

LOADING AND BRACING (TL & LTL) IN VAN TRAILERS* OF JSOW (AGM-154) MISSILES PACKED IN CNU-671 OR CNU-672 SHIPPING AND STORAGE CONTAINERS

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* **CAUTION:** THE PROCEDURES SHOWN HEREIN ARE ONLY APPLICABLE FOR HIGHWAY MOVEMENTS; NOT FOR TRAILER-ON-FLATCAR (TOFC) MOVEMENTS.

U.S. ARMY MATERIEL COMMAND DRAWING

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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 JSOW (AGM-154) MISSILES PACKED IN CNU-671 OR CNU-672 SHIPPING AND STORAGE CONTAINERS. SEE PAGE 3 AND RAYTHEON DRAWINGS 4283067-1 AND 4283068-1 FOR DETAILS OF THE CONTAINER.
- 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. REGARDLESS OF THE DIMENSIONS OF THE VAN TRAILERS SHOWN, THE PROCEDURES ARE ALSO APPLICABLE FOR TRAILERS WHICH ARE 89" THRU 101" 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 SPECIFIED BRACING IS ADEQUATE FOR LOADS WEIGHING UP TO AND INCLUDING THE MAXIMUM WEIGHTS PERMITTED BY LAW.
- D. 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.
- E. SELECTION OF A VEHICLE FOR THE TRANSPORT OF THE DESIGNATED ITEM IS THE RESPONSIBILITY OF THE ORIGINATING CARRIER AND THE SHIPPER. ONLY VEHICLES IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE REGULATORY DOCUMENTS WILL BE SELECTED FOR USE.
- 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. THE "LOAD AS SHOWN" FOR MOST OF THE FULL LOADS DEPICTED HEREIN IS BASED ON AN APPROXIMATE LADING WEIGHT OF 41,000 POUNDS. THE SPECIFIED BLOCKING AND BRACING FOR THE FULL LOADS IS ADEQUATE FOR THE RETENTION OF LOADS, UP TO 45,000 POUNDS, IF IT IS DESIRED TO INCREASE THE LADING WEIGHT.
- H. OTHER TYPES OF LADING ITEMS MAY BE LOADED INTO TRAILERS WHICH ARE PARTIALLY LOADED WITH CNU-671 OR CNU-672 CONTAINERS, 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.

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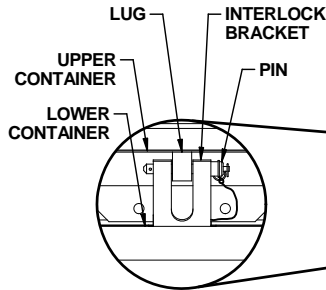
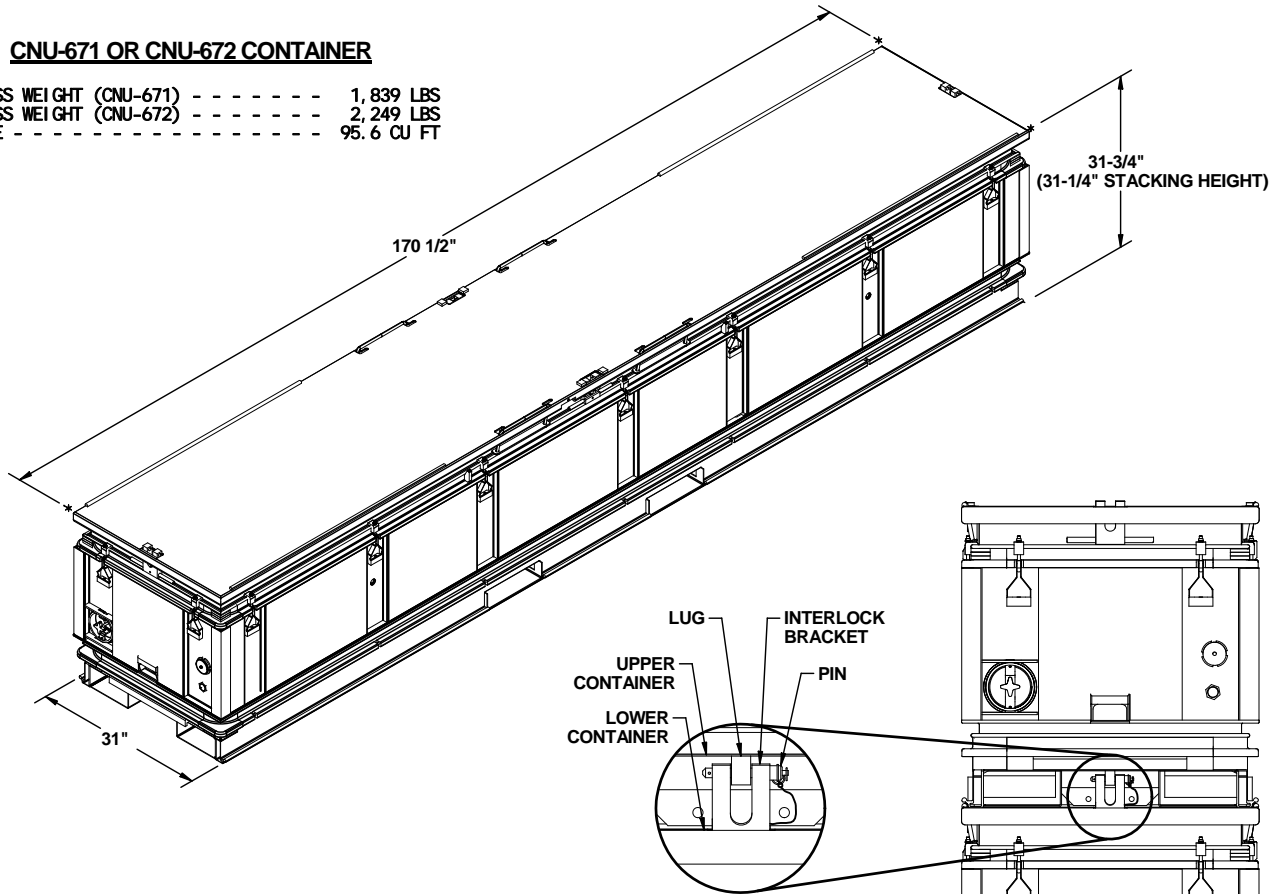
- J. SOME LOADS ARE SHOWN IN TRAILERS HAVING ROUNDED CORNERS AT THE FORWARD END. IF THE CONVENTIONAL VAN TRAILER BEING USED IS EQUIPPED WITH A SQUARE FRONT OR WITH AN INSTALLED BULKHEAD, OMIT THE FORWARD BLOCKING ASSEMBLY AND POSITION THE CONTAINERS DIRECTLY AGAINST THE FORWARD PORTION OF THE TRAILER.
- K. 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 22 FOR GUIDANCE.
- L. 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.
- M. **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.
- 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 ASTM F1667 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 SENCO PRODUCTS INCORPORATED. **NOTE:** STAPLES WILL NOT BE SUBSTITUTED FOR NAILS IN ANY LOAD RESTRAINING FLOOR DUNNAGE APPLICATION.
- O. PORTIONS OF THE TRAILERS, SUCH AS SIDEWALLS, ENDWALLS, AND ROOFS, HAVE NOT BEEN SHOWN IN THE LOAD VIEWS FOR CLARITY PURPOSES.
- P. THE UNBLOCKED SPACE ACROSS THE WIDTH OF A LOAD BAY IS NOT TO EXCEED 6". EXCESSIVE SLACK CAN BE ELIMINATED FROM A LOAD BY INCREASING THE LENGTH OF THE RETAINER PIECE ON THE ANTI-SWAY BRACES, OR ADJUSTING THE WIDTH ON THE FILLER ASSEMBLIES.
- Q. IF THE SPACE AT THE REAR OF THE LOAD, BETWEEN THE CONTAINERS AND THE REAR DOOR MEASURES 1-1/2" OR LESS REAR BLOCKING IS NOT REQUIRED. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 1-1/2" BUT LESS THE 9", USE "SOLID FILL" AS DEPICTED ON PAGE 10. IF THE VOID AT THE REAR OF THE LOAD IS 9" OR GREATER, USE THE "REAR BLOCKING ASSEMBLY", AS SHOWN ON PAGE 22. **NOTE:** REAR BLOCKING ASSEMBLIES MAY BE REPLACED WITH NAILED HEADERS AT THE REAR OF THE LOAD, PROVIDED THE TRAILER IS CONFIGURED SUCH AS TO ALLOW NAILING IN THE AREA IN QUESTION. REFER TO THE REAR HEADER ON PAGE 6 AND THE HEADER NAILING CHARTS ON PAGE 7 FOR GUIDANCE. **CAUTION:** THE NAILED HEADER METHOD IS REQUIRED WHEN LOADING VAN TRAILERS EQUIPPED WITH ROLL-UP TYPE DOORS.
- R. **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.
- S. THESE PROCEDURES CAN ALSO BE UTILIZED FOR THE SHIPMENT OF CNU-672 OR CNU-672 CONTAINERS WHEN THEY ARE LOADED WITH AN ITEM OTHER THAN THE SPECIFIED JSOW MISSILES, OR WHEN THEY ARE EMPTY.
- T. 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.
- U. ANTI-CHAFING MATERIAL MAY BE INSTALLED AT POINTS OF CONTACT BETWEEN CONTAINERS AND THE VAN TRAILER OR INDIVIDUAL CONTAINERS, IF DESIRED, TO PREVENT CHAFING DAMAGE TO CONTAINERS.

MATERIAL SPECIFICATIONS

LUMBER - - - - - :	SEE TM 743-200-1 (DUNNAGE LUMBER) AND VOLUNTARY PRODUCT STANDARD PS 20.
NAILS - - - - - :	ASTM F1667; COMMON STEEL NAIL (NLCMS OR NLCMS).
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-PRF-121 (OR EQUAL); NEUTRAL BARRIER MATERIAL.

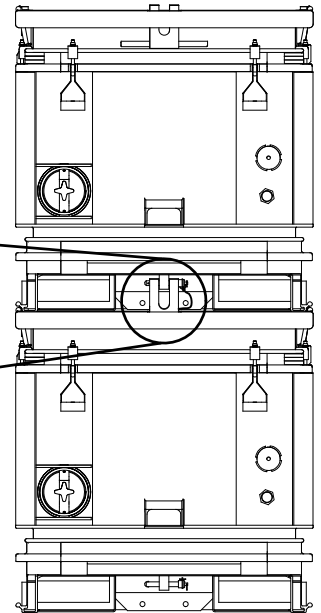
CNU-671 OR CNU-672 CONTAINER

GROSS WEIGHT (CNU-671) - - - - - 1,839 LBS
 GROSS WEIGHT (CNU-672) - - - - - 2,249 LBS
 CUBE - - - - - 95.6 CU FT



CONTAINER INTERLOCK DETAIL

ALIGN AND INSERT PIN THROUGH INTERLOCK BRACKET AND LUG. PIN SHALL BE FULLY INSERTED AND LOCKED. BOTH ENDS OF CONTAINERS MUST BE INTERLOCKED AS SHOWN BY THIS DETAIL. SEE "UNITIZATION AND HANDLING GUIDANCE" BELOW.



UNITIZATION AND HANDLING GUIDANCE

(UNITIZATION AND HANDLING GUIDANCE CONTINUED)

1. STACKING CONTAINERS FOR UNITIZING:

- A. AN UPPER CONTAINER SHOULD BE PLACED AS CLOSE AS POSSIBLE IN VERTICAL ALIGNMENT WITH THE NEXT LOWER CONTAINER.
- B. POSITION THE AFT END OF AN UPPER CONTAINER ABOVE THE AFT END OF THE NEXT LOWER CONTAINER.
- C. THE CONTAINER SKIDS OF AN UPPER CONTAINER SHOULD BE FULLY SEATED AGAINST THE SKID LOCATOR PIECES ON THE COVER OF THE NEXT LOWER CONTAINER.

2. UNITIZING PROCEDURE USING PREFERRED INTERLOCKING FEATURE.

- A. DETACH QUICK RELEASE PIN (BOTH SIDES) ON CONTAINER TO BE PLACED ON TOP.
- B. STACK TWO CONTAINERS AS SHOWN. BE SURE TO ALIGN THE STACKING FEATURES.
- C. SECURE TOP CONTAINER TO BOTTOM CONTAINER USING INTERLOCKING FEATURE.
- D. INSTALL QUICK RELEASE PIN (BOTH SIDES).

3. UNITIZING PROCEDURE USING OPTIONAL 1-1/4" BANDING STRAPS.

- A. STACK TWO CONTAINERS AS SHOWN. BE SURE TO ALIGN THE STACKING FEATURES.
- B. FEED UNITIZING STRAP THROUGH FORK POCKETS OF BOTH CONTAINERS. (2 PLACES)
- C. TENSION AND SECURE EACH STRAP WITH ONE DOUBLE-NOTCHED SEAL.

