

LOADING AND BRACING (TL & LTL) IN CLOSED OR OPEN TOP VAN TRAILERS[⊕] OF CBU-87/B & CBU-89/B CLUSTER BOMBS IN CNU-327/E SHIPPING AND STORAGE CONTAINERS

⊕ CAUTION: THE PROCEDURES SHOWN HEREIN ARE ONLY APPLICABLE TO
HIGHWAY MOVEMENTS; NOT FOR TRAILER-ON-FLATCAR MOVEMENTS.

U.S. ARMY MATERIEL COMMAND DRAWING			
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JULY 1994			
	CLASS	DIVISION	DRAWING
	19	48	8549
			FILE
			SP11J22

DO NOT SCALE

PROJECT SP 251-92

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 IN THIS DRAWING ARE APPLICABLE TO THE CBU-87/B (GATOR) AND CBU-89/B (CEM) CLUSTER BOMBS PACKED IN THE CNU-327/E SHIPPING AND STORAGE CONTAINER. SEE THE CONTAINER DETAIL ON PAGE 3.

CONTAINER DIMENSIONS - - 100-1/8" L X 40-1/8" W X 23-3/4" H
CONTAINER WEIGHT (CBU-87/B) - 2,486 LBS (APPROX)
CONTAINER WEIGHT (CBU-89/B) - 1,886 LBS (APPROX)
CONTAINER CUBE - - - - - 55.2 CUBIC FEET (APPROX)

C. 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. VAN TRAILERS WHICH ARE 40'-0" AND 45'-0" LONG BY 7'-6" WIDE (INSIDE DIMENSION) HAVE BEEN SHOWN, HOWEVER, THE PROCEDURES ARE ALSO APPLICABLE FOR TRAILERS WHICH ARE 89" THRU 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 AND IN NARROWER OR WIDER VANS THAN SHOWN. THE SPECIFIED BRACING IS ADEQUATE FOR LOADS WEIGHING UP TO AND INCLUDING THE MAXIMUM WEIGHTS PERMITTED BY LAW.

D. 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.

E. 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 SEMITRAILER 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 THE TOTAL GROSS WEIGHT OR AXLE WEIGHT EXCEEDS THE MAXIMUM ALLOWED, WEIGHT SHOULD BE VERIFIED BY ACTUALLY WEIGHING THE LOADED VEHICLE.

F. NOTICE: A SHIPMENT WILL BE POSITIONED IN THE TRAILER CONSISTENT WITH STATE WEIGHT LAWS. THE NUMBER OF LADING UNITS MAY BE ADJUSTED TO FIT THE SIZE OF THE TRAILER TO BE LOADED OR THE QUANTITY TO BE SHIPPED. COMBINATIONS OF THE OUTLOADING PROCEDURES SPECIFIED MAY BE USED, HOWEVER, THE APPROVED METHODS SHOWN MUST BE FOLLOWED AS CLOSELY AS POSSIBLE FOR BLOCKING, BRACING, AND STAYING OF THE DESIGNATED ITEMS.

G. OTHER TYPES OF LADING ITEMS MAY BE LOADED INTO TRAILERS WHICH ARE PARTIALLY LOADED WITH THE DESIGNATED ITEM PROVIDING THE TOTAL LOAD IS COMPATIBLE, EXISTING DIRECTIVES ARE NOT VIOLATED, AND THE OTHER LADING ITEMS ARE BLOCKED AND BRACED TO EQUAL THE BLOCKING AND BRACING CRITERIA SPECIFIED HEREIN.

(CONTINUED AT RIGHT)

H. WHEN STEEL STRAPPING IS SEALED AT 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 SEALER 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. REFER TO THE "STRAP JOINT A" AND "STRAP JOINT B" DETAILS ON PAGE 3 FOR GUIDANCE.

J. 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.

K. 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. THE NAILING PATTERN WILL BE ADJUSTED AS REQUIRED SO THAT A NAIL DOES NOT PENETRATE INTO OR NEAR A CRACK BETWEEN FLOOR BOARDS. 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 THE PIECE ONTO OR RIGHT BESIDE A NAIL IN A LOWER PIECE.

L. 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 AS PRACTICABLE. STAPLES WHICH ARE LONGER THAN 2-1/2" WILL BE A COMMERCIAL GRADE, OF A QUALITY EQUIVALENT TO THOSE MANUFACTURED BY SENCOR PRODUCTS INCORPORATED. NOTE: STAPLES WILL NOT BE SUBSTITUTED FOR NAILS IN ANY LOAD RESTRAINING FLOOR DUNNAGE APPLICATION.

M. PORTIONS OF THE TRAILERS, SUCH AS SIDEWALLS, ENDWALLS, AND ROOFS, HAVE NOT BEEN SHOWN IN THE LOAD VIEWS FOR CLARITY PURPOSES.

N. THE UNBLOCKED SPACE ACROSS THE WIDTH OF A LOAD BAY IS NOT TO EXCEED 3". EXCESSIVE SLACK CAN BE ELIMINATED FROM A LOAD BY LAMINATING ADDITIONAL PIECES OF APPROPRIATE THICKNESS TO THE SIDE FILL ASSEMBLIES. NAIL EACH ADDITIONAL PIECE TO THE HORIZONTAL PIECE W/1 APPROPRIATELY SIZED NAIL EVERY 12". ADDITIONALLY, THE THICKNESS AND QUANTITY OF THE LUMBER USED IN THE SIDE FILL ASSEMBLIES MAY BE ADJUSTED AS REQUIRED TO FACILITATE VARIANCE IN THE SIZE OF THE CNU CONTAINER.

O. CAUTION: WHEN POWER OR PNEUMATIC NAILERS ARE BEING USED IN THE APPLICATION OF NAILED FLOORLINE BLOCKING OR BRACING, CONTAINERS BEING LOADED INTO THE CONVEYANCE MUST BE POSITIONED TO ALLOW A CLEAR PATH OF EXIT FOR THE OPERATOR AT ALL TIMES, SHOULD AN EMERGENCY EXIT BECOME NECESSARY.

