

# LOADING AND BRACING (TL & LTL) IN CLOSED OR OPEN TOP VAN TRAILERS OF CHARGE, DEMOLITION, LINEAR, HE M58A3 AND INERT M68A2, IN METAL SHIPPING AND STORAGE CONTAINER

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U.S. ARMY MATERIEL COMMAND DRAWING			
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JUNE 1986			
REVISION NO. 1	OCTOBER 1991	CLASS	DIVISION
SEE THE REVISION LISTING ON PAGE 2		DRAWING	FILE
		19	48
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DO NOT SCALE

## GENERAL NOTES

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1, AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- B. THE OUTLOADING PROCEDURES SPECIFIED IN THIS DRAWING ARE APPLICABLE TO LINEAR DEMOLITION CHARGES, HE M58A3 AND INERT M68A2, IN METAL SHIPPING AND STORAGE CONTAINER. SUBSEQUENT REFERENCE TO CONTAINER MEANS THE SHIPPING AND STORAGE CONTAINER WITH CONTENTS.
- C. FOR DETAILS OF THE SHIPPING AND STORAGE CONTAINER, SEE THE DETAIL ON PAGE 3.
- CONTAINER DIMENSIONS -- 6'-11-1/4" LONG BY 53-3/4" WIDE BY 24-3/4" HIGH.  
GROSS WEIGHT (APPROX):  
WITH HE COMP C4 M58A3 CHARGE, DODIC M913 -- 2,900 LBS  
WITH INERT M68A2 CHARGE, DODIC M914 -- 2,790 LBS  
CUBE ----- 64.1 CUBIC FEET
- D. THIS ITEM, WHEN AN M58A3 CHARGE, IS A DOT CLASS "A" EXPLOSIVE; WHEN AN M68A2 CHARGE, IS INERT. THE OUTLOADING PROCEDURES SPECIFIED HEREIN CAN ALSO BE UTILIZED FOR THE SHIPMENT OF THE DEPICTED CONTAINERS WHEN THEY ARE LOADED WITH AN ITEM WHICH IS IDENTIFIED DIFFERENTLY BY NOMENCLATURE THAN THE ITEM DESIGNATED WITHIN THE DRAWING TITLE.
- E. THE OUTLOADING PROCEDURES DEPICTED WITHIN THIS DOCUMENT ARE APPLICABLE FOR SHIPMENTS IN CONVENTIONAL TYPE VAN TRAILERS, AND APPLY TO TRAILERS HAVING WOOD, OR WOOD AND METAL, OR ALL METAL FLOORS. THEY ARE LIMITED TO HIGHWAY MOVEMENT ONLY. VAN TRAILERS WHICH ARE 40'-0" LONG BY 7'-8" (INSIDE DIMENSION) HAVE BEEN SHOWN. HOWEVER, THE PROCEDURES ARE ALSO APPLICABLE FOR TRAILERS WHICH ARE EIGHTY-NINE INCHES (89") THRU NINETY-NINE INCHES (99") IN WIDTH AND FOR TRAILERS OF OTHER LENGTHS FROM THE SHORTEST TO THE LONGEST AVAILABLE (REF: 24' TO 53'). AND FOR STRAIGHT TRUCK VANS. THE LOADING AND BRACING PROCEDURES SPECIFIED HEREIN ARE ALSO ADEQUATE (CONFIGURATION-WISE AND STRENGTH-WISE) FOR LOADS IN SHORTER OR LONGER VANS THAN SHOWN. THE SPECIFIED BRACING IS ADEQUATE FOR LOADS WEIGHING UP TO AND INCLUDING THE MAXIMUM WEIGHTS PERMITTED BY LAW.
- F. SELECTION OF A VEHICLE TO BE USED TO TRANSPORT THE DESIGNATED ITEM MUST COMPLY WITH AR 55-355, CHAPTER 29, FOR EXPLOSIVES AND OTHER DANGEROUS ARTICLES, IN FULL.
- G. 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, DUNNAGE, OF THE TRACTOR AND OF THE SEMI-TRAILER CARRYING THE LADING MUST NOT EXCEED THE MAXIMUM GROSS WEIGHT ALLOWED FOR BY THE STATE OR STATES THRU WHICH THE LOAD IS TO BE TRANSPORTED BY MOTOR CARRIER. LIKEWISE, THE GROSS WEIGHT ON A SINGLE OR A TANDEM AXLE MUST NOT EXCEED THE MAXIMUM ALLOWABLE WEIGHT. IF THERE IS ANY DOUBT AS TO WHETHER THE TOTAL GROSS WEIGHT OR AXLE WEIGHT EXCEEDS THE MAXIMUM ALLOWED, WEIGHTS SHOULD BE VERIFIED BY ACTUALLY WEIGHING THE LOADED VEHICLE.
- H. THE NUMBER OF LADING CONTAINERS MAY BE ADJUSTED TO SUIT THE CAPACITY OF THE TRAILER BEING LOADED OR THE QUANTITY TO BE SHIPPED. HOWEVER, THE APPROVED METHODS SPECIFIED HEREIN MUST BE FOLLOWED AS CLOSELY AS POSSIBLE FOR BLOCKING, BRACING, AND STAYING OF THE LOADS.
- J. 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.

