

REV NO. 2 APPROVED BY
 BUREAU OF EXPLOSIVES
D. J. ...
 SUPERVISOR, MILITARY & INTERMODAL SERVICES
 DATE 3/19/79

REVISION NO. 3
 SIGNED E. P. Ratten
 DATE 4/3/84

DRAGON

LOADING AND BRACING (TL & LTL) IN
 CLOSED OR OPEN TOP VAN TRAILERS
 OF GUIDED MISSILE AND LAUNCHER,
 SURFACE ATTACK, M222 OR PRACTICE,
 M223, PACKED ONE PER SHIPPING AND
 STORAGE CONTAINER, UNPALLETIZED
 AND PALLETIZED, AND PACKED 15 PER
 MULTIPACK PALLET UNIT

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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.

THIS DRAWING, INCLUDING REVISION 3, SUPERSEDES DRAWING 19-48-5928-GM11DR1, DATED SEPTEMBER 1973, AND REVISIONS 1 AND 2 THERETO.

DO NOT SCALE

REVISIONS				DRAFTSMAN gjm	PROJ ENGR DAK	RHS	CBA	EAS
2	MAR 79	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
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CLASS	DIVISION	DRAWING	FILE					
19	48	5928	GM 11 DR1					

GENERAL NOTES

(GENERAL NOTES CONTINUED)

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 WITHIN THIS DOCUMENT ARE APPLICABLE TO THE DRAGON GUIDED MISSILE AND LAUNCHER, SURFACE ATTACK, M222, OR PRACTICE, M223, PACKED EITHER ONE (1) EACH PER SHIPPING AND STORAGE CONTAINER, TWENTY (20) EACH PER PALLET UNIT OR FIFTEEN (15) EACH PER MULTIPACK PALLET UNIT. SUBSEQUENT REFERENCE TO CONTAINER HEREIN MEANS THE CONTAINER WITH MISSILE COMPONENTS, SUBSEQUENT REFERENCE TO PALLET UNIT HEREIN MEANS THE PALLET UNIT WITH TWENTY (20) MISSILE COMPONENTS AND SUBSEQUENT REFERENCE TO MULTIPACK UNIT HEREIN MEANS MULTIPACK BOX PALLET WITH FIFTEEN (15) MISSILE COMPONENTS.

C. FOR DETAIL OF THE CONTAINER, SEE PACKAGING DATA SHEET NUMBER 10695149 OR 10695150 (US ARMY MISSILE COMMAND) AND THE "CONTAINER" DETAIL ON PAGE 3.

CONTAINER DIMENSIONS --- 47-1/2" LONG X 16" WIDE X 16" HIGH.
GROSS WEIGHT ----- 67 POUNDS (APPROX).
CUBE ----- 7.0 CUBIC FEET.

D. FOR DETAIL OF THE PALLET UNIT, SEE US ARMY DARCOM DRAWING NO. 19-48-5218-GM20DR1 AND THE "PALLET UNIT" DETAIL ON PAGE 3.

PALLET UNIT DIMENSIONS -- 47-1/2" LONG X 6'-8" WIDE X 69" HIGH.
GROSS WEIGHT ----- 1,451 POUNDS (APPROX).
CUBE ----- 151.7 CUBIC FEET.

E. FOR DETAIL OF THE MULTIPACK UNIT, SEE US ARMY MISSILE COMMAND DRAWING NO. 13013762 AND THE "MULTIPACK UNIT" DETAIL ON PAGE 3.

MULTIPACK UNIT DIMENSIONS - 37-1/4" LONG X 49" WIDE X 66" HIGH.
GROSS WEIGHT ----- 658 POUNDS (APPROX).
CUBE ----- 69.7 CUBIC FEET.

F. THIS ITEM M222 (DATA SHEET 10695150) IS A DOT CLASS "A" EXPLOSIVE, ITEM M223 (PRACTICE) (DATA SHEET 10695149) IS A DOT CLASS "B" EXPLOSIVE. THESE PROCEDURES CAN ALSO BE UTILIZED FOR THE SHIPMENT OF THE CONTAINERS WHEN THEY ARE LOADED WITH AN ITEM OTHER THAN THE SPECIFIED GUIDED MISSILE AND LAUNCHER, OR WHEN THEY ARE EMPTY.

G. THE LOADS AS SHOWN HEREIN ARE BASED ON 40'-0" LONG CLOSED OR OPEN TOP VAN TRAILERS WHICH ARE 89" TO 93" WIDE (INSIDE DIMENSION) AND 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.

H. THE OUTLOADING PROCEDURES SPECIFIED IN THE PARTIAL ELEVATION VIEWS SHOWN ON PAGES 5, 15, AND 27 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 HEREIN. CAUTION: TRAILERS EQUIPPED WITH FACILITIES WHICH DO NOT MEET THE LOCATION REQUIREMENTS MUST NOT BE USED. THE HEIGHT DIMENSIONS SPECIFIED WITHIN THIS DRAWING FOR INSTALLATION OF CROSS MEMBERS ARE IDENTICAL WITH THOSE RECOMMENDED BY THE BUREAU OF EXPLOSIVES PAMPHLET 6C, AND APPENDICES THERETO.

J. VOIDS LENGTHWISE WITHIN THE LOAD MUST BE HELD TO A MINIMUM. FOR CONVENTIONAL TRAILERS, REAR BLOCKING MUST CONTACT THE REAR DOORS OF THE TRAILER WHEN THEY ARE CLOSED. FOR THE TRAILERS EQUIPPED WITH MECHANICAL BRACING DEVICES, 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). CROSS MEMBERS IN EMPTY TRAILERS AND THOSE NOT USED IN LOADED TRAILERS MUST BE SECURED FOR SHIPMENT. COMPONENTS ASSIGNED TO EACH TRAILER MUST REMAIN THERWITH EVEN THOUGH UNUSED DURING SOME SHIPMENTS.

K. 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.

(CONTINUED AT RIGHT)

MATERIAL SPECIFICATIONS

LUMBER -----: TM 743-200-1 (DUNNAGE LUMBER) AND FED SPEC MM-L-751.

NAILS -----: FED SPEC FF-N-105. COMMON.

STRAPPING, STEEL: FED SPEC QQ-S-781, CLASS 1, TYPE I OR IV, HEAVY DUTY, FINISH A, B (GRADE 2), OR C.

SEAL, STRAP -----: FED SPEC QQ-S-781, TYPE I, STYLE I, II, OR IV, CLASS H, FINISH A, B (GRADE 2), OR C.

WIRE -----: FED SPEC QQ-W-461.

L. 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. THE TOTAL WEIGHT OF THE LADING, OF THE DUNNAGE, OF THE TRACTOR AND OF THE SEMI-TRAILER CARRYING THE LADING MUST NOT EXCEED THE MAXIMUM GROSS WEIGHT ALLOWED FOR THE STATE OR STATES THRU WHICH THE LOAD IS TO BE TRANSPORTED BY MOTOR CARRIER. LIKEWISE, THE GROSS WEIGHT ON A SINGLE OR TANDEM AXLE MUST NOT EXCEED THE MAXIMUM ALLOWABLE WEIGHT. IF THERE IS ANY DOUBT AS TO WHETHER ANY AXLES ARE OVER-LOADED, OR ANY DOUBT AS TO WHETHER THE TOTAL GROSS WEIGHT EXCEEDS THE MAXIMUM ALLOWED, PROPER WEIGHT DISTRIBUTION SHOULD BE VERIFIED BY ACTUALLY WEIGHING THE LOADED VEHICLE.

M. 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.

N. PALLETIZED UNITS WHICH DO NOT CONTAIN A FULL QUANTITY OF CONTAINERS CAN BE TRANSPORTED. A PARTIAL UNIT MAY BE POSITIONED ON TOP OF THE LOAD, TRAILER HEIGHT PERMITTING, AND SECURED TO THE UNIT DIRECTLY BELOW WITH STEEL STRAPPING. REFER TO THE "SHIPMENT OF PARTIAL UNITS" ON PAGES 21 THRU 23 FOR GUIDANCE. FOR THE TRANSPORTATION OF A QUANTITY OF CONTAINERS INSUFFICIENT TO FORM A PARTIAL UNIT (A PARTIAL UNIT WILL CONSIST OF FULL LAYERS) REFER TO THE "SHIPMENT OF LEFTOVER CONTAINERS" PROCEDURES ON PAGE 24 FOR GUIDANCE.

O. 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 HEREIN.

P. UNLESS OTHERWISE SPECIFIED, WHEN STEEL STRAPPING IS SEALED AT AN END-OVER-END LAP JOINT, A MINIMUM OF TWO (2) SEALS, BUTTED TOGETHER, WITH TWO (2) PAIR OF CRIMPS PER SEAL MUST BE USED TO SEAL THE JOINT.

Q. DUNNAGE LUMBER SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE, 2" X 4" MATERIAL IS ACTUALLY 1-1/2" THICK BY 3-1/2" WIDE AND 2" X 6" MATERIAL IS ACTUALLY 1-1/2" THICK BY 5-1/2" WIDE.

R. A STAGGERED NAILING PATTERN WILL BE USED WHENEVER 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.

S. PORTIONS OF THE TRAILER BODIES DEPICTED WITHIN THIS PROCEDURAL DRAWING, SUCH AS ONE OF THE VAN TRAILER SIDE WALLS, HAVE NOT BEEN SHOWN IN THE LOAD VIEWS FOR CLARITY PURPOSES.

T. WHEN REFERRING TO THE PALLET UNIT LENGTH OR UNIT WIDTH, THE 47-1/2" DIMENSION OF THE PALLET UNIT CONSTITUTES THE LENGTH AND THE 6'-8" DIMENSION CONSTITUTES THE WIDTH. SEE THE PALLETIZED UNIT ON PAGE 3. WHEN REFERRING TO THE MULTIPACK UNIT LENGTH OR WIDTH, THE 37-1/4" DIMENSION OF THE MULTIPACK UNIT CONSTITUTES THE LENGTH AND THE 49" DIMENSION CONSTITUTES THE WIDTH. SEE THE MULTIPACK UNIT ON PAGE 3.

U. FOR ADDITIONAL GUIDANCE, ATTENTION IS DIRECTED TO THE "SPECIAL NOTES" SECTIONS WHICH ARE IMMEDIATELY ADJACENT TO DEPICTED OUTLOADING METHODS.

V. IN SOME INSTANCES CONTAINERS WILL ALREADY BE PALLETIZED WHEN OFFERED FOR LOADING. THESE PALLET UNITS SHOULD BE INSPECTED AND, AS REQUIRED, LOOSE UNITIZING STEEL STRAPPING MUST BE REPLACED.

W. CONVERSION TO METRIC EQUIVALENTS: DIMENSIONS WITHIN THIS DOCUMENT ARE EXPRESSED IN INCHES, AND WEIGHTS ARE EXPRESSED IN POUNDS. WHEN NECESSARY, THE METRIC EQUIVALENTS MAY BE COMPUTED ON THE BASIS OF ONE INCH EQUALS 25.4MM, AND ONE POUND EQUALS 0.454KG.

X. POWER DRIVEN STAPLES MAY BE USED AS ALTERNATIVE FASTENERS FOR NAILS WHEN CONSTRUCTING DUNNAGE ASSEMBLIES WHICH ARE TO BE USED IN THE DELINEATED VAN TRAILER LOADS SHOWN THROUGHOUT THIS DRAWING. THE STAPLES TO BE USED MUST BE EQUAL IN LENGTH TO THE SPECIFIED NAIL SIZE AND MUST BE SUBSTITUTED ON A ONE STAPLE FOR ONE NAIL BASIS. STAPLES WHICH ARE 2" OR LESS IN LENGTH SHOULD BE IN ACCORDANCE WITH THE FEDERAL SPECIFICATION FF-N-105 AS NEARLY AS PRACTICABLE. STAPLES WHICH ARE LONGER THAN 2" WILL BE A COMMERCIAL GRADE, OF A QUALITY EQUIVALENT TO THOSE MANUFACTURED BY SENCO PRODUCTS INCORPORATED. NOTE: STAPLES WILL NOT BE SUBSTITUTED FOR NAILS IN ANY LOAD RESTRAINING FLOOR DUNNAGE APPLICATION.

Y. IF AVAILABLE, THE USE OF A 42'-0" OR LONGER TRAILER IS RECOMMENDED. WHEN USING A LONGER TRAILER, ADDITIONAL CONTAINERS, PALLET UNITS, OR MULTIPACK UNITS CAN BE SHIPPED; AND GENERALLY, LESS REAR DUNNAGE WILL BE REQUIRED THAN THAT REQUIRED IN A 40'-0" LONG TRAILER. ADDITIONALLY, THE USE OF A 102-INCH WIDE TRAILER IS RECOMMENDED, IF AVAILABLE, FOR SHIPPING THE UNPALLETIZED CONTAINERS OR PALLET UNITS. TRAILERS 102-INCHES WIDE CAN BE USED FOR SHIPPING MULTIPACK UNITS. HOWEVER, NARROWER TRAILERS ARE PREFERRED SINCE LESS LATERAL BRACING IS REQUIRED THAN WHEN USING 102-INCH WIDE TRAILERS. ADDITIONAL GUIDANCE IS CONTAINED WITHIN THE "SPECIAL NOTES" AND "ALTERNATIVE SECTION VIEWS" PORTIONS DELINEATED THROUGHOUT THIS PROCEDURAL DRAWING.

REVISIONS

REVISION NO. 1, DATED OCTOBER 1973, CONSISTS OF:

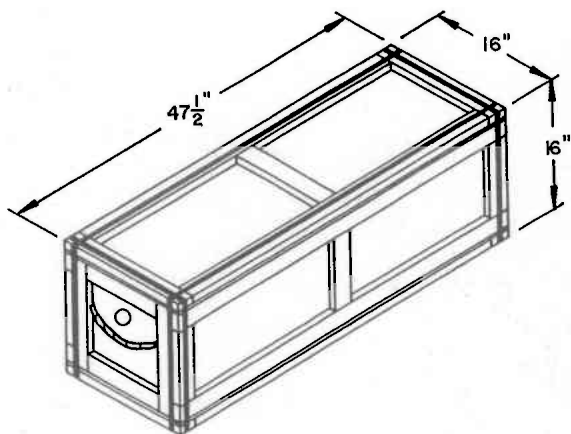
CHANGING CONTAINER CONFIGURATION AND WEIGHT.

REVISION NO. 2, DATED MARCH 1979, CONSISTS OF:

1. ADDING PROCEDURES FOR PARTIAL PALLET UNITS AND LEFTOVER CONTAINERS.
2. ADDING PROCEDURES FOR THE FIFTEEN (15) MISSILE MULTIPACK UNIT.
3. CHANGING PROCEDURES TO CONFORM TO CURRENT STANDARDS.

REVISION NO. 3, DATED DECEMBER 1983, CONSISTS OF:

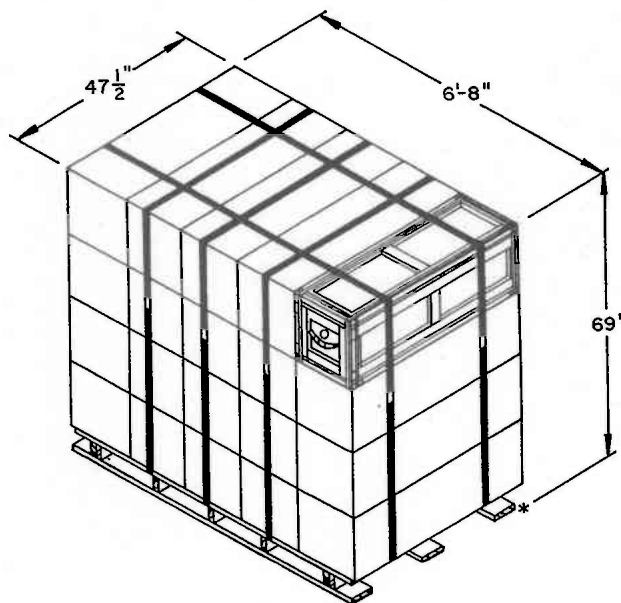
1. UPDATING PALLET UNIT CONFIGURATION AND WEIGHT.
2. CHANGING PROCEDURES TO CONFORM TO 1.
3. ADDING PROCEDURES FOR 102-INCH WIDE TRAILERS.



CONTAINER

CONTAINER DATA

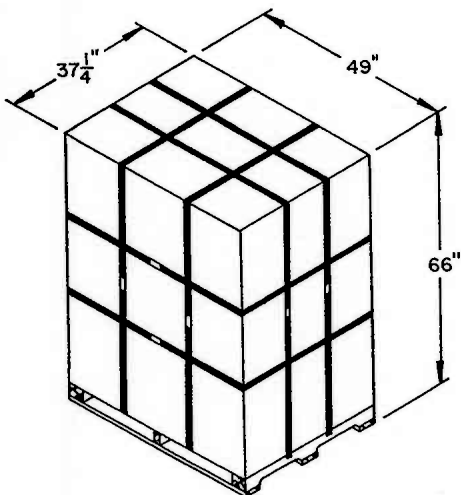
GROSS WEIGHT ----- 67 POUNDS (APPROX)
 CUBE ----- 7.0 CUBIC FEET



*** PALLET UNIT**

PALLET UNIT DATA

NUMBER OF CONTAINERS ----- TWENTY (20)
 GROSS WEIGHT ----- 1,451 POUNDS (APPROX)
 CUBE ----- 151.7 CUBIC FEET



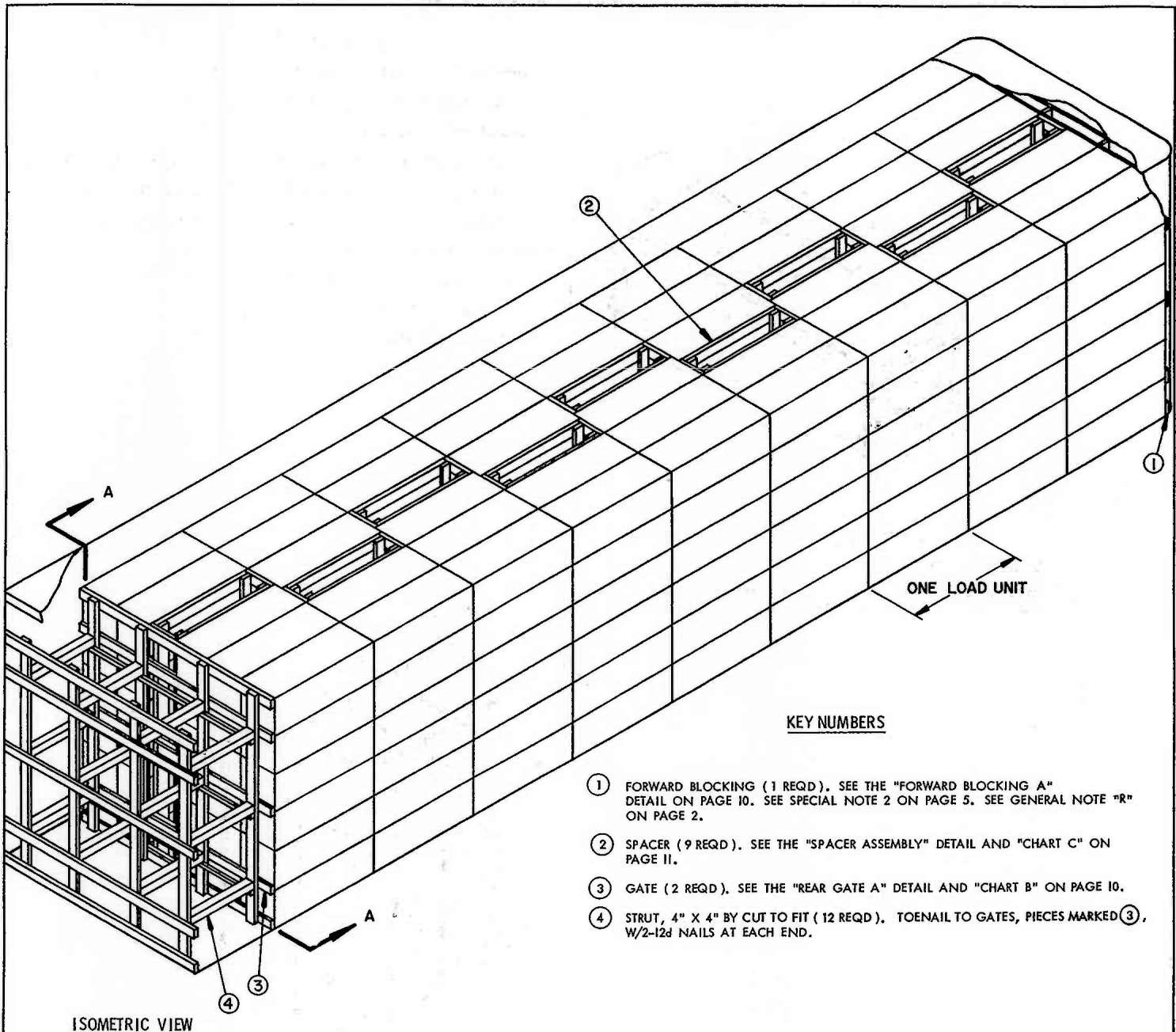
MULTIPACK UNIT

MULTIPACK UNIT DATA

NUMBER OF MISSILES ----- FIFTEEN (15)
 UNIT WEIGHT ----- 698 POUNDS (APPROX)
 CUBE ----- 69.7 CUBIC FEET

* THE PALLET UNIT DEPICTED ABOVE IS THAT WHICH IS DELINEATED WITHIN REVISION 2 TO US ARMY DARCOM DRAWING 19-48-5218-GM20DR1. ALTHOUGH THE BLOCKING AND BRACING PROCEDURES CONTAINED WITHIN THIS DRAWING ARE DESIGNED FOR USE WITH THE ABOVE DEPICTED PALLET UNIT, THEY CAN ALSO BE APPLIED TO PALLET UNITS WHICH WERE BUILT IN ACCORDANCE TO REVISION 1 TO DRAWING 19-48-5218-GM20DR1.

