

APPROVED BY
BUREAU OF EXPLOSIVES

O. L. Haly

DATE 9/12/97

LOADING AND BRACING IN END OPENING ISO CONTAINERS OF VOLCANO MINE CANISTERS PACKED IN CYLINDRICAL METAL CONTAINERS

PA113 SERIES CONTAINERS

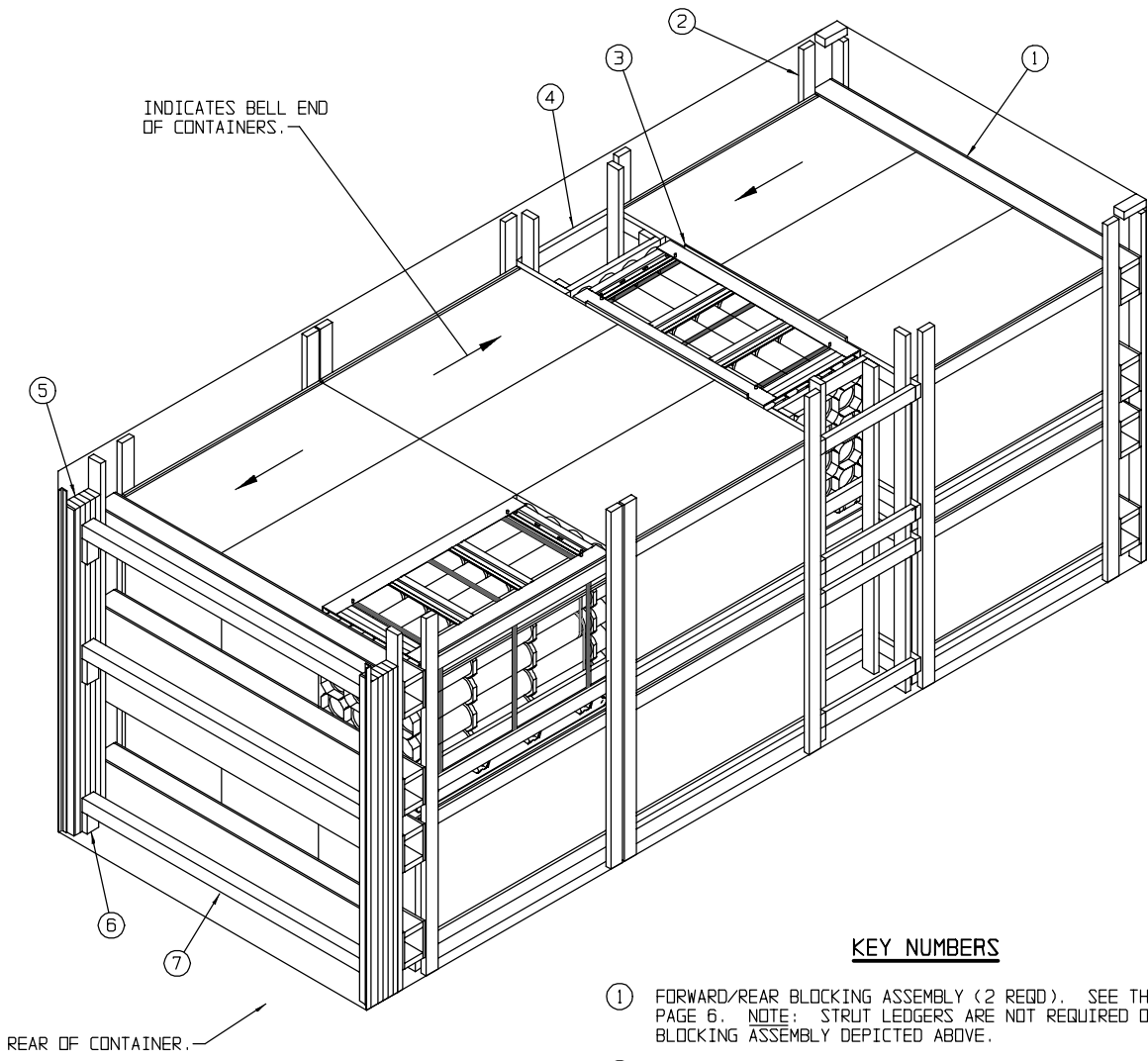
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- LOADING AND BRACING SPECIFICATIONS SET FORTH WITHIN THIS DRAWING ARE APPLICABLE TO LOADS THAT ARE TO BE SHIPPED BY TRAILER/CONTAINER-ON-FLATCAR (T/COFC) RAIL CARRIER SERVICE. THESE SPECIFICATIONS MAY ALSO BE USED FOR LOADS THAT ARE TO BE MOVED BY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

U.S. ARMY MATERIEL COMMAND DRAWING

APPROVED, U.S. ARMY INDUSTRIAL OPERATIONS COMMAND <i>[Signature]</i>	ENGINEER	BASIC REV.	LAURA FIEFFER	DO NOT SCALE			
	TECHNICIAN	BASIC REV.		WEBSITE: HTTP://WWW.DAC.ARMY.MIL			
	DRAFTSMAN	BASIC REV.		APRIL 1997			
APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND <i>William F Ernst</i> DEFENSE AMMUNITION CENTER	TRANSPORTATION ENGINEERING DIVISION		<i>W. R. Truicks</i>				
	VALIDATION ENGINEERING DIVISION		<i>[Signature]</i> TESTED	CLASS	DIVISION	DRAWING	FILE
	LOGISTICS ENGINEERING OFFICE		<i>William F Ernst</i>	19	48	4245/ 81	15PM1009



ISOMETRIC VIEW

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	20	38,760 LBS
DUNNAGE		1,016 LBS
CONTAINER		4,700 LBS
TOTAL WEIGHT		44,476 LBS (APPROX)

