

APPROVED BY

BUREAU OF EXPLOSIVES

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DATE 5/8/70

LOADING AND BRACING (TL & LTL) IN CLOSED OR OPEN TOP VAN TRAILERS OF 2.75 INCH ROCKET PACKED 25 PER PLYWOOD CLEATED BOX

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⊙ THIS DOCUMENT INCLUDES 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:

PROCEDURES SHOWN HEREIN FOR MECHANICAL BRACING DEVICE EQUIPPED TRAILERS ARE ONLY APPLICABLE FOR HIGHWAY MOVEMENT, NOT FOR CONTAINER/TRAILER-ON-FLAT-CAR MOVEMENT.

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			JULY 1970
			CLASS DIVISION DRAWING FILE
			19 48 4025 11A4

DO NOT SCALE

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. THE OUTLOADING PROCEDURES SPECIFIED HEREIN ARE APPLICABLE TO 2.75 INCH ROCKETS WHEN THEY ARE PACKAGED TWENTY-FIVE (25) PER PLYWOOD CLEATED BOX. SUBSEQUENT REFERENCE TO CONTAINER HEREIN MEANS THE PLYWOOD CLEATED BOX WITH CONTENTS.
- C. FOR DETAILS OF THE PLYWOOD CLEATED BOX SEE DRAWING NO. 9235041.
CONTAINER DIMENSIONS --- 61-1/16" LONG BY 20-3/16" WIDE BY 25-1/4" HIGH.
GROSS WEIGHT ----- 776 POUNDS (APPROX).
CUBE ----- 18.0 CUBIC FEET.
- D. THE 54-UNIT LOAD SHOWN ON PAGES 4 AND 5 IS BASED ON A 40'-0" LONG BY 7'-6" WIDE (INSIDE DIMENSION) CLOSED OR OPEN TOP VAN TRAILER WHICH HAS A WOOD, OR A WOOD AND METAL, OR A METAL FLOOR. THE DELINEATED OUTLOADING PROCEDURES ARE ALSO APPLICABLE TO TRAILERS OF OTHER WIDTHS BY ADJUSTING THE THICKNESS OF THE "CRIB FILL ASSEMBLY" AS DETAILED ON PAGE 8.
- E. THE 54-UNIT LOAD SHOWN ON PAGES 12 AND 13 IS BASED ON A 40'-0" LONG BY 7'-6" WIDE (INSIDE DIMENSION) CLOSED OR OPEN TOP VAN TRAILER WHICH CONTAINS A MECHANICAL LOAD-BLOCKING SYSTEM WHICH CONFORMS TO SPECIFICATIONS SET FORTH WITHIN THE BUREAU OF EXPLOSIVES PAMPHLET 6C AND THE APPENDICES THERETO. CAUTION: A CROSS MEMBER WILL NOT BE RELIED UPON TO RETAIN MORE THAN 10,000 POUNDS OR TWELVE CONTAINERS ON EITHER SIDE.
- F. VOIDS LENGTHWISE WITHIN THE LOAD MUST BE HELD TO A MINIMUM. FOR CONVENTIONAL TRAILERS, REAR BLOCKING MUST CONTACT REAR DOORS OF THE TRAILER WHEN THEY ARE CLOSED. FOR TRAILERS EQUIPPED WITH MECHANICAL BRACING DEVICES, THE CROSS MEMBER MUST BE PLACED AGAINST THE LADING AS TIGHTLY AS THE WALL MEMBER LOCKING HOLE SPACING PERMITS: CROSS MEMBERS WILL BE INSTALLED WITH EACH END ATTACHED AS NEARLY AS POSSIBLE IN "MATED" POSITIONS, AT EQUAL HEIGHTS AND AT EQUAL DISTANCES FROM END OF TRAILER.
- G. MECHANICAL 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.
- H. 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.
- 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 HEREIN MUST BE FOLLOWED AS CLOSELY AS POSSIBLE FOR BLOCKING, BRACING, AND STAYING OF THE DESIGNATED ITEMS.
- K. THE OUTLOADING PROCEDURES SPECIFIED HEREIN CAN ALSO BE UTILIZED FOR THE SHIPMENT OF THE DEPICTED CONTAINERS WHEN THEY ARE EMPTY OR LOADED WITH AN ITEM WHICH IS IDENTIFIED DIFFERENTLY BY NOMENCLATURE THAN THE ITEM DESIGNATED WITHIN THE DRAWING TITLE.
- L. OTHER TYPES OF LADING ITEMS MAY BE LOADED INTO TRAILERS WHICH ARE PARTIALLY LOADED WITH THE DESIGNATED 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.
- M. 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. CAUTION: EXERCISE CARE DURING TENSIONING TO PREVENT DAMAGE TO THE CONTAINERS.
- N. DUNNAGE LUMBER SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE, 2" X 6" MATERIAL IS ACTUALLY 1-5/8" THICK BY 5-5/8" WIDE AND 4" X 4" MATERIAL IS ACTUALLY 3-5/8" THICK BY 3-5/8" WIDE.

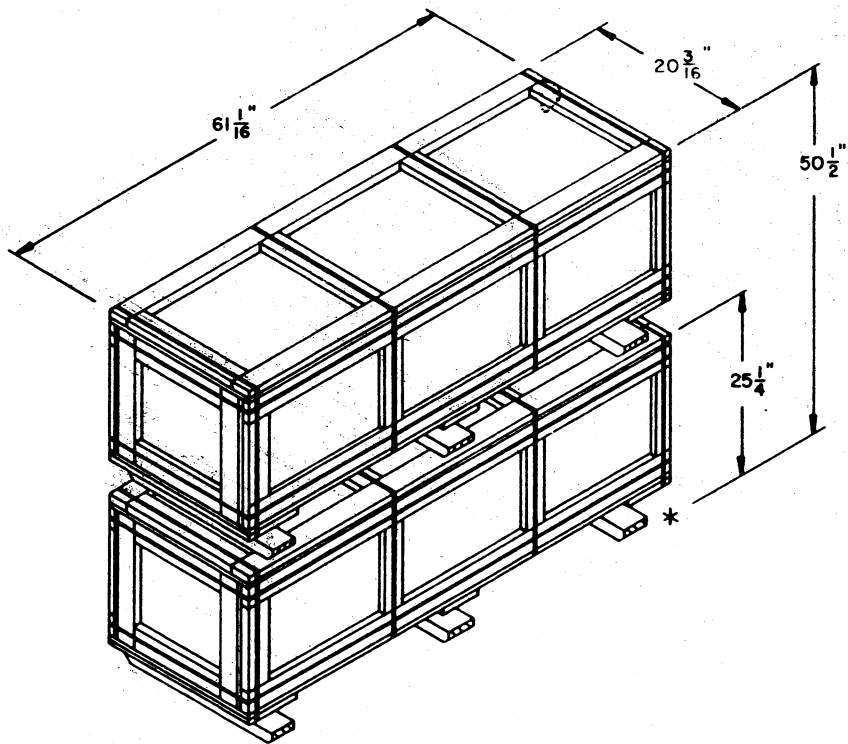
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MATERIAL SPECIFICATIONS

