

GENERAL NOTES

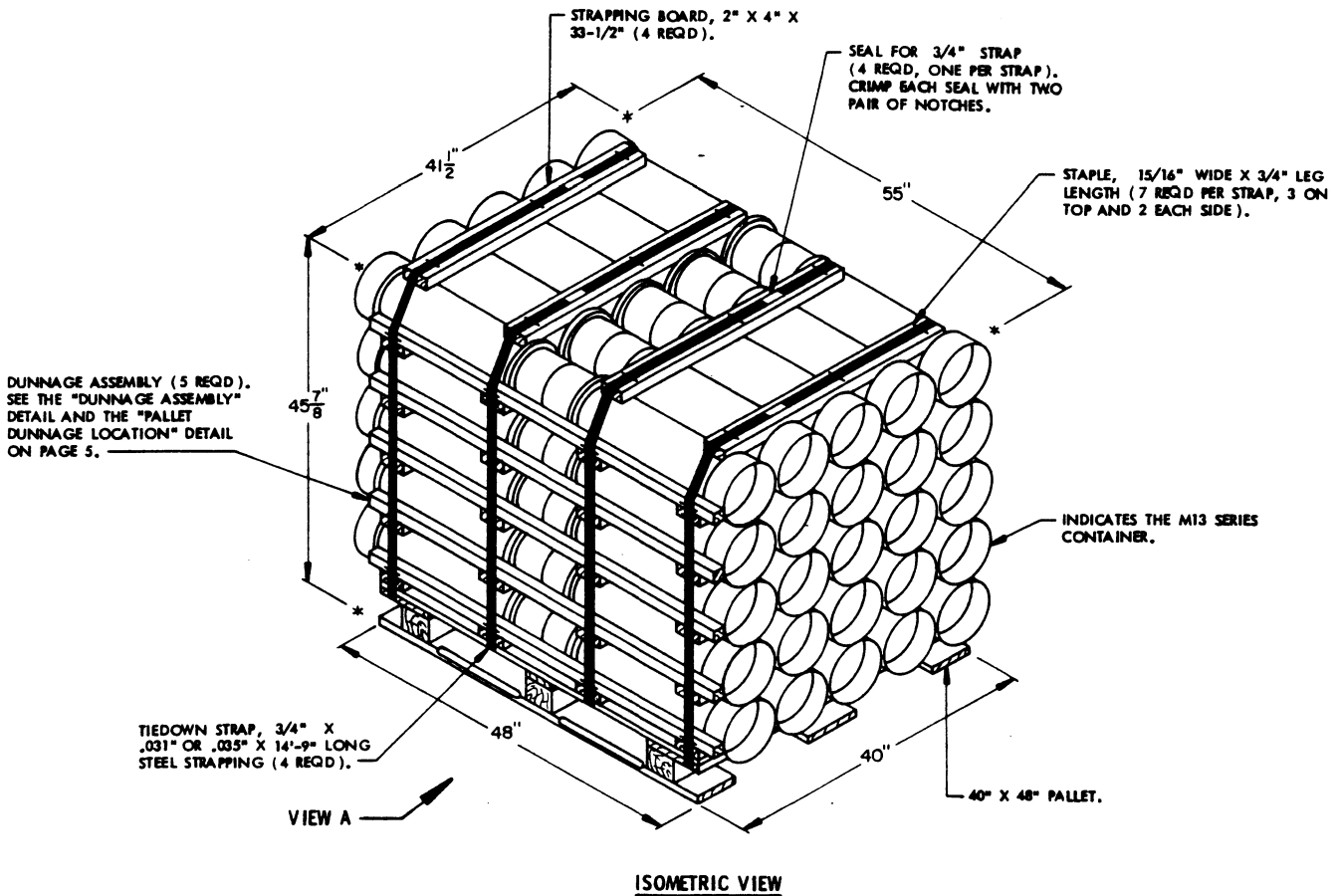
- A. THIS APPENDIX CANNOT STAND ALONE BUT MUST BE USED IN CONJUNCTION WITH THE BASIC UNITIZING PROCEDURES DRAWING 19-48-4042-20PM1001. TO PRODUCE AN APPROVED UNIT LOAD, ALL PERTINENT PROCEDURES, SPECIFICATIONS AND CRITERIA SET FORTH WITHIN THE BASIC DRAWING WILL APPLY TO THE PROCEDURES DELINEATED IN 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 SPECIFIED ITEM, AND METHOD OF UNITIZATION.
- C. UNLOADING 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 M13 SERIES CONTAINER. THE EXPLOSIVE CLASSIFICATION OF OTHER ITEMS MAY BE DIFFERENT THAN THOSE SHOWN.
- G. FOR DETAILS OF THE M13 SERIES CONTAINER, SEE PICATINNY ARSENAL DRAWING NO. 8880527:
- CONTAINER DIMENSIONS --- 27-1/2" LONG BY 7-25/32" DIAMETER.
CONTAINER CUBE ----- 1.0 CUBIC FOOT.
CONTAINER WEIGHT
(WITH CHARGE) ----- 30.5 POUNDS (APPROX).
- H. THE SPECIFIED UNITIZING PROCEDURES SHOWN HEREIN DEPICT TWO DIFFERENT METHODS FOR UNITIZING THE M13 SERIES CONTAINERS:
1. UNIT "A" DEPICTS CONTAINERS UNITIZED ON FLAT DUNNAGE. SEE DETAILS ON PAGES 4 AND 5.
 2. UNIT "B" DEPICTS CONTAINERS UNITIZED ON ROUTED DUNNAGE. SEE DETAILS ON PAGES 6 AND 7.
- BOTH 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 BE REDUCED BY ONE COMPLETE LAYER OF CONTAINERS. FOR FURTHER UNITIZATION GUIDANCE, SEE SPECIAL NOTE 1 ON PAGES 4 AND 6.

