

APPENDIX 8A

UNITIZATION PROCEDURES FOR COMPLETE ROUNDS PACKED IN CYLINDRICAL METAL CONTAINERS ON 4-WAY ENTRY PALLETS* PA 117 SERIES CONTAINER

INDEX

<u>ITEM</u>	<u>PAGE (S)</u>
GENERAL NOTES -----	2
UNIT DETAIL -----	4
DUNNAGE DETAIL -----	5
FILLERS AND INSTALLATION PROCEDURES FOR OMITTED CONTAINERS -----	6,7

PALLET UNIT DATA						
ITEMS INCLUDED		HAZARD CLASSIFICATION ^①				WEIGHT (LBS)
NSN	DODIC	DOT CLASS	CG CLASS	QD CLASS	COMP GROUP	
1315-01-245-4019	C524	B	II-B	(0.8) 1.2	C	1,804

① HAZARD CLASSIFICATION DATA CONTAINED IN THE ABOVE CHART IS FOR GUIDANCE AND INFORMATIONAL PURPOSES ONLY. VERIFICATION OF THE SPECIFIED DATA SHOULD BE MADE BY CONSULTING THE MOST RECENT JOINT HAZARD CLASSIFICATION SYSTEM LISTING OR OTHER APPROVED LISTING (S).

* SEE GENERAL NOTE "J" ON PAGE 2.

NOTICE: THIS APPENDIX CANNOT STAND ALONE BUT MUST BE USED IN CONJUNCTION WITH THE BASIC UNITIZATION PROCEDURES DRAWING 19-48-4079-20PM1002.

