

APPENDIX 4

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

**CARTRIDGE, 6.5MM, PACKED 460 PER M2 SERIES
METAL CONTAINER, 2 CONTAINERS PER WIRE-
BOUND BOX, UNITIZED 48 BOXES PER 40" X 48"
PALLET; APPROX BOX SIZE 14-7/16" L X 12-17/32" W
X 8-1/8" H**

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

DISTRIBUTION STATEMENT A:

APPROVED FOR PUBLIC RELEASE
DISTRIBUTION IS UNLIMITED.

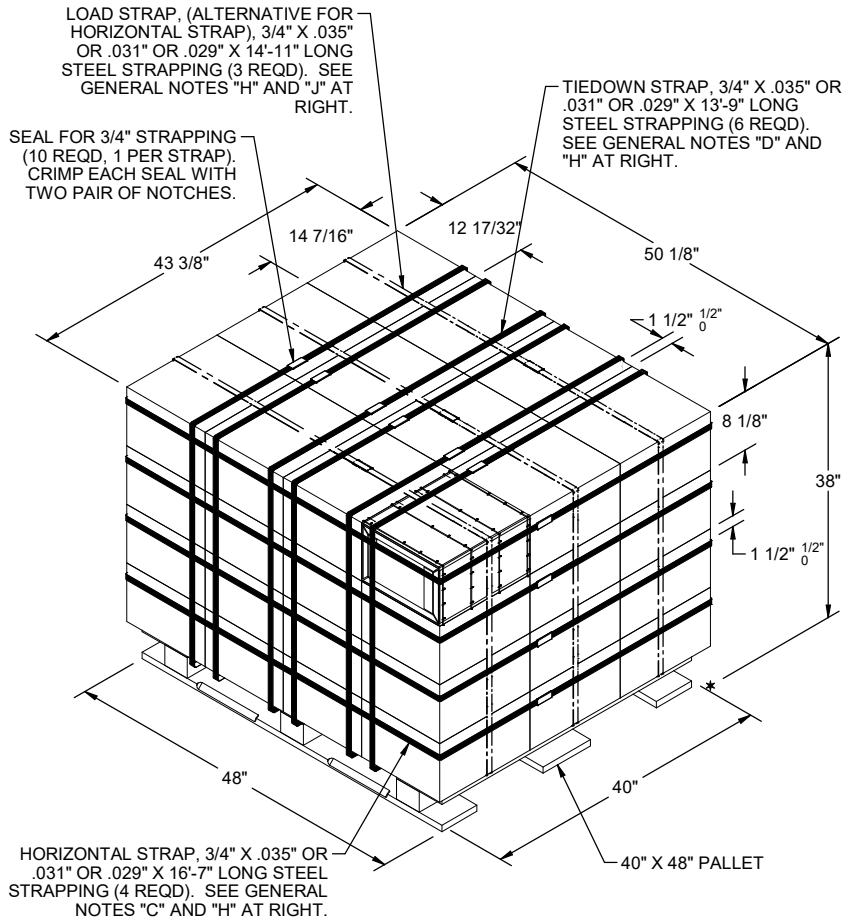
U.S. ARMY MATERIEL COMMAND DRAWING

<p>APPROVED, COMBAT CAPABILITIES DEVELOPMENT COMMAND ARMAMENTS CENTER</p> <p>HANSSSEN.J Digitally signed by HANSSSEN.JOSEPH. W.1376495538 OSEPH.W.13 Date: 2023.01.05 76495538 07:56:01 -06'00' FCDD-ACE-LTP</p>	<p>CAUTION: VERIFY PRIOR TO USE AT https://www.dau.edu/cop/ammo/Pages/Default.aspx THAT THIS IS THE MOST CURRENT VERSION OF THIS DOCUMENT. THIS IS PAGE 1 OF 4.</p>																
<p>APPROVED, U.S. ARMY JOINT MUNITIONS COMMAND</p> <p>WARD.GINA. Digitally signed by WARD.GINA.M.1369379808 M.1369379808 Date: 2023.03.20 19:01:41 -05'00' AMSJM-MLT</p>	<p>DO NOT SCALE</p>		<h2 style="margin: 0;">DECEMBER 2022</h2>														
<p>APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND</p> <p>BRAILSFORD.KEITH Digitally signed by BRAILSFORD.KEITH.ANTHONY. H.ANTHONY.10286 1028655661 55661 Date: 2023.03.21 07:51:35 -05'00' DEFENSE AMMUNITION CENTER</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">DESIGN ENGINEER</td> <td style="width: 15%;">BASIC</td> <td style="width: 70%;">SPENCER HOVEY</td> </tr> <tr> <td></td> <td style="text-align: center;">REV.</td> <td></td> </tr> </table>	DESIGN ENGINEER	BASIC	SPENCER HOVEY		REV.		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">CLASS</td> <td style="width: 25%;">DIVISION</td> <td style="width: 25%;">DRAWING</td> <td style="width: 25%;">FILE</td> </tr> <tr> <td style="text-align: center;">19</td> <td style="text-align: center;">48</td> <td style="text-align: center;">4116/4</td> <td style="text-align: center;">20PA1002</td> </tr> </table>		CLASS	DIVISION	DRAWING	FILE	19	48	4116/4	20PA1002
