d NAILS AT EACH END.

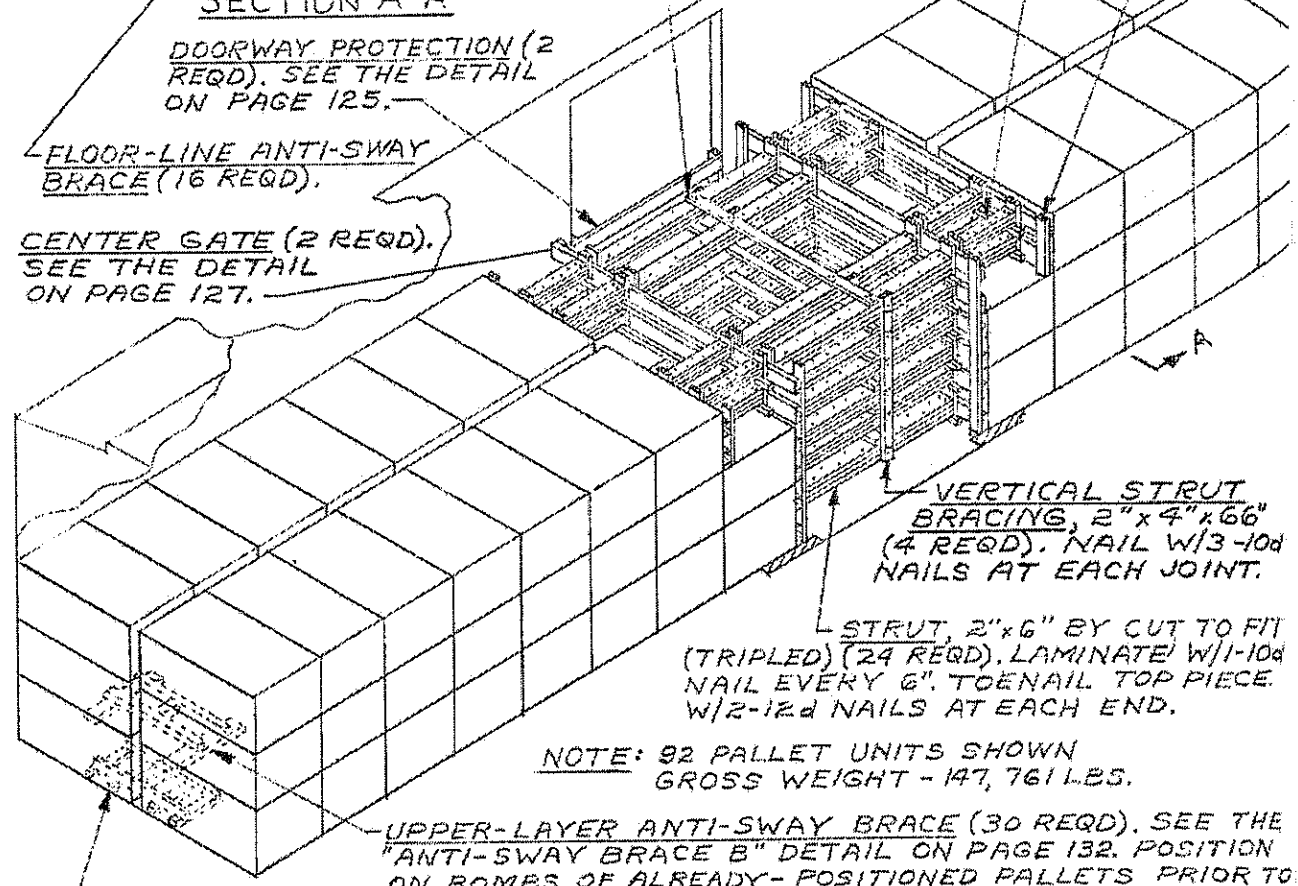
HORIZONTAL STRUT BRACING, 2"x4"x8'-0" (6 REQD). NAIL W/3-10d NAILS AT EACH JOINT.

**SECTION A-A**

DOORWAY PROTECTION (2 REQD). SEE THE DETAIL ON PAGE 125.

FLOOR-LINE ANTI-SWAY BRACE (16 REQD).

CENTER GATE (2 REQD). SEE THE DETAIL ON PAGE 127.



VERTICAL STRUT BRACING, 2"x4"x66" (4 REQD). NAIL W/3-10d NAILS AT EACH JOINT.

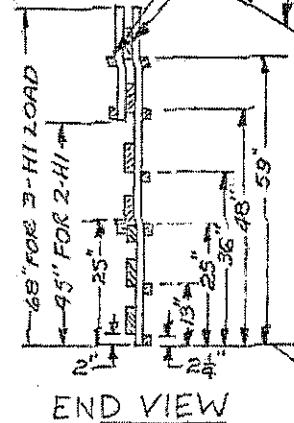
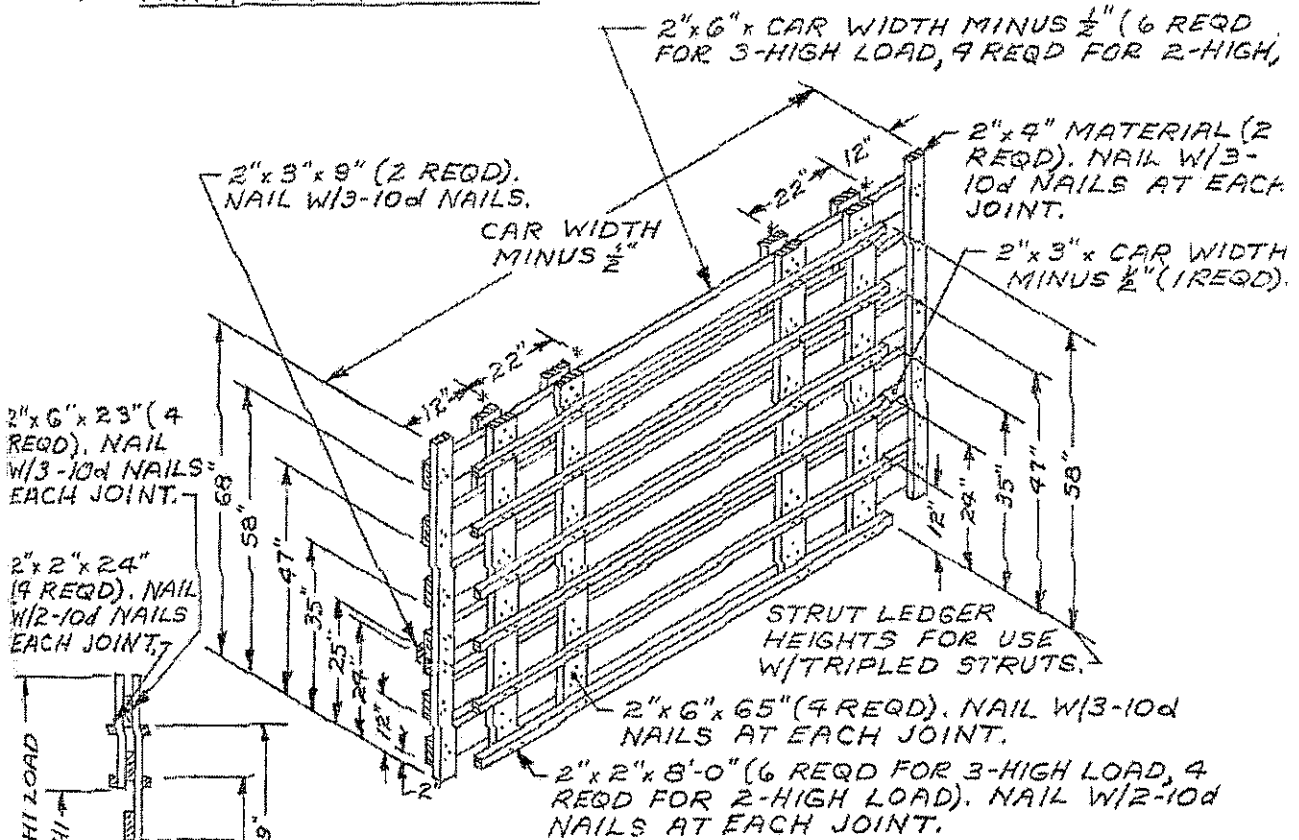
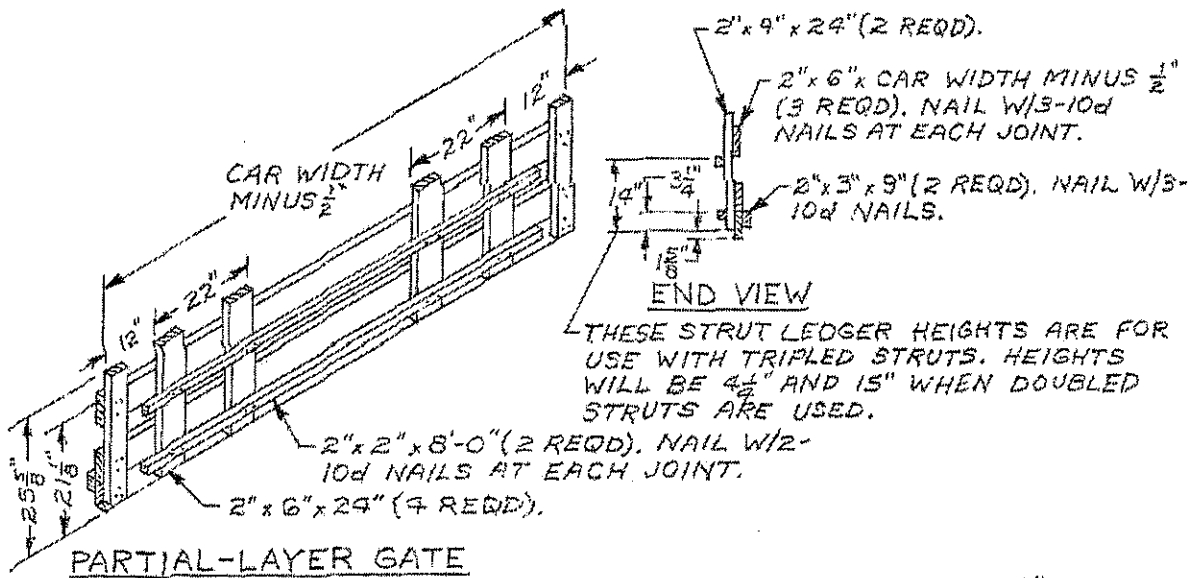
STRUT, 2"x6" BY CUT TO FIT (TRIPLED) (24 REQD). LAMINATE W/1-10d NAIL EVERY 6". TOENAIL TOP PIECE W/2-12d NAILS AT EACH END.

NOTE: 92 PALLET UNITS SHOWN GROSS WEIGHT - 147,761 LBS.

UPPER-LAYER ANTI-SWAY BRACE (30 REQD). SEE THE "ANTI-SWAY BRACE B" DETAIL ON PAGE 132. POSITION ON BOMBS OF ALREADY-POSITIONED PALLETS PRIOR TO LOADING NEXT LAYER. SEE "POSITION FOR ANTI-SWAY BRACE B" DETAIL ON PAGE 132.

FLOOR-LINE ANTI-SWAY BRACE (16 REQD). SEE THE "ANTI-SWAY BRACE A" DETAIL ON PAGE 132. PRE-POSITION AS SHOWN IN "POSITION FOR ANTI-SWAY BRACE A" DETAIL ON PAGE 132.

