

APPROVED BY
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 DATE 4/14/75

LOADING AND BRACING (TL & LTL) IN CLOSED OR OPEN TOP VAN TRAILERS OF 105MM HOWITZER AMMUNITION IN PA55 FIBER CONTAINER PACKED 39 PER WIREBOUND PALLET TYPE BOX

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THIS DOCUMENT INCLUDES OUTLOADING PROCEDURES FOR CONVENTIONAL TYPE TRAILERS AND FOR TRAILERS EQUIPPED WITH MECHANICAL BRACING DEVICES AS APPROVED BY THE BUREAU OF EXPLOSIVES, ASSOCIATION OF AMERICAN RAILROADS. CAUTION: THE PROCEDURES SHOWN HEREIN, FOR BOTH TYPES OF TRAILERS, ARE ONLY APPLICABLE FOR HIGHWAY MOVEMENTS; NOT FOR CONTAINER/TRAILER-ON-FLAT-CAR MOVEMENTS.

● THESE PROCEDURES ARE ALSO APPLICABLE FOR 105MM FIXED AMMUNITION PACKED IN PA71 FIBER CONTAINER.

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DO NOT SCALE

GENERAL NOTES

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1, AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- B. THE OUTLOADING PROCEDURES SPECIFIED IN THIS DRAWING ARE APPLICABLE TO 105MM HOWITZER AMMUNITION IN PA55 FIBER CONTAINER PACKED 39 PER WIRE-BOUND PALLET TYPE BOX. WITH MODIFICATIONS AS SPECIFIED THE PROCEDURES ARE ALSO APPLICABLE TO 105MM FIXED AMMUNITION IN PA71 FIBER CONTAINER PACKED 39 PER WIREBOUND PALLET TYPE BOX. SUBSEQUENT REFERENCE TO CONTAINER MEANS THE PALLET TYPE BOX WITH CONTENTS.
- C. FOR DETAILS OF THE WIREBOUND PALLET TYPE BOX SEE "UNIT DETAIL" ON PAGE 3. CONTAINER DIMENSIONS --- 32-3/4" LONG BY 33-5/8" WIDE BY 40-1/2" HIGH. GROSS WEIGHT ----- 1,960 POUNDS (APPROX).
- D. THE DEPICTED PROCEDURES ARE BASED ON TRAILERS OF THE CONVENTIONAL TYPE, OR ARE BASED ON TRAILERS WHICH ARE EQUIPPED WITH VARIOUS TYPES OF SELF-CONTAINED MECHANICAL BRACING DEVICES (CROSS MEMBERS AND WALL MEMBERS) AND APPLY TO TRAILERS HAVING WOOD, OR WOOD AND METAL, OR METAL FLOORS. SEE GENERAL NOTE "P".
- E. IF THE TRAILER BEING USED IS EQUIPPED WITH A MECHANICAL LOAD BLOCKING SYSTEM, THE CROSS MEMBER ATTACHMENT FACILITIES WITHIN THE TRAILER MUST PROVIDE FOR THE INSTALLATION OF LOAD BLOCKING CROSS MEMBERS AT THE HEIGHTS SPECIFIED HEREIN. CAUTION: TRAILERS EQUIPPED WITH FACILITIES WHICH DO NOT MEET THE LOCATION REQUIREMENTS MUST NOT BE USED. THE HEIGHT REQUIREMENTS SPECIFIED WITHIN THIS DRAWING FOR INSTALLATION OF CROSS MEMBERS ARE IDENTICAL WITH THOSE RECOMMENDED BY THE BUREAU OF EXPLOSIVES PAMPHLET 6C, AND APPENDICES THERETO.
1. ITEMS SHOULD BE LOADED TIGHTLY AGAINST EACH OTHER AND/OR AGAINST INSTALLED CROSS MEMBERS; 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. 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.
- F. THE 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.
- G. NOTICE: A SHIPMENT WILL BE POSITIONED IN THE TRAILER CONSISTENT WITH STATE WEIGHT LAWS. 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 LOADING AND BRACING PROCEDURES SPECIFIED HEREIN MUST BE FOLLOWED AS CLOSELY AS POSSIBLE FOR BLOCKING, BRACING, AND STAYING OF THE DESIGNATED ITEM.
- H. THESE PROCEDURES MAY BE UTILIZED FOR THE SHIPMENT OF THE DEPICTED CONTAINERS WHEN THEY ARE LOADED WITH ITEMS OTHER THAN THE ITEM DESIGNATED WITHIN THE DRAWING TITLE.
- J. OTHER TYPES OF LADING ITEMS MAY BE LOADED IN TRAILERS WHICH ARE PARTIALLY LOADED WITH THE DEPICTED CONTAINERS, 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 HEREIN.
- K. WHEN ANY STRAP 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.

(CONTINUED AT RIGHT)

(GENERAL NOTES CONTINUED)