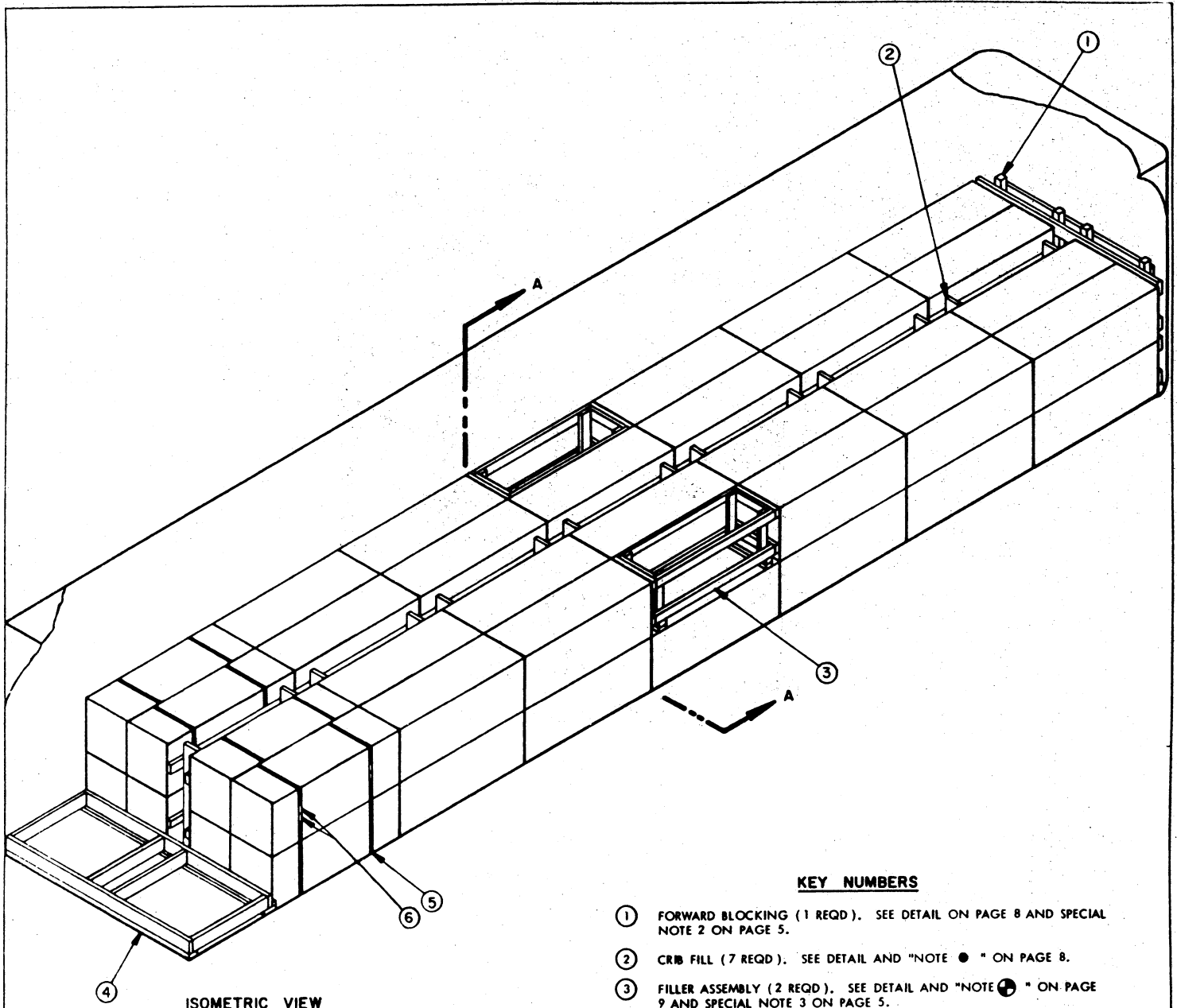
- LUMBER----- : SEE TM 743-200-1, DUNNAGE LUMBER; FED SPEC MM-L-751.
- NAILS----- : COMMON, CEMENT COATED OR CHEMICALLY ETCHED,
FED SPEC FF-N-105.
ALT: ANNULAR-RING TYPE NAIL OF SAME SIZE.
- STRAPPING STEEL -- : TYPE I OR IV, CLASS A OR B; FED SPEC QQ-5-781.
- STRAP SEAL ----- : COMMERCIAL GRADE.
- WIRE ----- : FED SPEC QQ-W-461.

(GENERAL NOTES CONTINUED)

- O. 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. 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.
- P. PORTIONS OF THE TRAILER BODIES DEPICTED WITHIN THIS PROCEDURAL DRAWING, SUCH AS ONE OF THE SIDE WALLS, HAVE NOT BEEN SHOWN IN THE LOAD VIEWS FOR CLARITY PURPOSES.
- Q. FOR ADDITIONAL GUIDANCE, ATTENTION IS DIRECTED TO THE "SPECIAL NOTES" SECTIONS WHICH ARE IMMEDIATELY ADJACENT TO THE DEPICTED OUTLOADING METHODS.



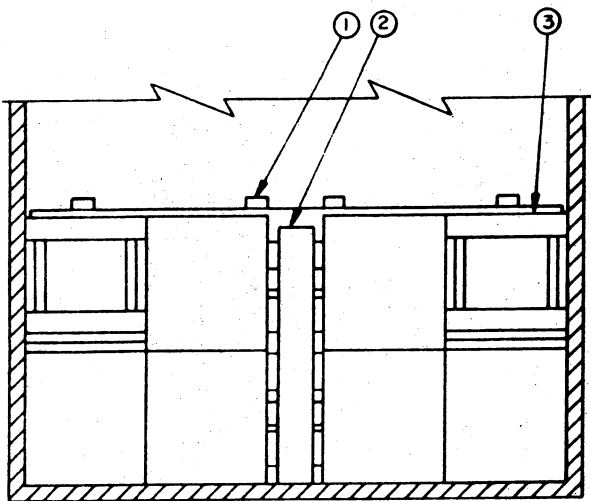
STACK DETAIL



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD BLOCKING (1 REQD). SEE DETAIL ON PAGE 8 AND SPECIAL NOTE 2 ON PAGE 5.
- ② CRIB FILL (7 REQD). SEE DETAIL AND "NOTE ●" ON PAGE 8.
- ③ FILLER ASSEMBLY (2 REQD). SEE DETAIL AND "NOTE ⊕" ON PAGE 9 AND SPECIAL NOTE 3 ON PAGE 5.
- ④ REAR BLOCKING (1 REQD). SEE DETAIL ON PAGE 9 AND SPECIAL NOTE 4 ON PAGE 5.
- ⑤ UNITIZING STRAP, 1-1/4" X .035" X 13'-0" LONG STEEL STRAPPING (8 REQD, 2 PER STACK). SEE GENERAL NOTE "M" ON PAGE 2.
- ⑥ SEAL FOR 1-1/4" STEEL STRAPPING (16 REQD, 2 PER STRAP JOINT).



SECTION A - A

SPECIAL NOTES :

1. A 54-UNIT LOAD IS SHOWN IN A 40'-0" LONG BY 7'-6" WIDE (INSIDE DIMENSION) TRAILER THAT HAS ROUNDED-CORNERS AT THE FORWARD END BUT NO REAR CORNER POSTS AT THE REAR END. SHORTER TRAILERS CAN BE USED. A 37'-0" LONG TRAILER IS THE SHORTEST TRAILER THAT CAN BE USED FOR THE DEPICTED LOAD, PROVIDING THE TRAILER HAS A SQUARE FRONT. WIDER OR NARROWER TRAILERS MAY BE USED.
2. A TRAILER WITH ROUNDED-CORNERS AT THE FORWARD END IS SHOWN IN THE LOAD VIEW. IF THE TRAILER BEING LOADED HAS A SQUARE FRONT WALL, OMIT THE FORWARD BLOCKING DUNNAGE AND POSITION THE CONTAINERS DIRECTLY AGAINST THE FRONT WALL OF THE TRAILER.
3. THE DEPICTED LOAD CONFIGURATION MAY BE ADJUSTED TO SATISFY THE QUANTITY OF ITEMS TO BE SHIPPED BY OMITTING AN ENTIRE BAY OF EIGHT (8) CONTAINERS, OR BY USING ADDITIONAL FILLER ASSEMBLIES IN PLACE OF OMITTED CONTAINERS. FURTHER ADJUSTMENT MAY BE ACCOMPLISHED WITH THE USE OF A PARTIAL LAYER. HOWEVER, IN A PARTIAL LAYER SHIPMENT, EACH TWO-HIGH STACK WHICH IS LONGITUDINALLY ADJACENT TO A ONE-HIGH STACK MUST BE UNITIZED WITH STEEL STRAPPING IN THE SAME MANNER AS DEPICTED FOR THE REAR OF THE LOAD. SEE KEY NUMBERS ⑤ AND ⑥ ON PAGE 4.
4. IF THE TRAILER BEING OUTLOADED HAS REAR CORNER POSTS, POSITION THE REAR HEADER OF THE REAR BLOCKING ASSEMBLY AGAINST THE CORNER POSTS AND LAMINATE 6" WIDE BY 48" LONG MATERIAL TO THE REAR SURFACE OF THE HEADER, AS REQUIRED TO FILL THE VOID BETWEEN THE HEADER AND THE REAR DOORS WHEN THEY ARE CLOSED.

