

REVISION NO. 1 APPROVED BY
BUREAU OF EXPLOSIVES

J. H. Hershman

DATE *12/10/92*

LOADING AND BRACING IN END OPENING ISO CONTAINERS OF COMPLETE ROUNDS PACKED IN CYLINDRICAL METAL CONTAINERS

PA104 SERIES CONTAINERS

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- LOADING AND BRACING SPECIFICATIONS SET FORTH WITHIN THIS DRAWING ARE APPLICABLE TO LOADS THAT ARE TO BE SHIPPED BY TRAILER/CONTAINER-ON-FLAT CAR (T/COFC) RAIL CARRIER SERVICE. THESE SPECIFICATIONS MAY ALSO BE USED FOR LOADS THAT ARE TO BE MOVED BY MOTOR OR WATER CARRIERS.

U.S. ARMY MATERIEL COMMAND DRAWING

APPROVED, U.S. ARMY ARMAMENT, MUNITIONS AND
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U.S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL

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FILE

REVISION NO. 1

FEBRUARY 1993

19

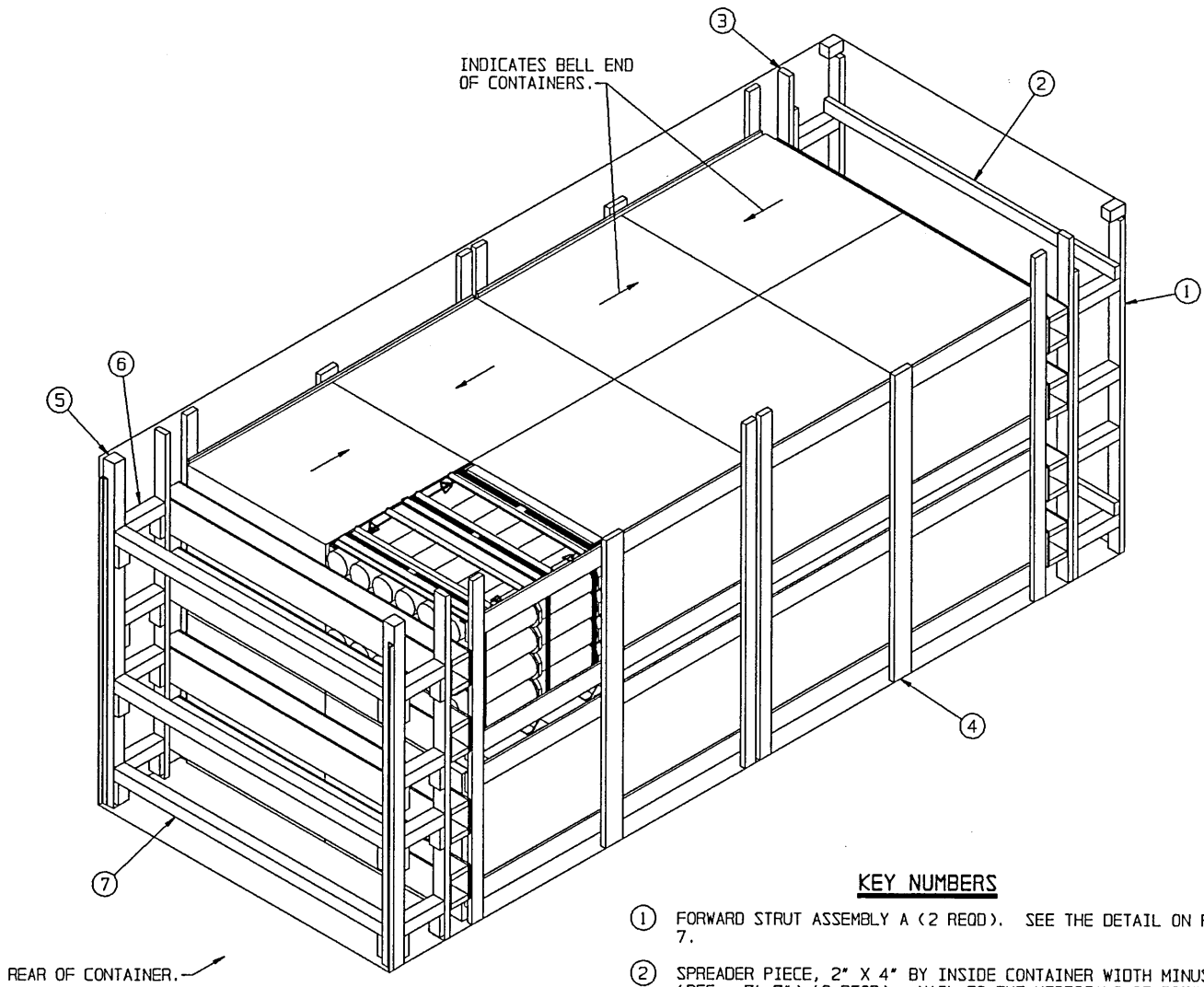
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DO NOT SCALE

SEE THE REVISION LISTING ON PAGE 3



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD STRUT ASSEMBLY A (2 REOD). SEE THE DETAIL ON PAGE 7.
- ② SPREADER PIECE, 2" X 4" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-7") (2 REOD). NAIL TO THE VERTICALS OF PIECE MARKED ① W/2-10d NAILS AT EACH END.
- ③ FORWARD/REAR BLOCKING ASSEMBLY A (2 REOD). SEE THE DETAIL ON PAGE 6 AND THE "ALTERNATIVE FORWARD/REAR BLOCKING ASSEMBLY A" ON PAGE 10. NAIL THROUGH THE BUFFER PIECES INTO THE VERTICAL PIECES OF PIECE MARKED ① W/8-10d NAILS.
- ④ SIDE FILL ASSEMBLY (4 REOD). SEE THE DETAIL ON PAGE 6.
- ⑤ DOOR POST VERTICAL A (2 REOD, 1 LEFT HAND AND 1 RIGHT HAND). SEE THE DETAIL ON PAGE 7, AND DETAILS A AND B ON PAGE 11.
- ⑥ STRUT, 4" X 4" BY CUT-TO-FIT (REF: 12-3/4") (8 REOD). TOENAIL TO THE BUFFER PIECE OF THE REAR BLOCKING ASSEMBLY AND TO THE DOOR POST VERTICAL W/2-12d NAILS AT EACH END. SEE THE BEVEL CUT DETAIL ON PAGE 7.
- ⑦ DOOR SPANNER, 4" X 4" MATERIAL CUT TO A LENGTH THAT WILL PROVIDE FOR A DRIVE FIT (REF: 7'-1-3/8") (3 REOD). TOENAIL TO THE DOOR POST VERTICALS W/2-12d NAILS AT EACH END. SEE THE BEVEL CUT DETAIL ON PAGE 7.

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	16	36,528 LBS
DUNNAGE		907 LBS
CONTAINER		4,700 LBS
TOTAL WEIGHT		42,135 LBS (APPROX)

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	120	60
2" X 4"	150	100
2" X 6"	150	150
4" X 4"	55	74
NAILS	NO. REOD	POUNDS
6d (2")	496	3
10d (3")	164	2-3/4
12d (3-1/4")	44	3/4
PLYWOOD, 1/2"	96.06 SQ FT REOD	132.09 LBS

N. THE QUANTITY OF PALLET UNITS SHOWN IN THE LOADS ON PAGES 2 AND 4 MAY BE REDUCED FOR SHIPMENT, IF DESIRED. SEE THE FILLER ASSEMBLY ON PAGE 5. WHEN A CONTAINER IS TO BE LOADED WITH A REDUCED QUANTITY OF LADING UNITS, THE LENGTHWISE CENTER OF GRAVITY OF THE LOAD MUST BE WITHIN 12", IN EITHER DIRECTION, OF THE MID-POINT OF THE CONTAINER.