(CONTINUED AT RIGHT)

## MATERIAL SPECIFICATIONS

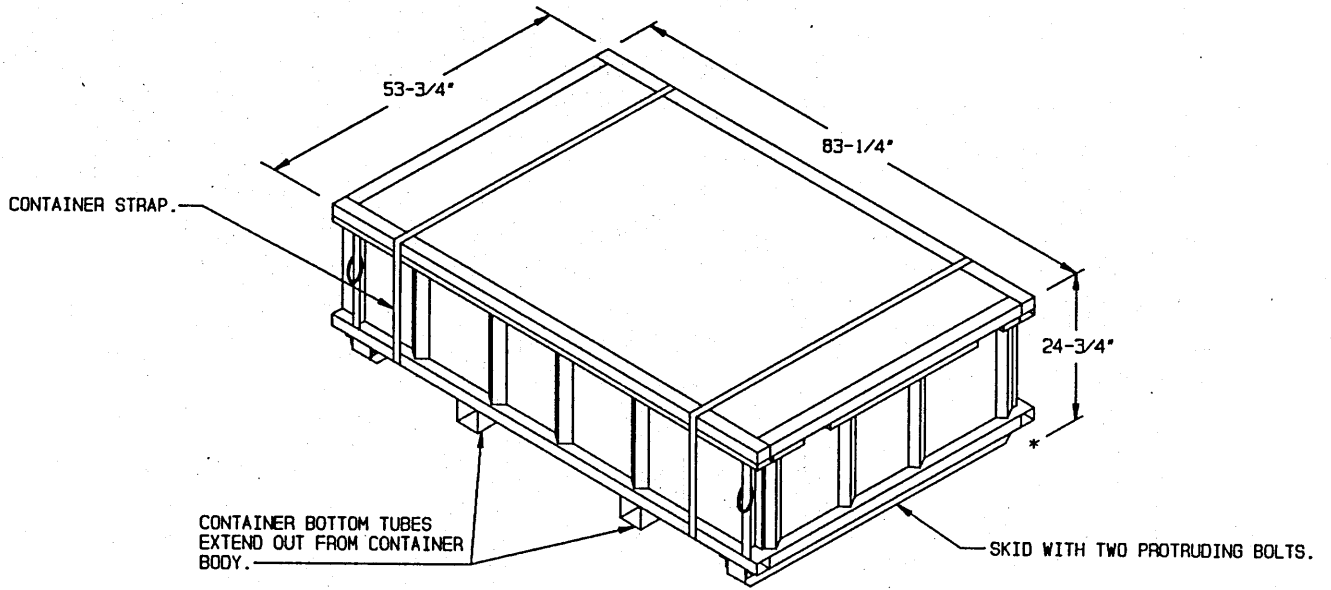
- LUMBER ----- : SEE TM 743-200-1, DUNNAGE LUMBER:  
FED SPEC MM-L-751.
- NAILS ----- : FED SPEC FF-N-105, COMMON.
- STRAPPING, STEEL - : ASTM D 3953; FLAT STRAPPING, TYPE 1 OR 2, HEAVY DUTY, COATED FINISH (ORGANIC), ZINC-COATED (GRADE 2), OR UNCOATED.
- SEAL, STRAP - - - - : ASTM D 3953; CLASS H, FINISH A, B (GRADE 2), OR C, TYPE D, STYLE I, II, OR IV.

## (GENERAL NOTES CONTINUED)

- K. 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 1" X 6" MATERIAL IS ACTUALLY 3/4" THICK BY 5-1/2" WIDE.
- L. 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. SEE GENERAL NOTE "N" BELOW.
- M. CAUTION: BLOCKING WILL NOT BE NAILED TO THE TRAILER WALLS. ALL NAILING WILL BE WITHIN THE DUNNAGE.
- N. POWER DRIVEN STAPLES MAY BE USED AS ALTERNATIVE FASTENERS FOR NAILS WHEN CONSTRUCTING DUNNAGE ASSEMBLIES WHICH ARE TO BE USED IN THE DELINEATED 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 2-1/2" OR LESS IN LENGTH SHOULD BE IN ACCORDANCE WITH FEDERAL SPECIFICATION FF-N-105 AS NEARLY PRACTICABLE. STAPLES WHICH ARE LONGER THAN 2-1/2" 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.
- O. WHEN STEEL STRAPPING IS SEALED IN AN END-OVER-END LAP JOINT, A MINIMUM OF ONE SEAL WITH TWO PAIR OF NOTCHES WILL BE USED TO SEAL THE JOINT WHEN A NOTCH-TYPE SEAL IS BEING USED. A MINIMUM OF TWO SEALS, BUTTED TOGETHER WITH TWO PAIR OF CRIMPS PER SEAL, WILL BE USED TO SEAL THE JOINT WHEN A CRIMP-TYPE SEALER IS BEING USED.
- P. PORTIONS OF THE TRAILERS, SUCH AS SIDEWALLS, END WALLS, AND ROOFS, HAVE NOT BEEN SHOWN IN THE LOAD VIEWS FOR CLARITY PURPOSES.
- Q. FOR ADDITIONAL GUIDANCE, ATTENTION IS DIRECTED TO THE "SPECIAL NOTES" SECTIONS WHICH ARE IMMEDIATELY ADJACENT TO THE DEPICTED OUTLOADING METHODS.
- R. 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.

