APPENDIX 54

UNITIZATION PROCEDURES FOR BOXED AMMUNITION AND COMPONENTS ON 4-WAY ENTRY PALLETS

LUG. BOMB. SUSPENSION, PACKED 160 PER FIBERBOARD OR WOODEN BOX. UNITIZED 64 BOXES PER 40" X 48" FIBERBOARD A). 60 WOODEN BOXES PER 40" (UNIT LOAD 48" PALLET (UNIT LOAD B). 80 FIBERBOARD 53" PALLET (UNIT BOXES PER 42" X OR 45 WOODEN BOXES PER 35" X 45-1/2" PALLET LOAD D): APPROX FIBERBOARD BOX X 9-3/8" W X 10-3/8" W Χ LOAD C). APPROX WOODEN BOX W X 6-1/2" H (UNIT LOAD B) OR 15-1/2" | X 11-1/2" W X 6-3/4" H (UNIT LOAD D)

NOTICE: THIS APPENDIX CANNOT STAND ALONE BUT MUST BE USED IN CONJUNCTION WITH THE BASIC UNITIZATION PROCEDURES DRAWING 19-48-4116-20PA1002.

U.S. ARM	Y MATERIE	EL C	OMM	AND DR	AWING
APPROVED, U.S. ARMY ARMAMEN	NT, MUNITIONS AND	DRAFTS	SMAN	TECHNICIAN	ENGINEER
CHEMICAL COMMAND		D. REIF	STECK		W. FRERICHS
David a hakorik	Stachark	D. WHI	TMORE		S. SCHULTZ
SMCAH-ESK AM	1SMC-TMD	EVALUA DIVIS		STORAGE & OUTLOAD DIVISION	DING LOGISTICS ENGINEERING OFFICE
APPROVED BY ORDER OF COMMAN ARMY MATERIEL COMMAND	1	-	TIM	w. Jun	
John L.	/ Syrt		V	MAY 1981	
U.S. ARMY DEFENSE AMMUNITIO	ON CENTER AND SCHOOL	CLASS	DIVISIO	N DRAWING	FILE
REVISION NO. 3	AUGUST 1990	19	48	4116/	20PA
SEE THE REVISION LI	STING ON PAGE 2	13	10	54	1002

DO NOT SCALE

PALLET UNIT DATA											
ITEMS INCL	.UDED	HAZA	RD CLASS	SIFICATIO	N	WEIGHT (LBS)					
NSN	DODIC	DOT CLASS	CG CLASS	QD CLASS	UNIT A	UNIT B	UNIT C	UNIT D			
1325- 00-991-8890 01-236-8604	G263 G251			RT		2,518 2,518	3,328 3,328	3,772 3,772	2,405 2,405		

HAZARD CLASSIFICATION DATA CONTAINED IN THE ABOVE CHART IS FOR GUIDANCE AND INFORMATIONAL PURPOSES ONLY. VERIFICATION OF THE SPECIFIED DATA SHOULD BE MADE BY CONSULTING THE MOST RECENT JOINT HAZARD CLASSIFICATION SYSTEM LISTING OR OTHER APPROVED LISTING(S).

REVISIONS

REVISION NO. 1. DATED MARCH 1982, CONSISTS OF:

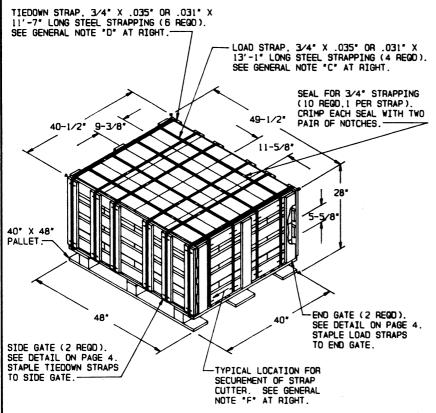
- 1. ADDING ONE MORE LAYER OF BOXES.
- 2. CHANGING UNITIZATION PROCEDURES TO CONFORM TO 1 ABOVE.

REVISION NO. 2. DATED NOVEMBER 1983, CONSISTS OF:

- 1. CHANGING FIBERBOARD BOX SIZE.
- 2. ADDING PROCEDURES FOR WOODEN BOXES.
- 3. CHANGING PROCEDURES TO CONFORM WITH 1 AND 2 IMMEDIATELY ABOVE.

