

CHAPARRAL

LOADING AND BRACING (TL & LTL) IN CLOSED OR OPEN TOP VAN TRAILERS OF COMPLETE ROUND IN THE M570 SHIPPING AND STORAGE CONTAINER (PALLETIZED)

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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 FOR MECHANICAL BRACING DEVICE EQUIPPED TRAILERS ARE ONLY APPLICABLE FOR HIGHWAY MOVEMENT; NOT FOR CONTAINER/TRAILER-ON-FLAT-CAR MOVEMENTS.

THIS DRAWING, INCLUDING REVISION 1, SUPERSEDES DRAWING 19-48-5749-GM11K3, DATED FEBRUARY 1971.

DO NOT SCALE

REVISIONS				DESIGNED <i>WES</i>	PROJ. ENG. <i>WMD</i>	AMSHI-SP <i>B B H</i>
1	MAY 74	<i>WES</i>	<i>Wesley E. Gilleland</i>	<i>WES</i>	<i>WMD</i>	<i>B B H</i>
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			<i>Wesley E. Gilleland</i>	U.S. ARMY MATERIEL COMMAND		
				MAY 1974		
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						FILE
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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 IN THIS DRAWING ARE APPLICABLE TO THE CHAPARRAL MISSILE, WHEN PACKAGED IN THE M570 SHIPPING AND STORAGE CONTAINER PALLETIZED FOUR PER PALLET UNIT. SUBSEQUENT REFERENCE TO UNIT MEANS THE PALLETIZED UNIT.
- C. FOR DETAIL OF PALLET UNIT SEE USAMC DRAWING NUMBER 19-48-5235-GM20CH1, AND "UNIT DETAIL" ON PAGE 3.
- PALLET UNIT DIMENSIONS --- 128-1/4" LONG BY 36" WIDE BY 44-5/8"
HIGH (APPROX).
GROSS WEIGHT ----- 1,402 POUNDS (APPROX).
CUBE ----- 119.2 CUBIC FEET.
- D. THIS ITEM IS A DOT CLASS "A" EXPLOSIVE. THE OUTLOADING PROCEDURES SPECIFIED 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 TITLE OF THIS DOCUMENT.
- E. SELECTION OF A VEHICLE TO BE USED TO TRANSPORT THE DESIGNATED ITEM MUST COMPLY WITH AR 55-355, CHAPTER 213, FOR EXPLOSIVES AND OTHER DANGEROUS ARTICLES, IN FULL.
- F. THE LOADS AS SHOWN ARE BASED ON 40'-0" LONG VAN TRAILERS OF ANY WIDTH, HAVING WOOD, OR WOOD AND METAL, OR METAL FLOORS, AND THEY ARE LIMITED TO HIGHWAY MOVEMENTS ONLY. THE DEPICTED LOADS 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). SEE GENERAL NOTE "S".
- G. IF A TRAILER BEING USED CONTAINS A MECHANICAL LOAD-BLOCKING SYSTEM WHICH CONFORMS TO SPECIFICATIONS SET FORTH WITHIN THE BUREAU OF EXPLOSIVES PAMPHLET 6C AND THE APPENDICES THERETO, THE MECHANICAL SYSTEM MAY BE USED IN ACCORDANCE WITH PROCEDURES DELINEATED ON PAGE 5 OF THIS DOCUMENT, IN LIEU OF REAR-OF-LOAD BLOCKING SPECIFIED FOR THE DEPICTED LOADS.
- H. VOIDS LENGTHWISE WITHIN A 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 MEMBERS 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 THE END OF THE TRAILER).
- J. 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.
- K. 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.
- L. THE NUMBER OF LADING UNITS MAY BE ADJUSTED TO FIT THE SIZE OF THE TRAILER TO BE LOADED OR THE QUANTITY TO BE SHIPPED AND COMBINATIONS OF THE OUTLOADING PROCEDURES SPECIFIED MAY BE USED. HOWEVER, THE APPROVED METHODS SHOWN MUST BE FOLLOWED AS CLOSELY AS POSSIBLE FOR BLOCKING, BRACING, AND STAYING OF THE DESIGNATED ITEMS.
- M. OTHER TYPES OF LADING ITEMS MAY BE LOADED IN A TRAILER WHICH IS PARTIALLY LOADED WITH THE DESIGNATED 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.

(CONTINUED AT RIGHT)

MATERIAL SPECIFICATIONS

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

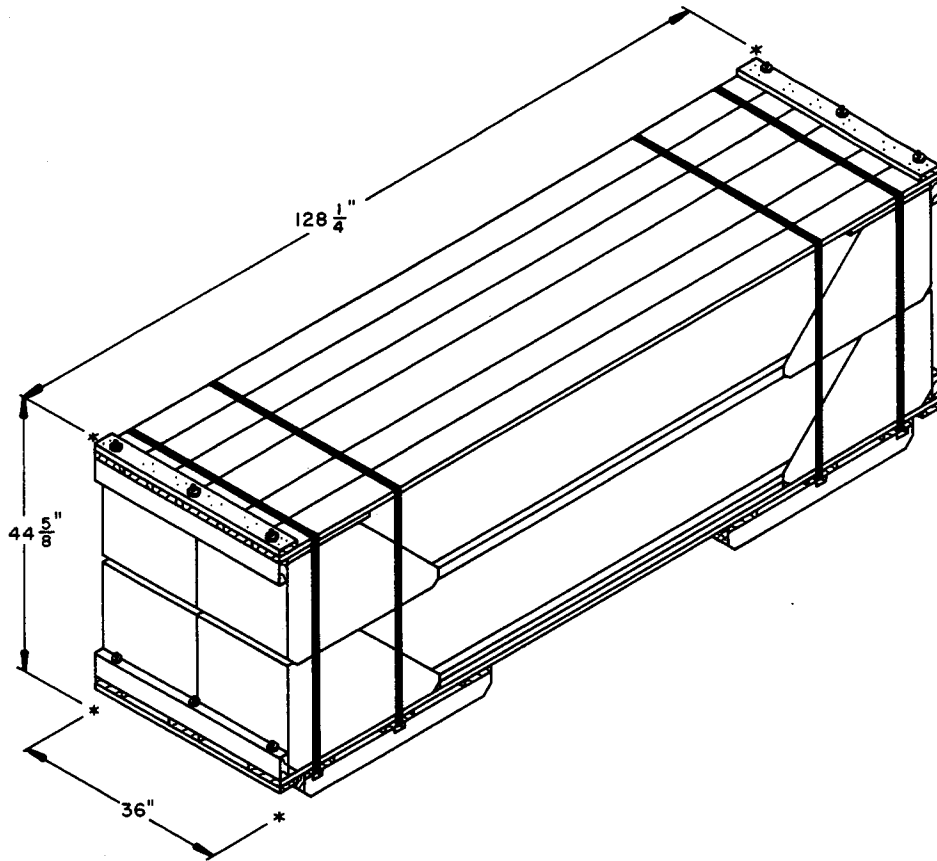
(GENERAL NOTES CONTINUED)

