

APPROVED BY
 BUREAU OF EXPLOSIVES
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 DATE 4/26/72

LOADING AND BRACING IN A CONTAINER/TRAILER EQUIPPED WITH A MECHANICAL BRACING SYSTEM OF PALLETIZED PROPELLING CHARGES AND COMPLETE ROUNDS PACKED IN CYLINDRICAL METAL CONTAINERS FOR CONTAINER/TRAILER-ON-FLAT-CAR (C/TOFC) SHIPMENT

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PROCEDURES SHOWN FOR THE PALLETIZED PROPELLING CHARGES ARE APPLICABLE FOR BOTH THE ROUTED DUNNAGE AND FLAT DUNNAGE UNITS.

DO NOT SCALE

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				CLASS	DIVISION	DRAWING	FILE
				19	48	4100	15 PM 1000

GENERAL NOTES

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AMCR 740-13, AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- B. THIS PROCEDURAL DRAWING IS APPLICABLE TO A TRAILER OR CONTAINER WHICH IS EQUIPPED WITH A MECHANICAL LOAD BRACING SYSTEM AS SPECIFIED WITHIN THE BUREAU OF EXPLOSIVES PAMPHLET NO. 6C AND APPENDICES THERETO. SUBSEQUENT REFERENCE TO A TRAILER THROUGHOUT THIS DOCUMENT MEANS A TRAILER OR CONTAINER. FOR TOFC AND/OR COFC SHIPMENTS, ONLY RAILCARS WHICH ARE SPECIFIED BY THE BUREAU OF EXPLOSIVES PAMPHLET NO. 6C, OR THE AFORE MENTIONED APPENDICES, WILL BE USED.
- C. THE LOADS AS SHOWN ARE BASED ON TRAILERS WHICH ARE 40'-0" LONG BY 7'-6" WIDE (INSIDE DIMENSION) WITH A WOOD OR A WOOD AND METAL, OR A METAL FLOOR. THE DELINEATED OUTLOADING PROCEDURES ARE ALSO APPLICABLE TO TRAILERS WHICH ARE EIGHTY-NINE INCHES (89") THROUGH NINETY-THREE INCHES (93") IN WIDTH.
- D. THE HEIGHT LOCATIONS SPECIFIED WITHIN THIS DRAWING FOR THE INSTALLATION OF CROSS MEMBERS ARE IDENTICAL TO THOSE RECOMMENDED WITHIN THE BUREAU OF EXPLOSIVES PAMPHLET NO. 6C AND APPENDICES THERETO. **CAUTION:** TRAILERS EQUIPPED WITH FACILITIES WHICH DO NOT MEET THE LOCATION REQUIREMENTS SPECIFIED IN THIS DRAWING MUST NOT BE USED.
 - 1. VOIDS WITHIN THE LENGTH OF A LOAD MUST BE HELD TO A MINIMUM. CROSS MEMBERS MUST BE PLACED AGAINST THE LADING AS TIGHTLY AS THE HOLE SPACING IN THE CROSS MEMBER ATTACHMENT FACILITY PERMITS. ALSO; EACH CROSS MEMBER WILL BE INSTALLED WITH THE ENDS ATTACHED AS NEARLY AS POSSIBLE IN "MATED" POSITIONS (AT EQUAL HEIGHTS AND AT EQUAL DISTANCES FROM THE END OF THE TRAILER).
 - 2. CROSS MEMBERS IN EMPTY TRAILERS AND THOSE UNUSED IN LOADED TRAILERS MUST BE SECURED FOR SHIPMENT. COMPONENTS ASSIGNED TO EACH TRAILER MUST REMAIN THERewith EVEN THOUGH UNUSED DURING SOME SHIPMENTS.
 - 3. A CROSS MEMBER WILL NOT BE RELIED UPON TO RETAIN MORE LADING ON EITHER SIDE THAN AS SHOWN WITHIN THE LOAD VIEWS WITHIN THE LOADING METHODS.
- E. FOR DETAILS OF THE PALLETIZED UNITS, SEE DRAWING NO. 19-48-4042-1-2-5-11-14PM1000 (REV NO. 2) FOR PROPELLING CHARGES AND DRAWING NO. 19-48-4079-1-2-5-11-14PM1001 FOR COMPLETE ROUNDS. SEE GENERAL NOTES "Q" AND "S".

PROPELLING CHARGES (FLAT DUNNAGE):

- UNIT 1 --- M10 SERIES CNTR --- 43-1/4" L X 55-1/2" W X 49-1/4" H --- 2,146 LBS (APPROX).
- UNIT 2 --- M13 SERIES CNTR --- 40" L X 55" W X 46" H --- 1,774 LBS (APPROX).
- UNIT 3 --- M14 SERIES CNTR --- 40" L X 48" W X 47-3/8" H --- 1,445 LBS (APPROX).
- UNIT 4 --- M16 SERIES CNTR --- 44" L X 48" W X 50-1/4" H --- 1,552 LBS (APPROX).
- UNIT 5 --- M18 SERIES CNTR --- 44" L X 52-9/16" W X 50-1/4" H --- 1,810 LBS (APPROX).
- UNIT 6 --- M19 SERIES CNTR --- 41" L X 58-1/2" W X 47-1/4" H --- 1,886 LBS (APPROX).
- UNIT 7 --- 175MM GREEN BAG --- 40" L X 48" W X 51-1/2" H --- 1,581 LBS (APPROX).
- UNIT 8 --- M460 SERIES CNTR --- 40" L X 55" W X 46-3/8" H --- 1,904 LBS (APPROX).

PROPELLING CHARGES (ROUTED DUNNAGE):

- UNIT 1 --- M10 SERIES CNTR --- 42" L X 55-1/2" W X 49" H --- 2,105 LBS (APPROX).
- UNIT 2 --- M13 SERIES CNTR --- 40" L X 55" W X 45-1/2" H --- 1,794 LBS (APPROX).
- UNIT 3 --- M14 SERIES CNTR --- 40" L X 48" W X 46-1/8" H --- 1,447 LBS (APPROX).
- UNIT 4 --- M16 SERIES CNTR --- 42-1/2" L X 48" W X 49-1/8" H --- 1,545 LBS (APPROX).
- UNIT 5 --- M18 SERIES CNTR --- 42" L X 52-9/16" W X 49-1/4" H --- 1,861 LBS (APPROX).
- UNIT 6 --- M19 SERIES CNTR --- 40" L X 58-1/2" W X 46-3/16" H --- 1,887 LBS (APPROX).
- UNIT 7 --- 175MM GREEN BAG --- 40" L X 48" W X 51-1/2" H --- 1,586 LBS (APPROX).
- UNIT 8 --- M460 SERIES CNTR --- 40" L X 55" W X 46-3/8" H --- 1,855 LBS (APPROX).
- UNIT 9 --- M460 SERIES CNTR W/PROTECTIVE COVER --- 40" L X 55" W X 45-1/2" H --- 2,091 LBS (APPROX).

COMPLETE ROUNDS:

- UNIT 1 --- M173 SERIES CNTR --- 40" L X 48" W X 35-1/2" H --- 2,189 LBS (APPROX).
- UNIT 2 --- T53 SERIES CNTR --- 40" L X 48" W X 35" H --- 2,197 LBS (APPROX).
- UNIT 3 --- M159 SERIES CNTR --- 40" L X 48" W X 41-1/4" H --- 2,200 LBS (APPROX).
- UNIT 4 --- M152 SERIES CNTR --- 40" L X 48" W X 34-3/8" H --- 2,160 LBS (APPROX).

(CONTINUED AT RIGHT)

MATERIAL SPECIFICATIONS

LUMBER --- SEE TM 743-200-1, DUNNAGE LUMBER; FED SPEC MM-L-751.

PLYWOOD: GROUP B OR C, GRADE* C-D (EXTERIOR); FED SPEC NN-P-530. FSN 5530-051-1198.

NAILS -- COMMON, CEMENT COATED OR CHEMICALLY ETCHED, FED SPEC FF-N-105. ALT: ANNULAR-RING TYPE NAIL OF THE SAME SIZE.

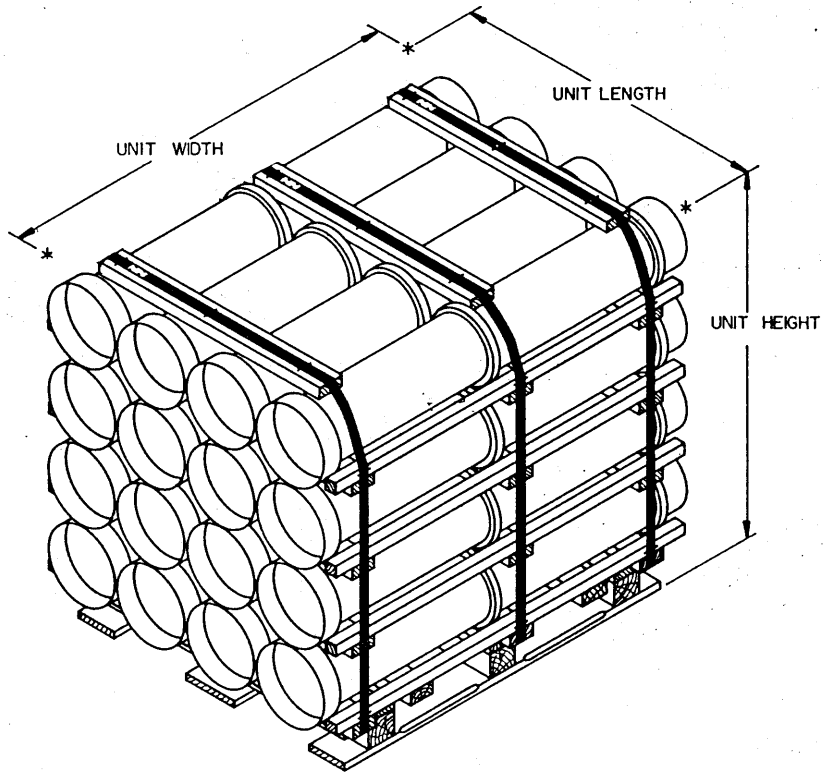
* IF SPECIFIED GRADE IS NOT AVAILABLE, A BETTER EXTERIOR GRADE MAY BE SUBSTITUTED.

STEEL STRAPPING --- TYPE I OR IV, CLASS A OR B. FED SPEC QQ-S-781.

STRAP SEAL ----- COMMERCIAL GRADE.

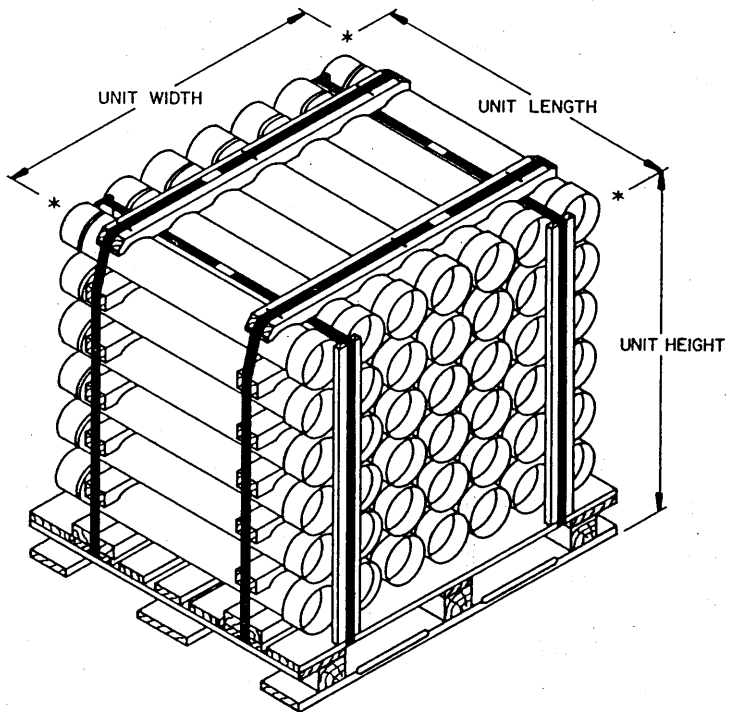
- F. THE OUTLOADING PROCEDURES SPECIFIED CAN ALSO BE UTILIZED FOR THE SHIPMENT OF THE DEPICTED UNITS WHEN THEY ARE LOADED WITH AN ITEM WHICH IS IDENTIFIED DIFFERENTLY BY NOMENCLATURE THAN THE ITEM DESIGNATED WITHIN THE DRAWING TITLE.
- G. **CAUTION:** PROPELLING CHARGES WILL NOT BE STACKED FOR SHIPMENT; HOWEVER, COMPLETE ROUNDS MAY BE STACKED AS DEPICTED BY THE "PARTIAL SECOND-LAYER LOAD" DETAILS ON PAGES 15, 17, AND 19.
- H. GROSS WEIGHT AND AXLE DISTRIBUTION OF WEIGHT FOR A LOAD WILL BE THE RESPONSIBILITY OF THE CARRIER. THE CARRIER WILL ADVISE THE SHIPPER OF THE APPLICABLE LOADING REQUIREMENTS AND THE SHIPPER WILL LOAD ACCORDINGLY. **NOTICE:** A SHIPMENT WILL BE POSITIONED IN A TRAILER CONSISTENT WITH THE WEIGHT LAWS OF THE STATES THROUGH WHICH THE TRAILER WILL BE TRANSPORTED BY HIGHWAY (MOTOR CARRIER).
- J. THE NUMBER OF LADING UNITS MAY BE ADJUSTED TO FIT THE SIZE OF THE TRAILER TO BE LOADED OR THE QUANTITY TO BE SHIPPED; HOWEVER, THE APPROVED METHODS SHOWN MUST BE FOLLOWED AS CLOSELY AS POSSIBLE FOR BLOCKING, BRACING, AND STAYING OF THE DESIGNATED ITEM.
- K. OTHER TYPES OF LADING ITEMS MAY BE LOADED INTO TRAILERS WHICH ARE PARTIALLY LOADED WITH THE DEPICTED ITEM, PROVIDING THE TOTAL LOAD IS COMPATIBLE, EXISTING DIRECTIVES ARE NOT VIOLATED, AND THE OTHER LADING ITEMS ARE BLOCKED AND BRACED TO EQUAL THE BLOCKING AND BRACING CRITERIA SPECIFIED IN THIS DRAWING.
- L. DUNNAGE LUMBER SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE, 1" X 4" MATERIAL IS ACTUALLY 3/4" THICK BY 3-5/8" WIDE AND 2" X 6" MATERIAL IS ACTUALLY 1-5/8" THICK BY 5-5/8" WIDE.
- M. DO NOT NAIL BLOCKING TO THE TRAILER WALLS OR FLOOR. ALL NAILING WILL BE WITHIN THE DUNNAGE.
- N. PORTIONS OF THE TRAILER BODY DEPICTED WITHIN THIS PROCEDURAL DRAWING, SUCH AS ONE OF THE SIDE WALLS, HAVE NOT BEEN SHOWN IN THE LOAD VIEWS FOR CLARITY PURPOSES.
- O. **NOTICE:** A STAGGERED NAILING PATTERN WILL BE USED WHEREVER POSSIBLE WHEN NAILS ARE DRIVEN INTO JOINTS OF DUNNAGE ASSEMBLIES, OR WHEN LAMINATING DUNNAGE.
- P. FOR ADDITIONAL GUIDANCE, ATTENTION IS DIRECTED TO THE "SPECIAL NOTES" SECTION WHICH IS IMMEDIATELY ADJACENT TO THE DEPICTED OUTLOADING METHOD.
- Q. PROPELLING CHARGE PALLETIZATION PROCEDURES BY BOTH THE FLAT DUNNAGE AND ROUTED DUNNAGE METHODS FOR UNITS 1 THRU 8, AND ALSO FOR UNIT 9 WITH THE PROTECTIVE COVER, WILL BE INCLUDED IN REVISION NUMBER 2 TO DRAWING 19-48-4042-1-2-5-11-14PM1000, WHEN PUBLISHED. IN THE MEANTIME, PALLETIZATION PROCEDURES BY THE FLAT DUNNAGE METHOD FOR UNITS 1, 2, 4, 5, AND 6 ARE SHOWN IN REVISION NUMBER 1 TO THAT DRAWING. THE M460 SERIES CONTAINER WITH PROTECTIVE COVER, DESIGNATED AS UNIT 9 WITHIN THIS DRAWING, IS SHOWN IN REVISION NUMBER 1 AS UNIT 7. REFER TO DRAWING C-AMXSV-4079 FOR PALLETIZATION OF UNIT 3, THE M14 SERIES CONTAINER PACKED 42 PER PALLET, BY EITHER THE FLAT DUNNAGE OR ROUTED DUNNAGE METHOD. REFER TO DRAWING C-4085 FOR PALLETIZATION OF THE 175MM GREEN BAG BY THE FLAT DUNNAGE METHOD AND TO DRAWING C-AMXSV-4086 FOR PALLETIZATION BY THE ROUTED DUNNAGE METHOD.
- R. WHEN STEEL STRAPPING IS SEALED AT AN END-OVER-END LAP JOINT, A MINIMUM OF TWO (2) SEALS, BUTTED TOGETHER, WITH TWO (2) PAIR OF CRIMPS PER SEAL MUST BE USED TO SEAL THE JOINT.
- S. THE APPLICABLE OUTLOADING PROCEDURES TO BE USED FOR EACH ITEM IDENTIFIED IN GENERAL NOTE "E" ARE AS SHOWN ON THE INDICATED PAGES:

ITEM (S)	PAGE (S)
PROPELLING CHARGE (UNITS 1, 2, 3, 5, 6, 8, AND 9)	4, 5, 11
PROPELLING CHARGE (UNIT 4)	6, 7, 11
PROPELLING CHARGE (UNIT 7)	8, 9, 11
COMPLETE ROUND (UNITS 1 OR 2)	14, 15, 20
COMPLETE ROUND (UNIT 3)	16, 17, 20
COMPLETE ROUND (UNIT 4)	18, 19, 20



TYPICAL PALLET UNIT (FLAT DUNNAGE)

REF: DRAWING 19-48-4042-1-2-5-11-14PM1000 (REV NO. 2),
UNIT 1 DEPICTED ABOVE. SEE GENERAL NOTE "Q" ON PAGE 2.

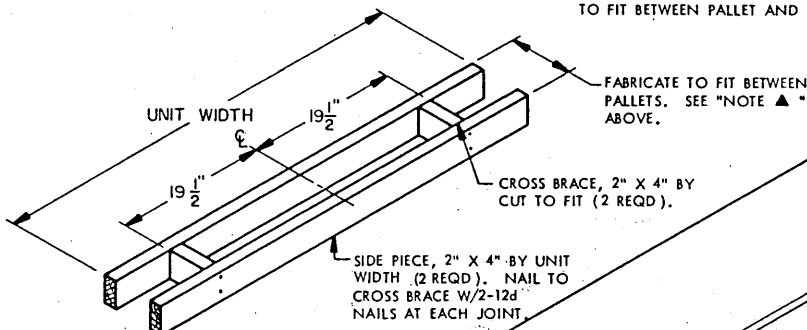


TYPICAL PALLET UNIT (ROUTED DUNNAGE)

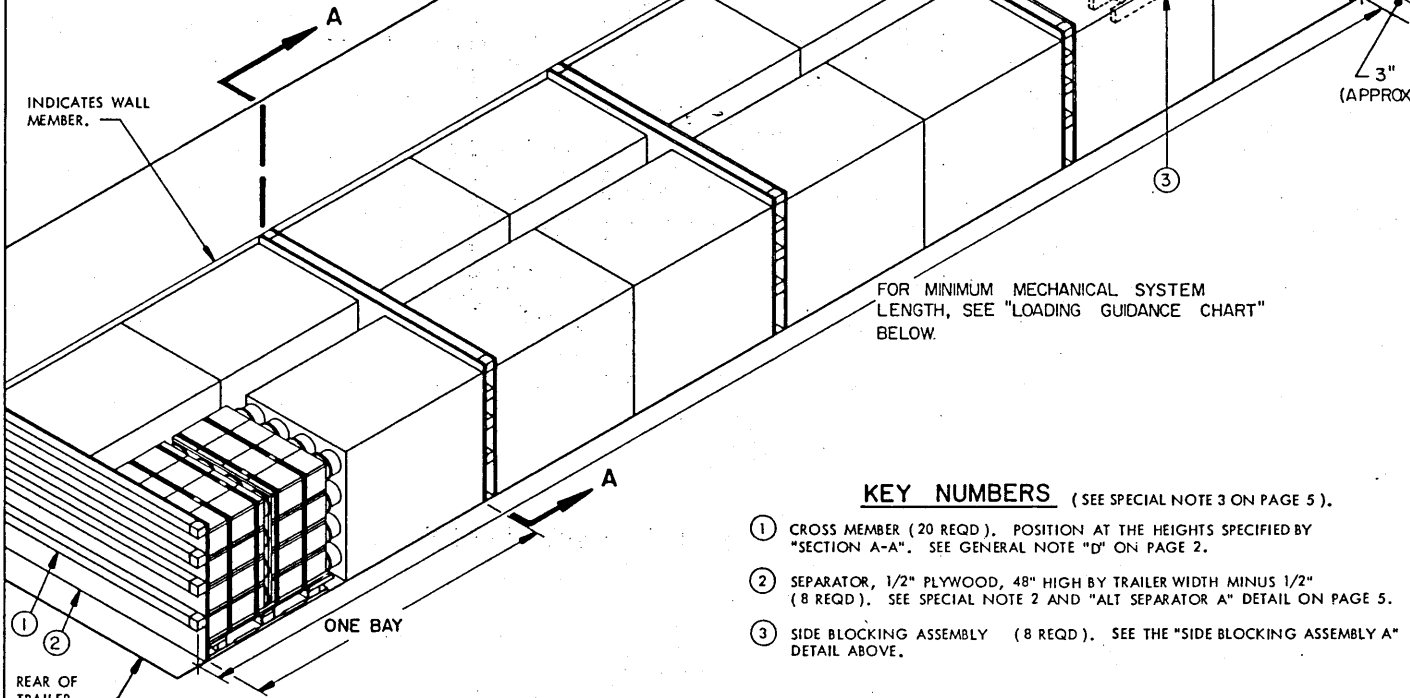
REF: DRAWING 19-48-4042-1-2-5-11-14PM1000 (REV NO. 2), UNIT 3 DEPICTED ABOVE.
SEE GENERAL NOTE "Q" ON PAGE 2.

NOTE ▲:

IF USING "SIDE BLOCKING ASSEMBLY A" FOR OMITTING A PALLET AS SHOWN ON PAGE 11, THIS DIMENSION WILL BE FABRICATED TO FIT BETWEEN PALLET AND SIDE WALL OF TRAILER.



SIDE BLOCKING ASSEMBLY A

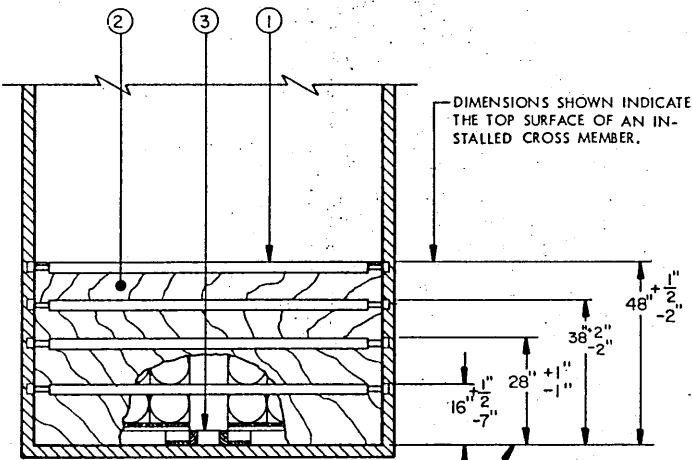


ISOMETRIC VIEW

UNIT NO. 9 DEPICTED.

KEY NUMBERS (SEE SPECIAL NOTE 3 ON PAGE 5).

- ① CROSS MEMBER (20 REQD.). POSITION AT THE HEIGHTS SPECIFIED BY "SECTION A-A". SEE GENERAL NOTE "D" ON PAGE 2.
- ② SEPARATOR, 1/2" PLYWOOD, 48" HIGH BY TRAILER WIDTH MINUS 1/2" (8 REQD.). SEE SPECIAL NOTE 2 AND "ALT SEPARATOR A" DETAIL ON PAGE 5.
- ③ SIDE BLOCKING ASSEMBLY (8 REQD.). SEE THE "SIDE BLOCKING ASSEMBLY A" DETAIL ABOVE.



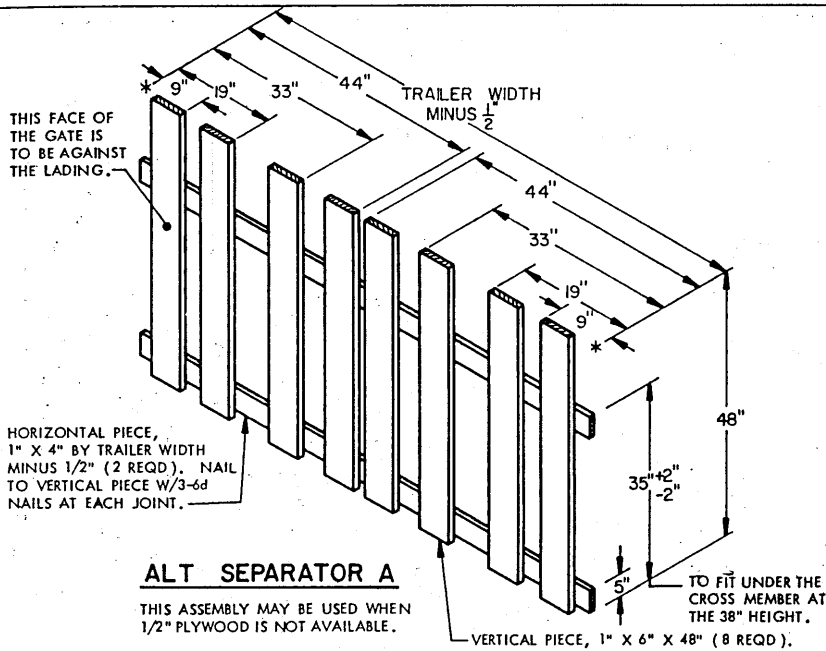
SECTION A-A

INDICATES THE TRAILER FLOOR.

LOADING GUIDANCE CHART						
UNIT NO.	MAX UNITS PER BAY	NO. OF BAYS	TOTAL UNITS	TOTAL WEIGHT LBS [Ⓢ]	CM'S REQD.	MIN MECHANICAL SYSTEM LENGTH
1	4	4	16	34,336	20	38'-7"
2	6 *	2-2/3	16	28,704	16	37'-11"
3	6 *	3	18	26,046	16	37'-3"
5	6 *	2-2/3	16	29,776	16	36'-5"
6	6 *	2-1/3	14	26,418	16	35'-6"
8	4	4	16	30,464	20	38'-3"
9	4	4	16	33,456	20	38'-3"

* SEE "6-UNIT BAY DETAIL" AND SPECIAL NOTE 1 ON PAGE 5.

Ⓢ THE TOTAL WEIGHT OF A LOAD IS BASED ON THE HEAVIEST WEIGHT FOR A UNIT. UNITS 1 AND 8 ARE BASED ON THE FLAT DUNNAGE UNIT AND UNITS 2, 3, 5, AND 6 ARE BASED ON THE ROUTED DUNNAGE UNIT.

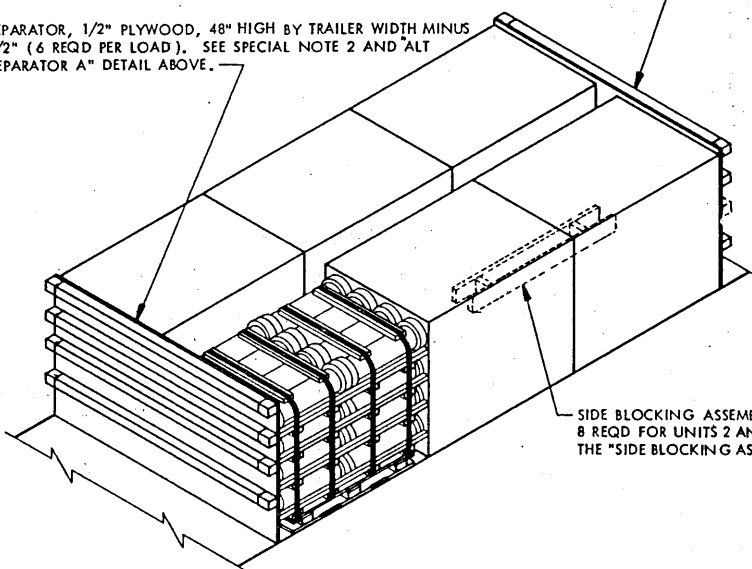


SPECIAL NOTES:

1. A 16-UNIT LOAD IS SHOWN IN A 40'-0" LONG TRAILER WHICH IS EQUIPPED WITH A MECHANICAL LOAD BLOCKING SYSTEM. UNITS NO. 1, 8, AND 9 WILL BE LOADED AS SHOWN IN THE "ISOMETRIC VIEW" ON PAGE 4. UNITS NO. 2, 3, 5, AND 6 MAY BE LOADED AS SHOWN IN "6-UNIT BAY DETAIL" ON THIS PAGE.
2. IF 1/2" PLYWOOD IS NOT AVAILABLE A SEPARATOR GATE MAY BE FABRICATED FROM 1" THICK MATERIAL. SEE "ALT SEPARATOR A" ON THIS PAGE; A SEPARATOR IS REQUIRED TO RETAIN ITEMS WHEN UNIT WIDTH IS PARALLEL TO TRAILER LENGTH.
3. THE QUANTITIES OF CROSS MEMBERS, SEPARATORS, AND SIDE BLOCKING ASSEMBLIES SPECIFIED IN THE KEY NUMBERS ON PAGE 4 ARE APPLICABLE FOR UNITS 1, 8, AND 9. FOR UNITS 2 AND 5, SIXTEEN (16) CROSS MEMBERS ARE REQUIRED IN LIEU OF 20 AND SIX (6) SEPARATORS ARE REQUIRED IN LIEU OF 8. UNITS 3 AND 6 ALSO REQUIRE SIXTEEN (16) CROSS MEMBERS AND SIX (6) SEPARATORS. HOWEVER, NINE (9) SIDE BLOCKING ASSEMBLIES ARE REQUIRED FOR UNIT 3, AND SEVEN (7) ARE REQUIRED FOR UNIT 6 IN LIEU OF THE 8 AS SPECIFIED.
4. FOR PROCEDURES APPLICABLE TO OMITTING A PALLET UNIT FROM THE DEPICTED LOAD, REFER TO THE "METHOD A" DETAIL ON PAGE 11. NOTE THAT THE LOAD MUST BE BAYED OFF IN SUCH A MANNER THAT A SINGLE PALLET UNIT WILL BE IN A BAY BY ITSELF. TWO (2) EACH ADDITIONAL CROSS MEMBERS AND SEPARATORS AND ONE (1) ADDITIONAL "SIDE BLOCKING ASSEMBLY A" WILL BE REQUIRED TO ACCOMPLISH THIS WHEN THE 48" DIMENSION OF THE PALLET IS LENGTHWISE IN THE TRAILER AS SHOWN, AND WHEN THE PALLET IS OMITTED FROM THE REARMOST OR FORWARDMOST BAY. FOUR (4) ADDITIONAL CROSS MEMBERS ARE REQUIRED WHEN THE 1-UNIT BAY IS ELSEWHERE WITHIN THE LOAD. IF THE PALLET IS TURNED 90°, OMIT ONE "SIDE BLOCKING ASSEMBLY A" AND REPLACE WITH TWO (2) "SIDE BLOCKING ASSEMBLY C" ASSEMBLIES, AS DETAILED ON PAGE 11.