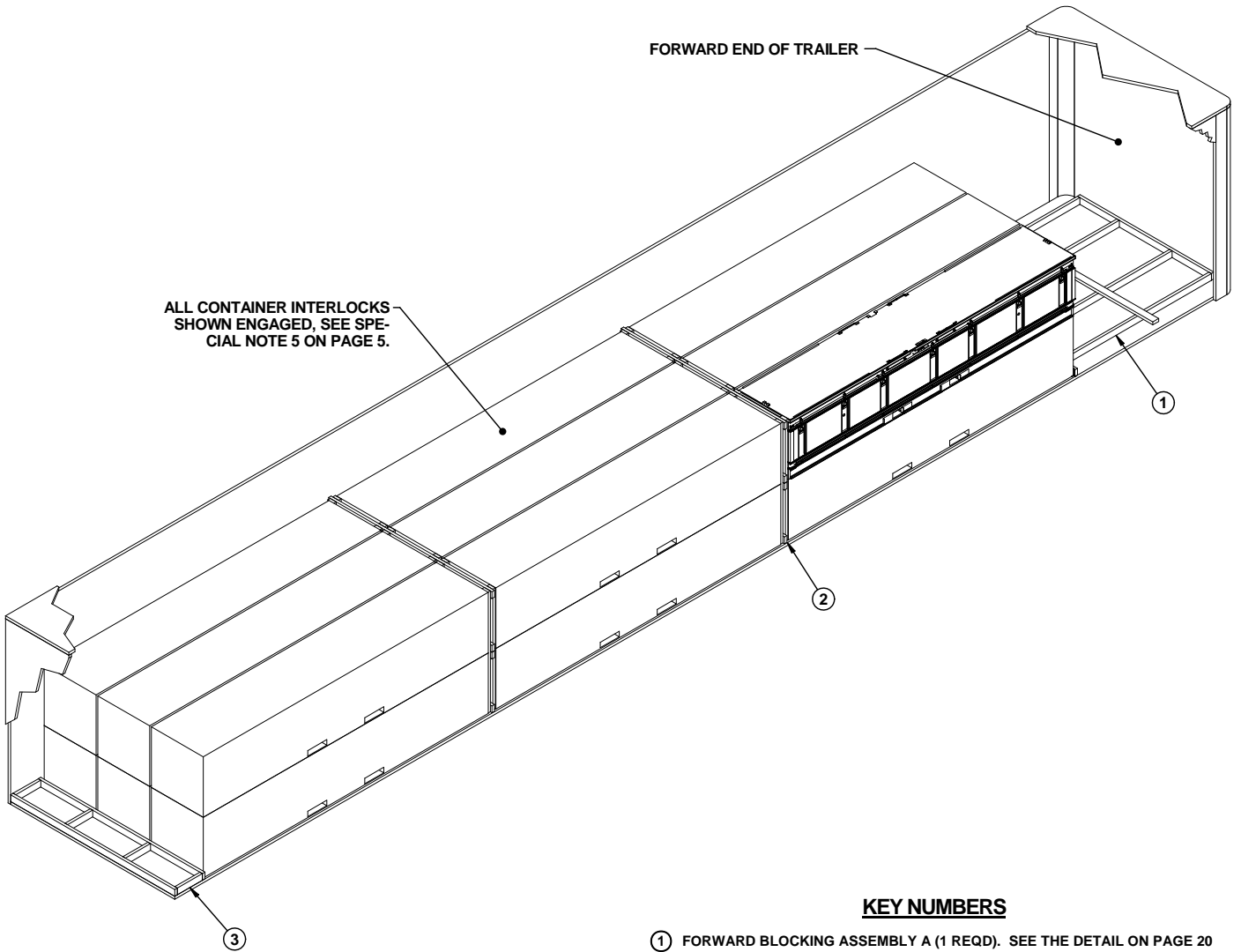
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4. CONTAINER OR CONTAINER STACK HANDLING:

- A. ONLY APPROVED AND APPROPRIATELY SIZED MATERIAL HANDLING EQUIPMENT WILL BE USED FOR HANDLING THE DEPICTED CONTAINERS. APPROVED MATERIAL HANDLING EQUIPMENT (FORKLIFT TRUCKS, CRANES, HAND TRUCKS, DOLLIES, ROLLER ASSEMBLIES, SLINGS, SPREADER BARS, ETC.) IS SPECIFIED ELSEWHERE.
- B. PRECAUTIONARY HANDLING TECHNIQUES NORMALLY EMPLOYED OR AS SPECIFIED FOR THE TYPE OF COMMODITY INVOLVED WILL BE OBSERVED.
- C. IF HANDLING IS ACCOMPLISHED WITH A FORKLIFT TRUCK, THE CONTAINERS SHOULD BE HANDLED FROM A SIDE POSITION AS MUCH AS POSSIBLE. CARE MUST BE EXERCISED WHEN INSERTING FORKS UNDER A CONTAINER, TO PREVENT DAMAGE TO THE CONTAINER BY THE FORK TINES OR THE FORKLIFT PACKAGE GUARD.
- D. WHEN UNLOADING A CONTAINER OR CONTAINER STACK FROM THE VAN TRAILER, THE FORKLIFT TINES WILL BE INSERTED UNDER THE LOWER CONTAINER, THE FORKLIFT WILL THEN ELEVATE THE END SLIGHTLY ABOVE THE FLOOR, AND BEGIN DRAGGING THE CONTAINER OR STACK FROM THE TRAILER AFTER ATTACHING A CHAIN OR WEB STRAP FROM A LOWER CONTAINER LIFT POINT AROUND THE FORKLIFT MAST TO A LIFT POINT OF THE OPPOSITE SIDE OF THE CONTAINER.
- E. THE MK45 HANDLIFT TRUCK IS PREFERRED FOR LIFTING AND MANEUVERING THE CONTAINERS WITHIN THE VAN TRAILER. THE MK45 HANDTRUCK CONSISTS OF A CAST ALUMINUM BODY MOUNTED ON TWO WHEELS WITH A LIFTING MECHANISM. THE MK45 LIFTING MECHANISM IS CONNECTED TO A RECESS IN THE END OF THE CONTAINER. THE HANDTRUCK SHALL BE USED IN PAIRS WITH ONE MK45 POSITIONED AT EACH END OF THE CONTAINER. THE WEIGHT CAPACITY OF TWO MK45 HANDTRUCKS IS 6,000 POUNDS.

FORWARD END OF TRAILER

ALL CONTAINER INTERLOCKS
SHOWN ENGAGED, SEE SPE-
CIAL NOTE 5 ON PAGE 5.



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD BLOCKING ASSEMBLY A (1 REQD). SEE THE DETAIL ON PAGE 20 AND SPECIAL NOTES 2 THROUGH 4 ON PAGE 5.
- ② SEPARATOR GATE (2 REQD). SEE THE DETAIL ON PAGE 23 AND SPECIAL NOTE 6 ON PAGE 5.
- ③ REAR BLOCKING ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 22 AND SPECIAL NOTE 7 ON PAGE 5.

SPECIAL NOTES:

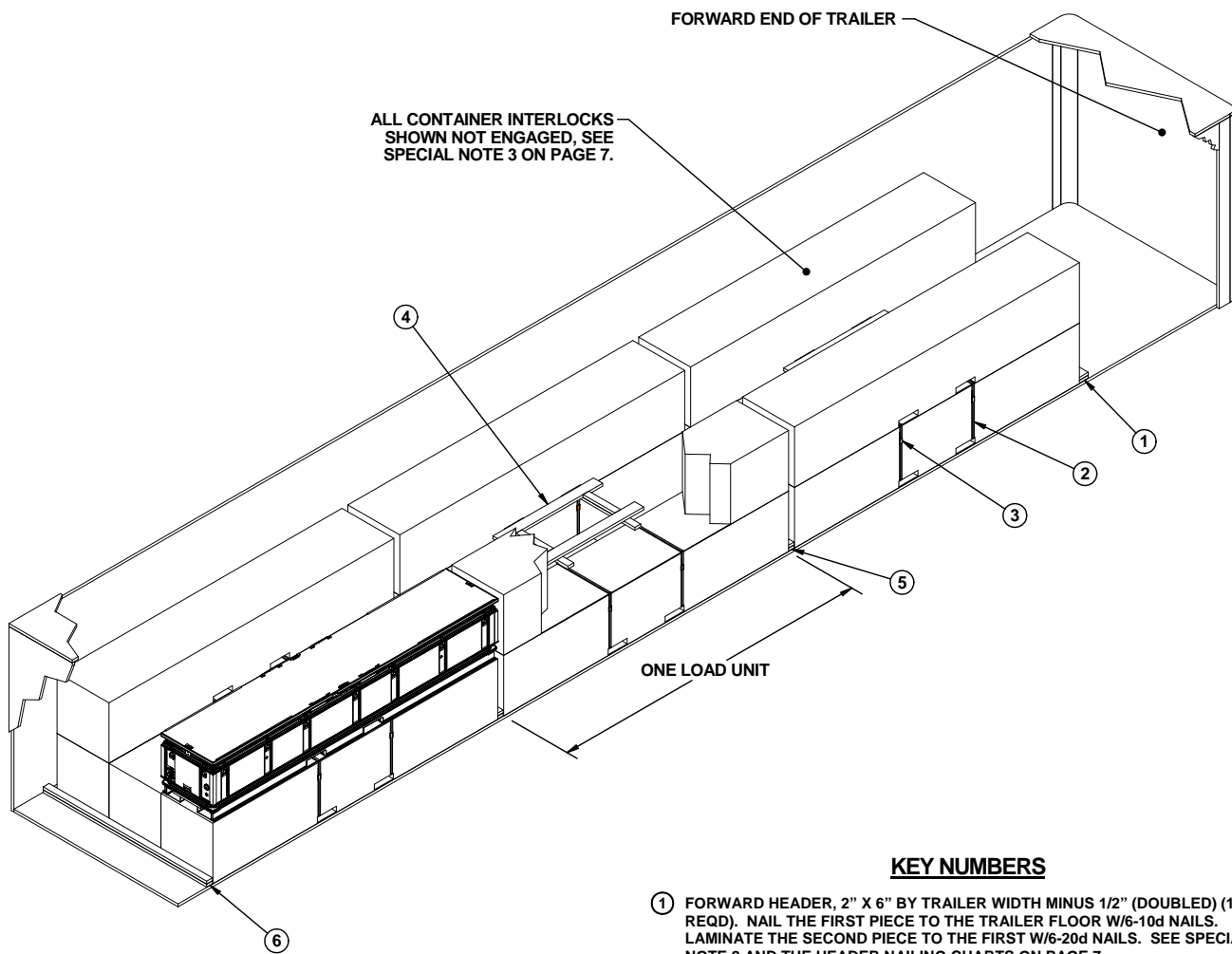
1. AN 18-UNIT LOAD OF CNU-671 OR CNU-672 CONTAINERS IS SHOWN IN A 53'-0" LONG BY 8'-2" WIDE (INSIDE DIMENSION) CONVENTIONAL VAN TRAILER. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
2. A TRAILER HAVING ROUNDED FRONT CORNERS IS SHOWN. IF A TRAILER WITH SQUARE FRONT CORNERS IS TO BE LOADED, THE FORWARD BLOCKING ASSEMBLY SHOULD BE OMITTED.
3. THE LENGTH OF THE STRUTS IN THE FORWARD BLOCKING ASSEMBLY SHOWN ON PAGE 4 CAN BE ADJUSTED TO PROVIDE FOR PROPER WEIGHT DISTRIBUTION IN THE TRAILER, THE STRUTS SHOWN ARE TYPICAL ONLY.
4. IF THE TRAILER HAS SUFFICIENT NAILING AREA AT THE FRONT OF THE LOAD, A NAILED HEADER MAY BE USED IN PLACE OF THE FORWARD BLOCKING ASSEMBLY. SEE THE LOAD ON PAGE 6 FOR GUIDANCE IN INSTALLING A NAILED HEADER.
5. A STACK, CONSISTING OF TWO CONTAINERS, MUST BE UNITIZED PRIOR TO LOADING IN THE VAN TRAILER. THE STACKS WILL BE FORMED AT THE REAR OF THE TRAILER. THE LOAD AS SHOWN ON PAGE 4 IS UNITIZED IN ACCORDANCE WITH THE PREFERRED INTERLOCK METHOD AS DESCRIBED ON PAGE 3. THE OPTIONAL USE OF 1-1/4" STEEL STRAPPING IS SHOWN ON PAGE 6.
6. THE SEPARATOR GATES SHOWN ON PAGE 4 SHALL ONLY BE INSTALLED WHEN THERE IS AN EQUAL NUMBER OF CONTAINERS ON EITHER SIDE OF THE SEPARATOR GATE. IF THE TRAILER HAS A NAILABLE FLOOR, NAILED HEADERS MAY BE USED INSTEAD, AND MUST BE USED IF THERE IS NOT FULL LAYER FOR EACH LAYER LOADED. SEE THE LOAD ON PAGE 6 FOR GUIDANCE.
7. IF THE TRAILER HAS SUFFICIENT NAILING AREA AT THE REAR OF THE LOAD, A NAILED HEADER MAY BE USED IN PLACE OF THE REAR BLOCKING ASSEMBLY, IF DESIRED. SEE THE LOAD ON PAGE 6 FOR GUIDANCE ON INSTALLING A NAILED HEADER. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 1-1/2" BUT LESS THAN 9", SOLID FILL MAY BE USED. SEE THE LOAD ON PAGE 10 FOR GUIDANCE ON INSTALLING SOLID FILL.
8. THE DEPICTED LOAD CAN BE REDUCED TO SUIT THE QUANTITY TO BE SHIPPED. SEE THE PROCEDURES DEPICTED ON PAGES 6 THROUGH 18 FOR GUIDANCE ON SHIPPING A QUANTITY OF CONTAINERS OTHER THAN 18.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	266	177
NAI LS	NO. REQD	POUNDS
10d (3")	241	3-3/4

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CNU-672 CONTAINER	18	40,482 LBS
DUNNAGE		358 LBS
TOTAL WEIGHT		40,840 LBS (APPROX)



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD HEADER, 2" X 6" BY TRAILER WIDTH MINUS 1/2" (DOUBLED) (1 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/6-10d NAILS. LAMINATE THE SECOND PIECE TO THE FIRST W/6-20d NAILS. SEE SPECIAL NOTE 2 AND THE HEADER NAILING CHARTS ON PAGE 7.
- ② UNITIZING STRAP, 1-1/4" X .035" OR .031" X 10'-8" (12 REQD, 2 PER STACK). INSTALL THROUGH FORKLIFT OPENINGS AS FAR APART AS OPENINGS ALLOW.
- ③ SEAL FOR 1-1/4" STEEL STRAPPING (12 REQD, 1 PER STRAP). DOUBLE NOTCH EACH SEAL. SEE THE "END-OVER-END LAP JOINT DETAILS" ON PAGE 22.
- ④ ANTI-SWAY BRACE (4 REQD). POSITION BETWEEN EACH LAYER OF CONTAINERS IN THE FOUR CONTAINER LOAD UNITS. SEE THE DETAIL ON PAGE 20 AND SPECIAL NOTE 6 ON PAGE 7.
- ⑤ CENTER HEADER, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (DOUBLED) (2 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/6-10d NAILS. LAMINATE THE SECOND PIECE TO THE FIRST W/6-20d NAILS. SEE SPECIAL NOTE 4 AND THE HEADER NAILING CHARTS ON PAGE 7.
- ⑥ REAR HEADER, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (DOUBLED) (1 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/6-10d NAILS. LAMINATE THE SECOND PIECE TO THE FIRST W/6-10d NAILS. SEE SPECIAL NOTE 5 AND THE HEADER NAILING CHARTS ON PAGE 7.

