

APPENDIX 2

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

CARTRIDGE, 12 GAGE, PACKED VARIOUS QUANTITIES PER M2 SERIES METAL BOX, 2 M2 SERIES METAL BOXES PER WIREBOUND BOX, UNITIZED 48 BOXES PER 40" X 48" PALLET; APPROX BOX SIZE 14-1/2" L X 12-3/4" W X 8-3/8" 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

<p>APPROVED U.S. ARMY RESEARCH, DEVELOPMENT AND ENGINEERING COMMAND</p> <p>REHMSTEDT.MA RK.J.1230548400</p> <p><small>Digitally signed by REHMSTEDT.MARK.J.1230548400 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=REHMSTEDT.MARK.J.1230548400 Date: 2015.12.14 12:42:37 -06'00'</small></p> <p style="text-align: right;">RDAR-EIL-TP</p>	<p>CAUTION: VERIFY PRIOR TO USE AT HTTPS://MHP.REDSTONE.ARMY.MIL THAT THIS IS THE MOST CURRENT VERSION OF THIS DOCUMENT. THIS IS PAGE 1 OF 4.</p>		<p style="font-size: 24pt; font-weight: bold;">JULY 1979</p>									
<p>APPROVED U.S. ARMY JOINT MUNITIONS COMMAND</p> <p>RUS.ALLEN.J .1230354282</p> <p><small>Digitally signed by RUS.ALLEN.J.1230354282 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=RUS.ALLEN.J.1230354282 Date: 2016.01.06 09:01:09 -06'00'</small></p> <p style="text-align: right;">AMSJM-MMT</p>	<p style="font-weight: bold;">DO NOT SCALE</p>		<p style="font-size: 18pt; font-weight: bold;">REVISION NO. 8</p> <p style="font-size: 18pt; font-weight: bold;">FEBRUARY 2016</p>									
<p>APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND</p> <p>SHIMP.UPTON .R.1231257183</p> <p><small>Digitally signed by SHIMP.UPTON.R.1231257183 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=SHIMP.UPTON.R.1231257183 Date: 2016.01.08 13:32:32 -06'00'</small></p> <p style="text-align: center;">U.S. ARMY DEFENSE AMMUNITION CENTER</p>	<p>ENGINEERING DIVISION</p> <p>TEST ENGINEER</p> <p>TEST REPORT</p> <p>EXPLOSIVE SAFETY DIRECTORATE</p>	<p>BASIC</p> <p>REV.</p>	<p>MELVIN W. DAUEMER</p> <p>SPENCER HOVEY</p>	<p style="text-align: center; font-weight: bold;">SEE THE REVISION LISTING ON PAGE 2</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">CLASS</td> <td style="width: 15%;">DIVISION</td> <td style="width: 15%;">DRAWING</td> <td style="width: 15%;">FILE</td> </tr> <tr> <td style="text-align: center; font-weight: bold;">19</td> <td style="text-align: center; font-weight: bold;">48</td> <td style="text-align: center; font-weight: bold;">4116/2</td> <td style="text-align: center; font-weight: bold;">20PA1002</td> </tr> </table>	CLASS	DIVISION	DRAWING	FILE	19	48	4116/2	20PA1002
CLASS	DIVISION	DRAWING	FILE									
19	48	4116/2	20PA1002									
	<p>ENGINEERING DIVISION</p> <p>TEST ENGINEER</p> <p>TEST REPORT</p> <p>EXPLOSIVE SAFETY DIRECTORATE</p>	<p>FIEFFER.LAUR A.A.1230375727</p> <p>FELICIANO.AD IN.1259200373</p> <p>CUMMINS.PAU L.A.1231883122</p>	<p><small>Digitally signed by FIEFFER.LAURA.A.1230375727 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=FIEFFER.LAURA.A.1230375727 Date: 2015.04.07 09:51:52 -05'00'</small></p> <p><small>Digitally signed by FELICIANO.ADN.1259200373 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=FELICIANO.ADN.1259200373 Date: 2015.04.13 07:51:20 -05'00'</small></p> <p><small>Digitally signed by CUMMINS.PAUL.A.1231883122 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=CUMMINS.PAUL.A.1231883122 Date: 2015.04.23 12:32:18 -05'00'</small></p>									

