

D. M. Healy

DATE 4-27-95

LOADING AND BRACING WITH WOODEN DUNNAGE IN HALF-HIGH ISO CONTAINERS OF PALLETIZED UNITS OF SEPARATE LOADING PROJECTILES

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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 ARMAMENT, MUNITIONS AND CHEMICAL COMMAND <i>Timothy R. Fore</i>	DRAFTSMAN	TECHNICIAN	ENGINEER
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MAY 1995			
	CLASS	DIVISION	DRAWING
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			FILE
			15PE1008

DO NOT SCALE

GENERAL NOTES

(GENERAL NOTES CONTINUED)

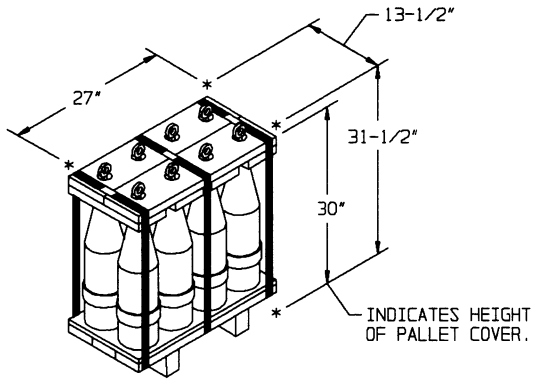
- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1 AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- B. THE SPECIFIED OUTLOADING PROCEDURES ARE APPLICABLE TO LOADS OF PALLETIZED SEPARATE LOADING PROJECTILES. SUBSEQUENT REFERENCE TO PALLET UNIT HEREIN MEANS THE PALLET UNIT WITH AMMUNITION ITEMS. SEE PAGE 3 FOR DETAILS OF THE PALLET UNITS. CAUTION: REGARDLESS OF THE QUANTITY OF PALLET UNITS TO BE SHIPPED, THE "MAXIMUM GROSS WEIGHT" OF THE HALF-HIGH ISO CONTAINER MUST NOT BE EXCEEDED.
- C. THE LOAD AS SHOWN IS BASED ON A 4,800 POUND 20' LONG BY 8' WIDE BY 4'-3" HIGH HALF-HIGH ISO CONTAINER WITH INSIDE DIMENSIONS OF 19'-2-1/2" LONG BY 90-1/2" WIDE BY 40-1/2" HIGH NEAR THE SIDE RAILS (MAXIMUM HEIGHT IS GREATER TOWARD THE CENTER OF THE CONTAINER) AND A MAXIMUM GROSS WEIGHT OF 52,910 POUNDS. 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 AND SIDEWALLS). 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 VERTICAL OR FILL PIECES ON THE SEPARATOR GATES. NAIL EACH ADDITIONAL PIECE WITH APPROPRIATELY SIZED NAIL EVERY 12". ADDITIONALLY, THE THICKNESS AND/OR QUANTITY OF THE VERTICAL OR FILL PIECES IN THE SEPARATOR GATES MAY BE ADJUSTED AS REQUIRED TO FACILITATE VARIANCE IN THE PALLET UNIT SIZE OR THE INTERIOR CONTAINER DIMENSIONS.
- 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 AND REAR WALLS. PIECES OF DUNNAGE MATERIAL MUST BE LAMINATED TO THE BUFFER PIECES ON THE FORWARD/REAR BLOCKING ASSEMBLIES, FORWARD STRUT ASSEMBLIES, OR FILL MATERIAL 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. NOTE: THE REAR CORNER POSTS IN THE HALF-HIGH CONTAINER WILL PROJECT INTO THE LOAD AREA SUFFICIENTLY TO ALLOW THE FILL PIECES TO BEAR AGAINST THE EDGE OF THE END DOOR/RAMP.
- H. CAUTION: DO NOT NAIL DUNNAGE MATERIAL TO THE CONTAINER WALLS OR FLOOR. ALL NAILING WILL BE WITHIN THE DUNNAGE.

(CONTINUED AT RIGHT)

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.
- ANTI-CHAFING MATERIAL - - - - - : MIL-B-121 (OR EQUAL); NEUTRAL BARRIER MATERIAL.

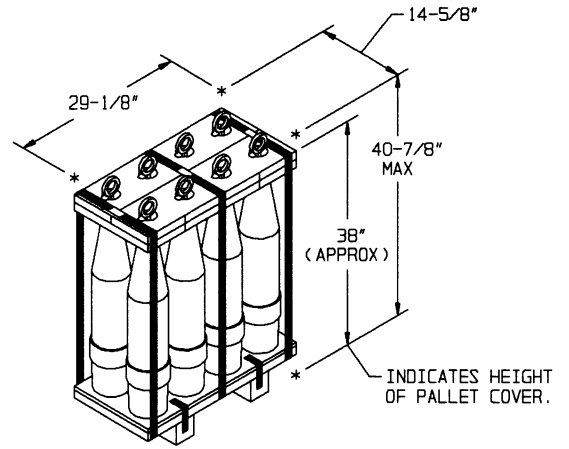
- J. PORTIONS OF THE CONTAINER DEPICTED WITHIN THIS DRAWING, SUCH AS THE SIDEWALL AND TOP RAILS, HAVE NOT BEEN SHOWN IN THE LOAD VIEWS FOR CLARITY PURPOSES.
- K. MAXIMUM LOAD WEIGHT CRITERIA:
THE MAXIMUM LOAD WEIGHTS ARE CONTROLLED BY EQUIPMENT CAPABILITY FACTORS. ALTHOUGH THE HEAVIEST MAXIMUM LOADS 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.
- L. 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.
- M. 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.
- N. 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 25.4 MM AND ONE POUND EQUALS 0.454 KG.
- O. THE QUANTITY OF PALLET UNITS SHOWN IN THE LOADS MAY BE REDUCED FOR SHIPMENT, IF DESIRED. SEE THE OMITTED UNIT ASSEMBLY ON PAGE 16 AND THE "TYPICAL REDUCED LOAD PROVISIONS" ON PAGE 14. 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, LADING UNITS NORMALLY MAY BE ELIMINATED FROM THE CENTER OF THE LOAD.
 - 2. IF A LOAD IS REDUCED BY A LARGE AMOUNT, 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.
- P. THE 4" X 4" STRUTS DEPICTED IN LOADS WITHIN THIS DRAWING ARE CAPABLE OF SUPPORTING 5,000 POUNDS EACH. FOR EXAMPLE, IF A LOAD OF 30 PALLET UNITS IS STRUTTED AT THE FORWARD END OF THE CONTAINER, AND EACH PALLET UNIT WEIGHS 1,250 POUNDS, EIGHT STRUTS ARE REQUIRED, 37,500 POUNDS DIVIDED BY 5,000 POUNDS EQUATES TO EIGHT STRUTS. THE QUANTITY OF STRUTS REQUIRED IS NOT SOLELY DETERMINED BY THE WEIGHT OF THE LOAD. THE LADING UNITS MUST BE FULLY SUPPORTED AND BLOCKED ONLY AGAINST SECTIONS THAT ARE STRONG ENOUGH TO SUPPORT THE FULL LOAD. FOR EXAMPLE, DO NOT ALIGN ONE STRUT WITH A PALLET COVER ASSEMBLY WITHOUT HAVING A RESPECTIVE STRUT ALIGNED WITH THE PALLET BASE ASSEMBLY.
- Q. LOAD-BLOCKING STRUTS WHICH ARE 48" OR LONGER MUST BE STIFFENED BY THE APPLICATION OF HORIZONTAL AND VERTICAL STRUT BRACING AS SHOWN BY KEY NUMBERS ⑤ AND ⑥ ON PAGE 14. BRACING IS NOT REQUIRED IF THE STRUTS FOR THE LOAD BEING SHIPPED ARE SHORTER THAN 48". THE LENGTH OF THE LOAD-BLOCKING STRUTS SHOULD BE KEPT AS SHORT AS POSSIBLE (APPROX 18" MINIMUM), BUT IN THE EVENT IT IS NECESSARY TO USE STRUTS WHICH ARE 8'-0" OR MORE IN LENGTH, IT WILL BE NECESSARY TO APPLY AN ADDITIONAL SET OF HORIZONTAL AND VERTICAL STRUT BRACING PIECES. STRUT BRACING SHOULD BE APPLIED SO AS TO PROVIDE NEARLY EQUAL SPACES BETWEEN THE BRACING PIECES AND THE ENDS OF THE STRUTS AND/OR BETWEEN ADJACENT STRUT BRACING PIECES.