P. 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 25.4 MM AND ONE POUND EQUALS 0.454 KG.

MATERIAL SPECIFICATIONS

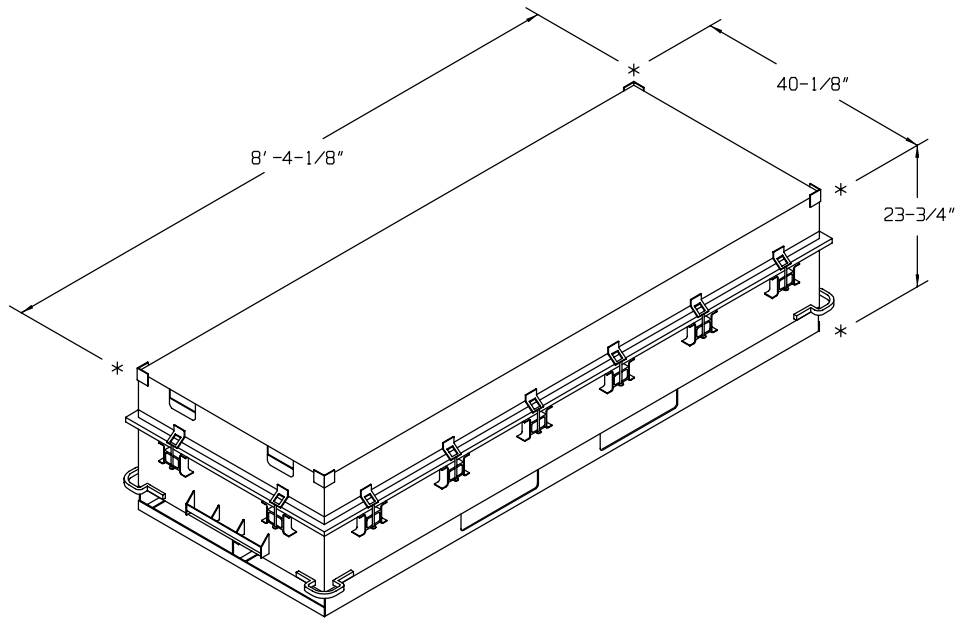
LUMBER - - - - - : SEE TM 743-200-1 (DUNNAGE LUMBER) AND FED SPEC MM-L-751.

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

STRAPPING, STEEL - - : ASTM D3953; FLAT STRAPPING, TYPE 1, HEAVY DUTY, FINISH A, B (GRADE 2), OR C.

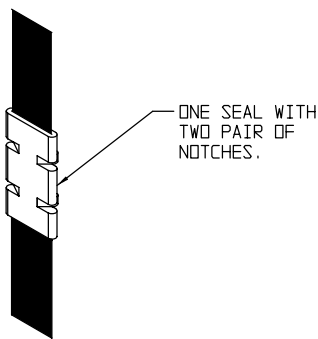
SEAL, STRAP - - - - : ASTM D3953; CLASS H, FINISH A, B (GRADE 2), OR C, DOUBLE NOTCH TYPE, STYLE I, II, OR IV.

ANTI-CHAFING MATERIAL - - - - - : MIL-B-121 (OR EQUAL); NEUTRAL BARRIER MATERIAL.



CNU-327/E CONTAINER DETAIL

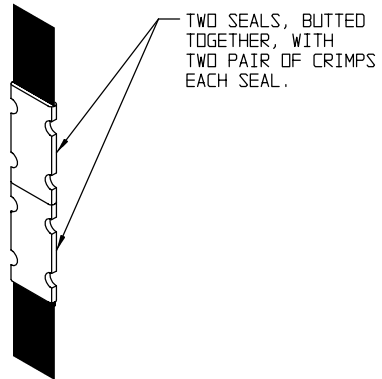
CUBE - - - - - 55.2 CUBIC FEET (APPROX)
 GROSS WEIGHT (CBU-87/B) - - - 2,486 LBS (APPROX)
 GROSS WEIGHT (CBU-89/B) - - - 1,886 LBS (APPROX)



ONE SEAL WITH
TWO PAIR OF
NOTCHES.

STRAP JOINT A

METHOD OF SECURING A
STRAP JOINT WHEN USING
A NOTCH-TYPE SEALER.

