

CHAPARRAL

UNITIZATION PROCEDURES FOR GUIDED
MISSILE TARGET DETECTING DEVICE,
PACKED 1 PER METAL DRUM, UNITIZED
12 DRUMS PER 35" X 45-1/2" PALLET;
DRUM SIZE 16-5/8" DIA X 21-3/8" H

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REVISIONS				DRAFTSMAN B	APP'D 85	PUBLI ENG LAP/WRF	AMSMI-280P 73-1000
1	AUG 85	WRF 10/2/85	<i>Gen. [Signature]</i> <i>William J. [Signature]</i>	CHECKED GKS	LOG BRANCH OFFICE WV Drault	APPROVED, U.S. ARMY MISSILE COMMAND <i>Allen G. Morn</i>	
				APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND (AMC) <i>John X. [Signature]</i> U.S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL			
U.S. ARMY AMC DRAWING							
MARCH 1985							
				CLASS	DIVISION	DRAWING	FILE
				19	48	5258	GM 20CH5

DO NOT SCALE

GENERAL NOTES

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1, AND AUGMENTS TM 743-200-1 (CHAPTER 5) AND CONFORMS TO MIL-STD-1660.
- B. DIMENSIONS, CUBE AND WEIGHT OF A PALLET UNIT WILL VARY SLIGHTLY DEPENDING UPON THE ACTUAL DIMENSIONS OF THE DRUMS AND THE WEIGHT OF THE SPECIFIC ITEM BEING UNITIZED.
- C. FOR DETAILS OF THE TARGET DETECTING DEVICE METAL DRUM, SEE US ARMY MISSILE COMMAND DRAWING NO. 10226939.
- CONTAINER DIMENSIONS ----- 16-5/8" DIA. BY 21-3/8" HIGH.
GROSS WEIGHT ----- 50 LBS (APPROX).
- D. DIMENSIONAL LUMBER SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE UNLESS OTHERWISE SPECIFIED. FOR EXAMPLE, 1" X 4" MATERIAL IS ACTUALLY 3/4" THICK BY 3-1/2" WIDE AND 2" X 4" MATERIAL IS ACTUALLY 1-1/2" THICK BY 3-1/2" WIDE.
- E. IN ORDER TO OBTAIN COMPACT (SOUND) UNITS, ALL STRAPS SHALL BE LOCATED IN PROPER ALIGNMENT AND TENSIONED UNTIL THEY CUT INTO THE EDGE OF THE DUNNAGE AND THE PALLET DECK. AFTER TENSIONING, ALL STRAPS WILL BE SECURED USING ONE SEAL AND TWO PAIR OF NOTCHES PER SEAL.
- F. WHEN ASSEMBLING A PALLETIZED UNIT, CARE SHALL BE TAKEN TO INSURE THAT THE DRUMS ARE EVENLY ALIGNED Laterally, LONGITUDINALLY, AND VERTICALLY SO THAT THE SIDES AND ENDS OF THE PALLET UNIT DO NOT EXCEED A 1/2" TOLERANCE.
- G. A PLUS OR MINUS 1/4" IS ALLOWED ON OVERALL DIMENSIONS OF ANY DUNNAGE ASSEMBLY, HOWEVER, SIMILAR PIECES IN AN ASSEMBLY MUST BE WITHIN 1/8" OF THE SAME DIMENSION.
- H. WHEN APPLYING ANY STRAP, CARE MUST BE EXERCISED TO ASSURE THAT THE END OF THE STRAP ON THE UNDERSIDE OF THE JOINT EXTENDS AT LEAST 6" BEYOND THE SEAL. THIS EXTRA MINIMUM LENGTH OF STRAP IS REQUIRED TO PERMIT SUBSEQUENT TIGHTENING OF LOOSENED STRAPPING. RETENSIONING CAN BE ACCOMPLISHED WITHOUT REPLACING STRAPPING OR SPlicing STRAPPING THROUGH THE USE OF A FEEDWHEEL TYPE TENSIONING TOOL, MANUAL OR PNEUMATIC, AND THE APPLICATION OF ONE ADDITIONAL SEAL.
- J. CAUTION: STRAPPING LESS THAN 3/4" WIDE OR LESS THAN .031" THICK WILL NOT BE USED. IF THE SPECIFIED STRAPPING IS NOT AVAILABLE, STRAPPING WIDER THAN SPECIFIED AND AT LEAST .031" THICK MAY BE USED ON AN INTERIM BASIS UNTIL THE SPECIFIED STRAPPING CAN BE ACQUIRED.
- K. CONVERSION TO METRIC EQUIVALENTS. DIMENSIONS WITHIN THIS DOCUMENT ARE EXPRESSED IN INCHES, AND WEIGHTS ARE EXPRESSED IN POUNDS. WHEN NECESSARY, THE METRIC EQUIVALENTS MAY BE COMPUTED ON THE BASIS OF ONE INCH EQUALS 25.4 MM, AND ONE POUND EQUALS 0.454 KG.
- L. FOR THE METHOD OF SECURING A STRAP CUTTER TO THE PALLET UNIT, SEE DARCOM DRAWING 19-48-4127-20P1000.
- M. INSTALL EACH HORIZONTAL STRAP TO ENCIRCLE A DUNNAGE ASSEMBLY AS SHOWN. HORIZONTAL STRAPS WILL BE TENSIONED AND SEALED PRIOR TO APPLICATION OF TIEDOWN STRAPS.