REVISION NO. 3. DATED AUGUST 1990, CONSISTS OF:

- ADDING ITEM BY NATIONAL STOCK NUMBER (NSN) TO "PALLET UNIT DATA CHART".
- 2. ADDING UNITS C AND D.



PALLET UNIT A

SEE GENERAL NOTE "B" AT RIGHT.

64 BOXES OF LUG.	BOMB SUSPENSION	(160 PER BOX) AT 3	37 LBS 2,368 LBS ((APPROX)
DUNNAGE			70 LBS	
PALLET			80 LBS	
				_

TOTAL WEIGHT - - - - - - - - - - - - - 2.518 LBS (APPROX)

CUBE - - - - - - - - - - - - - 32.5 CU FT (APPROX)

BILL OF MATERIAL UNIT A								
LUMBER	LINEAR FEET BOARD FEET							
1* X 4*	89.83	29.95						
NAILS	NO. REGO	POUNDS						
6d (2*)	144	0.85						
PALLET. 40° X 48° 1 REGD 80 LBS STEEL STRAPPING, 3/4° - 121.83′ REGD 8.70 LBS SEAL FOR 3/4° STRAPPING10 REGD NIL STAPLE 40 REGD 0.11 LBS								

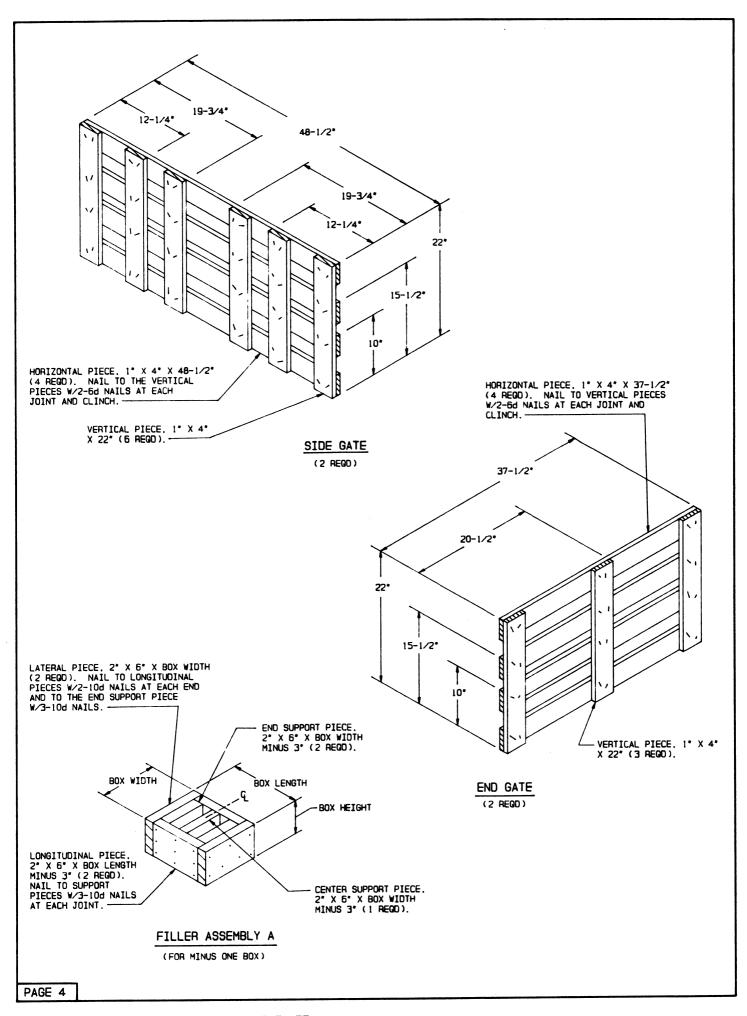
GENERAL NOTES FOR UNIT A

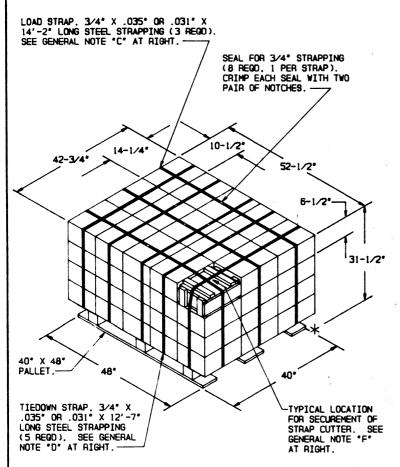
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- B. DIMENSIONS. CUBE AND WEIGHT OF A PALLET UNIT WILL VARY SLIGHTLY DEPENDING UPON THE ACTUAL DIMENSIONS OF THE BOXES AND THE WEIGHT OF THE SPECIFIC ITEM BEING UNITIZED.
- C. THE LOAD STRAPS MUST BE PRE-POSITIONED ON THE PALLET DECK PRIOR TO PLACING BOXES ON THE PALLET. LOAD STRAPS MUST BE TENSIONED AND SEALED PRIOR TO APPLICATION OF TIEDOWN STRAPS.
- D. INSTALL EACH TIEDOWN STRAP TO PASS UNDER THE DECK/STRINGER BOARDS OF THE PALLET AND TO BE LOCATED AS SHOWN. TIEDOWN STRAPS WILL NOT BE APPLIED UNTIL THE LOAD STRAPS HAVE BEEN TENSIONED AND SEALED.
- E. THE FOLLOWING AMC DRAWINGS ARE APPLICABLE FOR OUTLOADING AND STORAGE OF THE ITEMS COVERED BY THIS APPENDIX.

CARLOADING - - - 19-48-4115-5PA1002 TRUCKLOADING - - 19-48-4117-11PA1003 STORAGE - - - 19-48-4118-1-2-3-4-14-22PA1002