FORWARD HEADER NAILING CHART*	
#NAILS	MAX. LOAD WEIGHT (LBS)
3	15,000
4	20,000
5	25,000
6	30,000
7	35,000
8	40,000
9	45,000

- HEADERS AT THE FRONT END OF A LOAD OR AT THE FRONT END OF A DIVIDED LOAD WILL BE DOUBLED 2" X 6" MATERIAL. THE NUMBER OF NAILS INDICATED ABOVE REFERS TO THE NUMBER OF NAILS USED IN EACH LAMINATION OF A HEADER, FOR EXAMPLE 8 NAILS MEANS THE FIRST BOARD IS NAILED TO THE TRAILER FLOOR W/8-10d NAILS, AND THE SECOND BOARD IS LAMINATED TO THE FIRST W/8-20d NAILS, FOR A TOTAL OF 8-10d AND 8-20d NAILS PER HEADER. A MINIMUM OF 6 PAIRS OF NAILS WILL BE USED FOR TRAILER WIDTH HEADERS.

REAR HEADER NAILING CHART*	
#NAILS	MAX. LOAD WEIGHT (LBS)
6	15,000
7	17,500
8	20,000
9	22,500
10	25,000
11	27,500
12	30,000
13	32,500
14	35,000
15	37,500
16	40,000
17	42,500
18	45,000

- * HEADERS AT THE REAR OF A FULL LOAD OR AT THE REAR END OF A DIVIDED LOAD WILL BE DOUBLED 2" X 4" MATERIAL. THE NUMBER OF NAILS INDICATED ABOVE REFERS TO THE NUMBER OF NAILS USED IN EACH LAMINATION OF A HEADER, FOR EXAMPLE 8 NAILS MEANS THE FIRST BOARD IS NAILED TO THE TRAILER FLOOR W/8-10d NAILS, AND THE SECOND BOARD IS LAMINATED TO THE FIRST W/8-10d NAILS, FOR A TOTAL OF 16-10d NAILS. A MINIMUM OF 6 PAIRS OF NAILS WILL BE USED FOR TRAILER WIDTH HEADERS. NOTE: REAR HEADERS MAY BE HANDLED IN THE SAME MANNER AS FORWARD HEADERS, USING 2" X 6" MATERIAL WITH 10d AND 20d NAILS, IF DESIRED.

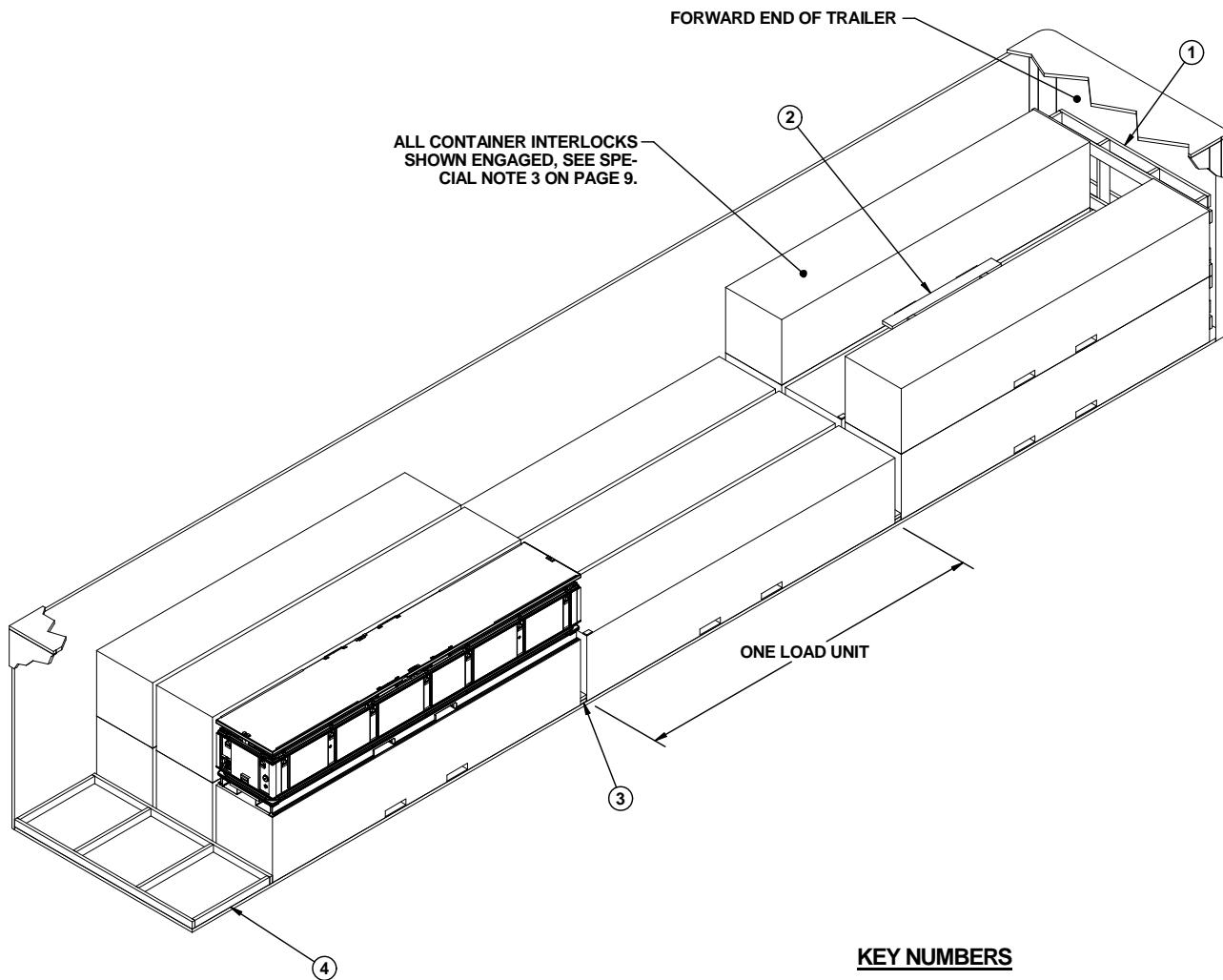
SPECIAL NOTES:

- A 13-UNIT LOAD OF CNU-671 OR CNU-672 CONTAINERS IS SHOWN IN A 53'-0" LONG BY 8'-2" WIDE (INSIDE DIMENSION) CONVENTIONAL VAN TRAILER. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
- A FORWARD BLOCKING ASSEMBLY MAY BE USED AT THE FRONT OF THE LOAD IN PLACE OF THE NAILED HEADER SHOWN ON PAGE 6, IF DESIRED. SEE THE LOAD ON PAGES 4 OR 8 FOR GUIDANCE ON INSTALLING A FORWARD BLOCKING ASSEMBLY.
- A STACK, CONSISTING OF TWO CONTAINERS, MUST BE UNITIZED PRIOR TO LOADING IN THE VAN TRAILER. THE STACKS WILL BE FORMED AT THE REAR OF THE TRAILER. THE LOAD ON PAGE 6 SHOWS THE OPTIONAL USE OF 1-1/4" STEEL STRAPPING. THE PREFERRED INTERLOCKING METHOD FOR UNITIZING THE STACKS IS DESCRIBED ON PAGE 3.
- A SEPARATOR GATE MAY BE USED BETWEEN STACKS OF CONTAINERS IN PLACE OF A CENTER HEADER IF DESIRED. A SEPARATOR GATE AS SHOWN IN THE LOAD ON PAGE 4 MAY BE SUBSTITUTED FOR THE CENTER HEADER ONLY WHEN THERE IS AN EQUAL NUMBER OF CONTAINERS ON EITHER SIDE OF THE SEPARATOR GATE.
- A REAR BLOCKING ASSEMBLY MAY BE USED AT THE REAR OF THE LOAD IN PLACE OF THE NAILED HEADER SHOWN ON PAGE 6, IF DESIRED. SEE THE LOAD ON PAGE 4 FOR GUIDANCE ON INSTALLING A REAR BLOCKING ASSEMBLY. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 1-1/2" BUT LESS THAN 9", SOLID FILL MAY BE USED. SEE THE LOAD ON PAGE 10 FOR GUIDANCE ON INSTALLING SOLID FILL.
- ANTI-SWAY BRACES ARE REQUIRED IN ANY LAYER OF A LOAD UNIT THAT CONSISTS OF ONLY TWO CONTAINERS Laterally (OMITTED CENTER CONTAINER).
- THE DEPICTED LOAD CAN BE INCREASED TO SUIT THE QUANTITY TO BE SHIPPED BY ADDING CONTAINERS IN THE CENTER ROW. THE DEPICTED LOAD CAN BE ALSO BE REDUCED TO SUIT THE QUANTITY TO BE SHIPPED. SEE THE PROCEDURES DEPICTED ON PAGE 4 AND PAGES 8 THROUGH 18 FOR GUIDANCE ON SHIPPING A QUANTITY OF CONTAINERS OTHER THAN 13.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	91	61
2" X 6"	57	57
NAI LS	NO. REQD	POUNDS
10d (3")	102	1-3/4
20d (4")	18	3/4
STEEL STRAPPING, 1-1/4" - - 128' REQD - - -		19 LBS
SEAL FOR 1-1/4" STRAPPING - - 12 REQD - - -		1/2 LB

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CNU-672 CONTAINER	- 13 - - - -	29,237 LBS
DUNNAGE	- - - - -	254 LBS
TOTAL WEIGHT - - - - -		29,491 LBS (APPROX)



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD BLOCKING ASSEMBLY B (1 REQD). SEE THE DETAIL ON PAGE 21 AND SPECIAL NOTE 2 ON PAGE 9.
- ② ANTI-SWAY BRACE (1 REQD). SEE THE DETAIL ON PAGE 20 AND SPECIAL NOTE 6 ON PAGE 9.
- ③ CENTER HEADER, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (DOUBLED) (2 REQD). NAIL THE FIRST PIECE TO THE FLOOR W/6-10d NAILS. LAMINATE THE SECOND PIECE TO THE FIRST W/6-20d NAIL EVERY 12". SEE SPECIAL NOTE 4 ON PAGE 9 AND THE HEADER NAILING CHARTS ON PAGE 7.
- ④ REAR BLOCKING ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 22 AND SPECIAL NOTE 5 ON PAGE 9.