(CONTINUED AT RIGHT)

MATERIAL SPECIFICATIONS

- PALLET ----- : MIL SPEC MIL-P-15011, 4-WAY ENTRY, STYLE IA, TYPE I, CLASS I, PRESERVATIVE TREATED. SEE GENERAL NOTE "P".
- LUMBER ----- : SEE TM 743-200-1 (DUNNAGE LUMBER) AND FED SPEC MM-L-751.
- NAILS ----- : FED SPEC FF-N-105; COMMON, ALT: ANNULAR-RING TYPE NAIL OR PALLET TYPE (MECHANICALLY DEFORMED) NAIL OF THE SAME SIZE.
- STRAPPING, STEEL ----- : FED SPEC QQ-S-781, CLASS I, TYPE I OR IV, HEAVY DUTY, FINISH B (GRADE 2), SIZE 3/4" X .035" OR .031".
- SEAL, STRAP ----- : FED SPEC QQ-S-781; TYPE D, STYLE I, II, OR IV, CLASS H, FINISH B (GRADE 2).
- STAPLE, STRAP ----- : FED SPEC FF-N-105; TYPE III, STYLE 3, SIZE 15/16" X 3/4" LEG LENGTH FOR 3/4" STRAPPING.

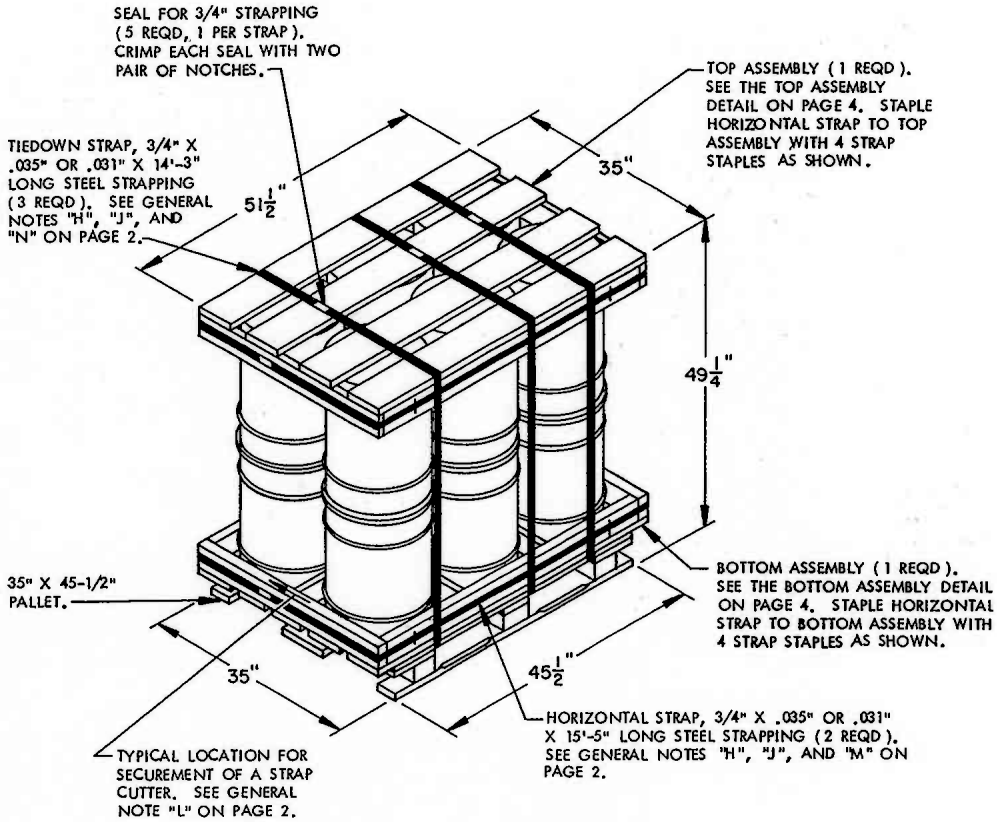
(GENERAL NOTES CONTINUED)

