

APPENDIX 9

UNITIZING PROCEDURES FOR PROPELLING CHARGES PACKED IN CYLINDRICAL METAL CONTAINERS ON 4-WAY ENTRY PALLETS

PA37 SERIES CONTAINERS

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PALLET UNIT DATA						
ITEMS INCLUDED		HAZARD CLASSIFICATION ①				WEIGHT (LBS)
NSN	DODIC	DOT CLASS	CG CLASS	QD CLASS	COMP GROUP	
1320-						
00-143-6847	D533	B	II-A	1.3	C	1,160
00-965-0554	D533	B	II-A	1.3	C	TO
01-051-4132	D533	B	II-A	1.3	C	
01-093-6856	D533	B	II-A	1.3	C	1,462
00-767-9441	D534	B	II-A	1.3	C	

① HAZARD CLASSIFICATION DATA CONTAINED IN THE CHART AT LEFT 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).

THIS DRAWING SUPERSEDES PART OF DRAWING 19-48-4042-1-2-5-11-14PM1000, DATED 8 FEBRUARY 1965, AND REVISION 1, THERETO, DATED 25 AUGUST 1969.

NOTICE: THIS APPENDIX CANNOT STAND ALONE BUT MUST BE USED IN CONJUNCTION WITH THE BASIC UNITIZATION PROCEDURES DRAWING 19-48-4042-20PM1001.

DO NOT SCALE

REVISIONS				DRAPTSMAN K.B. DAK	PROJ ENG WRE/ANWD
NO.	DATE	BY	REASON	CHECKER RSH	LOC ENGNG OFFICE AN
1	FEB 81	WRE/ANWD	Revised for D533-LEP D533-TMD		
2	MAR 84	WRE/ANWD	Revised for D533-LEP D533-TMD		
3	OCT 85	WRE/ANWD	Revised for D533-LEP D533-TMD		
4	AUG 88	WRE/ANWD	Revised for D533-LEP D533-TMD		
OCTOBER 1979					
			CLASS	DIVISION	DRAWING
			19	48	4042A/ 9
					FILE
					20PM 1001

GENERAL NOTES

- A. THIS APPENDIX CANNOT STAND ALONE BUT MUST BE USED IN CONJUNCTION WITH THE BASIC UNITIZING PROCEDURES DRAWING 19-48-4042-20PM1001. 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, REVISION NO. 1.
- 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 PA37 SERIES CONTAINER. THE EXPLOSIVE CLASSIFICATION OF OTHER ITEMS MAY BE DIFFERENT THAN THOSE SHOWN.
- G. FOR DETAILS OF THE PA37 SERIES CONTAINER SEE PICATINNY ARSENAL DRAWING NO. 9234357.
- CONTAINER DIMENSIONS ----- 32-3/4" LONG BY 8-13/32" DIAMETER.
CONTAINER CUBE ----- 1.1 CUBIC FEET.
CONTAINER WEIGHT (WITH CHARGE) ----- 42 LBS (APPROX).
- H. THE SPECIFIED UNITIZING PROCEDURES SHOWN HEREIN DEPICT THREE DIFFERENT METHODS FOR UNITIZING THE PA37 SERIES CONTAINERS:
1. UNIT "A" DEPICTS CONTAINERS UNITIZED ON FLAT DUNNAGE WITH EVERY OTHER CONTAINER ALTERNATED (BASE END, BELL END, BASE END) INDIVIDUALLY AND BY LAYERS. SEE DETAILS ON PAGES 4 THRU 7.
 2. UNIT "B" DEPICTS CONTAINERS UNITIZED ON FLAT DUNNAGE. SEE DETAILS ON PAGES 8 AND 9.
 3. UNIT "C" DEPICTS CONTAINERS UNITIZED ON ROUTED DUNNAGE. SEE DETAILS ON PAGES 10 AND 11.
- ALTHOUGH UNIT "A" DEPICTS THE PREFERRED METHOD OF UNITIZING THE PA37 SERIES CONTAINERS, ALL THREE METHODS ARE APPROVED FOR USE.
- J. IF DEEMED MORE ECONOMICAL FOR SHIPPING AND STORAGE BY THE RESPONSIBLE COMMAND, THE UNITS DEPICTED ON THE FOLLOWING PAGES MAY HAVE ONE COMPLETE LAYER OF CONTAINERS EITHER ADDED OR DELETED, WHICHEVER IS APPLICABLE. FOR FURTHER UNITIZATION GUIDANCE, SEE SPECIAL NOTE 1 ON PAGES 4, 8, AND 10.
- K. THE STYLE 1A PALLET DELINEATED IN THE DETAILS ON PAGES 4 THRU 11 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.

REVISIONS

REVISION NO. 1, DATED FEBRUARY 1987, CONSISTS OF:

1. ADDING FIVE COL TUBERT TO UNIT B (FLAT UNIT) AND CHANGING UNITIZATION PROCEDURES.
2. CHANGING DIMENSIONS ON FILLER ASSEMBLIES FOR FLAT AND ROUTED DUNNAGE UNITS.
3. ADDING SPECIAL NOTE 2 ON PAGES 4, 8 AND 10.

REVISION NO. 2, DATED MARCH 1984, CONSISTS OF:

1. ADDING ITEM BY NATIONAL STOCK NUMBER TO THE "PALLET UNIT DATA" CHART.
2. ADDING HAZARD CLASSIFICATION NOTE.

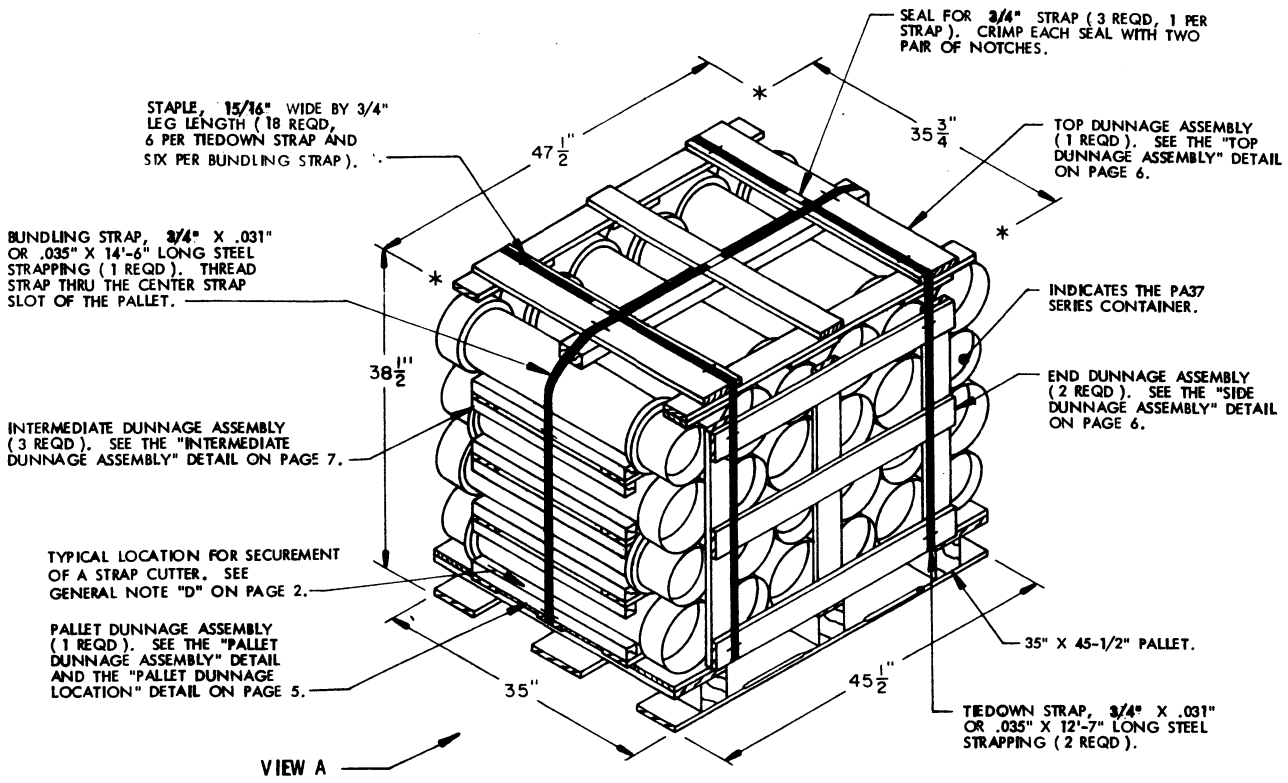
REVISION NO. 3, DATED OCTOBER 1985, CONSISTS OF:

1. CHANGING CONTAINER WEIGHT.
2. UPDATING PALLET UNITS TO CONFORM TO 1 ABOVE.

REVISION NO. 4, DATED AUGUST 1988, CONSISTS OF:

1. CHANGING "TOP DUNNAGE ASSEMBLY" FOR UNIT A.
2. UPDATING PALLET UNIT A (ALTERNATED CONTAINERS) TO CONFORM TO 1 ABOVE.
3. ADDING ITEMS BY NATIONAL STOCK NUMBER TO THE "PALLET UNIT DATA" CHART.