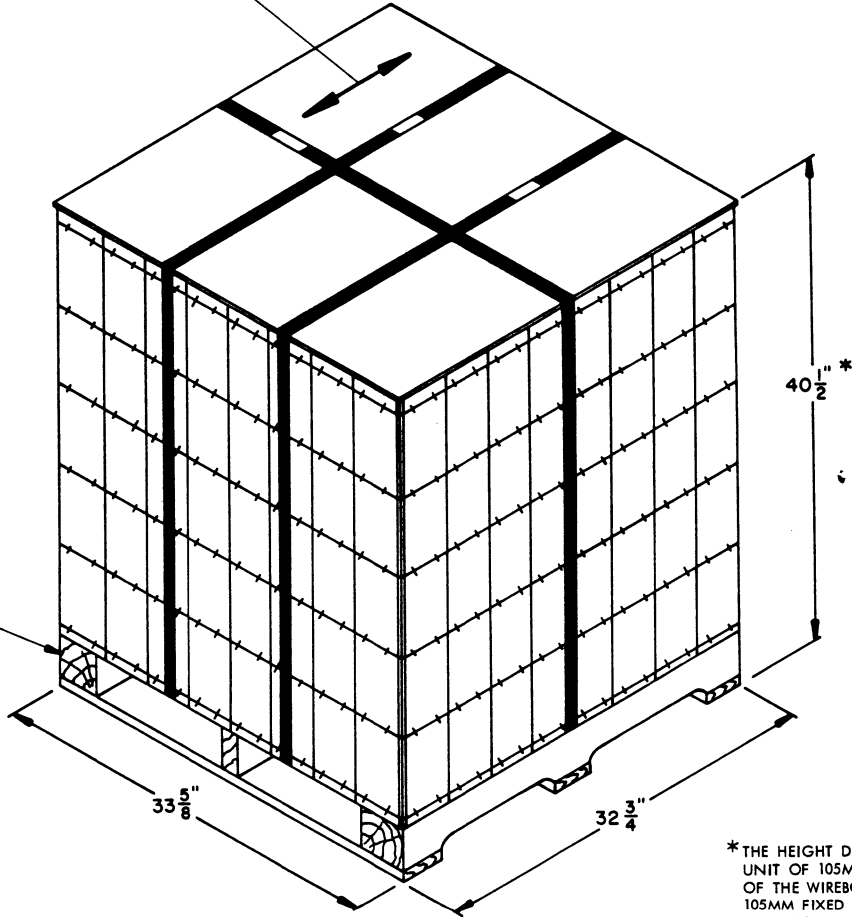
- L. DUNNAGE LUMBER SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE, 1" X 6" MATERIAL IS ACTUALLY 3/4" THICK BY 5-1/2" OR 5-5/8" WIDE AND 2" X 4" MATERIAL IS ACTUALLY 1-1/2" THICK BY 3-1/2" WIDE OR 1-5/8" THICK BY 3-5/8" WIDE.
- M. NOTICE: A STAGGERED NAILING PATTERN WILL BE USED WHEREVER POSSIBLE WHEN NAILS ARE DRIVEN INTO JOINTS OF DUNNAGE ASSEMBLIES. ALSO, A STAGGERED NAILING PATTERN WILL BE USED WHEN DUNNAGE IS NAILED TO THE FLOOR OF THE TRANSPORTING VEHICLE OR WHEN LAMINATING DUNNAGE. THE NAILING PATTERN WILL BE ADJUSTED AS REQUIRED SO THAT A NAIL DOES NOT PENETRATE INTO OR NEAR A CRACK BETWEEN FLOOR BOARDS. ADDITIONALLY, THE NAILING PATTERN FOR AN UPPER PIECE OF LAMINATED DUNNAGE WILL BE ADJUSTED AS REQUIRED SO THAT A NAIL FOR THAT PIECE WILL NOT BE DRIVEN THROUGH ONTO OR RIGHT BESIDE A NAIL IN A LOWER PIECE.
- N. PORTIONS OF THE TRAILER BODIES DEPICTED WITHIN THIS PROCEDURAL DRAWING, SUCH AS ONE OF THE TRAILER SIDEWALLS, HAVE NOT BEEN SHOWN IN THE LOAD VIEWS FOR CLARITY PURPOSES.
- O. FOR ADDITIONAL GUIDANCE, ATTENTION IS DIRECTED TO THE "SPECIAL NOTES" SECTIONS WHICH ARE IMMEDIATELY ADJACENT TO THE DEPICTED OUTLOADING METHODS.
- P. ALTHOUGH THE FULL LOAD SHOWN HEREIN IS BASED ON A 40'-0" LONG TRAILER, LONGER TRAILERS MAY BE USED. TRAILERS OF LENGTHS UP TO AND INCLUDING 45'-0" MAY BE USED BY INCREASING THE LENGTH OF THE SPACER ASSEMBLY SHOWN AS PIECE MARKED ③ ON PAGE 4. THE SPECIFIED BLOCKING WITH THE AFOREMENTIONED MODIFIED SPACER ASSEMBLY IS ADEQUATE FOR BLOCKING AND BRACING MAXIMUM-SIZE LOADS IN TRAILERS THAT ARE LONGER THAN SHOWN.

MATERIAL SPECIFICATIONS

- LUMBER ----- : SEE TM 743-200-1, DUNNAGE LUMBER; FED SPEC MM-L-751.
- NAILS ----- : COMMON, CEMENT COATED OR CHEMICALLY ETCHED. FED SPEC FF-N-105. ALT: ANNULAR-RING TYPE NAIL OF SAME SIZE.
- STRAPPING, STEEL: TYPE I OR II, FINISH A OR B, FED SPEC QQ-5-781.
- STRAP SEAL ----- : COMMERCIAL GRADE.

UNITS WILL BE POSITIONED IN A TRAILER
SO THAT THE SKIDS OF THE UNIT ARE
PARALLEL WITH THE SIDEWALL.

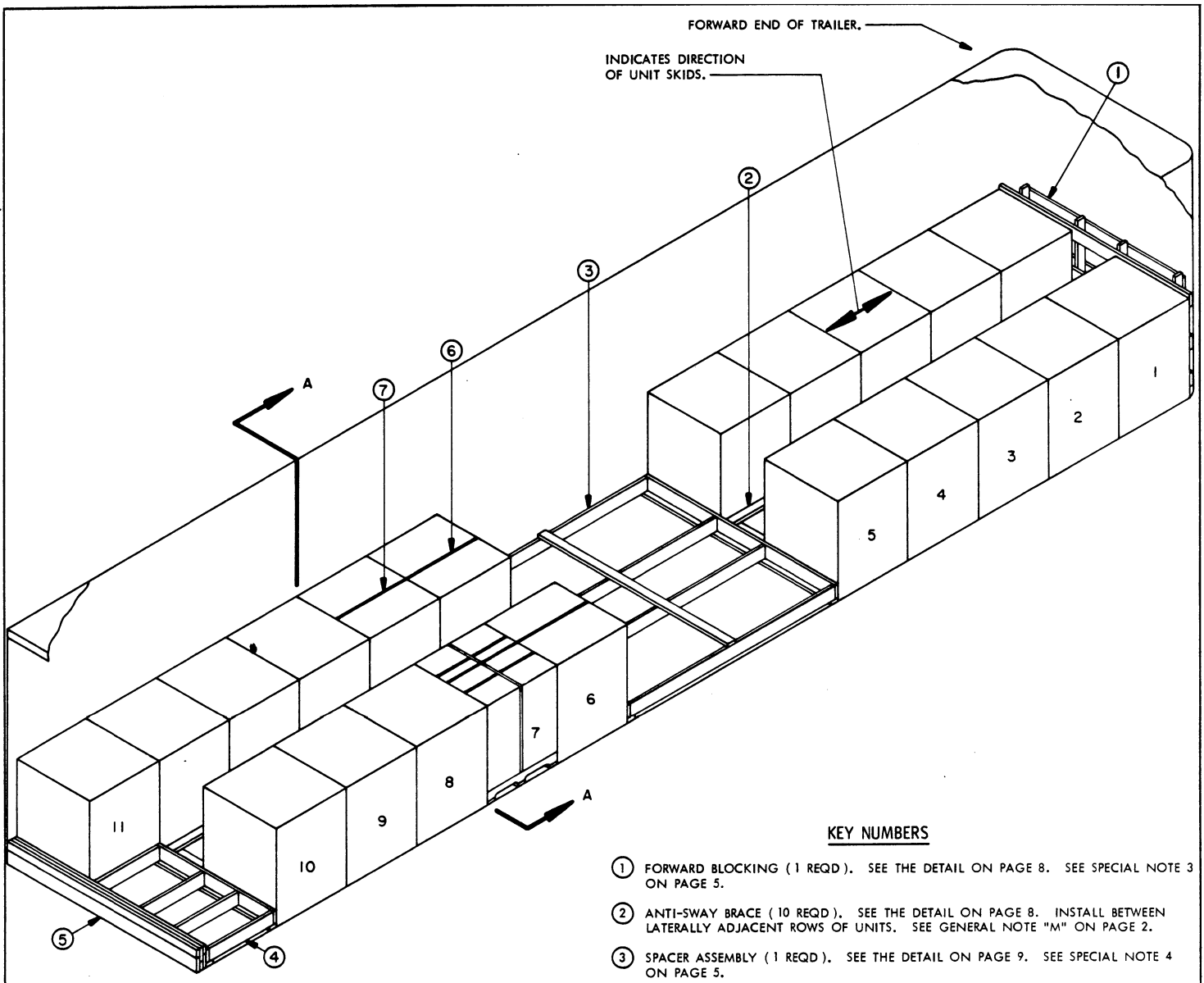
INDICATES UNIT SKID.