DESIGN ENGINEER	BASIC	SPENCER HOVEY															
	REV.																
CLASS	DIVISION	DRAWING	FILE														
19	48	4116/4	20PA1002														
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">ENGINEERING DIVISON</td> <td style="width: 85%;">FIEFFER.LAUR A.A.1230375727 Digitally signed by FIEFFER.LAURA.A.1230375727 Date: 2022.11.22 07:31:19 -05'00'</td> </tr> <tr> <td style="width: 15%;">TEST ENGINEER</td> <td style="width: 85%;">FELICIANO.AD IN.1259200373 Digitally signed by FELICIANO.ADIN.1259200373 Date: 2022.11.23 09:17:59 -05'00'</td> </tr> <tr> <td style="width: 15%;">TEST REPORT</td> <td style="width: 85%; text-align: center;">NA</td> </tr> <tr> <td style="width: 15%;">EXPLOSIVE SAFETY DIRECTORATE</td> <td style="width: 85%;">CUMMINS.PAU L.A.1231883122 Digitally signed by CUMMINS.PAUL.A.1231883122 Date: 2022.12.15 12:21:47 -05'00'</td> </tr> </table>	ENGINEERING DIVISON	FIEFFER.LAUR A.A.1230375727 Digitally signed by FIEFFER.LAURA.A.1230375727 Date: 2022.11.22 07:31:19 -05'00'	TEST ENGINEER	FELICIANO.AD IN.1259200373 Digitally signed by FELICIANO.ADIN.1259200373 Date: 2022.11.23 09:17:59 -05'00'	TEST REPORT	NA	EXPLOSIVE SAFETY DIRECTORATE	CUMMINS.PAU L.A.1231883122 Digitally signed by CUMMINS.PAUL.A.1231883122 Date: 2022.12.15 12:21:47 -05'00'								
ENGINEERING DIVISON	FIEFFER.LAUR A.A.1230375727 Digitally signed by FIEFFER.LAURA.A.1230375727 Date: 2022.11.22 07:31:19 -05'00'																
TEST ENGINEER	FELICIANO.AD IN.1259200373 Digitally signed by FELICIANO.ADIN.1259200373 Date: 2022.11.23 09:17:59 -05'00'																
TEST REPORT	NA																
EXPLOSIVE SAFETY DIRECTORATE	CUMMINS.PAU L.A.1231883122 Digitally signed by CUMMINS.PAUL.A.1231883122 Date: 2022.12.15 12:21:47 -05'00'																

PALLET UNIT DATA				
ITEMS INCLUDED		*HAZARD CLASS AND DIVISION	*COMPATIBILITY GROUP	APPROX WEIGHT (LBS)
NSN	DODIC			
1305-01-683-6646	AC58	1.4	S	3,163

