

APPENDIX 6A

UNITIZATION PROCEDURES FOR WHITE PHOSPHORUS (WP) AND PLASTICIZED WHITE PHOSPHORUS (PWP) IN CYLINDRICAL METAL CONTAINERS ON 4-WAY ENTRY PALLETS


CARTRIDGE, 90MM, PACKED ONE PER M159AI
CONTAINER, UNITIZED 42 CONTAINERS PER 40"
X 48" PALLET; APPROX CONTAINER SIZE
6 $\frac{1}{8}$ " DIA X 41 $\frac{3}{8}$ " L

PALLET UNIT DATA						
ITEMS INCLUDED		HAZARD CLASSIFICATION ^①				WEIGHT
NSN	DODIC	DOT CLASS	CG CLASS	QD CLASS	COMP GROUP	(LBS)
1315-00-341-4183	C273	A	II-D	(12) 1.2	H	2,994

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

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).

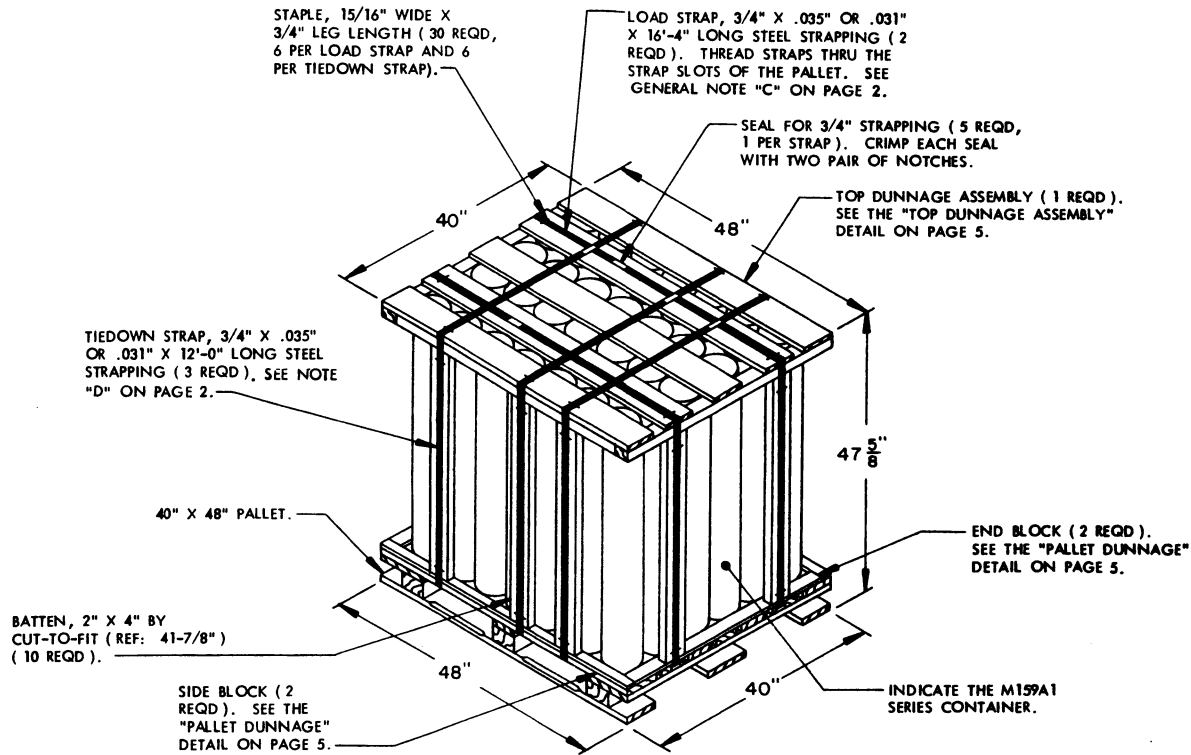
DO NOT SCALE

REVISIONS				DRAWN BY th pl	PROJ ENG /llw
				CHECKER /llw	LOG ENGRG OFFICE /llw
				APPROVED U S ARMY ARMAMENT, MUNITIONS AND CHEMICAL COMMAND	
				 DRBG-LEP DRBG-TM 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
				19	48
				DRAWING	FILE
				4015/ 6A	20PA 1004

GENERAL NOTES

- A. 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.
- B. DIMENSIONS, CUBE, AND WEIGHT OF A PALLET UNIT WILL VARY SLIGHTLY DEPENDING ON THE ACTUAL DIMENSIONS OF THE CONTAINER AND THE WEIGHT OF THE SPECIFIC ITEM BEING UNITIZED.
- C. INSTALL EACH LOAD STRAP TO PASS THROUGH THE STRAP SLOTS OF THE PALLET AND TO BE LOCATED AS SHOWN. 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 CONTAINERS NEED NOT BE REUNITIZED SOLELY TO CONFORM TO THIS APPENDIX.
- H. THE UNITIZATION PROCEDURES DEPICTED HEREIN MAY ALSO BE USED FOR UNITIZING 90MM CARTRIDGES WHEN IDENTIFIED BY DIFFERENT NATIONAL STOCK NUMBERS (NSN) THAN WHAT IS SHOWN ON THE TITLE PAGE, PROVIDED THE CONTAINER PACK DOES NOT VARY FROM WHAT IS DELINEATED HEREIN. THE EXPLOSIVE CLASSIFICATION OF OTHER ITEMS MAY BE DIFFERENT THAN WHAT IS SHOWN.

