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LOADING AND BRACING⊕ IN END OPENING ISO CONTAINERS OF 8 INCH M188 AND M188A1 PROPELLING CHARGES, PACKED IN PA66 CYLINDRICAL METAL CONTAINERS, ON WOODEN PALLETS

INDEX

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⊕ **THE PROCEDURES SHOWN HEREIN ARE APPLICABLE TO LOADS THAT ARE TO BE SHIPPED BY TRAILER/CONTAINER-ON-FLATCAR (T/COFC) RAIL, MOTOR, OR WATER CARRIERS.**

U.S. ARMY MATERIEL COMMAND DRAWING

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CLASS	DIVISION	DRAWING	FILE
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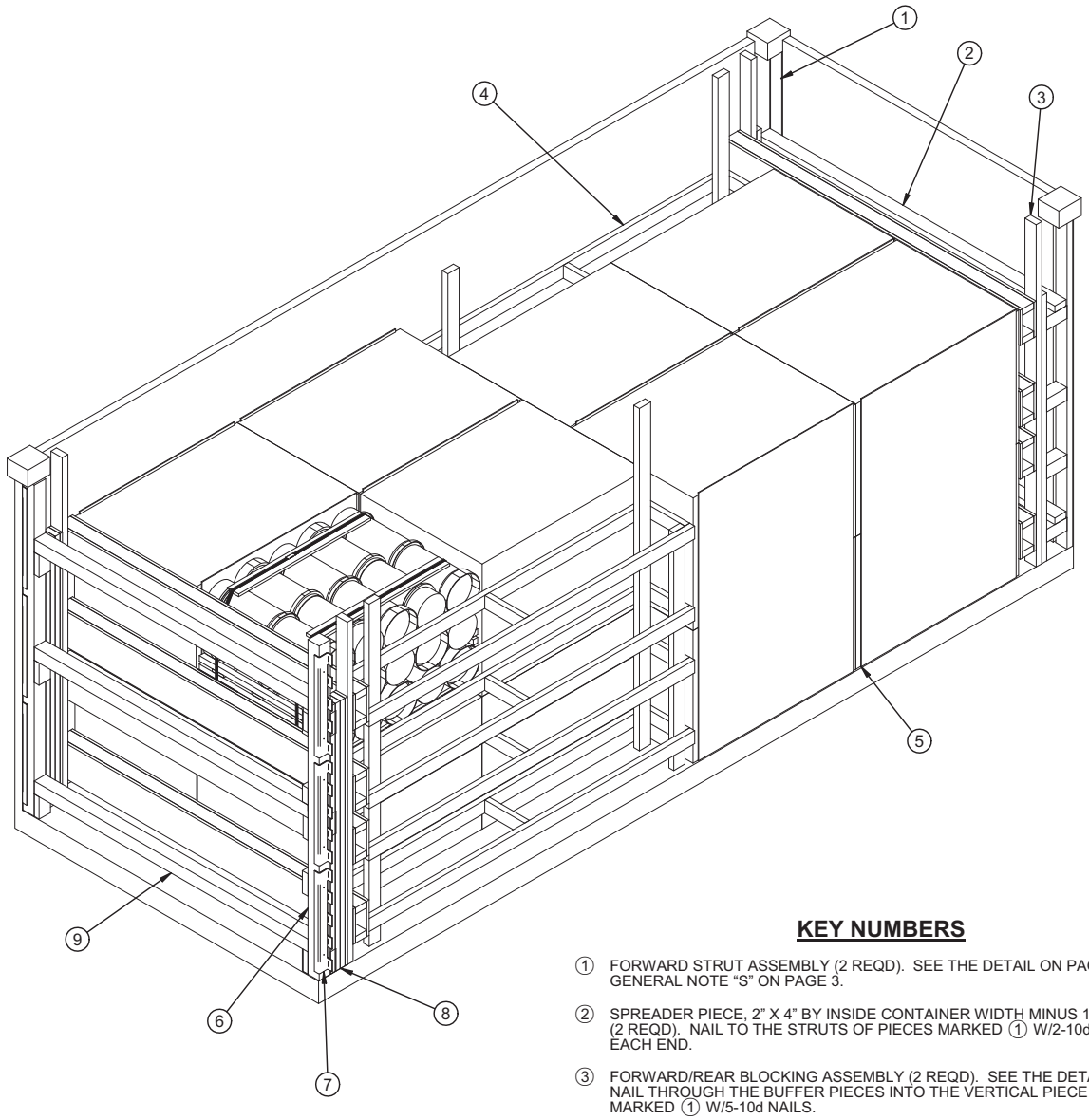
PROJECT CA 175/10-80



ISOMETRIC VIEW

KEY NUMBERS

① FORWARD STRUT ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 7 AND GENERAL NOTE "S" ON PAGE 3.

② SPREADER PIECE, 2" X 4" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-7") (2 REQD). NAIL TO THE STRUTS OF PIECES MARKED ① W/2-10d NAILS AT EACH END.

③ FORWARD/REAR BLOCKING ASSEMBLY (2 REQD). SEE THE DETAIL PAGE 8. NAIL THROUGH THE BUFFER PIECES INTO THE VERTICAL PIECE OF PIECES MARKED ① W/5-10d NAILS.

④ CRIB FILL ASSEMBLY A (2 REQD). SEE THE DETAIL ON PAGE 9.

⑤ SEPARATOR GATE (8 REQD). SEE THE DETAIL ON PAGE 10 AND GENERAL NOTE "R" ON PAGE 3.

⑥ DOOR POST VERTICAL (2 REQD). SEE THE DETAIL AND, "DETAIL A" ON PAGE 7, AND GENERAL NOTE "Q" ON PAGE 3.

⑦ UNIVERSAL LOAD RETAINER (6 REQD, 3 PER SIDE). NAIL THROUGH THE HOLES INTO THE DOOR POST VERTICAL W/2-10d NAILS. SEE DEPARTMENT OF ARMY DRAWING DA-116, "DETAIL A" ON PAGE 7, AND GENERAL NOTE "Q" ON PAGE 3.

⑧ FILL MATERIAL, 4" WIDE BY 72" LONG MATERIAL (AS REQD). NAIL THE FIRST PIECE TO THE REAR BLOCKING ASSEMBLY W/6d 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" ON PAGE 7.