REVISION

REVISION NO. 1, DATED JUNE 1986, CONSISTS OF:

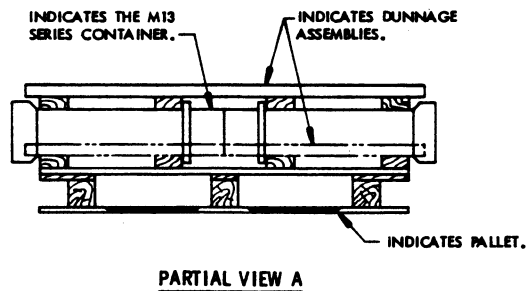
CHANGING 1-1/4" STRAPPING TO 3/4" STRAPPING.

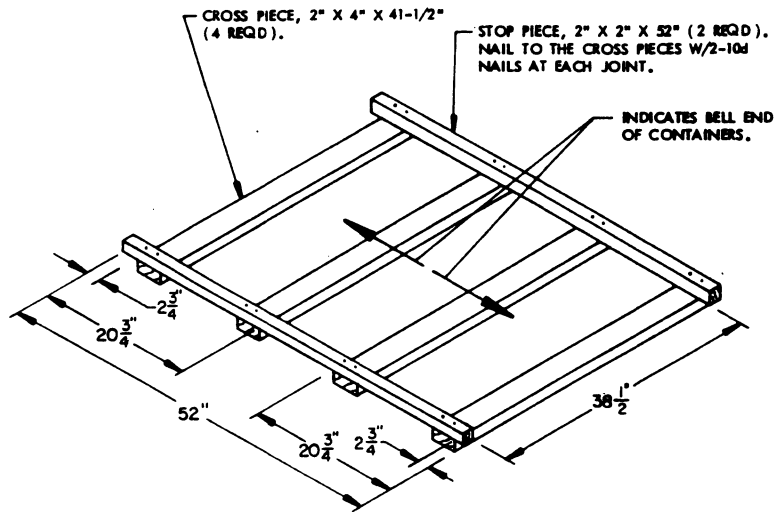
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SPECIAL NOTES

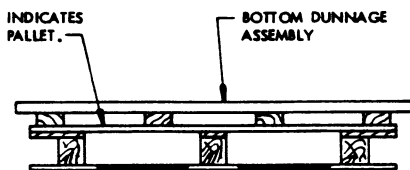
1. THE UNIT DEPICTED ABOVE MAY BE REDUCED BY ONE COMPLETE LAYER OF CONTAINERS BY THE DELETION OF ONE DUNNAGE ASSEMBLY AND TEN CONTAINERS, AND BY DECREASING THE STRAP LENGTHS APPROPRIATELY. THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 38-1/8".



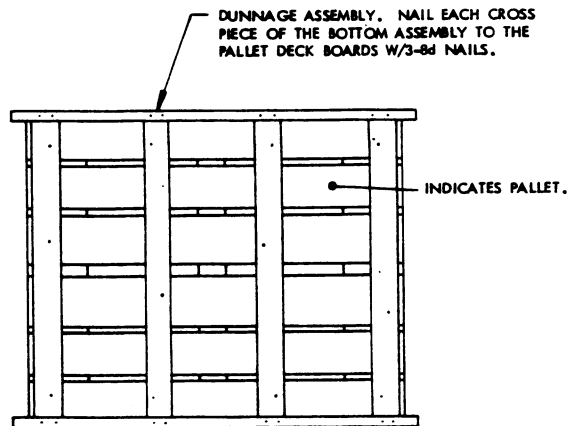


DUNNAGE ASSEMBLY

(5 REQD)



