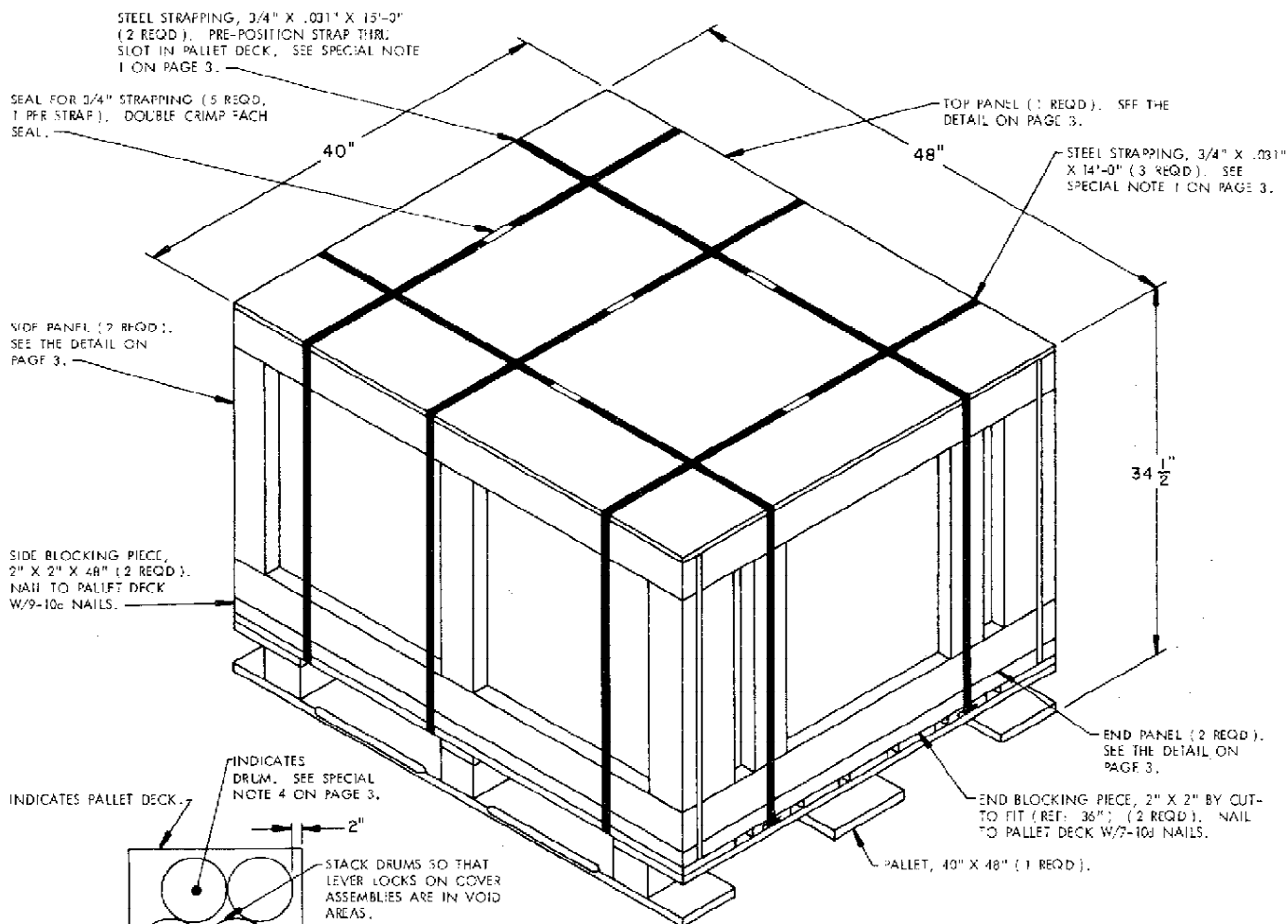


UNITIZATION PROCEDURES FOR BULK EXPLOSIVES WHEN PACKAGED IN A 19-1/2" DIAMETER BY 27" HIGH FIBERBOARD DRUM, OVERPACKED FOUR PER PALLET UNIT (48"L X 40"W X 34-1/2"H) REQUIRING 40" X 48", 4-WAY ENTRY PALLET