COMMERCIAL CONTAINER - - - - 19-48-4153-15PA1002 MILVAN - - - - - 19-48-4166-15PA1003

- F. FOR METHOD OF SECURING A STRAP CUTTER TO THE PALLET UNIT. SEE AMC DRAWING 19-48-4127-20P1000.
- G. IF ITEMS COVERED HEREIN ARE UNITIZED PRIOR TO ISSUANCE OF THIS APPENDIX. THE BOXES NEED NOT BE REUNITIZED SOLELY TO CONFORM TO THIS APPENDIX.
- H. THE UNITIZATION PROCEDURES DEPICTED HEREIN MAY ALSO BE USED FOR UNITIZING LUG, BOMB SUSPENSION WHEN IDENTIFIED BY DIFFERENT NATIONAL STOCK NUMBERS (NSN) THAN WHAT IS SHOWN ON PAGE 2. PROVIDED THE BOX PACK DOES NOT VARY FROM WHAT IS DELINEATED HEREIN. THE EXPLOSIVE CLASSIFICATION OF OTHER ITEMS MAY BE DIFFERENT THAT WHAT IS SHOWN.
- K. WHEN THE UNIT LOAD DEPICTED AT LEFT IS TO BE USED FOR UNITIZING MARINE CORPS AMMUNITION, I LAYER OF BOXES MUST BE OMITTED, TIEDOWN STRAP LENGTHS MUST BE DECREASED TO 10'-8". LOAD STRAP LENGTHS MUST BE DECREASED TO 12'-2". AND GATE ASSEMBLIES MUST BE MODIFIED. THE SIDE GATE AND END GATE ASSEMBLY MODIFICATIONS INCLUDE CHANGING THE VERTICAL PIECE LENGTHS TO 17". ELIMINATING THE HORIZONTAL PIECE LOCATED AT THE 22" HEIGHT DIMENSION, AND LOCATING THE UPPERMOST HORIZONTAL PIECE EVEN WITH THE TOP OF THE VERTICAL PIECES. THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 22-1/2", A GROSS UNIT WEIGHT OF 1.910 POUNDS, AND A UNIT CUBE OF 19.5 CUBIC FEET.
- J. THE STYLE 1 PALLET DELINEATED IN THE DETAIL AT LEFT NEED NOT HAVE CHAMFERS OR STRAP SLOTS AS SPECIFIED WITHIN MILITARY SPECIFICATION MIL-P-15011 WHEN USED FOR THE UNITIZATION OF ITEMS COVERED BY THIS APPENDIX.





PALLET UNIT B

SEE GENERAL NOTE "B" AT RIGHT.