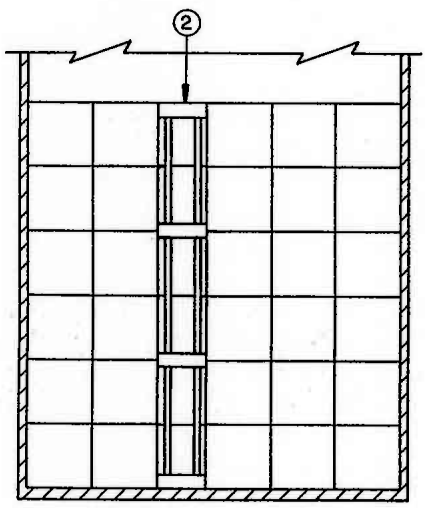
CONTAINER, PALLET UNIT, AND MULTIPACK UNIT DETAILS



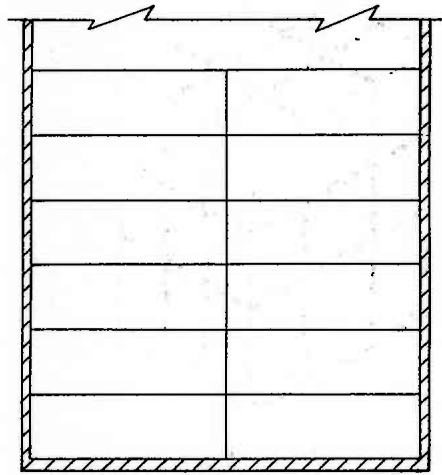
KEY NUMBERS

- ① FORWARD BLOCKING (1 REQD). SEE THE "FORWARD BLOCKING A" DETAIL ON PAGE 10. SEE SPECIAL NOTE 2 ON PAGE 5. SEE GENERAL NOTE "R" ON PAGE 2.
- ② SPACER (9 REQD). SEE THE "SPACER ASSEMBLY" DETAIL AND "CHART C" ON PAGE 11.
- ③ GATE (2 REQD). SEE THE "REAR GATE A" DETAIL AND "CHART B" ON PAGE 10.
- ④ STRUT, 4" X 4" BY CUT TO FIT (12 REQD). TOENAIL TO GATES, PIECES MARKED ③, W/2-12d NAILS AT EACH END.

ISOMETRIC VIEW



SECTION A-A



ALTERNATIVE SECTION VIEW
(SEE SPECIAL NOTE 5 ON PAGE 5.)

SPECIAL NOTES:

1. A 270-UNIT LOAD IS SHOWN IN A 7'-6" WIDE BY 8'-11" HIGH (INSIDE DIMENSIONS) BY 40'-0" LONG HIGH-VOLUME VAN TRAILER. A WIDER OR NARROWER TRAILER MAY BE USED.
2. A TRAILER WITH ROUNDED CORNERS AT THE FORWARD END IS SHOWN IN THE LOAD VIEW. IF THE TRAILER BEING USED HAS SQUARE CORNERS, OMIT THE FORWARD BLOCKING PIECE MARKED ①, 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 LOAD UNIT OF THIRTY (30) CONTAINERS, OR BY OMITTING ENTIRE LAYERS OF CONTAINERS. INDIVIDUAL CONTAINERS MAY BE OMITTED FROM THE TOP LAYER BY SUBSTITUTING A FILLER ASSEMBLY AS DETAILED ON PAGE 11 AND SHOWN IN THE LTL VIEW ON PAGE 6. THE LOAD CONFIGURATION MAY ALSO BE ADJUSTED BY USE OF ONE OR MORE "RISER ASSEMBLIES" AS DEPICTED ON PAGE 9.
4. THE DEPICTED LOAD CAN ALSO BE SHIPPED IN A HIGH-VOLUME TRAILER WHICH 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. THE CROSS MEMBERS WILL BE USED AT THE REAR OF THE LOAD AT SPECIFIED HEIGHTS. PIECES MARKED ③ AND ④ WILL BE OMITTED AND THE PROCEDURES USED AS SPECIFIED IN THE "PARTIAL ISOMETRIC VIEW" SHOWN AT THE RIGHT. THE TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES MUST HAVE A SYSTEM LENGTH OF AT LEAST 36'-8" AS MEASURED FROM THE FRONT WALL OF THE TRAILER. REDUCED QUANTITIES OF CONTAINERS CAN ALSO BE SHIPPED BY USE OF ONE OR MORE "RISER ASSEMBLIES" AS DEPICTED IN THE "PARTIAL ELEVATION VIEW" BELOW.
5. IF AVAILABLE, THE USE OF A 102-INCH WIDE TRAILER IS RECOMMENDED. WHEN USING A WIDER TRAILER WHICH HAS AN INSIDE WIDTH OF AT LEAST 96", IT WILL BE POSSIBLE TO SHIP THE CONTAINERS CROSSWISE IN THE TRAILER RATHER THAN LENGTHWISE AS SHOWN IN THE "ISOMETRIC VIEW" ON PAGE 4. FOR ADDITIONAL GUIDANCE, SEE THE "ALTERNATIVE SECTION VIEW" ON PAGE 4. BY UTILIZING THESE WIDE TRAILERS, A LOAD OF 348 UNPALLETIZED CONTAINERS IN A 40-FOOT TRAILER, 360 IN A 42-FOOT TRAILER, 384 IN A 45-FOOT TRAILER, OR 420 IN A 48- FOOT TRAILER CAN BE SHIPPED.

SEAL FOR 1-1/4" STRAPPING
(10 REQD, 2 PER STRAP).
DOUBLE CRIMP EACH
SEAL.

INDICATES
BELT RAIL.

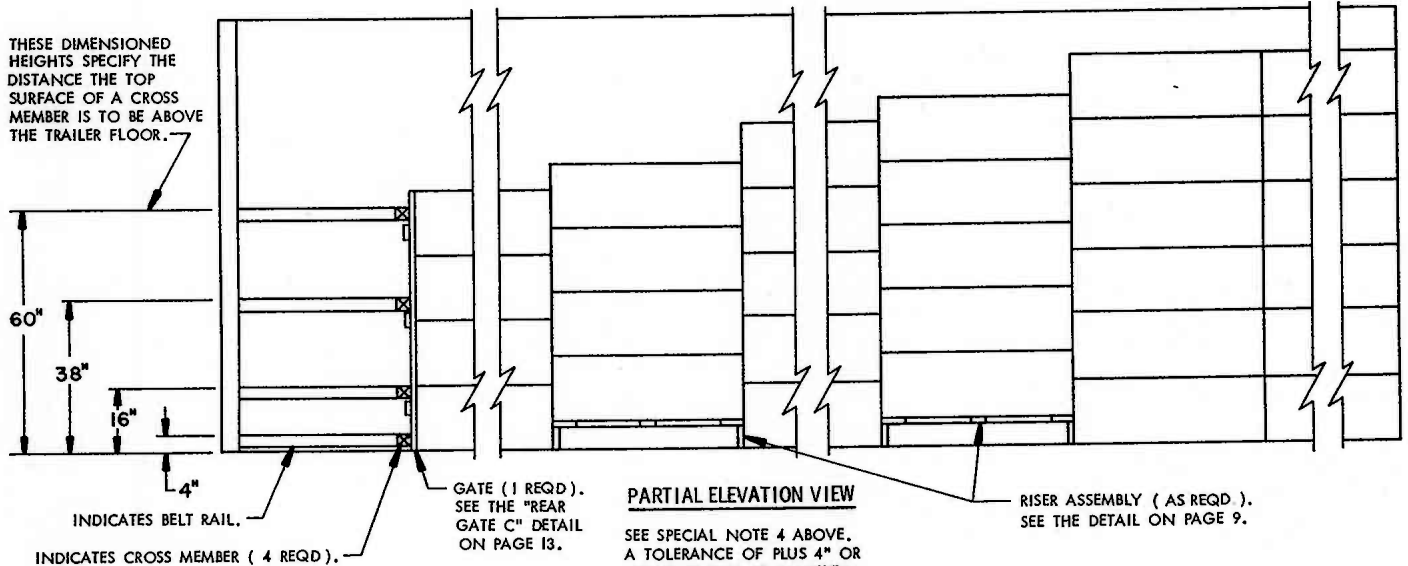
INDICATES
CROSS MEMBER.

BUNDLING STRAP, 1-1/4" X
.035" X 18'-0" LONG STEEL
STRAPPING (5 REQD, 1 PER STACK).
PRE-POSITION AND INSTALL TO
ENCIRCLE THE THREE (3) TOP CON-
TAINERS IN A STACK.

GATE (1 REQD).
SEE THE "REAR
GATE C" DETAIL
ON PAGE 13.

PARTIAL ISOMETRIC VIEW

FOR CROSS MEMBER HEIGHT LOCATIONS, SEE THE "PARTIAL ELEVATION VIEW" BELOW.



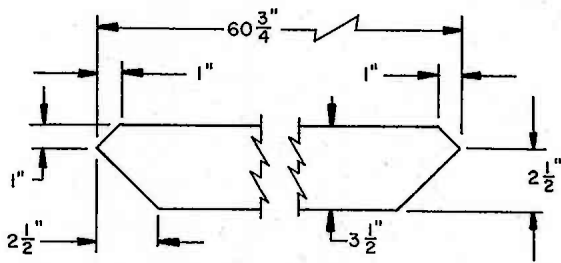
PARTIAL ELEVATION VIEW

SEE SPECIAL NOTE 4 ABOVE. A TOLERANCE OF PLUS 4" OR MINUS 0" WILL BE ALLOWED FOR THE VERTICAL POSITIONING OF THE CROSS MEMBERS.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 2"	40	13
2" X 4"	783	522
2" X 6"	55	55
4" X 4"	35	48
NAILS	NO. REQD	POUNDS
10d (3")	984	15
12d (3-1/4")	48	1

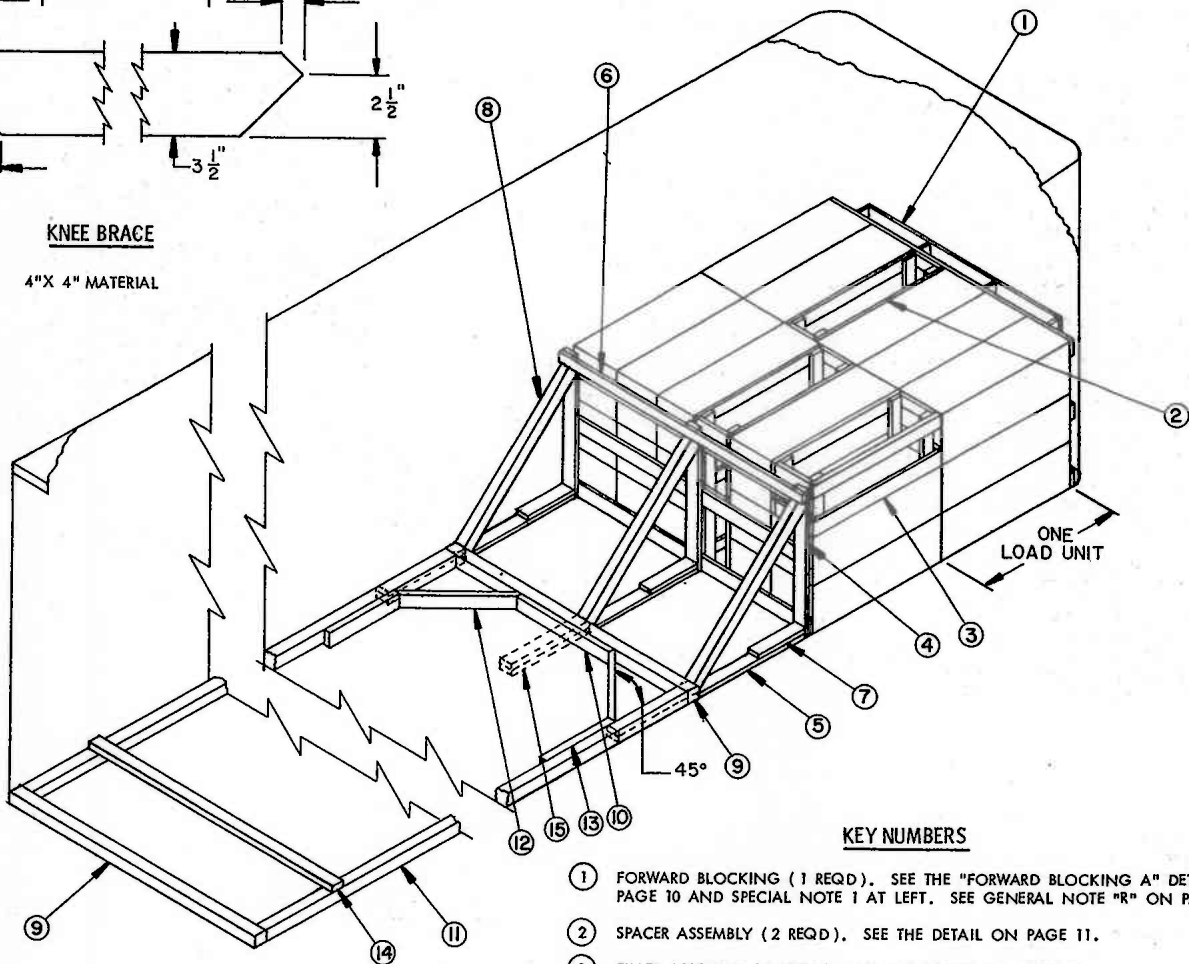
LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CONTAINER	270	18,090 LBS
DUNNAGE		1,292 LBS
TOTAL WEIGHT		19,382 LBS



KNEE BRACE

4" X 4" MATERIAL



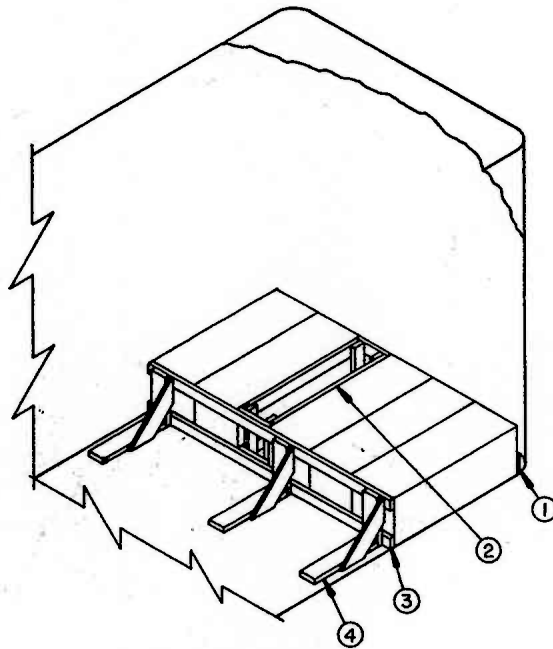
ISOMETRIC VIEW

KEY NUMBERS

- 1 FORWARD BLOCKING (1 REQD). SEE THE "FORWARD BLOCKING A" DETAIL ON PAGE 10 AND SPECIAL NOTE 1 AT LEFT. SEE GENERAL NOTE "R" ON PAGE 2.
- 2 SPACER ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 11.
- 3 FILLER ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 11.
- 4 GATE (1 REQD). SEE THE "REAR GATE B" DETAIL ON PAGE 12.
- 5 FLOOR CLEAT, 2" X 4" X 43" (3 REQD).
- 6 HOLD DOWN, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (1 REQD). NAIL TO THE VERTICALS OF GATE MARKED 4 W/3-10d NAILS AT EACH JOINT.
- 7 POCKET CLEAT, 2" X 4" X 18" (3 REQD). NAIL TO PIECE MARKED 5 W/5-10d NAILS. TOENAIL TO PIECE MARKED 4 W/2-12d NAILS.
- 8 KNEE BRACE, 4" X 4" X 60-3/4" (3 REQD). SEE THE "KNEE BRACE" DETAIL ABOVE FOR THE BEVEL CUTS REQUIRED. TOENAIL TO PIECES MARKED 4 AND 5 W/2-16d NAILS AT EACH END.
- 9 HEADER, 4" X 4" BY TRAILER WIDTH MINUS 1/2" (2 REQD). TOENAIL FORWARD HEADER TO KNEE BRACES MARKED 8 W/2-12d NAILS AT EACH JOINT.
- 10 CENTER CLEAT, 2" X 4" X 36" (1 REQD). NAIL TO THE FORWARD PIECE MARKED 9 W/7-10d NAILS.
- 11 SIDE STRUT, 4" X 4" BY CUT TO FIT BETWEEN FORWARD AND REAR PIECES MARKED 9 (2 REQD). TOENAIL TO HEADERS MARKED 9 W/2-16d NAILS AT EACH END.
- 12 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 9 AND 11 W/2-12d NAILS AT EACH END.
- 13 SIDE CLEAT, 2" X 4" X 24" (2 REQD). NAIL TO PIECE MARKED 11 W/8-10d NAILS.
- 14 STRUT BRACING, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (CUT TO FIT) (MINIMUM OF 1 REQD). INSTALL ONE (1) NEAR THE REAR END OF PIECES MARKED 11 AS SHOWN. ONE (1) ADDITIONAL PIECE IS REQUIRED FOR EVERY 7'-0" OF STRUT LENGTH. NAIL TO PIECE MARKED 11 W/3-10d NAILS AT EACH END.
- 15 BACK-UP CLEAT, 2" X 4" X 30" (DOUBLED) (3 REQD). ALIGN WITH A KNEE BRACE, PIECE MARKED 8, AND 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 3 AT LEFT.

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 BLOCKING" PIECE MARKED 1 WILL NOT BE REQUIRED.
2. THE "K-BRACE" BLOCKING, SHOWN AS PIECES MARKED 9 THRU 14 IS ADEQUATE FOR RETAINING A MAXIMUM THREE CONTAINER HIGH LOAD.
3. PIECES MARKED 15 ARE FOR USE IN A TRAILER WHICH HAS A NAILABLE FLOOR AND SHOULD BE USED, IF POSSIBLE, IN LIEU OF PIECES MARKED 9 THRU 14 WHICH APPLY TO TRAILERS HAVING NON-NAILABLE FLOORS. WHEN USING NAILABLE FLOOR LINE DUNNAGE, NAIL THE FLOOR CLEAT, PIECE MARKED 5 TO THE TRAILER FLOOR W/1-12d NAIL EVERY 6". THREE (3) BACK-UP CLEATS, SHOWN AS PIECE MARKED 15, ARE ADEQUATE FOR RETAINING A MAXIMUM THREE CONTAINER HIGH LOAD.