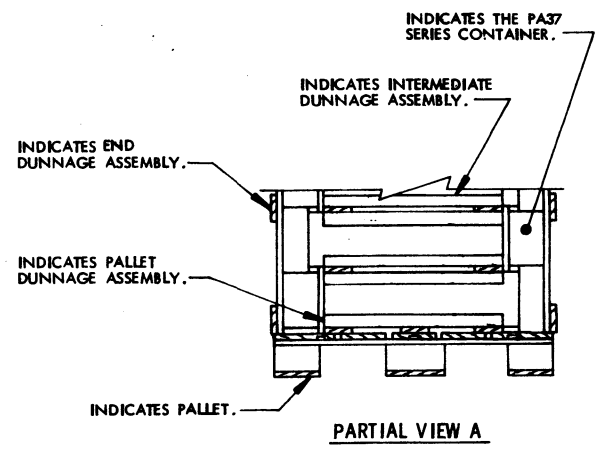
THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK.

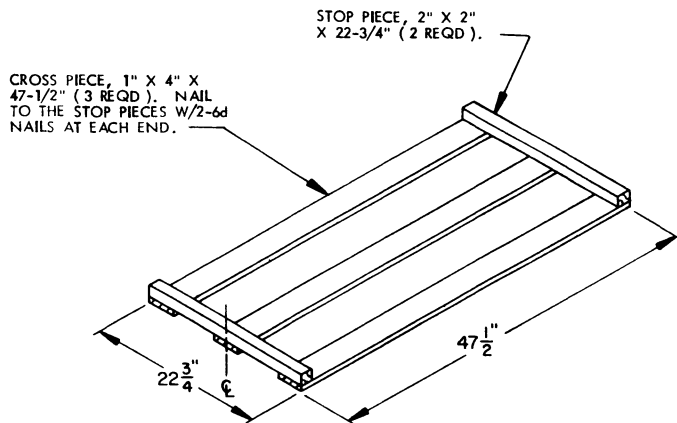


ISOMETRIC VIEW

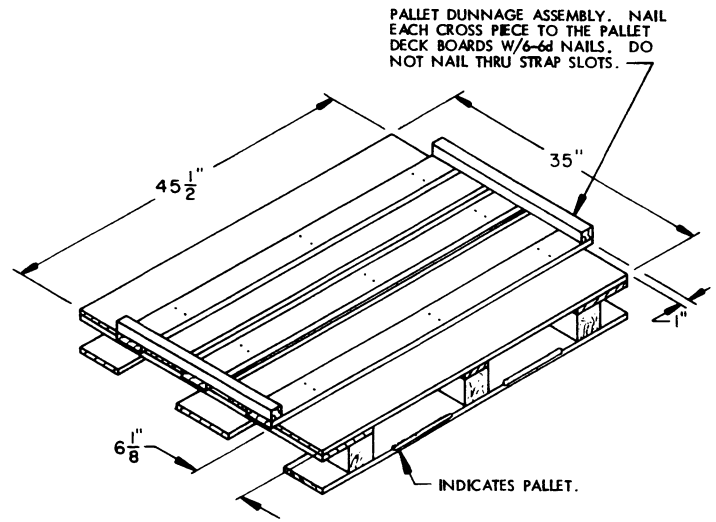
SPECIAL NOTE:

1. THE UNIT DEPICTED ABOVE MAY BE INCREASED BY ONE COMPLETE LAYER OF CONTAINERS BY THE ADDITION OF ONE INTERMEDIATE DUNNAGE ASSEMBLY AND SIX CONTAINERS, BY MODIFYING TOP AND END DUNNAGE ASSEMBLIES APPROPRIATELY, AND BY INCREASING THE STRAP LENGTHS APPROPRIATELY. THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 46- $1/8$ ".
2. 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 VARIANCE OF CONTAINER DIMENSIONS, ADJUSTMENTS MAY BE REQUIRED AS TO THE LOCATION OF CERTAIN PIECES OF DUNNAGE IN A DUNNAGE ASSEMBLY.





PALLET DUNNAGE ASSEMBLY
(1 REQD)



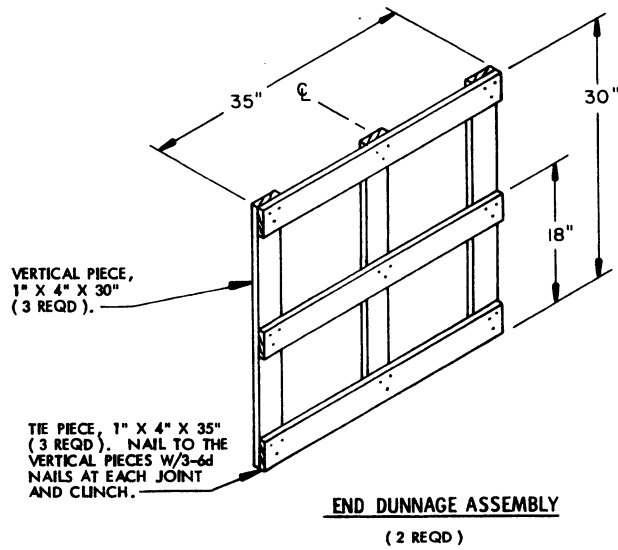
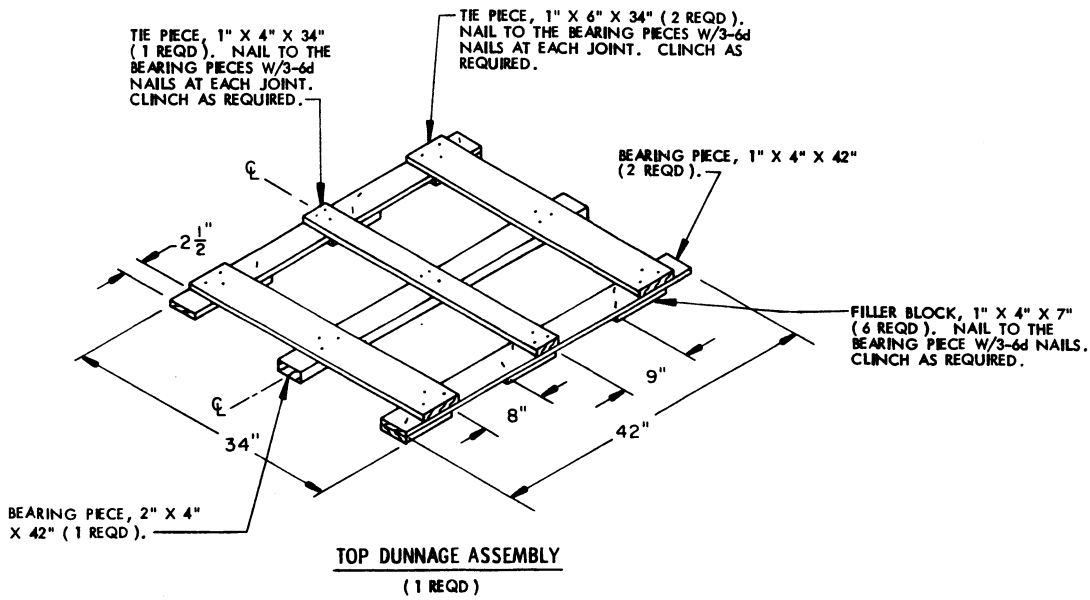
PALLET DUNNAGE LOCATION

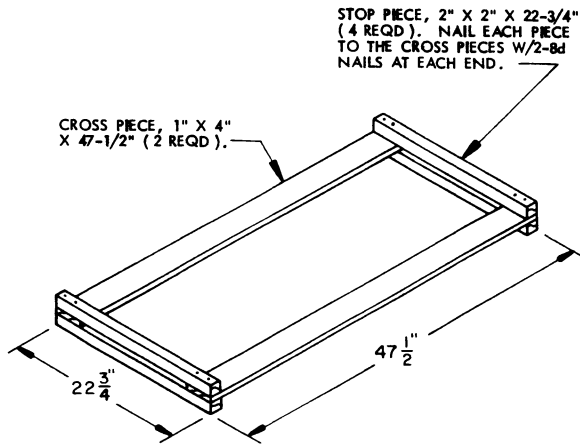
BILL OF MATERIAL			
LUMBER	NO. REQD	LINEAR FEET	BOARD FEET
1" X 4" X 7"	6	3.50	1.17
1" X 4" X 30"	6	15.00	5.00
1" X 4" X 34"	1	2.83	0.94
1" X 4" X 35"	6	17.50	5.83
1" X 4" X 42"	2	7.00	2.33
1" X 4" X 47-1/2"	9	35.63	11.88
1" X 6" X 34"	2	5.67	2.83
2" X 2" X 22-3/4"	14	26.54	8.85
2" X 4" X 42"	1	4.20	1.33
NAILS		NO. REQD	POUND.
6d (2")		129	0.76
8d (2-1/2")		48	0.51
PALLET, 35" X 45-1/2"		1 REQD	65 LBS
STEEL STRAPPING, 3/4" X .031" OR .035"		39.67' REQD	2.08 LBS
SEAL FOR 3/4" STRAP		3 REQD	NIL
STAPLE, 15/16" X 3/4"		10 REQD	NIL

