

UNITIZATION PROCEDURES FOR SINGLE ROUND CONTAINER OVERPACKS, UNITIZED 9 OVER- PACKS PER SPECIAL 4-WAY ENTRY PALLET

U.S. ARMY MATERIEL COMMAND DRAWING			
APPROVED, U.S. ARMY ARMAMENT, MUNITIONS AND CHEMICAL COMMAND <i>David A. Pichosik</i> ^{WES} <i>Timothy R. Free</i> SMCAR-ESK AMSMC-TMJ-T	DRAFTSMAN ENGINEER BETTY J. KUNDERT SANDRA M. SCHULTZ		
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		LOGISTICS ENGINEERING OFFICE <i>William J. Ernst</i>	
		DECEMBER 1992	
		CLASS	DIVISION
		DRAWING	FILE
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		4540	CB 20PM2

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 DUNNAGE AND SRC'S AND THE WEIGHT OF THE SPECIFIC ITEM BEING UNITIZED.
- C. FOR DETAILS OF THE SINGLE ROUND CONTAINER OVERPACK (SRCK) SEE U.S. ARMY ARMAMENT RESEARCH AND DEVELOPMENT COMMAND CHEMICAL SYSTEMS LABORATORY DRAWING 400-90-09.
- CONTAINER DIMENSIONS - - - - UNIT A 38-5/8" L OR
UNIT B 60" L OR
UNIT C 88" L X
15" DIAMETER
- D. INSTALL EACH TIEDOWN STRAP TO PASS UNDER THE TOP DECK OF THE PALLET. NOTE THAT THE STRAPS WILL BE LOCATED AS SHOWN. TIEDOWN STRAPS WILL NOT BE APPLIED UNTIL THE HORIZONTAL STRAPS HAVE BEEN TENSIONED AND SEALED.
- E. FOR OUTLOADING AND STORAGE OF THE ITEMS COVERED BY THIS DRAWING, CONTACT THE U.S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL, ATTN: SMCAC-DET, SAVANNA, IL 61074-9639 FOR SPECIFIC PROCEDURAL GUIDANCE.
- F. 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 LOOSENEED 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.
- G. EMPTY OR REJECT SINGLE ROUND CONTAINER OVERPACKS WILL BE USED AS FILLER CONTAINERS AS NECESSARY. FILLER CONTAINERS MUST BE INSTALLED IN THE MIDDLE OF THE TOP LAYER(S) OF CONTAINERS. IF THREE CONTAINERS ARE TO BE OMITTED, ONE FULL LAYER OF CONTAINERS WILL BE OMITTED. WHEN (EMPTY) FILLER CONTAINERS ARE TO BE USED IN PLACE OF OMITTED CONTAINERS TO COMPLETELY FILL OUT A LAYER ON A PALLET, THEY WILL BE MARKED AS SPECIFIED IN MIL-STD-129.

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

TIEDOWN STRAP, 1-1/4" X .035" OR .031" X 16'-0" LONG STEEL STRAPPING (4 REQD). STAPLE TO DUNNAGE ASSEMBLIES AS SHOWN.

SEAL FOR 1-1/4" STRAPPING (7 REQD, 1 PER STRAP). CRIMP EACH SEAL WITH TWO PAIR OF NOTCHES.

END BRACING, 3/4" PLYWOOD X 45" WIDE X 45" HIGH (2 REQD, ONE AT EACH END).

TOP DUNNAGE ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 4.

40-1/8"

45"

50"

INTERMEDIATE DUNNAGE ASSEMBLY, (2 REQD). SEE THE DETAIL ON PAGE 4.

BOTTOM DUNNAGE ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 5.

HORIZONTAL STRAP, 1-1/4" X .035" OR .031" X 15'-3" LONG STEEL STRAPPING (3 REQD). STAPLE TO END BRACING PLYWOOD AS SHOWN.

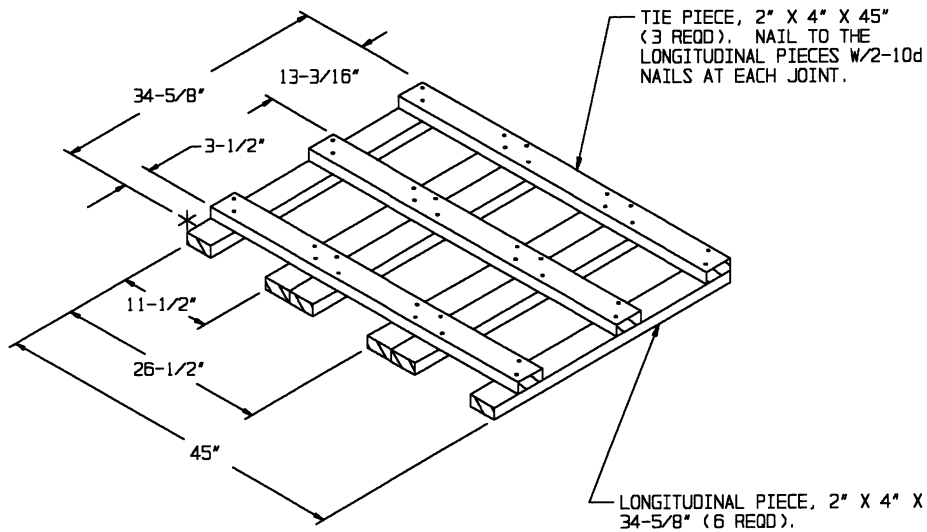
SPECIAL PALLET, 45" X 40-1/8" (1 REQD). SEE THE DETAIL ON PAGE 5.