⑨ DOOR SPANNER, 4" X 4" MATERIAL CUT TO A LENGTH THAT WILL PROVIDE A DRIVE FIT (REF:7'-1-1/4") (3 REQD). TOENAIL TO THE DOOR POST VERTICAL W/2-12d NAILS AT EACH END. SEE THE "BEVEL-CUT" DETAIL ON PAGE 8.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	15	5
2" X 4"	211	141
4" X 4"	17	23
NAILS	**NO. REQD**	**POUNDS**
6d (2")	224	1-1/4
10d (3")	272	4-1/4
12d (3-1/4")	44	3/4
PLYWOOD, 1/2" - 192.00 SQ FT REQD - - - 264 LBS		
PLYWOOD, 3/4" - - 96.06 SQ FT REQD - - - 198 LBS		
UNIVERSAL LOAD RETAINER - - 6 REQD - - - 39 LBS		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	16	20,368 LBS
DUNNAGE		806 LBS
CONTAINER		4,700 LBS
TOTAL WEIGHT		25,874 LBS (APPROX)

16 PALLET UNIT LOAD (ALTERNATED CONTAINER-BASIC HEIGHT)

PROJECT CA 175/10-80

GENERAL NOTES

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 8" M188 AND M188A1 PROPELLING CHARGES PACKED IN PA66 SERIES CYLINDRICAL METAL CONTAINERS. SUBSEQUENT REFERENCE TO PALLET UNIT HEREIN MEANS THE PALLET UNIT WITH AMMUNITION ITEMS. SEE PAGES 5 AND 6 AND AMC DRAWING 19-48-4042A/10-20PM1001 FOR DETAILS OF THE PALLET UNITS. **CAUTION**: REGARDLESS OF THE QUANTITY OF PALLET UNITS 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 LONGITUDINAL PIECES ON THE CRIB OR SIDE FILL ASSEMBLIES. NAIL EACH ADDITIONAL PIECE W/1 APPROPRIATELY SIZED NAIL EVERY 12". ADDITIONALLY, THE LENGTH OF THE LATERAL PIECES IN THE CRIB OR 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 STRUT ASSEMBLIES 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.

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 ASSOCIATION OF AMERICAN RAILROADS (AAR) INTERMODAL LOADING GUIDE 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.

(CONTINUED AT RIGHT)

(**GENERAL NOTES CONTINUED**)

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 LOADS ON PAGES 2 AND 4 MAY BE REDUCED FOR SHIPMENT, IF DESIRED. SEE THE FILLER ASSEMBLY ON PAGE 6.

1. IF A LOAD IS REDUCED BY ONLY A SMALL AMOUNT (ONE, TWO OR THREE 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 THREE 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. IF NECESSARY, STRUT LEDGERS MAY BE APPLIED TO THE REAR BLOCKING ASSEMBLY AND THE DOOR POST VERTICALS, TO ALLOW FOR REAR OF LOAD STRUTTING. INSTALL TO ALIGN WITH THE STRUTS IN THE FORWARD STRUT ASSEMBLY.

Q. SIX UNIVERSAL LOAD RETAINERS, AS DEPICTED IN THE LOAD ON PAGE 2, ARE REQUIRED WHEN LOADING TWO LAYERS OF PALLET UNITS, FOUR ARE REQUIRED WHEN LOADING ONE LAYER OF PALLET UNITS. REFER TO DAC DRAWING ACV00682 FOR DETAILS OF THE UNIVERSAL LOAD RETAINER CONSTRUCTION, AND TO DEPARTMENT OF THE ARMY DRAWING DA-116 FOR DETAILS FOR INSTALLATION TO THE DOOR POST VERTICAL, PLACEMENT INTO THE CONTAINER, AND FOR OTHER METHODS OF REAR-OF-LOAD RESTRAINT.

R. SEPARATOR GATES MUST BE USED WHEN LOADING ALTERNATED CONTAINER PALLET UNITS. INSTALL SEPARATOR GATES BETWEEN PALLET UNITS AND BETWEEN PALLET UNITS AND THE ISO CONTAINER WHEREVER METAL TO METAL CONTACT EXISTS, AS DEPICTED ON PAGE 2. SEPARATOR GATES ARE NOT REQUIRED WHEN LOADING ROUTED OR FLAT DUNNAGE PALLET UNITS.

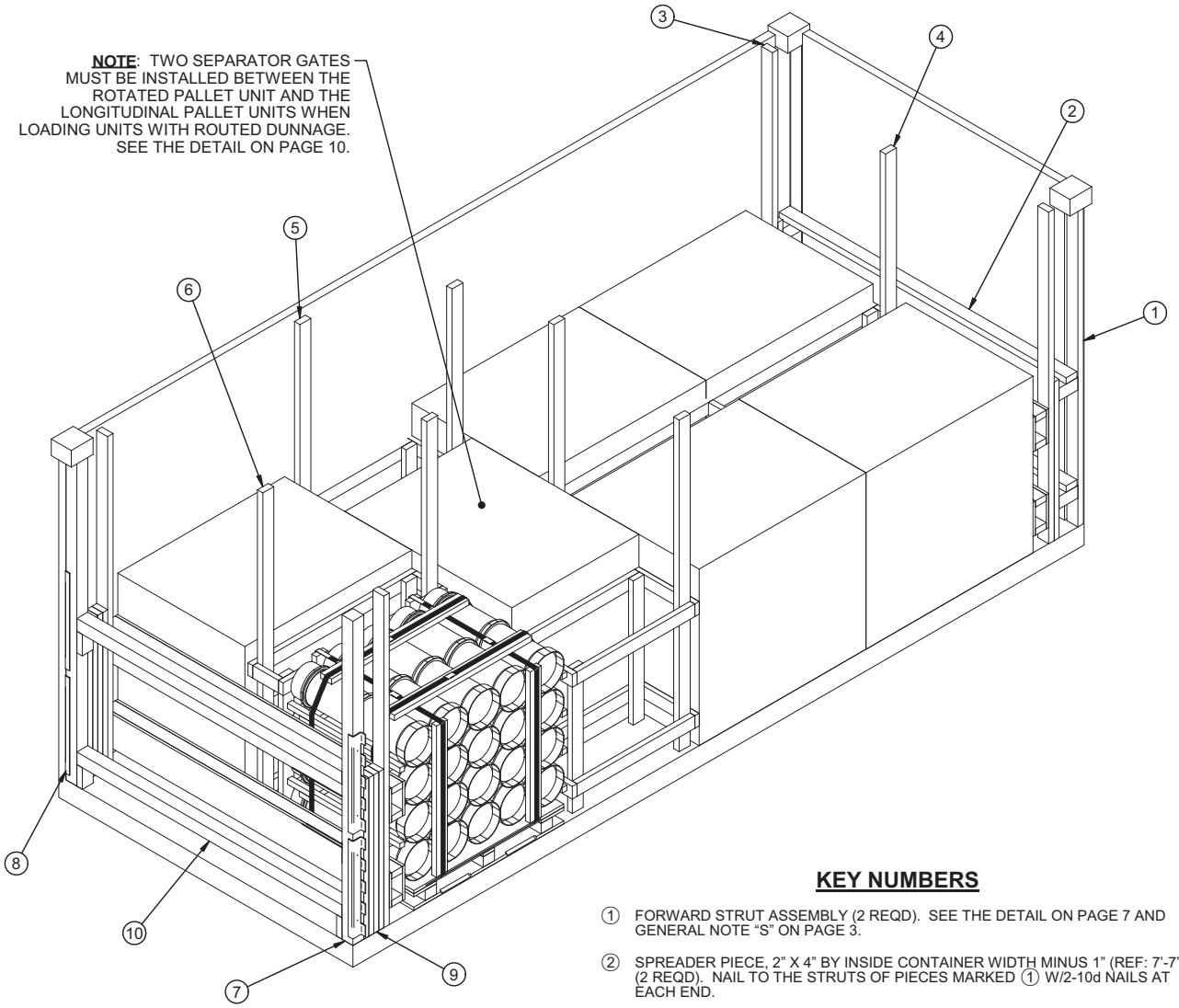
S. THE FORWARD STRUT ASSEMBLY MAY BE OMITTED, IF DESIRED, AS LONG AS THE CENTER OF GRAVITY REQUIREMENTS STATED IN GENERAL NOTE "H" ARE MET.