155MM SLP, 8/SMALL WOODEN PALLET

800 POUNDS (APPROX)

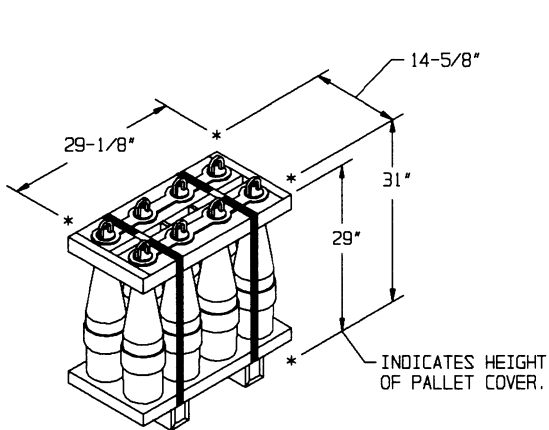
REFER TO THE LOAD ON PAGE 4



155MM SLP, 8/LARGE WOODEN PALLET

874 POUNDS (APPROX)

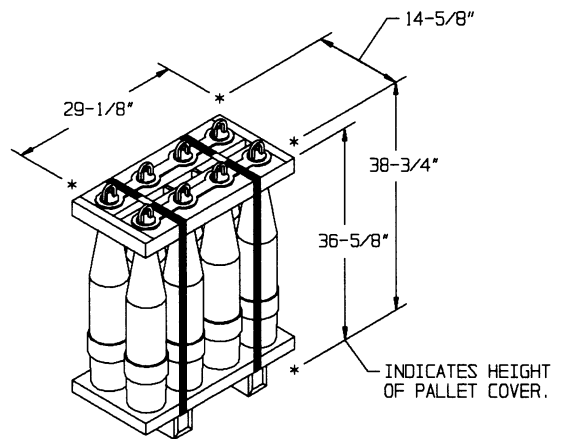
REFER TO THE LOAD ON PAGE 6



155MM SLP, 8 SHORT/METAL PALLET

857 POUNDS (APPROX)

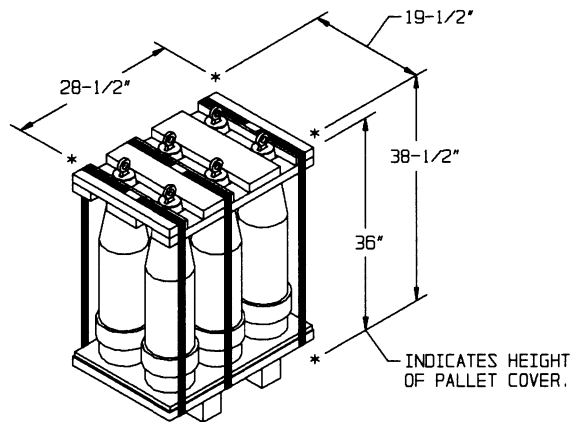
REFER TO THE LOAD ON PAGE 8



155MM SLP, 8 TALL/METAL PALLET

897 POUNDS (APPROX)

REFER TO THE LOAD ON PAGE 10



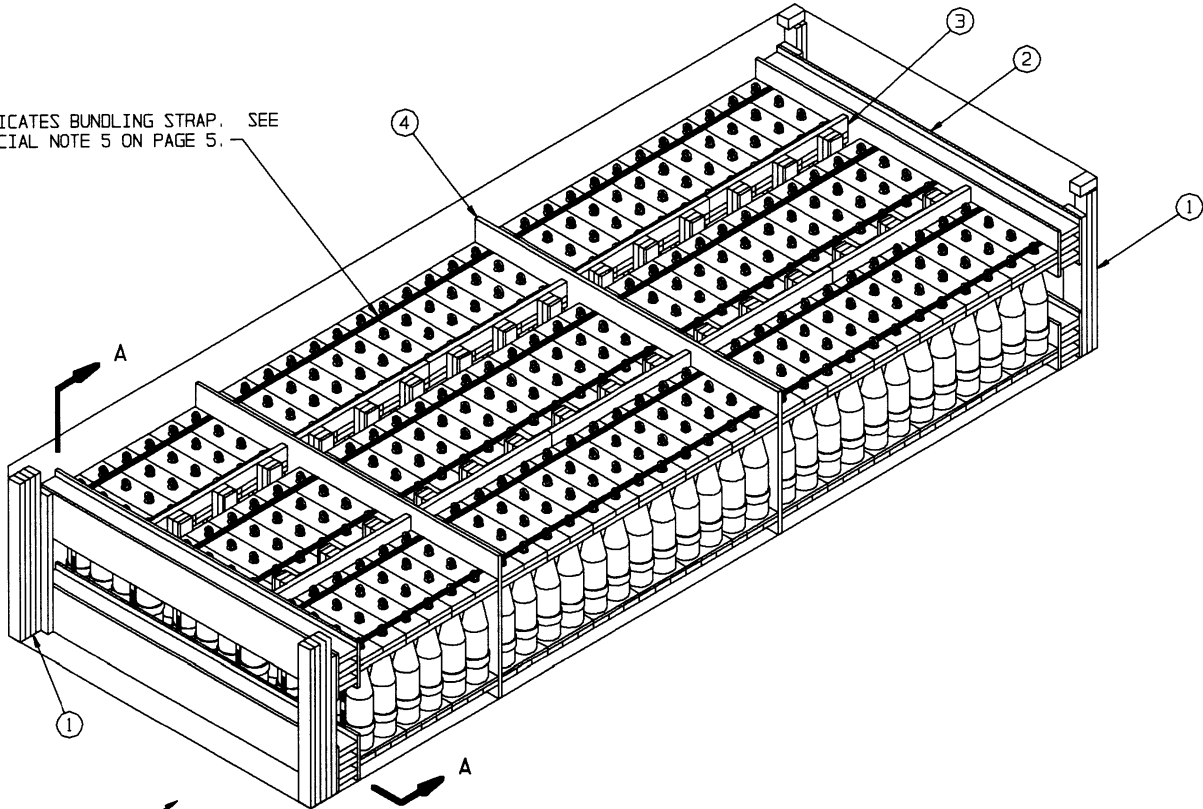
8" SLP, 6/WOODEN PALLET

1,256 POUNDS (APPROX)

REFER TO THE LOAD ON PAGE 12

PALLET UNIT DETAILS

INDICATES BUNDLING STRAP. SEE SPECIAL NOTE 5 ON PAGE 5.

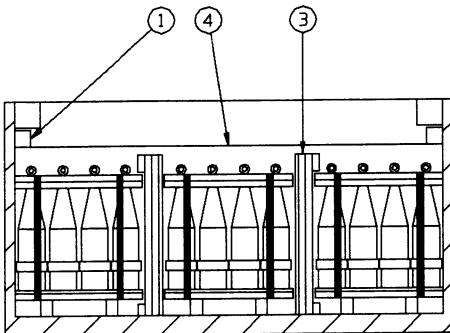


REAR OF CONTAINER.

ISOMETRIC VIEW

KEY NUMBERS

- ① FILL MATERIAL, 4" WIDE BY 40" LONG MATERIAL (AS REQD). NAIL THE FIRST PIECE TO THE FORWARD/REAR BLOCKING ASSEMBLY W/5 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 SPECIAL NOTE 2 ON PAGE 5.
- ② FORWARD/REAR BLOCKING ASSEMBLY (2 REQD, TYPE "A"). SEE THE DETAIL ON PAGE 17 AND SPECIAL NOTE 3 ON PAGE 5.
- ③ SEPARATOR GATE A (10 REQD). SEE THE DETAIL ON PAGE 5 AND SPECIAL NOTE 4 ON PAGE 5.
- ④ PLYWOOD, 1/2" X 36" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-5-1/2") (2 REQD).



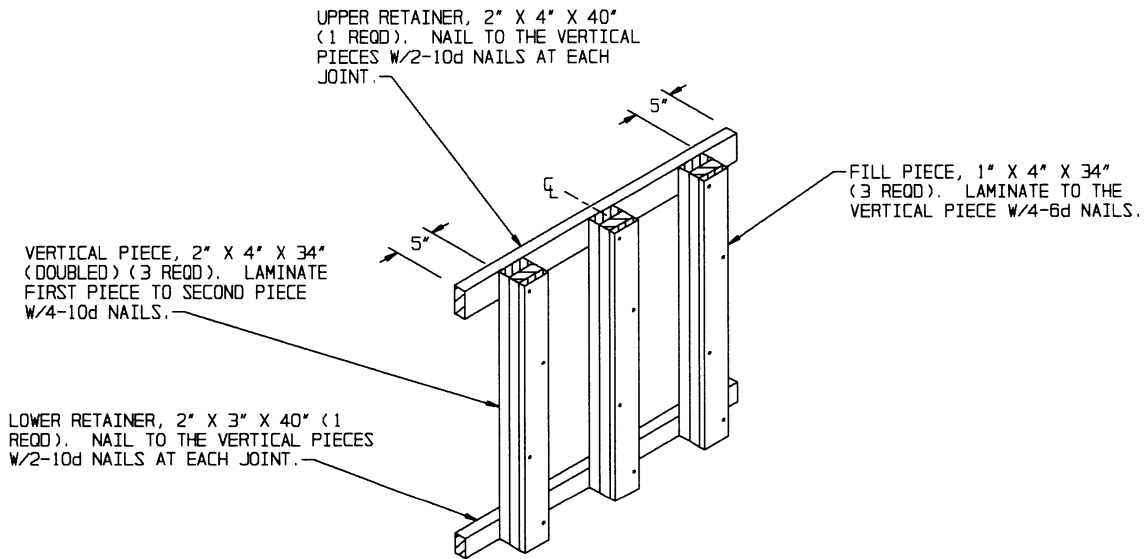
SECTION A-A

RECOMMENDED SEQUENTIAL LOADING PROCEDURES

1. PREFABRICATE TWO FORWARD/REAR BLOCKING ASSEMBLIES, TYPE "A", NAIL FILL MATERIAL TO EACH BUFFER PIECE ON THE FORWARD BLOCKING ASSEMBLY, AND FABRICATE TEN SEPARATOR GATES "A".
2. INSTALL THE FORWARD BLOCKING ASSEMBLY.
3. LOAD 18 PALLET UNITS AND INSTALL FOUR SEPARATOR GATES.
4. POSITION PLYWOOD, PIECE MARKED ④, AGAINST ALREADY LOADED PALLET UNITS.
5. REPEAT STEPS 3 AND 4.
6. LOAD NINE PALLET UNITS AND INSTALL TWO SEPARATOR GATES.
7. INSTALL THE REAR BLOCKING ASSEMBLY.
8. INSTALL THE FILL MATERIAL BETWEEN THE REAR BLOCKING ASSEMBLY AND THE CORNER POST AND/OR EDGE OF DOOR.

SPECIAL NOTES:

1. THE LOAD AS DEPICTED ON PAGE 4 IS FOR SMALL WOODEN PALLET UNITS OF 155MM SEPARATE LOADING PROJECTILES.
2. AT LEAST TWO PIECES OF FILL MATERIAL WILL BE LAMINATED TO BOTH BUFFER PIECES ON THE FORWARD BLOCKING ASSEMBLY BEFORE THE ASSEMBLY IS INSTALLED INTO THE CONTAINER. NAIL AS SPECIFIED IN KEY NUMBER 1 ON PAGE 4. SEE GENERAL NOTE "G" ON PAGE 2.
3. THE WIDTH OF THE REAR BLOCKING ASSEMBLY MAY VARY FROM THE WIDTH OF THE FORWARD BLOCKING ASSEMBLY. SEE THE DETAIL ON PAGE 17. ALSO, TO FACILITATE INSTALLATION, THE BUFFER PIECES MAY BE NAILED TO THE BOX BEAMS OF THE REAR BLOCKING ASSEMBLY AFTER FIRST POSITIONING THE INDIVIDUAL BOX BEAMS AT THE REAR OF THE LOAD. CARE MUST BE EXERCISED TO ENSURE THAT THE BOX BEAMS ARE INSTALLED AT THE CORRECT HEIGHT AND THAT THE REAR BLOCKING ASSEMBLY IS CENTERED ON THE LOAD.
4. THE QUANTITY AND/OR THICKNESS OF THE VERTICAL AND FILL PIECES USED ON THE SEPARATOR GATES, PIECE MARKED ③, MUST BE VARIED AS NECESSARY TO ENSURE NO MORE THAN 1-1/2" OF VOID ACROSS THE WIDTH OF THE LOAD. SEE GENERAL NOTE "D" ON PAGE 2.
5. PALLET UNITS WHICH ARE ALREADY BUNDLED TOGETHER WITH STEEL STRAPPING INTO GROUPS OF THREE MAY REMAIN BUNDLED FOR SHIPMENT. ONLY THE BUNDLING STRAPS HAVE BEEN SHOWN IN THE LOAD ON PAGE 4, UNITIZATION STRAPS HAVE BEEN OMITTED FOR CLARITY PURPOSES. BUNDLING STRAPS HAVE BEEN SHOWN AS TYPICAL ONLY, AND ARE NOT SPECIFICALLY REQUIRED WHEN LOADING IN ACCORDANCE WITH THE PROCEDURES DETAILED ON PAGE 4.



SEPARATOR GATE A

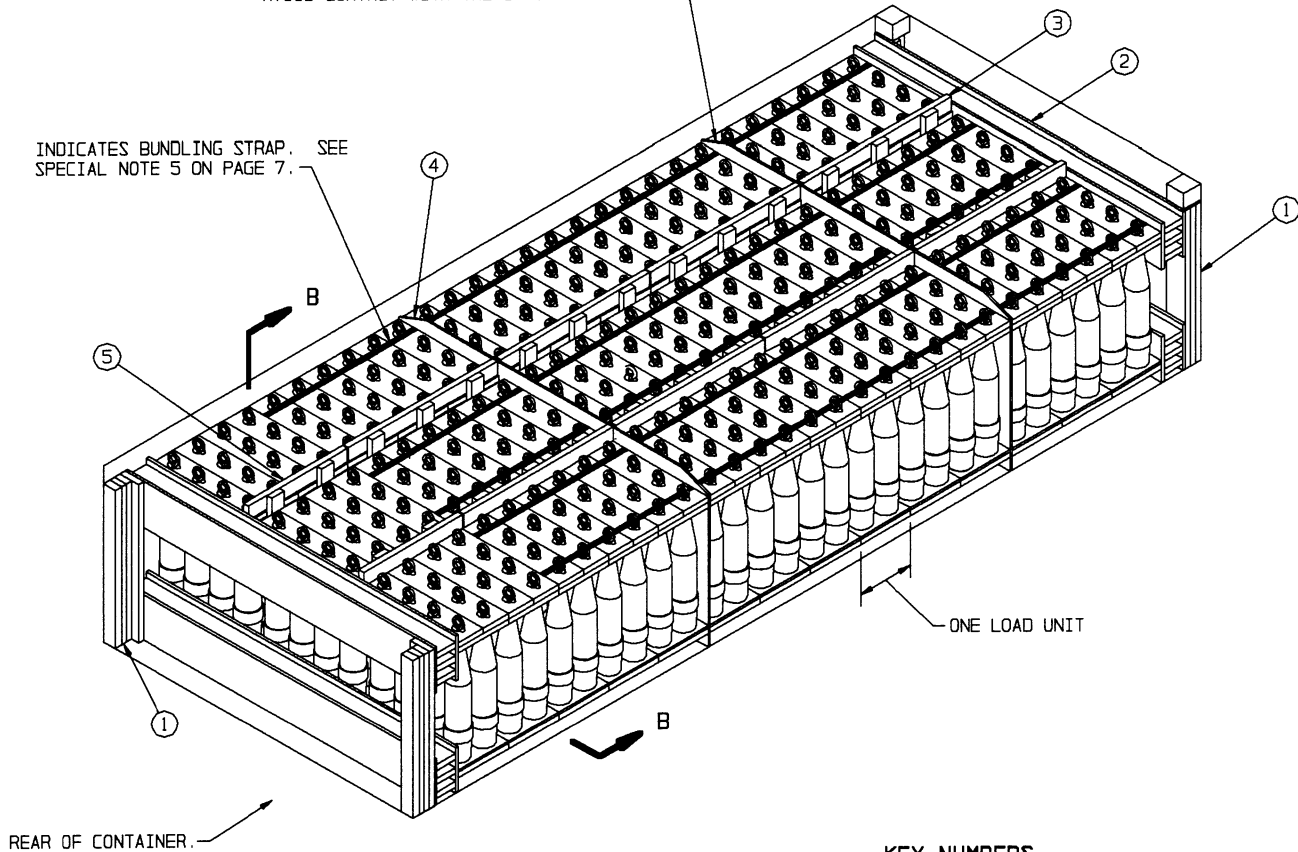
BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	85	29
2" X 3"	34	17
2" X 4"	244	163
2" X 6"	100	100
NAILS	NO. REQD	POUNDS
6d (2")	384	2-1/2
10d (3")	348	5-1/2
PLYWOOD, 1/2" - - -	44.75 SQ FT REQD - -	61.54 LBS
PLYWOOD, 3/4" - - -	55.91 SQ FT REQD - -	115.32 LBS

