

APPENDIX I

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

MIO SERIES CONTAINERS

INDEX

<u>ITEM</u>	<u>PAGE (S)</u>
GENERAL NOTES -----	2
UNIT A (ALTERNATED CONTAINERS):	
METHOD 1 -----	4, 5
METHOD 2 -----	6, 7
UNIT B (FLAT DUNNAGE) -----	8, 9
UNIT C (ROUTED DUNNAGE) -----	10, 11
FILLERS AND INSTALLATION PROCEDURES FOR OMITTED CONTAINERS:	
UNIT A (ALTERNATED CONTAINERS) -----	12, 13
UNITS B AND C (FLAT AND ROUTED DUNNAGE) -----	14, 15

PALLET UNIT DATA						
ITEMS INCLUDED		HAZARD CLASSIFICATION ①				WEIGHT (LBS).
nSN	DODIC	DOT CLASS	CG CLASS	QD CLASS	COMP GROUP	
1320-00-028-4377	D676	B	II-A	1.3	C	1,628 TO 2,123

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

THIS DRAWING SUPERSEDES PART OF DRAWING 19-48-4042-1-2-5-11-14PM1000, DATED FEBRUARY 1965, AND REVISION 1, THERETO, DATED 29 AUGUST 1969.

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).

DO NOT SCALE

REVISIONS				DRAFTSMAN	CHK	PROJ ENG	PROJ FILE
1	JUL 86	<i>W. F. Ernst</i>	SMCAR-ESK	<i>W. F. Ernst</i>	<i>W. F. Ernst</i>	<i>W. F. Ernst</i>	<i>W. F. Ernst</i>
2	AUG 88	<i>W. F. Ernst</i>	SMCAR-ESK	<i>W. F. Ernst</i>	<i>W. F. Ernst</i>	<i>W. F. Ernst</i>	<i>W. F. Ernst</i>
				APPROVED BY ORDER OF COMMANDING GENERAL, U. S. ARMY MATERIAL DEVELOPMENT AND READINESS COMMAND (DARCOM)			
				U. S. ARMY DARCOM DRAWING			
				OCTOBER 1979			
				CLASS	DIVISION	DRAWING	FILE
				19	48	4042A	20PM 1001

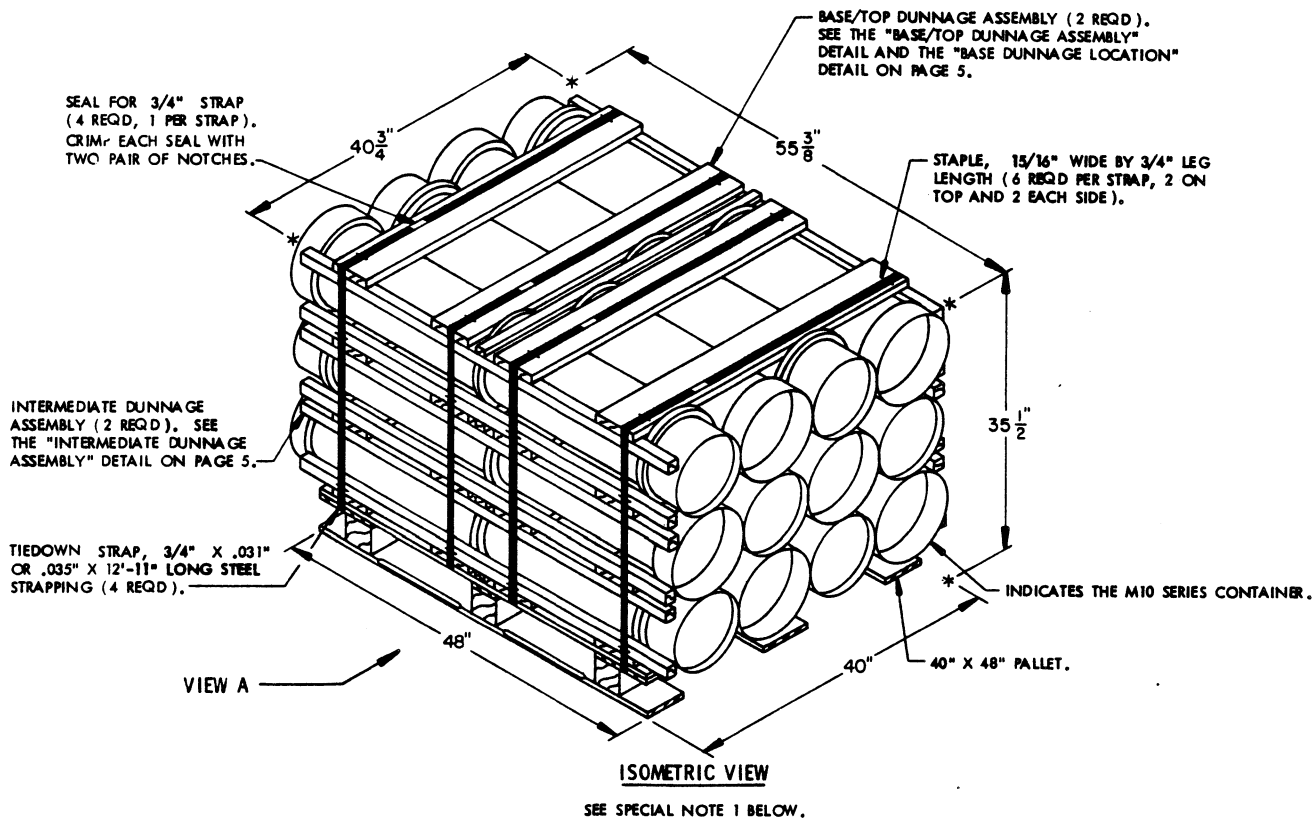
GENERAL NOTES

- 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. OUTLOADING AND STORAGE OF THE ITEMS COVERED BY THIS APPENDIX SHALL BE ACCOMPLISHED IN ACCORDANCE WITH AMC (DARCOM) DRAWINGS IDENTIFIED WITHIN DA PAMPHLET 75-5.
- 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 A DIFFERENT NATIONAL STOCK NUMBER (NSN) THAN THOSE SHOWN ON THE COVER PAGE, PROVIDED THE ITEM IS PACKED IN THE M10 SERIES CONTAINER. THE EXPLOSIVE CLASSIFICATION OF OTHER ITEMS MAY BE DIFFERENT THAN THOSE SHOWN.
- G. FOR DETAILS OF THE M10 SERIES CONTAINER SEE PICATINNY ARSENAL DRAWING NO. 8880533:
- CONTAINER DIMENSIONS ----- 55-3/8" LONG BY 10-1/2" DIAMETER.
CONTAINER CUBE ----- 2.8 CUBIC FEET.
CONTAINER WEIGHT
(WITH CHARGE) ----- 121 LBS (APPROX).
- H. THE SPECIFIED UNITIZING PROCEDURES SHOWN HEREIN DEPICTS THREE DIFFERENT METHODS FOR UNITIZING THE M10 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 M10 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 IN THE FOLLOWING PAGES MAY HAVE ONE COMPLETE LAYER OF CONTAINERS EITHER ADDED OR DELETED, WHICHEVER IS APPLICABLE. FOR FURTHER UNITIZATION GUIDANCE, SEE SPECIAL NOTE 2 ON PAGES 4, 6, 8, AND 10.
- K. THE STYLE 1 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

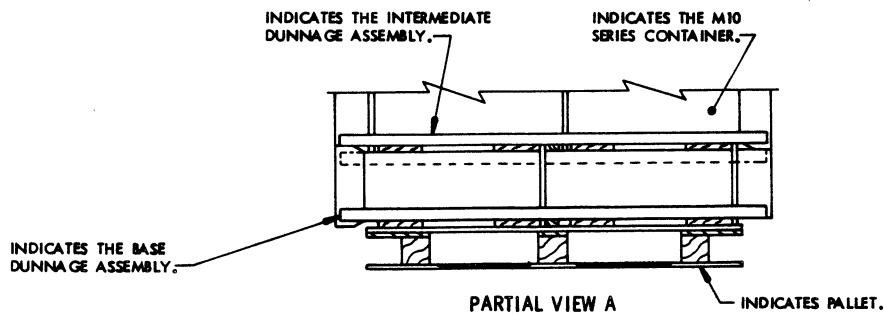
- REVISION NO. 1, DATED JULY 1986, CONSISTS OF:
- CHANGING 1-1/4" STRAPPING TO 3/4" STRAPPING.
- REVISION NO. 2, DATED AUGUST 1988, CONSISTS OF:
- DELETING ITEM BY NATIONAL STOCK NUMBER FROM THE "PALLET UNIT DATA" CHART.

