

APPROVED BY	
BUREAU OF EXPLOSIVES	
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MILITARY ASSISTANT	
DATE	<i>10/30/69</i>
REVISION, NO 1	
SIGNED	<i>d. F. Grassmuck</i>
DATE	<i>4/20/72</i>

LOADING AND BRACING (TL & LTL) IN CLOSED OR OPEN TOP VAN TRAILERS OF CBU ITEMS PACKED IN THE CNU-100/E CONTAINER

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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 MOVEMENTS.

DO NOT SCALE

DRAFTSMAN <i>GBF/WB#</i>	PROJ ENG <i>MWD/lem</i>	APSA <i>PJS</i>	SUBMITTED <i>W.B. Harding, Col.</i>
CHECKER <i>GBF/WB#</i>	ARC AMMO CTR <i>John Boyd</i>		COMMANDING OFFICER, SAVANNA ARMY DEPOT
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1	MAY 72	<i>John Boyd</i>	AMMUNITION PROCUREMENT & SUPPLY AGENCY
			APPROVED BY ORDER OF COMMANDING GENERAL U. S. ARMY MATERIEL COMMAND
			<i>Paul Klein</i>
			U. S. ARMY MATERIEL COMMAND
			SEPTEMBER 1969
			CLASS DIVISION DRAWING FILE
			19 48 7052 SPIIK2

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 CBU ITEMS WHEN THEY ARE PACKED IN THE CNU-100/E CONTAINER. SUBSEQUENT REFERENCE TO CONTAINER MEANS THE CNU-100/E CONTAINER WITH CONTENTS. CAUTION: CONTAINERS MUST NOT BE STACKED MORE THAN FOUR (4) CONTAINERS HIGH.
- C. FOR DETAIL OF THE CONTAINER, SEE DRAWING NO. 66F10067.
CONTAINER DIMENSIONS ----- 85-1/2" LONG X 14" WIDE X 16-5/8" HIGH.
GROSS WEIGHT (MAX) ----- 328 POUNDS (APPROX).
TARE WEIGHT ----- 62 POUNDS (APPROX).
- D. THIS ITEM IS A DOT CLASS "A" EXPLOSIVE (DOT SHIPPING NOMENCLATURE "EXPLOSIVE BOMB") AND WILL BE SHIPPED UNDER THE PROVISIONS OF DOT SPECIAL PERMIT NO. 5047.
- E. THE LOADS AS SHOWN ARE FOR CLOSED OR OPEN TOP VAN TRAILERS WHICH ARE 89" TO 93" WIDE (INSIDE DIMENSION) AND OF VARIOUS LENGTHS, 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 SELF-CONTAINED MECHANICAL BRACING DEVICES (CROSS MEMBERS AND WALL MEMBERS) AND APPLY TO TRAILERS HAVING WOOD, WOOD AND METAL, OR METAL FLOORS.
- F. THE OUTLOADING PROCEDURES SPECIFIED ON PAGES 4 THROUGH 8 ARE FOR CONVENTIONAL TYPE VAN TRAILERS WHICH DO NOT HAVE REAR CORNER POSTS. FOR TRAILERS EQUIPPED WITH REAR CORNER POSTS, REAR BLOCKING MUST BE ADJUSTED TO CONTACT THE REAR DOORS OR CORNER POSTS WHEN CLOSED.
- G. THE OUTLOADING PROCEDURES SPECIFIED ON PAGES 9 THROUGH 12 ARE FOR TRAILERS EQUIPPED WITH VARIOUS TYPES OF SELF-CONTAINED MECHANICAL BRACING DEVICES. HOWEVER, CROSS MEMBER ATTACHMENT FACILITIES WITHIN THESE TRAILERS MUST PROVIDE FOR THE INSTALLATION OF LOAD BLOCKING CROSS MEMBERS AT THE HEIGHTS SPECIFIED. 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. VOIDS LENGTHWISE WITHIN 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.
 3. A CROSS MEMBER WILL NOT BE RELIED UPON TO RETAIN MORE CONTAINERS THAN SHOWN IN THE LOAD VIEWS.
- H. THE OUTLOADING PROCEDURES SPECIFIED CAN ALSO BE UTILIZED FOR THE SHIPMENT OF THE DEPICTED CONTAINERS WHEN THEY ARE LOADED WITH EMPTY DISPENSERS OR LOADED WITH AN ITEM WHICH IS IDENTIFIED DIFFERENTLY BY NOMENCLATURE THAN THE ITEMS DESIGNATED WITHIN THE DRAWING TITLE.
- J. 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 THE TRAILER CONSISTENT WITH STATE WEIGHT LAWS.
- K. THE APPROVED BLOCKING, BRACING, AND STAYING METHODS FOR THE LOADS SPECIFIED MUST BE FOLLOWED. THE NUMBER OF UNITS MAY BE ADJUSTED TO FIT THE SIZE OF THE VEHICLE TO BE LOADED OR THE QUANTITY TO BE SHIPPED. FOR A LOAD QUANTITY OTHER THAN SPECIFIED, THE APPROVED METHODS MUST BE FOLLOWED AS CLOSELY AS POSSIBLE.
- L. OTHER TYPES OF LADING ITEMS MAY BE LOADED INTO TRAILERS WHICH ARE PARTIALLY LOADED WITH THE DESIGNATED ITEMS, 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 THE RIGHT)

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 THE SAME SIZE.
- STRAPPING, STEEL -----: TYPE I OR IV. CLASS "A" OR "B" FOR PALLETIZING AND CLASS "A", "B", OR "C" FOR OUTLOADING; FED SPEC QQ-5-781.
- NON-METALLIC STRAPPING: TYPE II OR III; FED SPEC PPP-S-760.
- PLYWOOD -----: GROUP B OR C, GRADE *C-D (EXTERIOR);
FED SPEC NN-P-530. FSN 5530-051-1198.
- STRAP SEAL; STRAP STAPLE -: COMMERCIAL GRADE.

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

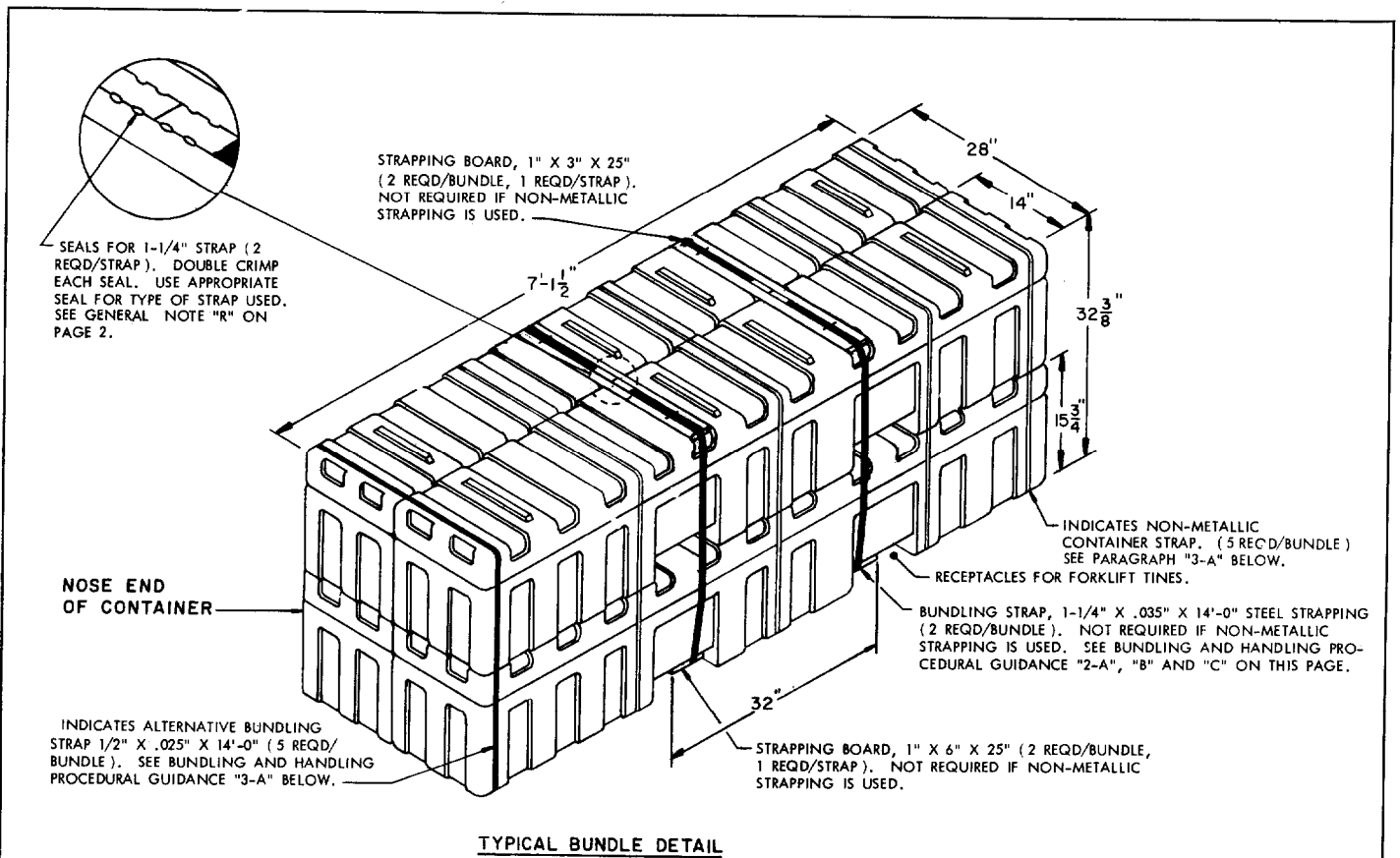
(GENERAL NOTES CONTINUED)

- M. EXCEPT FOR PLYWOOD, DUNNAGE LUMBER SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE, 2" X 4" MATERIAL IS ACTUALLY 1-5/8" THICK BY 3-5/8" WIDE AND 2" X 6" MATERIAL IS ACTUALLY 1-5/8" THICK BY 5-5/8" WIDE.
- 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. PORTIONS OF THE TRAILER BODIES DEPICTED WITHIN THIS DOCUMENT, SUCH AS ONE OF THE SIDE WALLS, HAVE NOT BEEN SHOWN IN THE LOAD VIEWS FOR CLARITY PURPOSES.
- P. FOR ADDITIONAL GUIDANCE, ATTENTION IS DIRECTED TO THE "CONTAINER DETAIL AND HANDLING PROCEDURES" ON PAGE 3 AND TO THE "SPECIAL NOTES" SECTIONS WHICH ARE IMMEDIATELY ADJACENT TO THE OUTLOADING METHODS DELINEATED.
- Q. ONE AND ONE QUARTER INCH (1-1/4") STEEL STRAPPING WILL BE USED TO UNITIZE BUNDLED CONTAINERS AS SHOWN ON PAGE 3, AND AS SPECIFIED BY THE OUTLOADING METHOD SHOWN ON PAGES 4, 5, 6, 7, 10, 11, AND 12. IF THE CAPACITY OF THE MATERIALS HANDLING EQUIPMENT USED TO LOAD THE CONTAINERS ABOARD A TRAILER PERMITS, IT IS RECOMMENDED THAT THE CONTAINER BE BUNDLED PRIOR TO PLACEMENT IN THE TRAILER. NOTICE: IN SOME CASES, CONTAINERS WILL BE BUNDLED WHEN OFFERED FOR LOADING. THESE BUNDLED CONTAINERS SHOULD BE INSPECTED AND AS REQUIRED, LOOSE STRAPS MUST BE RETENSIONED OR REPLACED.
- R. WHEN ANY BUNDLING STRAP IS SEALED AT AN END OVER END LAP JOINT, A MINIMUM OF TWO (2) SEALS WITH TWO (2) PAIR OF CRIMPS PER SEAL MUST BE USED. CAUTION: EXERCISE CARE DURING TENSIONING TO PREVENT DAMAGE TO UNITS.