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	45	36,000 LBS
DUNNAGE		803 LBS
CONTAINER		4,800 LBS
TOTAL WEIGHT		41,603 LBS (APPROX)

BOTH CORNERS OF THE PLYWOOD, PIECE MARKED ④, WILL BE BEVELED, AS REQUIRED, TO AVOID CONTACT WITH THE INSIDE TOP RAIL.

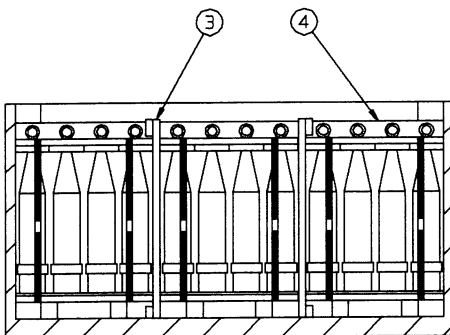
INDICATES BUNDLING STRAP. SEE SPECIAL NOTE 5 ON PAGE 7.



ISOMETRIC VIEW

KEY NUMBERS

- ① FILL MATERIAL, 4" WIDE BY 40" LONG MATERIAL (AS REQD). NAIL THE FIRST PIECE TO THE FORWARD/REAR BLOCKING ASSEMBLY W/5 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 SPECIAL NOTE 2 ON PAGE 7.
- ② FORWARD/REAR BLOCKING ASSEMBLY (2 REQD, TYPE "B"). SEE THE DETAIL ON PAGE 17 AND SPECIAL NOTE 3 ON PAGE 7.
- ③ SEPARATOR GATE B (8 REQD). SEE THE DETAIL AND SPECIAL NOTE 4 ON PAGE 7.
- ④ PLYWOOD, 1/2" X 41-1/2" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-5-1/2") (2 REQD).
- ⑤ SEPARATOR GATE C (2 REQD). SEE THE DETAIL AND SPECIAL NOTE 4 ON PAGE 7.



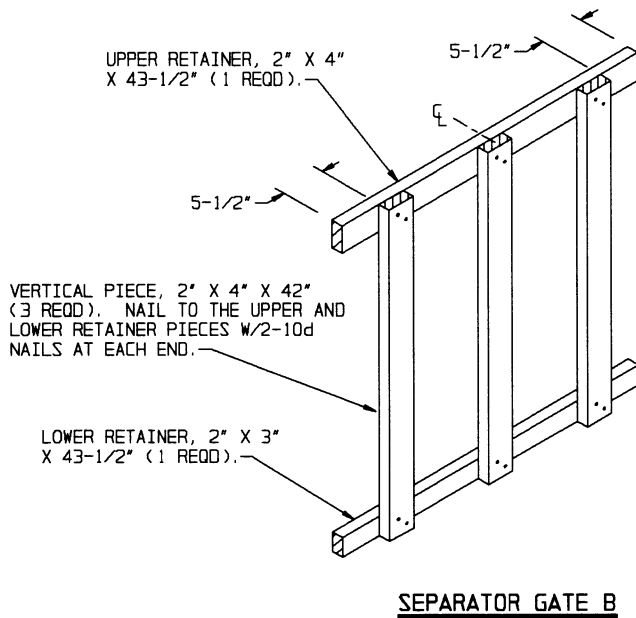
SECTION B-B

RECOMMENDED SEQUENTIAL LOADING PROCEDURES

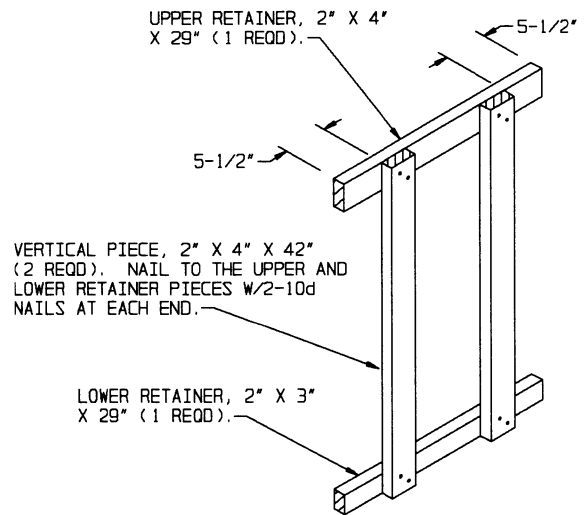
1. PREFABRICATE TWO FORWARD/REAR BLOCKING ASSEMBLIES, TYPE "B", NAIL FILL MATERIAL TO EACH BUFFER PIECE ON THE FORWARD BLOCKING ASSEMBLY, FABRICATE EIGHT SEPARATOR GATES "B" AND TWO SEPARATOR GATES "C".
2. INSTALL THE FORWARD BLOCKING ASSEMBLY.
3. LOAD NINE PALLET UNITS AND INSTALL TWO SEPARATOR GATES "B".
4. POSITION PLYWOOD, PIECE MARKED ④, AGAINST ALREADY LOADED PALLET UNITS.
5. LOAD 18 PALLET UNITS AND INSTALL FOUR SEPARATOR GATES "B".
6. REPEAT STEP 4.
7. LOAD 15 PALLET UNITS AND INSTALL TWO SEPARATOR GATES "B" AND TWO SEPARATOR GATES "C".
8. INSTALL THE REAR BLOCKING ASSEMBLY.
9. INSTALL THE FILL MATERIAL BETWEEN THE REAR BLOCKING ASSEMBLY AND THE CORNER POST AND/OR EDGE OF DOOR.

SPECIAL NOTES:

1. THE LOAD AS DEPICTED ON PAGE 6 IS FOR LARGE WOODEN PALLET UNITS OF 155MM SEPARATE LOADING PROJECTILES.
2. AT LEAST TWO PIECES OF FILL MATERIAL WILL BE LAMINATED TO BOTH BUFFER PIECES ON THE FORWARD BLOCKING ASSEMBLY BEFORE THE ASSEMBLY IS INSTALLED INTO THE CONTAINER. NAIL AS SPECIFIED IN KEY NUMBER 1 ON PAGE 6. SEE GENERAL NOTE "G" ON PAGE 2.
3. THE WIDTH OF THE REAR BLOCKING ASSEMBLY MAY VARY FROM THE WIDTH OF THE FORWARD BLOCKING ASSEMBLY. SEE THE DETAIL ON PAGE 17. ALSO, TO FACILITATE INSTALLATION, THE BUFFER PIECES MAY BE NAILED TO THE BOX BEAMS OF THE REAR BLOCKING ASSEMBLY AFTER FIRST POSITIONING THE INDIVIDUAL BOX BEAMS AT THE REAR OF THE LOAD. CARE MUST BE EXERCISED TO ENSURE THAT THE BOX BEAMS ARE INSTALLED AT THE CORRECT HEIGHT AND THAT THE REAR BLOCKING ASSEMBLY IS CENTERED ON THE LOAD.
4. THE QUANTITY AND/OR THICKNESS OF THE VERTICAL PIECES USED ON THE SEPARATOR GATES, PIECES MARKED ③ AND ⑤, MUST BE VARIED AS NECESSARY TO ENSURE NO MORE THAN 1-1/2" OF VOID ACROSS THE WIDTH OF THE LOAD. SEE GENERAL NOTE "D" ON PAGE 2 AND THE "ALTERNATIVE DETAILS FOR CONTAINERS WITH PROJECTING TOP SIDE RAILS" ON PAGE 18.
5. PALLET UNITS WHICH ARE ALREADY BUNDLED TOGETHER WITH STEEL STRAPPING INTO GROUPS OF THREE MAY REMAIN BUNDLED FOR SHIPMENT UNLESS THEY ARE TO BE POSITIONED IN THE LAST TWO LOAD UNITS NEAR THE DOOR. ONLY THE BUNDLING STRAPS HAVE BEEN SHOWN IN THE LOAD ON PAGE 6, UNITIZATION STRAPS HAVE BEEN OMITTED FOR CLARITY PURPOSES. BUNDLING STRAPS HAVE BEEN SHOWN AS TYPICAL ONLY, AND ARE NOT SPECIFICALLY REQUIRED WHEN LOADING IN ACCORDANCE WITH THE PROCEDURES DETAILED ON PAGE 6.



SEPARATOR GATE B



SEPARATOR GATE C

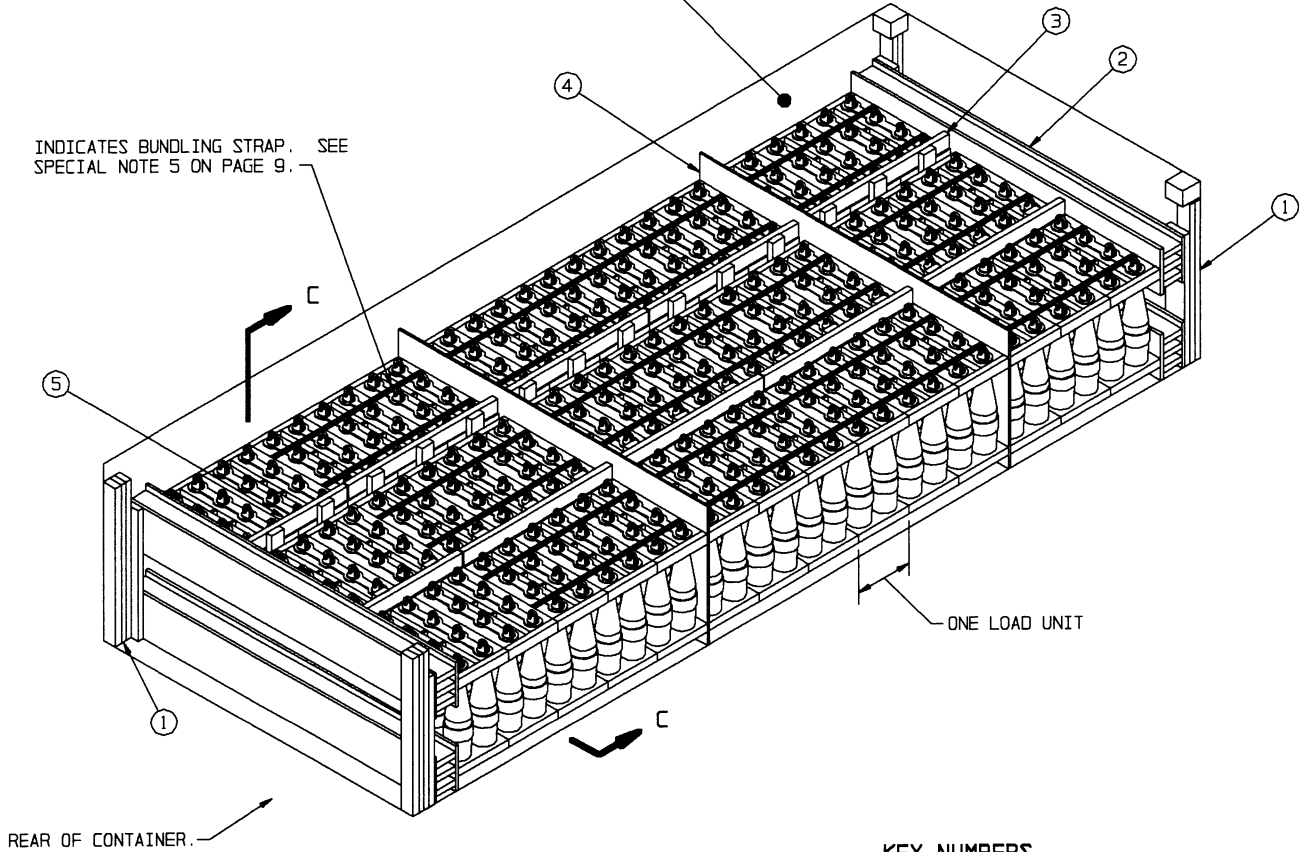
BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 3"	34	17
2" X 4"	166	111
2" X 6"	101	101
NAILS	NO. REQD	POUNDS
6d (2")	264	1-3/4
10d (3")	210	3-1/4
PLYWOOD, 1/2" - - - -	51.59 SQ FT REQD - -	70.94 LBS
PLYWOOD, 3/4" - - - -	55.91 SQ FT REQD - -	115.32 LBS