ELEVATION



PLAN

PALLET DUNNAGE LOCATION

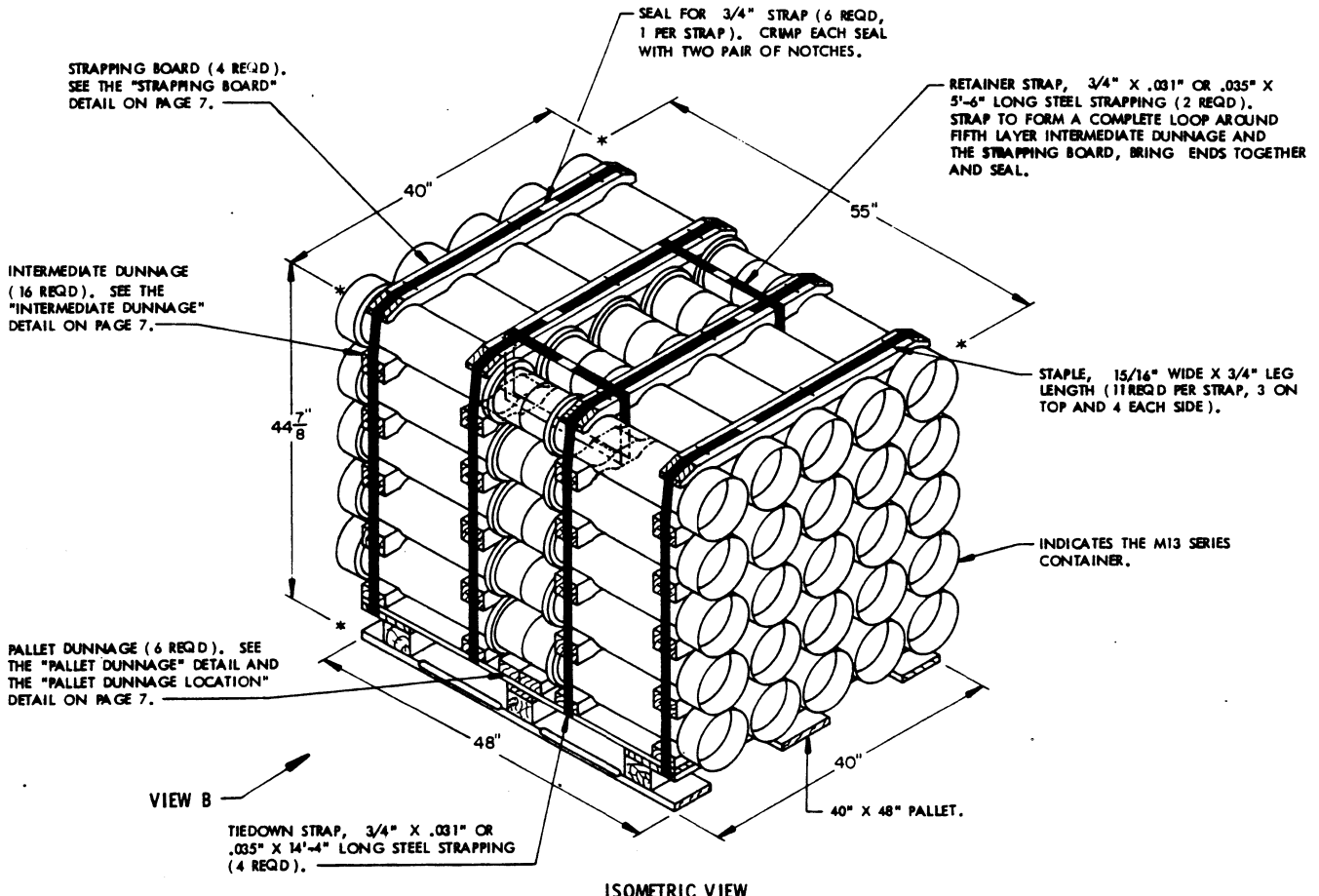
| BILL OF MATERIAL | | | |
|----------------------------------------------------------------|----------|-------------|------------|
| LUMBER | NO. REQD | LINEAR FEET | BOARD FEET |
| 2" X 2" X 32" | 10 | 43.33 | 14.44 |
| 2" X 4" X 33-1/2" | 4 | 11.17 | 7.44 |
| 2" X 4" X 41-1/2" | 20 | 69.17 | 46.11 |
| NAILS | NO. REQD | POUNDS | |
| 8d (2-1/2") | 12 | 0.13 | |
| 10d (3") | 80 | 1.23 | |
| STEEL STRAPPING, 3/4" X .031" OR .035" - 59.00' REQD-4, 21 LBS | | | |
| SEAL FOR 3/4" STRAP ----- 4 REQD -- NIL | | | |
| STRAP STAPLE, 15/16" X 3/4" ----- 28 REQD -- NIL | | | |
| PALLET, 40" X 48" ----- 1 REQD -- 80 LBS | | | |

