

# APPENDIX 92B

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

**SPIDER SYSTEM NETWORK COMMAND MUNITION  
COMPONENTS, MUNITION CONTROL UNITS (MCA),  
XM10, OR TRAINER CONTROL UNITS (MCAT), XM96,  
PACKED 2 PER STEEL PAIL, UNITIZED 24 PAILS PER  
40" X 48" PALLET; APPROX PAIL SIZE 11-1/2" DIA X  
18-1/2" HIGH**

**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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**APPROVED FOR PUBLIC RELEASE  
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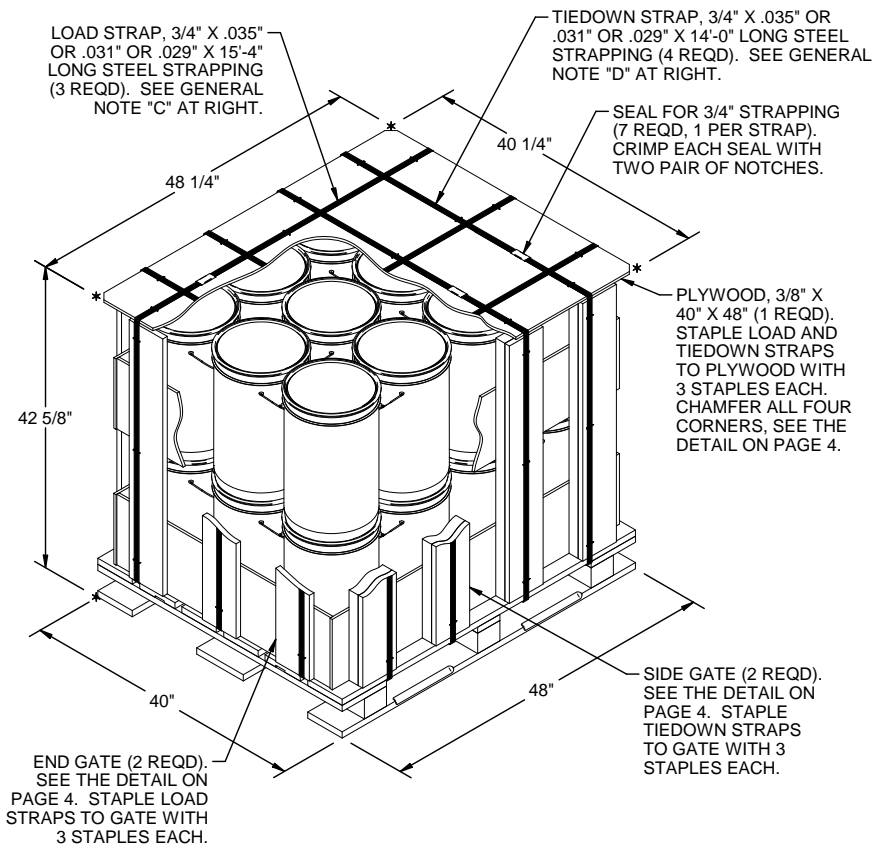
### U.S. ARMY MATERIEL COMMAND DRAWING