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT - - - - -	42 - - - - -	36,708 LBS
DUNNAGE - - - - -	- - - - -	650 LBS
CONTAINER - - - - -	- - - - -	4,800 LBS
TOTAL WEIGHT - - - - -		42,158 LBS (APPROX)

ANTI-CHAFING MATERIAL MAY BE INSTALLED AT POINTS OF CONTACT BETWEEN METAL PALLETS AND THE HALF-HIGH CONTAINER, IF DESIRED, TO PREVENT CHAFING DAMAGE.

INDICATES BUNDLING STRAP. SEE SPECIAL NOTE 5 ON PAGE 9.

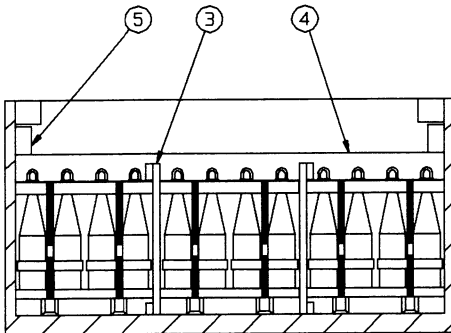


REAR OF CONTAINER.

ISOMETRIC VIEW

KEY NUMBERS

- ① FILL MATERIAL, 4" WIDE BY 40" LONG MATERIAL (AS REQD). NAIL THE FIRST PIECE TO THE FORWARD/REAR BLOCKING ASSEMBLY W/5 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 SPECIAL NOTE 2 ON PAGE 9.
- ② FORWARD/REAR BLOCKING ASSEMBLY (2 REQD, TYPE "C"). SEE THE DETAIL ON PAGE 17 AND SPECIAL NOTE 3 ON PAGE 9.
- ③ SEPARATOR GATE D (8 REQD). SEE THE DETAIL AND SPECIAL NOTE 4 ON PAGE 9.
- ④ PLYWOOD, 1/2" X 36" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-5-1/2") (2 REQD).
- ⑤ SEPARATOR GATE E (2 REQD). SEE THE DETAIL AND SPECIAL NOTE 4 ON PAGE 9.



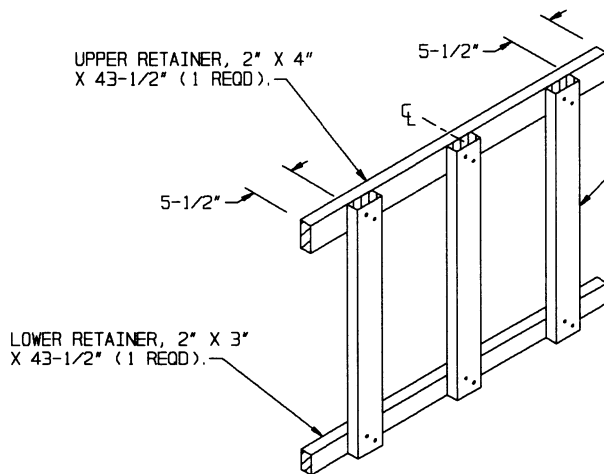
SECTION C-C

RECOMMENDED SEQUENTIAL LOADING PROCEDURES

1. PREFABRICATE TWO FORWARD/REAR BLOCKING ASSEMBLIES, TYPE "C", NAIL FILL MATERIAL TO EACH BUFFER PIECE ON THE FORWARD BLOCKING ASSEMBLY, FABRICATE EIGHT SEPARATOR GATES "D" AND TWO SEPARATOR GATES "E".
2. INSTALL THE FORWARD BLOCKING ASSEMBLY.
3. LOAD NINE PALLET UNITS AND INSTALL TWO SEPARATOR GATES "D".
4. POSITION PLYWOOD, PIECE MARKED ④, AGAINST ALREADY LOADED PALLET UNITS.
5. LOAD 18 PALLET UNITS AND INSTALL FOUR SEPARATOR GATES "D".
6. REPEAT STEP 4.
7. LOAD 15 PALLET UNITS AND INSTALL TWO SEPARATOR GATES "D" AND TWO SEPARATOR GATES "E".
8. INSTALL THE REAR BLOCKING ASSEMBLY.
9. INSTALL THE FILL MATERIAL BETWEEN THE REAR BLOCKING ASSEMBLY AND THE CORNER POST AND/OR EDGE OF DOOR.

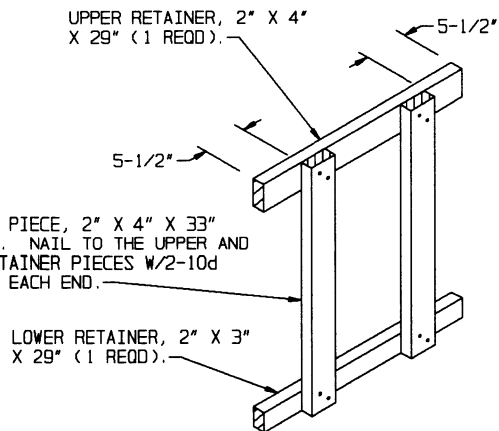
SPECIAL NOTES:

1. THE LOAD AS DEPICTED ON PAGE 8 IS FOR METAL PALLET UNITS OF SHORT 155MM SEPARATE LOADING PROJECTILES.
2. AT LEAST TWO PIECES OF FILL MATERIAL WILL BE LAMINATED TO BOTH BUFFER PIECES ON THE FORWARD BLOCKING ASSEMBLY BEFORE THE ASSEMBLY IS INSTALLED INTO THE CONTAINER. NAIL AS SPECIFIED IN KEY NUMBER 1 ON PAGE 8. SEE GENERAL NOTE "G" ON PAGE 2.
3. THE WIDTH OF THE REAR BLOCKING ASSEMBLY MAY VARY FROM THE WIDTH OF THE FORWARD BLOCKING ASSEMBLY. SEE THE DETAIL ON PAGE 17. ALSO, TO FACILITATE INSTALLATION, THE BUFFER PIECES MAY BE NAILED TO THE BOX BEAMS OF THE REAR BLOCKING ASSEMBLY AFTER FIRST POSITIONING THE INDIVIDUAL BOX BEAMS AT THE REAR OF THE LOAD. CARE MUST BE EXERCISED TO ENSURE THAT THE BOX BEAMS ARE INSTALLED AT THE CORRECT HEIGHT AND THAT THE REAR BLOCKING ASSEMBLY IS CENTERED ON THE LOAD.
4. THE QUANTITY AND/OR THICKNESS OF THE VERTICAL PIECES USED ON THE SEPARATOR GATES, PIECES MARKED ③ AND ⑤, MUST BE VARIED AS NECESSARY TO ENSURE NO MORE THAN 1-1/2" OF VOID ACROSS THE WIDTH OF THE LOAD. SEE GENERAL NOTE "D" ON PAGE 2.
5. PALLET UNITS WHICH ARE ALREADY BUNDLED TOGETHER WITH STEEL STRAPPING INTO GROUPS OF THREE MAY REMAIN BUNDLED FOR SHIPMENT UNLESS THEY ARE TO BE POSITIONED IN THE LAST TWO LOAD UNITS NEAR THE DOOR. ONLY THE BUNDLING STRAPS HAVE BEEN SHOWN IN THE LOAD ON PAGE 8. UNITIZATION STRAPS HAVE BEEN OMITTED FOR CLARITY PURPOSES. BUNDLING STRAPS HAVE BEEN SHOWN AS TYPICAL ONLY, AND ARE NOT SPECIFICALLY REQUIRED WHEN LOADING IN ACCORDANCE WITH THE PROCEDURES DETAILED ON PAGE 8.



SEPARATOR GATE D

VERTICAL PIECE, 2" X 4" X 33"
(3 REQD). NAIL TO THE UPPER AND LOWER RETAINER PIECES W/2-10d NAILS AT EACH END.



SEPARATOR GATE E

VERTICAL PIECE, 2" X 4" X 33"
(2 REQD). NAIL TO THE UPPER AND LOWER RETAINER PIECES W/2-10d NAILS AT EACH END.

LOWER RETAINER, 2" X 3"
X 29" (1 REQD).

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 3"	34	17
2" X 4"	145	97
2" X 6"	99	99
NAILS	NO. REQD	POUNDS
6d (2")	264	1-3/4
10d (3")	210	3-1/4
PLYWOOD, 1/2"	44.75 SQ FT REQD	61.54 LBS
PLYWOOD, 3/4"	55.91 SQ FT REQD	115.32 LBS