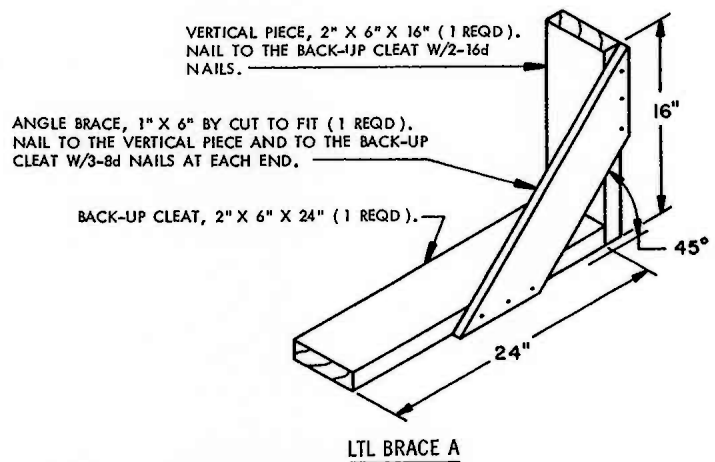
ISOMETRIC VIEW

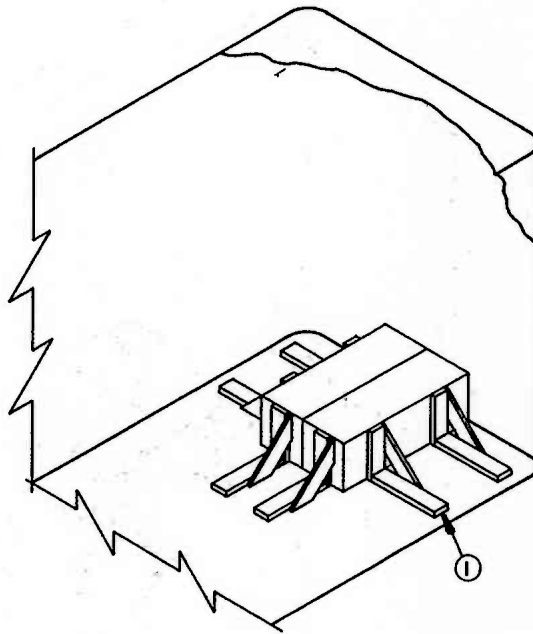
KEY NUMBERS

SPECIAL NOTES:

1. THESE OUTLOADING PROCEDURES DEPICT THE OUTLOADING OF A ONE (1) CONTAINER HIGH LOAD IN A TRAILER WHICH HAS A NAILABLE FLOOR. TRAILERS WITH A NON-NAILABLE FLOOR CANNOT BE USED. CONTAINERS WILL NOT BE MORE THAN ONE (1) HIGH WHEN USING THE LTL BRACE. IF A SQUARE FRONT TRAILER IS USED, THE "FORWARD BLOCKING" PIECE MARKED ① WILL NOT BE REQUIRED.
2. EACH ONE OF THE THREE (3) LTL BRACES AS APPLIED FOR LONGITUDINAL BRACING WILL SUPPORT 2,000 POUNDS OF LADING.

- ① FORWARD BLOCKING (1 REQD). SEE THE "FORWARD BLOCKING B" DETAIL ON PAGE 12 AND SPECIAL NOTE 1 AT LEFT. SEE GENERAL NOTE "R" ON PAGE 2.
- ② SPACER ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 11.
- ③ LOAD BEARING PIECE, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (2 REQD). NAIL TO THE LTL BRACES W/3-10d NAILS AT EACH JOINT.
- ④ LTL BRACE (3 REQD). SEE THE "LTL BRACE A" DETAIL BELOW. NAIL TO THE TRAILER FLOOR W/7-12d NAILS.





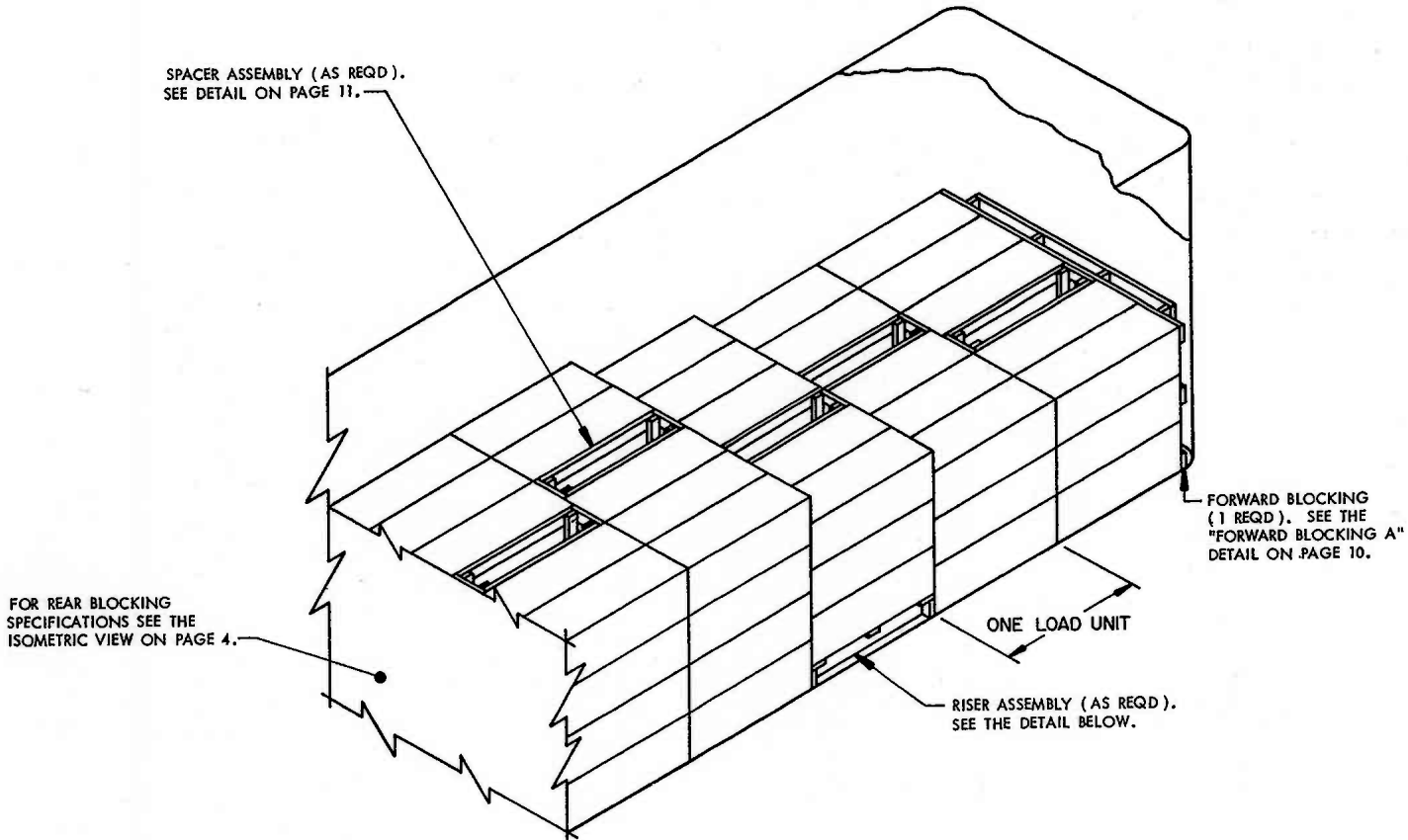
ISOMETRIC VIEW

KEY NUMBER

- ① LTL BRACE (6 REQD). SEE THE "LTL BRACE A" DETAIL ON PAGE 7. SEE GENERAL NOTE "R" ON PAGE 2. NAIL TO THE TRAILER FLOOR W/7-12d NAILS.

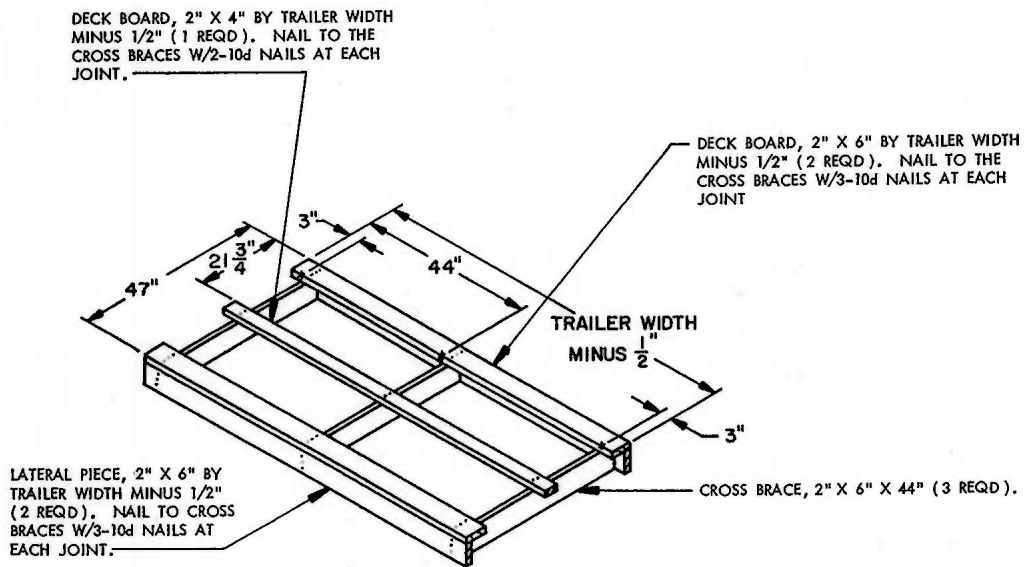
SPECIAL NOTES:

1. THESE OUTLOADING PROCEDURES DEPICT THE USE OF "LTL BRACE" TYPE BLOCKING IN A VAN TRAILER WHICH IS EQUIPPED WITH A AVAILABLE FLOOR.
2. EACH "LTL BRACE" AS SPECIFIED WILL RETAIN 2,000 POUNDS OF LADING LONGITUDINALLY.



ISOMETRIC VIEW

THE ISOMETRIC VIEW ABOVE DEPICTS THE USE OF A "RISER ASSEMBLY" TO ADJUST THE NUMBER OF CONTAINERS TO BE SHIPPED. THE "RISER ASSEMBLY" MAY BE USED TO STEP-UP OR STEP-DOWN A LOAD UNIT. THE LOCATION AND/OR WIDTH OF THE "RISER ASSEMBLY" MAY ALSO BE ADJUSTED AS REQUIRED.



RISER ASSEMBLY

DETAILS

CHART A			
LAYERS OF CONTAINERS	DIM A	DIM B	DIM C
2	32"		
3	48"	27"	
4	64"	35"	
5	6'-8"	51"	19"
6	8'-0"	67"	35"

FRONT HORIZONTAL PIECE, 2" X 6" BY TRAILER WIDTH MINUS 16-1/2" (2 REQD). NAIL TO THE VERTICAL PIECES W/3-10d NAILS AT EACH JOINT.

VERTICAL PIECE, 2" X 4" BY LENGTH TO SUIT (4 REQD). SEE "CHART A" AT LEFT.

INTERMEDIATE FRONT HORIZONTAL PIECE, 2" X 6" BY TRAILER WIDTH MINUS 16-1/2" (AS REQD). NAIL TO THE VERTICAL PIECES W/3-10d NAILS AT EACH JOINT.

INTERMEDIATE LOAD BEARING PIECE, 2" X 6" BY TRAILER WIDTH MINUS 1/2" (AS REQD). NAIL TO THE VERTICAL PIECES W/3-10d NAILS AT EACH JOINT.

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

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

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

STRUT LEDGER, 2" X 2" X 6'-8" (ONE REQD ADJACENT TO EACH INTERMEDIATE LOAD BEARING PIECE USED). ALIGN TOP EDGE OF STRUT LEDGER WITH BOTTOM EDGE OF ADJACENT INTERMEDIATE LOAD BEARING PIECE. NAIL TO THE VERTICAL PIECES W/2-10d NAILS AT EACH JOINT.

VERTICAL PIECE, 2" X 4" BY LENGTH TO SUIT (4 REQD). SEE "CHART B" BELOW.

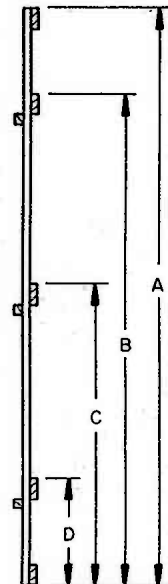
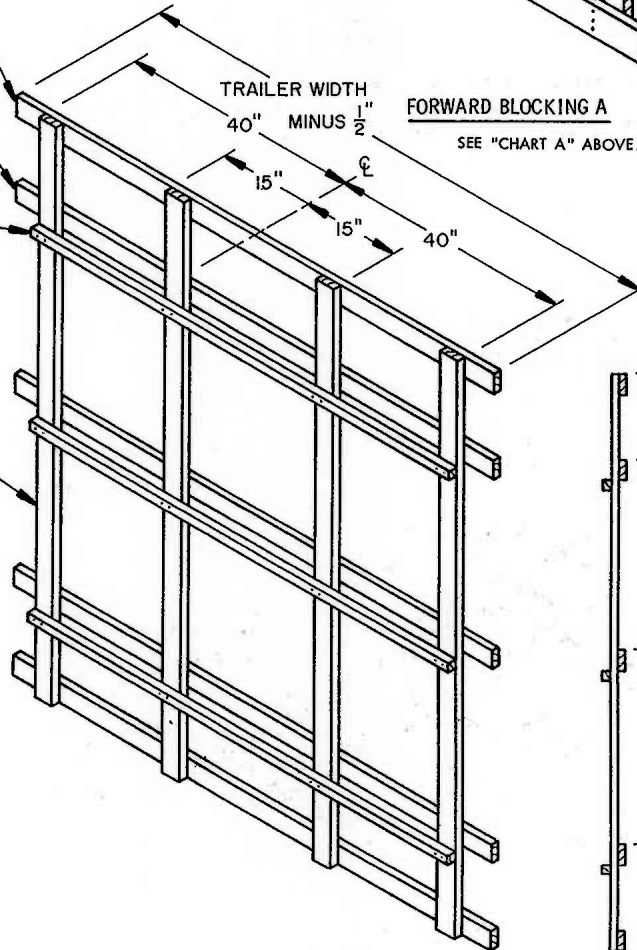
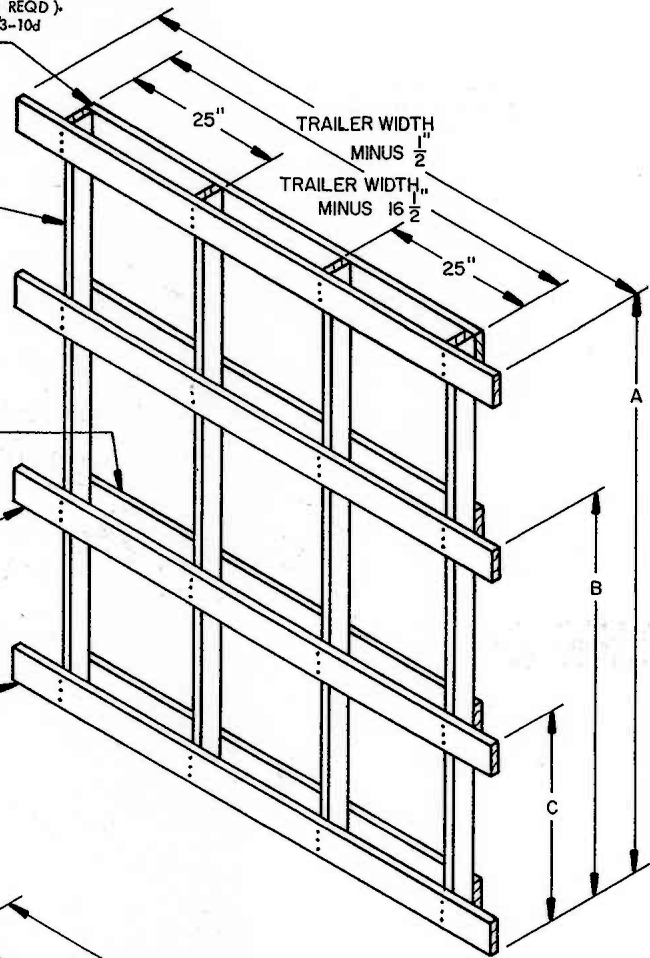


CHART B					
LAYERS OF CONTAINERS	NO. OF STRUT LEDGERS	DIM A	DIM B	DIM C	DIM D
2	1	32"	18"		
3	2	48"	34"		18"
4	2	64"	50"		18"
5	3	6'-8"	66"	50"	18"
6	3	8'-0"	6'-10"	50"	18"

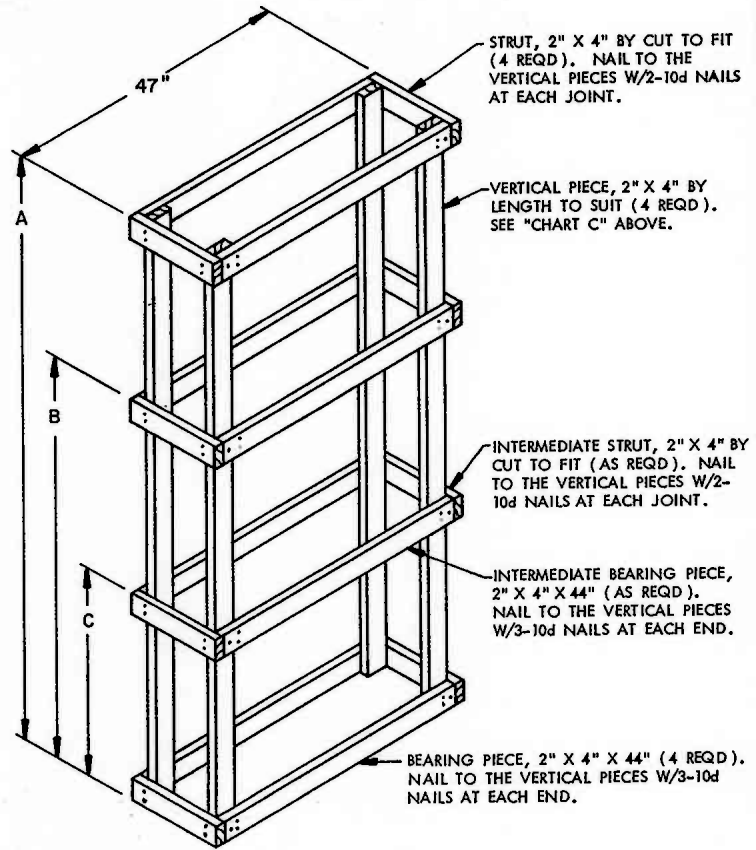
REAR GATE A

SEE "CHART B" AT LEFT

END VIEW

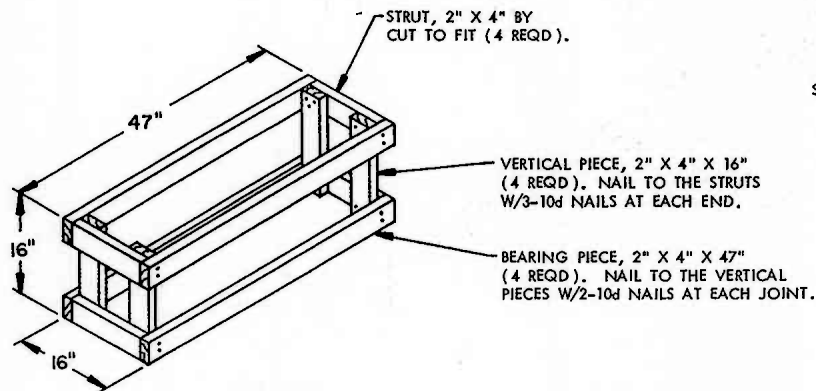
DETAILS

CHART C			
LAYERS OF CONTAINERS	DIM A	DIM B	DIM C
1	16"		
2	32"	18"	
3	48"	26"	
4	64"	34"	
5	6'-8"	50"	18"
6	8'-0"	66"	34"



SPACER ASSEMBLY

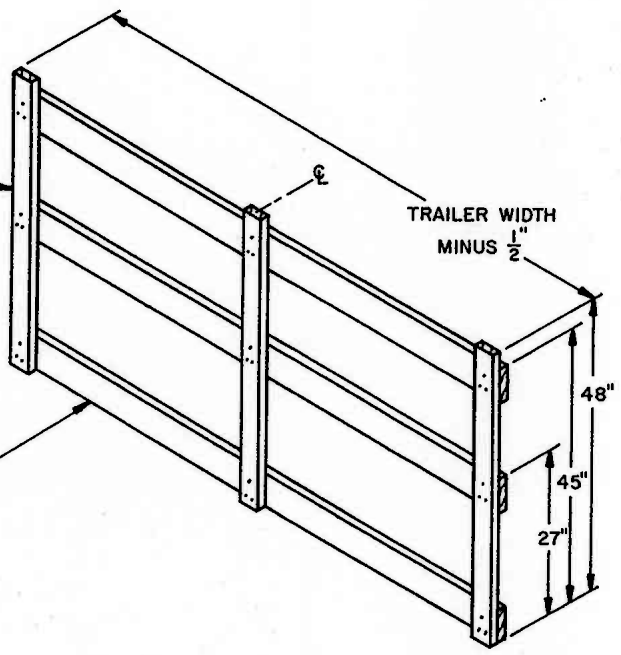
SEE "CHART C" ABOVE



FILLER ASSEMBLY

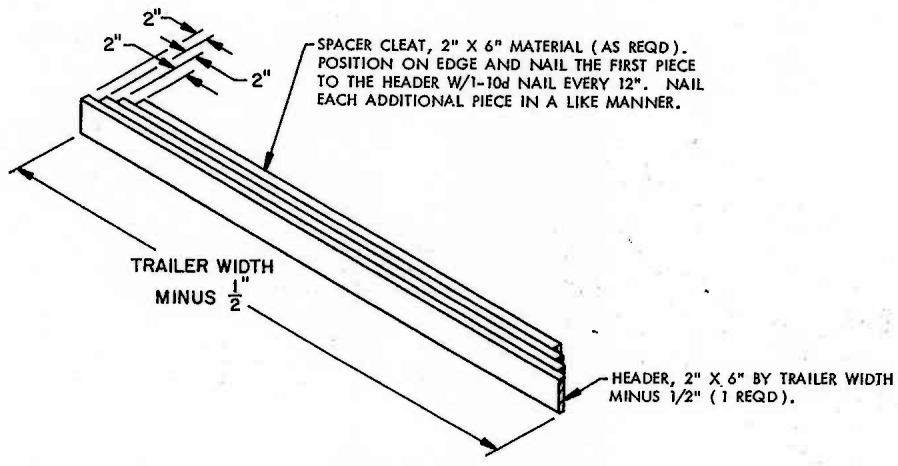
VERTICAL PIECE, 2" X 4" X 48"
(3 REQD). NAIL TO THE LOAD
BEARING PIECES W/3-10d NAILS
AT EACH JOINT.

