

# APPENDIX 55A

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

FUZE, BOMB, TAIL, AN, PACKED 25 PER WOODEN BOX,  
UNITIZED 18 BOXES PER 35" X 45 $\frac{1}{2}$ " PALLET;  
APPROX BOX SIZE 18 $\frac{1}{2}$ " L X 14 $\frac{3}{4}$ " W X 15 $\frac{3}{4}$ " H

PALLET UNIT DATA						
ITEMS INCLUDED		HAZARD CLASSIFICATION <sup>①</sup>				WEIGHT
NSN	DOD IC	DOT CLASS	CG CLASS	QD CLASS	COMP GROUP	( LBS )
1325-00-028-5442	F949	C	III	(04) 1.2	B	2,033

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 <i>BZ/mk</i>	PROJ ENG <i>RBF/kuw</i>
		CHECKER <i>RSW</i>	LOGGING OFFICER <i>John B...</i>
		APPROVED, U. S. ARMY ARMAMENT, MUNITIONS AND CHEMICAL COMMAND <i>M. Laster</i> <i>John O...</i>	
		DRMOC - LEP	DRMOC - TND
		APPROVED BY ORDER OF COMMANDING GENERAL, U. S. ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND (DARCOM) <i>John L. Reynolds</i>	
		U. S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL	
		U. S. ARMY DARCOM DRAWING	
		OCTOBER 1983	
		CLASS	DIVISION
		DRAWING	FILE
		19	48
		4116/55A	20PA 1002

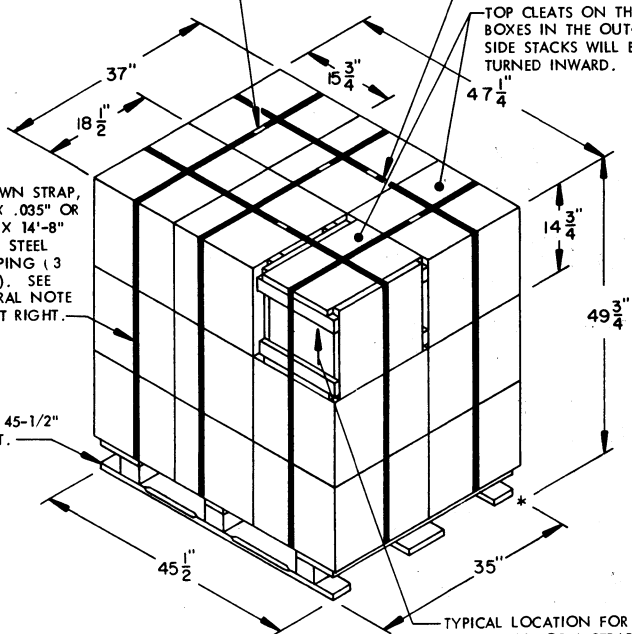
SEAL FOR 3/4" STRAPPING ( 5 REQD, 1 PER STRAP ). CRIMP EACH SEAL WITH TWO PAIR OF NOTCHES.

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

TOP CLEATS ON THE BOXES IN THE OUTSIDE STACKS WILL BE TURNED INWARD.

TIEDOWN STRAP, 3/4" X .035" OR .031" X 14'-8" LONG STEEL STRAPPING ( 3 REQD ). SEE GENERAL NOTE "C" AT RIGHT.

35" X 45-1/2" PALLET.



**PALLET UNIT**

SEE GENERAL NOTE "B" AT RIGHT.

18 BOXES OF FUZES ( 25 PER BOX ) @ 109 LBS-----	1,962 LBS ( APPROX )
DUNNAGE -----	6 LBS
PALLET -----	65 LBS
<b>TOTAL WEIGHT -----</b>	<b>2,033 LBS ( APPROX )</b>
<b>CUBE -----</b>	<b>50.3 CU FT ( APPROX )</b>

**GENERAL NOTES**

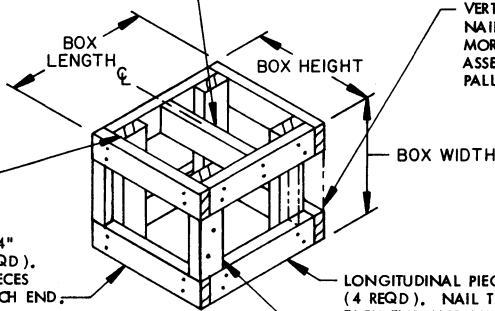
- A. THIS APPENDIX CANNOT STAND ALONE BUT MUST BE USED IN CONJUNCTION WITH THE BASIC UNITIZATION PROCEDURES DRAWING 19-48-4116-20PA1002. TO PRODUCE AN APPROVED UNIT LOAD, ALL PERTINENT PROCEDURES, SPECIFICATIONS AND CRITERIA SET FORTH WITHIN THE BASIC DRAWING WILL APPLY TO THE PROCEDURES DELINEATED IN 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 INSTALLED 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 TOP DECK 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 OUTLOADING 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 BOMB 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 12'-2", AND LOAD STRAP LENGTHS MUST BE DECREASED TO 13'-11". THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 35", A GROSS UNIT WEIGHT OF 1,378 POUNDS, AND A UNIT CUBE OF 35.4 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" -----	76.67 <sup>1</sup> REQD -----	5.48 LBS
SEAL FOR 3/4" STRAPPING -----	5 REQD -----	NIL

SUPPORT PIECE, 2" X 4" X BOX HEIGHT MINUS 3" ( 1 REQD ).



VERTICAL SUPPORT PIECE, 2" X 4" X CUT-TO-FIT IN LENGTH ( AS REQD ). NAIL TO A VERTICAL PIECE W/2-10d NAILS. NOTE: WHEN A UNIT HAS MORE THAN FOUR ( 4 ) BOXES OMITTED, THE FILLER ASSEMBLY OR ASSEMBLIES LOCATED IN AN OUTER STACK ON THE 35" SIDE OF THE PALLET WILL REQUIRE A VERTICAL SUPPORT PIECE AS SHOWN.

**FILLER ASSEMBLY**

( FOR MINUS ONE BOX )