*THE HEIGHT DIMENSION WILL BE 44-3/8" FOR A
UNIT OF 105MM FIXED AMMUNITION. DETAILS
OF THE WIREBOUND PALLET TYPE BOX FOR
105MM FIXED AMMUNITION PACKED IN PA71
FIBER CONTAINERS ARE DELINEATED IN DRAWING
NO. 9277353.

WIREBOUND PALLET TYPE BOX

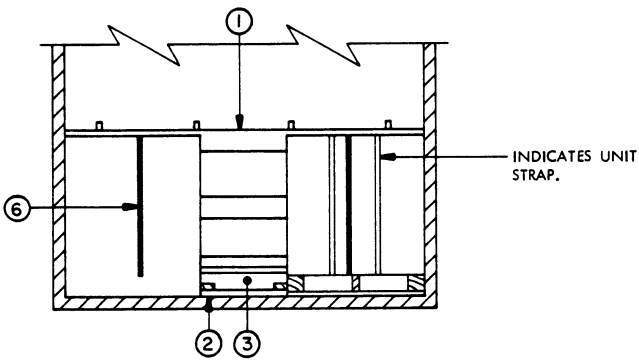
UNIT WEIGHT ----- 1,960 - 2,200 LBS (APPROX)
CUBE OF 40-1/2" HIGH UNIT ----- 25.8 CUBIC FEET (APPROX)
CUBE OF 44-3/8" HIGH UNIT ----- 28.3 CUBIC FEET (APPROX)



ISOMETRIC VIEW

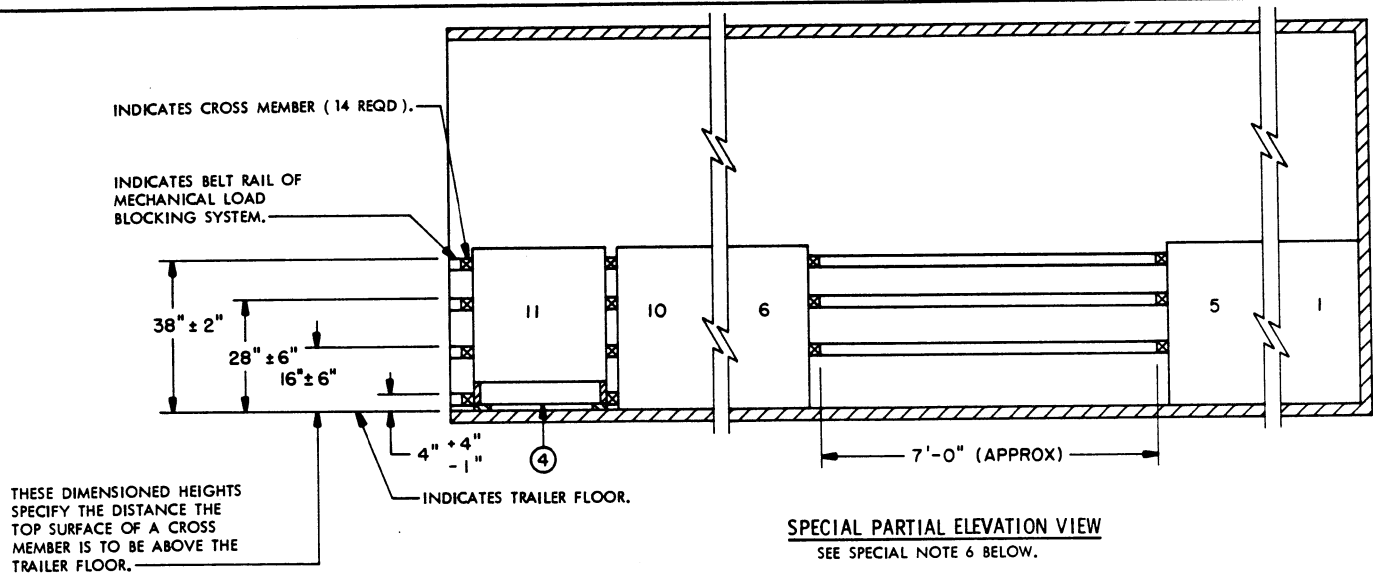
KEY NUMBERS

- ① FORWARD BLOCKING (1 REQD). SEE THE DETAIL ON PAGE 8. SEE SPECIAL NOTE 3 ON PAGE 5.
- ② ANTI-SWAY BRACE (10 REQD). SEE THE DETAIL ON PAGE 8. INSTALL BETWEEN LATERALLY ADJACENT ROWS OF UNITS. SEE GENERAL NOTE "M" ON PAGE 2.
- ③ SPACER ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 9. SEE SPECIAL NOTE 4 ON PAGE 5.
- ④ FILLER ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 9. SEE SPECIAL NOTE 2 ON PAGE 5.
- ⑤ REAR BLOCKING, SOLID FILL, 4" AND 6" WIDE MATERIAL BY TRAILER WIDTH MINUS 1/2" IN LENGTH BY THE THICKNESS REQUIRED TO CONTACT THE REAR DOORS OF THE TRAILER WHEN THEY ARE CLOSED. POSITION PIECES ON EDGE, ONE ON TOP OF THE OTHER, ALTERNATELY AS SHOWN, AND LAMINATE TOGETHER W/1-10d NAIL EVERY 12". SEE SPECIAL NOTE 5 ON PAGE 5.
- ⑥ UNITIZING STRAP, 1-1/4" X .035" X 20'-0" LONG STEEL STRAPPING (2 REQD).
- ⑦ SEAL FOR 1-1/4" STEEL STRAPPING (4 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "K" ON PAGE 2.



