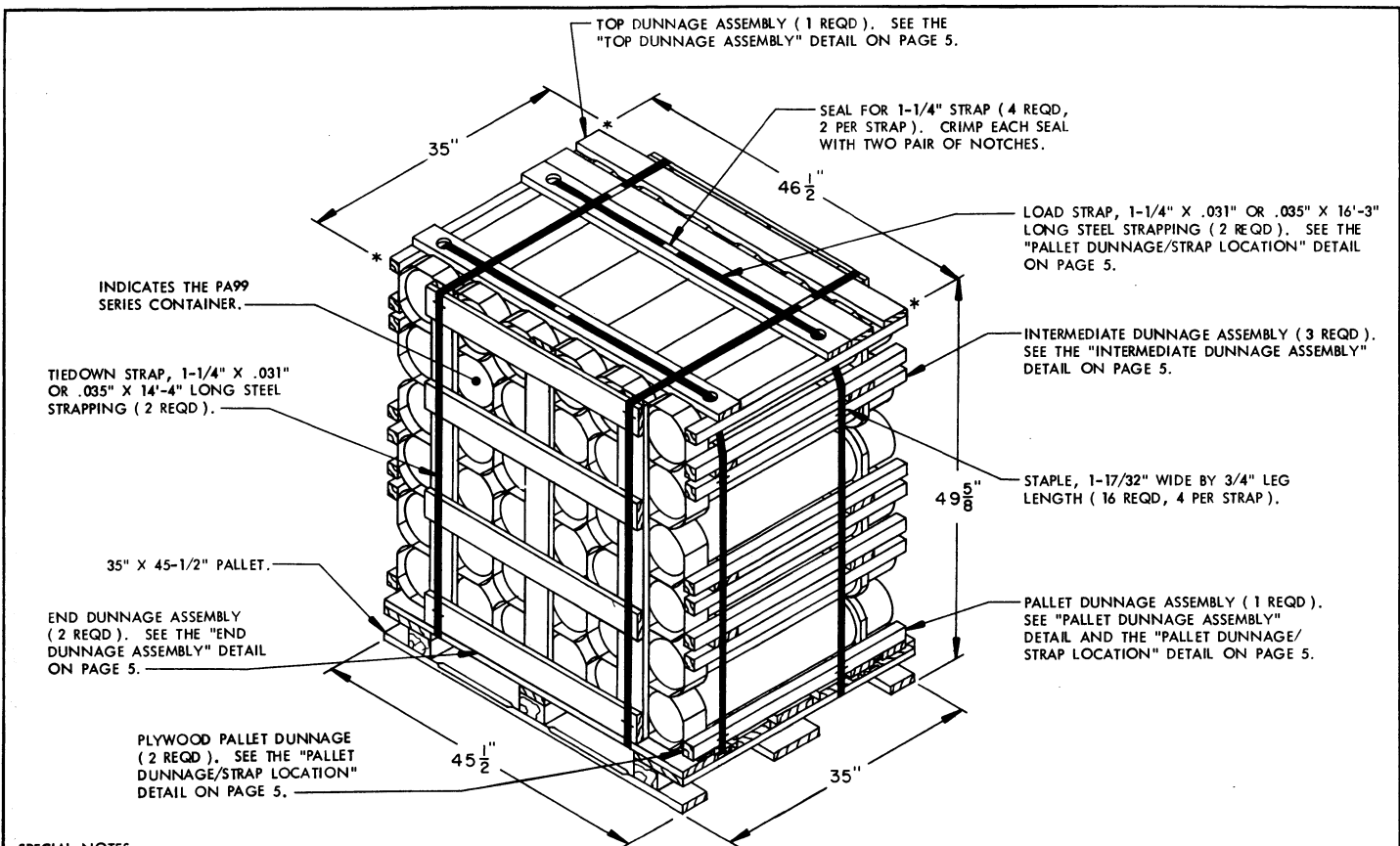


GENERAL NOTES

- A. THIS APPENDIX CANNOT STAND ALONE BUT MUST BE USED IN CONJUNCTION WITH THE BASIC UNITIZING PROCEDURES DRAWING 19-48-4042A-20PM1001. 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 SPECIFIC ITEM, AND METHOD OF UNITIZATION.
- C. FOR OUTLOADING AND STORAGE OF THE ITEMS COVERED BY THIS APPENDIX, SEE DARCOM DRAWING 19-48-4042-1-2-5-11-14PM1000, REV NO. 1 (WILL BE SUPERSEDED BY ANOTHER 19-48 SERIES DARCOM DRAWING SPECIFICALLY FOR THE PA99 SERIES CONTAINER).
- 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. THE UNITIZATION PROCEDURES DEPICTED HEREIN MAY ALSO BE USED FOR UNITIZING PROPELLING CHARGES WHEN IDENTIFIED BY DIFFERENT NATIONAL STOCK NUMBERS (NSN) THAN THOSE SHOWN ON THE COVER PAGE, PROVIDED THE ITEM IS PACKED IN THE PA99 SERIES CONTAINER. THE EXPLOSIVE CLASSIFICATION OF OTHER ITEMS MAY BE DIFFERENT THAN THOSE SHOWN.
- G. FOR DETAILS OF THE PA99 SERIES CONTAINER, SEE US ARMY ARMAMENT RESEARCH AND DEVELOPMENT COMMAND DRAWING NO. 9331204.
- CONTAINER DIMENSIONS ----- 32" LONG X 7-1/4" WIDE X 7-1/4" HIGH.
CONTAINER CUBE ----- 0.97 CUBIC FEET.
CONTAINER WEIGHT (WITH CHARGE)-43 LBS (APPROX).
- H. IF DEEMED MORE ECONOMICAL FOR SHIPPING AND STORAGE BY THE RESPONSIBLE COMMAND, THE UNIT DEPICTED ON THE FOLLOWING PAGES MAY BE DECREASED BY ONE COMPLETE LAYER OF CONTAINERS. FOR FURTHER UNITIZATION GUIDANCE, SEE SPECIAL NOTES ON PAGE 4.

THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK.



SPECIAL NOTES:

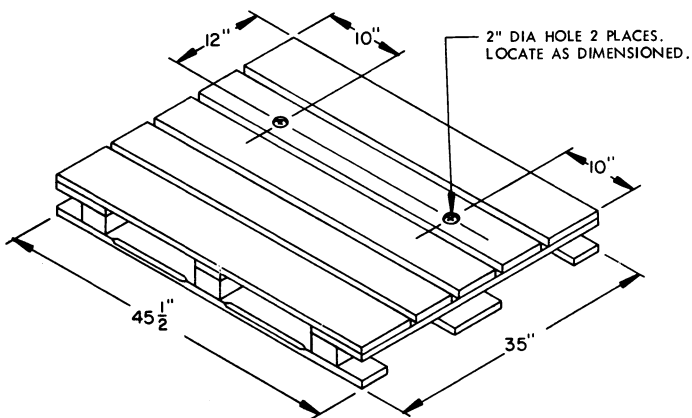
1. WHEN THE UNIT LOAD DEPICTED ABOVE IS TO BE USED FOR UNITIZING MARINE CORPS AMMUNITION, ONE LAYER OF CONTAINERS MUST BE OMITTED, THE UPPERMOST "INTERMEDIATE DUNNAGE ASSEMBLY" MUST BE OMITTED, TIEDOWN STRAP LENGTHS MUST BE DECREASED TO 13'-1", LOAD STRAP LENGTHS MUST BE DECREASED TO 15'-0", AND THE "END DUNNAGE ASSEMBLY" MUST BE MODIFIED. DUNNAGE ASSEMBLY MODIFICATIONS INCLUDE CHANGING VERTICAL PIECE LENGTH TO 36-1/2", LOCATING THE UPPER HORIZONTAL PIECE EVEN WITH THE TOP OF THE VERTICAL PIECES, AND CHANGING THE LOCATION DIMENSION OF THE HORIZONTAL PIECE SECOND FROM THE TOP TO 24". THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 42-3/8", A GROSS UNIT WEIGHT OF 1,442 POUNDS, AND A UNIT CUBE OF 39.9 CUBIC FEET.
2. THE UNIT LOAD DEPICTED ABOVE MAY ALSO BE REDUCED BY ONE LAYER OF CONTAINERS, AS DESCRIBED IN SPECIAL NOTE 1, WHEN BEING SHIPPED BY MILVAN OR COMMERCIAL INTERMODAL FREIGHT CONTAINER, CONVENTIONAL VAN TRAILER OR CONVENTIONAL OR HIGH-CAPACITY BOXCAR. THE DETERMINATION TO REDUCE THE LOAD BY A LAYER WILL BE MADE BY THE RESPONSIBLE COMMAND AND WILL BE BASED UPON ECONOMICS OF TRANSPORTATION AND HANDLING.

