

APPENDIX 15C

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

CARTRIDGE, 20MM, PACKED VARIOUS QUANTITIES
PER M548 METAL BOX, UNITIZED 24 BOXES PER
40" X 48" PALLET; APPROX BOX SIZE 18-19/32" L
X 8-19/64" W X 14-19/32" H

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

THIS APPENDIX SUPERSEDES THE TWO-LAYER UNITIZATION PROCEDURES OF INTERIM DRAWING
19-48-4141-20PA1003, DATED FEBRUARY 1977.

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	JUNE 1981		
U.S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL	CLASS	DIVISION	DRAWING
REVISION NO. 5	19	48	4116/ 15C
SEE THE REVISION LISTING ON PAGE 2			FILE 20PA 1002
			20PA 1002

DO NOT SCALE

PALLET UNIT DATA				
ITEMS INCLUDED		HAZARD CLASS AND DIVISION ●		APPROX WEIGHT LBS
NSN	DODIC	OO CLASS	COMP GROUP	
1305-				
00-522-3700	A651	1.4	C	3,647
00-785-2829	A651	1.4	C	3,647
01-118-9930	A651	1.4	C	4,000 *
00-935-6171	A659	(04)1.2	E	3,983
01-118-9929	A659	(04)1.2	E	4,000 *
00-926-9278	A791	(04)1.2	E	3,983
00-143-7050	A813	(04)1.2	G	3,983
00-143-7049	A814	(04)1.2	G	2,782
00-180-9271	A834	(04)1.2	E	2,782
00-143-7176	A835	(04)1.2	E	2,782
00-143-7167	A846	(04)1.2	G	2,782
00-143-7168	A846	(04)1.2	G	2,782
00-935-9104	A890	(04)1.2	E	3,983
01-116-3931	A890	(04)1.2	E	4,000 *
01-118-9928	A890	(04)1.2	E	4,000 *
00-752-8114	A891	1.4	C	3,599
01-116-4560	A891	1.4	C	4,000 *
00-935-2019	A892	1.4	C	3,743
01-116-3930	A892	1.4	C	4,000 *
00-799-8669	A924	---	-	3,983
01-116-3923	A924	---	-	4,000 *

● 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).

* SEE GENERAL NOTE "K" ON PAGE 3.

REVISIONS

REVISION NO. 1, DATED NOVEMBER 1981, CONSISTS OF:

1. ADDING NATIONAL STOCK NUMBER TO THE "PALLET UNIT DATA" CHART.
2. REDESIGNING "FILLER ASSEMBLY".

REVISION NO. 2, DATED NOVEMBER 1982, CONSISTS OF:

1. ADDING NOTE "J" TO GENERAL NOTES SECTION ON PAGE 3.

REVISION NO. 3, DATED DECEMBER 1983, CONSISTS OF:

1. CHANGING BOX DIMENSIONS.

REVISION NO. 4, DATED AUGUST 1994, CONSISTS OF:

1. CHANGING WEIGHT OF NATIONAL STOCK NUMBERS ON THE "PALLET UNIT DATA" CHART.
2. ADDING NATIONAL STOCK NUMBER TO "PALLET UNIT DATA" CHART.

REVISION NO. 5, DATED SEPTEMBER 1996, CONSISTS OF:

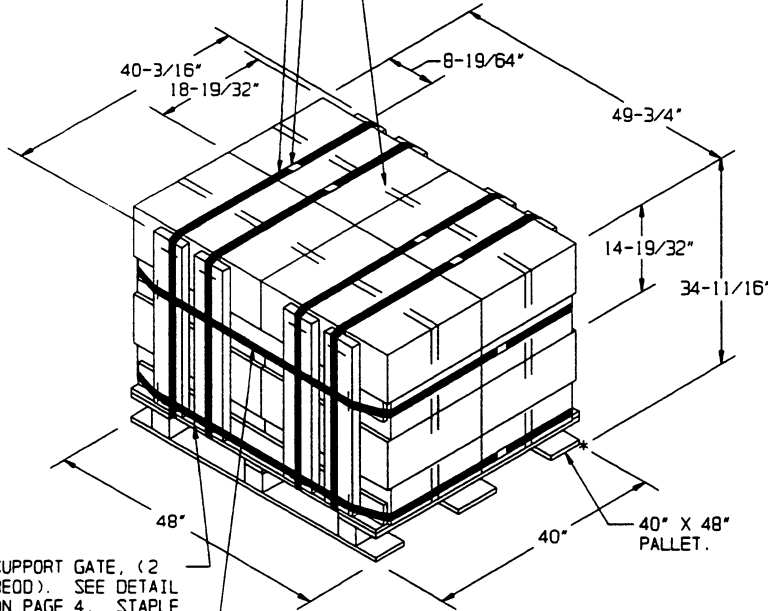
1. CHANGING THE LOAD STRAP CALLOUT ON PAGE 3.
2. DELETING GENERAL NOTE RELATING TO STRAP CUTTER AND RE-LETTERING OTHER GENERAL NOTES.

