

# APPENDIX 128D

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

FIRING DEVICE, DEMOLITION, PACKED 250 PER  
WOODEN BOX, UNITIZED 24 BOXES PER 35" X  
45 $\frac{1}{2}$ " PALLET; APPROX BOX SIZE 25 $\frac{1}{4}$ " L X  
10 $\frac{1}{4}$ " W X 12 $\frac{3}{4}$ " H

PALLET UNIT DATA						
ITEMS INCLUDED		HAZARD CLASSIFICATION <sup>Ⓢ</sup>				WEIGHT
NSN	DODIC	DOT CLASS	CG CLASS	QD CLASS	COMP GROUP	( LBS )
1375-00-028-5179	M626	C	I	1.4	S	1,993

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

Ⓢ 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>1/83</i>	PROJ. ENG. <i>1/83</i>
				CHECKER <i>Rstb</i>	LOG. ENGRG. OFFIC. <i>John Boyd</i>
<small>APPROVED, U. S. ARMY ARMAMENT, MUNITIONS AND CHEMICAL COMMAND</small>					
<i>North</i> <i>Boyd</i>					
<small>DRBNC - LEP</small>					
<small>DRBNC - TND</small>					
<small>APPROVED BY ORDER OF COMMANDING GENERAL, U. S. ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND (DARCOM)</small>					
<i>John X. Boyd</i>					
<small>U. S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL</small>					
<b>U. S. ARMY DARCOM DRAWING</b>					
<b>NOVEMBER 1983</b>					
				CLASS	DIVISION
				DRAWING	FILE
				<b>19</b>	<b>48</b>
				4116/ 128D	20PA 1002

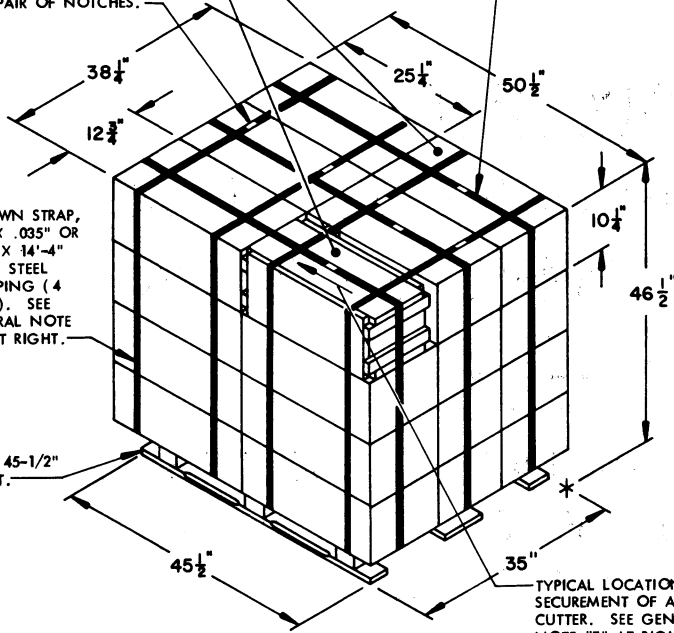
TOP CLEATS ON THE BOXES IN THE OUTSIDE STACKS WILL BE TURNED INWARD, EXCEPT AS OTHERWISE SPECIFIED IN MIL-STD 129.

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

SEAL FOR 3/4" STRAPPING (7 REQD, 1 PER STRAP). CRIMP EACH SEAL WITH TWO PAIR OF NOTCHES.

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

35" X 45-1/2" PALLET.



**PALLET UNIT**

SEE GENERAL NOTE "B" AT RIGHT.

24 BOXES OF FIRING DEVICE (250 PER BOX) @ 80 LBS	-----	1,920 LBS (APPROX)
DUNNAGE	-----	8 LBS
PALLET	-----	65 LBS
<b>TOTAL WEIGHT</b>	-----	<b>1,993 LBS (APPROX)</b>
<b>CUBE</b>	-----	<b>52.0 CU FT (APPROX)</b>

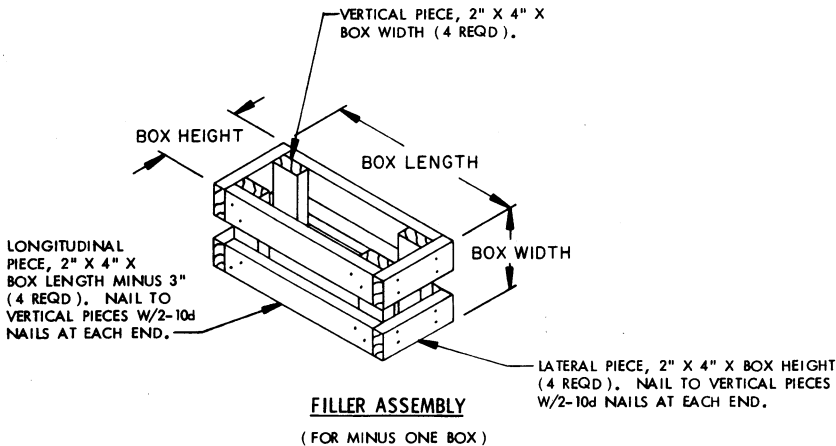
**BILL OF MATERIAL**

PALLET, 35" X 45-1/2"	-----	1 REQD	-----	65 LBS
STEEL STRAPPING, 3/4"	-----	106.33 REQD	-----	7.60 LBS
SEAL FOR 3/4" STRAPPING	-----	7 REQD	-----	NIL

**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 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 FIRING DEVICES 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'-7", AND LOAD STRAP LENGTHS MUST BE DECREASED TO 14'-8". THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 36-1/4", A GROSS UNIT WEIGHT OF 1,512 POUNDS, AND A UNIT CUBE OF 40.5 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.
- K. THE 50-1/2" WIDTH DIMENSION OF THE UNIT LOAD DEPICTED AT LEFT 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.



**FILLER ASSEMBLY**

(FOR MINUS ONE BOX)