

BUNDLING OF SEPARATE LOADING PROJECTILES FOR STORAGE AND TRANSPORT

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GENERAL NOTES

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1 AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- B. THE DEPICTED BUNDLING PROCEDURES ARE APPLICABLE FOR 155MM PROJECTILES PACKED 8 PER SMALL PALLET OR 8 PER LARGE PALLET, 8" PROJECTILES PACKED 3 PER PALLET, 8" PROJECTILES PACKED 6 PER SMALL PALLET OR 6 PER LARGE PALLET, AND 8" TALL PROJECTILES PACKED 6 PER SMALL PALLET.
- C. PALLET UNITS OF SEPARATE LOADING PROJECTILES TO BE TRANSPORTED BY ANY MODE MAY BE BUNDLED PRIOR TO LOADING. DEPENDING UPON THE UNIT BEING LOADED AND UPON THE MODE OF SHIPMENT, THERE WILL BE SOME UNITS WHICH CANNOT BE BUNDLED AS SHOWN AND MUST BE LOADED AS INDIVIDUAL PALLET UNITS.
- D. PALLET UNITS OF SEPARATE LOADING PROJECTILES TO BE STORED IN ANY STRUCTURE MAY BE BUNDLED PRIOR TO PLACEMENT IN THE MAGAZINE. DEPENDENT UPON THE MAGAZINE IN WHICH THE PROJECTILES ARE BEING STORED, OR THE PLACEMENT AREA FOR THE PALLET UNITS IN THE MAGAZINE, ALL PALLET UNITS CANNOT BE BUNDLED AS SHOWN HEREIN. IN THE TYPE "C" STACKS IN IGLOO, ARCH TYPE, AND STRADLEY MAGAZINES AND IN ANY STACKS IN CORBETTA AND 100' X 50' MAGAZINES BUNDLING PROCEDURES MAY VARY. FOR 155MM PALLET UNITS, SOME MAY NEED TO BE BUNDLED IN TWOS FOR STORAGE OR SOME MAY NEED TO BE STORED INDIVIDUALLY. FOR 8" PROJECTILES PALLETIZED 3/PALLET, SOME MAY NEED TO BE BUNDLED IN THREES OR TWOS OR SOME MAY NEED TO BE STORED INDIVIDUALLY. FOR 8" PROJECTILES PALLETIZED 6/PALLET, SOME MAY NEED TO BE STORED INDIVIDUALLY.
- E. STRAPPING TO BE USED FOR THE BUNDLING OF THE PALLET UNITS OF SEPARATE LOADING PROJECTILES MUST BE 1-1/4" WIDE. NARROWER WIDTH STRAPPING WILL NOT WITHSTAND THE FORCES INCURRED DURING HOISTING BY THE LIFTING EYES AND MUST NOT BE USED.
- F. TO THE MAXIMUM EXTENT POSSIBLE, LOT INTEGRITY WILL BE MAINTAINED WITHIN EACH BUNDLE OF SEPARATE LOADING PROJECTILE PALLET UNITS, FOR BUNDLES BEING ASSEMBLED AT PRODUCTION FACILITIES OR FOR LARGE AMMUNITION MAINTENANCE OPERATIONS AT DEPOTS. THIS WILL AID IN MAINTAINING LOT SEPARATION AND SEGREGATIONS WITHIN STORAGE MAGAZINES. FIELD ASSEMBLED AND RETURNED PROJECTILE PALLET UNIT BUNDLES MAY CONTAIN MORE THAN ONE LOT PROVIDED THE BUNDLE IS PROPERLY MARKED IN ACCORDANCE WITH DAC DRAWING ACV00561.
- G. PALLET UNITS WHICH ARE PRESENTLY IN STORAGE AND WHICH ARE NOT BUNDLED IN ACCORDANCE WITH THE PROCEDURES DEPICTED HEREIN NEED NOT BE BUNDLED AND RE-STORED IN ORDER TO COMPLY WITH THE BUNDLING PROCEDURES. HOWEVER, WHEN A SHIPMENT IS MADE FROM THAT STORAGE, PROPER BUNDLING MAY BE ACCOMPLISHED AT THAT TIME. PALLET UNITS ELSEWHERE IN THE LOGISTICAL SYSTEM SUCH AS IN TRANSIT SHOULD BE BUNDLED PRIOR TO PLACEMENT IN A MAGAZINE OR PRIOR TO RE-SHIPMENT, AS APPLICABLE.
- H. THE BUNDLED PALLET UNITS WILL BE MARKED AND BAR CODED FOR SHIPMENT AND TRANSPORTATION IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH WITHIN DAC DRAWING ACV00561 IN ADDITION TO THE MARKING AND BAR CODES ON THE INDIVIDUAL PALLET UNITS.
- J. WHEN BUNDLING 155MM PROJECTILES, THE STRAPPING MUST BE SEALED ALONG THE SIDE OF THE PALLET. SEALING OF THE STRAPS ON THE TOP OF THE PALLET MAY CREATE AN UNSTABLE STACK WHEN STORING IN MAGAZINES. TO FACILITATE INSTALLATION OF THE STRAPPING, THE OUTER LIFTING PLUGS MAY BE TURNED SO AS TO ALIGN WITH THE STRAPPING. LIFTING PLUGS WILL BE TURNED CLOCKWISE.