LOAD BEARING PIECE,
2" X 6" BY TRAILER WIDTH
MINUS 1/2" (3 REQD).



REAR GATE B

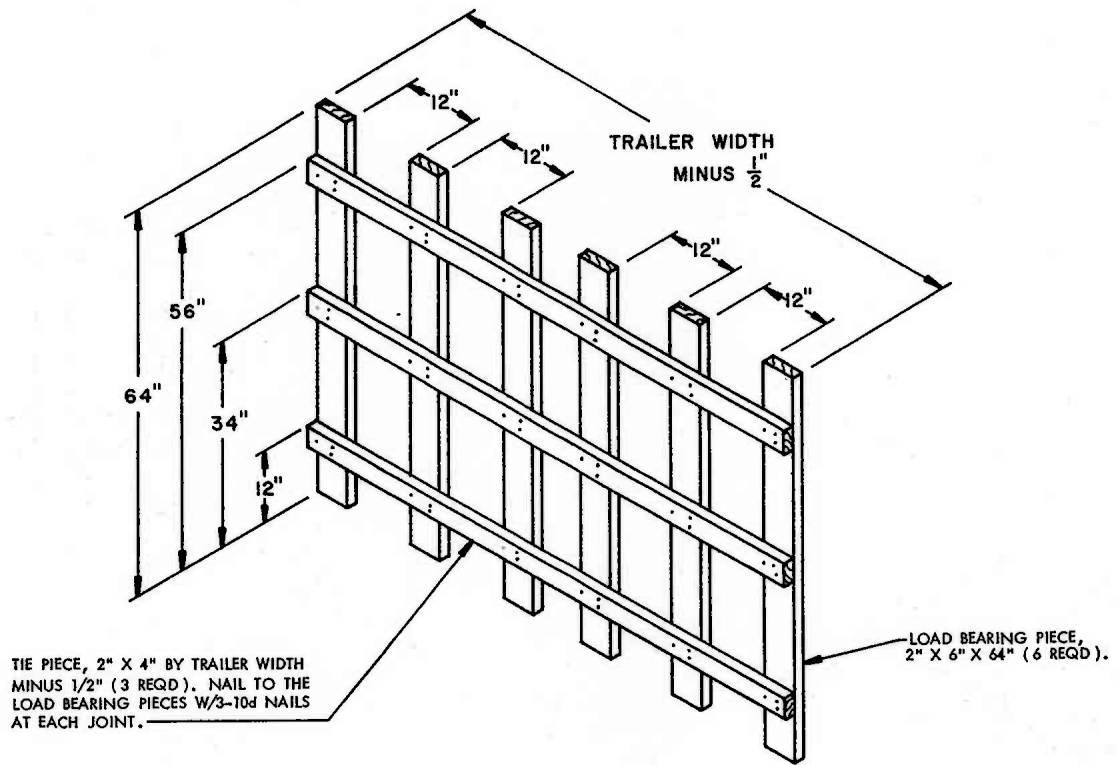
SPACER CLEAT, 2" X 6" MATERIAL (AS REQD).
POSITION ON EDGE AND NAIL THE FIRST PIECE
TO THE HEADER W/1-10d NAIL EVERY 12". NAIL
EACH ADDITIONAL PIECE IN A LIKE MANNER.



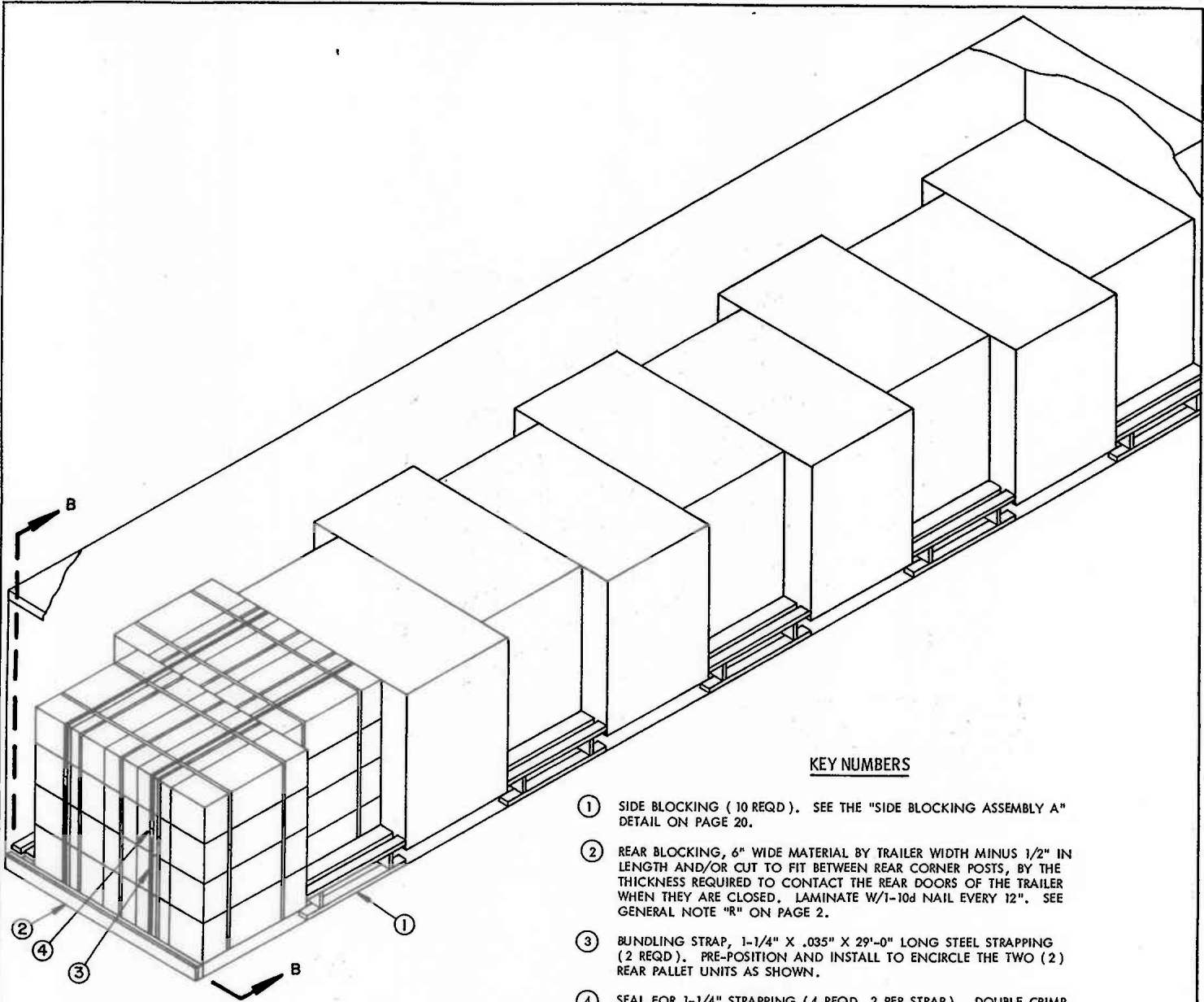
FORWARD BLOCKING B

THIS FORWARD BLOCKING ASSEMBLY IS DESIGNED FOR USE AT THE FORWARD
END OF A TRAILER HAVING ROUNDED CORNERS OF AN INSIDE RADIUS OF
7" OR LESS. ADDITIONAL LAMINATIONS MUST BE ADDED TO THE BACK SIDE
OF THE SPACER CLEATS TO COMPENSATE FOR LARGER SIZE CORNERS.

DETAILS



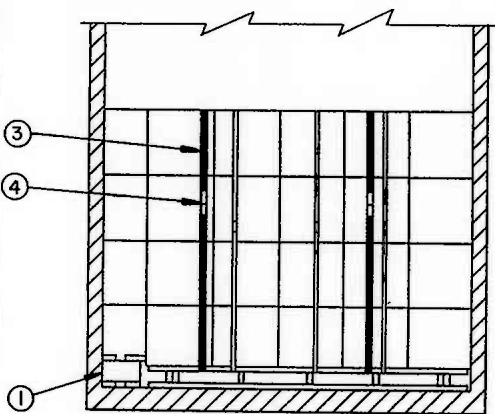
REAR GATE C



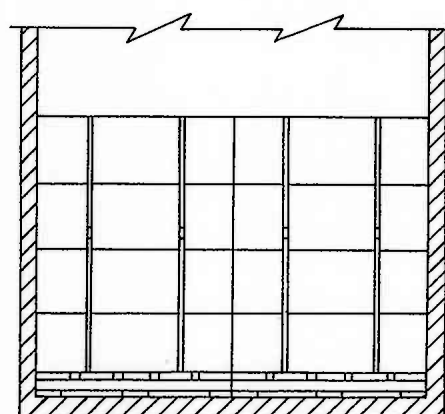
ISOMETRIC VIEW

KEY NUMBERS

- ① SIDE BLOCKING (10 REQD). SEE THE "SIDE BLOCKING ASSEMBLY A" DETAIL ON PAGE 20.
- ② REAR BLOCKING, 6" WIDE MATERIAL BY TRAILER WIDTH MINUS 1/2" IN LENGTH AND/OR CUT TO FIT BETWEEN REAR CORNER POSTS, BY THE THICKNESS REQUIRED TO CONTACT THE REAR DOORS OF THE TRAILER WHEN THEY ARE CLOSED. LAMINATE W/1-10d NAIL EVERY 12". SEE GENERAL NOTE "R" ON PAGE 2.
- ③ BUNDLING STRAP, 1-1/4" X .035" X 29'-0" LONG STEEL STRAPPING (2 REQD). PRE-POSITION AND INSTALL TO ENCIRCLE THE TWO (2) REAR PALLET UNITS AS SHOWN.
- ④ SEAL FOR 1-1/4" STRAPPING (4 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "P" ON PAGE 2.



SECTION B-B



ALTERNATIVE SECTION VIEW
(SEE SPECIAL NOTE 8 ON PAGE 15.)

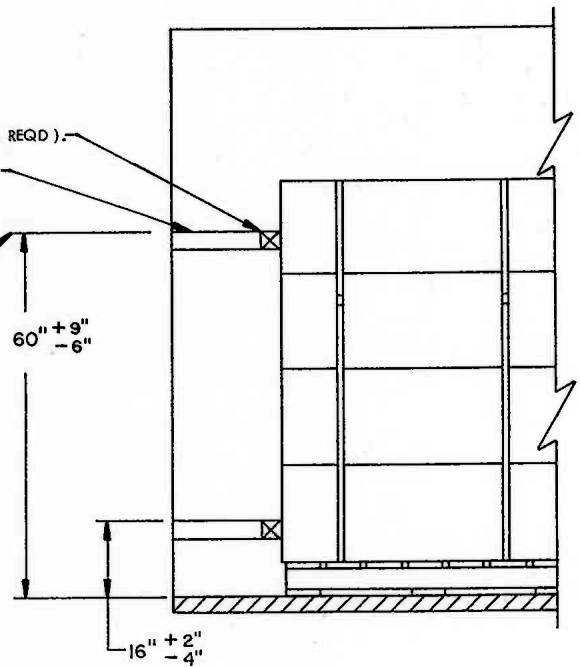
SPECIAL NOTES:

(SPECIAL NOTES CONTINUED)

1. A 10-UNIT LOAD IS SHOWN IN A 7'-7" WIDE BY 39'-9" LONG (INSIDE DIMENSIONS) HIGH-VOLUME VAN TRAILER WITH A SQUARE FRONT.
2. A WIDER OR NARROWER TRAILER THAN SHOWN MAY BE USED FOR SHIPPING THE DEPICTED LOAD. ADJUST THE WIDTH OF THE "SIDE BLOCKING" AS NECESSARY TO PROVIDE A "TIGHT" LOAD ACROSS THE WIDTH OF THE TRAILER.
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 IN LIEU OF "REAR BLOCKING", PIECE MARKED ② ON PAGE 14 OR PIECE MARKED ③ ON PAGE 16. SEE THE "PARTIAL ELEVATION VIEW" BELOW FOR CROSS MEMBER LOCATION AND QUANTITY REQUIREMENTS. THE MECHANICAL BRACING DEVICE SYSTEM OF A TRAILER MUST HAVE A LENGTH OF AT LEAST 39'-11" FOR A 10-UNIT LOAD AS SHOWN ON PAGE 14, OR 36'-0" FOR A 9-UNIT LOAD AS SHOWN ON PAGE 16 AS MEASURED FROM THE FRONT WALL OF THE TRAILER.
4. IF THE TRAILER BEING LOADED HAS ROUNDED CORNERS AT THE FORWARD END, CENTER THE FORWARD PALLET UNIT IN THE TRAILER AND USE TWO (2) SIDE BLOCKING ASSEMBLIES SHOWN AS PIECES MARKED ① ON PAGE 16. SEE THE "SIDE BLOCKING ASSEMBLY B" DETAIL ON PAGE 20.
5. IF A TRAILER BEING LOADED HAS AN INSIDE LENGTH OF LESS THAN 39'-8", ONLY NINE PALLET UNITS CAN BE LOADED INTO THE TRAILER, AND THE "REAR BLOCKING ASSEMBLY" DEPICTED AS PIECE MARKED ③ ON PAGE 16 MUST BE USED IN LIEU OF THE REAR BLOCKING SPECIFIED IN THE LOAD VIEW ON PAGE 14.
6. IF A PALLET UNIT WHICH DOES NOT CONTAIN A FULL QUANTITY OF CONTAINERS IS TO BE TRANSPORTED, REFER TO THE "SHIPMENT OF A PARTIAL UNIT" PROCEDURES ON PAGES 21, 22, AND 23 FOR GUIDANCE.
7. LEFTOVER CONTAINERS, IN AN AMOUNT NOT TO EXCEED THE QUANTITY IN ONE LAYER OF A UNIT, MAY BE SECURED TO THE TOP OF A FULL PALLET UNIT FOR SHIPMENT. REFER TO THE "PROCEDURES FOR SHIPMENT OF LEFTOVER CONTAINERS" ON PAGE 24 FOR GUIDANCE.

(CONTINUED AT RIGHT)

INDICATES CROSS MEMBER (2 REQD).
 INDICATES BELT RAIL.
 THESE DIMENSIONED HEIGHTS SPECIFY THE DISTANCE THE TOP SURFACE OF A CROSS MEMBER IS TO BE ABOVE THE TRAILER FLOOR.



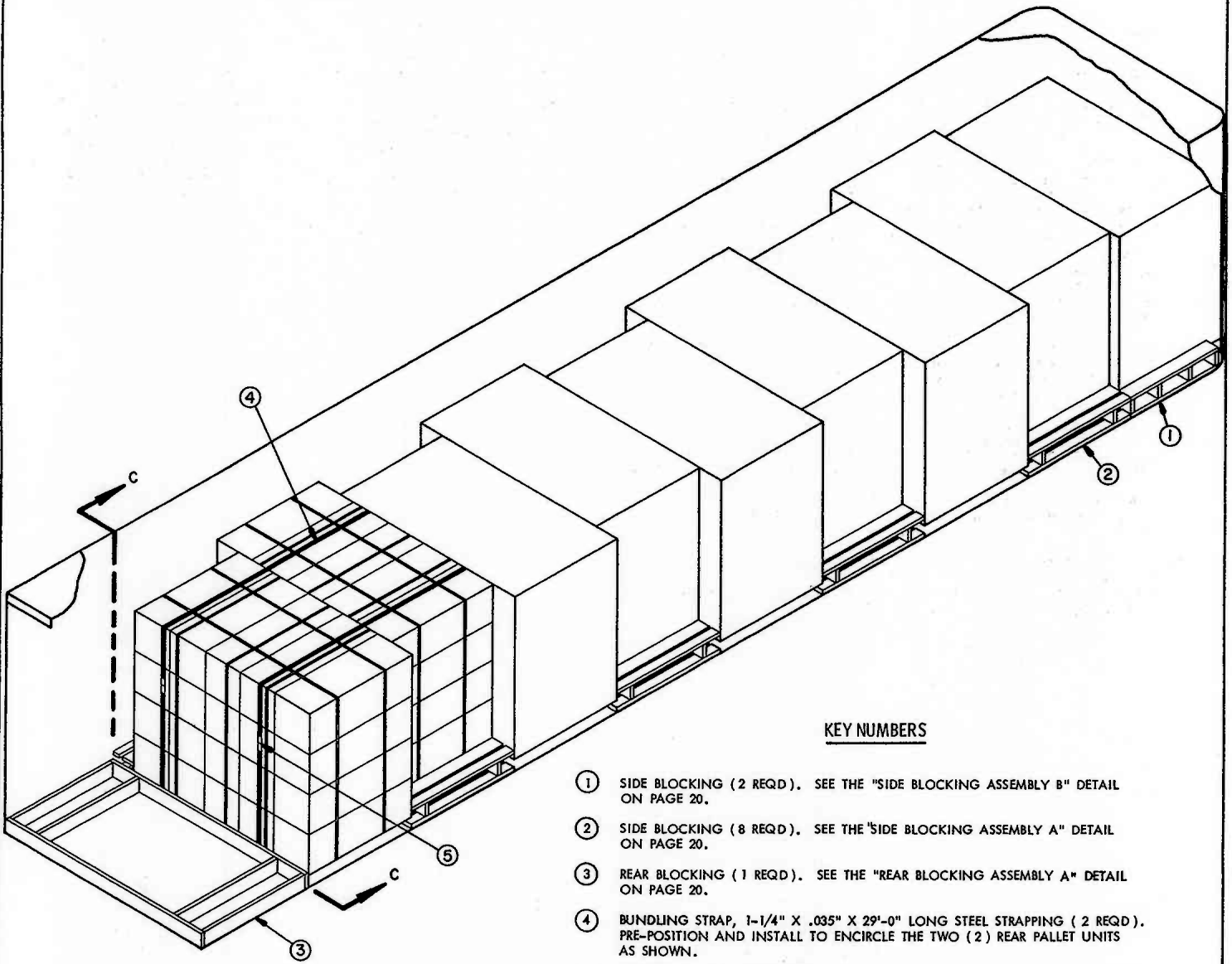
PARTIAL ELEVATION VIEW

SEE SPECIAL NOTE 3 ABOVE.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	120	80
2" X 6"	70	70
NAILS	NO. REQD	POUNDS
10d (3")	168	2-3/4
STEEL STRAPPING, 1-1/4" X .035"-----58' REQD-----8 LBS		
SEAL FOR 1-1/4" STRAPPING-----4 REQD-----NIL		

LOAD AS SHOWN

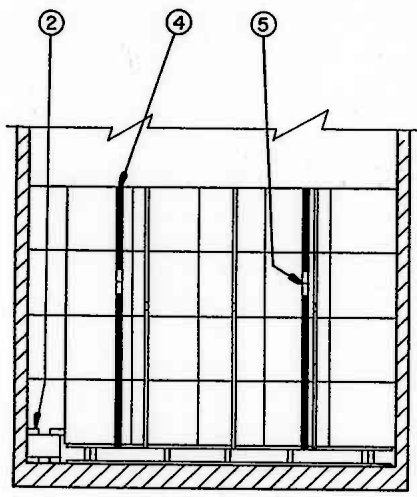
ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT-----	10-----	14,510 LBS
DUNNAGE-----		311 LBS
TOTAL WEIGHT-----		14,821 LBS



KEY NUMBERS

- ① SIDE BLOCKING (2 REQD). SEE THE "SIDE BLOCKING ASSEMBLY B" DETAIL ON PAGE 20.
- ② SIDE BLOCKING (8 REQD). SEE THE "SIDE BLOCKING ASSEMBLY A" DETAIL ON PAGE 20.
- ③ REAR BLOCKING (1 REQD). SEE THE "REAR BLOCKING ASSEMBLY A" DETAIL ON PAGE 20.
- ④ BUNDLING STRAP, 1-1/4" X .035" X 29'-0" LONG STEEL STRAPPING (2 REQD). PRE-POSITION AND INSTALL TO ENCIRCLE THE TWO (2) REAR PALLET UNITS AS SHOWN.
- ⑤ SEAL FOR 1-1/4" STRAPPING (4 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "P" ON PAGE 2.