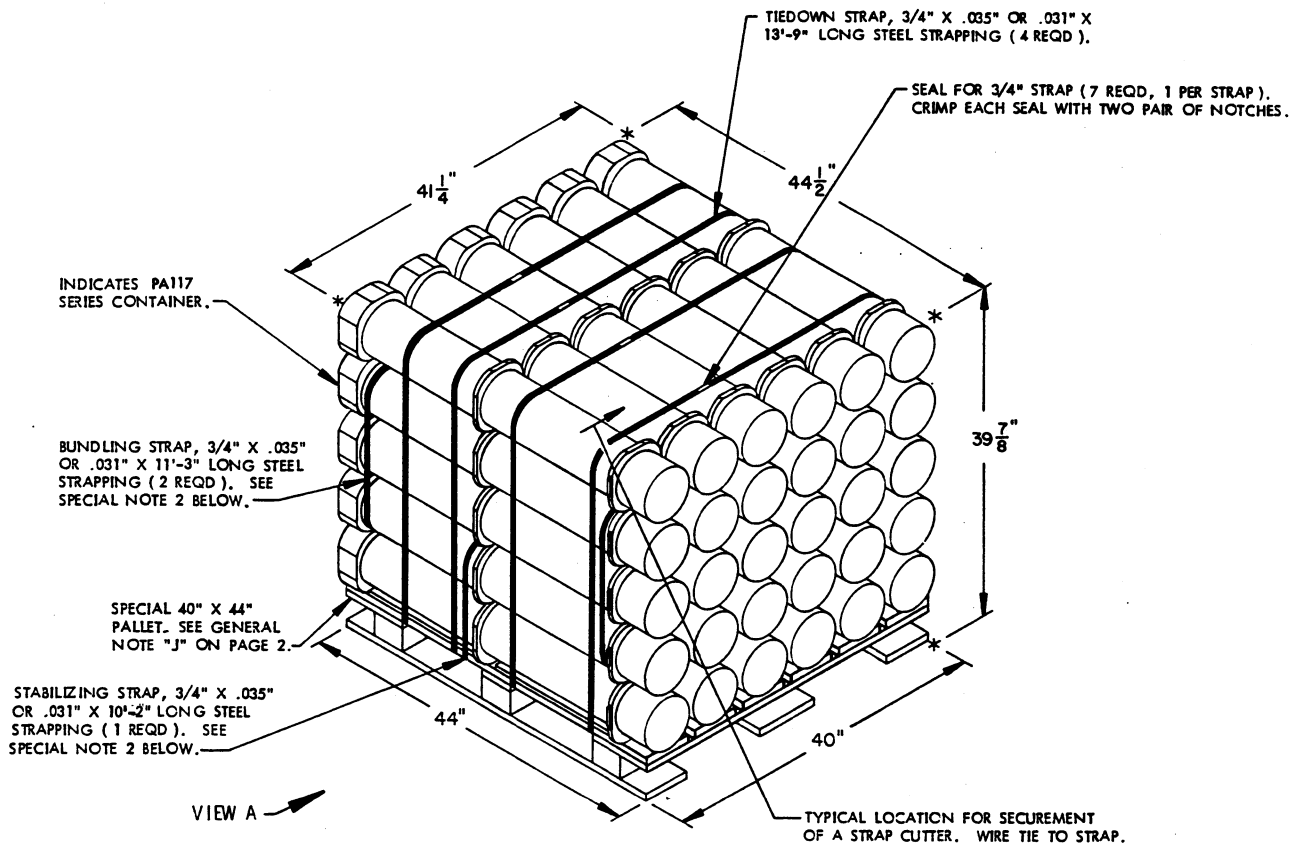
DO NOT SCALE

REVISIONS				DRAFTSMAN TM	PROJ ENG LAF/WRF
				CHECKER CRG	LOG ENGRG OFFICE W. Oneal
				APPROVED, U.S. ARMY ARMAMENT, MUNITIONS, AND CHEMICAL COMMAND (AMC)	
				David O. Redorick SACAR - ESK	William F. Ernst AMSMC - THD
				APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND (AMC)	
				William F. Ernst U.S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL	
				U.S. ARMY AMC DRAWING	
				AUGUST 1990	
				CLASS	DIVISION
				19	48
				DRAWING	FILE
				4079/ 8A	20 PM 1002

GENERAL NOTES

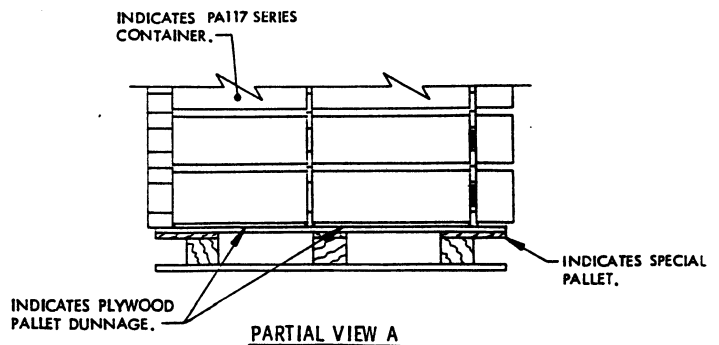
- A. THIS APPENDIX CANNOT STAND ALONE BUT MUST BE USED IN CONJUNCTION WITH THE BASIC UNITIZING PROCEDURES DRAWING 19-48-4079-20PM1002. TO PRODUCE AN APPROVED UNIT LOAD, ALL PERTINENT PROCEDURES, SPECIFICATIONS AND CRITERIA SET FORTH WITHIN THE BASIC DRAWING WILL APPLY TO THE PROCEDURES DELINEATED IN THIS APPENDIX. ANY EXCEPTIONS TO THE BASIC PROCEDURES ARE SPECIFIED IN THIS APPENDIX.
- B. DIMENSIONS, CUBE AND WEIGHT OF A PALLET UNIT WILL VARY SLIGHTLY DEPENDING UPON THE ACTUAL DIMENSIONS OF THE CONTAINER, WEIGHT OF THE SPECIFIED ITEM AND METHOD OF UNITIZATION.
- C. FOR OUTLOADING AND STORAGE OF THE ITEMS COVERED BY THIS APPENDIX, CONTACT THE U.S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL ATTN: SMCAC-DEO, SAVANNA, IL 61074-9639 FOR SPECIFIC PROCEDURAL GUIDANCE.
- D. FOR METHOD OF SECURING A STRAP CUTTER TO THE PALLET UNIT, SEE DARCOM DRAWING 19-48-4127-20P1000.
- E. IF ITEMS COVERED HEREIN ARE UNITIZED PRIOR TO ISSUANCE OF THIS APPENDIX, THE CONTAINERS NEED NOT BE REUNITIZED SOLELY TO CONFORM TO THIS APPENDIX.
- F. FOR DETAILS OF THE PA 117 SERIES CONTAINER, SEE U.S. ARMY ARMAMENT RESEARCH AND DEVELOPMENT COMMAND DRAWING NO. 9378166.
- CONTAINER DIMENSIONS ----- 44-1/2" LONG X 6-7/8" WIDE X 6-7/8" HIGH.
CONTAINER CUBE -----1.18 CUBIC FEET (APPROX)
CONTAINER WEIGHT
(WITH ROUND) -----57 POUNDS (APPROX)
- G. THE UNITIZATION PROCEDURES SPECIFIED HEREIN MAY ALSO BE USED FOR UNITIZING COMPLETE ROUNDS WHEN IDENTIFIED BY DIFFERENT NATIONAL STOCK NUMBERS (NSN) THAN THOSE SHOWN ON THE COVER PAGE, PROVIDED THE ITEM IS PACKED IN THE SAME CONTAINER. THE EXPLOSIVE CLASSIFICATION OF OTHER ITEMS MAY BE DIFFERENT THAN THOSE SHOWN.
- H. DIMENSIONS GIVEN FOR DUNNAGE PIECES WILL BE FIELD CHECKED PRIOR TO THEIR ASSEMBLY TO THE PALLET UNIT. CONTAINERS MUST FIT SNUGLY IN THE DUNNAGE ASSEMBLIES.
- J. THE SPECIAL PALLET WILL BE CONSTRUCTED AND ASSEMBLED IN ACCORDANCE WITH A MILITARY SPECIFICATION MIL-P-15011, STYLE 1, TYPE I, CLASS 1 PALLET WITH THE EXCEPTION THAT THE TOP AND BOTTOM DECK BOARDS WILL BE 44" LONG INSTEAD OF 48". ALL OTHER REQUIREMENTS SPECIFIED WITHIN MIL-P-15011 FOR A STYLE 1, TYPE I, CLASS 1 PALLET WILL APPLY TO THE PALLET SPECIFIED WITHIN THIS DRAWING.
- K. THE SPECIAL PALLET DELINEATED IN THE DETAIL ON PAGE 4 NEED NOT HAVE CHAMFERS OR STRAP SLOTS AS SPECIFIED WITHIN MILITARY SPECIFICATION MIL-P-15011 WHEN USED FOR THE UNITIZATION OF THE ITEMS COVERED BY THIS APPENDIX.