- N. 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.
- O. DUNNAGE LUMBER SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE, 1" X 4" MATERIAL IS ACTUALLY 3/4" THICK BY 3-1/2" OR 3-5/8" WIDE AND 2" X 6" MATERIAL IS ACTUALLY 1-1/2" THICK BY 5-1/2" WIDE OR 1-5/8" THICK BY 5-5/8" WIDE.
- 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. WHEN ANY STRAP IS SEALED AT AN END-OVER-END LAP JOINT, A MINIMUM OF TWO (2) SEALS, BUTTED TOGETHER, WITH TWO (2) PAIRS OF CRIMPS PER SEAL MUST BE USED. CAUTION: EXERCISE CARE DURING STRAP TENSIONING TO PREVENT DAMAGE TO CONTAINERS.
- R. FOR ADDITIONAL GUIDANCE, ATTENTION IS DIRECTED TO THE "SPECIAL NOTES" SECTIONS WHICH ARE IMMEDIATELY ADJACENT TO DEPICTED OUTLOADING METHODS.
- S. IN ADDITION TO THE 40'-0" LONG VAN TRAILER AS SPECIFIED IN GENERAL NOTE "F", LONGER VAN TRAILERS MAY ALSO BE USED FOR SHIPMENT OF THE DEPICTED LOADS.

REVISIONS

REVISION NO. 1, DATED MAY 1974, CONSISTS OF:

1. CHANGING PALLET UNIT DETAIL.
2. CHANGING "FILLER ASSEMBLY" DETAIL.
3. CHANGING DRAWING FILE NUMBER FROM GM11K3 TO GM11CH1.

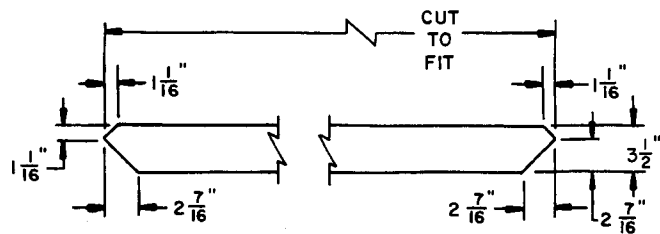


UNIT DETAIL

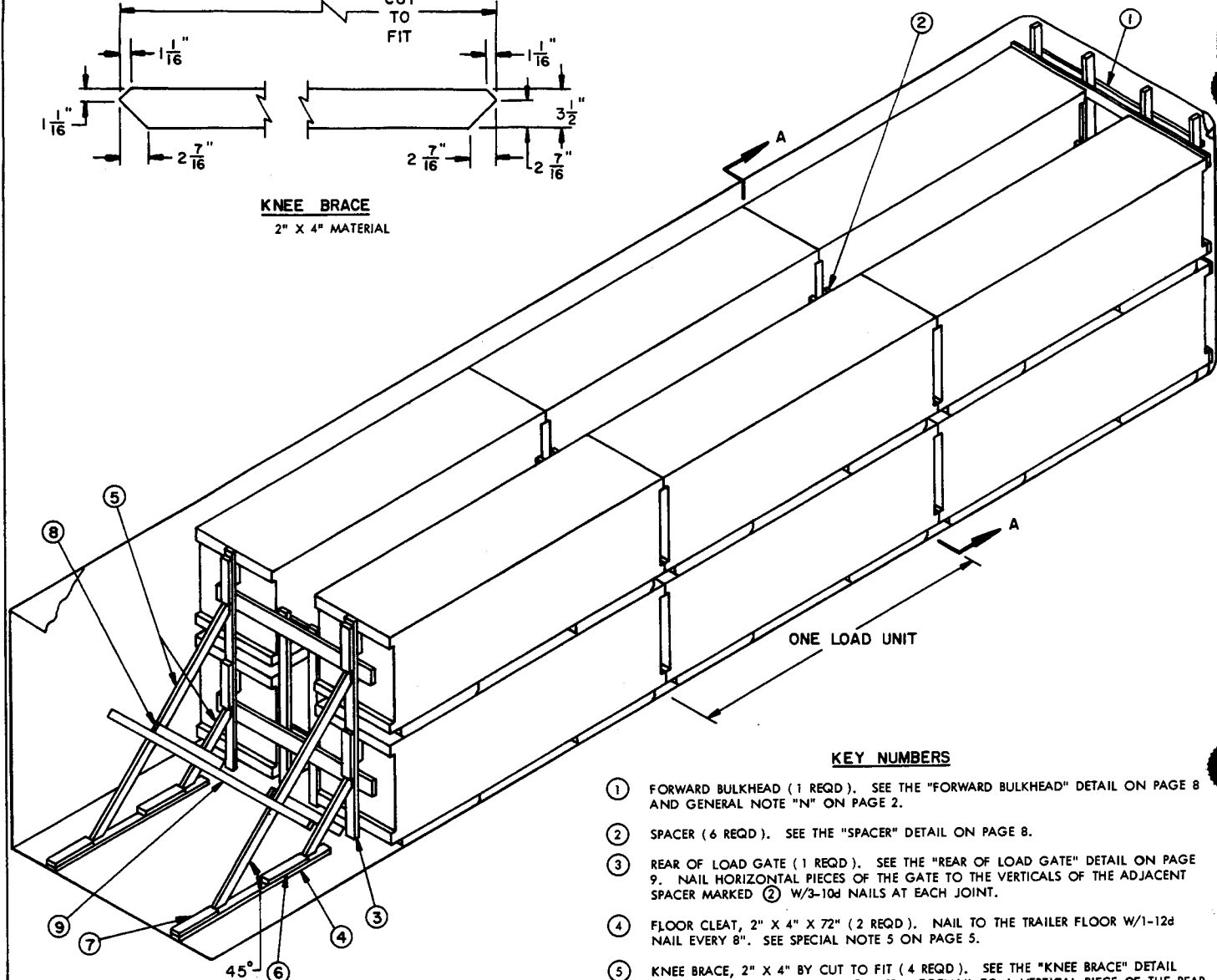
FOR ADDITIONAL UNIT DATA, SEE USAMC DRAWING
NUMBER 19-48-5235-GM20CH1.

PALLET UNIT DATA:

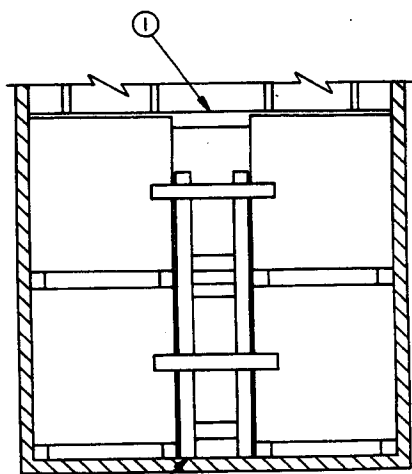
NUMBER OF CONTAINERS ——— FOUR (4).
GROSS WEIGHT ————— 1,402 POUNDS (APPROX).
CUBE ————— 119.2 CUBIC FEET.



