

APPENDIX 121X

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

**CAP, BLASTING, NON-ELECTRIC, DELAY, M15,
PACKED 60 PER WOODEN BOX, UNITIZED 12 BOXES
PER 40" X 48" PALLET; APPROX BOX SIZE 25-1/4" L
X 23-3/4" W X 14-3/4" 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 HANSSSEN.JO. Digitally signed by SEP.H.W.1376 HANSSSEN.JOSEPH.W. 495538 1376495538 Date: 2020.06.04 10:32:30 -05'00'	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.		
APPROVED, U.S. ARMY JOINT MUNITIONS COMMAND WARD.GINA. Digitally signed by M.1369379808 WARD.GINA.M.1369379808 Date: 2020.06.04 12:57:11 -05'00'	DO NOT SCALE		JUNE 2020
APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND SMITH.THERESA. Digitally signed by ANN.1009147639 SMITH.THERESA.ANN.1009147 639 Date: 2020.06.05 09:41:04 -05'00'	DESIGN ENGINEER ENGINEERING DIVISON TEST ENGINEER TEST REPORT EXPLOSIVE SAFETY DIRECTORATE	BASIC REV. MADELINE BANKS FIEFFER.LAUR A.A.1230375727 Digitally signed by FIEFFER.LAURA.A.1230375727 Date: 2020.05.27 11:13:11 -05'00' FELICIANO.ADI N.1259200373 Digitally signed by FELICIANO.ADIN.1259200373 Date: 2020.05.29 13:33:45 -05'00' THOMAS.CARL.AN THONY.110462137 Digitally signed by THOMAS.CARL.ANTHONY.1104 621372 Date: 2020.06.02 10:33:01 -05'00'	CLASS DIVISION DRAWING FILE 19 48 4116/ 121X 20PA1002
U.S. ARMY DEFENSE AMMUNITION CENTER			

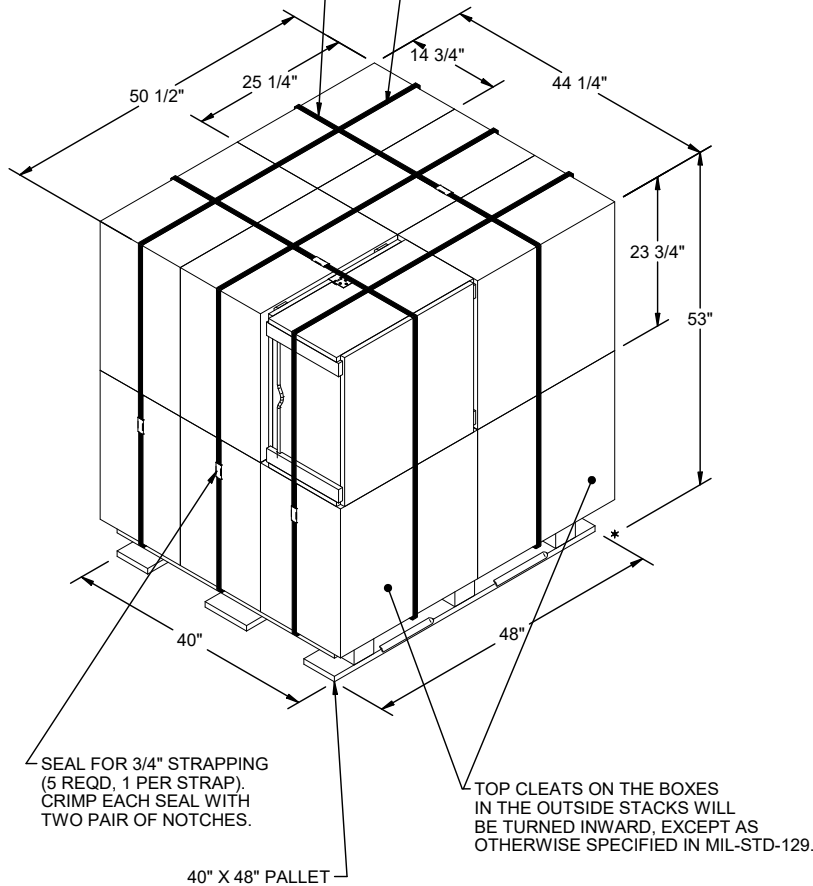
PALLET UNIT DATA				
ITEMS INCLUDED		*HAZARD CLASS AND DIVISION	*COMPATIBILITY GROUP	APPROX WEIGHT (LBS)
NSN	DODIC			
1375-01-447-2049	MN07	1. 4	S	856

*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

TIEDOWN STRAP, 3/4" X .029" OR .031" OR .035" X 16'-5" LONG STEEL STRAPPING (2 REQD). SEE GENERAL NOTE "D" AT RIGHT.

LOAD STRAP, 3/4" X .029" OR .031" OR .035" X 17'-5" LONG STEEL STRAPPING (3 REQD). SEE GENERAL NOTE "C" AT RIGHT.