REVISION

REV. NO. 1, DATED MAY 1972, CONSISTS OF:

1. ADDING BUNDLING PROCEDURES.
2. LOADING PROCEDURES WERE REVISED DUE TO UNIT DIMENSION CHANGES.
3. UPDATE FORMAT.



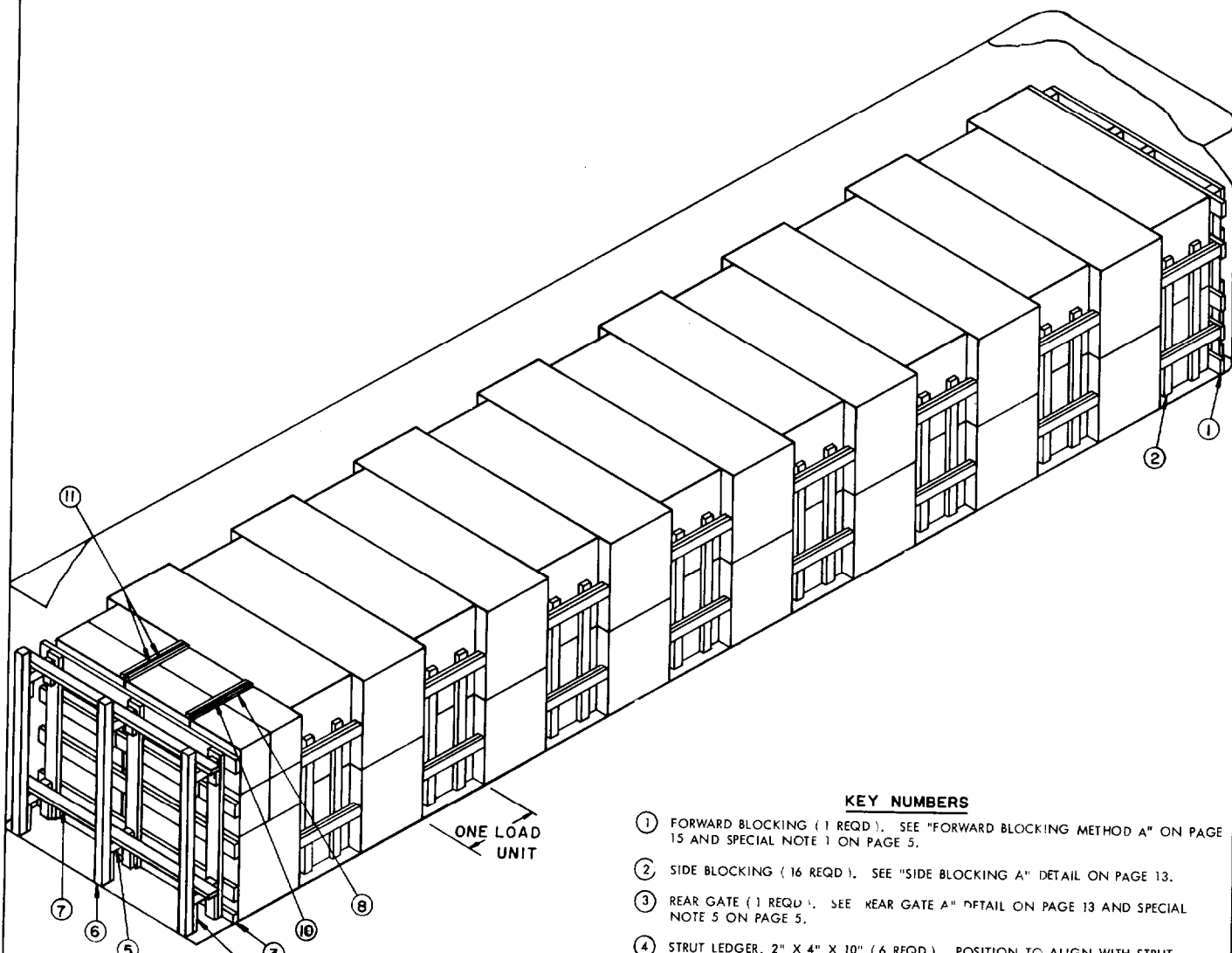
**BUNDLING AND HANDLING
PROCEDURAL GUIDANCE**

1. BUNDLING CONTAINERS.
 - A. THE BOTTOM CONTAINERS WILL BE ALIGNED WITH THE ADJACENT CONTAINER.
 - B. AN UPPER CONTAINER WILL BE FULLY SEATED ON THE CONTAINER STACKING LOCATORS OF THE NEXT LOWER CONTAINER AND AS NEARLY AS POSSIBLE IN VERTICAL ALIGNMENT.
2. INSTALLATION OF 1-1/4" X .035" STEEL BUNDLING STRAP. SEE GENERAL NOTES "Q" AND "R" ON PAGE 2. NOT REQUIRED IF BUNDLED IN ACCORDANCE WITH PARAGRAPH 3A.
 - A. THE BUNDLING STRAP SHOULD BE POSITIONED AROUND THE CONTAINERS AND STRAPPING BOARD AS SHOWN, AND PLACED SO THAT THE STRAPPING LAYS FLAT AND STRAIGHT WITH THE BODY SURFACES OF THE CONTAINERS; VERTICAL ALONG THE SIDES AND STRAIGHT ACROSS THE TOP AND BOTTOMS OF THE BUNDLE.
 - B. PLACE THE STRAPPING BOARDS (1" X 3" X 25") UNDER THE STRAPPING ACROSS THE TOP AND THE (1" X 6" X 25") ACROSS THE BOTTOM OF THE BUNDLE AS SHOWN ABOVE, TO PREVENT THE STRAPPING FROM DAMAGING THE CONTAINER WHEN TENSIONED.
 - C. STRAPPING WILL BE FIRMLY TENSIONED, AND EACH END OVER END LAP JOINT WILL BE SEALED WITH TWO (2) DOUBLE CRIMPED STRAP SEALS AS SHOWN. THE LAP JOINT WILL BE MADE ABOVE THE TOP OF THE BUNDLE SO THAT THE SEALS WILL NOT BE IN CONTACT WITH THE CONTAINER. DURING TENSIONING CARE MUST BE EXERCISED TO INSURE THAT THE CONTAINERS ARE NOT DAMAGED. EXCESS STRAPPING (STRAP ENDS) SHALL BE CUT OFF OR BROKEN NEAR THE JOINT SEALS.
3. INSTALLATION OF NON-METALLIC BUNDLING STRAP AND/OR 1/2" X .025" ALTERNATIVE STEEL BUNDLING STRAPS.
 - A. BUNDLING STRAP SHOULD BE PLACED DIRECTLY OVER THE CONTAINER STRAPS AT ALL FIVE (5) PLACES. **CAUTION:** CARE MUST BE TAKEN NOT TO TENSION SO THAT IT CAUSES DAMAGE TO THE CONTAINER OR CONTAINER STRAPPING.

(CONTINUED AT RIGHT)

(BUNDLING AND HANDLING PROCEDURAL GUIDANCE CONTINUED)

4. BUNDLE HANDLING.
 - A. **CAUTION:** EXTREME CARE MUST BE EXERCISED DURING OUTLOADING OPERATIONS TO PREVENT DAMAGE TO THE PLASTIC CONTAINERS.
 1. APPROVED MATERIAL HANDLING EQUIPMENT (FORKLIFT TRUCKS, CRANES, HAND TRUCKS, DOLLIE ROLLER ASSEMBLIES, SLINGS, SPREADER BARS, ETC.) IS SPECIFIED ELSEWHERE, OTHER THAN HEREIN.
 2. PRECAUTIONARY HANDLING TECHNIQUES NORMALLY EMPLOYED OR AS SPECIFIED FOR THE TYPE OF COMMODITY INVOLVED WILL BE OBSERVED.
 - B. ONLY APPROVED AND APPROPRIATELY SIZED MATERIAL HANDLING EQUIPMENT WILL BE USED FOR HANDLING THE DEPICTED CONTAINER.
 - C. IF HANDLING IS ACCOMPLISHED WITH A FORKLIFT, CONTAINER SHOULD BE HANDLED FROM A SIDE POSITION. **CAUTION:** THE USUALLY APPLIED END HANDLING IS NOT PERMITTED.

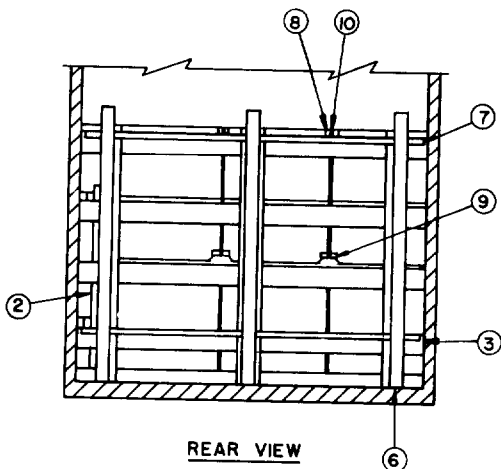


ISOMETRIC VIEW

ONE LOAD UNIT

KEY NUMBERS

- ① FORWARD BLOCKING (1 REQD). SEE "FORWARD BLOCKING METHOD A" ON PAGE 15 AND SPECIAL NOTE 1 ON PAGE 5.
- ② SIDE BLOCKING (16 REQD). SEE "SIDE BLOCKING A" DETAIL ON PAGE 13.
- ③ REAR GATE (1 REQD). SEE "REAR GATE A" DETAIL ON PAGE 13 AND SPECIAL NOTE 5 ON PAGE 5.
- ④ STRUT LEDGER, 2" X 4" X 10" (6 REQD). POSITION TO ALIGN WITH STRUT LEDGER OF REAR GATE PIECE MARKED ③. NAIL TO VERTICAL STRUT BEARING PIECE MARKED ⑥ W/3-10d NAILS. SEE GENERAL NOTE "N" ON PAGE 2.
- ⑤ STRUTS, 4" X 4" BY CUT TO FIT (6 REQD). POSITION ON PIECE MARKED ④ AND WEDGE FIT BETWEEN PIECES MARKED ③ AND ⑥. NAIL W/2-16d NAILS EACH END.
- ⑥ VERTICAL STRUT BEARING PIECE, 4" X 4" X 72" (3 REQD). POSITION TO ALIGN W/GATE VERTICALS.
- ⑦ SPREADER PIECE, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (2 REQD). NAIL W/3-10d NAILS AT EACH JOINT.
- ⑧ STRAPPING BOARD, 1" X 3" X 25" (64 REQD, 2/BUNDLE). SEE "UNITIZING AND HANDLING PROCEDURAL GUIDANCE" AND "TYPICAL BUNDLING DETAIL" ON PAGE 3.
- ⑨ STRAPPING BOARD, 1" X 6" X 25" (64 REQD, 2/BUNDLE). SEE "TYPICAL BUNDLE DETAIL" ON PAGE 3.
- ⑩ STEEL STRAP, 1-1/4" X .035" X 14'-0" (64 REQD, 2/BUNDLE). SEE GENERAL NOTE "Q" ON PAGE 2 AND BUNDLING AND HANDLING PROCEDURAL GUIDANCE PARAGRAPHS 2 AND 3 ON PAGE 3.
- ⑪ SEALS FOR 1-1/4" STEEL STRAP (128 REQD, 2/STRAP). SEE GENERAL NOTE "R" ON PAGE 2.