SECTION A-A

21-UNIT LOAD IN A 40'-0" LONG TRAILER



SPECIAL NOTES:

1. A 40'-0" LONG BY 7'-6" WIDE (INSIDE DIMENSION) CONVENTIONAL VAN TRAILER IS SHOWN. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
2. A 21-UNIT LOAD IS SHOWN AS TYPICAL. THE NUMBER OF UNITS CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED. TWENTY-TWO (22) UNITS CAN BE LOADED IF THE GROSS WEIGHT AND AXLE DISTRIBUTION OF WEIGHT LIMITATIONS ARE NOT EXCEEDED; OR, UNITS CAN BE OMITTED IN ORDER TO OBTAIN THE DESIRED QUANTITY. NOTE THAT THE FILLER ASSEMBLY, PIECE MARKED (4), IS ONLY REQUIRED WHEN A SHIPMENT CONSISTS OF AN UNEVEN NUMBER OF UNITS.
3. THE FORWARD BLOCKING, PIECE MARKED (1), IS FOR USE IN TRAILERS HAVING ROUNDED CORNERS AT THE FORWARD END. IF THE TRAILER TO BE LOADED HAS INSIDE SQUARE CORNERS AT THE FRONT END, THE FORWARD BLOCKING MAY BE OMITTED AND THE UNITS POSITIONED DIRECTLY AGAINST THE FRONT WALL.
4. THE SPACER ASSEMBLY, PIECE MARKED (3), MAY BE LOCATED WITHIN THE LENGTH OF THE LOAD OTHER THAN BETWEEN LOAD UNITS NUMBERED 5 AND 6, AS NECESSARY TO PROVIDE FOR PROPER WEIGHT DISTRIBUTION.
5. WHEN THE SPACE BETWEEN THE LADING AND THE TRAILER DOORS IS NINE INCHES (9") OR MORE, STRUT TYPE REAR BLOCKING SHOULD BE USED IN LIEU OF THE DEPICTED SOLID FILL BLOCKING. SEE THE "REAR BLOCKING ASSEMBLY" DETAIL ON PAGE 10.
6. IF THE TRAILER BEING OUTLOADED CONTAINS MECHANICAL BRACING DEVICES, SUCH AS WALL BELT RAILS AND LOAD BLOCKING CROSS MEMBERS, WHICH CONFORM TO SPECIFICATIONS SET FORTH WITHIN THE BUREAU OF EXPLOSIVES PAMPHLET 6C AND THE APPENDICES THERETO, THEY MAY BE USED. SEE THE "SPECIAL PARTIAL ELEVATION VIEW" ABOVE FOR GUIDANCE. IN LIEU OF USING THE SPACER ASSEMBLY, PIECE MARKED (3), IN THE LONGITUDINAL CENTER OF THE TRAILER, THREE (3) CROSS MEMBERS AT EACH END OF THE VOID CAN BE USED. FOUR (4) CROSS MEMBERS MUST BE USED BEFORE AND BEHIND LOAD UNIT NUMBER 11 IN ORDER TO RETAIN THE FILLER ASSEMBLY, PIECE MARKED (4), IF USED. IF AN EVEN NUMBERED QUANTITY IS BEING SHIPPED, THE FILLER ASSEMBLY WILL NOT BE REQUIRED. THREE (3) CROSS MEMBERS AT THE REAR OF THE LADING WILL THEN BE ADEQUATE FOR RETENTION OF THE REAR PORTION OF THE LOAD.

BILL OF MATERIAL

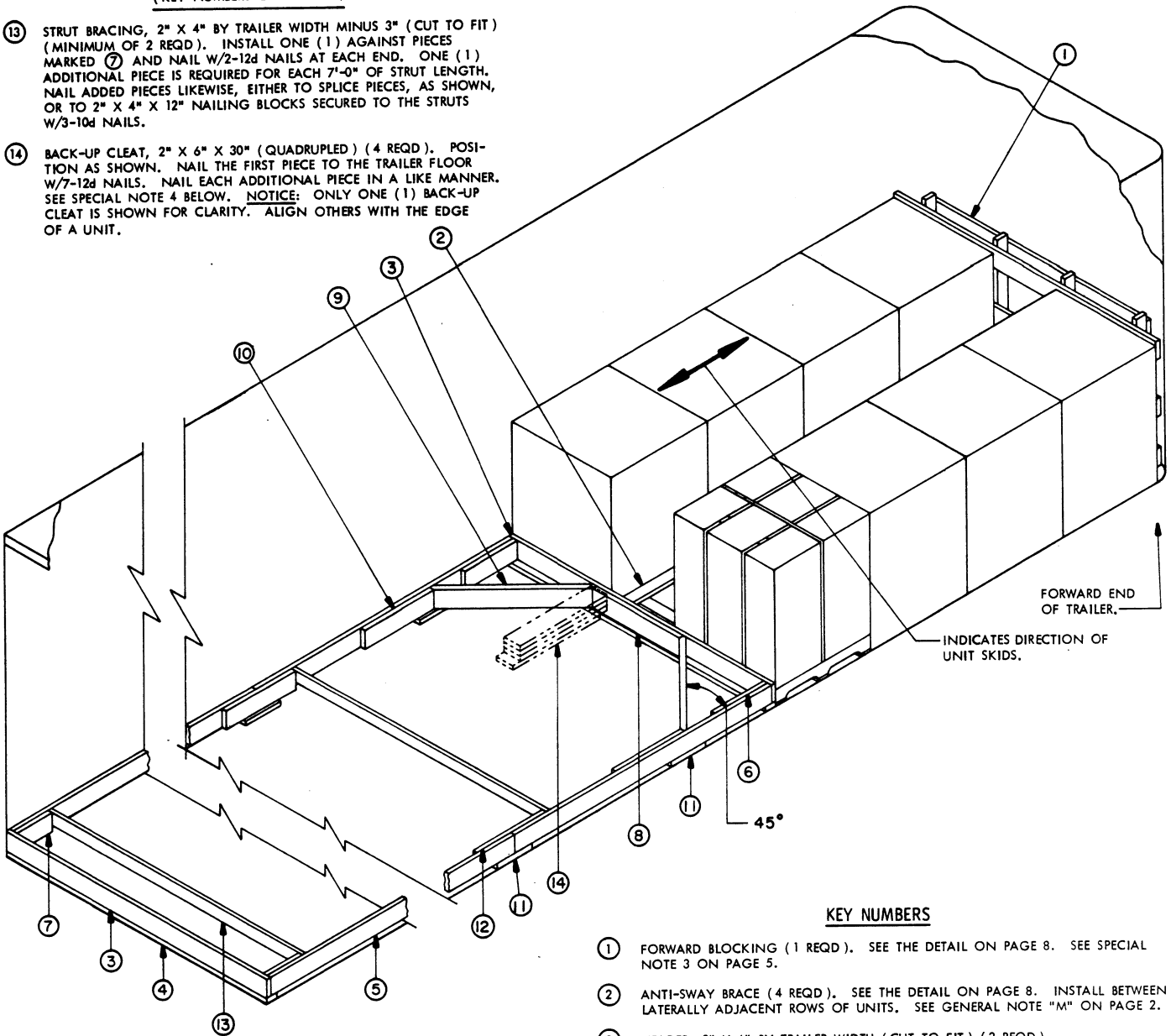
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	172	115
2" X 6"	130	130
NAILS	NO. REQD	POUNDS
10d (3")	148	2-1/2
12d (3-1/4")	154	2-3/4
STEEL STRAPPING, 1-1/4" X .035" ----- 40' REQD ----- 6 LBS		
SEAL FOR 1-1/4" STEEL STRAPPING ----- 4 REQD ----- NIL		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CONTAINER -----	21 -----	41,160 LBS
DUNNAGE -----	-----	624 LBS
TOTAL WEIGHT -----		41,784 LBS

