

APPROVED BY

BUREAU OF EXPLOSIVES

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DATE *7/14/71*

BATS

LOADING AND BRACING (CL & LCL) IN BOX CARS \oplus OF BALLISTIC AERIAL TARGET SYSTEM, MAIN ASSEMBLAGE, PACKED ONE PER SHIPPING CONTAINER

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\oplus ONLY CUSHIONED BOX CARS CAN BE USED FOR SHIPPING SPECIFIED ITEM. NON-CUSHIONED CARS MUST NOT BE USED. CARS HAVING SLIDING CENTER SILL TYPE CUSHIONING DEVICES OR END-OF-CAR TYPE DEVICES WHICH HAVE AT LEAST 15" OF TRAVEL ARE ACCEPTABLE.

● THE OUTLOADING PROCEDURES SPECIFIED WITHIN THIS DRAWING ARE ONLY APPLICABLE TO ITEMS WHICH ARE EMPTY. NOTICE: THE ITEM PACKAGING AND THE SPECIFIED LOADING AND BRACING PROCEDURES WILL NOT BE USED FOR SHIPPING ITEMS CONTAINING EXPLOSIVES.

DO NOT SCALE

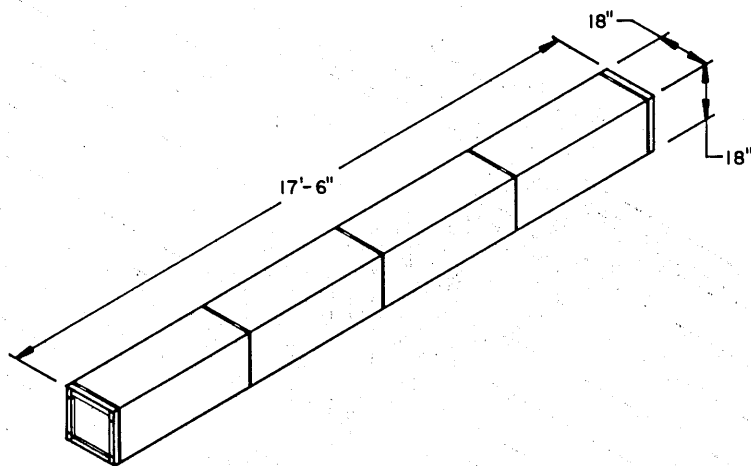
REVISIONS		DRAFTSMAN <i>PE/JM/HMB</i>	PROJ. ENG. <i>C.R./HWD</i>
CHECKER <i>RSH/WBH</i>	APP. OFFICE <i>John Boyd</i>	APPROVED BY <i>John Boyd</i>	APPROVED BY <i>JPP</i>
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U. S. ARMY MATERIEL COMMAND OCTOBER 1971			
CLASS	DIVISION	DRAWING	FILE
19	48	5497	GM 5A175

