

# APPENDIX 155

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

FUZE, TIME, PACKED 24 PER WOODEN BOX  
UNITIZED 42 BOXES PER 35" X 45 $\frac{1}{2}$ " PALLET;  
APPROX BOX SIZE 19 $\frac{3}{8}$ " L X 17 $\frac{5}{8}$ " W X 6 $\frac{3}{4}$ " H

PALLET UNIT DATA						
ITEMS INCLUDED		HAZARD CLASSIFICATION <sup>①</sup>				WEIGHT
NSN	DODIC	DOT CLASS	CG CLASS	OD CLASS	COMP GROUP	( LBS )
1390-00-471-8665	N384	C	I	1.4	B	2,801

① 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**

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

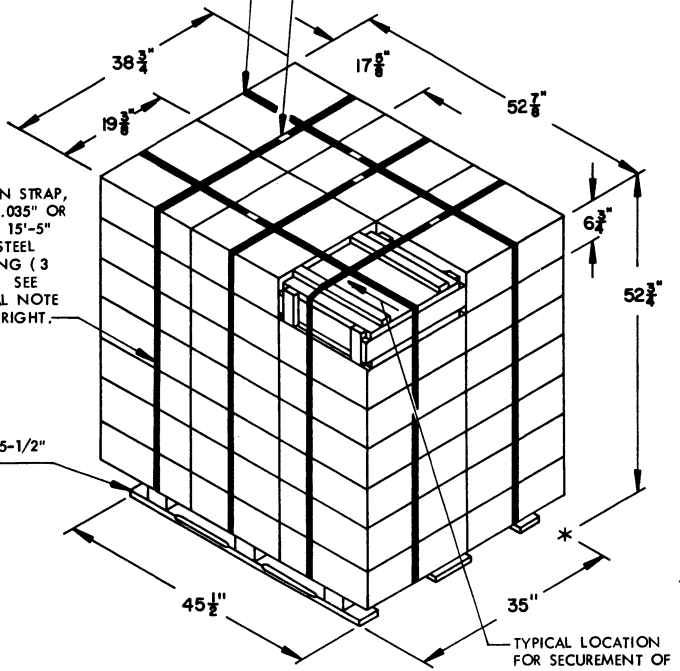
REVISIONS				DRAFTSMAN	PROJ ENG		
				<i>Pat Mack</i>	<i>John New</i>		
				CHECKER	LOG ENGRS OFFICE		
				<i>RSA</i>	<i>John Boyd</i>		
APPROVED, U. S. ARMY ARMAMENT, MUNITIONS AND CHEMICAL COMMAND							
				<i>John Boyd</i>	<i>John Boyd</i>		
DRMNC - L&P      DRMNC - TMD							
APPROVED BY ORDER OF COMMANDING GENERAL, U. S. ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND (DARCOM)							
U. S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL							
U. S. ARMY DARCOM DRAWING							
NOVEMBER 1983							
				CLASS	DIVISION	DRAWING	FILE
				19	48	4116/155	20PA 1002

LOAD STRAP, 3/4" X .035" OR .031" X 17'-10" LONG STEEL STRAPPING (2 REQD). SEE GENERAL NOTE "C" AT RIGHT.

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

TIEDOWN STRAP, 3/4" X .035" OR .031" X 15'-5" LONG STEEL STRAPPING (3 REQD). SEE GENERAL NOTE "D" AT RIGHT.

35" X 45-1/2" PALLET.



**PALLET UNIT**

SEE GENERAL NOTE "B" AT RIGHT.

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

42 BOXES OF FUZE (24 PER BOX) @ 65 LBS	-----	2,730 LBS (APPROX)
DUNNAGE	-----	6 LBS
PALLET	-----	65 LBS
<b>TOTAL WEIGHT</b>	-----	<b>2,801 LBS (APPROX)</b>
<b>CUBE</b>	-----	<b>62.5 CU FT (APPROX)</b>

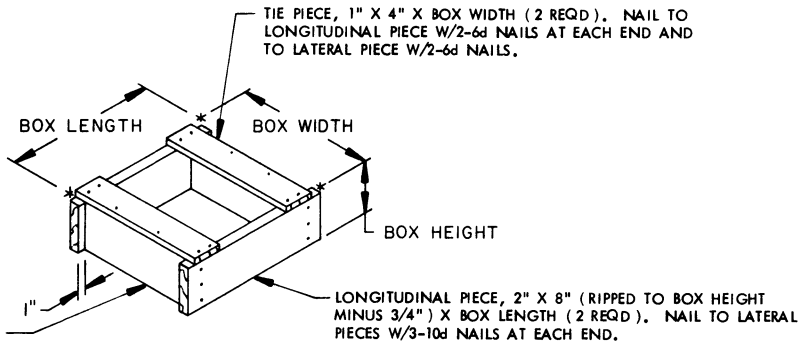
**GENERAL NOTES**

- 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 WILL BE THREADED THROUGH THE STRAP SLOTS OF A 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 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, TWO LAYERS OF BOXES MUST BE OMITTED, TIEDOWN STRAP LENGTHS MUST BE DECREASED TO 13'-2", AND LOAD STRAP LENGTHS MUST BE DECREASED TO 15'-7". THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 39'-1/4", A GROSS UNIT WEIGHT OF 2,021 POUNDS, AND A UNIT CUBE OF 46.5 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 LAYER(S) FOR TRANSPORTATION WILL BE MADE BY THE RESPONSIBLE COMMAND AND WILL BE BASED UPON ECONOMICS OF TRANSPORTATION AND HANDLING.
- K. THE WIDTH DIMENSION OF THE PALLET UNIT DEPICTED AT LEFT IS AN EXCEPTION TO THE CRITERIA SPECIFIED WITHIN THE BASIC PROCEDURES DRAWING. HOWEVER, THE EXCEPTION IS NECESSARY, FOR THE AMMUNITION PACK, COVERED BY THIS APPENDIX, TO MOST EFFECTIVELY GET AN ACCEPTABLE, COMPACT AND SOUND PALLET UNIT.

**BILL OF MATERIAL**

PALLET, 35" X 45-1/2" -----	1 REQD -----	65 LBS
STEEL STRAPPING, 3/4" -----	81.92' REQD -----	5.85 LBS
SEAL FOR 3/4" STRAPPING -----	5 REQD -----	NIL



**FILLER ASSEMBLY**

(FOR MINUS ONE BOX)