(KEY NUMBERS CONTINUED)

- ⑬ STRUT BRACING, 2" X 4" BY TRAILER WIDTH MINUS 3" (CUT TO FIT) (MINIMUM OF 2 REQD). INSTALL ONE (1) AGAINST PIECES MARKED ⑦ AND NAIL W/2-12d NAILS AT EACH END. ONE (1) ADDITIONAL PIECE IS REQUIRED FOR EACH 7'-0" OF STRUT LENGTH. NAIL ADDED PIECES LIKEWISE, EITHER TO SPLICE PIECES, AS SHOWN, OR TO 2" X 4" X 12" NAILING BLOCKS SECURED TO THE STRUTS W/3-10d NAILS.
- ⑭ BACK-UP CLEAT, 2" X 6" X 30" (QUADRUPLED) (4 REQD). POSITION AS SHOWN. NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/7-12d NAILS. NAIL EACH ADDITIONAL PIECE IN A LIKE MANNER. SEE SPECIAL NOTE 4 BELOW. NOTICE: ONLY ONE (1) BACK-UP CLEAT IS SHOWN FOR CLARITY. ALIGN OTHERS WITH THE EDGE OF A UNIT.



ISOMETRIC VIEW

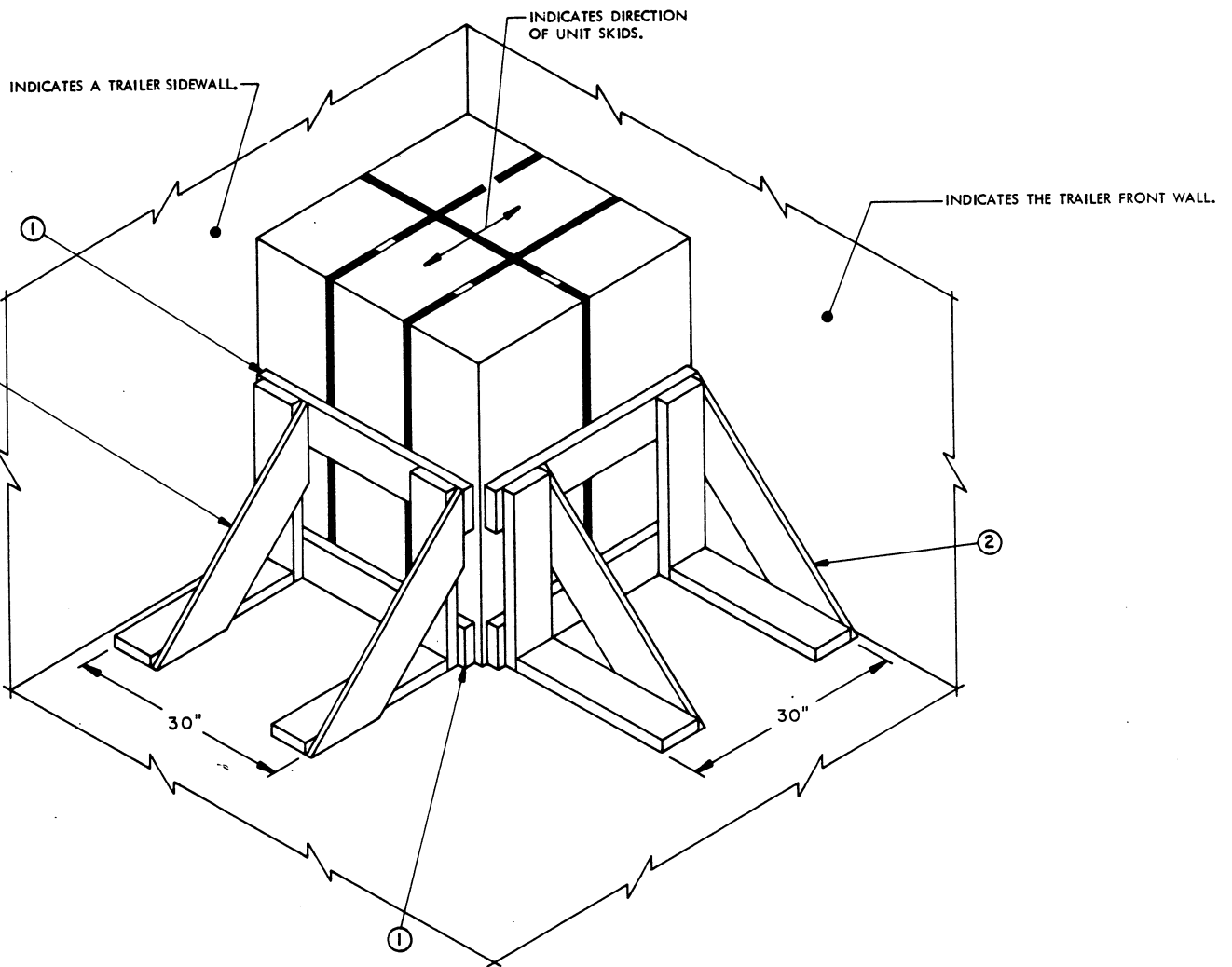
SPECIAL NOTES:

1. A 7'-6" WIDE (INSIDE DIMENSION) CONVENTIONAL VAN TRAILER IS SHOWN. TRAILERS OF OTHER WIDTHS CAN BE USED.
2. THESE UNLOADING PROCEDURES DEPICT TWO METHODS OF BLOCKING, THE USE OF A "K-BRACE" AND THE USE OF "NAILED FLOORLINE" BLOCKING.
3. THE "K-BRACE" BLOCKING, SHOWN AS PIECES MARKED ③ THRU ⑬, IS ADEQUATE FOR RETAINING NOT MORE THAN EIGHT (8) UNITS.
4. PIECES MARKED ⑭ ARE FOR USE IN A TRAILER WHICH HAS A NAILABLE FLOOR AND MAY BE USED IN LIEU OF PIECES MARKED ③ THRU ⑬ WHICH APPLY TO TRAILERS HAVING NON-NAILABLE FLOORS. FOUR (4) BACK-UP CLEATS, SHOWN AS PIECES MARKED ⑭, ARE ADEQUATE FOR RETAINING UNITS AS FOLLOWS:
 - 4 EACH 30" BACK-UP CLEATS --- 8 UNITS @ 1,960 POUNDS
 - 4 EACH 36" BACK-UP CLEATS --- 10 UNITS @ 2,000 POUNDS OR 8 UNITS @ 2,200 POUNDS
 - 4 EACH 42" BACK-UP CLEATS --- 12 UNITS @ 2,200 POUNDS
5. IF AN UNEVEN NUMBER OF UNITS IS TO BE SHIPPED, POSITION A FILLER ASSEMBLY, WHICH IS SHOWN AS PIECE MARKED ④ ON PAGE 4, IN THE PLACE OF A UNIT OMITTED FROM THE REARMOSEST LOAD UNIT.
6. THE SIDE STRUTS, PIECES MARKED ⑤ MUST BE FORMED FROM MORE THAN ONE PIECE OF MATERIAL. A SPLICE PIECE, SHOWN AS PIECE MARKED ⑫, WILL BE APPLIED AT EACH JOINT, AND A PIECE MARKED ⑪ POSITIONED UNDERNEATH. TWO (2) SPLICE PIECES ARE SHOWN; ADDITIONAL PIECES MARKED ⑪ AND ⑫ MAY BE REQUIRED.