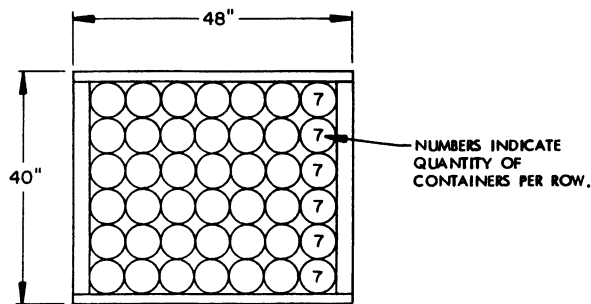
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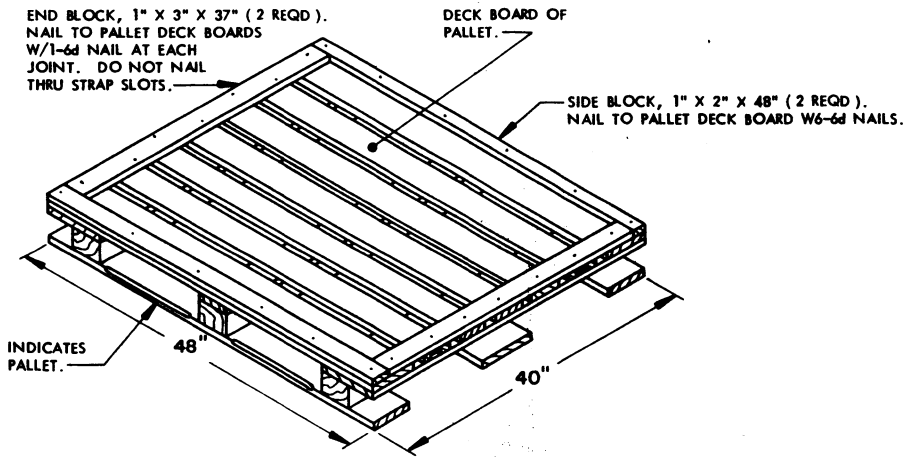
ISOMETRIC VIEW

SPECIAL NOTES:

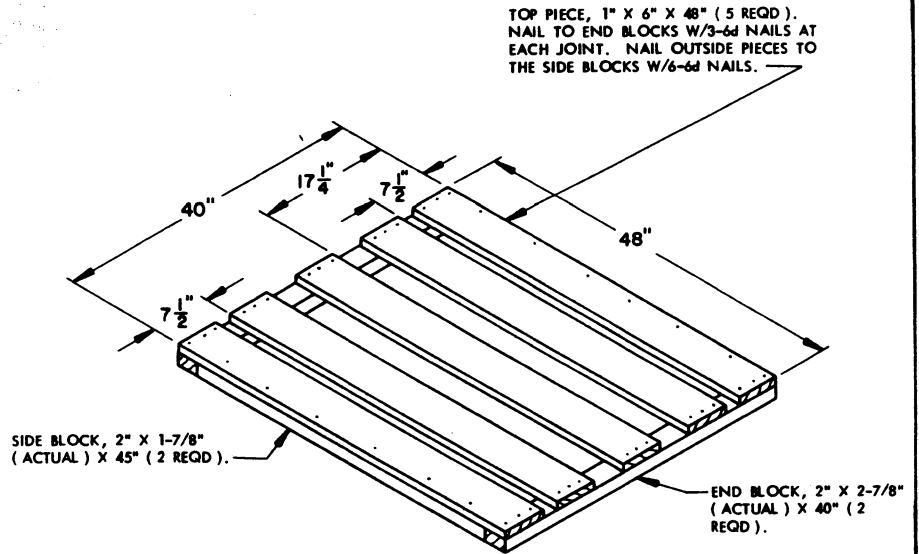
1. THE UNIT SHOWN ABOVE DEPICTS A 42-CONTAINER PALLET UNIT OF COMPLETE ROUNDS OF AMMUNITION PACKED IN M159A1 SERIES CYLINDRICAL METAL CONTAINERS. FOR UNITS OF LESS THAN 42 CONTAINERS, SEE THE "FILLERS AND INSTALLATION PROCEDURES FOR OMITTED CONTAINERS" DETAIL ON PAGE 6.
2. THE 1-7/8" AND 2 -7/8" ACTUAL WIDTH PIECES SPECIFIED FOR THE PALLET DUNNAGE MAY BE RIPPED (SAWED) FROM 4" AND 6" NOMINAL WIDTH PIECES, RESPECTIVELY.
3. DIMENSIONS GIVEN FOR DUNNAGE PIECES OR DUNNAGE ASSEMBLIES WILL BE FIELD CHECKED PRIOR TO THEIR ASSEMBLY TO THE PALLET UNIT. CONTAINERS MUST FIT SNUGLY IN THE DUNNAGE ASSEMBLIES. ALSO, DUE TO THE VARIATION OF CONTAINER DIMENSIONS, ADJUSTMENTS MAY BE REQUIRED AS TO THE LOCATION OF CERTAIN PIECES OF DUNNAGE EITHER IN A DUNNAGE ASSEMBLY OR LOCATED ON THE PALLET.