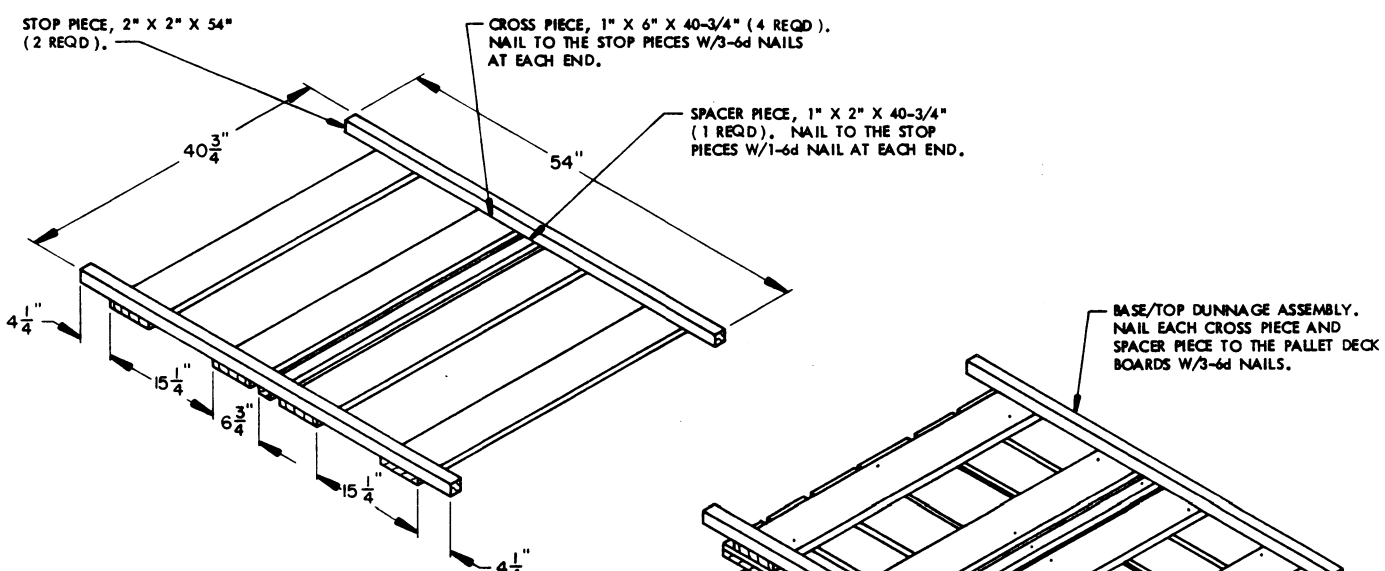
THIS PAGE INTENTIONALLY LEFT BLANK.



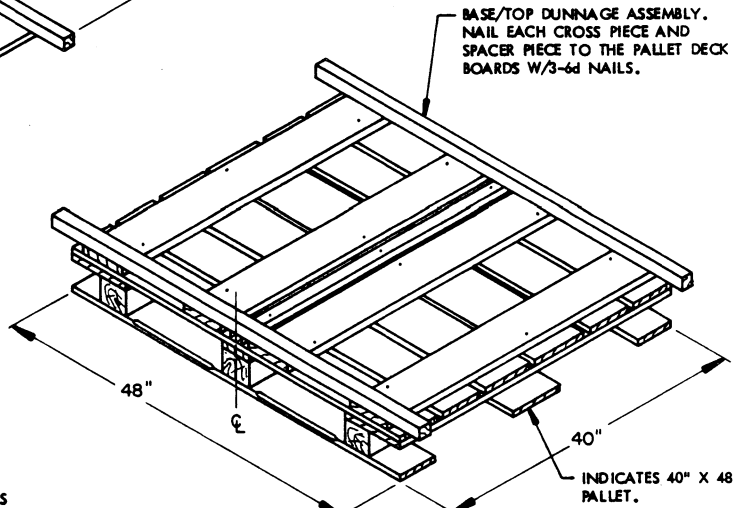
SPECIAL NOTES

1. THE M10 SERIES CONTAINER DEPICTED ABOVE IS BASED ON THE MIDDLE RING LOCATION BEING 28-3/4" FROM THE BASE OF THE CONTAINER.
THE PROCEDURES DEPICTED ON PAGES 6 AND 7 ARE BASED ON THE M10 SERIES CONTAINERS WITH THE RING LOCATION 34" FROM THE BASE OF THE CONTAINER. SLIGHT VARIATION OF RING LOCATION WILL REQUIRE ADJUSTING THE CROSS PIECES OF THE DUNNAGE ASSEMBLIES.
2. THE UNIT DEPICTED ABOVE MAY BE INCREASED BY ONE COMPLETE LAYER OF CONTAINERS BY THE ADDITION OF ONE MORE INTERMEDIATE DUNNAGE ASSEMBLY AND FOUR MORE CONTAINERS, AND BY INCREASING STRAP LENGTHS APPROPRIATELY. THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 45-1/4".

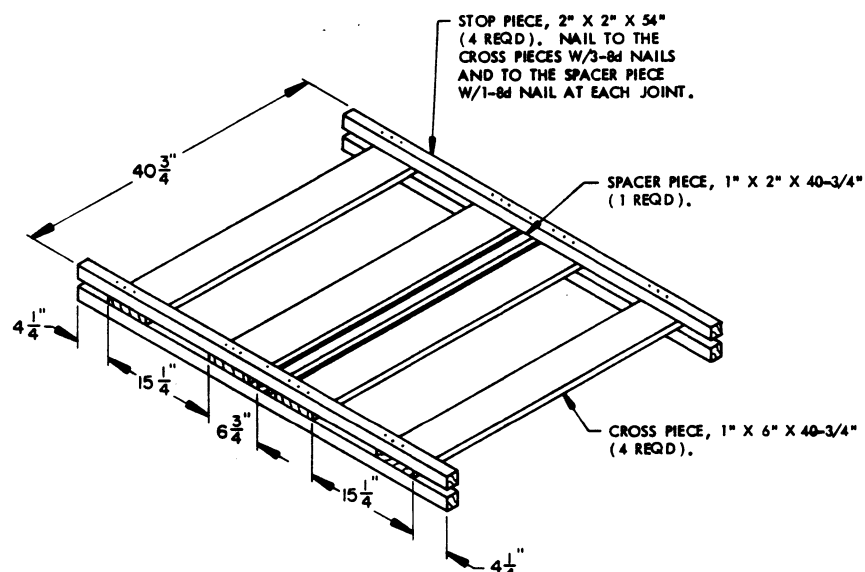




BASE/TOP DUNNAGE ASSEMBLY
(2 REQD)



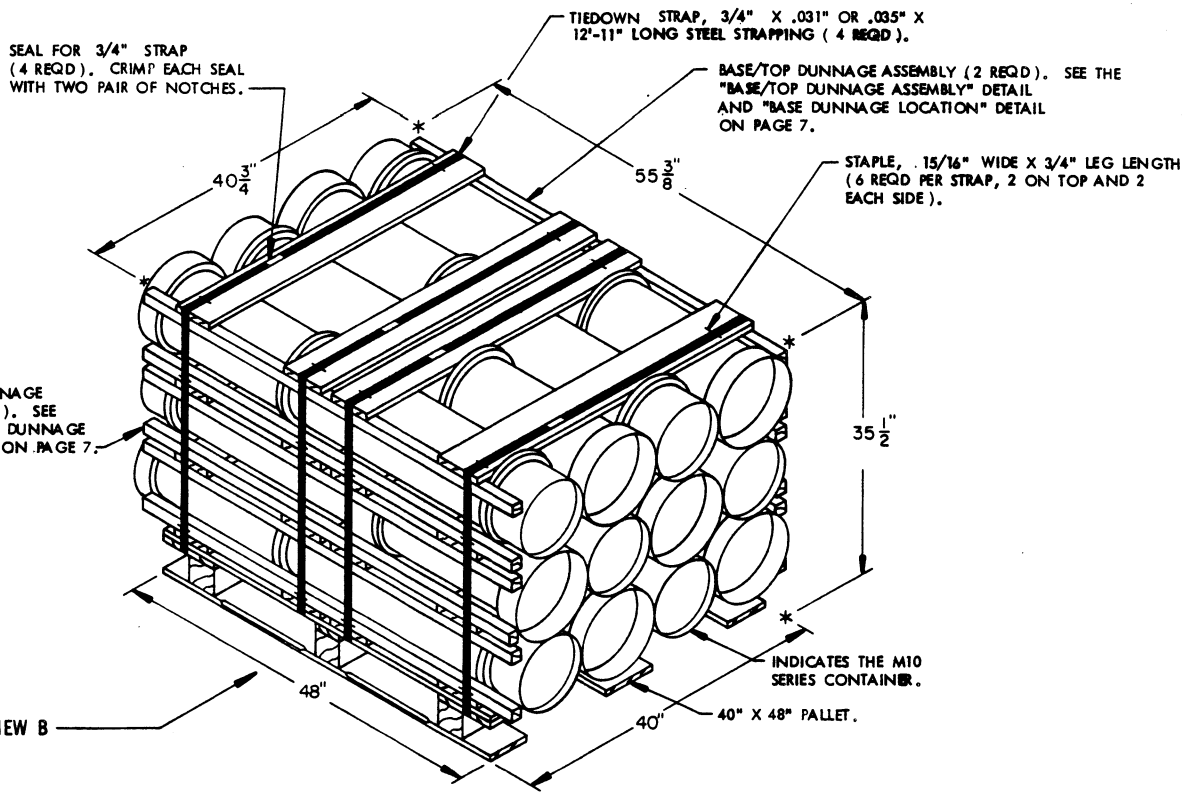
BASE DUNNAGE LOCATION



INTERMEDIATE DUNNAGE ASSEMBLY
(2 REQD)