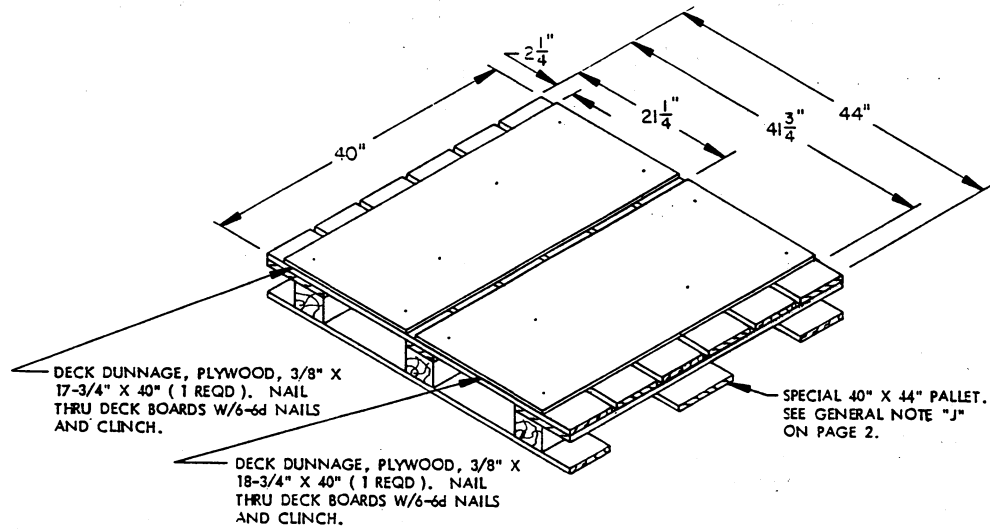
THIS PAGE INTENTIONALLY LEFT BLANK



SPECIAL NOTES:

1. ALTHOUGH THE CONTAINERS DEPICTED IN THE UNIT LOAD ABOVE ARE CONSTRUCTED WITH INTERLOCKING DEVICES, THE INTERLOCKS WILL NOT FUNCTION PROPERLY UNLESS THE CONTAINERS ARE POSITIONED SO THAT THE "PINS" OF THE INTERLOCKS ARE IN AN UPRIGHT ORIENTATION. THIS ORIENTATION WILL PRECLUDE INTERFERENCE OF THE "PINS" AND THE PLYWOOD PALLET DUNNAGE. FOR THE LATERAL INTERLOCKS TO FUNCTION PROPERLY, THE LATERAL INTERLOCKING DEVICES ON THE RINGS OF A CONTAINER MUST BE ENGAGED WITH THE LATERAL INTERLOCKING DEVICES ON THE RINGS OF AN ADJACENT CONTAINER. LATERAL INTERLOCK ENGAGEMENT IS ACCOMPLISHED WHEN CONTAINERS ARE LOWERED ONTO THE PALLET UNIT. THE INTERLOCKS WILL AID IN THE PREVENTION OF CONTAINER MOVEMENT, BOTH LATERAL AND LONGITUDINAL, DURING SHIPMENT OF THE UNIT LOAD.
2. BUNDLING STRAPS AND STABILIZING STRAP MUST BE TENSIONED AND SEALED PRIOR TO THE APPLICATION OF THE TIEDOWN STRAPS.
3. ALL STRAPS MUST BE INSTALLED AS CLOSE AS POSSIBLE TO THE CONTAINER RINGS. CAUTION: STRAPS MUST NOT BE ALLOWED TO OVERLAP.





PALLET DUNNAGE LOCATION

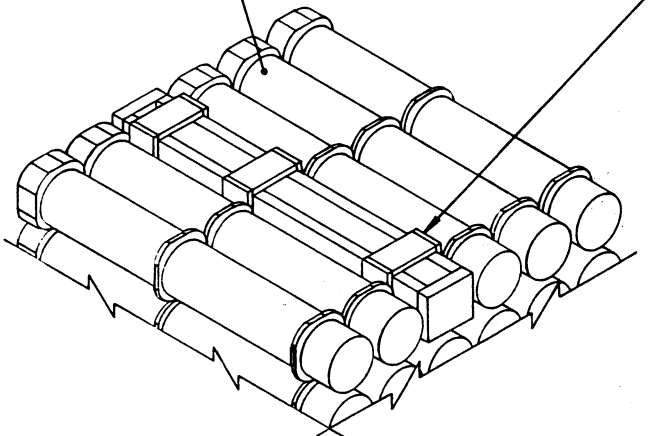
BILL OF MATERIAL		
NAILS	NO. REQD	POUNDS
6d (2")	12	0.09
SPECIAL PALLET, 40" X 44"	1 REQD	77 LBS
STEEL STRAPPING, 3/4"	22.67' REQD	6.26 LBS
SEAL FOR 3/4" STRAPPING	7 REQD	NIL
PLYWOOD, 3/8"	10.14 SQ FT REQD	10.46 LBS

UNIT DATA

CUBE	41.8 CUBIC FEET (APPROX)	
CONTAINER	30 EACH @ 57 LBS	1,710 LBS (APPROX)
DUNNAGE		17 LBS
PALLET		77 LBS
TOTAL WEIGHT		1,804 LBS (APPROX)

INDICATES PA 117
SERIES CONTAINER.

FILLER (1 REQD). SEE THE
"FILLER A" DETAIL ON PAGE 7.



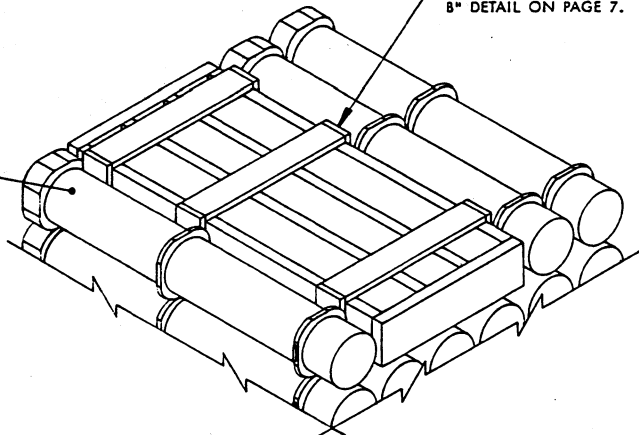
DETAIL A

THIS DETAIL DEPICTS PROCEDURES TO BE USED
WHEN A STANDARD PALLET UNIT MINUS ONE
CONTAINER IS TO BE UNITIZED. THE FILLER
ASSEMBLY DEPICTED MUST BE INSTALLED IN THE
MIDDLE OF THE TOP LAYER OF THE PALLET UNIT.