KEY NUMBERS

- ① FORWARD/REAR BLOCKING ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 6. NOTE: STRUT LEDGERS ARE NOT REQUIRED ON EITHER BLOCKING ASSEMBLY DEPICTED ABOVE.
- ② SIDE FILL ASSEMBLY (6 REQD). SEE THE DETAIL ON PAGE 7.
- ③ SEPARATOR (2 REQD). SEE THE DETAIL ON PAGE 6.
- ④ CRIB FILL ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 7.
- ⑤ FILL MATERIAL, 4" WIDE BY 7'-0" LONG MATERIAL (AS REQD). NAIL THE FIRST PIECE TO THE REAR BLOCKING ASSEMBLY W/7 NAILS OF A SUITABLE SIZE (10d FOR 2" THICK MATERIAL). NAIL EACH ADDITIONAL PIECE TO THE PREVIOUS PIECE IN A SIMILAR MANNER. NOTE: MULTIPLE PIECES MAY BE LAMINATED TOGETHER FIRST AND THEN TOENAILED TO THE REAR BLOCKING ASSEMBLY. SEE THE "DETAIL A" AND "DETAIL B" ON PAGE 9.
- ⑥ DOOR SPANNER LEDGER, 2" X 4" X 5" OR 6" (6 REQD - OPTIONAL). INSTALL IF DESIRED TO AID IN THE INSTALLATION OF SPANNER PIECES. NAIL TO THE FILL MATERIAL W/2-10d NAILS.
- ⑦ DOOR SPANNER, 4" X 4" MATERIAL, CUT TO A LENGTH THAT WILL PROVIDE FOR A DRIVE FIT (REF: 7'-1-3/8") (3 REQD). LOCATE SUCH THAT THE TOP OF THE UPPER DOOR SPANNER IS FLUSH WITH THE TOP OF THE UPPER BEAM ASSEMBLY IN PIECE MARKED ①, AND THE BOTTOM OF THE LOWER DOOR SPANNER IS FLUSH WITH THE BOTTOM OF THE LOWER BEAM ASSEMBLY. CENTER THE MIDDLE DOOR SPANNER BETWEEN THE UPPER AND LOWER DOOR SPANNERS. TOENAIL TO THE FILL MATERIAL W/2-12d NAILS AT EACH END. SEE THE "BEVEL-CUT" DETAIL ON PAGE 6. NOTE THAT THESE PIECES ARE NOT REQUIRED IF THE SPACE BETWEEN THE REAR BLOCKING ASSEMBLY AND THE LOAD RETAINER IS NOT GREATER THAN 6".

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	131	44
2" X 4"	312	208
2" X 6"	122	122
4" X 4"	22	29
NAILS	NO. REQD	POUNDS
6d (2")	462	2-3/4
10d (3")	286	4-1/2
12d (3-1-4")	12	1/4
PLYWOOD, 1/2"	149.39 SQ FT REQD	205.41 LBS

L. MAXIMUM LOAD WEIGHT CRITERIA:

THE MAXIMUM LOAD WEIGHTS ARE CONTROLLED BY EQUIPMENT CAPABILITY FACTORS. ALTHOUGH THE HEAVIEST MAXIMUM LOADS ARE DELINEATED IN THE LOAD VIEWS, PROVISIONS ARE INCLUDED WITHIN THIS DRAWING SO THAT THE BASIC LOADS CAN BE ADJUSTED TO SATISFY A LESSER QUANTITY OF LADING UNITS. DEPENDING ON TRANSPORTATION ROUTING, IT MAY BE NECESSARY TO REDUCE THE LOAD WEIGHT TO SATISFY "WEIGHT LAWS" OF CERTAIN STATES. ALSO, IT MAY BE NECESSARY TO REDUCE THE LOAD WEIGHT TO SATISFY OTHER WEIGHT RESTRICTIONS IMPOSED ON THE INTERMODAL CONTAINER SYSTEM.

M. 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.

N. 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.

O. 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.

P. THE QUANTITY OF PALLET UNITS SHOWN IN THE LOAD ON PAGES 2 AND 4 MAY BE REDUCED FOR SHIPMENT, IF DESIRED. SEE THE FILLER ASSEMBLY ON PAGE 5.

RECOMMENDED SEQUENTIAL LOADING PROCEDURES FOR THE LOAD ON PAGE 2

- 1. PREFABRICATE TWO FORWARD/REAR BLOCKING ASSEMBLIES, SIX SIDE FILL ASSEMBLIES, TWO SEPARATORS AND TWO CRIB FILL ASSEMBLIES.
- 2. INSTALL THE FORWARD BLOCKING ASSEMBLY.
- 3. INSTALL TWO SIDE FILL ASSEMBLIES AND LOAD SIX PALLET UNITS.
- 4. INSTALL ONE SEPARATOR AND LOAD TWO PALLET UNITS.
- 5. INSTALL TWO CRIB FILL ASSEMBLIES AND ONE SEPARATOR.
- 6. REPEAT STEP 3 TWO TIMES.
- 7. INSTALL THE REAR BLOCKING ASSEMBLY.
- 8. INSTALL THE FILL MATERIAL.
- 9. INSTALL THE DOOR SPANNER LEDGERS (IF USED) AND THE DOOR SPANNERS.

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.

STEEL, STRUCTURAL - : ASTM A501, STEEL STRUCTURAL TUBING; AND ASTM A570, STEEL, STRIP, HOT-ROLLED, GRADE 36 (MINIMUM).

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 VOLCANO MINE CANISTERS PACKED IN PA113 SERIES METAL CONTAINERS. SUBSEQUENT REFERENCE TO PALLET UNIT HEREIN MEANS THE PALLET UNIT WITH AMMUNITION ITEMS. SEE PAGE 5 AND AMC DRAWING 19-48-4231/81-20PM1006 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 LOAD AS SHOWN IS 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 93" HIGH, WITH A MAXIMUM GROSS WEIGHT OF 52,910 POUNDS. OLDER/OTHER CONTAINERS MAY HAVE A TOTAL INSIDE HEIGHT OF 95", BUT A CLEAR HEIGHT UNDER THE ROOF BOWS OF 93". VERIFY INSIDE CONTAINER HEIGHT PRIOR TO FABRICATING DUNNAGE. 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). THE UNBLOCKED SPACE ACROSS THE WIDTH OF A LOAD BAY IS NOT TO EXCEED 1-1/2". EXCESSIVE SLACK CAN BE ELIMINATED FROM A LOAD BY LAMINATING ADDITIONAL PIECES OF APPROPRIATE THICKNESS TO THE HORIZONTAL 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 SIZE OF THE PALLET UNIT.

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" THICK 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.