BILL OF MATERIAL			
LUMBER	NO. REQD	LINEAR FEET	BOARD FEET
1" X 2" X 40-3/4"	4	13.58	2.26
1" X 6" X 40-3/4"	16	54.33	27.17
2" X 2" X 54"	12	54.00	18.00
NAILS		NO. REQD	POUNDS
6d (2")		67	0.39
8d (2-1/2")		104	1.09
STEEL STRAPPING, 3/4" X .031" OR .035" — 51.67' REQD			3.68 LBS
SEAL FOR 3/4" STRAPPING		4 REQD	NIL
STAPLE, 15/16" X 3/4"		24 REQD	NIL
PALLET, 40" X 48"		1 REQD	80 LBS

UNIT DATA	WEIGHT
CUBE ————— 46.4 CUBIC FEET (APPROX)	
CONTAINER, M10 SERIES — 12 EA @ 121 LBS	1,452 LBS (APPROX)
DUNNAGE —————	100 LBS
PALLET —————	80 LBS
TOTAL WEIGHT —————	1,632 LBS (APPROX)



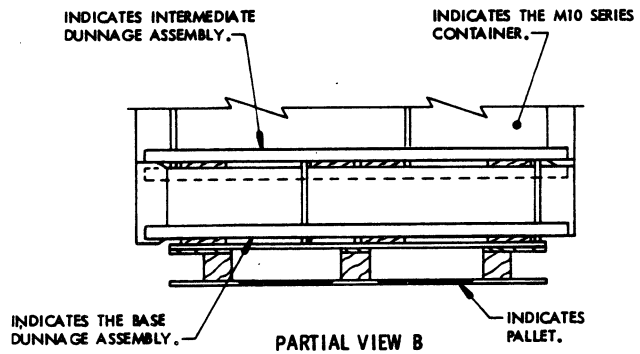
ISOMETRIC VIEW

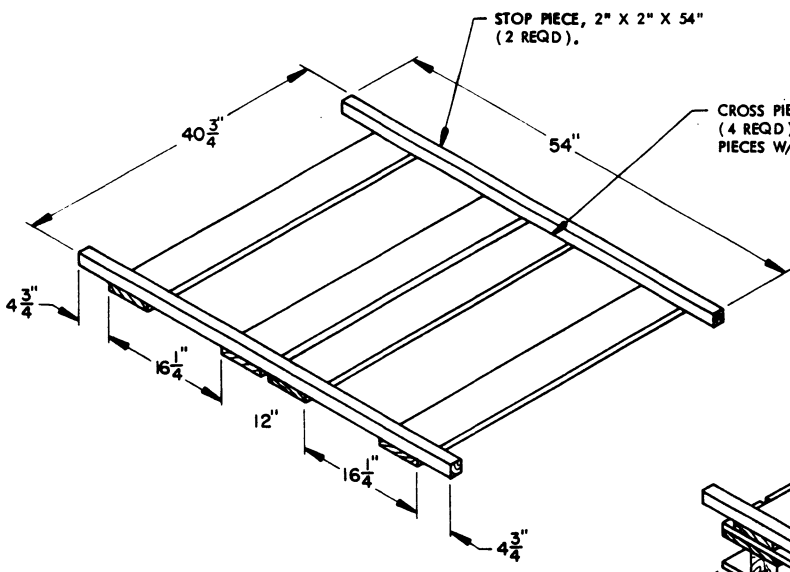
SEE SPECIAL NOTE 1 BELOW.

SPECIAL NOTES

1. THE M10 SERIES CONTAINER DEPICTED ABOVE IS BASED ON THE MIDDLE RING LOCATION BEING 34" FROM THE BASE OF THE CONTAINER.

THE PROCEDURES DEPICTED ON PAGES 4 AND 5 ARE BASED ON THE M10 SERIES CONTAINERS WITH THE RING LOCATION 28-3/4" FROM THE BASE OF THE CONTAINER. SLIGHT VARIATION OF RING LOCATION WILL REQUIRE ADJUSTING THE CROSS PIECES OF THE DUNNAGE ASSEMBLIES.
2. THE UNIT DEPICTED ABOVE MAY BE INCREASED BY ONE COMPLETE LAYER OF CONTAINERS BY THE ADDITION OF ONE MORE INTERMEDIATE DUNNAGE ASSEMBLY AND FOUR MORE CONTAINERS, AND BY INCREASING STRAP LENGTHS APPROPRIATELY. THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 45-1/4".

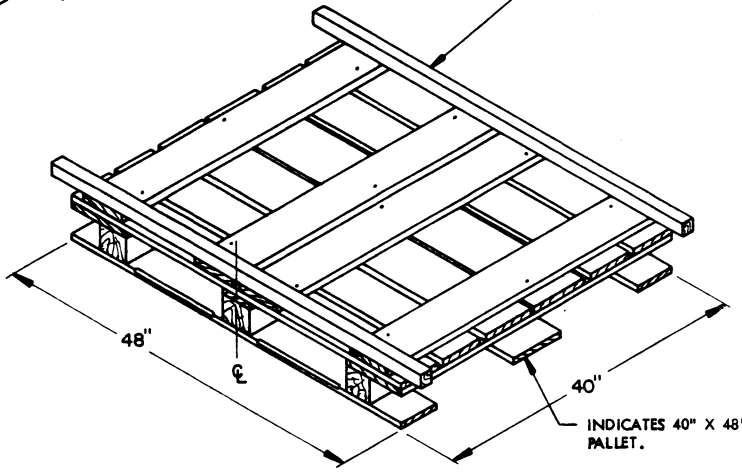




BASE/TOP DUNNAGE ASSEMBLY
(2 REQD)

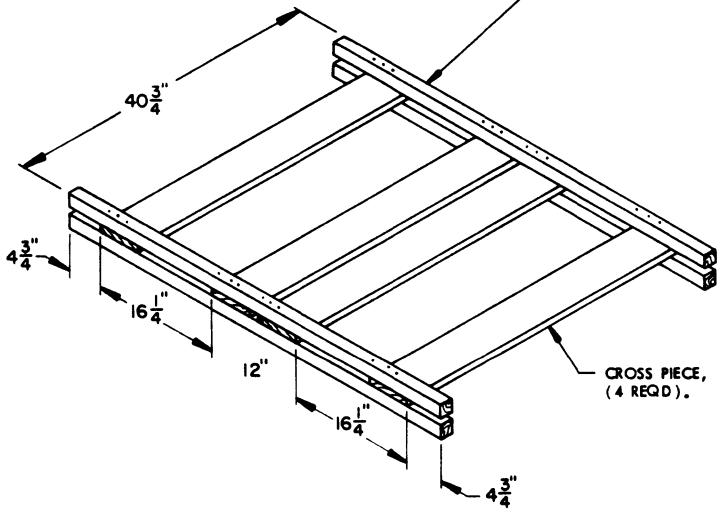
CROSS PIECE, 1" X 6" X 40-3/4"
(4 REQD). NAIL TO THE STOP
PIECES W/3-6d NAILS AT EACH END.

BASE/TOP DUNNAGE ASSEMBLY.
NAIL EACH CROSS PIECE TO THE
PALLET DECK BOARDS W/3-6d NAILS.



BASE DUNNAGE LOCATION

STOP PIECE, 2" X 2" X 54" (4 REQD).
NAIL TO THE CROSS PIECES W/3-8d
NAILS AT EACH LOCATION.