UNIT DATA

WEIGHT

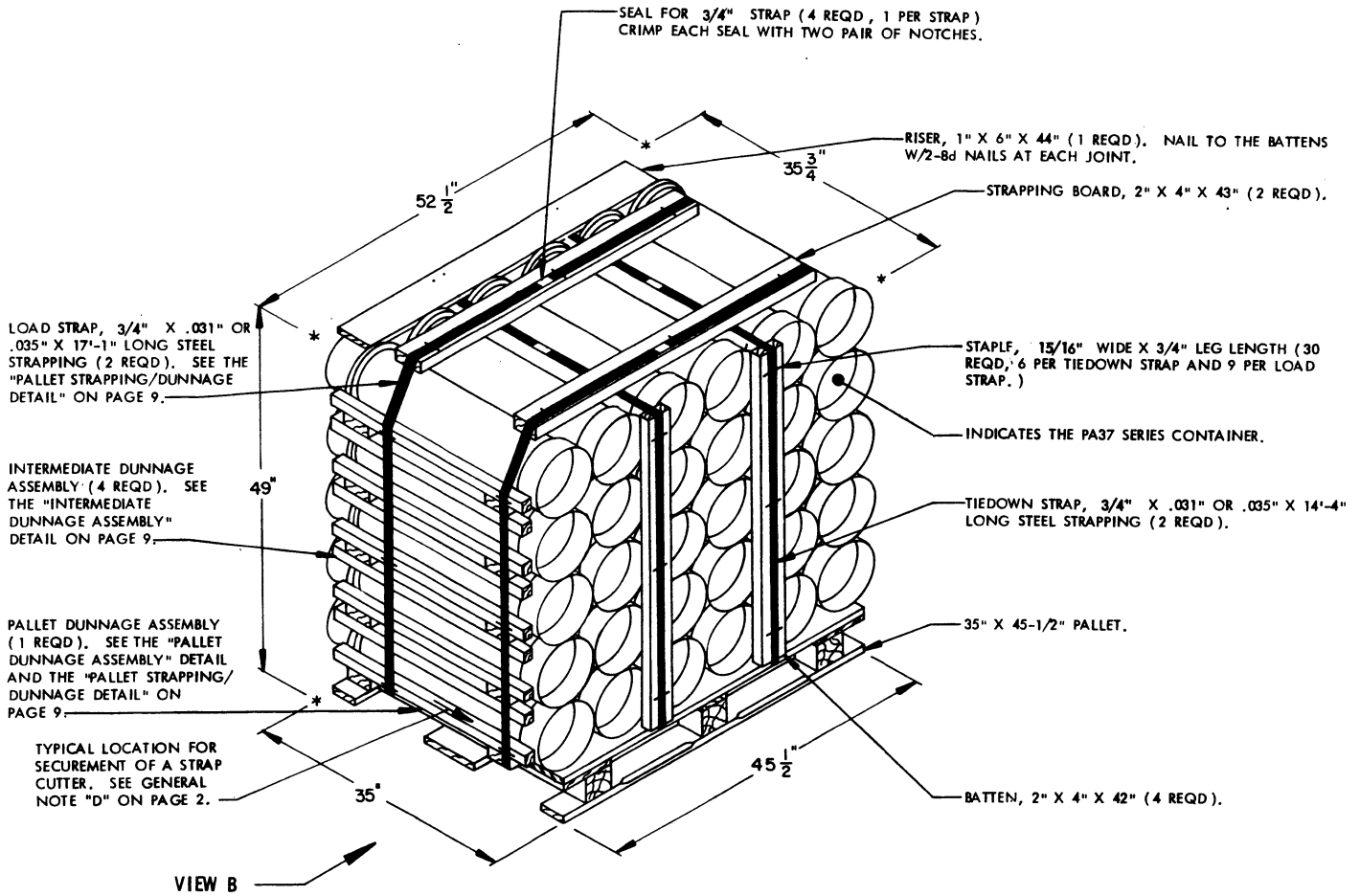
CUBE	-----37.8 CUBIC FEET (APPROX)	
CONTAINER, PA37 SERIES	----- 24 EACH @ 42 LBS	1,008 LBS (APPROX)
DUNNAGE	-----	87 LBS
PALLET	-----	65 LBS
TOTAL WEIGHT -----		1,160 LBS (APPROX)





INTERMEDIATE DUNNAGE ASSEMBLY

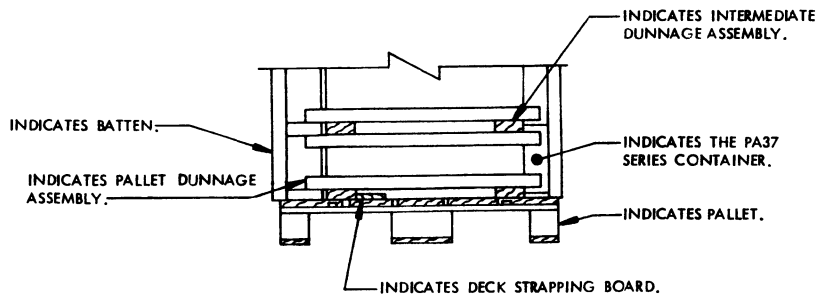
(3 REQD)



ISOMETRIC VIEW

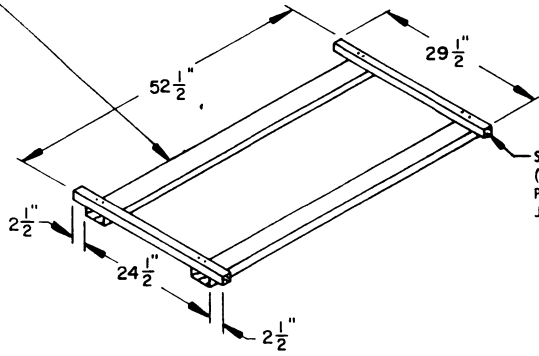
SPECIAL NOTES:

1. THE UNIT DEPICTED ABOVE MAY BE REDUCED BY ONE COMPLETE LAYER OF CONTAINERS BY THE DELETION OF ONE INTERMEDIATE DUNNAGE ASSEMBLY AND SIX CONTAINERS, AND BY DECREASING STRAP LENGTHS APPROPRIATELY. THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 40-5/8".
2. 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 VARIANCE OF THE CONTAINER DIMENSIONS, ADJUSTMENTS MAY BE REQUIRED AS TO THE LOCATION OF CERTAIN PIECES OF DUNNAGE IN A DUNNAGE ASSEMBLY.



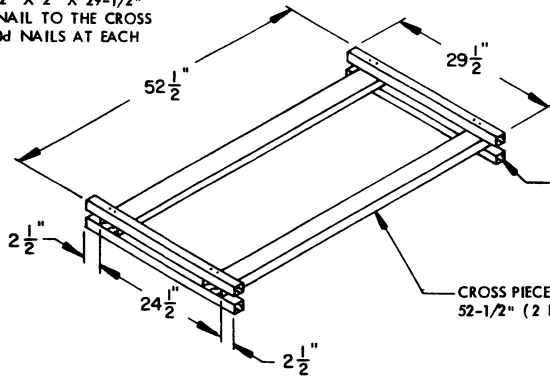
PARTIAL VIEW B

CROSS PIECE, 2" X 4" X 52-1/2" (2 REQD).



PALLET DUNNAGE ASSEMBLY
(1 REQD)

STOP PIECE, 2" X 2" X 29-1/2" (2 REQD). NAIL TO THE CROSS PIECES W/2-10d NAILS AT EACH JOINT.