PALLET UNIT A

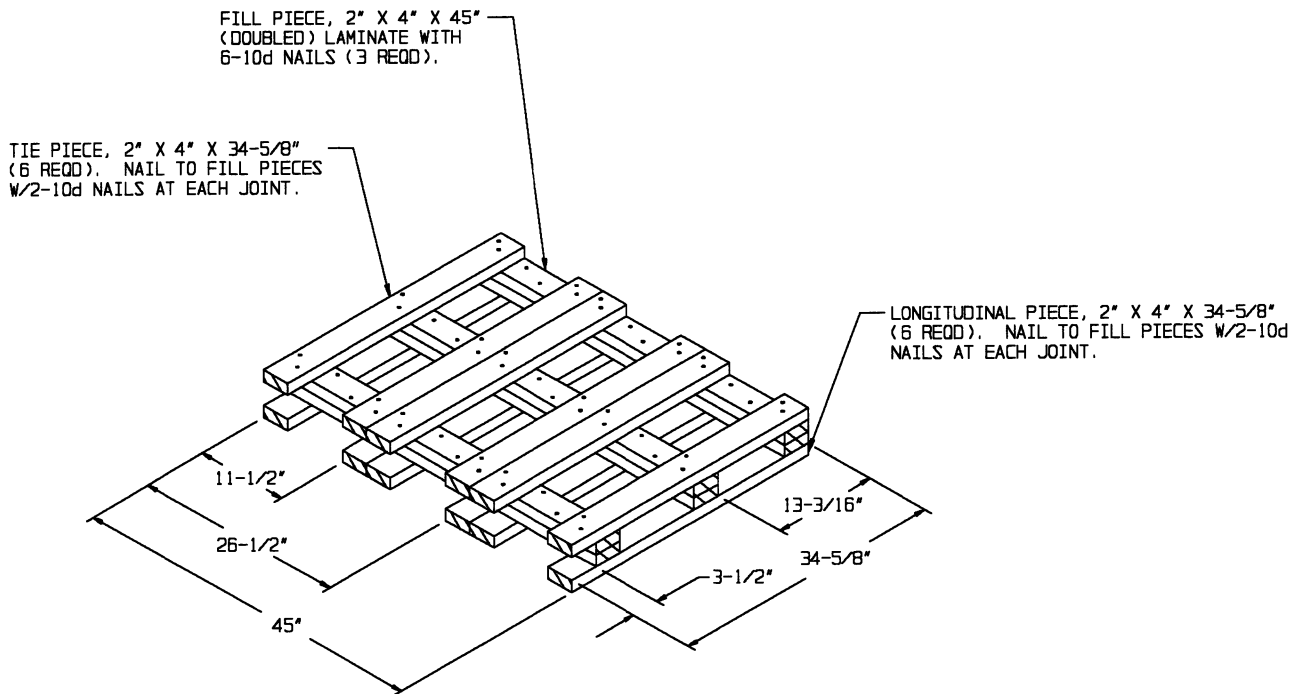
9 SRCX CONTAINERS AT ----- LBS (APPROX)
DUNNAGE/PALLET ----- 364 LBS

TOTAL WEIGHT ----- LBS (APPROX)
CUBE ----- 52.25 CU FT (APPROX)