INTERMEDIATE DUNNAGE ASSEMBLY
(2 REQD)

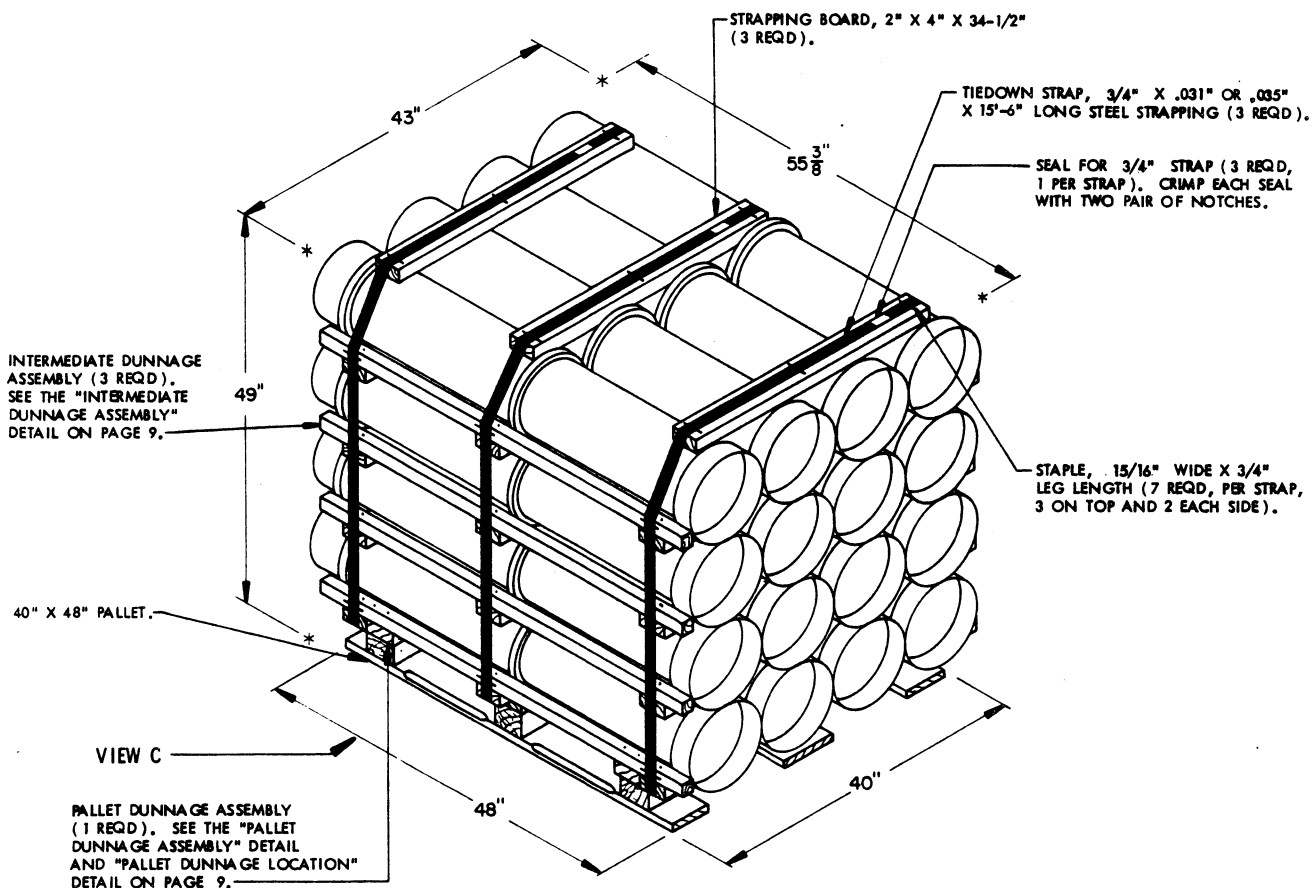
CROSS PIECE, 1" X 6" X 40-3/4"
(4 REQD).

UNIT DATA

	WEIGHT
CUBE -----	46.4 CUBIC FEET (APPROX)
CONTAINER, M10 SERIES -----	12 EA @ 121 LBS ----- 1,452 LBS (APPROX)
DUNNAGE -----	96 LBS
PALLET -----	80 LBS

TOTAL WEIGHT ----- 1,628 LBS (APPROX)

BILL OF MATERIAL			
LUMBER	NO. REQD	LINEAR FEET	BOARD FEET
1" X 6" X 40-3/4"	16	54.33	27.17
2" X 2" X 54"	12	54.00	18.00
NAILS		NO. REQD	POUNDS
6d (2")		60	0.35
8d (2-1/2")		96	1.01
STEEL STRAPPING, 3/4" X .031" OR .035" -- 51.67' REQD --- 3.69 LBS			
SEAL FOR 3/4" STRAPPING ----- 4 REQD --- NIL			
STAPLE, 15/16" X 3/4" ----- 24 REQD --- NIL			
PALLET, 40" X 48" ----- 1 REQD --- 80 LBS			

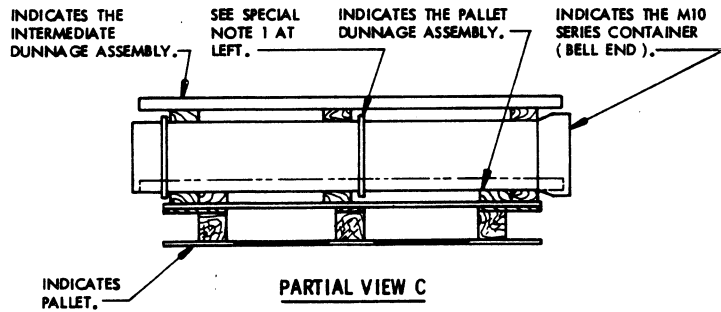


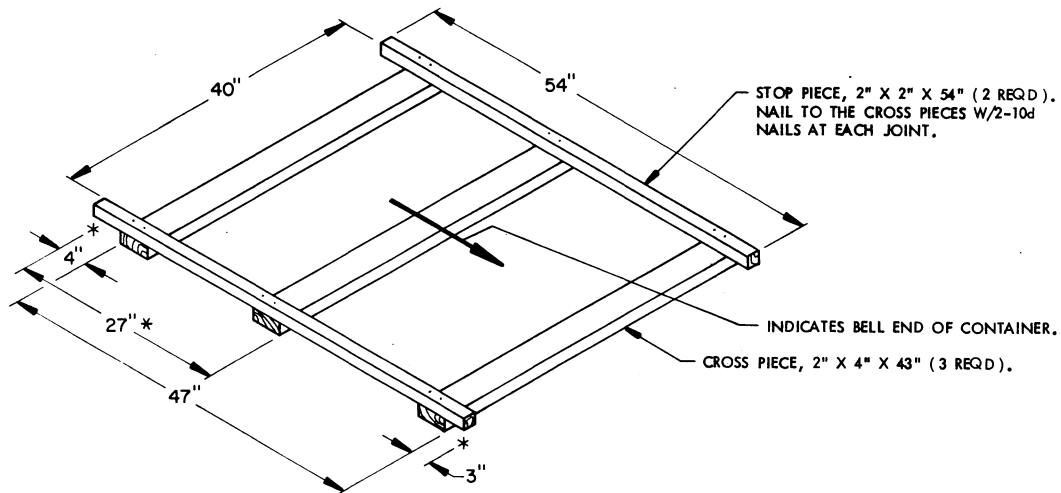
ISOMETRIC VIEW

SEE SPECIAL NOTE 1 BELOW.

SPECIAL NOTES

1. THE M10 SERIES CONTAINER DEPICTED ABOVE IS BASED ON THE LOCATION OF THE MIDDLE RING BEING 28-3/4" FROM THE BASE OF THE CONTAINER. VARIATION OF RING LOCATION WILL REQUIRE ADJUSTMENT OF THE DIMENSIONS GIVEN ON PAGE 9.
2. THE UNIT DEPICTED ABOVE MAY BE REDUCED BY ONE COMPLETE LAYER OF CONTAINERS BY THE DELETION OF ONE INTERMEDIATE DUNNAGE ASSEMBLY AND FOUR CONTAINERS, AND BY DECREASING STRAP LENGTHS APPROPRIATELY. THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 38-1/2".
3. IF DESIRED, A 2" X 6" PIECE CAN BE SUBSTITUTED FOR EACH SET OF TWO (SIDE BY SIDE) 2" X 4" PIECES ON THE PALLET DUNNAGE ASSEMBLY. EACH 2" X 6" PIECE WILL BE NAILED TO THE PALLET WITH SIX 8d NAILS.

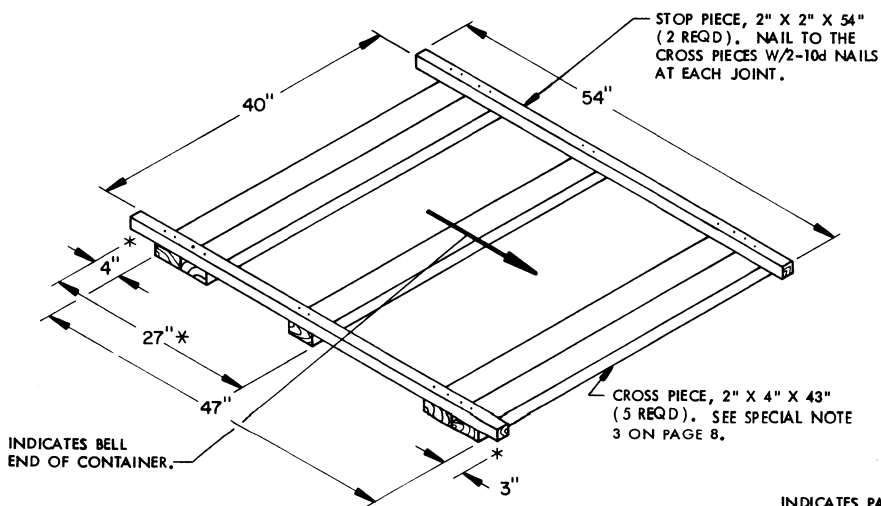




INTERMEDIATE DUNNAGE ASSEMBLY

(3 REQD).