ISOMETRIC VIEW



SECTION C-C

SPECIAL NOTES:

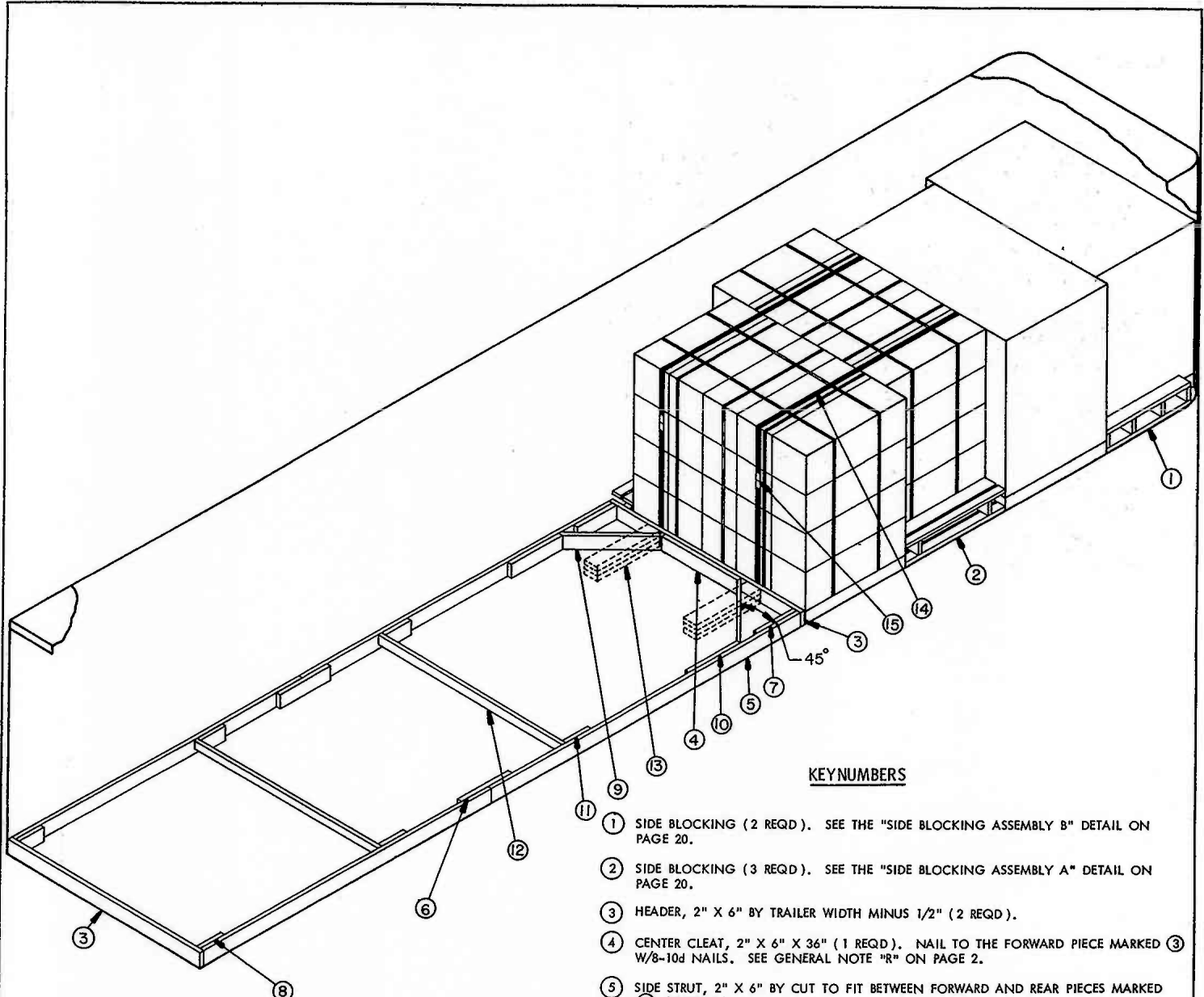
1. A 9-UNIT LOAD IS SHOWN IN A 7'-7" WIDE (INSIDE DIMENSION) BY 40'-0" LONG VAN TRAILER WITH ROUNDED CORNERS AT THE FORWARD END.
2. A WIDER OR NARROWER TRAILER THAN SHOWN MAY BE USED FOR SHIPPING THE DEPICTED LOAD. ADJUST THE WIDTH OF THE "SIDE BLOCKING", PIECES MARKED ① AND ②, AS NECESSARY TO PROVIDE A "TIGHT" LOAD ACROSS THE WIDTH OF THE TRAILER. FOR TRAILERS LESS THAN 7'-7" WIDE IT WILL BE NECESSARY TO CONSTRUCT ONE (1) OF THE "SIDE BLOCKING ASSEMBLY B", PIECE MARKED ①, OF 2" X 4" MATERIAL RATHER THAN 2" X 6" MATERIAL AS SPECIFIED IN THE "SIDE BLOCKING ASSEMBLY B" DETAIL ON PAGE 20.
3. IF THE TRAILER BEING OUTLOADED CONTAINS MECHANICAL BRACING DEVICES SEE THE "PARTIAL ELEVATION VIEW" AND SPECIAL NOTE 3 ON PAGE 15 FOR APPLICABLE LOADING PROCEDURES.
4. IF THE TRAILER BEING LOADED HAS A SQUARE FRONT OR AN INSTALLED BULKHEAD, DELETE THE "SIDE BLOCKING ASSEMBLY B", PIECES MARKED ① ON PAGE 16, AND POSITION THE FORWARD PALLET UNIT DIRECTLY AGAINST THE FORWARD PORTION OF THE TRAILER AS DEPICTED IN THE LOAD VIEW ON PAGE 14. ONE ADDITIONAL "SIDE BLOCKING ASSEMBLY A", PIECE MARKED ② ON PAGE 16, WILL BE REQUIRED.
5. IF A PALLET UNIT WHICH DOES NOT CONTAIN A FULL QUANTITY OF CONTAINERS IS TO BE TRANSPORTED, REFER TO THE "SHIPMENT OF A PARTIAL UNIT" PROCEDURES ON PAGES 21, 22, AND 23 FOR GUIDANCE.
6. LEFTOVER CONTAINERS, IN AN AMOUNT NOT TO EXCEED THE QUANTITY IN ONE LAYER OF A UNIT, MAY BE SECURED TO THE TOP OF A FULL PALLET UNIT FOR SHIPMENT. REFER TO THE "PROCEDURES FOR SHIPMENT OF LEFTOVER CONTAINERS" ON PAGE 24 FOR GUIDANCE.
7. IF AVAILABLE, THE USE OF A 102-INCH WIDE TRAILER IS RECOMMENDED. FOR ADDITIONAL GUIDANCE, SEE SPECIAL NOTE 8 ON PAGE 15 AND THE "ALTERNATIVE SECTION VIEW" ON PAGE 14.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	96	64
2" X 6"	93	93
NAILS	NO. REQD	POUNDS
10d (3")	200	3-1/4
STEEL STRAPPING, 1-1/4" X .035"-----58' REQD-----8 LBS		
SEAL FOR 1-1/4" STRAPPING-----4 REQD-----NIL		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT-----	9-----	13,059 LBS
DUNNAGE-----	-----	326 LBS
TOTAL WEIGHT-----		13,385 LBS

9-UNIT LOAD IN A 40'-0" LONG TRAILER (PALLETIZED)



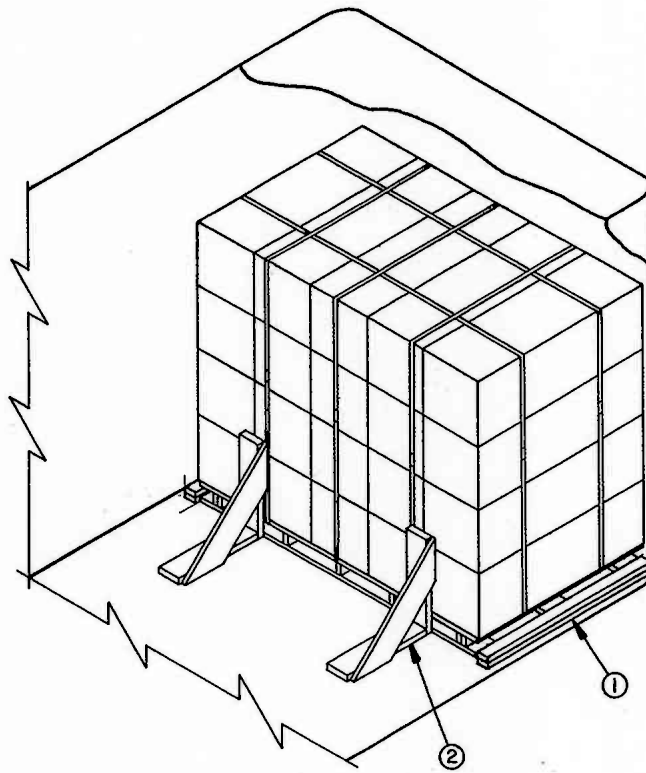
ISOMETRIC VIEW

KEYNUMBERS

- ① SIDE BLOCKING (2 REQD). SEE THE "SIDE BLOCKING ASSEMBLY B" DETAIL ON PAGE 20.
- ② SIDE BLOCKING (3 REQD). SEE THE "SIDE BLOCKING ASSEMBLY A" DETAIL ON PAGE 20.
- ③ HEADER, 2" X 6" BY TRAILER WIDTH MINUS 1/2" (2 REQD).
- ④ CENTER CLEAT, 2" X 6" X 36" (1 REQD). NAIL TO THE FORWARD PIECE MARKED ③ W/8-10d NAILS. SEE GENERAL NOTE "R" ON PAGE 2.
- ⑤ SIDE STRUT, 2" X 6" BY CUT TO FIT BETWEEN FORWARD AND REAR PIECES MARKED ③ (2 REQD).
- ⑥ SPLICE PIECE, 2" X 6" X 24" (2 REQD). CENTER ON A JOINT OF PIECES MARKED ⑤ AND NAIL W/4-10d NAILS AT EACH END.
- ⑦ POCKET CLEAT, 2" X 6" X 18" (2 REQD). NAIL TO PIECE MARKED ⑤ W/5-10d NAILS. TOENAIL TO THE ADJACENT PIECE MARKED ③ W/3-12d NAILS.
- ⑧ 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.
- ⑨ DIAGONAL BRACE, 2" X 6" BY CUT TO FIT (2 REQD). DOUBLE BEVEL EACH END WITH 45° CUTS. INSTALL AT 45° ANGLE AS SHOWN AND TOENAIL TO THE ADJACENT PIECE MARKED ③ AND TO PIECE MARKED ⑤ W/2-12d NAILS AT EACH END.
- ⑩ SIDE CLEAT, 2" X 6" X 24" (2 REQD). NAIL TO PIECE MARKED ⑤ W/8-10d NAILS.
- ⑪ STRUT BRACING SUPPORT PIECE, 2" X 6" X 12" (4 REQD). POSITION SO THAT PIECES MARKED ⑫ ARE EQUALLY SPACED ON THE LENGTH OF PIECE MARKED ⑤. NAIL TO PIECE MARKED ⑤ W/3-10d NAILS.
- ⑫ STRUT BRACING, 2" X 4" BY TRAILER WIDTH MINUS 3" (CUT TO FIT) (2 REQD). NAIL TO PIECE MARKED ⑪ W/2-12d NAILS AT EACH END. ONE STRUT BRACE IS REQUIRED FOR EACH 7'-0" LENGTH OF SIDE STRUTS MARKED ⑤.
- ⑬ BACK-UP CLEAT, 2" X 4" X 36" (TRIPLED) (2 REQD). POSITION 18" FROM TRAILER SIDEWALL AS SHOWN AND NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/9-12d NAILS. NAIL EACH ADDITIONAL PIECE IN A LIKE MANNER. TOENAIL THE TOP PIECE TO THE ADJACENT HEADER MARKED ③ W/2-12d NAILS. SEE SPECIAL NOTE 3 AT LEFT.
- ⑭ BUNDLING STRAP, 1-1/4" X .035" X 29'-0" LONG STEEL STRAPPING (2 REQD). PRE-POSITION AND INSTALL TO ENCIRCLE THE TWO (2) REAR PALLET UNITS AS SHOWN.
- ⑮ SEAL FOR 1-1/4" STRAPPING (4 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "P" ON PAGE 2.

SPECIAL NOTES:

1. A 4-UNIT LOAD IS SHOWN. THESE OUTLOADING PROCEDURES DEPICT THE USE OF BOTH "K-BRACE" TYPE BLOCKING AND "NAILED-FLOOR-LINE" BLOCKING IN A 7'-7" WIDE (INSIDE DIMENSION) VAN TRAILER WHICH IS EQUIPPED WITH OR WITHOUT A NAILABLE FLOOR.
2. THE DEPICTED "K-BRACE" BLOCKING WILL RETAIN A MAXIMUM SIZE LTL LOAD.
3. PIECES MARKED ⑬ ARE FOR USE IN A TRAILER WHICH HAS A NAILABLE FLOOR AND MAY BE USED IN LIEU OF PIECES MARKED ④ THRU ⑫ WHICH APPLY TO TRAILERS HAVING NON-NAILABLE FLOORS. TWO (2) BACK-UP CLEATS AS SHOWN ARE ADEQUATE FOR RETAINING A MAXIMUM OF SIX (6) PALLET UNITS.
4. A WIDER OR NARROWER TRAILER THAN SHOWN MAY BE USED FOR SHIPPING THE DEPICTED LOAD. ADJUST THE WIDTH OF THE "SIDE BLOCKING", PIECES MARKED ① AND ②, AS NECESSARY TO PROVIDE A "TIGHT" LOAD ACROSS THE WIDTH OF THE TRAILER. FOR TRAILERS LESS THAN 7'-7" WIDE IT WILL BE NECESSARY TO CONSTRUCT ONE (1) OF THE "SIDE BLOCKING ASSEMBLY B", PIECES MARKED ①, OF 2" X 4" MATERIAL RATHER THAN 2" X 6" MATERIAL AS SPECIFIED IN THE "SIDE BLOCKING ASSEMBLY B" DETAIL ON PAGE 20.



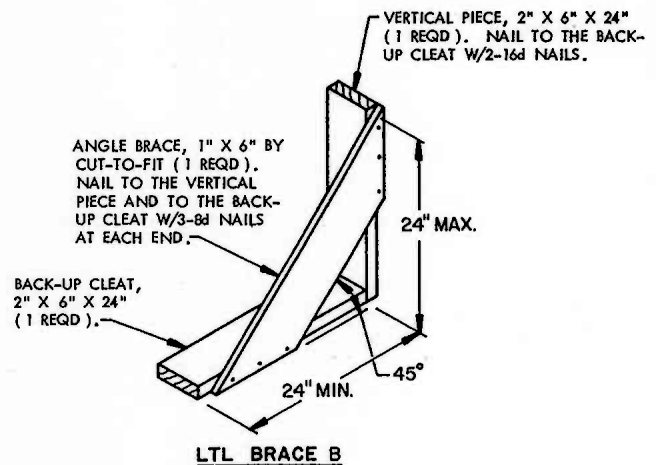
ISOMETRIC VIEW

KEY NUMBERS

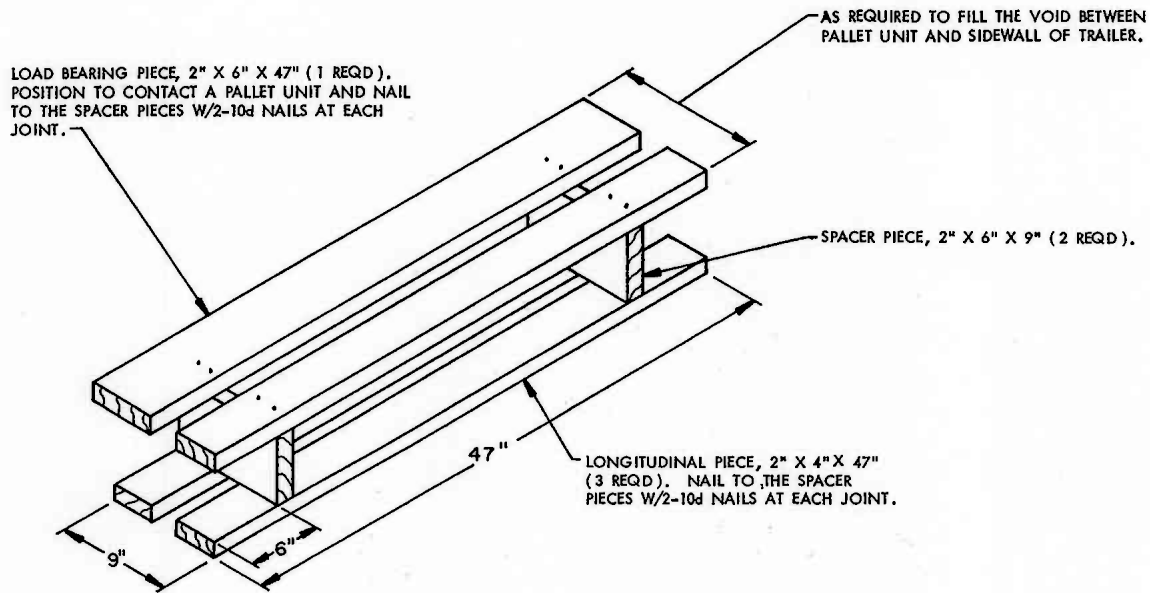
SPECIAL NOTES:

1. A 1-UNIT LOAD IS SHOWN. THESE OUTLOADING PROCEDURES DEPICT THE USE OF "LTL BRACE" TYPE BLOCKING IN A 7'-6" WIDE (INSIDE DIMENSION) VAN TRAILER WHICH IS EQUIPPED WITH A NAILABLE FLOOR. WIDER OR NARROWER TRAILERS CAN BE USED.
2. THE TWO (2) LTL BRACES AS APPLIED FOR LONGITUDINAL BRACING WILL SUPPORT NOT MORE THAN TWO (2) UNITS OF LADING.

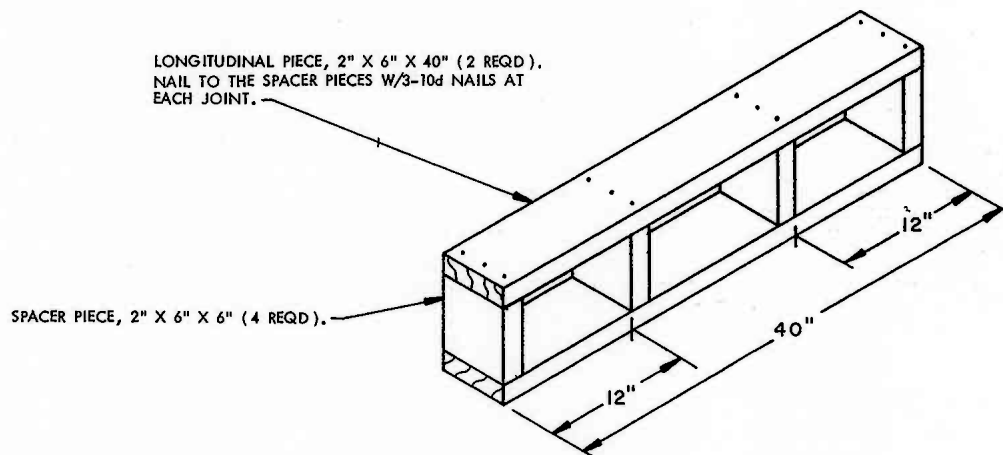
- ① SIDE BLOCKING, 2" X 4" X 48" (DOUBLED) (2 REQD). PRE-POSITION AND NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/6-12d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER. SEE GENERAL NOTE "R" ON PAGE 2.
- ② LTL BRACE (2 REQD). SEE THE "LTL BRACE B" DETAIL BELOW. NAIL TO THE TRAILER FLOOR W/7-12d NAILS.