1. IF A LOAD IS REDUCED BY ONLY A SMALL AMOUNT (ONE OR TWO LADING UNITS), LADING UNITS NORMALLY MAY BE ELIMINATED FROM THE CENTER OF THE LOAD.
2. IF A LOAD IS REDUCED BY A LARGE AMOUNT (MORE THAN TWO LADING UNITS), LADING UNITS SHOULD BE ELIMINATED AS REQUIRED AND THE TOTAL LOAD SHIFTED FORE OR AFT, AS NECESSARY, TO ACHIEVE A SYMMETRICAL WEIGHT DISTRIBUTION. THE DEPICTED PROCEDURES WILL BE FOLLOWED AS CLOSELY AS POSSIBLE, MAKING ONLY THOSE ADJUSTMENTS TO THE DUNNAGE WHICH ARE REQUIRED TO ACCOMMODATE THE NUMBER OF UNITS TO BE SHIPPED.

RECOMMENDED SEQUENTIAL LOADING PROCEDURES FOR THE LOAD DEPICTED ON PAGE 2:

1. PREFABRICATE TWO FORWARD STRUT ASSEMBLIES, TWO FORWARD/REAR BLOCKING ASSEMBLIES, FOUR SIDE FILL ASSEMBLIES, AND TWO DOOR POST VERTICALS.
2. INSTALL THE TWO FORWARD STRUT ASSEMBLIES AND THE TWO SPREADER PIECES.
3. INSTALL THE FORWARD BLOCKING ASSEMBLY.
4. INSTALL TWO SIDE FILL ASSEMBLIES.
5. LOAD EIGHT PALLET UNITS.
6. REPEAT STEPS 4 AND 5.
7. INSTALL THE REAR BLOCKING ASSEMBLY.
8. INSTALL THE TWO DOOR POST VERTICALS.
9. INSTALL THE THREE DOOR SPANNER PIECES.
10. INSTALL THE EIGHT STRUTS.

REVISION

REVISION NO. 1, DATED FEBRUARY 1993, CONSISTS OF: STREAMLINING DUNNAGING METHODS.

MATERIAL SPECIFICATIONS

- LUMBER - - - - - : SEE TM 743-200-1 (DUNNAGE LUMBER) AND FED SPEC MM-L-751.
- NAILS - - - - - : FED SPEC FF-N-105; COMMON.
- PLYWOOD - - - - - : COMMERCIAL ITEM DESCRIPTION A-A-55057, TYPE A, CONSTRUCTION AND INDUSTRIAL PLYWOOD, INTERIOR WITH EXTERIOR GLUE, GRADE C-D. IF SPECIFIED GRADE IS NOT AVAILABLE, A BETTER INTERIOR OR AN EXTERIOR GRADE MAY BE SUBSTITUTED.
- WIRE, CARBON STEEL - - : ASTM A853; ANNEALED AT FINISH, BLACK OXIDE FINISH, .0800" DIA, GRADE 1006 OR BETTER.

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1 AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- B. THE SPECIFIED OUTLOADING PROCEDURES ARE APPLICABLE TO LOADS OF COMPLETE ROUNDS PACKED IN PA104 SERIES METAL CONTAINERS. SUBSEQUENT REFERENCE TO PALLET UNIT HEREIN MEANS THE PALLET UNIT WITH AMMUNITION ITEMS. SEE PAGE 5 AND AMC DRAWING 19-48-4079/68-20PM1002 FOR DETAILS OF THE PALLET UNIT. CAUTION: REGARDLESS OF THE QUANTITY OF CONTAINERS TO BE SHIPPED, THE "MAXIMUM GROSS WEIGHT" OF THE END OPENING ISO CONTAINER MUST NOT BE EXCEEDED.
- C. THE LOADS AS SHOWN ARE BASED ON A 4,700 POUND 20' LONG BY 8' WIDE BY 8'-6" HIGH END OPENING ISO CONTAINER WITH INSIDE DIMENSIONS OF 19'-4" LONG BY 92" WIDE BY 95" (93" CLEAR HEIGHT). THE LOAD IS DESIGNED FOR TRAILER/CONTAINER-ON-FLATCAR (T/COFC) SHIPMENT, HOWEVER, THE LOAD AS DESIGNED CAN ALSO BE MOVED BY OTHER SURFACE MODES OF TRANSPORT. NOTICE: OTHER CONTAINERS OF THE SAME DESIGN CONFIGURATION CAN BE USED.
- D. WHEN LOADING PALLET UNITS, THEY ARE TO BE POSITIONED SO AS TO ACHIEVE A TIGHT LOAD (TIGHT AGAINST THE DUNNAGE ASSEMBLIES). ALTHOUGH A TOTAL OF 1-1/2" OF UNBLOCKED SPACE ACROSS THE WIDTH OF A LOAD BAY IS PERMITTED, LATERAL VOIDS WITHIN THE LOAD ARE TO BE HELD TO A MINIMUM. EXCESSIVE SLACK CAN BE ELIMINATED FROM A LOAD BY LAMINATING ADDITIONAL PIECES OF APPROPRIATE THICKNESS TO THE VERTICAL PIECES ON THE SIDE FILL ASSEMBLIES. NAIL EACH ADDITIONAL PIECE W/1 APPROPRIATELY SIZED NAIL EVERY 12". ADDITIONALLY, THE THICKNESS AND/OR QUANTITY OF THE VERTICAL OR HORIZONTAL PIECES IN THE SIDE FILL ASSEMBLIES MAY BE ADJUSTED AS REQUIRED TO FACILITATE VARIANCE IN THE PALLET UNIT SIZE.
- E. DUNNAGE LUMBER SPECIFIED IS OF NOMINAL SIZE. FOR EXAMPLE, 1" X 4" MATERIAL IS ACTUALLY 3/4" THICK BY 3-1/2" WIDE AND 2" X 6" MATERIAL IS ACTUALLY 1-1/2" BY 5-1/2" WIDE.
- F. A STAGGERED NAILING PATTERN WILL BE USED WHENEVER POSSIBLE WHEN NAILS ARE DRIVEN INTO JOINTS OF DUNNAGE ASSEMBLIES 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.
- G. IN SOME CONTAINERS THERE IS A SLOT AT THE CORNERS OF THE FORWARD WALL. PIECES OF DUNNAGE MATERIAL MUST BE LAMINATED TO THE BUFFER PIECES ON THE FORWARD BLOCKING ASSEMBLY TO PROVIDE A FLAT SURFACE FOR THE BUFFER PIECES. A PIECE OF 2" X 4", 2" X 3" OR A SPECIAL WIDTH PIECE CUT-TO-FIT CAN BE USED. THIS FILL PIECE WILL BE NAILED WITH ONE APPROPRIATELY SIZED NAIL EVERY 12". THIS PIECE IS NOT REQUIRED WHEN THE CORNER PORTIONS OF THE CONTAINER FORWARD WALL ARE SMOOTH AND FLAT.
- H. CAUTION: DO NOT NAIL DUNNAGE MATERIAL TO THE CONTAINER WALLS OR FLOOR. ALL NAILING WILL BE WITHIN THE DUNNAGE.
- J. PORTIONS OF THE CONTAINER DEPICTED WITHIN THIS DRAWING, SUCH AS THE SIDEWALL, HAVE NOT BEEN SHOWN IN THE LOAD VIEWS FOR CLARITY PURPOSES.
- K. REQUIREMENTS CITED WITHIN THE BUREAU OF EXPLOSIVES PAMPHLET 6C APPLY WHEN THE SHIPMENT MOVES BY TRAILER/CONTAINER-ON-FLATCAR (T/COFC). SPECIAL T/COFC NOTES FOLLOW:
 1. A LOADED CONTAINER MUST BE ON A CHASSIS EQUIPPED WITH TWO BOGIE ASSEMBLIES WHEN BEING MOVED IN TOFC SERVICE.
 2. THE LOAD LIMIT OF A T/COFC RAILCAR MUST NOT BE EXCEEDED, NOR WILL A CAR BE LOADED SO THAT THE TRUCK UNDER ONE END OF THE CAR CARRIES MORE THAN ONE-HALF OF THE LOAD LIMIT FOR THAT CAR.
- L. DURING INTRASTATE AND/OR INTERSTATE MOVES BY MOTOR CARRIER, A PROPER CHASSIS OR MODIFIED FLATBED TRAILER MUST BE USED TO PRECLUDE VIOLATION OF ONE OR MORE "WEIGHT LAWS" APPLICABLE TO THE STATE OR STATES INVOLVED.
- M. CONVERSION TO METRIC EQUIVALENTS: DIMENSIONS WITHIN THIS DOCUMENT ARE EXPRESSED IN INCHES AND WEIGHTS ARE EXPRESSED IN POUNDS. WHEN NECESSARY, THE METRIC EQUIVALENTS MAY BE COMPUTED ON THE BASIS OF ONE INCH EQUALS 25.4MM AND ONE POUND EQUALS 0.454 KG.

