


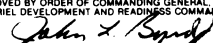
# APPENDIX 5

## UNITIZATION PROCEDURES FOR BOXED WHITE PHOSPHORUS (WP) AND PLASTICIZED WHITE PHOSPHORUS (PWP) LOADED AMMUNITION ON 4-WAY ENTRY PALLETS

CARTRIDGE, 81MM, PACKED 2 PER WOODEN BOX,  
UNITIZED 30 BOXES PER 40" X 48" PALLET;  
APPROX BOX SIZE 28" L X 9 $\frac{11}{16}$ " W X 6 $\frac{15}{32}$ " H

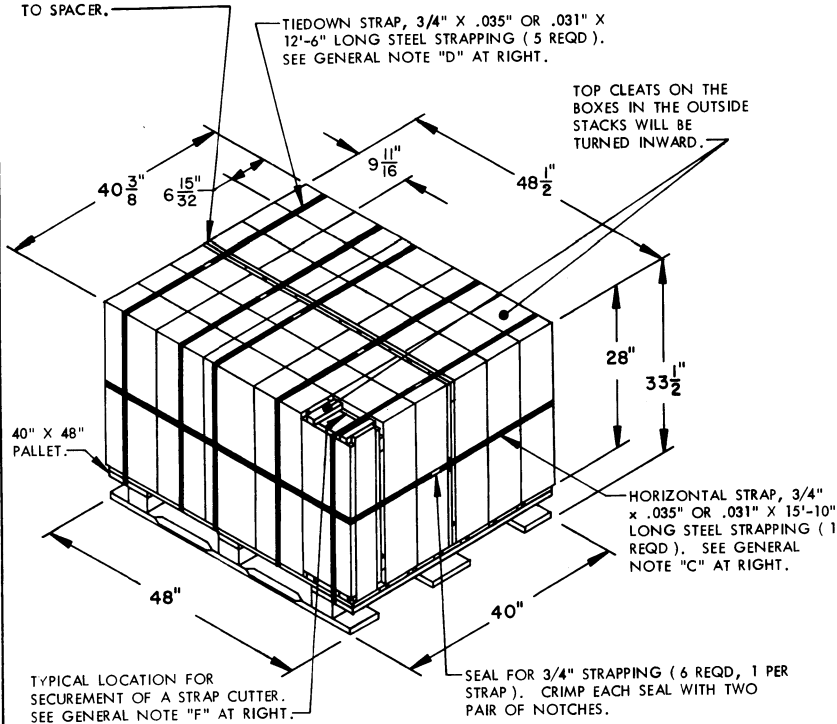
PALLET UNIT DATA						
ITEMS INCLUDED		HAZARD CLASSIFICATION				WEIGHT (LBS)
NSN	DODIC	DOT CLASS	CG CLASS	QD CLASS	COMP GROUP	
1315-						
00-540-8499	C230	A	II-D	(12)1.2	H	1,391
00-603-7768	C230	A	II-D	(12)1.2	H	1,391
00-682-4626	C230	A	II-D	(12)1.2	H	1,391
00-682-4627	C230	A	II-D	(12)1.2	H	1,391
00-729-6566	C230	A	II-D	(12)1.2	H	1,391
00-935-9209	C230	A	II-D	(12)1.2	H	1,391
00-935-9210	C230	A	II-D	(12)1.2	H	1,391
00-028-4989	C231	A	II-D	(12)1.2	H	1,391

NOTICE: THIS APPENDIX CANNOT STAND ALONE BUT MUST BE USED IN CONJUNCTION WITH THE BASIC UNITIZATION PROCEDURES DRAWING 19-48-4015-20PA1004.

REVISIONS				DRAFTSMAN <i>LN</i> / <i>JC</i>	PROJ ENG <i>WRE/NEW</i>
				CHECKER <i>GEG</i>	LOG ENGRG OFFICE <i>W. G. G. G.</i>
				APPROVED, U. S. ARMY ARMAMENT MATERIEL READINESS COMMAND	
				 <small>DARSAR-LEP      DARSAR-TMO</small>	
				APPROVED BY ORDER OF COMMANDING GENERAL, U. S. ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND (DARCOM)	
				 <small>U. S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL</small>	
				<b>U. S. ARMY DARCOM DRAWING</b>	
				<b>FEBRUARY 1983</b>	
				CLASS	DIVISION
				DRAWING	FILE
				<b>19</b>	<b>48</b>
				<b>4015/5</b>	<b>20PA 1004</b>

DO NOT SCALE

SPACER ASSEMBLY ( 1 REQD ).  
SEE DETAIL BELOW. STAPLE  
HORIZONTAL STRAP  
TO SPACER.