T. LOAD-BLOCKING STRUTS WHICH ARE 48" OR LONGER MUST BE STIFFENED BY THE APPLICATION OF HORIZONTAL AND VERTICAL STRUT BRACING AS SHOWN IN THE "TYPICAL STRUT BRACING" DETAIL ON PAGE 73 OF DRAWING AMC 19-48-4153-15PA1002. 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 CENTER GATES AND/OR BETWEEN ADJACENT STRUT BRACING PIECES. NOTE THAT HORIZONTAL STRUT BRACING PIECES FOR THE UPPER LEVEL OF STRUTS FOR ALL BUT THE UPPERMOST TIER OF A LOAD MAY BE DIFFICULT TO APPLY TO THE TOP SURFACES OF THE STRUT AS DEPICTED. STRUT BRACING WILL BE EQUALLY EFFECTIVE IF APPLIED TO THE UNDER SIDE OF THOSE STRUTS.

U. ANTI-CHAFING MATERIAL MAY BE INSTALLED AT POINTS OF CONTACT BETWEEN PALLET UNITS AND BETWEEN PALLET UNITS AND THE END OPENING CONTAINER, TO PREVENT CHAFING DAMAGE TO CONTAINER PAINT AND MARKINGS.

MATERIAL SPECIFICATIONS

LUMBER	SEE TM 743-200-1 (DUNNAGE LUMBER) AND VOLUNTARY PRODUCT STANDARD PS 20.
NAILS	ASTM F1667; COMMON STEEL NAIL (NLCMS OR NLCMMS).
PLYWOOD	COMMERCIAL ITEM DESCRIPTION A-A-55057, 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, 0.0800" DIA, GRADE 1006 OR BETTER.
ANTI-CHAFING MATERIAL	MIL-PRF-121 (OR EQUAL); NEUTRAL BARRIER MATERIAL.
STEEL, STRUCTURAL	ASTM A36; 36,000 PSI MINIMUM YIELD OR BETTER.



ISOMETRIC VIEW

KEY NUMBERS

① FORWARD STRUT ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 7 AND GENERAL NOTE "S" ON PAGE 3.

② SPREADER PIECE, 2" X 4" BY INSIDE CONTAINER WIDTH MINUS 1" (REF: 7'-7") (2 REQD). NAIL TO THE STRUTS OF PIECES MARKED ① W/2-10d NAILS AT EACH END.

③ FORWARD/REAR BLOCKING ASSEMBLY (2 REQD). SEE THE DETAIL PAGE 8. NAIL THROUGH THE BUFFER PIECES INTO THE VERTICAL PIECE OF PIECES MARKED ① W/5-10d NAILS.

④ CRIB FILL ASSEMBLY A (1 REQD). SEE THE DETAIL ON PAGE 9.

⑤ SIDE FILL ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 9.

⑥ CRIB FILL ASSEMBLY B (1 REQD). SEE THE DETAIL ON PAGE 9.

⑦ DOOR POST VERTICAL (2 REQD). SEE THE DETAIL AND, "DETAIL A" ON PAGE 7, AND GENERAL NOTE "Q" ON PAGE 3.

⑧ UNIVERSAL LOAD RETAINER (4 REQD, 2 PER SIDE). NAIL THROUGH THE HOLES INTO THE DOOR POST VERTICAL W/2-10d NAILS. SEE DEPARTMENT OF ARMY DRAWING DA-116, "DETAIL A" ON PAGE 7, AND GENERAL NOTE "Q" ON PAGE 3.

⑨ FILL MATERIAL, 4" WIDE BY 48" LONG MATERIAL (AS REQD). NAIL THE FIRST PIECE TO THE REAR BLOCKING ASSEMBLY W/4 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" ON PAGE 7.

⑩ DOOR SPANNER, 4" X 4" MATERIAL CUT TO A LENGTH THAT WILL PROVIDE A DRIVE FIT (REF:7'-1-1/4") (2 REQD). TOENAIL TO THE DOOR POST VERTICAL W/2-12d NAILS AT EACH END. SEE THE "BEVEL-CUT" DETAIL ON PAGE 8.

BILL OF MATERIAL

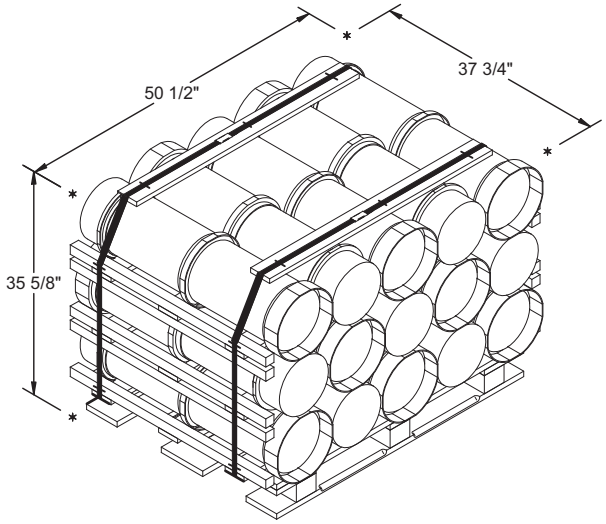
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	6	4
2" X 4"	302	402
4" X 4"	30	81
NAILS	**NO. REQD**	**POUNDS**
6d (2")	26	1/4
10d (3")	544	8-1/2
12d (3-1/4")	48	3/4
PLYWOOD, 3/4" - - 48.00 SQ FT REQD - 99.10 LBS		
UNIVERSAL LOAD RETAINER - - 4 REQD - - - 26 LBS		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT	(APPROX)
PALLET UNIT	7	12,166 LBS	
DUNNAGE		595 LBS	
CONTAINER		4,700 LBS	
TOTAL WEIGHT		17,461 LBS	(APPROX)