(CONTINUED AT LEFT)

INDICATES BELL END
OF CONTAINERS.

REAR OF CONTAINER.

ISOMETRIC VIEW

ANTI-CHAFING MATERIAL OMITTED
FROM THIS SIDE OF THE LOAD FOR
CLARITY PURPOSES.

KEY NUMBERS

- ① FORWARD STRUT ASSEMBLY B (2 REOD). SEE THE DETAIL ON PAGE 9.
- ② SPREADER PIECE, 2" X 4" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-7") (2 REOD). NAIL TO THE VERTICALS OF PIECE MARKED ① W/2-10d NAILS AT EACH END.
- ③ FORWARD/REAR BLOCKING ASSEMBLY B (2 REOD). SEE THE DETAIL ON PAGE 8 AND THE "ALTERNATIVE FORWARD/REAR BLOCKING ASSEMBLY B" ON PAGE 10. NAIL THROUGH THE BUFFER PIECES INTO THE VERTICAL PIECES OF PIECE MARKED ① W/8-10d NAILS.
- ④ ANTI-CHAFING, FIBERBOARD (AS REOD). AFFIX (STRAP TAPE, ETC.) TO THE SIDEWALL OR PALLET UNIT TO ELIMINATE METAL-TO-METAL CONTACT.
- ⑤ DOOR POST VERTICAL B (2 REOD, 1 LEFT HAND AND 1 RIGHT HAND). SEE THE DETAIL ON PAGE 9, AND DETAILS A AND B ON PAGE 11.
- ⑥ STRUT, 4" X 4" BY CUT-TO-FIT (REF: 17-1/4") (8 REOD). TOENAIL TO THE BUFFER PIECE OF THE REAR BLOCKING ASSEMBLY AND TO THE DOOR POST VERTICAL W/2-12d NAILS AT EACH END. SEE THE BEVEL CUT DETAIL ON PAGE 7.
- ⑦ DOOR SPANNER, 4" X 4" MATERIAL CUT TO A LENGTH THAT WILL PROVIDE FOR A DRIVE FIT (REF: 7'-1-3/8") (3 REOD). TOENAIL TO THE DOOR POST VERTICAL W/2-12d NAILS AT EACH END. SEE THE BEVEL CUT DETAIL ON PAGE 7.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	87	58
2" X 6"	122	122
4" X 4"	60	80
NAILS	NO. REOD	POUNDS
6d (2")	352	2-1/4
10d (3")	164	2-3/4
12d (3-1/4")	44	3/4
PLYWOOD, 1/2"	96.06 SQ FT REOD	132.09 LBS
ANTI-CHAFING MATERIAL	AS REOD	NIL

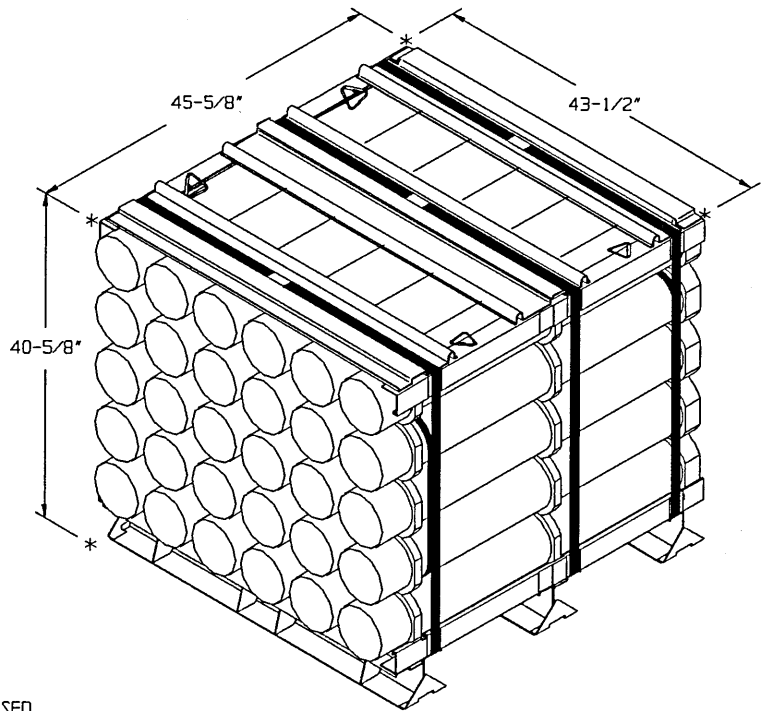
LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	16	36,528 LBS
DUNNAGE		658 LBS
CONTAINER		4,700 LBS

TOTAL WEIGHT - - - - - 41,886 LBS (APPROX)

RECOMMENDED SEQUENTIAL LOADING PROCEDURES FOR THE LOAD DEPICTED ON PAGE 4:

1. PREFABRICATE TWO FORWARD STRUT ASSEMBLIES, TWO FORWARD/REAR BLOCKING ASSEMBLIES, AND TWO DOOR POST VERTICALS.
2. INSTALL THE TWO FORWARD STRUT ASSEMBLIES AND THE TWO SPREADER PIECES.
3. INSTALL THE FORWARD BLOCKING ASSEMBLY.
4. INSTALL THE ANTI-CHAFING PIECES.
5. LOAD EIGHT PALLET UNITS.
6. INSTALL THE REAR BLOCKING ASSEMBLY.
7. INSTALL THE TWO DOOR POST VERTICALS.
8. INSTALL THE THREE DOOR SPANNER PIECES.
9. INSTALL THE EIGHT STRUTS.