UNIT DATA

WEIGHT

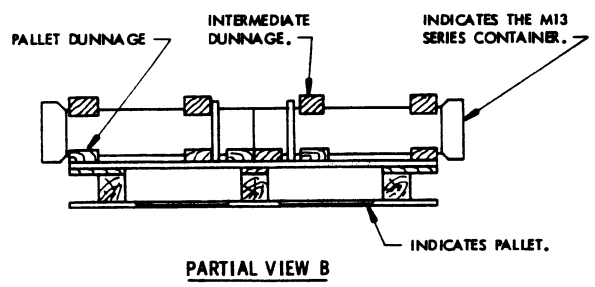
| | |
|-------------------------------------------------|--------------------------|
| CUBE ----- | 60.6 CUBIC FEET (APPROX) |
| CONTAINER, M13 SERIES -- 50 EA @ 30.5 LBS ----- | 1,525 LBS (APPROX) |
| DUNNAGE ----- | 142 LBS |
| PALLET ----- | 80 LBS |

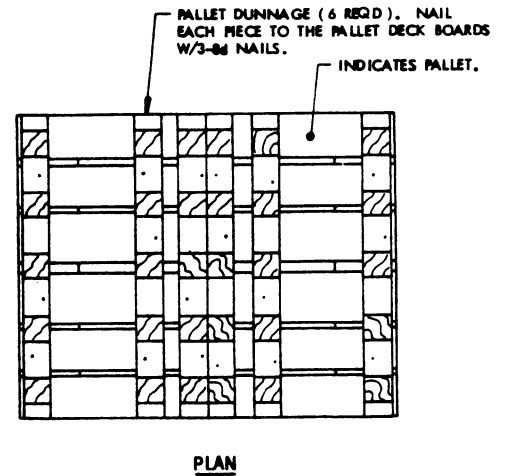
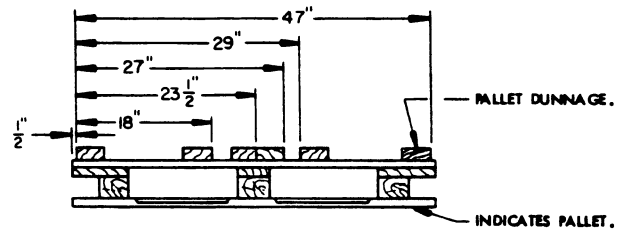
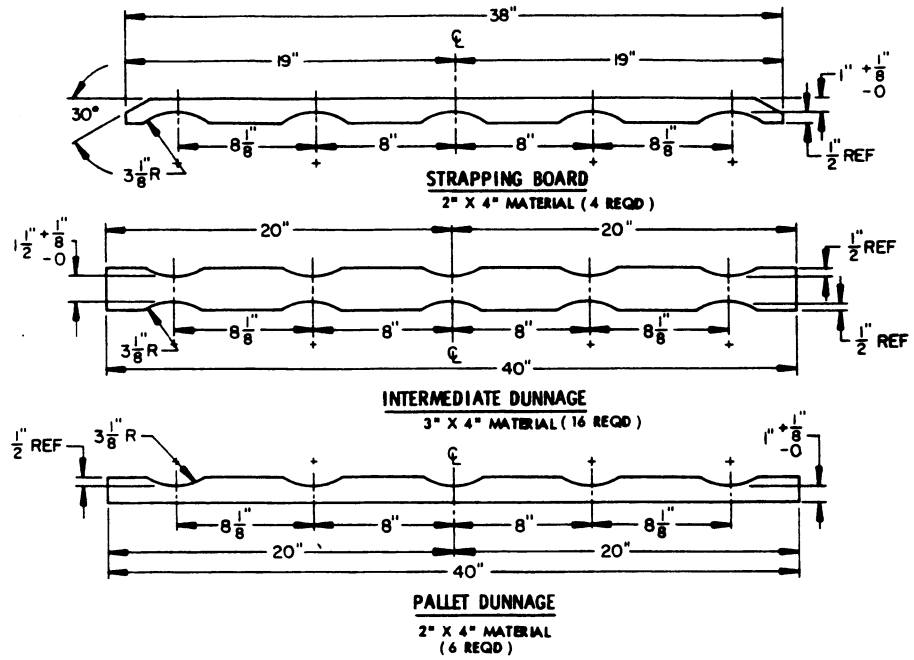
TOTAL WEIGHT ----- 1,747 LBS (APPROX)



SPECIAL NOTES

1. THE UNIT DEPICTED ABOVE MAY BE REDUCED BY ONE COMPLETE LAYER OF CONTAINERS BY THE DELETION OF FOUR INTERMEDIATE DUNNAGE PIECES AND TEN CONTAINERS, AND BY DECREASING THE STRAP LENGTHS APPROPRIATELY. THIS WILL RESULT IN AN OVERALL UNIT HEIGHT OF 37-1/8".