- N. 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 STRAPS HAVE BEEN TENSIONED AND SEALED.
- O. FILLER ASSEMBLIES, TO BE USED IN PLACE OF OMITTED DRUMS, WILL ONLY BE PLACED IN THE TOP LAYER OF A PALLET UNIT.
- P. ALL ASSEMBLED PALLETS AND DUNNAGE PIECES OR ASSEMBLIES MUST BE PRESERVATIVE TREATED WITH EITHER COPPER-B-QUINOLINOLATE OR ZINC NAPHTHENATE EMULSIFIABLE. THE LETTERS "PA" DENOTING PQ56 (COPPER-B-QUINOLINOLATE) OR "PB" DENOTING M-GARD W550 (ZINC NAPHTHENATE EMULSIFIABLE) MUST BE APPLIED TO THE OUTSIDE OF A CENTER POST OF A PRESERVATIVE TREATED PALLET OR TO A DUNNAGE PIECE OR ASSEMBLY IN LETTERS AT LEAST ONE-INCH (1") HIGH.

REVISION

REVISION NO. 1, DATED AUGUST 1985, CONSISTS OF:

UPDATING MATERIAL SPECIFICATIONS TO CONFORM TO CURRENT STANDARDS.



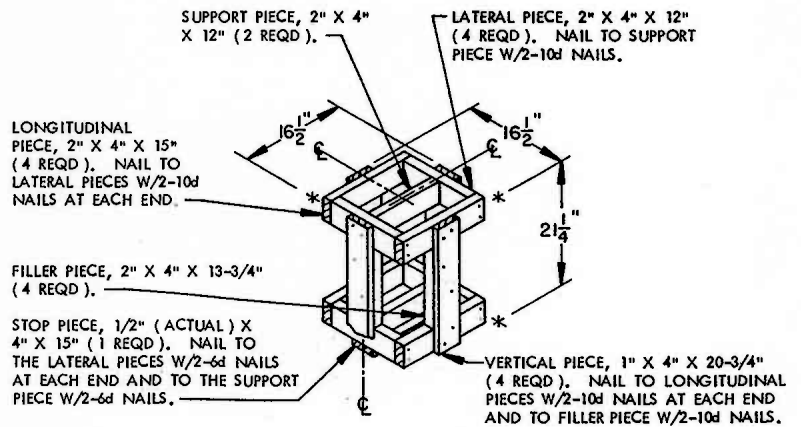
PALLET UNIT

SEE GENERAL NOTE "B" ON PAGE 2.