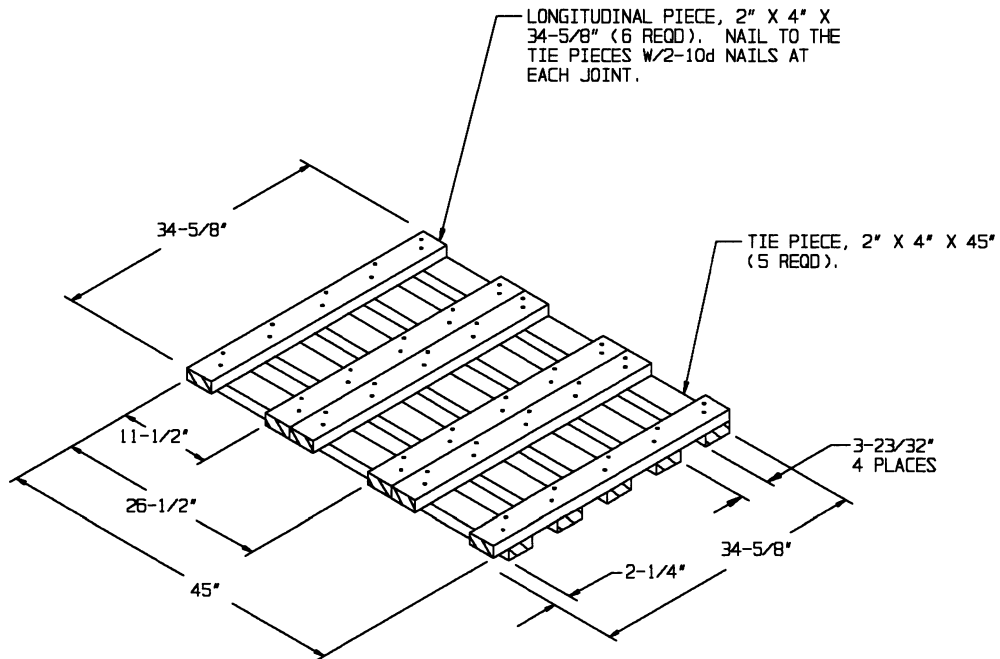
BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	10.03	5.02
2" X 4"	178.88	119.24
4" X 4"	4.13	5.51
NAILS	NO REQD	POUNDS
10d	270	4.15
STEEL STRAPPING, 1-1/4" - 109.75' REQD -- 15.68 LBS		
SEAL FOR 1-1/4" STRAPPING --- 7 REQD --- NIL		
STAPLES --- 36 REQD --- NIL		
PLYWOOD, 3/4" --- 40.66 SQ FT REQD -- 83.87 LBS		



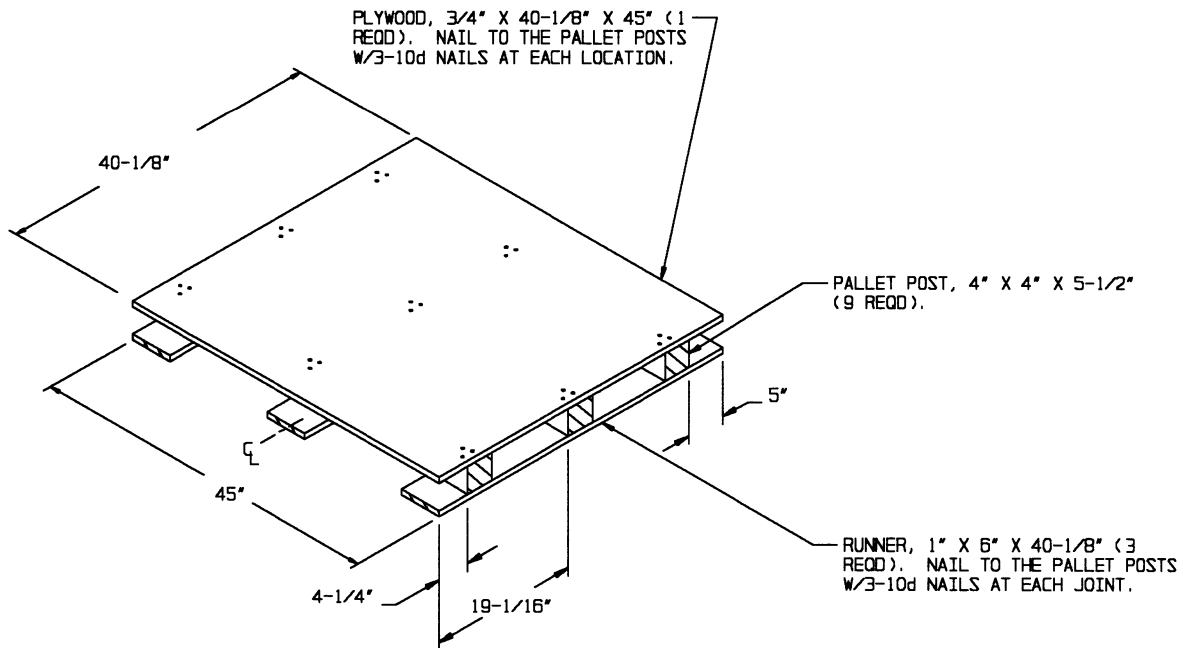
TOP DUNNAGE ASSEMBLY



INTERMEDIATE DUNNAGE ASSEMBLY



BOTTOM DUNNAGE ASSEMBLY



SPECIAL PALLET

TIEDOWN STRAP, 1-1/4" X .035" OR .031" X 16'-0" LONG STEEL STRAPPING (4 REOD). STAPLE TO DUNNAGE ASSEMBLIES AS SHOWN.

SEAL FOR 1-1/4" STRAPPING (7 REOD, 1 PER STRAP). CRIMP EACH SEAL WITH TWO PAIR OF NOTCHES.

END BRACING, 3/4" PLYWOOD X 45" WIDE X 45" HIGH (2 REOD, ONE AT EACH END).

TOP DUNNAGE ASSEMBLY (1 REOD). SEE THE DETAIL ON PAGE 7.

