

APPROVED BY
BUREAU OF EXPLOSIVES

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SHILLELAGH




LOADING AND BRACING • WITH WOODEN
DUNNAGE IN SIDE OPENING ISO
CONTAINERS OF GUIDED MISSILES,
PACKED IN THE M555 CONTAINER,
PALLETIZED AND UNPALLETIZED

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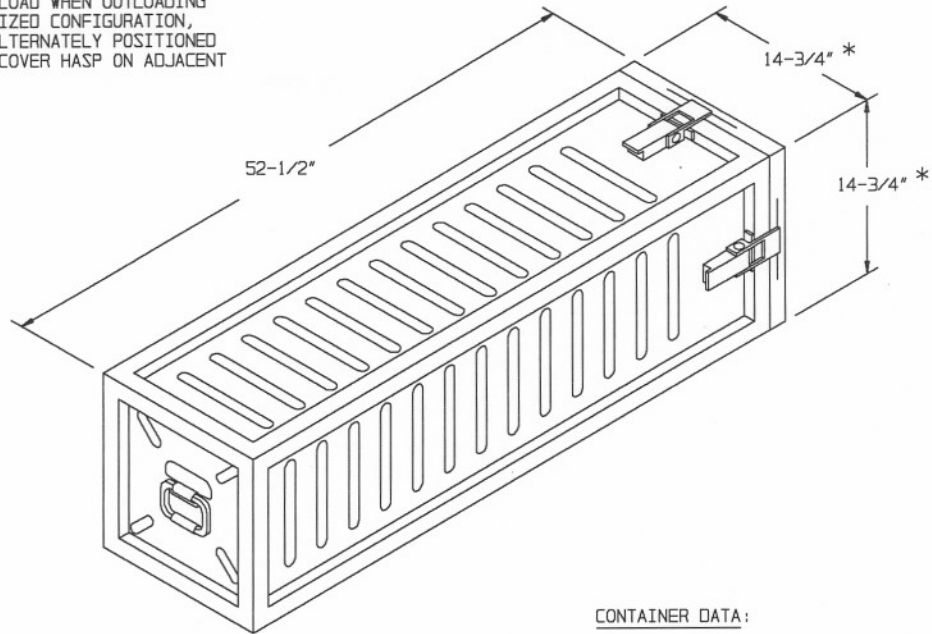
- LOADING AND BRACING SPECIFICATIONS SET FORTH WITHIN THIS DRAWING ARE APPLICABLE TO LOADS THAT ARE TO BE SHIPPED BY TRAILER/CONTAINER-ON-FLATCAR (T/COFC) RAIL CARRIER SERVICE. THESE SPECIFICATIONS MAY ALSO BE USED FOR LOADS THAT ARE TO BE MOVED BY MOTOR OR WATER CARRIERS.

U.S. ARMY MATERIEL COMMAND DRAWING

APPROVED, U.S. ARMY MISSILE COMMAND 	DRAFTSMAN	TECHNICIAN	ENGINEER
		G. GUAY	
APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND 	VALIDATION ENGINEERING DIVISION	TRANSPORTATION ENGINEERING DIVISION	LOGISTICS ENGINEERING OFFICE
U.S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL	 NOVEMBER 1993		
	CLASS	DIVISION	DRAWING
	19	48	8205
			FILE
			GM15SH3