KNEE BRACE
2" X 4" MATERIAL



ISOMETRIC VIEW



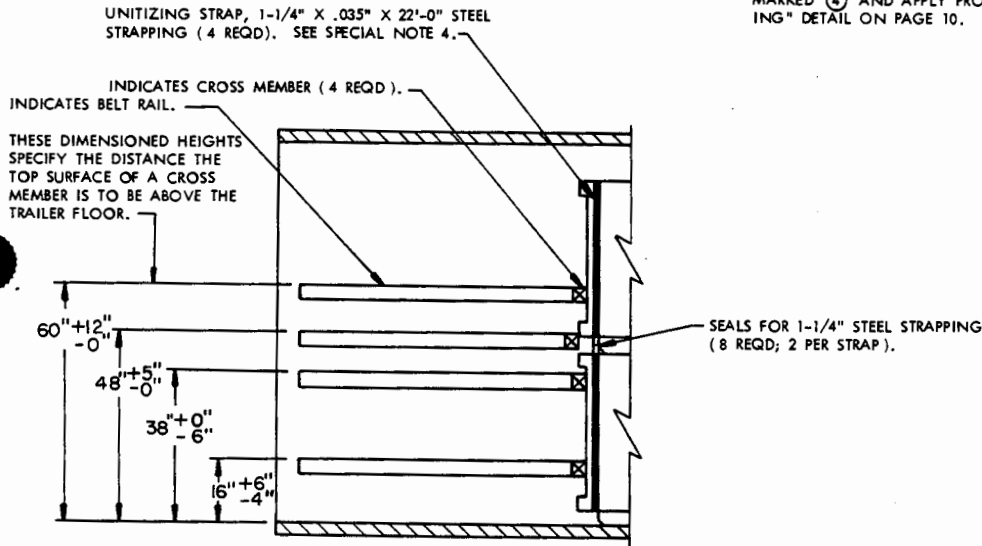
SECTION A-A

KEY NUMBERS

- ① FORWARD BULKHEAD (1 REQD). SEE THE "FORWARD BULKHEAD" DETAIL ON PAGE 8 AND GENERAL NOTE "N" ON PAGE 2.
- ② SPACER (6 REQD). SEE THE "SPACER" DETAIL ON PAGE 8.
- ③ REAR OF LOAD GATE (1 REQD). SEE THE "REAR OF LOAD GATE" DETAIL ON PAGE 9. NAIL HORIZONTAL PIECES OF THE GATE TO THE VERTICALS OF THE ADJACENT SPACER MARKED ② W/3-10d NAILS AT EACH JOINT.
- ④ FLOOR CLEAT, 2" X 4" X 72" (2 REQD). NAIL TO THE TRAILER FLOOR W/1-12d NAIL EVERY 8". SEE SPECIAL NOTE 5 ON PAGE 5.
- ⑤ KNEE BRACE, 2" X 4" BY CUT TO FIT (4 REQD). SEE THE "KNEE BRACE" DETAIL ABOVE FOR THE BEVEL CUTS REQUIRED. TOENAIL TO A VERTICAL PIECE OF THE REAR OF LOAD GATE MARKED ③ AND TO A FLOOR CLEAT MARKED ④ W/2-12d NAILS AT EACH END.
- ⑥ BACK-UP CLEAT, 2" X 4" X 18" (2 REQD). NAIL TO FLOOR CLEAT MARKED ④ W/5-12d NAILS.
- ⑦ BACK-UP CLEAT, 2" X 4" BY CUT TO FIT BETWEEN KNEE BRACE PIECE MARKED ⑤ AND THE TRAILER DOORS WHEN THEY ARE CLOSED (2 REQD). NAIL TO FLOOR CLEAT MARKED ④ W/5-12d NAILS.
- ⑧ DIAGONAL TIE PIECE, 2" X 4" BY CUT TO FIT (2 REQD). NAIL TO KNEE BRACES MARKED ⑤ W/3-10d NAILS AT EACH JOINT.
- ⑨ CROSS BRACE/TIE PIECE, 2" X 4" BY TRAILER WIDTH (CUT TO FIT) (1 REQD). NAIL TO KNEE BRACES MARKED ⑤ W/2-12d NAILS AT EACH JOINT.

SPECIAL NOTES:

1. A 12-UNIT LOAD IS SHOWN IN A 40'-0" LONG BY 7'-6" WIDE (INSIDE DIMENSION) TRAILER WHICH HAS ROUNDED-CORNERS AT THE FORWARD END AND IS EQUIPPED WITH A NAILABLE FLOOR. A WIDER OR NARROWER TRAILER MAY BE USED. IF A SQUARE FRONT TRAILER IS USED, THE "FORWARD BULKHEAD" MARKED ① WILL NOT BE REQUIRED.
2. IF THE DELINEATED OUTLOADING METHOD IS USED FOR A LESS-THAN-FULL-LOAD SHIPMENT, AND THE QUANTITY OF UNITS TO BE SHIPPED CANNOT BE SATISFIED BY OMITTING A COMPLETE LOAD UNIT OR A COMPLETE LAYER THE FULL LENGTH OF THE LOAD, A "FILLER ASSEMBLY", AS DETAILED ON PAGE 10, MUST BE SUBSTITUTED IN THE PLACE OF EACH OMITTED UNIT. A UNIT MAY BE OMITTED AT ANY LOCATION WITHIN THE TOP LAYER OF ONE OR MORE LOAD UNITS.
3. 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 AT THE REAR OF THE LOAD AT SPECIFIED HEIGHTS. PIECES MARKED ③ THRU ⑧ WILL BE OMITTED AND PROCEDURES USED AS SPECIFIED IN THE "SPECIAL PARTIAL ELEVATION VIEW" SHOWN ON THIS PAGE. THE TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES MUST HAVE A SYSTEM LENGTH OF NOT LESS THAN 32'-10" AS MEASURED FROM THE FRONT WALL OF THE TRAILER. ALSO, THE FORWARD BULKHEAD PIECE MARKED ① MAY BE OMITTED BY USE OF FOUR (4) ADDITIONAL CROSS MEMBERS POSITIONED AT THE FRONT OF THE LOAD AT THE SAME HEIGHTS AS SPECIFIED FOR THE REAR OF THE LOAD. UNITIZING STRAPS WILL ALSO BE REQUIRED. SEE SPECIAL NOTE 4 BELOW.
4. PALLET UNITS LOCATED IN EACH STACK WHICH IS ADJACENT TO CROSS MEMBERS, WHETHER AT THE REAR OR FRONT OF THE LOAD, MUST BE UNITIZED. EACH PALLET UNIT IN THE SECOND LAYER MUST BE UNITIZED TO THE PALLET UNIT IN THE FIRST LAYER W/2-1-1/4" STEEL STRAPS, ONE AT EACH END OF THE PALLET UNITS. PALLET UNITS MAY BE UNITIZED PRIOR TO PLACEMENT IN THE TRAILER. SEE GENERAL NOTE "Q" ON PAGE 2.
5. IF THE TRAILER HAS A NON-NAILABLE FLOOR, OMIT NAILING SPECIFIED FOR PIECES MARKED ④ AND APPLY PROCEDURES DEPICTED IN THE "ALTERNATIVE REAR BLOCKING" DETAIL ON PAGE 10.