TYPICAL LOAD OF BOMBS, 750 LB, PALLETIZED (AIR FORCE UNIT LOAD PER TPO 1325-926-1868) IN A 50'-6" LONG BY 9'-4" OR WIDER CONVENTIONAL BOX CAR



**NOTE:** GATE IS FOR EITHER 2-LAYER OR 3-LAYER LOADS. STRUT LEDGER HEIGHTS SHOWN BY VIEW ABOVE ARE APPLICABLE FOR A TRIPLED STRUT INSTALLATION IN 50'-6" LONG CAR. LEDGER HEIGHTS BY THE END VIEW ARE APPLICABLE FOR DOUBLED STRUTS IN 40' CARS. IF CAR HAS "PLUG" DOORS AND A PALLET EXTENDS INTO DOORWAY MORE THAN 15" PAST A DOOR POST, USE THE GATE SHOWN ON PAGES 128 AND 129 IN LIEU OF THE ABOVE.

VERTICAL PIECE, 2" x 6" x 48" (4 REQD). NAIL TO TOP CROSS BRACE AND TO THE HORIZONTAL PIECES W/3-10d NAILS AT EACH JOINT.

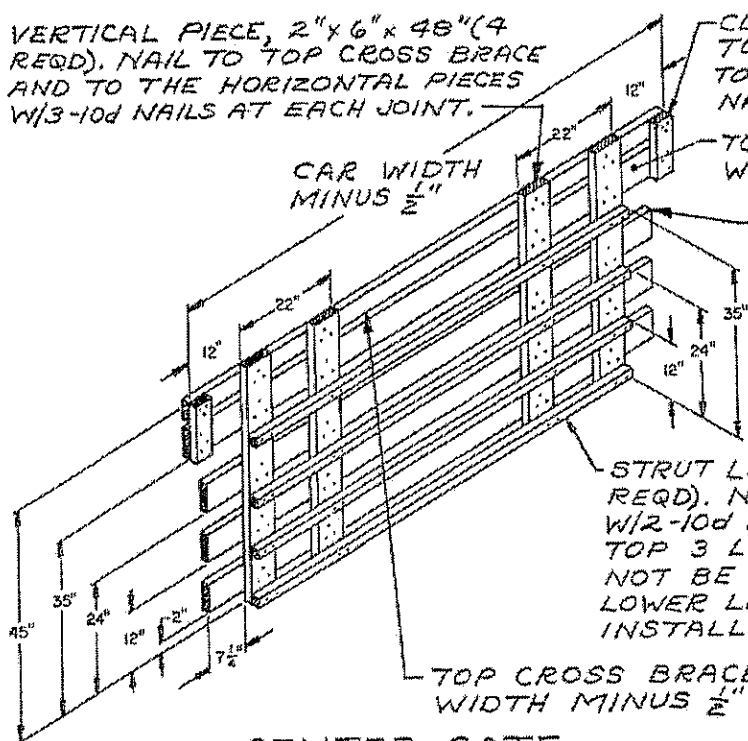
CLEAT, 2" x 4" x 10" (2 REQD), NAIL TO TOP CROSS BRACE AND TO THE TOP HORIZONTAL PIECE W/3-10d NAILS AT EACH JOINT.

TOP HORIZONTAL PIECE, 2" x 6" x CAR WIDTH MINUS 1/2" (1 REQD).

LOWER HORIZONTAL PIECE, 2" x 6" x CAR WIDTH MINUS 10" (3 REQD).

STRUT LEDGER, 2" x 2" x CUT TO FIT (4 REQD). NAIL TO THE VERTICAL PIECES W/2-10d NAILS AT EACH JOINT. NOTE: THE TOP 3 LEDGERS ON ONE GATE SHOULD NOT BE APPLIED UNTIL THE NEXT LOWER LEVEL OF STRUTS HAS BEEN INSTALLED.

TOP CROSS BRACE, 2" x 4" x CAR WIDTH MINUS 1/2" (1 REQD).



### CENTER GATE

FOR USE IN PLUG DOOR CARS WITH THE LOADS ON PAGES 124 AND 126. OMIT LEDGERS IF SOLID FILL CENTER BLOCKING IS USED. INCREASE VERTICALS TO 60" AND 6'-6" FOR 2 AND 3-HIGH LOADS, RESPECTIVELY.

#### NOTES:

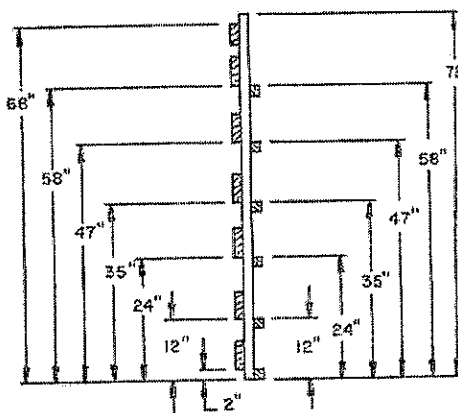
1. THE PROVISIONS ON THIS PAGE AND ON PAGE 129 ARE APPLICABLE FOR THE LOADS OF 750 LB BOMBS SHOWN ON PAGES 124 AND 126 WHEN SHIPPED IN A CAR EQUIPPED WITH PLUG DOORS, AND WHEN THE PALLET UNIT EXTENDS INTO THE DOORWAY AREA AT LEAST FIFTEEN INCHES (15").

2. EACH OF THE 4" x 4" DOOR PROTECTION PIECES MUST BE OF ONE-PIECE MATERIAL; SPLICING IS NOT PERMITTED.

3. IF A CAR HAS A COMBINATION PLUG AND CONVENTIONAL SLIDING DOOR INSTALLED SIDE-BY-SIDE, THE ONE-PIECE 4" x 4" DOOR PROTECTION MUST BE OF ADEQUATE LENGTH TO SPAN BOTH DOORS AS THOUGH THEY WERE ONE.

#### 4. NEAR-SIDE LOADING GUIDANCE:

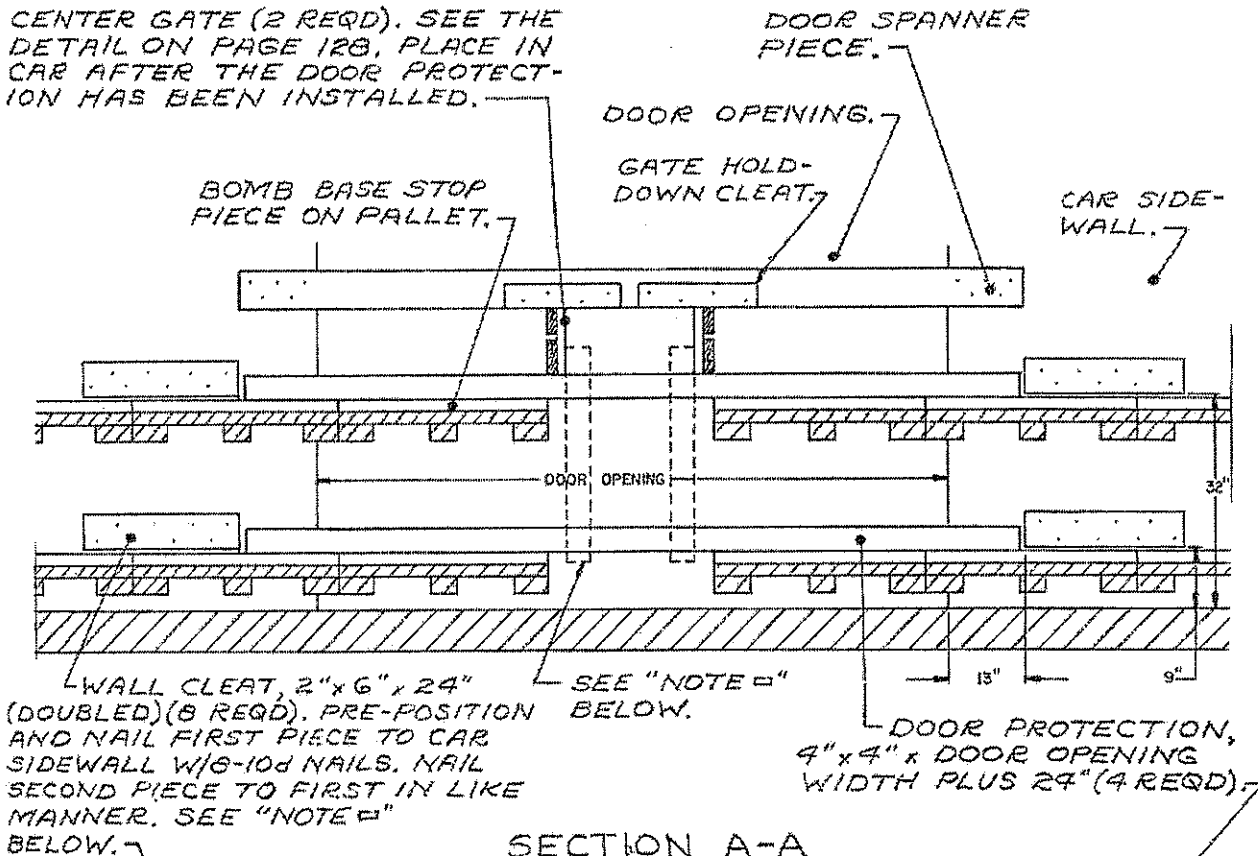
- SLIDE ONE END OF 4" x 4" BACK OVER WALL CLEAT TO FACILITATE LOWERING OTHER END TO JUST ABOVE BOMB BASE STOP PIECE.
- SLIDE 4" x 4" IN OPPOSITE DIRECTION TO CONTACT ADJACENT WALL CLEAT. PRESS 4" x 4" DOWNWARD ALONG ENTIRE LENGTH TO CONTACT TOP SURFACE OF EACH BOMB BASE STOP PIECE ON LOWER LAYER PALLETS.



### END VIEW

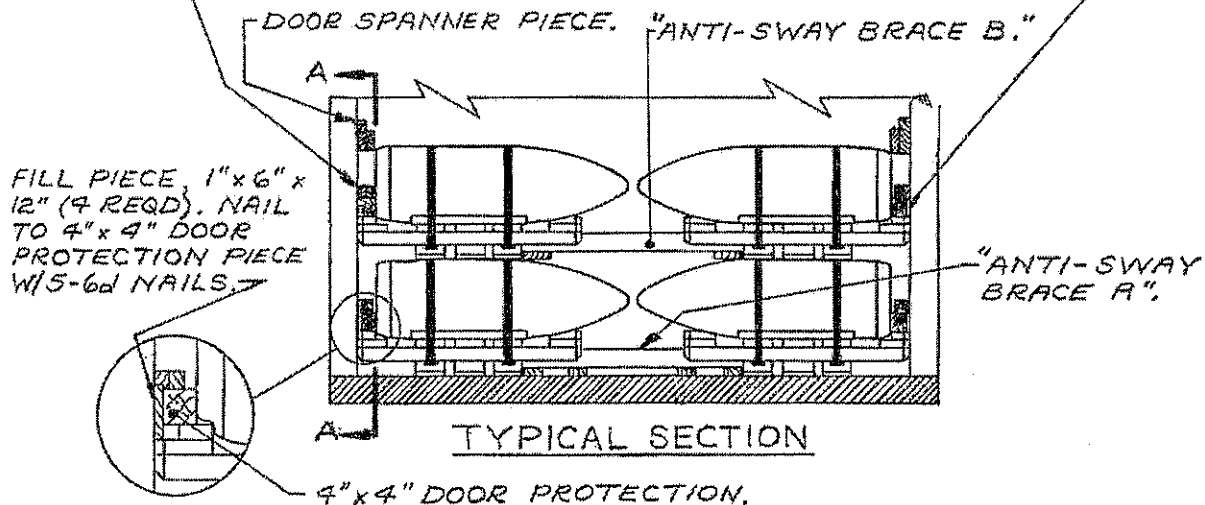
THE DIMENSIONS ABOVE ARE FOR A 3-HIGH LOAD.