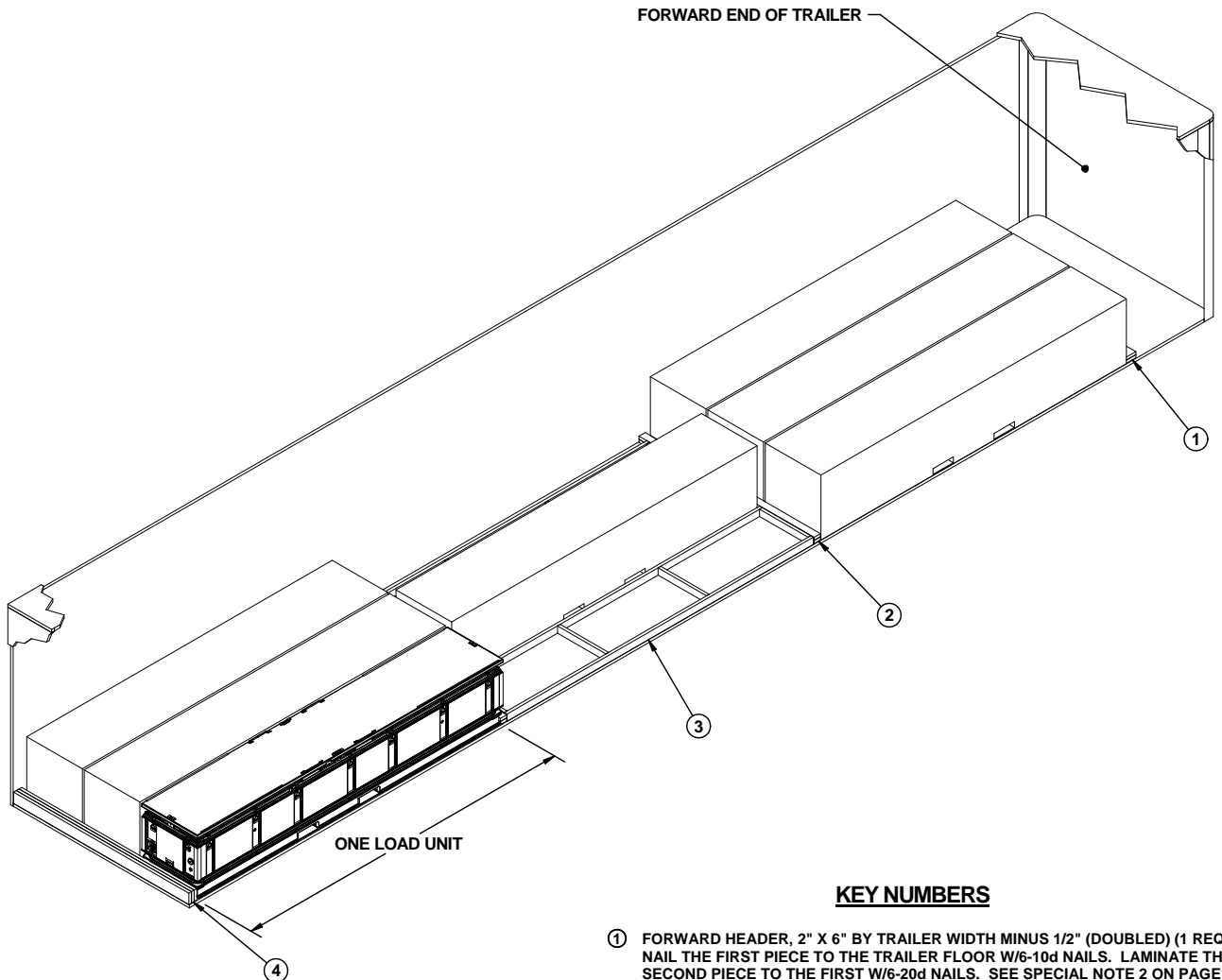
SPECIAL NOTES:

1. A 14-UNIT LOAD OF CNU-671 OR CNU-672 CONTAINERS IS SHOWN IN A 48'-0" LONG BY 8'-2" WIDE (INSIDE DIMENSION) CONVENTIONAL VAN TRAILER. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
2. A TRAILER HAVING ROUNDED FRONT CORNERS IS SHOWN. IF A TRAILER WITH SQUARE FRONT CORNERS IS TO BE LOADED, THE FORWARD BLOCKING ASSEMBLY SHOULD BE OMITTED.
3. A STACK, CONSISTING OF TWO CONTAINERS, MUST BE UNITIZED PRIOR TO LOADING IN THE VAN TRAILER. THE STACKS WILL BE FORMED AT THE REAR OF THE TRAILER. THE LOAD AS SHOWN ON PAGE 8 IS UNITIZED IN ACCORDANCE WITH THE PREFERRED INTERLOCK METHOD AS DESCRIBED ON PAGE 3. THE OPTIONAL USE OF 1-1/4" STEEL STRAPPING IS SHOWN ON PAGE 6.
4. A SEPARATOR GATE MAY BE USED BETWEEN STACKS OF CONTAINERS IN PLACE OF A CENTER HEADER IF DESIRED. A SEPARATOR GATE AS SHOWN IN THE LOAD ON PAGE 4 MAY BE SUBSTITUTED FOR THE CENTER HEADER ONLY WHEN THERE IS AN EQUAL NUMBER OF CONTAINERS ON EITHER SIDE OF THE SEPARATOR GATE.
5. IF THE TRAILER HAS SUFFICIENT NAILING AREA AT THE REAR OF THE LOAD, A NAILED HEADER MAY BE USED IN PLACE OF THE REAR BLOCKING ASSEMBLY SHOWN ON PAGE 8, IF DESIRED. SEE THE LOAD ON PAGE 6 FOR GUIDANCE ON INSTALLING A NAILED HEADER. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 1-1/2" BUT LESS THAN 9", SOLID FILL MAY BE USED. SEE THE LOAD ON PAGE 10 FOR GUIDANCE ON INSTALLING SOLID FILL.
6. ANTI-SWAY BRACES ARE REQUIRED IN ANY LAYER OF A LOAD UNIT THAT CONSISTS OF ONLY TWO CONTAINERS LATERALLY (OMITTED CENTER CONTAINER).
7. THE DEPICTED LOAD CAN BE INCREASED TO SUIT THE QUANTITY TO BE SHIPPED BY ADDING CONTAINERS IN THE UPPER LAYER. THE DEPICTED LOAD CAN BE ALSO BE REDUCED TO SUIT THE QUANTITY TO BE SHIPPED. SEE THE PROCEDURES DEPICTED ON PAGES 4 THROUGH 6 AND PAGES 10 THROUGH 18 FOR GUIDANCE ON SHIPPING A QUANTITY OF CONTAINERS OTHER THAN 14.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	41	27
2" X 6"	107	107
NAI LS	NO. REQD	POUNDS
10d (3")	142	2-1/4
20d (4")	12	1/2

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CNU-672 CONTAINER	- 14 - - - -	31,486 LBS
DUNNAGE	- - - - -	271 LBS
TOTAL WEIGHT - - - - -		31,757 LBS (APPROX)



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD HEADER, 2" X 6" BY TRAILER WIDTH MINUS 1/2" (DOUBLED) (1 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/6-10d NAILS. LAMINATE THE SECOND PIECE TO THE FIRST W/6-20d NAILS. SEE SPECIAL NOTE 2 ON PAGE 11 AND THE HEADER NAILING CHARTS ON PAGE 7.
- ② CENTER HEADER, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (DOUBLED) (2 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/6-10d NAILS. LAMINATE THE SECOND PIECE TO THE FIRST W/6-20d NAILS. SEE SPECIAL NOTE 3 ON PAGE 11 AND THE HEADER NAILING CHARTS ON PAGE 7.
- ③ FILLER ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 24 AND SPECIAL NOTE 4 ON PAGE 11.
- ④ SOLID FILL, 1" OR 2" X 6" BY INSIDE TRAILER WIDTH MINUS 1/2" (AS REQD TO FILL VOID AT THE REAR OF THE LOAD). LAMINATE THE SECOND PIECE TO THE FIRST PIECE W/8 APPROPRIATELY SIZED NAILS. LAMINATE THE REMAINING PIECES IN A LIKE MANNER. SEE SPECIAL NOTES 5 AND 6 ON PAGE 11.

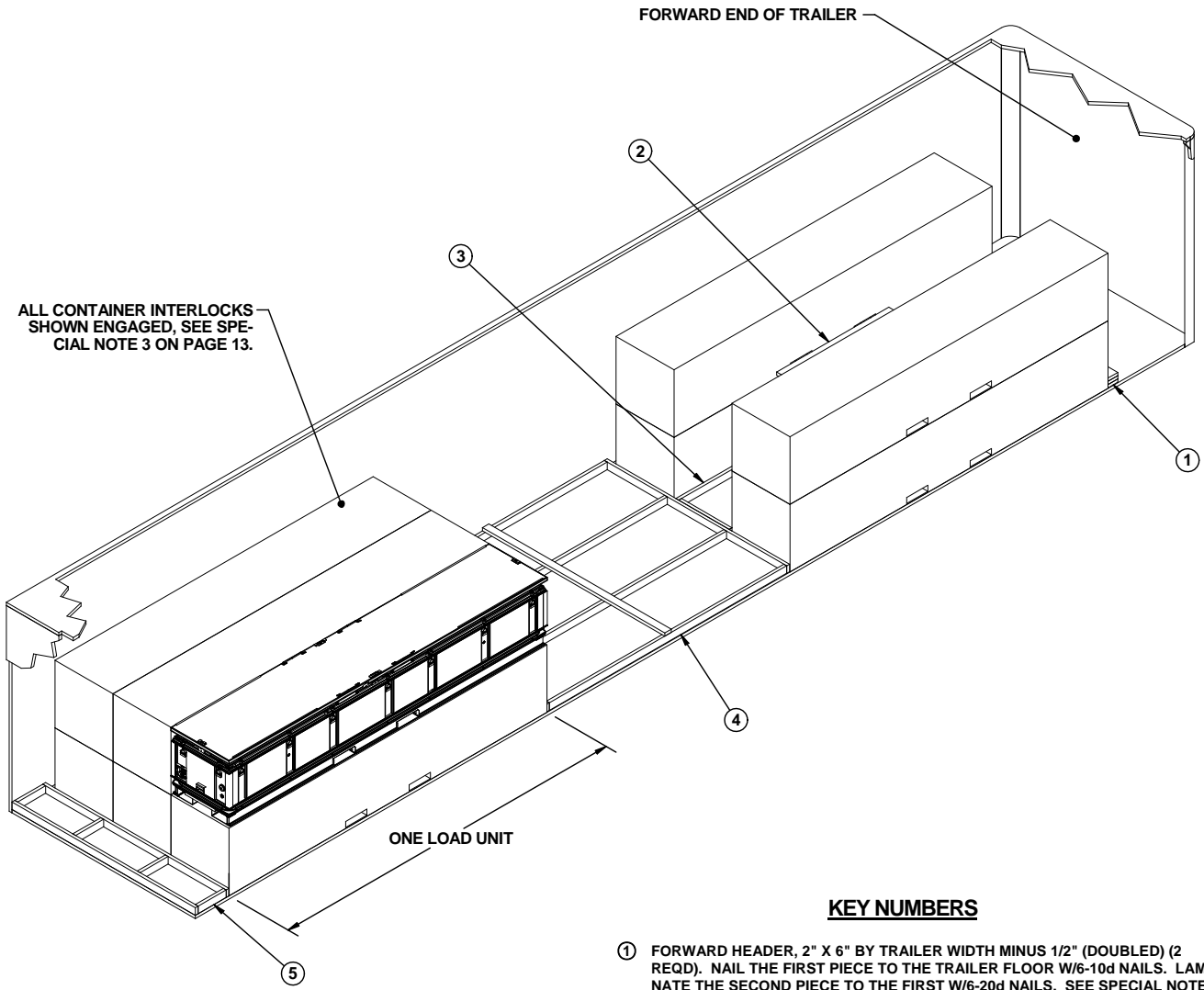
SPECIAL NOTES:

1. A SEVEN-UNIT LOAD OF CNU-671 OR CNU-672 CONTAINERS IS SHOWN IN A 48'-0" LONG BY 8'-2" WIDE (INSIDE DIMENSION) CONVENTIONAL VAN TRAILER. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
2. A FORWARD BLOCKING ASSEMBLY MAY BE USED AT THE FRONT OF THE LOAD IN PLACE OF THE NAILED HEADER SHOWN ON PAGE 10, IF DESIRED. SEE THE LOAD ON PAGES 4 OR 8 FOR GUIDANCE ON INSTALLING A FORWARD BLOCKING ASSEMBLY.
3. A SEPARATOR GATE MAY BE USED BETWEEN LONGITUDINALLY ADJACENT CONTAINERS IN PLACE OF A CENTER HEADER IF DESIRED. A SEPARATOR GATE AS SHOWN IN THE LOAD ON PAGE 4 MAY BE SUBSTITUTED FOR THE CENTER HEADER ONLY WHEN THERE IS AN EQUAL NUMBER OF CONTAINERS ON EITHER SIDE OF THE SEPARATOR GATE.
4. NAILED SIDE BLOCKING MAY BE SUBSTITUTED FOR THE FILLER ASSEMBLIES, IF DESIRED. SEE THE LOAD ON PAGE 18 FOR GUIDANCE IN INSTALLING NAILED SIDE BLOCKING. FILLER ASSEMBLIES AND NAILED SIDE BLOCKING SHALL NOT BE INSTALLED IN A LOAD UNIT CONTAINING AN UPPER LAYER OF CONTAINERS.
5. IF SOLID FILL IS INSTALLED AT THE REAR OF THE LOAD AND THE TRAILER IS EQUIPPED WITH REAR CORNER POSTS, INSTALL A FILLER PIECE 6" WIDE BY 48" LONG BY THE THICKNESS REQUIRED TO FILL THE EXCESS SPACE BETWEEN THE SOLID FILL AND THE REAR DOORS OF THE TRAILER WHEN THEY ARE CLOSED. LAMINATE THE FILLER PIECE TO THE SOLID FILL W/4 APPROPRIATE SIZED NAILS.
6. IF THE TRAILER HAS SUFFICIENT NAILING AREA AT THE REAR OF THE LOAD, A NAILED HEADER MAY BE USED AT THE REAR OF THE LOAD IN PLACE OF THE SOLID FILL SHOWN ON PAGE 10, IF DESIRED. SEE THE LOAD ON PAGE 6 FOR GUIDANCE ON INSTALLING A NAILED HEADER. IF THE SPACE AT THE REAR OF THE LOAD EXCEEDS 9", A REAR BLOCKING ASSEMBLY MAY BE USED IN PLACE OF THE SOLID FILL. SEE THE LOAD ON PAGE 4 FOR GUIDANCE ON INSTALLING A REAR BLOCKING ASSEMBLY.
7. THE DEPICTED LOAD CAN BE INCREASED TO SUIT THE QUANTITY TO BE SHIPPED BY ADDING CONTAINERS TO THE LOWER LAYER, ADDITIONAL CONTAINERS MAY THEN BE ADDED TO THE UPPER LAYER. THE DEPICTED LOAD CAN BE ALSO BE REDUCED TO SUIT THE QUANTITY TO BE SHIPPED. IF CONTAINERS ARE REMOVED FROM THE FORWARD OR AFT LOAD UNITS, NAILED SIDE BLOCKING OR FILLER ASSEMBLIES WILL BE REQUIRED. SEE THE PROCEDURES DEPICTED ON PAGES 4 THROUGH 6 AND PAGES 10 THROUGH 18 FOR GUIDANCE ON SHIPPING A QUANTITY OF CONTAINERS OTHER THAN SEVEN.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	109	73
2" X 6"	41	41
NAI LS	NO. REQD	POUNDS
10d (3")	62	1
20d (4")	18	3/4