(CONTINUED AT RIGHT)

MATERIAL SPECIFICATIONS

- STRAPPING, STEEL - -: ASTM D3953; FLAT STRAPPING, TYPE 1, HEAVY DUTY, FINISH B (GRADE 2). NOTE: IF EDGES DO NOT MEET THE PREECE TEST FOR GRADE 2 ANY BRITE OR SLIT EDGES MUST HAVE FINISH A OVERLAY APPLIED.
- SEAL, STRAP - - - -: ASTM D3953; CLASS H, FINISH B (GRADE 2), DOUBLE NOTCH TYPE, STYLE I, II, III OR IV. ALTERNATIVE SEAL FINISH: SIGNODE OR DELTA PAINTED SEALS MAY BE USED AS AN ALTERNATIVE IF ALL SURFACES ARE PAINTED. GRI TTED BACKING IS NOT PERMITTED.
- STAPLE - - - - -: ASTM F1667; STFCs-224, 1-17/32" CROWN.

(GENERAL NOTES CONTINUED)

- K. THE FOLLOWING 19-48 SERIES AMC DRAWINGS ARE APPLICABLE FOR STORAGE AND TRANSPORTATION OF THE DEPICTED PALLET UNITS OF SEPARATE LOADING PROJECTILES:

6' OPEN TOP ISO CONTAINER	- - - - -	19-48-4188-15PE1005
BOXCAR	- - - - -	19-48-4112-5PE1000
CROP	- - - - -	19-18-4906/102-CA1707
END OPENING ISO CONTAINER	- - - - -	19-48-4155-15PE1001
HALF-HIGH ISO CONTAINER	- - - - -	19-48-4268-15PE1008
MLVAN	- - - - -	19-48-4163-15PE1002
SIDE OPENING ISO CONTAINER	- - - - -	19-48-4292-15PE1010
STORAGE:		
155MM (8 PER SMALL PALLET)	- - -	19-48-4102/1-1-2-3-4-14-22PE1001
155MM (8 PER LARGE PALLET)	- - -	19-48-4102/2-1-2-3-4-14-22PE1001
8" (3 PER PALLET)	- - - - -	19-48-4102/6-1-2-3-4-14-22PE1001
8" (6 PER SMALL PALLET)	- - - - -	19-48-4102/7-1-2-3-4-14-22PE1001
8" (6 PER LARGE PALLET)	- - - - -	19-48-4102/8-1-2-3-4-14-22PE1001
8" (6 PER TALL/SMALL PALLET)	- - - - -	19-48-4102/23-1-2-3-4-14-22PE1001
TOFC VAN BULKHEAD	- - - - -	19-48-4034-15PE1000
155MM (8 PER SMALL PALLET)		
8" (3 PER PALLET)		
8" (6 PER SMALL PALLET)		
TOFC VAN MECHANICAL	- - - - -	19-48-4030-15H1002
155MM (8 PER SMALL PALLET)		
8" (3 PER PALLET)		
8" (6 PER SMALL PALLET)		
TOHC VAN PALLAGARD	- - - - -	19-48-4183-18PE1003
ALL UNITS EXCEPT 8" (3 PER PALLET)		
VAN TRAILER	- - - - -	19-48-4019-11PE1000