KEY NUMBERS

- ① FORWARD BLOCKING (1 REQD). SEE THE DETAIL ON PAGE 8. SEE SPECIAL NOTE 3 ON PAGE 5.
- ② ANTI-SWAY BRACE (4 REQD). SEE THE DETAIL ON PAGE 8. INSTALL BETWEEN LATERALLY ADJACENT ROWS OF UNITS. SEE GENERAL NOTE "M" ON PAGE 2.
- ③ HEADER, 2" X 6" BY TRAILER WIDTH (CUT TO FIT) (2 REQD).
- ④ HEADER SUPPORT, 2" X 4" BY TRAILER WIDTH (CUT TO FIT) (2 REQD). NAIL TO THE BOTTOM EDGE OF PIECE MARKED ③ W/1-10d NAIL EVERY 8".
- ⑤ SIDE STRUT, 2" X 6" BY CUT TO FIT BETWEEN THE FORWARD AND REAR PIECES MARKED ③ (2 REQD). SEE SPECIAL NOTE 6 AT LEFT.
- ⑥ POCKET CLEAT, 2" X 6" X 18" (2 REQD). NAIL TO PIECE MARKED ⑤ W/5-10d NAILS. TOENAIL TO THE FORWARD PIECE MARKED ③ W/3-12d NAILS.
- ⑦ STRUT RETAINING BLOCK, 2" X 6" X 12" (2 REQD). NAIL TO PIECE MARKED ⑤ W/3-10d NAILS. TOENAIL TO THE REAR PIECE MARKED ③ W/3-12d NAILS.
- ⑧ CENTER CLEAT, 2" X 6" X 30" (1 REQD). NAIL TO THE FORWARD PIECE MARKED ③ W/6-10d NAILS.
- ⑨ DIAGONAL BRACE, 2" X 6" BY CUT TO FIT (2 REQD). DOUBLE BEVEL EACH END WITH 45° CUTS. INSTALL AT A 45° ANGLE AS SHOWN AND TOENAIL TO PIECES MARKED ③ AND ⑤ W/2-16d NAILS AT EACH END.
- ⑩ SIDE CLEAT, 2" X 6" X 24" (2 REQD). NAIL TO PIECE MARKED ⑤ W/8-10d NAILS. TOENAIL TO PIECE MARKED ⑪ W/2-12d NAILS.
- ⑪ DIAGONAL BRACE/SPLICE PIECE SUPPORT, 2" X 4" X 12" (4 REQD). CENTER UNDER JOINT OF PIECES MARKED ⑦ AND ⑩ AND/OR UNDER SPLICE JOINT OF PIECE MARKED ⑫.
- ⑫ SPLICE PIECE, 2" X 6" X 24" (2 REQD). NAIL TO PIECE MARKED ⑤ W/4-10d NAILS AT EACH SIDE OF JOINT. TOENAIL TO PIECE MARKED ⑪ W/2-12d NAILS.

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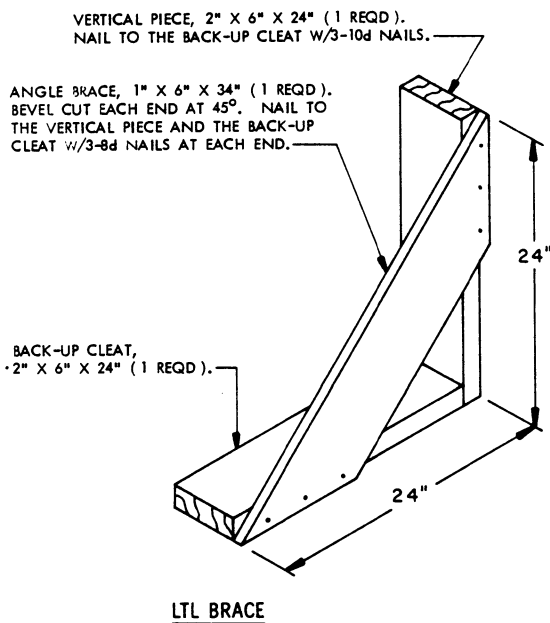
ISOMETRIC VIEW

KEY NUMBERS

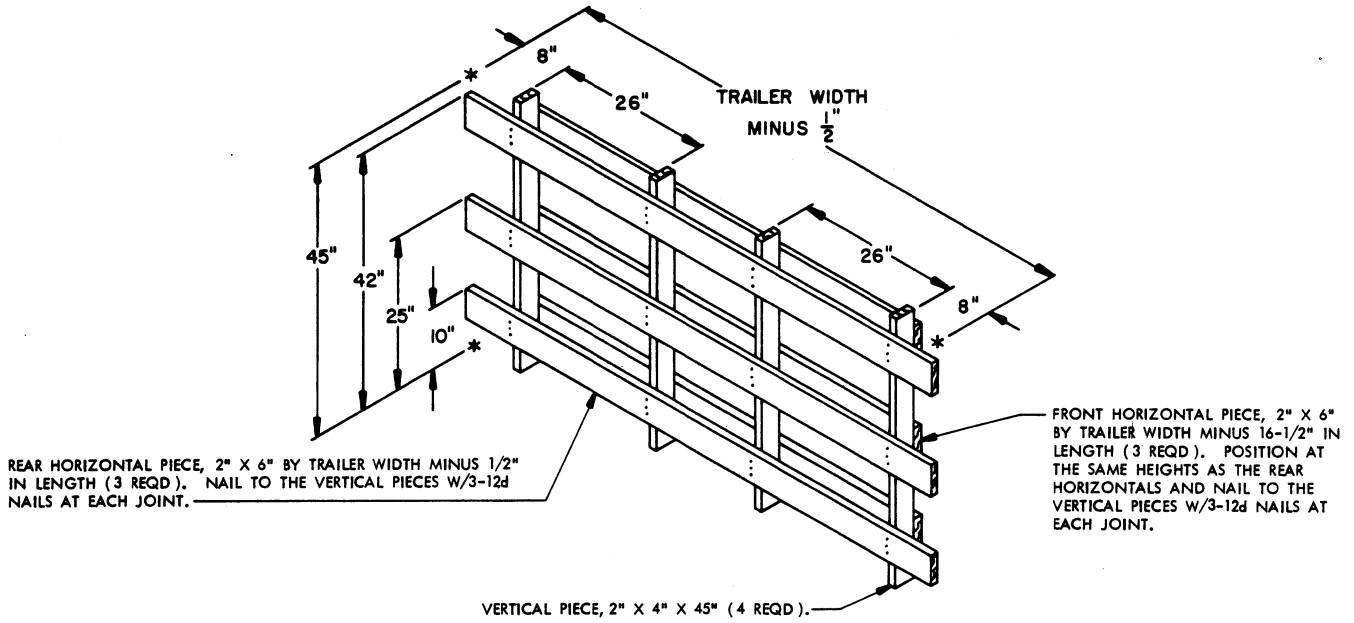
- ① LOAD BEARING PIECE, 2" X 6" X 32" (4 REQD). LOCATE AS SHOWN.
- ② LTL BRACE (4 REQD). SEE THE DETAIL AT LEFT. NAIL TO PIECES MARKED ① W/4-10d NAILS AT EACH JOINT. NAIL EACH LTL BRACE TO THE TRAILER FLOOR W/6-12d NAILS. SEE SPECIAL NOTE 3 BELOW.