CENTER GATE (2 REQD). SEE THE DETAIL ON PAGE 128. PLACE IN CAR AFTER THE DOOR PROTECTION HAS BEEN INSTALLED.



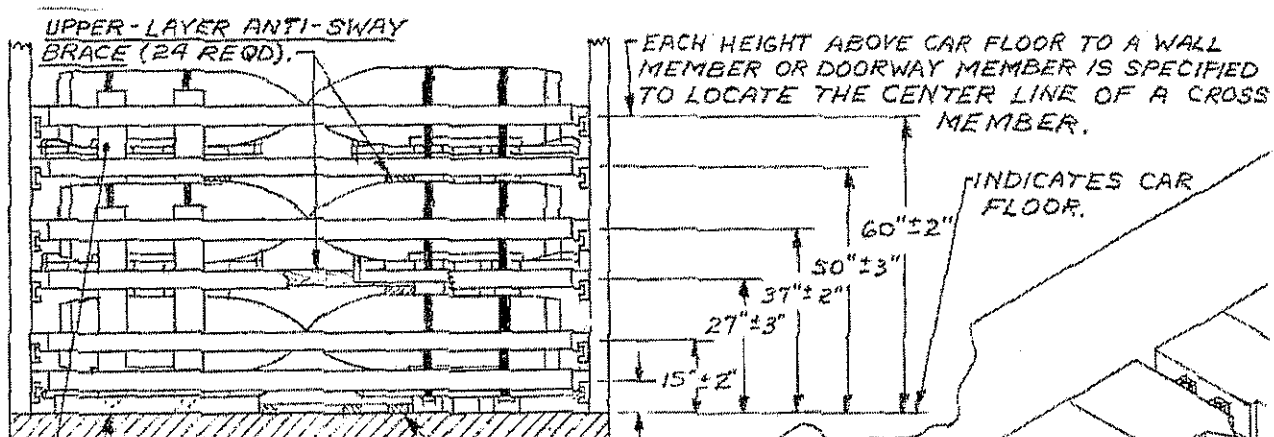
**SECTION A-A**

THIS SECTION DEPICTS PROPER INSTALLATION OF DOOR PROTECTION DUNNAGE AND THE CENTER GATES SHOWN ON PAGE 128 IN CARS EQUIPPED WITH PLUG DOORS.



THIS BLOW UP VIEW SHOWS A 1"x6" FILL PIECE NAILED TO EACH END OF 4"x4" DOOR PROTECTION TO PROVIDE CONTACT WITH CAR WALL WHEN DISTANCE FROM BASE OF BOMB TO CAR WALL IS GREATER THAN 3 1/2". THIS FILL REQD FOR PLUG DOORS, OPTIONAL FOR SLIDING DOORS.

**NOTE A:** 4"x4" DOOR PROTECTION CAN BE HELD LONGITUDINALLY BY PLACING A 2"x4"x36" VERTICALLY IN CONTACT WITH CENTER GATE. NAIL TO 4"x4" PIECES W/3-10d NAILS EACH JOINT. OMIT WALL CLEATS.

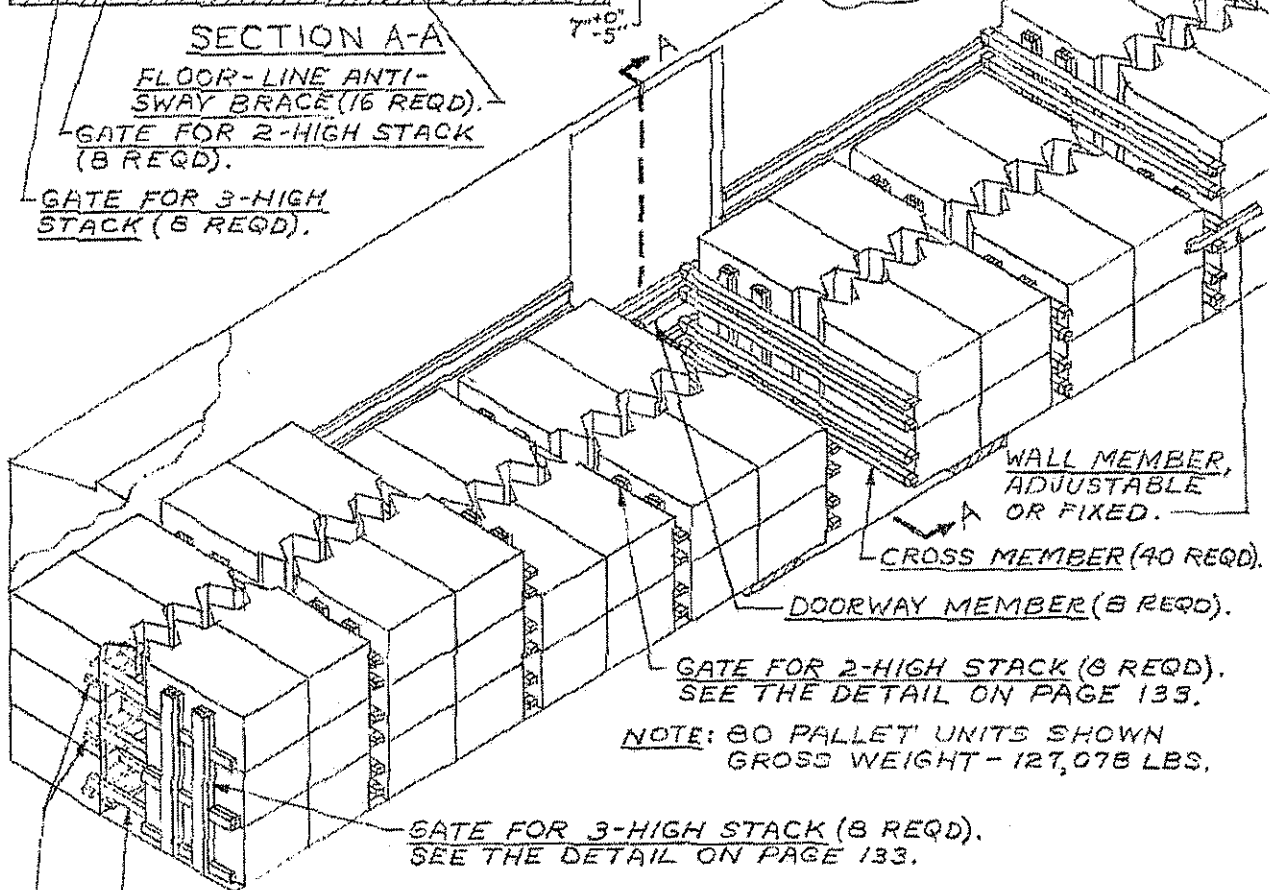


**SECTION A-A**

FLOOR-LINE ANTI-SWAY BRACE (16 REQD).

GATE FOR 2-HIGH STACK (8 REQD).

GATE FOR 3-HIGH STACK (8 REQD).

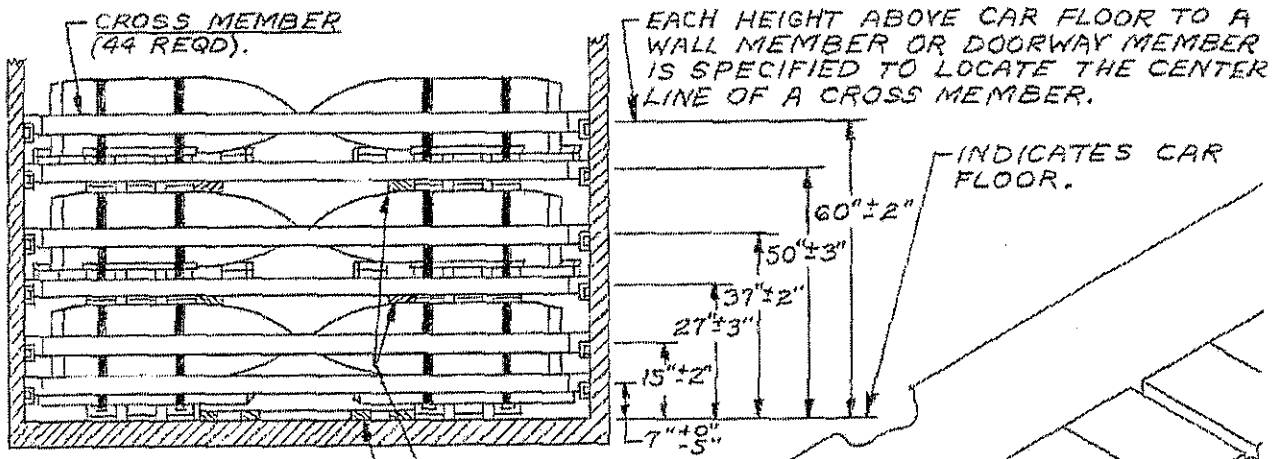


NOTE: 80 PALLET UNITS SHOWN  
GROSS WEIGHT - 127,078 LBS.

FLOOR-LINE ANTI-SWAY BRACE (16 REQD), SEE THE "ANTI-SWAY BRACE A" DETAIL ON PAGE 132. PRE-POSITION AS SHOWN IN "POSITION FOR ANTI-SWAY BRACE A" DETAIL ON PAGE 132.

UPPER-LAYER ANTI-SWAY BRACE (24 REQD). SEE THE "ANTI-SWAY BRACE C" DETAIL ON PAGE 133. POSITION ON BOMBS OF ALREADY-POSITIONED PALLETS PRIOR TO LOADING NEXT LAYER. SEE THE "POSITION FOR ANTI-SWAY BRACE C" DETAIL ON PAGE 133.

TYPICAL LOAD OF BOMBS, 750 LB, PALLETIZED  
(AIR FORCE UNIT LOAD PER TPO 1325-926-1868) IN  
50'-6" LONG BY 9'-2" WIDE OR LESS BOX CAR EQUIPPED WITH  
MECHANICAL BRACING DEVICES (CROSS MEMBERS)



EACH HEIGHT ABOVE CAR FLOOR TO A WALL MEMBER OR DOORWAY MEMBER IS SPECIFIED TO LOCATE THE CENTER LINE OF A CROSS MEMBER.