REVISIONS

REVISION NO. 1, DATED JUNE 1993, CONSISTS OF:

1. ADDING BUNDLING PROCEDURES FOR THE 155MM PROJECTILE METAL PALLET; I.E., FIELD ARTILLERY PROJECTILE PALLET (FAPP).
2. CHANGING GENERAL NOTE "D".
3. CHANGING WORD "MUST" TO "MAY" IN GENERAL NOTE "F" (NOW GENERAL NOTE "G").
4. ADDING GENERAL NOTE "J".

REVISION NO. 2, DATED JULY 2000, CONSISTS OF:

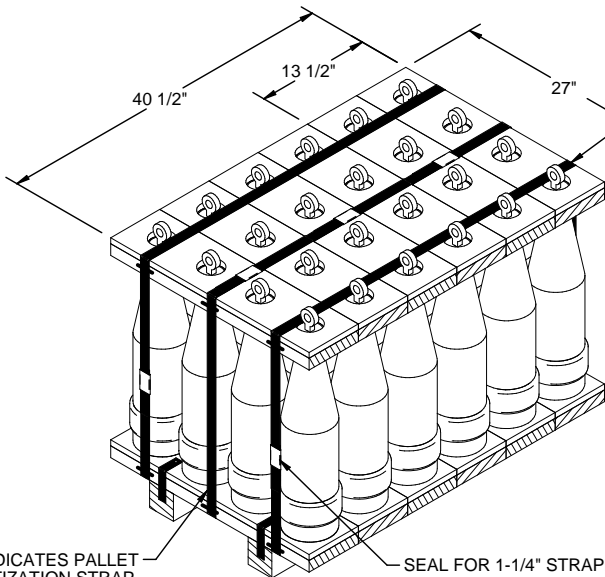
1. MOVING UNITIZATION STRAPS ON THE 155MM PALLETS TO THE CORRECT LOCATION.
2. CHANGING THE NOTES ON THE DRAWINGS REFERRING TO SEALS TO INDICATE ONE SEAL PER STRAP.
3. UPDATING DRAWING FORMAT.

REVISION NO. 3, DATED SEPTEMBER 2002, CONSISTS OF:

UPDATING MATERIAL SPECIFICATIONS.

REVISION NO. 4, DATED AUGUST 2010, CONSISTS OF CHANGES PER ECP R09K2037, INCLUDING:

1. CHANGING WORD "SHOULD" TO "MUST" IN GENERAL NOTE "J" (SEAL LOCATION).
2. UPDATING MATERIAL SPECIFICATIONS.



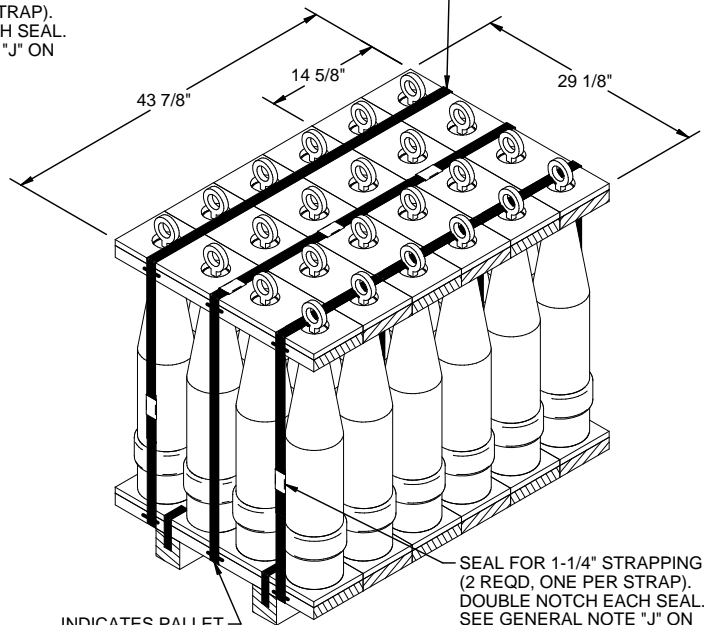
INDICATES PALLET UNITIZATION STRAP. SEE NOTE BELOW.