61-1/2"

45"

50"

INTERMEDIATE DUNNAGE ASSEMBLY, (2 REOD). SEE THE DETAIL ON PAGE 7.

BOTTOM DUNNAGE ASSEMBLY (1 REOD). SEE THE DETAIL ON PAGE 8.

HORIZONTAL STRAP, 1-1/4" X .035" OR .031" X 18'-9" LONG STEEL STRAPPING (3 REOD). STAPLE TO END BRACING PLYWOOD AS SHOWN.

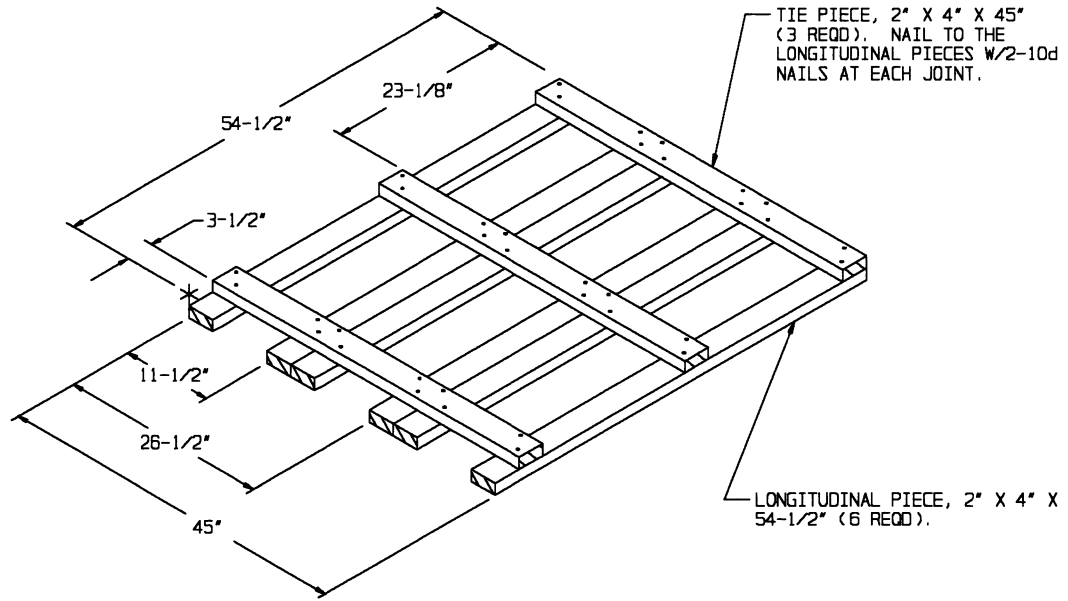
SPECIAL PALLET, 45" X 60" (1 REOD). SEE THE DETAIL ON PAGE 8.

PALLET UNIT B

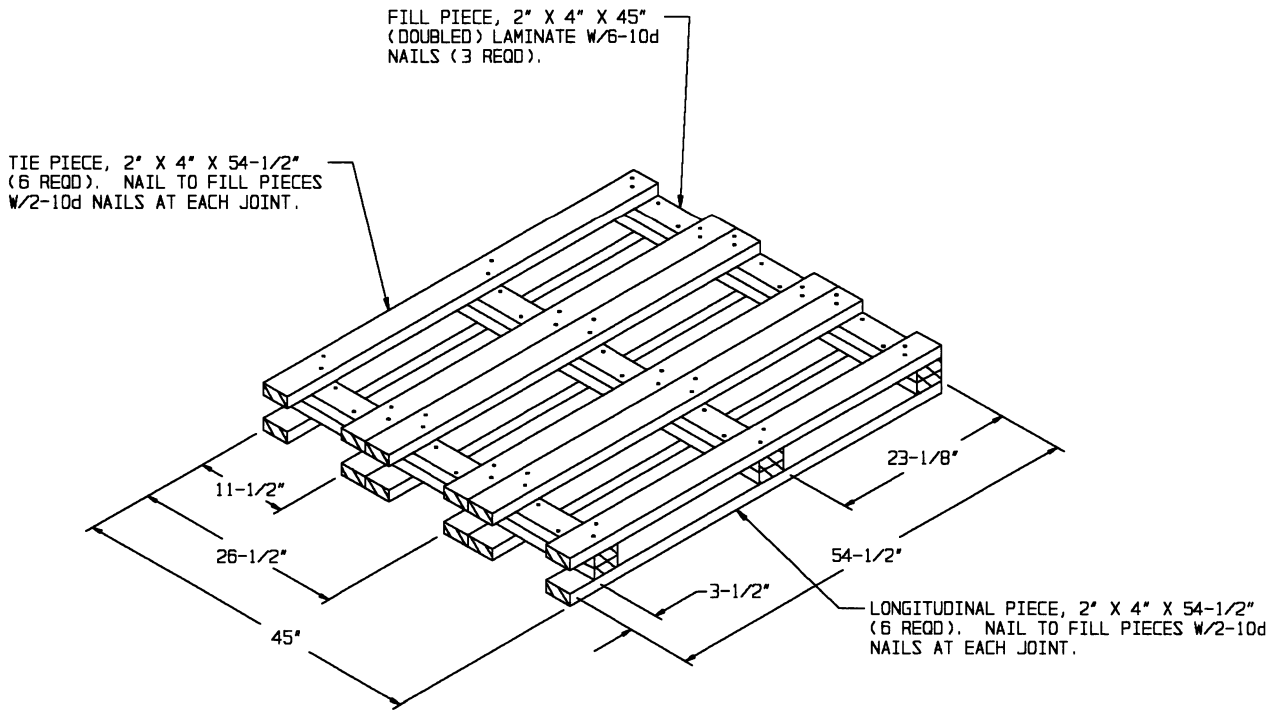
9 SRCX CONTAINERS AT	-----	LBS (APPROX)
DUNNAGE/PALLET	-----	487 LBS
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TOTAL WEIGHT	-----	LBS (APPROX)
CUBE	-----	78.13 CU FT (APPROX)