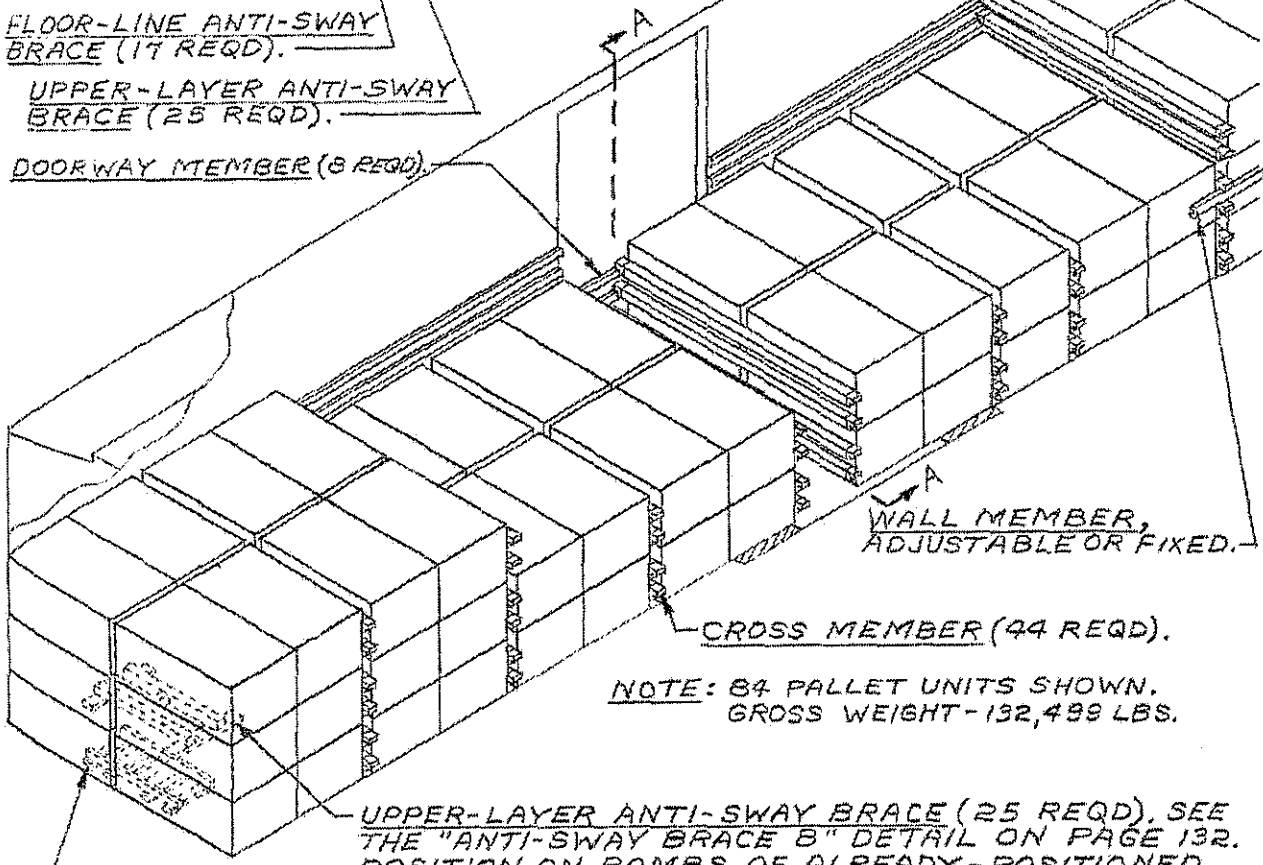
INDICATES CAR FLOOR.

**SECTION A-A**

FLOOR-LINE ANTI-SWAY BRACE (17 REQD).

UPPER-LAYER ANTI-SWAY BRACE (25 REQD).

DOORWAY MEMBER (8 REQD).



WALL MEMBER, ADJUSTABLE OR FIXED.

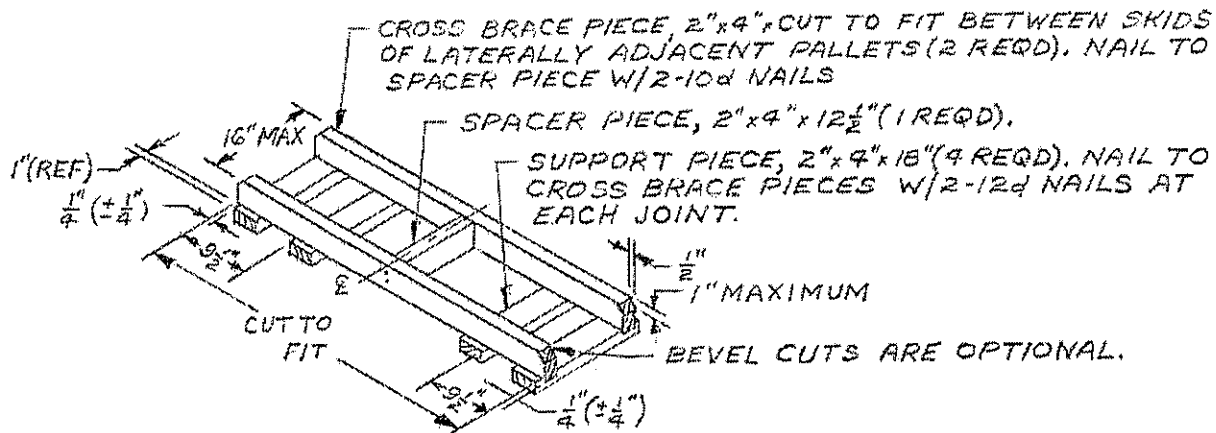
CROSS MEMBER (44 REQD).

NOTE: 84 PALLET UNITS SHOWN. GROSS WEIGHT-132,499 LBS.

UPPER-LAYER ANTI-SWAY BRACE (25 REQD). SEE THE "ANTI-SWAY BRACE B" DETAIL ON PAGE 132. POSITION ON BOMBS OF ALREADY-POSITIONED PALLETS PRIOR TO LOADING NEXT LAYER. SEE "POSITION FOR ANTI-SWAY BRACE B" DETAIL ON PAGE 132.

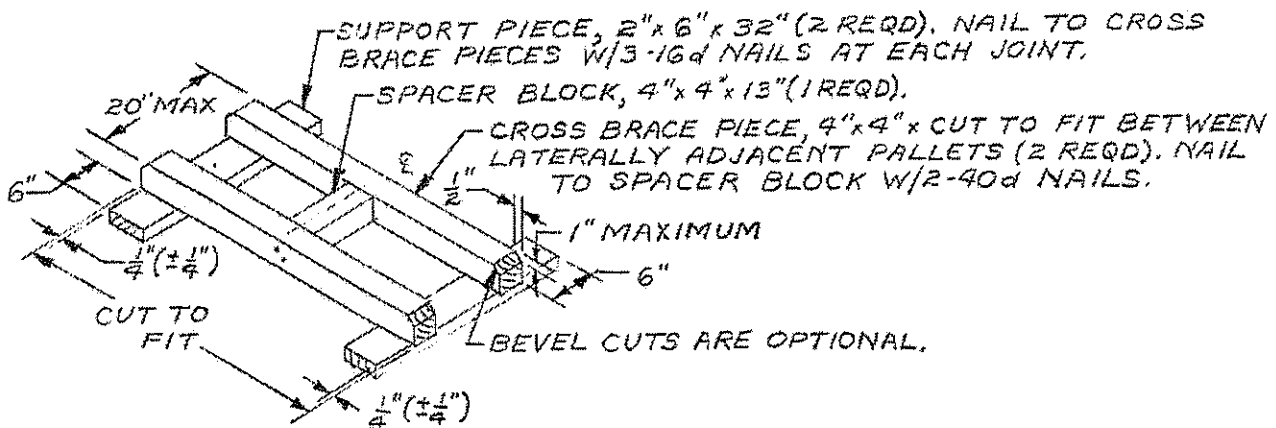
FLOOR-LINE ANTI-SWAY BRACE (17 REQD). SEE THE "ANTI-SWAY BRACE A" DETAIL ON PAGE 132. PRE-POSITION AS SHOWN IN "POSITION FOR ANTI-SWAY BRACE A" DETAIL ON PAGE 132.

TYPICAL LOAD OF BOMBS, 750 LB, PALLETIZED (AIR FORCE UNIT LOAD PER TPO 1325-926-1868) IN 50'-6" LONG BY 9'-4" OR WIDER BOX CAR EQUIPPED WITH MECHANICAL BRACING DEVICES (CROSS MEMBERS) PAGE 131



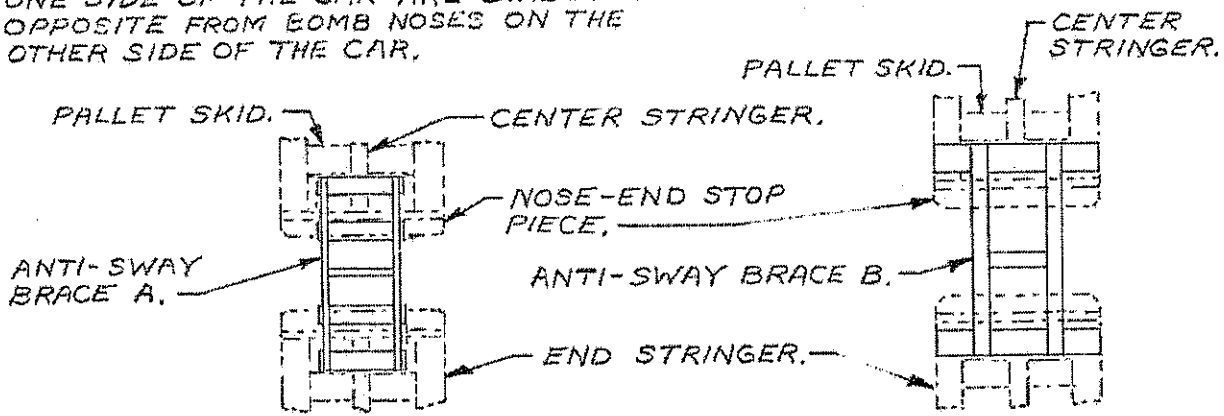
**ANTI-SWAY BRACE A**

THIS ANTI-SWAY BRACE IS DESIGNED FOR FLOOR-LINE LATERAL BRACING.



**ANTI-SWAY BRACE B**

THIS ANTI-SWAY BRACE IS DESIGNED FOR LATERAL BRACING IN 2<sup>ND</sup> OR 3<sup>RD</sup> LAYER OF LOAD WHEN BOMB NOSES ON ONE SIDE OF THE CAR ARE DIRECTLY OPPOSITE FROM BOMB NOSES ON THE OTHER SIDE OF THE CAR.

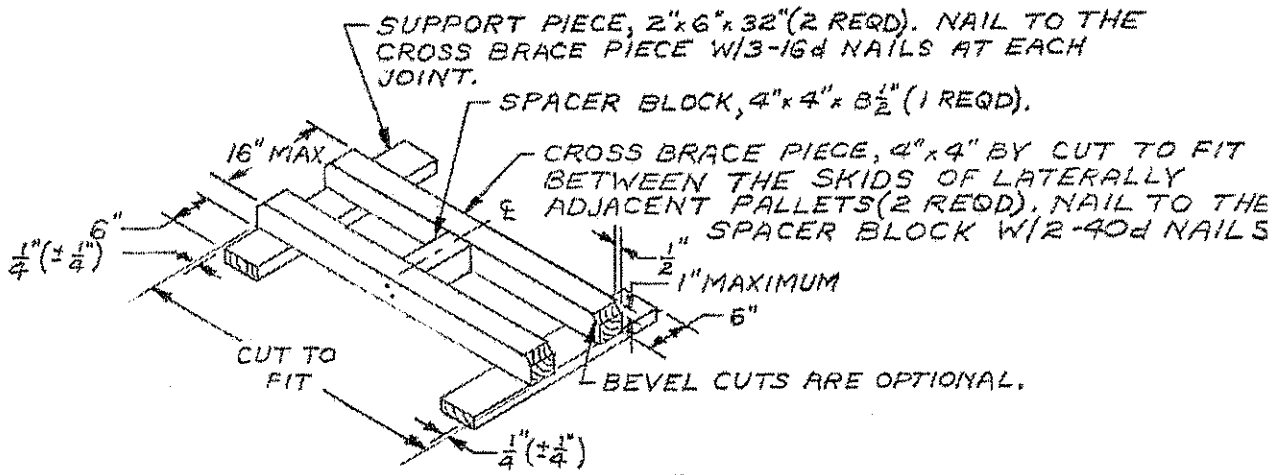


**POSITION FOR ANTI-SWAY BRACE A**

THIS VIEW SHOWS LOCATION OF ANTI-SWAY BRACE A USED FOR LATERAL BRACING IN BOTTOM LAYER OF A LOAD.