DO NOT SCALE

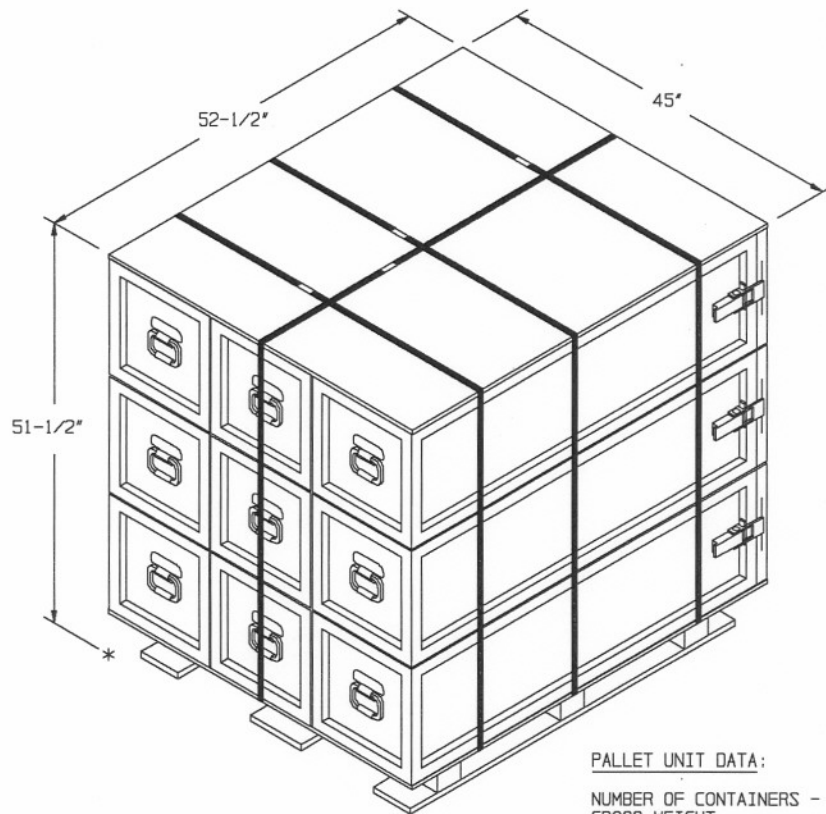
* THESE 14-3/4" HEIGHT AND WIDTH DIMENSIONS DO NOT INCLUDE THE 1/8" (APPROX) THICKNESS OF THE CLOSING HASP ON EACH FACE OF THE CONTAINER. TO PROVIDE FOR A STABLE LOAD WHEN OUTLOADING THIS ITEM IN AN UNPALLETIZED CONFIGURATION, THE CONTAINERS MUST BE ALTERNATELY POSITIONED END-FOR-END SO THAT THE COVER HASP ON ADJACENT CONTAINERS DO NOT TOUCH.



CONTAINER

CONTAINER DATA:

GROSS WEIGHT - - - - - 116 POUNDS (APPROX)
 CUBE - - - - - 6.8 CUBIC FEET

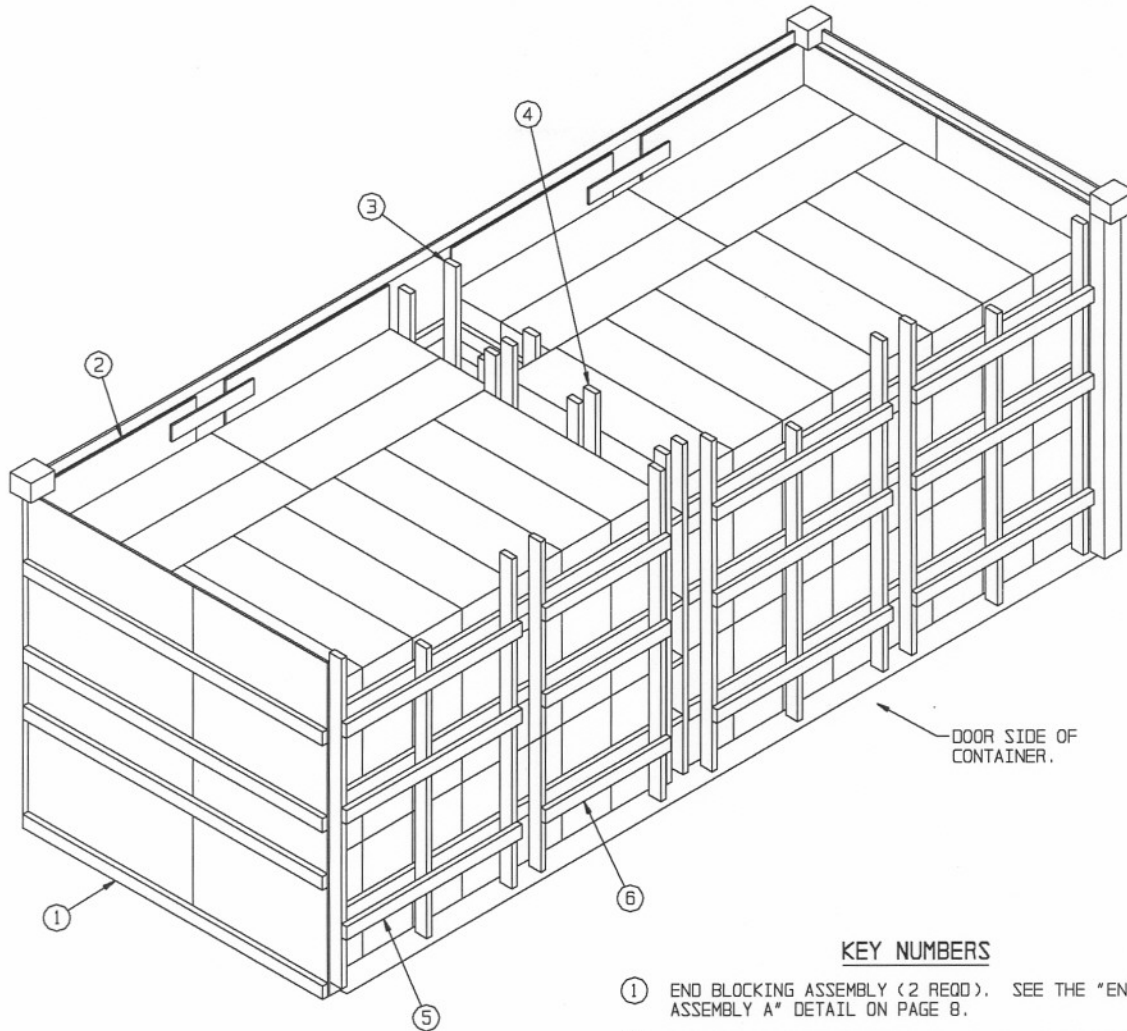


PALLET UNIT

PALLET UNIT DATA:

NUMBER OF CONTAINERS - - - NINE (9)
 GROSS WEIGHT - - - - - 1,167 POUNDS (APPROX)
 CUBE - - - - - 70.5 CUBIC FEET

CONTAINER AND PALLET UNIT DETAIL



ISOMETRIC VIEW

DOOR SIDE OF CONTAINER.

KEY NUMBERS

- ① END BLOCKING ASSEMBLY (2 REQD). SEE THE "END BLOCKING ASSEMBLY A" DETAIL ON PAGE 8.
- ② SIDE FILL ASSEMBLY (2 REQD). SEE THE "SIDE FILL ASSEMBLY A" DETAIL ON PAGE 9.
- ③ FILLER ASSEMBLY (1 REQD). SEE THE "FILLER ASSEMBLY A" DETAIL ON PAGE 11.
- ④ CENTER GATE (1 REQD). SEE THE "CENTER GATE A" DETAIL ON PAGE 10.
- ⑤ SIDE FILL ASSEMBLY (3 REQD). SEE THE "SIDE FILL ASSEMBLY B" DETAIL ON PAGE 9.
- ⑥ SIDE FILL ASSEMBLY C (1 REQD). SEE THE "NOTE ▲" ON PAGE 9.