REAR VIEW

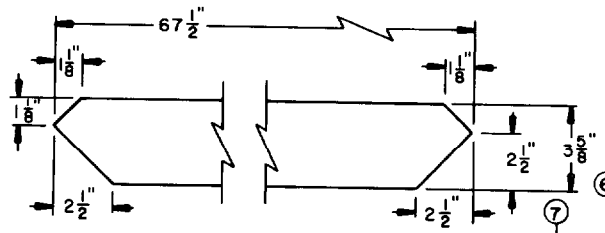
SPECIAL NOTES:

1. A 128-UNIT LOAD IS SHOWN IN A ROUND CORNER CONVENTIONAL TRAILER WHICH IS 7'-6" WIDE (INSIDE DIMENSION) BY 40'-0" LONG. FOR SQUARE FRONT TRAILERS, FORWARD BLOCKING PIECE MARKED ① MAY BE OMITTED.
2. A LONGER TRAILER THAN SHOWN MAY BE USED FOR THE SHIPMENT OF THE DEPICTED LOAD. HOWEVER, THE "ALTERNATE REAR BLOCKING" AS DETAILED ON PAGE 15 MUST BE USED WITH STRUT BRACING AS REQUIRED. NOTE: IF THE VOID AT THE REAR OF A LOAD SHOULD BE LESS THAN 12", OMIT PIECES MARKED ④, ⑤, ⑥, AND ⑦. LAMINATE 2" X 4" X 64" SOLID FILL TO THE VERTICALS OF THE REAR GATE "A" PIECE MARKED ③ IN LIEU OF THE STRUT LEDGERS, AS REQUIRED TO FILL THE VOID.
3. IF A NARROWER OR WIDER TRAILER IS USED, THE THICKNESS OF THE HORIZONTAL PIECES OF THE "SIDE BLOCKING ASSEMBLY A" AS DETAILED ON PAGE 13, MUST BE ADJUSTED TO PROVIDE FOR A "TIGHT" LOAD ACROSS THE WIDTH OF THE TRAILER.
4. IF THE DELINEATED METHOD IS USED FOR A LESS-THAN-FULL-LOAD SHIPMENT, AND THE QUANTITIES CAN NOT BE SATISFIED BY OMITTING A COMPLETE LOAD UNIT (8 CONTAINERS) A "FILLER ASSEMBLY" AS SHOWN IN "ISOMETRIC VIEW" ON PAGE 6 AND DETAILS ON PAGE 16, MUST BE SUBSTITUTED IN PLACE OF EACH OMITTED CONTAINER. CONTAINERS MAY BE OMITTED AT ANY LOCATION WITHIN THE TOP LAYER OF ONE OR MORE BUNDLES IN THE TOP LAYER OF BUNDLES.
5. A PLYWOOD REAR GATE, AS SHOWN IN THE "REAR GATE C" DETAIL ON PAGE 14, MAY BE USED IN LIEU OF THE "REAR GATE A" PIECE MARKED ③ AS DEPICTED IN THE LOAD VIEWS.
6. THE USE OF SLIDING TANDEM TRAILERS IS PREFERRED AND THESE TRAILERS SHOULD BE USED WHENEVER POSSIBLE. TRAILERS WITH AXLES LOCATED IN THE "WESTERN" POSITION (AT EXTREME REAR OF TRAILER) MAY BE USED PROVIDED THE LIGHT WEIGHT OF THE TRACTORS DRIVE AXLES DOES NOT EXCEED 11,500 LBS. SEE SPECIAL NOTES 2 AND 4 ABOVE AND GENERAL NOTE "J" ON PAGE 2.

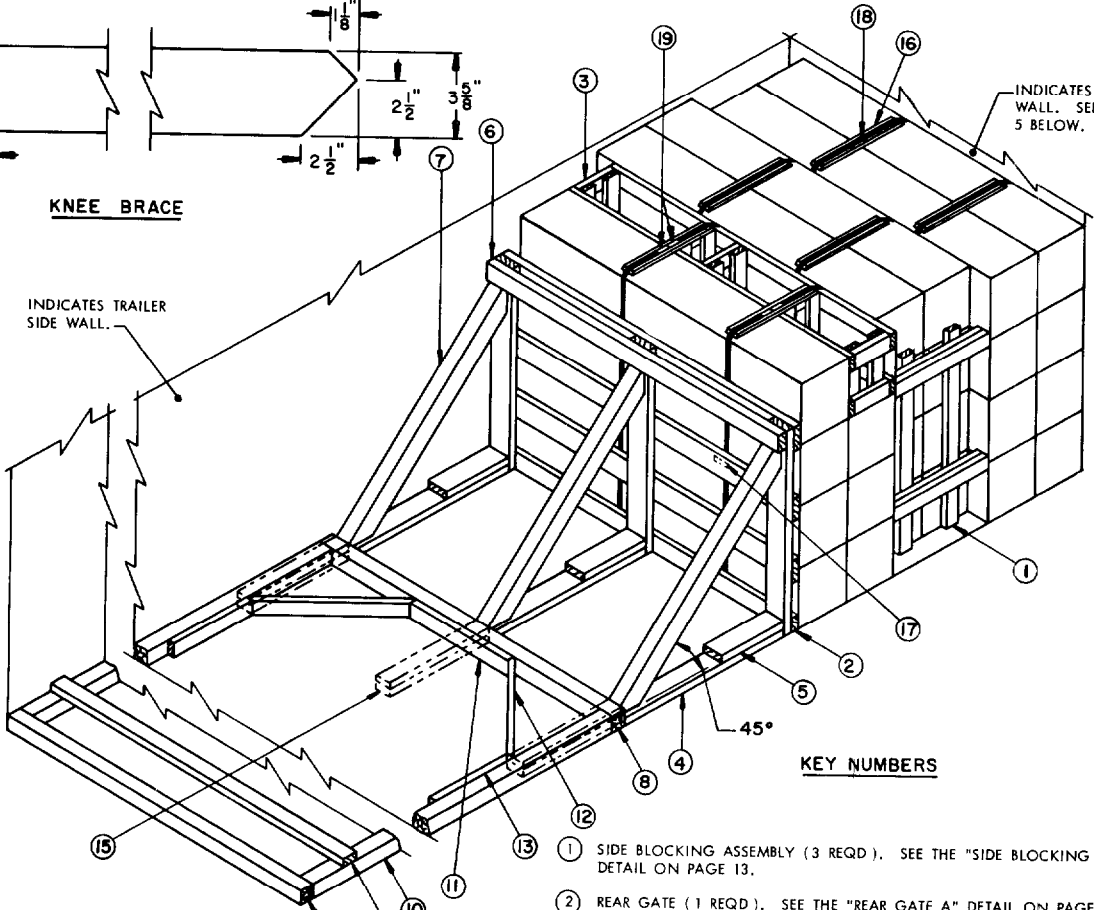
BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 3"	81	27
1" X 6"	81	41
2" X 4"	310	203
2" X 6"	116	116
4" X 4"	31	40
NAILS	NO. REQD	POUNDS
10d (3")	521	8
16d (3-1/2")	24	1/2
STEEL STRAPPING, 1-1/4" X .035" ----- 896' REQD ----- 128 LBS		
SEAL FOR 1-1/4" STRAP ----- 128 REQD ----- 5 LBS		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CONTAINER		
(W/CBU ITEM) -----	128 -----	41,984 LBS
DUNNAGE -----		1,209 LBS
TOTAL WEIGHT -----		43,193 LBS



KNEE BRACE



ISOMETRIC VIEW

KEY NUMBERS

SPECIAL NOTES:

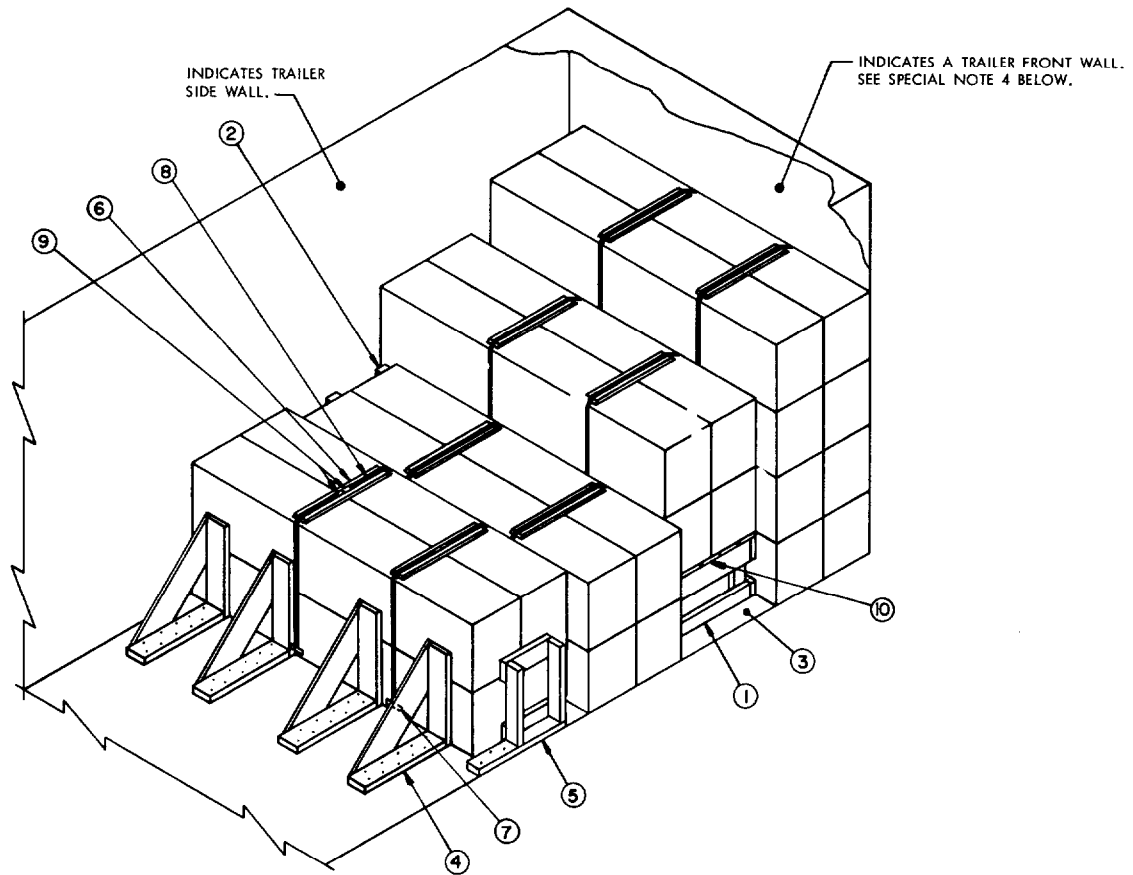
1. THESE OUTLOADING PROCEDURES ARE SHOWN DEPICTING THE USE OF "KNEE BRACE" BLOCKING IN A 7'-6" WIDE (INSIDE DIMENSION) TRAILER. NARROWER OR WIDER TRAILERS CAN BE USED.
2. THE USE OF THE "FILLER ASSEMBLY" IS SPECIFIED FOR THE DEPICTED LOAD ONLY TO SHOW A TYPICAL APPLICATION. "FILLER ASSEMBLIES" MAY BE USED IN THE TOP LAYER OF A TOP BUNDLE OF THE LOAD AS REQUIRED TO ADJUST THE LOADING PATTERN FOR THE NUMBER OF CONTAINERS TO BE SHIPPED.
3. THE REAR BLOCKING, SHOWN AS PIECES MARKED ② AND ④ THROUGH ⑭ IS ADEQUATE FOR RETAINING THE MAXIMUM LTL LOAD THAT CAN BE SHIPPED IN A TRAILER.
4. PIECES MARKED ⑬ ARE FOR USE IN TRAILERS WHICH HAVE NAILABLE FLOORS, AND SHOULD BE USED IF POSSIBLE IN LIEU OF PIECES MARKED ⑧ THROUGH ⑭ 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". THREE (3) BACK-UP CLEATS, SHOWN AS PIECES MARKED ⑮, ARE ADEQUATE FOR RETAINING NOT MORE THAN 10,800 POUNDS OF LADING.
5. IF THE TRAILER BEING LOADED HAS A ROUND FRONT OR ROUNDED CORNERS AT THE FORWARD END, USE "FORWARD BLOCKING METHOD A" SHOWN ON PAGE 15.
6. IF THE TRAILER BEING LOADED IS EQUIPPED WITH REAR CORNER POSTS, POSITION PIECE MARKED ⑨ AGAINST THE REAR CORNER POSTS AND INSTALL AS SHOWN.