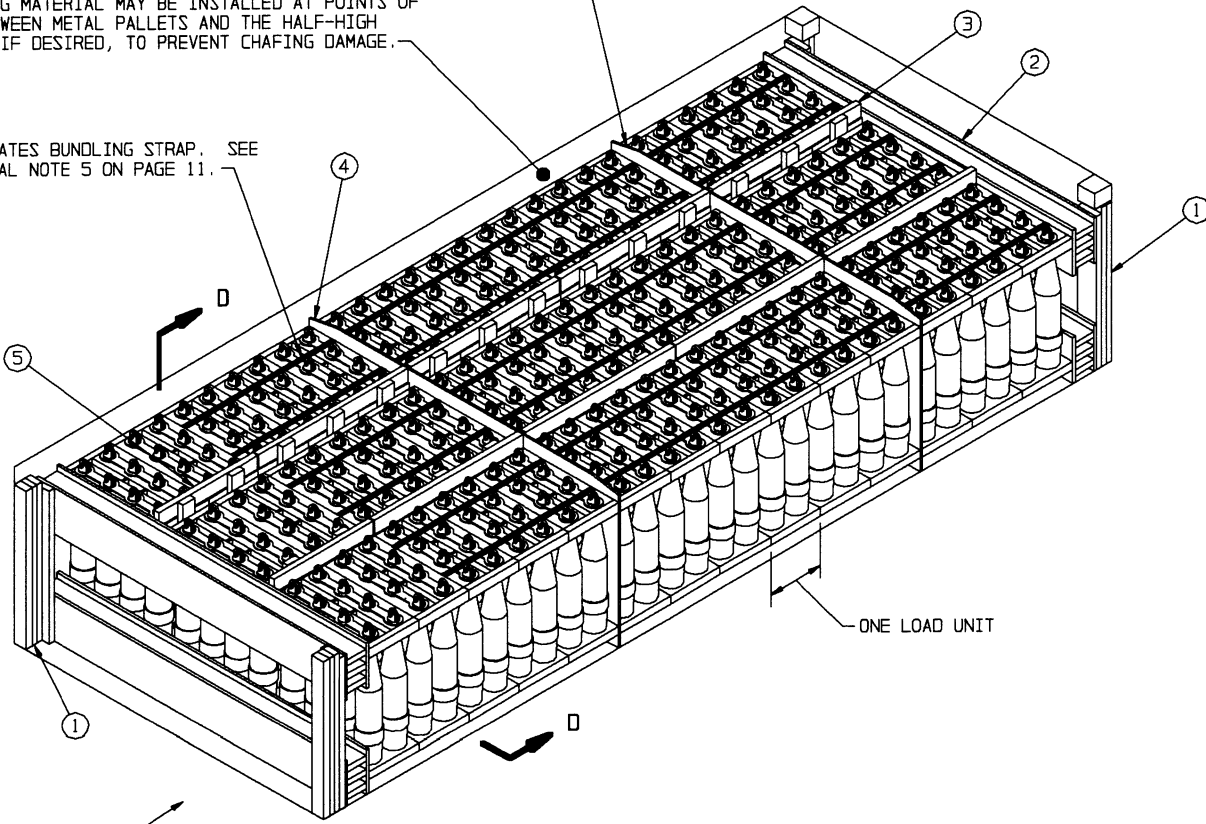
LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	42	35,994 LBS
DUNNAGE		608 LBS
CONTAINER		4,800 LBS
TOTAL WEIGHT		41,402 LBS (APPROX)

BOTH CORNERS OF THE PLYWOOD, PIECE MARKED ④, WILL BE BEVELED, AS REQUIRED, TO AVOID CONTACT WITH THE INSIDE TOP RAIL.

ANTI-CHAFING MATERIAL MAY BE INSTALLED AT POINTS OF CONTACT BETWEEN METAL PALLETS AND THE HALF-HIGH CONTAINER, IF DESIRED, TO PREVENT CHAFING DAMAGE.

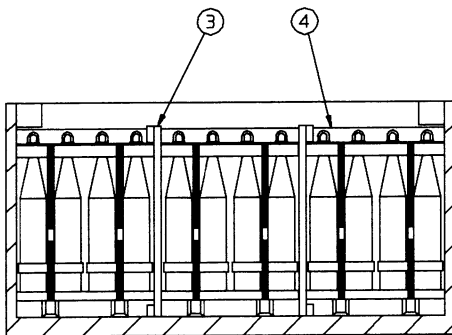
INDICATES BUNDLING STRAP. SEE SPECIAL NOTE 5 ON PAGE 11.



ISOMETRIC VIEW

KEY NUMBERS

- ① FILL MATERIAL, 4" WIDE BY 40" LONG MATERIAL (AS REQD). NAIL THE FIRST PIECE TO THE FORWARD/REAR BLOCKING ASSEMBLY W/5 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 TO NAILED TO THE REAR BLOCKING ASSEMBLY. SEE SPECIAL NOTE 2 ON PAGE 11.
- ② FORWARD/REAR BLOCKING ASSEMBLY (2 REQD, TYPE "B"). SEE THE DETAIL ON PAGE 17 AND SPECIAL NOTE 3 ON PAGE 11.
- ③ SEPARATOR GATE F (8 REQD). SEE THE DETAIL AND SPECIAL NOTE 4 ON PAGE 11.
- ④ PLYWOOD, 1/2" X 40" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-5-1/2") (2 REQD).
- ⑤ SEPARATOR GATE G (2 REQD). SEE THE DETAIL AND SPECIAL NOTE 4 ON PAGE 11.



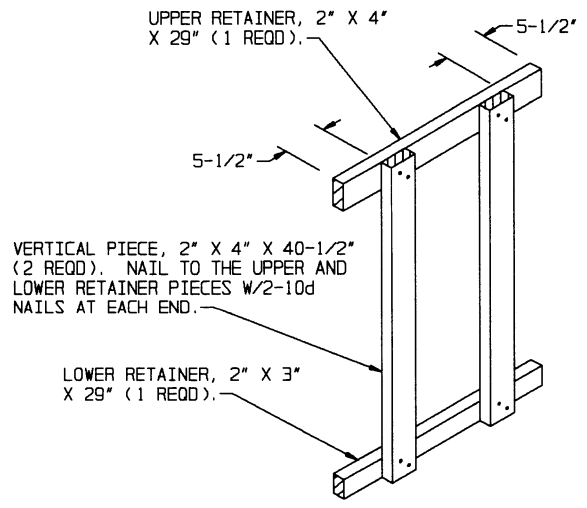
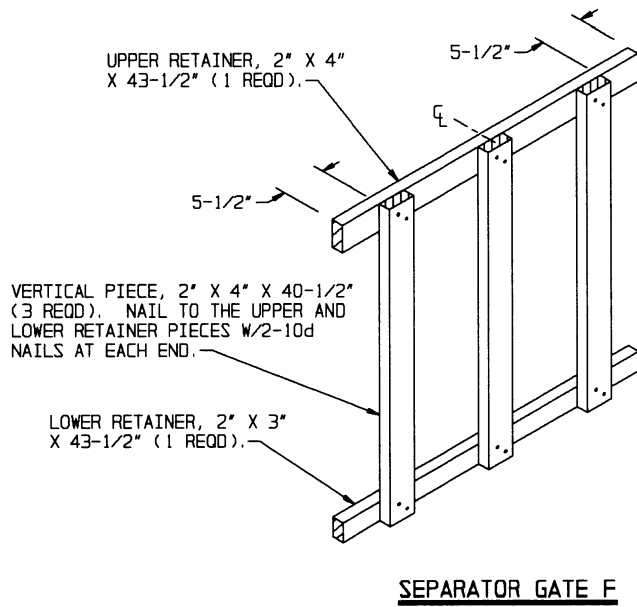
SECTION D-D

RECOMMENDED SEQUENTIAL LOADING PROCEDURES

1. PREFABRICATE TWO FORWARD/REAR BLOCKING ASSEMBLIES, TYPE "B", NAIL FILL MATERIAL TO EACH BUFFER PIECE ON THE FORWARD BLOCKING ASSEMBLY, FABRICATE EIGHT SEPARATOR GATES "F" AND TWO SEPARATOR GATES "G".
2. INSTALL THE FORWARD BLOCKING ASSEMBLY.
3. LOAD NINE PALLET UNITS AND INSTALL TWO SEPARATOR GATES "F".
4. POSITION PLYWOOD, PIECE MARKED ④, AGAINST ALREADY LOADED PALLET UNITS.
5. LOAD 18 PALLET UNITS AND INSTALL FOUR SEPARATOR GATES "F".
6. REPEAT STEP 4.
7. LOAD 15 PALLET UNITS AND INSTALL TWO SEPARATOR GATES "F" AND TWO SEPARATOR GATES "G".
8. INSTALL THE REAR BLOCKING ASSEMBLY.
9. INSTALL THE FILL MATERIAL BETWEEN THE REAR BLOCKING ASSEMBLY AND THE CORNER POST AND/OR EDGE OF DOOR.

SPECIAL NOTES:

1. THE LOAD AS DEPICTED ON PAGE 10 IS FOR METAL PALLET UNITS OF TALL 155MM SEPARATE LOADING PROJECTILES.
2. TWO PIECES OF FILL MATERIAL WILL BE LAMINATED TO BOTH BUFFER PIECES ON THE FORWARD BLOCKING ASSEMBLY BEFORE THE ASSEMBLY IS INSTALLED INTO THE CONTAINER. NAIL AS SPECIFIED IN KEY NUMBER 1 ON PAGE 10. SEE GENERAL NOTE "G" ON PAGE 2.
3. THE WIDTH OF THE REAR BLOCKING ASSEMBLY MAY VARY FROM THE WIDTH OF THE FORWARD BLOCKING ASSEMBLY. SEE THE DETAIL ON PAGE 17. ALSO, TO FACILITATE INSTALLATION, THE BUFFER PIECES MAY BE NAILED TO THE BOX BEAMS OF THE REAR BLOCKING ASSEMBLY AFTER FIRST POSITIONING THE INDIVIDUAL BOX BEAMS AT THE REAR OF THE LOAD. CARE MUST BE EXERCISED TO ENSURE THAT THE BOX BEAMS ARE INSTALLED AT THE CORRECT HEIGHT AND THAT THE REAR BLOCKING ASSEMBLY IS CENTERED ON THE LOAD.
4. THE QUANTITY AND/OR THICKNESS OF THE VERTICAL PIECES USED ON THE SEPARATOR GATES, PIECES MARKED ③ AND ⑤, MUST BE VARIED AS NECESSARY TO ENSURE NO MORE THAN 1-1/2" OF VOID ACROSS THE WIDTH OF THE LOAD. SEE GENERAL NOTE "D" ON PAGE 2 AND THE "ALTERNATIVE DETAILS FOR CONTAINERS WITH PROJECTING TOP SIDE RAILS" ON PAGE 18.
5. PALLET UNITS WHICH ARE ALREADY BUNDLED TOGETHER WITH STEEL STRAPPING INTO GROUPS OF THREE MAY REMAIN BUNDLED FOR SHIPMENT UNLESS THEY ARE TO BE POSITIONED IN THE LAST TWO LOAD UNITS NEAR THE DOOR. ONLY THE BUNDLING STRAPS HAVE BEEN SHOWN IN THE LOAD ON PAGE 10, UNITIZATION STRAPS HAVE BEEN OMITTED FOR CLARITY PURPOSES. BUNDLING STRAPS HAVE BEEN SHOWN AS TYPICAL ONLY, AND ARE NOT SPECIFICALLY REQUIRED WHEN LOADING IN ACCORDANCE WITH THE PROCEDURES DETAILED ON PAGE 10.