GENERAL NOTES

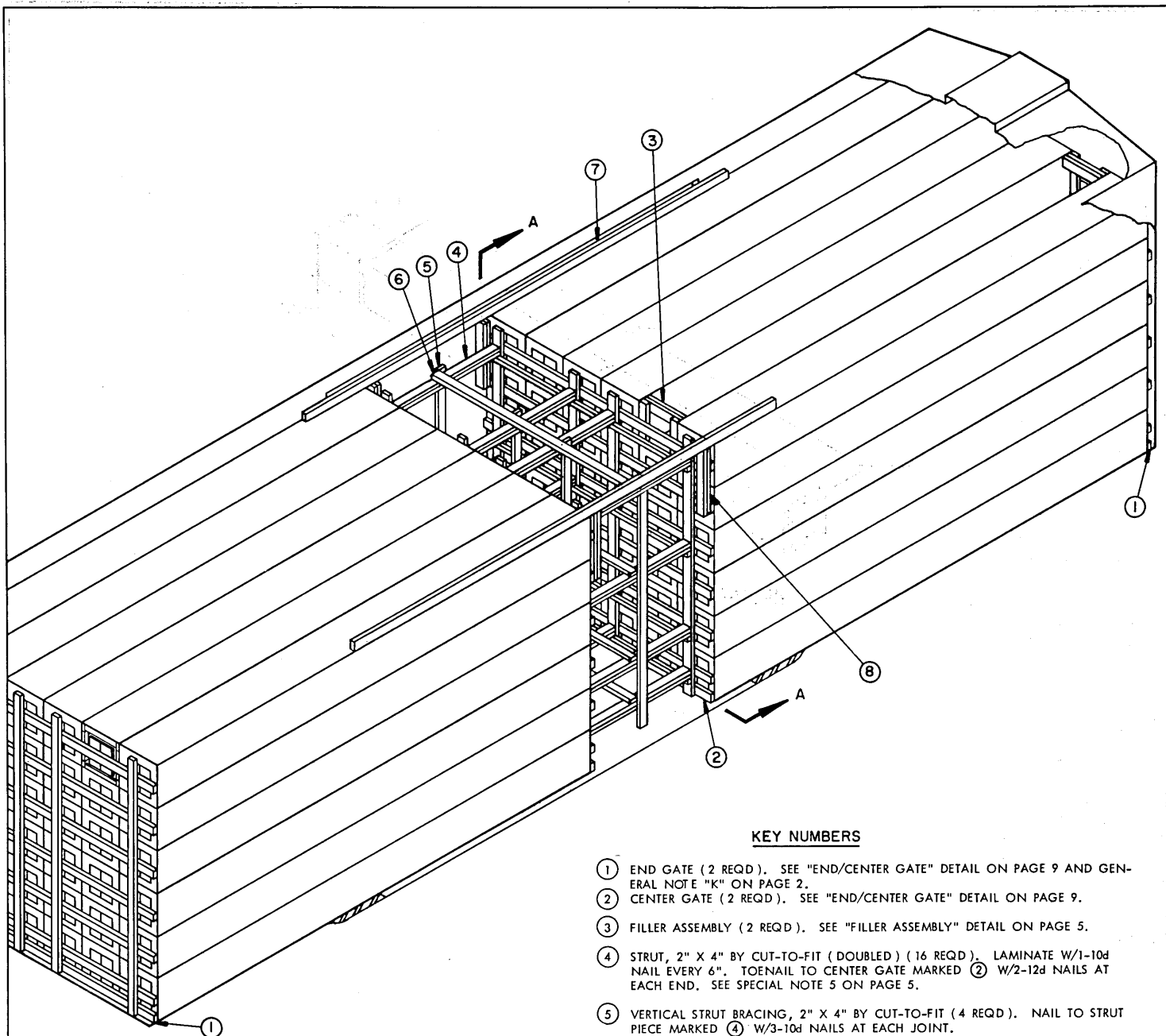
- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AMCR 740-13, AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- B. THE OUTLOADING PROCEDURES SPECIFIED ARE APPLICABLE TO THE (BATS) BALLISTIC AERIAL TARGET SYSTEM PACKED ONE PER SHIPPING CONTAINER. SUBSEQUENT REFERENCE TO CONTAINER MEANS THE SHIPPING CONTAINER WITH CONTENTS.
- C. FOR DETAILS OF THE SHIPPING CONTAINER SEE DRAWING NO. _____
CONTAINER DIMENSIONS --- 210" LONG BY 18" WIDE BY 18" HIGH
GROSS WEIGHT ----- 250 POUNDS (APPROX).
- D. OUTLOADING PROCEDURES SPECIFIED IN THIS DRAWING ARE ONLY FOR CUSHIONED TYPE BOX CARS OF VARIOUS LENGTH AND WIDTH COMBINATIONS. **CAUTION:** NON-CUSHIONED CARS MUST NOT BE USED FOR SHIPMENT OF THE SPECIFIED ITEM. CARS HAVING SLIDING CENTER SILL TYPE CUSHIONING DEVICES OR END-OF-CAR TYPE DEVICES WHICH HAVE AT LEAST 15" OF TRAVEL ARE ACCEPTABLE.
- E. THE LOADS AS SHOWN ARE BASED ON CARS WHICH HAVE VARIOUS WIDTH DOORS OF THE CONVENTIONAL SLIDING TYPE. THE DEPICTED OUTLOADING PROCEDURES ARE ALSO APPLICABLE TO CARS WHICH ARE EQUIPPED WITH PLUG DOORS. THE "DOORWAY AREA" WITHIN A CAR IS DEFINED AS THE CARGO SPACE THAT IS ADJACENT TO A CONVENTIONAL TYPE AND/OR A PLUG TYPE DOOR. THE LENGTH OF A "DOORWAY AREA" CAN BE AS MUCH AS 24 FEET IN SOME CARS THAT ARE EQUIPPED WITH STAGGERED DOORS. **CAUTION:** DUNNAGE MATERIAL MUST NOT BE NAILED TO ANY PLUG DOOR, WHETHER AUXILIARY OR MAIN, EXCEPT TO A NAILING STRIP IF A DOOR IS SO EQUIPPED, FOR SECURING SUCH ITEMS AS GATE HOLD DOWNS OR DOORWAY SPANNER DUNNAGE; ALSO, SPECIAL PROVISIONS MUST BE IMPLEMENTED AS DIRECTED IN THE "SPECIAL NOTES" SECTION WHICH APPLIES TO THE BASIC LOAD INVOLVED. ALSO, AFTER THE PLUG DOORS ON A CAR ARE CLOSED AND READY FOR THE INSTALLATION OF "CAR SEALS", A PIECE OF WIRE OF SUITABLE SIZE WILL BE USED IN ADDITION TO, AND IN CONJUNCTION WITH, EACH CAR SEAL USED TO "SEAL" THE CAR. THE WIRE WILL BE THREADED THROUGH THE HOLES IN THE DOOR LATCH ASSEMBLY ONE OR MORE TIMES, AND THE WIRE ENDS WILL BE TWISTED TOGETHER.
- F. **NOTICE:** A SHIPMENT WILL BE POSITIONED IN THE RAIL CAR IN COMPLIANCE WITH THE WEIGHT DISTRIBUTION REQUIREMENTS OF THE AAR. THE APPROVED BLOCKING, BRACING, AND STAYING METHODS FOR THE LOADS SPECIFIED MUST BE FOLLOWED. THE NUMBER OF UNITS MAY BE ADJUSTED TO FIT THE SIZE OF THE CAR TO BE LOADED, OR THE QUANTITY TO BE SHIPPED. FOR A LOAD QUANTITY OTHER THAN SPECIFIED, THE APPROVED METHODS MUST BE FOLLOWED AS CLOSELY AS POSSIBLE.
- G. OTHER TYPES OF LADING ITEMS MAY BE LOADED IN A CAR WHICH IS PARTIALLY LOADED WITH THE DESIGNATED ITEMS, PROVIDING THE TOTAL LOAD IS COMPATIBLE, EXISTING DIRECTIVES ARE NOT VIOLATED, AND THE OTHER LADING ITEMS ARE BLOCKED AND BRACED TO EQUAL THE BLOCKING AND BRACING CRITERIA SPECIFIED.
- H. DUNNAGE LUMBER SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE, 2" X 4" MATERIAL IS ACTUALLY 1-5/8" THICK BY 3-5/8" WIDE AND 2" X 6" MATERIAL IS ACTUALLY 1-5/8" THICK BY 5-5/8" WIDE.
- J. IF THE CAR BEING LOADED FOR THE SHIPMENT OF THE DEPICTED LOADS IS EQUIPPED WITH A NAILABLE METAL FLOOR AND A NAIL SIZE FOR FLOOR NAILING IS MARKED ON THE SIDE WALL OF THE CAR, THAT GUIDANCE SHOULD BE APPLIED TO THE NAILING OF THE FLOOR DUNNAGE. IF A NAIL SIZE IS NOT SPECIFIED IN THE CAR, 30d NAILS SHOULD BE USED IN LIEU OF THOSE SPECIFIED IN THE KEY NUMBERS.
- K. A STAGGERED NAILING PATTERN WILL BE USED WHEREVER POSSIBLE WHEN NAILS ARE DRIVEN INTO JOINTS OF DUNNAGE ASSEMBLIES. ALSO, A STAGGERED NAILING PATTERN WILL BE USED WHEN DUNNAGE IS NAILED TO THE FLOOR OR A SIDE WALL OF THE TRANSPORTING VEHICLE, OR WHEN LAMINATING DUNNAGE. ADDITIONALLY, THE NAILING PATTERN FOR AN UPPER PIECE OF LAMINATED DUNNAGE WILL BE ADJUSTED AS REQUIRED SO THAT A NAIL FOR THAT PIECE WILL NOT BE DRIVEN THROUGH ONTO OR RIGHT BESIDE A NAIL IN A LOWER PIECE.
- L. FOR ADDITIONAL GUIDANCE, ATTENTION IS DIRECTED TO THE "SPECIAL NOTES" SECTIONS WHICH ARE IMMEDIATELY ADJACENT TO DEPICTED OUTLOADING METHODS.
- M. THROUGHOUT THIS PROCEDURAL DRAWING PORTIONS OF THE BLOCKING COMPONENTS AND OF THE DEPICTED CARS, SUCH AS A CAR SIDE WALL, HAVE BEEN OMITTED FROM THE LOAD VIEWS FOR CLARITY PURPOSES.
- N. THE SELECTION OF RAIL CARS FOR THE TRANSPORT OF THE DESIGNATED ITEMS IS THE RESPONSIBILITY OF THE SHIPPER. ONLY CARS WHICH HAVE "SOUND" FLOORS/WALLS AND ARE IN OTHERWISE PROPER CONDITION TO SAFELY TRANSPORT THE LADING TO DESTINATION WITHOUT DAMAGE WILL BE SELECTED.

MATERIAL SPECIFICATIONS

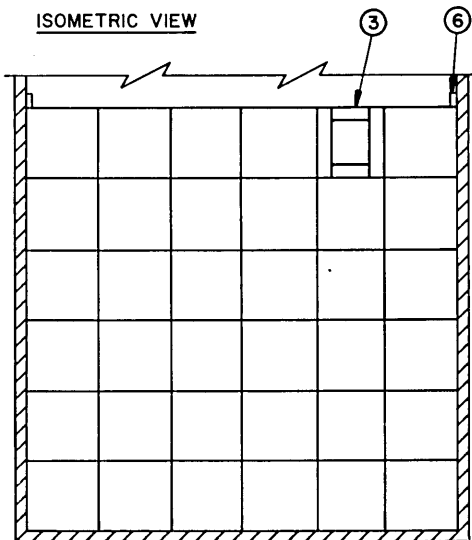
- LUMBER ----- : SEE TM 743-200-1, DUNNAGE LUMBER; FED SPEC MM-L-751.
- NAILS ----- : COMMON, CEMENT COATED OR CHEMICALLY ETCHED, FED SPEC FF-N-105.
ALT: ANNULAR-RING TYPE NAIL OF THE SAME SIZE.