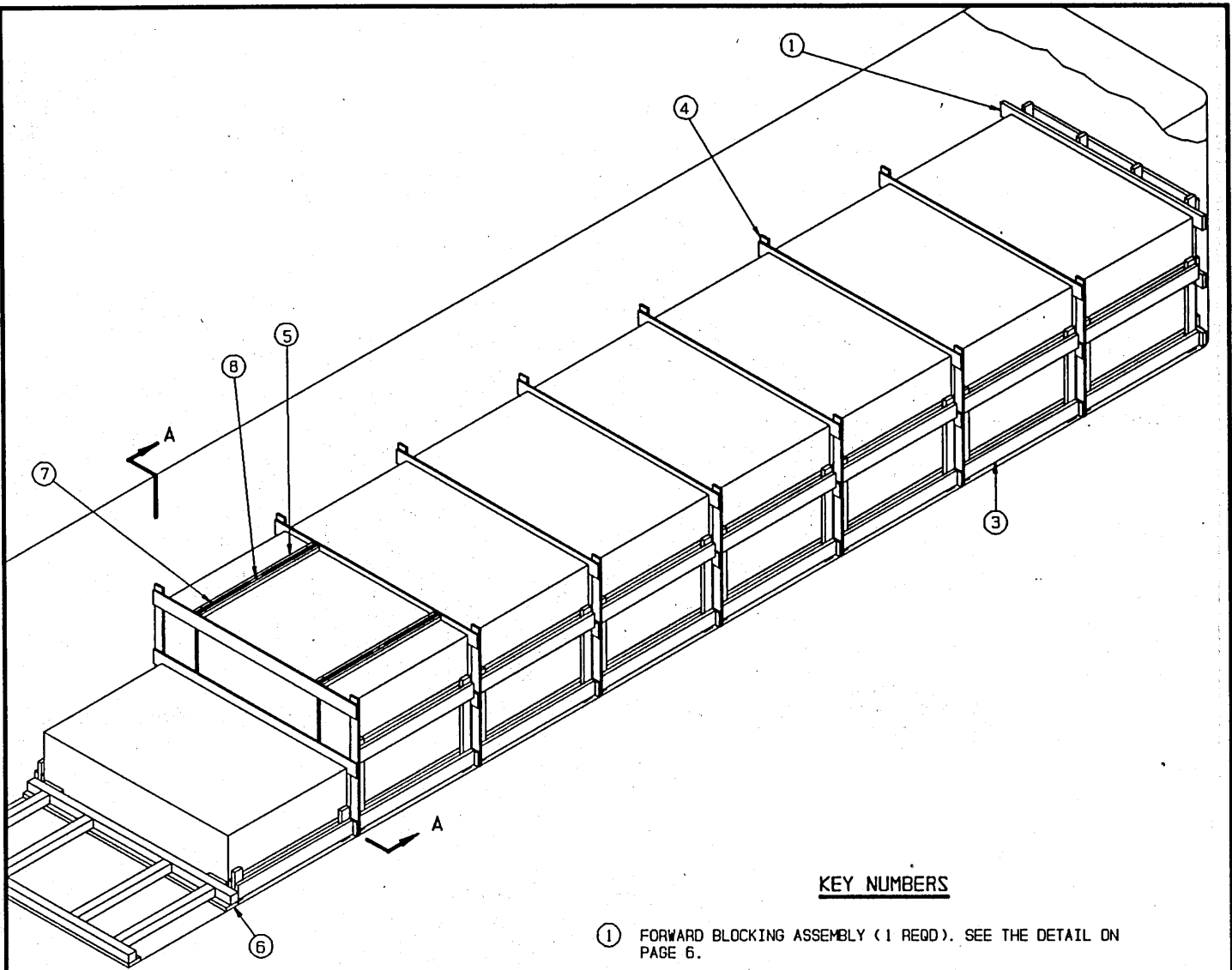
## REVISION

- REVISION NO. 1, DATED OCTOBER 1991, CONSISTS OF:
1. ADDING PROCEDURES FOR USING WIDER TYPE TRAILERS.



CONTAINER DETAIL

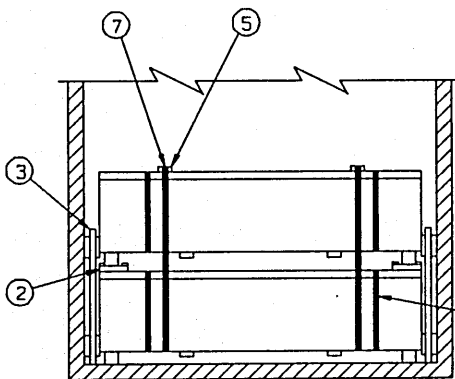
NOTE: CONTAINERS CANNOT BE STACKED  
UNLESS COVER SPANNER ASSEMBLIES ARE  
PROVIDED UNDER SKIDS BETWEEN LAYERS.



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD BLOCKING ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 6.
- ② COVER SPANNER ASSEMBLY (14 REQD). POSITION TWO ON COVER OF FIRST-LAYER CONTAINER AND TO BE LOCATED UNDER SKIDS OF SECOND-LAYER CONTAINER. SEE THE DETAIL ON PAGE 6.
- ③ SIDE FILL ASSEMBLY (14 REQD FOR 2-LAYER LOAD UNITS; 2 REQD FOR 1-LAYER LOAD UNIT). SEE THE "SIDE FILL ASSEMBLY A" DETAIL ON PAGE 7. SEE SPECIAL NOTE 5 ON PAGE 5.
- ④ ANTI-CHAFING GATE (7 REQD). SEE THE DETAIL ON PAGE 6.
- ⑤ STRAPPING BOARD, 2" X 4" X 53-1/2" (2 REQD). POSITION UNDER BUNDLING STRAPS.
- ⑥ REAR BLOCKING ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 7 AND SPECIAL NOTE 4 ON PAGE 5.
- ⑦ BUNDLING STRAP, 1-1/4" X .035" DR .031" STEEL STRAPPING BY LENGTH REQUIRED TO ENCIRCLE ONE 2-LAYER LOAD UNIT AS SHOWN (2 REQD). PRE-POSITION PRIOR TO FINAL PLACEMENT OF CONTAINERS. STAPLE TO THE STRAPPING BOARD 1/2 STAPLES.
- ⑧ SEAL FOR 1-1/4" STRAPPING (4 REQD, 2 PER STRAP). CRIMP EACH SEAL WITH TWO PAIR OF CRIMPS. SEE GENERAL NOTE "D" ON PAGE 2.



INDICATES CONTAINER STRAP.