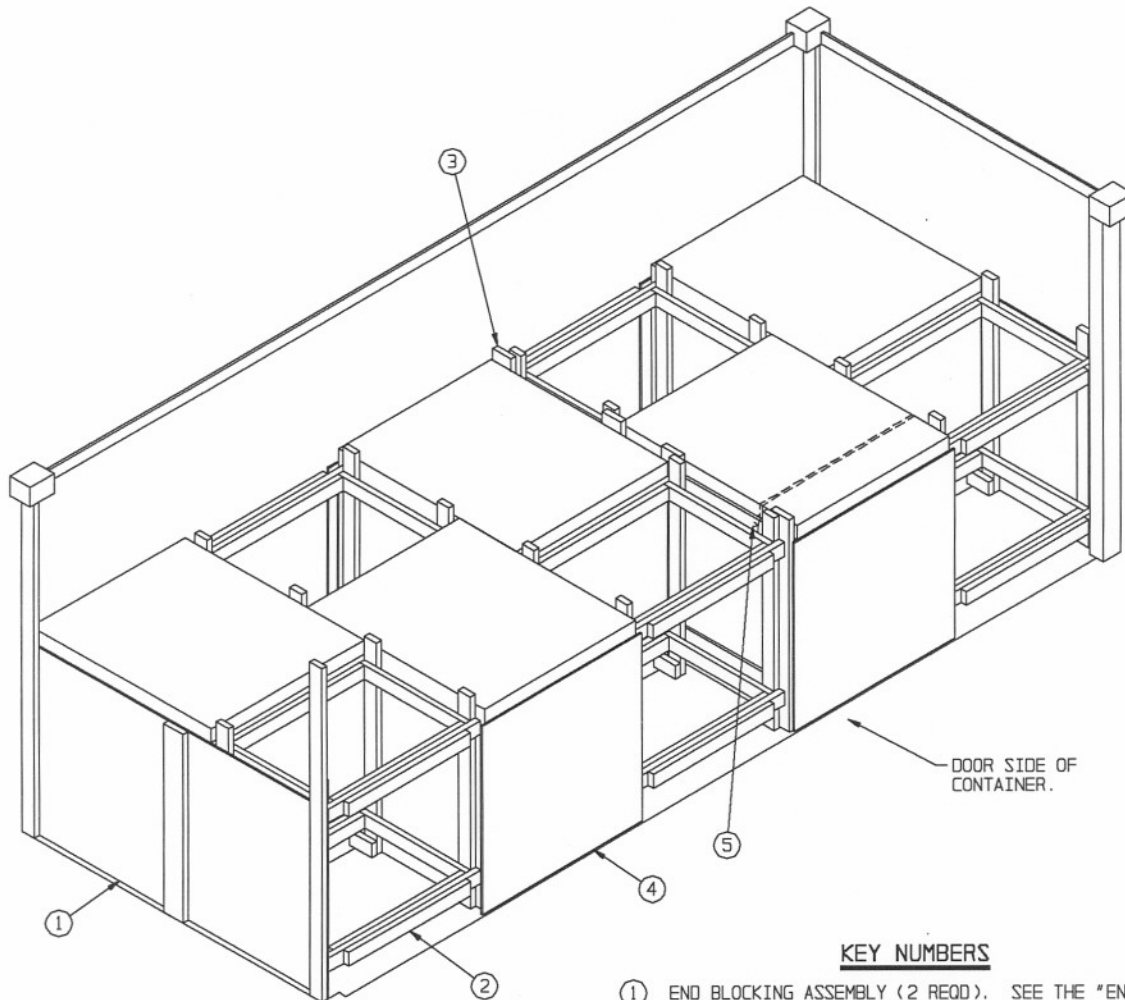
RECOMMENDED SEQUENTIAL LOADING PROCEDURES

1. PREFABRICATE TWO END BLOCKING ASSEMBLIES "A", ONE FILLER ASSEMBLY "A", ONE CENTER GATE "A", TWO SIDE FILL ASSEMBLIES "A", THREE SIDE FILL ASSEMBLIES "B" AND ONE SIDE FILL ASSEMBLY "C".
2. INSTALL ONE END BLOCKING ASSEMBLY, ONE SIDE FILL ASSEMBLY "A" AND LOAD 20 CONTAINERS.
3. REPEAT STEP 2.
4. INSTALL THE FILLER ASSEMBLY.
5. LOAD THIRTY-FIVE CONTAINERS.
6. LOAD FORTY CONTAINERS.
7. INSTALL THE CENTER FILL ASSEMBLY, THREE SIDE FILL ASSEMBLIES "B" AND ONE SIDE FILL ASSEMBLY "C".

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	462	308
NAILS	NO. REQD	POUNDS
6d (2")	516	3
10d (3")	692	10-3/4
PLYWOOD, 1/2"	216.14 SQ FT REQD	297.26 LBS

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CONTAINERS	115	13,340 LBS
DUNNAGE		772 LBS
CONTAINER		6,050 LBS
TOTAL WEIGHT		20,162 LBS (APPROX)



ISOMETRIC VIEW

KEY NUMBERS

- ① END BLOCKING ASSEMBLY (2 REQD). SEE THE "END BLOCKING ASSEMBLY B" DETAIL ON PAGE 8.
- ② FILLER ASSEMBLY (5 REQD). SEE THE "FILLER ASSEMBLY B" DETAIL ON PAGE 11.
- ③ CENTER GATE (1 REQD). SEE THE "CENTER GATE B" DETAIL ON PAGE 10.
- ④ SIDE FILL ASSEMBLY (5 REQD). SEE THE "SIDE FILL ASSEMBLY C" DETAIL ON PAGE 12.
- ⑤ TIE WIRE, NO. 14 GAGE WIRE 18" LONG (2 REQD). INSTALL TO FORM A COMPLETE LOOP AROUND THE TOP HORIZONTAL PIECE OF PIECE MARKED ③ AND A PALLET UNIT STRAP, ONE AT EACH END. BRING END TOGETHER AND TWIST TAUT.

