

APPENDIX 5D

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

**CARTRIDGE, 5.56MM, PACKED 1,200 PER PA108 SE-
RIES METAL CONTAINER, 2 PER WIREBOUND BOX,
UNITIZED 36 BOXES PER 40" X 48" PALLET; AP-
PROX BOX SIZE 17" L X 13-3/8" W X 9-3/8" 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

APPROVED, COMBAT CAPABILITIES DEVELOPMENT COMMAND ARMAMENTS CENTER HANSSEN.JOSEP H.W.1376495538 <small>Digitally signed by HANSSEN.JOSEPH.W.1376495538 Date: 2022.04.08 06:16:54 -05'00'</small> FCDD-ACE-LTP	CAUTION: VERIFY PRIOR TO USE AT HTTPS://www.dau.mil/cop/ammo/Pages/Default.aspx THAT THIS IS THE MOST CURRENT VERSION OF THIS DOCUMENT. THIS IS PAGE 1 OF 4.			JANUARY 2014			
APPROVED, U.S. ARMY JOINT MUNITIONS COMMAND WARD.GINA. M.1369379808 <small>Digitally signed by WARD.GINA.M.1369379808 Date: 2022.07.20 11:06:56 -05'00'</small> AMSJM-MLT	DESIGN ENGINEER	BASIC REV.	MADELINE BANKS MADELINE BANKS	REVISION NO. 2		APRIL 2022	
APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND BRAILSFORD.KEITH. ANTHONY.10286556 61 DEFENSE AMMUNITION CENTER	ENGINEERING DIVISON	FIEFFER.LAUR A.A.1230375727 <small>Digitally signed by FIEFFER.LAURA.A.1230375727 Date: 2022.03.24 08:38:15 -05'00'</small>		SEE THE REVISION LISTING ON PAGE 2			
TEST ENGINEER TEST REPORT	NA	FELICIANO.AD IN.1259200373 <small>Digitally signed by FELICIANO.ADIN.1259200373 Date: 2022.03.29 13:16:05 -05'00'</small>		CLASS	DIVISION	DRAWING	FILE
EXPLOSIVE SAFETY DIRECTORATE	CUMMINS.PAU L.A.1231883122 <small>Digitally signed by CUMMINS.PAULA.1231883122 Date: 2022.05.30 08:52:30 -05'00'</small>		19	48	4116/5D	20PA1002	

PALLET UNIT DATA				
ITEMS INCLUDED		*HAZARD CLASS AND DIVISION	*COMPATI-BILITY GROUP	APPROX WEIGHT (LBS)
NSN	DODIC			
1305-				
01-536-9289	AB15	1.4	S	3,044
01-537-1521	AB16	1.4	S	3,044
01-537-1522	AB17	1.4	S	3,044
01-670-4995	AC42	1.4	S	3,044
01-670-5149	AC43	1.4	S	3,044
01-671-1541	AC44	1.4	S	3,044
01-696-6093	AC64	1.4	S	3,008

*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

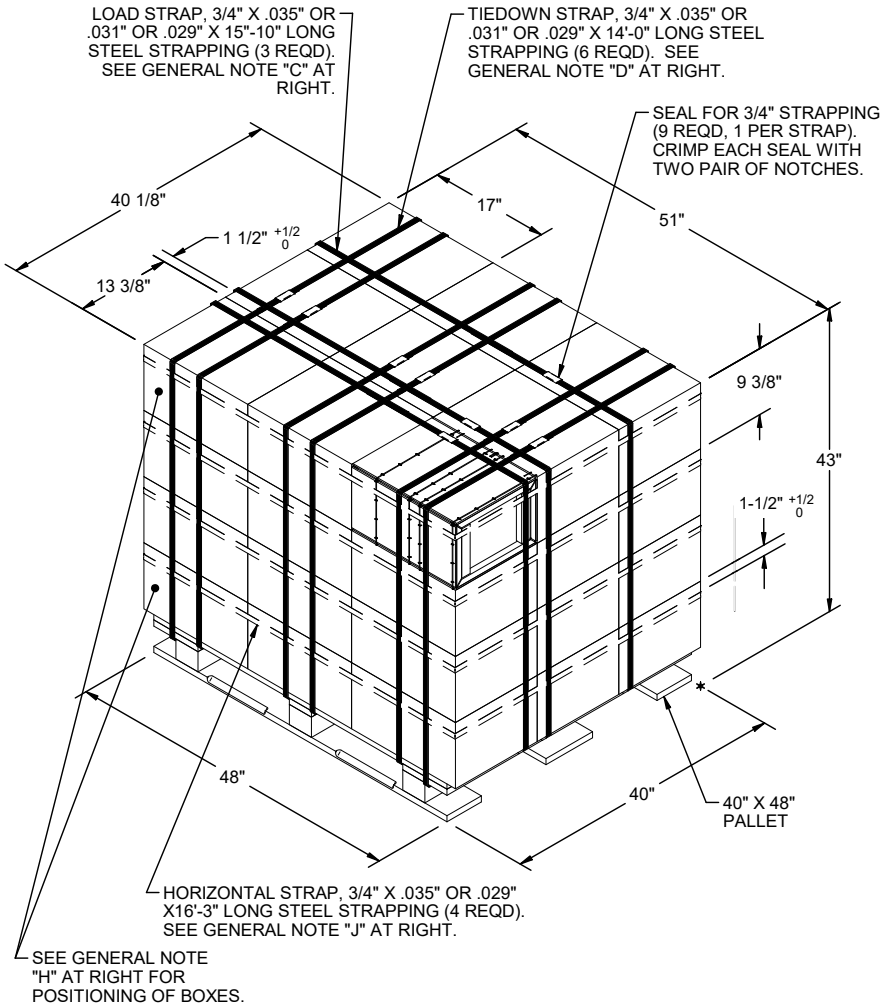
REVISION NO. 1, DATED SEPTEMBER 2019, CONSISTS OF CHANGES PER ECP R17Q2029 INCLUDING:

1. ADDING ITEMS BY NATIONAL STOCK NUMBER TO "PALLET UNIT DATA" CHART.
2. UPDATING APPROXIMATE WEIGHT INFORMATION IN "PALLET UNIT DATA" CHART.

REVISION NO. 2, DATED APRIL 2022, CONSISTS OF CHANGES PER ECP R21K2010 NOR 5 AND ECP R22K3002 NOR 3 INCLUDING:

1. UPDATING TITLE NOMENCLATURE.
2. ADDING ITEM BY NATIONAL STOCK NUMBER TO "PALLET UNIT DATA" CHART.

GENERAL NOTES

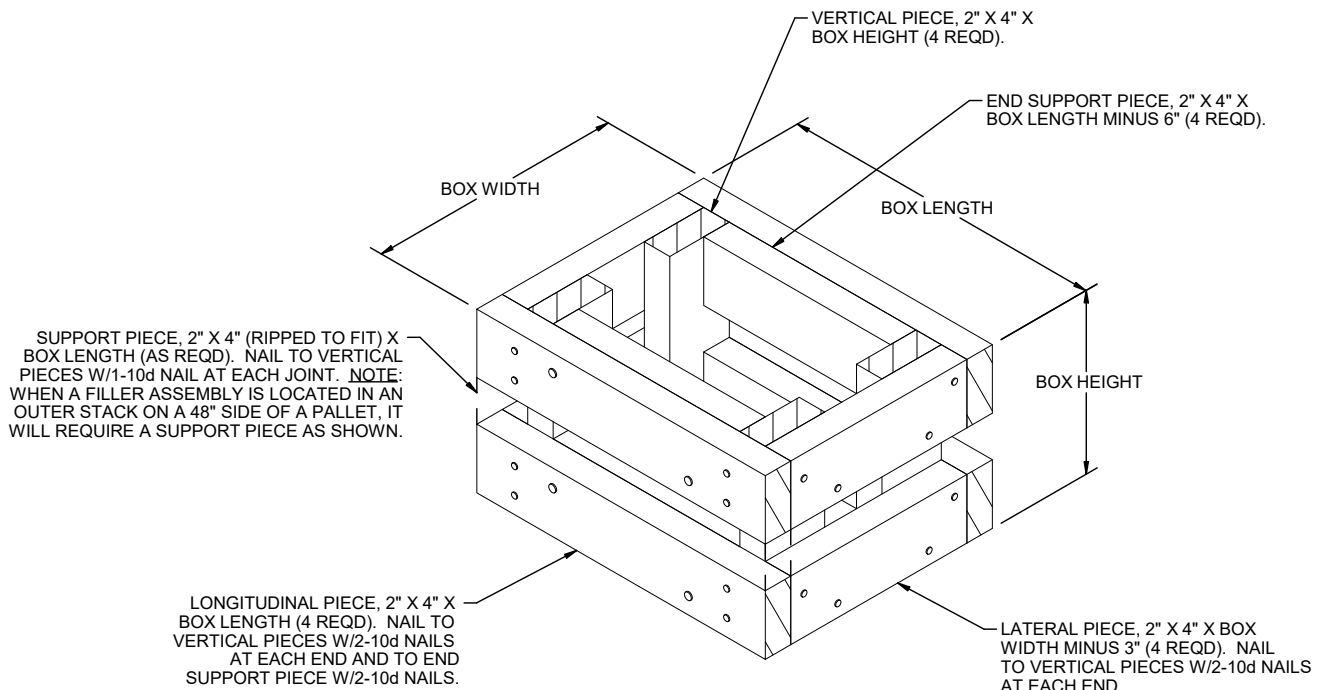


PALLET UNIT
SEE GENERAL NOTE "B" AT RIGHT.