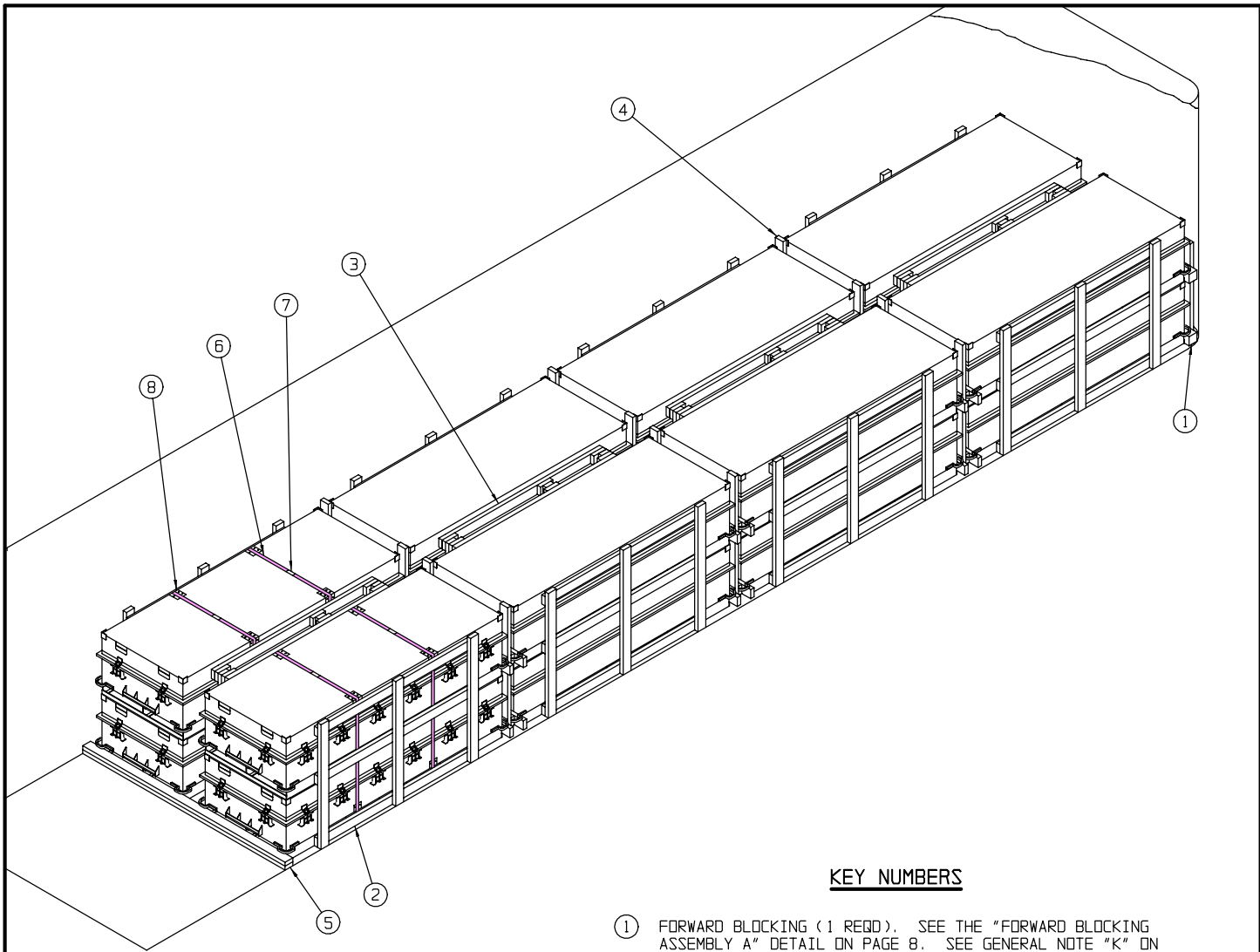


TWO SEALS, BUTTED
TOGETHER, WITH
TWO PAIR OF CRIMPS
EACH SEAL.

STRAP JOINT B

METHOD OF SECURING A
STRAP JOINT WHEN USING
A CRIMP-TYPE SEALER.

END-OVER-END LAP JOINT DETAILS



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD BLOCKING (1 REQD). SEE THE "FORWARD BLOCKING ASSEMBLY A" DETAIL ON PAGE 8. SEE GENERAL NOTE "K" ON PAGE 2.
- ② SIDE FILL ASSEMBLY (8 REQD). SEE THE DETAIL ON PAGE 8. POSITION AS SHOWN WITH THE VERTICAL PIECES AGAINST THE TRAILER SIDE WALL.
- ③ CENTER FILL ASSEMBLY (4 REQD). SEE THE DETAIL ON PAGE 9. SEE SPECIAL NOTE 2 ON PAGE 5.
- ④ SEPARATOR (3 REQD). SEE THE DETAIL ON PAGE 9.
- ⑤ REAR BLOCKING, 2" X 4" X TRAILER WIDTH MINUS 1/2" (DOUBLED) (1 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/16-10d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER.
- ⑥ STACK UNITIZING STRAP, 1-1/4" X .035" OR .031" X 16'-0" LONG STEEL STRAPPING (4 REQD).
- ⑦ SEAL FOR 1-1/4" STRAPPING (4 REQD, 1 PER STRAP). DOUBLE NOTCH EACH SEAL. SEE GENERAL NOTE "H" ON PAGE 2.
- ⑧ ANTI-CHAFING NEUTRAL BARRIER MATERIAL (AS REQD). PLACE UNDER ALL STRAPS AT POINTS OF CONTACT WITH CONTAINERS.

SPECIAL NOTES:

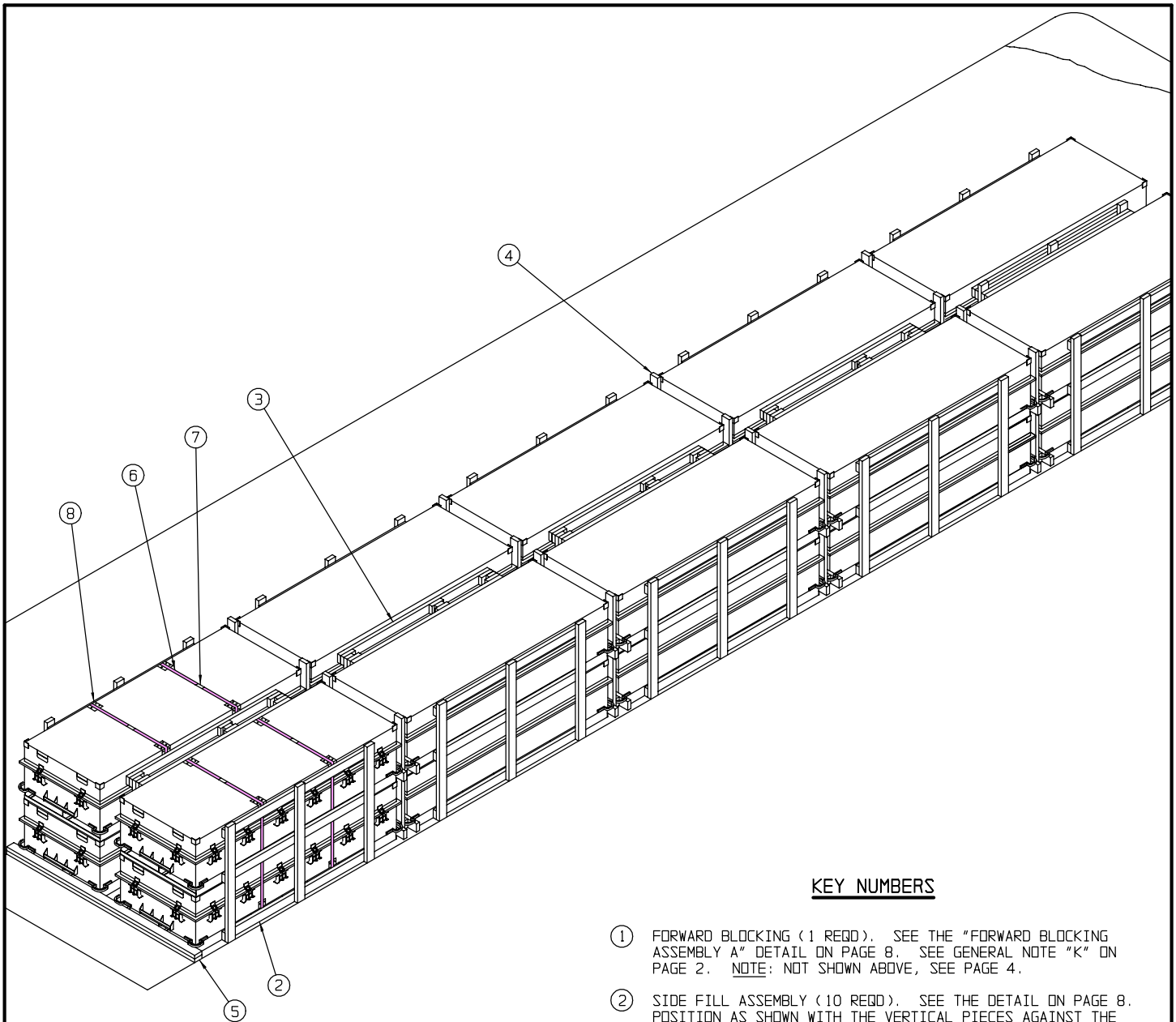
1. A SIXTEEN UNIT LOAD OF CBU-87/B CLUSTER BOMBS PACKED IN THE CNU-327/E CONTAINER IS SHOWN IN A 40'-0" LOMG BY 7'-6" WIDE (INSIDE DIMENSION) CONVENTIONAL TYPE VAN TRAILER. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
2. A WIDER OR NARROWER TRAILER THAN SHOWN ON PAGE 4 MAY BE USED FOR SHIPPING OF THE DEPICTED LOAD BY ADJUSTING THE NUMBER AND THICKNESS OF THE VERTICAL AND HORIZONTAL PIECES OF THE "SIDE/CENTER FILL ASSEMBLIES" AS NECESSARY.
3. FOR SHIPMENT OF A ONE-CONTAINER HIGH STACK, USE END BLOCKING ASSEMBLY B, AS SHOWN ON PAGE 11, AND MODIFY THE SIDE FILL ASSEMBLIES, CENTER FILL ASSEMBLIES AND SEPARATOR GATES AND OMIT PIECES MARKED ⑥, ⑦, AND ⑧.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	738	492
2" X 6"	6	6
4" X 4"	90	120
NAILS	NO. REQD	POUNDS
10d (3")	752	12
STEEL STRAPPING, 1-1/4" - - 64' REQD - - - -		9 LBS
SEAL FOR 1-1/4" STRAPPING - - 4 REQD - - - -		NIL
ANTI-CHAFING MATERIAL - - - AS REQD - - - -		NIL

LOAD AS SHOWN

<u>ITEM</u>	<u>QUANTITY</u>	<u>WEIGHT (APPROX)</u>
CONTAINER - - - - -	16 - - - - -	39,776 LBS
DUNNAGE - - - - -	- - - - -	1,257 LBS
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TOTAL WEIGHT - - - - -	- - - - -	41,033 LBS (APPROX)



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD BLOCKING (1 REQD). SEE THE "FORWARD BLOCKING ASSEMBLY A" DETAIL ON PAGE 8. SEE GENERAL NOTE "K" ON PAGE 2. NOTE: NOT SHOWN ABOVE, SEE PAGE 4.
- ② SIDE FILL ASSEMBLY (10 REQD). SEE THE DETAIL ON PAGE 8. POSITION AS SHOWN WITH THE VERTICAL PIECES AGAINST THE TRAILER SIDE WALL.
- ③ CENTER FILL ASSEMBLY (5 REQD). SEE THE DETAIL ON PAGE 9. SEE SPECIAL NOTE 3 ON PAGE 7.
- ④ SEPARATOR (4 REQD). SEE THE DETAIL ON PAGE 9.
- ⑤ REAR BLOCKING, 2" X 4" X TRAILER WIDTH MINUS 1/2" (DOUBLED) (1 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/16-10d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER.
- ⑥ STACK UNITIZING STRAP, 1-1/4" X .035" OR .031" X 16'-0" LONG STEEL STRAPPING (4 REQD).
- ⑦ SEAL FOR 1-1/4" STRAPPING (4 REQD, 1 PER STRAP). DOUBLE NOTCH EACH SEAL. SEE GENERAL NOTE "H" ON PAGE 2.
- ⑧ ANTI-CHAFING NEUTRAL BARRIER MATERIAL (AS REQD). PLACE UNDER ALL STRAPS AT POINTS OF CONTACT WITH CONTAINERS.