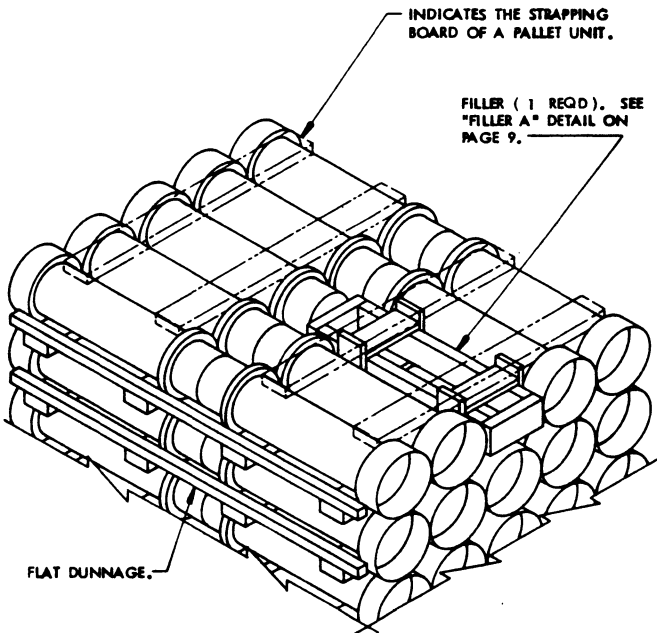




PALLET DUNNAGE LOCATION

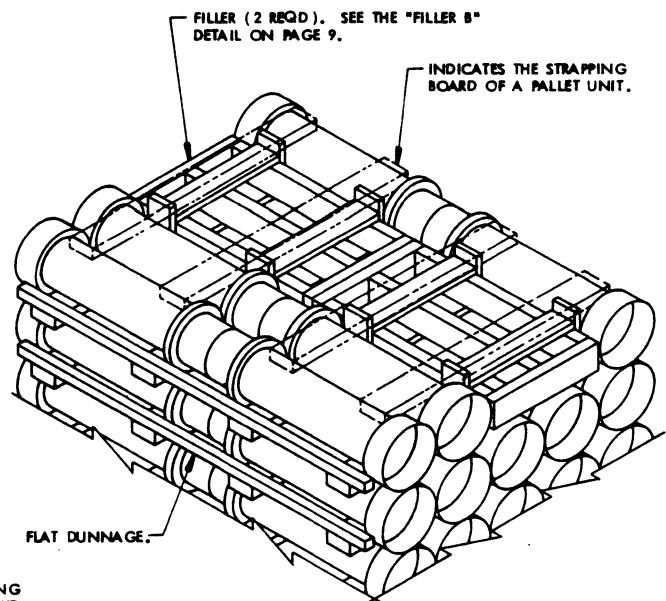
| BILL OF MATERIAL | | | |
|----------------------------------------|----------|-------------|------------|
| LUMBER | NO. REQD | LINEAR FEET | BOARD FEET |
| 2" X 4" X 38" | 4 | 12.67 | 8.44 |
| 2" X 4" X 40" | 6 | 20.00 | 13.33 |
| 3" X 4" X 40" | 16 | 53.33 | 53.33 |
| NAILS | | NO. REQD | POUNDS |
| 8d (2-1/2") | | 18 | 0.19 |
| STEEL STRAPPING, 3/4" X .031" OR .035" | | 68.33' REQD | 4.88 LBS |
| SEAL FOR 3/4" STRAP | | 6 --- REQD | -NIL |
| STAPLE, 15/16" X 3/4" | | 44 --- REQD | -NIL |
| PALLET, 40" X 48" | | 1 --- REQD | 80 LBS |

| UNIT DATA | | WEIGHT |
|-----------------------|--------------------------|---------------------------|
| CUBE | 57.1 CUBIC FEET (APPROX) | |
| CONTAINER, M13 SERIES | 30 EA @ 30.5 LBS | 1,525 LBS (APPROX) |
| DUNNAGE | | 156 LBS |
| PALLET | | 80 LBS |
| TOTAL WEIGHT | | 1,761 LBS (APPROX) |



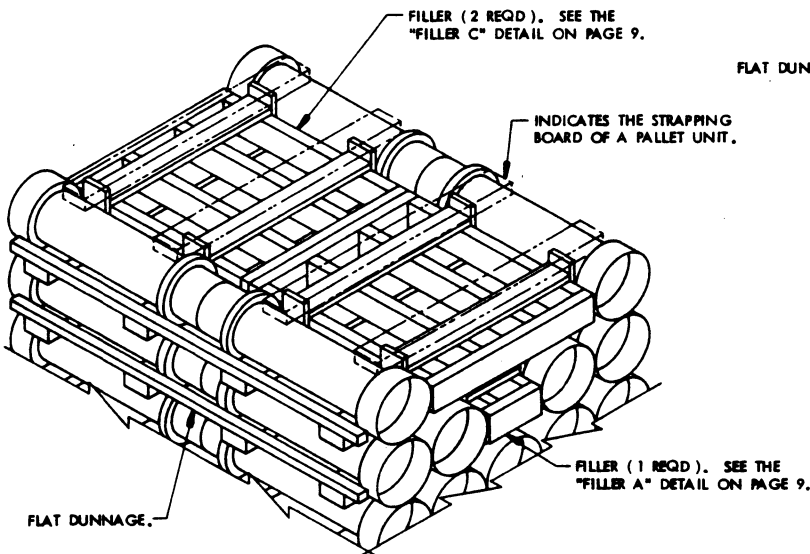
DETAIL A

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 A PALLET UNIT WHEN ONE CONTAINER IS TO BE OMITTED FROM A PALLET UNIT.