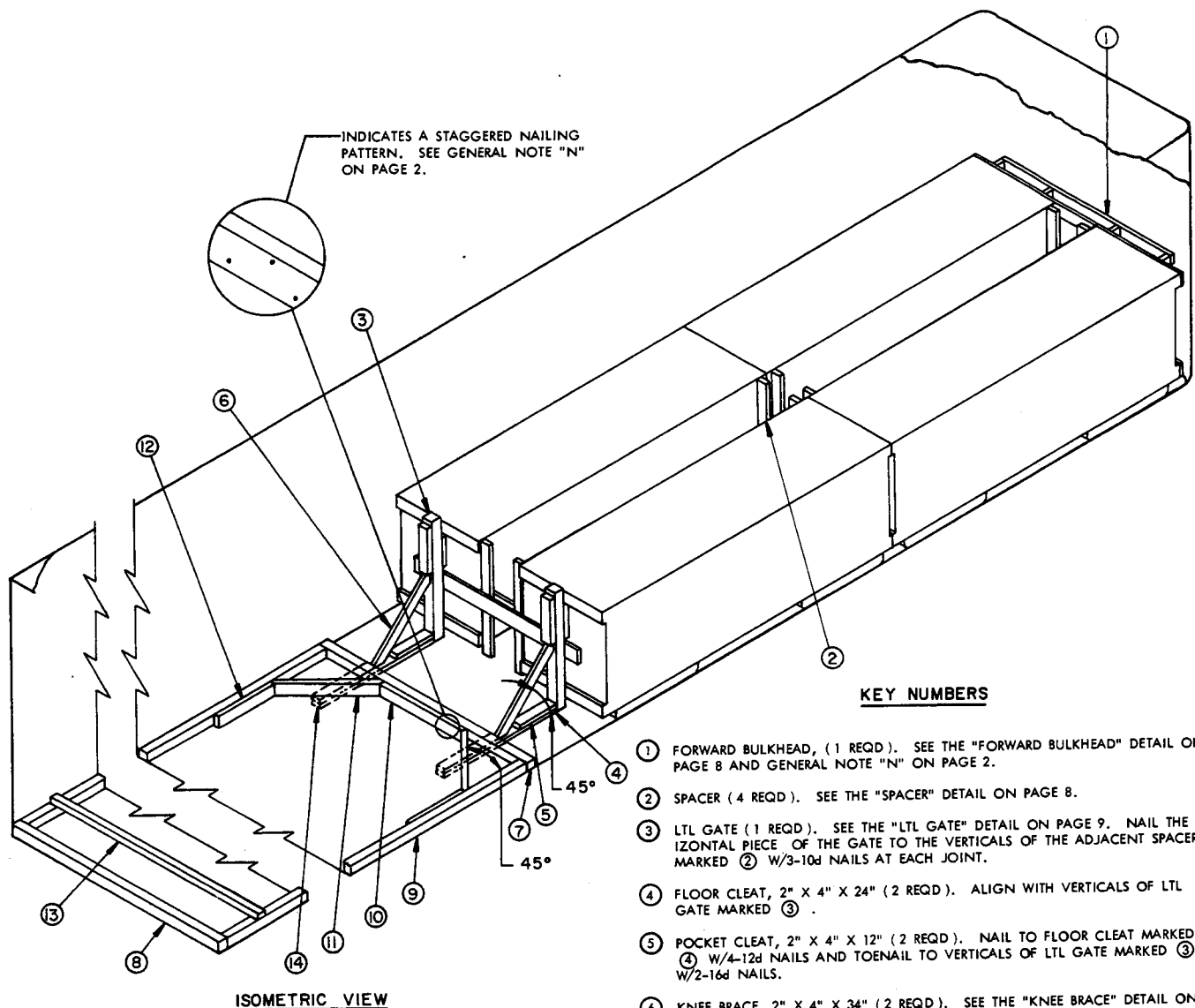
SPECIAL PARTIAL ELEVATION VIEW

SEE SPECIAL NOTES 3 AND 4 AT RIGHT.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	30	10
2" X 4"	250	167
2" X 6"	12	12
NAILS	NO. REQD	POUNDS
6d (2")	32	1/4
10d (3")	232	3-3/4
12d (3-1/4")	58	1

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	12	16,824 LBS
DUNNAGE		478 LBS
TOTAL WEIGHT		17,302 LBS