RECOMMENDED SEQUENTIAL LOADING PROCEDURES

1. PREFABRICATE TWO END BLOCKING ASSEMBLIES "B", FIVE FILLER ASSEMBLIES "B", ONE CENTER GATE "B" AND FIVE SIDE FILL ASSEMBLIES "C".
2. INSTALL ONE END BLOCKING ASSEMBLY, ONE SIDE FILL ASSEMBLY, LOAD ONE PALLET UNIT AND INSTALL ONE FILLER ASSEMBLY.
3. REPEAT STEP 2.
4. INSTALL ONE FILLER ASSEMBLY, LOAD ONE PALLET UNIT AND INSTALL ONE SIDE FILL ASSEMBLY.
5. REPEAT STEP 4.
6. INSTALL ONE SIDE FILL ASSEMBLY, LOAD ONE PALLET UNIT AND INSTALL THE CENTER GATE WITH TIE WIRES AND ONE FILLER ASSEMBLY.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	15	5
2" X 4"	363	242
2" X 6"	18	18
NAILS	NO. REQD	POUNDS
6d (2")	69	1/2
10d (3")	320	5
WIRE, NO. 14 GAGE	3' REQD	NIL
PLYWOOD 1/2"	137.33 SQ FT REQD	188.82 LBS

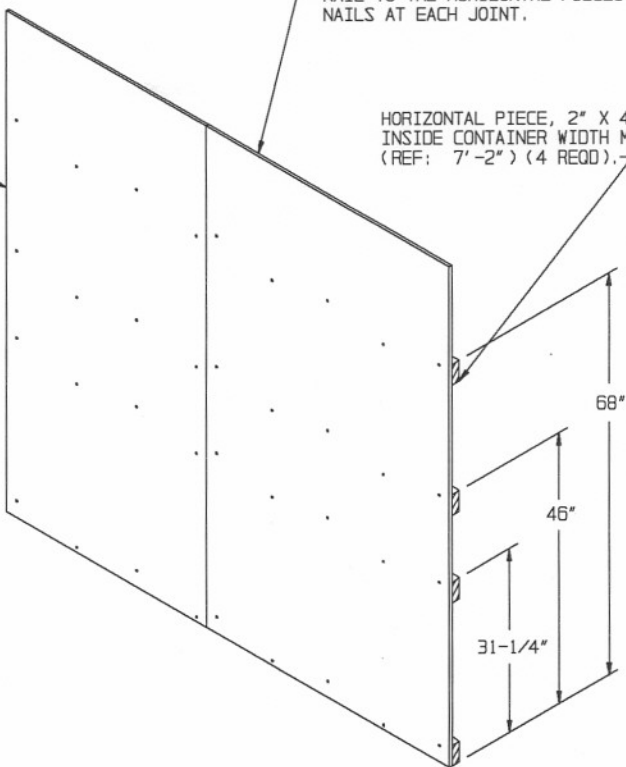
LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	5	5,835 LBS
DUNNAGE		724 LBS
CONTAINER		6,050 LBS
TOTAL WEIGHT		12,609 LBS (APPROX)

PLYWOOD, 1/2" X 38" BY INSIDE CONTAINER HEIGHT MINUS 1" (REF: 7'-1") (1 REQD). NAIL TO THE HORIZONTAL PIECES W/4-6d NAILS AT EACH JOINT.

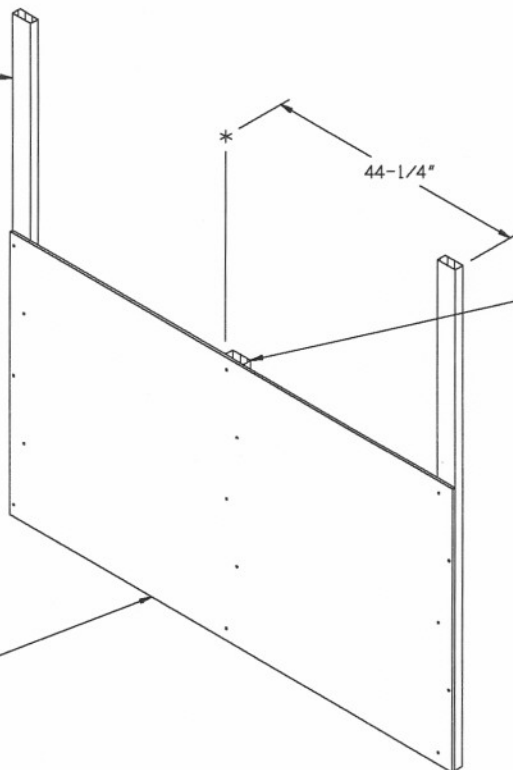
PLYWOOD, 1/2" X 48" BY INSIDE CONTAINER HEIGHT MINUS 1" (REF: 7'-1") (1 REQD). NAIL TO THE HORIZONTAL PIECES W/5-6d NAILS AT EACH JOINT.