SECTION A-A

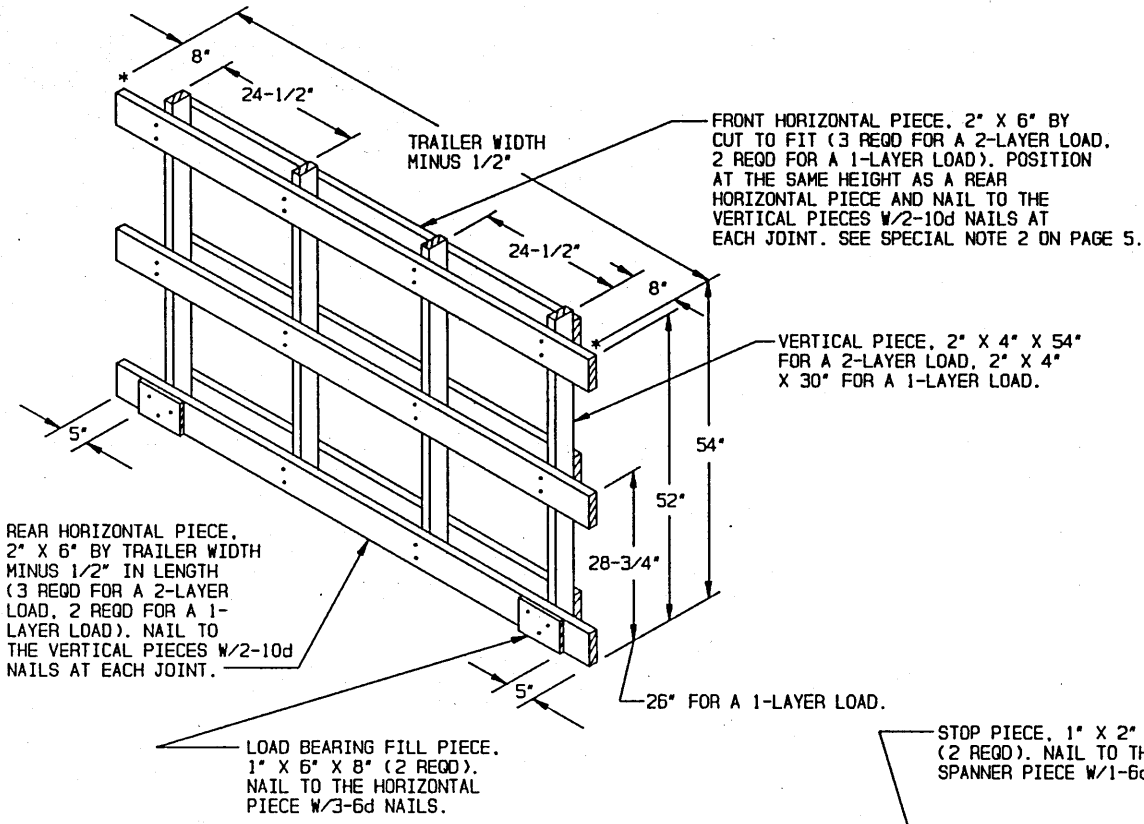
**SPECIAL NOTES:**

1. A 15-CONTAINER LOAD OF INERT M68A2 CHARGES IS SHOWN IN A 40'-0" LONG BY 7'-8" WIDE (INSIDE DIMENSION) TRAILER THAT HAS ROUNDED CORNERS AT THE FORWARD END. TRAILERS OF OTHER SIZES MAY BE USED. SEE NOTE 5 BELOW.
2. IF THE TRAILER TO BE USED HAS SQUARE CORNERS AT THE FRONT, THE FRONT HORIZONTAL PIECES OF THE FORWARD BLOCKING ASSEMBLY SHOULD BE TRAILER WIDTH MINUS 1/2". DUE TO THE CONFIGURATION OF THE CONTAINER, A FORWARD BLOCKING ASSEMBLY IS REQUIRED.
3. FOR A LOAD OF HE M58A3 CHARGES, THE QUANTITY OF CONTAINERS TO BE SHIPPED MAY HAVE TO BE REDUCED DEPENDING ON THE WEIGHT CAPACITY OF THE TRAILER TO BE USED. SEE GENERAL NOTES "G" AND "H" ON PAGE 2.
4. THE REAR BLOCKING ASSEMBLY, PIECE MARKED ⑥ ON PAGE 4, MUST BE FABRICATED SO THAT THE REAR HEADER OF THE ASSEMBLY IS IN CONTACT WITH THE DOORS OF THE TRAILER WHEN THEY ARE CLOSED. IF THE TRAILER HAS REAR CORNER POSTS, THE REAR HEADER OF THE ASSEMBLY MUST CONTACT THE CORNER POSTS AND ADDITIONAL 4" WIDE MATERIAL NAILED TO THE REAR HEADER OF THICKNESS (ES) REQUIRED TO CONTACT THE DOORS WHEN CLOSED.
5. THE LOAD SHOWN ON PAGE 4 IS DEPICTED IN A 7'-8" WIDE TRAILER. HOWEVER, IF A WIDER TRAILER IS FURNISHED FOR LOADING, MODIFICATIONS MAY BE MADE TO THE SIDE FILL ASSEMBLY A, OR SIDE FILL ASSEMBLY B AS DETAILED ON PAGE 7 MAY BE USED. SEE "NOTE ■" ON PAGE 7.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 2"	126	21
1" X 4"	65	22
1" X 6"	181	91
2" X 4"	115	77
2" X 6"	318	318
2" X 8"	63	84
4" X 4"	24	32
NAILS	NO. REQD	POUNDS
6d (2")	474	3
10d (3")	310	5
16d (3-1/2")	16	1/2
STEEL STRAPPING, 1-1/4" --- 36' REQD --- 5 LBS		
SEAL FOR 1-1/4" STRAPPING --- 4 REQD --- NIL		

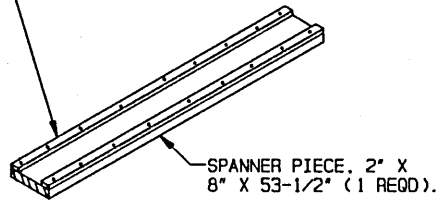
**LOAD AS SHOWN**

ITEM	QUANTITY	WEIGHT (APPROX)
CONTAINER WITH		
INERT M68A2 CHARGE	--15	41,850 LBS
DUNNAGE	-----	1,304 LBS
TOTAL WEIGHT		----- 43,154 LBS (APPROX)