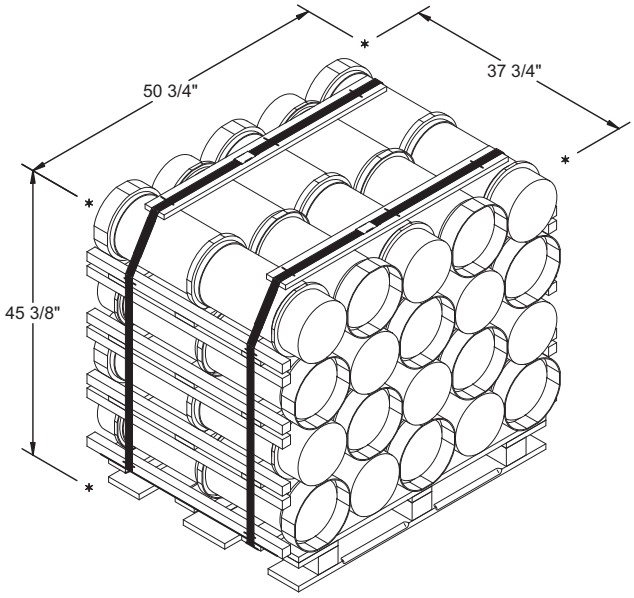
7 PALLET UNIT LOAD (FLAT DUNNAGE-BASIC HEIGHT)

PROJECT CA 175/10-80



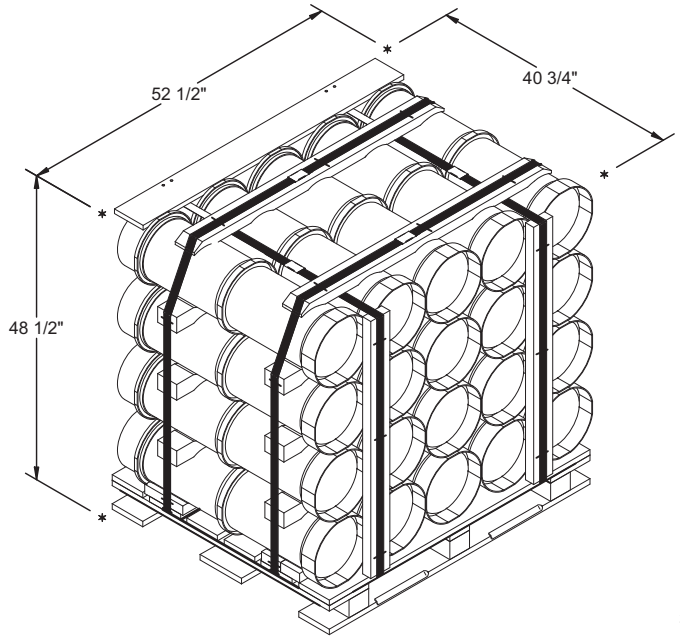
ALTERNATED CONTAINER-BASIC HEIGHT PALLET UNIT

GROSS WEIGHT - - - - - - - - - - - - - 1,273 LBS
CUBE - - - - - - - - - - - - - - - - - 39.3 CU FT



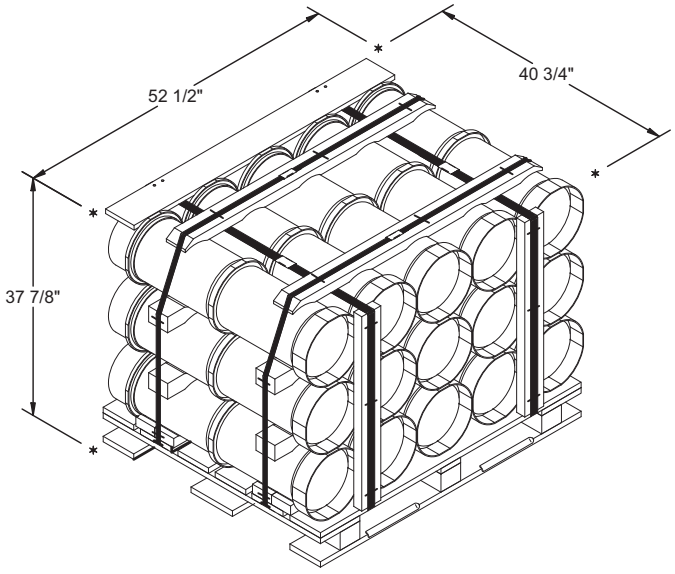
ALTERNATED CONTAINER-INCREASED HEIGHT PALLET UNIT

GROSS WEIGHT - - - - - - - - - - - - - 1,658 LBS
CUBE - - - - - - - - - - - - - - - - - 50.1 CU FT



ROUTED DUNNAGE-BASIC HEIGHT PALLET UNIT

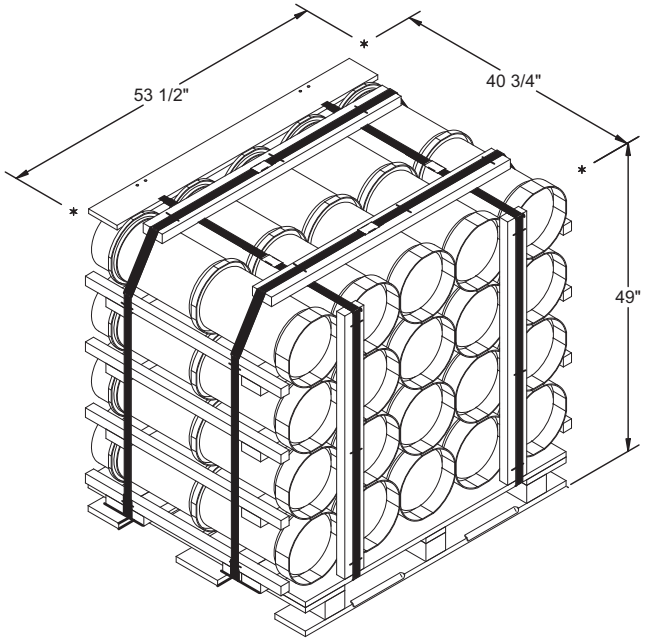
GROSS WEIGHT - - - - - - - - - - - - - 1,736 LBS
CUBE - - - - - - - - - - - - - - - - - 60.1 CU FT



