VOLCANO

UNITIZATION PROCEDURES FOR
VOLCANO MINE SYSTEM HARDWARE,
TWO MINE DISPENSER SUPPORT
PANEL ASSEMBLIES AND ONE
GROUND SYSTEM ACCESSORIES
SET PACKED IN FIBERGLASS
REINFORCED PLASTIC CONTAINERS

U.S. ARMY MATER	IEL (OMM	AND DF	AWING
APPROVED, U.S. ARMY ARMAMENT, MUNITIONS AND	DRAFTSMAN		BETTY J. KUNDERT	
CHEMICAL COMMAND	ENGIN	NEER	SANDRA M. SCHULTZ	
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APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND	Williams Fo Ernst			
Alm L. Legus	SEPTEMBER 1988			
U.S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL	CLASS	NOISIVID	DRAWING	FILE
REVISION NO. 2 DECEMBER 1992	19	48	4240/3	20PM
SEE THE REVISION LISTING ON PAGE 2		ָ ו	12 10/ 3	1009

DO NOT SCALE

GENERAL NOTES

- 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.
- DIMENSIONAL LUMBER SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF A NOMINAL SIZE, UNLESS OTHERWISE SPECIFIED. FOR EXAMPLE, 1" X 6" MATERIAL IS ACTUALLY 3/4" THICK BY 5-1/2" WIDE AND 2" X 6" MATERIAL IS ACTUALLY 1-1/2" THICK BY 5-1/2" WIDE.
- C. DETAILS OF THE FIBERGLASS REINFORCED PLASTIC CONTAINER.

CONTAINER DIMENSIONS - - LENGTH - - 61-1/2"
WIDTH - - 43"

HEIGHT - - 17"

GROSS WEIGHT (TRIPOD) - - - - - 437 LBS (APPROX) (ACCESSORIES) - - - - 562 LBS (APPROX)

