

## APPENDIX 48B

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

REDUCER, FLASH, PROPELLING CHARGE, M3, PACKED  
40 PER WOODEN BOX, UNITIZED 30 BOXES PER  
35" X 45 $\frac{1}{2}$ " PALLET; APPROX BOX SIZE 18 $\frac{7}{8}$ " L X  
9 $\frac{1}{2}$ " W X 15" H

PALLET UNIT DATA						
ITEMS INCLUDED		HAZARD CLASSIFICATION				WEIGHT
NSN	DOD IC	DOT CLASS	CG CLASS	QD CLASS	COMP GROUP	( LBS )
1320-00-926-9303	D681	A	IX-A	1.1	D	2,055

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

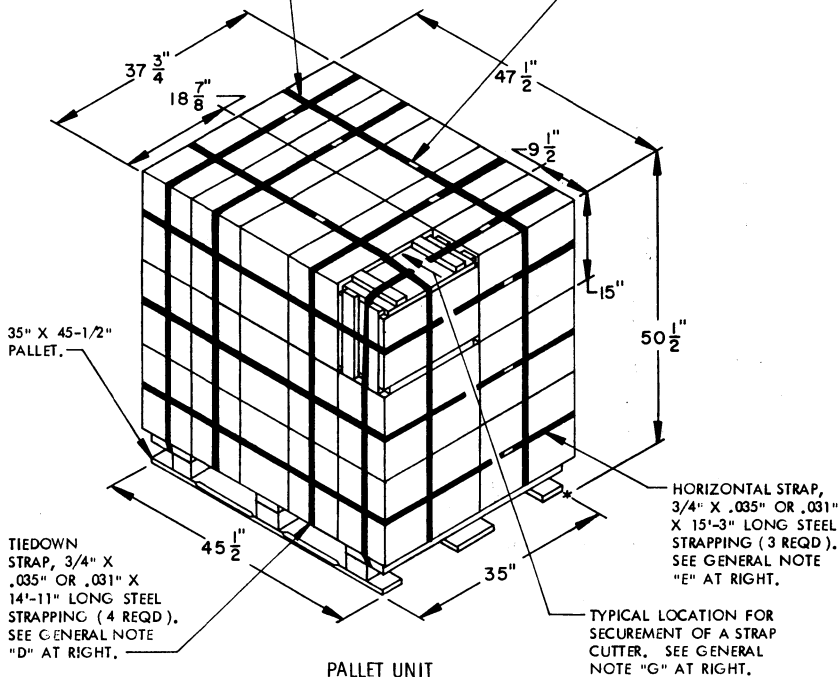
REVISIONS				DRAFTSMAN	PROJ ENG
				CHECKER RSH	LOG ENGRS OFFICE
				APPROVED, U. S. ARMY ARMAMENT MATERIEL READINESS COMMAND	
				 DRBAR-LEP                      DRBAR-TMO	
				APPROVED BY ORDER OF COMMANDING GENERAL, U. S. ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND (DARCOM)  U. S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL	
				U. S. ARMY DARCOM DRAWING	
				MARCH 1983	
				CLASS	DIVISION
				DRAWING	FILE
				19	48
				4116/48B	20PA 1002

**DO NOT SCALE**

LOAD STRAP, 3/4" X .035" OR .031" X 16'-6" LONG STEEL STRAPPING (2 REQD). SEE GENERAL NOTE "C" AT RIGHT.

SEAL FOR 3/4" STRAPPING (9 REQD, 1 PER STRAP). CRIMP EACH SEAL WITH TWO PAIR OR NOTCHES.

**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 HORIZONTAL STRAPS.
- D. INSTALL EACH TIEDOWN STRAP TO PASS UNDER THE DECK/ STRINGER BOARDS OF THE PALLET AND LOCATE AS SHOWN. TIEDOWN STRAPS WILL BE APPLIED BUT NOT TENSIONED UNTIL THE HORIZONTAL STRAPS HAVE BEEN INSTALLED AND TENSIONED.
- E. INSTALL EACH HORIZONTAL STRAP TO ENCIRCLE A LAYER OF BOXES ON THE PALLET. HORIZONTAL STRAPS MUST BE TENSIONED AND SEALED PRIOR TO TENSIONING OF TIEDOWN STRAPS.
- F. THE FOLLOWING DARCOM DRAWINGS ARE APPLICABLE FOR CUT-LOADING AND STORAGE OF THE ITEMS COVERED BY THIS APPENDIX.  
 CARLOADING ----- DRAWING 19-48-4115-5PA1002  
 TRUCKLOADING----- DRAWING 19-48-4117-11PA1003  
 STORAGE ----- DRAWING 19-48-4118-1-2-3-4-14-22PA-1002
- G. FOR METHOD OF SECURING A STRAP CUTTER TO THE PALLET UNIT, SEE DARCOM DRAWING 19-48-4127-20P1000.
- H. IF ITEMS COVERED HEREIN ARE UNITIZED PRIOR TO ISSUANCE OF THIS APPENDIX, THE BOXES NEED NOT BE REUNITIZED SOLELY TO CONFORM TO THIS APPENDIX.
- J. THE UNITIZATION PROCEDURES DEPICTED HEREIN MAY ALSO BE USED FOR UNITIZING FLASH REDUCER 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.
- K. 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'-5", LOAD STRAP LENGTHS MUST BE DECREASED TO 14'-0", AND ONE HORIZONTAL STRAP MUST BE OMITTED. THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 35'-1/2", A GROSS UNIT WEIGHT OF 1,391 POUNDS, AND A UNIT CUBE OF 36.8 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.

SEE GENERAL NOTE "B" AT RIGHT.

30 BOXES OF FLASH REDUCER (40 PER BOX) @ 66 LBS-----	1,980 LBS (APPROX)
DUNNAGE -----	10 LBS
PALLET -----	65 LBS
<b>TOTAL WEIGHT-----</b>	<b>2,055 LBS (APPROX)</b>
<b>CUBE -----</b>	<b>52.4 CUBIC FEET (APPROX)</b>

BILL OF MATERIAL		
PALLET, 35" X 45-1/2" -----	1 REQD-----	65 LBS
STEEL STRAPPING, 3/4" -----	138.42 REQD-----	9.89 LBS
SEAL FOR 3/4" STRAPPING-----	9 REQD-----	NIL