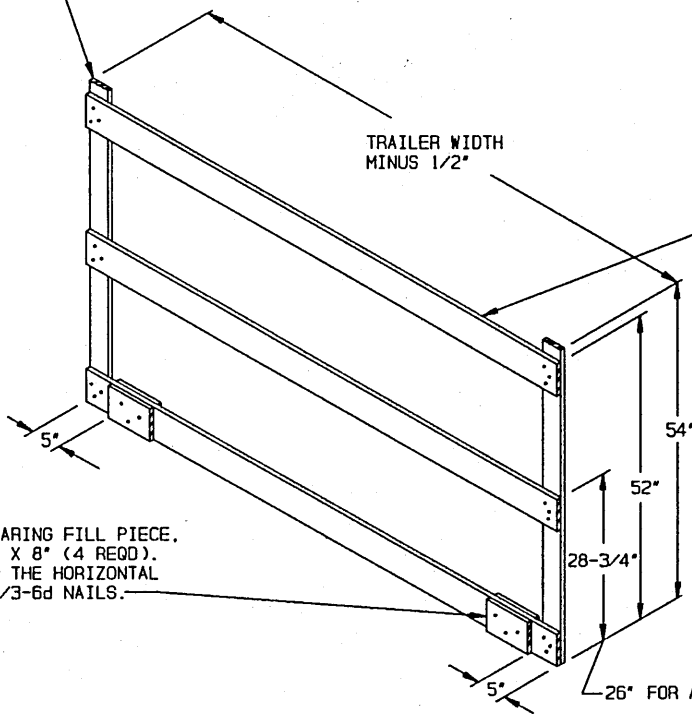


**FORWARD BLOCKING ASSEMBLY**

VERTICAL PIECE, 1" X 4" X 54" FOR A 2-LAYER LOAD, 1" X 4" X 29" FOR A 1-LAYER LOAD (2 REQD).

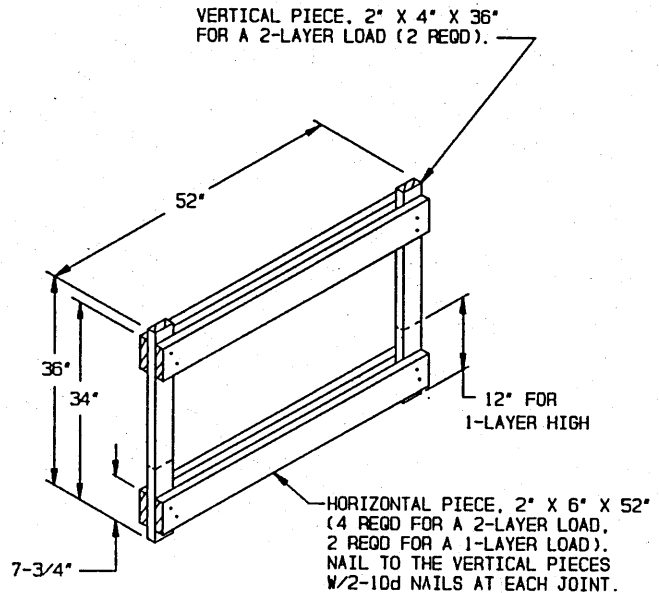


**COVER SPANNER ASSEMBLY**



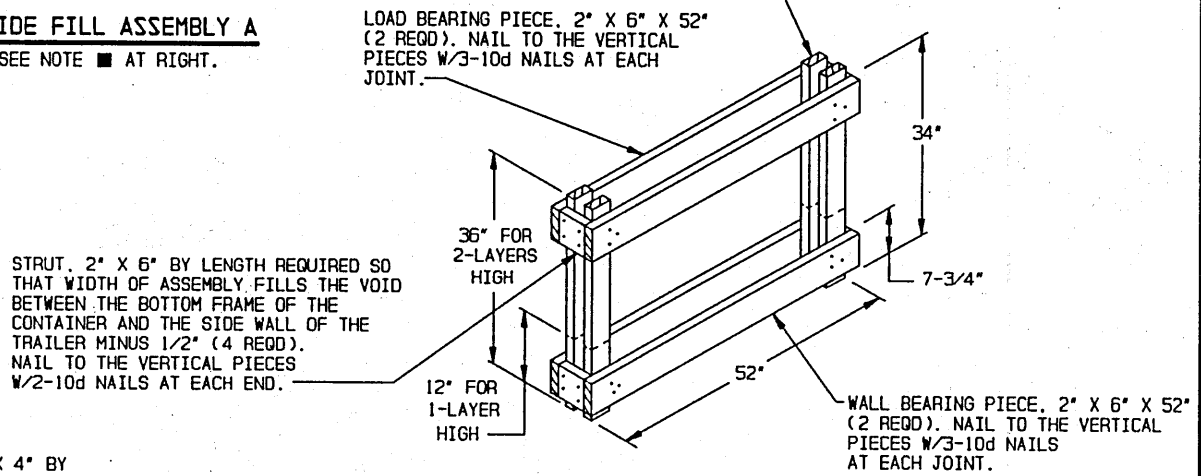
HORIZONTAL PIECE, 1" X 6" BY TRAILER WIDTH MINUS 1/2" IN LENGTH (3 REQD FOR A 2-LAYER LOAD, 2 REQD FOR A 1-LAYER LOAD). NAIL TO THE VERTICAL PIECES W/3-6d NAILS AT EACH JOINT AND CLINCH.