12 DRUMS OF TARGET DETECTING DEVICES (1 PER DRUM) @ 50 LBS-----	600 LBS (APPROX)
DUNNAGE -----	79 LBS
PALLET -----	65 LBS

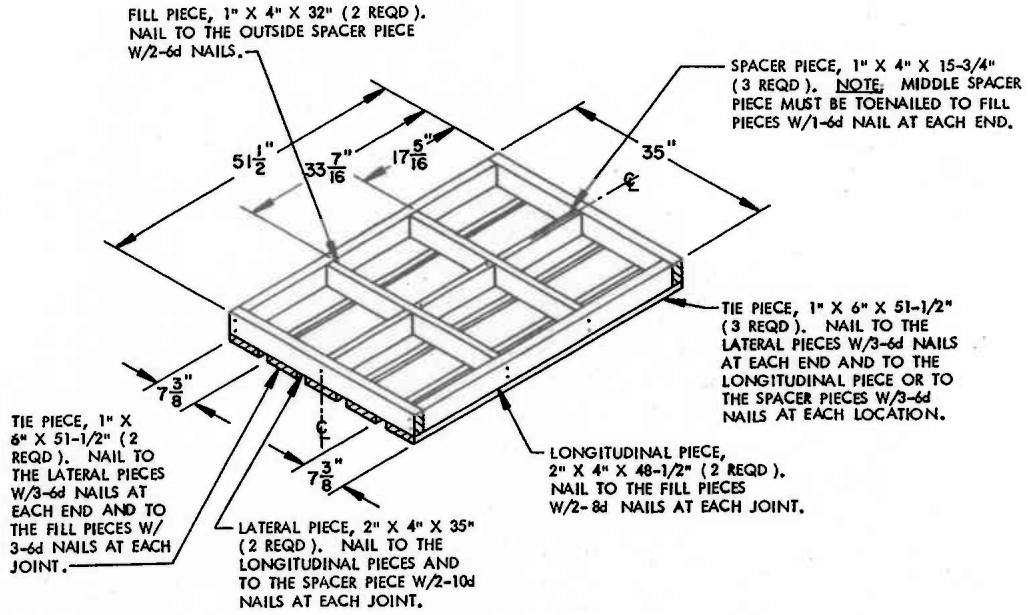
TOTAL WEIGHT -----	744 LBS (APPROX)
CUBE -----	51.4 CU FT (APPROX)

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	23.44	7.81
1" X 6"	38.63	19.31
2" X 4"	13.92	9.28
NAILS	NO. REQD	POUNDS
6d (2")	101	0.59
8d (2-1/2")	8	0.08
10d (3")	12	0.18
PALLET, 35" X 45-1/2"	1 REQD	65 LBS
STEEL STRAPPING, 3/4"	73.58" REQD	5.26 LBS
SEAL FOR 3/4" STRAPPING	5 REQD	NIL
STAPLE, 15/16" X 3/4"	8 REQD	NIL

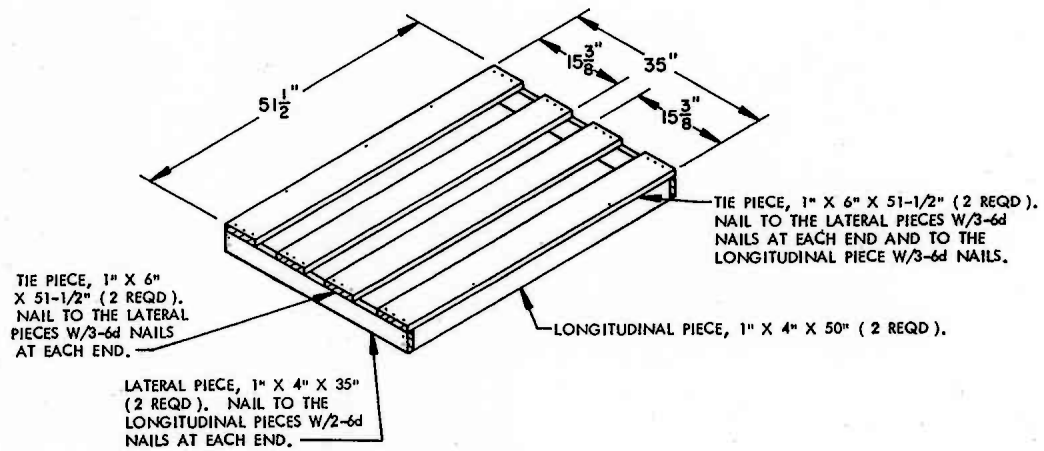


FILLER ASSEMBLY

(FOR MINUS ONE DRUM)



BOTTOM ASSEMBLY



TOP ASSEMBLY