SPECIAL NOTES:

1. WHEN SIX CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT, A COMPLETE LAYER OF CONTAINERS MUST BE OMITTED. WHEN FIVE CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT, A COMBINATION OF FILLER ASSEMBLIES DEPICTED ON PAGE 7 MUST BE USED. WHEN FOUR OR LESS CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT, A COMBINATION OR ONE OF THE FILLER ASSEMBLIES DEPICTED ON PAGE 7 MAY BE USED. ALL FILLER ASSEMBLIES MUST BE INSTALLED IN THE MIDDLE OF THE TOP LAYER OR LAYERS OF A PALLET UNIT.
2. WHEN A "FILLER A" ASSEMBLY IS USED IN COMBINATION WITH A "FILLER B" OR "FILLER C" ASSEMBLY, THE "FILLER A" ASSEMBLY MUST BE POSITIONED IN THE SECOND LAYER OF CONTAINERS FROM THE TOP OF THE PALLET UNIT AND MUST HAVE ITS OVERALL HEIGHT REDUCED FROM 6-7/8" TO 6".
3. WHEN TWO "FILLER A" ASSEMBLIES ARE USED IN PLACE OF TWO OMITTED CONTAINERS, THE FILLER ASSEMBLIES WILL BE SEPARATED BY AT LEAST ONE CONTAINER TO INSURE PROPER FILLER ASSEMBLY RETENTION AND TO PRECLUDE ASSEMBLY INTERFERENCES.

FILLER (1 REQD). SEE THE "FILLER
B" DETAIL ON PAGE 7.

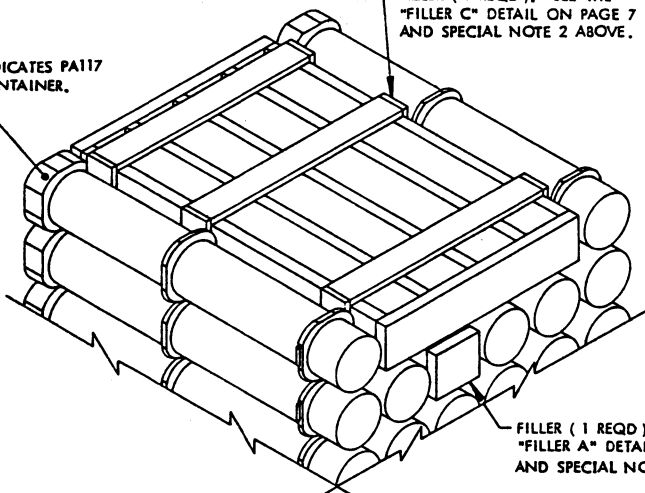


DETAIL B

THIS DETAIL DEPICTS PROCEDURES TO BE USED
WHEN A STANDARD PALLET UNIT MINUS THREE
CONTAINERS IS TO BE UNITIZED. THE FILLER
ASSEMBLY MUST BE INSTALLED IN THE MIDDLE
OF THE TOP LAYER OF THE PALLET UNIT.

FILLER (1 REQD). SEE THE
"FILLER C" DETAIL ON PAGE 7
AND SPECIAL NOTE 2 ABOVE.

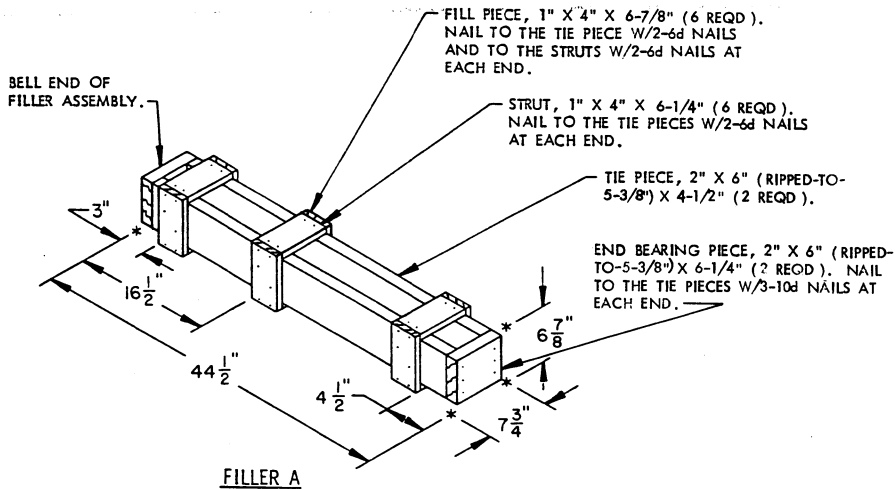
INDICATES PA117
CONTAINER.