BILL OF MATERIAL

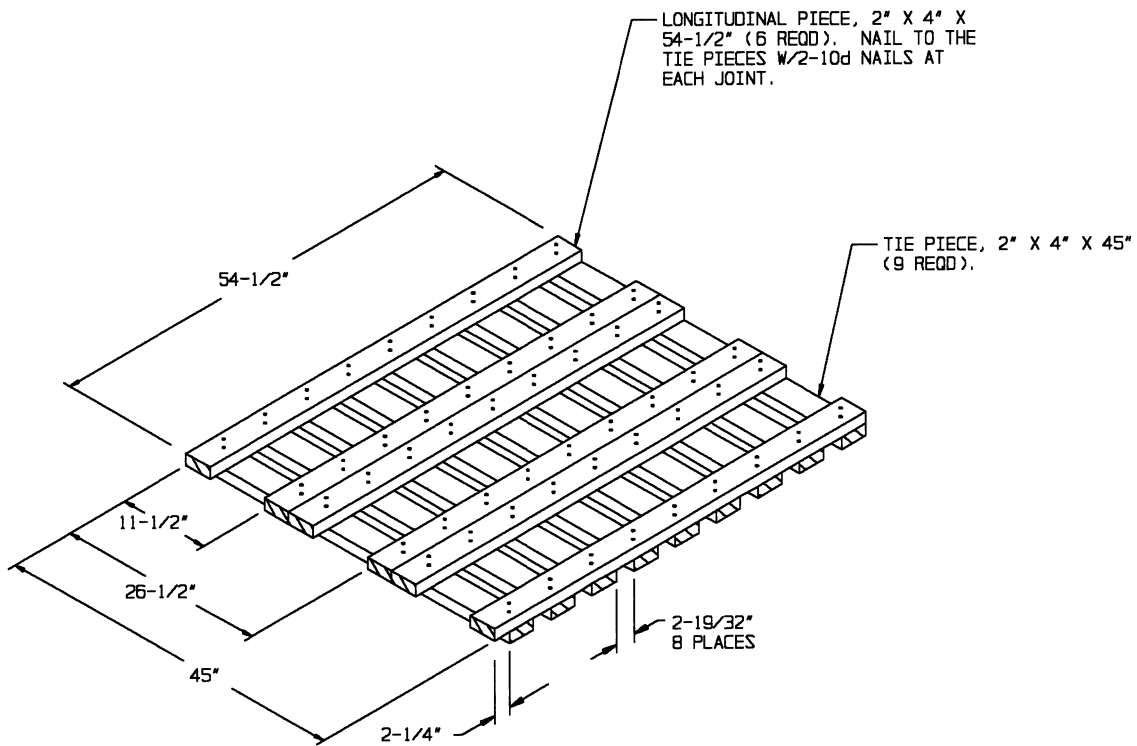
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	15.38	7.69
2" X 4"	253.50	168.98
4" X 4"	4.13	5.51
NAILS	NO REOD	POUNDS
10d	477	7.34
STEEL STRAPPING, 1-1/4" -- 119.50' REOD - 17.08 LBS		
SEAL FOR 1-1/4" STRAPPING --- 7 REOD --- NIL		
STAPLES --- 36 REOD --- NIL		
PLYWOOD, 3/4" --- 47.34 SQ FT - 97.65 LBS		