*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



PALLET UNIT

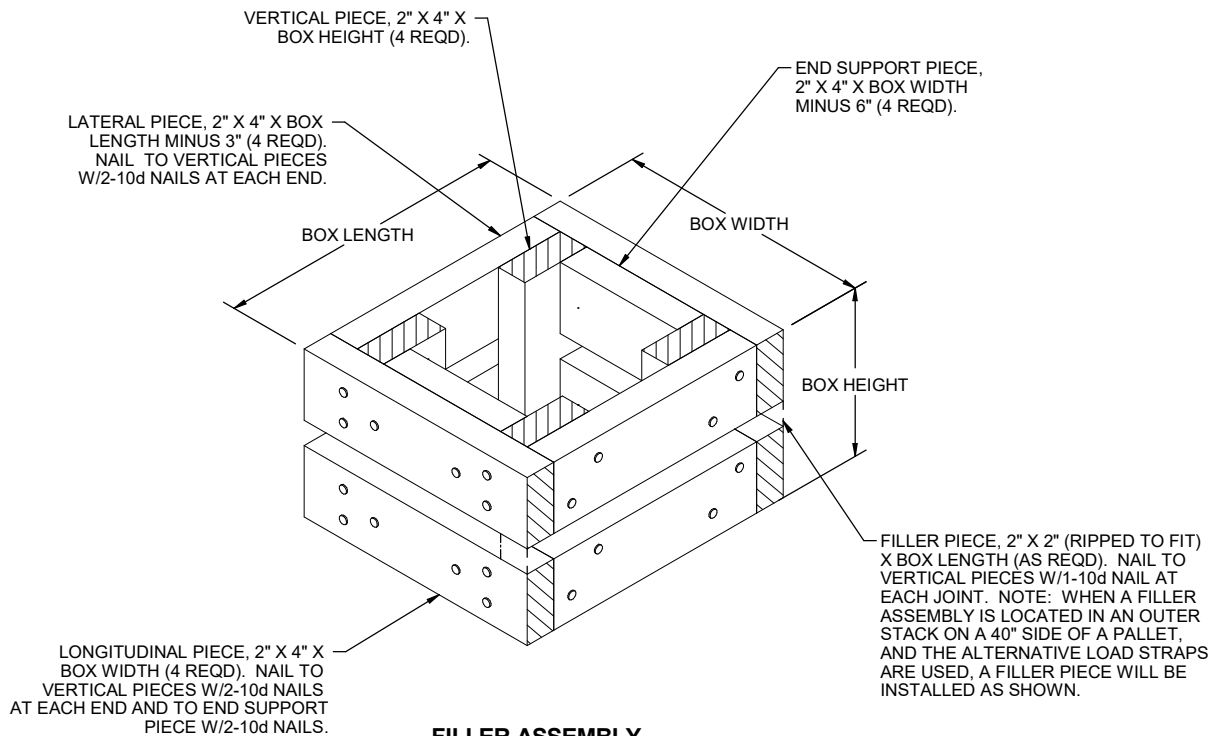
SEE GENERAL NOTE "B" AT RIGHT.

48 BOXES OF 6.5MM CARTRIDGE (920 PER BOX) @ 64.0 LBS	-	3,072 LBS (APPROX)
DUNNAGE	-	11 LBS
PALLET	-	80 LBS
TOTAL WEIGHT	-	3,163 LBS (APPROX)
CUBE	-	47.8 CU FT (APPROX)

BILL OF MATERIAL

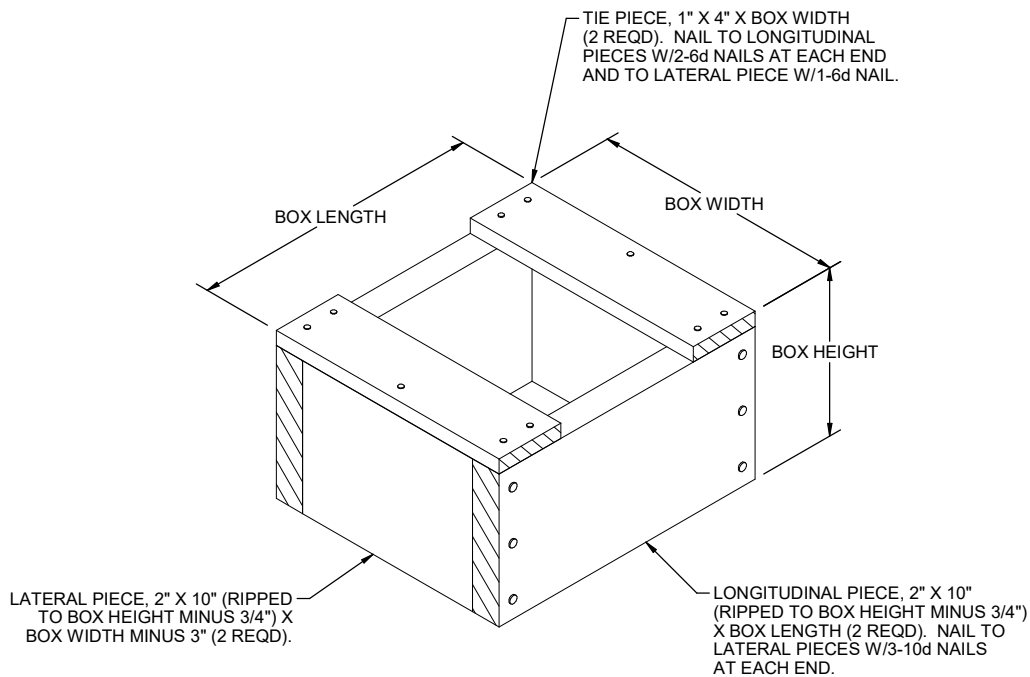
PALLET, 40" X 48"	-	1 REQD	-	80 LBS
STEEL STRAPPING, 3/4"	-	148.70'	REQD	10.60 LBS
SEAL FOR 3/4" STRAPPING	-	10 REQD	-	NIL