SPECIAL NOTES:

1. A TWENTY UNIT LOAD OF CBU-89/B CLUSTER BOMBS PACKED IN THE CNU-327/E CONTAINER IS SHOWN IN A 45'-0" LONG BY 7'-6" WIDE (INSIDE DIMENSION) CONVENTIONAL TYPE VAN TRAILER. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
2. THE FORWARD BLOCKING ASSEMBLY "A" IS NOT SEEN IN THE ISOMETRIC VIEW ON PAGE 6, REFER TO PIECE MARKED ①, ON PAGE 4.
3. A WIDER OR NARROWER TRAILER THAN SHOWN ON PAGE 6 MAY BE USED FOR SHIPPING OF THE DEPICTED LOAD BY ADJUSTING THE NUMBER AND THICKNESS OF THE VERTICAL AND HORIZONTAL PIECES OF THE "SIDE/CENTER FILL ASSEMBLIES" AS NECESSARY.
4. FOR SHIPMENT OF CBU-87/B CLUSTER BOMBS THE NUMBER OF UNITS WILL BE ADJUSTED ACCORDINGLY SO AS TO COMPLY WITH GENERAL NOTE "F" ON PAGE 2.
5. FOR SHIPMENT OF A ONE-CONTAINER HIGH LOAD, USE END BLOCKING ASSEMBLY B, AS SHOWN ON PAGE 11, AND MODIFY THE SIDE FILL ASSEMBLIES, CENTER FILL ASSEMBLIES, SEPARATOR GATES, AND OMIT PIECES MARKED ⑥, ⑦, AND ⑧.

BILL OF MATERIAL

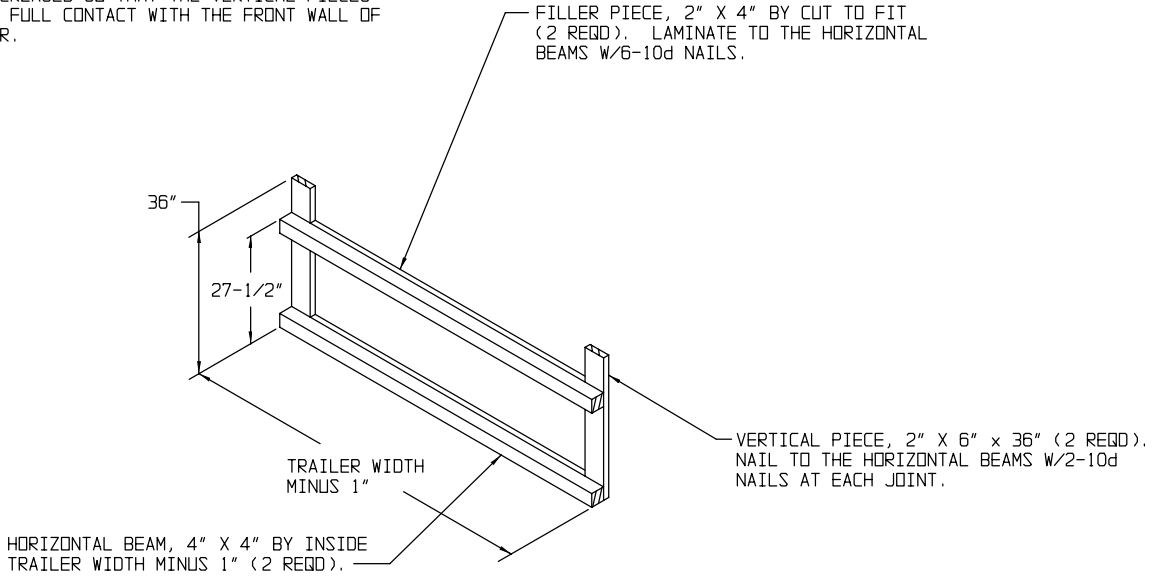
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	928	619
2" X 6"	6	6
4" X 4"	90	120
NAILS	NO. REQD	POUNDS
10d (3")	942	15
STEEL STRAPPING, 1-1/4" -- 64' REQD ---		9 LBS
SEAL FOR 1-1/4" STRAPPING -- 4 REQD ----		NIL
ANTI-CHAFING MATERIAL --- AS REQD -----		NIL

LOAD AS SHOWN

<u>ITEM</u>	<u>QUANTITY</u>	<u>WEIGHT (APPROX)</u>
CONTAINER - - - - -	20 - - - - -	37,720 LBS
DUNNAGE - - - - -	- - - - -	1,514 LBS
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TOTAL WEIGHT - - - - -	- - - - -	39,234 LBS (APPROX)

SPECIAL NOTE:

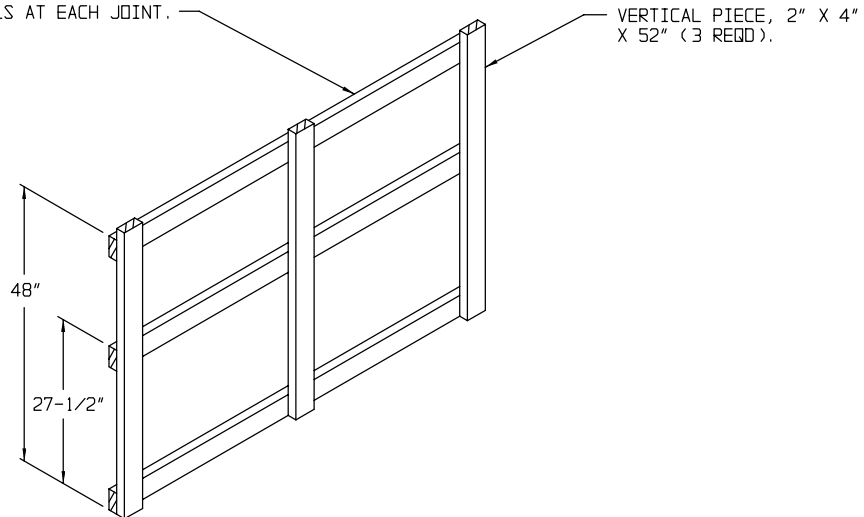
IF THE TRAILER BEING LOADED HAS ROUNDED CORNERS, THE WIDTH OF THE "FORWARD BLOCKING ASSEMBLY A" WILL BE DECREASED SO THAT THE VERTICAL PIECES WILL BE IN FULL CONTACT WITH THE FRONT WALL OF THE TRAILER.