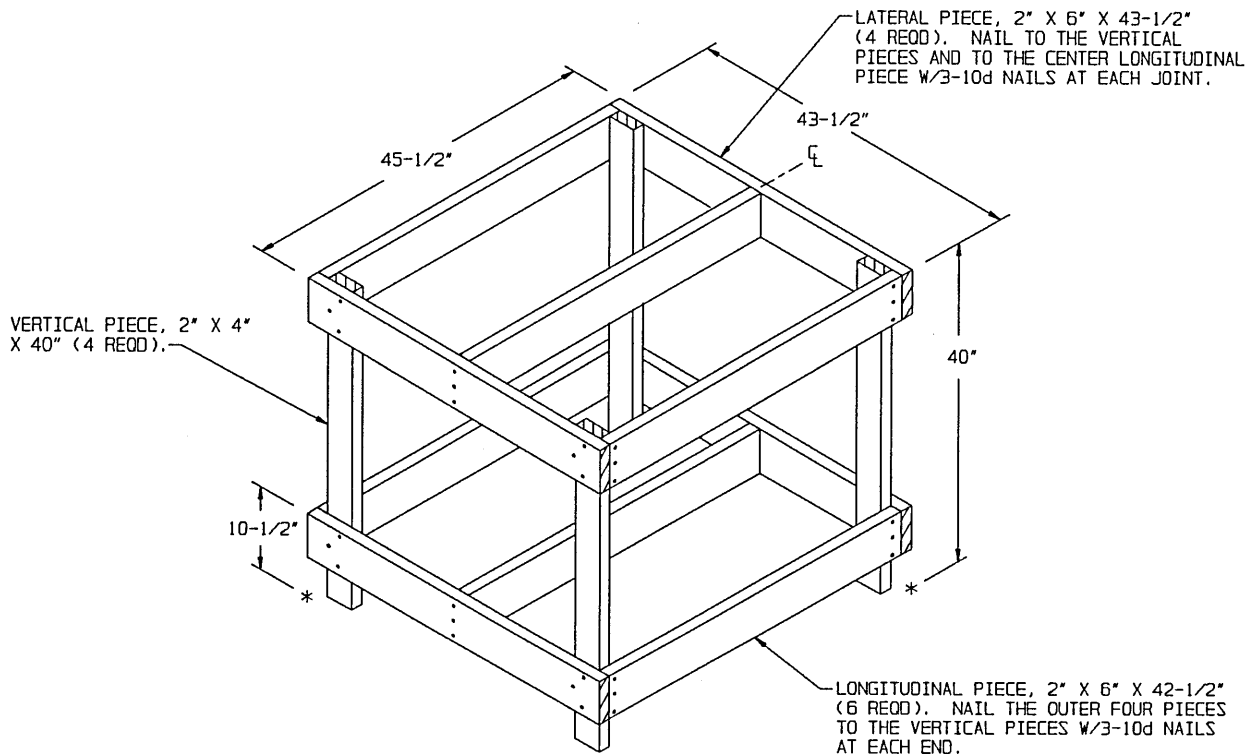


PALLET UNIT

UNIT WEIGHT - - - - - 2.283 LBS (APPROX)
 CUBE - - - - - 46.7 CU FT (APPROX)

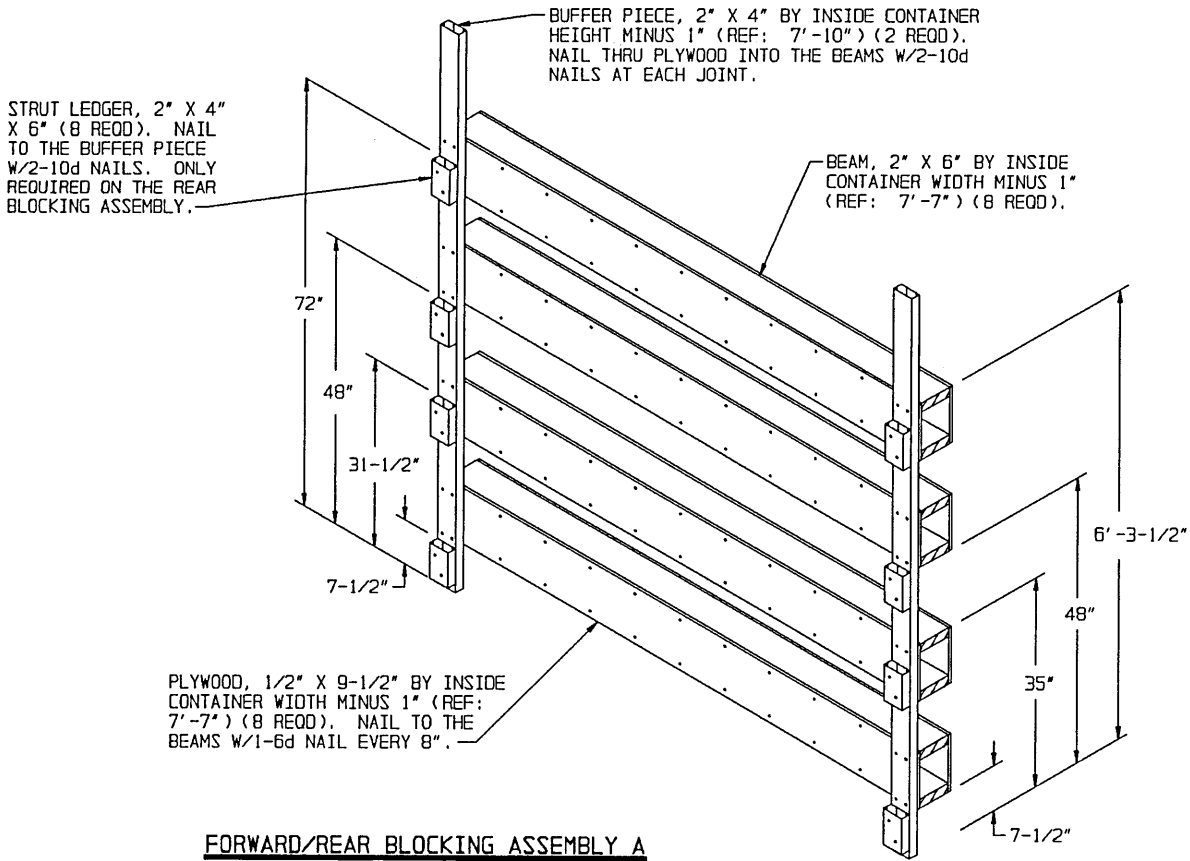
SPECIAL NOTE:

THE ALTERNATIVE LOAD PATTERN DEPICTED ON PAGE 4 MAY BE USED IF DEEMED MORE ECONOMICAL TO LOAD THAN THE PATTERN DEPICTED ON PAGE 2. IT MUST BE NOTED, HOWEVER, THAT WITH AN OVERALL LOAD WIDTH OF APPROXIMATELY 91-1/2", DIFFICULTIES MAY BE ENCOUNTERED IN LOADING CONTAINERS HAVING AN INSIDE WIDTH OF 92".



