

# APPENDIX 156L

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

FUZE, POINT DETONATING AND/OR MECHANICAL  
TIME, PACKED VARIOUS QUANTITIES PER WOODEN  
BOX, UNITIZED 24 BOXES PER 35" X 45  $\frac{1}{2}$ "  
PALLET; APPROX BOX SIZE 18  $\frac{1}{2}$ " L X 13  $\frac{7}{8}$ " W X  
12  $\frac{7}{8}$ " H

PALLET UNIT DATA						
ITEMS INCLUDED		HAZARD CLASSIFICATION <sup>①</sup>				WEIGHT
NSN	DODIC	DOT CLASS	CG CLASS	QD CLASS	COMP GROUP	(LBS)
1390- 00-028-4913	N276	C	I	1.4	B	2,112
00-028-4916	N276	C	I	1.4	B	2,112
00-892-4089	N280	A	VI	1.1	B	1,992
00-305-0868	N276	C	I	1.4	B	1,992

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

<sup>①</sup> 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).

**DO NOT SCALE**

REVISIONS				DRAFTSMAN	PROJ ENG
				<i>nick</i>	<i>[Signature]</i>
				CHECKER	LOG ENGRG OFFICE
				<i>RSW</i>	<i>[Signature]</i>
APPROVED, U. S. ARMY ARMAMENT, MUNITIONS AND CHEMICAL COMMAND					
				DRSMC-LEP	DRSMC-TND
APPROVED BY ORDER OF COMMANDING GENERAL, U. S. ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND (DARCOM)					
U. S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL					
<b>U. S. ARMY DARCOM DRAWING</b>					
<b>NOVEMBER 1983</b>					
CLASS	DIVISION	DRAWING	FILE		
19	48	4116/ 156L	20PA 1002		

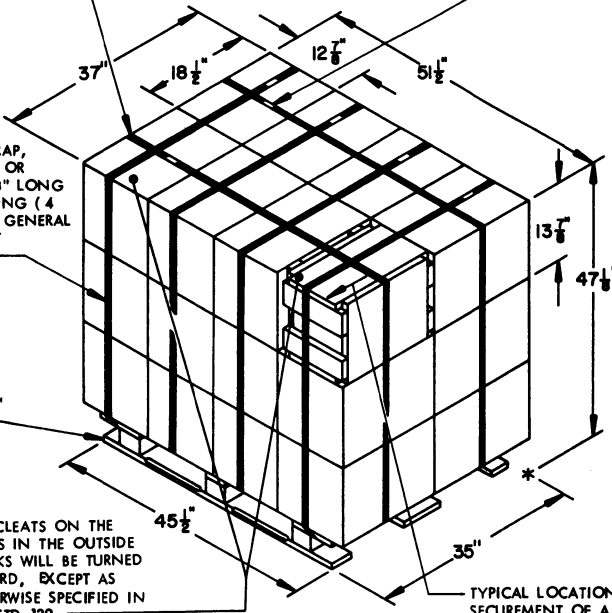
LOAD STRAP, 3/4" X .035" OR .031" X 16'-8" LONG STEEL STRAPPING (2 REQD.). SEE GENERAL NOTE "C" AT RIGHT.

SEAL FOR 3/4" STRAPPING (6 REQD, 1 PER STRAP). CRIMP EACH SEAL WITH TWO PAIR OF NOTCHES.

TIEDOWN STRAP, 3/4" X .035" OR .031" X 14'-3" LONG STEEL STRAPPING (4 REQD.). SEE GENERAL NOTE "D" AT RIGHT.

35" X 45-1/2" PALLET.

TOP CLEATS ON THE BOXES IN THE OUTSIDE STACKS WILL BE TURNED INWARD, EXCEPT AS OTHERWISE SPECIFIED IN MIL-STD-129.



TYPICAL LOCATION FOR SECUREMENT OF A STRAP CUTTER. SEE GENERAL NOTE "F" AT RIGHT.

**PALLET UNIT**

SEE GENERAL NOTE "B" AT RIGHT.