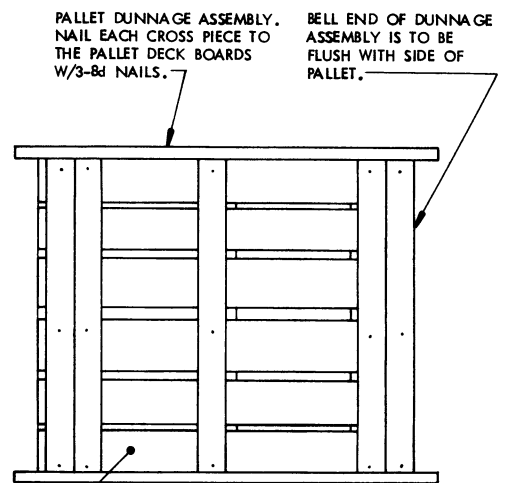
* SEE SPECIAL NOTE 1 ON PAGE 8.



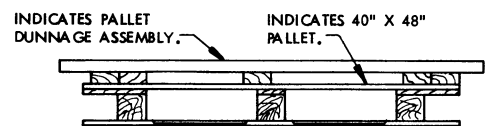
PALLET DUNNAGE ASSEMBLY

(1 REQD)

* SEE SPECIAL NOTE 1 ON PAGE 8.



PLAN



ELEVATION

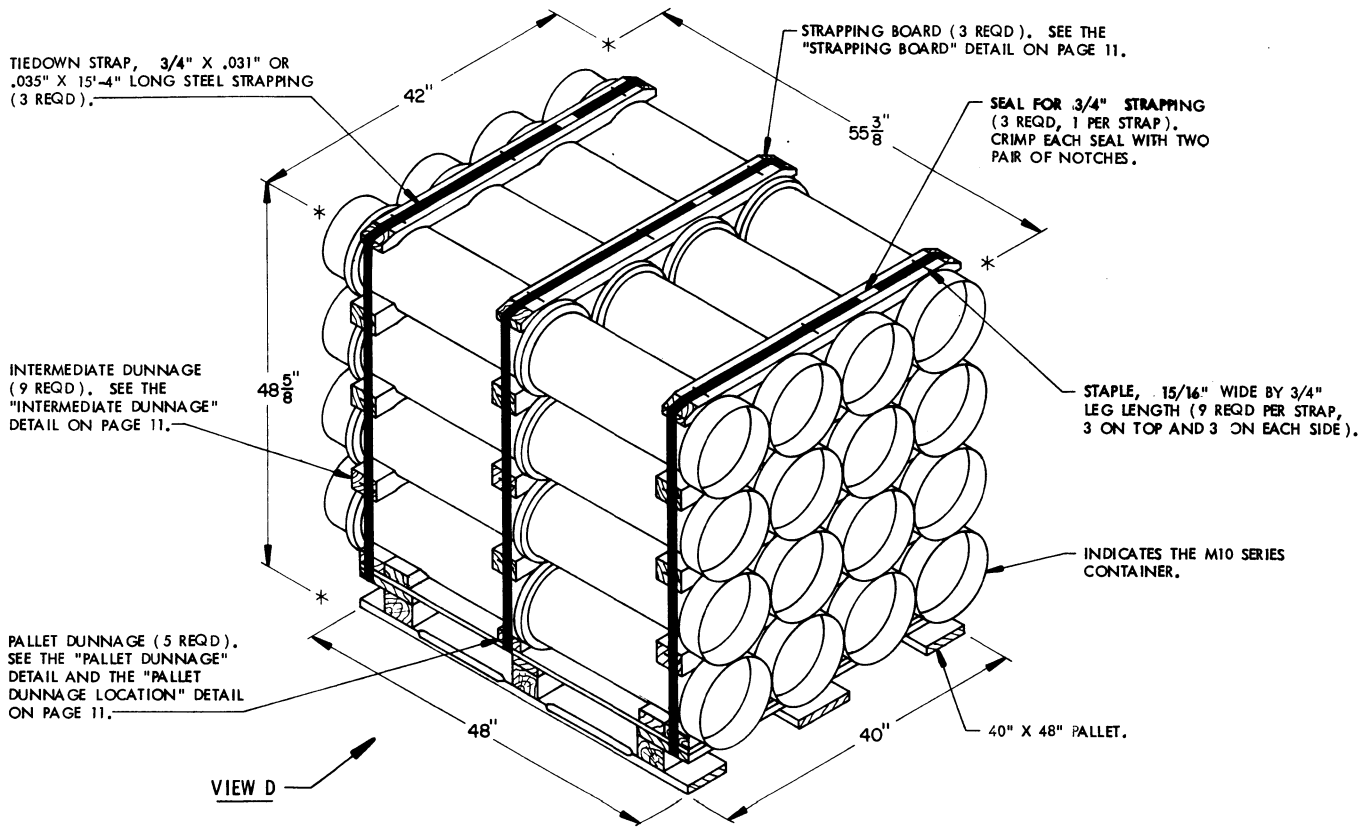
PALLET DUNNAGE LOCATION

BILL OF MATERIAL			
LUMBER	NO. REQD	LINEAR FEET	BOARD FEET
2" X 2" X 54"	8	36.00	12.00
2" X 4" X 43"	14	50.17	33.44
2" X 4" X 34-1/2"	3	8.63	5.75
NAILS	NO. REQD	POUNDS	
8d (2-1/2")	15	0.16	
10d (3")	56	0.86	
STEEL STRAPPING, 3/4" X .031" OR .035"	46.50' REQD	3.32 LBS	
SEAL FOR 3/4" STRAPPING	3 REQD	NIL	
STRAP STAPLE, 15/16" X 3/4"	21 REQD	NIL	
PALLET, 40" X 48"	1 REQD	80 LBS	

UNIT DATA

WEIGHT

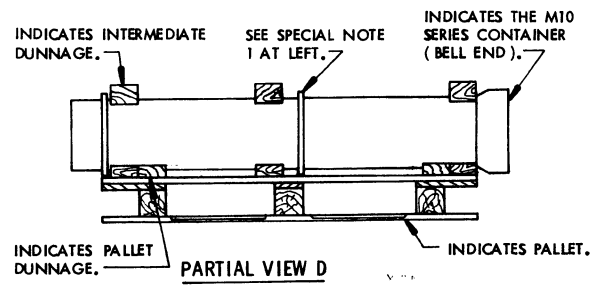
CUBE	67.5 CUBIC FEET (APPROX)	
CONTAINER, M10 SERIES	16 EA @ 121 LBS	1,936 LBS (APPROX)
DUNNAGE		107 LBS
PALLET		80 LBS
TOTAL WEIGHT		2,123 LBS (APPROX)

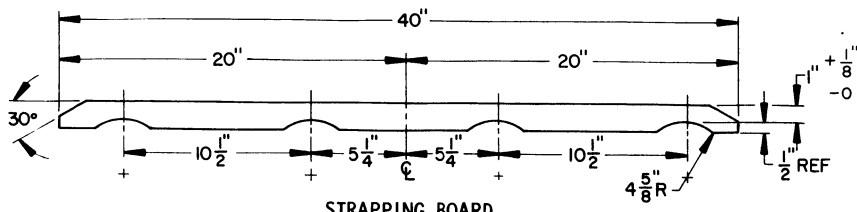


ISOMETRIC VIEW
SEE SPECIAL NOTE 1 BELOW.

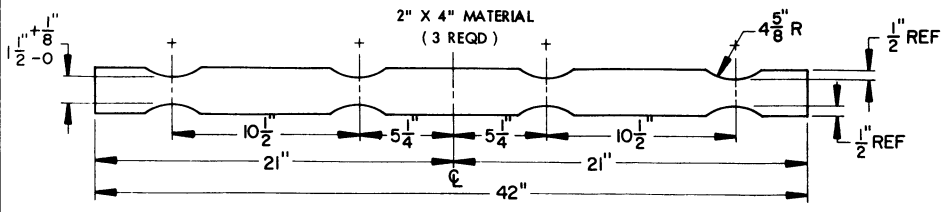
SPECIAL NOTES

1. THE M10 SERIES CONTAINER DEPICTED ABOVE IS BASED ON THE LOCATION OF THE MIDDLE RING BEING 28-3/4" FROM THE BASE OF THE CONTAINER. VARIATION OF THE RING LOCATION WILL REQUIRE ADJUSTMENT OF THE DIMENSIONS GIVEN ON PAGE 11.
2. THE UNIT DEPICTED ABOVE MAY BE REDUCED BY ONE COMPLETE LAYER OF CONTAINERS BY THE DELETION OF THREE INTERMEDIATE DUNNAGE PIECES AND FOUR CONTAINERS, AND BY DECREASING STRAP LENGTHS APPROPRIATELY. THIS WILL RESULT IN AN OVERALL HEIGHT OF 38".
3. IF DESIRED, A 2" X 6" PIECE CAN BE SUBSTITUTED FOR EACH SET OF TWO (SIDE BY SIDE) 2" X 4" PIECES OF PALLET DUNNAGE. EACH 2" X 6" PIECE WILL BE NAILED TO THE PALLET WITH SIX 8d NAILS.

