

APPENDIX 105A

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

**SIGNAL KIT, PACKED 100 OR 200 PER WOODEN
BOX, UNITIZED 6 BOXES PER 40" X 48" PALLET;
APPROX BOX SIZE 34-3/4" L X 21-3/8" W X 13" H**

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

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U.S. ARMY MATERIEL COMMAND DRAWING

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APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND SHIMP.UPTON .R.1231257183 <small>Digitally signed by SHIMP.UPTON.R.1231257183 DN: c=US, ou=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=SHIMP.UPTON.R.1231257183 Date: 2016.02.17 16:28:18 -0600'</small>		DESIGN ENGINEER	BASIC REV.	GEORGE B. FECKE MATTHEW THOMPSON		REVISION NO. 5	FEBRUARY 2016
ENGINEERING DIVISION		FIEFFER.LAUR A.A.1230375727 <small>Digitally signed by FIEFFER.LAURA.A.1230375727 DN: c=US, ou=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=FIEFFER.LAURA.A.1230375727 Date: 2014.05.05 07:27:54 -0500'</small>		SEE THE REVISION LISTING ON PAGE 2			
TEST ENGINEER		BELLIS.WILLIAM.M ORGAN.116315434 6 <small>Digitally signed by BELLIS.WILLIAM.MORGAN.1163154346 DN: c=US, ou=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=BELLIS.WILLIAM.MORGAN.1163154346 Date: 2014.05.05 07:28:49 -0500'</small>		CLASS	DIVISION	DRAWING	FILE
TEST REPORT		NA		19	48	4116/ 105A	20PA1002
EXPLOSIVE SAFETY DIRECTORATE		TRIVITT.TERRY .F.1230872011 <small>Digitally signed by TRIVITT.TERRY.F.1230872011 DN: c=US, ou=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=TRIVITT.TERRY.F.1230872011 Date: 2014.05.20 08:50:15 -0500'</small>					

PALLET UNIT DATA				
ITEMS INCLUDED		*HAZARD CLASS AND DIVISION	*COMPATIBILITY GROUP	APPROX WEIGHT (LBS)
NSN	DODIC			
1370-				
00-490-7362	L119	1.3	G	705
01-523-4694	L119	1.3	G	705
00-490-7363	L170	1.3	G	525
00-490-7364	L171	1.3	G	525
00-490-7365	L172	1.3	G	525

*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).

REVISIONS

REVISION NO. 1, DATED NOVEMBER 1983, CONSISTS OF:

1. CHANGING BOX AND PALLET SIZES.
2. ADDING ITEMS BY NATIONAL STOCK NUMBER TO THE "PALLET UNIT DATA" CHART.

REVISION NO. 2, DATED MARCH 1985, CONSISTS OF:

1. DELETING ITEM BY NATIONAL STOCK NUMBER FROM "PALLET UNIT DATA" CHART.
2. UPDATING THE DRAWING FORMAT.

REVISION NO. 3, DATED JUNE 1995, CONSISTS OF:

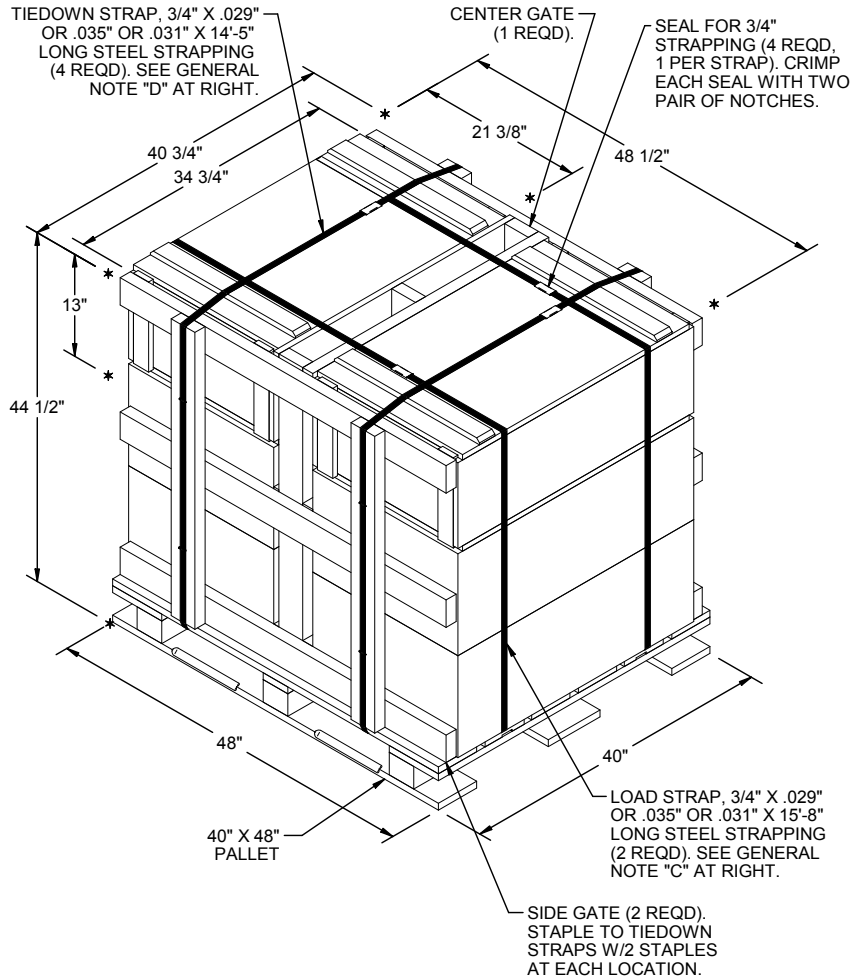
1. CHANGING WEIGHT OF THE ITEM.
2. DELETING ITEM BY NATIONAL STOCK NUMBER FROM "PALLET UNIT DATA" CHART.
3. CHANGING THE QUANTITY PER WOODEN BOX ON COVER PAGE.

REVISION NO. 4, DATED DECEMBER 2005, CONSISTS OF:

1. ADDING ITEM BY NATIONAL STOCK NUMBER TO THE "PALLET UNIT DATA" CHART.
2. REVISING GENERAL NOTES.
3. REVISING THE DRAWING FORMAT.

REVISION NO. 5, DATED FEBRUARY 2016, CONSISTS OF:

1. CHANGING BOX ORIENTATION FROM VERTICAL TO FLAT.
2. CHANGING NUMBER OF BOXES PER PALLET FROM EIGHT TO SIX.
3. ADDING ALLOWABLE STRAPPING THICKNESS OF .029".



PALLET UNIT
SEE GENERAL NOTE "B" AT RIGHT.

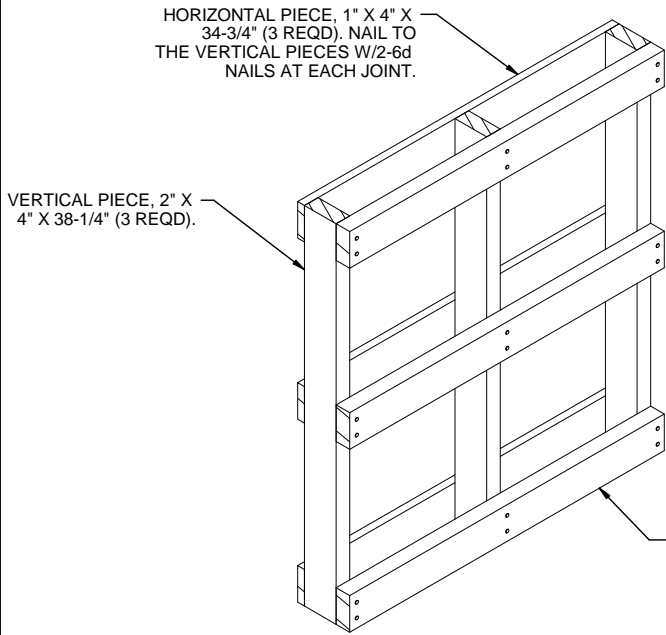
6 BOXES OF SIGNAL KITS (100 PER BOX) @ 90 LBS	---	540 LBS
DUNNAGE	---	85 LBS
PALLET	---	80 LBS
TOTAL WEIGHT	---	705 LBS (APPROX)
CUBE	---	50.9 CU FT (APPROX)

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 THE 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 AMC DRAWINGS ARE APPLICABLE FOR OUTLOADING AND STORAGE OF THE ITEMS COVERED BY THIS APPENDIX.