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CNU-672 CONTAINER	- 7 - - - -	15,743 LBS
DUNNAGE	- - - - -	228 LBS
TOTAL WEIGHT - - - - -		16,071 LBS (APPROX)



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD HEADER, 2" X 6" BY TRAILER WIDTH MINUS 1/2" (DOUBLED) (2 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/6-10d NAILS. LAMINATE THE SECOND PIECE TO THE FIRST W/6-20d NAILS. SEE SPECIAL NOTE 2 ON PAGE 13 AND HEADER NAILING CHARTS ON PAGE 7.
- ② ANTI-SWAY BRACE (1 REQD). SEE THE DETAIL ON PAGE 20 AND SPECIAL NOTE 4 ON PAGE 13.
- ③ FILLER ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 24 AND SPECIAL NOTE 4 ON PAGE 13.
- ④ SPACER ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 24 AND SPECIAL NOTE 5 ON PAGE 13.
- ⑤ REAR BLOCKING ASSEMBLY (1 REQD). SEE THE DETAIL ON PAGE 22 AND SPECIAL NOTE 7 ON PAGE 13.

SPECIAL NOTES:

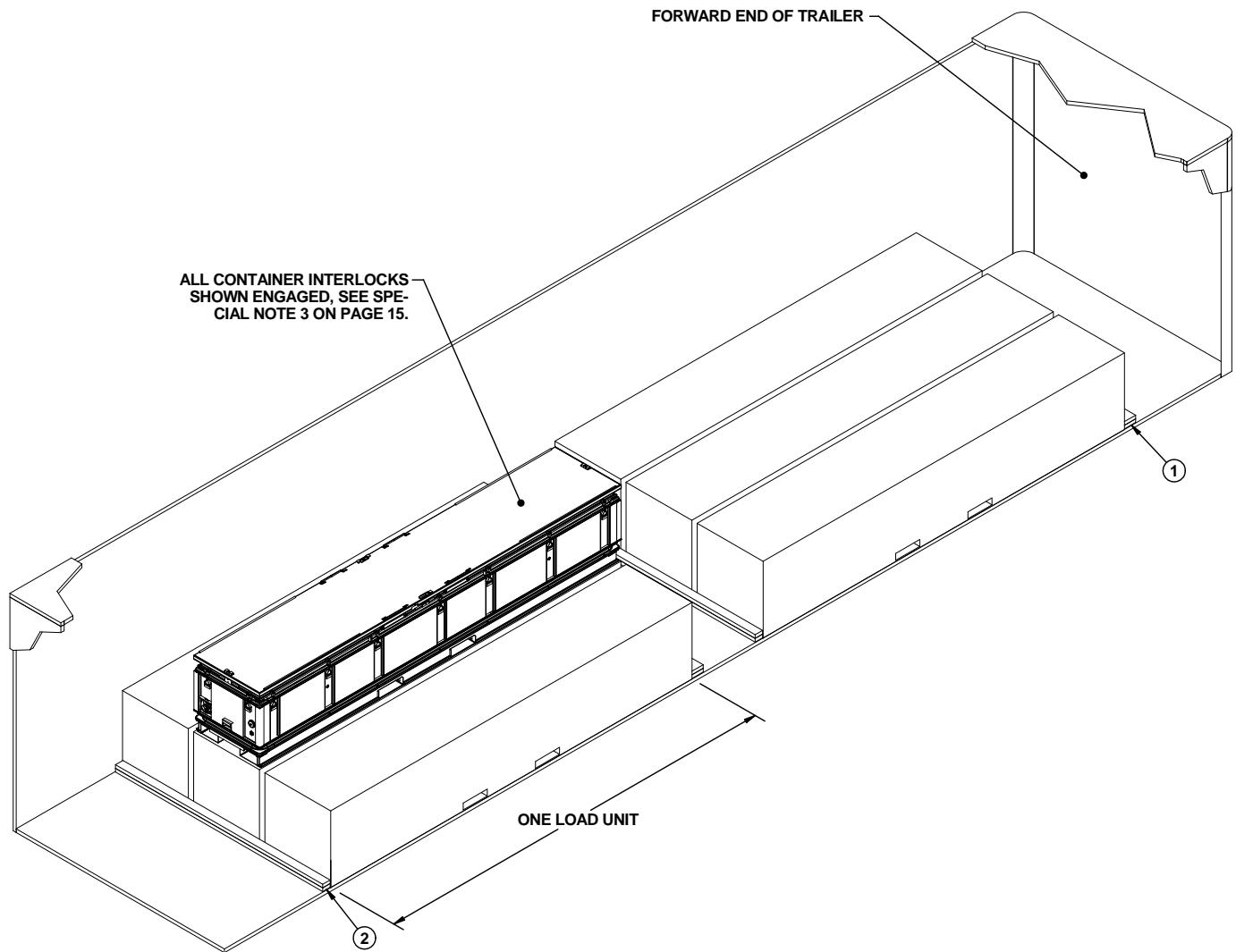
1. A 10-UNIT LOAD OF CNU-671 OR CNU-672 CONTAINERS IS SHOWN IN A 45'-0" LONG BY 8'-2" WIDE (INSIDE DIMENSION) CONVENTIONAL VAN TRAILER. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
2. A FORWARD BLOCKING ASSEMBLY MAY BE USED AT THE FRONT OF THE LOAD IN PLACE OF THE NAILED HEADER SHOWN ON PAGE 12, IF DESIRED. SEE THE LOAD ON PAGES 4 OR 8 FOR GUIDANCE ON INSTALLING A FORWARD BLOCKING ASSEMBLY.
3. A STACK, CONSISTING OF TWO CONTAINERS, MUST BE UNITIZED PRIOR TO LOADING IN THE VAN TRAILER. THE STACKS WILL BE FORMED AT THE REAR OF THE TRAILER. THE LOAD AS SHOWN ON PAGE 12 IS UNITIZED IN ACCORDANCE WITH THE PREFERRED INTERLOCK METHOD AS DESCRIBED ON PAGE 3. THE OPTIONAL USE OF 1-1/4" STEEL STRAPPING IS SHOWN ON PAGE 6.
4. AN ANTI-SWAY BRACE IS REQUIRED IN THE UPPER LAYER OF A LOAD BAY WHEN A FILLER ASSEMBLY IS INSTALLED BETWEEN STACKS OF CONTAINERS. NO ANTI-SWAY BRACES OR FILLER ASSEMBLIES ARE REQUIRED WHEN THE LOWER LAYER OF CONTAINERS IN A LOAD BAY IS FULL.
5. THE SPACER ASSEMBLY SHOWN ON PAGE 12 IS TO BE USED FOR THE PURPOSE OF PROPER WEIGHT DISTRIBUTION, AND IS SHOWN AS TYPICAL ONLY. IF THE TRAILER LENGTH DIFFERS FROM WHAT IS SHOWN, THE LENGTH OF THE STRUTS IN THE ASSEMBLY MAY BE DIFFERENT FROM WHAT IS SHOWN.
6. SIDE FILLER ASSEMBLIES OR NAILED SIDE BLOCKING SHALL NOT BE INSTALLED IN A LOAD BAY CONTAINING AN UPPER LAYER OF CONTAINERS. INSTALL ANTI-SWAY BRACES AS REQUIRED.
7. IF THE TRAILER HAS SUFFICIENT NAILING AREA AT THE REAR OF THE LOAD, A NAILED HEADER MAY BE USED AT THE REAR OF THE LOAD IN PLACE OF THE REAR BLOCKING ASSEMBLY IF DESIRED. SEE THE LOAD ON PAGE 6 FOR GUIDANCE ON INSTALLING A NAILED HEADER. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 1-1/2" BUT LESS THAN 9", SOLID FILL MAY BE USED. SEE THE LOAD ON PAGE 10 FOR GUIDANCE ON INSTALLING SOLID FILL.
8. THE DEPICTED LOAD CAN BE INCREASED TO SUIT THE QUANTITY TO BE SHIPPED BY ADDING CONTAINERS IN THE FORWARD LOAD UNIT. THE DEPICTED LOAD CAN BE ALSO BE REDUCED TO SUIT THE QUANTITY TO BE SHIPPED. SEE THE PROCEDURES DEPICTED ON PAGES 4 THROUGH 10 AND PAGES 14 THROUGH 18 FOR GUIDANCE ON SHIPPING A QUANTITY OF CONTAINERS OTHER THAN 10.

BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	127	85
2" X 6"	25	25
NAILS	NO. REQD	POUNDS
10d (3")	74	1-1/4
20d (4")	18	3/4

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CNU-672 CONTAINER	10	22,490 LBS
DUNNAGE		219 LBS
TOTAL WEIGHT		22,709 LBS (APPROX)



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD HEADER, 2" X 6" BY TRAILER WIDTH MINUS 1/2" (DOUBLED) (2 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/6-10d NAILS. LAMINATE THE SECOND PIECE TO THE FIRST W/6-20d NAILS. SEE SPECIAL NOTE 2 ON PAGE 15 AND THE HEADER NAILING CHARTS ON PAGE 7.
- ② REAR HEADER, 2" X 4" BY TRAILER WIDTH MINUS 1/2" (DOUBLED) (1 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/6-10d NAILS. LAMINATE THE SECOND PIECE TO THE FIRST W/6-10d NAILS. SEE SPECIAL NOTE 5 AND THE HEADER NAILING CHARTS ON PAGE 7.

SPECIAL NOTES:

1. A SEVEN-UNIT LOAD OF CNU-671 OR CNU-672 CONTAINERS IS SHOWN IN A 40'-0" LONG BY 8'-2" WIDE (INSIDE DIMENSION) CONVENTIONAL VAN TRAILER. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
2. A FORWARD BLOCKING ASSEMBLY MAY BE USED AT THE FRONT OF THE LOAD IN PLACE OF THE NAILED HEADER SHOWN ON PAGE 14, IF DESIRED. SEE THE LOAD ON PAGES 4 OR 8 FOR GUIDANCE ON INSTALLING A FORWARD BLOCKING ASSEMBLY.
3. A STACK, CONSISTING OF TWO CONTAINERS, MUST BE UNITIZED PRIOR TO LOADING IN THE VAN TRAILER. THE STACKS WILL BE FORMED AT THE REAR OF THE TRAILER. THE LOAD AS SHOWN ON PAGE 14 IS UNITIZED IN ACCORDANCE WITH THE PREFERRED INTERLOCK METHOD AS DESCRIBED ON PAGE 3. THE OPTIONAL USE OF 1-1/4" STEEL STRAPPING IS SHOWN ON PAGE 6.
4. A SEPARATOR GATE MAY BE USED BETWEEN STACKS OF CONTAINERS IN PLACE OF THE HEADERS IF DESIRED. A SEPARATOR GATE AS SHOWN IN THE LOAD ON PAGE 4 MAY BE SUBSTITUTED FOR THE CENTER HEADER ONLY WHEN THERE IS AN EQUAL NUMBER OF CONTAINERS ON EITHER SIDE OF THE SEPARATOR GATE.
5. SIDE FILLER ASSEMBLIES OR NAILED SIDE BLOCKING SHALL NOT BE INSTALLED IN A LOAD BAY CONTAINING AN UPPER LAYER OF CONTAINERS. INSTALL ANTI-SWAY BRACES AS REQUIRED.
6. A REAR BLOCKING ASSEMBLY MAY BE USED AT THE REAR OF THE LOAD IN PLACE OF THE NAILED HEADER SHOWN ON PAGE 14, IF DESIRED. SEE THE LOAD ON PAGE 4 FOR GUIDANCE ON INSTALLING A REAR BLOCKING ASSEMBLY. IF THE SPACE AT THE REAR OF THE LOAD IS GREATER THAN 1-1/2" BUT LESS THAN 9", SOLID FILL MAY BE USED. SEE THE LOAD ON PAGE 10 FOR GUIDANCE ON INSTALLING SOLID FILL.
7. THE DEPICTED LOAD CAN BE INCREASED TO SUIT THE QUANTITY TO BE SHIPPED BY ADDING CONTAINERS TO THE UPPER LAYER. THE DEPICTED LOAD CAN BE ALSO BE REDUCED TO SUIT THE QUANTITY TO BE SHIPPED. SEE THE PROCEDURES DEPICTED ON PAGE 4 THROUGH 12 AND PAGES 16 THROUGH 18 FOR GUIDANCE ON SHIPPING A QUANTITY OF CONTAINERS OTHER THAN SEVEN.