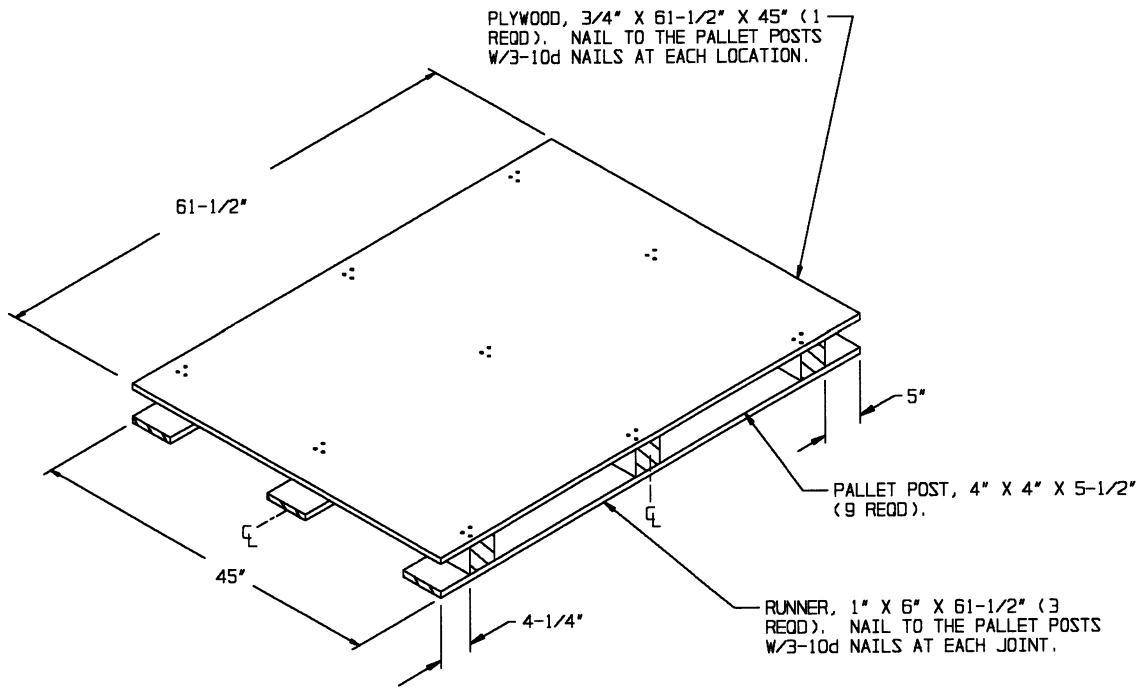
TOP DUNNAGE ASSEMBLY



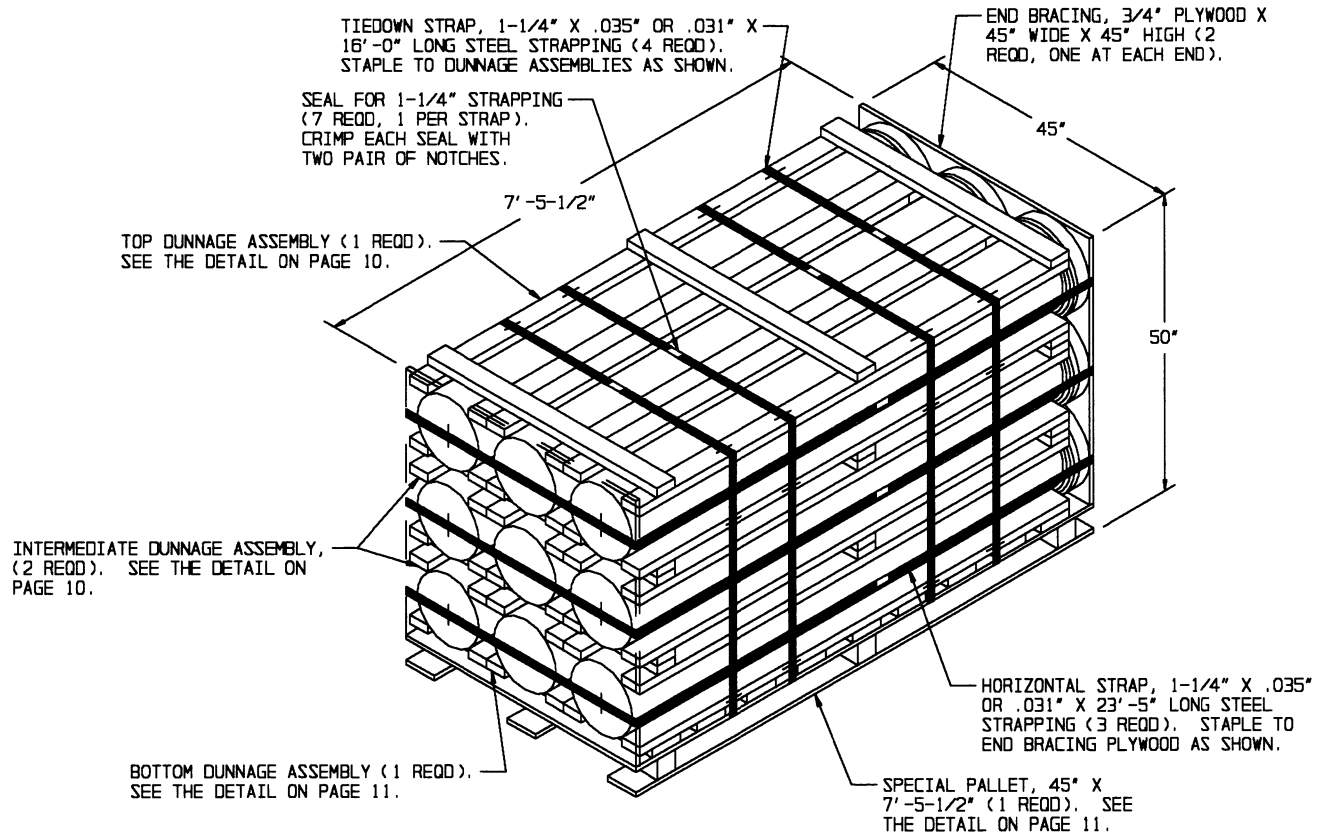
INTERMEDIATE DUNNAGE ASSEMBLY



BOTTOM DUNNAGE ASSEMBLY



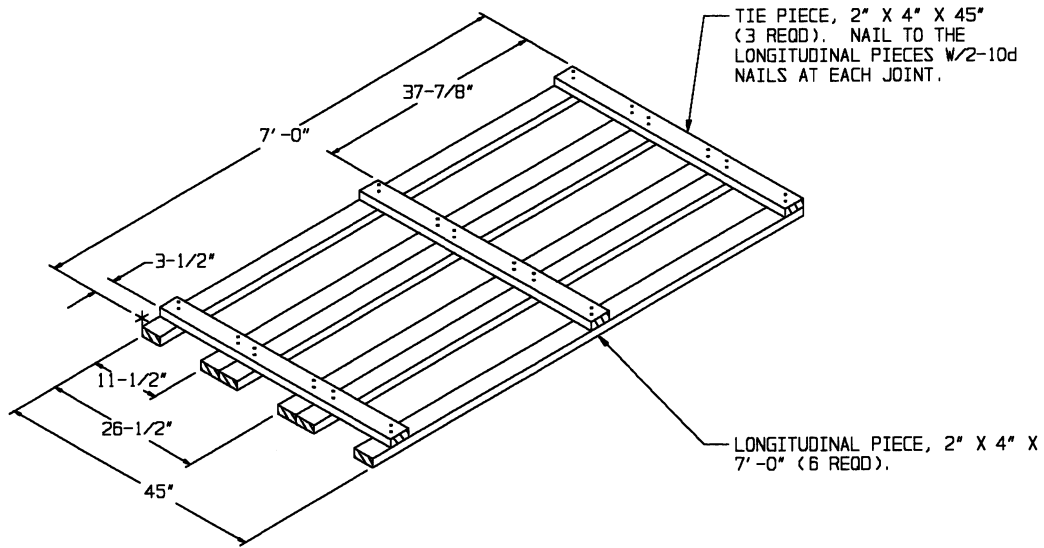
SPECIAL PALLET