(KEY NUMBERS CONTINUED FROM RIGHT)

- ⑬ STRAPPING BOARD, 1" X 3" X 25" (12 REQ'D, 2/BUNDLE). SEE BUNDLING AND HANDLING PROCEDURES AND "TYPICAL BUNDLE DETAIL" ON PAGE 3.
- ⑭ STRAPPING BOARD, 1" X 6" X 25" (12 REQ'D, 2/BUNDLE). SEE TYPICAL BUNDLE DETAIL ON PAGE 3.
- ⑮ STEEL STRAPPING, 1-1/4" X .035" X 12'-0" (12 REQ'D). SEE BUNDLING AND HANDLING PROCEDURES AND TYPICAL BUNDLING DETAIL ON PAGE 3 AND GENERAL NOTE "Q" ON PAGE 2.
- ⑯ SEAL FOR 1-1/4" STRAPPING (24 REQ'D, 2/STRAP). POSITION AND DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "R" ON PAGE 2.

- ① SIDE BLOCKING ASSEMBLY (3 REQ'D). SEE THE "SIDE BLOCKING ASSEMBLY A" DETAIL ON PAGE 13.
- ② REAR GATE (1 REQ'D). SEE THE "REAR GATE A" DETAIL ON PAGE 13.
- ③ FILLER (1 REQ'D). SEE THE "FILLER ASSEMBLY" DETAIL ON PAGE 16.
- ④ FLOOR CLEAT, 2" X 6" X 47-3/4" (3 REQ'D). ALIGN WITH VERTICAL PIECES OF REAR GATE MARKED ②. SEE SPECIAL NOTE 4 AT LEFT.
- ⑤ POCKET CLEAT, 2" X 6" X 18" (3 REQ'D). NAIL TO FLOOR CLEAT MARKED ④ W/5-12d NAILS. TOENAIL TO THE VERTICAL PIECE OF REAR GATE MARKED ② W/2-12d NAILS. SEE GENERAL NOTE "N" ON PAGE 2.
- ⑥ HOLD DOWN PIECE, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (1 REQ'D). NAIL TO THE VERTICAL PIECES OF REAR GATE MARKED ② W/3-10d NAILS AT EACH JOINT.
- ⑦ KNEE BRACE, 4" X 4" X 67-1/2" (3 REQ'D). SEE DETAIL ABOVE FOR BEVEL CUTS REQUIRED. CENTER ON AND TOENAIL TO FLOOR CLEAT MARKED ④ AND TO VERTICAL PIECE OF REAR GATE MARKED ② W/2-16d NAILS AT EACH END.
- ⑧ FORWARD HEADER, 4" X 4" BY TRAILER WIDTH MINUS 1/2" (1 REQ'D). TOENAIL TO KNEE BRACES MARKED ⑦ W/2-16d NAILS AT EACH JOINT.
- ⑨ REAR HEADER, 4" X 4" BY TRAILER WIDTH MINUS 1/2" (1 REQ'D). POSITION TO CONTACT THE REAR DOORS OF THE TRAILER WHEN THEY ARE CLOSED.
- ⑩ SIDE STRUT, 4" X 4" BY CUT TO FIT BETWEEN FORWARD AND REAR HEADERS MARKED ⑧ AND ⑨ (2 REQ'D). TOENAIL TO PIECES MARKED ⑧ AND ⑨ W/2-16d NAILS AT EACH END.
- ⑪ CENTER CLEAT, 2" X 4" X 30" (1 REQ'D). NAIL TO FORWARD HEADER MARKED ⑧ W/7-12d NAILS.
- ⑫ DIAGONAL BRACE, 2" X 4" BY CUT TO FIT (2 REQ'D). DOUBLE BEVEL EACH END WITH 45° CUTS. INSTALL AT 45° ANGLE AS SHOWN AND TOENAIL TO FORWARD HEADER MARKED ⑧ AND TO ADJACENT SIDE STRUT MARKED ⑩ W/2-16d NAILS AT EACH END.
- ⑬ SIDE CLEAT, 2" X 4" X 24" (2 REQ'D). NAIL TO SIDE STRUT MARKED ⑩ W/6-12d NAILS.
- ⑭ STRUT BRACING, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (MINIMUM OF 1 REQ'D). INSTALL ONE (1) NEAR END OF STRUTS MARKED ⑩ AS SHOWN. ONE (1) ADDITIONAL PIECE IS REQUIRED FOR EVERY 7'-0" OF STRUT LENGTH. NAIL TO SIDE STRUTS MARKED ⑩ W/3-12d NAILS AT EACH END.
- ⑮ BACK-UP CLEAT, 2" X 4" X 30" (DOUBLED) (3 REQ'D). ALIGN WITH A KNEE BRACE MARKED ⑦. NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/7-12d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER. SEE SPECIAL NOTE 4 AT LEFT.

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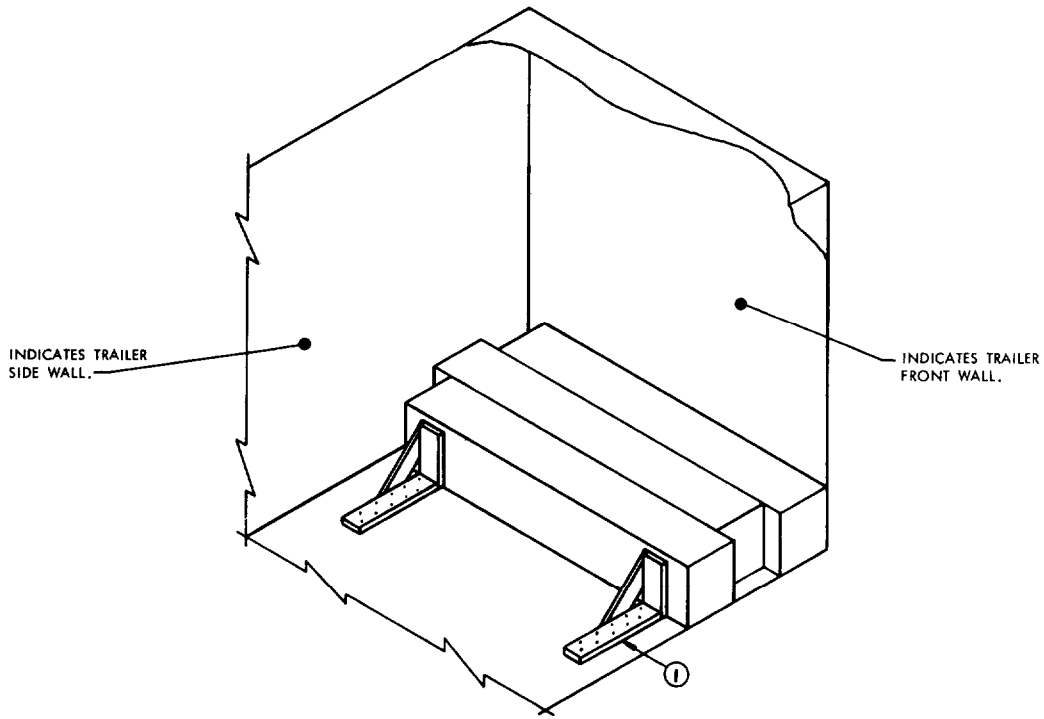
ISOMETRIC VIEW

SPECIAL NOTES:

1. THESE OUTLOADING PROCEDURES ARE SHOWN DEPICTING THE USE OF "FILLER ASSEMBLY" AS A RISER FOR PARTIAL LAYER BLOCKING IN A 7'-6" WIDE (INSIDE DIMENSION) TRAILER. NARROWER OR WIDER TRAILERS CAN BE USED.
2. THE USE OF THE LTL BRACE PIECE MARKED ④ IS ADEQUATE FOR RETAINING THE MAXIMUM LTL LOAD THAT CAN BE SHIPPED IN A TRAILER. SEE NOTE "●" ON PAGE 16.
3. THE USE OF THE "FILLER ASSEMBLY" IS SPECIFIED FOR THE DEPICTED LOAD ONLY TO SHOW A TYPICAL APPLICATION FOR THE SHIPMENT OF A LOAD WITH AN ODD NUMBER OF BUNDLES. SEE "FILLER ASSEMBLY" DETAIL AND NOTE "●" ON PAGE 16.
4. IF THE TRAILER BEING LOADED HAS A ROUNDED FRONT OR ROUNDED CORNERS AT THE FORWARD END, REFER TO "FORWARD BLOCKING METHOD A" ON PAGE 15.