<p><b>APPROVED, U.S. ARMY RESEARCH, DEVELOPMENT AND ENGINEERING COMMAND</b></p> <p>REHMSTEDT.MA RK.J.1230548400</p> <p><small>Digitally signed by REHMSTEDT.MARK.J.1230548400 DN: cn=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, c=US, email=CASILLAS.GILBERT.J.1230393644 Date: 2012.05.23 07:02:23 -05'00'</small></p> <p style="text-align: right;"><b>RDAR-EIL-TP</b></p>		<p><b>CAUTION: VERIFY PRIOR TO USE AT WWW.DAC.ARMY.MIL THAT THIS IS THE MOST CURRENT VERSION OF THIS DOCUMENT. THIS IS PAGE 1 OF 4.</b></p>											
<p><b>APPROVED, U.S. ARMY JOINT MUNITIONS COMMAND</b></p> <p>CASILLAS.GILBE RT.J.1230393644</p> <p><small>Digitally signed by CASILLAS.GILBERT.J.1230393644 DN: cn=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=CASILLAS.GILBERT.J.1230393644 Date: 2012.10.18 10:06:15 -05'00'</small></p> <p style="text-align: right;"><b>AMSJM-LIT</b></p>		<p><b>DO NOT SCALE</b></p>		<p><b>JULY 2011</b></p>									
<p><b>APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND</b></p> <p>SHIMP.UPTON .R.1231257183</p> <p><small>Digitally signed by SHIMP.UPTON.R.1231257183 DN: cn=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=SHIMP.UPTON.R.1231257183 Date: 2012.10.18 10:06:15 -05'00'</small></p> <p style="text-align: center;"><b>U.S. ARMY DEFENSE AMMUNITION CENTER</b></p>		<p>ENGINEER OR TECHNICIAN</p>	<p>BASIC REV.</p>	<p><b>CANH TRAN</b></p>									
<p><b>TRANSPORTATION ENGINEERING DIVISION</b></p>		<p>FIEFFER.LAUR A.A.1230375727</p> <p><small>Digitally signed by FIEFFER.LAURA.A.1230375727 DN: cn=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=FIEFFER.LAURA.A.1230375727 Date: 2011.08.09 14:14:59 -05'00'</small></p>		<p><b>TESTED</b></p>									
<p><b>VALIDATION ENGINEERING DIVISION</b></p>		<p>BARICKMAN. PHILIP.W.123 0202202</p> <p><small>Digitally signed by BARICKMAN.PHILIP.W.1230202202 DN: cn=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=BARICKMAN.PHILIP.W.1230202202 Date: 2011.08.09 14:12:51 -05'00'</small></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;"><b>19</b></td> <td style="text-align: center;"><b>48</b></td> <td style="text-align: center;"><b>4116/92B</b></td> <td style="text-align: center;"><b>20PA1002</b></td> </tr> </table>		CLASS	DIVISION	DRAWING	FILE	<b>19</b>	<b>48</b>	<b>4116/92B</b>	<b>20PA1002</b>
CLASS	DIVISION	DRAWING	FILE										
<b>19</b>	<b>48</b>	<b>4116/92B</b>	<b>20PA1002</b>										
<p><b>ENGINEERING DIRECTORATE</b></p>		<p>BEAVER.JERRY. W.1230949952</p> <p><small>Digitally signed by BEAVER.JERRY.W.1230949952 DN: cn=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA, cn=BEAVER.JERRY.W.1230949952 Date: 2011.08.09 14:49:14 -05'00'</small></p>											

PALLET UNIT DATA				
ITEMS INCLUDED		*HAZARD CLASS AND DIVISION	*COMPATIBILITY GROUP	APPROX WEIGHT (LBS)
NSN	DODIC			
1346-01-538-3145	TS04	- - - - I N E R T - - - -		963
6920-01-565-5599	----	- - - - I N E R T - - - -		963

\*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).

**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 PAILS AND THE WEIGHT OF THE SPECIFIC ITEM BEING UNITIZED.
- C. THE LOAD STRAPS MUST BE PRE-POSITIONED ON THE PALLET DECK PRIOR TO PLACING PAILS 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 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