CROSS MEMBER (16 REQD.). POSITION AT THE HEIGHTS SPECIFIED IN "SECTION A-A" ON PAGE 4. SEE GENERAL NOTE "D" ON PAGE 2.

SEPARATOR, 1/2" PLYWOOD, 48" HIGH BY TRAILER WIDTH MINUS 1/2" (6 REQD PER LOAD). SEE SPECIAL NOTE 2 AND "ALT SEPARATOR A" DETAIL ABOVE.



6-UNIT BAY DETAIL

SHOWING LOADING PATTERN FOR UNITS NO. 2, 3, 5, AND 6. (UNIT NO. 6 DEPICTED ABOVE) (FLAT DUNNAGE).

BILL OF MATERIAL

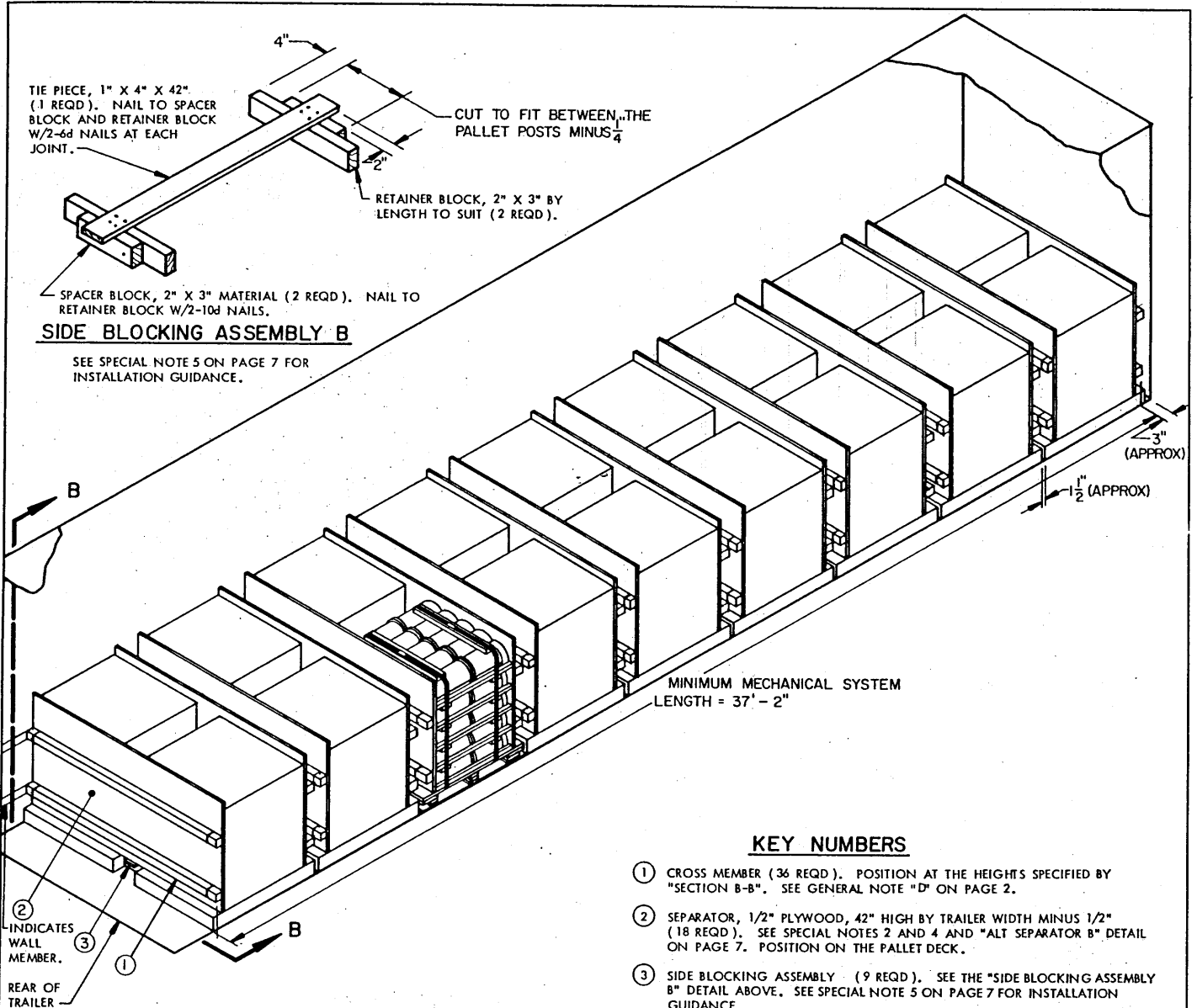
UNIT NO.	2" X 4"		12d NAILS		PLYWOOD, 1/2" X 48" X TW MINUS 1/2"
	LINEAR FEET	BOARD FEET	NO. REQD.	POUNDS	
1	81	54	64	1-1/4	8 REQD ----- 328 LBS
2	83	56	64	1-1/4	6 REQD ----- 252 LBS
3	83	56	72	1-1/4	6 REQD ----- 252 LBS
5	77	52	64	1-1/4	6 REQD ----- 252 LBS
6	77	52	56	1	6 REQD ----- 252 LBS
8	83	56	64	1-1/4	8 REQD ----- 328 LBS
9	83	56	64	1-1/4	8 REQD ----- 328 LBS

• TW=TRAILER WIDTH.

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT NO. 9	16	33,456 LBS
DUNNAGE		470 LBS
TOTAL WEIGHT		33,926 LBS

TYPICAL 16-UNIT LOAD (PROPELLING CHARGE; UNITS 1, 2, 3, 5, 6, 8 AND 9)

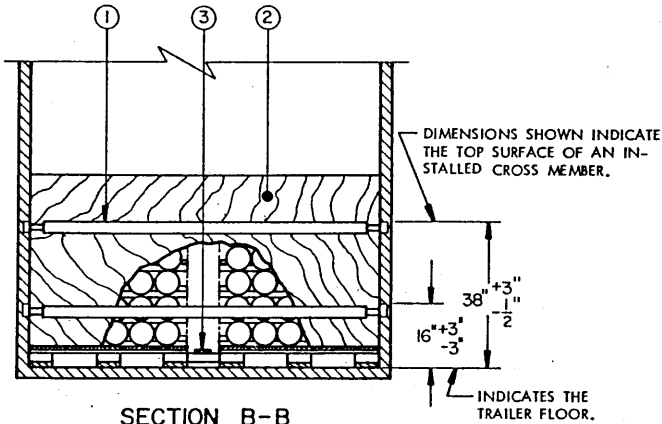


ISOMETRIC VIEW

UNIT NO. 4 DEPICTED
(FLAT DUNNAGE)

KEY NUMBERS

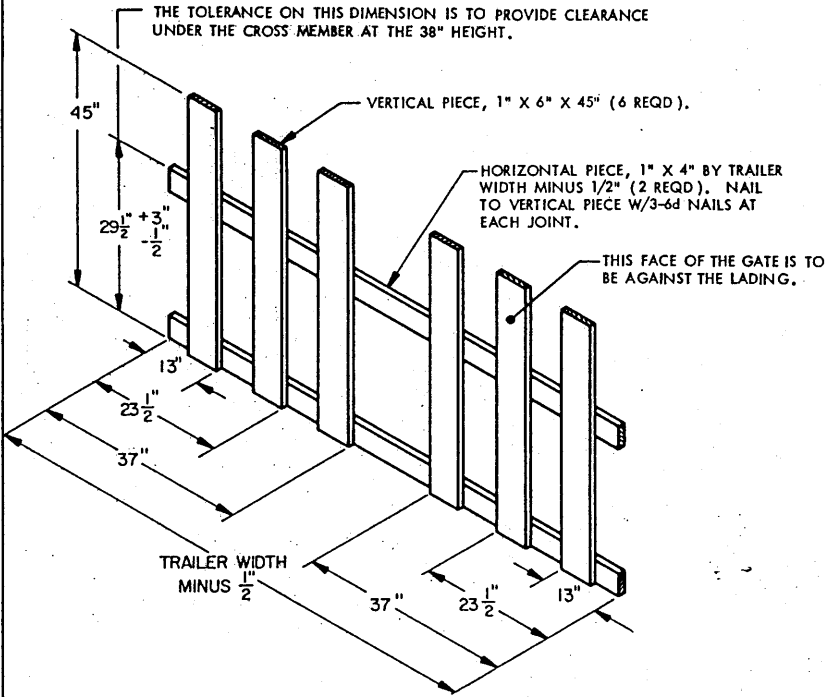
- ① CROSS MEMBER (36 REQD). POSITION AT THE HEIGHTS SPECIFIED BY "SECTION B-B". SEE GENERAL NOTE "D" ON PAGE 2.
- ② SEPARATOR, 1/2" PLYWOOD, 42" HIGH BY TRAILER WIDTH MINUS 1/2" (18 REQD). SEE SPECIAL NOTES 2 AND 4 AND "ALT SEPARATOR B" DETAIL ON PAGE 7. POSITION ON THE PALLET DECK.
- ③ SIDE BLOCKING ASSEMBLY (9 REQD). SEE THE "SIDE BLOCKING ASSEMBLY B" DETAIL ABOVE. SEE SPECIAL NOTE 5 ON PAGE 7 FOR INSTALLATION GUIDANCE.



SECTION B-B

TYPICAL 18-UNIT LOAD (PROPELLING CHARGE, UNIT 4)

THE TOLERANCE ON THIS DIMENSION IS TO PROVIDE CLEARANCE UNDER THE CROSS MEMBER AT THE 38" HEIGHT.

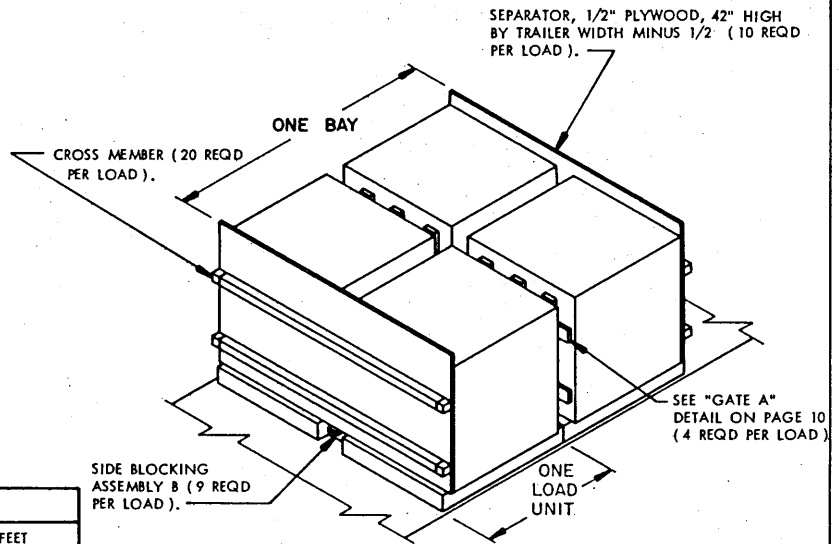


SPECIAL NOTES:

1. AN 18-UNIT LOAD IS SHOWN IN A 40'-0" LONG TRAILER WHICH IS EQUIPPED WITH A MECHANICAL BRACING SYSTEM. UNIT NO. 4 MAY BE LOADED AS SHOWN IN THE "ISOMETRIC VIEW" ON PAGE 6.
2. IF 1/2" PLYWOOD IS NOT AVAILABLE A SEPARATOR GATE MAY BE FABRICATED FROM 1" THICK MATERIAL. SEE "ALT SEPARATOR B" ON THIS PAGE. A SEPARATOR IS REQUIRED TO RETAIN ITEMS WHEN UNIT WIDTH IS PARALLEL TO TRAILER LENGTH.
3. IF THE TRAILER DOES NOT HAVE SUFFICIENT CROSS MEMBERS TO BLOCK THE LOAD AS SHOWN IN THE "ISOMETRIC VIEW" ON PAGE 6, SEE THE "ALTERNATIVE BLOCKING METHOD" DETAIL BELOW FOR GUIDANCE.
4. THE SEPARATOR, PIECE MARKED ②, MUST BE AT LEAST 42" HIGH. TO ELIMINATE THE RIPPING OF THE PLYWOOD SHEETS, 48" WIDE MATERIAL MAY BE USED, IF DESIRED.
5. A "SIDE BLOCKING ASSEMBLY B", KEY NUMBER ③ ON PAGES 6 AND 8, MUST BE ASSEMBLED IN PLACE. INSTALLATION SHOULD BE ACCOMPLISHED IN ACCORDANCE WITH THE FOLLOWING GUIDANCE. LAMINATE A RETAINER BLOCK AND A SPACER BLOCK. NAIL ONE END OF THE TIE PIECE, ALLOWING 2" TO PROTRUDE. POSITION THE ASSEMBLED RETAINER BLOCK AND SPACER BLOCK PIECES BEYOND THE CENTER POSTS OF THE LATERALLY ADJACENT PALLETS AND MOVE THE ASSEMBLY FORWARD UNTIL IT CONTACTS THE OUTWARD PALLET POSTS. NAIL THE OTHER END OF THE TIE PIECE TO AN ASSEMBLED RETAINER BLOCK AND SPACER BLOCK WHICH IS POSITIONED JUST BEYOND THE NEAREST PALLET POST.
6. FOR PROCEDURES APPLICABLE TO OMITTING A PALLET UNIT FROM THE DEPICTED LOAD, REFER TO THE "METHOD B" DETAIL ON PAGE 11.

ALT SEPARATOR B

THIS ASSEMBLY MAY BE USED WHEN 1/2" PLYWOOD IS NOT AVAILABLE.



BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	32	11
2" X 3"	42	21
NAILS	NO. REQD	POUNDS
6d (2")	72	1/2
10d (3")	36	3/4
PLYWOOD, 1/2" X 42" BY TW MINUS 1/2" ---- 18 REQD ----- 646 LBS		

● TW=TRAILER WIDTH.

ALTERNATIVE BLOCKING METHOD

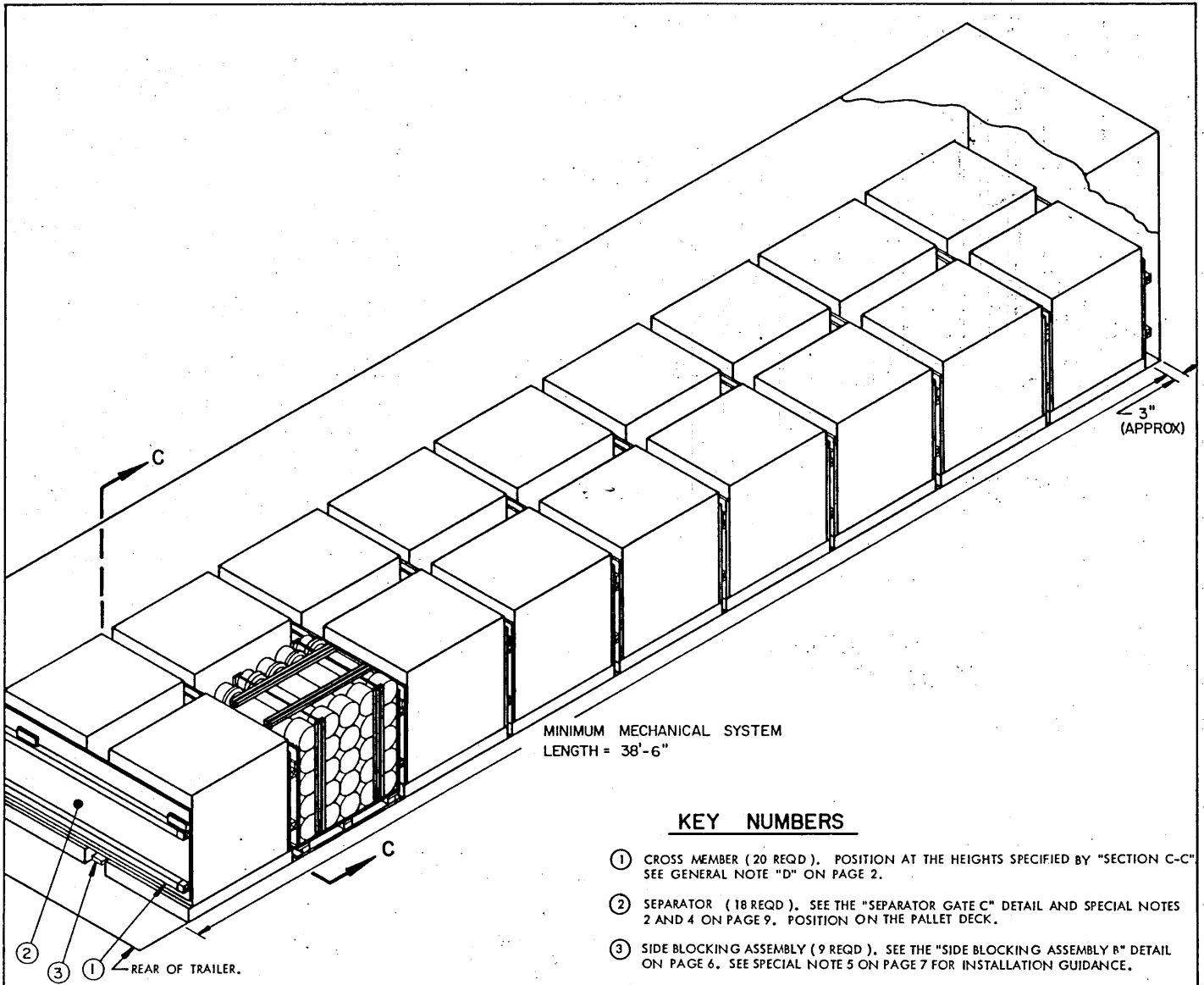
THIS METHOD MAY BE USED WHEN THERE IS A SHORTAGE OF CROSS MEMBERS IN A TRAILER. THE LOAD SHOULD BE BAYED OFF IN GROUPS OF 4 PALLET UNITS AS SHOWN. INSTALL A "GATE A" BETWEEN LONGITUDINALLY ADJACENT LOAD UNITS WITHIN A BAY IN LIEU OF USING 4 CROSS MEMBERS AND 2 SEPARATORS. NOTE THAT THE GATE IS TO BE POSITIONED ON TOP OF THE PROJECTING PALLETS. SEE THE "GATE A" DETAIL ON PAGE 10 FOR CONSTRUCTION GUIDANCE.

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	18	27,936 LBS *
DUNNAGE		728 LBS
TOTAL WEIGHT		28,664 LBS

* BASED ON FLAT DUNNAGE UNIT.

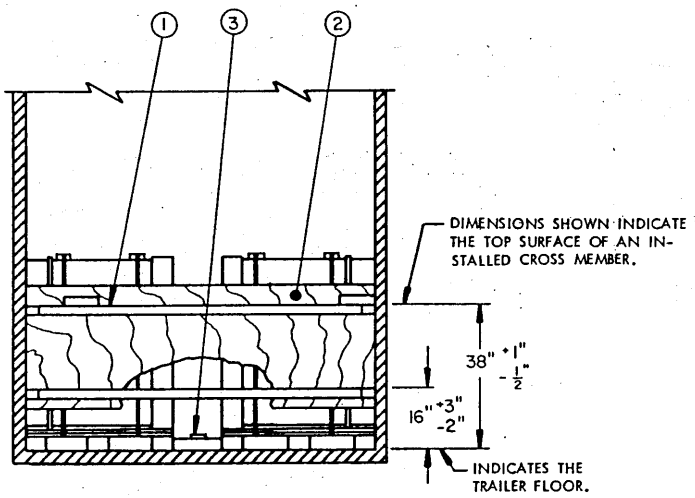
TYPICAL 18-UNIT LOAD (PROPELLING CHARGE, UNIT 4)



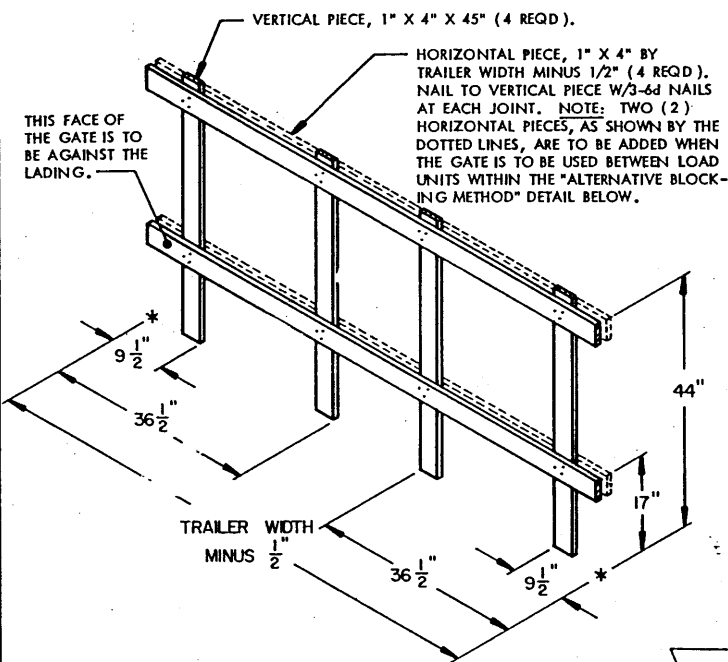
ISOMETRIC VIEW
 UNIT NO. 7 DEPICTED.
 (FLAT DUNNAGE)

KEY NUMBERS

- ① CROSS MEMBER (20 REQD). POSITION AT THE HEIGHTS SPECIFIED BY "SECTION C-C" SEE GENERAL NOTE "D" ON PAGE 2.
- ② SEPARATOR (18 REQD). SEE THE "SEPARATOR GATE C" DETAIL AND SPECIAL NOTES 2 AND 4 ON PAGE 9. POSITION ON THE PALLET DECK.
- ③ SIDE BLOCKING ASSEMBLY (9 REQD). SEE THE "SIDE BLOCKING ASSEMBLY B" DETAIL ON PAGE 6. SEE SPECIAL NOTE 5 ON PAGE 7 FOR INSTALLATION GUIDANCE.



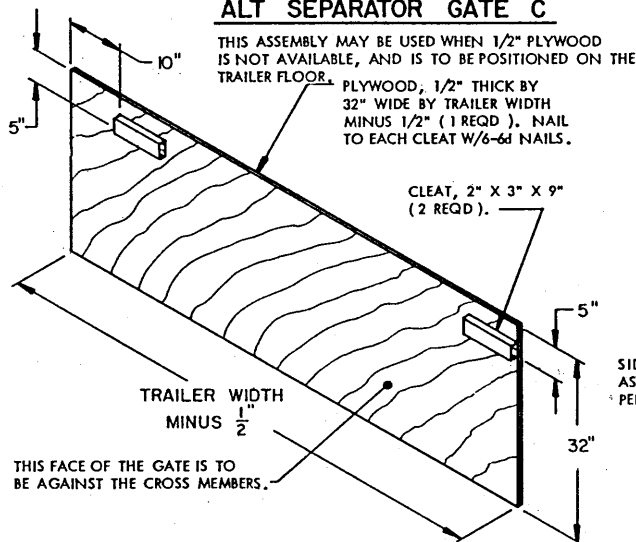
SECTION C-C



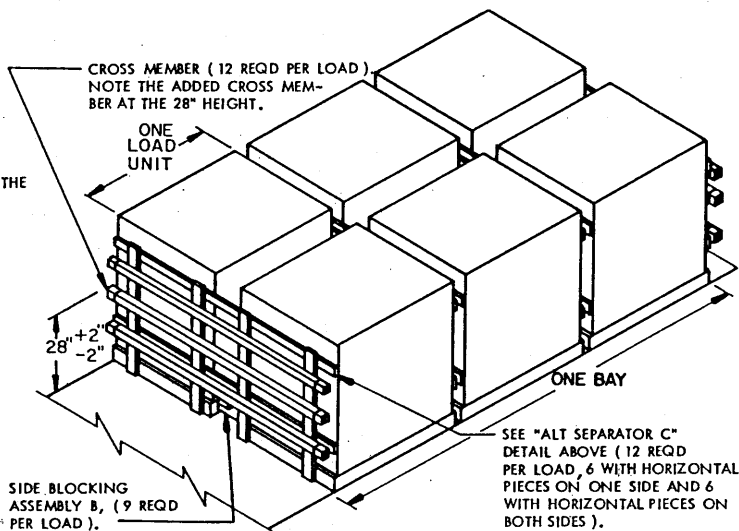
SPECIAL NOTES:

1. AN 18-UNIT LOAD IS SHOWN IN A 40'-0" LONG TRAILER WHICH IS EQUIPPED WITH A MECHANICAL BRACING SYSTEM. UNIT NO. 7 MAY BE LOADED AS SHOWN IN THE "ISOMETRIC VIEW" ON PAGE 8.
2. IF 1/2" PLYWOOD IS NOT AVAILABLE A SEPARATOR GATE MAY BE FABRICATED FROM 1" THICK MATERIAL. SEE "ALT SEPARATOR C" ON THIS PAGE.
3. IF THE TRAILER DOES NOT HAVE SUFFICIENT CROSS MEMBERS TO BLOCK THE LOAD AS SHOWN IN THE "ISOMETRIC VIEW" ON PAGE 8, SEE THE "ALTERNATIVE BLOCKING METHOD" DETAIL BELOW FOR GUIDANCE.
4. A SEPARATOR, PIECE MARKED (C) MAY BE CONSTRUCTED FROM TWO OF THE 16" WIDE PIECES OF PLYWOOD WHICH REMAIN WHEN 32" WIDE STRIPS ARE RIPPED FROM A FULL SHEET. APPLY THREE (3) 1" X 4" X 12" SPLICE PIECES ON THE JOINT IN SUCH A MANNER THAT THEY WILL NOT INTERFERE WITH THE POSITIONING OF THE CROSS MEMBERS. NAIL EACH PLYWOOD PIECE TO THE SPLICE PIECES W/4-6d NAILS AT EACH JOINT AND CLINCH.
5. FOR PROCEDURES APPLICABLE TO OMITTING A PALLET UNIT FROM THE DEPICTED LOAD, REFER TO THE "METHOD B" DETAIL ON PAGE 11.

ALT SEPARATOR GATE C



SEPARATOR GATE C



ALTERNATIVE BLOCKING METHOD

THIS METHOD MAY BE USED WHEN THERE IS A SHORTAGE OF CROSS MEMBERS IN A TRAILER. THE LOAD SHOULD BE BAYED OFF IN GROUPS OF 6 PALLET UNITS AS SHOWN. INSTALL AN "ALT SEPARATOR GATE C", WITH HORIZONTAL PIECES ON ONE SIDE, AT EACH END OF A BAY, WITH THE VERTICAL PIECES IN CONTACT WITH THE CROSS MEMBERS. INSTALL AN "ALT SEPARATOR GATE C", WITH HORIZONTAL PIECES ON BOTH SIDES, BETWEEN THE LOAD UNITS WITHIN THE BAY.

BILL OF MATERIAL

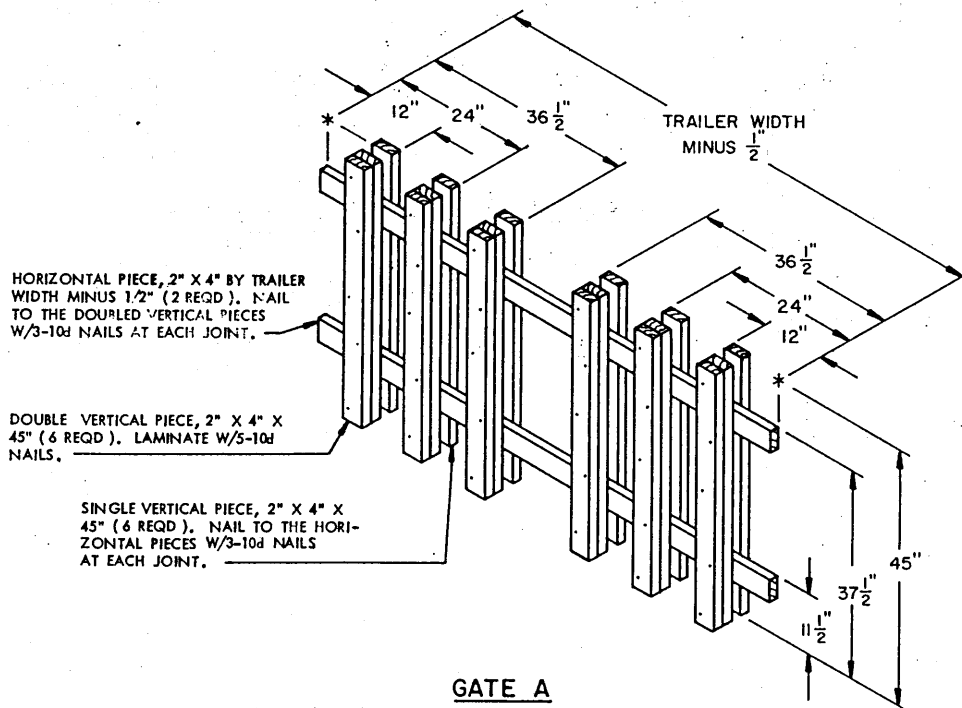
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	32	11
2" X 3"	69	35
NAILS	NO. REQD	POUNDS
6d (2")	432	2-1/2
10d (3")	36	3/4
PLYWOOD, 1/2" X 32" BY TW MINUS 1/2" --- 18 REQD --- 493 LBS		

● TW=TRAILER WIDTH.