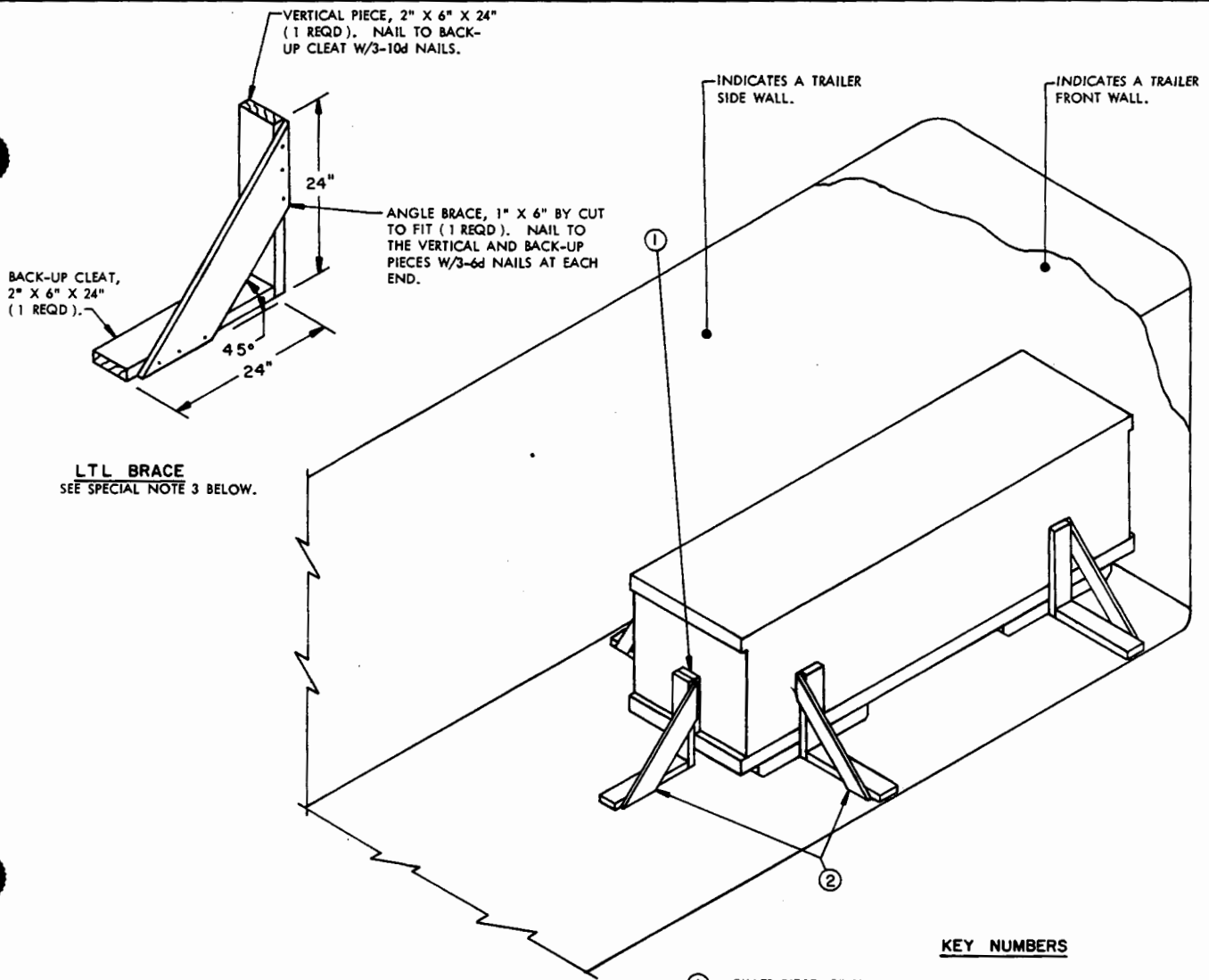
KEY NUMBERS

- ① FORWARD BULKHEAD, (1 REQD). SEE THE "FORWARD BULKHEAD" DETAIL ON PAGE 8 AND GENERAL NOTE "N" ON PAGE 2.
- ② SPACER (4 REQD). SEE THE "SPACER" DETAIL ON PAGE 8.
- ③ LTL GATE (1 REQD). SEE THE "LTL GATE" DETAIL ON PAGE 9. NAIL THE HORIZONTAL PIECE OF THE GATE TO THE VERTICALS OF THE ADJACENT SPACER MARKED ② W/3-10d NAILS AT EACH JOINT.
- ④ FLOOR CLEAT, 2" X 4" X 24" (2 REQD). ALIGN WITH VERTICALS OF LTL GATE MARKED ③.
- ⑤ POCKET CLEAT, 2" X 4" X 12" (2 REQD). NAIL TO FLOOR CLEAT MARKED ④ W/4-12d NAILS AND TOENAIL TO VERTICALS OF LTL GATE MARKED ③ W/2-16d NAILS.
- ⑥ KNEE BRACE, 2" X 4" X 34" (2 REQD). SEE THE "KNEE BRACE" DETAIL ON PAGE 4 FOR THE BEVEL CUTS REQUIRED. TOENAIL TO A FLOOR CLEAT MARKED ④ AND TO A VERTICAL PIECE OF THE LTL GATE MARKED ③ W/2-12d NAILS AT EACH END.
- ⑦ REAR OF LOAD HEADER, 4" X 4" BY TRAILER WIDTH MINUS 1/2" (1 REQD). TOENAIL TO KNEE BRACE PIECES MARKED ⑥ W/1-16d NAIL AT EACH JOINT.
- ⑧ REAR HEADER, 4" X 4" BY TRAILER WIDTH MINUS 1/2" (1 REQD). POSITION SO AS TO CONTACT THE REAR DOORS OF THE TRAILER WHEN THEY ARE CLOSED, OR POSITION AGAINST CORNER POSTS IF THE TRAILER IS SO EQUIPPED.
- ⑨ SIDE STRUT, 4" X 4" BY CUT TO FIT BETWEEN HEADERS MARKED ⑦ AND ⑧ (2 REQD). TOENAIL TO PIECES MARKED ⑦ AND ⑧ W/2-16d NAILS AT EACH END.
- ⑩ SPACER CLEAT, 2" X 4" X 36" (1 REQD). NAIL TO HEADER MARKED ⑦ W/7-12d NAILS.
- ⑪ DIAGONAL BRACE, 2" X 4" 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 ⑦ AND ⑧ W/2-16d NAILS AT EACH END.
- ⑫ BACK-UP CLEAT, 2" X 4" X 24" (2 REQD). NAIL TO SIDE STRUT MARKED ⑨ W/6-12d NAILS.
- ⑬ STRUT BRACING, 2" X 4" BY TRAILER WIDTH (CUT TO FIT) (MINIMUM OF 1 REQD). INSTALL ONE (1) NEAR END OF SIDE STRUTS MARKED ⑨ AS SHOWN. ONE (1) ADDITIONAL PIECE REQUIRED FOR EVERY 7'-0" OF STRUT LENGTH. NAIL TO PIECES MARKED ⑨ W/3-10d NAILS AT EACH END.
- ⑭ BACK-UP CLEAT, 2" X 4" X 30" (DOUBLED) (2 REQD). ALIGN WITH FLOOR CLEAT AND KNEE BRACE. NAIL THE FIRST PIECE TO TRAILER FLOOR W/7-12d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER. SEE SPECIAL NOTE 3 AT LEFT.

ISOMETRIC VIEW

SPECIAL NOTES:

1. THESE LTL OUTLOADING PROCEDURES ARE SHOWN DEPICTING THE USE OF "KNEE-BRACE" BLOCKING IN A 7'-6" WIDE TRAILER. WIDER OR NARROWER TRAILERS CAN BE USED. IF A SQUARE FRONT TRAILER IS USED, THE "FORWARD BULKHEAD" MARKED ① WILL NOT BE REQUIRED.
2. THE "K-BRACE" BLOCKING, SHOWN AS PIECES MARKED ⑦ THRU ⑬ IS ADEQUATE FOR RETAINING NOT MORE THAN 18,000 POUNDS OF LADING.
3. PIECES MARKED ⑭ ARE FOR USE IN A TRAILER WHICH HAS A NAILABLE FLOOR AND SHOULD BE USED, IF POSSIBLE, IN LIEU OF PIECES MARKED ⑦ THRU ⑬ WHICH APPLY TO TRAILERS HAVING NON-NAILABLE FLOORS. WHEN USING NAILABLE FLOOR LINE DUNNAGE, NAIL THE FLOOR CLEAT, PIECE MARKED ④ TO THE TRAILER FLOOR W/1-12d NAIL EVERY 6". TWO (2) BACK UP CLEATS, SHOWN AS PIECES MARKED ⑫ ARE ADEQUATE FOR RETAINING NOT MORE THAN 7,800 POUNDS OF LADING.
4. IF THE TRAILER HAS A NAILABLE FLOOR, A 3-UNIT LOAD MAY BE SHIPPED BY CENTERING ONE UNIT LATERALLY IN THE TRAILER AT THE FORWARD END, OMITTING THE FORWARD BLOCKING MARKED ① AND TWO (2) SPACERS MARKED ②. TWO (2) LTL BRACES MUST BE USED ON EACH SIDE OF THE FORWARD UNIT FOR LATERAL BLOCKING AS DEPICTED ON PAGE 7. KNEE-BRACE BLOCKING PIECES MARKED ③ THRU ⑥ AND ⑭ WILL BE USED FOR REAR-OF-LOAD BLOCKING AND THE PROVISIONS OF SPECIAL NOTE 3 ABOVE WILL APPLY.
5. A TRAILER WITH A NON-NAILABLE FLOOR MAY ALSO BE USED FOR THE SHIPMENT OF A 3-UNIT LOAD BY APPLYING THE OUTLOADING METHOD DEPICTED IN THE ISOMETRIC VIEW ABOVE AND SUBSTITUTING A "FILLER ASSEMBLY", AS DETAILED ON PAGE 10, IN THE PLACE OF A UNIT AT THE FORWARD END OF THE TRAILER.