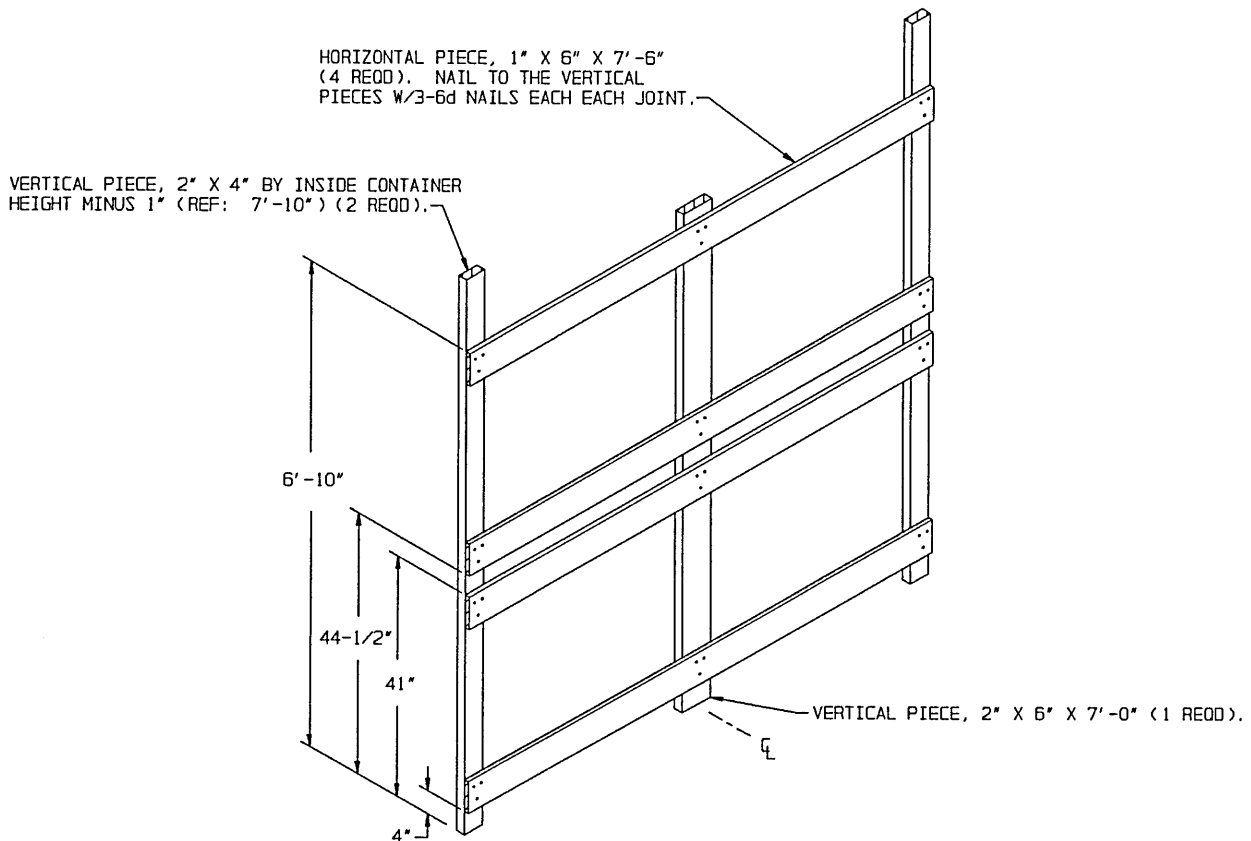
FILLER ASSEMBLY

THE ASSEMBLY DEPICTED ABOVE IS FOR USE IN PLACE OF AN OMITTED PALLET UNIT IN THE LOAD ON PAGE 2. FILLER ASSEMBLIES MUST BE WIRE TIED TO ADJACENT PALLET UNITS TO PREVENT UNDUCE MOVEMENT. NO MORE THAN FOUR FILLER ASSEMBLIES MAY BE USED PER LOAD. DO NOT INSTALL A FILLER ASSEMBLY IMMEDIATELY ADJACENT TO ANOTHER FILLER ASSEMBLY.



FORWARD/REAR BLOCKING ASSEMBLY A

NOTE: STRUT LEDGERS ARE ONLY REQUIRED ON THE REAR BLOCKING ASSEMBLY.



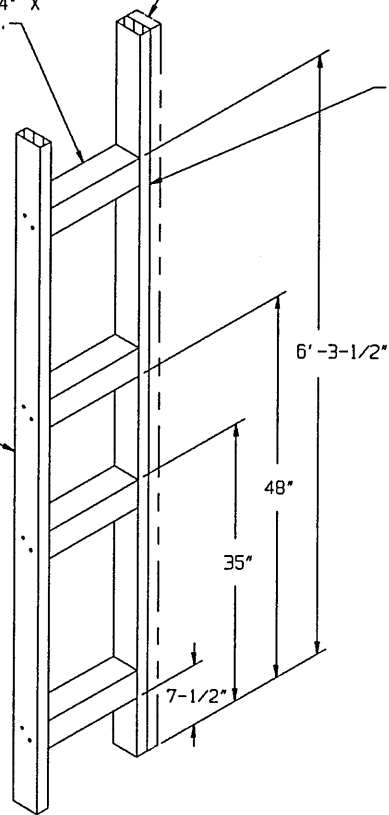
SIDE FILL ASSEMBLY

SEE GENERAL NOTE "G" ON PAGE 3.

STRUT, 4" X 4" X 13" (4 REOD).

VERTICAL PIECE, 2" X 4" BY INSIDE CONTAINER HEIGHT MINUS 1" (REF: 7'-7") (1 REOD). NAIL TO THE STRUTS W/2-10d NAILS AT EACH JOINT.

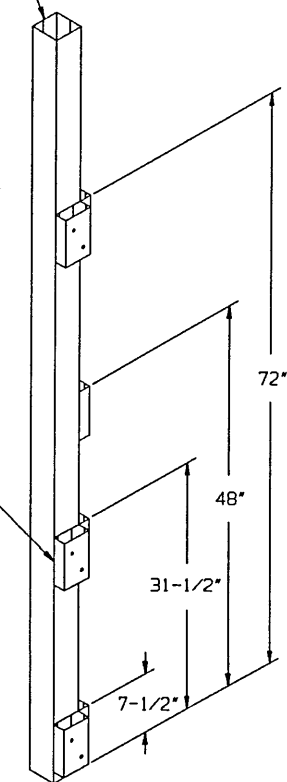
VERTICAL PIECE, 2" X 4" X 7'-0" (1 REOD). NAIL TO THE STRUTS W/2-10d NAILS AT EACH JOINT.



FORWARD STRUT ASSEMBLY A

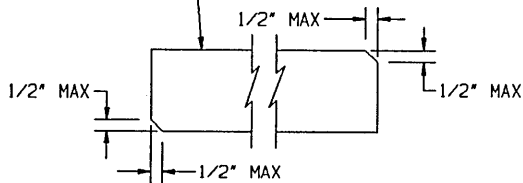
VERTICAL PIECE, 4" X 4" BY INSIDE CONTAINER HEIGHT MINUS 1" (REF: 7'-10") (1 REOD).

STRUT LEDGER, 2" X 4" X 6" (7 REOD). NAIL TO THE VERTICAL PIECE W/2-10d NAILS.



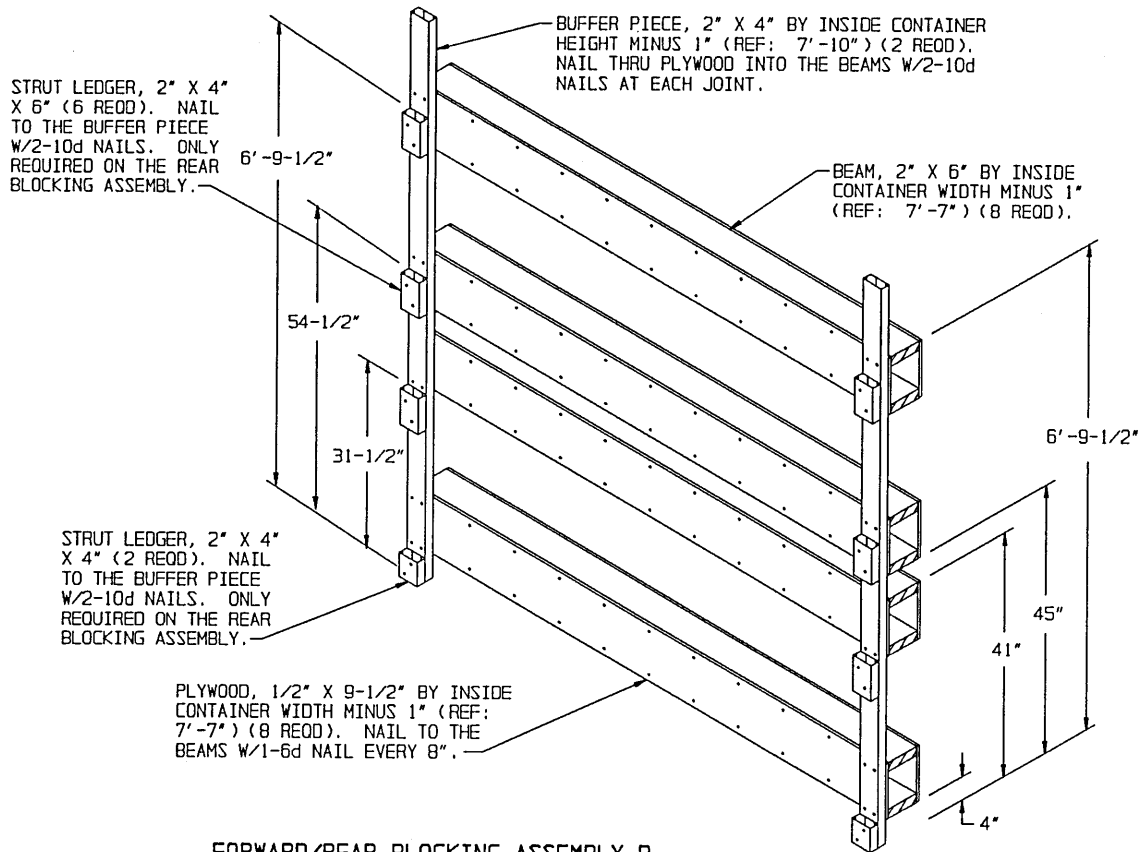
DOOR POST VERTICAL A

INDICATES A DOOR SPANNER.