SHIPPING CONTAINER



ISOMETRIC VIEW

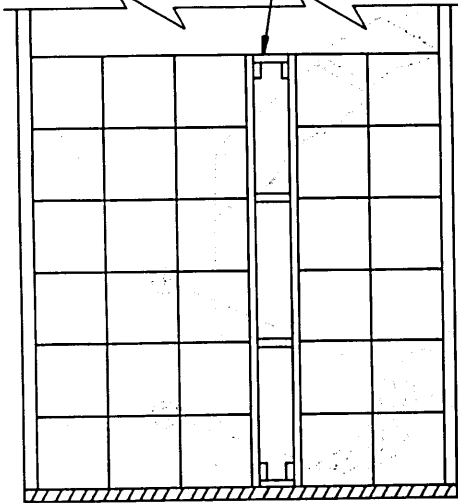


SECTION A-A

KEY NUMBERS

- ① END GATE (2 REQD). SEE "END/CENTER GATE" DETAIL ON PAGE 9 AND GENERAL NOTE "K" ON PAGE 2.
- ② CENTER GATE (2 REQD). SEE "END/CENTER GATE" DETAIL ON PAGE 9.
- ③ FILLER ASSEMBLY (2 REQD). SEE "FILLER ASSEMBLY" DETAIL ON PAGE 5.
- ④ STRUT, 2" X 4" BY CUT-TO-FIT (DOUBLED) (16 REQD). LAMINATE W/1-10d NAIL EVERY 6". TOENAIL TO CENTER GATE MARKED ② W/2-12d NAILS AT EACH END. SEE SPECIAL NOTE 5 ON PAGE 5.
- ⑤ VERTICAL STRUT BRACING, 2" X 4" BY CUT-TO-FIT (4 REQD). NAIL TO STRUT PIECE MARKED ④ W/3-10d NAILS AT EACH JOINT.
- ⑥ LATERAL STRUT BRACING, 2" X 4" BY CUT-TO-FIT (4 REQD). NAIL TO STRUT PIECE MARKED ④ W/3-10d NAILS AT EACH JOINT.
- ⑦ GATE HOLD-DOWN, 2" X 6" BY DOORWAY OPENING PLUS 24" (2 REQD). NAIL TO CAR WALL W/5-12d NAILS AT EACH END.
- ⑧ GATE HOLD-DOWN CLEAT, 2" X 4" X 30" (DOUBLED) (2 REQD). NAIL FIRST PIECE TO THE CENTER GATE AS SHOWN W/3-10d NAILS AT EACH JOINT. NAIL SECOND PIECE TO FIRST W/5-10d NAILS.

SPACER ASSEMBLY. SEE
DETAIL ON PAGE 10.

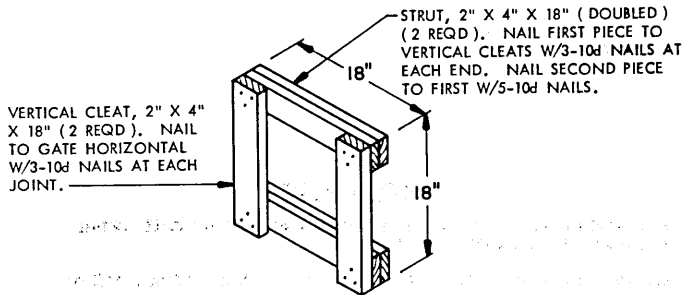


DETAIL A

THE SECTION VIEW SHOWN ABOVE
DEPICTS THE USE OF A "SPACER ASSEMBLY"
IN AN 8'-6" WIDE CAR. TWO (2) SPACER
ASSEMBLIES ARE REQUIRED AT EACH END OF
THE CAR. SEE SPECIAL NOTE 2 ON THIS
PAGE.

SPECIAL NOTES:

1. A 40'-6" LONG BY 9'-2" WIDE (INSIDE CLEARANCE) CUSHIONED TYPE BOX CAR EQUIPPED WITH 15'-0" WIDE STAGGERED DOOR OPENINGS IS SHOWN. A WIDER CAR AND A CAR HAVING 6'-0" WIDE OR WIDER DOORS CAN BE USED FOR SHIPMENT OF THE DEPICTED LOAD. A LONGER CAR IS NOT RECOMMENDED.
2. IF THE CAR BEING OUTLOADED IS 9'-0" WIDE, OR LESS, USE A "SPACER ASSEMBLY" AS DEPICTED IN "DETAIL A" ON THIS PAGE.
3. DUE TO THE CONTAINER LENGTH IT WILL BE NECESSARY TO OMIT ONE OR MORE CONTAINERS FROM THE TOP LAYER IN A SIX (6) CONTAINER HIGH LOAD. USE TWO (2) "FILLER ASSEMBLIES" SHOWN AS PIECE MARKED ③ ON PAGE 4 FOR EACH OMITTED CONTAINER. A "FILLER ASSEMBLY" MUST BE USED IN THE TOP LAYER ONLY.
4. IF THE CAR BEING OUTLOADED HAS PLUG DOORS NO SPECIAL PROVISIONS ARE REQUIRED.
5. 4" X 4" MATERIAL MAY BE USED AS STRUTS IN LIEU OF 2" X 4" (DOUBLED). TOENAIL TO CENTER GATE MARKED ② W/2-12d NAILS AT EACH END.
6. FOR SHIPMENT OF THE CONTAINER IN A 50'-6" LONG BY 9'-2" WIDE CAR, SEE PAGE 11.



FILLER ASSEMBLY

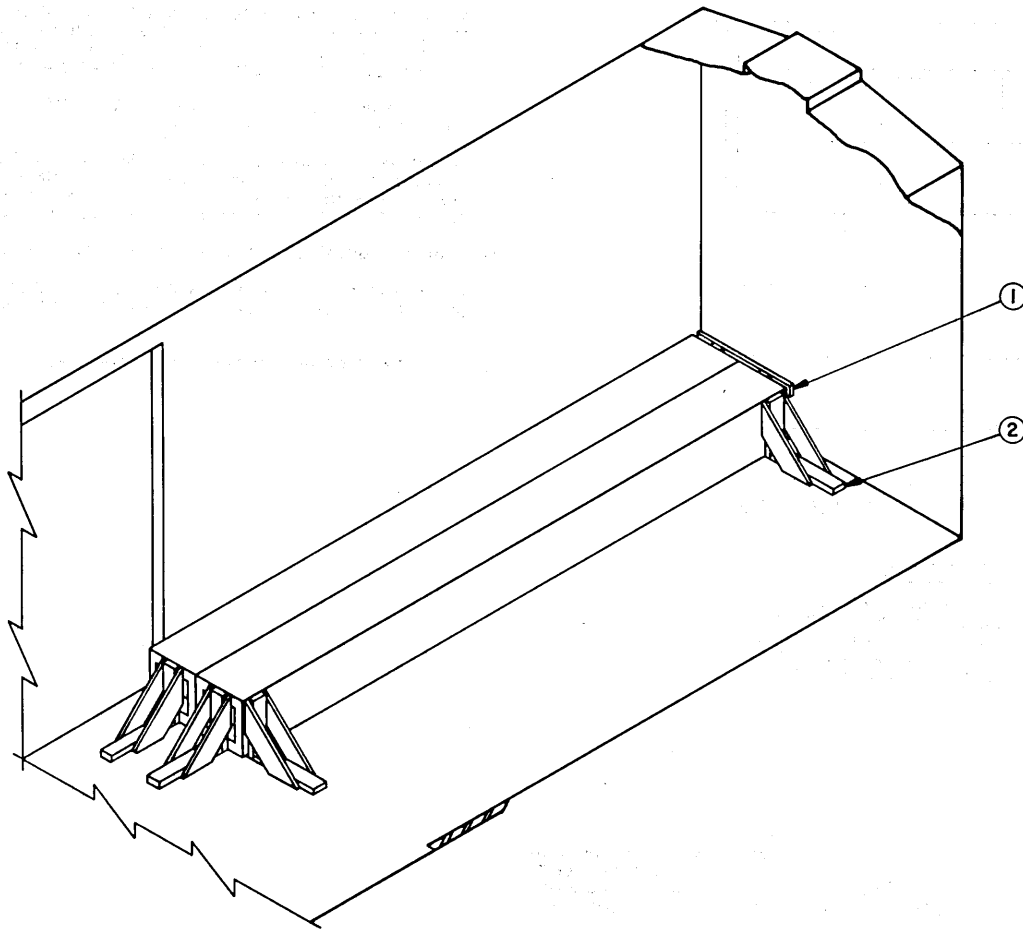
(2 REQD/OMITTED CONTAINER). STRUT
MAY BE EXTENDED TO 36" IF TWO
(2) ADJACENT CONTAINERS ARE OMITTED).