ISOMETRIC VIEW

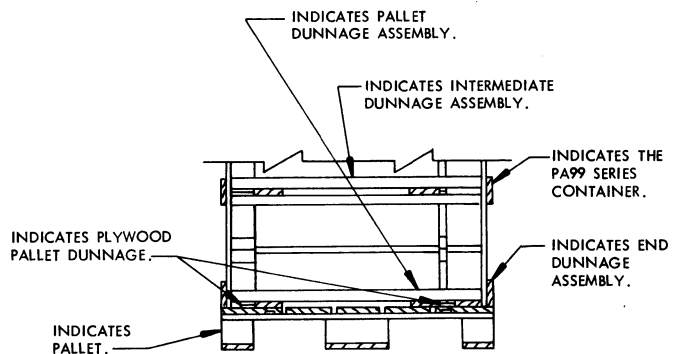
(SPECIAL NOTES CONTINUED)

3. DIMENSIONS GIVEN FOR DUNNAGE PIECES OR DUNNAGE ASSEMBLIES WILL BE FIELD CHECKED PRIOR TO THEIR ASSEMBLY TO THE PALLET UNIT. CONTAINERS MUST FIT SNUGLY IN THE DUNNAGE ASSEMBLIES. ALSO, DUE TO THE VARIATION OF CONTAINER DIMENSIONS, ADJUSTMENTS MAY BE REQUIRED AS TO THE LOCATION OF CERTAIN PIECES OF DUNNAGE IN A DUNNAGE ASSEMBLY.
4. ALTHOUGH THE PROPELLING CHARGE 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 AND WILL AID IN THE PREVENTION OF CONTAINER MOVEMENT, BOTH Laterally AND LONGITUDINALLY, DURING SHIPMENT OF THE UNIT LOAD.

(CONTINUED AT RIGHT)