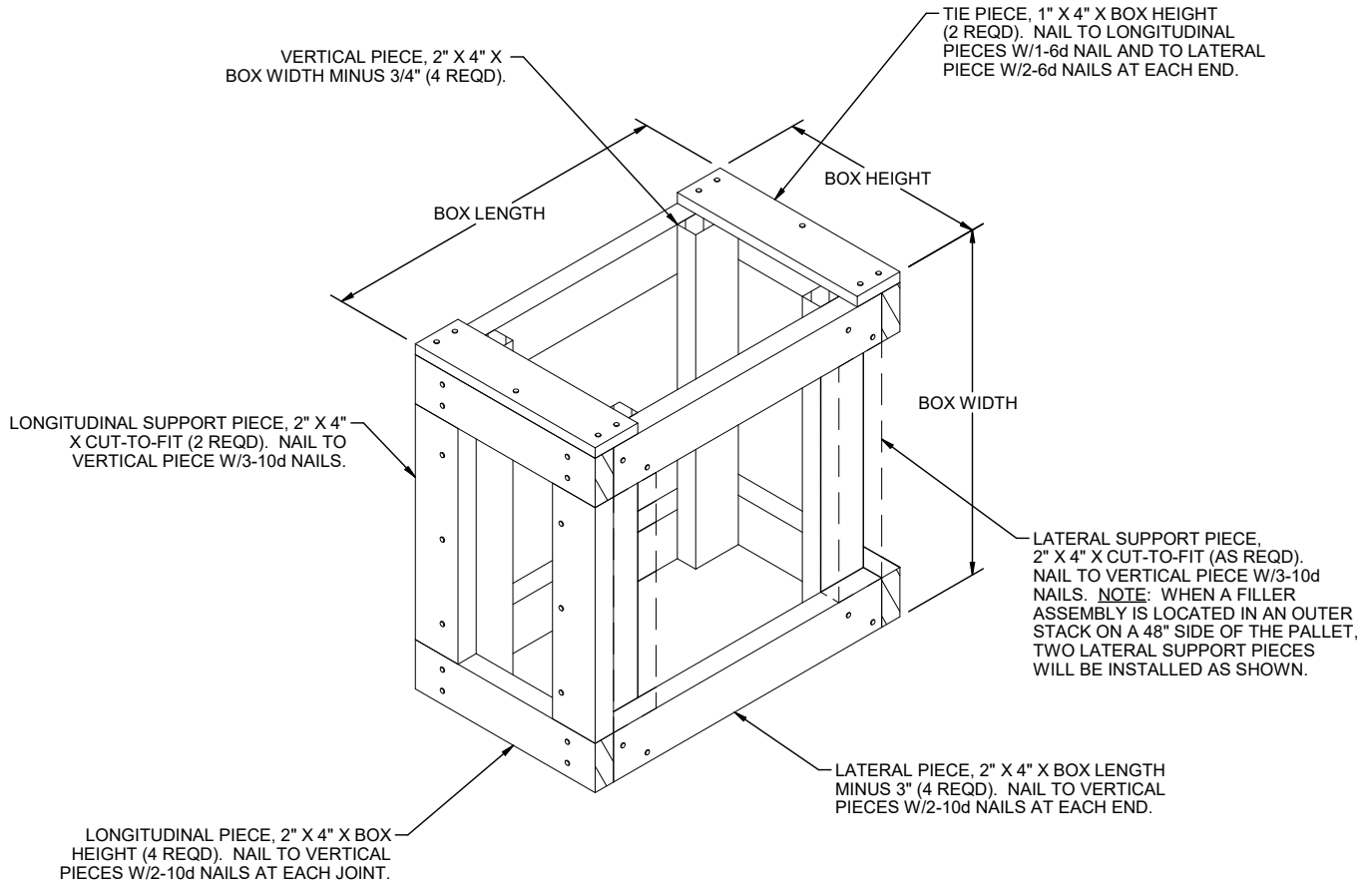
PALLET UNIT
SEE GENERAL NOTE "B" AT RIGHT.

12 BOXES OF BLASTING CAPS (60 PER BOX) @ 64 LBS	---	768 LBS
DUNNAGE	---	8 LBS
PALLET	---	80 LBS
<hr/>		
TOTAL WEIGHT	---	856 LBS (APPROX)
CUBE	---	68.5 CU FT (APPROX)

BILL OF MATERIAL		
PALLET, 40" X 48"	1 REQD	80 LBS
STEEL STRAPPING, 3/4"	85.00' REQD	7.59 LBS
SEAL FOR 3/4" STRAPPING	5 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 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 BLASTING CAPS 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. THE 50-1/2" LENGTH DIMENSION IS AN EXCEPTION TO THE BASIC PROCEDURES. HOWEVER, THE EXCEPTION IS NECESSARY FOR THE AMMUNITION PACK COVERED BY THIS APPENDIX TO MOST EFFECTIVELY GET AN ACCEPTABLE, COMPACT AND SOUND PALLET UNIT.
- K. WHEN THE UNIT LOAD DEPICTED AT LEFT IS TO BE USED FOR UNITIZING MARINE CORPS AMMUNITION, ONE LAYER OF BOXES MUST BE OMITTED, TIEDOWN STRAP LENGTHS MUST BE DECREASED TO 12'-6", AND LOAD STRAP LENGTHS MUST BE DECREASED TO 13'-6". THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 29-1/4", A GROSS UNIT WEIGHT OF 469 POUNDS, AND A UNIT CUBE OF 37.8 CUBIC FEET. ADDITIONALLY, THE UNIT MAY BE MODIFIED AS DESCRIBED WHEN BEING SHIPPED BY MILVAN OR ISO INTERMODAL FREIGHT CONTAINER, VAN TRAILER, OR BOXCAR. THE DETERMINATION TO REDUCE THE LOAD BY A LAYER FOR TRANSPORTATION WILL BE MADE BY THE RESPONSIBLE COMMAND AND WILL BE BASED UPON ECONOMICS OF TRANSPORTATION AND HANDLING.
- L. FOR DETAILS OF THE WOODEN BOX SEE ARDEC DRAWING 12972631.



FILLER ASSEMBLY
(FOR MINUS ONE BOX)