**POSITION FOR ANTI-SWAY BRACE B**

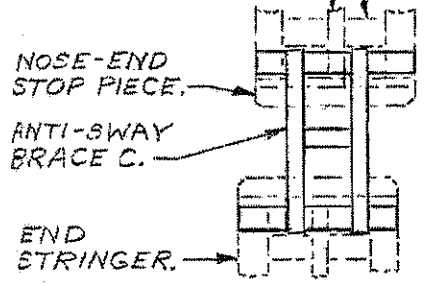
THIS VIEW SHOWS LOCATION OF ANTI-SWAY BRACE B USED FOR LATERAL BRACING IN THE SECOND AND THIRD LAYERS OF A LOAD.



**ANTI-SWAY BRACE C**

THIS ANTI-SWAY BRACE IS DESIGNED FOR LATERAL BRACING IN 2<sup>ND</sup> OR 3<sup>RD</sup> LAYER OF LOAD WHEN BOMB NOSES ON ONE SIDE OF THE CAR HAVE BEEN OFFSET FROM BOMB NOSES ON THE OTHER SIDE OF THE CAR.

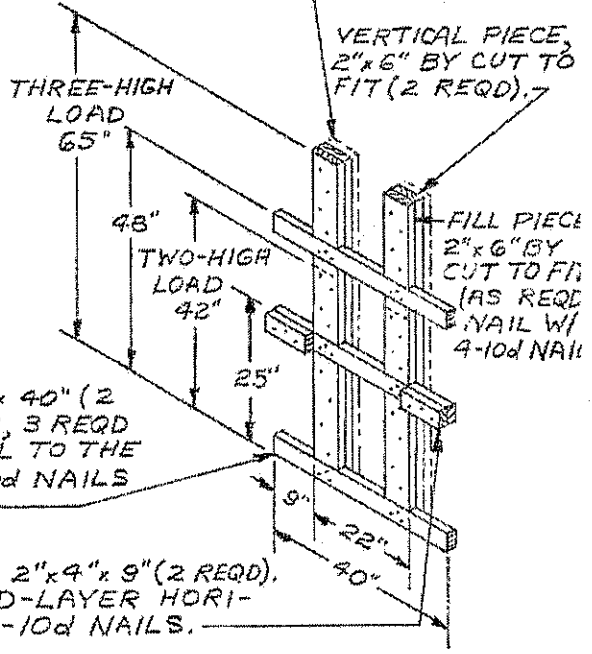
CENTER STRINGER. PALLET SKID.



**POSITION FOR ANTI-SWAY BRACE C**

THIS VIEW SHOWS LOCATION OF ANTI-SWAY BRACE C USED FOR LATERAL BRACING IN THE SECOND AND THIRD LAYERS OF AN OFF-SET LOAD.

SOLID FILL, 2" x 6" MATERIAL (SINGLE THICK FOR 9'-0" AND 9'-2" WIDE CARS, DOUBLED FOR LESS THAN 9'-0"). NAIL W/1-10d NAIL EVERY 8".

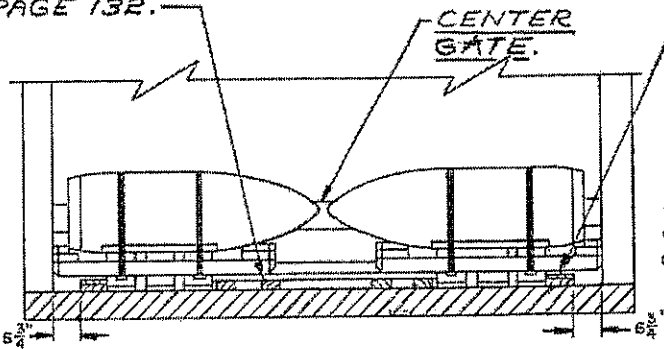


HORIZONTAL PIECE, 2" x 4" x 40" (2 REQD FOR 2-HIGH STACKS, 3 REQD FOR 3-HIGH STACKS). NAIL TO THE VERTICAL PIECES W/3-10d NAILS AT EACH JOINT.

HOLD-DOWN CLEAT, 2" x 4" x 9" (2 REQD). NAIL TO THE SECOND-LAYER HORIZONTAL PIECE W/3-10d NAILS.

FLOOR-LINE ANTI-SWAY BRACE (17 REQD). SEE THE "ANTI-SWAY BRACE A" DETAIL ON PAGE 132. PRE-POSITION AS SHOWN IN "POSITION FOR ANTI-SWAY BRACE A" DETAIL ON PAGE 132.

REFER TO PAGES 22 THRU 26 FOR NOTES ON LOAD DIVIDER CARS.



SECTION A-A

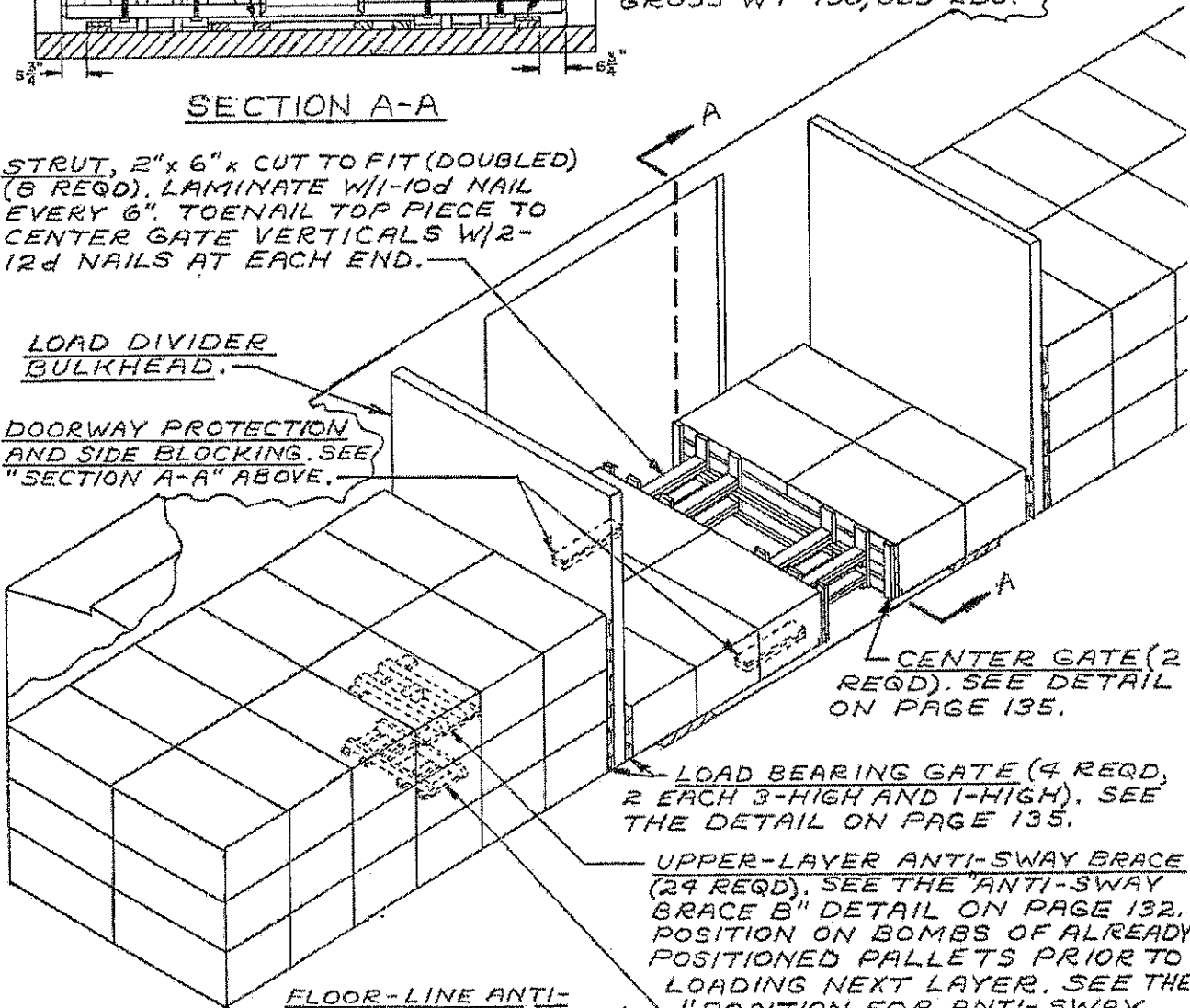
DOORWAY PROTECTION AND SIDE BLOCKING, 2" x 6" x 28" AND 1" x 6" x 28" (6 EACH REQD). PRE-POSITION AS SHOWN AND NAIL THE 1" x 6" PIECE THRU THE 2" x 6" PIECE INTO THE CAR FLOOR W/6-20d NAILS.

NOTE:  
82 PALLET UNITS SHOWN  
GROSS WT-130,065 LBS.

STRUT, 2" x 6" x CUT TO FIT (DOUBLED) (8 REQD). LAMINATE W/1-10d NAIL EVERY 6". TOENAIL TOP PIECE TO CENTER GATE VERTICALS W/2-12d NAILS AT EACH END.

LOAD DIVIDER BULKHEAD.

DOORWAY PROTECTION AND SIDE BLOCKING. SEE "SECTION A-A" ABOVE.



CENTER GATE (2 REQD). SEE DETAIL ON PAGE 135.

LOAD BEARING GATE (4 REQD, 2 EACH 3-HIGH AND 1-HIGH). SEE THE DETAIL ON PAGE 135.

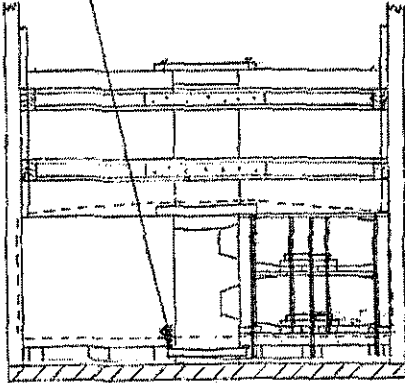
UPPER-LAYER ANTI-SWAY BRACE (24 REQD). SEE THE "ANTI-SWAY BRACE B" DETAIL ON PAGE 132. POSITIONED ON BOMBS OF ALREADY-POSITIONED PALLET PRIOR TO LOADING NEXT LAYER. SEE THE "POSITION FOR ANTI-SWAY BRACE B" DETAIL ON PAGE 132.

FLOOR-LINE ANTI-SWAY BRACE (17 REQD).