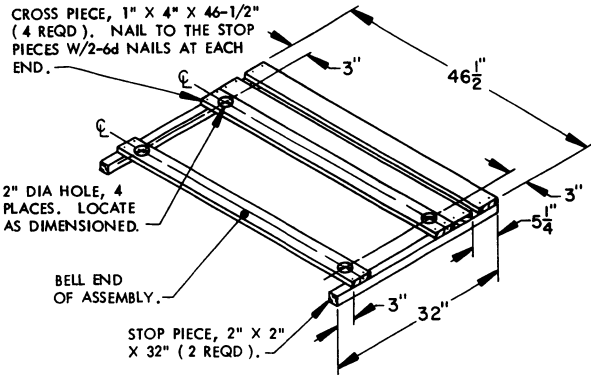


PALLET WITH PRE-DRILLED HOLES

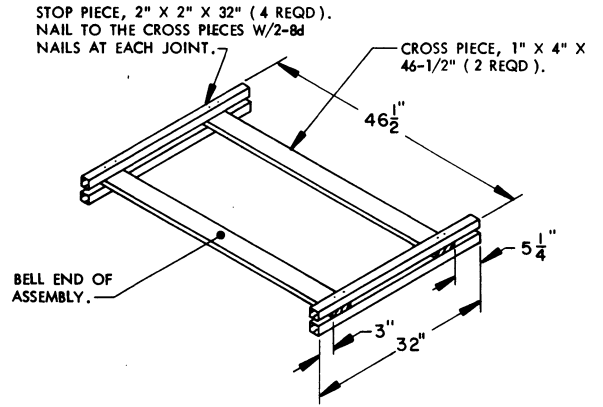


PARTIAL VIEW A

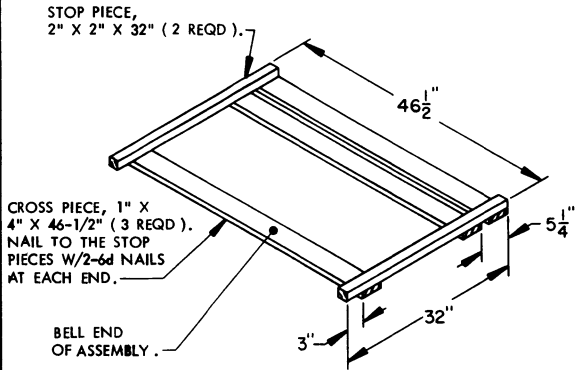
UNIT DETAIL AND PALLET DETAIL



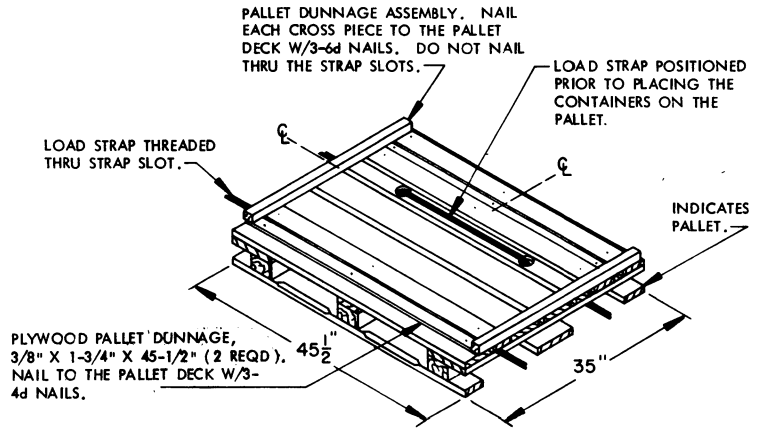
TOP DUNNAGE ASSEMBLY
(1 REQD).



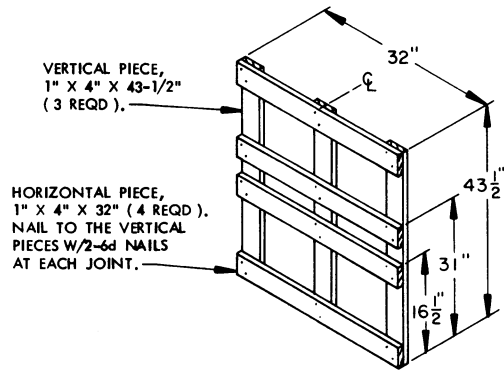
INTERMEDIATE DUNNAGE ASSEMBLY
(3 REQD).



PALLET DUNNAGE ASSEMBLY
(1 REQD)



PALLET DUNNAGE/STRAP LOCATION



END DUNNAGE ASSEMBLY
(2 REQD)

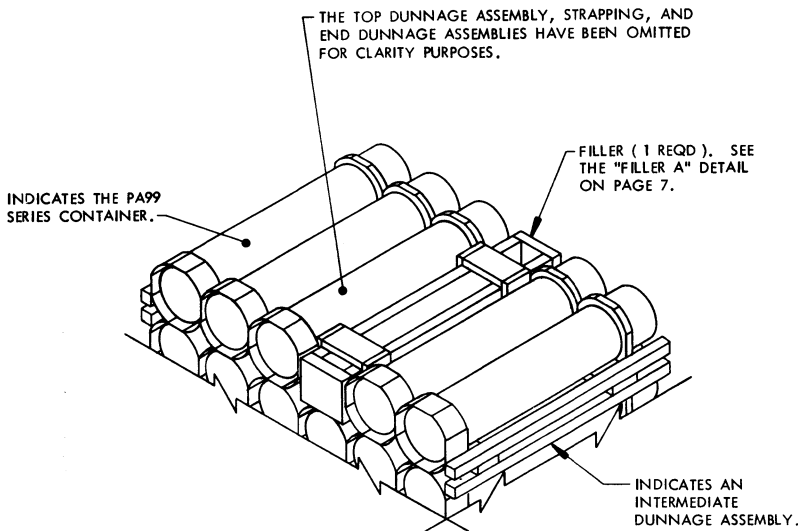
BILL OF MATERIAL			
LUMBER	NO. REQD	LINEAR FEET	BOARD FEET
1" X 4" X 46-1/2"	13	50.38	16.79
1" X 4" X 43-1/2"	6	21.75	7.25
1" X 4" X 32"	8	71.33	7.11
2" X 2" X 32"	16	42.67	14.22
NAILS		NO. REQD	POUNDS
4d (1-1/2")		6	0.02
6d (2")		85	0.50
8d (2-1/2")		48	0.51
PALLET, 35" X 45-1/2" ----- 1 REQD ----- 65 LBS			
STEEL STRAPPING, 1-1/4" X .031" OR .035" - 61.17' REQD --- 8.74 LBS			
SEAL FOR 1-1/4" STRAPPING ----- 4 REQD ----- NIL			
STAPLE, 1-17/32" X 3/4" ----- 16 REQD ----- NIL			
PLYWOOD, 3/8" ----- 1.11 SQ FT REQD --- 1.14 LBS			