KEY NUMBERS

- ① RISER (1 REQD). SEE THE "FILLER ASSEMBLY" DETAIL AND NOTE "●" ON PAGE 16.
- ② SIDE BLOCKING, (1 REQD). SEE "SIDE BLOCKING ASSEMBLY A" FOR ODD BUNDLE HIGH ON PAGE 13.
- ③ SIDE BLOCKING (2 REQD). SEE "SIDE BLOCKING ASSEMBLY A" FOR EVEN (2) BUNDLES HIGH ON PAGE 13. OMITTED FROM VIEW FOR CLARITY PURPOSES.
- ④ LTL BRACE (4 REQD). SEE THE "LTL BRACE" DETAIL AND NOTE "●" ON PAGE 16. NAIL TO TRAILER FLOOR W/10-10d NAILS AS SHOWN.
- ⑤ SIDE BLOCKING (1 REQD). SEE "SIDE BLOCKING ASSEMBLY B" ON PAGE 13. NAIL TO FLOOR W/3-10d NAILS.
- ⑥ STRAPPING BOARD, 1" X 3" X 25" (10 REQD, 2/BUNDLE). SEE "BUNDLING AND HANDLING PROCEDURES GUIDANCE" AND "TYPICAL BUNDLE DETAIL" ON PAGE 3.
- ⑦ STRAPPING BOARD, 1" X 6" X 25" (10 REQD, 2/BUNDLE). SEE "TYPICAL BUNDLE DETAIL" ON PAGE 3.
- ⑧ STEEL STRAPPING, 1-1/4" X .035" X 12'-0" (10 REQD, 2/BUNDLE). FOR STRAP INSTALLATION SEE "BUNDLING AND HANDLING GUIDANCE" ON PAGE 3 AND GENERAL NOTE "Q" ON PAGE 2.
- ⑨ SEAL FOR 1-1/4" STRAPPING, (20 REQD, 2/STRAP). DOUBLE CRIMP EACH SEAL AND SEE GENERAL NOTE "R" ON PAGE 2.
- ⑩ DECK PIECE, 1" X 6" X 7'-1" (3 REQD). POSITION AS SHOWN AND NAIL TO FILLER ASSEMBLY AS SPECIFIED IN NOTE "●" ON PAGE 16.



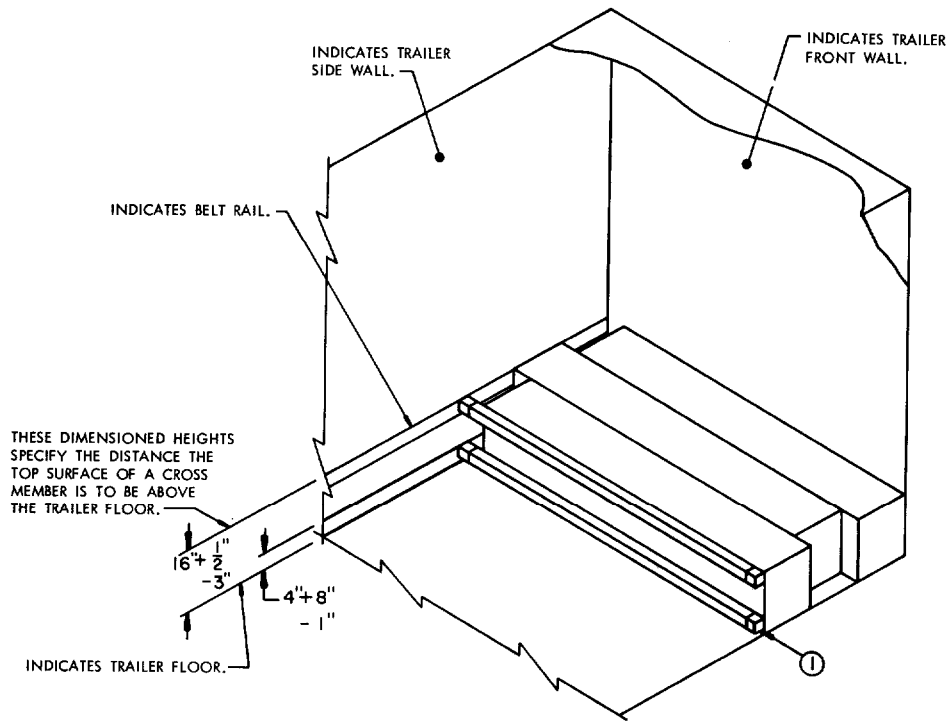
ISOMETRIC VIEW

SPECIAL NOTES:

1. THE UNIT LOAD SHOWN DEPICTS THE METHOD FOR OUTLOADING A 3 CONTAINER LTL LOAD IN A TRAILER EQUIPPED WITH A NAILABLE FLOOR. THE LTL BRACE, AS SHOWN, MAY BE USED FOR SHIPMENT OF A ONE CONTAINER HIGH LOAD. SEE SPECIAL NOTE 2 AND "NOTE ●" ON PAGE 16. TRAILERS WITH ALL METAL FLOORS CANNOT BE USED.
2. THE LTL BRACE DEPICTED ON THIS PAGE IS 16" HIGH AND USED FOR ONE CONTAINER HIGH LOADS ONLY. FOR LOADS HAVING CONTAINERS BUNDLED FOR SHIPMENT, SEE METHODS DEPICTED ON PAGE 7.
3. IF THE TRAILER BEING LOADED HAS A ROUND FRONT OR HAS ROUNDED CORNERS AT THE FORWARD END, TWO (2) ADDITIONAL LTL BRACES MAY BE USED AT THE FORWARD END OF THE LADING.

KEY NUMBERS

- ① LTL BRACE (2 REQD). SEE THE "LTL BRACE DETAIL" AND "NOTE ●" ON PAGE 16. NAIL TO THE TRAILER FLOOR W/10-10d NAILS AS SHOWN. SEE SPECIAL NOTE 2 AT LEFT.



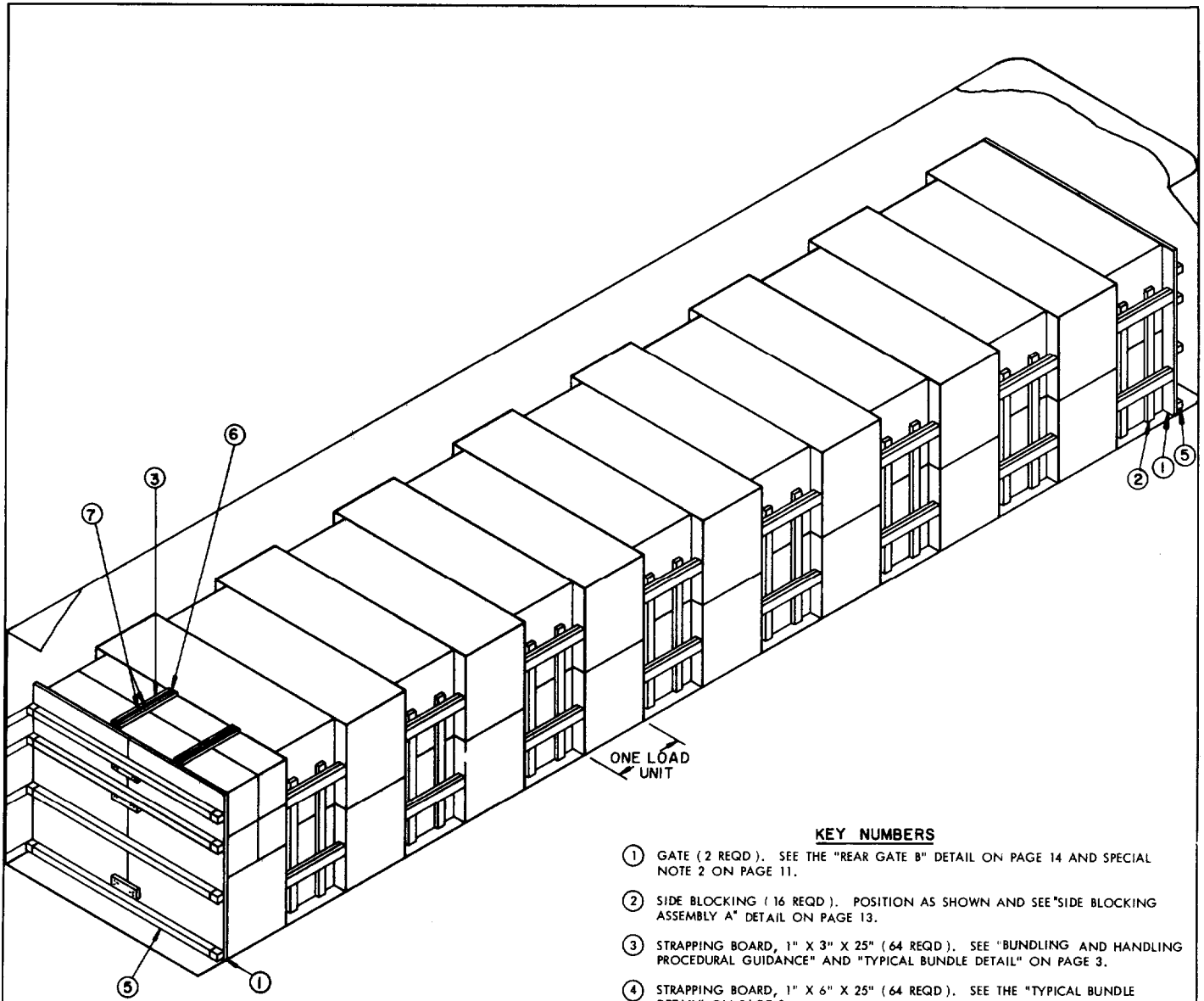
ISOMETRIC VIEW

SPECIAL NOTES:

1. A 3-UNIT LOAD IS SHOWN IN A TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES.
2. IF DESIRED, OR IF THE TRAILER BEING USED HAS A ROUND-FRONT OR HAS ROUNDED CORNERS AT THE FORWARD END, THE METHOD FOR BLOCKING THE REAR OF THE LOAD MAY ALSO BE USED FOR BLOCKING THE FRONT OF THE LOAD.

KEY NUMBERS

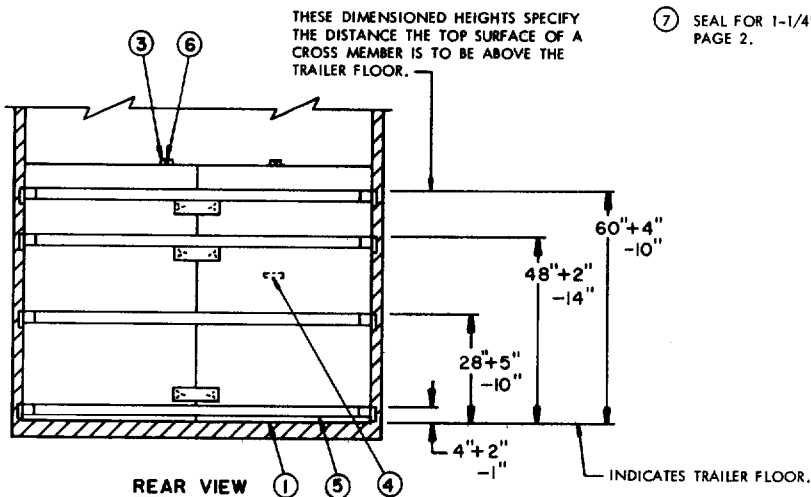
- ① CROSS MEMBER (2 REQD). POSITION AT HEIGHTS SHOWN IN THE "ISOMETRIC VIEW" ABOVE. SEE GENERAL NOTE "G-1" ON PAGE 2.