TYPICAL LOAD OF BOMBS, 750 LB, PALLETIZED  
(AIR FORCE UNIT LOAD PER TPO 1325-926-1868)  
IN A 50'-6" LONG BY 9'-2" WIDE BOX  
CAR EQUIPPED WITH LOAD DIVIDERS



DOORWAY BLOCKING, 2"x9"x CUT TO FIT BETWEEN PALLETS AND 2"x9"x CUT TO FIT PLUS 4" (6 EACH REQD, 3 PER LOAD UNIT), NAIL THE FIRST PIECE TO THE CAR FLOOR W/5-16d NAILS. NAIL THE SECOND PIECE TO THE FIRST W/5-16d NAILS.



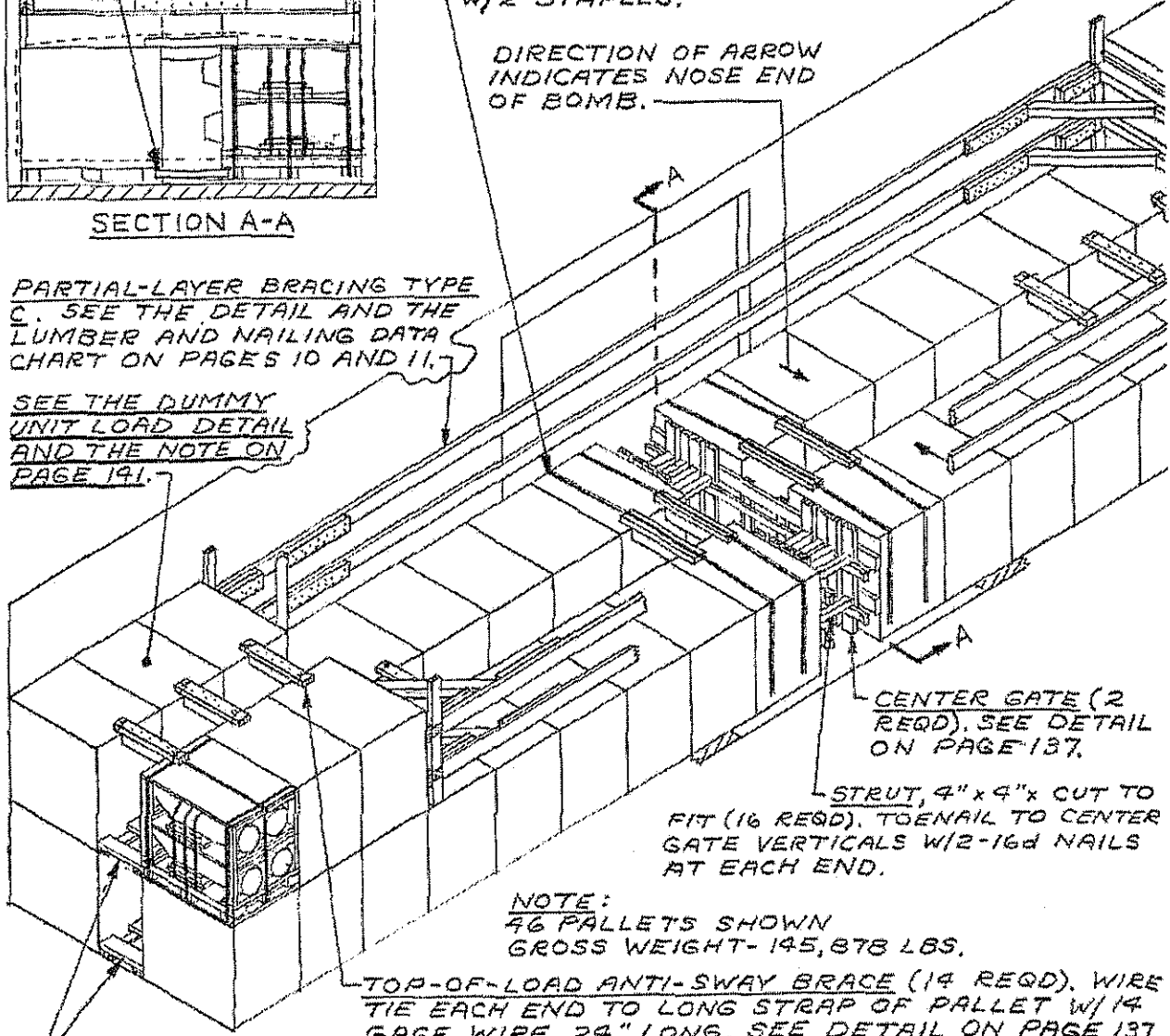
SECTION A-A

DOORWAY PROTECTION, 1 1/2" x .035" x 28'-0" LONG STEEL STRAPPINGS (4 REQD), THREAD BETWEEN DECK BOARDS AND SKIDS, ADJACENT TO OUTER STRINGER OF PALLET. STAPLE TO TOP-OF-LOAD ANTI-SWAY BRACE W/2 STAPLES.

DIRECTION OF ARROW INDICATES NOSE END OF BOMB.

PARTIAL-LAYER BRACING TYPE C. SEE THE DETAIL AND THE LUMBER AND NAILING DATA CHART ON PAGES 10 AND 11.

SEE THE DUMMY UNIT LOAD DETAIL AND THE NOTE ON PAGE 191.



CENTER GATE (2 REQD), SEE DETAIL ON PAGE 137.

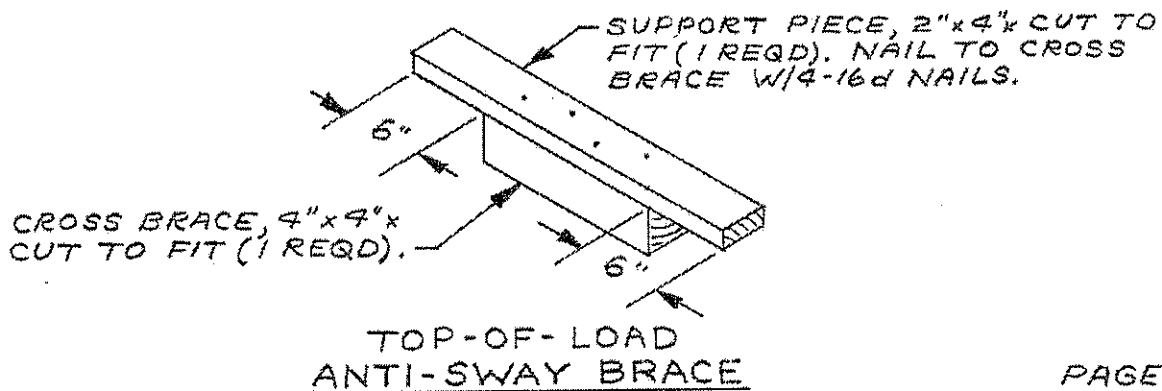
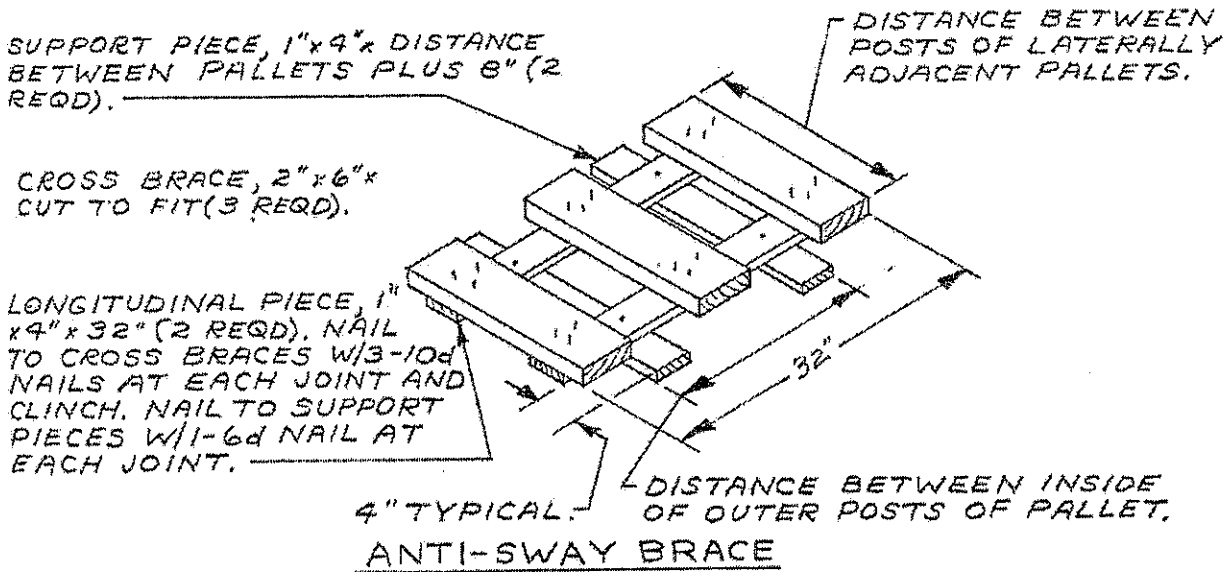
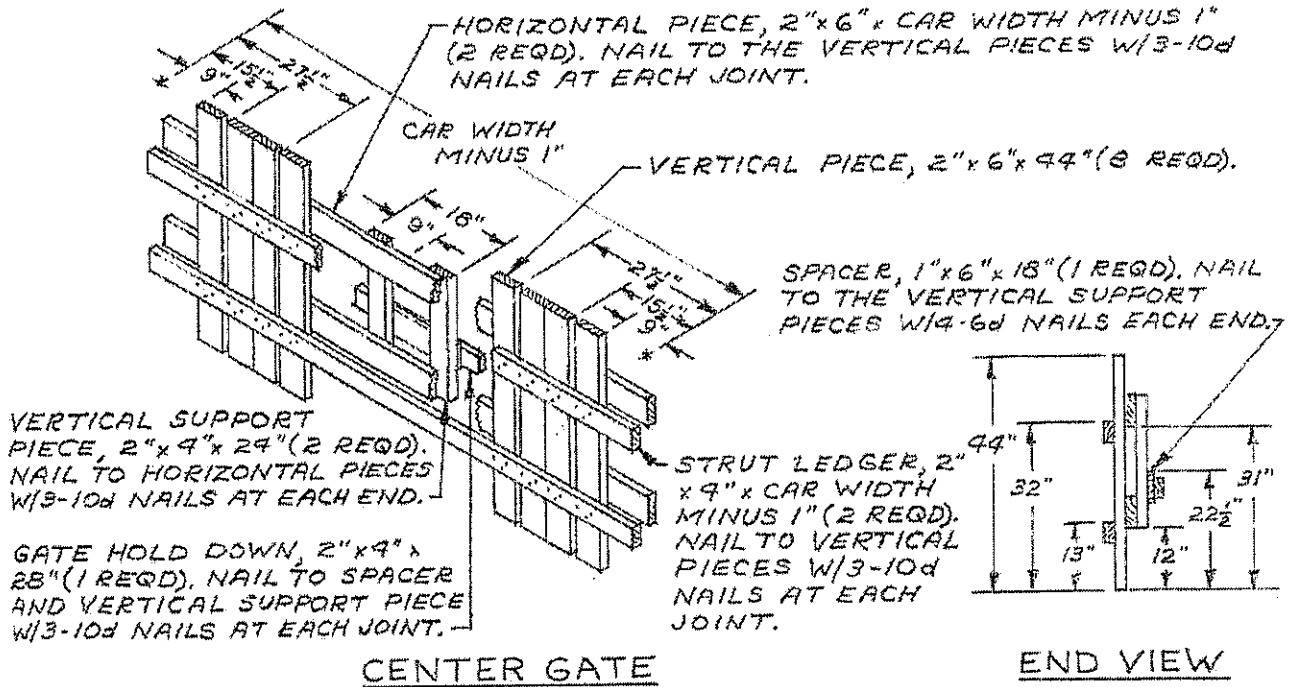
STRUT, 4"x4"x CUT TO FIT (16 REQD), TOENAIL TO CENTER GATE VERTICALS W/2-16d NAILS AT EACH END.