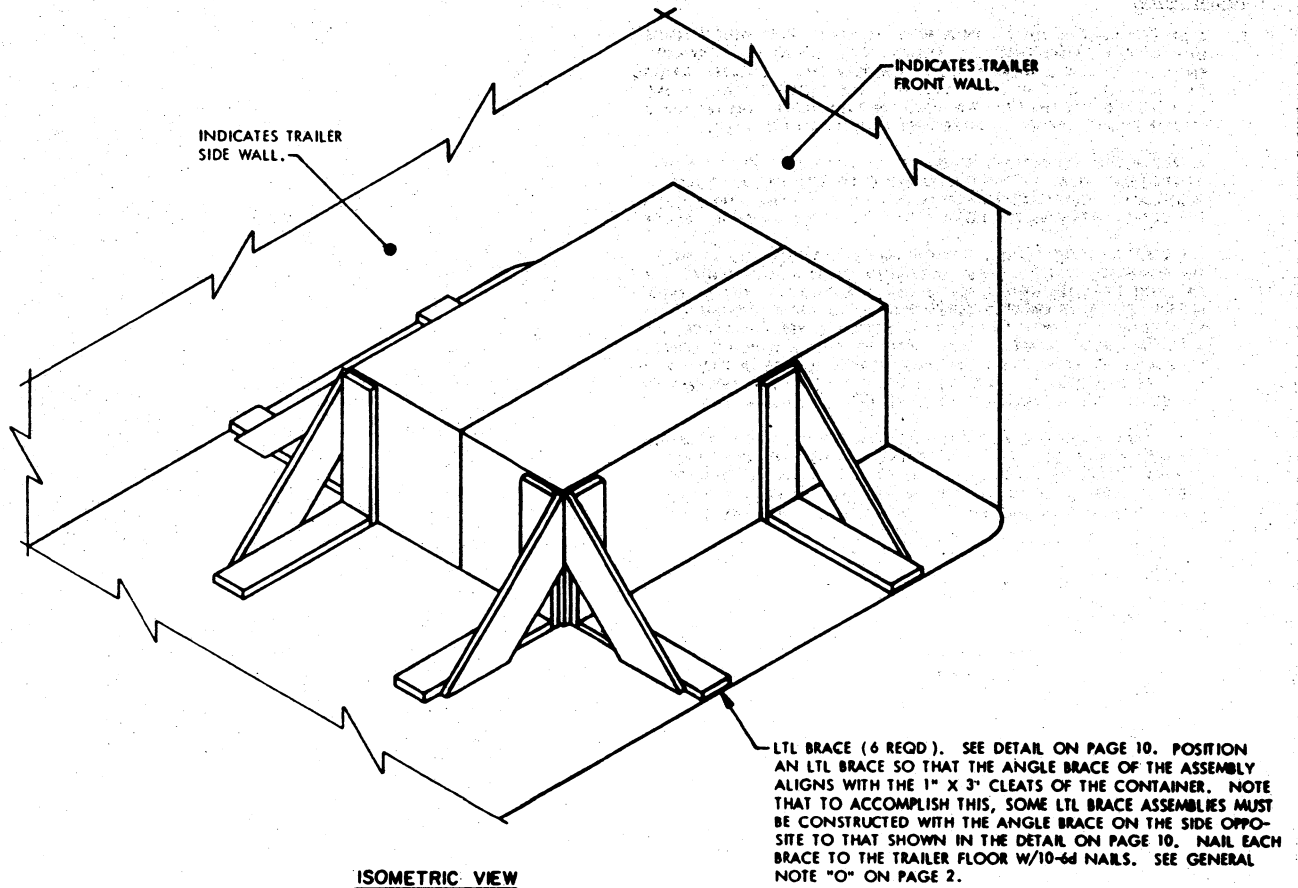
BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 2"	2	1
2" X 4"	248	162
2" X 6"	145	145
4" X 4"	20	27
NAILS	NO. REQD	POUNDS
10d (3")	318	5
12d (3-1/4")	184	3
STEEL STRAPPING, 1-1/4" X .035" ----- 104' REQD ---- 15 LBS		
SEAL FOR 1-1/4" STRAPPING ----- 16 REQD ---- 1 LBS		

LOAD AS SHOWN

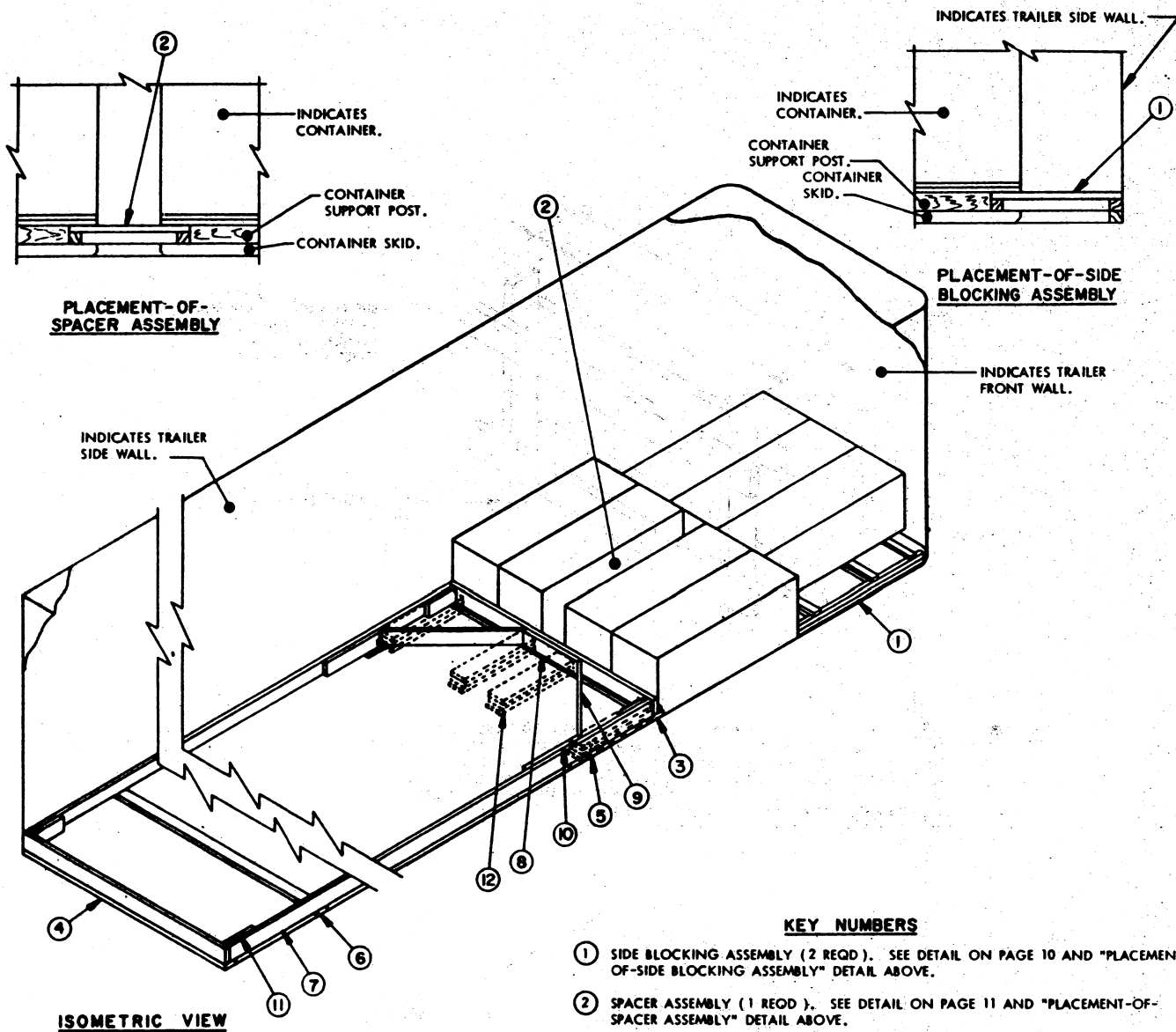
ITEM	QUANTITY	WEIGHT (APPROX)
CONTAINER -----	54 -----	41,904 LBS
DUNNAGE -----		862 LBS
TOTAL WEIGHT -----		42,766 LBS

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



SPECIAL NOTES :

1. THESE LTL UNLOADING PROCEDURES DEPICT THE USE OF BLOCKING THAT IS ONLY APPLICABLE TO TRAILERS WHICH HAVE NAILABLE FLOORS.
2. THE TYPICAL LOAD IS SHOWN FOR A 7'-6" WIDE (INSIDE DIMENSION) TRAILER THAT HAS ROUNDED CORNERS AT THE FORWARD END. WIDER OR NARROWER TRAILERS MAY ALSO BE USED. IF A SHIPMENT OF MORE THAN TWO (2) CONTAINERS IS REQUIRED SEE THE TYPICAL LTL (7-UNIT LOAD) DEPICTED ON PAGE 7 FOR SPECIFICATIONS WHICH MUST BE USED.
3. EACH LTL BRACE AS SPECIFIED WILL RETAIN 2,000 POUNDS OF LADING; HOWEVER, AT LEAST TWO (2) BRACES MUST BE USED TO BLOCK THE LOAD IN ANY ONE DIRECTION.