LTL BRACE
SEE SPECIAL NOTE 3 BELOW.

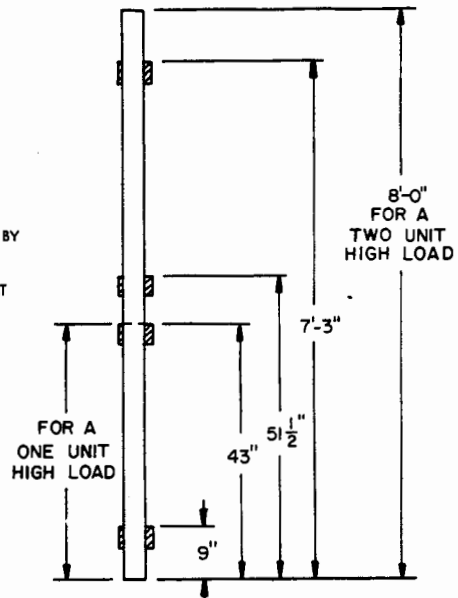
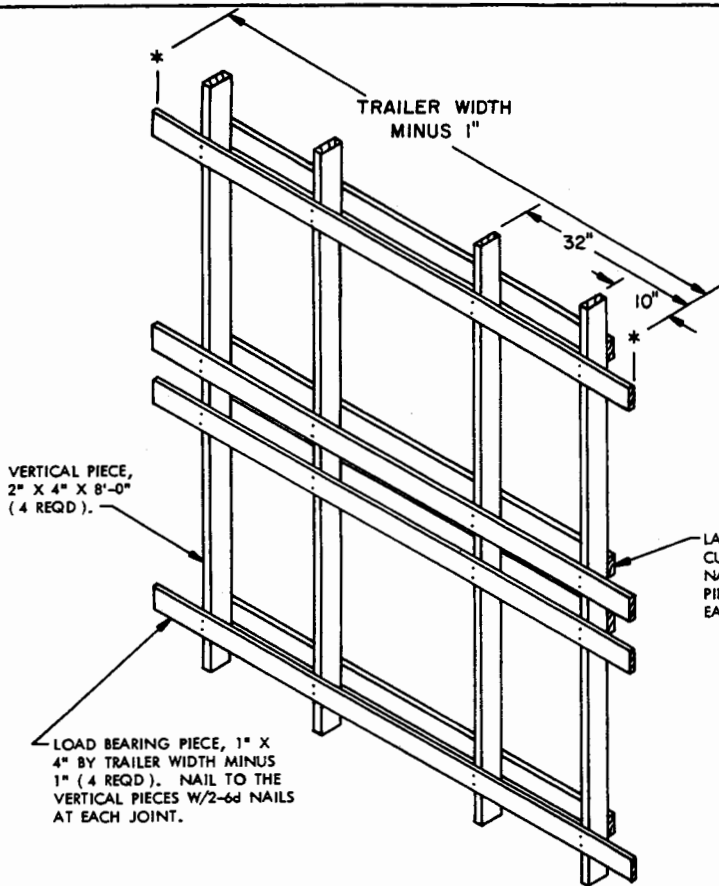
ISOMETRIC VIEW

KEY NUMBERS

- ① FILLER PIECE, 2" X 6" X 14-1/2" (1 REQD).
- ② LTL BRACE (5 REQD). SEE DETAIL AT LEFT ABOVE. NAIL LTL BRACE POSITIONED AT END OF UNIT TO FILLER PIECE MARKED ① W/4-10d NAILS. NAIL EACH BRACE TO CAR FLOOR W/10-12d NAILS.

SPECIAL NOTES:

1. THESE OUTLOADING PROCEDURES DEPICT THE USE OF THE LTL BRACE METHOD IN A TRAILER WHICH IS EQUIPPED WITH A NAILABLE FLOOR. THESE PROCEDURES ARE LIMITED TO A ONE UNIT HIGH LOAD.
2. IF THE TRAILER BEING LOADED HAS SQUARE CORNERS AT THE FORWARD END, THE UNIT MAY BE POSITIONED AGAINST ONE SIDE WALL OF THE TRAILER, AND TWO LESS-THAN-SHOWN LTL BRACES WILL BE REQUIRED.
3. EACH BRACE AS APPLIED FOR LONGITUDINAL BRACING WILL SUPPORT 2,000 POUNDS OF LADING. ALSO, A MINIMUM OF TWO (2) LTL BRACES MUST BE USED AGAINST THE LENGTH OF A UNIT AND ONE (1) LTL BRACE MUST BE USED AGAINST THE END OF EACH UNIT.



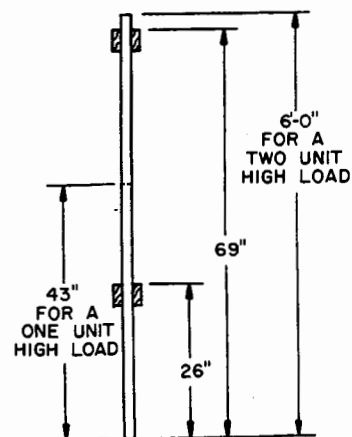
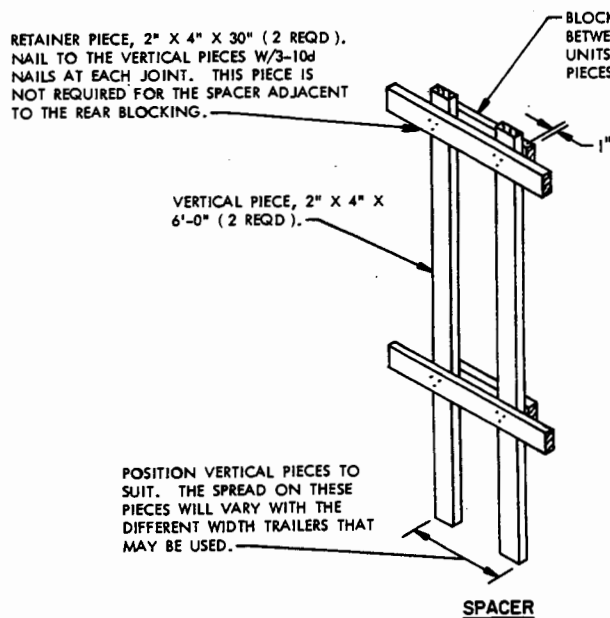
FORWARD BULKHEAD

IF THE TRAILER HAS ROUNDED CORNERS AT THE FORWARD END WITH A RADIUS GREATER THAN 6", USE 2" X 6" MATERIAL FOR THE VERTICAL PIECES IN LIEU OF 2" X 4" MATERIAL. ALSO, ADDITIONAL PIECES MAY BE LAMINATED TO THE FORWARD SIDE OF THE LATERAL PIECES TO PROVIDE FOR LARGE-RADIUS CORNERS.