BILL OF MATERIAL UNIT B

PALLET. 40° X 48° - - - - - 1 REGD - - - - 80 LBS STEEL STRAPPING, 3/4° - 105.42′ REGD - - - - 7.53 LBS SEAL FOR 3/4° STRAPPING - - 8 REGD - - - NIL

GENERAL NOTES FOR UNIT B

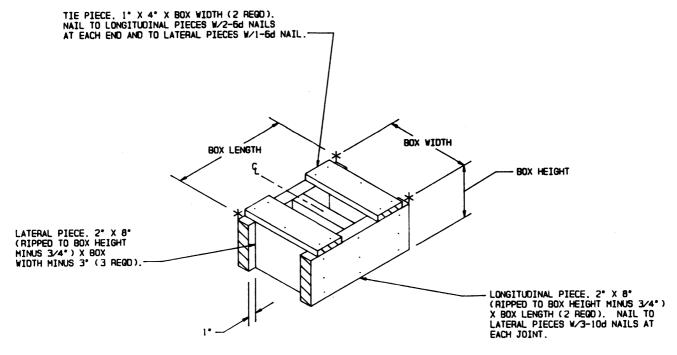
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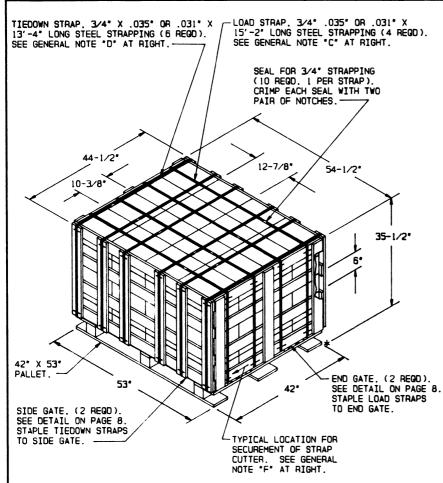
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- J. WHEN THE UNIT LOAD DEPICTED AT LEFT IS TO BE USED FOR UNITIZING MARINE CORPS AMMUNITION, 2 LAYERS OF BOXES MUST BE OMITTED, TIEDOWN STRAP LENGTHS MUST BE DECREASED TO 7'-4" AND THE LOAD STRAP LENGTHS MUST BE DECREASED TO 12'-0". THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 18-1/2", A GROSS UNIT WEIGHT OF 1,706 POUNDS AND A UNIT CUBE OF 24.0 CUBIC FEET
- K. THE STYLE 1 PALLET DELINEATED IN THE DETAIL AT LEFT NEED NOT HAVE CHAMFERS OR STRAP SLOTS AS SPECIFIED WITHIN MILITARY SPECIFICATION MIL-P-15011 WHEN USED FOR THE UNITIZATION OF ITEMS COVERED BY THIS APPENDIX.

PAGE 5



FILLER ASSEMBLY B

(FOR MINUS ONE BOX)



PALLET UNIT C

SEE GENERAL NOTE "B" AT RIGHT.

80 BOXES OF L DUNNAGE PALLET			 	 	 	82	(APPROX)
	TOTAL	WETCHT	 	 	 	2 772	 (ADDDOV)

TOTAL	WEIGHT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,772 LBS (APPROX) J. 46.8 CU FT (APPROX)
CUBE -		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46.8 CU FT (APPROX)

BILL OF MATERIAL UNIT C									
LUMBER	LINEAR FEET	BOARD FEET							
1* X 4*	107.00	35.66							
NAILS	NO . REGO	POUNDS							
6d (2°)	144	0.85							
DALLET 42* V 53	• 1 DE(OD OO I BS							

PALLET, 42° X 53° - - - - - 1 REQD - - - - 90 LBS STEEL STRAPPING, 3/4° - 140.67' REQD - - - -10.05 LBS SEAL FOR 3/4° STRAPPING - - -10 REQD - - - NIL STAPLE - - - - - - - 40 REQD - - - 0.11 LBS