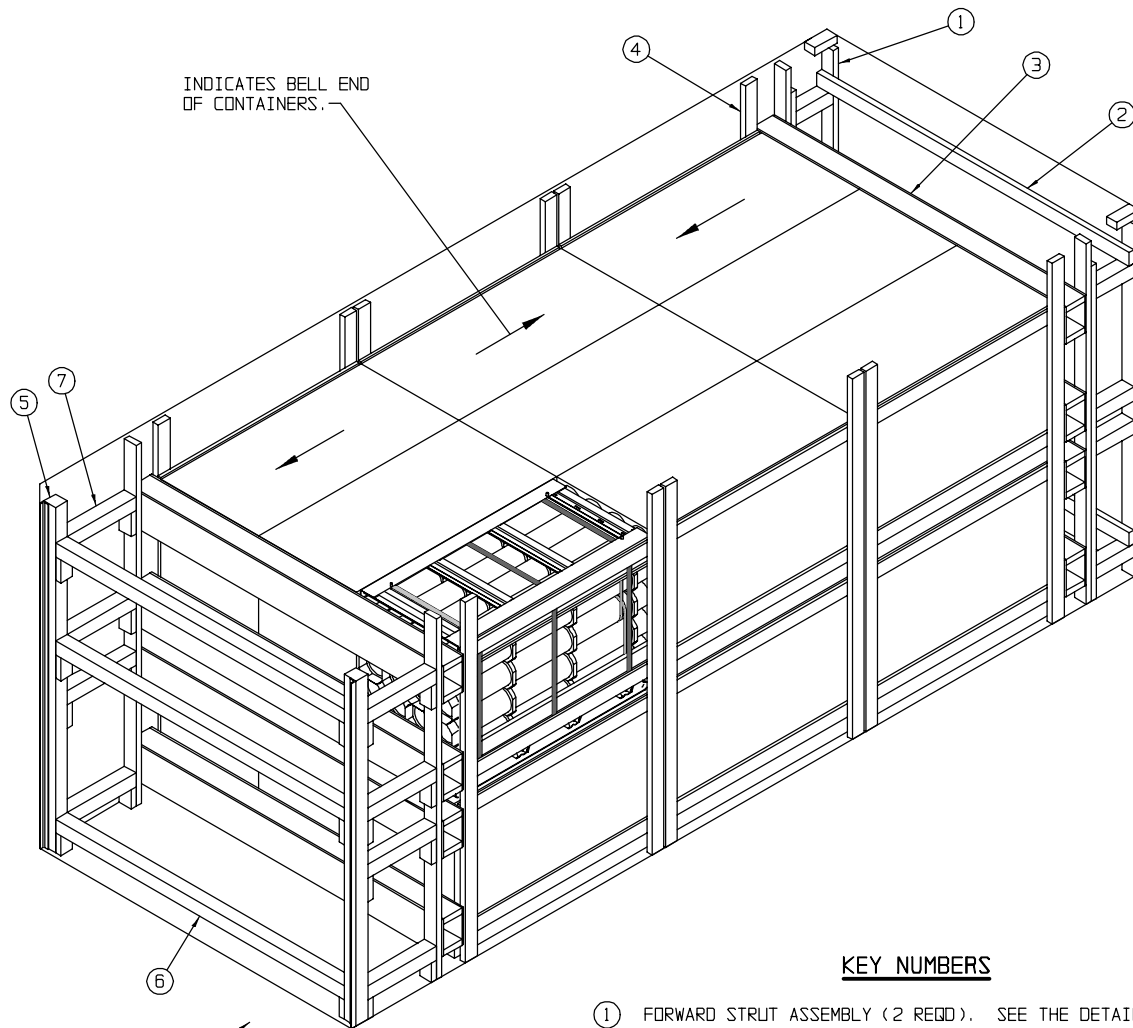
G. IN SOME CONTAINERS THERE IS A SLOT AT THE CORNERS OF THE FORWARD WALL. PIECES OF DUNNAGE MATERIAL MUST BE LAMINATED TO THE BUFFER PIECES ON THE FORWARD BLOCKING ASSEMBLY OR FORWARD STRUT ASSEMBLY TO PROVIDE A FLAT SURFACE FOR THE BUFFER PIECES. A PIECE OF 2" X 4", 2" X 3" OR A SPECIAL WIDTH PIECE CUT-TO-FIT CAN BE USED. THIS FILL PIECE WILL BE NAILED WITH ONE APPROPRIATELY SIZED NAIL EVERY 12". NOTE THAT SOME CONTAINERS ARE EQUIPPED WITH "TIE-BARS" IN THE CORNER SLOT, WHICH PRECLUDE THE USE OF A FULL HEIGHT FILL PIECE. WHEN "TIE-BARS" ARE PRESENT, THE FILL PIECE MUST BE INSTALLED IN SEGMENTS DESIGNED TO FIT BETWEEN THE "TIE-BARS" VERTICALLY. THE FILL PIECE(S) IS NOT REQUIRED WHEN THE CORNER PORTIONS OF THE CONTAINER FORWARD WALL ARE SMOOTH AND FLAT. DO NOT ALLOW ANY DUNNAGE ASSEMBLY TO CONTACT THE CONTAINER FORWARD WALL, ONLY THE CORNER POSTS OF THE CONTAINER SHOULD BE USED FOR FORWARD LONGITUDINAL BLOCKING.

H. WHETHER A CONTAINER IS FULL OR IS 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.

J. CAUTION: DO NOT NAIL DUNNAGE MATERIAL TO THE CONTAINER WALLS OR FLOOR. ALL NAILING WILL BE WITHIN THE DUNNAGE.

K. PORTIONS OF THE CONTAINER DEPICTED WITHIN THIS DRAWING, SUCH AS THE SIDEWALL, HAVE NOT BEEN SHOWN IN THE LOAD VIEWS FOR CLARITY PURPOSES.

(CONTINUED AT LEFT)



INDICATES BELL END OF CONTAINERS.

REAR OF CONTAINER.