NOTE:  
46 PALLETS SHOWN  
GROSS WEIGHT- 145,878 LBS.

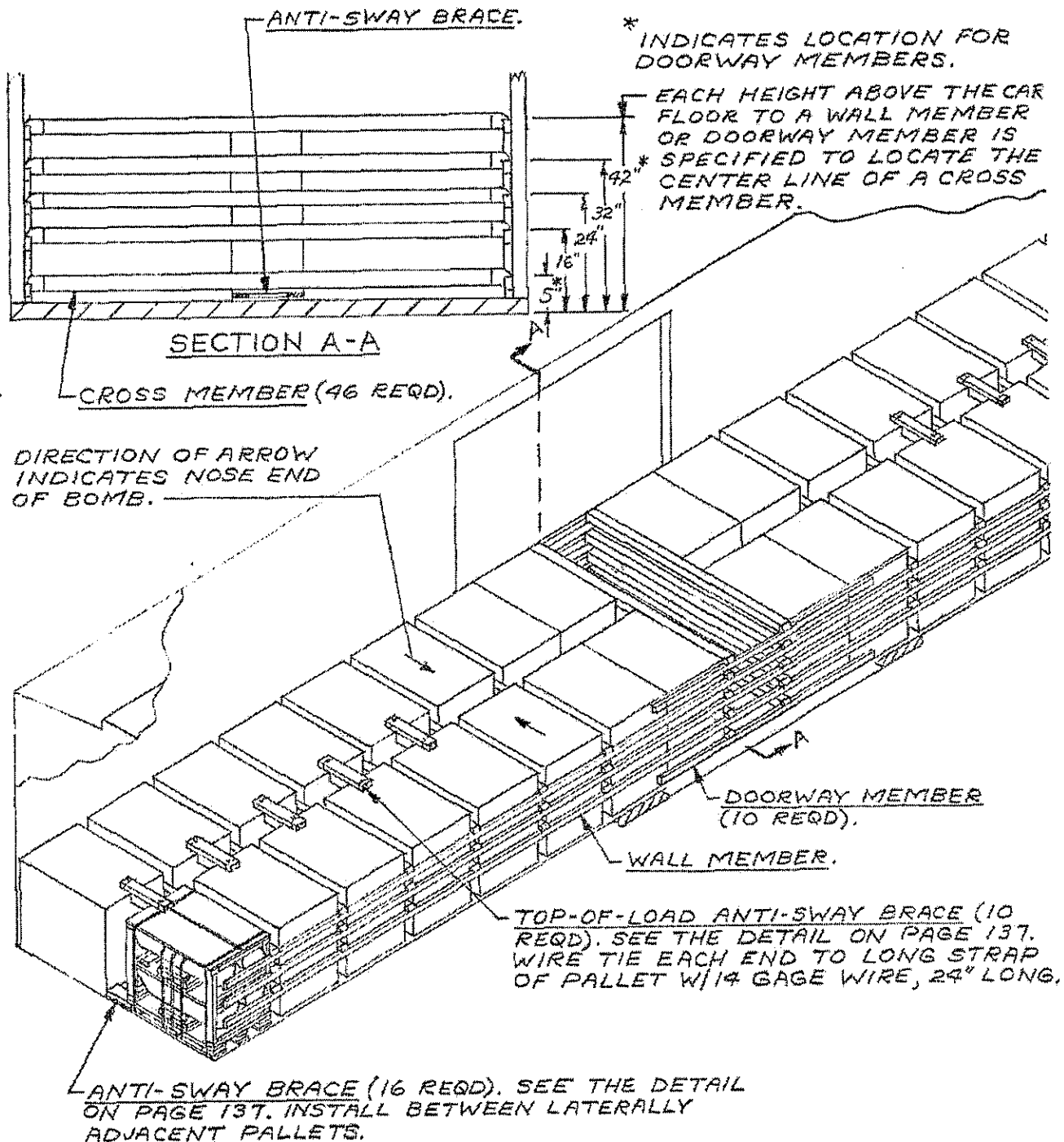
TOP-OF-LOAD ANTI-SWAY BRACE (14 REQD), WIRE TIE EACH END TO LONG STRAP OF PALLET W/14 GAGE WIRE, 24" LONG. SEE DETAIL ON PAGE 137.

ANTI-SWAY BRACE (21 REQD), SEE DETAIL ON PAGE 137. INSTALL BETWEEN ALL LATERALLY ADJACENT PALLETS EXCEPT THOSE IN DOORWAY.

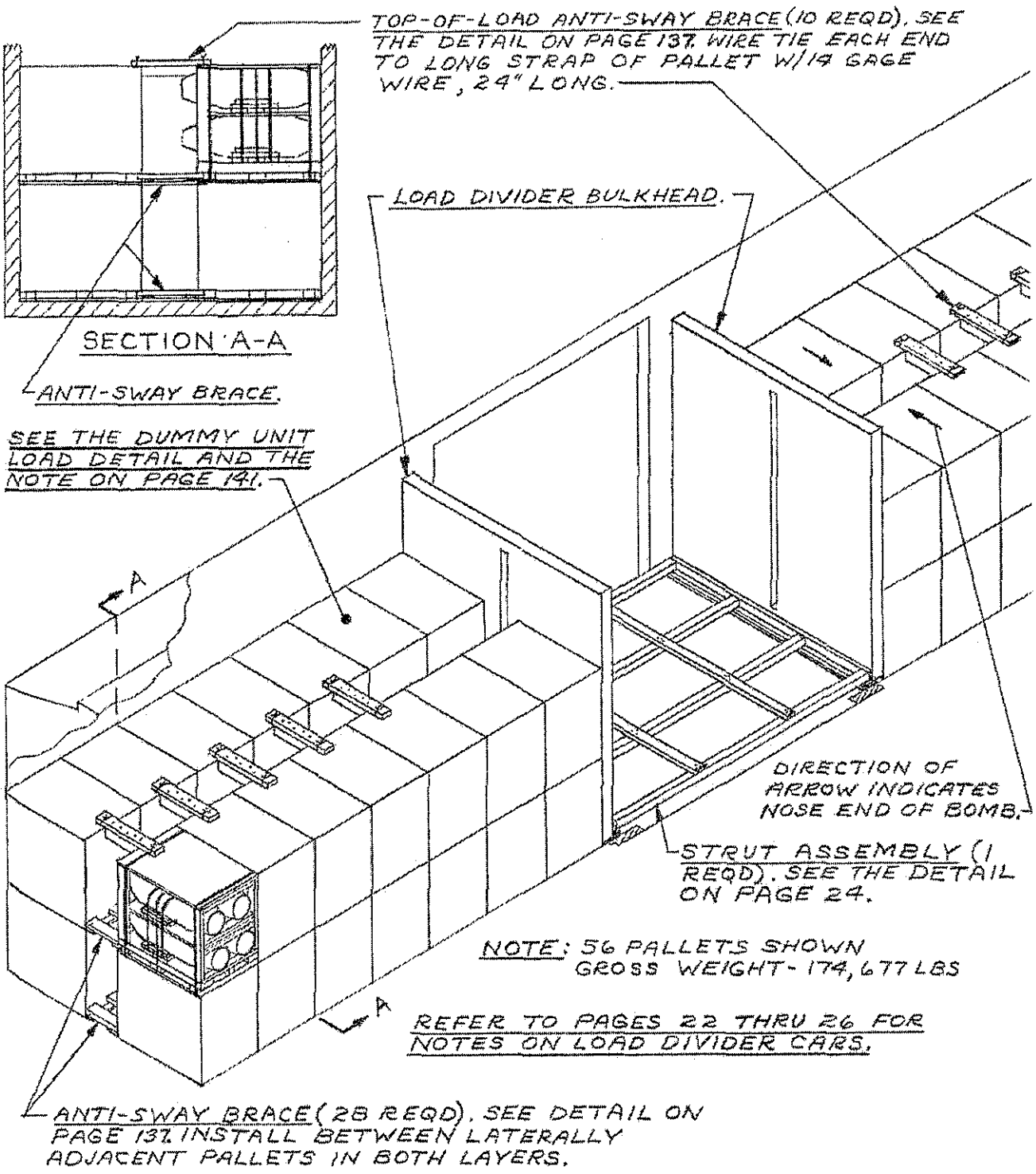
TYPICAL LOAD OF BOMBS, 750 LB, PALLETIZED 4 PER PALLET (AIR FORCE UNIT LOAD PER TPO 1325-232-6331, REV F) IN A 50'-6" LONG BY 9'-2" WIDE CONVENTIONAL BOX CAR



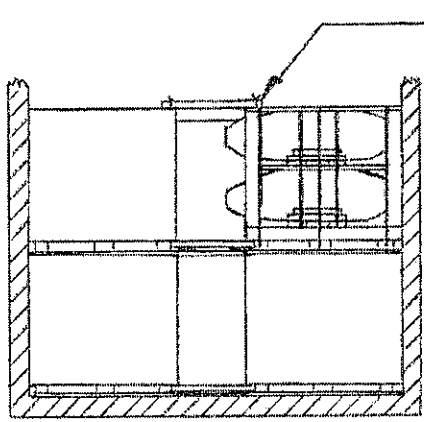
**NOTE:**  
 32 PALLET UNITS SHOWN  
 GROSS WT. - 100,400 LBS.



TYPICAL LOAD OF BOMBS, 750 LB, PALLETIZED 4 PER PALLET (AIR FORCE UNIT LOAD PER TPO 1325-232-6331, REV F) IN A 50'-6" LONG BOX CAR EQUIPPED WITH MECHANICAL BRACING DEVICES (CROSS MEMBERS)



TYPICAL LOAD OF BOMBS, 750 LB, PALLETIZED 4 PER PALLET (AIR FORCE UNIT LOAD PER TPO 1325-232-6331, REV F) IN A 50'-6" LONG BY 9'-2" WIDE CAR EQUIPPED WITH LOAD DIVIDERS



SECTION A-A

TOP-OF-LOAD ANTI-SWAY BRACE (14 REQD). SEE DETAIL ON PAGE 137. WIRE TIE EACH END TO LONG STRAP OF PALLET W/14 GAGE WIRE, 24" LONG.