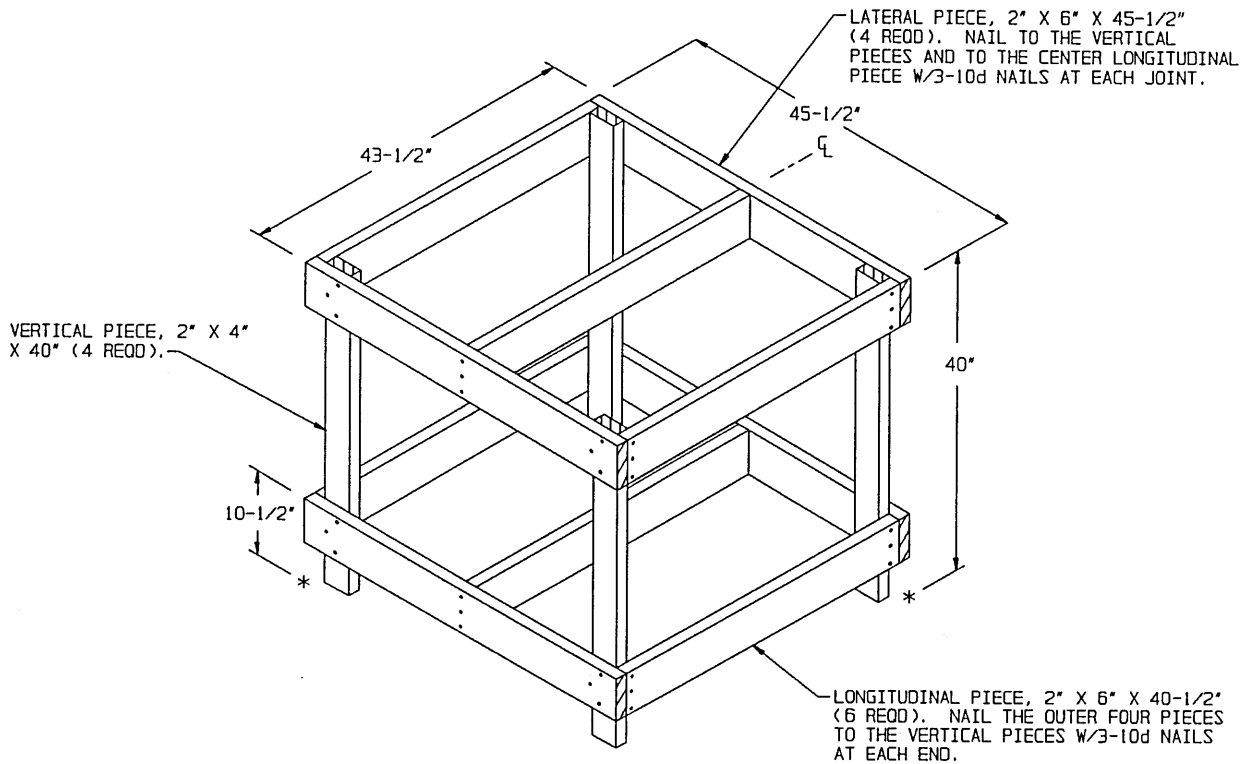
BEVEL-CUT

IF DESIRED, EACH END OF A DOOR SPANNER PIECE OR STRUT MAY BE BEVEL-CUT AS SHOWN ABOVE TO FACILITATE THE ACHIEVEMENT OF A TIGHT DOOR-POST-TO-DOOR-POST FIT OR A TIGHT REAR-OF-LOAD FIT.



FORWARD/REAR BLOCKING ASSEMBLY B

NOTE: STRUT LEDGERS ARE ONLY REQUIRED ON THE REAR BLOCKING ASSEMBLY.



FILLER ASSEMBLY

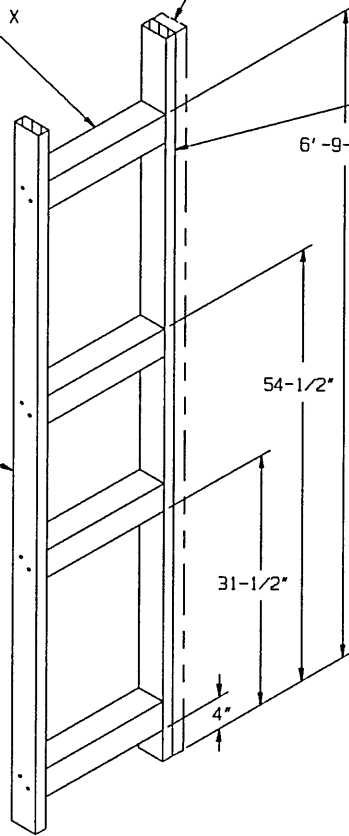
THE ASSEMBLY DEPICTED ABOVE IS FOR USE IN PLACE OF AN OMITTED PALLET UNIT IN THE LOAD ON PAGE 4. FILLER ASSEMBLIES MUST BE WIRE TIED TO ADJACENT PALLET UNITS TO PREVENT UNQUE MOVEMENT. NO MORE THAN FOUR FILLER ASSEMBLIES MAY BE USED PER LOAD. DO NOT INSTALL A FILLER ASSEMBLY IMMEDIATELY ADJACENT TO ANOTHER FILLER ASSEMBLY.

SEE GENERAL NOTE "G" ON PAGE 3.

STRUT, 4" X 4" X 17" (4 REQD).

VERTICAL PIECE, 2" X 4" BY INSIDE CONTAINER HEIGHT MINUS 1" (REF: 7'-7") (1 REQD). NAIL TO THE STRUTS W/2-10d NAILS AT EACH JOINT.

VERTICAL PIECE, 2" X 4" X 7'-4" (1 REQD). NAIL TO THE STRUTS W/2-10d NAILS AT EACH JOINT.

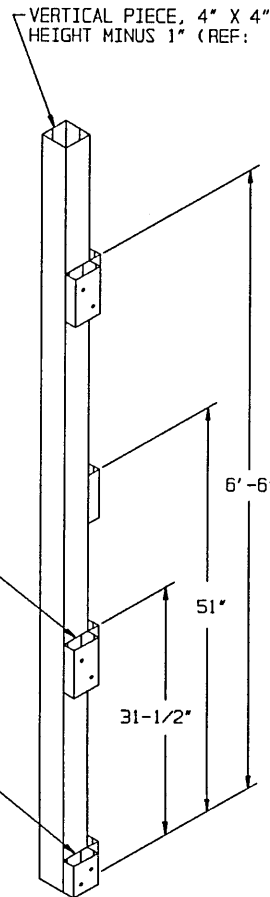


FORWARD STRUT ASSEMBLY B

VERTICAL PIECE, 4" X 4" BY INSIDE CONTAINER HEIGHT MINUS 1" (REF: 7'-10") (1 REQD).