TYPICAL LTL (1-UNIT LOAD) (PALLETIZED)

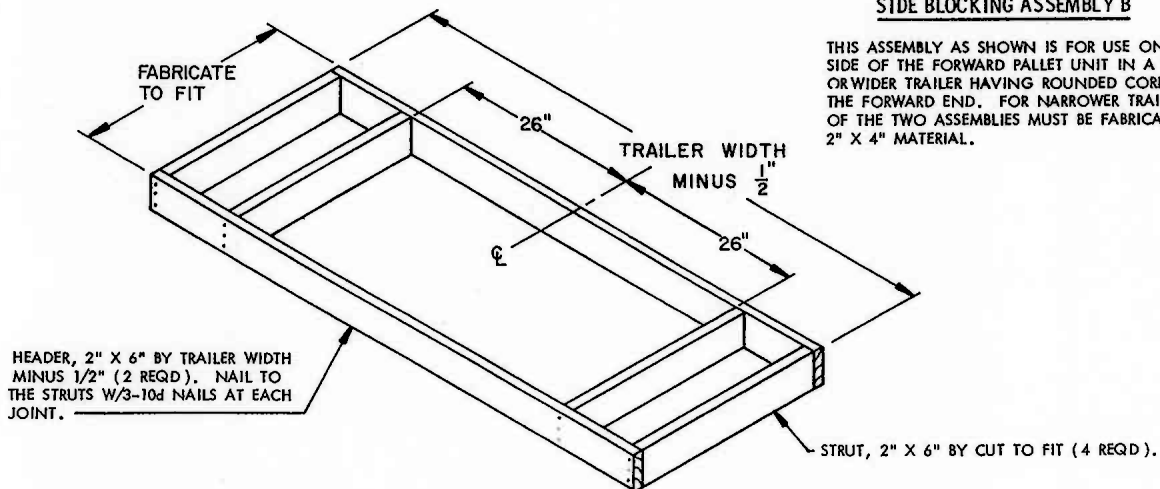


SIDE BLOCKING ASSEMBLY A



SIDE BLOCKING ASSEMBLY B

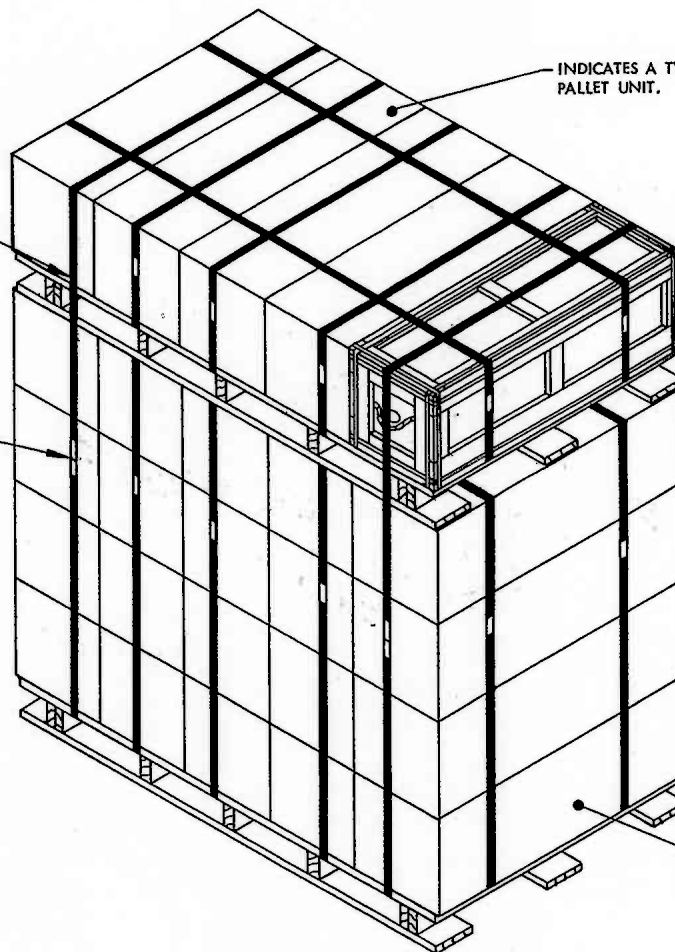
THIS ASSEMBLY AS SHOWN IS FOR USE ON EACH SIDE OF THE FORWARD PALLET UNIT IN A 91" WIDE OR WIDER TRAILER HAVING ROUNDED CORNERS AT THE FORWARD END. FOR NARROWER TRAILERS, ONE OF THE TWO ASSEMBLIES MUST BE FABRICATED WITH 2" X 4" MATERIAL.



REAR BLOCKING ASSEMBLY A

VERTICAL UNITIZING STRAP, 1-1/4" X .035" BY A LENGTH-TO-SUIT STEEL STRAPPING (2 REQD), POSITION AGAINST THE POSTS ON THE PALLET UNIT BASE AS SHOWN.

INDICATES TWO (2) 1-1/4" STRAP SEALS.



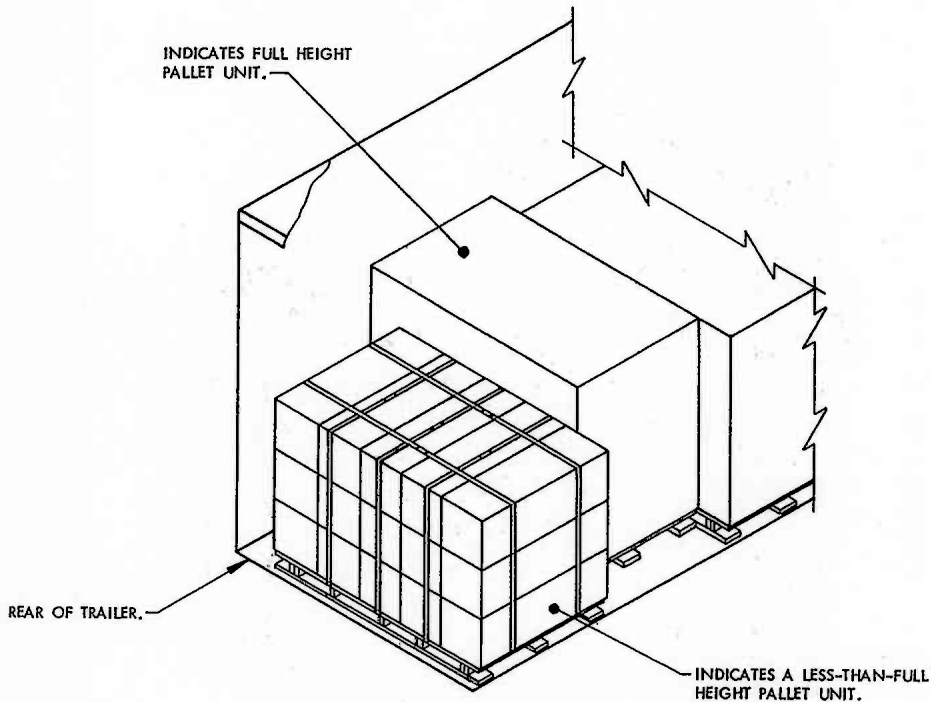
INDICATES A TYPICAL 1-LAYER PALLET UNIT.

INDICATES A FULL PALLET UNIT.

SECUREMENT OF A PARTIAL PALLET UNIT
ON TOP OF A FULL PALLET UNIT

SPECIAL NOTES:

1. THE VIEW SHOWN ABOVE DEPICTS PROCEDURES FOR SECUREMENT OF A PARTIAL PALLET UNIT ON TOP OF A FULL PALLET UNIT.
2. SHIPMENTS OF PALLET UNITS SHOULD CONSIST OF FULL-HEIGHT AND FULL-LAYER UNITS TO THE MAXIMUM EXTENT POSSIBLE. HOWEVER, THE END OF A LOT, OR THE QUANTITY OF ITEMS NEEDED TO FILL A REQUISITION MAY NECESSITATE THE SHIPMENT OF ONE OR MORE LESS-THAN-FULL PALLET UNITS WITHIN A LOAD. THE PROCEDURES ON THIS PAGE AND ON PAGES 22 AND 23 ARE PRESENTED AS GUIDANCE IN THE SHIPMENT OF THESE PARTIAL UNITS.
3. FOR SHIPMENT OF A LESS-THAN-FULL-HEIGHT PALLET UNIT WITHIN A LOAD, SEE PAGES 22 AND 23.
4. FOR SHIPMENT OF "LEFTOVER" CONTAINERS, SEE THE PROCEDURES ON PAGE 24.



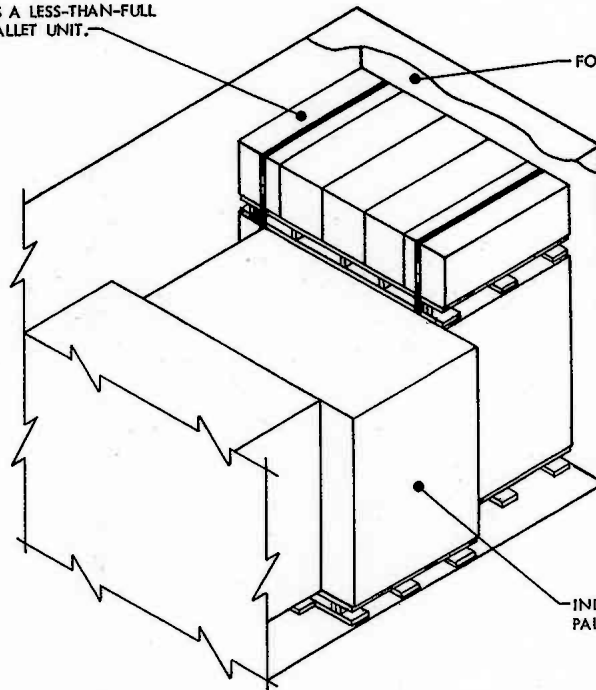
ISOMETRIC VIEW

SPECIAL NOTES:

1. THE ISOMETRIC VIEW SHOWN ABOVE DEPICTS PROCEDURES FOR SHIPMENT OF A PARTIAL PALLET UNIT WITHIN A LOAD.
2. FOR SECUREMENT OF A PARTIAL PALLET UNIT ON TOP OF A FULL-HEIGHT PALLET UNIT, SEE PAGE 21.
3. SHIPMENT OF PALLET UNITS SHOULD CONSIST OF FULL-HEIGHT AND FULL-LAYER UNITS TO THE MAXIMUM EXTENT POSSIBLE. HOWEVER, THE END OF A LOT OR THE QUANTITY OF ITEMS NEEDED TO FILL A REQUISITION MAY NECESSITATE THE SHIPMENT OF ONE OR MORE LESS-THAN-FULL UNITS WITHIN A LOAD. THE PROCEDURES ON THIS PAGE AND ON PAGE 23 ARE PRESENTED AS GUIDANCE IN THE SHIPMENT OF THESE PARTIAL UNITS.
4. THE PROCEDURES SHOWN ON THIS PAGE ARE ONLY APPLICABLE TO PARTIAL PALLET UNITS CONSISTING OF ONE, TWO, OR THREE FULL LAYERS OF CONTAINERS. FOR SHIPMENT OF "LEFTOVER" CONTAINERS, SEE THE PROCEDURES ON PAGE 24.
5. THE PROCEDURES SHOWN ARE ALSO APPLICABLE TO LOADS IN TRAILERS EQUIPPED WITH MECHANICAL BRACING DEVICES. SEE THE "PARTIAL ELEVATION VIEW" ON PAGE 15 FOR CROSS MEMBER LOCATIONS. THE TOP CROSS MEMBER WILL BE INSTALLED AGAINST THE REARMOST FULL-HEIGHT UNIT. NOTE THAT THE MINUS TOLERANCE FOR THE TOP CROSS MEMBER LOCATION IS LIMITED TO NOT MORE THAN A MINUS 3". THE LOWER CROSS MEMBER WILL BE INSTALLED AGAINST THE PARTIAL PALLET UNIT.
6. A 3-LAYER PARTIAL PALLET UNIT MAY BE POSITIONED ANYWHERE WITHIN THE LENGTH OF THE LOAD, ALTHOUGH AT THE REAR IS PREFERRED. A 1-LAYER OR 2-LAYER PARTIAL PALLET UNIT MUST BE POSITIONED AT THE REAR OF THE LOAD. IF A 3-LAYER OR 2-LAYER UNIT IS LOCATED AT THE REAR OF THE LOAD, THE BUNDLING STRAPS SHOWN AS PIECE MARKED ③ ON PAGE 14 MAY BE OMITTED. BUNDLING STRAPS ARE REQUIRED AROUND THE TWO REARMOST FULL-HEIGHT UNITS IF THE PARTIAL UNIT IS ONLY ONE LAYER IN HEIGHT.
7. NOTE: ONLY A PARTIAL VIEW OF A LOAD IS SHOWN, THE SIDE BLOCKING AND REAR BLOCKING ARE OMITTED.

INDICATES A LESS-THAN-FULL
HEIGHT PALLET UNIT.

FORWARD END OF TRAILER.

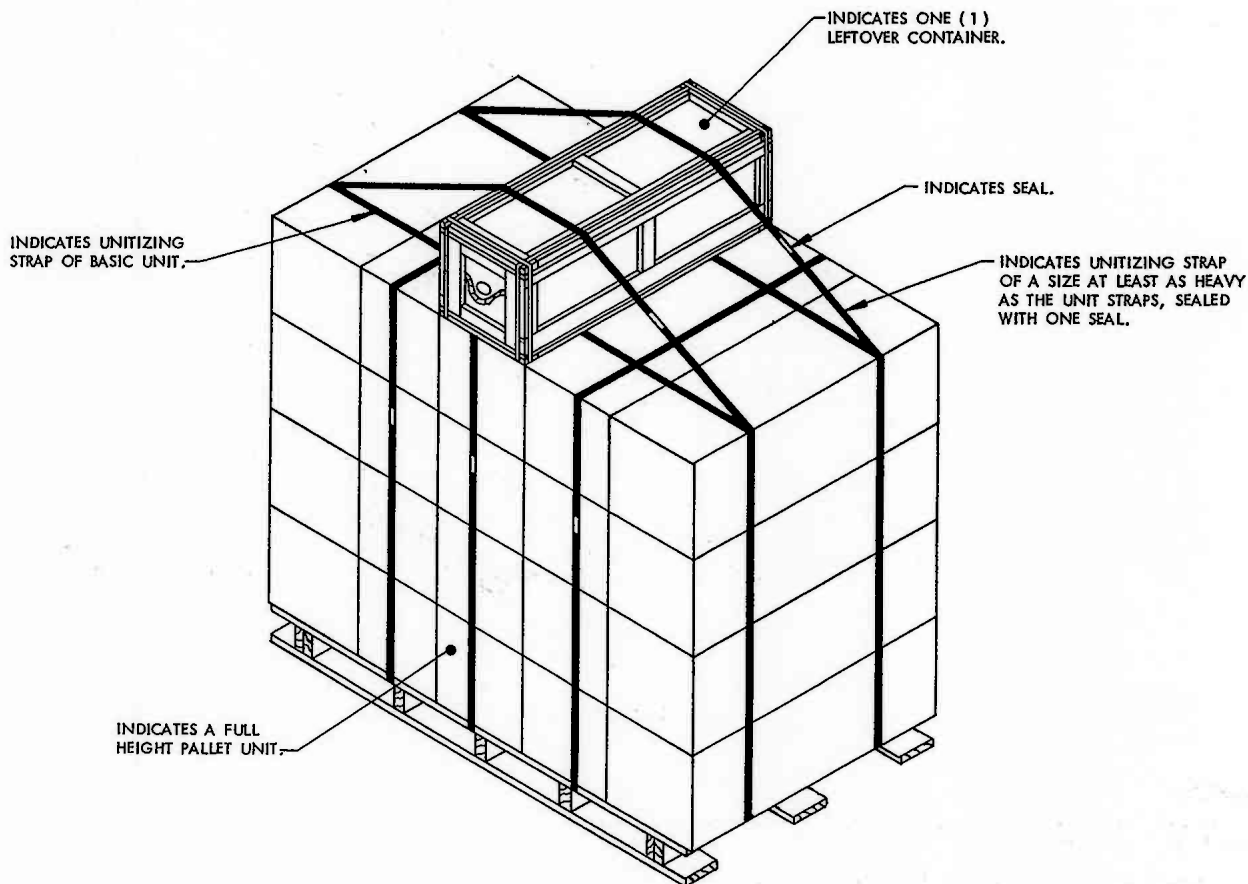


INDICATES FULL HEIGHT
PALLET UNIT.

ISOMETRIC VIEW

SPECIAL NOTES:

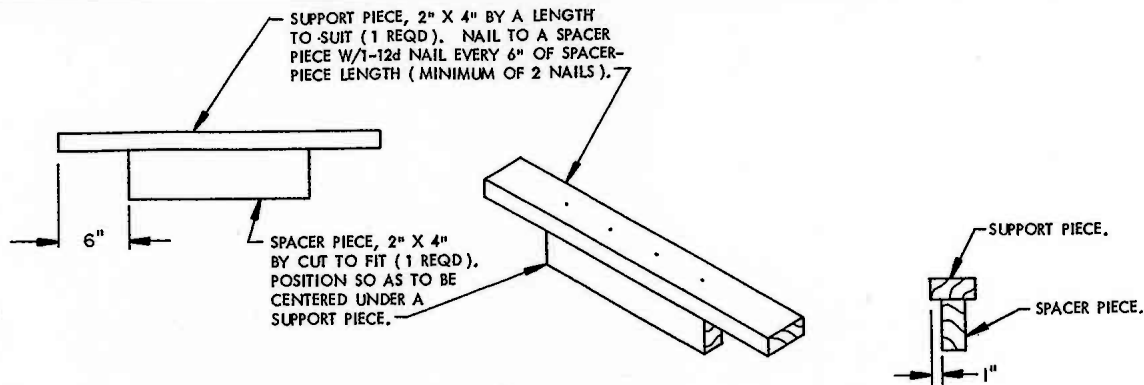
1. THE ISOMETRIC VIEW SHOWN ABOVE DEPICTS PROCEDURES FOR SHIPMENT OF A PARTIAL PALLET UNIT ON TOP OF A FULL PALLET UNIT.
2. FOR SECUREMENT OF A PARTIAL PALLET UNIT ON TOP OF A FULL HEIGHT PALLET UNIT, SEE PAGE 21.
3. SHIPMENTS OF PALLET UNITS SHOULD CONSIST OF FULL-HEIGHT AND FULL-LAYER UNITS TO THE MAXIMUM EXTENT POSSIBLE. HOWEVER, THE END OF A LOT OR THE QUANTITY OF ITEMS NEEDED TO FILL A REQUISITION MAY NECESSITATE THE SHIPMENT OF ONE OR MORE LESS-THAN-FULL UNITS WITHIN A LOAD. THE PROCEDURES ON THIS PAGE AND ON PAGE 22 ARE PRESENTED AS GUIDANCE IN THE SHIPMENT OF PARTIAL UNITS.
4. A PARTIAL PALLET UNIT MUST NOT BE POSITIONED ON THE REARMOST UNIT WITHIN THE LOAD.
5. THE PROCEDURES SHOWN ON THIS PAGE ARE ONLY APPLICABLE TO PARTIAL PALLET UNITS CONSISTING OF ONE LAYER OF CONTAINERS. FOR SHIPMENT OF "LEFTOVER" CONTAINERS, SEE THE PROCEDURES ON PAGE 24.
6. THE PROCEDURES SHOWN ARE APPLICABLE TO LOADS IN TRAILERS EQUIPPED WITH MECHANICAL BRACING DEVICES.
7. NOTE: ONLY A PARTIAL VIEW OF A LOAD IS SHOWN. THE SIDE BLOCKING AND REAR BLOCKING ARE OMITTED.