ISOMETRIC VIEW

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	18	34,884 LBS
DUNNAGE		841 LBS
CONTAINER		4,700 LBS
TOTAL WEIGHT		40,425 LBS (APPROX)

KEY NUMBERS

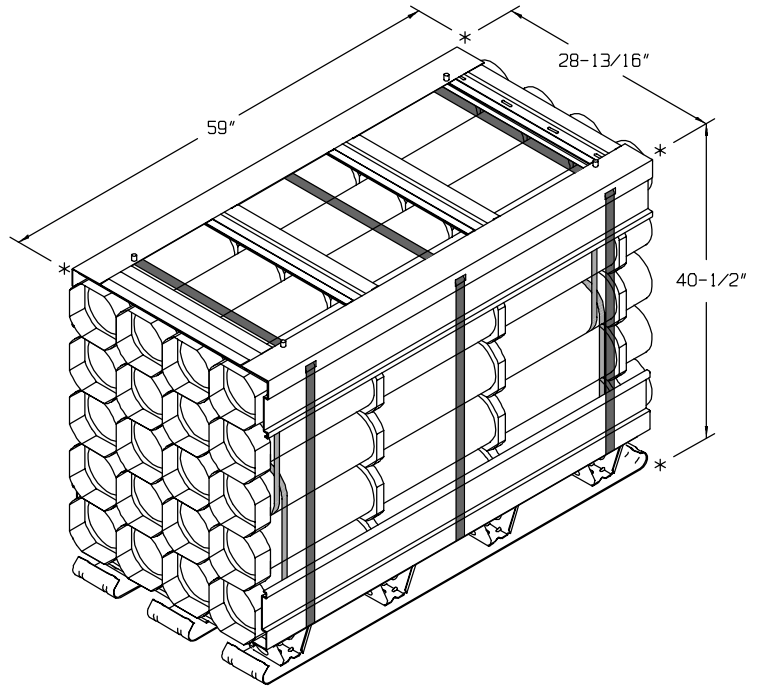
- ① FORWARD STRUT ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 8.
- ② SPREADER PIECE, 2" X 4" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-7") (2 REQD). NAIL TO THE BUFFER PIECES OF PIECE MARKED ① W/2-10d NAILS AT EACH END.
- ③ FORWARD/REAR BLOCKING ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 6. NAIL THROUGH THE BUFFER PIECES INTO THE VERTICAL PIECES OF PIECE MARKED ① W/6-10d NAILS. NOTE: STRUT LEDGERS ARE ONLY REQUIRED ON THE REAR BLOCKING ASSEMBLY. DO NOT INSTALL STRUT LEDGERS ON THE FORWARD BLOCKING ASSEMBLY.
- ④ SIDE FILL ASSEMBLY (6 REQD). SEE THE DETAIL ON PAGE 7.
- ⑤ DOOR POST VERTICAL (2 REQD). SEE THE DETAIL ON PAGE 8, AND "DETAIL A" AND "DETAIL B" ON PAGE 9.
- ⑥ DOOR SPANNER, 4" X 4" MATERIAL, CUT TO A LENGTH THAT WILL PROVIDE FOR A DRIVE FIT (REF: 7'-1-3/8") (3 REQD). TOENAIL TO THE FILL MATERIAL W/2-12d NAILS AT EACH END. SEE THE "BEVEL-CUT" DETAIL ON PAGE 6.
- ⑦ STRUT, 4" X 4" BY CUT-TO-FIT (REF: 20-1/4") (8 REQD). TOENAIL TO THE BUFFER PIECE OF THE REAR BLOCKING ASSEMBLY AND THE DOOR POST VERTICAL W/2-12d NAILS AT EACH END. SEE THE "BEVEL-CUT" DETAIL ON PAGE 6.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	117	39
2" X 4"	174	116
2" X 6"	121	121
4" X 4"	57	76
NAILS	NO. REQD	POUNDS
6d (2")	448	2-3/4
10d (3")	100	1-3/4
12d (3-1/4")	76	1-1/2
PLYWOOD, 1/2"	96.06 SQ FT REQD	132.08 LBS

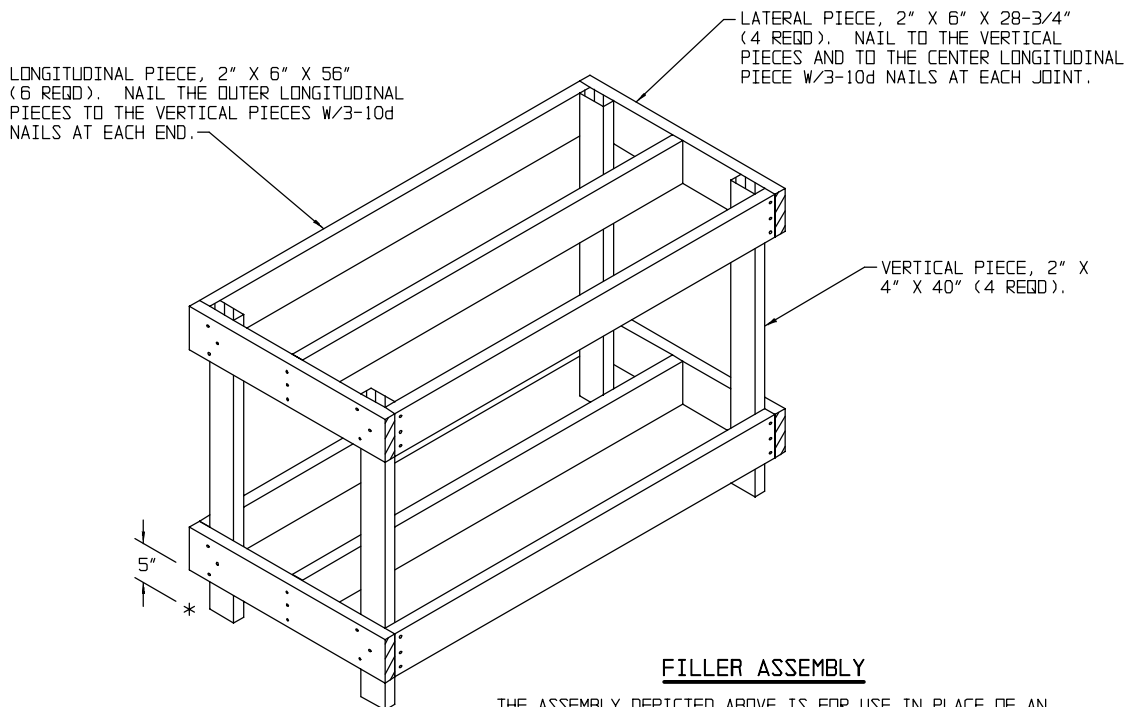
RECOMMENDED SEQUENTIAL LOADING PROCEDURES FOR THE LOAD ON PAGE 4

1. PREFABRICATE TWO FORWARD STRUT ASSEMBLIES, TWO FORWARD/REAR BLOCKING ASSEMBLIES (ONE WITH STRUT LEDGERS), SIX SIDE FILL ASSEMBLIES, AND TWO DOOR POST VERTICALS, ONE LEFT HAND AND ONE RIGHT HAND.
2. INSTALL THE FORWARD STRUT ASSEMBLIES AND THE SPREADER PIECES.
3. INSTALL THE FORWARD BLOCKING ASSEMBLY.
4. INSTALL TWO SIDE FILL ASSEMBLIES AND LOAD SIX PALLET UNITS.
5. REPEAT STEP 4 TWO TIMES.
6. INSTALL THE REAR BLOCKING ASSEMBLY.
7. INSTALL THE DOOR POST VERTICALS AND THE DOOR SPANNER PIECES.
8. INSTALL THE STRUTS.