**ANTI-CHAFING ASSEMBLY**



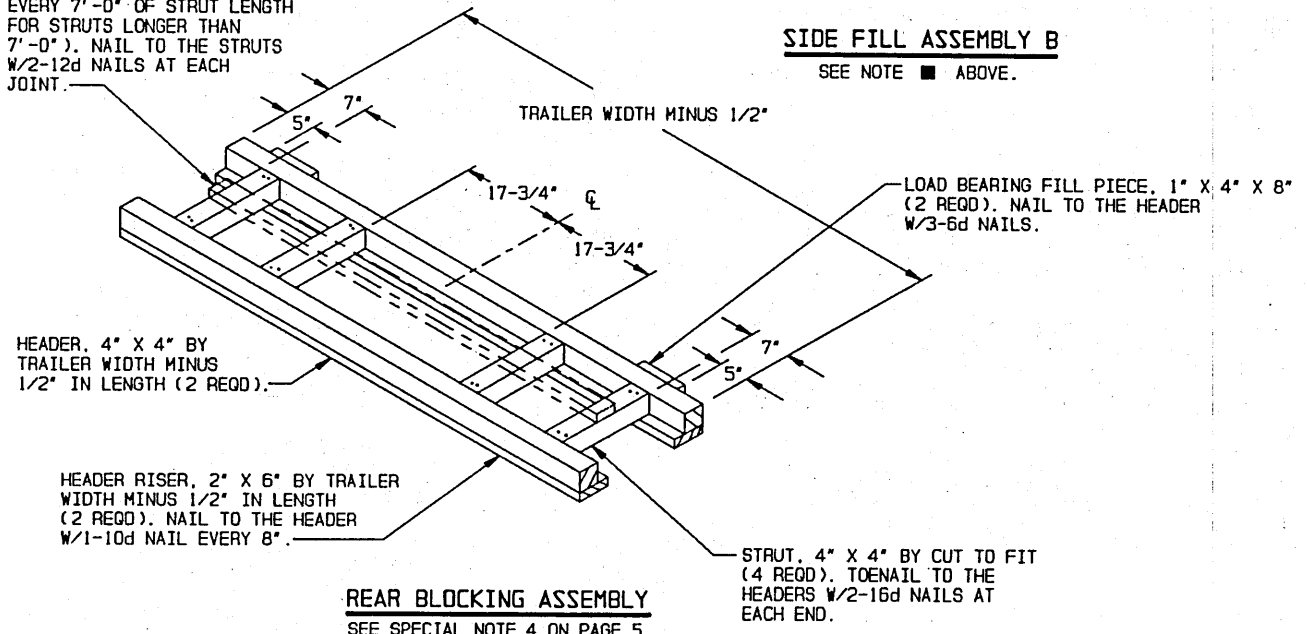
**SIDE FILL ASSEMBLY A**  
SEE NOTE ■ AT RIGHT.

**NOTE ■ :**  
DEPENDING ON THE WIDTH OF THE TRAILER BEING USED, THE SIDE FILL ASSEMBLY A WILL BE USED FOR A NARROWER TRAILER AND SIDE FILL ASSEMBLY B WILL BE USED FOR WIDER TRAILERS, SUCH AS 102-INCH WIDE TRAILERS. ALSO, THE EXCESS VOID ACROSS THE WIDTH OF THE TRAILER MAY BE COMPENSATED FOR BY ADJUSTING THE NUMBER AND THICKNESS OF THE VERTICAL PIECES OF THE SIDE FILL ASSEMBLY A AS NECESSARY.



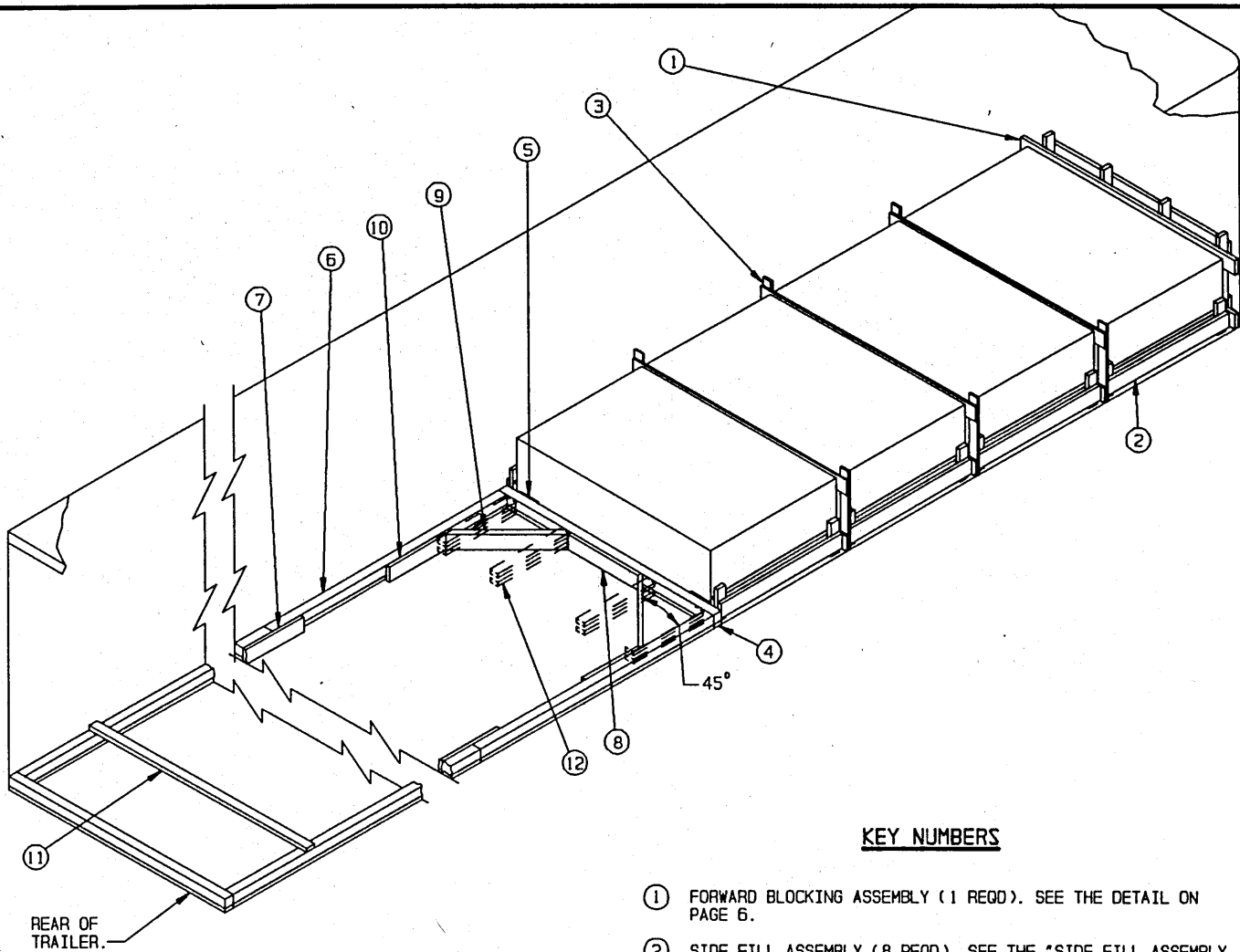
**SIDE FILL ASSEMBLY B**  
SEE NOTE ■ ABOVE.