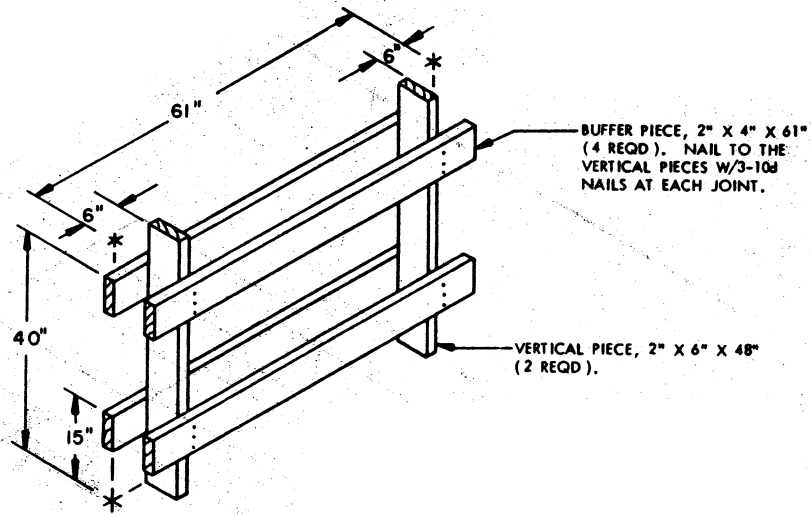


KEY NUMBERS

- ① SIDE BLOCKING ASSEMBLY (2 REQD). SEE DETAIL ON PAGE 10 AND "PLACEMENT-OF-SIDE BLOCKING ASSEMBLY" DETAIL ABOVE.
- ② SPACER ASSEMBLY (1 REQD). SEE DETAIL ON PAGE 11 AND "PLACEMENT-OF-SPACER ASSEMBLY" DETAIL ABOVE.
- ③ REAR-OF-LOAD HEADER (1 REQD). SEE DETAIL ON PAGE 11.
- ④ REAR HEADER (1 REQD). SEE DETAIL ON PAGE 11 AND SPECIAL NOTE 3 ON THIS PAGE.
- ⑤ RISER BLOCK, 2" X 4" X 12" (2 REQD). CENTER UNDER THE JOINT OF THE DIAGONAL BRACE AND THE BACK-UP CLEAT.
- ⑥ STRUT BRACE/RISER, 2" X 4" BY TRAILER WIDTH (CUT TO FIT). (MIN OF 1 REQD). POSITION ONE (1) NEAR THE REAR OF THE TRAILER AND ONE (1) EVERY 7'-0" OF SIDE STRUT LENGTH.
- ⑦ SIDE STRUT, 2" X 6" BY CUT TO FIT IN LENGTH (2 REQD). TOENAIL TO PIECES MARKED ③ AND ④ W/2-12d NAILS AT EACH END. TOENAIL TO PIECES MARKED ⑤ AND ⑥ W/2-10d NAILS AT EACH JOINT.
- ⑧ SPACER CLEAT, 2" X 6" X 24" (1 REQD). NAIL TO PIECE MARKED ③ W/5-10d NAILS.
- ⑨ DIAGONAL BRACE, 2" X 6" BY CUT TO FIT (2 REQD). DOUBLE BEVEL EACH END WITH 45° CUTS. TOENAIL TO PIECES MARKED ③ AND ⑦ W/2-12d NAILS AT EACH END.
- ⑩ BACK-UP CLEAT, 2" X 6" X 24" (2 REQD). NAIL TO PIECE MARKED ⑦ W/6-10d NAILS.
- ⑪ POCKET CLEAT, 2" X 6" X 12" (4 REQD). NAIL TO PIECES MARKED ⑦ W/3-10d NAILS. TOENAIL TO PIECES MARKED ③ AND ④ W/2-12d NAILS AT EACH JOINT.
- ⑫ BACK-UP CLEAT, 2" X 6" X 30" (TRIPLED) (4 REQD). ALIGN WITH THE SIDE OF A CONTAINER AND NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/7-12d NAILS. NAIL EACH ADDITIONAL PIECE IN A LIKE MANNER. SEE SPECIAL NOTE 4 ON THIS PAGE AND GENERAL NOTE "O" ON PAGE 2.

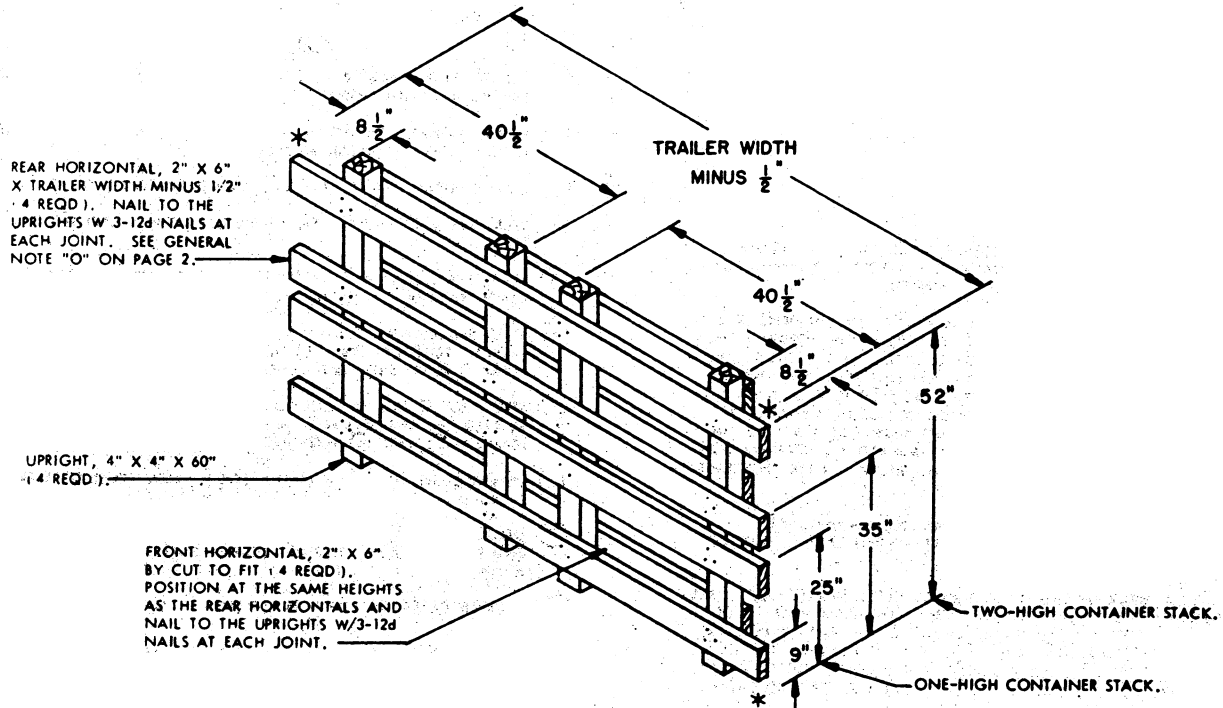
SPECIAL NOTES:

- 1. THESE LTL OUTLOADING PROCEDURES DEPICT THE USE OF BOTH "K-BRACE" BLOCKING AND "NAILED-TO-FLOOR" BLOCKING, FOR THE BRACING OF A PARTIAL LOAD SHIPMENT.
- 2. THE TYPICAL LOAD IS SHOWN FOR A 7'-6" (INSIDE DIMENSION) WIDE TRAILER THAT HAS ROUNDED CORNERS AT THE FORWARD END. WIDER OR NARROWER TRAILERS MAY BE USED. THIS METHOD CAN ALSO BE USED IN A SQUARE FRONT TRAILER. WHEN SHIPPING AN EVEN NUMBER OF CONTAINERS, SUCH AS 6 OR 8, IN A SQUARE FRONT TRAILER, OMIT THE SIDE BLOCKING ASSEMBLIES MARKED ①, POSITION CONTAINERS AGAINST BOTH SIDE WALLS OF THE TRAILER, AND USE A SPACER ASSEMBLY MARKED ② BETWEEN CONTAINERS IN EACH ONE-HIGH STACK, AS SHOWN IN THE "PLACEMENT-OF-SPACER ASSEMBLY" DETAIL ABOVE.
- 3. THE "K-BRACE" BLOCKING, SHOWN AS PIECES MARKED ③ THROUGH ⑪, IS ADEQUATE FOR RETAINING AN LTL LOAD OF NOT MORE THAN 20,000 POUNDS.
- 4. FOUR (4) BACK-UP CLEATS, SHOWN AS PIECES MARKED ⑫, ARE ADEQUATE FOR RETAINING NOT MORE THAN 20,000 POUNDS OF LADING. BACK-UP CLEATS ARE FOR USE IN A TRAILER WHICH HAS A NAILABLE FLOOR AND SHOULD BE USED, IF POSSIBLE, IN LIEU OF PIECES MARKED ③ THROUGH ⑪. IF DESIRED, PIECES MARKED ③ AND ⑫ CAN ALSO BE INSTALLED AT THE FORWARD END OF LADING.



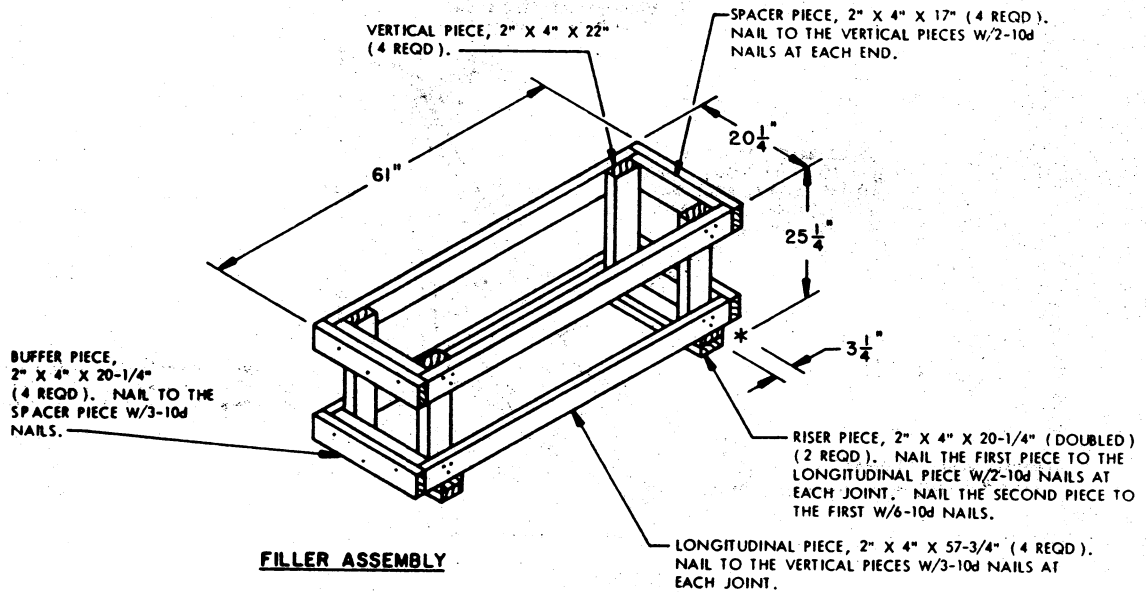
CRIB FILL

NOTE ● THE WIDTH OF THE CRIB FILL MUST BE ADJUSTED TO FILL THE VOID ACROSS THE WIDTH OF THE TRAILER. THIS CAN BE ACCOMPLISHED BY ADJUSTING THE WIDTH OF THE VERTICAL PIECES OR BY ADJUSTING THE THICKNESS OF THE BUFFER PIECES. DUE TO VARIATIONS IN CONTAINER WIDTH AND/OR TRAILER WIDTH, THE VOID LATERALLY IN THE TRAILER MUST BE FIELD CHECKED DURING UNLOADING OPERATIONS TO ASSURE A MAXIMUM VOID OF ONE INCH (1") ACROSS THE WIDTH OF THE TRAILER IS NOT EXCEEDED.

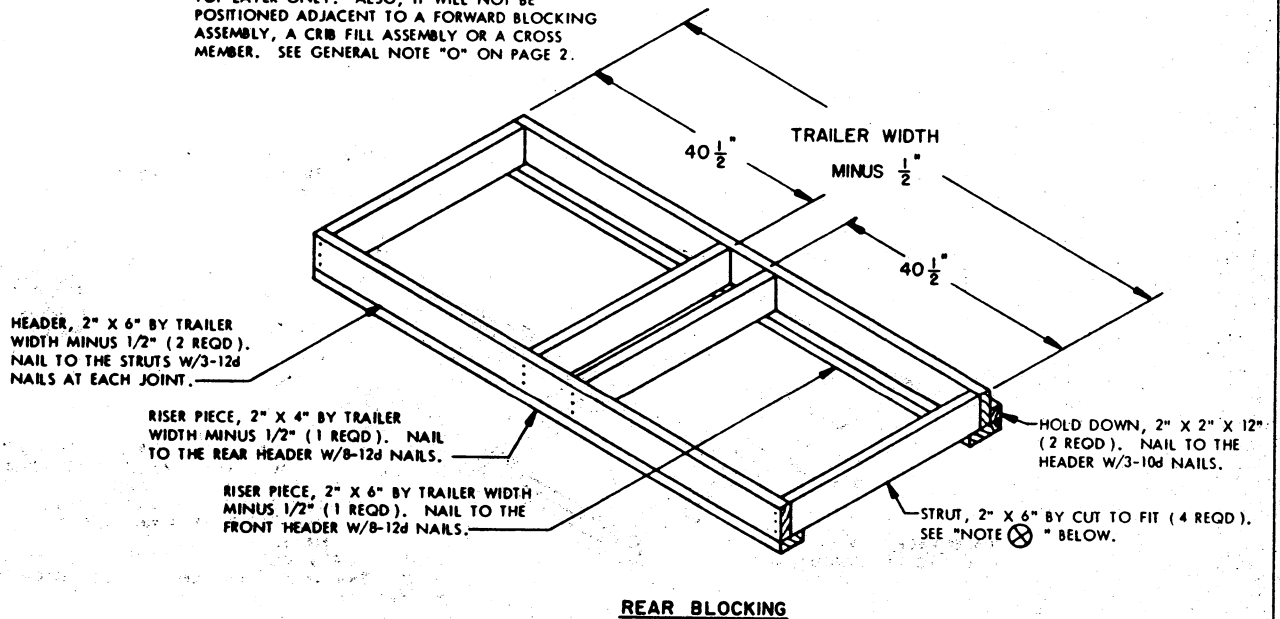


FORWARD BLOCKING

NOTE: FOR ROUNDED-CORNER TRAILERS WHERE THE RADIUS OF THE CORNERS IS GREATER THAN 8" ADDITIONAL DUNNAGE OF A THICKNESS TO SUIT MUST BE LAMINATED TO THE FRONT HORIZONTAL PIECES OF THE FORWARD BLOCKING, SO AS TO PROVIDE A BEARING SURFACE FOR THE FRONT OF THE ASSEMBLY.