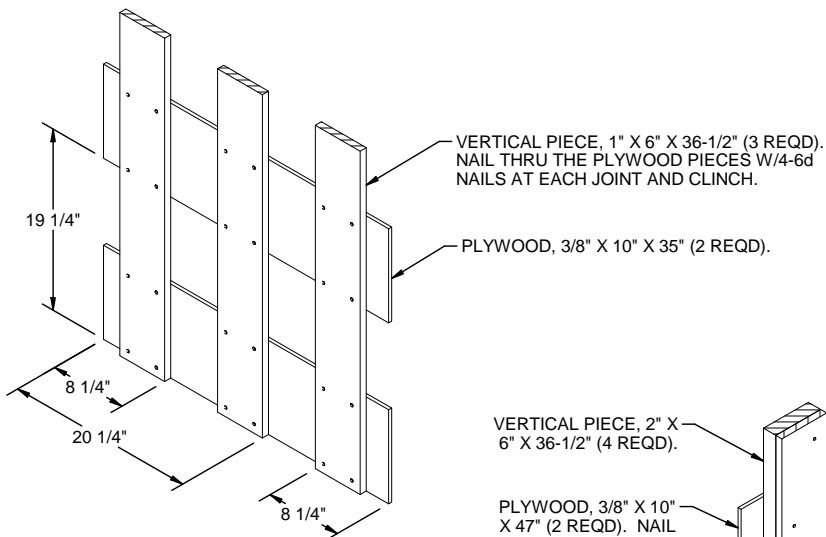
- F. IF ITEMS COVERED HEREIN ARE UNITIZED PRIOR TO ISSUANCE OF THIS APPENDIX, THE PAILS NEED NOT BE REUNITIZED SOLELY TO CONFORM TO THIS APPENDIX.
- G. THE UNITIZATION PROCEDURES DEPICTED HEREIN MAY ALSO BE USED FOR UNITIZING MCA OR MCAT WHEN IDENTIFIED BY DIFFERENT NATIONAL STOCK NUMBERS (NSN) THAN WHAT IS SHOWN ON PAGE 2, PROVIDED THE PAIL 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-P-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 STEEL PAIL, SEE ATK DRAWING NO. 28073001.
- L. EMPTY OR REJECT STEEL PAILS MAY BE USED AS FILLER PAILS AS NECESSARY. FILLER PAILS MUST BE INSTALLED IN THE TOP LAYER OF STEEL PAILS. IF 12 FULL PAILS ARE TO BE OMITTED, ONE FULL LAYER OF PAILS WILL BE OMITTED. WHEN (EMPTY) FILLER PAILS ARE USED IN PLACE OF OMITTED STEEL PAILS TO COMPLETELY FILL OUT A LAYER ON A PALLET, THEY WILL BE MARKED AS SPECIFIED IN ARDEC DRAWING 12982865.

**PALLET UNIT**

SEE GENERAL NOTE "B" AT RIGHT. **NOTE:** STACK PAILS SO THAT HANDLES ARE IN VOID AREA. SEE "PAIL PLACEMENT" DETAIL ON PAGE 4.

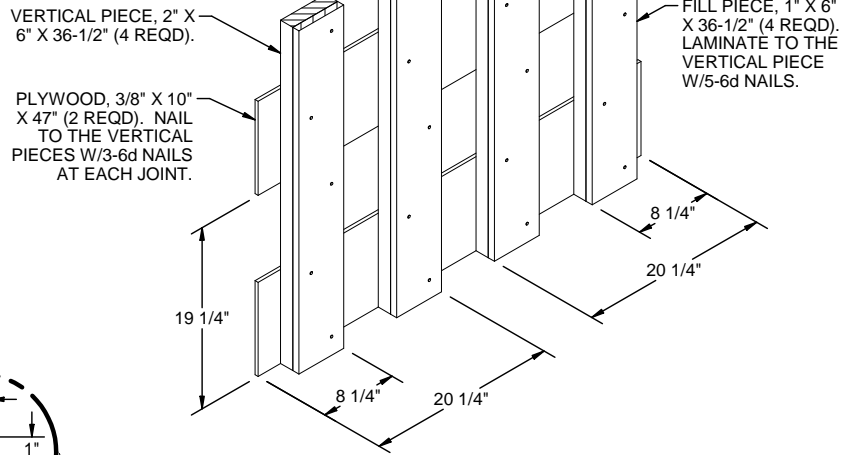
24 PAILS OF MCA (2 PER PAIL) @ 31 LBS	- - - - -	744 LBS
DUNNAGE	- - - - -	139 LBS
PALLET	- - - - -	80 LBS
<b>TOTAL WEIGHT</b>	- - - - -	<b>963 LBS (APPROX)</b>
<b>CUBE</b>	- - - - -	<b>47.9 CU FT (APPROX)</b>