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 2"	64	21
2" X 4"	624	416
2" X 6"	34	34
NAILS	NO. REQD	POUNDS
6d (2")	288	1-3/4
10d (3")	896	15
12d (3-1/4")	148	2-1/2

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CONTAINER	71	17,750 LBS
DUNNAGE		1,198 LBS
TOTAL WEIGHT		18,948 LBS



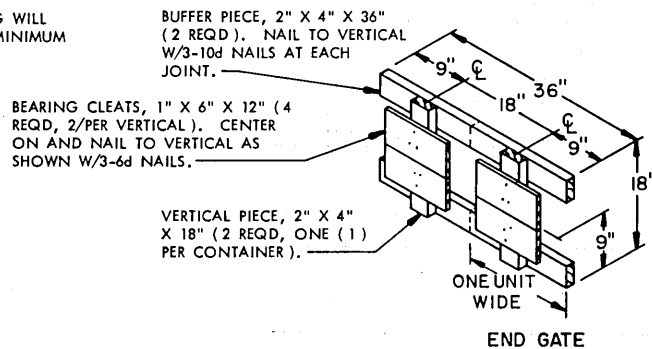
ISOMETRIC VIEW

KEY NUMBERS

- ① END GATE (1 REQD). POSITION AS SHOWN AND SEE "END GATE" DETAIL BELOW AND SPECIAL NOTE 2 AT LEFT.
- ② LCL BRACE (4 REQD). SEE LCL DETAIL ON PAGE 10 AND SPECIAL NOTES AT LEFT. NAIL TO CAR FLOOR W/7-16d NAILS.

SPECIAL NOTES:

1. THESE LCL OUTLOADING PROCEDURES DEPICT THE USE OF LCL BRACES IN A BOX CAR HAVING WOOD OR NAILABLE METAL FLOOR.
2. IF DESIRED LCL BRACES MAY BE INSTALLED AT EACH END OF THE CONTAINERS IN LIEU OF PIECE MARKED ①.
3. EACH BRACE AS APPLIED FOR LONGITUDINAL OR LATERAL BRACING WILL SUPPORT 2,000 OR 8,000 POUNDS OF LADING RESPECTIVELY. A MINIMUM OF TWO (2) BRACES MUST BE USED FOR LATERAL BRACING.



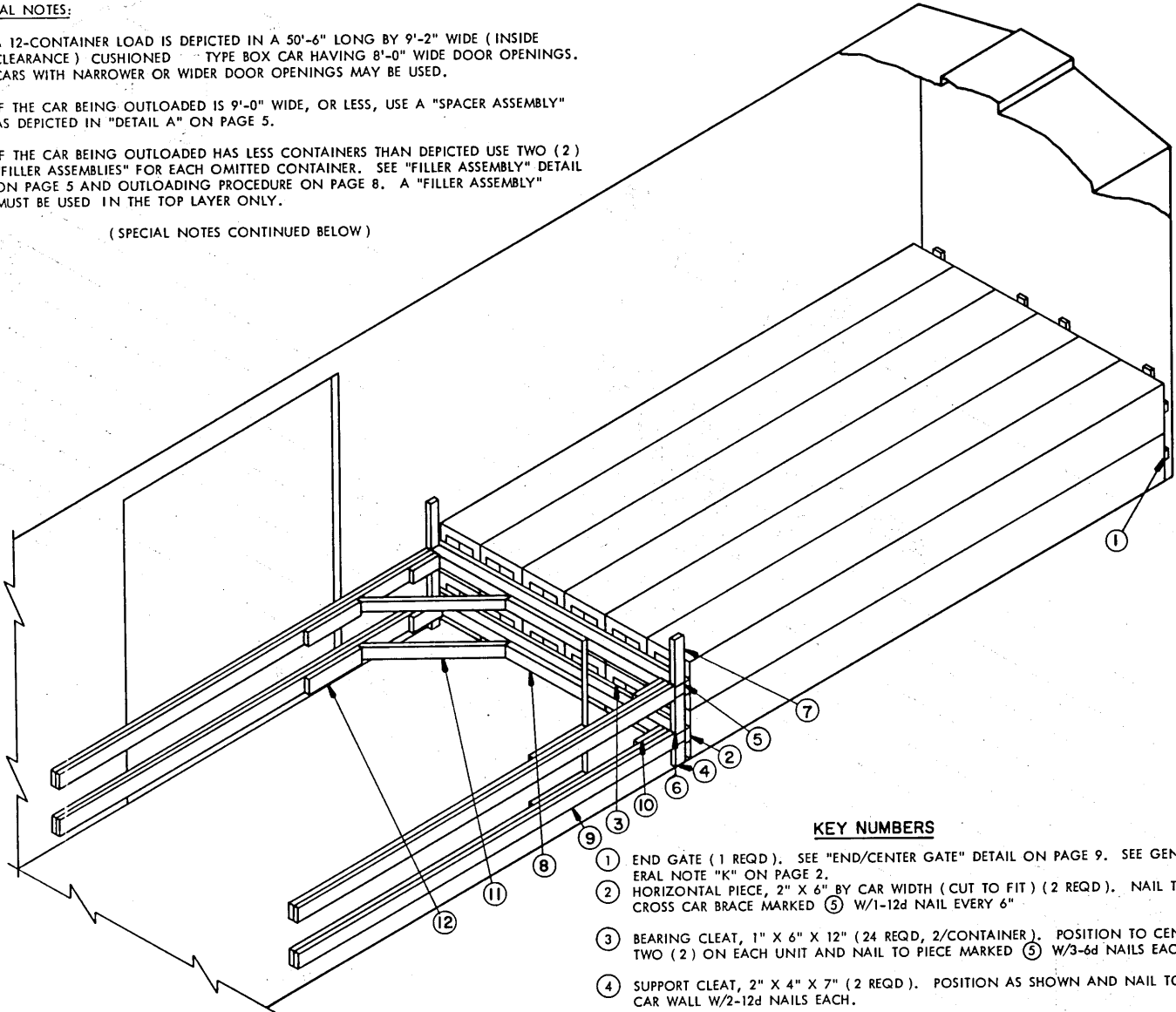
END GATE

(WIDTH OF GATE MAY BE INCREASED TO MEET THE NUMBER OF CONTAINERS SHIPPED).