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	18	28,548 LBS *
DUNNAGE		612 LBS
TOTAL WEIGHT		29,060 LBS

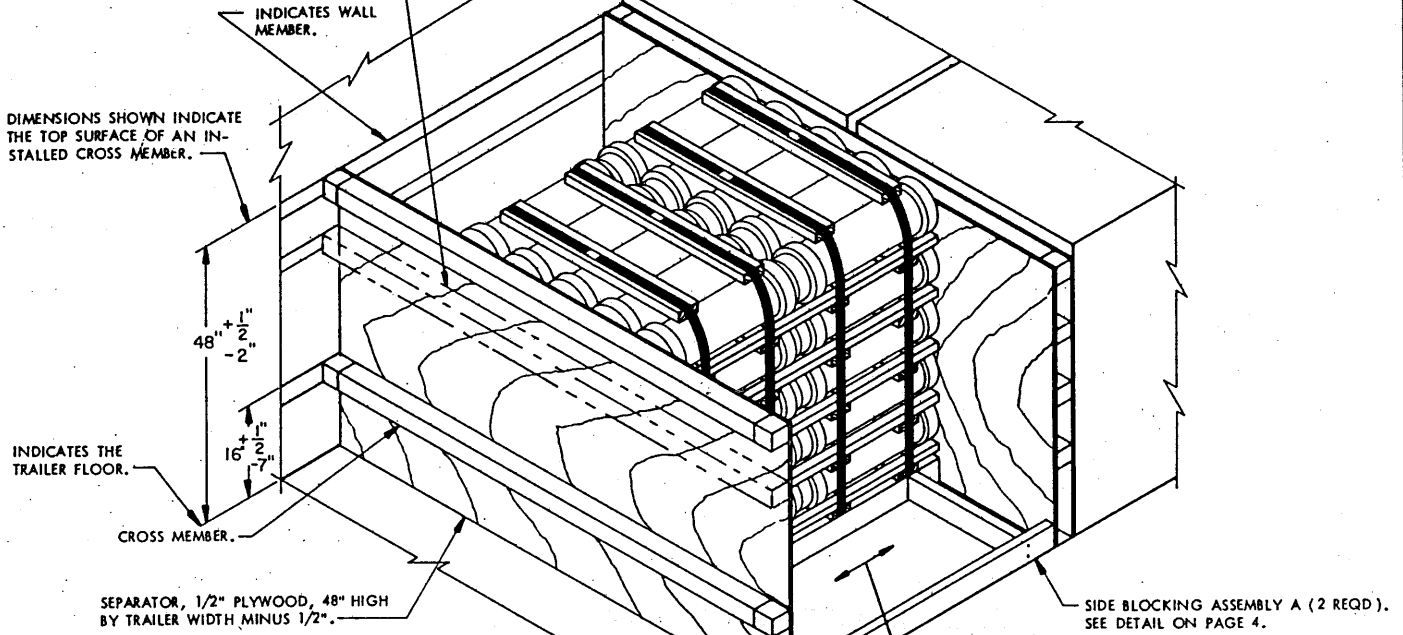
* BASED ON THE ROUTED DUNNAGE UNIT.



GATE A

THIS ASSEMBLY IS TO BE USED WITH THE "ALTERNATIVE BLOCKING METHOD" FOR UNIT NO. 4 SHOWN ON PAGE 7.

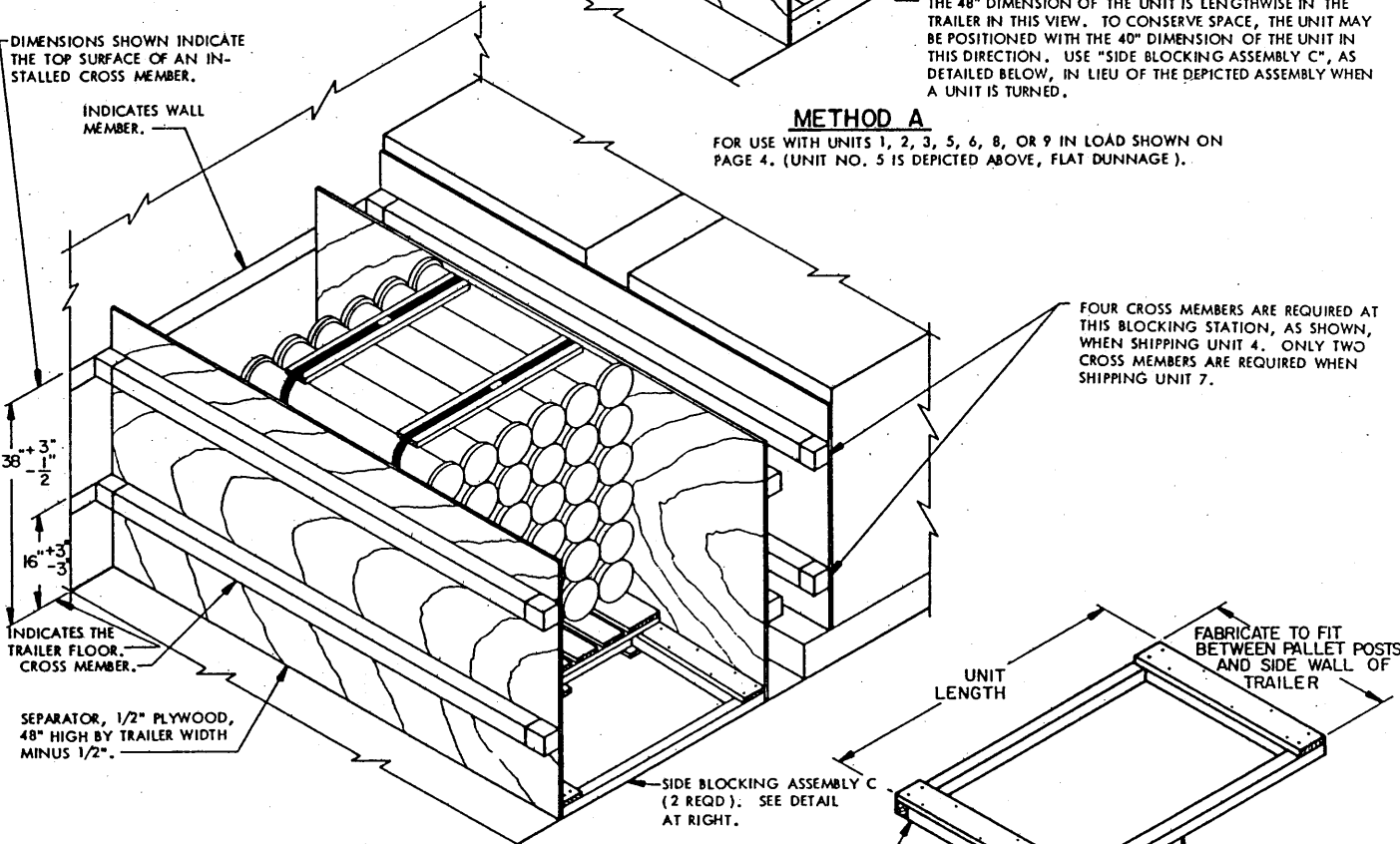
WHEN A PALLET UNIT IS TURNED SO THE 40" DIMENSION OF THE PALLET IS LENGTHWISE IN THE TRAILER THE UPPER CROSS MEMBER SHOULD BE POSITIONED AT THE 38" HEIGHT IN LIEU OF AT 48".



THE 48" DIMENSION OF THE UNIT IS LENGTHWISE IN THE TRAILER IN THIS VIEW. TO CONSERVE SPACE, THE UNIT MAY BE POSITIONED WITH THE 40" DIMENSION OF THE UNIT IN THIS DIRECTION. USE "SIDE BLOCKING ASSEMBLY C", AS DETAILED BELOW, IN LIEU OF THE DEPICTED ASSEMBLY WHEN A UNIT IS TURNED.

METHOD A

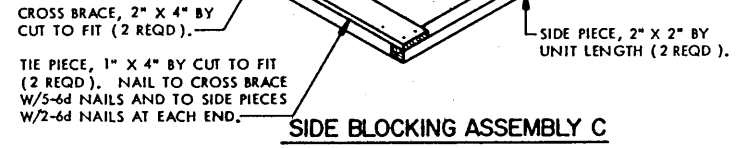
FOR USE WITH UNITS 1, 2, 3, 5, 6, 8, OR 9 IN LOAD SHOWN ON PAGE 4. (UNIT NO. 5 IS DEPICTED ABOVE, FLAT DUNNAGE).



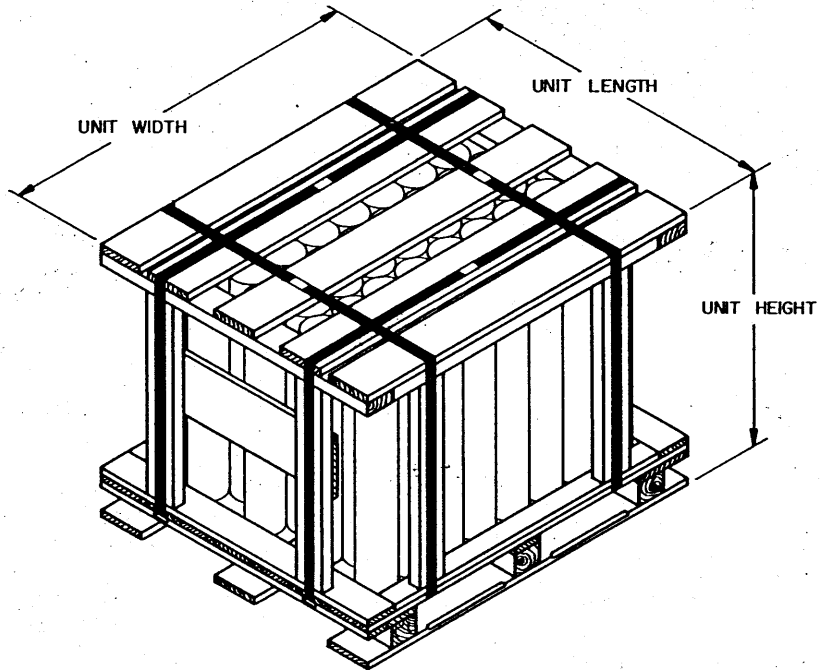
FOUR CROSS MEMBERS ARE REQUIRED AT THIS BLOCKING STATION, AS SHOWN, WHEN SHIPPING UNIT 4. ONLY TWO CROSS MEMBERS ARE REQUIRED WHEN SHIPPING UNIT 7.

METHOD B

FOR USE WITH UNIT 4 SHOWN ON PAGE 6 OR UNIT 7 SHOWN ON PAGE 8.

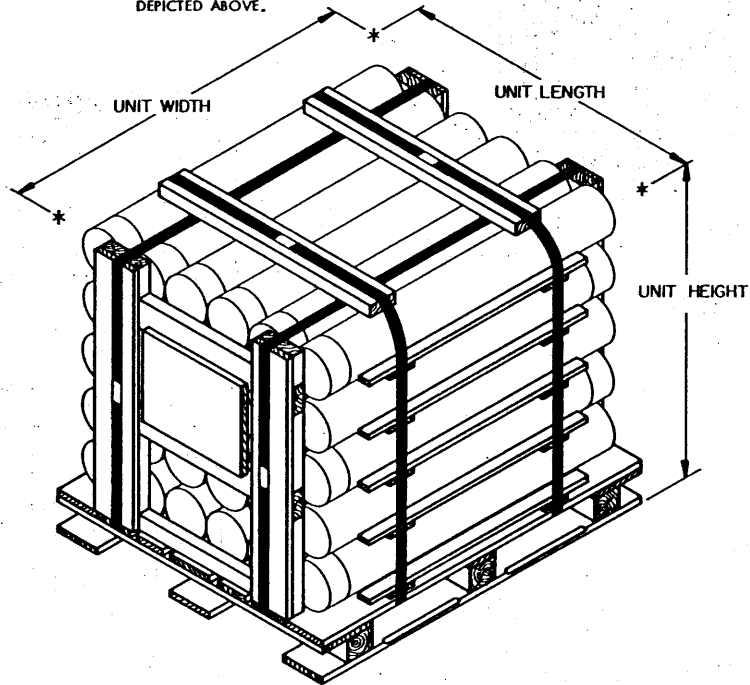


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TYPICAL PALLET UNIT

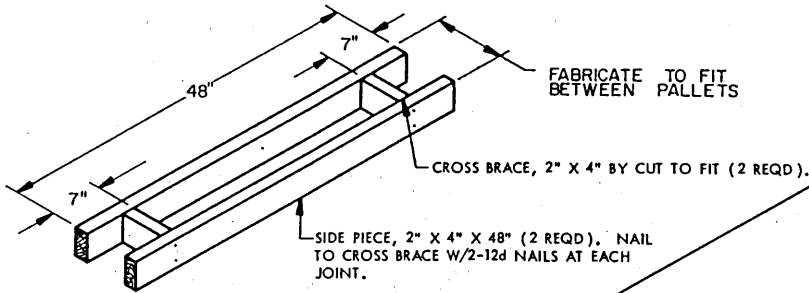
REF: DRAWING 19-48-4079-1-2-5-11-14PM1001. UNIT NO. 1
DEPICTED ABOVE.