ISOMETRIC VIEW

KEY NUMBERS

- ① GATE (2 REQD). SEE THE "REAR GATE B" DETAIL ON PAGE 14 AND SPECIAL NOTE 2 ON PAGE 11.
- ② SIDE BLOCKING (16 REQD). POSITION AS SHOWN AND SEE "SIDE BLOCKING ASSEMBLY A" DETAIL ON PAGE 13.
- ③ STRAPPING BOARD, 1" X 3" X 25" (64 REQD). SEE "BUNDLING AND HANDLING PROCEDURAL GUIDANCE" AND "TYPICAL BUNDLE DETAIL" ON PAGE 3.
- ④ STRAPPING BOARD, 1" X 6" X 25" (64 REQD). SEE THE "TYPICAL BUNDLE DETAIL" ON PAGE 3.
- ⑤ CROSS MEMBER, (8 REQD). POSITION AT THE HEIGHTS SHOWN IN THE "REAR VIEW" BELOW. SEE GENERAL NOTE "G-1" ON PAGE 2 AND SPECIAL NOTE 8 ON PAGE 11.
- ⑥ STEEL STRAP, 1-1/4" X .035" X 14'-0" (64 REQD, 2/BUNDLE). SEE GENERAL NOTE "Q" ON PAGE 2 AND "BUNDLING AND HANDLING PROCEDURAL GUIDANCE" 2 AND 3" ON PAGE 3.
- ⑦ SEAL FOR 1-1/4" STRAP (128 REQD, 2/STRAP). SEE GENERAL NOTE "R" ON PAGE 2.



REAR VIEW

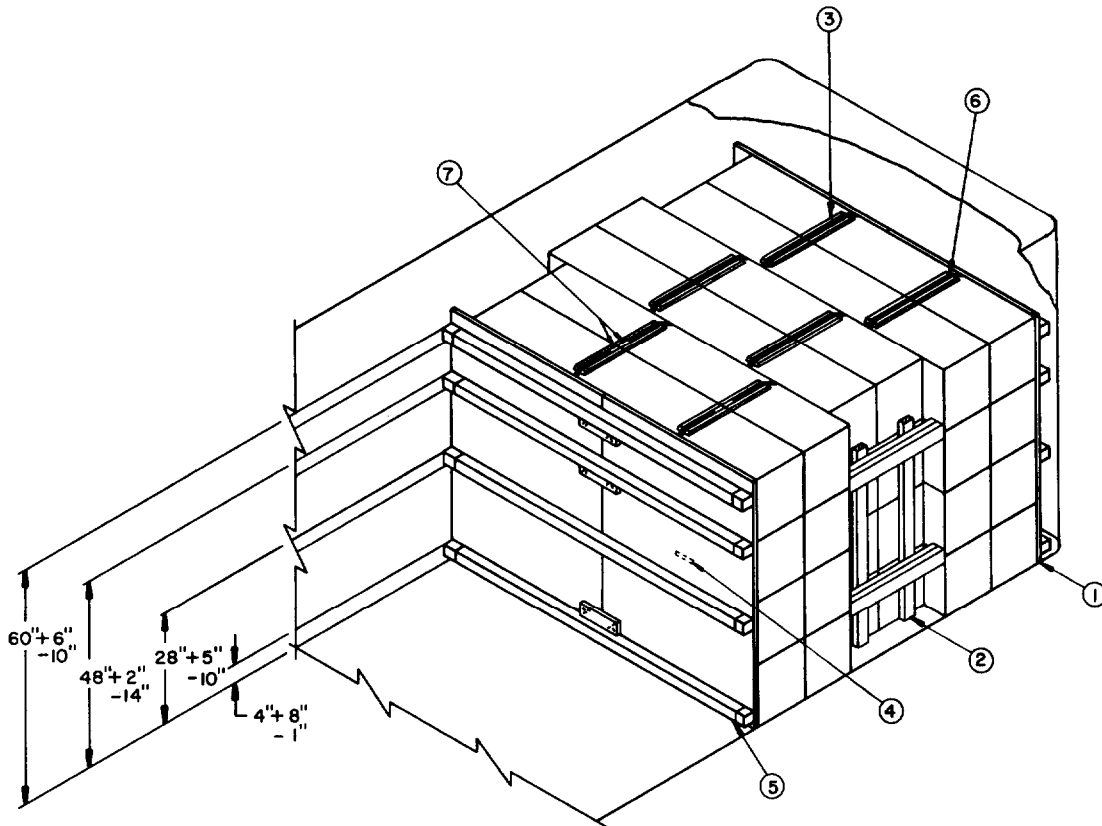
SPECIAL NOTES:

1. A 128-UNIT LOAD (BUNDLED) IS SHOWN IN A TRAILER WITH ROUNDED FRONT CORNERS WHICH IS 7'-6" WIDE INSIDE DIMENSIONS BY 40'-0" LONG, EQUIPPED WITH A MECHANICAL BLOCKING SYSTEM THAT CONTAINS AT LEAST 8 CROSS MEMBERS, AND IS AT LEAST 38'-10" IN LENGTH AS MEASURED FROM THE FRONT WALL OF THE TRAILER TO THE REAR OF THE SYSTEM. LONGER TRAILERS MAY BE USED IF EQUIPPED WITH THE ABOVE SPECIFIED LOAD BLOCKING SYSTEM.
2. SQUARE FRONT TRAILERS MAY BE USED. OMIT THE FORWARD BULKHEAD GATE AND FOUR (4) FORWARD CROSS MEMBER PIECES MARKED ① AND ⑤ RESPECTIVELY AND POSITION BUNDLES AGAINST THE FRONT WALL OF THE TRAILER.
3. SHORTER OR LONGER TRAILERS MAY BE USED BY ADJUSTING THE NUMBER OF LOAD UNITS TO SUIT.
4. A NARROWER OR WIDER TRAILER MAY BE USED. ADJUST THE THICKNESS OF THE SIDE BLOCKING ASSEMBLY, PIECE MARKED ② TO SUIT THE TRAILER TO BE LOADED.
5. IF THE DELINEATED OUTLOADING METHOD IS USED FOR AN EVEN NUMBER OF BUNDLES IN LESS THAN FULL LOAD SHIPMENT, SEE THE TYPICAL LTL VIEW ON PAGE 12. IF THE LOAD BEING SHIPPED HAS AN ODD NUMBER OF BUNDLES, POSITION THE TWO-HIGH PORTION OF THE LOAD AS SHOWN AND POSITION A ONE-HIGH GATE TO CONTACT THE CROSS MEMBERS OF THE TWO-HIGH LOAD. POSITION THE ODD BUNDLE BETWEEN THE FIRST AND A SECOND ONE-HIGH GATE AND BLOCK THE SECOND ONE-HIGH GATE WITH TWO (2) CROSS MEMBERS AT LOWER DIMENSIONS SHOWN IN "REAR VIEW" ON PAGE 10. FOR INFORMATION CONCERNING FABRICATION OF GATES, SEE "REAR GATE B" ON PAGE 14.
6. IF A LOAD TO BE SHIPPED HAS LESS THAN ENOUGH UNITS TO FORM A BUNDLE, INSTALL ONE (1) OR MORE FILLERS IN THE UPPER LAYER OF THE BUNDLE(S) TO COMPLETE THE LOAD UNIT(S). SEE THE "FILLER ASSEMBLY" DETAIL AND NOTE "A" ON PAGE 16.
7. THE USE OF SLIDING TANDEM TRAILERS IS PREFERRED AND THESE TRAILERS SHOULD BE USED WHENEVER POSSIBLE. TRAILERS WITH AXLES LOCATED IN THE "WESTERN" POSITION (AT EXTREME REAR OF THE TRAILER) MAY BE USED PROVIDED THE LIGHT WEIGHT OF THE TRACTORS DRIVE AXLES DOES NOT EXCEED 11,500 LBS. SEE SPECIAL NOTES 3 AND 4 ABOVE AND GENERAL NOTE "J" ON PAGE 2.
8. FORWARD BLOCKING MAY BE USED IN TRAILERS WITH ROUNDED FRONT CORNERS IN LIEU OF FORWARD PIECES ① AND ⑤. SEE "FORWARD BLOCKING METHOD A" DETAIL SHOWN ON PAGE 15.

BILL OF MATERIAL		
LUMBER	LINEAL FEET	BOARD FEET
1" X 3"	67	17
1" X 4"	6	2
1" X 6"	67	34
2" X 4"	288	192
NAILS	NO. REQD	POUNDS
6d (2")	36	1/2
10d (3")	320	5-1/4
PLYWOOD, 4'-0" X 8'-0" X 1/2" THICK ---- 4 REQD ---- 176 LBS		
STEEL STRAPPING 1-1/4" X .035" ----- 896' REQD ---- 128 LBS		
SEALS FOR 1-1/4" STEEL STRAP ----- 128 REQD ---- 5 LBS		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CONTAINER		
(W/CBU ITEM)	128	41,984 LBS
DUNNAGE		928 LBS
TOTAL WEIGHT		42,912 LBS



ISOMETRIC VIEW

SPECIAL NOTES:

1. A 24-UNIT LOAD (BUNDLED) IS SHOWN IN A 7'-6" TRAILER, EQUIPPED WITH MECHANICAL BRACING DEVICES, NARROWER OR WIDER TRAILERS MAY BE USED BY ADJUSTING THE SIDE BLOCKING ASSEMBLY THICKNESS TO OBTAIN A TIGHT FITTING LOAD.
2. LTL MAY BE SHIPPED BUNDLED ONE (1) OR TWO (2) LAYERS HIGH AS DESIRED, BY ADJUSTING THE GATE, PIECE MARKED ①. A FILLER ASSEMBLY OF THE DESIRED WIDTH MAY BE INSTALLED IN ONE OR MORE BUNDLES IN LIEU OF OMITTED CONTAINERS TO OBTAIN THE QUANTITY OF COMPLETED BUNDLES DESIRED. AN ODD BUNDLE OF CONTAINERS MAY BE POSITIONED AT THE REAR OF THE DEPICTED LOAD BY ADDING TWO (2) ONE-HIGH GATES AND TWO (2) ADDITIONAL PIECES MARKED ⑤, POSITIONED AT THE 4" AND 28" HEIGHT. ALSO THREE (3) OR LESS UNBUNDLED CONTAINER UNITS MAY BE ADDED TO THE DEPICTED LOAD BY INCREASING THE NUMBER OF CROSS MEMBERS MARKED ⑤ BY THREE (3). SEE METHOD SHOWN ON PAGE 9.
3. IF THE TRAILER BEING USED HAS A SQUARE FORWARD END, THE LOAD MAY BE POSITIONED AGAINST THE FORWARD WALL OF THE TRAILER AND OMIT THE FORWARD GATE AND CROSS MEMBERS.
4. FORWARD BLOCKING MAY BE USED IN TRAILERS WITH ROUNDED FRONT CORNERS IN LIEU OF FORWARD PIECES ① AND ⑤. SEE "FORWARD BLOCKING METHOD A" DETAIL SHOWN ON PAGE 15.