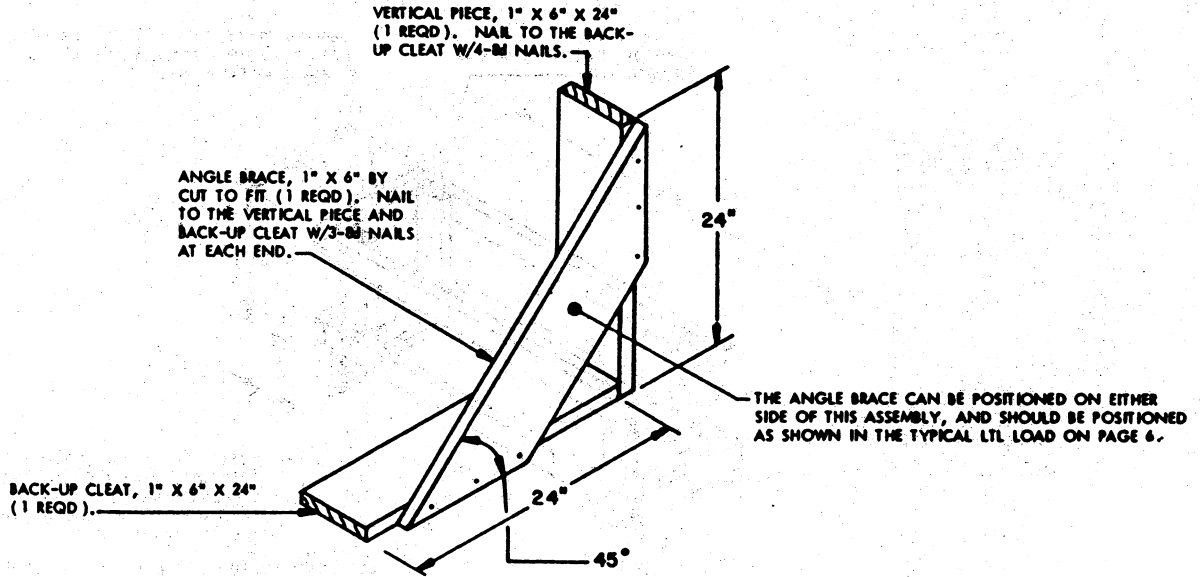


NOTE : THE FILLER ASSEMBLY AS SHOWN IS TO BE USED WITHIN THE LOAD TO TAKE THE PLACE OF AN OMITTED CONTAINER. IT MUST BE USED IN THE TOP LAYER ONLY. ALSO, IT WILL NOT BE POSITIONED ADJACENT TO A FORWARD BLOCKING ASSEMBLY, A CRIB FILL ASSEMBLY OR A CROSS MEMBER. SEE GENERAL NOTE "O" ON PAGE 2.



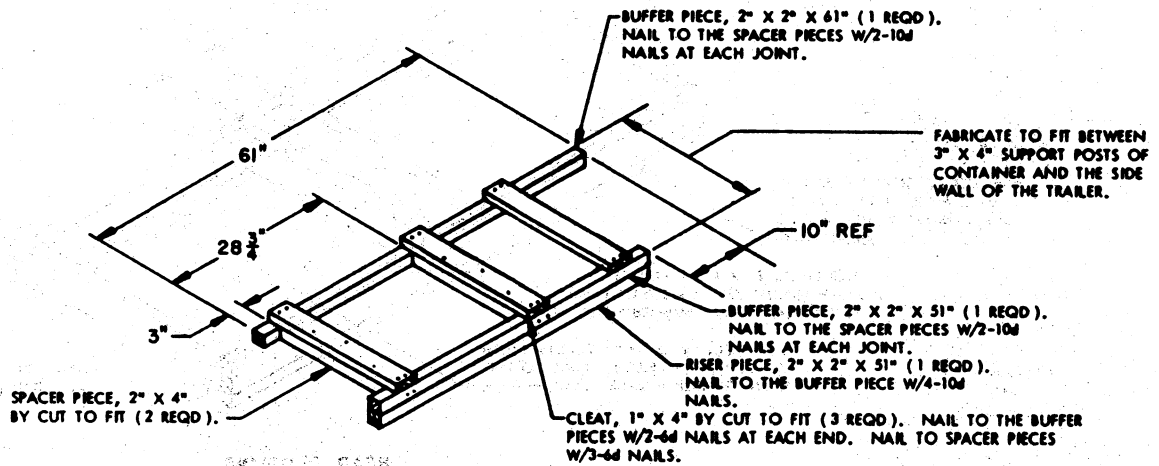
SEE SPECIAL NOTE 4 ON PAGE 5.

NOTE : IF THE SPACE BETWEEN THE HEADERS IS LESS THAN NINE INCHES (9") INSTALL 6" WIDE BY TRAILER WIDTH MINUS 1/2" SOLID FILL MATERIAL BETWEEN THE HEADERS IN LIEU OF THE STRUTS. LAMINATE THE FILL TO THE HEADER AND/OR SELF W/10d NAILS.



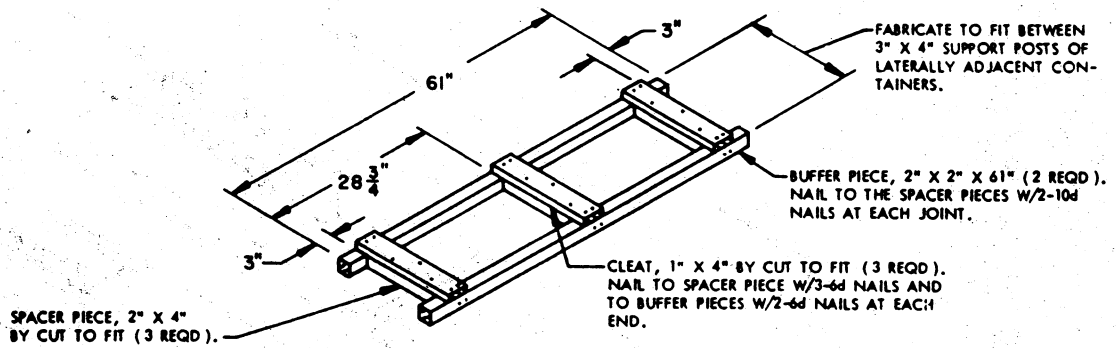
LTL BRACE

SEE SPECIAL NOTE 3 ON PAGE 6.

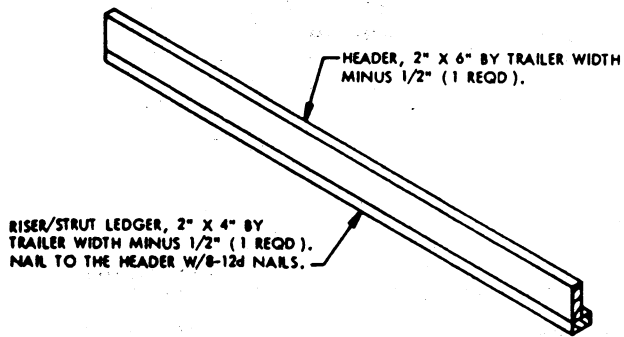


SIDE BLOCKING ASSEMBLY

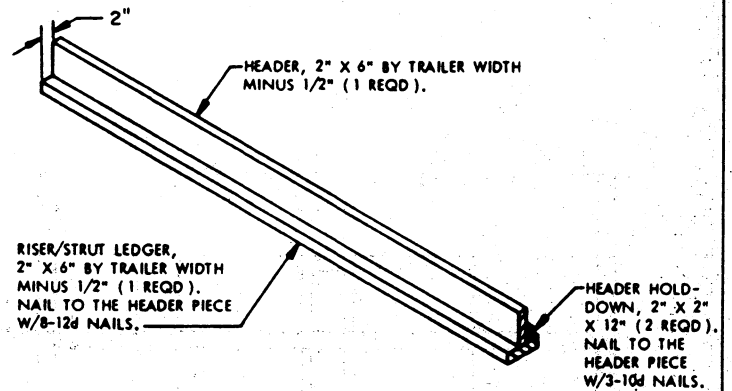
THIS SIDE BLOCKING ASSEMBLY IS DESIGNED FOR USE IN A TRAILER WITH ROUNDED CORNERS AT THE FORWARD END. TWO ASSEMBLIES ARE REQUIRED, ONE FOR THE RIGHT SIDE AS DEPICTED AND ONE FOR THE LEFT SIDE, CONSTRUCTED IN A REVERSE MANNER.