UNIT DATA

	WEIGHT
CUBE ----- 46.7 CUBIC FEET (APPROX)	
CONTAINER, PA99 SERIES -- 36 EACH @ 43 LBS -----	1,548 LBS (APPROX)
DUNNAGE -----	102 LBS
PALLET -----	65 LBS

TOTAL WEIGHT ----- 1,715 LBS (APPROX)

DUNNAGE DETAILS

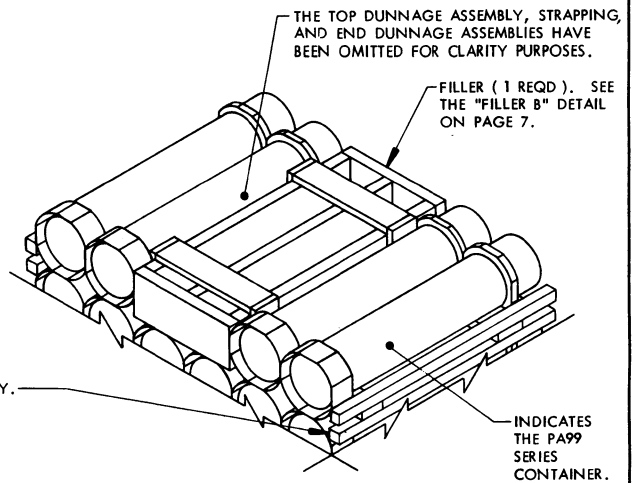


DETAIL A

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.

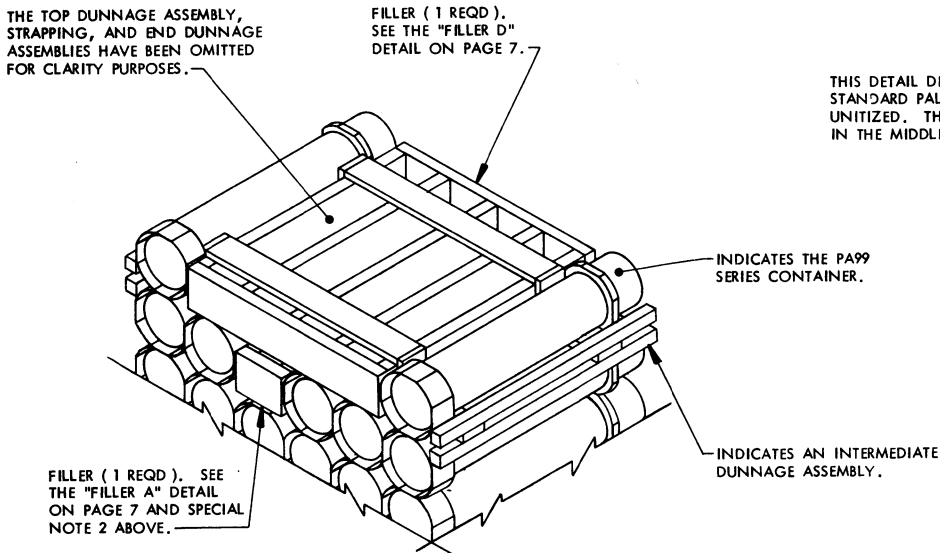
SPECIAL NOTES:

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. THE OVERALL HEIGHT OF THE FILLER ASSEMBLIES DEPICTED ON PAGE 7 MUST BE REDUCED FROM 7-1/4" TO 6-3/8" WHEN INSTALLED BETWEEN A TOP DUNNAGE ASSEMBLY AND AN INTERMEDIATE DUNNAGE ASSEMBLY OR BETWEEN ANOTHER FILLER ASSEMBLY AND AN INTERMEDIATE DUNNAGE ASSEMBLY.