24 BOXES OF FUZES ( VARIOUS QUANTITIES PER BOX ) @ 85 LBS	-----	2,040 LBS ( APPROX )
DUNNAGE	-----	7 LBS
PALLET	-----	65 LBS
TOTAL WEIGHT	-----	2,112 LBS ( APPROX )
CUBE	-----	52.0 CU FT ( APPROX )

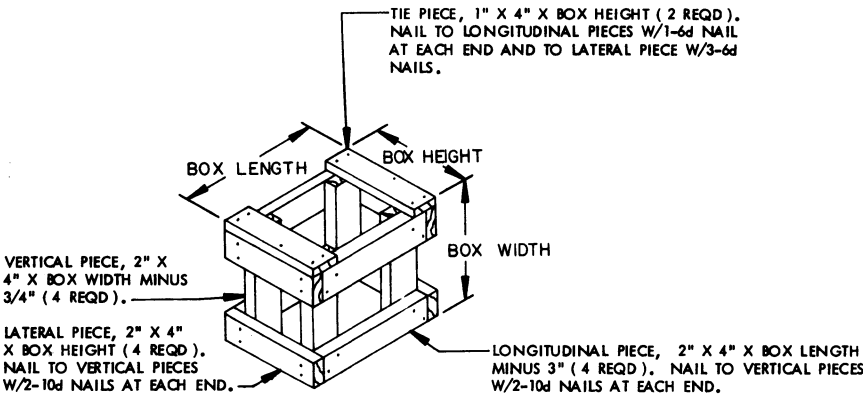
**GENERAL NOTES**

- 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. THE LOAD STRAPS MAY BE THREADED THROUGH THE STRAP SLOTS OF A PALLET OR 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 DARCOM DRAWINGS ARE APPLICABLE FOR OUT-LOADING AND STORAGE OF THE ITEMS COVERED BY THIS APPENDIX.
 

CARLOADING	-----	DRAWING 19-48-4115-5PA1002
TRUCKLOADING	-----	DRAWING 19-48-4117-11PA1003
STORAGE	-----	DRAWING 19-48-4118-1-2-3-4-14-22PA1002.
- F. FOR METHOD OF SECURING A STRAP CUTTER TO THE PALLET UNIT, SEE DARCOM 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 FUZES WHEN IDENTIFIED BY DIFFERENT NATIONAL STOCK NUMBERS ( NSN ) THAN WHAT IS SHOWN ON THE TITLE PAGE, 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.
- J. WHEN THE UNIT LOAD DEPICTED AT LEFT IS TO BE USED FOR UNITIZING MARINE CORPS AMMUNITION, ONE LAYER OF BOXES MUST BE OMITTED, TIEDOWN STRAP LENGTHS MUST BE DECREASED TO 11'-11", AND LOAD STRAP LENGTHS MUST BE DECREASED TO 14'-4". THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 33-1/4", A GROSS UNIT WEIGHT OF 1,511 POUNDS, AND A UNIT CUBE OF 36.7 CUBIC FEET. ADDITIONALLY, THE UNIT LOAD MAY BE MODIFIED AS DESCRIBED WHEN BEING SHIPPED BY MILVAN OR COMMERCIAL INTERMODAL FREIGHT CONTAINER, CONVENTIONAL VAN TRAILER, OR CONVENTIONAL OR HIGH-CAPACITY BOXCAR. THE DETERMINATION TO REDUCE THE LOAD BY A LAYER FOR TRANSPORTATION WILL BE MADE BY THE RESPONSIBLE COMMAND AND WILL BE BASED UPON ECONOMICS OF TRANSPORTATION AND HANDLING.

**BILL OF MATERIAL**

PALLET, 35" X 45-1/2"	-----	1 REQD	-----	65 LBS
STEEL STRAPPING, 3/4"	-----	90.33	REQD	6.45 LBS
SEAL FOR 3/4" STRAPPING	-----	6 REQD	-----	NIL



**FILLER ASSEMBLY**

( FOR MINUS ONE BOX )