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



END BLOCKING ASSEMBLY A

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

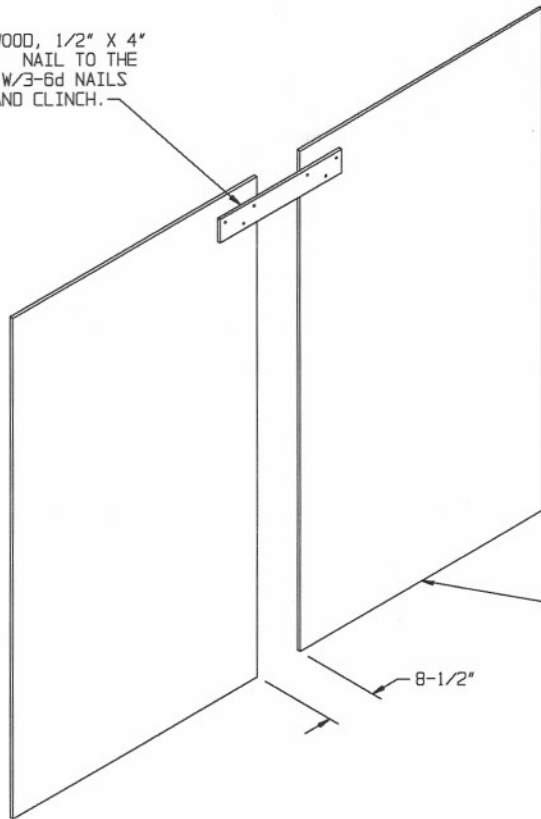


CENTER BEARING PIECE, 2" X 4" X 48" (1 REQD).

PLYWOOD, 1/2" X 48" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-2") (1 REQD). NAIL TO THE BUFFER PIECES AND CENTER BEARING PIECE W/5-6d NAILS AT EACH JOINT.

END BLOCKING ASSEMBLY B

TIE PIECE, PLYWOOD, 1/2" X 4" X 24" (1 REQD). NAIL TO THE PLYWOOD PIECES W/3-6d NAILS AT EACH JOINT AND CLINCH.

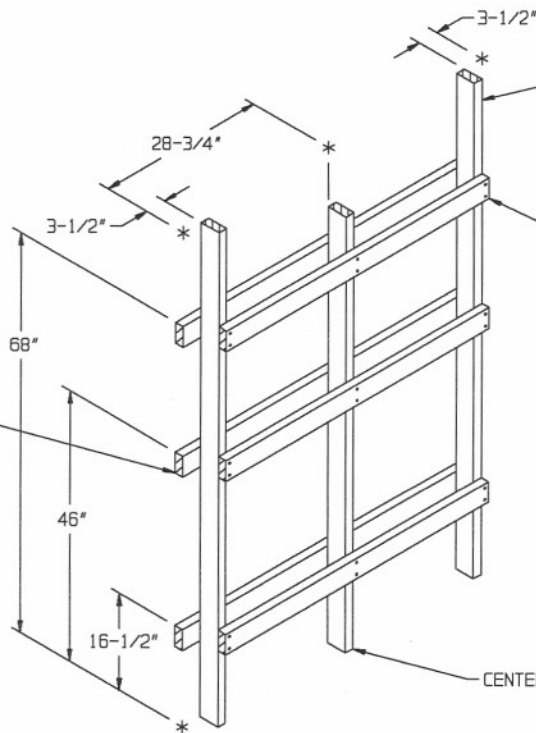


PLYWOOD, 1/2" X 48" BY INSIDE CONTAINER HEIGHT MINUS 1" (REF: 7'-1") (2 REQD).

8-1/2"

SIDE FILL ASSEMBLY A

BEARING PIECE, 2" X 4" X 59" (3 REQD). NAIL TO THE VERTICAL PIECES W/2-10d NAILS AT EACH JOINT.



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

FILL PIECE, 2" X 4" X 52" (3 REQD). NAIL TO THE VERTICAL PIECES W/2-10d NAILS AT EACH JOINT.

CENTER VERTICAL, 2" X 4" X 72" (1 REQD).

NOTE ▲:

"SIDE FILL ASSEMBLY C", PIECE MARKED © ON PAGE 4, WILL BE IDENTICAL TO "SIDE FILL ASSEMBLY B" WITH THE FOLLOWING EXCEPTIONS: THE CENTER FILL PIECE WILL BE DELETED, THE BEARING PIECES WILL BE 44-1/2" LONG AND THE FILL PIECES WILL BE 37-1/2" LONG.