SEAL FOR 1-1/4" STRAPPING (2 REQD, ONE PER STRAP). DOUBLE NOTCH EACH SEAL. SEE GENERAL NOTE "J" ON PAGE 2.

BUNDLING STRAP, 1-1/4" X .035" OR .031" OR .029" X 12'-6" LONG STEEL STRAPPING (2 REQD). STAPLE TO PALLET COVER ASSEMBLY AND BASE ASSEMBLY W/1 STAPLE AT EACH EXPOSED EDGE.

BUNDLING STRAP, 1-1/4" X .035" OR .031" OR .029" X 14'-3" LONG STEEL STRAPPING (2 REQD). STAPLE TO PALLET COVER ASSEMBLY AND BASE ASSEMBLY W/1 STAPLE AT EACH EXPOSED EDGE.

155MM SLP, 8/SMALL PALLET
THREE PALLET UNITS, BUNDLED

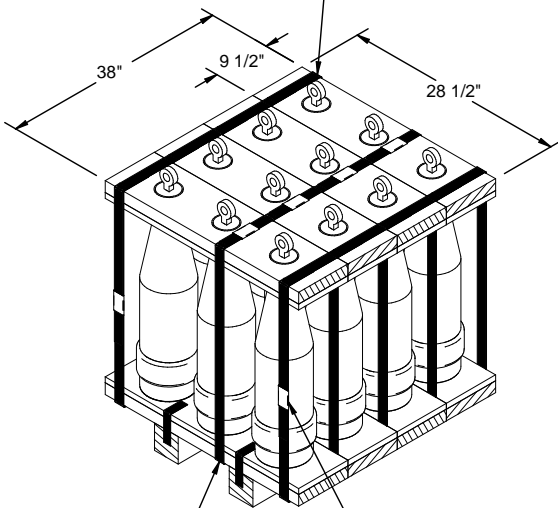


INDICATES PALLET UNITIZATION STRAP. SEE NOTE BELOW.

SEAL FOR 1-1/4" STRAPPING (2 REQD, ONE PER STRAP). DOUBLE NOTCH EACH SEAL. SEE GENERAL NOTE "J" ON PAGE 2.

155MM SLP, 8/LARGE PALLET
THREE PALLET UNITS, BUNDLED

BUNDLING STRAP, 1-1/4" X .035" OR .031" OR .029" X 13'-0" LONG STEEL STRAPPING (2 REQD). STAPLE TO PALLET COVER ASSEMBLY AND BASE ASSEMBLY W/1 STAPLE AT EACH EXPOSED EDGE.

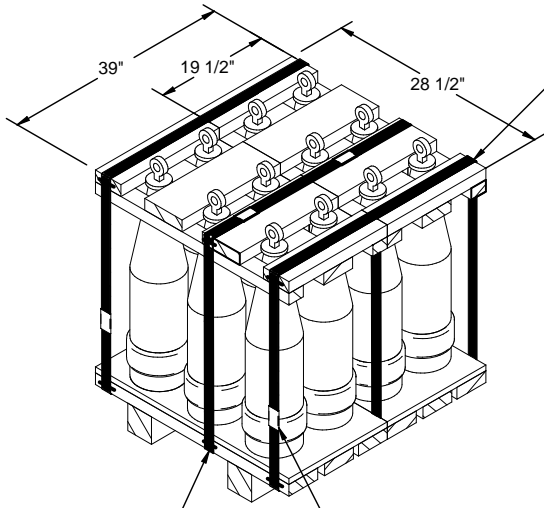


INDICATES PALLET UNITIZATION STRAP. SEE NOTE BELOW.