KEY NUMBERS

- ① GATE, (2 REQD). SEE "REAR GATE B" ON PAGE 14 AND SPECIAL NOTE 2 AT LEFT.
- ② SIDE BLOCKING, (3 REQD). SEE "SIDE BLOCKING ASSEMBLY A" ON PAGE 13.
- ③ STRAPPING BOARD, 1" X 3" X 25" (12 REQD, 2/BUNDLE). SEE "BUNDLING AND HANDLING PROCEDURAL GUIDANCE "2 AND 3" AND "TYPICAL BUNDLE DETAIL" ON PAGE 3.
- ④ STRAPPING BOARD, 1" X 6" X 25" (12 REQD, 2/BUNDLE). SEE "TYPICAL BUNDLE DETAIL" ON PAGE 3.
- ⑤ CROSS MEMBER, (8 REQD). POSITION AT THE HEIGHTS SHOWN IN THE ISOMETRIC VIEW ABOVE. SEE GENERAL NOTE "G-1" ON PAGE 2.
- ⑥ STEEL STRAPPING, 1-1/4" X .035" X 12"-0" (12 REQD, 2/BUNDLE). FOR STRAP INSTALLATION SEE "BUNDLING AND HANDLING GUIDANCE" ON PAGE 3 AND GENERAL NOTE "Q" ON PAGE 2.
- ⑦ SEAL FOR 1-1/4" STEEL STRAPPING (24 REQD, 2/STRAP). DOUBLE CRIMP EACH SEAL AND SEE GENERAL NOTE "R" ON PAGE 2.

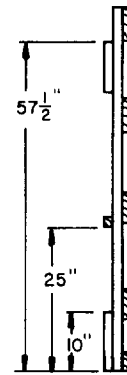
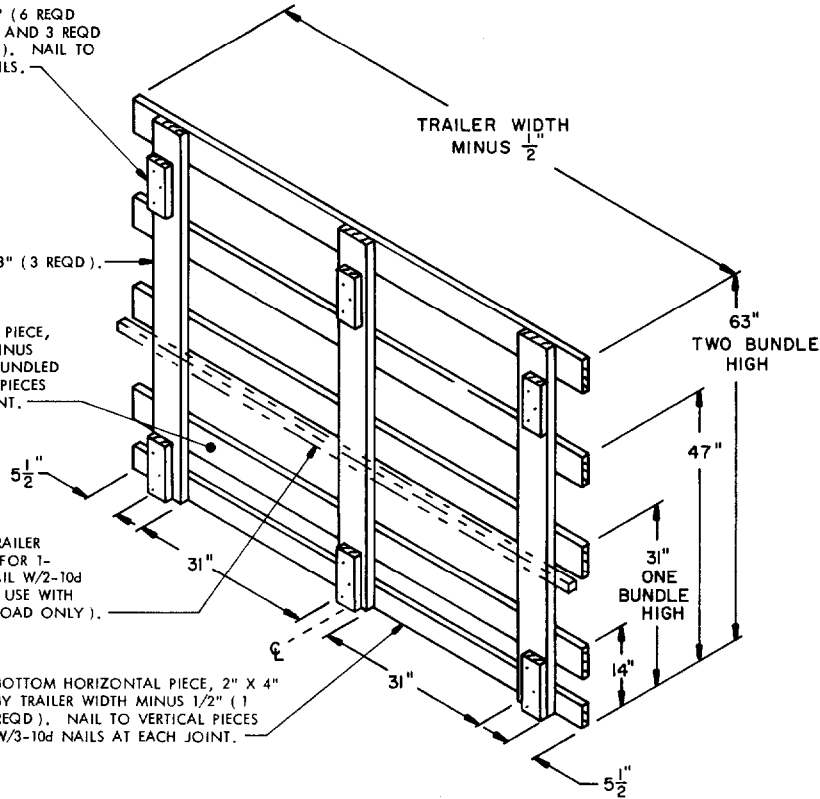
STRUT LEDGER, 2" X 4" X 10" (6 REQD FOR 2-LAYER BUNDLED LOAD AND 3 REQD FOR 1-LAYER BUNDLED LOAD). NAIL TO VERTICAL PIECES W/3-10d NAILS.

VERTICAL PIECE, 2" X 6" X 63" (3 REQD).

HORIZONTAL LOAD BEARING PIECE, 2" X 6" BY TRAILER WIDTH MINUS 1/2" (4 REQD FOR 2-LAYER BUNDLED LOAD). NAIL TO VERTICAL PIECES W/3-10d NAILS AT EACH JOINT.

STRUT LEDGER, 2" X 2" BY TRAILER WIDTH MINUS 1/2" (1 REQD FOR 1-LAYER BUNDLED LOAD). NAIL W/2-10d NAILS AT EACH JOINT (FOR USE WITH ONE LAYER HIGH BUNDLED LOAD ONLY).

BOTTOM HORIZONTAL PIECE, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (1 REQD). NAIL TO VERTICAL PIECES W/3-10d NAILS AT EACH JOINT.



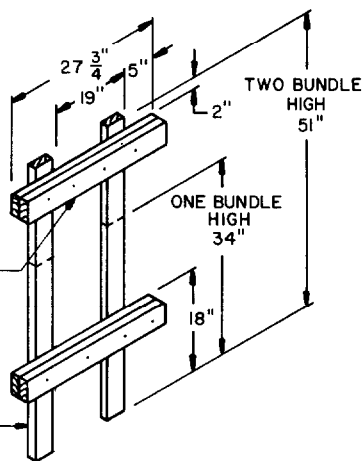
REAR GATE A

REAR GATE A (END VIEW)

THIS GATE IS DESIGNED FOR THE USE AT THE REAR END OF A 2-LAYER OR A 1-LAYER BUNDLED LOAD IN A CONVENTIONAL TRAILER AS DEPICTED ON PAGES 4 AND 5. WHEN USING SOLID FILL OR FOR LCL LOAD OMIT STRUT LEDGERS.

SIDE BLOCKING, 4" WIDE MATERIAL BY 27-3/4" LONG BY THICKNESS TO SUIT (2 REQD). NAIL TO SPACERS W/3-10d NAILS AT EACH JOINT. LAMINATE ADDITIONAL PIECES TO FIRST PIECE AS REQD W/4-10d NAILS.

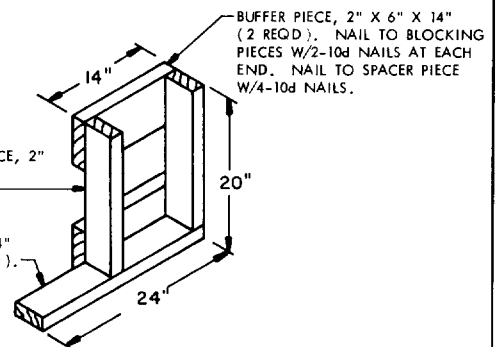
SPACER, 2" X 4" BY CUT TO SUIT (2 REQD).



SIDE BLOCKING ASSEMBLY A

BLOCKING PIECE, 2" X 4" X 18-1/2" (2 REQD).

SPACER, 2" X 4" X 24" (1 REQD).



SIDE BLOCKING ASSEMBLY B

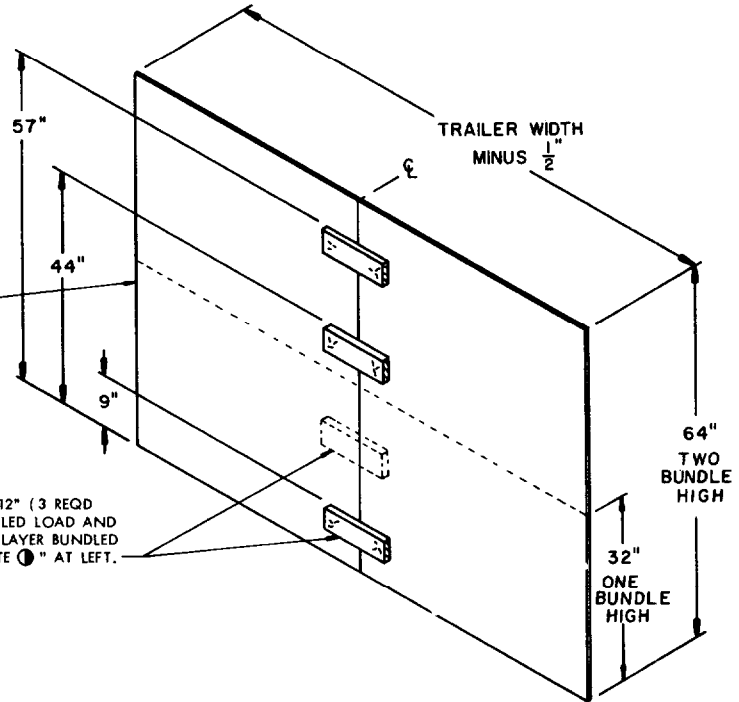
DETAILS

LOAD BEARING PIECE, 1/2" THICK PLYWOOD, 64" LONG BY TRAILER WIDTH MINUS 1/4" (2 REQD). BUTT THE EDGES OF THE PIECES TOGETHER ON THE CLEATS. NAIL EACH PIECE TO THE CLEATS W/3-6d NAILS AT EACH LOCATION AND CLINCH.

CLEAT, 1" X 4" X 12" (3 REQD FOR 2-LAYER BUNDLED LOAD AND 2 REQUIRED FOR 1-LAYER BUNDLED LOAD). SEE "NOTE 1" AT LEFT.

NOTE 1 :

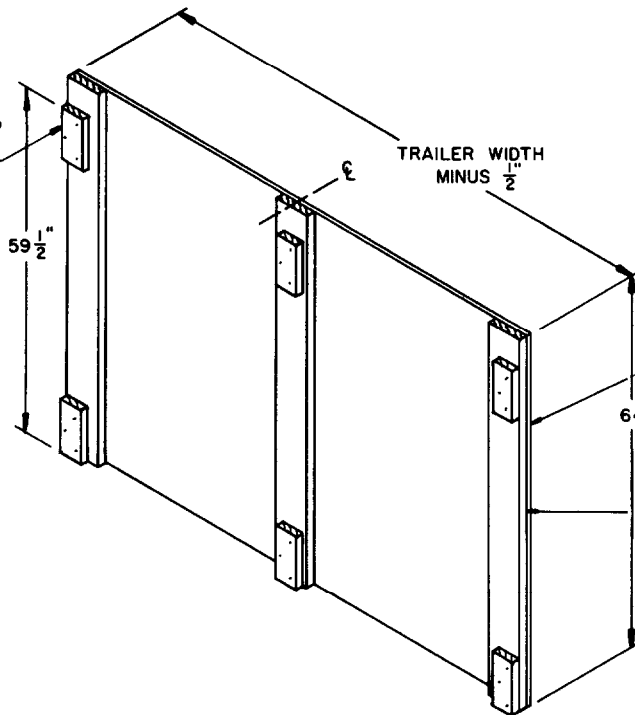
THE HEIGHT LOCATION OF A CLEAT MAY REQUIRE ADJUSTMENT TO CLEAR A MECHANICAL CROSS MEMBER. AT LEAST ONE CLEAT MUST BE LOCATED SO THAT ITS TOP EDGE IS WITHIN 1" OF THE BOTTOM OF A CROSS MEMBER TO PROVIDE FOR GATE HOLD DOWN.