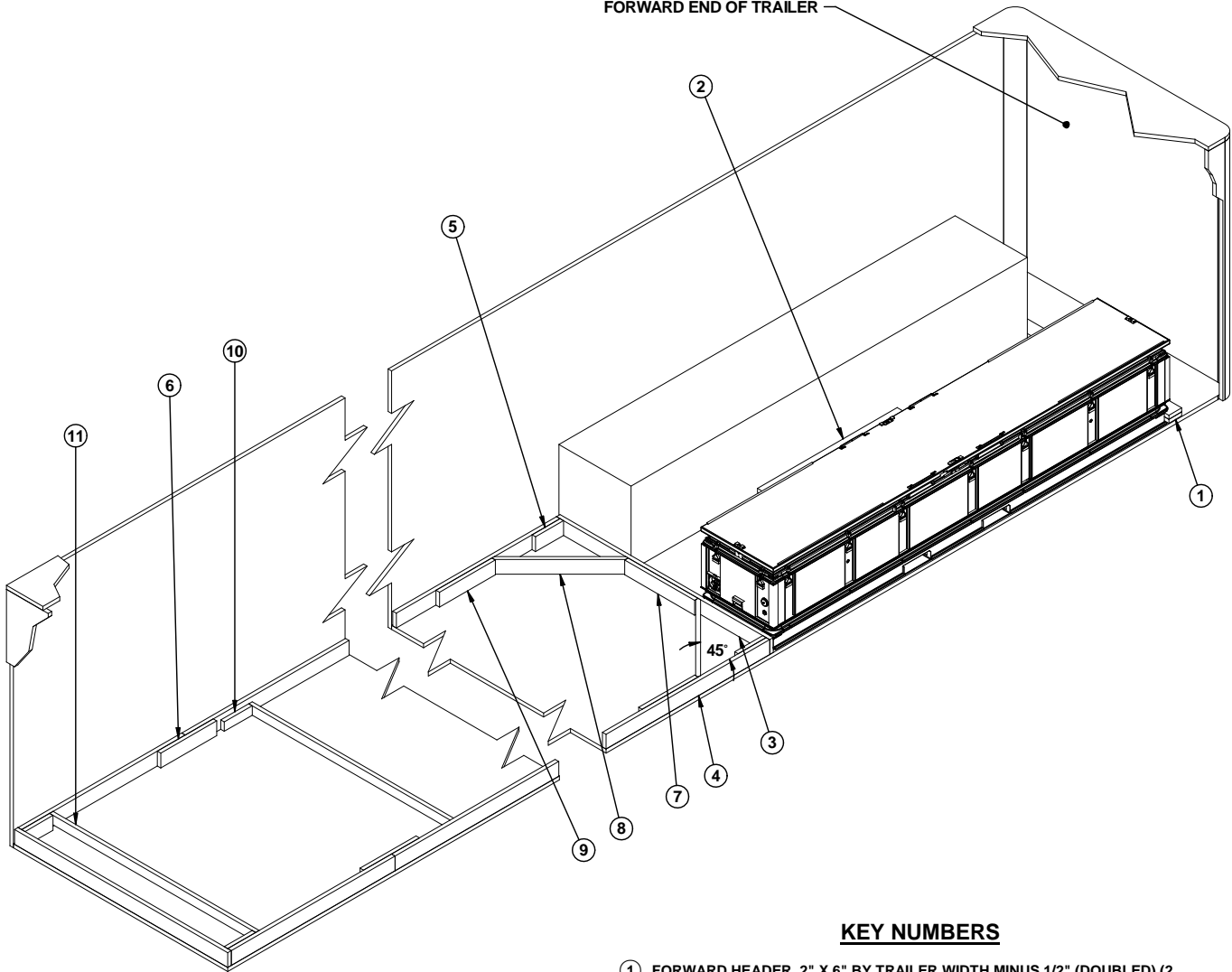
BILL OF MATERIAL

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	33	22
2" X 6"	33	33
NAI LS	NO. REQD	POUNDS
10d (3")	24	1/2
20d (4")	24	3/4

LOAD AS SHOWN

ITEM	QUANTI TY	WEIGHT (APPROX)
CNU-672 CONTAI NER	- 7 - - - -	15,743 LBS
DUNNAGE	- - - - -	110 LBS
TOTAL WEIGHT - - - - -		15,853 LBS (APPROX)

FORWARD END OF TRAILER



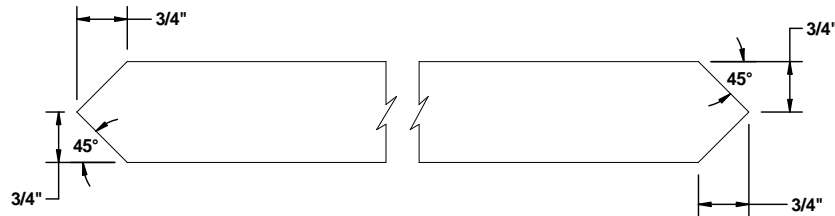
ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD HEADER, 2" X 6" BY TRAILER WIDTH MINUS 1/2" (DOUBLED) (2 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/6-10d NAILS. LAMINATE THE SECOND PIECE TO THE FIRST W/6-20d NAILS. SEE SPECIAL NOTE 2 ON PAGE 17 AND THE HEADER NAILING CHARTS ON PAGE 7.
- ② ANTI-SWAY BRACE (1 REQD). SEE THE DETAIL ON PAGE 20 AND SPECIAL NOTE 7 ON PAGE 17.
- ③ HEADER, 2" X 6" BY TRAILER WIDTH MINUS 1/2" IN LENGTH (2 REQD).
- ④ SIDE STRUT, 2" X 6" BY CUT TO FIT BETWEEN THE FORWARD AND REAR HEADERS (2 REQD). SEE SPECIAL NOTE 3 ON PAGE 17.
- ⑤ POCKET CLEAT, 2" X 6" X 12" (4 REQD). NAIL TO A SIDE STRUT W/3-10d NAILS. TOENAIL TO THE ADJACENT HEADER W/3-12d NAILS.
- ⑥ SPLICE PIECE, 2" X 6" X 24" (AS REQD). CENTER ON JOINT OF SIDE STRUT AND NAIL W/4-10d NAILS AT EACH END.
- ⑦ CENTER CLEAT, 2" X 6" X 30" (1 REQD). NAIL TO A HEADER W/6-10d NAILS.
- ⑧ 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 TOENAIL TO THE ADJACENT HEADER AND SIDE STRUT W/2-16d NAILS AT EACH END. SEE "DIAGONAL BRACE DETAIL" ON PAGE 17.
- ⑨ BACK-UP CLEAT, 2" X 6" X 24" (2 REQD). NAIL TO A SIDE STRUT W/8-10d NAILS.
- ⑩ STRUT BRACE RETAINING CLEAT, 2" X 4" X 12" (AS REQD). NAIL TO A SIDE STRUT W/3-10d NAILS.
- ⑪ STRUT BRACE, 2" X 4" BY TRAILER WIDTH MINUS 3" IN LENGTH (MINIMUM OF ONE REQUIRED). NAIL TO THE POCKET CLEATS AND/OR TO THE STRUT BRACE RETAINING CLEATS, W/2-12d NAILS AT EACH END. SEE SPECIAL NOTE 4 ON PAGE 17.

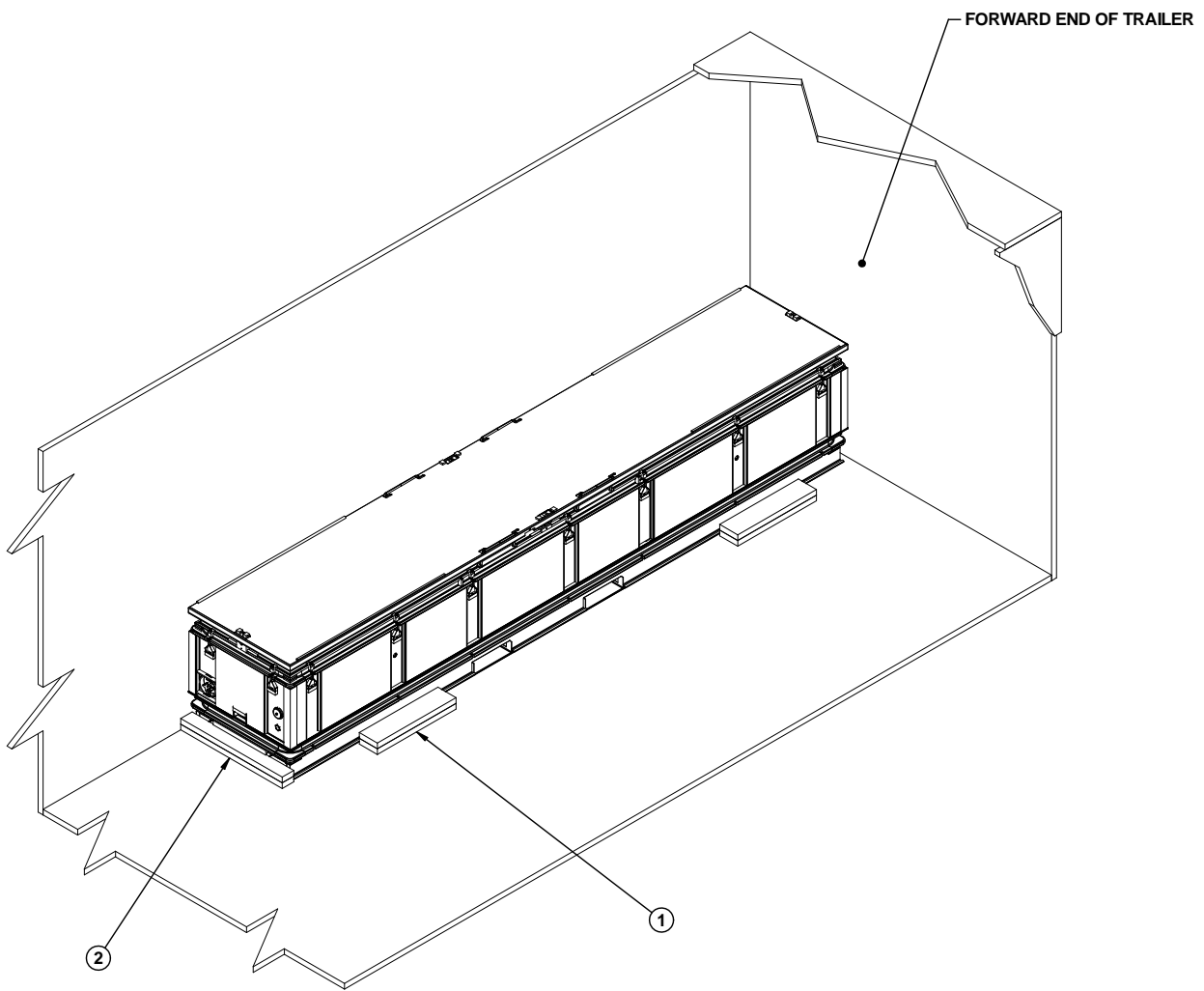
SPECIAL NOTES:

1. A TWO-UNIT LOAD OF CNU-671 OR CNU-672 CONTAINERS IS SHOWN IN A 8'-2" WIDE VAN TRAILER IS SHOWN. TRAILERS OF OTHER WIDTHS CAN BE USED.
2. A FORWARD BLOCKING ASSEMBLY MAY BE USED AT THE FRONT OF THE LOAD IN PLACE OF THE NAILED HEADER SHOWN ON PAGE 16, IF DESIRED. SEE THE LOAD ON PAGES 4 OR 8 FOR GUIDANCE ON INSTALLING A FORWARD BLOCKING ASSEMBLY.
3. DEPENDING ON THE NUMBER OF CONTAINERS BEING LOADED, EACH OF THE SIDE STRUTS MAY NEED TO BE FORMED FROM MORE THAN ONE PIECE OF MATERIAL. IF SUCH IS THE CASE, THE SIDE STRUTS MUST BE SPLICED. SPLICING CAN BE ACCOMPLISHED BY CENTERING A 2" X 6" X 24" PIECE ON THE JOINT OF THE SIDE STRUTS AND NAILING IT TO THE SIDE STRUTS W/4-10d NAILS AT EACH END.
4. ALL LTL LOADS, REGARDLESS OF THEIR SIZE, REQUIRE ONE STRUT BRACE POSITIONED AT THE REAR OF THE TRAILER AND NAILED TO POCKET CLEAT. IF THE SIDE STRUTS ARE LONGER THAN 7'-0", AN ADDITIONAL STRUT BRACE AND TWO STRUT BRACE RETAINING CLEATS, MUST BE APPLIED FOR EVERY 7'-0" OF SIDE STRUT LENGTH.
5. THE "K-BRACE" BLOCKING IS ADEQUATE FOR RETAINING A MAXIMUM LTL LOAD OF 20,000 POUNDS.
6. TRAILERS EQUIPPED WITH ROLL-UP TYPE DOORS MAY BE USED; HOWEVER, THE NAILED-HEADER METHOD OF REAR BLOCKING MUST BE INSTALLED IN LIEU OF THE "K-BRACE" TYPE BLOCKING. REFER TO PAGE 6 AND THE HEADER NAILING CHARTS ON PAGE 7 FOR GUIDANCE. NOTE THAT THE NAILED-HEADER METHOD OF REAR BLOCKING MAY ALSO BE USED IN TRAILERS EQUIPPED WITH HINGED DOORS AND NAILABLE FLOORS.
7. THE ANTI-SWAY BRACE MAY BE REPLACED WITH NAILED SIDE BLOCKING, IF DESIRED. SEE THE LOAD ON PAGE 18 FOR GUIDANCE ON INSTALLING NAILED SIDE BLOCKING.