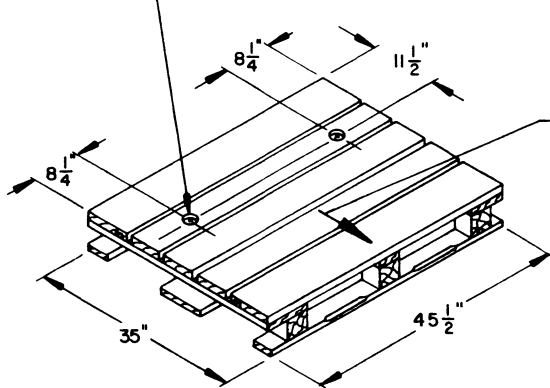


INTERMEDIATE DUNNAGE ASSEMBLY
(4 REQD)

STOP PIECE, 2" X 2" X 29-1/2" (4 REQD). NAIL TO THE CROSS PIECES W/2-10d NAILS AT EACH JOINT.

CROSS PIECE, 2" X 4" X 52-1/2" (2 REQD).

2" DIAMETER HOLE, 2 PLACES. HOLES MUST BE DRILLED PRIOR TO NAILING THE DUNNAGE ON THE PALLET DECK.



PALLET WITH PREDRILLED HOLES

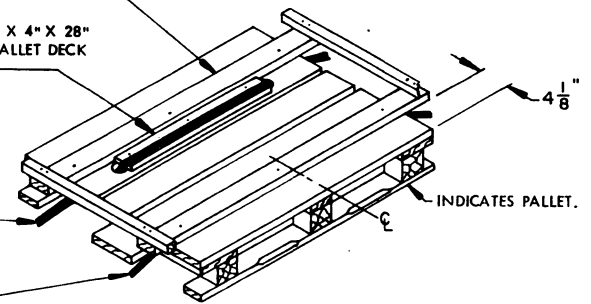
INDICATES BELL END OF CONTAINER.

PALLET DUNNAGE ASSEMBLY. NAIL EACH CROSS PIECE TO THE PALLET DECK W/3-8d NAILS. DO NOT NAIL THRU THE STRAP SLOTS.

DECK STRAPPING BOARD, 1" X 4" X 28" (1 REQD). NAIL TO THE PALLET DECK W/3-6d NAILS.

LOAD STRAP POSITIONED PRIOR TO PLACING THE CONTAINERS ON THE PALLET.

LOAD STRAP THREADED THRU STRAP SLOT.



PALLET STRAPPING/DUNNAGE DETAIL

BILL OF MATERIAL

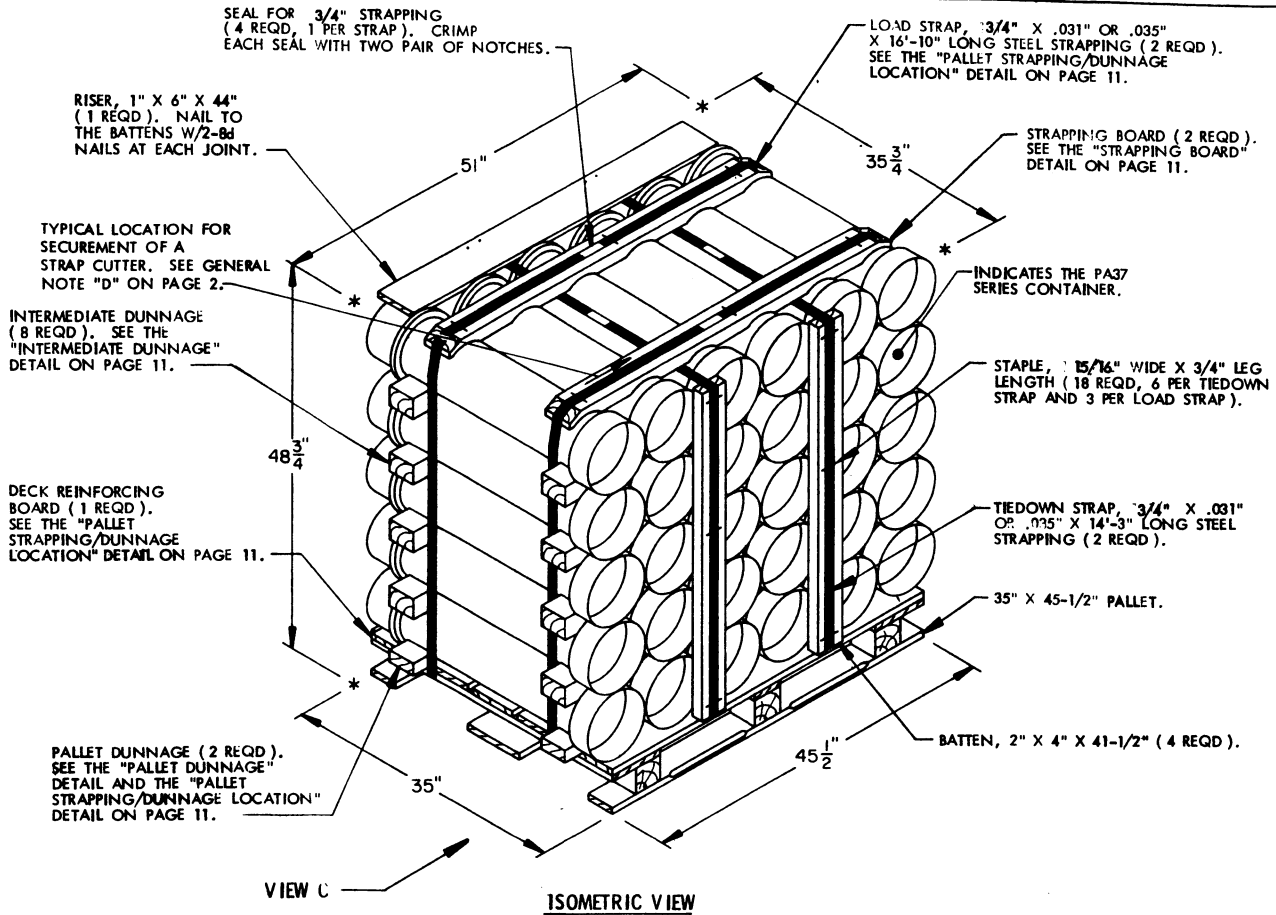
LUMBER	NO. REQD	LINEAR FEET	BOARD FEET
1" X 4" X 28"	1	2.33	0.78
1" X 6" X 44"	1	3.67	1.84
2" X 2" X 29-1/2"	18	44.25	14.75
2" X 4" X 42"	4	14.00	9.33
2" X 4" X 43"	2	7.17	4.78
2" X 4" X 52-1/2"	10	43.75	29.17
NAILS		NO. REQD	POUNDS
6d (2")	3		0.02
8d (2-1/2")	10		0.11
10d (3")	72		1.11
PALLET, 35" X 45-1/2"		1 REQD	65 LBS
STEEL STRAPPING, 3/4" X .031" OR .035"		62.83' REQD	4.49 LBS
SEAL FOR 3/4" STRAP		4 REQD	NIL
STAPLE, 15/16" X 3/4"		30 REQD	NIL

UNIT DATA

WEIGHT

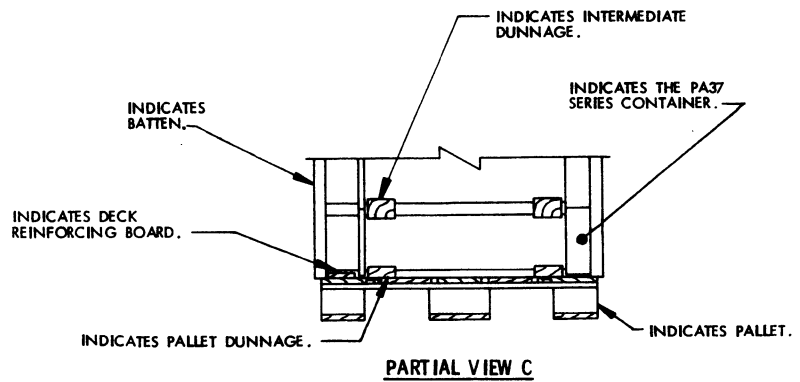
CUBE-----53.2 CUBIC FEET (APPROX)
 CONTAINER, PA37 SERIES ---30 EACH @ 42 LBS-----1,260 LBS (APPROX)
 DUNNAGE -----127 LBS
 PALLET-----65 LBS

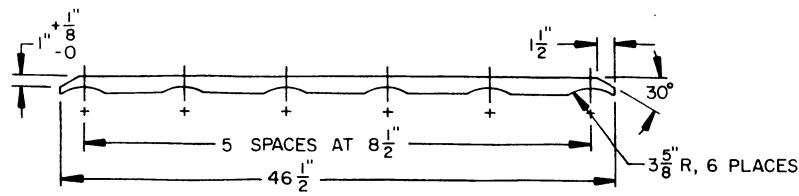
TOTAL WEIGHT ----- 1,452 LBS (APPROX)