PALLET UNIT

UNIT WEIGHT ----- 1,938 LBS (APPROX)
 CUBE ----- 39.8 CU FT (APPROX)



FILLER ASSEMBLY

THE ASSEMBLY DEPICTED ABOVE IS FOR USE IN PLACE OF AN OMITTED PALLET UNIT. FILLER ASSEMBLIES MUST BE WIRE TIED TO ADJACENT PALLET UNITS TO PREVENT UNDUE MOVEMENT. NO MORE THAN ONE FILLER ASSEMBLY MAY BE USED IN THE LOAD DEPICTED ON PAGE 2, AND NO MORE THAN FIVE FILLER ASSEMBLIES MAY BE USED IN THE LOAD DEPICTED ON PAGE 4.

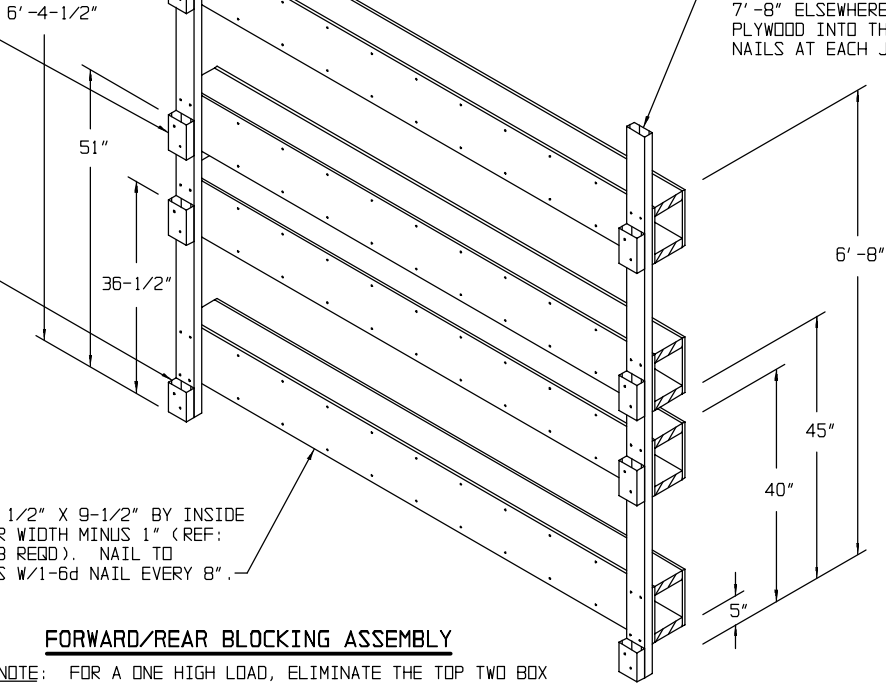
STRUT LEDGER, 2" X 4" X 6" (6 REQD). NAIL TO THE BUFFER PIECES W/2-10d NAILS EACH. NOTE: STRUT LEDGERS ARE ONLY REQUIRED ON THE REAR BLOCKING ASSEMBLY DEPICTED ON PAGE 4. DO NOT INSTALL ON ANY OTHER BLOCKING ASSEMBLY.

STRUT LEDGER, 2" X 4" X 5" (2 REQD). NAIL TO THE BUFFER PIECES W/2-10d NAILS EACH. NOTE: STRUT LEDGERS ARE ONLY REQUIRED ON THE REAR BLOCKING ASSEMBLY DEPICTED ON PAGE 4. DO NOT INSTALL ON ANY OTHER BLOCKING ASSEMBLY.

PLYWOOD, 1/2" X 9-1/2" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-7") (8 REQD). NAIL TO THE BEAMS W/1-6d NAIL EVERY 8".

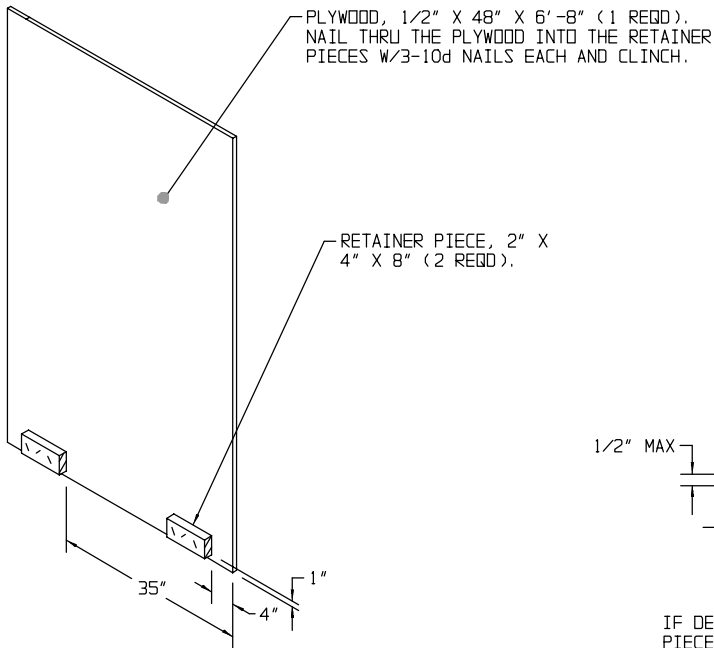
BEAM, 2" X 6" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-7") (8 REQD).

BUFFER PIECE, 2" X 4" BY INSIDE CONTAINER HEIGHT MINUS 1" (REF: 7'-6" UNDER CORNER FITTINGS, 7'-8" ELSEWHERE). NAIL THRU THE PLYWOOD INTO THE BEAMS W/2-10d NAILS AT EACH JOINT.



