

APPENDIX 69A

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

BODY, HAND GRENADE, PRACTICE, PACKED 50 PER
WOODEN BOX, UNITIZED 30 BOXES PER 35" X 45 $\frac{1}{2}$ "
PALLET; APPROX BOX SIZE 18 $\frac{1}{16}$ " L X 15 $\frac{7}{8}$ " W X 8 $\frac{27}{32}$ " H

PALLET UNIT DATA						
ITEMS INCLUDED		HAZARD CLASSIFICATION				WEIGHT (LBS)
NSN	DODIC	DOT CLASS	CG CLASS	QD CLASS	COMP GROUP	
1330- 00-178-8515	G811	————— INERT —————				2, 111

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

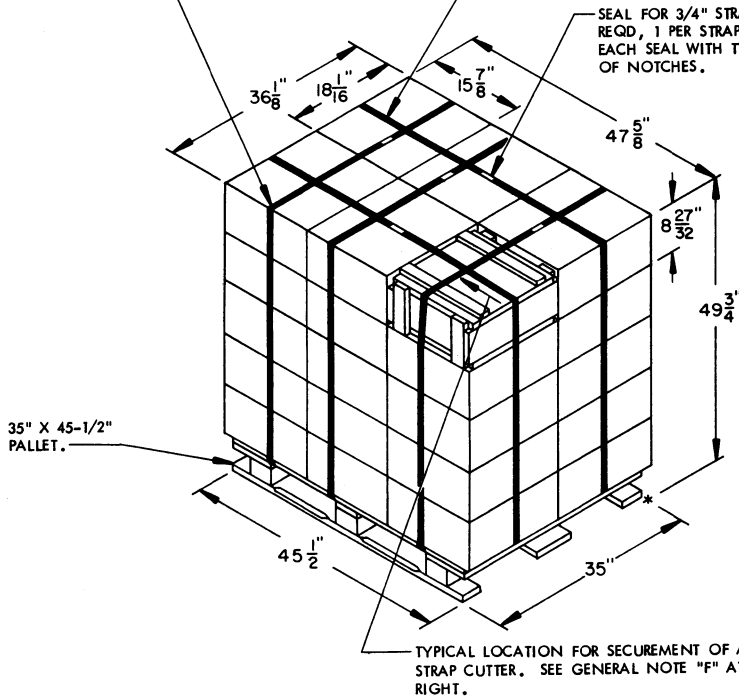
REVISIONS				DRAFTSMAN <i>PT</i>	PROJ ENG <i>WRF/MLW</i>
				<i>WRF</i>	<i>MLW</i>
				CHECKER <i>WRF</i>	LDG ENGRG OFFICE <i>WRF</i>
				APPROVED, U. S. ARMY ARMAMENT, MUNITIONS AND CHEMICAL COMMAND	
				<i>WRF</i> <i>MLW</i> DPSMC - TMD	
				APPROVED BY ORDER OF COMMANDING GENERAL, U. S. ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND (DARCOM)	
				<i>John L. Byrd</i> U. S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL	
				U. S. ARMY DARCOM DRAWING	
				NOVEMBER 1983	
				CLASS	DIVISION
				DRAWING	FILE
				19	48
				4116/ 69 A	20PA 1002

DO NOT SCALE

TIEDOWN STRAP, 3/4" X .035" OR .031" X 14'-6" LONG STEEL STRAPPING (3 REQD). SEE GENERAL NOTE "D" AT RIGHT.

LOAD STRAP, 3/4" X .035" OR .031" X 16'-5" 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.



PALLET UNIT

SEE GENERAL NOTE "B" AT RIGHT.

30 BOXES OF GRENADE BODIES (50 PER BOX) @ 68 LBS-----	2,040 LBS (APPROX)
DUNNAGE-----	6 LBS
PALLET-----	65 LBS
TOTAL WEIGHT-----	2,111 LBS (APPROX)
CUBE-----	49.5 CU FT (APPROX)

BILL OF MATERIAL

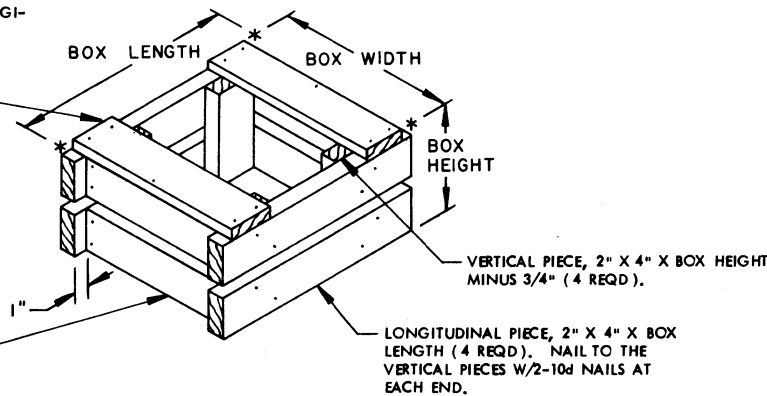
PALLET, 35" X 45-1/2"-----	1 REQD-----	65 LBS
STEEL STRAPPING, 3/4"-----	76.33 REQD-----	5.45 LBS
SEAL FOR 3/4" STRAPPING-----	5 REQD-----	NIL

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 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 UNLOADING AND STORAGE OF THE ITEMS COVERED BY THIS APPENDIX.
 CARLOADING-----DRAWING 19-48-4115-5PA1002
 TRUCKLOADING -----DRAWING 19-48-4117-11PA1008
 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 GRENADE BODIES 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.
- 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 13'-0", AND LOAD STRAP LENGTHS MUST BE DECREASED TO 14'-11". THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 40-7/8", A GROSS UNIT WEIGHT OF 1,702 POUNDS, AND A UNIT CUBE OF 40.7 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.

TIE PIECE, 1" X 4" X BOX WIDTH (2 REQD). NAIL TO THE LONGITUDINAL PIECES W/2-6d NAILS AT EACH END AND TO THE LATERAL PIECE W/1-6d NAIL.

LATERAL PIECE, 2" X 4" X BOX WIDTH MINUS 3" (4 REQD). NAIL TO THE VERTICAL PIECES W/2-10d NAILS AT EACH END.



FILLER ASSEMBLY

(FOR MINUS ONE BOX)