SPECIAL NOTES:

1. A 1-UNIT LOAD IS SHOWN IN A CONVENTIONAL VAN TRAILER DEPICTING THE USE OF LTL BRACES IN A TRAILER EQUIPPED WITH A SQUARE FRONT AND HAVING A NAILABLE FLOOR. TRAILERS EQUIPPED WITH NON-NAILABLE FLOORS CANNOT BE USED.
2. IF THE TRAILER IS EQUIPPED WITH ROUNDED CORNERS AT THE FORWARD END, EITHER THE "FORWARD BLOCKING" ASSEMBLY AS DETAILED ON PAGE 8, OR TWO (2) ADDITIONAL PIECES MARKED ① AND ② CAN BE USED AT THE FRONT OF THE LOAD.
3. EACH PAIR OF LTL BRACES AS APPLIED FOR LONGITUDINAL BRACING WILL SUPPORT TWO (2) UNITS. NOT LESS THAN TWO (2) LTL BRACES WILL BE USED AGAINST THE END OR AGAINST THE SIDE OF A UNIT.

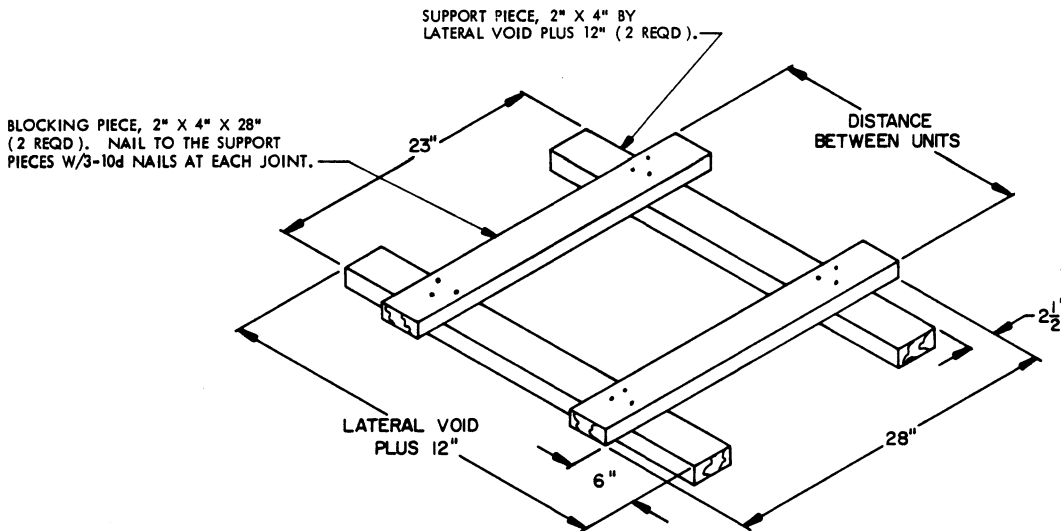


TYPICAL LTL (1-UNIT LOAD)



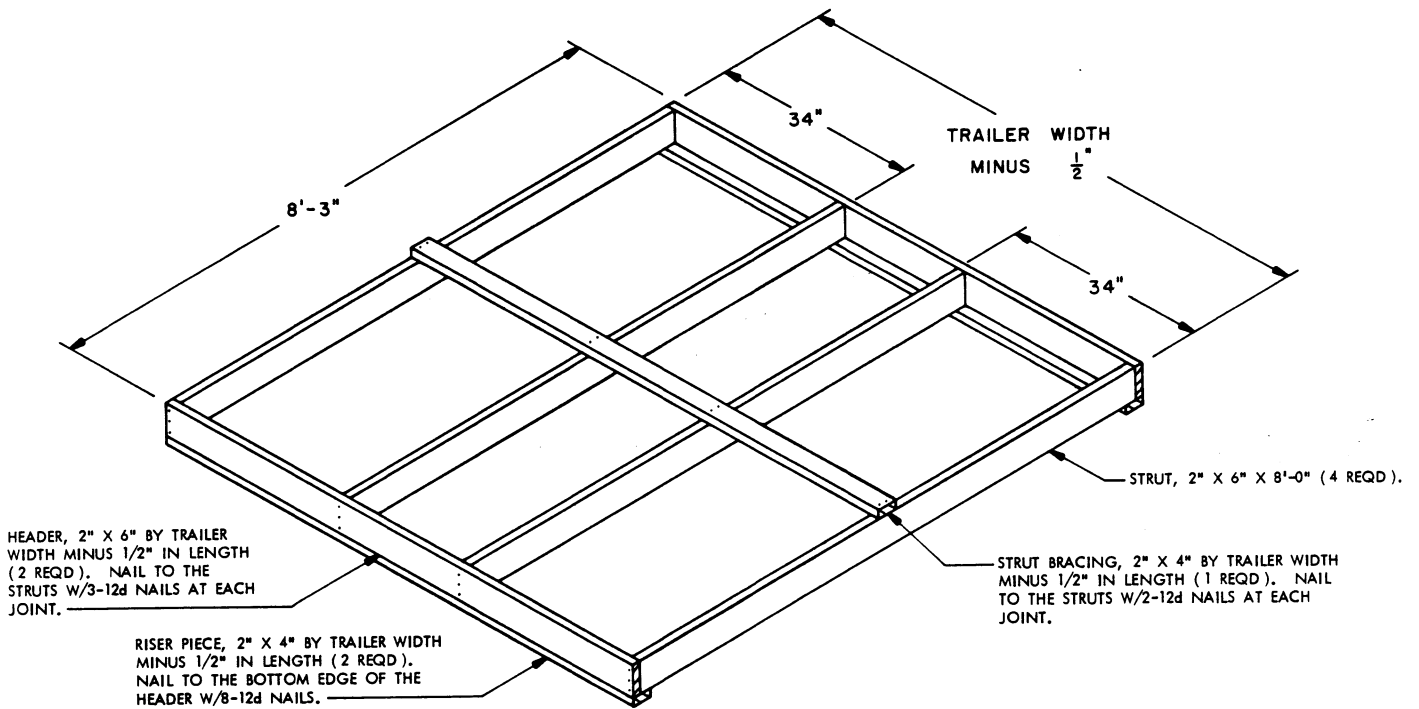
FORWARD BLOCKING

THIS ASSEMBLY IS DESIGNED FOR USE AT THE FRONT END OF A TRAILER HAVING ROUNDED CORNERS, AND IS APPLICABLE FOR A CORNER RADIUS OF NOT MORE THAN 6-1/2". IF THE RADIUS IS FROM 6-1/2" TO 8", 2" X 6" VERTICAL PIECES WILL BE USED IN LIEU OF THE 2" X 4" PIECES.