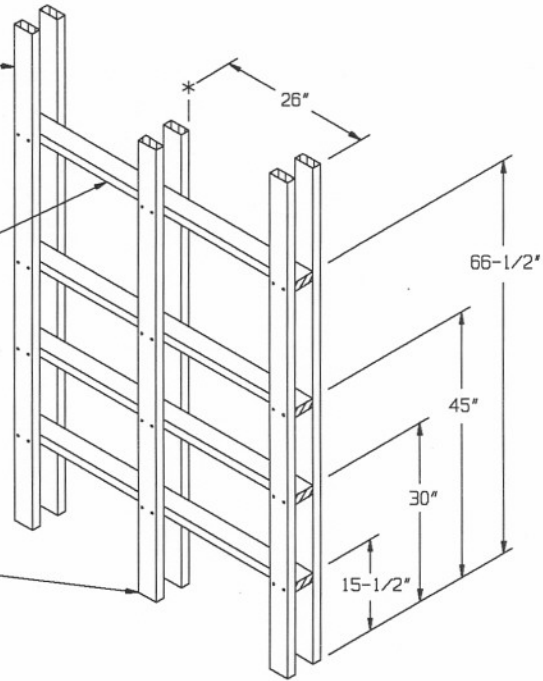
SIDE FILL ASSEMBLY B

DETAILS

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

SPACER PIECE, 2" X 4" X 54" (4 REQD).

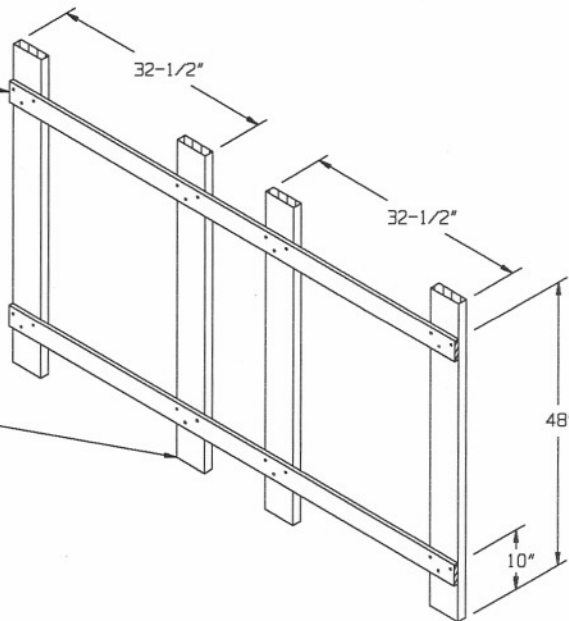
CENTER VERTICAL PIECE, 2" X 4"
X 6'-6" (2 REQD). NAIL TO THE
SPACER PIECES W/2-10d NAILS AT
EACH JOINT.