DETAIL B

THIS DETAIL DEPICTS PROCEDURES TO BE USED WHEN A STANDARD UNIT MINUS FOUR CONTAINERS IS TO BE UNITIZED. THESE ASSEMBLIES MUST BE INSTALLED IN THE MIDDLE OF THE TOP LAYER OF A PALLET UNIT WHEN FOUR CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT.



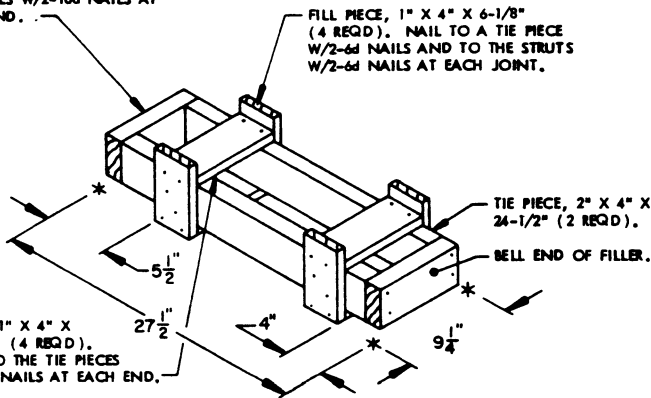
DETAIL C

THIS DETAIL DEPICTS PROCEDURES TO BE USED WHEN A STANDARD UNIT MINUS SEVEN CONTAINERS IS TO BE UNITIZED. THESE ASSEMBLIES MUST BE INSTALLED IN THE MIDDLE OF THE TOP LAYER OR LAYERS OF A PALLET UNIT WHEN SEVEN CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT. A COMBINATION OF FILLERS MUST BE USED WHEN NINE OR LESS CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT. WHEN TEN CONTAINERS ARE TO BE OMITTED, A COMPLETE LAYER MUST BE OMITTED.

END BEARING PIECE, 2" X 4", X 7-3/4" (2 REQD.). NAIL TO THE TIE PIECES W/2-10d NAILS AT EACH END.

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

STRUT, 1" X 4" X 7-3/4" (4 REQD.). NAIL TO THE TIE PIECES W/2-6d NAILS AT EACH END.



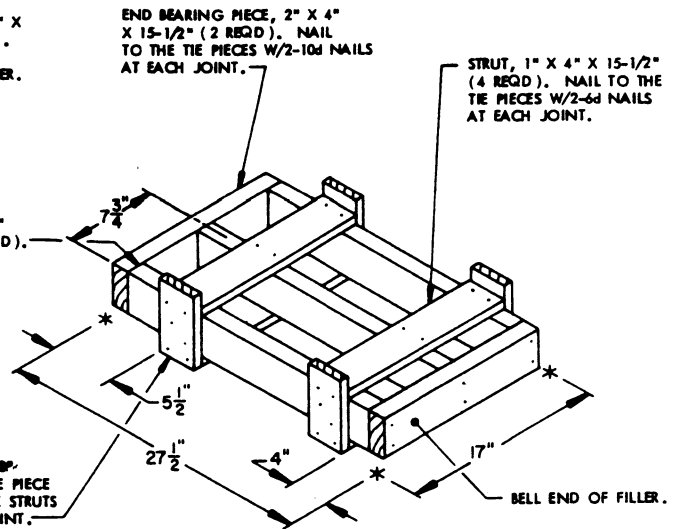
FILLER A

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

END BEARING PIECE, 2" X 4" X 15-1/2" (2 REQD.). NAIL TO THE TIE PIECES W/2-10d NAILS AT EACH JOINT.

STRUT, 1" X 4" X 15-1/2" (4 REQD.). NAIL TO THE TIE PIECES W/2-6d NAILS AT EACH JOINT.

TIE PIECE, 2" X 4" X 24-1/2" (3 REQD.).



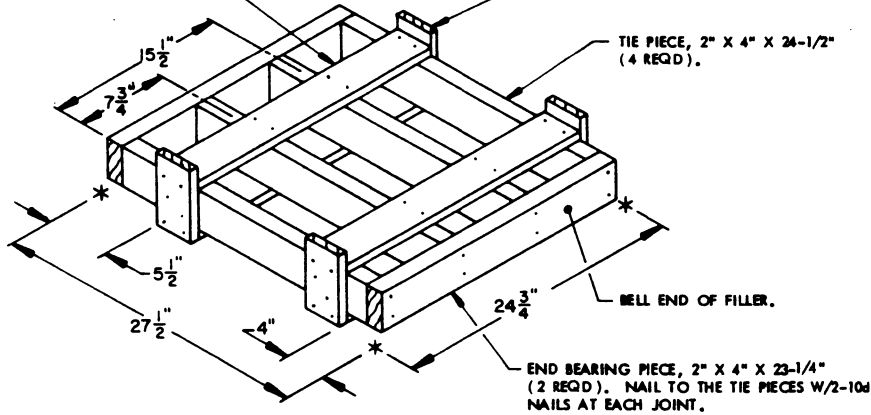
FILLER B

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

STRUT, 1" X 4" X 23-1/4" (4 REQD.). NAIL TO THE TIE PIECES W/2-10d NAILS AT EACH JOINT.