STRUT BRACING, 2" X 4" BY TRAILER WIDTH MINUS 1/2" IN LENGTH (1 REQD FOR EVERY 7'-0" OF STRUT LENGTH FOR STRUTS LONGER THAN 7'-0"). NAIL TO THE STRUTS W/2-12d NAILS AT EACH JOINT.



**REAR BLOCKING ASSEMBLY**  
SEE SPECIAL NOTE 4 ON PAGE 5.

**DETAILS**



**ISOMETRIC VIEW**

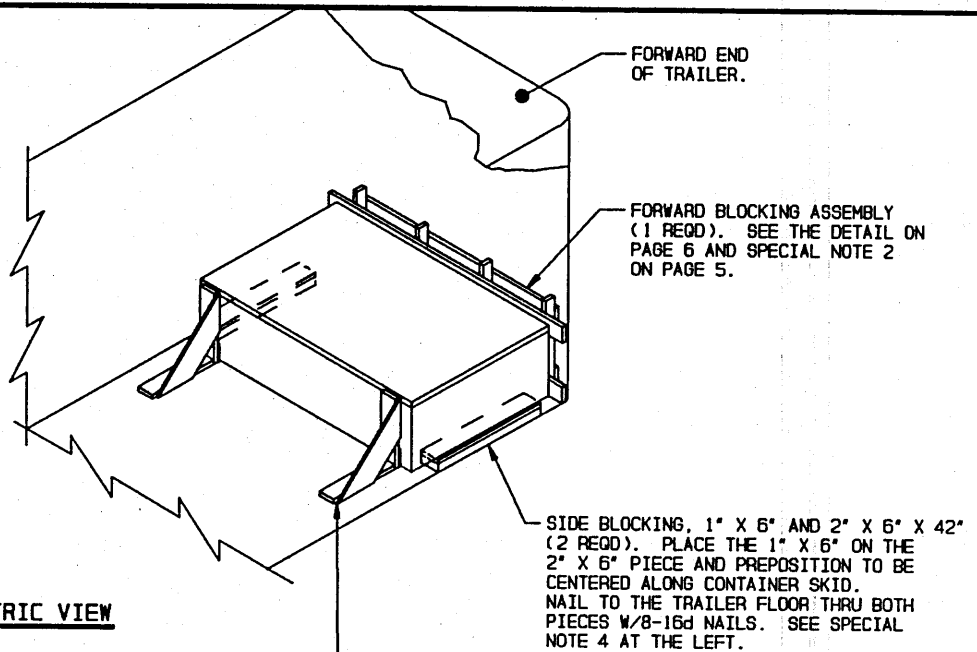
**KEY NUMBERS**

- ① FORWARD BLOCKING ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 6.
- ② SIDE FILL ASSEMBLY (8 REQD). SEE THE "SIDE FILL ASSEMBLY "A" DETAIL ON PAGE 7 AND SPECIAL NOTE 5 ON THIS PAGE.
- ③ ANTI-CHAFING GATE (3 REQD). SEE THE DETAIL ON PAGE 6.
- ④ HEADER, 2" X 4" AND 4" X 4" BY TRAILER WIDTH MINUS 1/2" IN LENGTH (2 REQD). LAMINATE W/1-10d NAIL EVERY 8".
- ⑤ LOAD BEARING FILL PIECE, 1" X 4" X 8" (2 REQD). POSITION 5" FROM END OF THE HEADER AND NAIL TO THE 4" X 4" W/3-6d NAILS.
- ⑥ SIDE STRUT, 2" X 4" AND 4" X 4" BY CUT TO FIT BETWEEN THE TWO HEADERS (2 REQD). LAMINATE W/1-10d NAIL EVERY 12" AND TOENAIL THE TOP PIECE TO THE HEADERS W/2-16d NAILS AT EACH END.
- ⑦ SPLICE PIECE, 2" X 6" X 24" (AS REQD). CENTER ON A JOINT OF PIECES MARKED ⑥ AND NAIL W/4-12d NAILS AT EACH END.
- ⑧ CENTER CLEAT, 2" X 6" X 30" (1 REQD). NAIL TO THE FORWARD HEADER, PIECE MARKED ④ W/7-12d NAILS.
- ⑨ DIAGONAL BRACE, 2" X 6" BY CUT TO FIT (2 REQD). DOUBLE BEVEL EACH END WITH 45° CUTS. INSTALL AT A 45° ANGLE AS SHOWN AND NAIL TO PIECES MARKED ④ AND ⑥ W/2-16d NAILS AT EACH END.
- ⑩ SIDE CLEAT, 2" X 6" X 24" (2 REQD). NAIL TO A SIDE STRUT, PIECE MARKED ⑥ W/8-10d NAILS.
- ⑪ STRUT BRACE, 2" X 4" BY TRAILER WIDTH MINUS 1/2" IN LENGTH (MINIMUM OF ONE REQD). POSITION NEAR REAR OF TRAILER AND NAIL TO THE SIDE STRUTS, PIECES MARKED ⑥ W/2-12d NAILS AT EACH END. SEE SPECIAL NOTE 3 ON THIS PAGE.
- ⑫ BACK-UP CLEAT, 2" X 4" X 30" (TRIPLED) (4 REQD). POSITION TO ALIGN WITH SKIDS AND BOTTOM TUBES OF THE CONTAINER. 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 A HEADER, PIECE MARKED ④ W/2-12d NAILS. SEE SPECIAL NOTE 4 ON THIS PAGE.