END VIEW

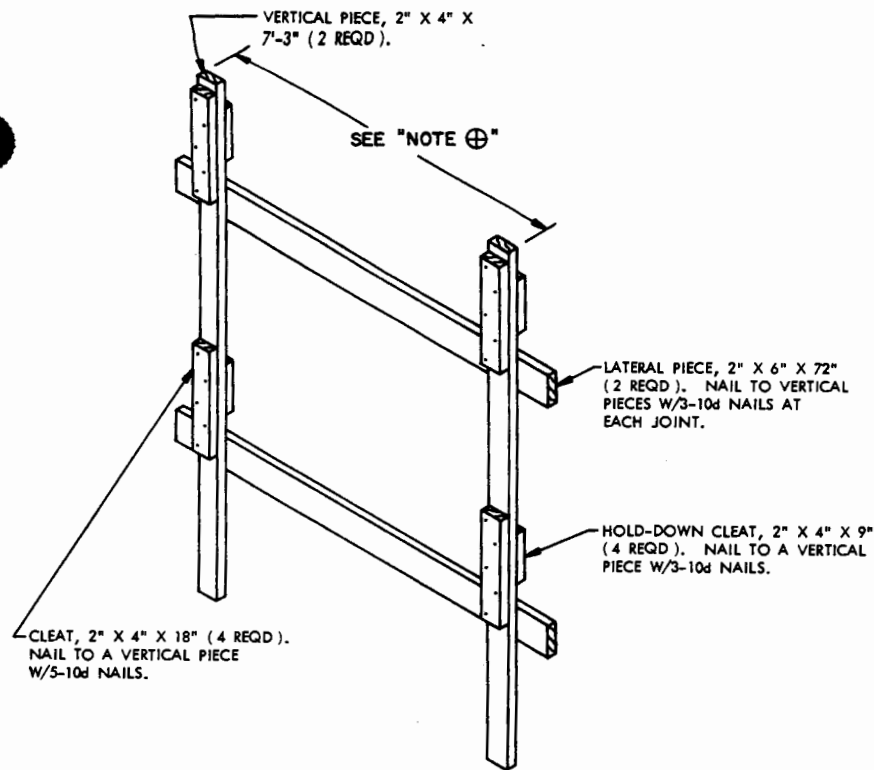
RETAINER PIECE, 2" X 4" X 30" (2 REQD). NAIL TO THE VERTICAL PIECES W/3-10d NAILS AT EACH JOINT. THIS PIECE IS NOT REQUIRED FOR THE SPACER ADJACENT TO THE REAR BLOCKING.

BLOCKING PIECE, 2" X 4" BY CUT TO FIT BETWEEN LATERALLY ADJACENT PALLETIZED UNITS (2 REQD). NAIL TO THE VERTICAL PIECES W/3-10d NAILS AT EACH JOINT.

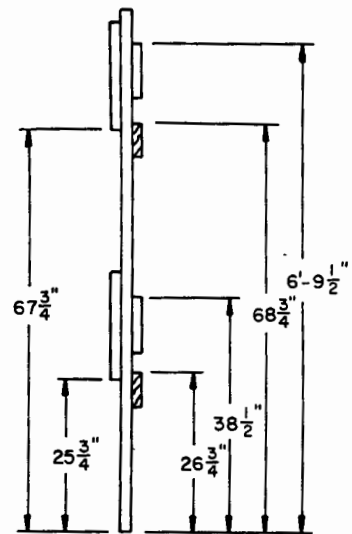


END VIEW

DETAILS



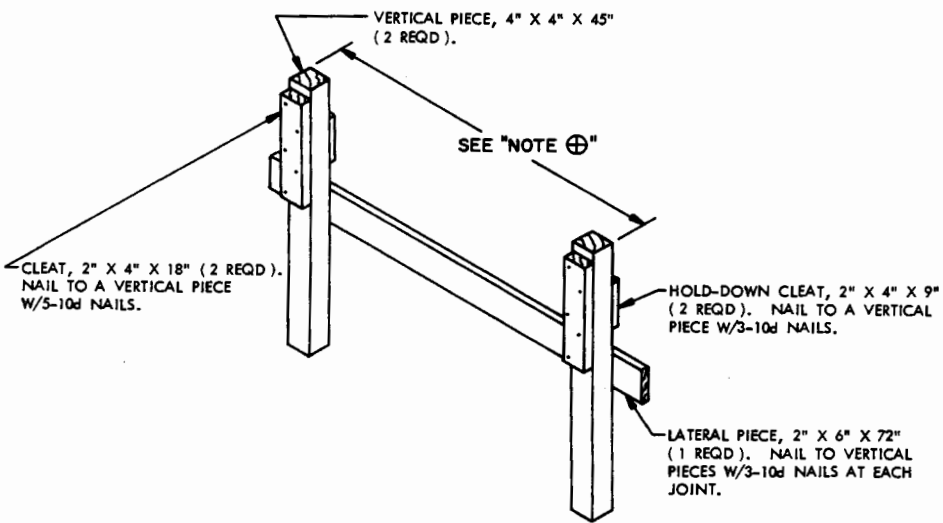
REAR OF LOAD GATE



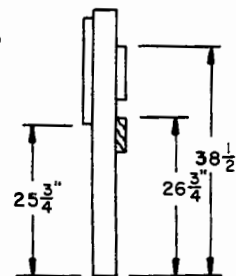
END VIEW

NOTE ⊕ :