STRUT LEDGER, 2" X 4" X 6" (5 REQD). NAIL TO THE VERTICAL PIECE W/2-10d NAILS.

STRUT LEDGER, 2" X 4" X 4" (2 REQD). NAIL TO THE VERTICAL PIECE W/2-10d NAILS.



DOOR POST VERTICAL B

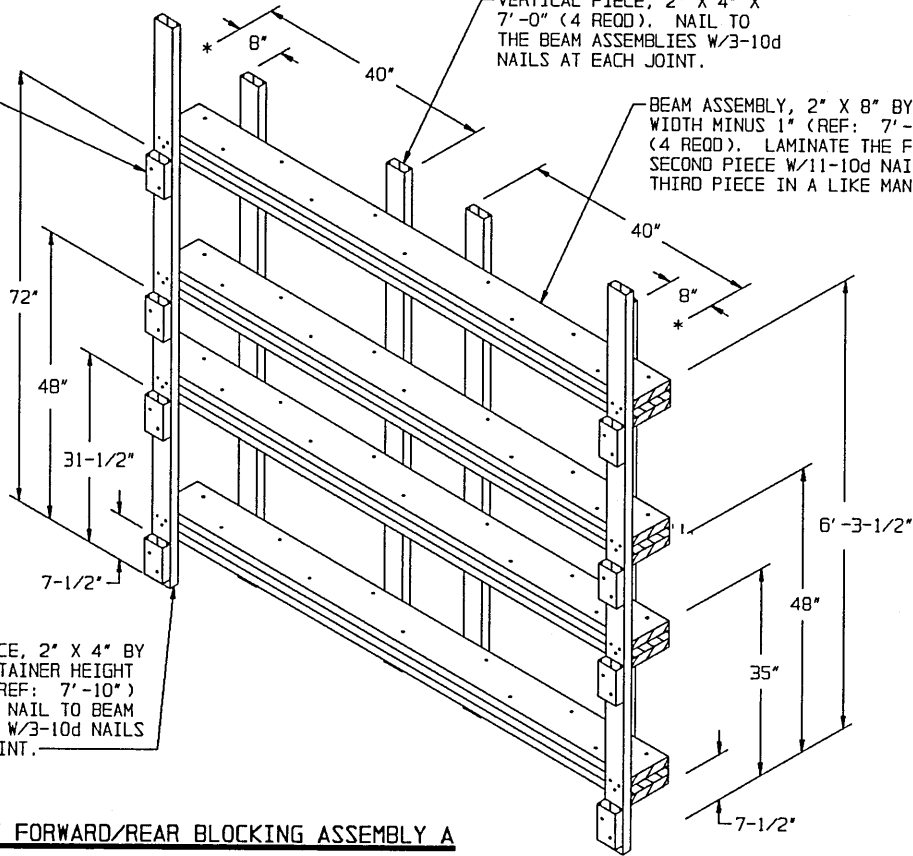
NOTE: WHEN USING THE ALTERNATIVE FORWARD/REAR BLOCKING ASSEMBLY B DEPICTED ON PAGE 10, STRUT LEDGER LOCATIONS MUST BE ADJUSTED TO MATCH STRUT LEDGER LOCATIONS ON THE REAR BLOCKING ASSEMBLY.

STRUT LEDGER, 2" X 4" X 6" (8 REOD). NAIL TO THE BUFFER PIECE W/2-10d NAILS. ONLY REQUIRED ON THE REAR BLOCKING ASSEMBLY.

VERTICAL PIECE, 2" X 4" X 7'-0" (4 REOD). NAIL TO THE BEAM ASSEMBLIES W/3-10d NAILS AT EACH JOINT.

BEAM ASSEMBLY, 2" X 8" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-7") (TRIPLED) (4 REOD). LAMINATE THE FIRST PIECE TO THE SECOND PIECE W/11-10d NAILS. LAMINATE THE THIRO PIECE IN A LIKE MANNER.

BUFFER PIECE, 2" X 4" BY INSIDE CONTAINER HEIGHT MINUS 1" (REF: 7'-10") (2 REOD). NAIL TO BEAM ASSEMBLIES W/3-10d NAILS AT EACH JOINT.



ALTERNATIVE FORWARD/REAR BLOCKING ASSEMBLY A

NOTE: THE FORWARD/REAR BLOCKING ASSEMBLY DEPICTED ABOVE MAY BE USED IN PLACE OF THE FORWARD/REAR BLOCKING ASSEMBLY DEPICTED ON PAGE 6, IF DESIRED. STRUT LEDGERS ARE ONLY REQUIRED ON THE REAR BLOCKING ASSEMBLY.

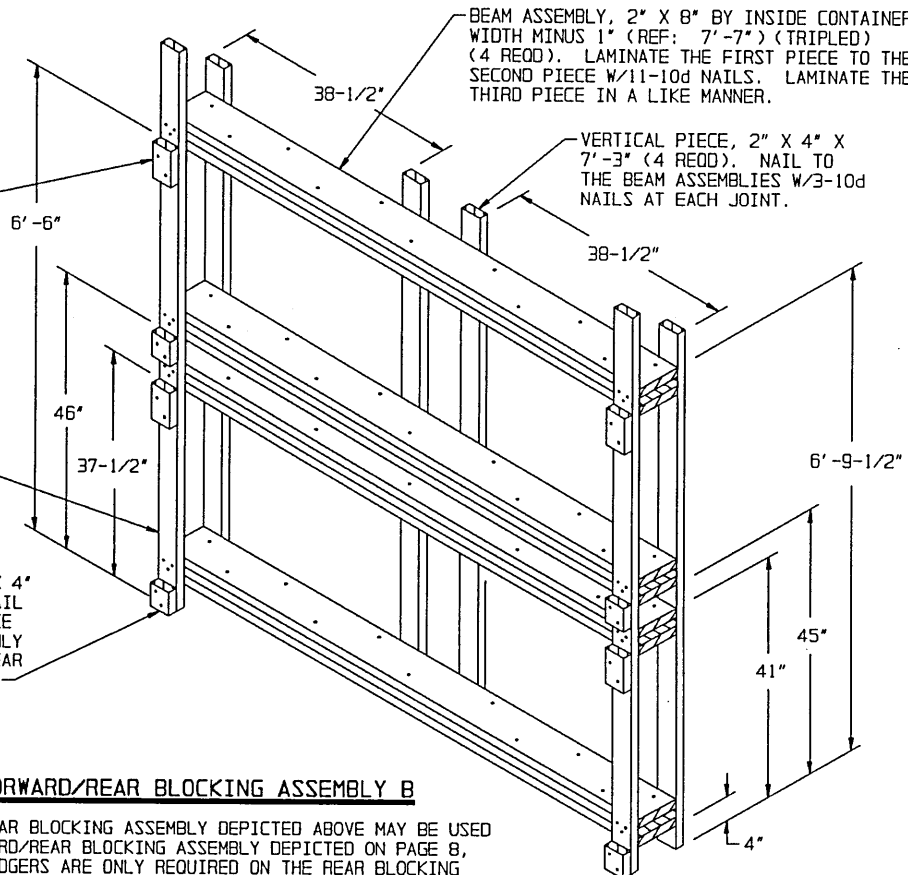
STRUT LEDGER, 2" X 4" X 6" (4 REOD). NAIL TO THE BUFFER PIECE W/2-10d NAILS. ONLY REQUIRED ON THE REAR BLOCKING ASSEMBLY.

BEAM ASSEMBLY, 2" X 8" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-7") (TRIPLED) (4 REOD). LAMINATE THE FIRST PIECE TO THE SECOND PIECE W/11-10d NAILS. LAMINATE THE THIRO PIECE IN A LIKE MANNER.

VERTICAL PIECE, 2" X 4" X 7'-3" (4 REOD). NAIL TO THE BEAM ASSEMBLIES W/3-10d NAILS AT EACH JOINT.