SPECIAL NOTES:

1. A 12-CONTAINER LOAD IS DEPICTED IN A 50'-6" LONG BY 9'-2" WIDE (INSIDE CLEARANCE) CUSHIONED TYPE BOX CAR HAVING 8'-0" WIDE DOOR OPENINGS. CARS WITH NARROWER OR WIDER DOOR OPENINGS MAY BE USED.
2. IF THE CAR BEING OUTLOADED IS 9'-0" WIDE, OR LESS, USE A "SPACER ASSEMBLY" AS DEPICTED IN "DETAIL A" ON PAGE 5.
3. IF THE CAR BEING OUTLOADED HAS LESS CONTAINERS THAN DEPICTED USE TWO (2) "FILLER ASSEMBLIES" FOR EACH OMITTED CONTAINER. SEE "FILLER ASSEMBLY" DETAIL ON PAGE 5 AND OUTLOADING PROCEDURE ON PAGE 8. A "FILLER ASSEMBLY" MUST BE USED IN THE TOP LAYER ONLY.

(SPECIAL NOTES CONTINUED BELOW)



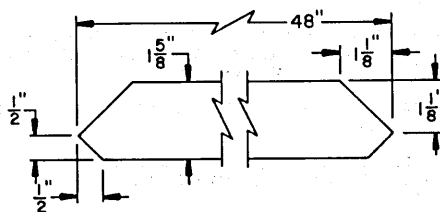
ISOMETRIC VIEW

(SPECIAL NOTES CONTINUED FROM ABOVE)

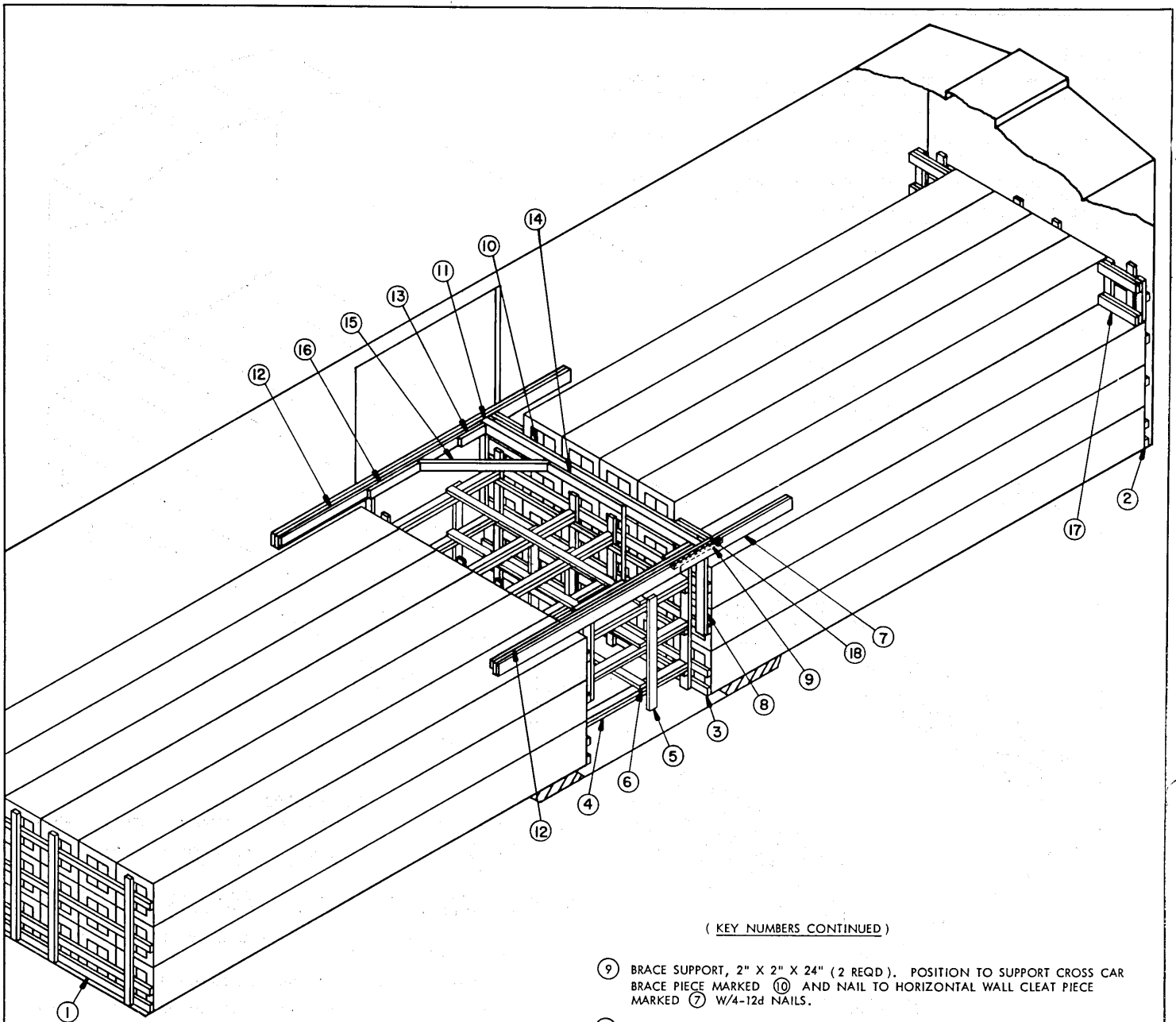
4. A K-BRACE ASSEMBLY AS SHOWN IS ADEQUATE FOR RETAINING A MAXIMUM PARTIAL LAYER LOAD.
5. IF A 40'-6" LONG CAR IS BEING USED BLOCK PARTIAL LAYER AS SHOWN ON PAGE 8.
6. IF THE CAR BEING OUTLOADED HAS PLUG DOORS NO SPECIAL PROVISIONS ARE REQUIRED.
7. A K-BRACE ASSEMBLY AS SHOWN MAY BE USED AT EACH END OF THE CAR.

KEY NUMBERS

- ① END GATE (1 REQD). SEE "END/CENTER GATE" DETAIL ON PAGE 9. SEE GENERAL NOTE "K" ON PAGE 2.
- ② HORIZONTAL PIECE, 2" X 6" BY CAR WIDTH (CUT TO FIT) (2 REQD). NAIL TO CROSS CAR BRACE MARKED ⑤ W/1-12d NAIL EVERY 6"
- ③ BEARING CLEAT, 1" X 6" X 12" (24 REQD, 2/CONTAINER). POSITION TO CENTER TWO (2) ON EACH UNIT AND NAIL TO PIECE MARKED ⑤ W/3-6d NAILS EACH.
- ④ SUPPORT CLEAT, 2" X 4" X 7" (2 REQD). POSITION AS SHOWN AND NAIL TO CAR WALL W/2-12d NAILS EACH.
- ⑤ CROSS CAR BRACE, 4" X 4" BY CAR WIDTH (CUT TO FIT) (2 REQD).
- ⑥ SPACER CLEAT, 2" X 4" X 14-1/2" (2 REQD). NAIL TO THE CAR WALL W/4-12d NAILS.
- ⑦ HOLD-DOWN CLEAT, 2" X 4" X 18" (2 REQD). NAIL TO CAR SIDE WALL W/4-12d NAILS.
- ⑧ CENTER CLEAT, 2" X 4" X 36" (2 REQD). NAIL TO CROSS CAR BRACE MARKED ⑤ W/7-12d NAILS.
- ⑨ HORIZONTAL WALL CLEAT, 2" X 6" BY DOOR OPENING WIDTH PLUS 6'-0" (DOUBLED) (4 REQD). NAIL FIRST PIECE TO THE CAR SIDE WALL W/16-12d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER.
- ⑩ POCKET CLEAT, 2" X 6" X 12" (4 REQD). NAIL TO HORIZONTAL WALL CLEAT MARKED ⑨ W/4-16d NAILS.
- ⑪ DIAGONAL BRACE, 2" X 4" X 50" (4 REQD). SEE "DIAGONAL BRACE" DETAIL ON THIS PAGE. TOENAIL TO CROSS CAR BRACE MARKED ⑤ AND HORIZONTAL WALL CLEAT MARKED ⑨ W/1-16d NAIL AT EACH END.
- ⑫ BACK-UP CLEAT, 2" X 6" X 24" (4 REQD). NAIL TO HORIZONTAL WALL CLEAT MARKED ⑨ W/8-16d NAILS.