GENERAL NOTES

TIEDOWN STRAP, 1-1/4" X .035" OR .031 X 12'-8" LONG STEEL STRAPPING (4 REOD). SEE GENERAL NOTE "D" AT RIGHT.

SEAL FOR 1-1/4" STRAPPING (6 REOD, 1 PER STRAP). CRIMP EACH SEAL WITH TWO PAIR OF NOTCHES.

LOAD STRAP, (ALTERNATE FOR HORIZONTAL STRAP), 1-1/4" X .035" OR .031" X 14'-2" LONG STEEL STRAPPING (2 REOD). EACH LOAD STRAP MAY BE THREADED THRU THE PALLET STRAP SLOT OR PRE-POSITIONED ON THE PALLET DECK PRIOR TO PLACING BOXES ON THE PALLET.



SUPPORT GATE, (2 REOD). SEE DETAIL ON PAGE 4. STAPLE HORIZONTAL AND TIEDOWN STRAPS TO SUPPORT GATE AS SHOWN.

HORIZONTAL STRAP, 1-1/4" X .035" OR .031" X 16'-0" LONG STEEL STRAPPING (2 REOD). SEE GENERAL NOTE "C" AT RIGHT.

PALLET UNIT

SEE GENERAL NOTE "B" AT RIGHT.

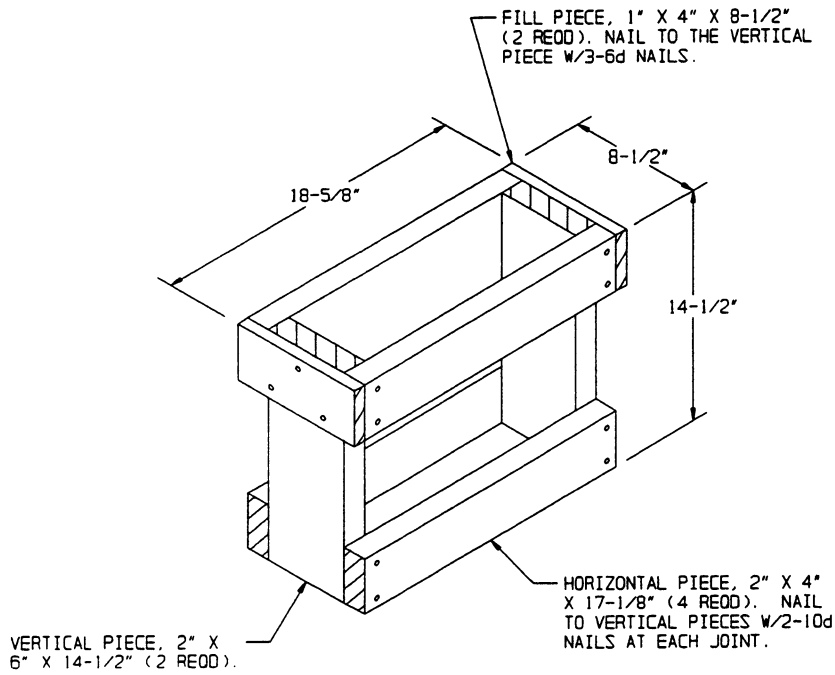
24 BOXES OF 20MM CARTRIDGE (100 PER BOX) AT 160 LBS - - - 3,840 LBS (APPROX)
 DUNNAGE - - - - - 63 LBS
 PALLET - - - - - 80 LBS

TOTAL WEIGHT - - - - - 3,983 LBS (APPROX)
 CUBE - - - - - 40.2 CU FT (APPROX)

