

# APPENDIX 121K

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

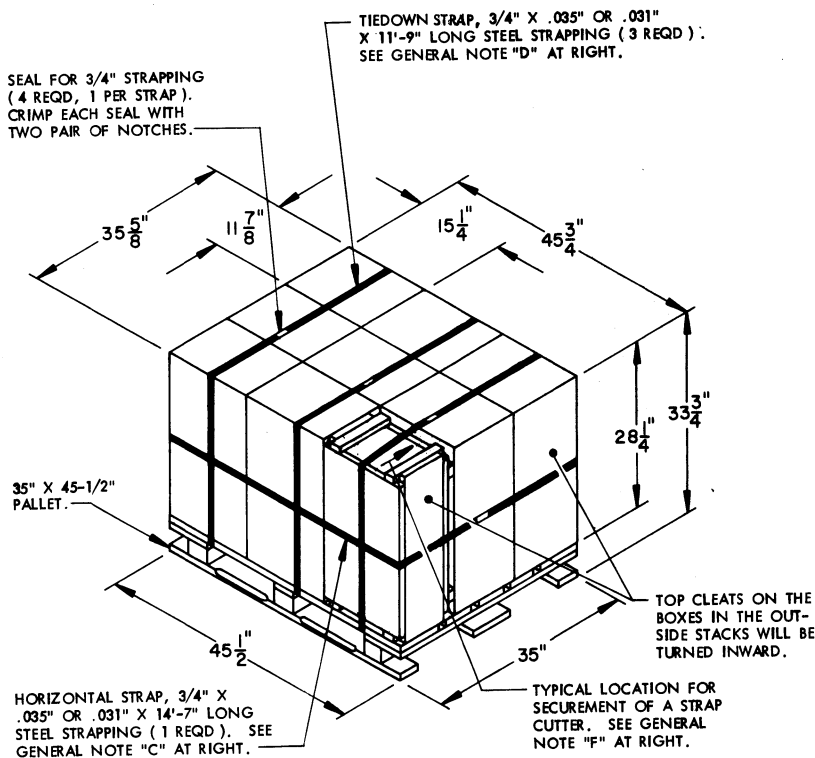
CAP, BLASTING, PACKED 500 PER WOODEN BOX,  
UNITIZED 9 BOXES PER 35" X 45 $\frac{1}{2}$ " PALLET; APPROX  
BOX SIZE 28 $\frac{1}{4}$ " L X 15 $\frac{1}{4}$ " W X 11 $\frac{7}{8}$ " H

| PALLET UNIT DATA |       |                       |          |          |            |                 |
|------------------|-------|-----------------------|----------|----------|------------|-----------------|
| ITEMS INCLUDED   |       | HAZARD CLASSIFICATION |          |          |            | WEIGHT<br>(LBS) |
| NSN              | DODIC | DOT CLASS             | CG CLASS | QD CLASS | COMP GROUP |                 |
| 1375-00-028-5224 | M130  | A                     | VIII     | 1.1      | B          | 762             |

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

| REVISIONS                        |  |  |  | DRAFTSMAN<br><i>KIC/MB</i>   | PROJ ENG<br><i>WRF/lew</i>             |
|----------------------------------|--|--|--|--|--|
|                                  |  |  |  | CHECKER<br><i>J. Gmt</i>   | LOG ENGRS OFFICE<br><i>W. Williams</i> |
|                                  |  |  |  | APPROVED, U. S. ARMY ARMAMENT MATERIEL READINESS COMMAND<br><i>William F. Ernst</i>  |  |
|                                  |  |  |  | DRSAR - LEP  | DRSAR - TMD                            |
|                                  |  |  |  | APPROVED BY ORDER OF COMMANDING GENERAL, U. S. ARMY<br>MATERIEL DEVELOPMENT AND READINESS COMMAND (DARCOM)<br><i>William F. Ernst</i><br>U. S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL |  |
| <b>U. S. ARMY DARCOM DRAWING</b> |  |  |  |  |  |
| <b>DECEMBER 1982</b>             |  |  |  |  |  |
|                                  |  |  |  | CLASS  | DIVISION                               |
|                                  |  |  |  | DRAWING  | FILE                                   |
|                                  |  |  |  | <b>19</b>  | <b>48</b>                              |
|                                  |  |  |  | <b>4116/<br/>121K</b>  | <b>20PA<br/>1002</b>                   |