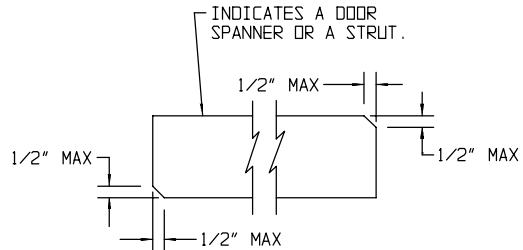
FORWARD/REAR BLOCKING ASSEMBLY

NOTE: FOR A ONE HIGH LOAD, ELIMINATE THE TOP TWO BOX BEAM ASSEMBLIES (AND THE TOP FOUR STRUT LEDGERS, IF APPLICABLE).



SEPARATOR GATE

FOR A ONE HIGH LOAD, REDUCE THE HEIGHT OF THE PLYWOOD TO 40".

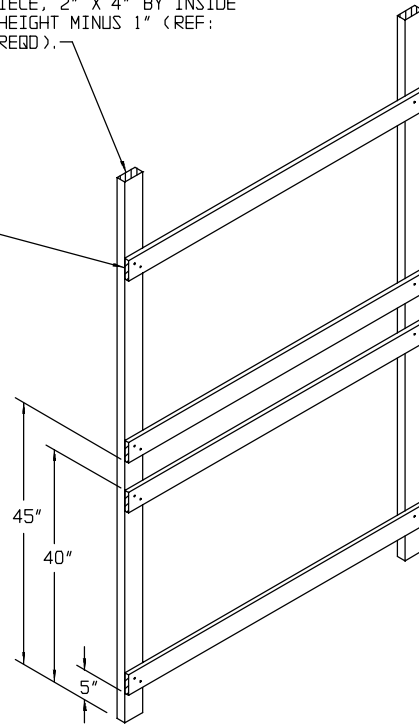


BEVEL-CUT

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

VERTICAL PIECE, 2" X 4" BY INSIDE
CONTAINER HEIGHT MINUS 1" (REF:
7'-8") (2 REQD).

HORIZONTAL PIECE, 1" X 4" X
58-1/2" (4 REQD). NAIL TO
THE VERTICAL PIECES W/2-6d
NAILS AT EACH JOINT.

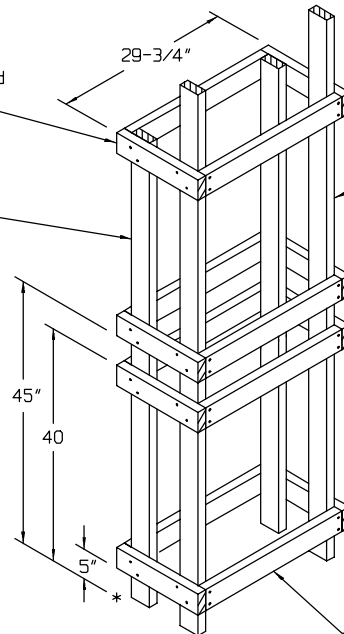


SIDE FILL ASSEMBLY

NOTE: FOR A ONE HIGH LOAD, ELIMINATE
THE TOP TWO HORIZONTAL PIECES.

LATERAL PIECE, 2" X 4" X
16" (8 REQD). NAIL TO
THE VERTICAL PIECES W/2-10d
NAILS AT EACH JOINT.

VERTICAL PIECE, 2" X
4" X 6'-7" (2 REQD).

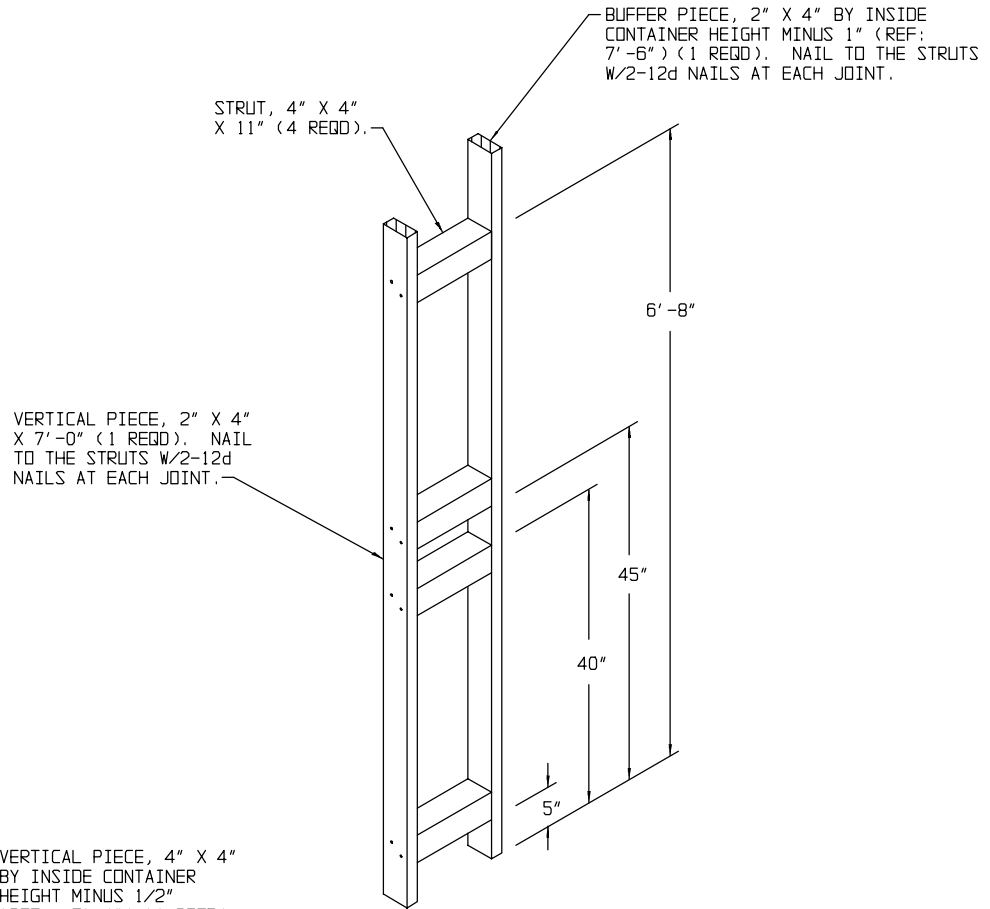


VERTICAL PIECE, 2" X 4" BY INSIDE
CONTAINER HEIGHT MINUS 1" (REF:
7'-8") (2 REQD).