LOADING PATTERN



PALLET DUNNAGE



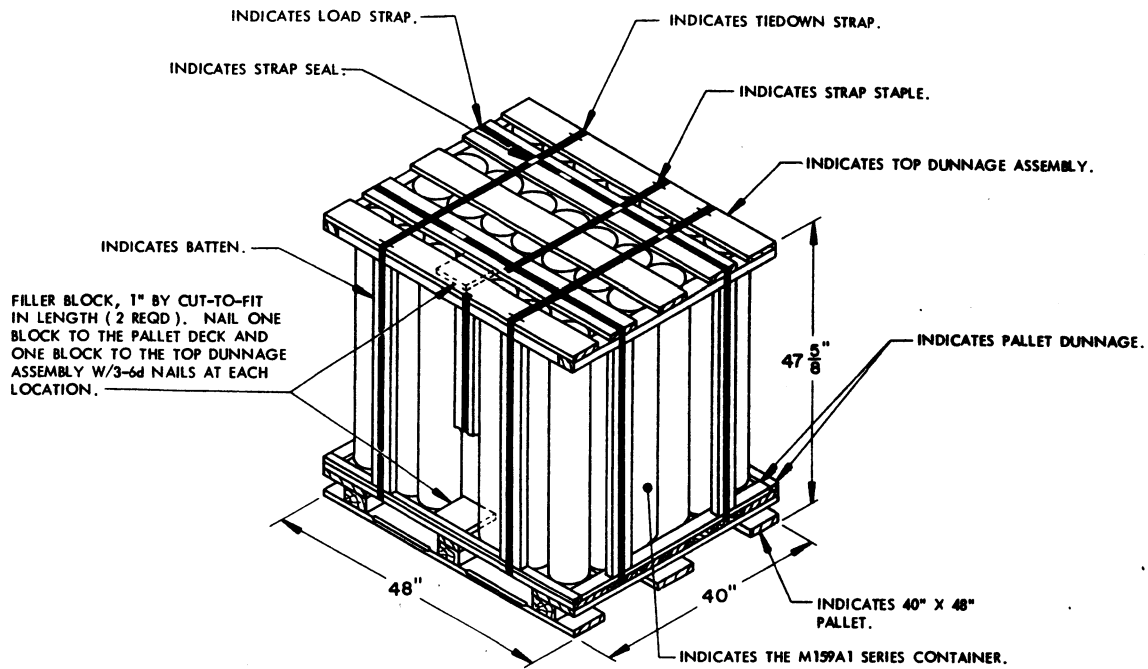
TOP DUNNAGE ASSEMBLY

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 2"	4.00	0.67
1" X 3"	6.17	1.54
1" X 6"	20.00	10.00
2" X 4"	42.40	28.27
2" X 6"	6.67	6.67
NAILS	NO. REQD	POUNDS
6d (2")	68	0.40
PALLET, 40" X 48" ----- 1 REQD ----- 80 LBS		
STEEL STRAPPING, 3/4" ----- 68.67' REQD ----- 4.91 LBS		
SEAL FOR 3/4" STRAPPING ----- 5 REQD ----- NIL		
STAPLE, 15/16" X 3/4" ----- 30 REQD ----- NIL		

UNIT DATA

WEIGHT

42 CONTAINERS, M159 SERIES @ 67 LBS EACH -----	2,814 LBS (APPROX)
DUNNAGE -----	100 LBS
PALLET -----	80 LBS
TOTAL WEIGHT -----	2,994 LBS (APPROX)
CUBE -----	52.9 CU FT (APPROX)



FILLER DETAIL

SPECIAL NOTES:

1. THE DETAIL ABOVE DEPICTS PROCEDURES TO BE USED WHEN A STANDARD PALLET UNIT MINUS ONE CONTAINER IS TO BE UNITIZED.
2. FILLER BLOCKS ARE TO BE USED TO OCCUPY THE UNUSED AREA LEFT BY OMITTING M159 CONTAINERS. FILLER BLOCKS ARE TO BE PLACED AGAINST THE INSIDE EDGE OF THE PALLET WHEN 22 OR LESS CONTAINERS ARE OMITTED FROM A PALLET UNIT. WHEN MORE THAN 22 CONTAINERS ARE OMITTED FROM THE PALLET UNIT, THE FIRST 22 FILLER BLOCKS ARE TO BE PLACED AGAINST THE INSIDE EDGE OF THE PALLET UNIT OR TOP DUNNAGE AND THE REMAINING BLOCKS ARE TO BE PLACED WITHIN THE LOAD AS DEEMED APPROPRIATE. ALL FILLER BLOCKS ARE TO BE NAILED AS SPECIFIED IN THE DETAIL ABOVE.