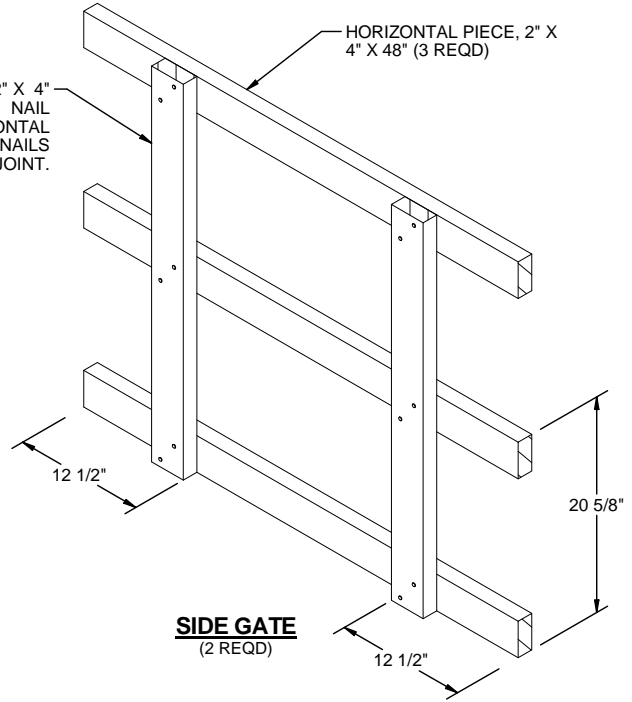
CARLOADING	---	19-48-4115-5PA1002
TRUCKLOADING	---	19-48-4117-11PA1003
STORAGE	---	19-48-4118-1-2-3-4-14-22PA1002
END OPENING ISO CONTAINER	---	19-48-4153-15PA1002
MILVAN	---	19-48-4166-15PA1003
SIDE OPENING ISO CONTAINER	---	19-48-4267-15PA1009
- F. IF ITEMS COVERED HEREIN ARE UNITIZED PRIOR TO ISSUANCE OF THIS REVISION TO THIS APPENDIX, THE BOXES NEED NOT BE REUNITIZED SOLELY TO CONFORM TO THIS REVISION.
- G. THE UNITIZATION PROCEDURES DEPICTED HEREIN MAY ALSO BE USED FOR UNITIZING SIGNAL KITS WHEN IDENTIFIED BY DIFFERENT NATIONAL STOCK NUMBERS (NSN) THAN WHAT IS SHOWN ON PAGE 2, 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.
- H. THE STYLE 1 PALLET DELINEATED IN THE DETAIL AT LEFT NEED NOT HAVE CHAMFERS OR STRAP SLOTS AS SPECIFIED WITHIN MILITARY SPECIFICATION MIL-DTL-15011 WHEN USED FOR THE UNITIZATION OF ITEMS COVERED BY THIS APPENDIX.
- J. ALL WOODEN DUNNAGE SHALL BE PRESERVATIVE TREATED IN ACCORDANCE WITH GENERAL NOTE "AA" IN THE BASIC PROCEDURES, AND HEAT TREATED IN ACCORDANCE WITH GENERAL NOTE "JJ" IN THE BASIC PROCEDURES.
- K. FOR DETAILS OF THE WOODEN BOX SEE AIR FORCE SPI F00-490-7362

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" x 4"	9	2.25
2" x 4"	55	36.67
NAILS	NO. REQD	POUNDS
6d (2")	18	0.10
10d (3")	55	0.85
PALLET, 40" x 48"	1 REQD	80 LBS
STEEL STRAPPING, 3/4"	60.17' REQD	5.37 LBS
SEAL FOR 3/4" STRAPPING	4 REQD	NIL
STAPLE, 15/16" x 3/8"	8 REQD	NIL



CENTER GATE
(1 REQD)

HORIZONTAL PIECE, 2" X 4" X 34-3/4" (3 REQD). NAIL TO THE VERTICAL PIECES W/2-10d NAILS AT EACH JOINT.



SIDE GATE
(2 REQD)

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

VERTICAL PIECE, 2" X 4" X BOX HEIGHT MINUS 3/4" (4 REQD).

BOX LENGTH

BOX WIDTH

BOX HEIGHT

SUPPORT PIECE, 2" X 4" X CUT-TO-FIT (2 REQD). NAIL TO VERTICAL PIECE W/2-10d NAILS.

LONGITUDINAL PIECE, 2" X 4" X BOX LENGTH (4 REQD). NAIL TO THE VERTICAL PIECES W/2-10d NAILS AT EACH JOINT.

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

ORIENT WITH THIS SIDE TOWARDS OUTER SIDE OF PALLET UNIT.

FILLER ASSEMBLY
(FOR MINUS ONE BOX)