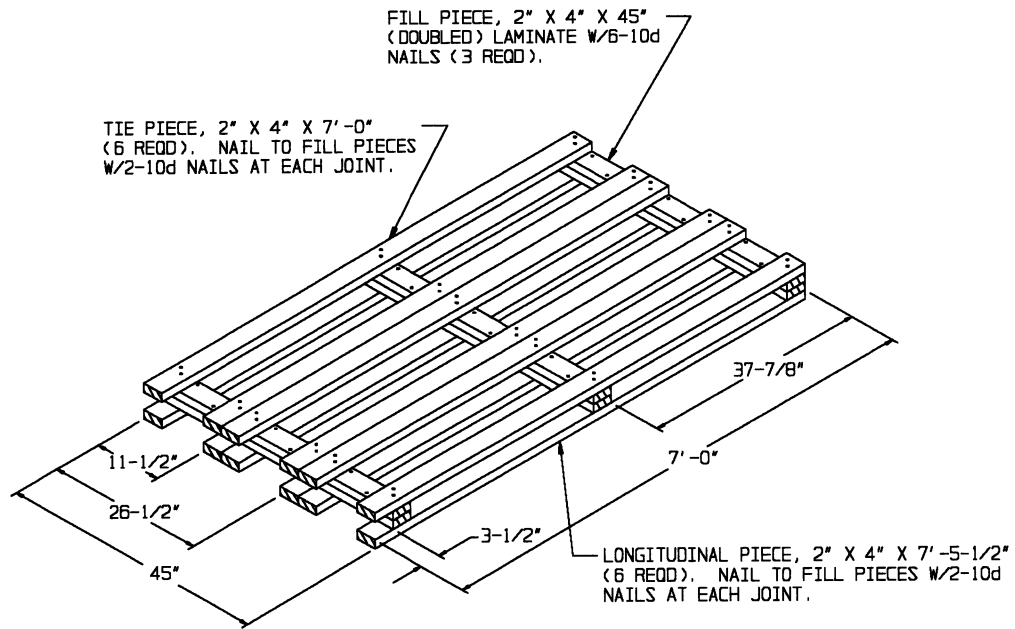
PALLET UNIT C

9 SRCX CONTAINERS AT	-----	LBS (APPROX)
DUNNAGE/PALLET	-----	652 LBS
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TOTAL WEIGHT	-----	LBS (APPROX)
CUBE	-----	116.54 CU FT (APPROX)