LONGITUDINAL PIECE, 2" X 4" X
26-3/4" (8 REQD). NAIL TO
THE VERTICAL PIECES W/2-10d
NAILS AT EACH JOINT.

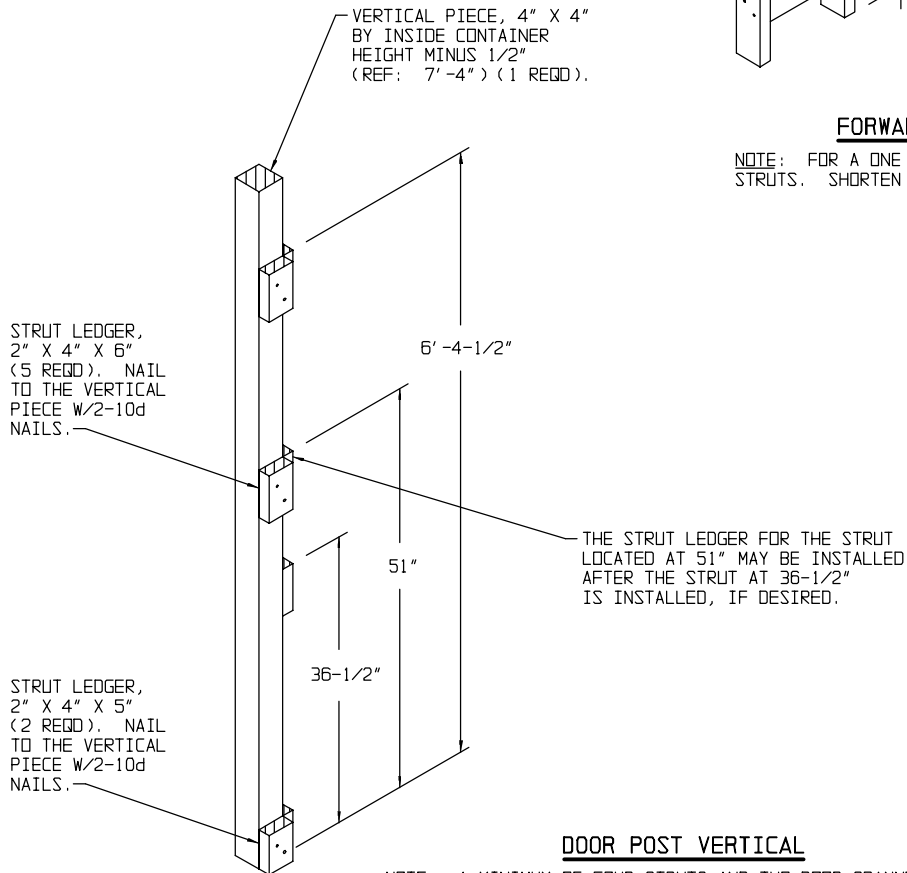
CRIB FILL ASSEMBLY

NOTE: FOR A ONE HIGH LOAD, ELIMINATE THE TOP FOUR
LONGITUDINAL PIECES AND THE TOP FOUR LATERAL PIECES.
SHORTEN THE 6'-7" VERTICAL PIECES APPROPRIATELY.
THE 29-3/4" DIMENSION MUST BE WITHIN 1/4" OF FILLING
THE LONGITUDINAL VOID IN THE LOAD. MODIFY THE LENGTH
OF THE LONGITUDINAL PIECES AS NECESSARY TO FILL THE VOID.



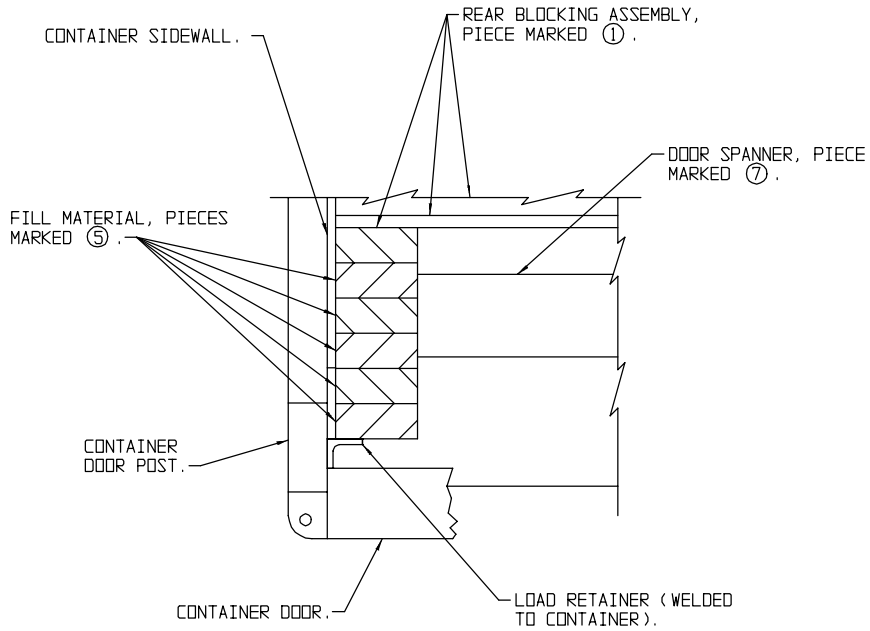
FORWARD STRUT ASSEMBLY

NOTE: FOR A ONE HIGH LOAD, ELIMINATE THE TOP TWO STRUTS. SHORTEN THE VERTICAL PIECE APPROPRIATELY.