- 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.
- WHEN ASSEMBLING A UNIT LOAD, CARE SHALL BE TAKEN TO INSURE THAT THE CONTAINER AND OR DUNNAGE ASSEMBLIES ARE EVENLY ALIGNED HORIZONTALLY AND VERTICALLY SO THAT THE SIDES AND ENDS OF THE UNIT LOAD DO NOT EXCEED A 1/2"
- IN ORDER TO OBTAIN COMPACT (SOUND) UNITS, STRAPS SHALL BE LOCATED IN PROPER ALIGNMENT AND PROPERLY TENSIONED SO AS TO NOT CAUSE CONTAINER DISTORTION. AFTER TENSIONING, EACH STRAP WILL BE SECURED USING ONE SEAL AND TWO PAIR OF NOTCHES PER SEAL. ALL STRAPPING MUST BE STRAIGHT WITHIN 2" ON ANY SURFACE OF THE UNITIZED LOAD, I.E., TOP, BOTTOM, SIDES, OR ENDS THAT IT ENCOUNTERS.
- G. 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 MANUAL OR PNEUMATIC FEEDWHEEL TYPE TENSIONING TOOL AND THE APPLICATION OF ONE ADDITIONAL SEAL ONE ADDITIONAL SEAL.
- ANTI-CHAFING (NEUTRAL BARRIER) MATERIAL MUST BE PLACED BETWEEN ALL CONTAINERS AND STRAPPING.
- FOR THE METHOD OF SECURING A STRAP CUTTER TO THE PALLET UNIT, SEE AMC DRAWING 19-48-4127-20P1000
- INSTALL THE UNITIZATION STRAPS TO ENCIRCLE THE CONTAINERS AS SHOWN. INSTALL THE TIEDOWN STRAPS AFTER THE UNITIZATION STRAPS. STAPLE STRAPS TO THE BLOCKING ASSEMBLIES.
- 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.
- POWER DRIVEN STAPLES MAY BE USED AS ALTERNATIVE FASTENERS FOR NAILS WHEN CONSTRUCTING THE DUNNAGE ASSEMBLIES WHICH ARE SPECIFIED WITHIN THIS DRAWING. THE STAPLES TO BE USED MUST BE EQUAL IN LENGTH TO THE SPECIFIC NAIL SIZE AND MUST BE SUBSTITUTED ON A ONE STAPLE FOR ONE NAIL BASIS.
- DIMENSIONS GIVEN FOR DUNNAGE PIECES OR DUNNAGE
 ASSEMBLIES WILL BE FIELD CHECKED PRIOR TO THEIR ASSEMBLY
 AND INSTALLATION. DUNNAGE ASSEMBLIES MUST BE
 CONSTRUCTED SUCH THAT THE VERTICAL PIECES WILL BE
 LOCATED IN LINE WITH THE STRAPPING, AND/OR THE
 HANDLES, AND THE HORIZONTAL PIECES WILL CONTACT THE CONTAINER.
- WOODEN DUNNAGE SHALL BE PRESERVATIVE TREATED IN ALL WOUDEN DUNNAGE SHALL BE PRESERVATIVE THEATED IN ACCORDANCE WITH THE PROCEDURES SPECIFIED IN MIL-B-2427 FOR CLEATED WOODEN BOXES. IF THE DUNNAGE CONSISTS OF MORE THAN ONE COMPONENT, IT MUST BE ASSEMBLED PRIOR TO TREATMENT. THE LETTERS PA DENOTING POS6 (COPPER OUINOLINOLATE), PB DENOTING M-GARD W550 (ZINC NAPHTHENATE EMULSIFIABLE) OR PC DENOTING M-GARD W510 OR CUNAPSOL (COPPER NAPHTHENATE) MUST BE APPLIED TO THE WOOD DINNAGE THE LETTERS AT LEST ONE THE LITTERS AT LEST ONE THE LITTERS AND LETTERS AT LESTERS AND LETTERS AT LESTERS AND LETTERS AT LESTERS AT LESTERS AND LETTERS AT LESTERS AND LETTERS AT LESTERS AND LETTERS AT LESTERS AT LESTERS AND LETTERS AND LETTERS AND LETTERS AT LESTERS AND LETTERS AT LESTERS AND LETTERS AT LESTERS AND LETTERS A WOOD DUNNAGE IN LETTERS AT LEAST ONE INCH HIGH.

REVISIONS

REVISION NO 1, DATED FEBRUARY 1989, CONSISTS OF:

CHANGING THE CONTAINER TYPE.

REVISION NO 2, DATED DECEMBER 1992, CONSISTS OF:

ADDING SKID BASE AND END GATES.

MATERIAL SPECIFICATIONS

LUMBER -- -- -- -: SEE TM 743 200 1 (DUNNAGE LUMBER) AND

FED SPEC MM-L-751.

NAILS ----: FED SPEC FF-N-105; COMMON.

PLYWOOD ----: COMMERCIAL ITEM DESCRIPTION

COMMERCIAL ITEM DESCRIPTION
A-A-55057, TYPE A, CONSTRUCTION AND
INDUSTRIAL PLYWOOD, INTERIOR WITH
EXTERIOR GLUE, GRADE C-D. IF
SPECIFIED GRADE IS NOT AVAILABLE, A
BETTER INTERIOR OR AN EXTERIOR GRADE
MAY BE SUBSTITUTED.

STRAPPING, STEEL - -: ASTM D 3953; FLAT STRAPPING, TYPE 1 OR 2, HEAVY DUTY, ZINC-COATED (GRADE 2), SIZE 3/4" X .035" OR .031".