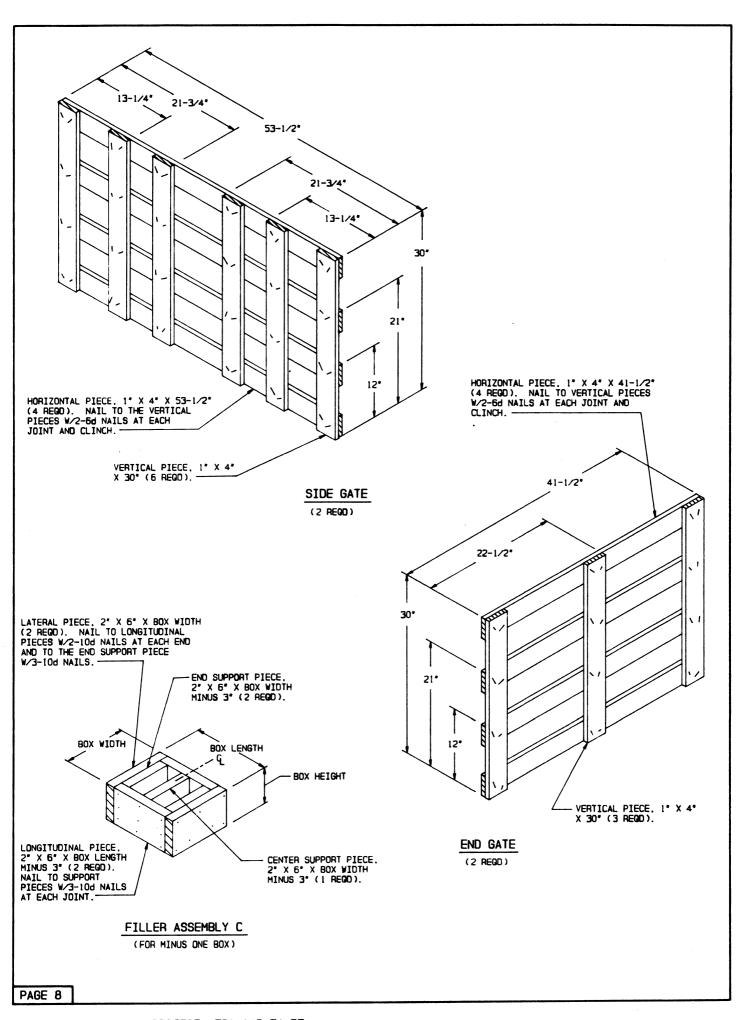
GENERAL NOTES FOR UNIT C

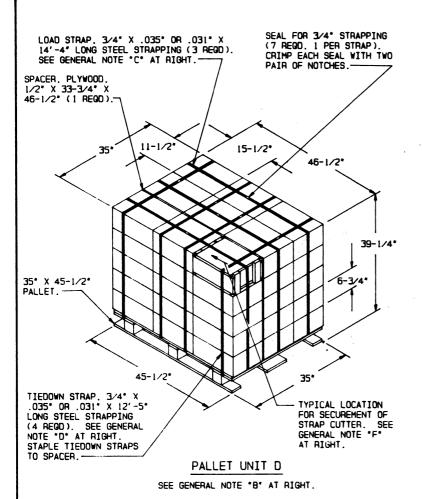
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- K. THE 44-1/2° LENGTH DIMENSION IS AN EXCEPTION TO THE BASIC PROCEDURES. HOWEVER, THE EXCEPTION IS NECESSARY FOR THE AMMUNITION PACK COVERED BY THIS APPENDIX. TO MOST EFFECTIVELY GET AN ACCEPTABLE, COMPACT AND SOUND PALLET UNIT.





SUSPENSION WHEN IDENTIFIED BY DIFFERENT NATIONAL STOCK NUMBERS (NSN) THAN WHAT IS SHOWN ON PAGE 2, PROVIDED THE BOX PACK DOES NOT VARY FROM WHAT IS DELINEATED HEREIN. THE CUBE - - - - - - - - - - - - 36.97 CU FT (APPROX) DIFFERENT THAT WHAT IS SHOWN. 45 BOXES OF LUGS, BOMB SUSPENSION (160 PER BOX) AT 51-1/2 LBS - - 2.318 LBS (APPROX) DUNNAGE - -PALLET

BILL OF MATERIAL UNIT D

PALLET, 35° X 45-1/2° - - - 1 REGD - - - - 65 LBS
STEEL STRAPPING, 3/4° - 92.67′ REGD - - - - 6.62 LBS
PLYWOOD, 1/2° - - - - - -10.90 SQ FT REGD - 14.99 LBS
SEAL FOR 3/4°STRAPPING - - - 7 REGD - - - NIL
STAPLE - - - - - - - - - 4 REGD - - - NIL

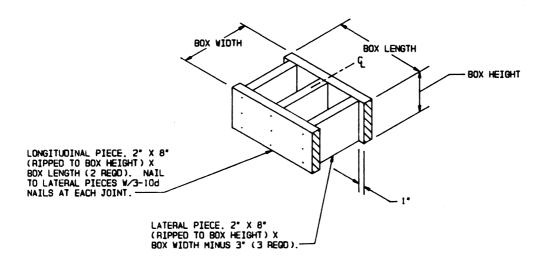
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FILLER ASSEMLY D (FOR MINUS ONE BOX)