DIAGONAL BRACE
2" X 4" MATERIAL



ISOMETRIC VIEW

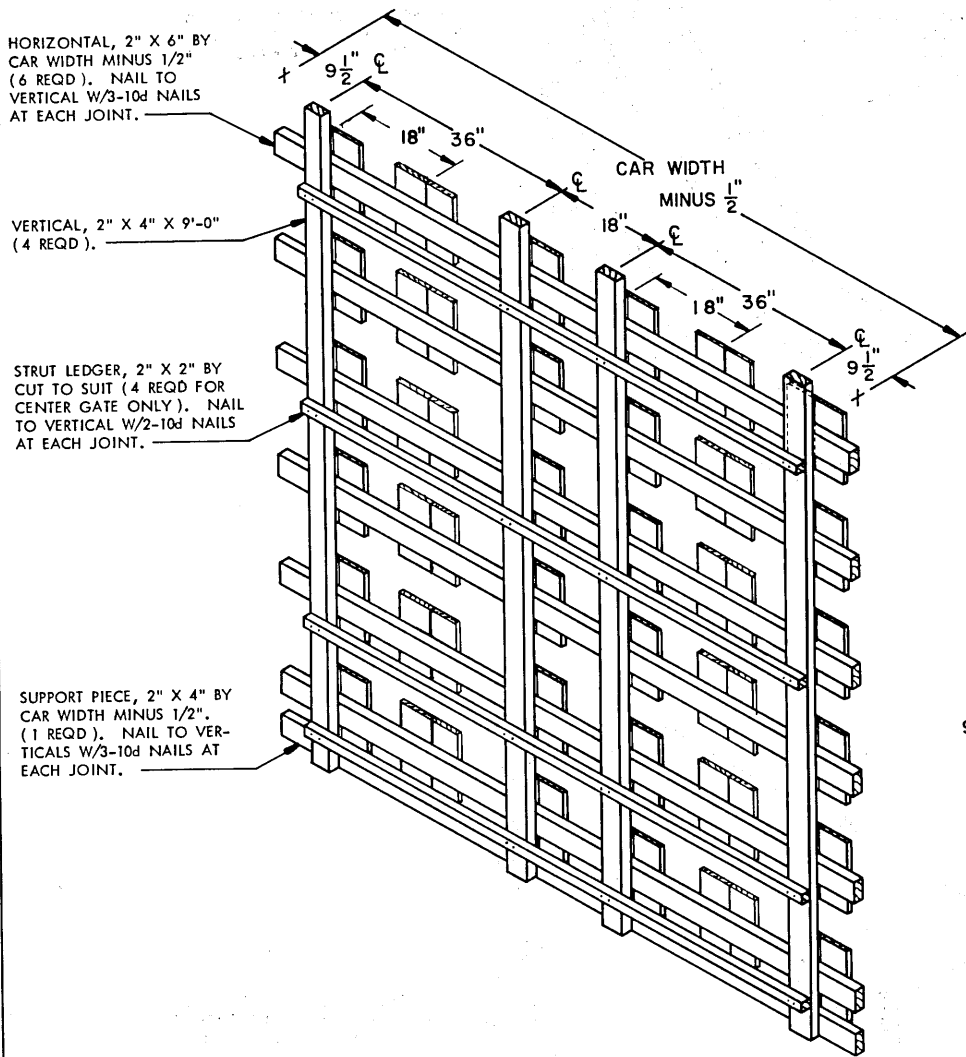
KEY NUMBERS

- ① END GATE (1 REQD). SEE "END/CENTER GATE" DETAIL FOR THREE (3) HIGH ON PAGE 9. SEE GENERAL NOTE "K" ON PAGE 2.
- ② END GATE (1 REQD). SEE "END/CENTER GATE" DETAIL FOR FOUR (4) HIGH ON PAGE 9.
- ③ CENTER GATE (2 REQD). SEE "END/CENTER GATE" DETAIL FOR THREE (3) HIGH ON PAGE 9.
- ④ STRUTS, 2" X 4" BY CUT TO FIT (DOUBLED) (16 REQD). LAMINATE W/1-10d NAIL EVERY 6". TOENAIL TOP PIECE TO CENTER GATE PIECE MARKED ③ W/2-12d NAILS AT EACH END.
- ⑤ VERTICAL STRUT BRACING, 2" X 4" BY CUT TO FIT (4 REQD). NAIL TO STRUT W/3-10d NAILS AT EACH JOINT.
- ⑥ LATERAL STRUT BRACING, 2" X 4" BY CUT TO FIT (3 REQD). NAIL TO STRUT W/3-10d NAILS AT EACH JOINT.
- ⑦ HORIZONTAL WALL CLEAT, 2" X 6" BY DOOR OPENING WIDTH PLUS 6'-0" (DOUBLED) (2 REQD). NAIL FIRST PIECE TO CAR SIDE WALL W/16-12d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER.
- ⑧ GATE HOLD-DOWN, 2" X 4" BY CUT TO FIT (4 REQD). NAIL TO UPPER GATE VERTICALS OF PIECE MARKED ③ W/3-10d NAILS AT EACH JOINT.

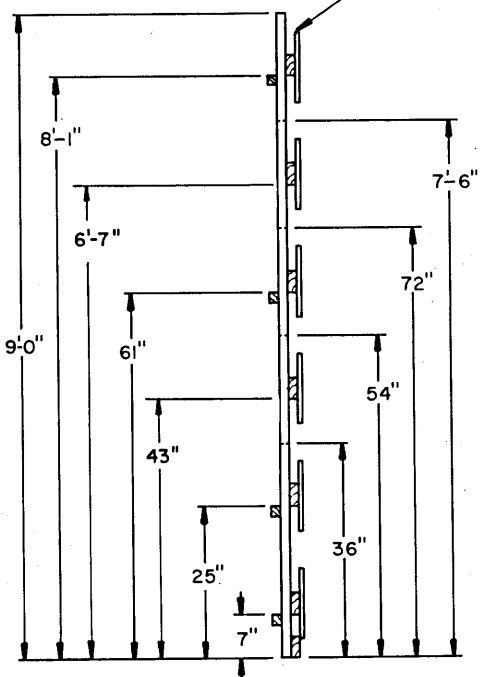
(KEY NUMBERS CONTINUED AT RIGHT)

(KEY NUMBERS CONTINUED)