SECUREMENT OF LEFTOVER CONTAINERS

SPECIAL NOTES:

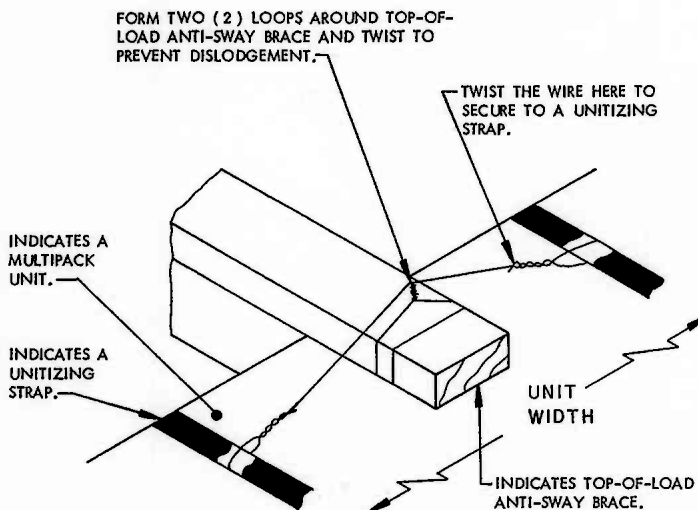
1. THE ISOMETRIC VIEW SHOWN ABOVE DEPICTS PROCEDURES FOR SECUREMENT OF A LEFTOVER CONTAINER ON TOP OF A FULL PALLET UNIT.
2. SHIPMENTS OF UNITS SHOULD CONSIST OF FULL-HEIGHT AND FULL-LAYER UNITS TO THE MAXIMUM EXTENT POSSIBLE, HOWEVER, THE END OF A LOT OR THE QUANTITY OF ITEMS NEEDED TO FILL A REQUISITION MAY NECESSITATE THE SHIPMENT OF ONE OR MORE LEFTOVER CONTAINERS.
3. THE QUANTITY OF LEFTOVER CONTAINERS WHICH CAN BE SECURED TO A FULL HEIGHT PALLET UNIT WILL NOT EXCEED FOUR. IF FIVE LEFTOVER CONTAINERS ARE TO BE SHIPPED, TWO CONTAINERS WILL BE SECURED TO THE TOP OF ONE PALLET UNIT AND THREE CONTAINERS WILL BE SECURED TO THE TOP OF A DIFFERENT PALLET UNIT.
4. LEFTOVER CONTAINERS MUST BE SECURED TO A FULL HEIGHT PALLET UNIT WITH A MINIMUM OF TWO (2) PIECES OF STEEL STRAPPING (SEPARATE FROM UNIT STRAPS) OF A SIZE AT LEAST AS HEAVY AS THE UNITIZING STRAPPING. THREAD A STRAP UNDER THE STRINGERS IN LINE WITH EXISTING UNITIZING STRAPS, COMPLETELY ENCIRCLE THE PALLET UNIT AND LEFTOVER CONTAINERS, TENSION, AND SEAL THE STRAP JOINT WITH ONE DOUBLE CRIMPED SEAL.
5. LEFTOVER CONTAINERS MAY ALSO BE SECURED ON TOP OF A PARTIAL PALLET UNIT.
6. SHIPMENT OF LEFTOVER CONTAINERS IS APPLICABLE FOR CONUS AND OCONUS MOTOR CARRIER SHIPMENTS FROM DEPOT TO DEPOT OR FROM DEPOTS TO POSTS, CAMPS, AND STATIONS, OR UPON APPROVAL FROM HIGHER HEAD-QUARTERS, FOR SHIPMENTS FROM LOAD, ASSEMBLE AND PACK PLANTS TO DEPOTS. **CAUTION:** A LOAD CONTAINING LEFTOVER CONTAINERS IN AN AMOUNT WHICH IS LESS THAN A FULL LAYER, AND SECURED TO THE TOP OF A FULL OR PARTIAL UNIT, MUST NOT BE DESTINED FOR SHIPMENT OVERSEAS BY WATER CARRIER.



TOP-OF-LOAD ANTI-SWAY BRACE ASSEMBLY

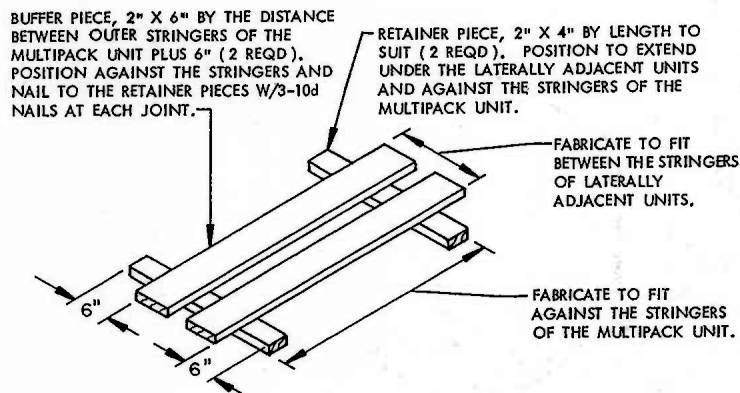
END VIEW

THIS ASSEMBLY IS DESIGNED FOR USE BETWEEN THE TOPS OF LATERALLY ADJACENT MULTIPACK UNIT STACKS TO PREVENT UNITS FROM TOPPLING INTO VOID AREA. THE ASSEMBLY WILL BE WIRE TIED TO THE UNITIZING STRAPS TO PREVENT DISPLACEMENT.

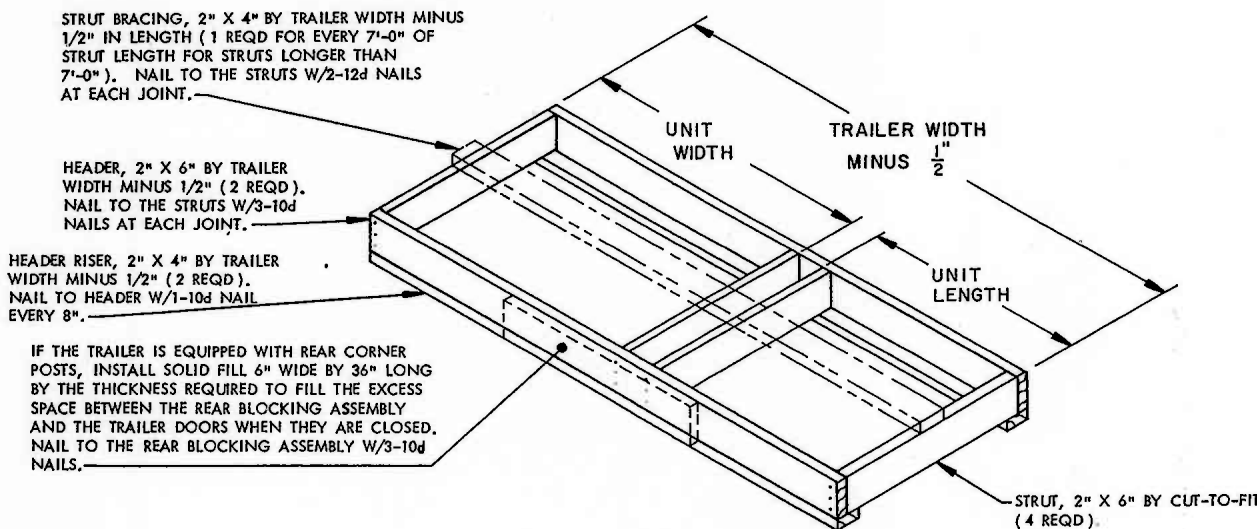


TIE WIRE APPLICATION

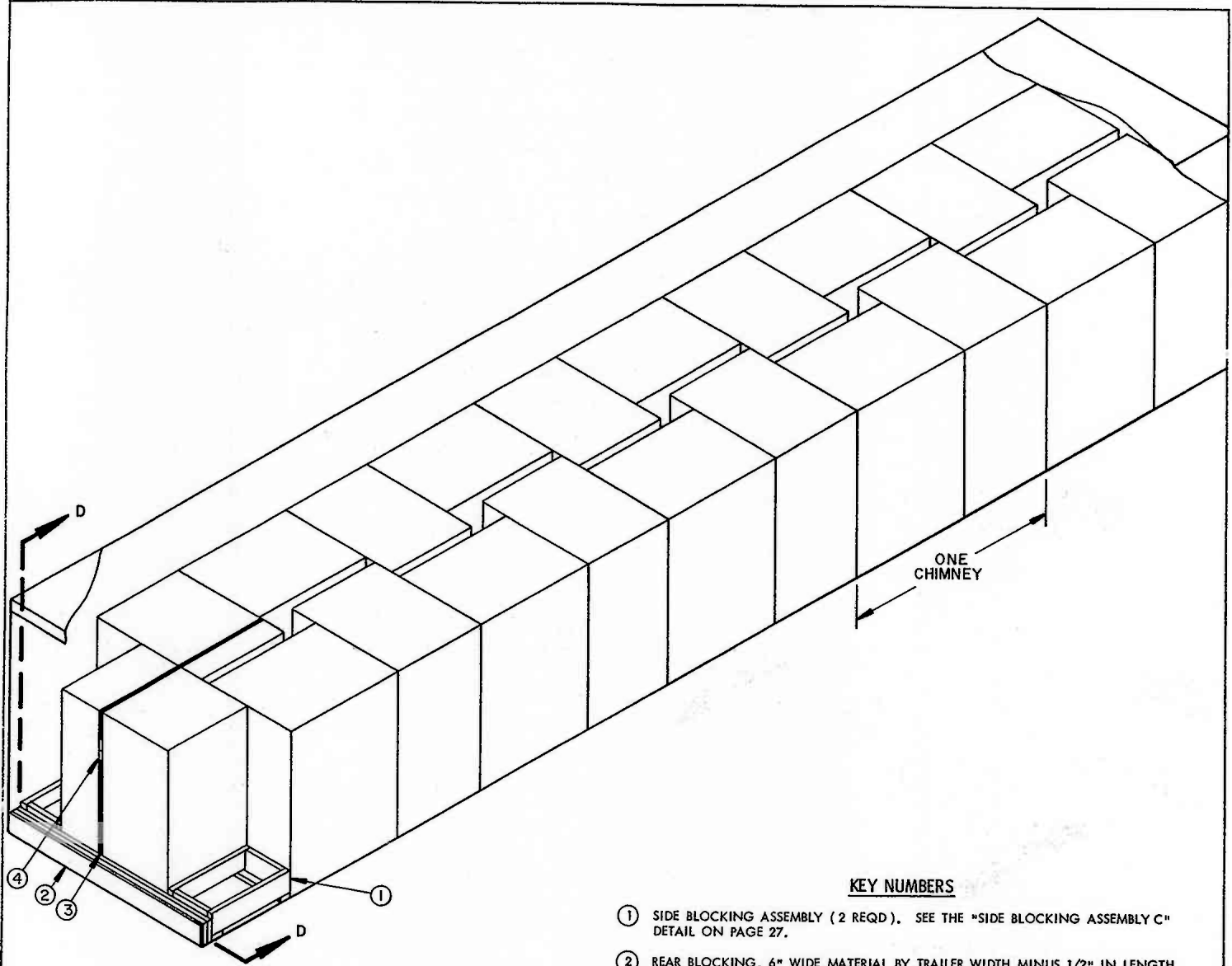
THIS VIEW DEPICTS THE SECUREMENT OF A TOP-OF-LOAD ANTI-SWAY BRACE TO THE TOP OF A MULTIPACK UNIT BY WIRE TYING TO THE UNITIZING STRAPS WITH NO. 14 GAGE WIRE.



ANTI-SWAY BRACE ASSEMBLY



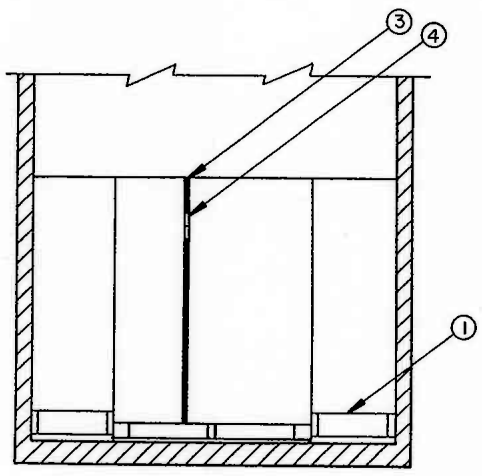
REAR BLOCKING ASSEMBLY B



ISOMETRIC VIEW

KEY NUMBERS

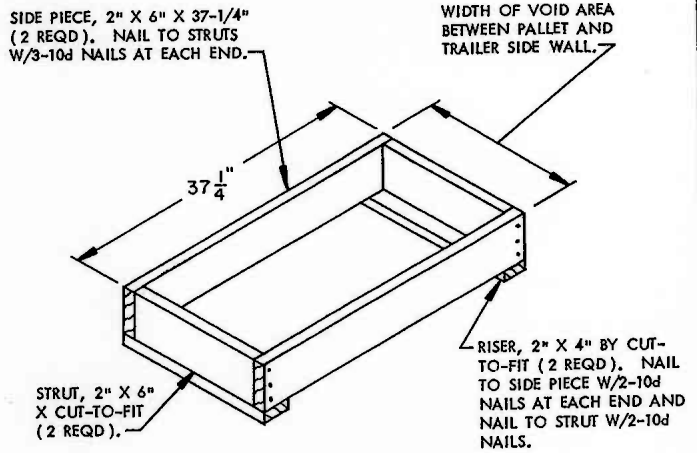
- ① SIDE BLOCKING ASSEMBLY (2 REQD). SEE THE "SIDE BLOCKING ASSEMBLY C" DETAIL ON PAGE 27.
- ② REAR BLOCKING, 6" WIDE MATERIAL BY TRAILER WIDTH MINUS 1/2" IN LENGTH AND/OR CUT TO FIT BETWEEN REAR CORNER POSTS, BY THE THICKNESS REQUIRED TO CONTACT THE REAR DOORS OF THE TRAILER WHEN THEY ARE CLOSED. LAMINATE W/1-10d NAIL EVERY 12". SEE GENERAL NOTE "R" ON PAGE 2.
- ③ BUNDLING STRAP, 1-1/4" X .035" X 25'-0" LONG STEEL STRAPPING (1 REQD). PRE-POSITION AND INSTALL TO ENCIRCLE THE TWO (2) REAR PALLET UNITS AS SHOWN.
- ④ SEAL FOR 1-1/4" STRAPPING (2 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "P" ON PAGE 2.



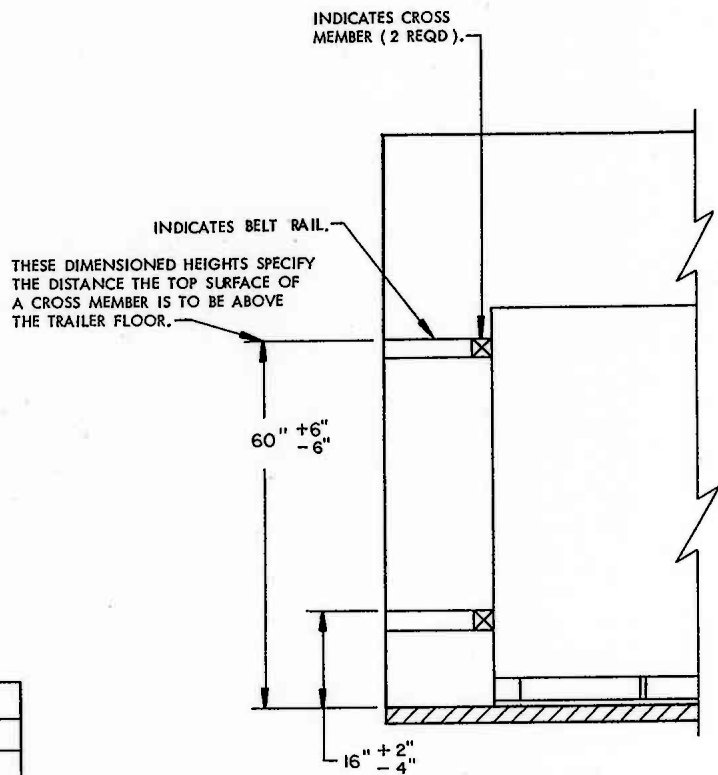
SECTION D-D

SPECIAL NOTES:

1. A 21-UNIT (CHIMNEY PATTERN) LOAD IS SHOWN IN A 39'-6" LONG BY 7'-6" WIDE (INSIDE DIMENSIONS) VAN TRAILER WITH A SQUARE FRONT. TRAILERS WIDER OR NARROWER CAN BE USED.
2. 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 IN LIEU OF "REAR BLOCKING", PIECES MARKED (2) ON PAGES 26 AND 28. SEE THE "PARTIAL ELEVATION VIEW" BELOW FOR CROSS MEMBER LOCATION AND QUANTITY REQUIREMENTS. THE MECHANICAL BRACING DEVICE SYSTEM OF A TRAILER MUST HAVE A LENGTH OF AT LEAST 39'-5" FOR A 21-UNIT LOAD AS SHOWN ON PAGE 26 OR 36'-4" FOR A 20-UNIT LOAD AS SHOWN ON PAGE 28, AS MEASURED FROM THE FRONT WALL OF THE TRAILER.
3. IF THE TRAILER BEING LOADED HAS ROUNDED CORNERS AT THE FORWARD END, INSTALL A "FORWARD BLOCKING ASSEMBLY" SHOWN AS PIECE MARKED (1) ON PAGE 28. SEE "FORWARD BLOCKING ASSEMBLY C" ON PAGE 29.
4. IF THE TRAILER BEING LOADED HAS AN INSIDE LENGTH OF LESS THAN 39'-1" ONLY 20 UNITS CAN BE LOADED INTO THE TRAILER AND THE "REAR BLOCKING ASSEMBLY" SHOWN AS PIECE MARKED (2) ON PAGE 28 MUST BE USED IN LIEU OF "REAR BLOCKING" SPECIFIED IN THE LOAD VIEW ON PAGE 26.
5. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED. A LOAD CAN BE REDUCED BY A MULTIPLE OF FOUR (4) UNITS BY OMITTING ONE OR MORE CHIMNEYS AND INCREASING THE LENGTH OF THE REAR BLOCKING SHOWN AS PIECE MARKED (2) ON PAGE 28. TWO (2) UNITS CAN BE LOADED IN THE PLACE OF ONE CHIMNEY BY USING THE ANTI-SWAY BRACES SHOWN AS PIECES MARKED (2) AND (3) ON PAGE 30.
6. TRAILERS HAVING INSIDE WIDTHS GREATER THAN 92" CAN BE USED FOR SHIPPING THE LOAD DEPICTED ON PAGE 26. HOWEVER, CENTER FILL ASSEMBLIES AS DETAILED ON PAGE 29, MUST BE INSTALLED BETWEEN LATERALLY ADJACENT MULTIPACK UNITS TO PREVENT LATERAL DISPLACEMENT OF THE UNITS DURING SHIPMENT. ALL OTHER DUNNAGE SPECIFIED FOR THE LOAD ON PAGE 26 WILL REMAIN UNCHANGED.