ROUTED DUNNAGE-REDUCED HEIGHT PALLET UNIT

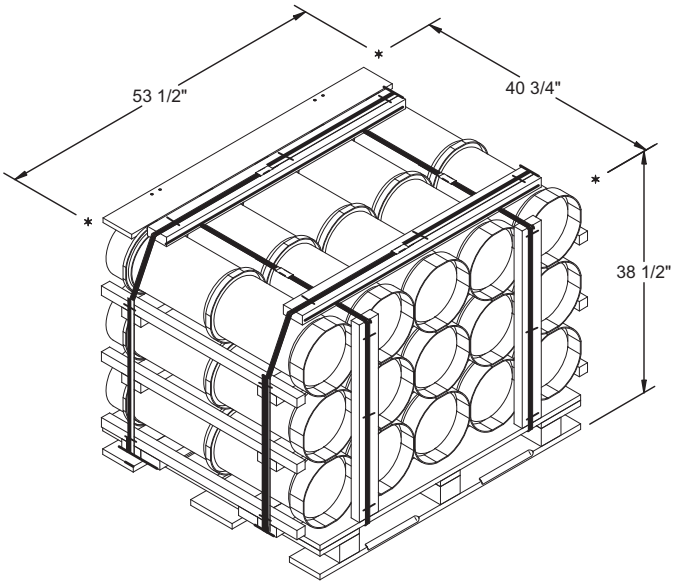
GROSS WEIGHT - - - - - - - - - - - - - 1,351 LBS
CUBE - - - - - - - - - - - - - - - - - 46.9 CU FT