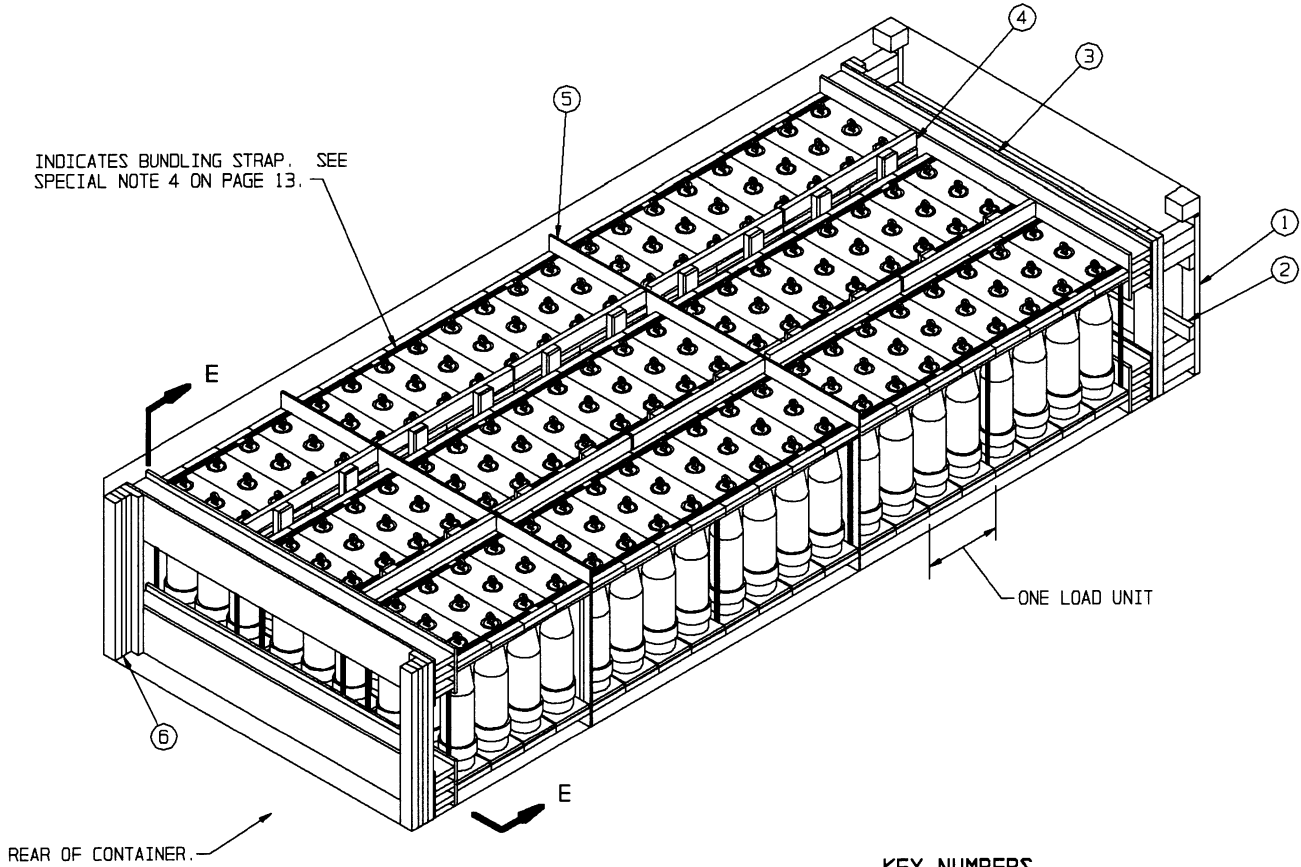


BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 3"	34	17
2" X 4"	162	108
2" X 6"	101	101
NAILS	NO. REOD	POUNDS
6d (2")	264	1-3/4
10d (3")	210	3-1/4
PLYWOOD, 1/2"	49.73 SQ FT REOD	68.38 LBS
PLYWOOD, 3/4"	55.91 SQ FT REOD	115.32 LBS

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	42	37,674 LBS
DUNNAGE		641 LBS
CONTAINER		4,800 LBS
TOTAL WEIGHT		43,115 LBS (APPROX)

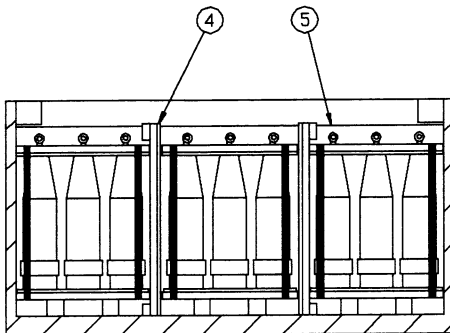
INDICATES BUNDLING STRAP. SEE SPECIAL NOTE 4 ON PAGE 13.



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD STRUT ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 13.
- ② SPREADER PIECE, 2" X 4" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-5-1/2") (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, TYPE "B"). NAIL THROUGH THE BUFFER PIECES INTO THE VERTICAL PIECES OF PIECE MARKED ① W/4-10d NAILS. SEE THE DETAIL ON 17 AND SPECIAL NOTE 2 ON PAGE 13.
- ④ SEPARATOR GATE H (10 REQD). SEE THE DETAIL AND SPECIAL NOTE 3 ON PAGE 13.
- ⑤ PLYWOOD, 1/2" X 40" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-5-1/2") (2 REQD).
- ⑥ FILL MATERIAL, 4" X WIDE BY 40" LONG MATERIAL (AS REQD). NAIL THE FIRST PIECE TO THE REAR BLOCKING ASSEMBLY W/5 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.



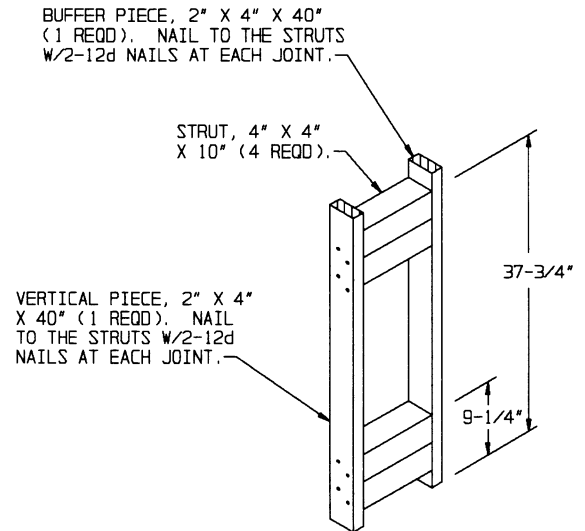
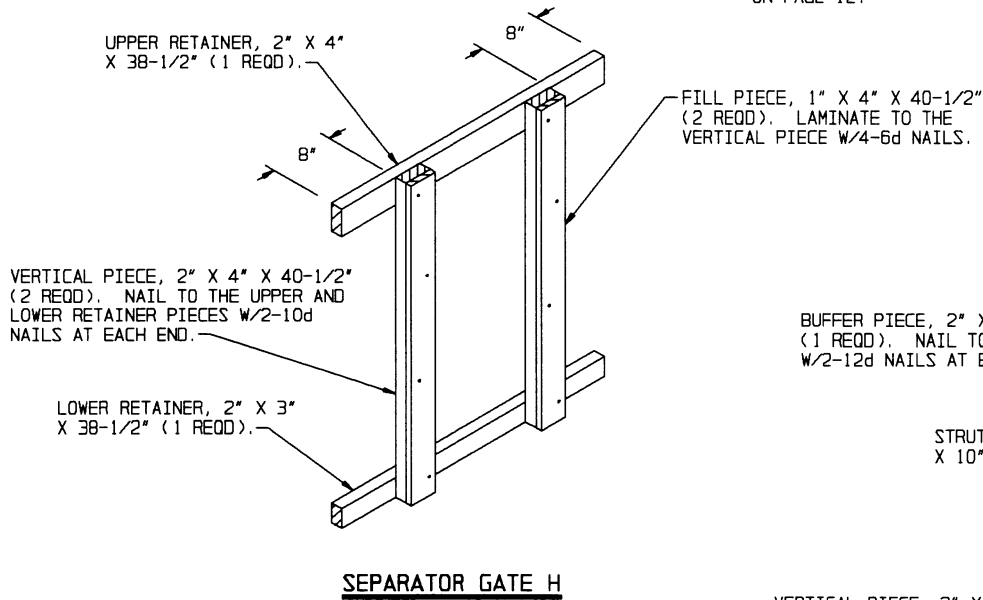
SECTION E-E

RECOMMENDED SEQUENTIAL LOADING PROCEDURES

1. PREFABRICATE TWO FORWARD/REAR BLOCKING ASSEMBLIES, TYPE "C", TWO FORWARD STRUT ASSEMBLIES, AND 10 SEPARATOR GATES "H".
2. INSTALL THE TWO FORWARD STRUT ASSEMBLIES AND THE TWO SPREADER PIECES.
3. INSTALL THE FORWARD BLOCKING ASSEMBLY.
4. LOAD 12 PALLET UNITS AND INSTALL FOUR SEPARATOR GATES "H".
5. POSITION PLYWOOD, PIECE MARKED ⑤, AGAINST ALREADY LOADED PALLET UNITS.
6. REPEAT STEPS 4 AND 5.
7. LOAD SIX PALLET UNITS AND INSTALL TWO SEPARATOR GATES "H".
8. INSTALL THE REAR BLOCKING ASSEMBLY.
9. INSTALL THE FILL MATERIAL BETWEEN THE REAR BLOCKING ASSEMBLY AND THE CORNER POST AND/OR EDGE OF DOOR.

SPECIAL NOTES:

1. THE LOAD AS DEPICTED ON PAGE 12 IS FOR WOODEN PALLET UNITS OF 8" SEPARATE LOADING PROJECTILES.
2. THE WIDTH OF THE REAR BLOCKING ASSEMBLY MAY VARY FROM THE WIDTH OF THE FORWARD BLOCKING ASSEMBLY. SEE THE DETAIL ON PAGE 17. ALSO, TO FACILITATE INSTALLATION, THE BUFFER PIECES MAY BE NAILED TO THE BOX BEAMS OF THE REAR BLOCKING ASSEMBLY AFTER FIRST POSITIONING THE INDIVIDUAL BOX BEAMS AT THE REAR OF THE LOAD. CARE MUST BE EXERCISED TO ENSURE THAT THE BOX BEAMS ARE INSTALLED AT THE CORRECT HEIGHT AND THAT THE REAR BLOCKING ASSEMBLY IS CENTERED ON THE LOAD.
3. THE QUANTITY AND/OR THICKNESS OF THE VERTICAL OR FILL PIECES USED ON THE SEPARATOR GATES, PIECES MARKED ④, MUST BE VARIED AS NECESSARY TO ENSURE NO MORE THAN 1-1/2" OF VOID ACROSS THE WIDTH OF THE LOAD. SEE GENERAL NOTE "D" ON PAGE 2.
4. PALLET UNITS WHICH ARE ALREADY BUNDLED TOGETHER WITH STEEL STRAPPING INTO GROUPS OF TWO MAY REMAIN BUNDLED FOR SHIPMENT. ONLY THE BUNDLING STRAPS HAVE BEEN SHOWN IN THE LOAD ON PAGE 12, UNITIZATION STRAPS HAVE BEEN OMITTED FOR CLARITY PURPOSES. BUNDLING STRAPS HAVE BEEN SHOWN AS TYPICAL ONLY, AND ARE NOT SPECIFICALLY REQUIRED WHEN LOADING IN ACCORDANCE WITH THE PROCEDURES DETAILED ON PAGE 12.



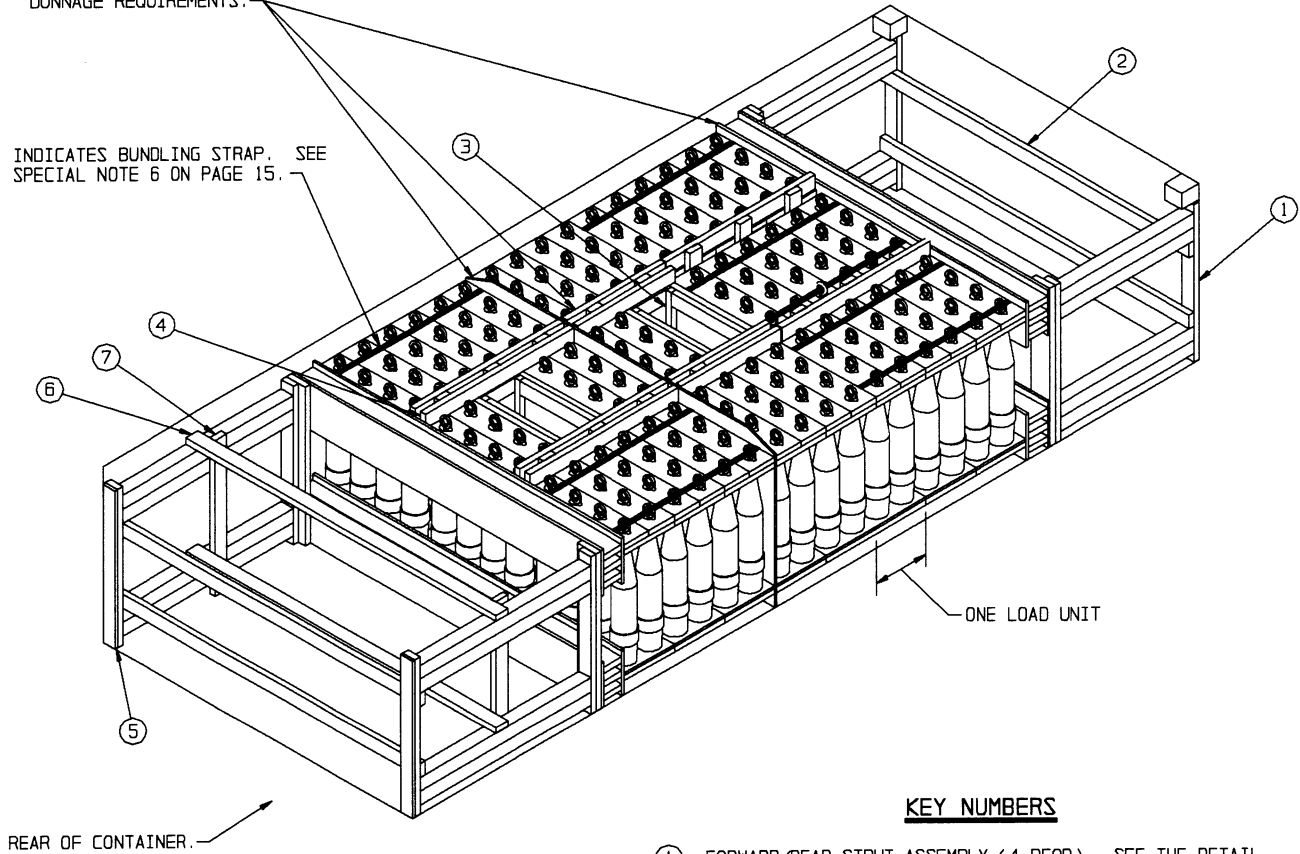
BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	68	23
2" X 3"	33	17
2" X 4"	148	99
2" X 6"	101	101
4" X 4"	7	10
NAILS	NO. REQD	POUNDS
6d (2")	344	2-1/4
10d (3")	174	2-3/4
12d (3-1/4")	32	3/4
PLYWOOD, 1/2"	49.73 SQ FT REQD	68.38 LBS
PLYWOOD, 3/4"	55.91 SQ FT REQD	115.32 LBS