● THE PALLET UNIT DATA DISPLAYED HEREIN IS BASED ON DRUM-PACKED RDX (WEI). HOWEVER, THE SPECIFIED UNITIZATION PROCEDURES ARE ALSO APPLICABLE TO OTHER DRUM PACKED BULK EXPLOSIVES WHICH ARE PACKED IN THE SAME SIZE FIBERBOARD DRUM PROVIDING THE GROSS WEIGHT OF A COMPLETE PALLET UNIT DOES NOT EXCEED 2,200 POUNDS. HEIGHT ADJUSTMENTS TO THE PALLET UNIT WILL BE MADE DURING FABRICATION AS REQUIRED TO COMPENSATE FOR DRUMS THAT VARY SLIGHTLY IN SIZE FROM THE DESIGNATED DIMENSIONS OF 19-1/2" AND 27". THE SPECIFIED PROCEDURES ARE APPLICABLE TO DRUMS WHICH HAVE DIAMETERS FROM 19-1/4" TO 19-1/2" AND HEIGHTS OF NOT MORE THAN 46". DRUMS WHICH ARE 15-1/2" OR LESS IN HEIGHT CAN BE TRIPLE-TIERED WITHIN A PALLET UNIT AND THOSE THAT ARE NOT MORE THAN 23" HIGH CAN BE DOUBLE-TIERED.

REVISIONS				<small>DRAFTSMAN</small> <i>CRB/MLN</i>	<small>PROJ ENG</small> <i>JAW/BNW</i>
				<small>CHECKER</small> <i>WAB/1113</i>	<small>LOG ENGINE OFFICE</small> <i>[Signature]</i>
				<small>APPROVED</small> <i>[Signature]</i>	
				<small>U. S. ARMY AMMUNITION COMMAND</small> <small>U. S. ARMY MATERIEL COMMAND</small> <small>USAMC AMMO CENTER</small>	
				<small>APPROVED BY ORDER OF COMMANDING GENERAL</small> <small>U. S. ARMY MATERIEL COMMAND</small> <i>[Signature]</i>	
				<small>U. S. ARMY MATERIEL COMMAND</small>	
				<small>OCTOBER 1975</small>	
				<small>CLASS</small>	<small>DIVISION</small>
				<small>DRAWING</small>	<small>FILE</small>
				19	48
				4129	20PN 1001

DO NOT SCALE



PALLET UNIT (BASED ON RDX, WET)

4 DRUMS @ 255 LBS -----	1020 LBS
PANEL MATERIALS -----	314 LBS
PALLET -----	80 LBS

TOTAL WEIGHT ----- 1414 LBS (APPROX)

CUBE ----- 38.3 CU. FT.

DRUM PLACEMENT ON PALLET

EXPLOSIVE CLASSIFICATION*	
(BASED ON RDX, WET)	
DOT CLASS -----	A
COAST GUARD CLASS -----	1X-B
Q D CLASS -----	7
COMPATIBILITY GROUP -----	M

* THE EXPLOSIVE CLASSIFICATION OF OTHER DRUM-PACKED BULK EXPLOSIVES MAY BE DIFFERENT THAN THAT SHOWN.

MATERIAL SPECIFICATIONS

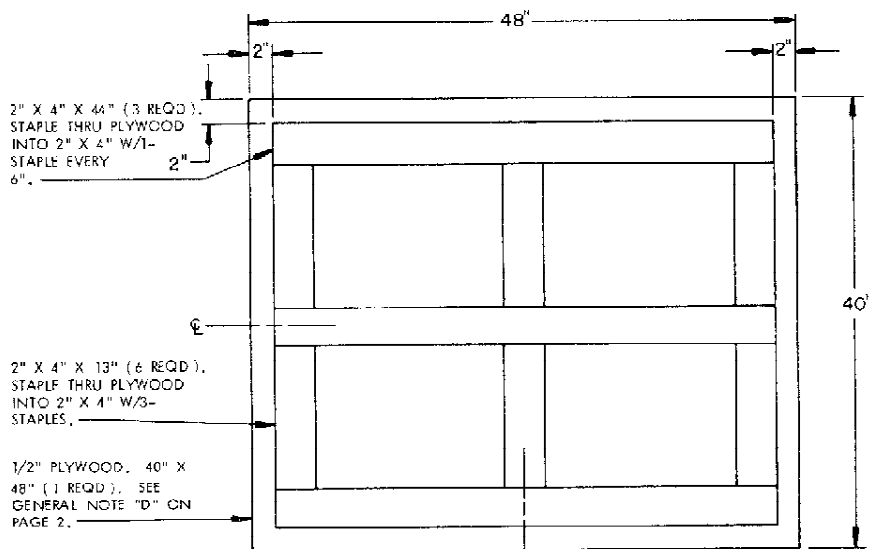
PALLET -----	4-WAY ENTRY SIZE 40" X 48", MIL-P-15011, STYLE 1, NSN 3990-00-141-7261 (FORMERLY FSN 3990-141-7261) HARDWOOD PALLET.
LUMBER -----	SEE MIL-STD-701, CLASS 2, GROUP II, III, OR IV.
PLYWOOD -----	GROUP 3 OR C, GRADE C-D (EXTERIOR); FED SPEC NN-P-530. NOTE: A BETTER GRADE MAY BE SUBSTITUTED.
NAILS -----	COMMON, CEMENT COATED OR CHEMICALLY ETCHED; FED SPEC FF-N-105. ALT: ANNULAR-RING TYPE NAIL OF THE SAME SIZE.
STRAPPING, STEEL -----	CLASS 1, TYPE I OR IV, HEAVY DUTY, FINISH B, GRADE 2, FED SPEC QQ-S-781.
STAPLE, LUMBER -----	TYPE III, STYLE 3, FED SPEC FF-N-105.
SEAL, STRAP -----	TYPE D, STYLE 1, II, OR IV, CLASS B, FED SPEC QQ-S-781.