PROJECT CA 175/10-80



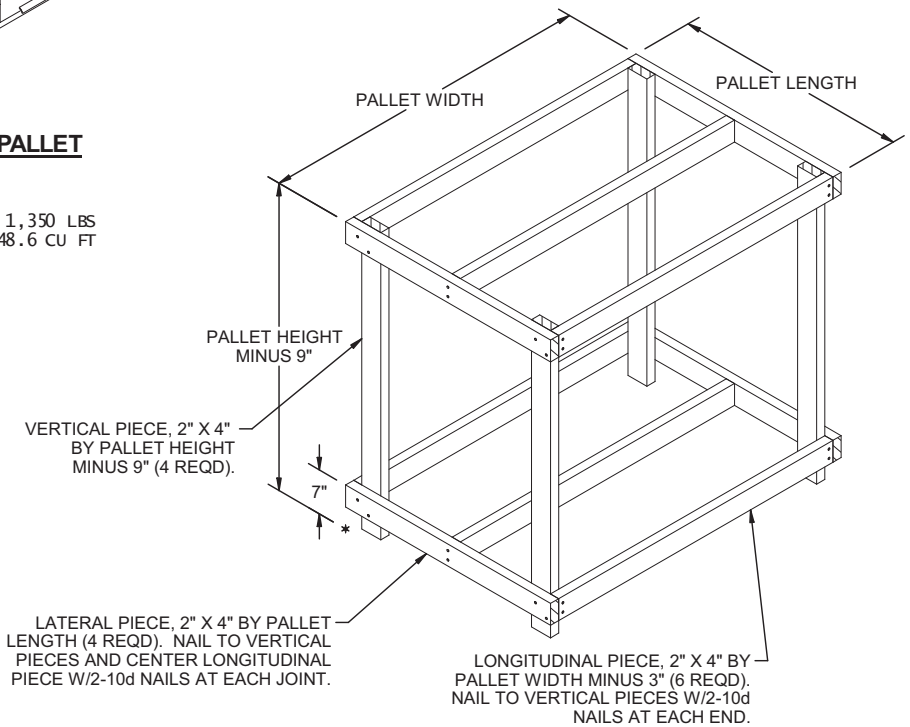
FLAT DUNNAGE-BASIC HEIGHT PALLET UNIT

GROSS WEIGHT - - - - - - - - - - - - - 1,738 LBS
CUBE - - - - - - - - - - - - - - - - - 61.8 CU FT



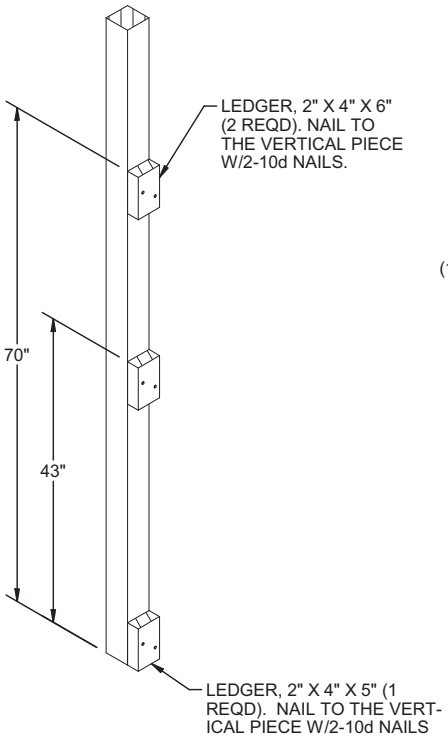
FLAT DUNNAGE-REDUCED HEIGHT PALLET UNIT

GROSS WEIGHT - - - - - - - - - - - - - 1,350 LBS
CUBE - - - - - - - - - - - - - - - - - 48.6 CU FT



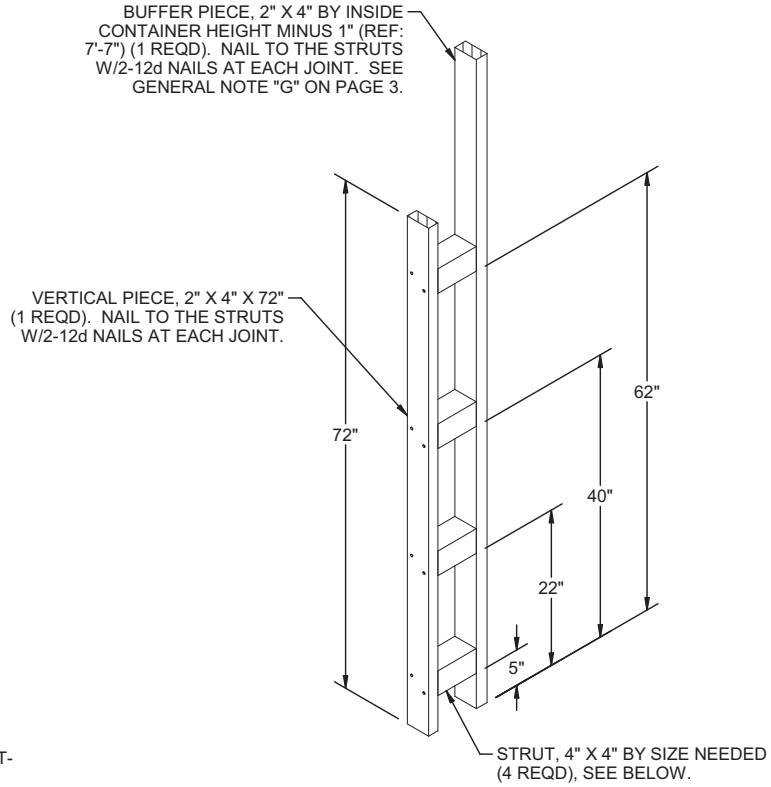
FILLER ASSEMBLY

THE ASSEMBLY DEPICTED ABOVE IS FOR USE IN PLACE OF ONE LONGITUDINALLY ORIENTED PALLET UNIT. FILLER ASSEMBLIES MUST BE WIRE TIED TO AN ADJACENT PALLET UNIT STRAP OR DUNNAGE ASSEMBLY IN AT LEAST TWO PLACES. NO MORE THAN THREE FILLER ASSEMLBIES WILL BE USED IN ANY TWO HIGH LOAD, AND NO MORE THAN ONE ASSEMBLY WILL BE USED IN ANY ONE HIGH LOAD. DO NOT USE TO REPLACE LATERALLY ORIENTED PALLET UNITS. **NOTE**: "PALLET LENGTH" IS EITHER 37-3/4" OR 40-3/4".



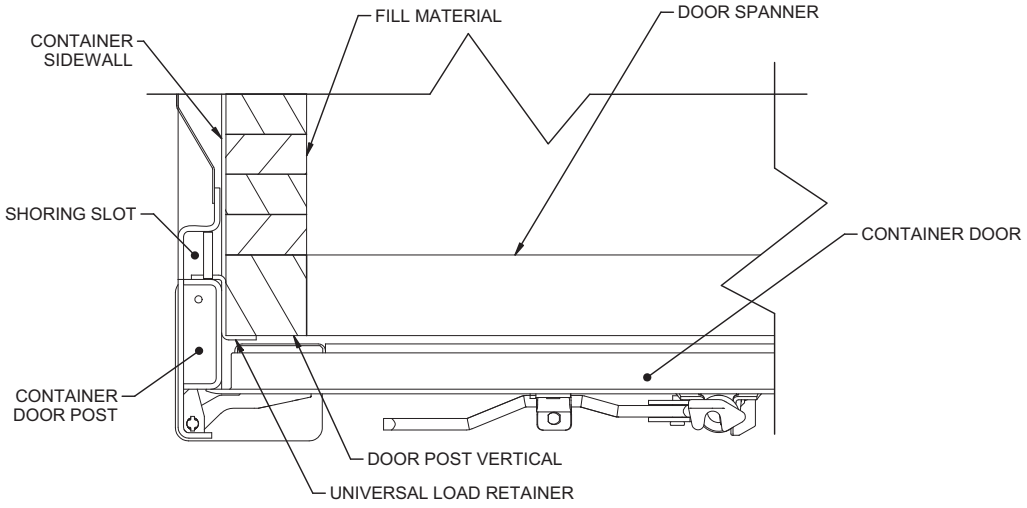
DOOR POST VERTICAL

FOR A ONE HIGH LOAD, ELIMINATE THE TOP DOOR SPANNER LEDGER, AND REPOSITION THE MIDDLE DOOR SPANNER LEDGER TO 39".



FORWARD STRUT ASSEMBLY

FOR THE STRUT LENGTH, USE 6" FOR THE LOAD ON PAGE 2, OR 5" FOR THE LOAD ON PAGE 4. FOR A ONE HIGH LOAD, ELIMINATE THE TOP TWO STRUTS AND REDUCE THE HEIGHT OF THE VERTICAL PIECE TO 48".