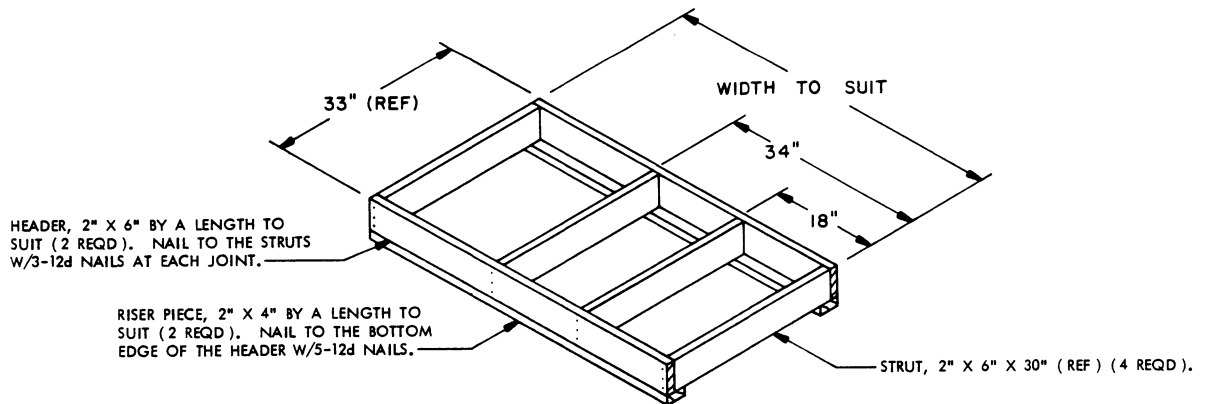
ANTI-SWAY BRACE

ANTI-SWAY BRACES SHOULD BE ASSEMBLED IN PLACE IN ORDER TO OBTAIN A SNUG FIT BETWEEN THE LADING AND THE BLOCKING PIECES OF THE BRACE.



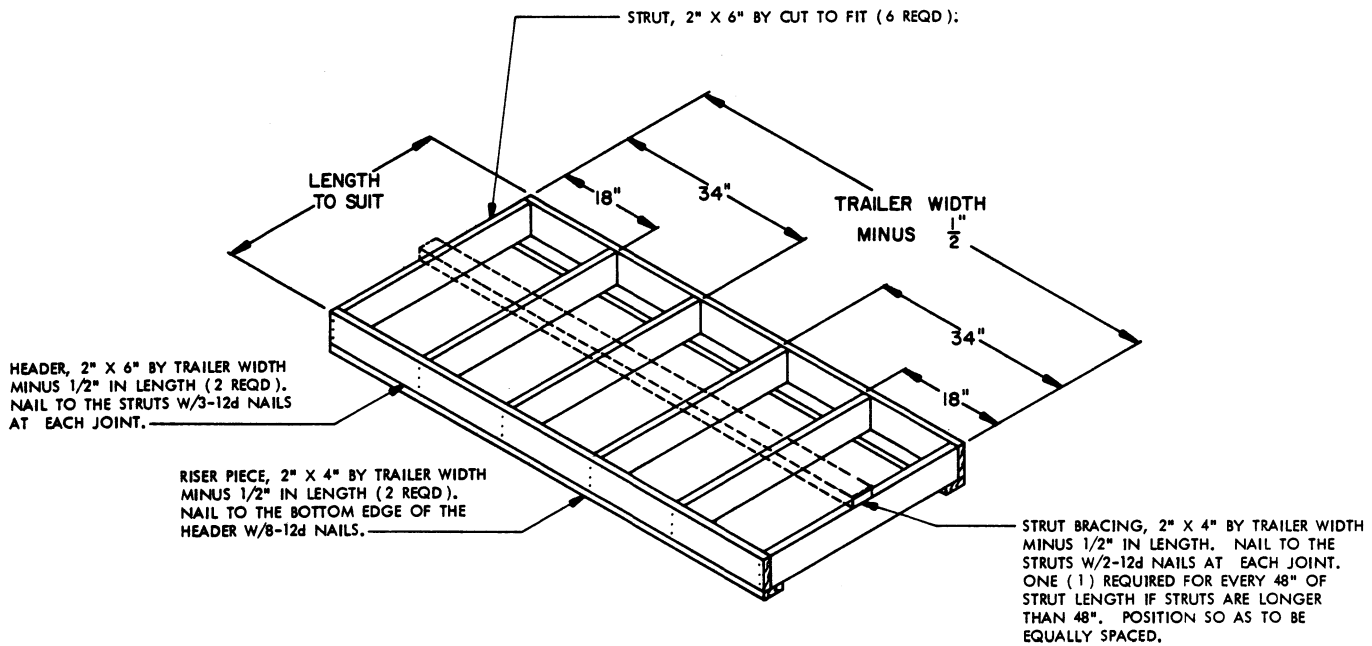
SPACER ASSEMBLY

THIS ASSEMBLY IS DESIGNED FOR USE WITHIN A LOAD TO PROVIDE PROPER WEIGHT DISTRIBUTION. THE LOCATION OF THE ASSEMBLY WITHIN THE LENGTH OF THE LOAD MAY BE ADJUSTED AS NECESSARY.



FILLER ASSEMBLY

THIS ASSEMBLY IS DESIGNED FOR USE IN THE PLACE OF AN OMITTED UNIT WHEN AN ODD NUMBER OF UNITS ARE TO BE SHIPPED.



REAR BLOCKING ASSEMBLY

THIS ASSEMBLY IS DESIGNED FOR USE AT THE REAR OF A LOAD WHEN THE EXCESS SPACE BETWEEN THE LADING AND THE TRAILER DOORS IS MORE THAN 9". NOTE THAT THE STRUTS LOCATED BY THE 18" DIMENSION MAY BE OMITTED IF THE LOAD CONSISTS OF NOT MORE THAN EIGHTEEN (18) UNITS.

DETAIL