SIDE BLOCKING ASSEMBLY C



PARTIAL ELEVATION VIEW

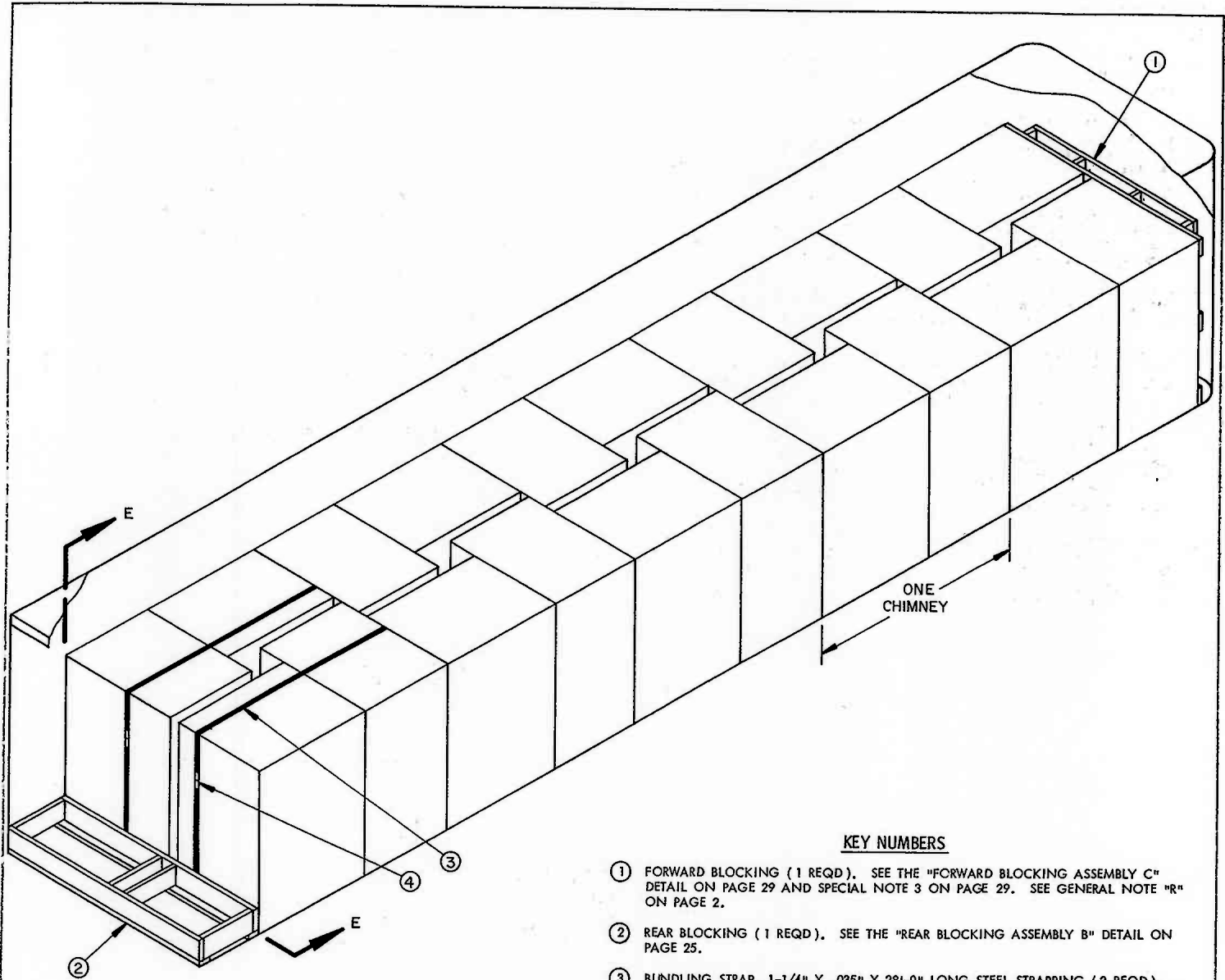
SEE SPECIAL NOTE 2 ABOVE.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 6"	8	4
2" X 4"	7	5
2" X 6"	32	32
NAILS	NO. REQD	POUNDS
10d (3")	62	1
STEEL STRAPPING, 1-1/4" X .035" ----- 25' REQD ----- 4 LBS		
SEAL FOR 1-1/4" STRAPPING ----- 2 REQD ----- NIL		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
MULTIPACK UNIT	21	13,818 LBS
DUNNAGE		87 LBS

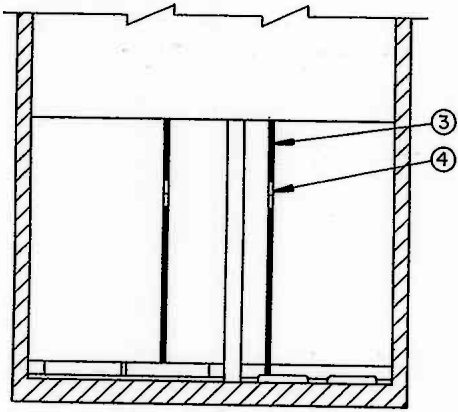
TOTAL WEIGHT --- 13,905 LBS



ISOMETRIC VIEW

KEY NUMBERS

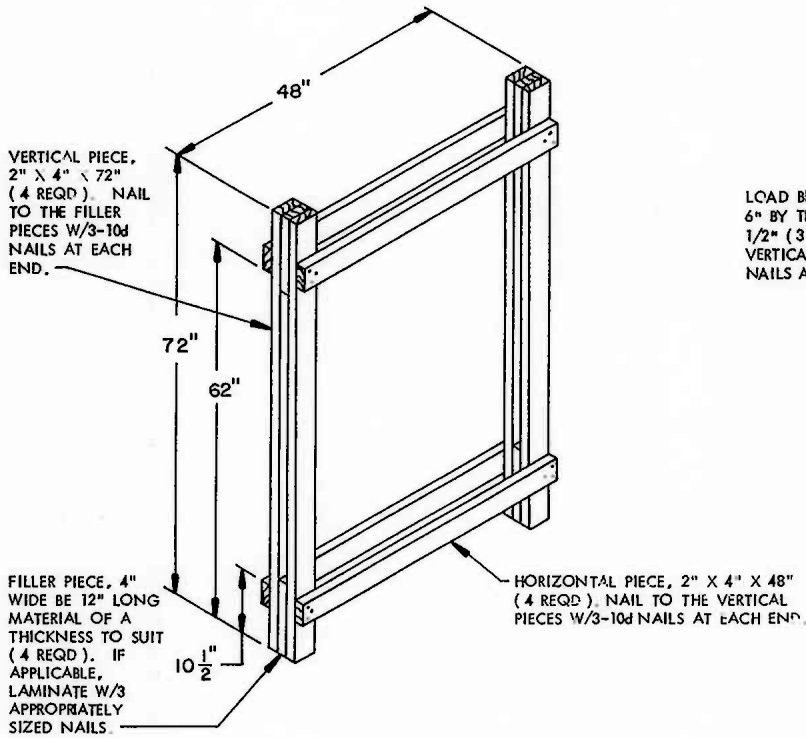
- ① FORWARD BLOCKING (1 REQD). SEE THE "FORWARD BLOCKING ASSEMBLY C" DETAIL ON PAGE 29 AND SPECIAL NOTE 3 ON PAGE 29. SEE GENERAL NOTE "R" ON PAGE 2.
- ② REAR BLOCKING (1 REQD). SEE THE "REAR BLOCKING ASSEMBLY B" DETAIL ON PAGE 25.
- ③ BUNDLING STRAP, 1-1/4" X .035" X 28'-0" LONG STEEL STRAPPING (2 REQD). PRE-POSITION AND INSTALL TO ENCIRCLE THE TWO (2) REAR PALLET UNITS AS SHOWN.
- ④ SEAL FOR 1-1/4" STRAPPING (4 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "P" ON PAGE 2.



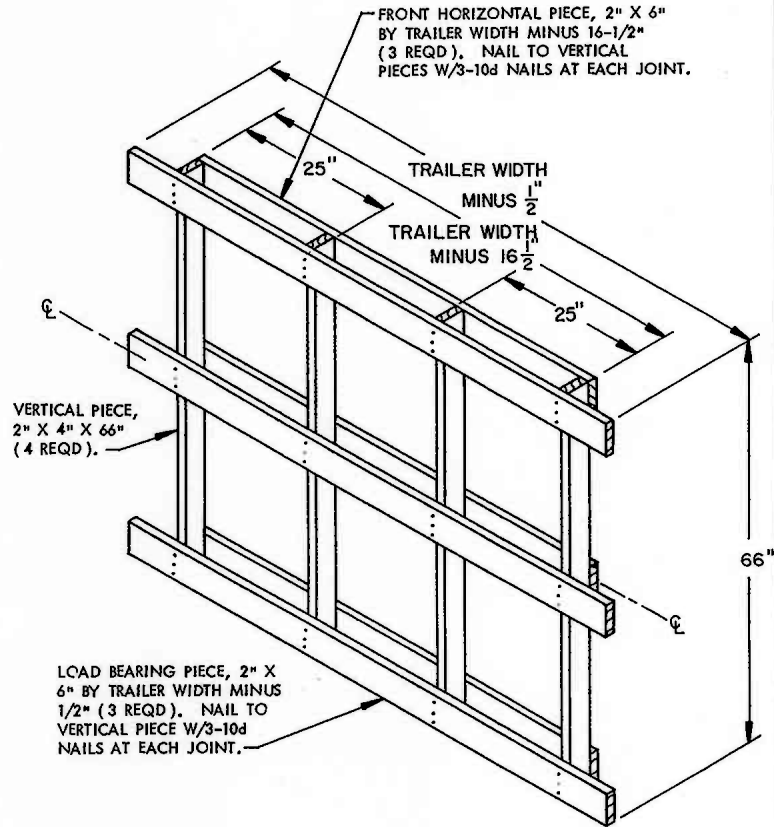
SECTION E-E

SPECIAL NOTES:

1. A 20-UNIT (CHIMNEY PATTERN) LOAD IS SHOWN IN A 39'-6" LONG BY 7'-6" WIDE (INSIDE DIMENSIONS) VAN TRAILER WITH ROUNDED CORNERS AT THE FORWARD END. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
2. IF THE TRAILER BEING OUTLOADED CONTAINS MECHANICAL BRACING DEVICES SEE THE "PARTIAL ELEVATION VIEW" AND SPECIAL NOTE 2 ON PAGE 27 FOR APPLICABLE LOADING PROCEDURES.
3. IF THE TRAILER BEING LOADED HAS A SQUARE FRONT OR AN INSTALLED BULKHEAD, DELETE THE "FORWARD BLOCKING", PIECE MARKED ① ON PAGE 28, AND POSITION THE FORWARD UNITS DIRECTLY AGAINST THE FORWARD PORTION OF THE TRAILER AS DEPICTED IN THE LOAD VIEW ON PAGE 26.
4. THE DEPICTED LOAD CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED. SEE SPECIAL NOTE 5 ON PAGE 27 FOR APPLICABLE LOADING PROCEDURES.
5. TO SHIP THE LOAD DEPICTED ON PAGE 28 IN TRAILERS HAVING INSIDE WIDTHS GREATER THAN 92", SEE SPECIAL NOTE 6 ON PAGE 27.



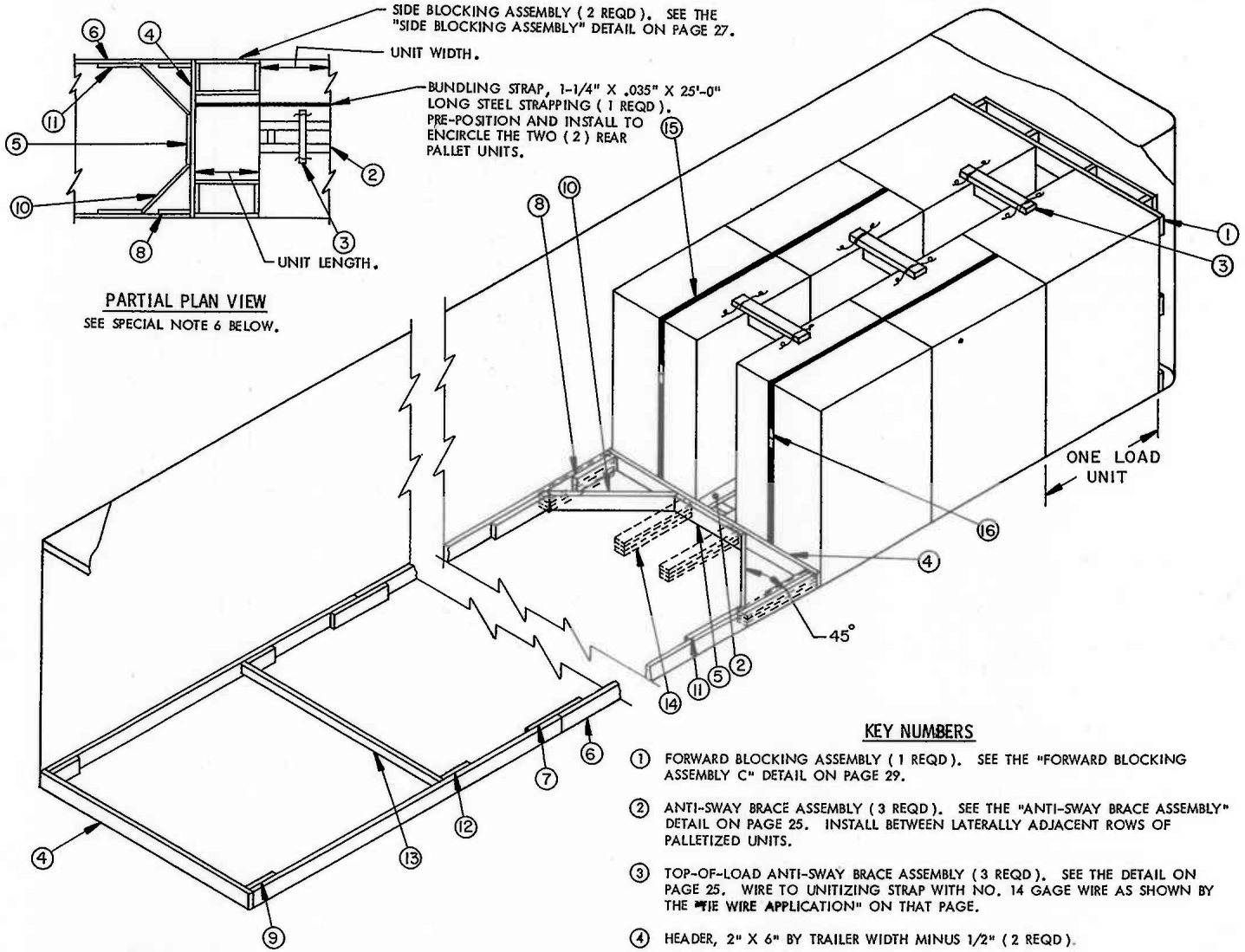
CENTER FILL ASSEMBLY



FORWARD BLOCKING ASSEMBLY C

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	37	25
2" X 6"	68	68
NAILS	NO. REQD	POUNDS
10 d (3")	112	1-3/4
STEEL STRAPPING, 1-1/4" X .035" -----	56' REQD -----	8 LBS
SEAL FOR 1-1/4" STRAPPING -----	4 REQD -----	NIL

LOAD AS SHOWN		
ITEM	QUANTITY	WEIGHT (APPROX)
MULTIPACK UNIT -----	20 -----	13,160 LBS
DUNNAGE -----		196 LBS
TOTAL WEIGHT --		13,356 LBS



PARTIAL PLAN VIEW
SEE SPECIAL NOTE 6 BELOW.

ISOMETRIC VIEW

SPECIAL NOTES:

1. A 6-UNIT LOAD IS SHOWN. THESE OUTLOADING PROCEDURES DEPICT THE USE OF BOTH "K-BRACE" TYPE BLOCKING AND "NAILED-FLOOR-LINE" BLOCKING IN A 7'-6" WIDE (INSIDE DIMENSION) VAN TRAILER WHICH IS EQUIPPED WITH OR WITHOUT A NAILABLE FLOOR.
2. THE DEPICTED "K-BRACE" BLOCKING WILL RETAIN A MAXIMUM SIZE LTL LOAD.
3. PIECES MARKED (14) ARE FOR USE IN A TRAILER WHICH HAS A NAILABLE FLOOR AND MAY BE USED IN LIEU OF PIECES MARKED (5) THRU (13) WHICH APPLY TO TRAILERS HAVING NON-NAILABLE FLOORS. FOUR (4) BACK-UP CLEATS AS SHOWN ARE ADEQUATE FOR RETAINING A MAXIMUM SIZE LTL LOAD.
4. A WIDER OR NARROWER TRAILER THAN SHOWN MAY BE USED FOR SHIPPING THE DEPICTED LOAD. ADJUST THE WIDTH OF THE ANTI-SWAY BRACING, PIECES MARKED (2) AND (3), AS NECESSARY TO PROVIDE A "TIGHT" LOAD ACROSS THE WIDTH OF THE TRAILER. FOR TRAILERS WITH SQUARE FRONT OR AN INSTALLED BULKHEAD, DELETE THE "FORWARD BLOCKING" PIECE MARKED (1) AND POSITION THE FORWARD UNITS DIRECTLY AGAINST THE FORWARD PORTION OF THE TRAILER.
5. IF DESIRED, THE QUANTITY OF UNITS TO BE SHIPPED MAY BE ADJUSTED BY USING THE CHIMNEY PATTERN AS SHOWN IN THE VIEWS ON PAGES 26 AND 28. THIS PATTERN PROVIDES MAXIMUM UTILIZATION OF THE TRAILER FLOOR SPACE FOR SHIPMENT OF THE UNITS AND DELETES THE USE OF ANTI-SWAY BRACING PIECES MARKED (2) AND (3).
6. THE "PARTIAL PLAN VIEW" SHOWN ABOVE DEPICTS PROCEDURES FOR LTL SHIPMENTS OF ODD NUMBERS OF MULTIPACK PALLET UNITS. NOTE THAT THE ODD UNIT REQUIRES ONLY ONE (1) BUNDLING STRAP IN LIEU OF THE TWO (2) PIECES MARKED (15), AS WELL AS THE USE OF SIDE BLOCKING ASSEMBLIES. THE BLOCKING AND BRACING FOR THE BALANCE OF THE LOAD WILL BE AS SHOWN IN THE ISOMETRIC VIEW ABOVE AND AS SPECIFIED BY THE KEY NUMBERS AT RIGHT.

KEY NUMBERS

- (1) FORWARD BLOCKING ASSEMBLY (1 REQD). SEE THE "FORWARD BLOCKING ASSEMBLY C" DETAIL ON PAGE 29.
- (2) ANTI-SWAY BRACE ASSEMBLY (3 REQD). SEE THE "ANTI-SWAY BRACE ASSEMBLY" DETAIL ON PAGE 25. INSTALL BETWEEN LATERALLY ADJACENT ROWS OF PALLETIZED UNITS.
- (3) TOP-OF-LOAD ANTI-SWAY BRACE ASSEMBLY (3 REQD). SEE THE DETAIL ON PAGE 25. WIRE TO UNITIZING STRAP WITH NO. 14 GAGE WIRE AS SHOWN BY THE "WIRE APPLICATION" ON THAT PAGE.
- (4) HEADER, 2" X 6" BY TRAILER WIDTH MINUS 1/2" (2 REQD).
- (5) CENTER CLEAT, 2" X 6" X 30" (1 REQD). NAIL TO THE FORWARD PIECE MARKED (4) W/7-10d NAILS. SEE GENERAL NOTE "R" ON PAGE 2.
- (6) SIDE STRUT, 2" X 6" BY CUT TO FIT BETWEEN FORWARD AND REAR PIECES MARKED (4) (2 REQD).
- (7) SPLICE PIECE, 2" X 6" X 24" (2 REQD). CENTER ON A JOINT OF PIECES MARKED (6) AND NAIL W/4-10d NAILS AT EACH END.
- (8) POCKET CLEAT, 2" X 6" X 18" (2 REQD). NAIL TO PIECE MARKED (6) W/5-10d NAILS. TOENAIL TO THE ADJACENT PIECE MARKED (4) W/3-12d NAILS.
- (9) STRUT RETAINING BLOCK, 2" X 6" X 12" (2 REQD). NAIL TO PIECE MARKED (6) W/3-10d NAILS. TOENAIL TO THE REAR PIECE MARKED (4) W/3-12d NAILS.
- (10) DIAGONAL BRACE, 2" X 6" BY CUT TO FIT (2 REQD). DOUBLE BEVEL EACH END WITH 45° CUTS. INSTALL AT 45° ANGLE AS SHOWN AND TOENAIL TO THE ADJACENT PIECE MARKED (4) AND TO PIECE MARKED (6) W/2-12d NAILS AT EACH END.
- (11) SIDE CLEAT, 2" X 6" X 24" (2 REQD). NAIL TO PIECE MARKED (6) W/8-10d NAILS.
- (12) STRUT BRACING SUPPORT PIECE, 2" X 6" X 12" (4 REQD). POSITION SO THAT PIECES MARKED (13) ARE EQUALLY SPACED ON THE LENGTH OF PIECE MARKED (6). NAIL TO PIECE MARKED (6) W/3-10d NAILS.
- (13) STRUT BRACING, 2" X 4" BY TRAILER WIDTH MINUS 3" (CUT TO FIT) (AS REQD). NAIL TO PIECE MARKED (12) W/2-12d NAILS AT EACH END. ONE STRUT BRACE IS REQUIRED FOR EACH 7'-0" LENGTH OF SIDE STRUTS MARKED (6).
- (14) BACK-UP CLEAT, 2" X 4" X 30" (TRIPLED) (4 REQD). POSITION AS SHOWN AND NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/7-12d NAILS. NAIL EACH ADDITIONAL PIECE IN A LIKE MANNER. TOENAIL THE TOP PIECE TO THE ADJACENT HEADER MARKED (4) W/2-12d NAILS. SEE SPECIAL NOTE 3 AT LEFT.
- (15) BUNDLING STRAP, 1-1/4" X .035" X 30'-0" LONG STEEL STRAPPING (2 REQD). PRE-POSITION AND INSTALL TO ENCIRCLE THE TWO (2) REAR PALLET UNITS AS SHOWN.
- (16) SEAL FOR 1-1/4" STRAPPING (4 REQD, 2 PER STRAP). DOUBLE CRIMP EACH SEAL. SEE GENERAL NOTE "P" ON PAGE 2.