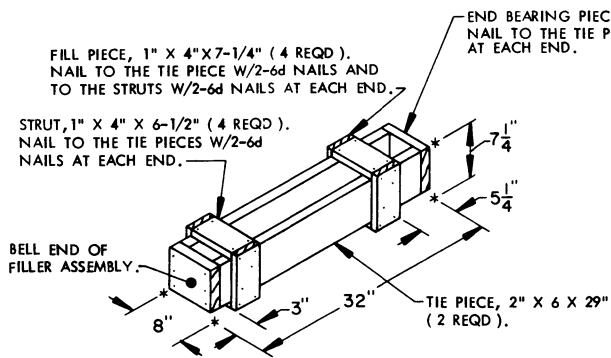
DETAIL B

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



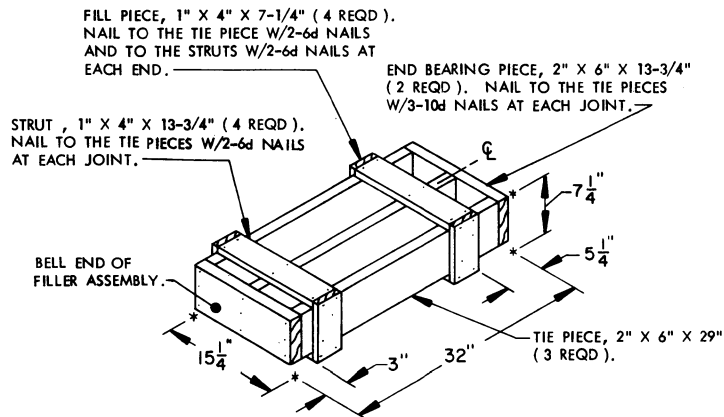
DETAIL C

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.



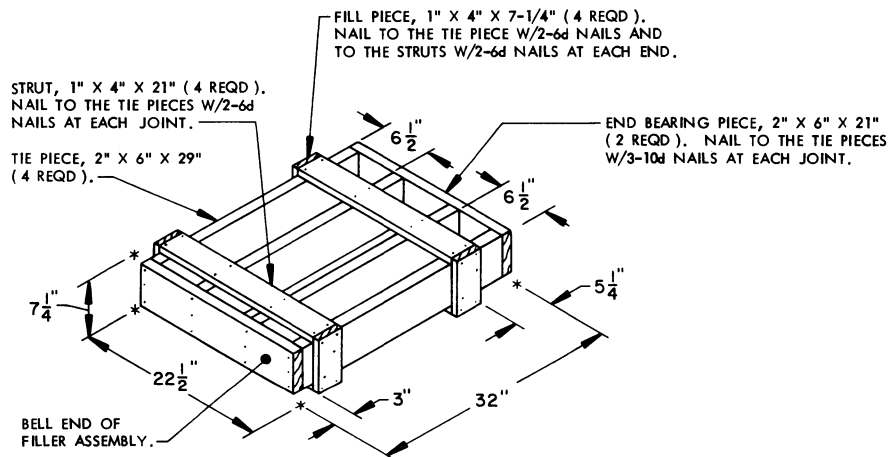
FILLER A

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



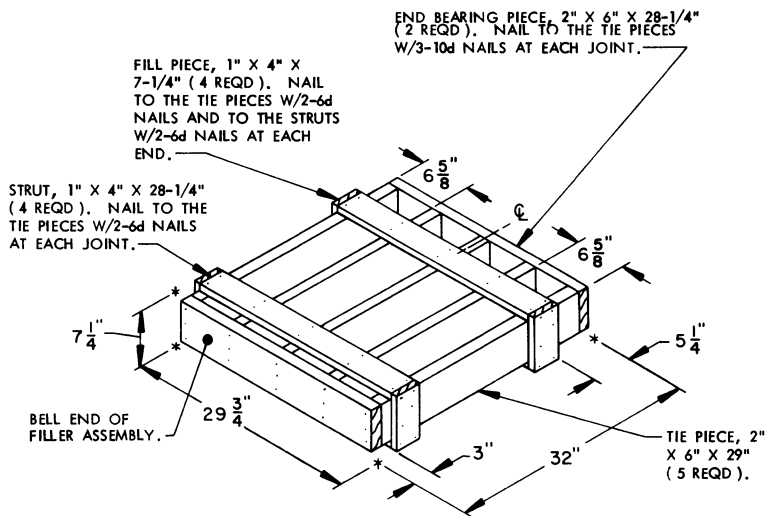
FILLER B

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



FILLER D

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