- ⑨ BRACE SUPPORT, 2" X 2" X 24" (2 REQD). POSITION TO SUPPORT CROSS CAR BRACE PIECE MARKED ⑩ AND NAIL TO HORIZONTAL WALL CLEAT PIECE MARKED ⑦ W/4-12d NAILS.
- ⑩ HORIZONTAL PIECE, 2" X 6" BY CUT TO FIT BETWEEN HORIZONTAL WALL CLEATS MARKED ⑦ MINUS 4" (1 REQD). NAIL TO CROSS CAR BRACE MARKED ⑩ W/1-12d NAIL EVERY 6".
- ⑪ CROSS CAR BRACE, 4" X 4" BY CUT TO FIT BETWEEN HORIZONTAL WALL CLEATS MARKED ⑦ (1 REQD). TOENAIL W/2-12d NAILS AT EACH END.
- ⑫ SUPPORT PIECE, 2" X 4" BY CUT TO FIT (2 REQD). NAIL TO HORIZONTAL WALL CLEAT MARKED ⑦ W/16-12d NAILS.
- ⑬ POCKET CLEAT, 2" X 4" X 12" (2 REQD). NAIL TO SUPPORT PIECE MARKED ⑪ W/4-16d NAILS.
- ⑭ CENTER CLEAT, 2" X 4" X 30" (2 REQD). NAIL TO CROSS CAR BRACE MARKED ⑪ W/7-12d NAILS.
- ⑮ DIAGONAL BRACE, 2" X 4" X 50" (2 REQD). SEE "DIAGONAL BRACE" DETAIL ON PAGE 7. TOENAIL TO CROSS CAR BRACE MARKED ⑦ AND SUPPORT PIECE MARKED ⑧ W/1-16d NAIL AT EACH END.
- ⑯ BACK-UP CLEAT, 2" X 4" X 24" (2 REQD). NAIL TO SUPPORT PIECE MARKED ⑧ W/8-16d NAILS.
- ⑰ FILLER ASSEMBLY (2 REQD, 1 PER OMITTED CNTR). NAIL TO UPPER HORIZONTAL OF END GATE PIECE MARKED ① W/3-10d NAILS AT EACH JOINT. SEE "FILLER ASSEMBLY" DETAIL ON PAGE 6.
- ⑱ SIDE BLOCKING, 2" X 4" BY CUT TO FIT (2 REQD, 1 PER OMITTED CNTR). (DOUBLED). NAIL FIRST PIECE TO PIECE MARKED ⑩ W/3-10d NAILS AND NAIL SECOND PIECE TO FIRST IN A LIKE MANNER.



BEARING CLEAT, 1" X 6" X 12" (72 REQD, 12 PER HORIZONTAL). POSITION TO CENTER VERTICALLY ON HORIZONTAL PIECE. NAIL W/3-6d NAILS EACH.



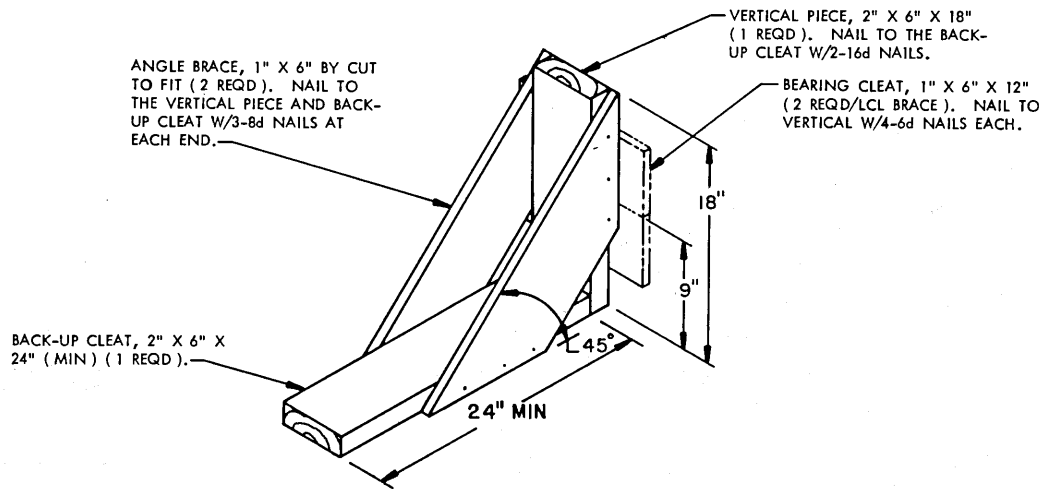
END/CENTER GATE
(OMIT STRUT LEDGERS FROM GATE WHEN USED AS AN END GATE).

NOTE: FOR 3-HIGH AND 5-HIGH LOAD GATES. INSTALL A STRUT LEDGER FOR THE TOP LAYER.

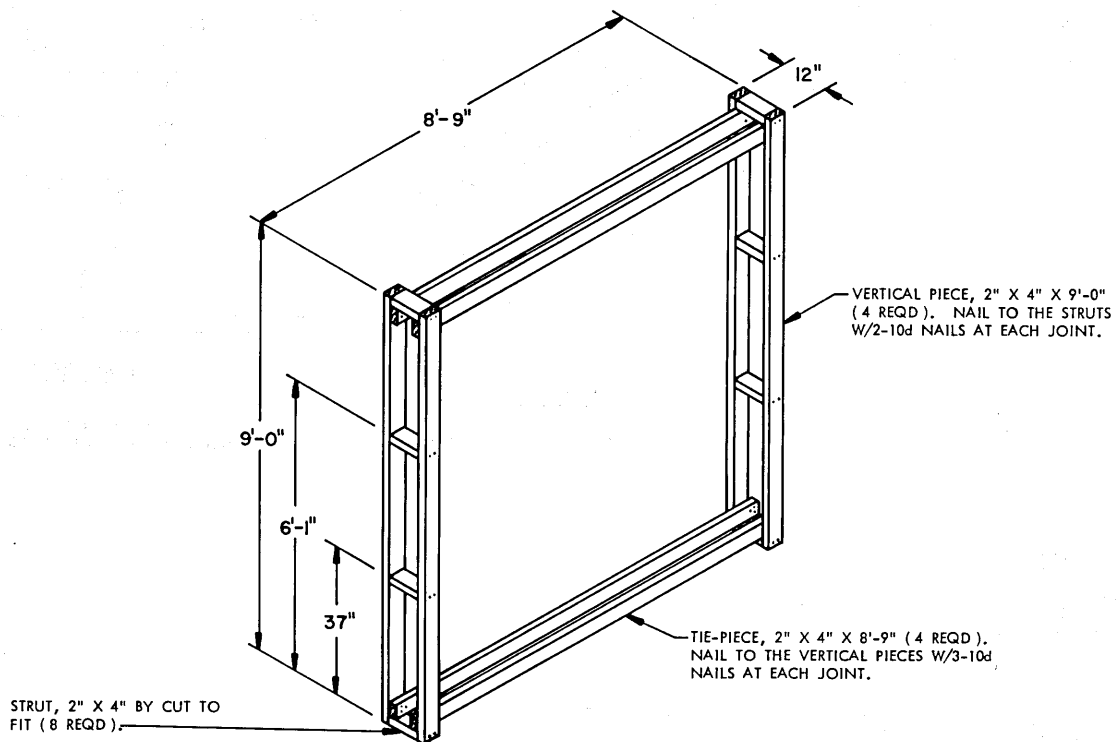
SPECIAL NOTES FOR PAGE 8:

1. A 40-CONTAINER LOAD IS DEPICTED IN A 40'-6" LONG BY 9'-2" WIDE (INSIDE CLEARANCE) CUSHIONED TYPE BOX CAR HAVING 6'-0" WIDE DOOR OPENING. CARS WITH WIDER DOOR OPENINGS MAY BE USED.
2. IF THE CAR BEING OUTLOADED IS 9'-0" WIDE, OR LESS, USE A "SPACER ASSEMBLY" AS DEPICTED IN "DETAIL A" ON PAGE 5.
3. IF THE CAR BEING OUTLOADED HAS LESS CONTAINERS THAN DEPICTED, USE TWO (2) "FILLER ASSEMBLIES" FOR EACH OMITTED CONTAINER. SEE "FILLER ASSEMBLY" DETAIL ON PAGE 5. A "FILLER ASSEMBLY" MUST BE USED IN THE TOP LAYER ONLY. FOR A PARTIAL LAYER THAT HAS LESS CONTAINERS THAN SHOWN ON PAGE 8 ADJUST LENGTH OF PIECES MARKED (14) AND (15).
4. A K-BRACE ASSEMBLY AS SHOWN IS ADEQUATE FOR RETAINING A MAXIMUM PARTIAL LAYER LOAD.
5. IF A 50'-6" LONG CAR IS BEING USED, BLOCK PARTIAL LAYER AS SHOWN ON PAGE 7. A K-BRACE ASSEMBLY MAY BE USED AT EACH END OF THE CAR.
6. IF THE CAR BEING LOADED HAS PLUG DOORS, NO SPECIAL PROVISIONS ARE REQUIRED.
7. 4" X 4" MATERIAL MAY BE USED AS STRUTS IN LIEU OF 2" X 4" (DOUBLED). TOE-NAIL TO CENTER GATE MARKED (2) W/2-12d NAILS AT EACH END.

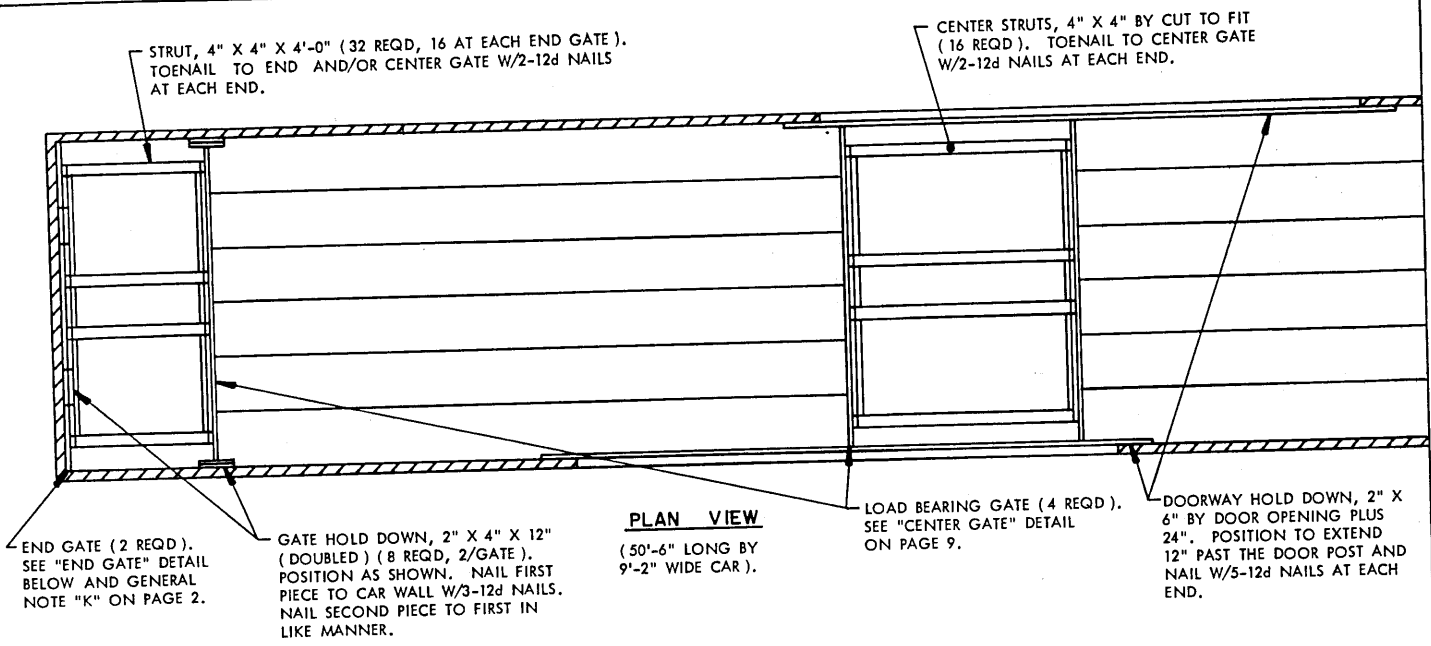
DETAILS



LCL BRACE



SPACER ASSEMBLY



PLAN VIEW

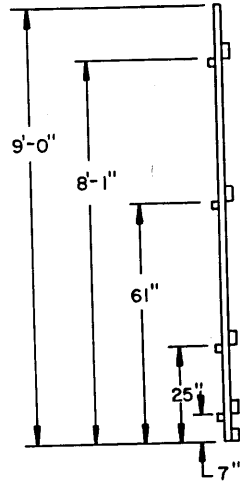
(50'-6" LONG BY 9'-2" WIDE CAR).

END-WALL BEARING HORIZONTAL, 2" X 4" BY CAR WIDTH MINUS 1/2" (4 REQD). POSITION AS SHOWN IN END VIEW AT RIGHT AND NAIL TO VERTICALS W/3-10d NAILS AT EACH JOINT.

STRUT LEDGER, 2" X 2" X 8'-0" (4 REQD). POSITION AT HEIGHTS SHOWN IN END VIEW AT RIGHT AND NAIL TO GATE VERTICALS W/3-10d NAILS AT EACH JOINT.

GATE SUPPORT PIECE, 2" X 4" BY CAR WIDTH MINUS 1/2" (1 REQD). POSITION AS SHOWN. NAIL TO VERTICALS W/3-10d NAILS AT EACH JOINT.

VERTICAL, 2" X 4" X 9" (4 REQD). POSITION AS SHOWN.

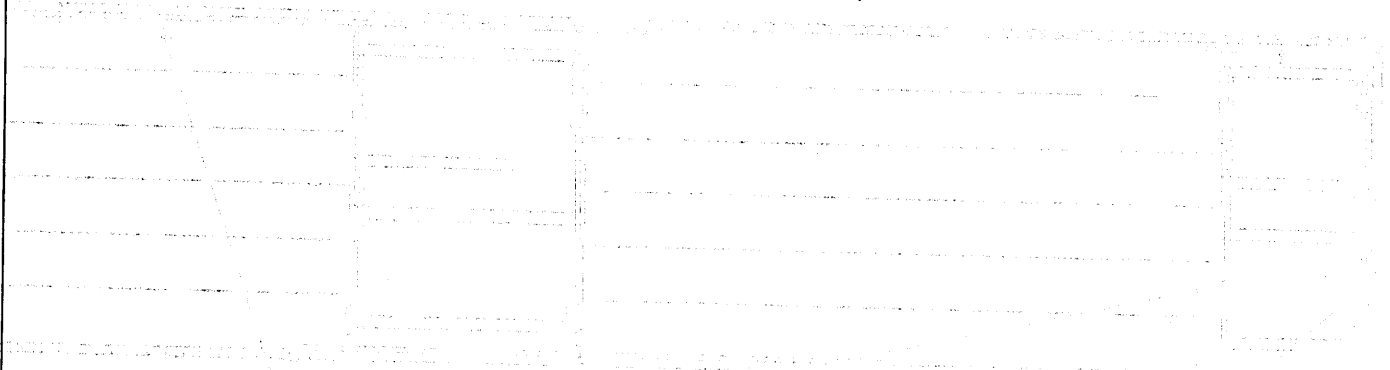


END GATE
(2 REQD)

END VIEW

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