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	42.58	21.29
2" X 6"	24.33	24.33
NAI LS	NO. REQD	POUNDS
6d (2")	136	0.80
PALLET, 40" X 48" - - - - - 1 REQD - - - - - 80 LBS PLYWOOD, 3/8" - - - 36.11 SQ FT REQD - - - - - 37.24 LBS STEEL STRAPPING, 3/4" - 102.00' REQD - - - - - 9.11 LBS SEAL FOR 3/4" STRAPPING - - - 7 REQD - - - - - NIL STAPLE, 15/16" X 3/4" - - - 63 REQD - - - - - 0.18 LB		



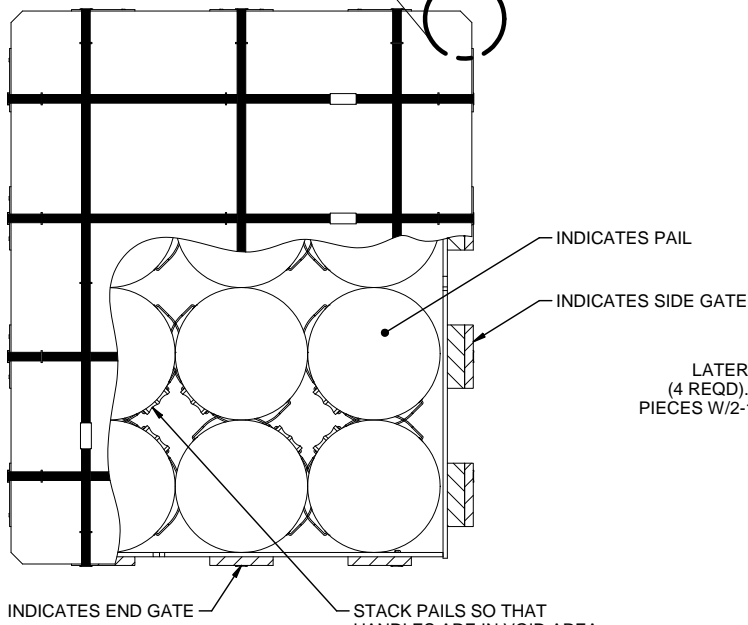
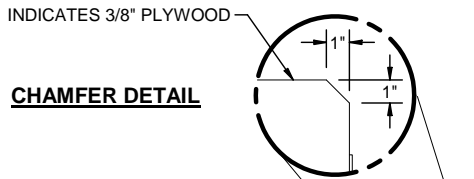
**END GATE**

FOR A ONE HIGH LOAD, ELIMINATE THE UPPER PLYWOOD PIECE AND REDUCE THE LENGTH OF THE VERTICAL PIECES TO 18-1/4".

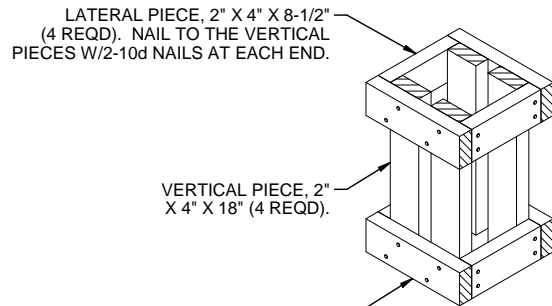


**SIDE GATE**

FOR A ONE HIGH LOAD, ELIMINATE THE UPPER PLYWOOD PIECE AND REDUCE THE LENGTH OF THE VERTICAL AND FILL PIECES TO 18-1/4".



**PAIL PLACEMENT**



**FILLER ASSEMBLY**  
(FOR MINUS ONE PAIL)