PALLET UNIT DATA				
ITEMS INCLUDED		*HAZARD CLASS AND DIVISION	*COMPATIBILITY GROUP	APPROX WEIGHT (LBS)
NSN	DODIC			
1305-				
00-892-4254	A011	1.4	S	2,010
01-232-8338	A011	1.4	S	2,634
00-147-5568	A014	1.4	S	2,010
00-146-1187	A017	1.4	S	2,010
00-782-9616	A020	1.4	S	2,010
01-470-2405	AA51	1.4	S	2,730
01-470-2139	AA52	1.4	S	2,730
01-475-7440	AA54	1.4	S	2,634
01-553-6192	AB08	1.4	S	2,826
01-631-2798	AC02	1.4	S	2,826

*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 APRIL 1981, CONSISTS OF:

ADDING ITEM BY NATIONAL STOCK NUMBER TO "PALLET UNIT DATA" CHART.

REVISION NO. 2, DATED OCTOBER 1987, CONSISTS OF:

ADDING GENERAL NOTE REGARDING PALLET CHAMFERS.

REVISION NO. 3, DATED JANUARY 1993, CONSISTS OF:

ADDING ITEM BY NATIONAL STOCK NUMBER TO "PALLET UNIT DATA" CHART.

REVISION NO. 4, DATED SEPTEMBER 1996, CONSISTS OF:

1. CHANGING BOX SIZE.
2. UPDATING PALLET UNIT TO CONFORM TO 1 ABOVE.
3. ADDING WIREBOUND BOX NUMBER TO GENERAL NOTES.
4. DELETING GENERAL NOTE RELATING TO STRAP CUTTER AND RE-LETTERING OTHER GENERAL NOTES.

REVISION NO. 5, DATED FEBRUARY 2002, CONSISTS OF:

1. ADDING ITEMS BY NATIONAL STOCK NUMBER TO "PALLET UNIT DATA" CHART.
2. ADDING "ALTERNATIVE FILLER ASSEMBLY".

REVISION NO. 6, DATED AUGUST 2005, CONSISTS OF:

1. CHANGING BOX SIZE.
2. UPDATING PALLET UNIT TO CONFORM TO 1 ABOVE.
3. ADDING ITEM BY NATIONAL STOCK NUMBER TO "PALLET UNIT DATA" CHART.

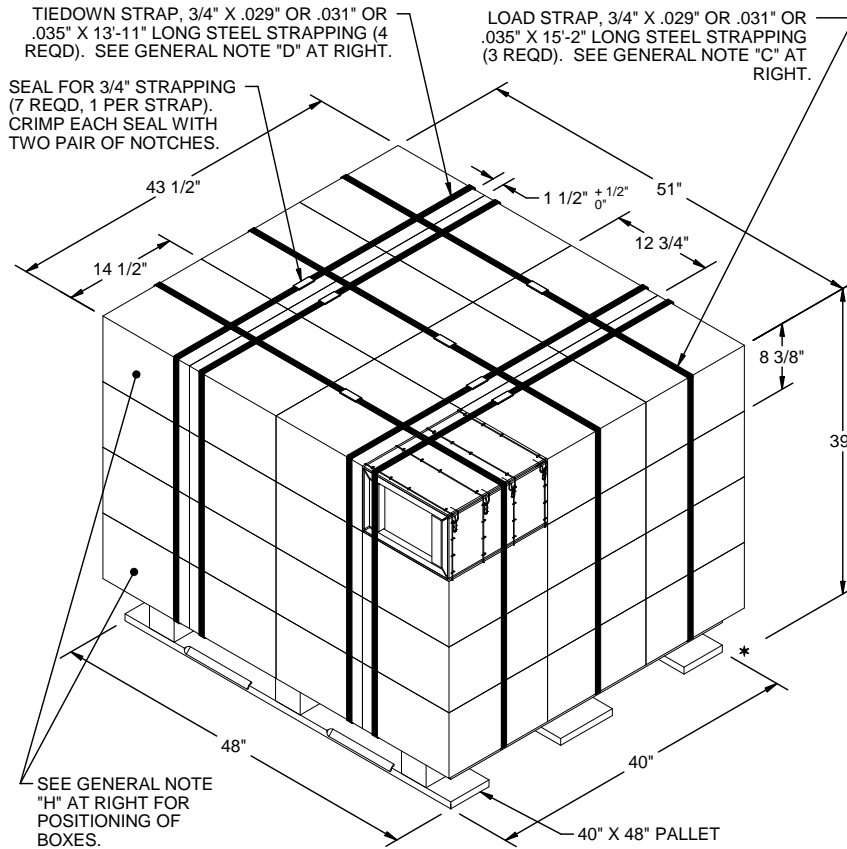
REVISION NO. 7, DATED MAY 2012, CONSISTS OF CHANGES PER ECP R11K3012 INCLUDING:

1. ADDING ITEM BY NATIONAL STOCK NUMBER TO "PALLET UNIT DATA" CHART.
2. UPDATING LOAD AS SHOWN TO HEAVIEST BOX LISTED IN "PALLET UNIT DATA" CHART.
3. ADDING REFERENCE TO .029" THICKNESS STRAPPING TO LEADER CALLOUTS IN PAGE 3 ISOMETRIC VIEW.

REVISION NO. 8, DATED FEBRUARY 2016, CONSISTS OF CHANGES PER ECP R14K2016 INCLUDING:

1. ADDING ITEM BY NATIONAL STOCK NUMBER TO "PALLET UNIT DATA" CHART.
2. UPDATING "MIL-P-15011" TO "MIL-DTL-15011" IN THE GENERAL NOTES.
3. UPDATING DRAWING FORMAT TO CURRENT STANDARDS.

GENERAL NOTES



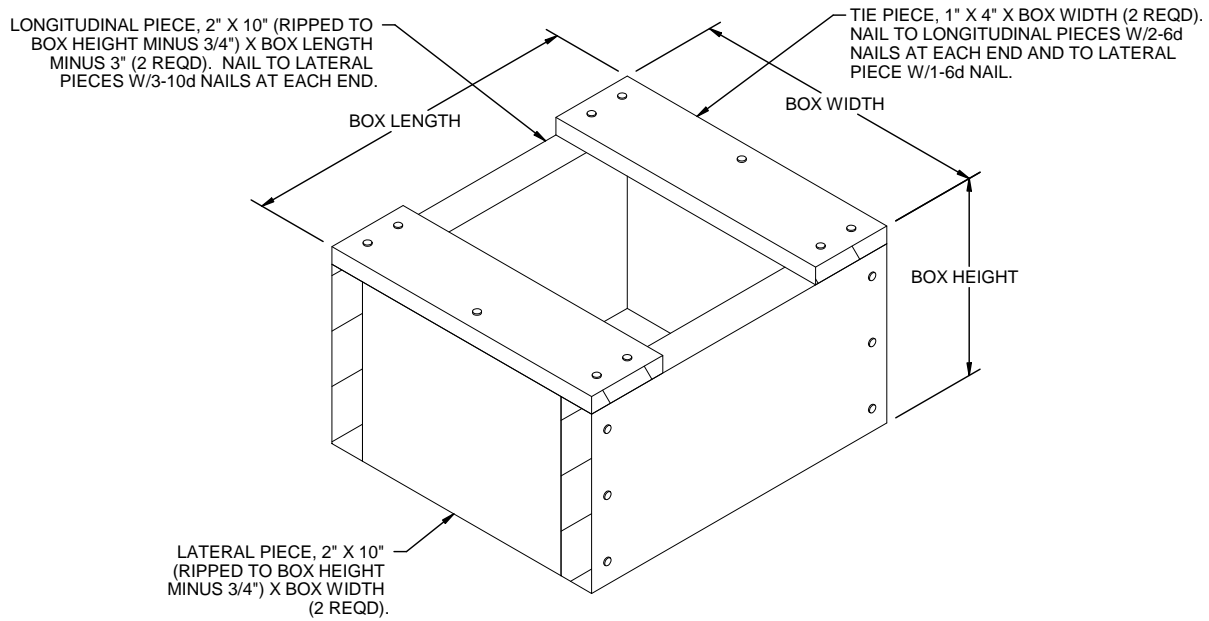
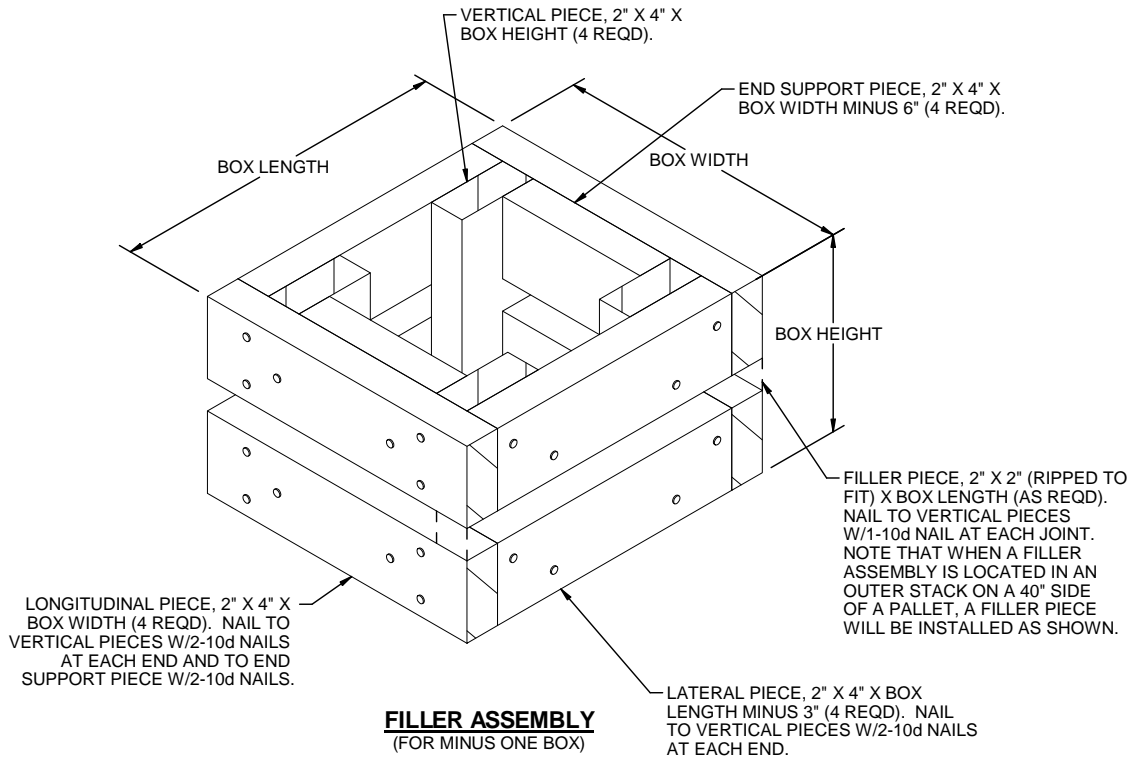
PALLET UNIT
SEE GENERAL NOTE "B" AT RIGHT.