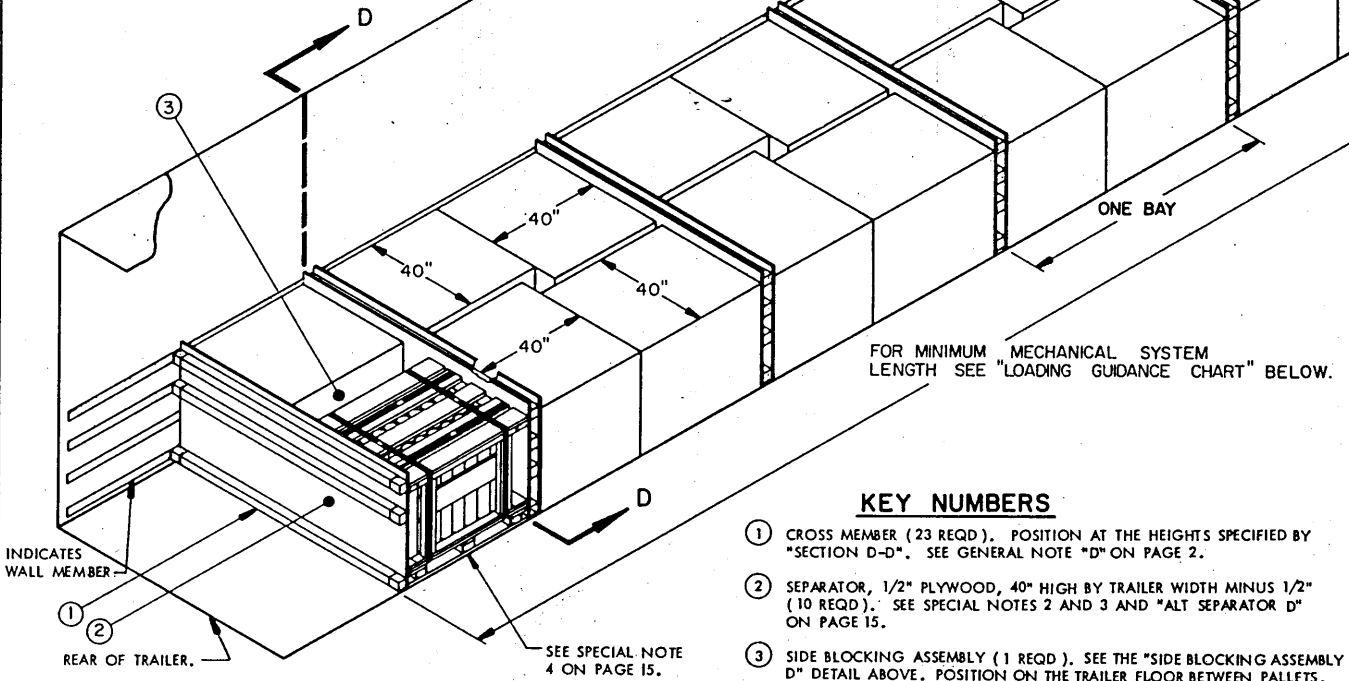
TYPICAL PALLET UNIT

REF: DRAWING 19-48-4079-1-2-5-11-14PM1001.
UNIT NO. 3 DEPICTED ABOVE.

TYPICAL COMPLETE ROUND PALLETIZED UNITS



SIDE BLOCKING ASSEMBLY D



ISOMETRIC VIEW

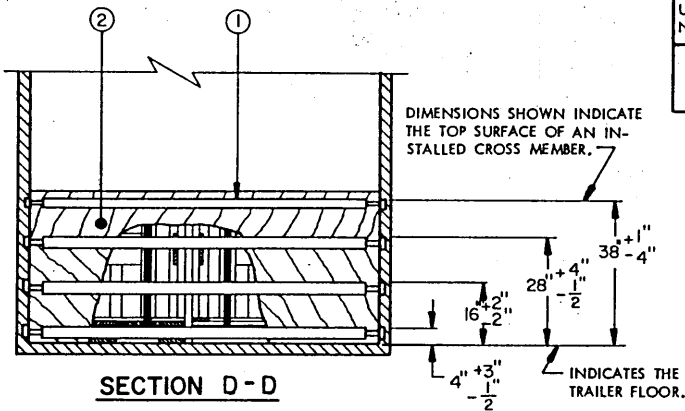
UNIT NO. 1 DEPICTED.

KEY NUMBERS

- ① CROSS MEMBER (23 REQD). POSITION AT THE HEIGHTS SPECIFIED BY "SECTION D-D". SEE GENERAL NOTE "D" ON PAGE 2.
- ② SEPARATOR, 1/2" PLYWOOD, 40" HIGH BY TRAILER WIDTH MINUS 1/2" (10 REQD). SEE SPECIAL NOTES 2 AND 3 AND "ALT SEPARATOR D" ON PAGE 15.
- ③ SIDE BLOCKING ASSEMBLY (1 REQD). SEE THE "SIDE BLOCKING ASSEMBLY D" DETAIL ABOVE. POSITION ON THE TRAILER FLOOR BETWEEN PALLETS.

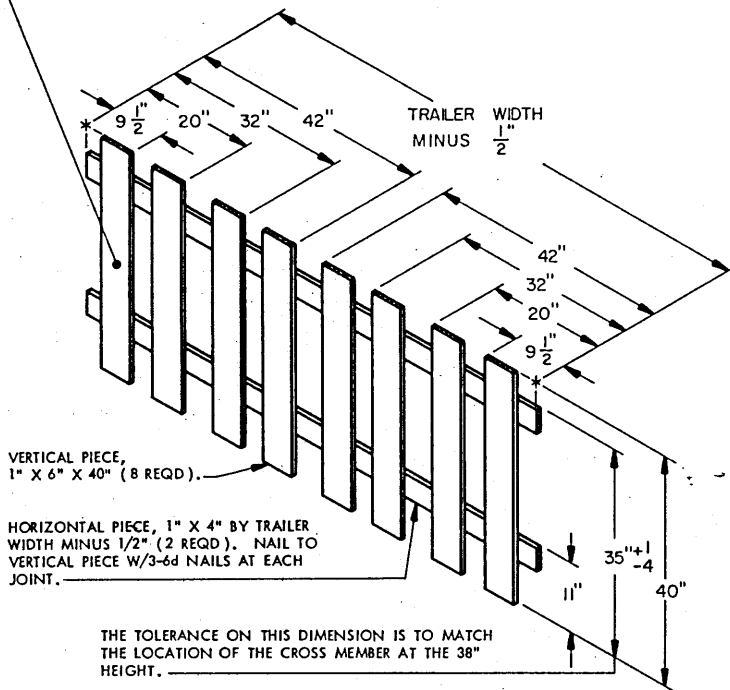
LOADING GUIDANCE CHART

UNIT NO.	MAX UNITS PER BAY	NO. OF BAYS	TOTAL UNITS	TOTAL WEIGHT LBS	CM'S REQD	MIN MECHANICAL SYSTEM LENGTH
1	4	4-1/2	18	39,402	23	35'-3"
2	4	4-1/2	18	39,546	23	35'-3"



SECTION D-D

THIS FACE OF THE GATE IS TO BE AGAINST THE LADING.



ALT SEPARATOR D

THIS ASSEMBLY MAY BE USED WHEN 1/2" PLYWOOD IS NOT AVAILABLE.

SPECIAL NOTES:

1. AN 18-UNIT LOAD IS SHOWN IN A 40'-0" LONG TRAILER WHICH IS EQUIPPED WITH A MECHANICAL BRACING SYSTEM. UNITS NO. 1 AND 2 MAY BE LOADED AS SHOWN IN THE "ISOMETRIC VIEW" ON PAGE 14.
2. IF 1/2" PLYWOOD IS NOT AVAILABLE, A SEPARATOR GATE MAY BE FABRICATED FROM 1" THICK MATERIAL. SEE "ALT SEPARATOR D" ON THIS PAGE. A SEPARATOR IS REQUIRED TO DISTRIBUTE THE WEIGHT AGAINST THE CROSS MEMBERS.
3. THE SEPARATOR, PIECE MARKED ②, MUST BE AT LEAST 40" HIGH TO ELIMINATE THE RIPPING OF THE PLYWOOD SHEETS, 48" WIDE MATERIAL MAY BE USED, IF DESIRED.
4. THE 2-UNIT BAY SHOWN AT THE REAR OF THE LOAD MAY BE POSITIONED AT THE FRONT OF THE LOAD OR AT ANY LOCATION IN THE LENGTH OF THE LOAD BETWEEN TWO BAYS OF PALLETS WHICH ARE LOADED IN THE "CHIMNEY" PATTERN. TO INCREASE A LOAD QUANTITY, THE 2-UNIT BAY MAY BE LOADED TWO (2) LAYERS HIGH. SEE THE "PARTIAL SECOND-LAYER LOAD" DETAIL BELOW AND SPECIAL NOTE 6 ON PAGE 17 FOR GUIDANCE.
5. THE "CHIMNEY" PATTERN OF LOADING, AS SHOWN IN THE FIRST FOUR BAYS OF THE LOAD, IS LIMITED TO ONE (1) LAYER IN HEIGHT.
6. IF THE MECHANICAL SYSTEM LENGTH IS AT LEAST 38'-7", FIVE BAYS CAN BE LOADED, FOR A TOTAL LOAD OF 20 UNITS AND APPROXIMATELY 43,780 POUNDS. CAUTION: LOAD WEIGHT RESTRICTIONS FOR THE MOTOR CARRIER PORTION OF A SHIPMENT MUST NOT BE EXCEEDED. SEE GENERAL NOTE "H" ON PAGE 2.
7. FOR PROCEDURES APPLICABLE TO OMITTING A PALLET FROM THE 2-UNIT BAY OF THE DEPICTED LOAD, REFER TO THE "METHOD C" DETAIL ON PAGE 20.

UNITIZING STRAP, 1-1/4" X .035" X 20'-6" LONG STEEL STRAPPING (4 REQD EACH 2-HIGH BAY). INSTALL TO EN-CIRCLE THE FIRST AND SECOND-LAYER PALLET UNITS. SEE GENERAL NOTE "R" ON PAGE 2.

SIDE BLOCKING ASSEMBLY E (1 REQD EACH 2-HIGH BAY). SEE THE DETAIL ON PAGE 16 AND SPECIAL NOTE 2 ON PAGE 17.

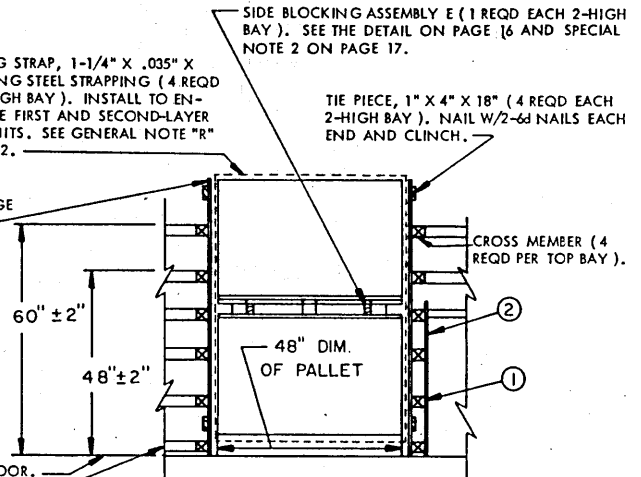
TIE PIECE, 1" X 4" X 18" (4 REQD EACH 2-HIGH BAY). NAIL W/2-6d NAILS EACH END AND CLINCH.

PLYWOOD, 1/2" THICK X 40" WIDE X 72" LONG (4 REQD). POSITION ON END WITH EDGE AGAINST TRAILER SIDEWALL. SECURE WITH TIE PIECES.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	10	7
NAILS	NO. REQD	POUNDS
12d (3-1/4")	8	NIL
PLYWOOD, 1/2" X 40" BY TW MINUS 1/2" ----- 10 REQD ----- 342 LBS		

● TW=TRAILER WIDTH.

INDICATES THE TRAILER FLOOR.
INDICATES A WALL MEMBER.



PARTIAL SECOND-LAYER LOAD

THIS VIEW SHOWS THE LOADING AND BRACING OF TWO (2) PALLETS OF UNIT 1 OR 2 IN THE SECOND LAYER OF THE 1-UNIT LONG BAY OF THE LOAD. SEE SPECIAL NOTE 6 ON PAGE 17. EACH SECOND-LAYER PALLET UNIT MUST BE POSITIONED DIRECTLY ABOVE A PALLET UNIT IN THE FIRST LAYER AND SECURED TO IT BY ENCIRCLING BOTH UNITS W/2-1-1/4" UNITIZING STRAPS. EACH UNIT IN THE SECOND LAYER MUST HAVE A UNIT LATERALLY ADJACENT, AND THESE UNITS MUST BE BRACED AGAINST THE TRAILER SIDEWALLS BY INSTALLING A "SIDE BLOCKING ASSEMBLY E", AS DETAILED ON PAGE 16, BETWEEN THE SECOND-LAYER PALLETS.

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	18	39,402 LBS
DUNNAGE		359 LBS
TOTAL WEIGHT		39,761 LBS

TIE PIECE, 1" X 4" X 42"
(1 REQD.). NAIL TO SPACER
BLOCK AND RETAINER BLOCK
W/2-6d NAILS AT EACH JOINT.

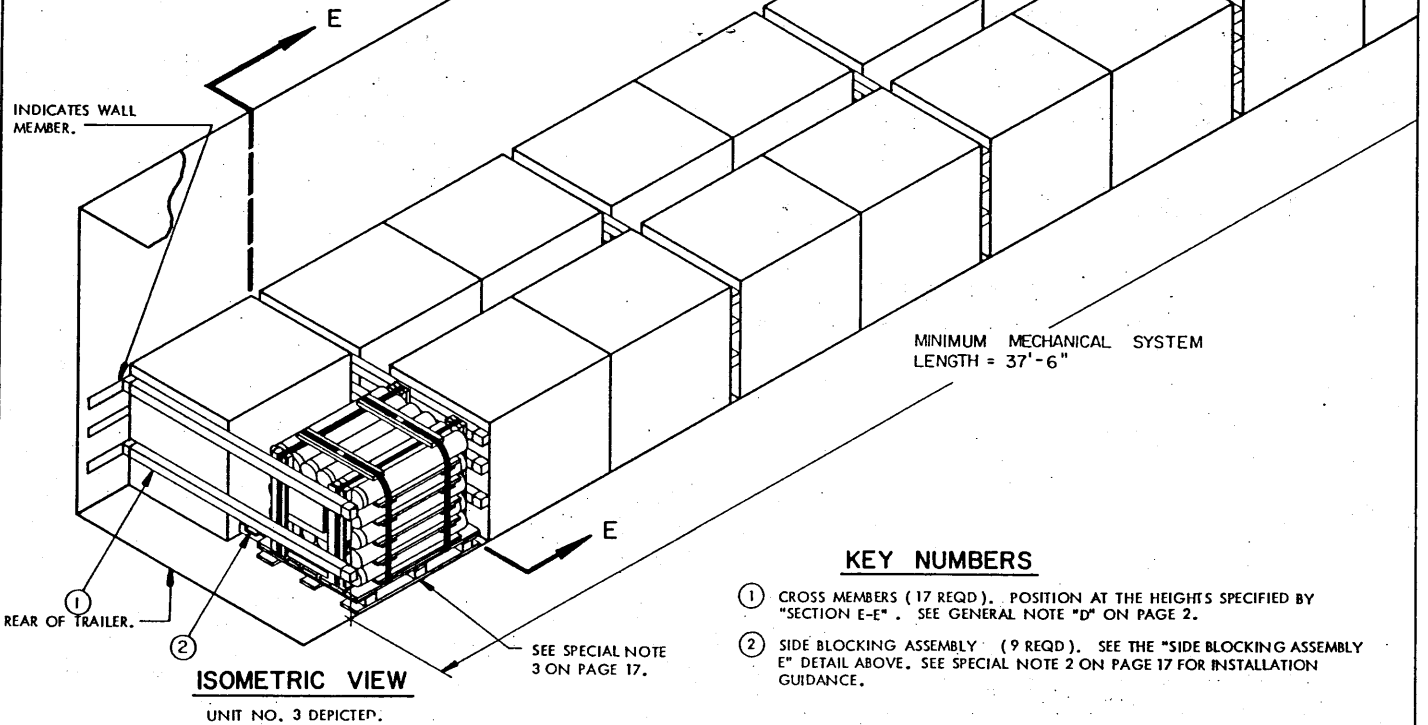
CUT TO FIT BETWEEN THE
PALLET POSTS MINUS $\frac{1}{4}$ "

RETAINER BLOCK, 2" X 3" BY
LENGTH TO SUIT (2 REQD).