REAR GATE B

THIS GATE IS DESIGNED FOR USE AT THE FORWARD AND/OR REAR OF A 2-LAYER OR 1-LAYER LOAD IN A TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES AS DEPICTED ON PAGES 10, 11 AND 12.

STRUT LEDGER, 2" X 4" X 10" (6 REQD). NAIL TO VERTICAL PIECES W/3-10d NAILS.



LOAD BEARING PIECE, 1/2" THICK PLYWOOD, 64" LONG BY ONE-HALF TRAILER WIDTH MINUS 1/4" (2 REQD). BUTT THE EDGES OF THE PIECES TOGETHER ON THE CENTER VERTICAL PIECE AND NAIL TO THE VERTICAL W/1-6d NAIL EVERY 8", NAIL TO OUTER VERTICAL PIECES IN A LIKE MANNER.

VERTICAL PIECE, 2" X 6" X 64" (3 REQD).

REAR GATE C

THIS GATE IS DESIGNED FOR USE AT THE REAR END OF A 2-LAYER OR 1-LAYER BUNDLED LOAD IN A CONVENTIONAL TRAILER AS DEPICTED ON PAGES 4 AND 5. WHEN USING SOLID FILL OR FOR LCL LOAD OMIT STRUT LEDGERS.

FORWARD LATERAL PIECE, 2" X 6" BY CUT TO FIT (5 REQD FOR A 2-LAYER BUNDLED LOAD AND 3 REQD FOR A 1-LAYER BUNDLED LOAD). ALIGN WITH LOAD BEARING PIECES AND NAIL TO VERTICAL PIECES W/3-10d NAILS AT EACH JOINT. IF THE TRAILER HAS ROUNDED CORNERS WITH A RADIUS OF BETWEEN 7" AND 12", ADDITIONAL LATERAL PIECES WILL BE LAMINATED W/10d NAILS.

VERTICAL PIECE, 4" X 4" X 64" (4 REQD).

LOAD BEARING PIECE, 2" X 6" BY TRAILER WIDTH MINUS 1/2" (5 REQD FOR A 2-LAYER BUNDLED LOAD AND 3 REQD FOR A 1-LAYER BUNDLED LOAD), NAIL TO VERTICAL PIECES W/3-10d NAILS AT EACH JOINT.

LATERAL STRUT BRACING, 2" X 4" BY CUT TO SUIT (2 REQD). POSITION AS SHOWN AND NAIL TO STRUTS W/3-12d NAILS AT EACH JOINT. SEE "NOTE ⊕" BELOW.

VERTICAL STRUT BRACING PIECE, 2" X 4" BY CUT TO SUIT (3 REQD). POSITION AS SHOWN AND NAIL TO THE STRUTS W/3-12d NAILS AT EACH JOINT.

NOTE ⊕ :

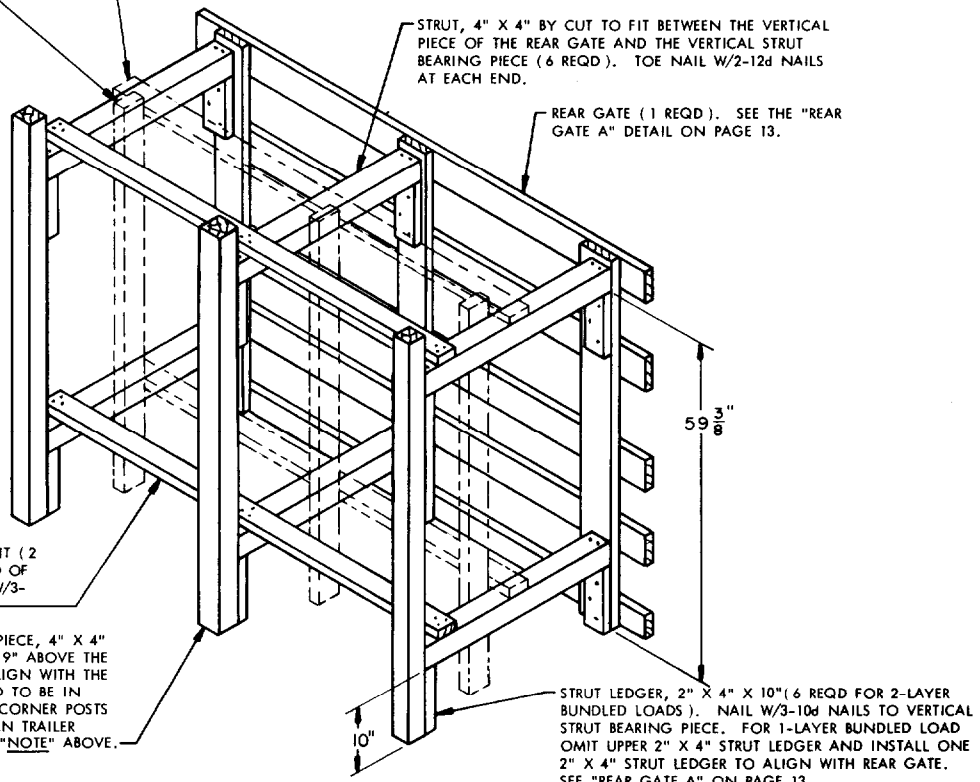
VERTICAL AND LATERAL STRUT BRACING PIECES SHOWN IN PHANTOM ARE ONLY REQUIRED FOR STRUTS WHICH ARE 7'-0" OR MORE IN LENGTH. A SET OF STRUT BRACING PIECES IS REQUIRED FOR EVERY 7'-0" OF STRUT LENGTH.

NOTE:

THE "ALTERNATE REAR BLOCKING" DETAIL AS SHOWN IS DESIGNED FOR THE USE AT THE REAR OF A 2-LAYER BUNDLED LOAD, AS DEPICTED ON PAGE 4 WHEN THE DISTANCE BETWEEN THE REAR OF THE LOAD AND THE REARDOORS OF THE TRAILER WHEN THEY ARE CLOSED, MEASURES MORE THAN 12". THIS PROCEDURE IS ALSO APPLICABLE TO 1-LAYER BUNDLE LOADS.

SPREADER PIECE, 2" X 4" BY CUT TO SUIT (2 REQD). POSITION NEAR THE REAR END OF THE STRUTS AND NAIL TO THE STRUTS W/3-12d NAILS AT EACH JOINT.

VERTICAL STRUT BEARING PIECE, 4" X 4" BY A LENGTH TO EXTEND 9" ABOVE THE TOP STRUT (3 REQD). ALIGN WITH THE REAR GATE VERTICALS AND TO BE IN CONTACT WITH THE REAR CORNER POSTS AND/OR REAR DOORS WHEN TRAILER DOORS ARE CLOSED. SEE "NOTE" ABOVE.



FORWARD BLOCKING METHOD A

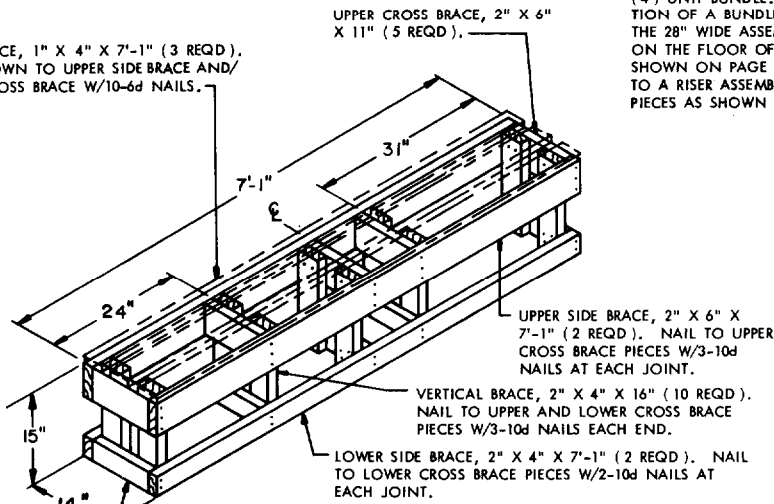
THIS "FORWARD BLOCKING" ASSEMBLY AS SHOWN IS DESIGNED FOR USE AT THE FORWARD END OF A 2-LAYER OR 1-LAYER BUNDLED LOAD WHICH IS TO BE SHIPPED IN A TRAILER HAVING ROUNDED CORNERS OF A RADIUS NOT MORE THAN 12".

**ALTERNATE REAR BLOCKING
DETAILS**

NOTE ● :

THIS ASSEMBLY MAY BE USED AS A 14" WIDE FILLER FOR AN OMITTED ONE UNIT CONTAINER TO COMPLETE A FOUR (4) UNIT BUNDLE OR AS A FILLER 28" WIDE FOR TWO (2) OMITTED CONTAINERS IN A FOUR (4) UNIT BUNDLE. FILLERS MUST BE POSITIONED IN THE TOP PORTION OF A BUNDLE AND IN THE TOP LAYER OF A LOAD; HOWEVER THE 28" WIDE ASSEMBLY MAY BE USED AS A RISER AND POSITIONED ON THE FLOOR OF THE TRAILER. SEE "THE RISER/FILLER METHOD SHOWN ON PAGE 7. **NOTICE:** TO CONVERT A 28" FILLER ASSEMBLY TO A RISER ASSEMBLY, POSITION THREE (3) 1" X 4" X 7'-1" DECKING PIECES AS SHOWN

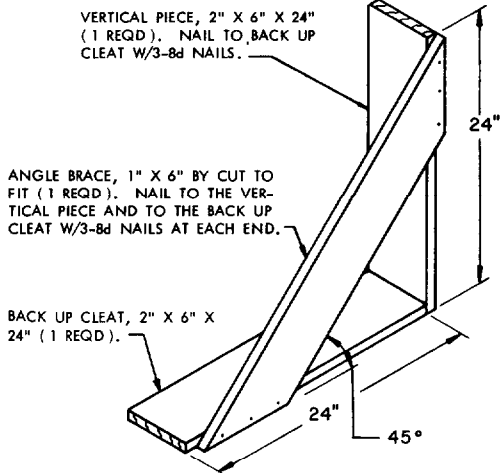
DECKING PIECE, 1" X 4" X 7'-1" (3 REQD). NAIL AS SHOWN TO UPPER SIDE BRACE AND/OR UPPER CROSS BRACE W/10-6d NAILS.



FILLER ASSEMBLY

SEE "NOTE ●" AT RIGHT.

LOWER CROSS BRACE, 2" X 4" X 11" (5 REQD).



LTL BRACE DETAIL

SEE "NOTE ●" AT RIGHT.

NOTE ● :

EACH BRACE AS APPLIED FOR LONGITUDINAL BRACING WILL SUPPORT 2,000 LBS OF LADING; HOWEVER, NOT LESS THAN TWO (2) BRACES WILL BE USED FOR LONGITUDINAL BRACING ACROSS THE WIDTH OF THE TRAILER. IF DESIRED LTL BRACES MAY ALSO BE USED AT THE FORWARD END OF THE LADING.