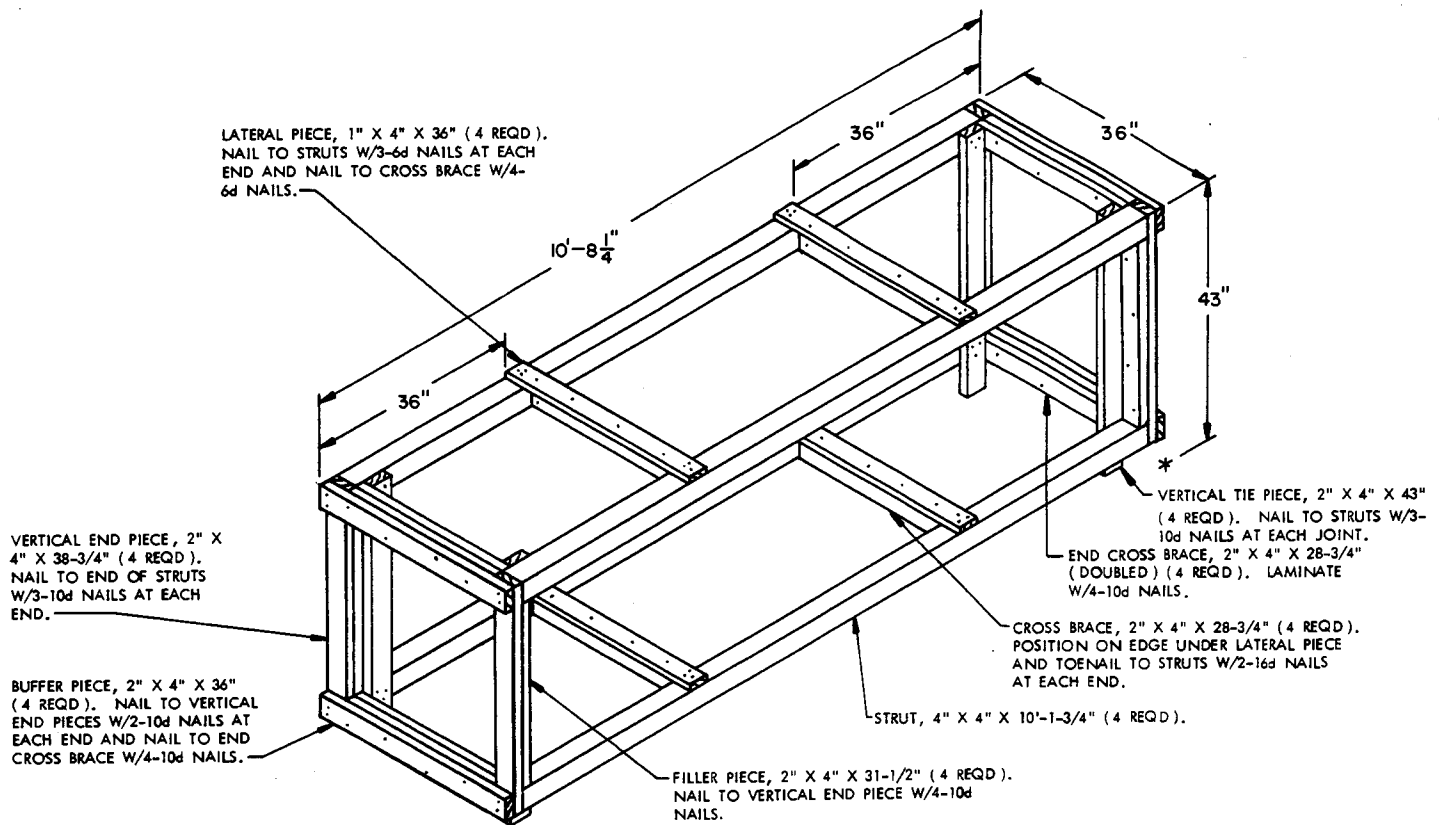
A VERTICAL PIECE IS TO BE LOCATED SO AS TO CENTER ON THE ENDS OF THE PALLET UNITS (ALIGNED ON JOINT BETWEEN LATERALLY ADJACENT CONTAINERS ON A PALLET). THE SPREAD ON THESE PIECES WILL VARY WITH THE DIFFERENT WIDTH TRAILERS THAT MAY BE USED.



LTL GATE

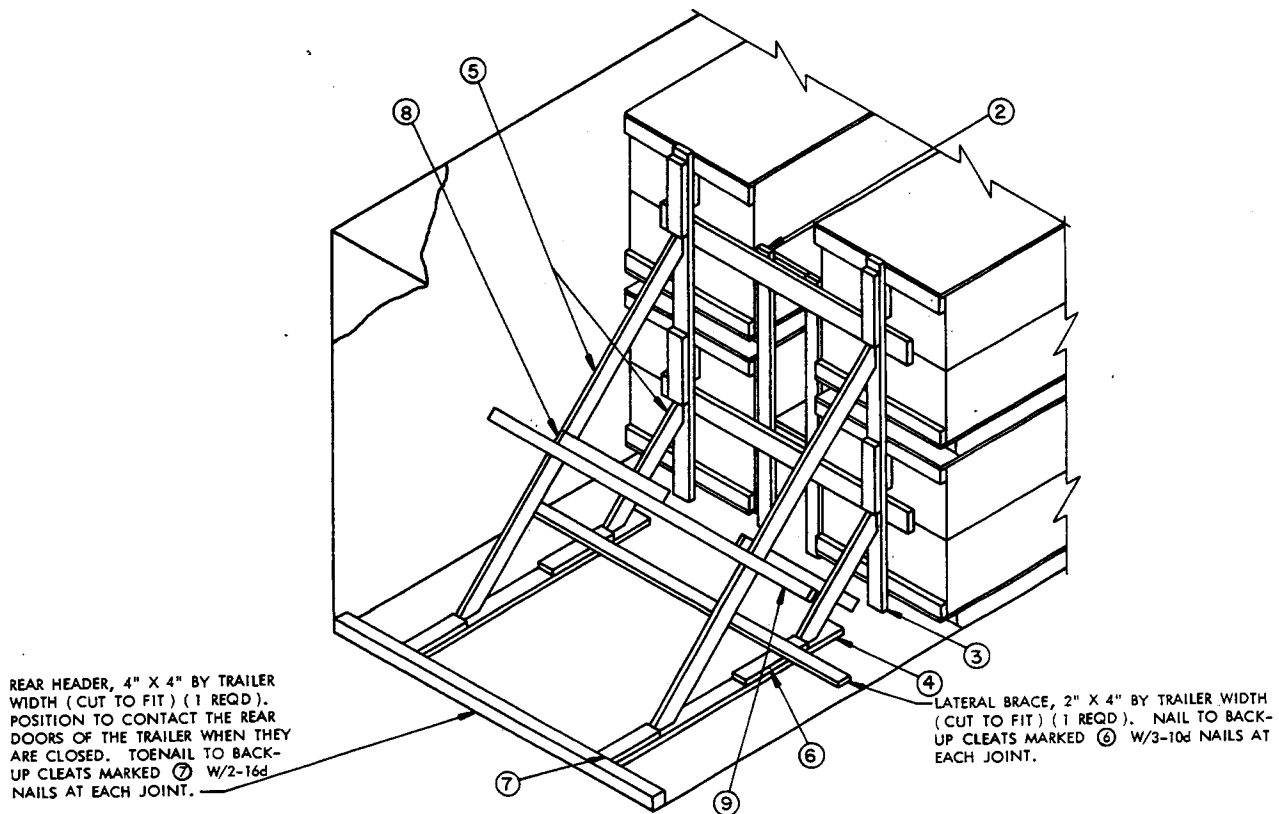


END VIEW



FILLER ASSEMBLY

(TO BE USED ON TOP LAYER ONLY).



ALTERNATIVE REAR BLOCKING

SEE PAGE 4 FOR IDENTIFYING KEY NUMBERS AND SPECIAL NOTE 5 ON PAGE 5.

DETAILS