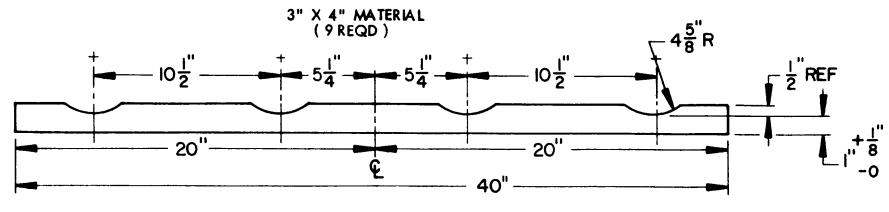




STRAPPING BOARD



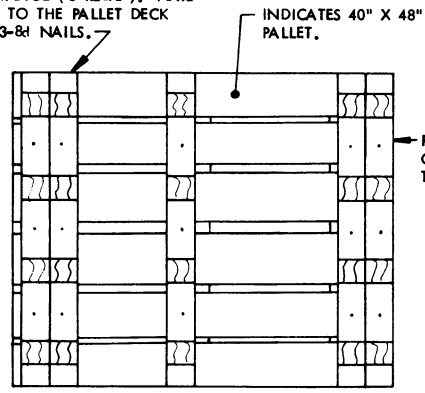
INTERMEDIATE DUNNAGE



PALLET DUNNAGE

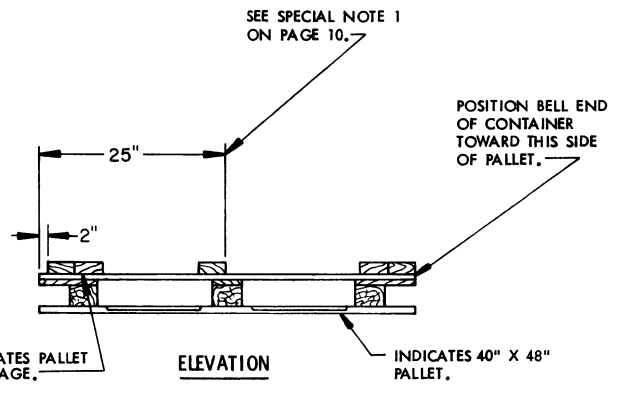
NOTE 3 ON PAGE 10.
 2" X 4" MATERIAL (SEE SPECIAL)
 (5 REQD)

PALLET DUNNAGE (5 REQD). NAIL EACH PIECE TO THE PALLET DECK BOARDS W/3-8d NAILS.



PLAN

POSITION BELL END OF CONTAINERS TOWARD THIS SIDE OF PALLET.



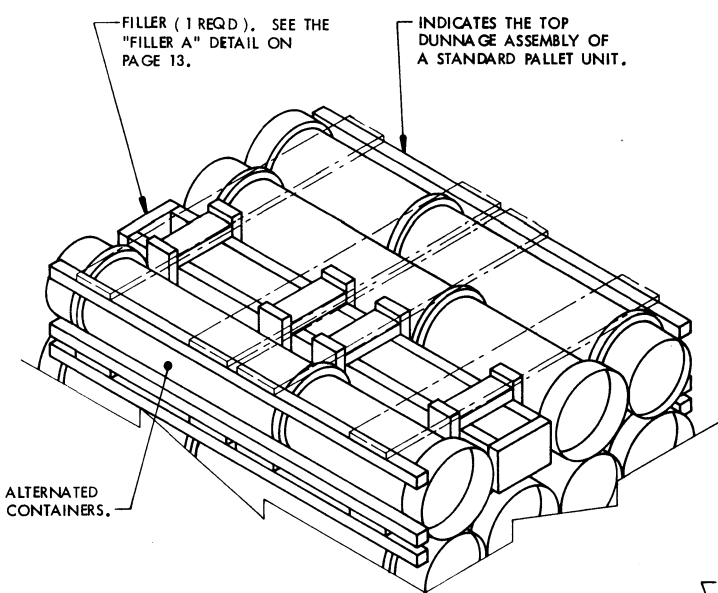
ELEVATION

PALLET DUNNAGE LOCATION

BILL OF MATERIAL			
LUMBER	NO. REQD	LINEAR FEET	BOARD FEET
2" X 4" X 40"	8	26.67	17.78
3" X 4" X 42"	9	31.50	31.50
NAILS	NO. REQD	POUNDS	
8d (2-1/2")	15	0.16	
STEEL STRAPPING, 3/4" X .031" OR .035"	46.00 ⁰⁰ REQD	3.29 LBS	
SEAL FOR 3/4" STRAPPING	3 REQD	NIL	
STRAP STAPLE, 15/16" X 3/4"	27 REQD	NIL	
PALLET, 40" X 48"	1 REQD	80 LBS	

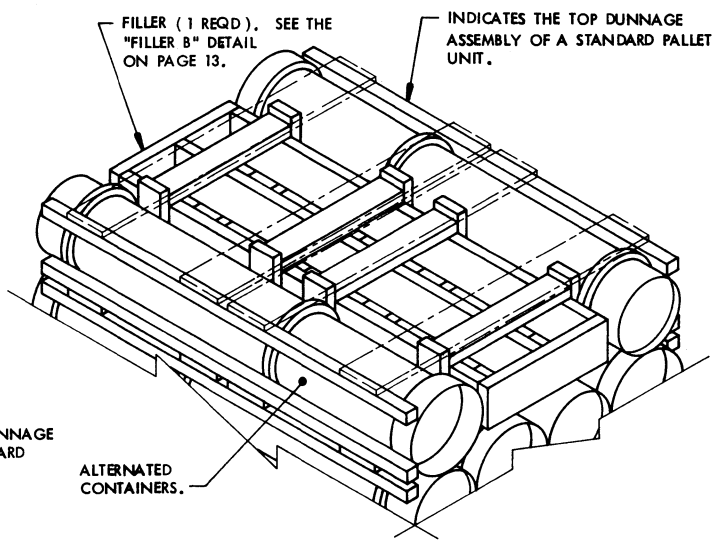
UNIT DATA

	WEIGHT
CUBE -----	65.4 CUBIC FEET (APPROX)
CONTAINER, M10 SERIES ---	16 @ 121 LBS ----- 1,936 LBS (APPROX)
DUNNAGE -----	103 LBS
PALLET -----	80 LBS
TOTAL WEIGHT -----	2,119 LBS (APPROX)



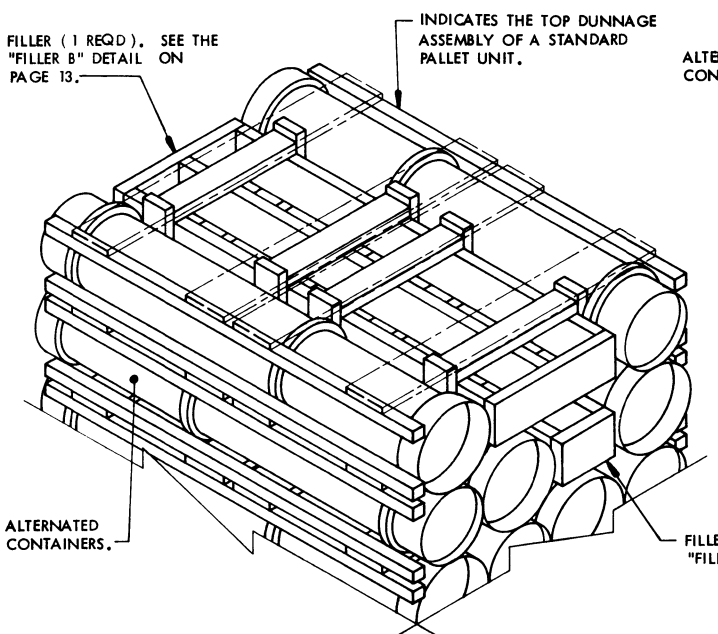
DETAIL A (UNIT A)