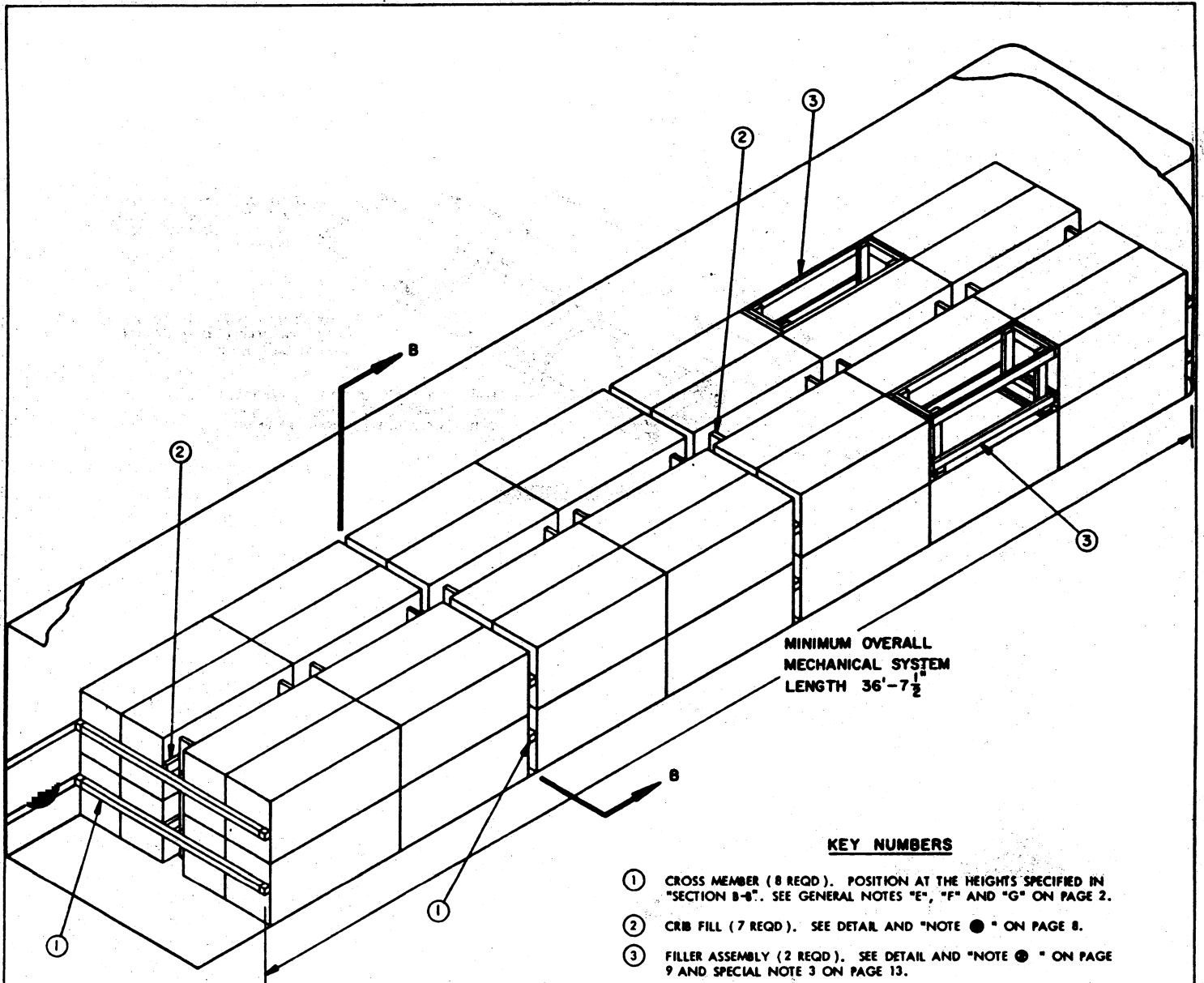
SPACER ASSEMBLY



REAR HEADER



REAR-OF-LOAD HEADER

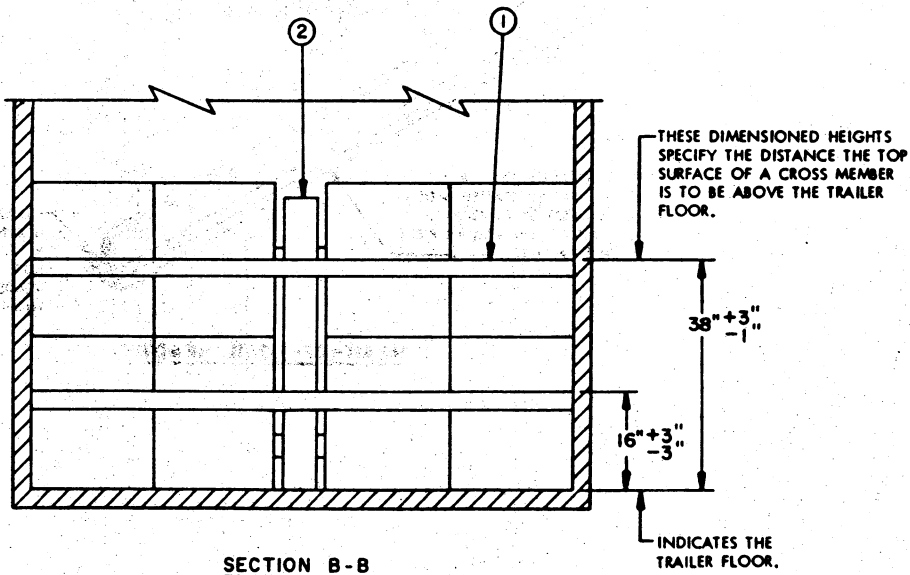


MINIMUM OVERALL
MECHANICAL SYSTEM
LENGTH 36'-7 1/2"

KEY NUMBERS

- ① CROSS MEMBER (8 REQD). POSITION AT THE HEIGHTS SPECIFIED IN "SECTION B-B". SEE GENERAL NOTES "E", "F" AND "G" ON PAGE 2.
- ② CRIB FILL (7 REQD). SEE DETAIL AND "NOTE ● " ON PAGE 8.
- ③ FILLER ASSEMBLY (2 REQD). SEE DETAIL AND "NOTE ● " ON PAGE 9 AND SPECIAL NOTE 3 ON PAGE 13.

ISOMETRIC VIEW



SECTION B-B

SPECIAL NOTES :

1. A 54-UNIT LOAD IS SHOWN IN A 40'-0" LONG BY 7'-6" WIDE (INSIDE DIMENSION) TRAILER WHICH IS EQUIPPED WITH A MECHANICAL LOAD BLOCKING SYSTEM THAT CONTAINS AT LEAST EIGHT (8) CROSS MEMBERS, AND HAS A MECHANICAL LOAD BLOCKING SYSTEM NOT LESS THAN 36'-7-1/2" LONG. A WIDER OR NARROWER TRAILER MAY BE USED.
2. A TRAILER WITH ROUNDED CORNERS AT THE FORWARD END IS SHOWN. IF THE TRAILER HAS A SQUARE-FRONT THE TWO (2) CROSS MEMBERS AT THE FRONT OF THE LOAD MAY BE OMITTED AND THE FORWARD CONTAINER STACK POSITIONED DIRECTLY AGAINST THE FRONT WALL OF THE TRAILER.
3. THE LOAD MAY BE ADJUSTED AS REQUIRED BY THE USE OF ADDITIONAL "FILLER ASSEMBLIES". LIKEWISE, THE LOAD MAY BE INCREASED BY SUBSTITUTING AN ADDITIONAL CONTAINER FOR A "FILLER ASSEMBLY", PROVIDING THE REQUIREMENTS OF GENERAL NOTES "E" AND "H" ON PAGE 2 ARE COMPLIED WITH.