GENERAL NOTES

- THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1, AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- DATA FOR FIBERBOARD DRUMS WHEN PACKED WITH RDX (WET):
DIMENSIONS ----- 19-1/2" DIAMETER BY 27" HIGH.
GROSS WEIGHT ----- 255 POUNDS (APPROX).
- PALLET UNIT DETAILS ARE BASED ON THE DIMENSIONS IDENTIFIED ABOVE. ANY VARIATIONS IN THE SIZE OF THE FIBER DRUMS ACTUALLY USED WILL REQUIRE A CORRESPONDING ADJUSTMENT IN THE UNIT DETAILS TO COMPENSATE. FOR EXAMPLE, IF THE DRUMS SHOULD ACTUALLY BE 26-1/2" HIGH, THE HEIGHT OF THE UNIT SIDE PANELS AND END PANELS WILL BE ADJUSTED ACCORDINGLY.
- WHERE PLYWOOD PANELS ARE SPECIFIED FOR VARIOUS LOCATIONS, THE DIMENSIONS ARE BASED ON USING ONE SOLID PIECE OF PLYWOOD FOR EACH PANEL. HOWEVER, IT IS PERMITTED TO ASSEMBLE SIDE PANELS FROM TWO PIECES PROVIDED THE CONSTRUCTED PANEL MEETS ALL SPECIFIED DIMENSIONAL CRITERIA. ONLY A HORIZONTAL BUTT JOINT IS PERMITTED, AND NOT MORE THAN ONE JOINT PER SIDE PANEL. NEITHER PIECE OF PLYWOOD ON A PANEL WILL BE LESS THAN TWELVE INCHES (12") WIDE. WHEN TWO STRIPS OF PLYWOOD ARE USED ON A SIDE PANEL, EXTRA STAPLES WILL BE USED; ONE (1) NOT MORE THAN ONE INCH (1") FROM THE JOINT ON EACH SIDE OF THE BUTT JOINT AT EACH SPECIFIED STAPLING LOCATION.

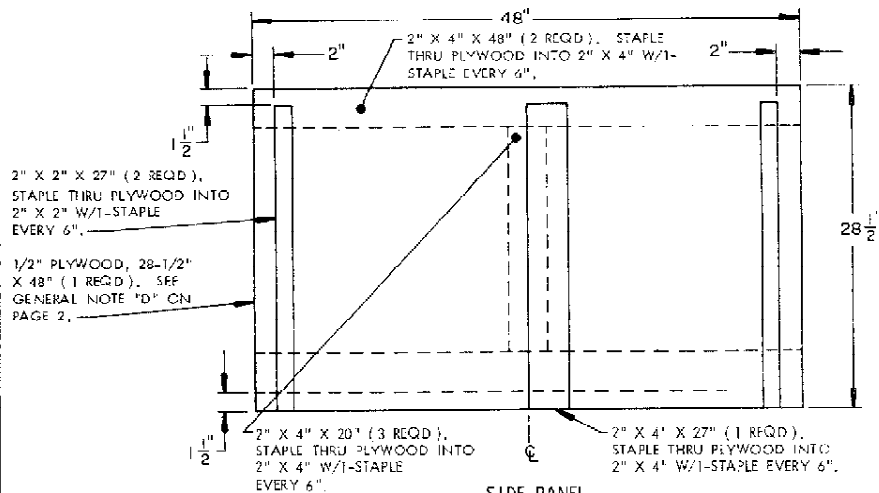
SPECIAL NOTES:

1. THE STEEL STRAPPING SPECIFIED IN THE PALLET UNIT DETAIL ON PAGE 2 IS 3/4" WIDE BY .031" THICK. FOR AN ALTERNATIVE, 3/4" WIDE BY .035" THICK STEEL STRAPPING MAY ALSO BE USED. ALL STRAPPING MUST BE STRAIGHT WITHIN TWO INCHES (2") ON ANY SURFACE OF THE UNUTILIZED LOAD; I.E., TOP, BOTTOM, SIDES OR ENDS THAT IT ENCOMPASSES. EACH STRAP WILL BE TENSIONED SUFFICIENTLY TO SLIGHTLY CRUSH THE EDGES OF THE PALLET UNIT.
2. A MANUFACTURING TOLERANCE OF + OR - 1/4" IS ALLOWED ON ALL DIMENSIONS. ALTHOUGH A + OR - 1/4" TOLERANCE IS ALLOWED, ALL DIMENSIONAL LUMBER MEMBERS IN A SET, SUCH AS THE VERTICAL 2" X 4" CLEATS ON EXTERIOR OF A SIDE PANEL, MUST BE WITHIN 1/8" OF THE SAME LENGTH.
3. DIMENSIONAL LUMBER SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE, 2" X 4" MATERIAL IS ACTUALLY 1-1/2" THICK BY 3-1/2" WIDE.
4. IF LESS THAN 4 DRUMS ARE LOADED INTO A PALLET UNIT, A BOX-TYPE ASSEMBLY CONSTRUCTED FROM DIMENSIONAL LUMBER AND PLYWOOD MUST BE INSTALLED TO OCCUPY THE VOID CREATED BY THE ELIMINATION OF A DRUM OR DRUMS. THE SPACE-OCCUPYING ASSEMBLY MUST BE AS STRONG OR STRONGER THAN THE DRUMS IT REPLACES.
5. IF DESIRED DURING ASSEMBLY OF A PALLET UNIT, ONE (1) 10d NAIL CAN BE DRIVEN THROUGH A SIDE PANEL AT EACH CORNER INTO AN INTERNAL FRAME MEMBER OF AN END PANEL TO TEMPORARILY HOLD PANELS IN PLACE PRIOR TO APPLYING STRAPPING.



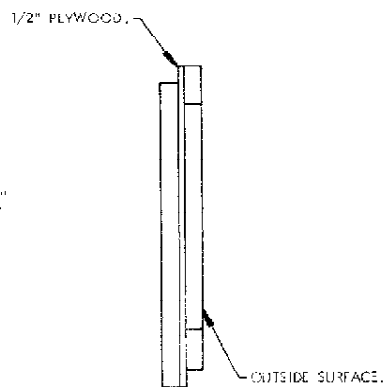
TOP PANEL

BOTTOM OF PANEL SHOWN.

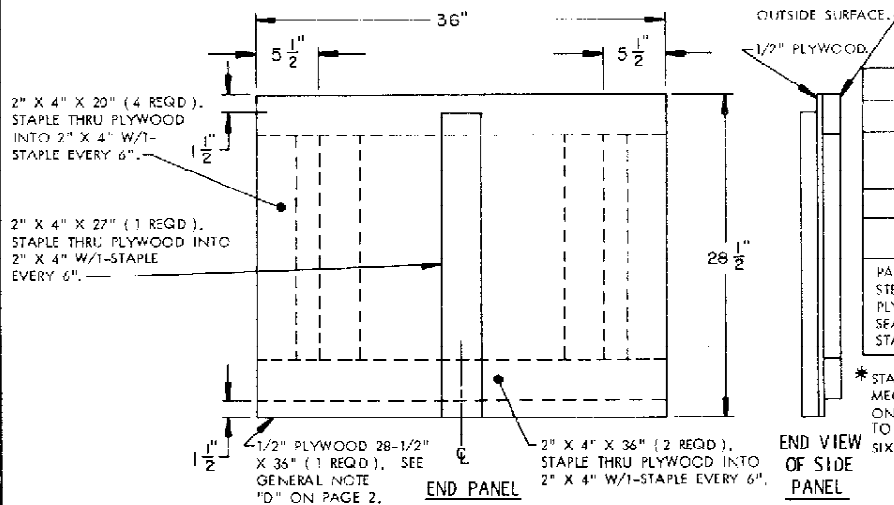


SIDE PANEL

CLEATS ON OUTSIDE SURFACE ARE SHOWN IN DASHED LINES.



END VIEW OF SIDE PANEL



END PANEL

END VIEW OF SIDE PANEL

CLEATS ON OUTSIDE SURFACE ARE SHOWN IN DASHED LINES.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 2"	23	8
2" X 4"	78	52
NAILS	NO. REQD	POUNDS
10d (3")	30	1/2
PALLET, 40" X 48"	1 EA	80 LBS
STEEL STRAPPING, 3/4" X .031"	72 REQD	6 LBS
PLYWOOD, 1/2"	47 SQ. FT.	76 LBS
SEAL FOR 3/4" STRAPPING	5 REQD	NIL
STAPLE, *	98 REQD	1 LB

* STAPLES TO BE USED SHOULD BE OF A TYPE USED IN PNEUMATIC OR MECHANICAL GUNS FOR FASTENING WOOD. LEG LENGTH WILL BE ONE INCH (1") AND THE CROWN WIDTH WILL BE 1/2" MINIMUM TO 1" MAXIMUM. THE WIRE GAGE OF THE STAPLE SHOULD BE SIXTEEN (16) GAGE OR HEAVIER.