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



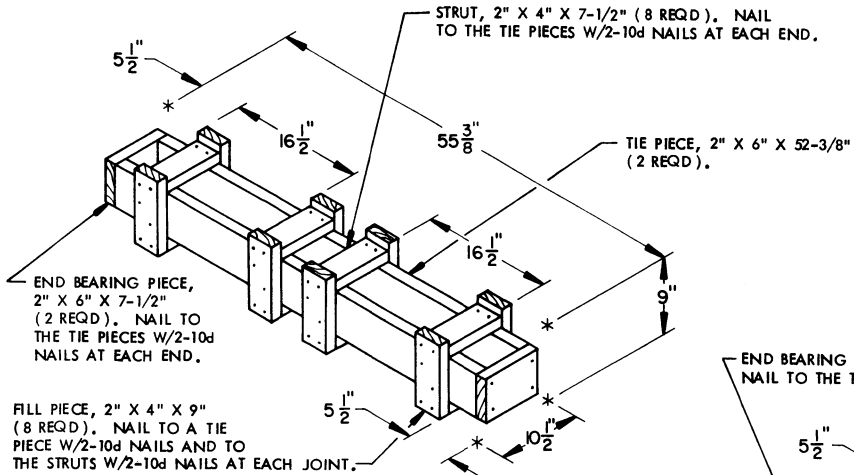
DETAIL B (UNIT A)

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



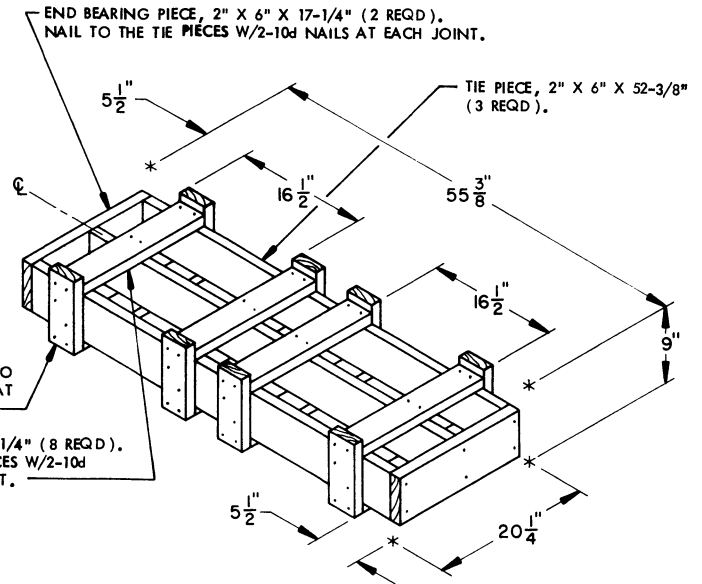
DETAIL C (UNIT A)

THIS DETAIL DEPICTS PROCEDURES TO BE USED WHEN A STANDARD PALLET UNIT MINUS THREE CONTAINERS IS TO BE UNITIZED. "FILLER A" CAN ONLY BE USED IN THE SECOND LAYER FROM THE TOP WHEN USED IN COMBINATION WITH A "FILLER B" ASSEMBLY. NO MORE THAN TWO FILLER ASSEMBLIES WILL BE USED IN ONE PALLET UNIT.



FILLER A

THIS FILLER IS TO BE USED WHEN ONE CONTAINER IS TO BE OMITTED FROM A FULL LAYER.

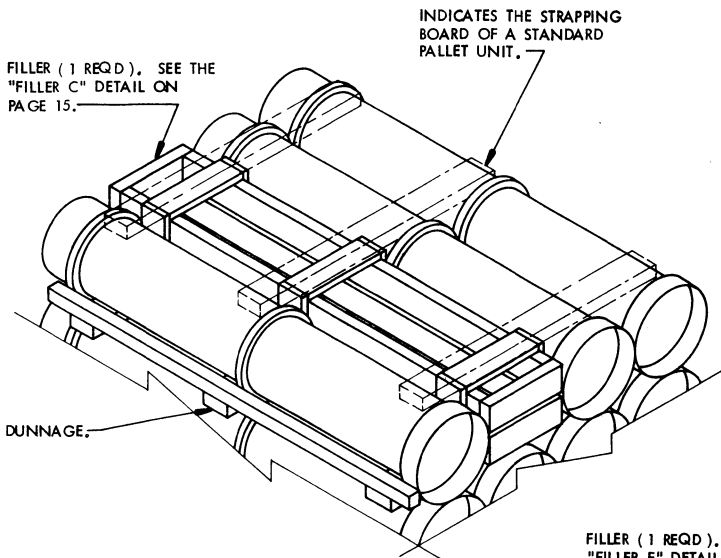


FILLER B

THIS FILLER IS TO BE USED WHEN TWO CONTAINERS ARE TO BE OMITTED FROM A FULL LAYER.

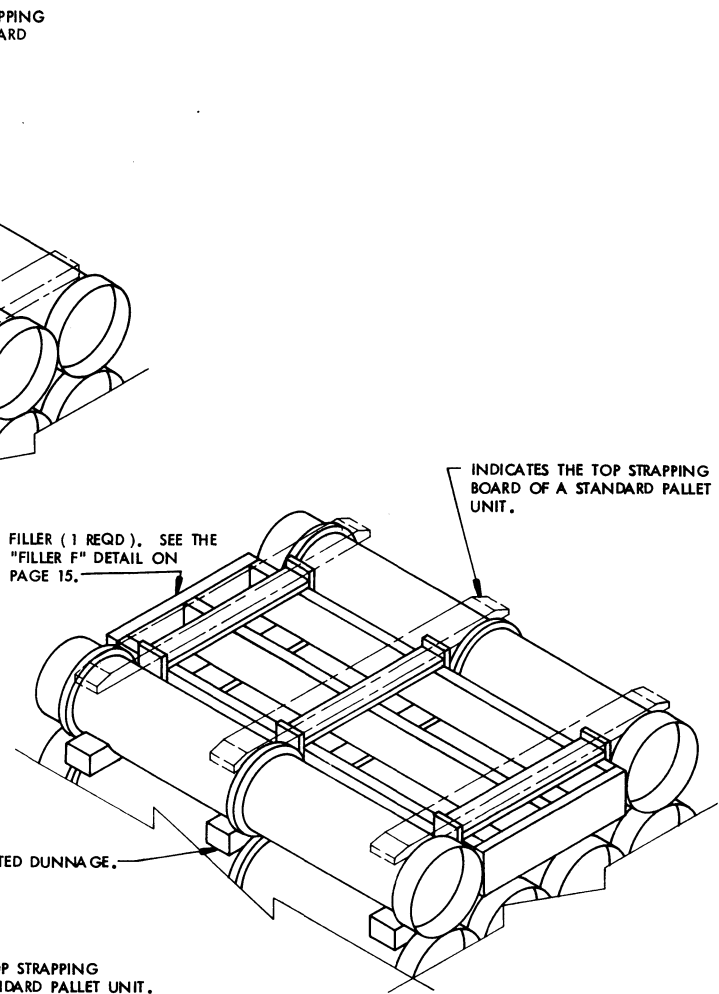
SPECIAL NOTE

1. THE FILLER ASSEMBLIES DEPICTED ON PAGES 12 AND 13 DEPICT FILLERS TO BE USED IN A PALLET UNIT WITH CONTAINERS HAVING A MIDDLE RING LOCATION OF 34" FROM THE BASE OF THE CONTAINERS. IF THE DIMENSION OF THE RING LOCATION IS OTHER THAN 34" FROM THE BASE OF THE CONTAINERS, ADJUSTMENTS MUST BE MADE TO THE CENTER FILL PIECE LOCATION IN RELATION TO THE END FILL PIECES. THE FILL PIECES MUST BE POSITIONED CLOSE TO, OR RIGHT NEXT TO A LOWER AND A MIDDLE RING.



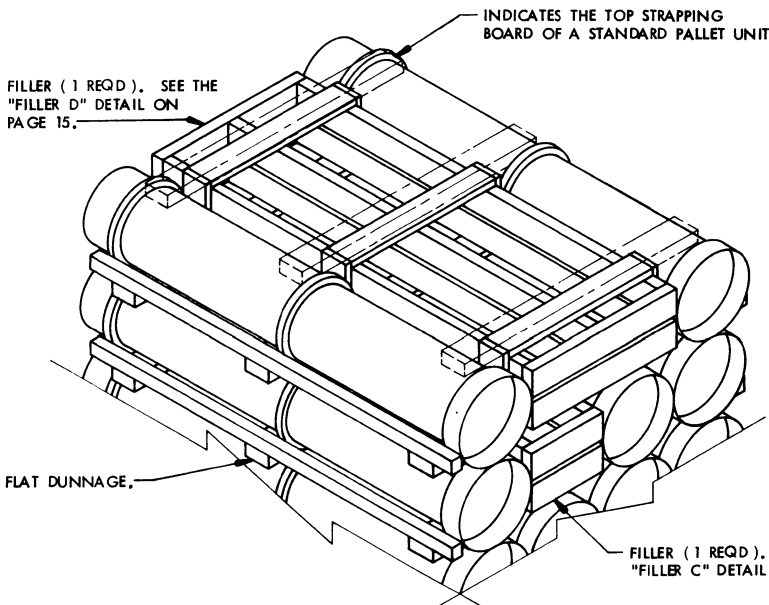
DETAIL D (UNIT B)

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



DETAIL E (UNIT C)

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



DETAIL F (UNIT B)

THIS DETAIL DEPICTS PROCEDURES TO BE USED WHEN A STANDARD PALLET UNIT MINUS THREE CONTAINERS IS TO BE UNITIZED. "FILLER C" CAN ONLY BE USED IN THE SECOND LAYER FROM THE TOP WHEN USED IN COMBINATION WITH A "FILLER D" ASSEMBLY. NO MORE THAN TWO FILLER ASSEMBLIES WILL BE USED IN ONE PALLET UNIT. THESE FILLER ASSEMBLIES WILL BE INSTALLED IN THE MIDDLE OF THE TOP LAYER OR LAYERS OF A PALLET UNIT WHEN THREE CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT.