FORWARD BLOCKING ASSEMBLY A

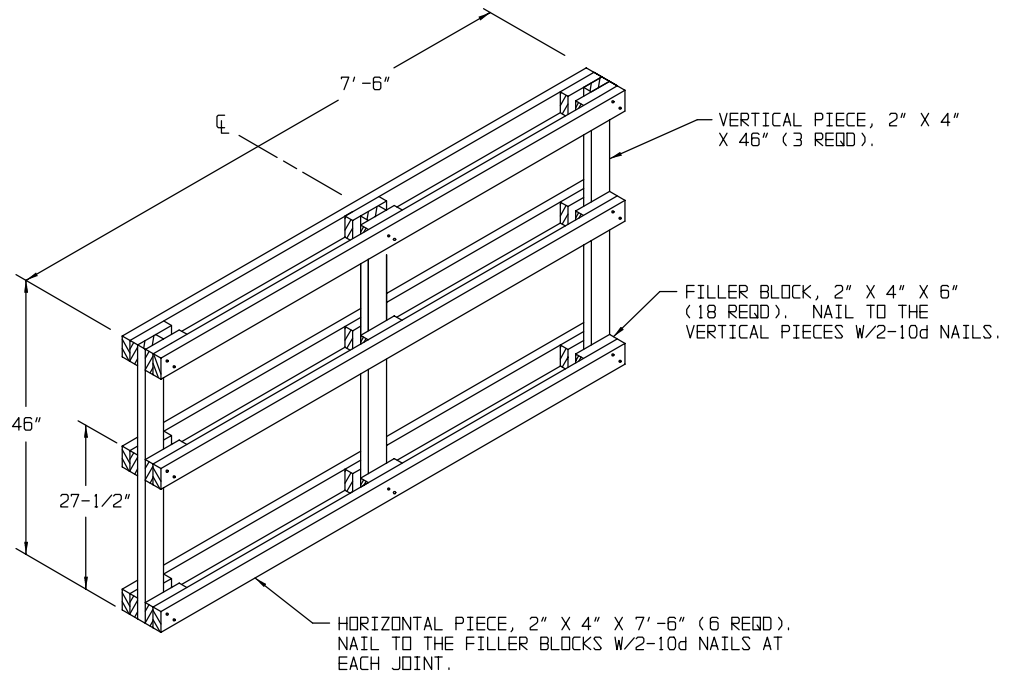
THE ASSEMBLY SHOWN ABOVE IS FOR USE WITH A TWO-CONTAINER HIGH LOAD. FOR SHIPMENT OF A ONE-CONTAINER HIGH LOAD USE THE END BLOCKING ASSEMBLY B AS SHOWN ON PAGE 11. SEE SPECIAL NOTE ABOVE.

HORIZONTAL PIECE, 2" X 4" X 7'-6" (3 REQD). NAIL TO THE VERTICAL PIECES W/3-10d NAILS AT EACH JOINT.



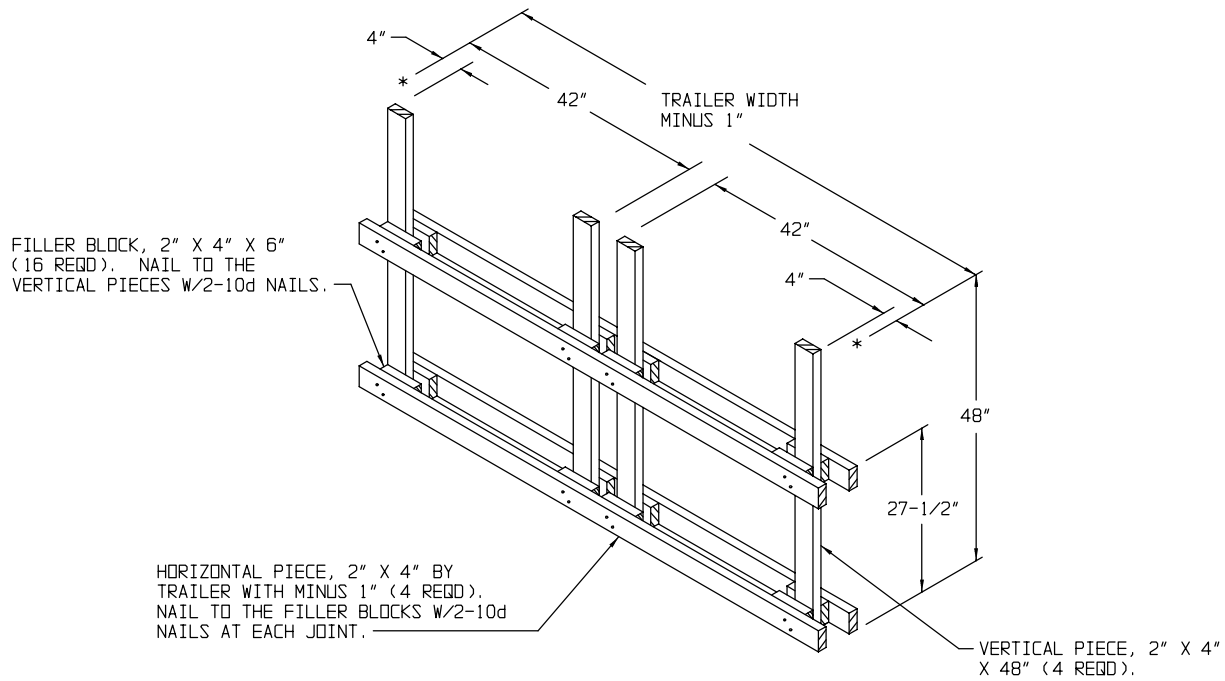
SIDE FILL ASSEMBLY

THE SIDE FILL ASSEMBLY DEPICTED ABOVE MAY BE USED WHEN SHIPPING A ONE-CONTAINER HIGH LOAD BY ELIMINATING THE MIDDLE HORIZONTAL PIECE, CUTTING THE VERTICAL PIECES 24" LONG AND PLACING THE TOP HORIZONTAL PIECE AT 24".