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	30	37,680 LBS
DUNNAGE		690 LBS
CONTAINER		4,800 LBS
TOTAL WEIGHT		43,170 LBS (APPROX)

INDICATES TYPICAL DUNNAGE ASSEMBLIES. REFER TO THE APPLICABLE LOAD PAGES FOR SPECIFIC DUNNAGE REQUIREMENTS.

INDICATES BUNDLING STRAP. SEE SPECIAL NOTE 6 ON PAGE 15.



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD/REAR STRUT ASSEMBLY (4 REQD). SEE THE DETAIL ON PAGE 16 AND SPECIAL NOTE 2 ON PAGE 15.
- ② SPREADER PIECE, 2" X 4" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-5-1/2") (4 REQD). NAIL TO THE BUFFER PIECES OF PIECE MARKED ① W/2-10d NAILS AT EACH END.
- ③ OMITTED UNIT ASSEMBLY (AS REQD). SEE THE DETAIL ON PAGE 16 AND SPECIAL NOTE 3 ON PAGE 15.
- ④ RETAINER PIECE, 2" X 4" BY LENGTH TO SUIT (AS REQD). NAIL TO THE VERTICAL PIECES OF THE SEPARATOR GATES W/2-10d NAILS AT EACH JOINT. RETAINER PIECES ARE ONLY REQUIRED TO BE INSTALLED ON SEPARATOR GATES THAT ARE Laterally ADJACENT TO AN OMITTED UNIT ASSEMBLY. THE LENGTH OF THE RETAINER PIECE SHOULD BE THE SAME AS THE LENGTH OF THE UPPER RETAINER IN THE CORRESPONDING SEPARATOR GATE.
- ⑤ FILL MATERIAL, 4" WIDE BY 40" LONG MATERIAL (AS REQD). NAIL THE FIRST PIECE TO THE REAR STRUT ASSEMBLY W/5 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 STRUT ASSEMBLY. SEE SPECIAL NOTE 4 ON PAGE 15.
- ⑥ HORIZONTAL STRUT BRACING, 2" X 4" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-5-1/2") (AS REQD, 2 SHOWN). NAIL TO THE STRUTS OF PIECE MARKED ① W/3-10d NAILS AT EACH END. SEE SPECIAL NOTE 5 ON PAGE 15 AND GENERAL NOTE "Q" ON PAGE 2.
- ⑦ VERTICAL STRUT BRACING, 2" X 4" BY A LENGTH TO EXTEND A MINIMUM OF 2" ABOVE THE TOP STRUT (AS REQD, 2 SHOWN). NAIL TO THE STRUTS OF PIECE MARKED ① W/2-10d NAILS AT EACH JOINT. SEE SPECIAL NOTE 5 ON PAGE 15 AND GENERAL NOTE "Q" ON PAGE 2.

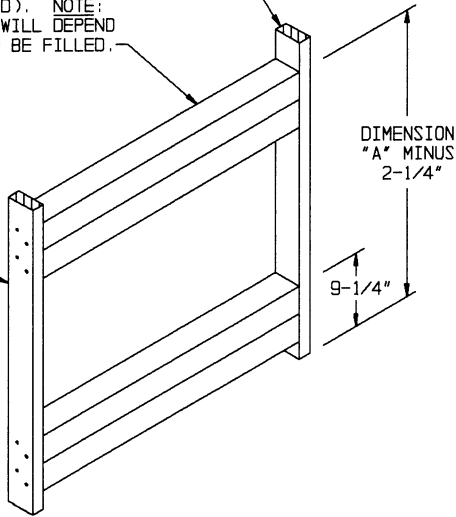
SPECIAL NOTES:

1. THE LOAD AS SHOWN ON PAGE 14 DEPICTS LARGE WOODEN PALLET UNITS OF 155MM SEPARATE LOADING PROJECTILES. THIS LOAD IS SHOWN AS TYPICAL ONLY. THE PROCEDURES MAY BE ADAPTED TO LOAD REDUCED QUANTITIES OF ANY OF THE PALLET UNITS SHOWN ON PAGE 3.
2. THE CENTER OF GRAVITY OF THE REDUCED LOAD MUST BE WITHIN 12" OF THE CENTER OF THE CONTAINER. ROUGHLY, THIS MEANS THAT THE DIFFERENCE BETWEEN THE VOID AT THE FRONT OF THE LOAD (FORWARD STRUT ASSEMBLY) AND THE VOID AT THE REAR OF THE LOAD (REAR STRUT ASSEMBLY PLUS FILL MATERIAL) MUST NOT EXCEED 24". FOR EXAMPLE, THE STRUTS IN THE FORWARD STRUT ASSEMBLY SHOWN IN THE TYPICAL LOAD ON PAGE 14 ARE 40-3/4" LONG, AND THE STRUTS IN THE REAR STRUT ASSEMBLY ARE 48-1/2" LONG, THEREFORE THE LOAD IS BALANCED, SINCE THE VOID AT THE FORWARD END OF THE LOAD IS 43-3/4", AND THE VOID AT THE REAR OF THE LOAD IS 52-1/4", AND THE DIFFERENCE IS LESS THAN 24" (8-1/2"). NOTE THAT IN THE IDEAL LOAD, THE VOID AT THE REAR OF THE LOAD WOULD BE EQUAL TO THE VOID AT THE FORWARD END OF THE LOAD. AN OFFSET LOAD WAS SHOWN ON PAGE 14 TO DISPLAY THE USE OF STRUT BRACING. THE LENGTHS OF THE STRUTS IN THE FORWARD/REAR BLOCKING ASSEMBLY MUST BE VARIED AS NECESSARY TO ACHIEVE A BALANCED LOAD.
3. NO MORE THAN TWO OMITTED UNIT ASSEMBLIES WILL BE USED IN ANY REDUCED LOAD. OMITTED UNIT ASSEMBLIES MUST BE PLACED WITHIN THE MIDDLE ROW OF A LOAD. IF MORE THAN TWO PALLET UNITS ARE TO BE OMITTED, OMIT ONE OR MORE LOAD UNITS, AND SHIFT THE LOAD TOWARDS THE FORWARD OR REAR OF THE CONTAINER, AS REQUIRED IN SPECIAL NOTE 2 ABOVE.
4. FILL MATERIAL MUST BE INSTALLED ON THE REAR STRUT ASSEMBLY AS NECESSARY TO ENSURE THAT THE LONGITUDINAL VOID IN THE LOAD DOES IS LESS THAN 3/4". THE USE OF FILL MATERIAL SHOULD BE KEPT TO A MINIMUM BY CAREFUL CONSTRUCTION OF THE REAR STRUT ASSEMBLIES. FILL MATERIAL MAY BE ELIMINATED IF THE VOID BETWEEN THE REAR STRUT ASSEMBLY AND THE REAR CORNER POST (OR CONTAINER DOOR) IS LESS THAN 3/4".
5. STRUT BRACING IS ONLY REQUIRED FOR STRUTS WHICH ARE 48" OR LONGER IN LENGTH. STRUT BRACING SHOULD BE LOCATED AS NEAR AS POSSIBLE TO THE CENTER OF THE STRUTS, BUT SHOULD NOT BE LOCATED SUCH THAT ANY UNBRACED SPAN OF STRUT LENGTH EXCEEDS 48".
6. PALLET UNITS WHICH ARE ALREADY BUNDLED TOGETHER WITH STEEL STRAPPING INTO GROUPS OF TWO OR THREE MAY REMAIN BUNDLED FOR SHIPMENT, IF IT IS FEASIBLE FOR THE LOAD QUANTITY TO BE SHIPPED. ONLY THE BUNDLING STRAPS HAVE BEEN SHOWN IN THE LOAD ON PAGE 14, UNITIZATION STRAPS HAVE BEEN OMITTED FOR CLARITY PURPOSES. BUNDLING STRAPS HAVE BEEN SHOWN AS TYPICAL ONLY, AND ARE NOT SPECIFICALLY REQUIRED WHEN LOADING IN ACCORDANCE WITH THE PROCEDURES DETAILED ON PAGE 14.

BUFFER PIECE, 2" X 4" X 40"
(1 REQD). NAIL TO THE STRUTS
W/2-12d NAILS AT EACH JOINT.

STRUT, 4" X 4" BY LENGTH
TO SUIT (4 REQD). NOTE:
STRUT LENGTHS WILL DEPEND
ON THE VOID TO BE FILLED.

VERTICAL PIECE, 2" X
4" BY DIMENSION "A"
(1 REQD). NAIL TO THE
STRUTS W/2-12d NAILS AT
EACH JOINT.



PALLET UNIT	DIMENSION "A"
155MM SLP, 8/SMALL WOODEN PALLET	35"
155MM SLP, 8/LARGE WOODEN PALLET	40"
155MM SLP, 8 SHORT/METAL PALLET	34"
155MM SLP, 8 TALL/METAL PALLET	40"
8" SLP, 6/WOODEN PALLET	40"

FORWARD/REAR STRUT ASSEMBLY

STRUT, 2" X 4" BY PALLET
LENGTH MINUS 3" (4 REQD).

PALLET LENGTH

PALLET WIDTH

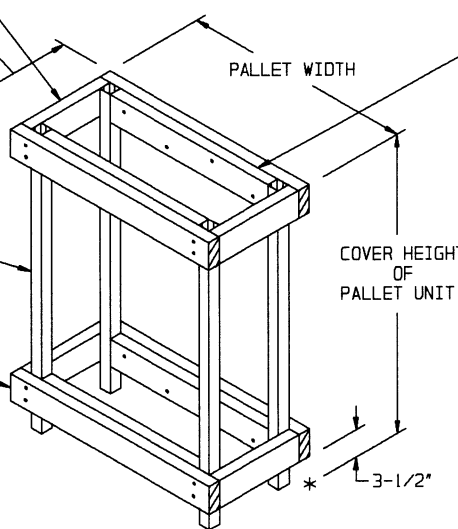
FILL PIECE, 2" X 4" BY PALLET WIDTH
MINUS 6" (4 REQD). NAIL TO BEARING
PIECE W/4-10d NAILS.

SUPPORT PIECE, 2" X 2" BY
PALLET COVER HEIGHT. NAIL
TO THE STRUTS W/2-10d NAILS
AT EACH JOINT.