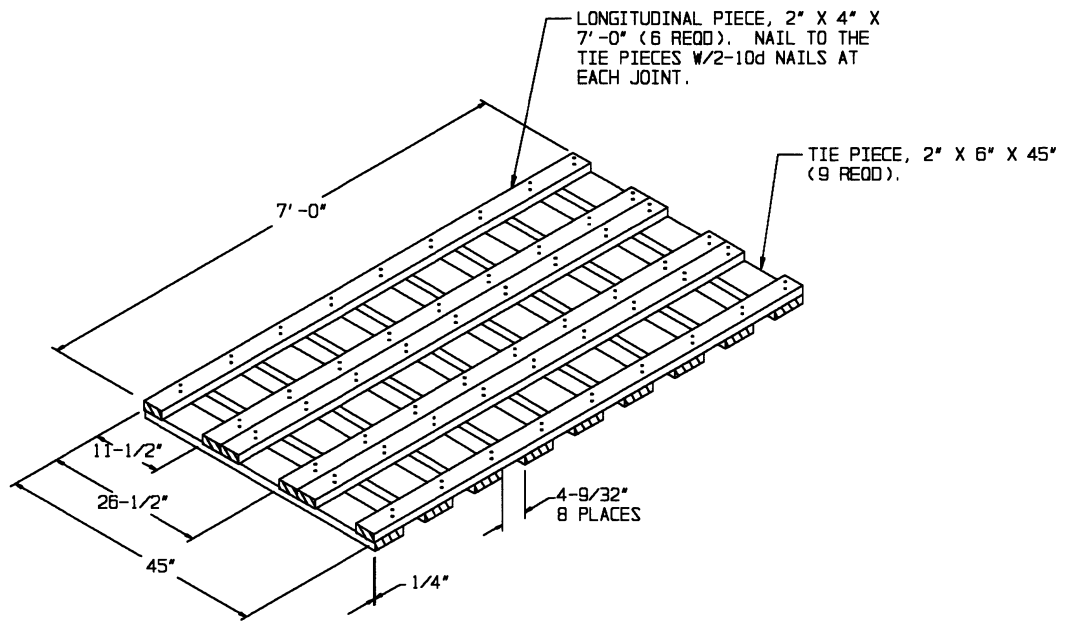
BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	22.88	11.19
2" X 4"	308.25	205.48
2" X 6"	33.75	33.75
4" X 4"	4.13	5.51
NAILS	NO REQD	POUNDS
10d	360	5.54
STEEL STRAPPING, 1-1/4" - 134.25' REQD - - 19.18 LBS		
SEAL FOR 1-1/4" STRAPPING - - - 7 REQD - - - - - NIL		
STAPLES - - - - - 36 REQD - - - - - NIL		
PLYWOOD, 3/4" - - - - 56.09 SQ FT REQD - 115.69 LBS		



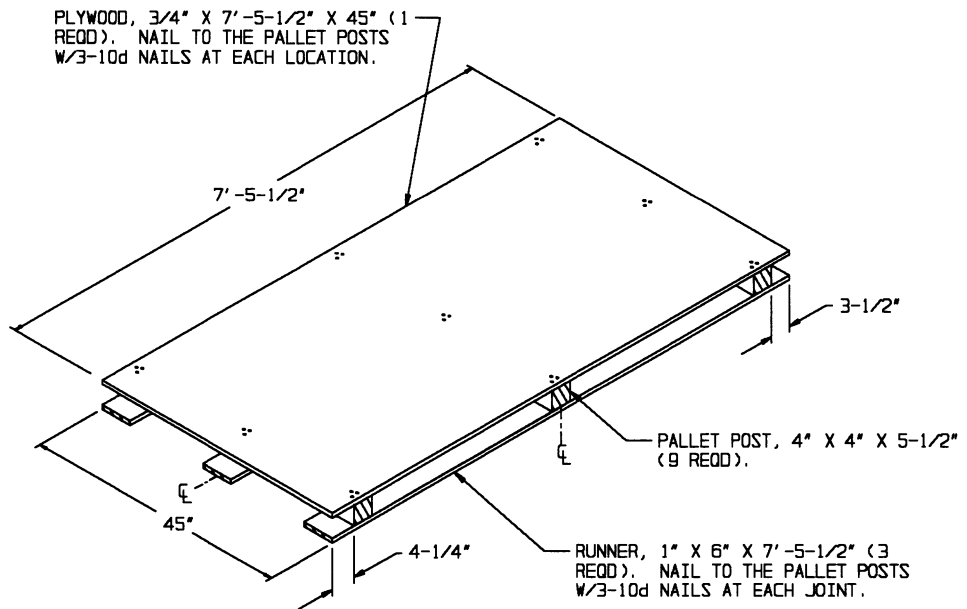
TOP DUNNAGE ASSEMBLY



INTERMEDIATE DUNNAGE ASSEMBLY



BOTTOM DUNNAGE ASSEMBLY



SPECIAL PALLET