**SPECIAL NOTES:**

- 1. THESE OUTLOADING PROCEDURES DEPICT THE USE OF BOTH "K-BRACE" TYPE BLOCKING AND "NAILED-FLOOR-LINE" BLOCKING IN A 7'-8" WIDE CONVENTIONAL VAN TRAILER. WIDER OR NARROWER TRAILERS CAN BE USED. SEE NOTE 5 BELOW.
- 2. THE "K-BRACE" BLOCKING, SHOWN AS PIECES MARKED ④ THRU ⑪, IS ADEQUATE FOR RETAINING A MAXIMUM LTL LOAD OF 26,000 POUNDS.
- 3. ALL LTL LOADS, REGARDLESS OF THEIR SIZE, REQUIRE ONE STRUT BRACE POSITIONED NEAR THE REAR OF THE TRAILER AND NAILED TO THE SIDE STRUTS. IF THE SIDE STRUTS, PIECES MARKED ⑥, ARE LONGER THAN 7'-0", AN ADDITIONAL STRUT BRACE, PIECE MARKED ⑪, MUST BE APPLIED FOR EVERY 7'-0" OF SIDE STRUT LENGTH.
- 4. BACK-UP CLEATS, PIECES MARKED ⑫, ARE ONLY FOR USE IN TRAILERS WHICH HAVE NAILABLE FLOORS. THEY MAY BE USED, IN LIEU OF REAR PIECE MARKED ④ AND PIECES MARKED ⑥ THRU ⑪ WHICH APPLY TO TRAILERS HAVING NON-NAILABLE FLOORS. FOUR (4) BACK-UP CLEATS ARE ADEQUATE FOR RETAINING A MAXIMUM SIZE LTL LOAD OF 16,000 POUNDS.
- 5. THE LTL LOAD SHOWN ON THIS PAGE IS DEPICTED IN A 7'-8" WIDE TRAILER. HOWEVER, IF WIDER TRAILERS ARE FURNISHED FOR LOADING, MODIFICATIONS MAY BE MADE TO THE SIDE FILL ASSEMBLY A OR SIDE FILL ASSEMBLY B AS DETAILED ON PAGE 7 MAY BE USED. SEE "NOTE ■" ON PAGE 7.





ISOMETRIC VIEW

LTL BRACE (2 REQD). SEE THE DETAIL BELOW. ALIGN WITH THE SKID OF THE CONTAINER AND NAIL TO THE TRAILER FLOOR W/6-12d NAILS.

SPECIAL NOTES:

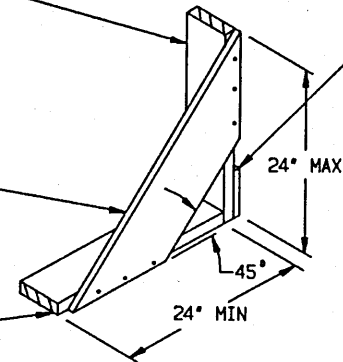
1. A 7'-8" WIDE CONVENTIONAL VAN TRAILER WHICH HAS A NAILABLE FLOOR IS SHOWN. TRAILERS OF OTHER WIDTHS CAN BE USED.
2. EACH LTL BRACE AS APPLIED FOR LONGITUDINAL BRACING WILL SUPPORT 2,000 POUNDS OF LADING; HOWEVER, NOT LESS THAN TWO BRACES WILL BE USED AGAINST THE CONTAINER ACROSS THE WIDTH OF THE TRAILER.
3. TWO (2) CONTAINERS MAY BE SHIPPED USING FOUR (4) LTL BRACES ACROSS THE WIDTH OF THE TRAILER. HOWEVER, AN ANTI-CHAFING GATE, AS DETAILED ON PAGE 6, MUST BE USED BETWEEN THE CONTAINERS AND TWO ADDITIONAL SIDE BLOCKING PIECES MUST BE PROVIDED AS SHOWN IN THE VIEW ABOVE. TWO (2) OF THE LTL BRACES, AS DETAILED, WILL BE ALIGNED WITH THE CONTAINER SKIDS AS SHOWN IN THE ISOMETRIC VIEW ABOVE. THE TWO (2) ADDITIONAL LTL BRACES REQUIRED WILL BE ALIGNED WITH THE BOTTOM TUBES OF THE CONTAINER, HOWEVER, THE 1" X 6" X 6" LOAD BEARING FILL PIECE MUST BE OMITTED FROM THESE TWO ADDITIONAL LTL BRACES.
4. IT MAY BE NECESSARY TO REDUCE THE 42" LENGTH OF THE SIDE BLOCKING PIECES SO AS TO FIT BETWEEN THE TWO BOLTS PROTRUDING FROM THE SIDES OF THE SKIDS.

LOAD BEARING FILL PIECE, 1" X 6" X 6" (1 REQD). NAIL TO THE VERTICAL PIECE W/3-6d NAILS.

VERTICAL PIECE, 2" X 6" X 24" (1 REQD). NAIL TO THE BACK-UP CLEAT W/2-16d NAILS.

ANGLE BRACE, 1" X 6" BY CUT TO FIT (1 REQD). NAIL TO THE VERTICAL PIECE AND TO THE BACK-UP CLEAT W/3-8d NAILS AT EACH END.

BACK-UP CLEAT, 2" X 6" X 24" (MIN) (1 REQD).



LTL BRACE

TYPICAL LTL IN A CONVENTIONAL TYPE VAN TRAILER