**DO NOT SCALE**



**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 BOXES AND THE WEIGHT OF THE SPECIFIC ITEM BEING UNITIZED.
- C. INSTALL THE HORIZONTAL STRAP TO ENCIRCLE THE LAYER OF BOXES ON THE PALLET. HORIZONTAL STRAP 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 HORIZONTAL STRAP HAS BEEN TENSIONED AND SEALED.
- E. THE FOLLOWING DARCOM DRAWINGS ARE APPLICABLE FOR OUTLOADING AND STORAGE OF THE ITEMS COVERED BY THIS APPENDIX.

|                   |  |
|-------------------|--|
| CARLOADING -----  | DRAWING 19-48-4115-5PA1002             |
| TRUCKLOADING ---- | DRAWING 19-48-4117-11PA1003            |
| STORAGE -----     | DRAWING 19-48-4118-1-2-3-4-14-22PA1002 |

- F. FOR METHOD OF SECURING A STRAP CUTTER TO THE PALLET UNIT, SEE DARCOM DRAWING 19-48-4127-20P1000.
- G. IF ITEMS COVERED HEREIN ARE UNITIZED PRIOR TO ISSUANCE OF THIS APPENDIX, THE BOXES NEED NOT BE REUNITIZED SOLELY TO CONFORM TO THIS APPENDIX.
- H. 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 THE TITLE PAGE, 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.
- J. IF THERE IS A NEED TO USE FILLER ASSEMBLIES AND AT LEAST TWO PALLETS ARE BEING CONSTRUCTED, NOT MORE THAN 5 FILLERS WILL BE INSTALLED IN ANY ONE PALLET UNIT. ADDITIONAL FILLERS CAN BE PUT IN A SECOND PALLET UNIT AS REQUIRED WHEN THE QUANTITY OF 5 FILLERS IN THE FIRST REDUCED PALLET UNIT IS INSUFFICIENT TO SATISFY THE TOTAL REDUCTION NEEDED. USING TWO PALLET UNITS TO SATISFY THE PALLETIZATION CRITERIA APPLICABLE TO LESS-THAN-FULL PALLET UNITS 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.

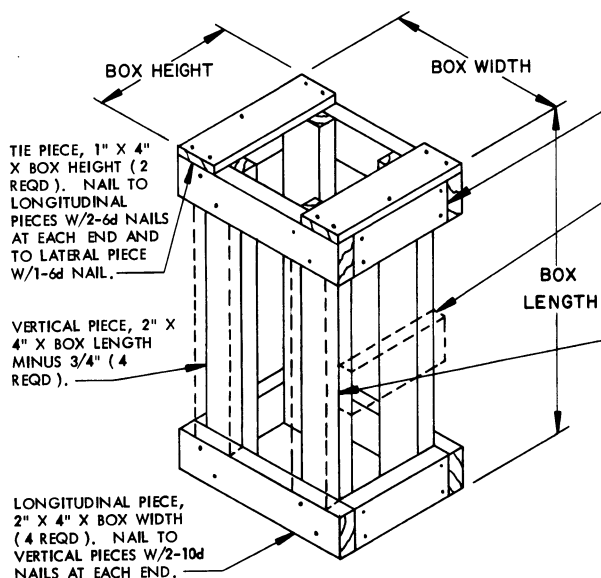
**PALLET UNIT**

SEE GENERAL NOTE "B" AT RIGHT.

|  |                            |
|--|----------------------------|
| 9 BOXES OF BLASTING CAP (500 PER BOX) @ 77 LBS ----- | 693 LBS (APPROX)           |
| DUNNAGE -----  | 4 LBS                      |
| PALLET -----   | 65 LBS                     |
| <b>TOTAL WEIGHT -----</b>                            | <b>762 LBS (APPROX)</b>    |
| <b>CUBE -----</b>                                    | <b>31.8 CU FT (APPROX)</b> |

**BILL OF MATERIAL**

|                               |            |          |
|-------------------------------|------------|----------|
| PALLET, 35" X 45-1/2" -----   | 1 REQD     | 65 LBS   |
| STEEL STRAPPING, 3/4" -----   | 49.83 REQD | 3.56 LBS |
| SEAL FOR 3/4" STRAPPING ----- | 4 REQD     | NIL      |



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