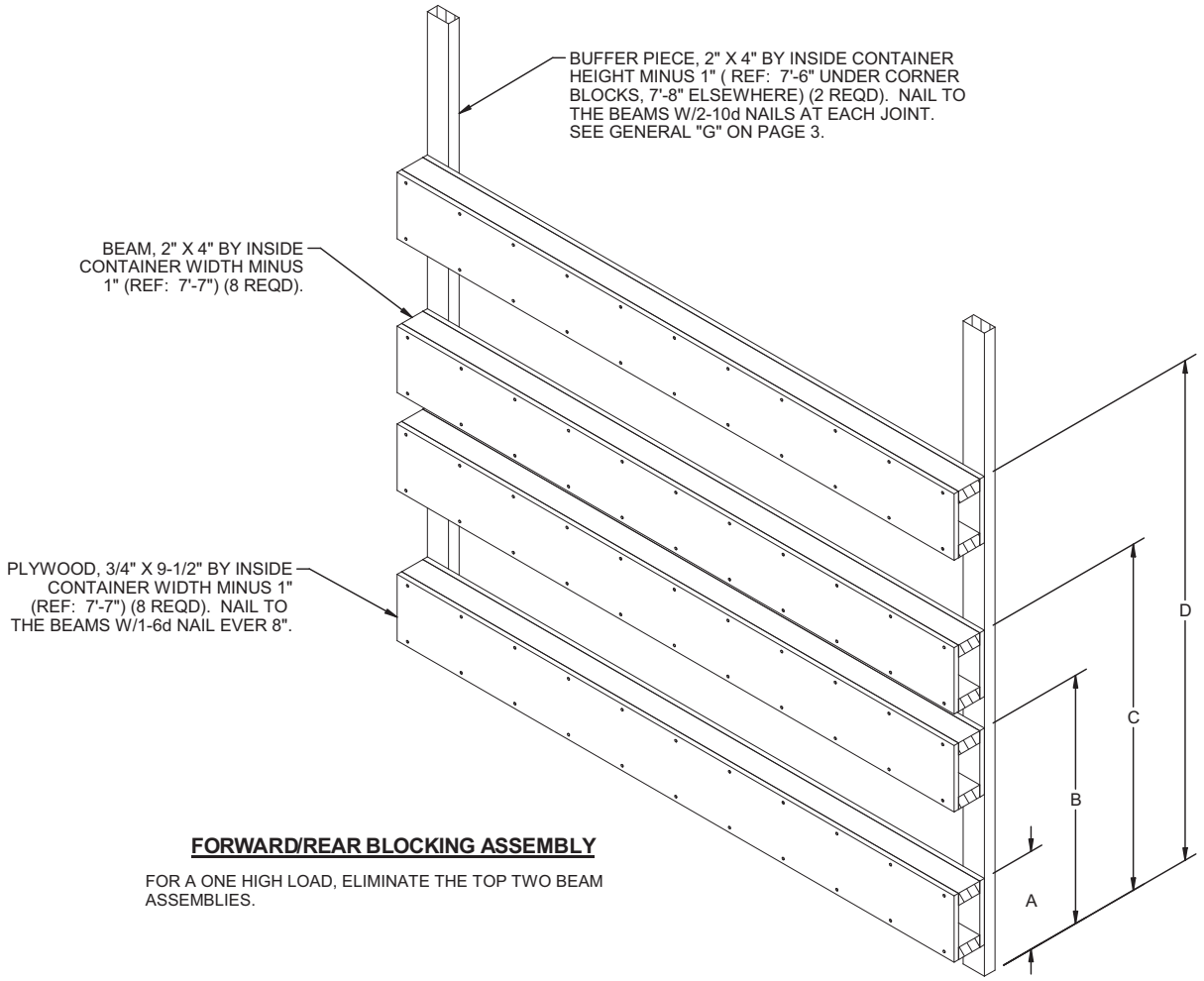


DETAIL A

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

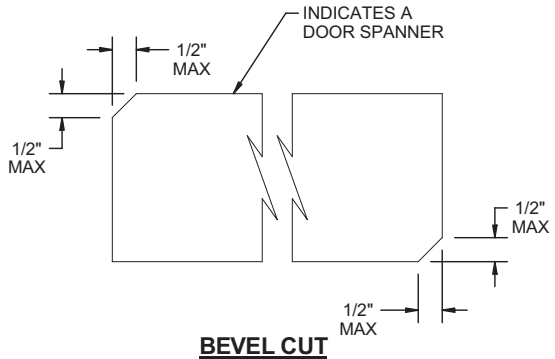
DIMENSION CHART

	DIMENSION								
PALLET UNIT	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**J**
ALTERNATED BASIC	15”	26”	51”	62”	8’-4”	13”	28”	44”	64”
ALTERNATED INCREASED	15”	36”	---	---	8’-4”	13”	38”	---	---
FLAT BASIC	17”	38”	---	---	8’-8”	7”	40”	---	---
FLAT REDUCED	17”	28-1/2”	55-1/2”	67”	8’-8”	7”	30”	46”	68”
ROUTED BASIC	17”	37”	---	---	8’-10”	7”	38”	---	---
ROUTED REDUCED	17”	36”	55”	6’-2”	8’-10”	7”	28”	46”	66”



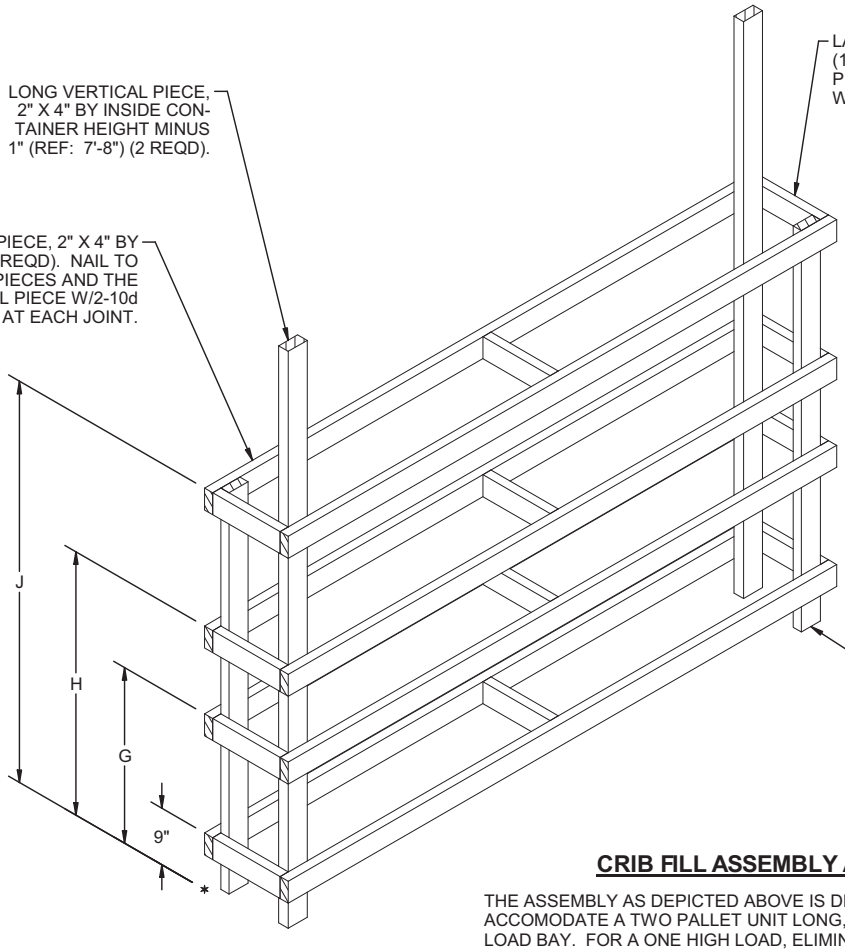
FORWARD/REAR BLOCKING ASSEMBLY

FOR A ONE HIGH LOAD, ELIMINATE THE TOP TWO BEAM ASSEMBLIES.



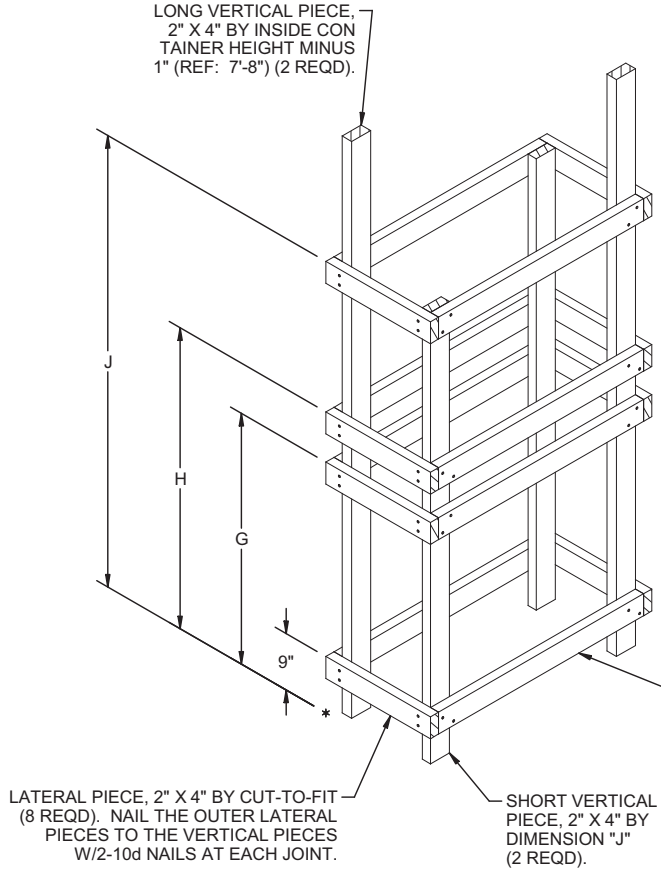
BEVEL CUT

IF DESIRED, EACH END OF A DOOR SPANNER MAY BE BEVEL-CUT AS SHOWN ABOVE TO FACILITATE INSTALLING THE STRUTS WITH A "DRIVE" FIT.