SEAL FOR 1-1/4" STRAPPING (2 REQD, ONE PER STRAP). DOUBLE NOTCH EACH SEAL.

8" SLP, 3/PALLET
FOUR PALLET UNITS, BUNDLED

NOTE: IN SOME INSTANCES, THE BUNDLING STRAPS ARE PLACED ON TOP OF THE UNITIZATION STRAPS. BECAUSE OF THIS, PORTIONS OF THE UNITIZATION STRAPS CANNOT BE SEEN.

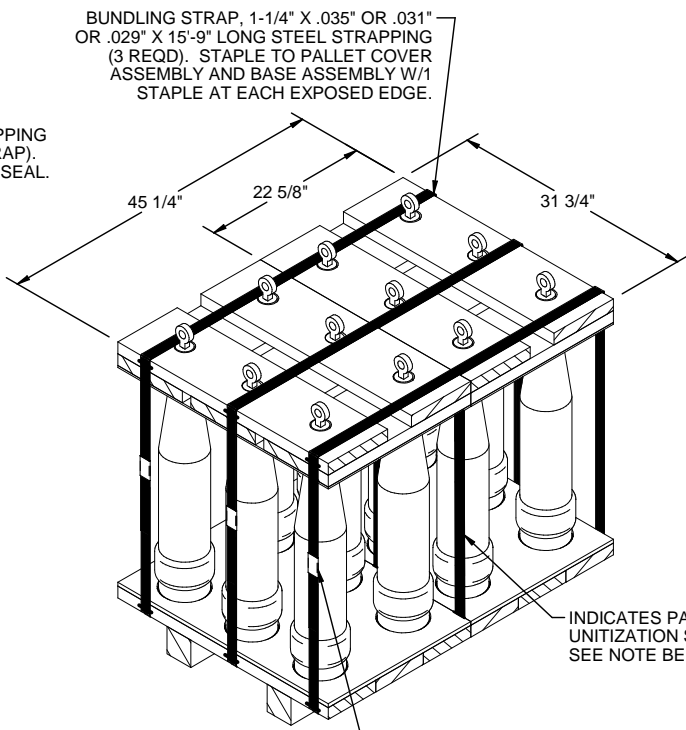


BUNDLING STRAP, 1-1/4" X .035" OR .031" OR .029" X 13'-0" LONG STEEL STRAPPING (2 REQD). STAPLE TO PALLET COVER ASSEMBLY AND BASE ASSEMBLY W/1 STAPLE AT EACH EXPOSED EDGE.

INDICATES PALLET UNITIZATION STRAP. SEE NOTE BELOW.

SEAL FOR 1-1/4" STRAPPING (2 REQD, ONE PER STRAP). DOUBLE NOTCH EACH SEAL.

8" SLP, 6/SMALL PALLET
TWO PALLET UNITS, BUNDLED



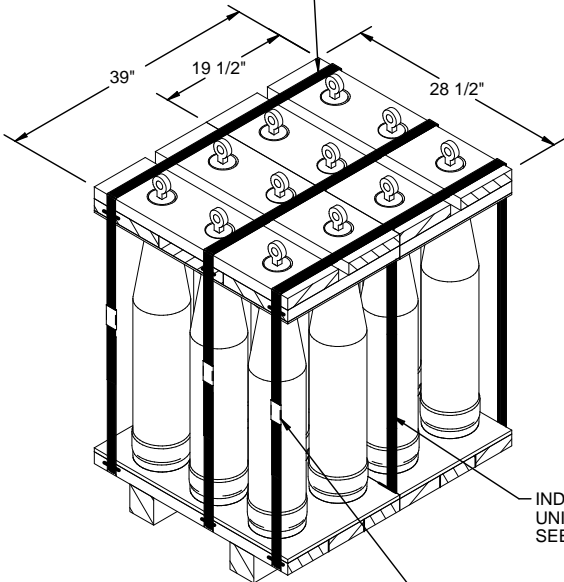
BUNDLING STRAP, 1-1/4" X .035" OR .031" OR .029" X 15'-9" LONG STEEL STRAPPING (3 REQD). STAPLE TO PALLET COVER ASSEMBLY AND BASE ASSEMBLY W/1 STAPLE AT EACH EXPOSED EDGE.