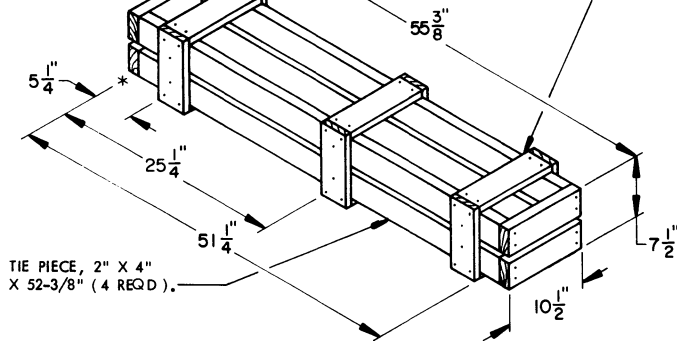
NOTE:

WHEN UNITIZING UNITS ON ROUTED DUNNAGE AND THREE CONTAINERS ARE TO BE OMITTED, FILLER ASSEMBLIES "E" AND "F" MUST BE USED IN COMBINATION SUCH AS FILLERS "C" AND "D" ARE USED IN "DETAIL F" AT LEFT.

END BEARING PIECE, 2" X 4" X 10-1/2" (4 REQD.), NAIL TO THE TIE PIECES W/2-10d NAILS AT EACH END.

FILL PIECE, 1" X 4" X 9" (6 REQD.), NAIL TO THE TIE PIECES W/1-6d NAIL AT EACH JOINT AND TO THE STRUTS W/2-6d NAILS AT EACH JOINT.

STRUT, 1" X 4" X 10-1/2" (6 REQD.), NAIL TO THE TIE PIECES W/2-6d NAILS AT EACH END.



TIE PIECE, 2" X 4" X 52-3/8" (4 REQD.).

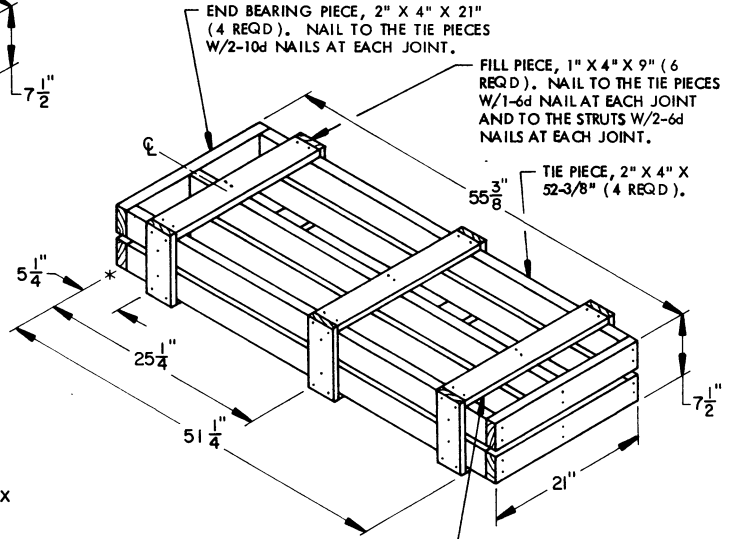
FILLER C

THIS FILLER IS TO BE USED WHEN ONE CONTAINER IS OMITTED FROM A LAYER OF A PALLET USING FLAT DUNNAGE.

END BEARING PIECE, 2" X 4" X 21" (4 REQD.), NAIL TO THE TIE PIECES W/2-10d NAILS AT EACH JOINT.

FILL PIECE, 1" X 4" X 9" (6 REQD.), NAIL TO THE TIE PIECES W/1-6d NAIL AT EACH JOINT AND TO THE STRUTS W/2-6d NAILS AT EACH JOINT.

TIE PIECE, 2" X 4" X 52-3/8" (4 REQD.).



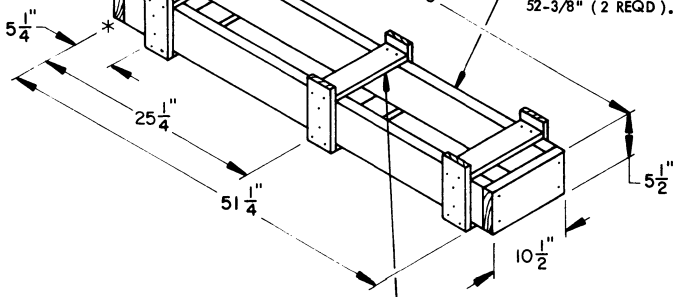
FILLER D

THIS FILLER IS TO BE USED WHEN TWO CONTAINERS ARE OMITTED FROM A LAYER OF A PALLET USING FLAT DUNNAGE.

END BEARING PIECE, 2" X 6" X 10-1/2" (2 REQD.), NAIL TO THE TIE PIECES W/2-10d NAILS AT EACH END.

FILL PIECE, 1" X 4" X 8" (6 REQD.), NAIL TO THE TIE PIECE W/2-6d NAILS AND TO THE STRUTS W/2-6d NAILS AT EACH JOINT.

TIE PIECE, 2" X 6" X 52-3/8" (2 REQD.).



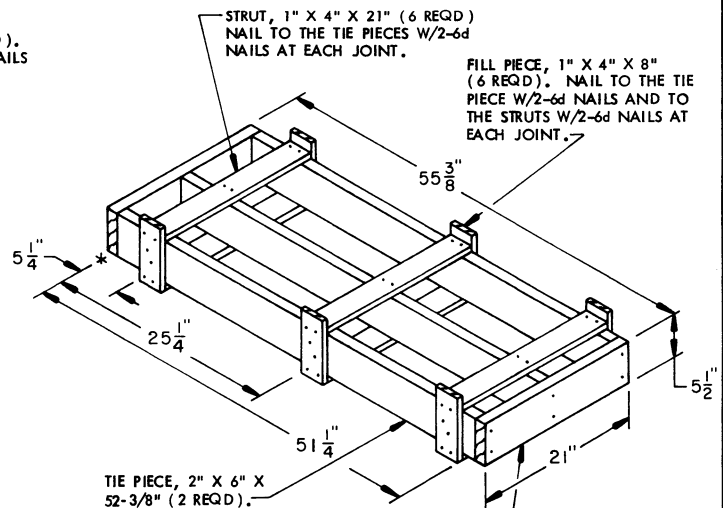
FILLER E

THIS FILLER IS TO BE USED WHEN ONE CONTAINER IS TO BE OMITTED FROM A LAYER OF A PALLET WHEN USING ROUTED DUNNAGE.

STRUT, 1" X 4" X 10-1/2" (6 REQD.), NAIL TO THE TIE PIECES W/2-6d NAILS AT EACH END.

STRUT, 1" X 4" X 21" (6 REQD.) NAIL TO THE TIE PIECES W/2-6d NAILS AT EACH JOINT.

FILL PIECE, 1" X 4" X 8" (6 REQD.), NAIL TO THE TIE PIECE W/2-6d NAILS AND TO THE STRUTS W/2-6d NAILS AT EACH JOINT.



FILLER F

THIS FILLER IS TO BE USED WHEN TWO CONTAINERS ARE OMITTED FROM A LAYER OF A PALLET USING ROUTED DUNNAGE.

END BEARING PIECE, 2" X 6" X 21" (2 REQD.), NAIL TO THE TIE PIECES W/2-10d NAILS AT EACH JOINT.

SPECIAL NOTE

1. THE FILLER ASSEMBLIES DEPICTED ON PAGES 14 AND 15 DEPICT FILLERS TO BE USED IN A PALLET UNIT WITH CONTAINERS HAVING A MIDDLE RING LOCATION OF 28-3/4" FROM THE BASE OF THE CONTAINERS. IF THE DIMENSION OF THE RING LOCATION IS OTHER THAN 28-3/4" FROM THE BASE OF THE CONTAINER, ADJUSTMENTS MUST BE MADE TO THE CENTER FILL PIECE LOCATION IN RELATION TO THE END FILL PIECES. THE FILL PIECES MUST BE POSITIONED CLOSE TO, OR RIGHT NEXT TO A LOWER AND A MIDDLE RING.