COVER HEIGHT
OF
PALLET UNIT

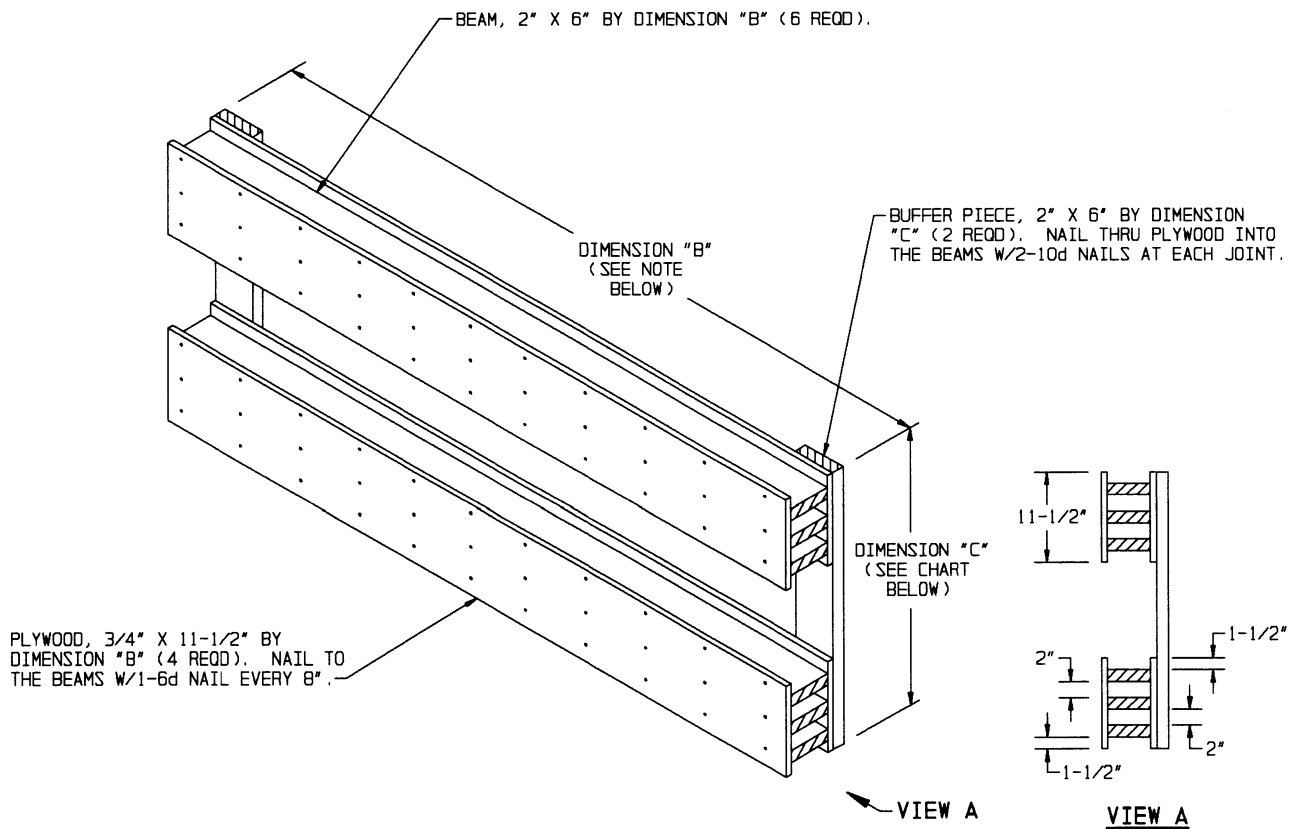
BEARING PIECE, 2" X 4" BY
PALLET WIDTH (4 REQD).
NAIL TO THE STRUTS W/2-10d
NAILS AT EACH JOINT.

* 3-1/2"



OMITTED UNIT ASSEMBLY

THE ASSEMBLY AS SPECIFIED ABOVE IS FOR USE IN PLACE OF AN OMITTED PALLET UNIT, AND WILL BE REQUIRED FOR SOME LOADS TO PROVIDE A 2-WIDE LOADING PATTERN THROUGHOUT THE LENGTH OF THESE LOADS. IT WILL NEVER BE REQUIRED TO USE MORE THAN TWO ASSEMBLIES IN ANY ONE LOAD. CAUTION: AN ASSEMBLY OR ASSEMBLIES MUST ONLY BE PLACED WITHIN THE MIDDLE ROW OF A LOAD.

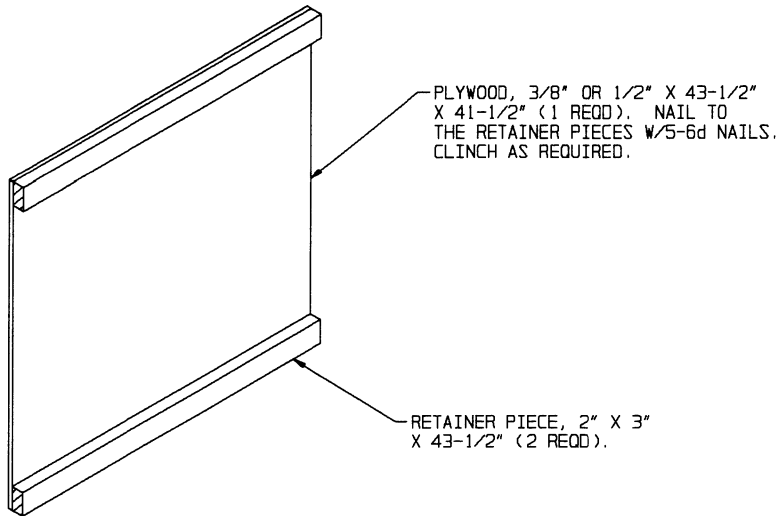


FORWARD/REAR BLOCKING ASSEMBLY

NOTE: DIMENSION "B" OF THE FORWARD BLOCKING ASSEMBLY IS EQUAL TO CONTAINER WIDTH MINUS 1" (REF: 7'-5") AND DIMENSION "B" OF THE REAR BLOCKING ASSEMBLY IS EQUAL TO DOOR OPENING WIDTH PLUS 3" (REF: 7'-2"). NOTE THAT THE REFERENCE DIMENSION FOR THE REAR BLOCKING ASSEMBLY IS FOR FULL LOADS. FOR LOADS SUCH AS THE LOAD DEPICTED ON PAGE 14 THAT UTILIZE REAR STRUT ASSEMBLIES, DIMENSION "B" WILL BE CONTAINER WIDTH MINUS 1" (REF: 7'-5").

FORWARD/REAR BLOCKING ASSEMBLY TYPE*	DIMENSION "C"
TYPE "A"	35"
TYPE "B"	40"
TYPE "C"	34"

*THE "FORWARD/REAR BLOCKING ASSEMBLY TYPE" REFERS TO THE TYPES LISTED IN THE KEY NUMBERS FOR EACH LOAD. FOR EXAMPLE, THE LOAD ON PAGE 4 REQUIRES TYPE "A" ASSEMBLIES.

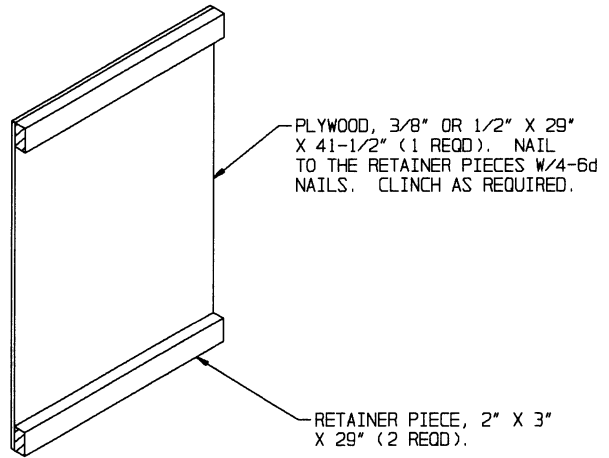


ALTERNATIVE SEPARATOR GATE B

(SEE THE SPECIAL NOTE BELOW)

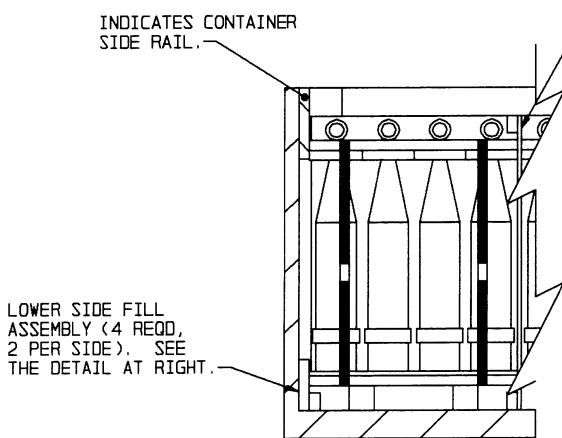
SPECIAL NOTE:

DETAILS SHOWN ON THIS PAGE ARE APPLICABLE WHEN THE 155MM SLP, 8' LARGE WOODEN PALLET OR 8' TALL/METAL PALLET IS TO BE LOADED INTO A HALF-HIGH OPEN TOP CONTAINER WHICH HAS TOP SIDE RAILS THAT PROJECT INTO THE CARGO AREA AND CONTACT THE TOP COVER OF THE PALLET UNIT (FOR EXAMPLE, THE CONTAINERS PRODUCED BY COBRA MANUFACTURING OF MONDOVI, ITALY). NOTE THAT THESE CONTAINERS MAY ALSO HAVE A GREATER INTERIOR WIDTH (92") THAN STATED IN GENERAL NOTE "C" ON PAGE 3 (90-1/2"). ADDITIONALLY, DUE TO THE REDUCED WIDTH BETWEEN THE LOWER SIDE FILL ASSEMBLIES, "ALTERNATIVE SEPARATOR GATE B" AND "ALTERNATIVE SEPARATOR GATE C" MAY BE SUBSTITUTED FOR "SEPARATOR GATE B" AND "SEPARATOR GATE C", AS IDENTIFIED BY KEY NUMBERS ③ AND ⑤ RESPECTIVELY ON PAGE 6 OR "SEPARATOR GATE F" AND "SEPARATOR GATE G", AS IDENTIFIED BY KEY NUMBERS ③ AND ⑤ RESPECTIVELY ON PAGE 10. ALSO NOTE THAT THE 1/2" PLYWOOD IDENTIFIED AS KEY NUMBER ④ ON PAGE 6 OR PAGE 10 MAY ONLY NEED TO BE 7'-2" WIDE, INSTEAD OF 7'-5-1/2".



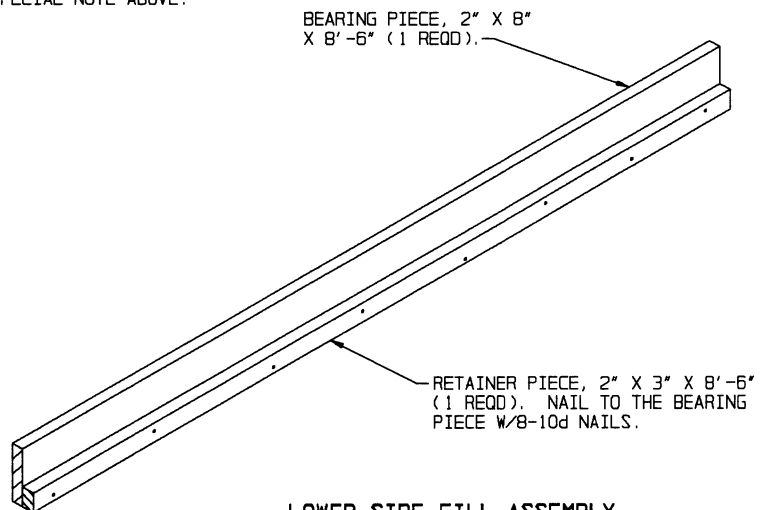
ALTERNATIVE SEPARATOR GATE C

(SEE THE SPECIAL NOTE AT LEFT)



PARTIAL END VIEW

(PARTIAL END VIEW OF THE LOAD ON PAGE 6.)



LOWER SIDE FILL ASSEMBLY

(SEE THE SPECIAL NOTE ABOVE)