INDICATES PALLET UNITIZATION STRAP. SEE NOTE BELOW.

SEAL FOR 1-1/4" STRAPPING (3 REQD, ONE PER STRAP). DOUBLE NOTCH EACH SEAL.

8" SLP, 6/LARGE PALLET
TWO PALLET UNITS, BUNDLED

BUNDLING STRAP, 1-1/4" X .035" OR .031" OR .029" X 14'-9" LONG STEEL STRAPPING (2 REQD). STAPLE TO PALLET COVER ASSEMBLY AND BASE ASSEMBLY W/1 STAPLE AT EACH EXPOSED EDGE.

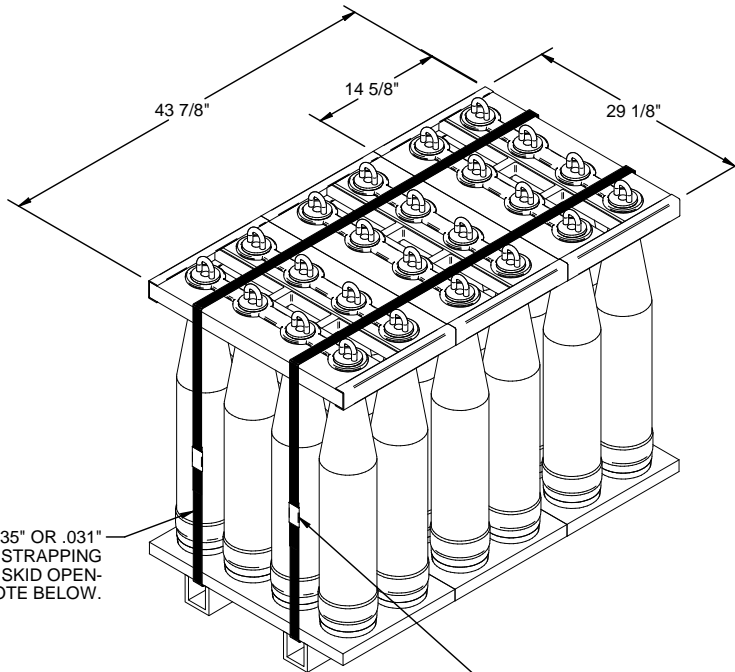


INDICATES PALLET UNITIZATION STRAP. SEE NOTE BELOW.

SEAL FOR 1-1/4" STRAPPING (2 REQD, ONE PER STRAP). DOUBLE NOTCH EACH SEAL.

8" SLP, 6 TALL PROJECTILES/SMALL PALLET
TWO PALLET UNITS, BUNDLED

NOTE: IN SOME INSTANCES, THE BUNDLING STRAPS ARE PLACED ON TOP OF THE UNITIZATION STRAPS. BECAUSE OF THIS, PORTIONS OF THE UNITIZATION STRAPS CANNOT BE SEEN.



BUNDLING STRAP, 1-1/4" X .035" OR .031" OR .029" X 14'-0" LONG STEEL STRAPPING (2 REQD). POSITION THRU SKID OPENINGS, AS SHOWN. SEE NOTE BELOW.

SEAL FOR 1-1/4" STRAPPING (2 REQD, ONE PER STRAP). DOUBLE NOTCH EACH SEAL.

155MM SLP, 8/METAL PALLET
THREE PALLET UNITS, BUNDLED

NOTE: THE 14'-0" LONG STEEL STRAPPING IS APPLICABLE FOR PROJECTILE PALLET UNITS WHICH ARE APPROXIMATELY 38-3/4" HIGH; FOR PALLET UNITS APPROXIMATELY 31-1/4" HIGH, 13'-0" LONG STRAPPING IS ADEQUATE.