SPACER BLOCK, 2" X 3" MATERIAL (2 REQD).
NAIL TO RETAINER BLOCK W/2-10d NAILS.

SIDE BLOCKING ASSEMBLY E

SEE SPECIAL NOTE 2 ON PAGE 17 FOR INSTALLATION
GUIDANCE.

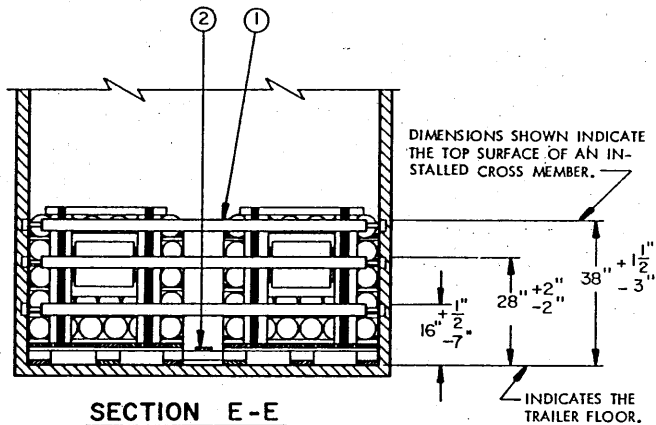


ISOMETRIC VIEW

UNIT NO. 3 DEPICTED.

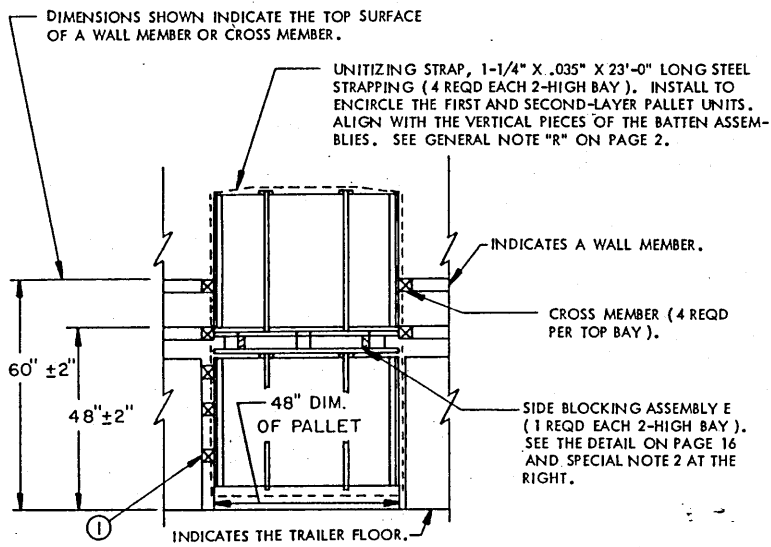
KEY NUMBERS

- ① CROSS MEMBERS (17 REQD). POSITION AT THE HEIGHTS SPECIFIED BY "SECTION E-E". SEE GENERAL NOTE "D" ON PAGE 2.
- ② SIDE BLOCKING ASSEMBLY (9 REQD). SEE THE "SIDE BLOCKING ASSEMBLY E" DETAIL ABOVE. SEE SPECIAL NOTE 2 ON PAGE 17 FOR INSTALLATION GUIDANCE.



SECTION E-E

INDICATES THE TRAILER FLOOR.



PARTIAL SECOND-LAYER LOAD

THIS VIEW SHOWS THE LOADING AND BRACING OF TWO (2) PALLET UNITS OF UNIT 3 IN THE SECOND LAYER OF A LOAD. SEE SPECIAL NOTE 6 AT THE RIGHT. EACH SECOND-LAYER PALLET UNIT MUST BE POSITIONED DIRECTLY ABOVE A PALLET UNIT IN THE FIRST LAYER AND SECURED TO IT BY ENCIRCLING BOTH UNITS W/2-1/4" UNITIZING STRAPS. EACH UNIT IN THE SECOND LAYER MUST HAVE A UNIT LATERALLY ADJACENT, AND THESE UNITS MUST BE BRACED AGAINST THE TRAILER SIDEWALLS BY INSTALLING A "SIDE BLOCKING ASSEMBLY E" BETWEEN THE PALLET. CAUTION: LOADING IN THE SECOND LAYER IS LIMITED TO ONE (1) UNIT LONG BETWEEN INSTALLED CROSS MEMBERS.

SPECIAL NOTES:

1. AN 18-UNIT LOAD IS SHOWN IN A 40'-0" LONG TRAILER WHICH IS EQUIPPED WITH A MECHANICAL BRACING SYSTEM. UNIT NO. 3 MAY BE LOADED AS SHOWN IN THE "ISOMETRIC VIEW" ON PAGE 16.
2. A SIDE BLOCKING ASSEMBLY E, KEY NUMBER ② ON PAGE 16, OR A "SIDE BLOCKING ASSEMBLY F", KEY NUMBER ③ ON PAGE 18, MUST BE ASSEMBLED IN PLACE. INSTALLATION SHOULD BE ACCOMPLISHED IN ACCORDANCE WITH THE FOLLOWING GUIDANCE. LAMINATE A RETAINER BLOCK AND A SPACER BLOCK. NAIL ONE END OF THE TIE PIECE, ALLOWING 2" TO PROTRUDE. POSITION THE ASSEMBLED RETAINER BLOCK AND SPACER BLOCK PIECES BEYOND THE CENTER POSTS OF THE LATERALLY ADJACENT PALLET AND MOVE THE ASSEMBLY FORWARD UNTIL IT CONTACTS THE OUTWARD PALLET POSTS. NAIL THE OTHER END OF THE TIE PIECE TO AN ASSEMBLED RETAINER BLOCK AND SPACER BLOCK WHICH IS POSITIONED JUST BEYOND THE NEAREST PALLET POST.
3. THE 2-UNIT BAY SHOWN AT THE REAR OF THE LOAD MAY BE POSITIONED AT THE FRONT OF THE LOAD OR AT ANY LOCATION IN THE LENGTH OF THE LOAD BETWEEN TWO BAYS OF FOUR UNITS.
4. FOR PROCEDURES APPLICABLE TO OMITTING A PALLET FROM THE 2-UNIT BAY OF THE DEPICTED LOAD, REFER TO THE "METHOD D" DETAIL ON PAGE 20 AND THE "NOTE ●" AT THE RIGHT OF THE DETAIL.
5. FOR GUIDANCE IN INCREASING A LOAD QUANTITY, SEE THE "PARTIAL SECOND-LAYER LOAD" DETAIL AT THE LEFT AND SPECIAL NOTE 6 BELOW.
6. IF THE GROSS WEIGHT AND AXLE DISTRIBUTION OF LADING WEIGHT FOR A LOAD OF COMPLETE ROUNDS WILL NOT EXCEED THE STATE LAW WEIGHT RESTRICTIONS FOR THE STATE OR STATES THRU WHICH A TRAILER WILL BE MOVED BY HIGHWAY (MOTOR CARRIER), AND IF THE TRAILER TO BE LOADED CONTAINS ENOUGH CROSS MEMBERS TO PROVIDE FOR PROPER BLOCKING OF THE ADDED UNITS, A PARTIAL SECOND LAYER MAY BE ADDED TO A DEPICTED LOAD. SEE THE "PARTIAL SECOND-LAYER LOAD" DETAIL ON THE PAGE OPPOSITE THE APPLICABLE LOAD PAGE FOR GUIDANCE IN BLOCKING AND BRACING THESE ADDED UNITS. NOTE THAT UNITS MUST BE PLACED IN THE SECOND LAYER IN LATERALLY ADJACENT PAIRS, AND SHOULD BE LOCATED WITHIN THE LENGTH OF THE TRAILER SO AS TO PROVIDE FOR PROPER WEIGHT DISTRIBUTION. SEE GENERAL NOTE "H" ON PAGE 2.

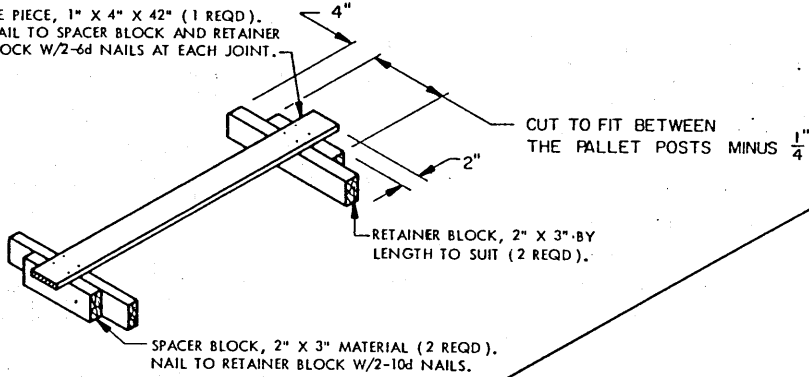
BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	32	11
2" X 3"	42	21
NAILS	NO. REQD	POUNDS
6d (2")	72	1/2
10d (3")	36	3/4

LOAD AS SHOWN

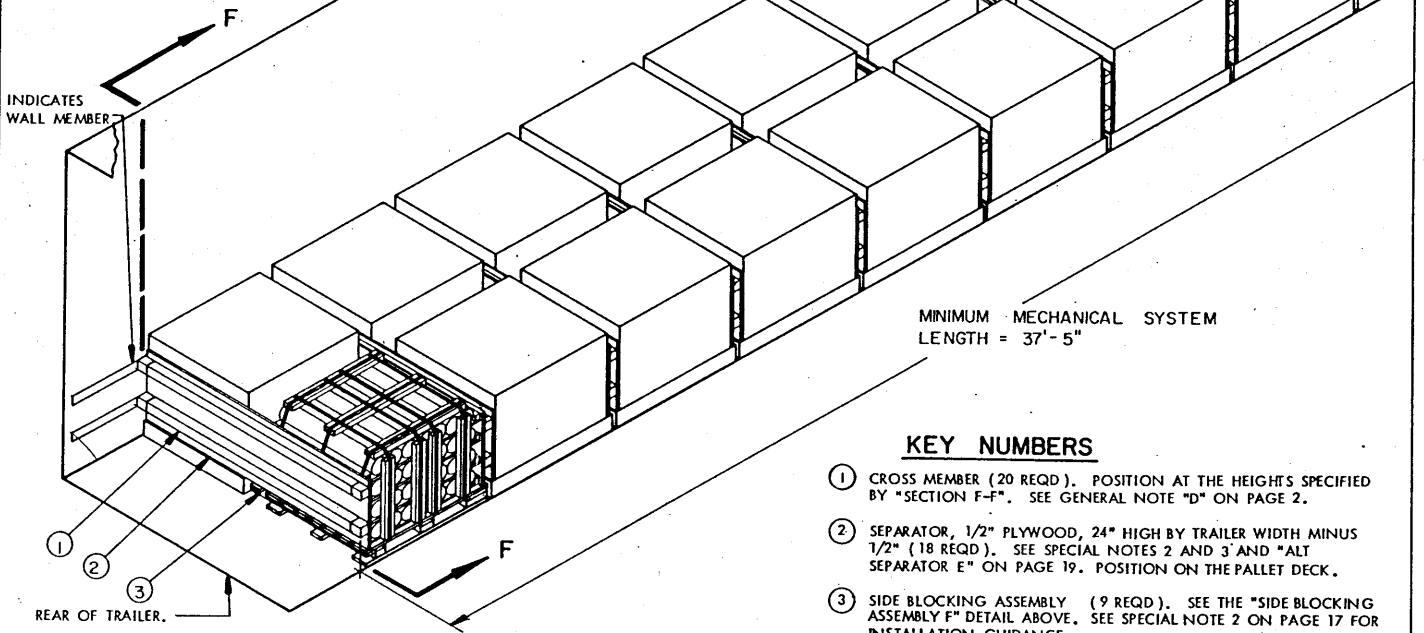
ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	18	39,600 LBS
DUNNAGE		82 LBS
TOTAL WEIGHT		39,682 LBS

TIE PIECE, 1" X 4" X 42" (1 REQD).
NAIL TO SPACER BLOCK AND RETAINER
BLOCK W/2-6d NAILS AT EACH JOINT.



SIDE BLOCKING ASSEMBLY F

SEE SPECIAL NOTE 2 ON PAGE 17
FOR INSTALLATION GUIDANCE.

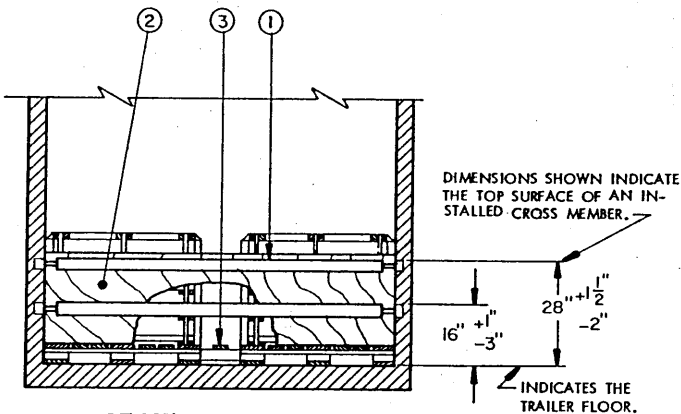


ISOMETRIC VIEW

UNIT NO. 4 DEPICTED.

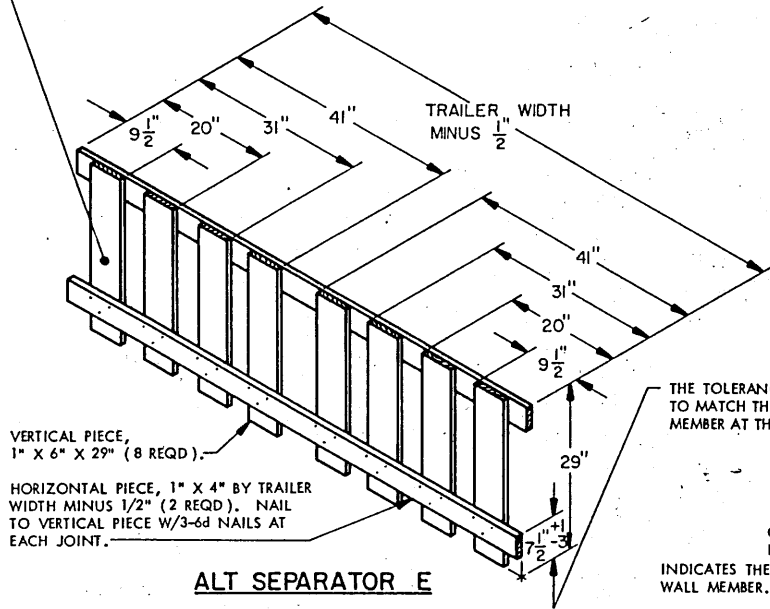
KEY NUMBERS

- ① CROSS MEMBER (20 REQD). POSITION AT THE HEIGHTS SPECIFIED BY "SECTION F-F". SEE GENERAL NOTE "D" ON PAGE 2.
- ② SEPARATOR, 1/2" PLYWOOD, 24" HIGH BY TRAILER WIDTH MINUS 1/2" (18 REQD). SEE SPECIAL NOTES 2 AND 3 AND "ALT SEPARATOR E" ON PAGE 19. POSITION ON THE PALLET DECK.
- ③ SIDE BLOCKING ASSEMBLY (9 REQD). SEE THE "SIDE BLOCKING ASSEMBLY F" DETAIL ABOVE. SEE SPECIAL NOTE 2 ON PAGE 17 FOR INSTALLATION GUIDANCE.