DIAGONAL BRACE DETAIL

DEPICTED ABOVE IS THE TOP VIEW OF 2" X 6" MATERIAL.
SEE THE LOAD ON PAGE 16.



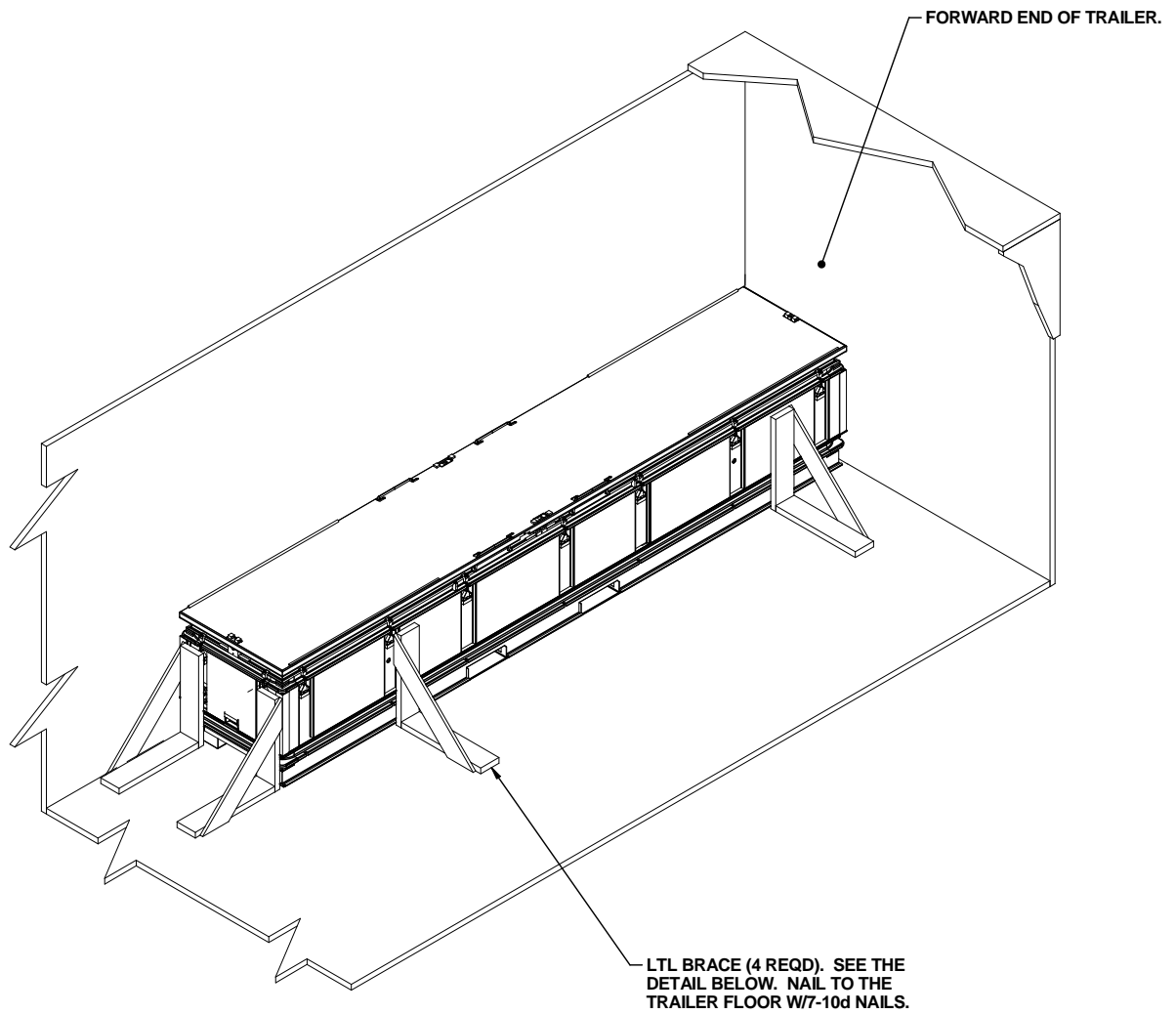
ISOMETRIC VIEW

KEY NUMBERS

- ① SIDE BLOCKING, 2" X 6" X 24" (DOUBLED) (2 REQD). ALIGN WITH THE CONTAINER SKIDS. NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/4-10d NAILS. LAMINATE THE SECOND PIECE TO THE FIRST W/4-10d NAILS. SEE SPECIAL NOTE 4 AT LEFT.
- ② REAR HEADER, 2" X 4" X 31" (DOUBLED) (1 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/4-10d NAILS. LAMINATE THE SECOND PIECE TO THE FIRST W/4-10d NAILS. SEE SPECIAL NOTE 4 AT LEFT.

SPECIAL NOTES:

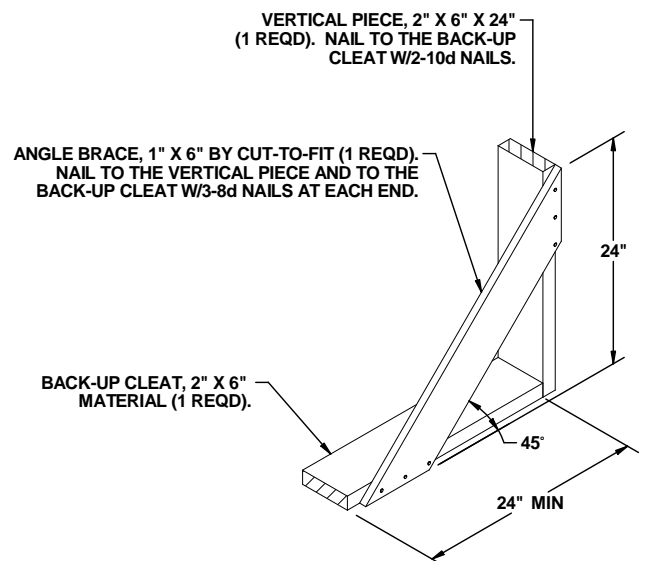
- 1. AN 8'-2" WIDE (INSIDE DIMENSION) VAN TRAILER WHICH HAS A NAILABLE FLOOR AND SQUARE FRONT CORNERS IS SHOWN. TRAILERS OF OTHER WIDTHS CAN BE USED. A FORWARD HEADER OR FORWARD BLOCKING ASSEMBLY IS REQUIRED FOR ANY LOAD IN A TRAILER WITH ROUNDED FRONT CORNERS.
- 2. THE POSITIONING OF A UNIT IS OPTIONAL. UNITS MAY BE LOCATED IN THE CORNER OF THE TRAILER AS SHOWN OR LATERALLY ACROSS THE CENTER OF THE TRAILER. SIDE BLOCKING IS REQUIRED ON BOTH SIDES OF A UNIT THAT IS LATERALLY CENTERED IN THE TRAILER.
- 3. IF MORE THAN ONE UNIT IS TO BE TRANSPORTED, THE LOAD SHOULD BE FORMED IN ROWS, WITH THE UNITS POSITIONED AGAINST OPPOSITE SIDEWALLS, AS SHOWN IN THE LOAD ON PAGE 16.
- 4. NAILED SIDE BLOCKING SHALL NOT BE USED TO BLOCK CONTAINERS STACKED MORE THAN ONE HIGH.



ISOMETRIC VIEW

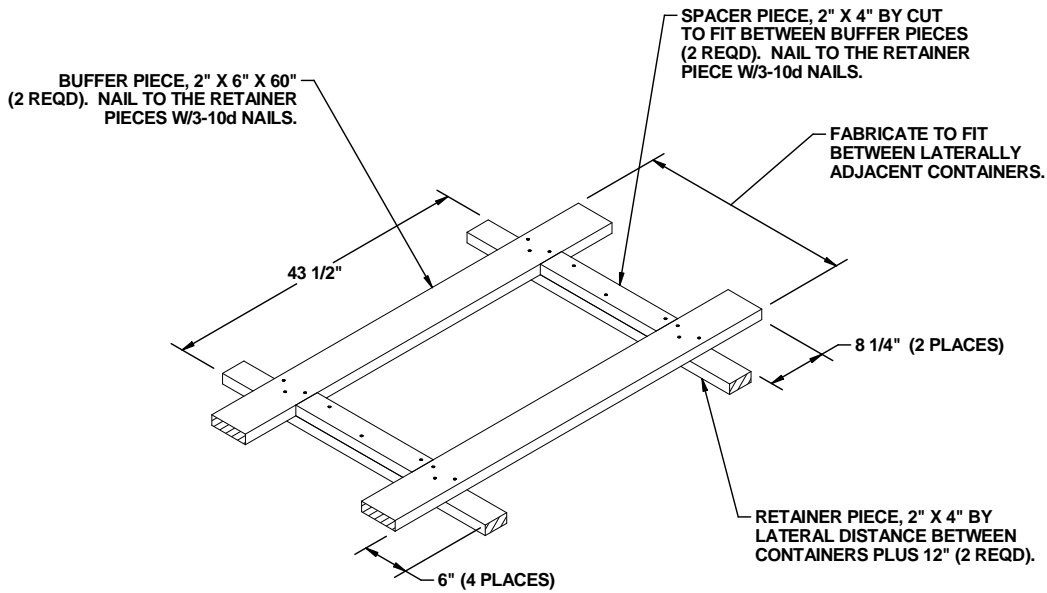
SPECIAL NOTES:

1. A 7'-8" WIDE (INSIDE DIMENSION) VAN TRAILER WHICH HAS A NAILABLE FLOOR AND SQUARE FRONT CORNERS IS SHOWN. TRAILERS OF OTHER WIDTHS CAN BE USED. A FORWARD HEADER OR FORWARD BLOCKING ASSEMBLY IS REQUIRED FOR ANY LOAD IN A TRAILER WITH ROUNDED FRONT CORNERS.
2. THE POSITIONING OF A CONTAINER IS OPTIONAL. CONTAINERS MAY ALSO BE LOCATED CENTERED IN THE TRAILER, IF DESIRED. ANGLE BRACES ARE REQUIRED ON BOTH SIDES OF A CONTAINER (TOTAL OF SIX ANGLE BRACES) WHICH IS CENTERED ACROSS THE WIDTH OF THE TRAILER.
3. MORE THAN ONE CONTAINER CAN BE SHIPPED, PROVIDING THE CAPACITY OF THE LTL BRACES IS NOT EXCEEDED. THE LOAD SHOULD BE FORMED IN ROWS, WITH THE UNITS POSITIONED AGAINST OPPOSITE SIDEWALLS. THE PROPER CENTER FILL OR BLOCKING WILL BE INSTALLED BETWEEN THE LATERALLY ADJACENT UNITS.
4. 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 EACH CONTAINER ACROSS THE WIDTH OF THE TRAILER.

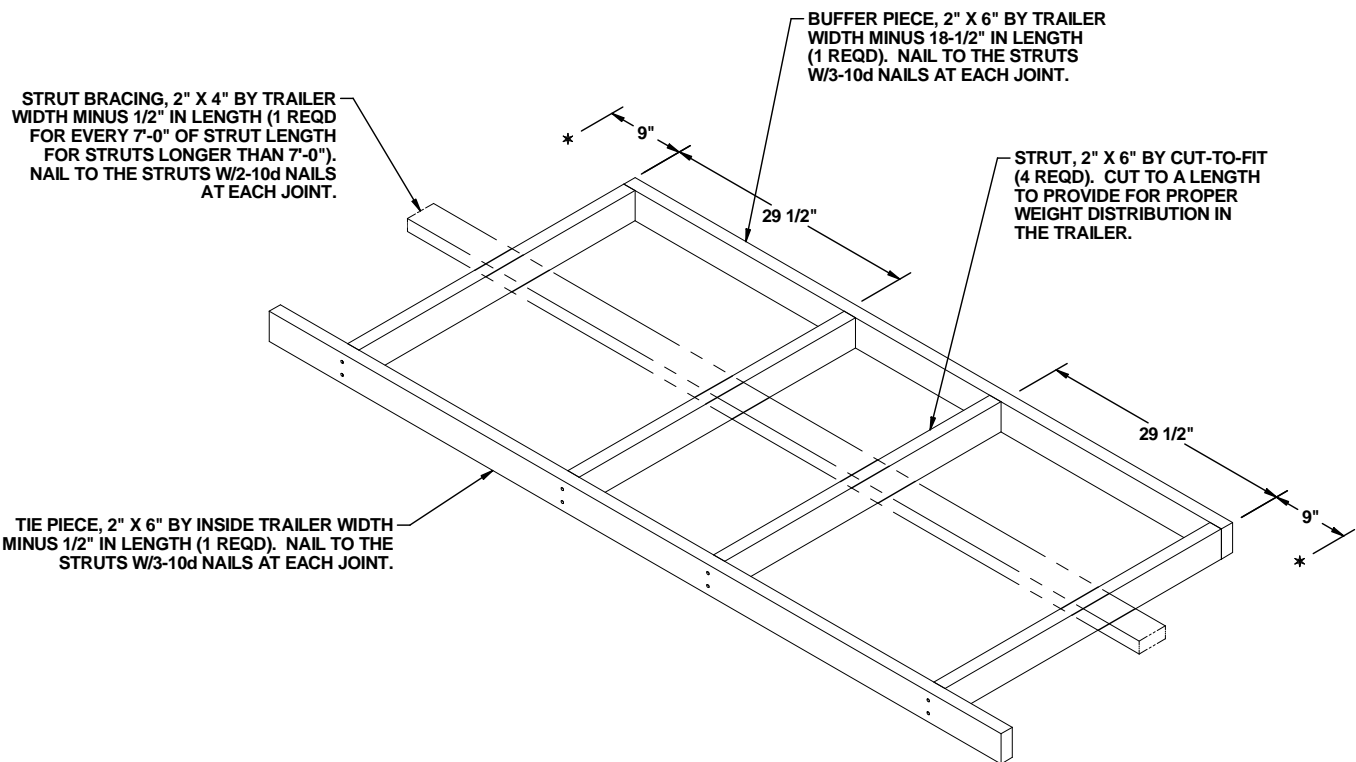


LTL BRACE

TYPICAL LTL (ONE-UNIT LOAD)