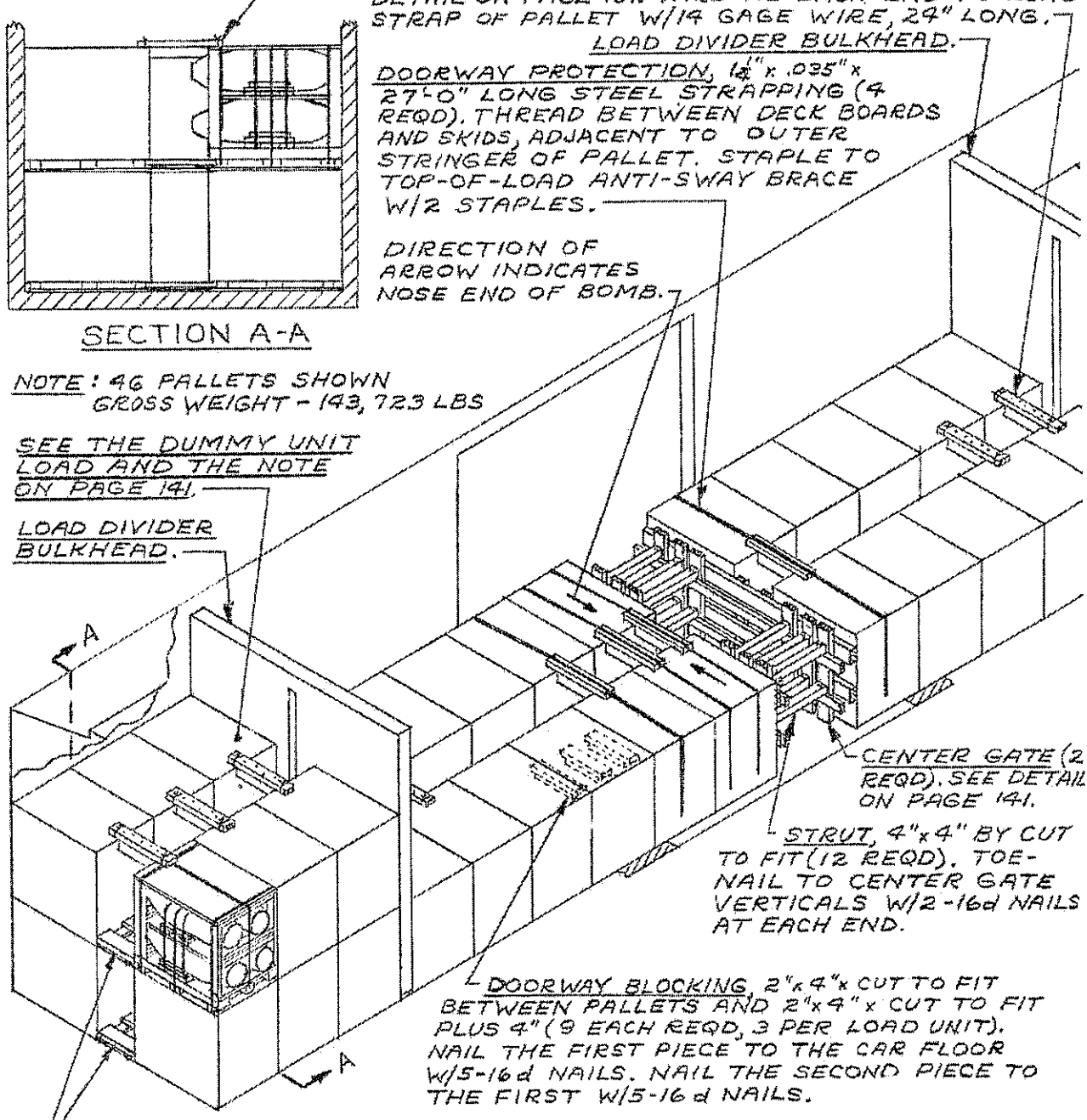
LOAD DIVIDER BULKHEAD.  
DOORWAY PROTECTION, 1 1/2" x .035" x 27'-0" LONG STEEL STRAPPING (4 REQD). THREAD BETWEEN DECK BOARDS AND SKIDS, ADJACENT TO OUTER STRINGER OF PALLET. STAPLE TO TOP-OF-LOAD ANTI-SWAY BRACE W/2 STAPLES.

DIRECTION OF ARROW INDICATES NOSE END OF BOMB.

NOTE: 46 PALLETS SHOWN  
GROSS WEIGHT - 143,723 LBS

SEE THE DUMMY UNIT LOAD AND THE NOTE ON PAGE 141.

LOAD DIVIDER BULKHEAD.



CENTER GATE (2 REQD). SEE DETAIL ON PAGE 141.

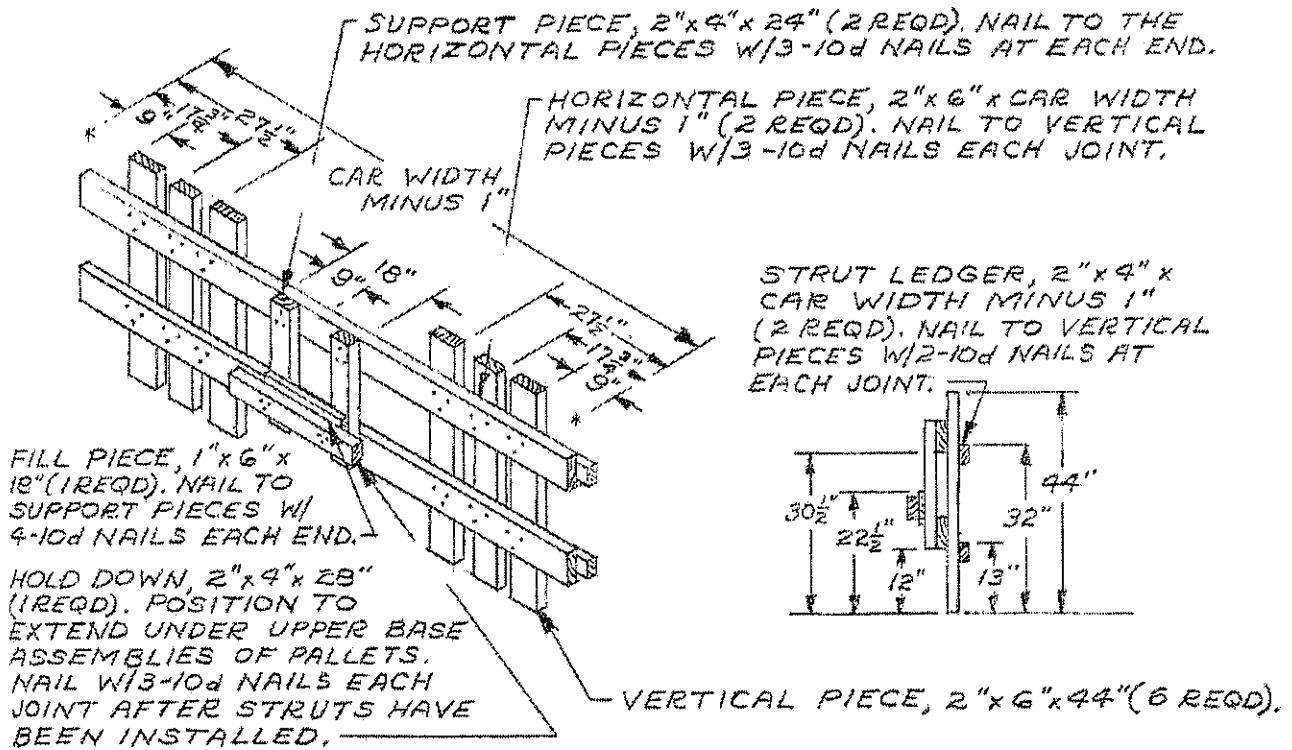
STRUT, 4" x 4" BY CUT TO FIT (12 REQD). TOE-NAIL TO CENTER GATE VERTICALS W/2-16d NAILS AT EACH END.

DOORWAY BLOCKING, 2" x 4" x CUT TO FIT BETWEEN PALLETS AND 2" x 4" x CUT TO FIT PLUS 4" (9 EACH REQD, 3 PER LOAD UNIT). NAIL THE FIRST PIECE TO THE CAR FLOOR W/5-16d NAILS. NAIL THE SECOND PIECE TO THE FIRST W/5-16d NAILS.

ANTI-SWAY BRACE (20 REQD). SEE THE DETAIL ON PAGE 137. INSTALL BETWEEN ALL LATERALLY ADJACENT PALLETS IN BOTH LAYERS EXCEPT THOSE UNITS IN THE DOORWAY.

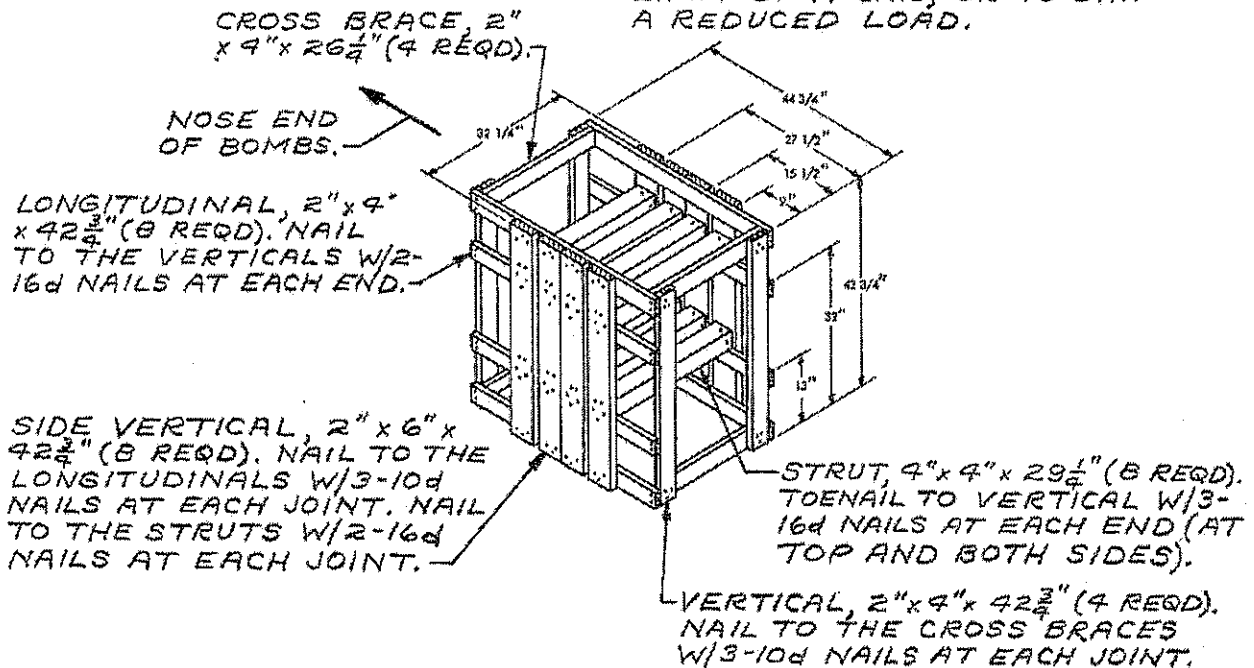
REFER TO PAGES 22 THRU 26 FOR NOTES ON LOAD DIVIDER CARS.

TYPICAL LOAD OF BOMBS, 750 LB, PALLETIZED 4 PER PALLET (AIR FORCE UNIT LOAD PER TPO 1325-232-6331, REV F) IN A 50'-6" LONG BY 9'-2" WIDE CAR EQUIPPED WITH LOAD DIVIDERS



CENTER GATE

NOTE: DUMMY UNIT LOADS WILL BE USED ONLY AS NEEDED TO AVOID EXCEEDING THE LOAD LIMIT OF A CAR, OR TO SHIP A REDUCED LOAD.



DUMMY UNIT LOAD