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

TIE PIECE, 2" X 4" X 24-1/2" (4 REQD.).



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.

SPECIAL NOTE:

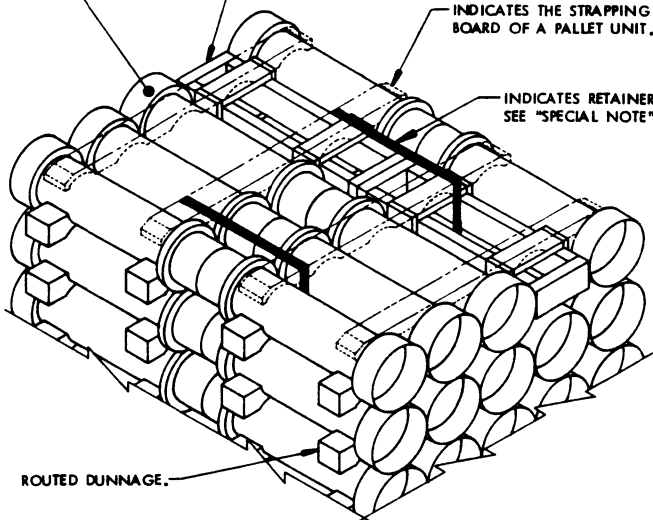
WHEN A PALLET UNIT REQUIRING A FILLER ASSEMBLY (S) IS TO BE BUILT, CARE MUST BE EXERCISED TO INSURE THAT SPACE IS PROVIDED FOR THE RETAINER STRAP. THE FILLER ASSEMBLY OR ASSEMBLIES MUST BE POSITIONED IN THE TOP LAYER OR LAYERS OF THE CENTER STACK OR STACKS OF A UNIT LOAD.

WHEN ONE CONTAINER IS OMITTED FROM A PALLET UNIT, THE FILLER MUST BE INSTALLED IN THE CENTER OF THE TOP LAYER.

FILLER (2 REQ'D). SEE THE "FILLER D" DETAIL ON PAGE 11.

INDICATES THE STRAPPING BOARD OF A PALLET UNIT.

INDICATES RETAINER STRAP. SEE "SPECIAL NOTE" ABOVE.



ROUTED DUNNAGE.

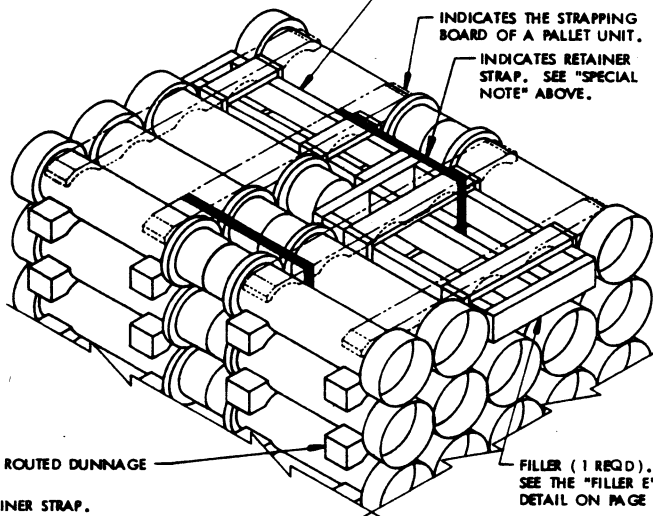
DETAIL D

THIS DETAIL DEPICTS PROCEDURES TO BE USED WHEN A STANDARD UNIT MINUS TWO CONTAINERS IS TO BE UNITIZED. THESE ASSEMBLIES ARE TO BE INSTALLED IN THE TOP LAYER OF A PALLET UNIT WHEN TWO CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT.

FILLER (1 REQ'D). SEE THE "FILLER D" DETAIL ON PAGE 11.

INDICATES THE STRAPPING BOARD OF A PALLET UNIT.

INDICATES RETAINER STRAP. SEE "SPECIAL NOTE" ABOVE.



ROUTED DUNNAGE

FILLER (1 REQ'D). SEE THE "FILLER E" DETAIL ON PAGE 11.