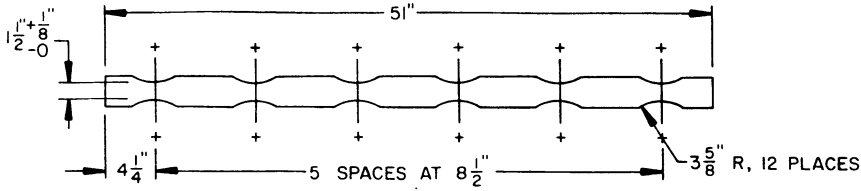
SPECIAL NOTE:

1. THE UNIT DEPICTED ABOVE MAY BE REDUCED BY ONE COMPLETE LAYER OF CONTAINERS BY THE DELETION OF TWO INTERMEDIATE DUNNAGE PIECES AND SIX CONTAINERS, AND BY DECREASING STRAP LENGTHS APPROPRIATELY. THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 40-3/8".
2. DIMENSIONS GIVEN FOR DUNNAGE PIECES WILL BE FIELD CHECKED PRIOR TO THEIR ASSEMBLY TO THE PALLET UNIT. CONTAINERS MUST FIT SNUGLY IN THE DUNNAGE PIECES. ALSO, DUE TO THE VARIANCE OF CONTAINER DIMENSIONS, ADJUSTMENTS MAY BE REQUIRED AS TO THE LOCATION OF CERTAIN PIECES OF DUNNAGE.

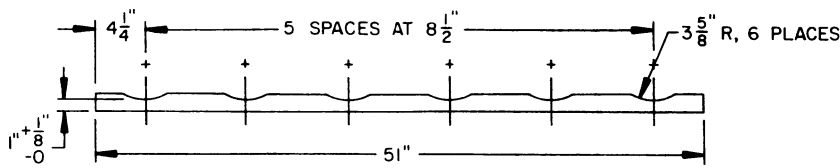




STRAPPING BOARD 2" X 4" MATERIAL (2 REQD)



INTERMEDIATE DUNNAGE 3" X 4" MATERIAL (8 REQD)



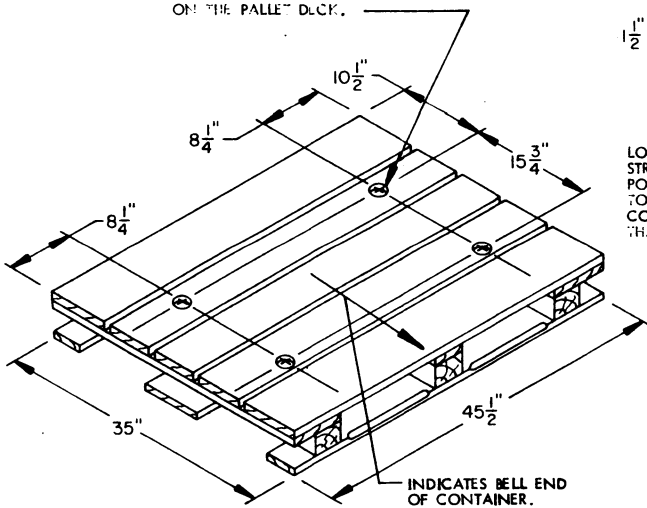
PALLET DUNNAGE
2" X 4" MATERIAL (2 REQD)

2" DIAMETER HOLE, 4 PLACES. HOLES MUST BE DRILLED PRIOR TO NAILING THE DUNNAGE ON THE PALLET DECK.

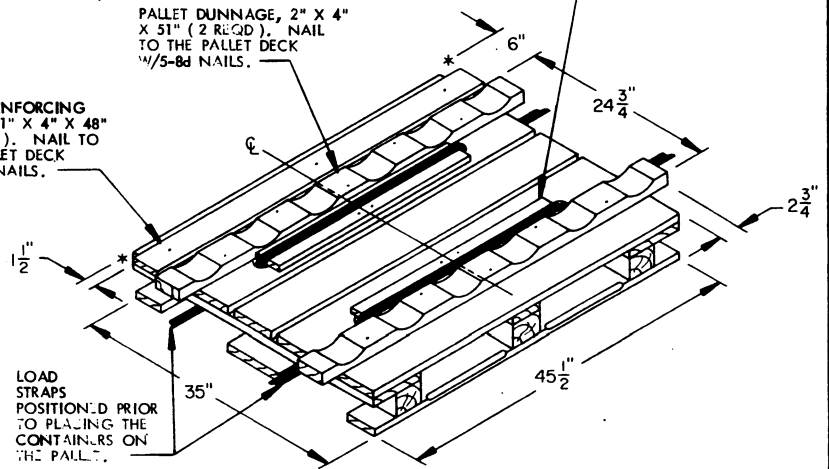
DECK REINFORCING BOARD, 1" X 4" X 48" (1 REQD). NAIL TO THE PALLET DECK W/3-6d NAILS.

PALLET DUNNAGE, 2" X 4" X 51" (2 REQD). NAIL TO THE PALLET DECK W/5-8d NAILS.

DECK REINFORCING STRAPPING BOARD, 1" X 4" X 28" (2 REQD). NAIL TO THE PALLET DECK W/2-6d NAILS.



PALLET WITH PREDRILLED HOLES



PALLET STRAPPING/DUNNAGE DETAIL

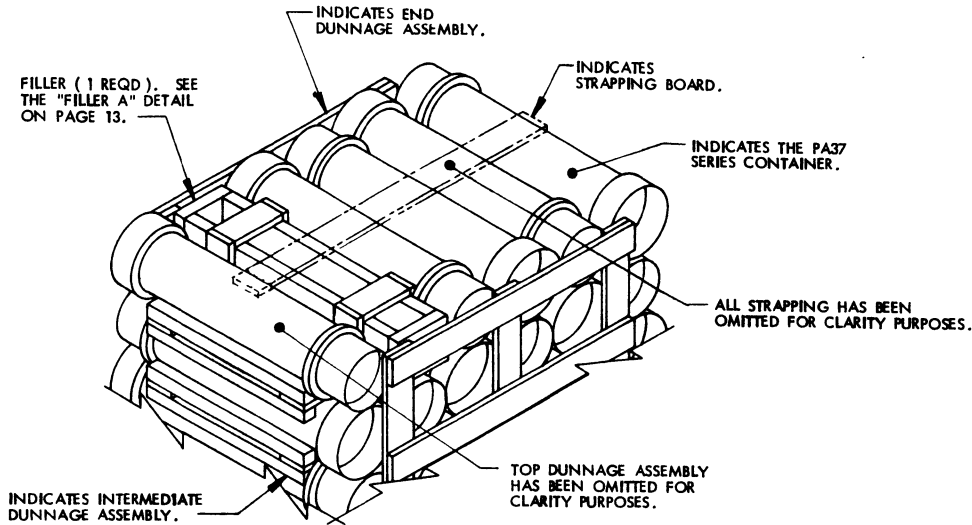
BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	8.67	2.89
1" X 6"	3.67	1.83
2" X 4"	15.92	10.61
3" X 4"	34.00	34.00
NAILS	NO. REQD	POUNDS
6d (2")	7	0.04
8d (2-1/2")	14	0.15
PALLET, 35" X 45-1/2"	1 REQD	65 LBS
STEEL STRAPPING, 3/4"	62.17' REQD	4.44 LBS
SEAL FOR STRAPPING, 3/4"	4 REQD	NIL
STRAP STAPLE, 15/16"	18 REQD	NIL

UNIT DATA

WEIGHT

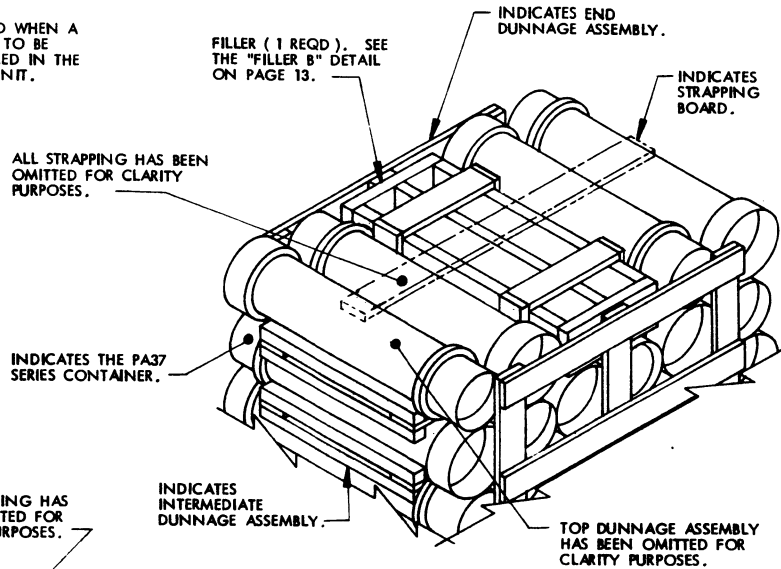
CUBE -----	51.4 CUBIC FEET (APPROX)	
CONTAINER, PA37 SERIES -----	30 EACH @ 42 LBS	1,260 LBS (APPROX)
DUNNAGE -----		104 LBS
PALLET -----		65 LBS