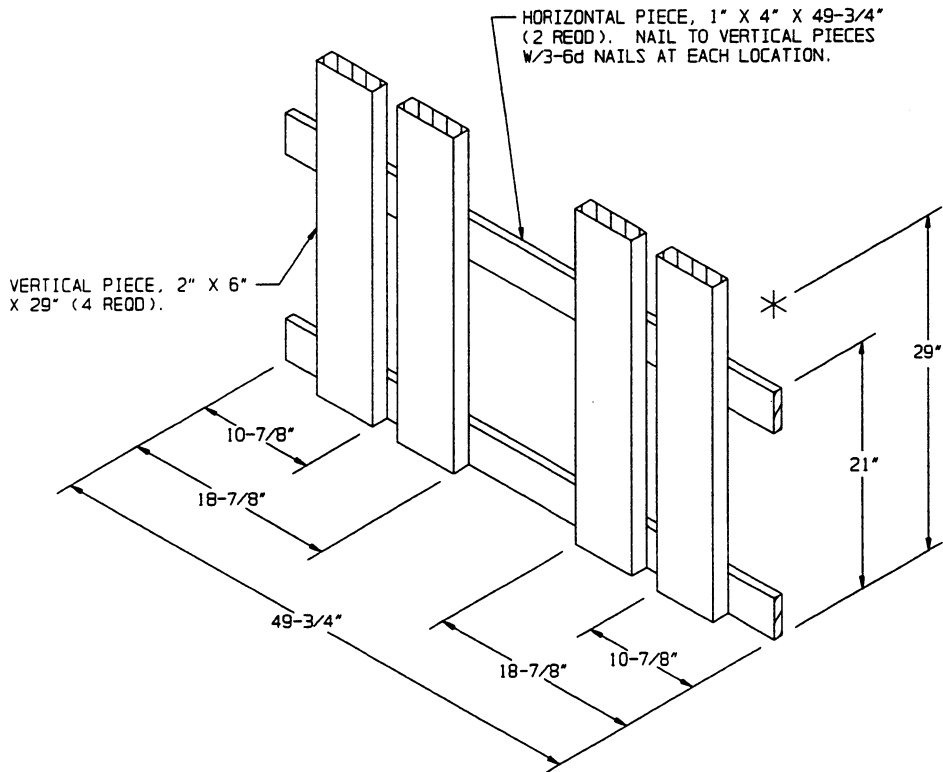
- A. THIS APPENDIX CANNOT STAND ALONE BUT MUST BE USED IN CONJUNCTION WITH THE BASIC UNITIZATION PROCEDURES DRAWING 19-48-4116-20PA1002. TO PRODUCE AN APPROVED UNIT LOAD, ALL PERTINENT PROCEDURES, SPECIFICATIONS AND CRITERIA SET FORTH WITHIN THE BASIC DRAWING WILL APPLY TO THE PROCEDURES DELINEATED IN THIS APPENDIX. ANY EXCEPTIONS TO THE BASIC PROCEDURES ARE SPECIFIED IN THIS APPENDIX.
- 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. INSTALL EACH HORIZONTAL STRAP TO ENCIRCLE A LAYER OF BOXES ON THE PALLET. NOTE THAT THE STRAPS WILL BE LOCATED AS SHOWN, ALIGNED WITH THE HORIZONTAL PIECE OF THE "SUPPORT GATE". HORIZONTAL STRAPS MUST BE TENSIONED AND SEALED PRIOR TO THE APPLICATION OF TIEDOWN STRAPS.
- D. INSTALL EACH TIEDOWN STRAP TO PASS UNDER THE TOP DECK BOARDS OF THE PALLET AND TO BE LOCATED AS SHOWN, ALIGNED WITH THE VERTICAL PIECES OF THE "SUPPORT GATE". TIEDOWN STRAPS WILL NOT BE APPLIED UNTIL THE HORIZONTAL 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
 - END OPENING ISO CONTAINER - - - - 19-48-4153-15PA1002
 - MILVAN - - - - - 19-48-4166-15PA1003
 - SIDE OPENING ISO CONTAINER - - - - 19-48-4267-15PA1009
- F. IF ITEMS COVERED HEREIN ARE UNITIZED PRIOR TO ISSUANCE OF THIS APPENDIX, THE BOXES NEED NOT BE REUNITIZED SOLELY TO CONFORM TO THIS APPENDIX.
- G. THE UNITIZATION PROCEDURES DEPICTED HEREIN MAY ALSO BE USED FOR UNITIZING 20MM CARTRIDGES 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 THAN WHAT IS SHOWN.
- H. 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.
- J. ALL DUNNAGE SHALL BE PRESERVATIVE TREATED IN ACCORDANCE WITH GENERAL NOTE "X" IN THE BASIC PROCEDURES.
- K. REGARDLESS OF THE QUANTITY OF BOXES TO BE PALLETIZED, THE TOTAL WEIGHT OF A FULLY LOADED PALLET UNIT WILL NOT EXCEED 4,000 POUNDS. WHEN THE TOTAL WEIGHT OF A FULLY LOADED PALLET UNIT EXCEEDS 4,000 POUNDS, ONE OR MORE LOADED BOXES MUST BE REMOVED, AND EITHER FILLER ASSEMBLIES, AS DEPICTED ON PAGE 4, OR EMPTY BOXES MUST BE SUBSTITUTED THEREFORE. FOR ADDITIONAL GUIDANCE, SEE THE "PROVISIONS FOR LESS-THAN-FULL-LAYER LOADS" IN THE BASIC UNITIZATION PROCEDURES DRAWING 19-48-4116-20PA1002.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	16.58	5.53
2" X 6"	19.33	19.33
NAILS	NO. REOD	POUNDS
6d(2")	48	0.28
PALLET, 40" X 48" - - - - 1 REOD - - - - 80 LBS		
STEEL STRAPPING, 3/4" - 82.67' REOD - - - - 12.53 LBS		
SEAL FOR 3/4" STRAPPING - - 6 REOD - - - - NIL		
STAPLE - - - - - 24 REOD - - - - NIL		



FILLER ASSEMBLY
(FOR MINUS ONE BOX)



SUPPORT GATE
(2 REOD)