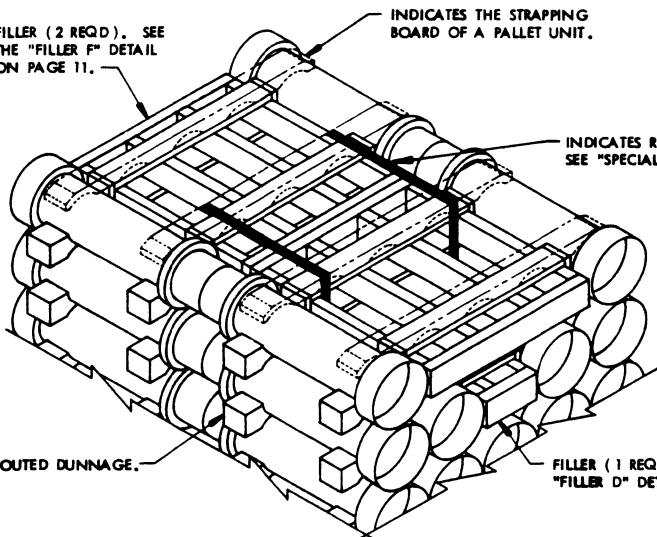
DETAIL E

THIS DETAIL DEPICTS THE PROCEDURES TO BE USED WHEN A STANDARD UNIT MINUS THREE CONTAINERS IS TO BE UNITIZED. THESE FILLERS ARE TO BE INSTALLED IN THE TOP LAYER OF A PALLET UNIT WHEN THREE CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT.

FILLER (2 REQ'D). SEE THE "FILLER F" DETAIL ON PAGE 11.

INDICATES THE STRAPPING BOARD OF A PALLET UNIT.

INDICATES RETAINER STRAP. SEE "SPECIAL NOTE" ABOVE.

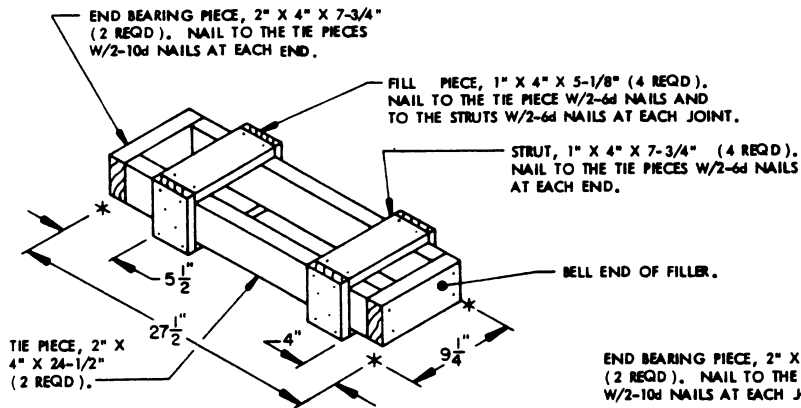


ROUTED DUNNAGE.

FILLER (1 REQ'D). SEE THE "FILLER D" DETAIL ON PAGE 11.

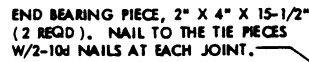
DETAIL F

THIS DETAIL DEPICTS THE PROCEDURES TO BE USED WHEN A STANDARD UNIT MINUS SEVEN CONTAINERS IS TO BE UNITIZED. A COMBINATION OF FILLERS MUST BE USED WHEN NINE OR LESS CONTAINERS ARE TO BE OMITTED FROM A PALLET UNIT. WHEN TEN CONTAINERS ARE TO BE OMITTED, A COMPLETE LAYER MUST BE OMITTED.



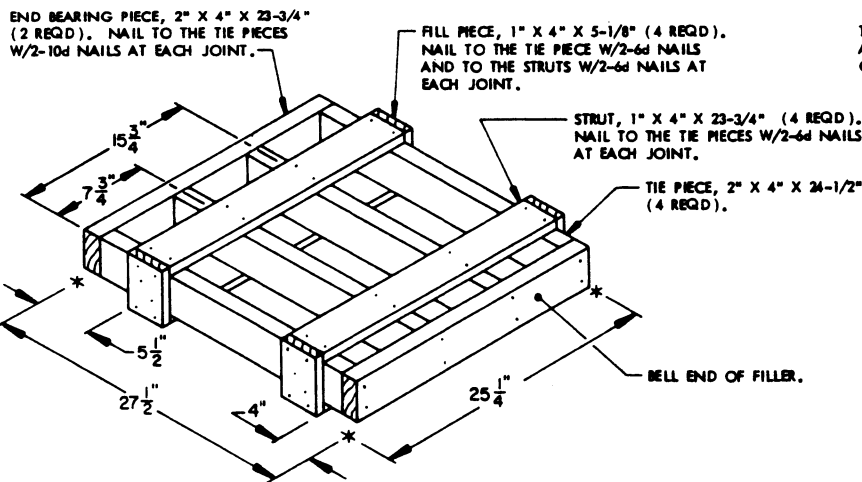
FILLER D

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 E

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 F

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