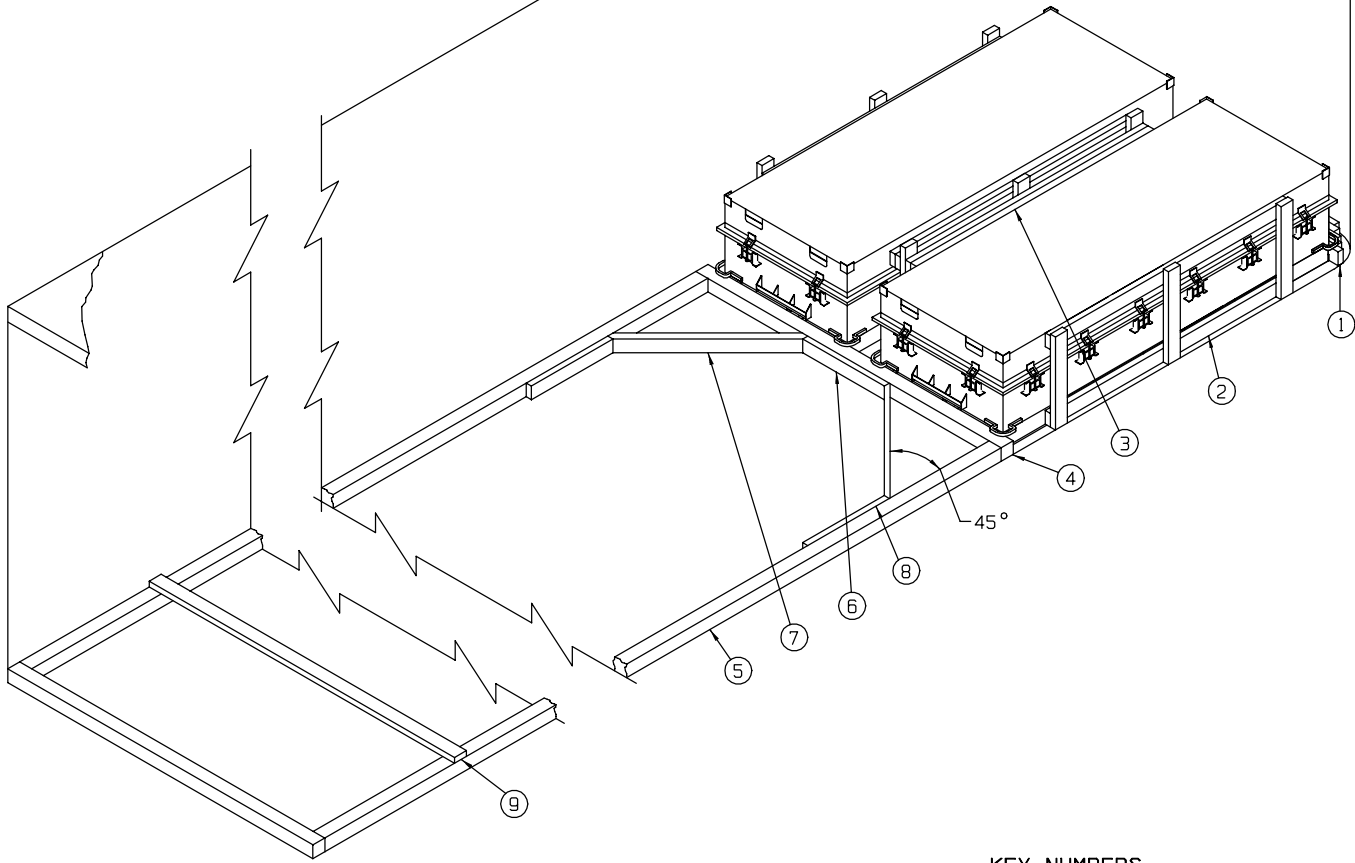
CENTER FILL ASSEMBLY

THE CENTER FILL ASSEMBLY DEPICTED ABOVE MAY BE USED WHEN SHIPPING A ONE-CONTAINER HIGH LOAD BY ELIMINATING THE MIDDLE AND UPPER HORIZONTAL PIECES AND REPLACING THE VERTICAL PIECES WITH 6" LONG 2" X 4" FILLER BLOCKS.



SEPARATOR

THE SEPARATOR DEPICTED ABOVE MAY BE USED WHEN SHIPPING A ONE-CONTAINER HIGH LOAD BY CUTTING THE VERTICAL PIECES TO 24" LONG AND PLACING THE TOP HORIZONTAL PIECES AND THE TOP FILLER BLOCKS AT 24".



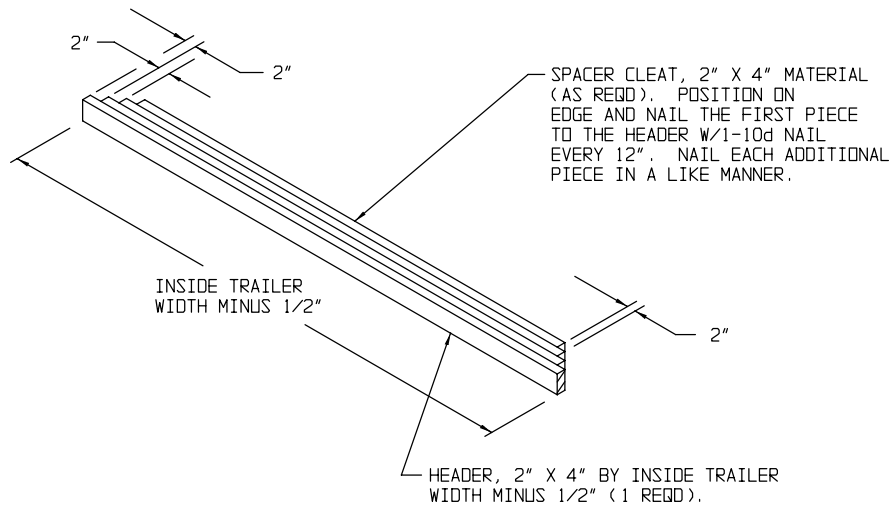
ISOMETRIC VIEW

SPECIAL NOTES:

1. THE TYPICAL LTL ABOVE DEPICTS A 2-UNIT LOAD IN A 7'-6" (INSIDE DIMENSION) CONVENTIONAL TYPE VAN TRAILER.
2. THE "K-BRACE" BLOCKING SHOWN ABOVE IS ADEQUATE FOR RETAINING A MAXIMUM LTL LOAD OF 24,000 POUNDS.
3. A WIDER OR NARROWER TRAILER THAN SHOWN ABOVE MAY BE USED FOR SHIPPING THE DEPICTED LOAD BY ADJUSTING THE THICKNESS OF THE SIDE/CENTER FILL ASSEMBLIES AS NECESSARY.
4. IF THE TRAILER BEING LOADED IS EQUIPPED WITH A SQUARE FRONT OR AN INSTALLED BULKHEAD, A HEADER, PIECE MARKED (4), WILL BE USED AT THE FRONT OF THE LOAD IN LIEU OF THE FORWARD BLOCKING ASSEMBLY, PIECE MARKED (1).
5. DEPENDING ON THE NUMBER OF CONTAINERS BEING LOADED, EACH OF THE SIDE STRUTS, PIECES MARKED (5), MAY BE FORMED FROM MORE THAN ONE PIECE OF MATERIAL. TO DO THIS, THE SIDE STRUTS MUST BE SPLICED. SPLICING CAN BE ACCOMPLISHED BY CENTERING A 2" X 4" X 24" PIECE ON THE JOINT OF THE SIDE STRUTS AND NAILING IT TO THE SIDE STRUTS W/12d NAILS AT EACH END.
6. ALL LTL LOADS, REGARDLESS OF THEIR SIZE, USING K-BRACE TYPE BLOCKING REQUIRE ONE STRUT BRACE POSITIONED NEAR THE REAR OF THE TRAILER AND NAILED TO THE SIDE STRUTS. IF THE SIDE STRUTS, PIECES MARKED (5), ARE LONGER THAN 7'-0", AN ADDITIONAL STRUT BRACE, PIECE MARKED (9), MUST BE APPLIED FOR EVERY 7'-0" OF SIDE STRUT LENGTH.
7. NOTE THAT SIDE FILL ASSEMBLIES AND CENTER FILL ASSEMBLY MUST BE MODIFIED AS DESCRIBED IN THE NOTES BENEATH THE DETAIL OF THE DUNNAGE ASSEMBLIES.

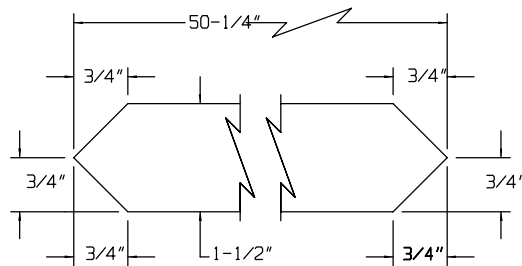
KEY NUMBERS

- (1) FORWARD BLOCKING ASSEMBLY (1 REQD). SEE THE "FORWARD BLOCKING ASSEMBLY B" DETAIL ON PAGE 11. SEE SPECIAL NOTE 4 AT LEFT AND GENERAL NOTE "K" ON PAGE 2.
- (2) SIDE FILL ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 8. POSITION WITH THE VERTICAL PIECES AGAINST THE TRAILER SIDEWALL. SEE SPECIAL NOTE 7 AT LEFT.
- (3) CENTER FILL ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 9 AND SPECIAL NOTE 7 AT LEFT.
- (4) HEADER, 4" X 4" BY INSIDE TRAILER WIDTH MINUS 1/2" (2 REQD).
- (5) SIDE STRUT, 4" X 4" BY CUT TO FIT (2 REQD). POSITION ALONG TRAILER WALLS AND TOENAIL TO HEADERS, PIECES MARKED (4), W/2-16d NAILS AT EACH END. SEE SPECIAL NOTE 5 AT LEFT.
- (6) CENTER CLEAT, 2" X 4" X 24" (1 REQD). NAIL TO THE HEADER, PIECE MARKED (4), W/ 6-10d NAILS.
- (7) DIAGONAL BRACE, 2" X 4" BY CUT TO FIT (2 REQD). SEE THE DETAIL ON PAGE 11. DOUBLE BEVEL EACH END WITH 45° CUTS. INSTALL AT 45° ANGLE AS SHOWN IN THE ISOMETRIC VIEW AND TOENAIL TO HEADER, PIECE MARKED (4), AND SIDE STRUT, PIECE MARKED (5), W/2-16d NAILS AT EACH END.
- (8) SIDE CLEAT, 2" X 4" X 24" (2 REQD). POSITION AGAINST DIAGONAL BRACE, PIECE MARKED (7), AND NAIL TO THE SIDE STRUT, PIECE MARKED (5), W/8-10d NAILS.
- (9) STRUT BRACING, 2" X 4" BY CUT TO FIT (MINIMUM OF 1 REQD). INSTALL ONE STRUT BRACE NEAR THE REAR END OF THE SIDE STRUTS, PIECES MARKED (5), AS SHOWN. NAIL TO THE SIDE STRUTS W/3-12d NAILS AT EACH END. SEE SPECIAL NOTE 6 AT LEFT.



FORWARD BLOCKING ASSEMBLY B

THE FORWARD BLOCKING ASSEMBLY DEPICTED ABOVE IS FOR USE AT THE FORWARD END OF A TRAILER HAVING ROUNDED CORNERS WITH AN INSIDE RADIUS OF 7" OR LESS. ADDITIONAL LAMINATIONS MUST BE ADDED TO COMPENSATE FOR CORNERS HAVING LARGER RADII.



DIAGONAL BRACE