DOOR POST VERTICAL

NOTE: A MINIMUM OF FOUR STRUTS AND TWO DOOR SPANNER PIECES ARE REQUIRED FOR ALL REDUCED LOADS. FOR A ONE HIGH LOAD, ELIMINATE THE TOP TWO LEDGERS USED WITH STRUTS, AND THE TOP LEDGER USED WITH DOOR SPANNERS. RELOCATE THE MIDDLE LEDGER USED WITH DOOR SPANNERS FROM 51" TO 36-1/2"

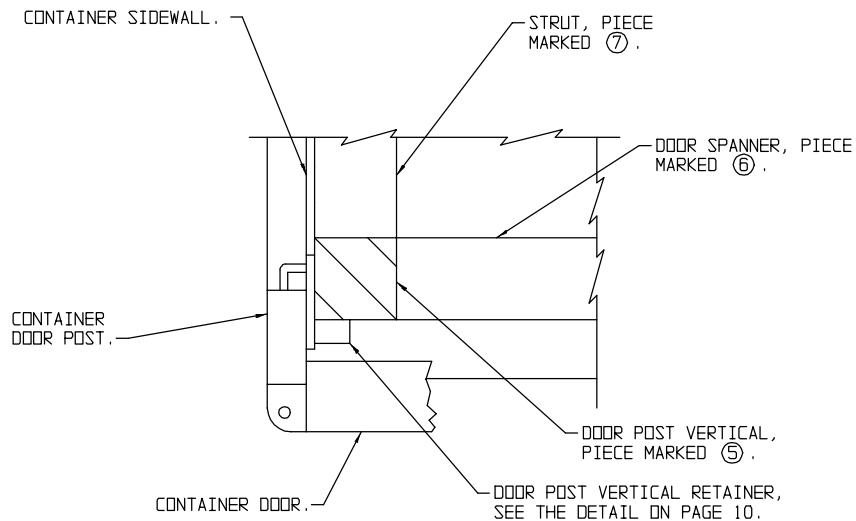


DETAIL A

A PARTIAL PLAN VIEW OF THE LEFT REAR PORTION OF THE CONTAINER IS SHOWN DEPICTING THE PROPER POSITION OF THE FILL MATERIAL AND ADJACENT DUNNAGE PIECES. KEY NUMBERS REFER TO KEY NUMBERS ON PAGE 2.

SPECIAL NOTE:

WHEN ISO CONTAINERS ARE NOT EQUIPPED WITH PRE-WELDED LOAD RETAINERS, AS DEPICTED IN "DETAIL A" ABOVE, DOOR POST VERTICALS, DOOR POST VERTICAL RETAINERS AND DOOR SPANNERS WILL BE REQUIRED FOR THE LOAD DEPICTED ON PAGE 2, AND DOOR POST VERTICAL RETAINERS WILL BE REQUIRED FOR THE LOAD DEPICTED ON PAGE 4. SEE VARIOUS LOADS WITHIN AMC DRAWING 19-48-4153-15PA1002 FOR EXAMPLES. SEE PAGE 10 FOR DETAILS OF THE METAL DOOR POST VERTICAL RETAINER.

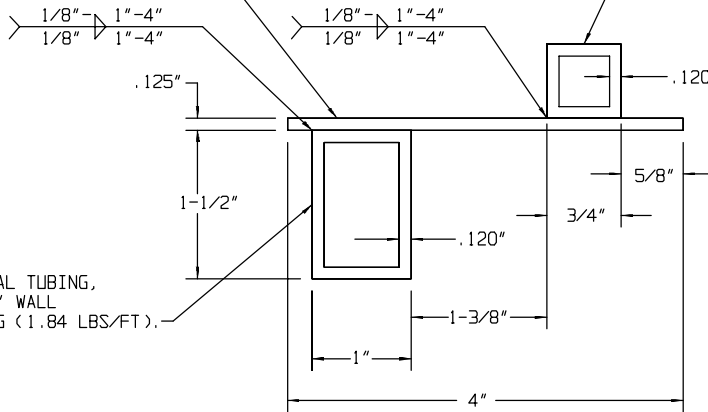


DETAIL B

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. KEY NUMBERS REFER TO THE KEY NUMBERS ON PAGE 4.

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).



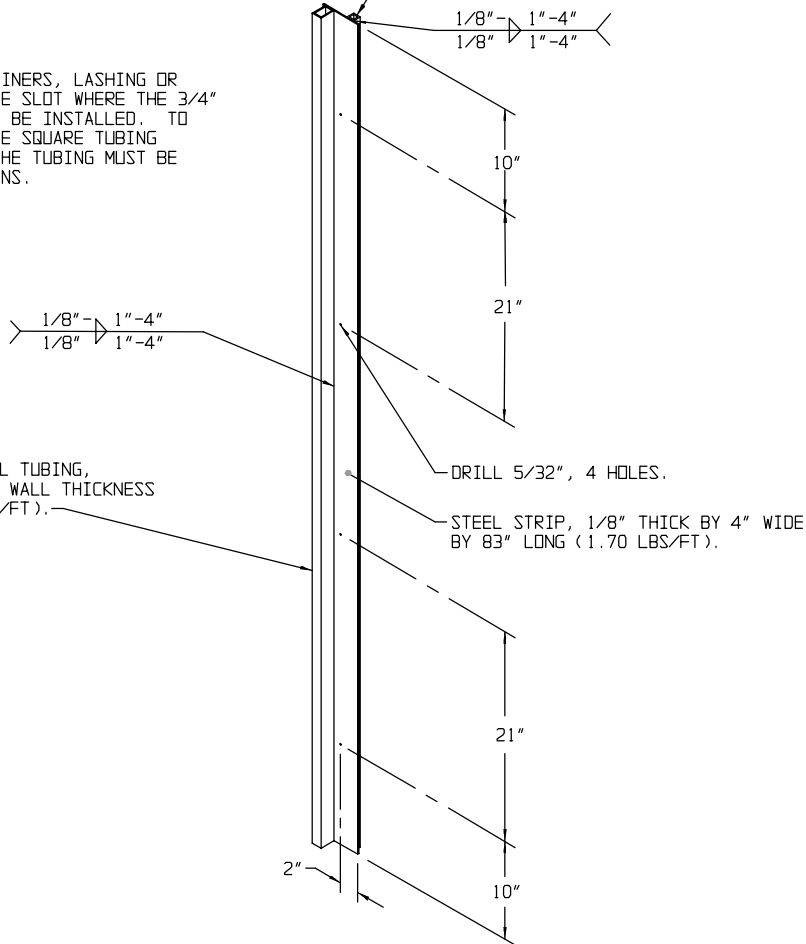
RECTANGULAR STRUCTURAL TUBING,
1-1/2" BY 1" BY .120" WALL
THICKNESS BY 83" LONG (1.84 LBS/FT).

VIEW A

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

SPECIAL NOTE:

IN MOST CORRUGATED STEEL CONTAINERS, LASHING OR TIE BARS WILL BE PRESENT IN THE SLOT WHERE THE 3/4" SQUARE STRUCTURAL TUBING IS TO BE INSTALLED. TO ENSURE PROPER ENGAGEMENT OF THE SQUARE TUBING AND THE CONTAINER DOOR POST, THE TUBING MUST BE NOTCHED AT THE TIE BAR LOCATIONS.



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.