TOTAL WEIGHT ----- 1,429 LBS (APPROX)



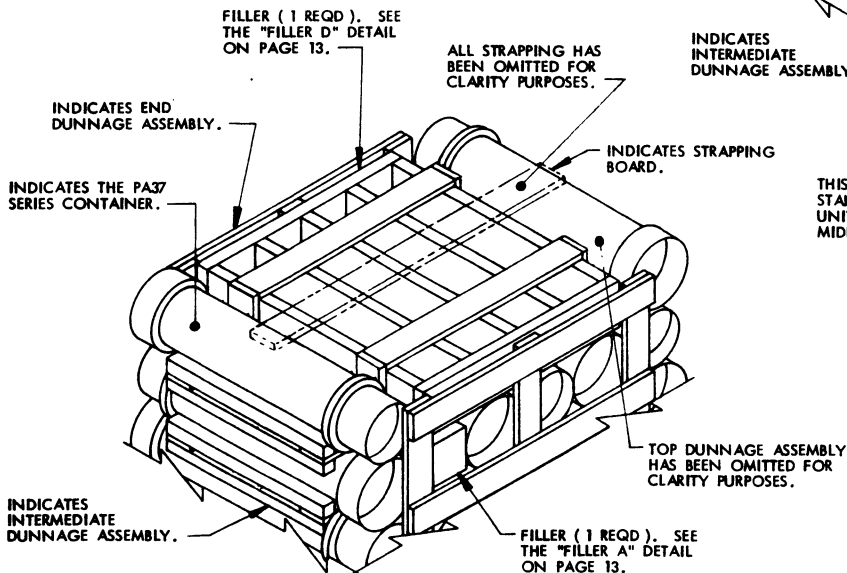
DETAIL A

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



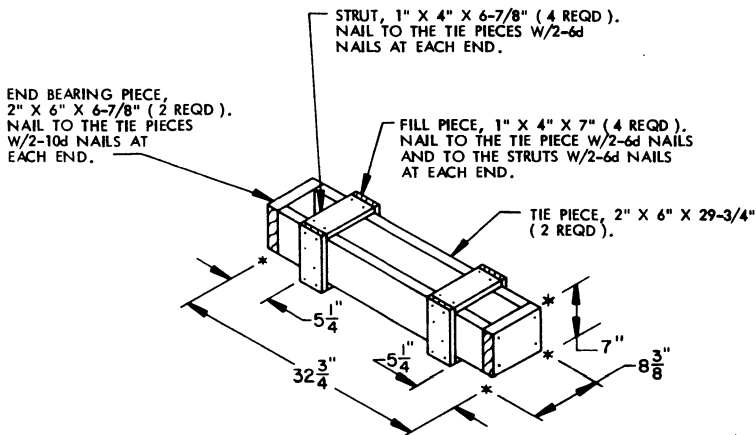
DETAIL B

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



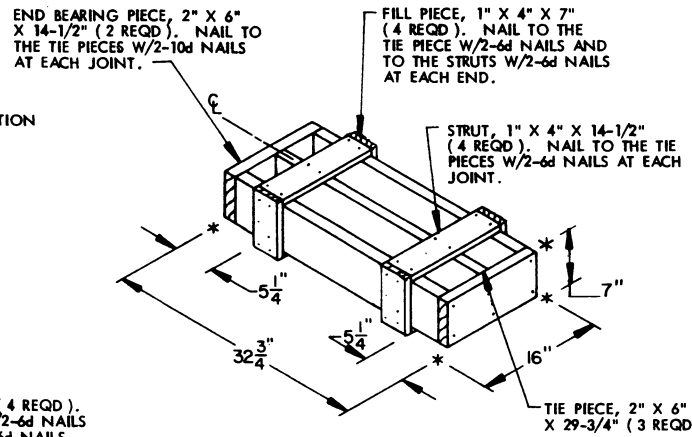
DETAIL C

THIS DETAIL DEPICTS PROCEDURES TO BE USED WHEN A STANDARD UNIT MINUS FIVE CONTAINERS IS TO BE UNITIZED. THESE ASSEMBLIES MUST BE INSTALLED IN THE MIDDLE OF THE TOP LAYER OR LAYERS OF A PALLET UNIT. WHEN SIX CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT, A COMPLETE LAYER OF CONTAINERS MUST BE OMITTED. A COMBINATION OF FILLERS MUST BE USED WHEN FIVE CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT. A COMBINATION OF FILLERS OR ONE OF THE FILLERS DEPICTED ON PAGE 13 MAY BE USED WHEN FOUR OR LESS CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT. ALL FILLER ASSEMBLIES MUST BE INSTALLED IN THE MIDDLE OF THE TOP LAYER OR LAYERS OF A PALLET UNIT.