DETAIL C

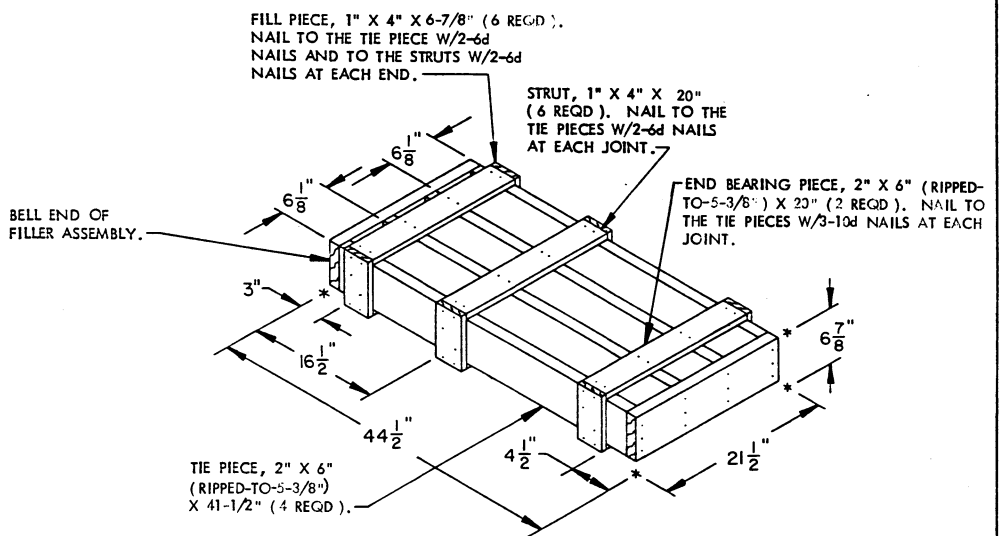
THIS DETAIL DEPICTS PROCEDURES TO BE USED WHEN A STANDARD PALLET
UNIT MINUS FIVE CONTAINERS IS TO BE UNITIZED. THE FILLER ASSEMBLIES
DEPICTED MUST BE INSTALLED IN THE MIDDLE OF THE TOP LAYERS OF THE
PALLET UNIT.

FILLER (1 REQD). SEE THE
"FILLER A" DETAIL ON PAGE 7
AND SPECIAL NOTE 2 ABOVE.



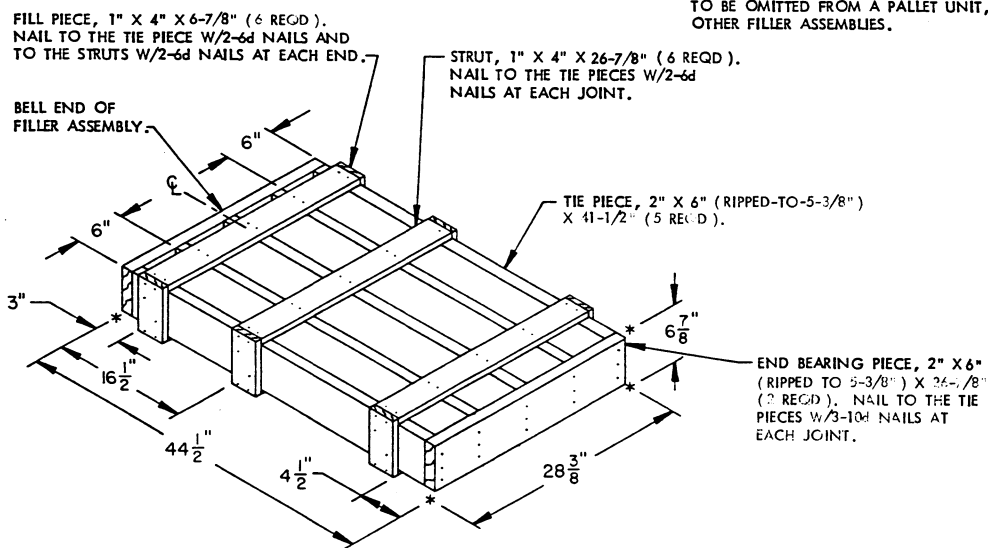
FILLER A

THIS FILLER ASSEMBLY IS TO BE USED WHEN ONE OR TWO CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT, OR IN COMBINATION WITH OTHER FILLER ASSEMBLIES. SEE SPECIAL NOTES 2 AND 3 ON PAGE 6.



FILLER B

THIS FILLER ASSEMBLY IS TO BE USED WHEN THREE CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT, OR IN COMBINATION WITH OTHER FILLER ASSEMBLIES.



FILLER C

THIS FILLER ASSEMBLY IS TO BE USED WHEN FOUR CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT, OR IN COMBINATION WITH A "FILLER A" ASSEMBLY.