CRIB FILL ASSEMBLY A

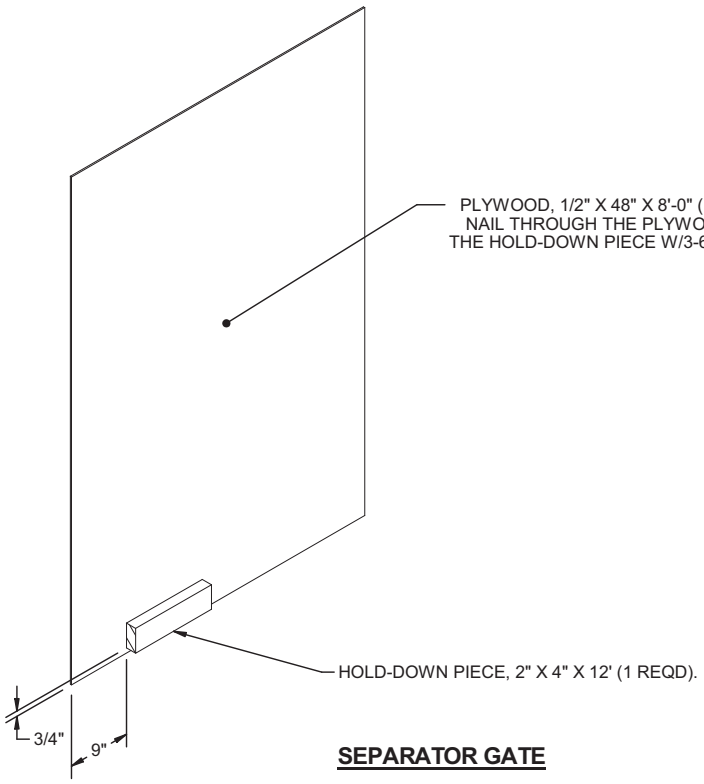
THE ASSEMBLY AS DEPICTED ABOVE IS DESIGNED TO ACCOMODATE A TWO PALLET UNIT LONG, TWO HIGH LOAD BAY. FOR A ONE HIGH LOAD, ELIMINATE THE FOUR UPPER LONGITUDINAL PIECES AND THE SIX UPPER LATERAL PIECES, AND REDUCE THE LENGTH OF THE SHORT VERTICAL PIECES TO DIMENSION "G".



NOTE: FOR LETTERED DIMENSIONS, REFER TO THE "DIMENSION CHART" ON PAGE 8.

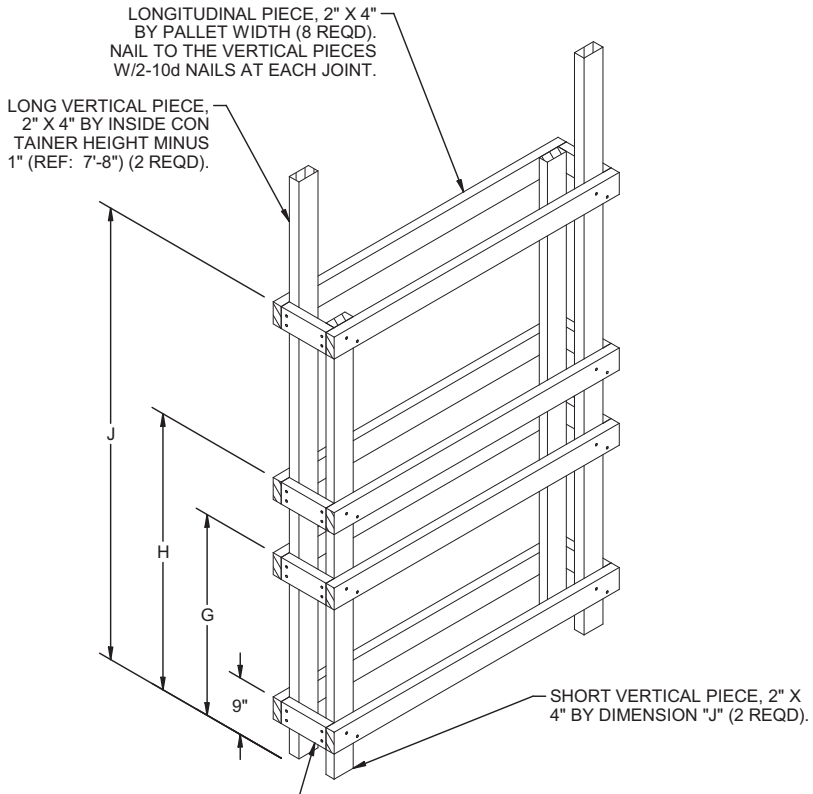
SIDE FILL ASSEMBLY

THE ASSEMBLY AS DEPICTED AT LEFT IS DESIGNED TO ACCOMODATE A ONE PALLET UNIT LONG, TWO HIGH LOAD BAY OF A FOURTEEN UNIT LOAD CONFIGURATION. FOR A ONE HIGH LOAD, ELIMINATE THE FOUR UPPER LONGITUDINAL AND LATERAL PIECES AND REDUCE THE HEIGHT OF THE SHORT VERTICAL PIECE TO DIMENSION "G".



SEPARATOR GATE

TO BE USED WITH ALTERNATED BASIC HEIGHT PALLET LOAD. FOR SINGLE LAYER LOAD, REDUCE THE HEIGHT OF THE PLYWOOD PIECE TO 48".



NOTE: FOR LETTERED DIMENSIONS, REFER TO THE "DIMENSION CHART" ON PAGE 8.

CRIB FILL ASSEMBLY B

THE ASSEMBLY AS DEPICTED AT RIGHT IS DESIGNED TO ACCOMODATE A ONE PALLET UNIT LONG, TWO HIGH LOAD BAY. FOR A ONE HIGH LOAD, ELIMINATE THE FOUR UPPER LONGITUDINAL PIECES, AND REDUCE THE LENGTH OF THE SHORT VERTICAL PIECES TO DIMENSION "G".