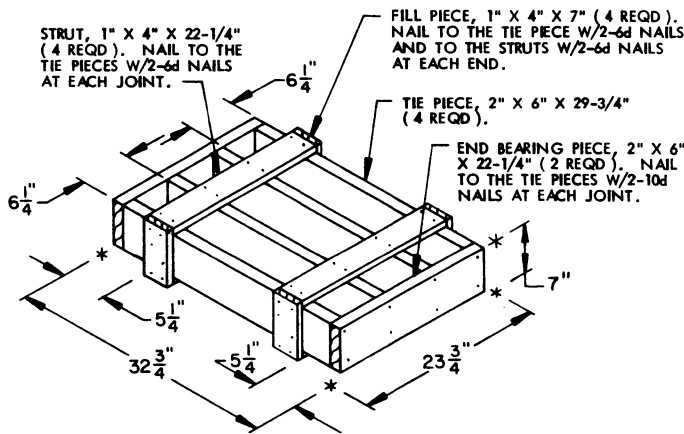
FILLER A

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



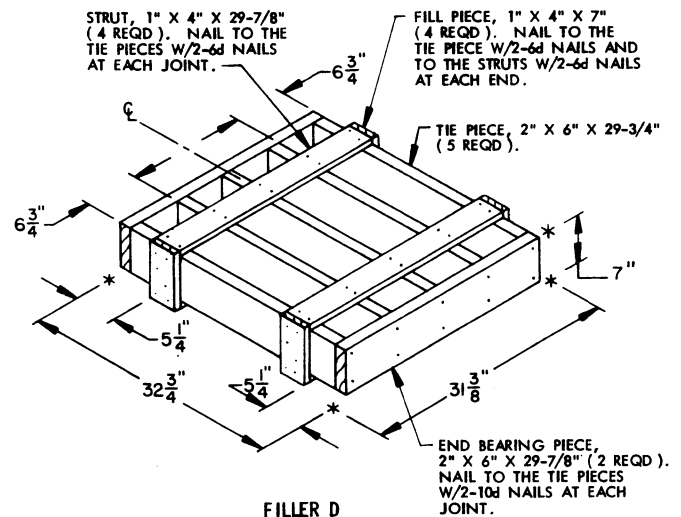
FILLER B

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



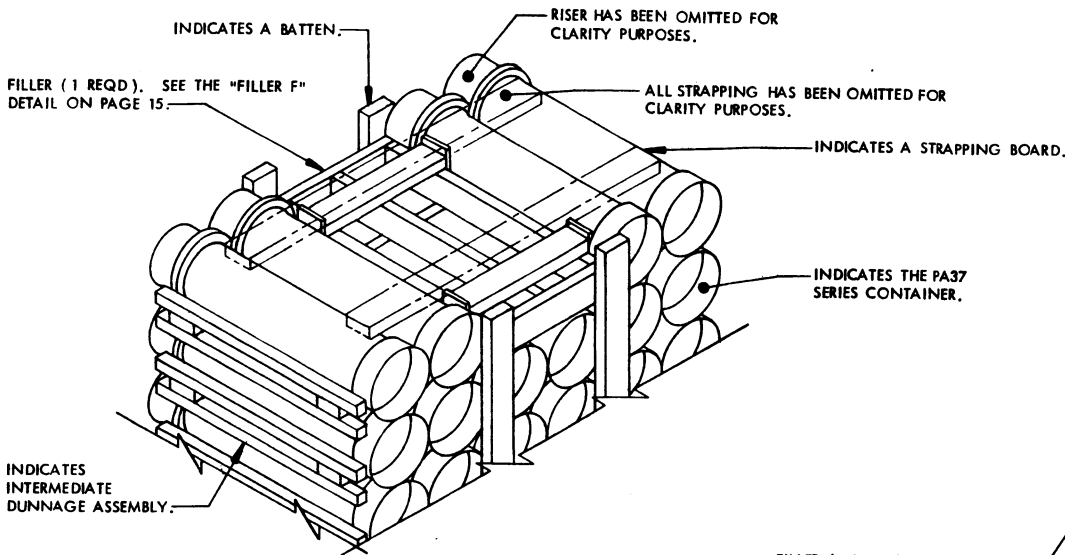
FILLER C

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



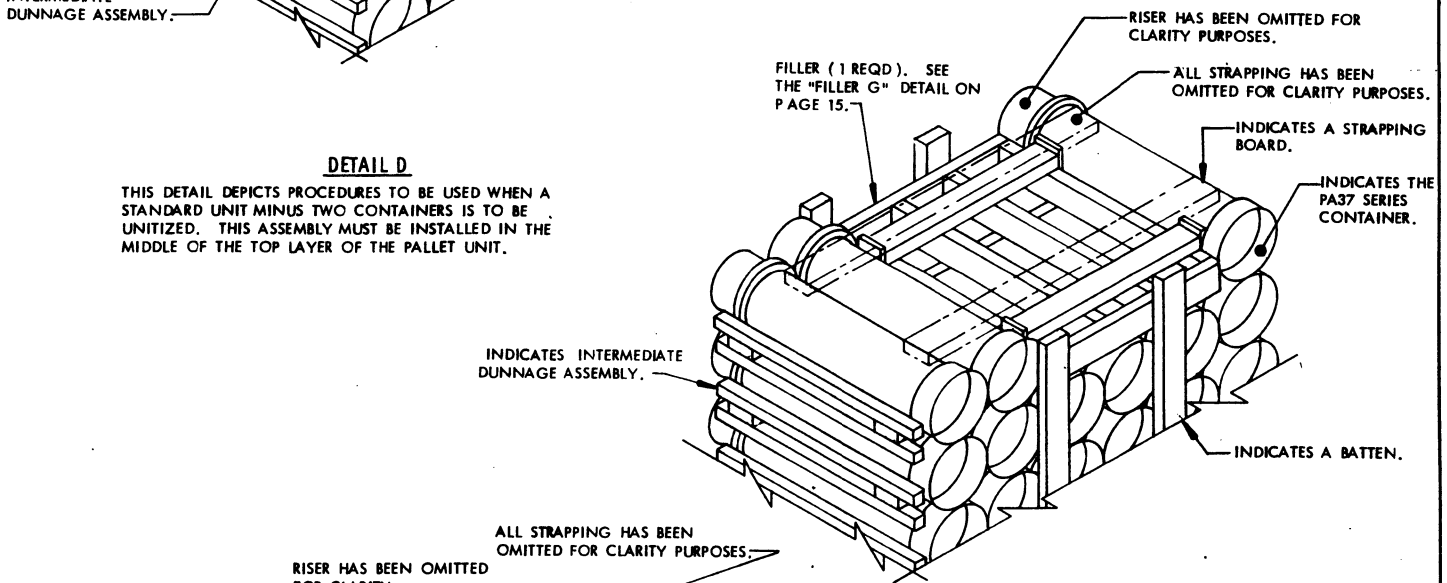
FILLER D

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



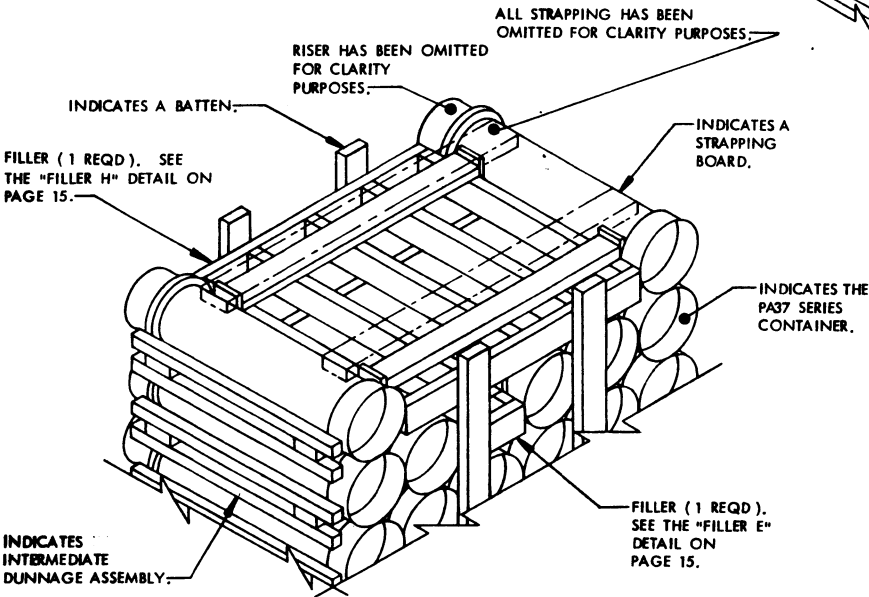
DETAIL D

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



DETAIL E

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



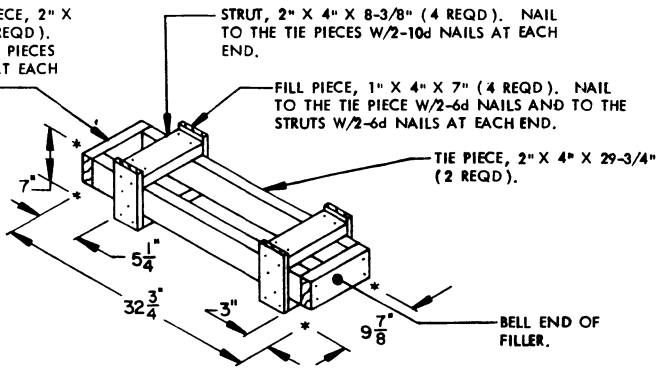
DETAIL F

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

SPECIAL NOTES:

1. WHEN SIX CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT, A COMPLETE LAYER OF CONTAINERS MUST BE OMITTED. A COMBINATION OF FILLERS MUST BE USED WHEN FIVE CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT. A COMBINATION OF FILLERS OR ONE OF THE FILLERS DEPICTED ON PAGE 15 MAY BE USED WHEN FOUR OR LESS CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT. ALL FILLERS MUST BE INSTALLED IN THE MIDDLE OF THE TOP LAYER OR LAYERS OF A PALLET UNIT.
2. WHEN USING FILLER ASSEMBLIES FOR OMITTED CONTAINERS IN A PALLET UNIT, THE LENGTH OF THE BATTENS MUST BE ADJUSTED SO THAT TIGHTENING OF THE TIEDOWN STRAPS DOES NOT DAMAGE (I.E. BREAK OR SPLIT) THE ENDS OF THE BATTENS.

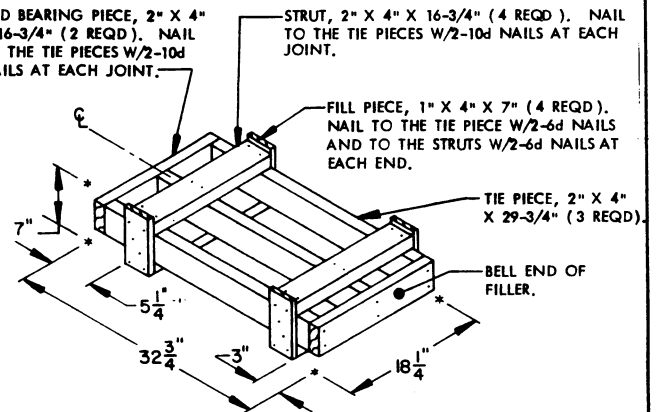
END BEARING PIECE, 2" X 4" X 8-3/8" (2 REQD). NAIL TO THE TIE PIECES W/2-10d NAILS AT EACH END.



FILLER E

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

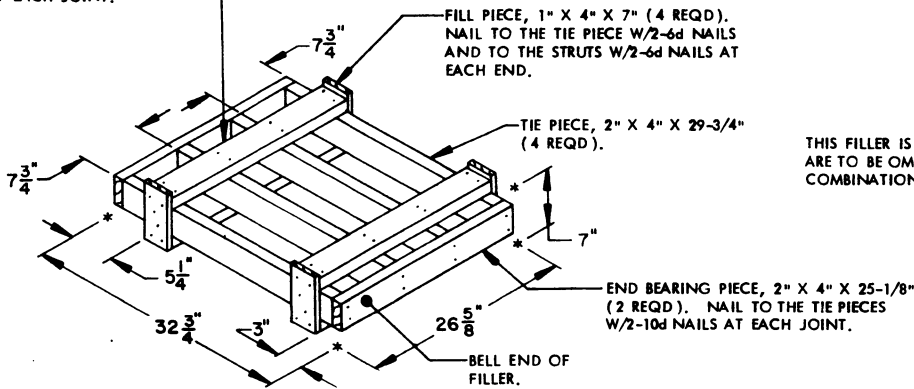
END BEARING PIECE, 2" X 4" X 16-3/4" (2 REQD). NAIL TO THE TIE PIECES W/2-10d NAILS AT EACH JOINT.