SECTION F - F

THIS FACE OF THE GATE IS TO BE AGAINST THE CROSS MEMBERS.



VERTICAL PIECE, 1" X 6" X 29" (8 REQD).

HORIZONTAL PIECE, 1" X 4" BY TRAILER WIDTH MINUS 1/2" (2 REQD). NAIL TO VERTICAL PIECE W/3-6d NAILS AT EACH JOINT.

ALT SEPARATOR E

THIS ASSEMBLY MAY BE USED WHEN 1/2" PLYWOOD IS NOT AVAILABLE. POSITION ON THE PALLET DECK.

DIMENSIONS SHOWN INDICATE THE TOP SURFACE OF AN INSTALLED CROSS MEMBER.

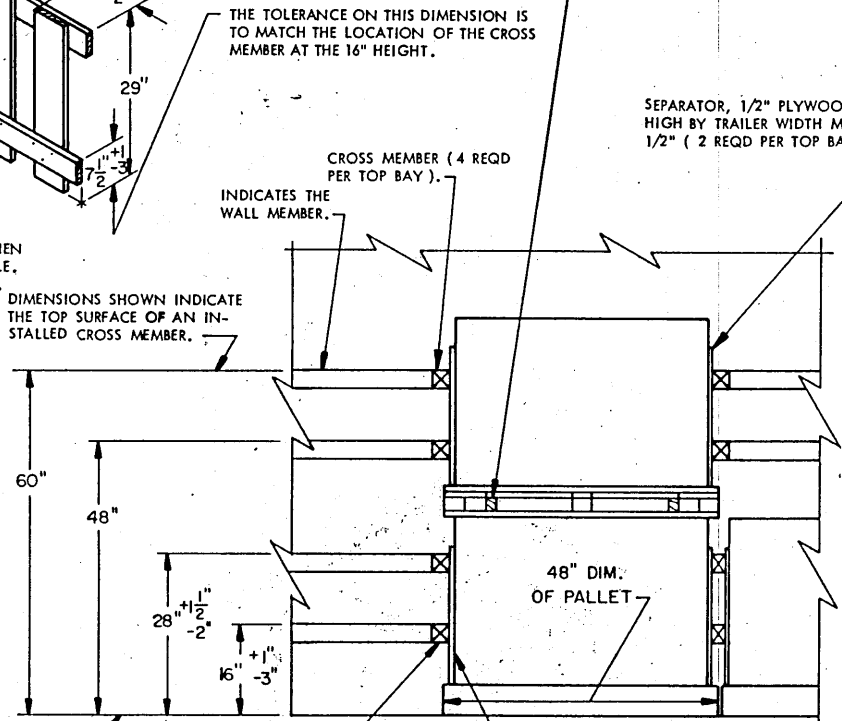
INDICATES THE TRAILER FLOOR.

SPECIAL NOTES:

1. AN 18-UNIT LOAD IS SHOWN IN A 40'-0" LONG TRAILER WHICH IS EQUIPPED WITH A MECHANICAL BRACING SYSTEM. UNIT NO. 4 MAY BE LOADED AS SHOWN IN THE "ISOMETRIC VIEW". FOR GUIDANCE IN INCREASING A LOAD QUANTITY, SEE THE "PARTIAL SECOND-LAYER LOAD" DETAIL BELOW AND SPECIAL NOTE 6 ON PAGE 17.
2. IF 1/2" PLYWOOD IS NOT AVAILABLE, A SEPARATOR GATE MAY BE FABRICATED FROM 1" THICK MATERIAL. SEE "ALT SEPARATOR E" ON THIS PAGE. A SEPARATOR IS REQUIRED TO DISTRIBUTE THE WEIGHT AGAINST THE CROSS MEMBERS.
3. FOR PROCEDURES APPLICABLE TO OMITTING A PALLET FROM THE DEPICTED LOAD, REFER TO THE "METHOD D" DETAIL ON PAGE 20.

SIDE BLOCKING ASSEMBLY F (1 REQD EACH 2-HIGH BAY). SEE THE DETAIL ON PAGE 18 AND SPECIAL NOTE 2 ON PAGE 17.

SEPARATOR, 1/2" PLYWOOD, 24" HIGH BY TRAILER WIDTH MINUS 1/2" (2 REQD PER TOP BAY).



PARTIAL SECOND-LAYER LOAD

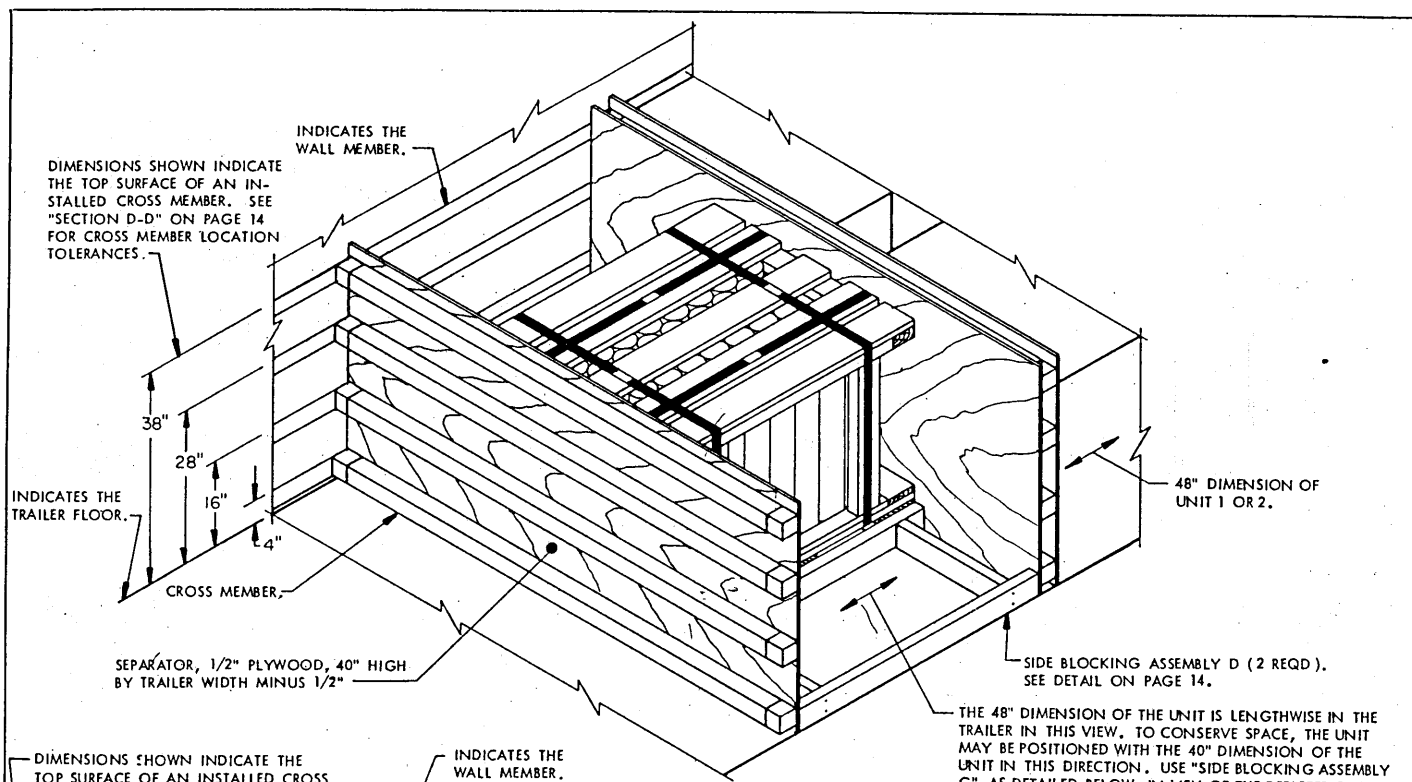
THIS VIEW SHOWS THE LOADING AND BRACING OF TWO (2) PALLET'S OF UNIT 4 IN THE SECOND LAYER OF A LOAD. SEE SPECIAL NOTE 6 ON PAGE 17. EACH SECOND-LAYER PALLET UNIT MUST BE POSITIONED DIRECTLY ABOVE A PALLET UNIT IN THE FIRST LAYER. EACH UNIT IN THE SECOND LAYER MUST HAVE A UNIT LATERALLY ADJACENT, AND THESE UNITS MUST BE BRACED AGAINST THE TRAILER SIDEWALLS BY INSTALLING A "SIDE BLOCKING ASSEMBLY F" BETWEEN THE PALLET'S. A SEPARATOR, PIECE MARKED ②, MUST BE POSITIONED BETWEEN THE CROSS MEMBERS AND THE LADING, AS SHOWN. CAUTION: LOADING IN THE SECOND LAYER IS LIMITED TO ONE (1) UNIT LONG BETWEEN INSTALLED CROSS MEMBERS.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	32	11
2" X 3"	42	21
NAILS	NO. REQD	POUNDS
6d (2")	72	1/2
10d (3")	36	3/4
PLYWOOD, 1/2" X 24" BY TW MINUS 1/2" ---- 18 REQD ---- 369 LBS		

• TW = TRAILER WIDTH.

LOAD AS SHOWN

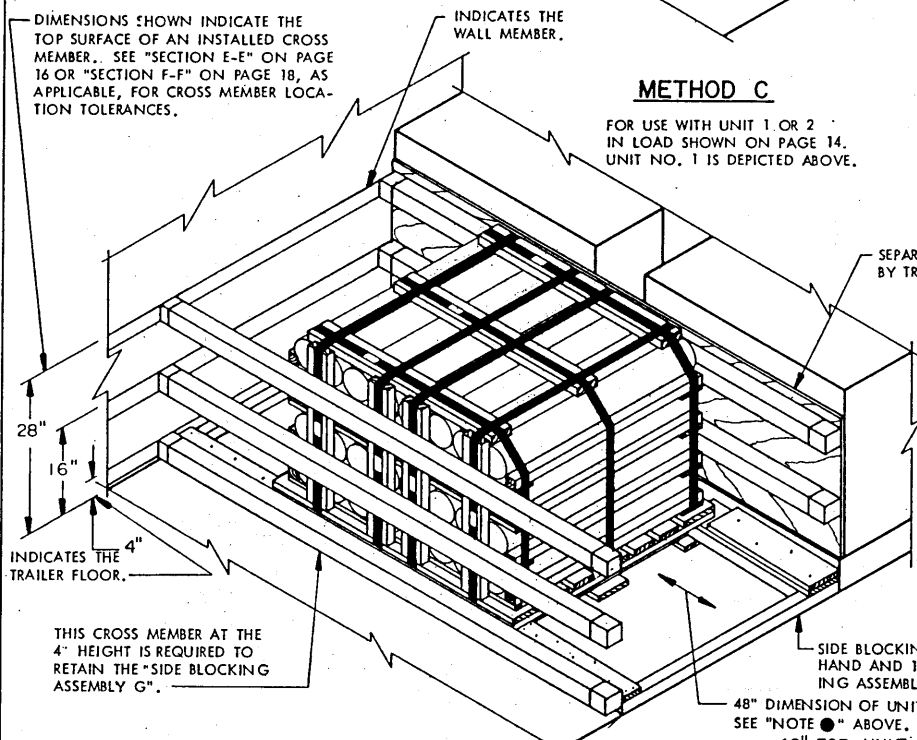
ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	18	38,880 LBS
DUNNAGE		451 LBS
TOTAL WEIGHT		39,331 LBS



THE 48" DIMENSION OF THE UNIT IS LENGTHWISE IN THE TRAILER IN THIS VIEW. TO CONSERVE SPACE, THE UNIT MAY BE POSITIONED WITH THE 40" DIMENSION OF THE UNIT IN THIS DIRECTION. USE "SIDE BLOCKING ASSEMBLY G", AS DETAILED BELOW, IN LIEU OF THE DEPICTED SIDE BLOCKING ASSEMBLY WHEN A UNIT IS TURNED.

METHOD C

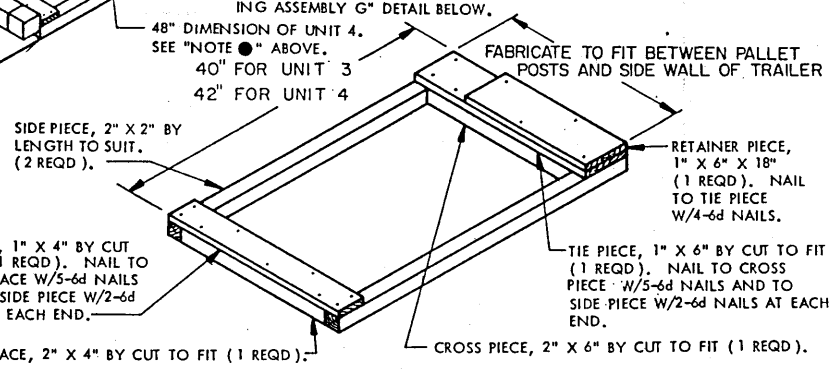
FOR USE WITH UNIT 1 OR 2 IN LOAD SHOWN ON PAGE 14. UNIT NO. 1 IS DEPICTED ABOVE.



METHOD D

FOR USE WITH UNIT 3 OR 4 IN LOADS SHOWN ON PAGES 16 AND 18. UNIT NO. 4 IS DEPICTED ABOVE. SEE THE "NOTE ●" AT THE RIGHT FOR GUIDANCE IN LOADING UNIT 3.

NOTE ●:
 UNIT 4 SHOULD BE POSITIONED WITH THE 48" DIMENSION OF THE UNIT CROSSWISE IN THE TRAILER AS SHOWN. UNIT 3 MAY BE POSITIONED EITHER WAY, HOWEVER, CROSS MEMBERS ARE REQUIRED AT 4", 16", 28", AND 38" AT EACH END OF THE UNIT, NO MATTER WHICH WAY IT IS POSITIONED. WITH THE 48" DIMENSION OF THE UNIT CROSSWISE, A 40" WIDE SEPARATOR MUST BE POSITIONED BETWEEN THE CROSS MEMBERS AND THE UNIT. WITH THE 40" DIMENSION OF UNIT 3 CROSSWISE, SEPARATORS ARE NOT REQUIRED, BUT "SIDE BLOCKING ASSEMBLY D" AS SHOWN ABOVE MUST BE USED IN LIEU OF "SIDE BLOCKING ASSEMBLY G".



SIDE BLOCKING ASSEMBLY G

1 RIGHT HAND AND 1 LEFT HAND ASSEMBLY REQUIRED FOR EACH 1-UNIT BAY.