ASTM D 3953; CLASS H, FINISH B (GRADE 2), TYPE D, STYLE I, II, OR IV. SEAL, STRAP - - - -:

STAPLE - - - - - - : FED SPEC FF-N-105; 15/16' OR 1" CROWN WIDTH X 3/4" LEG LENGTH FOR

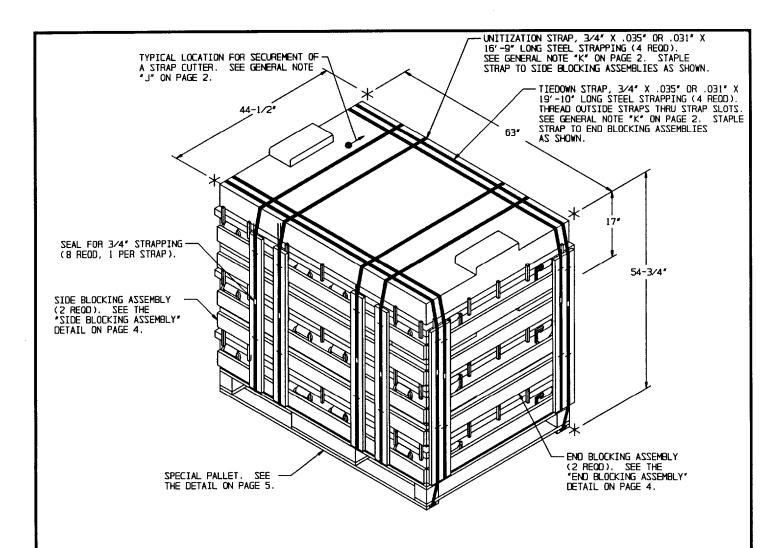
3/4" STRAPPING AND 1 17/32" CROWN WIDTH X 3/4" LEG LENGTH FOR 1 1/4"

STRAPPING, TYPE III, STYLE 3.

ANTI-CHAFING

MATERIAL - - - - -: MIL-B-121 (OR EQUAL); NEUTRAL BARRIER

MATERIAL.



UNIT LOAD

1 CONTAINER OF ASSESSORIES 1 CONTAINER WITH LEFT SIDE TRIPOD 1 CONTAINER WITH RIGHT SIDE TRIPOD	e 437	LBS (APPROX) LBS (APPROX)
TOTAL WEIGHT	1,593	LBS (APPROX)

TOTAL WEIGHT --- - 1,593 LBS (APPROX)
CUBE --- --- BB.8 CU FT (APPROX)

BILL OF MATERIAL BOARD FEET / LBS LUMBER LINEAR FEET 42.42 / 84.84 6.38 / 12.76 4.89 / 9.78 127.29 1" X 6" 4" X 4" 12.75 3.67 POUNDS NAILS NO. REQD 6d (2") 8d (2-1/2") 10d (3") 0.71 0.23 120 0.34

PLYWOOD, 3/4" - - - 18.37 SO FT REOD - 37.88 LBS STEEL STRAPPING, 3/4" - 145.33' REOD - 10.45 LBS SEAL FOR 3/4" STRAPPING - - - 8 REOD - - - - NIL STAPLE, 15/16" X 3/4" - - - 32 REOD - - - - NIL ANTI-CHAFING MATERIAL - - - AS REOD - - - NIL

SPECIAL NOTE

UNIT LOADS OF 2 CONTAINERS, ONE LEFT AND ONE RIGHT TRIPOD CONTAINER, MAY BE CONSTRUCTED IF DESIRED. FOR A 2 CONTAINER LOAD, REDUCE THE HEIGHT OF THE VERTICAL PIECES IN THE SIDE AND END BLOCKING ASSEMBLIES TO 21-5/8", ELIMINATE THE TOP TWO HORIZONTAL PIECES IN THE SIDE AND END BLOCKING ASSEMBLIES REDUCE THE UNITIZATION STRAP LENGTHS TO 14'-1" AND REDUCE THE TIEDOWN STRAP LENGTH TO 17'-2". THIS WILL RESULT IN A UNIT HEIGHT OF 38-3/4", A UNIT WEIGHT OF 988 POUNDS, AND A UNIT CUBE OF 62.9 CUBIC FEET.

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