FILLER F

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

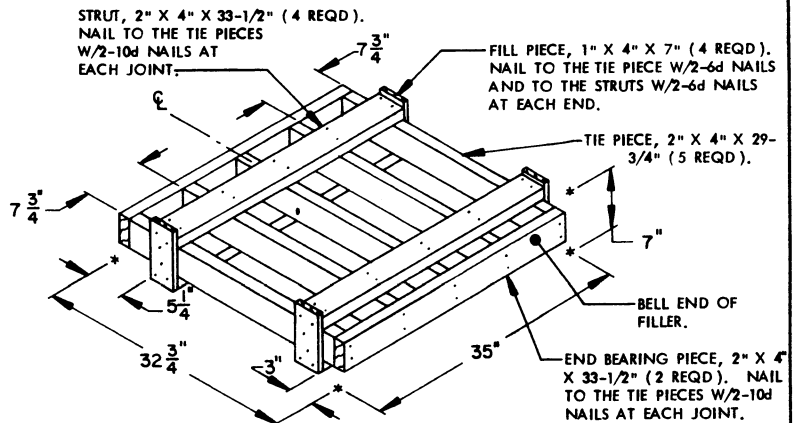
STRUT, 2" X 4" X 25-1/8" (4 REQD). NAIL TO THE TIE PIECES W/2-10d NAILS AT EACH JOINT.



FILLER G

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

STRUT, 2" X 4" X 33-1/2" (4 REQD). NAIL TO THE TIE PIECES W/2-10d NAILS AT EACH JOINT.



FILLER H

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

FILLER (1 REQD), SEE THE "FILLER J" DETAIL ON PAGE 17.

RISER HAS BEEN OMITTED FOR CLARITY PURPOSES.

ALL STRAPPING HAS BEEN OMITTED FOR CLARITY PURPOSES.

INDICATES A STRAPPING BOARD.

INDICATES THE PA37 SERIES CONTAINER.

INDICATES INTERMEDIATE DUNNAGE.

INDICATES A BATTEN.

DETAIL G

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

FILLER (1 REQD), SEE THE "FILLER K" DETAIL ON PAGE 17.

RISER HAS BEEN OMITTED FOR CLARITY PURPOSES.

INDICATES A STRAPPING BOARD.

INDICATES INTERMEDIATE DUNNAGE.

ALL STRAPPING HAS BEEN OMITTED FOR CLARITY PURPOSES.

INDICATES A BATTEN.

INDICATES THE PA37 SERIES CONTAINER.

DETAIL H

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

FILLER (1 REQD), SEE THE "FILLER L" DETAIL ON PAGE 17.

RISER HAS BEEN OMITTED FOR CLARITY PURPOSES.

INDICATES A STRAPPING BOARD.

INDICATES A BATTEN.

INDICATES THE PA37 SERIES CONTAINER.

INDICATES INTERMEDIATE DUNNAGE.

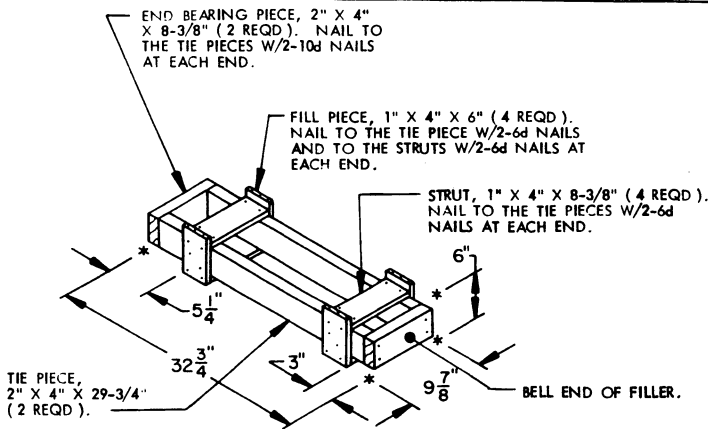
ALL STRAPPING HAS BEEN OMITTED FOR CLARITY PURPOSES.

DETAIL J

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

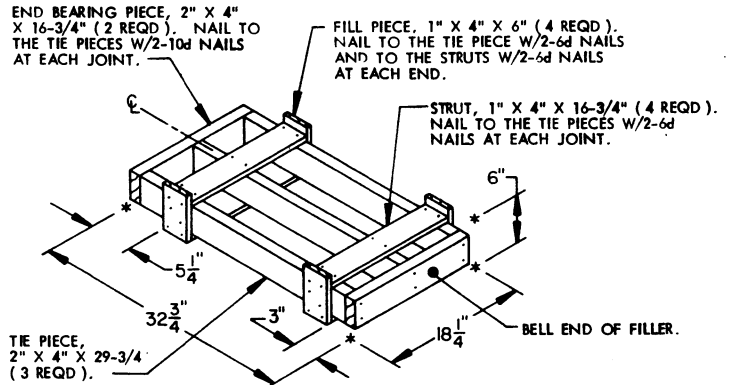
SPECIAL NOTES:

1. WHEN SIX CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT, A COMPLETE LAYER OF CONTAINERS MUST BE OMITTED. A COMBINATION OF FILLERS MUST BE USED WHEN FIVE CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT. A COMBINATION OF FILLERS OR ONE OF THE FILLERS DEPICTED ON PAGE 17 MAY BE USED WHEN FOUR OR LESS CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT. ALL FILLERS MUST BE INSTALLED IN THE MIDDLE OF THE TOP LAYER OR LAYERS OF A PALLET UNIT.
2. WHEN USING FILLER ASSEMBLIES FOR OMITTED CONTAINERS IN A PALLET UNIT, THE LENGTH OF THE BATTENS MUST BE ADJUSTED SO THAT TIGHTENING OF THE TIEDOWN STRAPS DOES NOT DAMAGE (I.E., BREAK OR SPLIT) THE ENDS OF THE BATTENS.



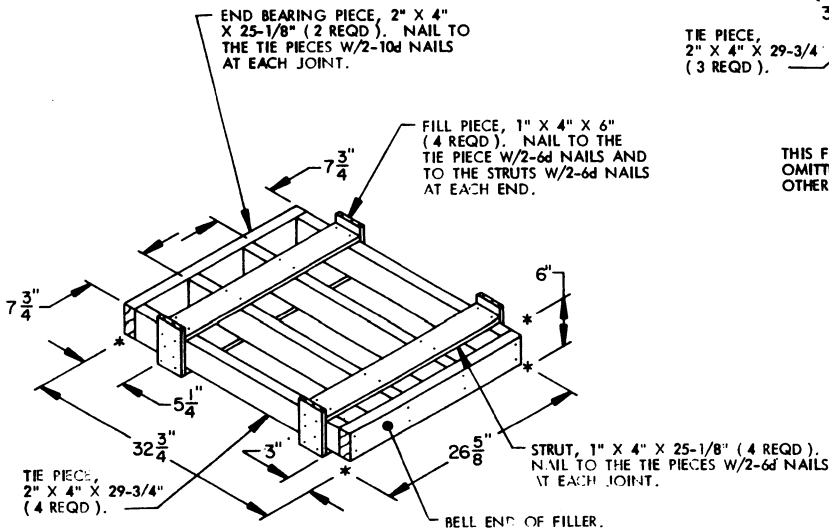
FILLER J

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



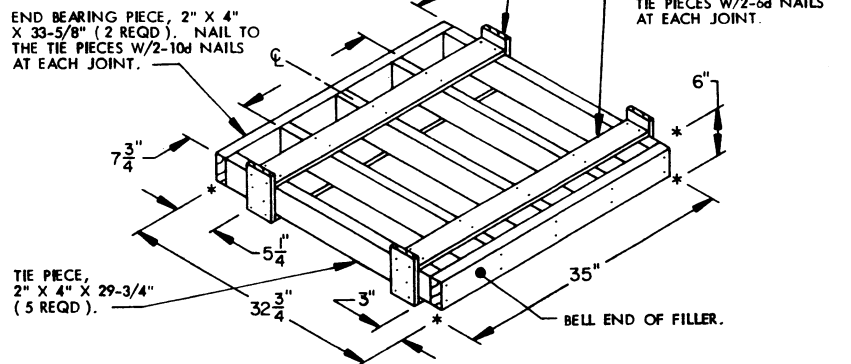
FILLER K

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



FILLER L

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



FILLER M

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