- 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. INSTALL EACH HORIZONTAL STRAP TO ENCIRCLE A LAYER OF BOXES ON THE PALLET. NOTE THAT THE STRAPS WILL BE LOCATED AS SHOWN, NEAR THE TOP OF EACH LAYER. HORIZONTAL STRAPS MUST BE TENSIONED AND SEALED PRIOR TO THE APPLICATION OF TIEDOWN STRAPS.
- D. INSTALL EACH TIEDOWN STRAP TO PASS UNDER THE TOP DECK BOARDS OF THE PALLET. NOTE THAT THE STRAPS WILL BE LOCATED AS SHOWN, NEAR THE SIDE CLEATS OF THE END PANELS OF THE BOX. TIEDOWN STRAPS WILL NOT BE APPLIED UNTIL THE HORIZONTAL OR LOAD STRAPS, AS APPLICABLE, 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 BOXES NEED NOT BE REUNITIZED SOLELY TO CONFORM TO THIS REVISION.
- G. THE UNITIZATION PROCEDURES DEPICTED HEREIN MAY ALSO BE USED FOR UNITIZING 6.5MM 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. 1-1/4" STRAPS MAY BE SUBSTITUTED FOR THE 3/4" STRAPPING SPECIFIED IN THE "PALLET UNIT" AT LEFT. FOUR 1-1/4" TIEDOWN STRAPS WILL REPLACE THE SIX 3/4" TIEDOWN STRAPS SPECIFIED, DELETE THE SECOND AND FIFTH STRAPS. REFER TO GENERAL NOTE "CC" IN THE BASIC UNITIZATION PROCEDURES DRAWING 19-48-4116-20PA1002 FOR ADDITIONAL GUIDANCE.
- J. LOAD STRAPS MAY BE USED IN LIEU OF HORIZONTAL STRAPS. LOAD STRAPS WILL BE LOCATED AS SHOWN IN THE DETAIL AT LEFT. LOAD STRAPS MAY BE PRE-POSITIONED ON THE PALLET DECK OR THREADED THROUGH STRAP SLOTS. **NOTE:** WHEN LOAD STRAPS ARE BEING USED IN LIEU OF HORIZONTAL STRAPS, THE THREE OUTBOARD BOXES ON THE BOTTOM LAYER OF THE 40" SIDES OF THE PALLET WILL BE POSITIONED WITH THE TOPS DOWNWARD AND THE THREE OUTBOARD BOXES ON THE TOP LAYER OF THE 40" SIDES OF THE PALLET WILL BE POSITIONED WITH THE TOPS UPWARD. LOAD STRAPS MUST BE TENSIONED AND SEALED PRIOR TO THE APPLICATION OF TIEDOWN STRAPS.
- K. IF DEEMED MORE ECONOMICALLY FEASIBLE, THE ALTERNATIVE FILLER ASSEMBLY MAY BE SUBSTITUTED FOR THE FILLER ASSEMBLY TO COMPLETE A LAYER ON A PALLET.
- L. 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.
- M. FOR DETAILS OF THE WIREBOUND BOX SEE DEVCOM DRAWING 13076679.



FILLER ASSEMBLY

(FOR MINUS ONE BOX)



ALTERNATIVE FILLER ASSEMBLY

(FOR MINUS ONE BOX)
SEE GENERAL NOTE "K" ON PAGE 3.