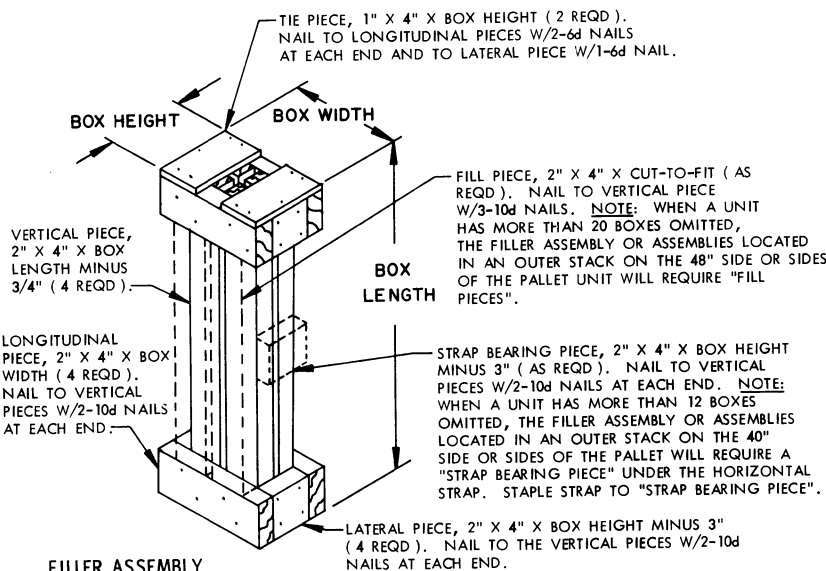


**PALLET UNIT**

SEE GENERAL NOTE "B" AT RIGHT.

30 BOXES OF 81MM CARTRIDGES ( 2 PER BOX ) @ 43 LBS -----	1,290 LBS ( APPROX )
DUNNAGE -----	21 LBS
PALLET -----	80 LBS
<b>TOTAL WEIGHT -----</b>	<b>1,391 LBS ( APPROX )</b>
<b>CUBE -----</b>	<b>38.8 CU FT ( APPROX )</b>

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	21.71	7.24
NAILS	NO. REQD	POUNDS
6d ( 2" )	24	0.14
PALLET, 40" X 48" -----	1 REQD -----	80 LBS
STEEL STRAPPING, 3/4" -----	78.33' REQD -----	5.60 LBS
SEAL FOR 3/4" STRAPPING -----	6 REQD -----	NIL
STAPLE, 15/16" X 3/4" -----	2 REQD -----	NIL



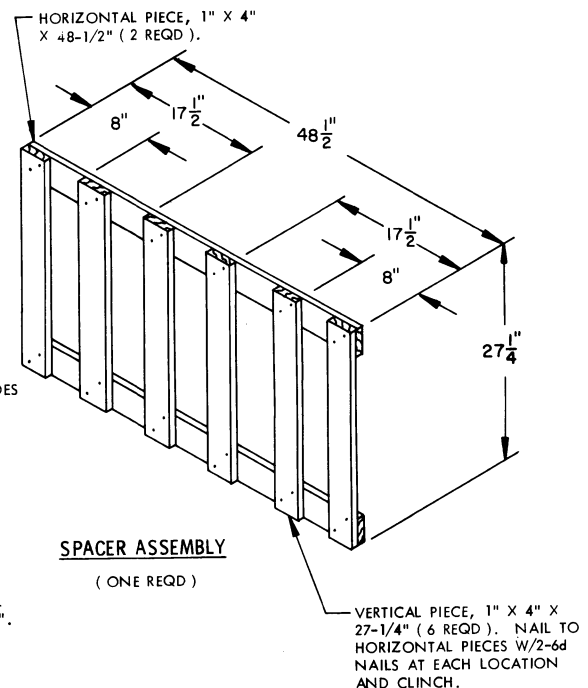
**FILLER ASSEMBLY**

( FOR MINUS ONE BOX )

**GENERAL NOTES**

- THIS APPENDIX CANNOT STAND ALONE BUT MUST BE USED IN CONJUNCTION WITH THE BASIC UNITIZATION PROCEDURES DRAWING 19-48-4015-20PA1004. 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.
- 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.
- INSTALL THE HORIZONTAL STRAP TO ENIRCLE THE LAYER OF BOXES ON THE PALLET. HORIZONTAL STRAP MUST BE TENSIONED AND SEALED PRIOR TO APPLICATION OF TIEDOWN STRAPS.
- 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 HORIZONTAL STRAP HAS BEEN TENSIONED AND SEALED.
- 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
- FOR METHOD OF SECURING A STRAP CUTTER TO THE PALLET UNIT, SEE DARCOM DRAWING 19-48-4127-20P1000.
- IF ITEMS COVERED HEREIN ARE UNITIZED PRIOR TO ISSUANCE OF THIS APPENDIX, THE BOXES NEED NOT BE REUNITIZED SOLELY TO CONFORM TO THIS APPENDIX.
- THE UNITIZATION PROCEDURES DEPICTED HEREIN MAY ALSO BE USED FOR UNITIZING 81MM CARTRIDGES 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.
- IF THERE IS A NEED TO USE FILLER ASSEMBLIES AND AT LEAST TWO PALLET UNITS ARE BEING CONSTRUCTED, NOT MORE THAN 26 FILLERS WILL BE INSTALLED IN ANY ONE PALLET UNIT. ADDITIONAL FILLERS CAN BE PUT IN A SECOND PALLET UNIT AS REQUIRED WHEN THE QUANTITY OF 26 FILLERS IN THE FIRST REDUCED PALLET UNIT IS INSUFFICIENT TO SATISFY THE TOTAL REDUCTION NEEDED. USING TWO PALLET UNITS TO SATISFY THE PALLETIZATION CRITERIA APPLICABLE TO LESS-THAN-FULL PALLET UNITS 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.



**SPACER ASSEMBLY**

( ONE REQD )