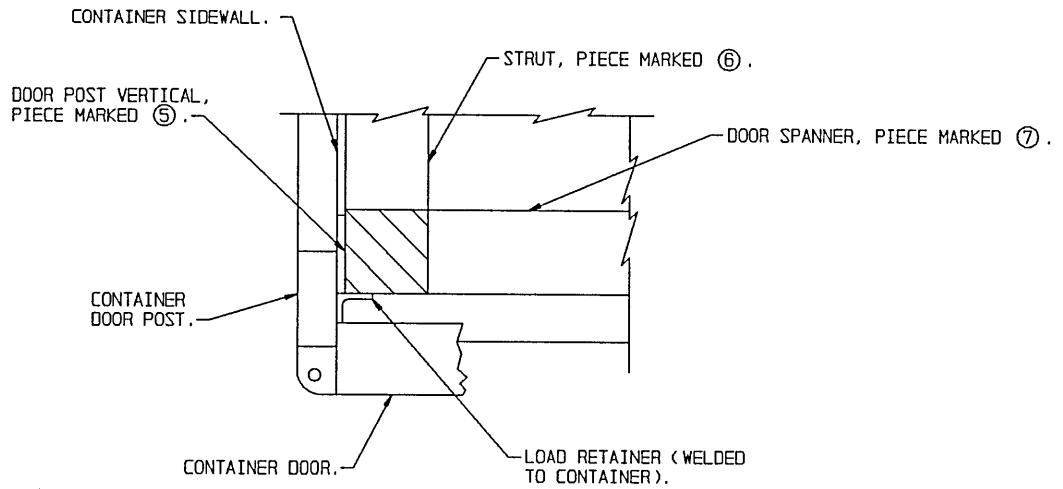
BUFFER PIECE, 2" X 4" BY INSIDE CONTAINER HEIGHT MINUS 1" (REF: 7'-10") (2 REOD). NAIL TO BEAM ASSEMBLIES W/3-10d NAILS AT EACH JOINT.

STRUT LEDGER, 2" X 4" X 4" (4 REOD). NAIL TO THE BUFFER PIECE W/2-10d NAILS. ONLY REQUIRED ON THE REAR BLOCKING ASSEMBLY.



ALTERNATIVE FORWARD/REAR BLOCKING ASSEMBLY B

NOTE: THE FORWARD/REAR BLOCKING ASSEMBLY DEPICTED ABOVE MAY BE USED IN PLACE OF THE FORWARD/REAR BLOCKING ASSEMBLY DEPICTED ON PAGE 8, IF DESIRED. STRUT LEDGERS ARE ONLY REQUIRED ON THE REAR BLOCKING ASSEMBLY. THE STRUT LEDGERS LOCATED AT 46" MUST BE NAILED TO THE REAR BLOCKING ASSEMBLY AFTER THE STRUT BELOW IT IS INSTALLED.

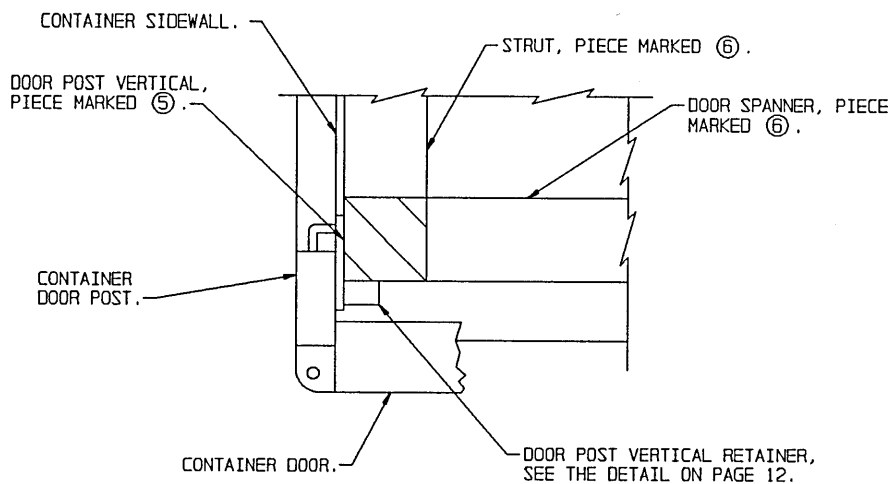


DETAIL A

A PARTIAL PLAN VIEW OF THE LEFT REAR PORTION OF THE CONTAINER IS SHOWN DEPICTING THE PROPER POSITION OF THE DOOR POST VERTICAL AND ADJACENT DUNNAGE PIECES.

SPECIAL NOTE:

WHEN END OPENING ISO CONTAINERS ARE NOT EQUIPPED WITH PRE-WELDED LOAD RETAINERS, AS DEPICTED IN "DETAIL A" ABOVE, DOOR POST VERTICAL RETAINERS WILL BE REQUIRED FOR THE LOADS DEPICTED ON PAGES 2 AND 4. SEE VARIOUS LOADS WITHIN AMC DRAWING 19-48-4153-15PA1002 FOR EXAMPLES. SEE PAGE 12 FOR DETAILS OF THE METAL DOOR POST VERTICAL RETAINER.

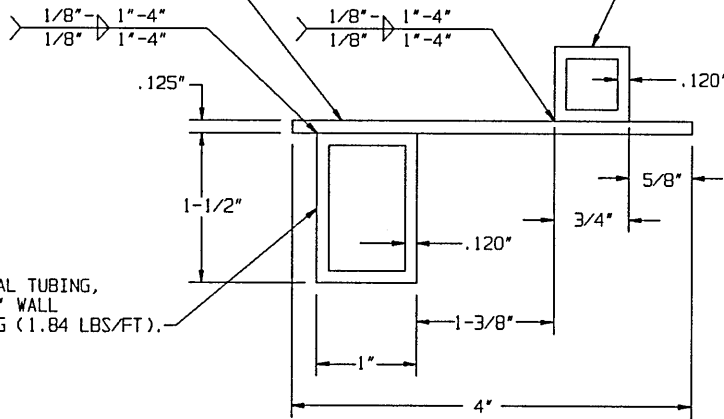


DETAIL B

A PARTIAL PLAN VIEW OF THE LEFT REAR PORTION OF THE CONTAINER IS SHOWN DEPICTING THE PROPER POSITION OF THE DOOR POST VERTICAL RETAINER AND ADJACENT DUNNAGE PIECES.

STEEL STRIP, 1/8" THICK BY 4" WIDE
BY 83" LONG (1.70 LBS/FT).

SQUARE STRUCTURAL TUBING, 3/4" SQUARE
BY .120" WALL THICKNESS BY 83" LONG
(1.03 LBS/FT).



RECTANGULAR STRUCTURAL TUBING,
1-1/2" BY 1" BY .120" WALL
THICKNESS BY 83" LONG (1.84 LBS/FT).

VIEW A

VIEW A
SQUARE STRUCTURAL TUBING,
3/4" SQUARE BY .120" WALL
THICKNESS BY 83" LONG
(1.03 LBS/FT).



RECTANGULAR STRUCTURAL TUBING,
1-1/2" BY 1" BY .120" WALL THICKNESS
BY 83" LONG (1.84 LBS/FT).

DRILL 5/32", 4 HOLES.

STEEL STRIP, 1/8" THICK BY 4" WIDE
BY 83" LONG (1.70 LBS/FT).

DOOR POST VERTICAL RETAINER

NOTE: THE ABOVE ASSEMBLY HAS BEEN SHOWN ROTATED 90° FROM THE ORIENTATION IN WHICH IT IS INSTALLED IN THE LEFT REAR CORNER OF THE CONTAINER. THE ASSEMBLY HAS BEEN ROTATED FOR HOLE LOCATION CLARITY.