CENTER GATE A

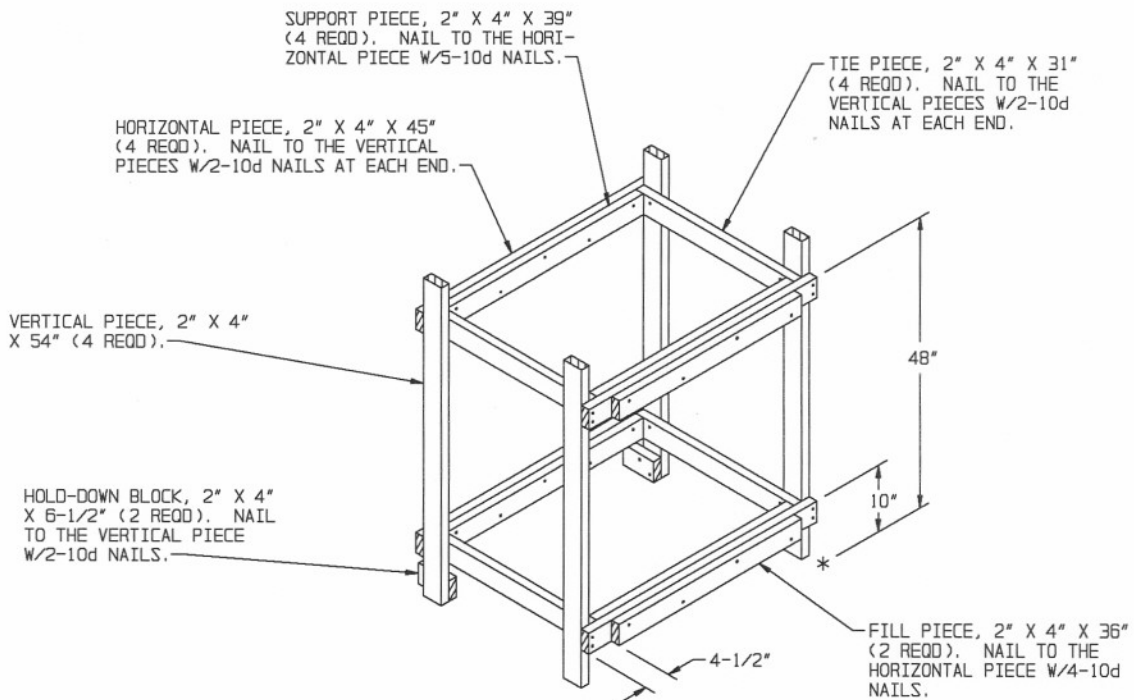
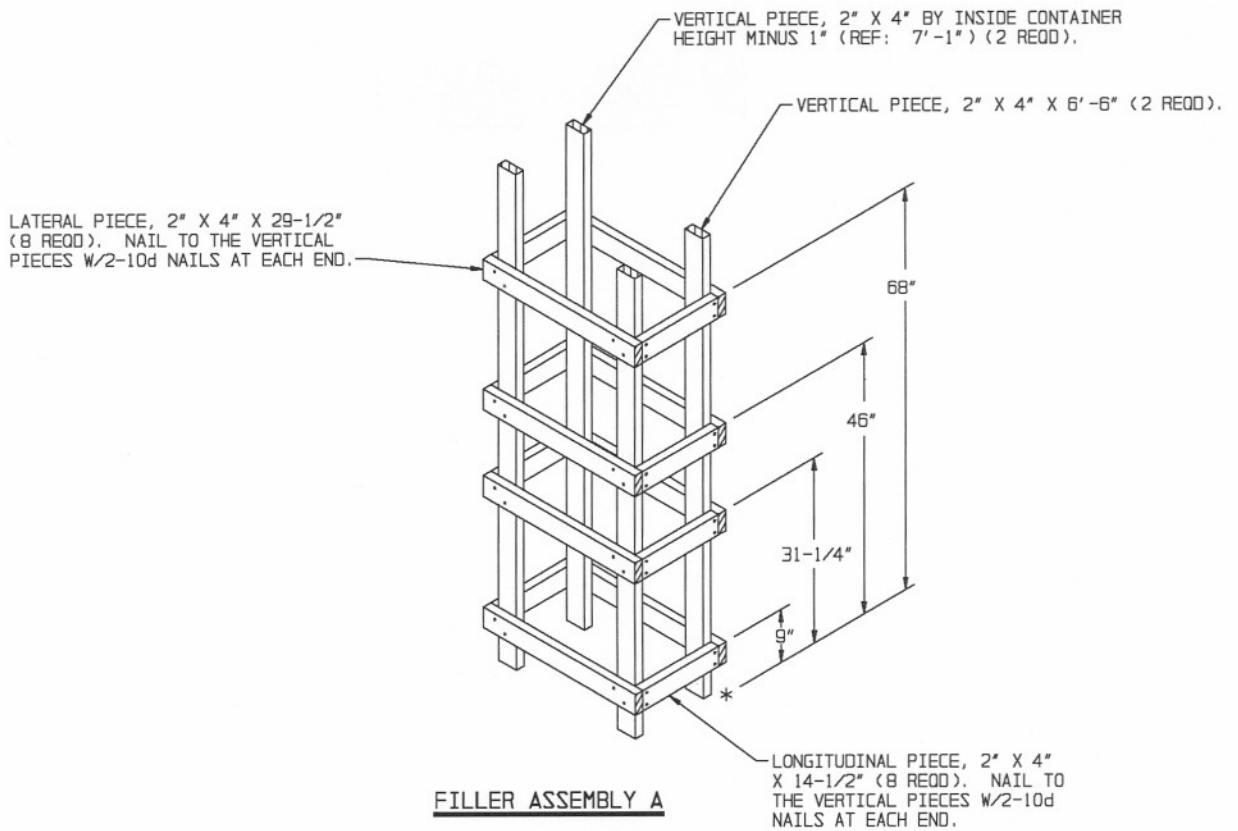
HORIZONTAL PIECE, 1" X 4" X 7'-4" (2 REQD).
NAIL TO THE VERTICAL PIECES W/3-6d NAILS
AT EACH JOINT.

VERTICAL PIECE,
2" X 6" X 54"
(4 REQD).



CENTER GATE B

DETAILS



DETAILS