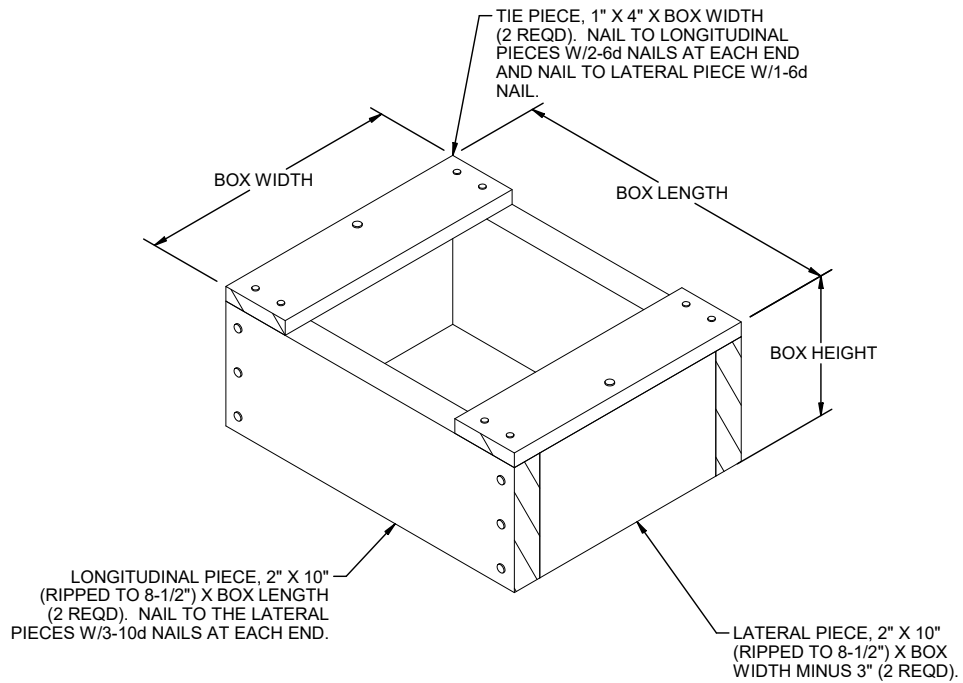
36 BOXES OF 5.56MM CTG (2,400 PER BOX) @ 82 LBS	-----	2,952 LBS
DUNNAGE	-----	12 LBS
PALLET	-----	80 LBS
TOTAL WEIGHT	-----	3,044 LBS (APPROX)
CUBE	-----	50.9 CU FT (APPROX)

BILL OF MATERIAL	
PALLET, 40" X 48"	1 REQD - - - -80 LBS
STEEL STRAPPING, 3/4"	131.50' REQD - 11.74 LBS
SEAL FOR 3/4" STRAPPING	9 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 MUST BE PRE-POSITIONED ON THE PALLET DECK PRIOR TO PLACING BOXES ON THE PALLET. NOTE THAT THE LOAD STRAPS WILL 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/STRINGER 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 BOXES NEED NOT BE REUNITIZED SOLELY TO CONFORM TO THIS APPENDIX.
- G. THE UNITIZATION PROCEDURES DEPICTED HEREIN MAY ALSO BE USED FOR UNITIZING 5.56MM 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 48" SIDES OF THE BOTTOM LAYER OF THE UNIT WITH THE TOPS DOWNWARD, AND THE THREE OUTWARD BOXES ON THE 48" SIDES OF THE TOP LAYER OF THE UNIT WITH TOPS UPWARDS.
- J. 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. OMIT THE TWO OUTER TIEDOWN STRAPS. REFER TO GENERAL NOTE "CC" IN THE BASIC UNITIZATION DRAWING 19-48-4116-20PA1002 FOR ADDITIONAL GUIDANCE.
- K. HORIZONTAL STRAPS MAY BE USED IN LIEU OF LOAD STRAPS. HORIZONTAL STRAPS WILL BE LOCATED AS DIMENSIONED IN THE DETAIL AT LEFT.
- L. IF DEEMED MORE ECONOMICALLY FEASIBLE, THE ALTERNATIVE FILLER ASSEMBLY MAY BE SUBSTITUTED FOR THE FILLER ASSEMBLY TO COMPLETE A LAYER ON A PALLET.
- M. 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.
- N. FOR DETAILS OF THE MIL-DTL-46506 WIREBOUND BOX SEE ARDEC DRAWING 12590217.



FILLER ASSEMBLY
(FOR MINUS ONE BOX)



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