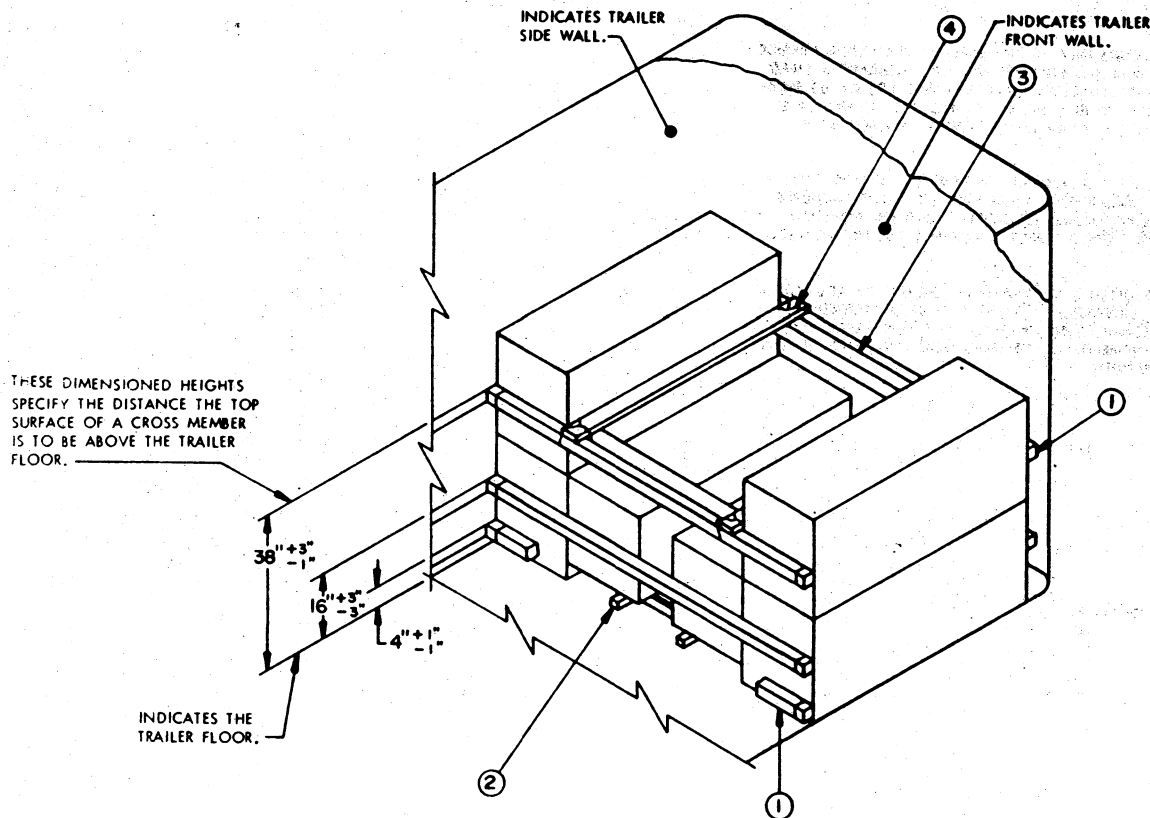
BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	236	158
2" X 6"	56	56
NAILS	NO. REQD	POUNDS
10d (3")	360	6

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CONTAINER -----	54 -----	41,904 LBS
DUNNAGE -----		541 LBS
TOTAL WEIGHT -----		42,445 LBS

54-UNIT LOAD IN A 40'-0" LONG TRAILER (MECHANICAL)



ISOMETRIC VIEW

SPECIAL NOTES:

1. A 6-UNIT LOAD IS SHOWN IN A TRAILER WHICH IS EQUIPPED WITH A MECHANICAL LOAD BLOCKING SYSTEM THAT CONTAINS AT LEAST SIX (6) CROSS MEMBERS.
2. THE USE OF A "SPACER ASSEMBLY" AND A "CONTAINER SEPARATOR ASSEMBLY" IS SPECIFIED FOR THE DEPICTED LOAD TO SHOW A TYPICAL APPLICATION. THESE ASSEMBLIES ARE ONLY REQUIRED WHEN UNLOADING FIVE, SIX, (AS DEPICTED ABOVE) OR SEVEN CONTAINERS IN ONE BAY. IF EIGHT CONTAINERS ARE TO BE UNLOADED, FOLLOW THE PROCEDURES DEPICTED ON PAGE 12.
3. THE CROSS MEMBER DEPICTED AT THE 4" HEIGHT DIMENSION IS ONLY USED TO KEEP THE "SPACER ASSEMBLY" FROM BECOMING DISPLACED LONGITUDINALLY.
4. FOUR (4) PIECES OF NO. 14 GAGE WIRE MAY BE USED IN LIEU OF THE NO. 8 GAGE WIRE. WHEN USING NO. 14 GAGE WIRE, INSTALL TWO (2) COMPLETE LOOPS AROUND THE CROSS MEMBER AND THE CONTAINER SEPARATOR ASSEMBLY AT EACH LOCATION.
5. IF DESIRED, UNITIZING STRAPS OF 1-1/4" X .035" STEEL STRAPPING MAY BE USED IN LIEU OF THE CONTAINER SEPARATOR ASSEMBLY. EACH CONTAINER ADJACENT TO AN OMITTED CONTAINER WILL BE UNITIZED TO A LOWER CONTAINER WITH TWO (2) 1-1/4" X .035" STEEL STRAPS. SEE THE LOAD DEPICTED ON PAGE 4 FOR STRAPPING GUIDANCE.

KEY NUMBERS

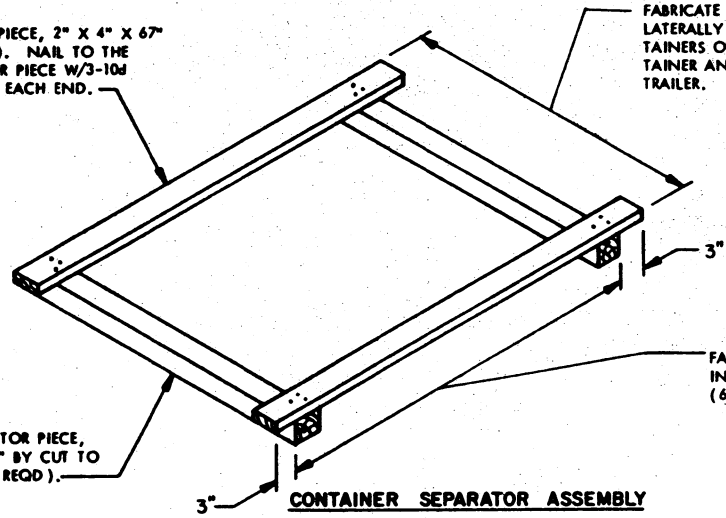
- ① CROSS MEMBER (6 REQD). POSITION AT THE HEIGHTS SPECIFIED. SEE GENERAL NOTES "E", "F", AND "G" ON PAGE 2 AND SPECIAL NOTE 3 AT THE LEFT.
- ② SPACER ASSEMBLY (1 REQD). SEE DETAIL ON PAGE 11 AND THE "PLACEMENT-OF-SPACER ASSEMBLY" DETAIL ON PAGE 7.
- ③ CONTAINER SEPARATOR ASSEMBLY (1 REQD). SEE DETAIL ON PAGE 15 AND SPECIAL NOTE 5 AT LEFT.
- ④ TIE WIRE, NO. 8 GAGE BLACK ANNEALED WIRE 30" LONG (4 REQD). INSTALL TO FORM A COMPLETE LOOP AROUND THE SEPARATOR PIECE AND THE SUPPORT PIECE OF THE CONTAINER SEPARATOR ASSEMBLY, AND THE ADJACENT CROSS MEMBER. BRING THE ENDS TOGETHER AND TWIST TAUT. SEE SPECIAL NOTE 4 AT LEFT.

SUPPORT PIECE, 2" X 4" X 67"
(2 REQD). NAIL TO THE
SEPARATOR PIECE W/3-10d
NAILS AT EACH END.

FABRICATE TO FIT BETWEEN
LATERALLY ADJACENT CON-
TAINERS OR BETWEEN CON-
TAINER AND SIDE WALL OF
TRAILER.

SEPARATOR PIECE,
4" X 4" BY CUT TO
FIT (2 REQD).

FABRICATE TO FIT BETWEEN
INSTALLED CROSS MEMBERS
(61" REF.).



CONTAINER SEPARATOR ASSEMBLY

THIS ASSEMBLY CAN BE FABRICATED TO SUIT WHEN ONE, TWO,
OR THREE CONTAINERS ARE OMITTED FROM THE SECOND LAYER
OF THE LTL PROCEDURES DEPICTED ON PAGE 14.