48 BOXES OF 12 GAGE CARTRIDGE (320 PER BOX) @ 57 LBS	-	2,736 LBS
DUNNAGE	-	10 LBS
PALLET	-	80 LBS
TOTAL WEIGHT		2,826 LBS (APPROX)
CUBE		50.1 CU FT (APPROX)

BILL OF MATERIAL			
PALLET, 40" X 48"	-	1 REQD	80 LBS
STEEL STRAPPING, 3/4"	-	101.17' REQD	9.03 LBS
SEAL FOR 3/4" STRAPPING	-	7 REQD	NIL

- 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 12 GAGE CARTRIDGES 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. POSITION THE THREE OUTBOARD BOXES ON THE 40" SIDES OF THE BOTTOM LAYER OF THE UNIT WITH THE TOPS DOWNWARD, AND THE THREE OUTWARD BOXES ON THE 40" SIDES OF THE TOP LAYER OF THE UNIT WITH TOPS UPWARDS.
- J. IF DEEMED MORE ECONOMICALLY FEASIBLE, THE ALTERNATIVE FILLER ASSEMBLY MAY BE SUBSTITUTED FOR THE FILLER ASSEMBLY TO COMPLETE A LAYER ON A PALLET.
- K. 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.
- L. FOR DETAILS OF THE WIREBOUND BOX SEE ARDEC DRAWING 9396206 OR 10535779.



ALTERNATIVE FILLER ASSEMBLY
(FOR MINUS ONE BOX)
SEE GENERAL NOTE "J" ON PAGE 3.