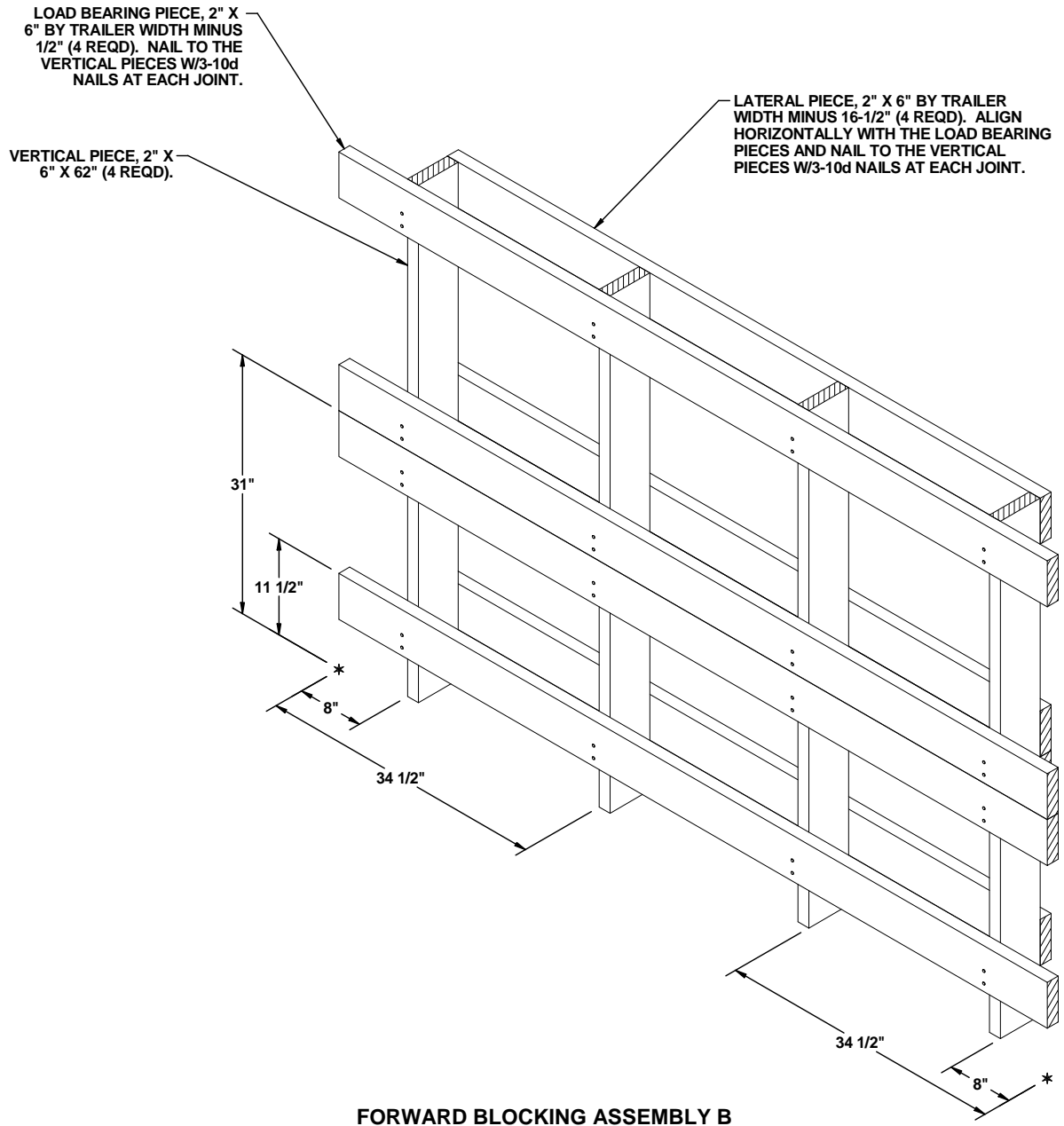


ANTI-SWAY BRACE



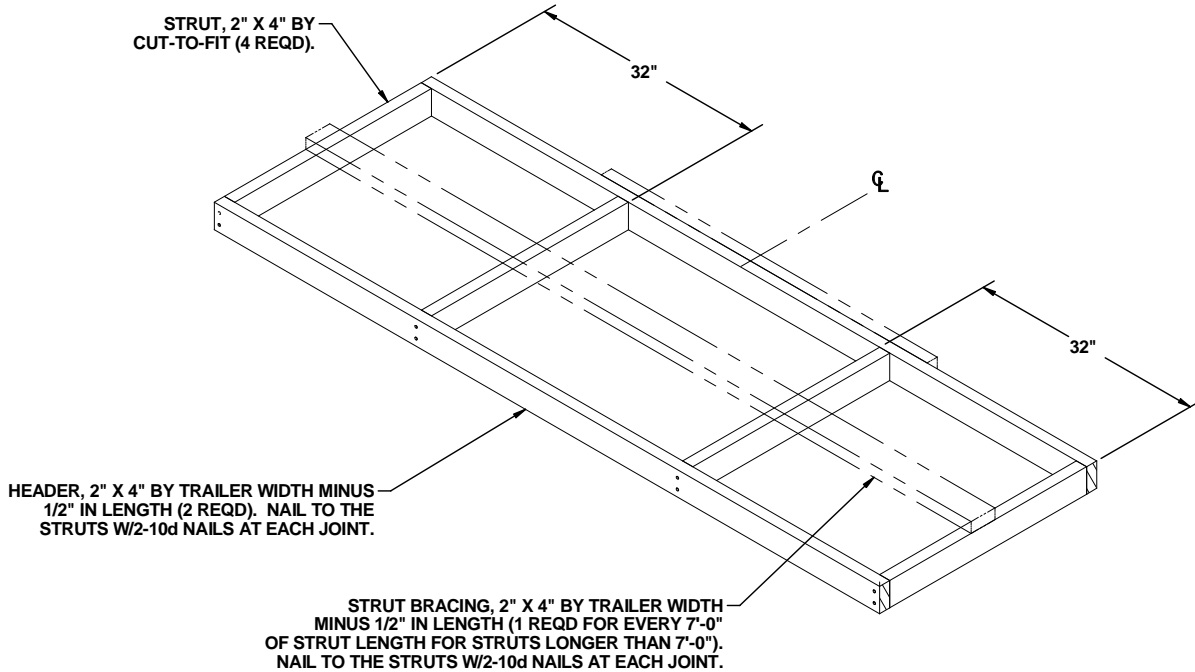
FORWARD BLOCKING ASSEMBLY A

NOTE: IF THE TRAILER TO BE LOADED HAS SQUARE INSIDE FRONT CORNERS, INCREASE THE BUFFER PIECE LENGTH TO "INSIDE TRAILER WIDTH MINUS 1/2". INSTALL THE OUTER STRUTS AT THE ENDS OF THE BUFFER AND TIE PIECES.



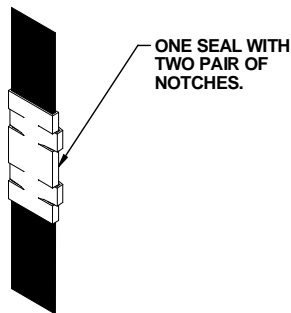
FORWARD BLOCKING ASSEMBLY B

NOTE: THIS ASSEMBLY IS DESIGNED FOR USE AT THE FRONT END OF A TRAILER HAVING ROUNDED CORNERS, AND IS APPLICABLE FOR A CORNER RADIUS OF BETWEEN 6-1/2" AND 8". IF THE RADIUS IS LESS THAN 6-1/2", 2" X 4" VERTICAL PIECES WILL BE USED IN LIEU OF THE 2" X 6" PIECES. IF THE TRAILER TO BE LOADED HAS LARGE-ANGLED CORNERS AT THE FORWARD END, USE THE HEADER METHOD OF FORWARD LOAD RESTRAINT. FOR ONE HIGH LOAD REDUCE VERTICAL PIECE LENGTH TO 31" AND ELIMINATE THE TOP TWO LOAD BEARING AND LATERAL PIECES.



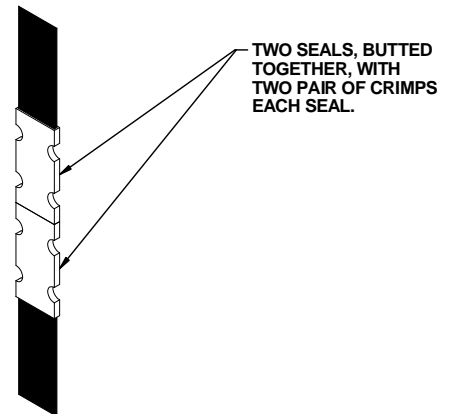
REAR BLOCKING ASSEMBLY

THIS ASSEMBLY IS DESIGNED FOR USE AT THE REAR OF A LOAD WHEN THE SPACE BETWEEN THE LADING AND THE TRAILER DOOR IS MORE THAN 9". NOTE THAT THE ABOVE VIEW IS ROTATED 180° FROM THE POSITION IN WHICH IT WILL BE INSTALLED.



STRAP JOINT A

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

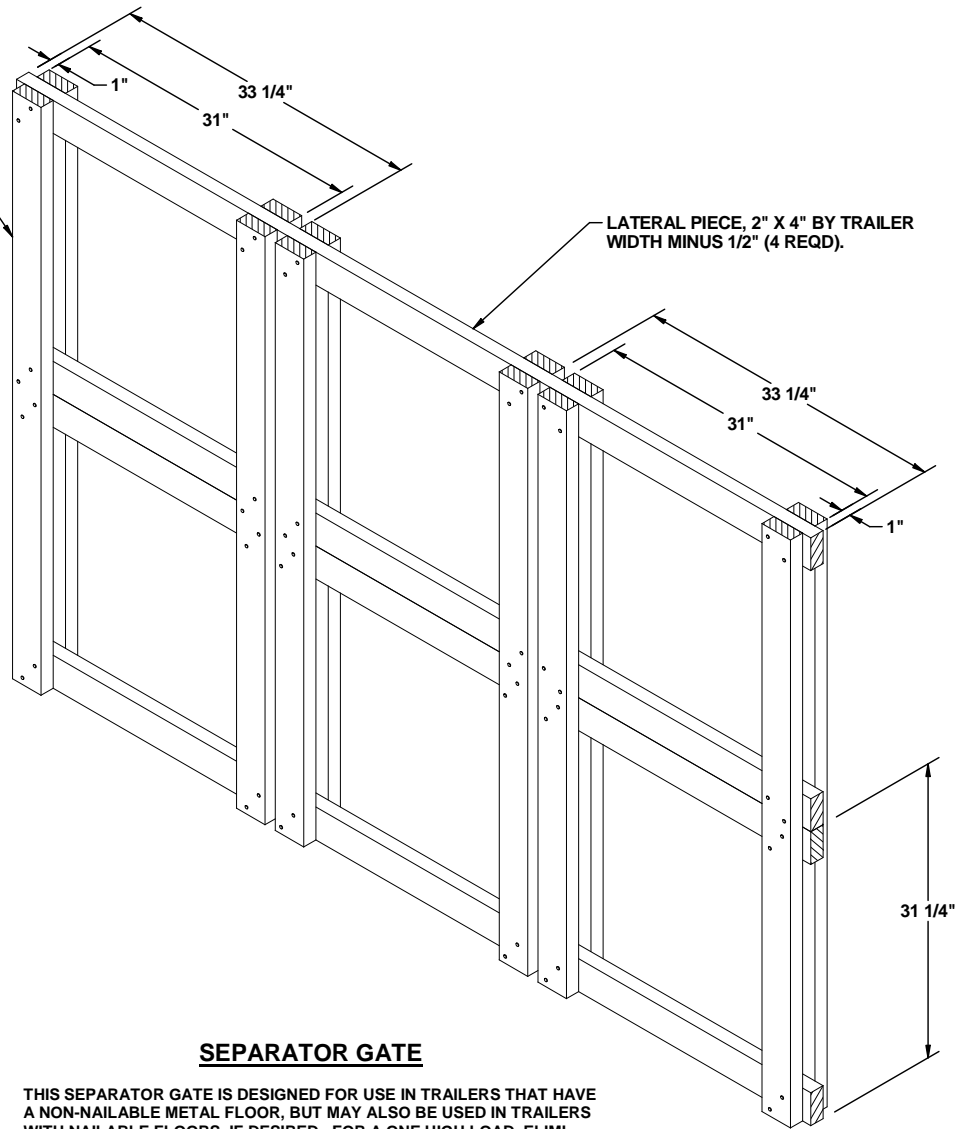


STRAP JOINT B

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

END-OVER-END LAP JOINTS

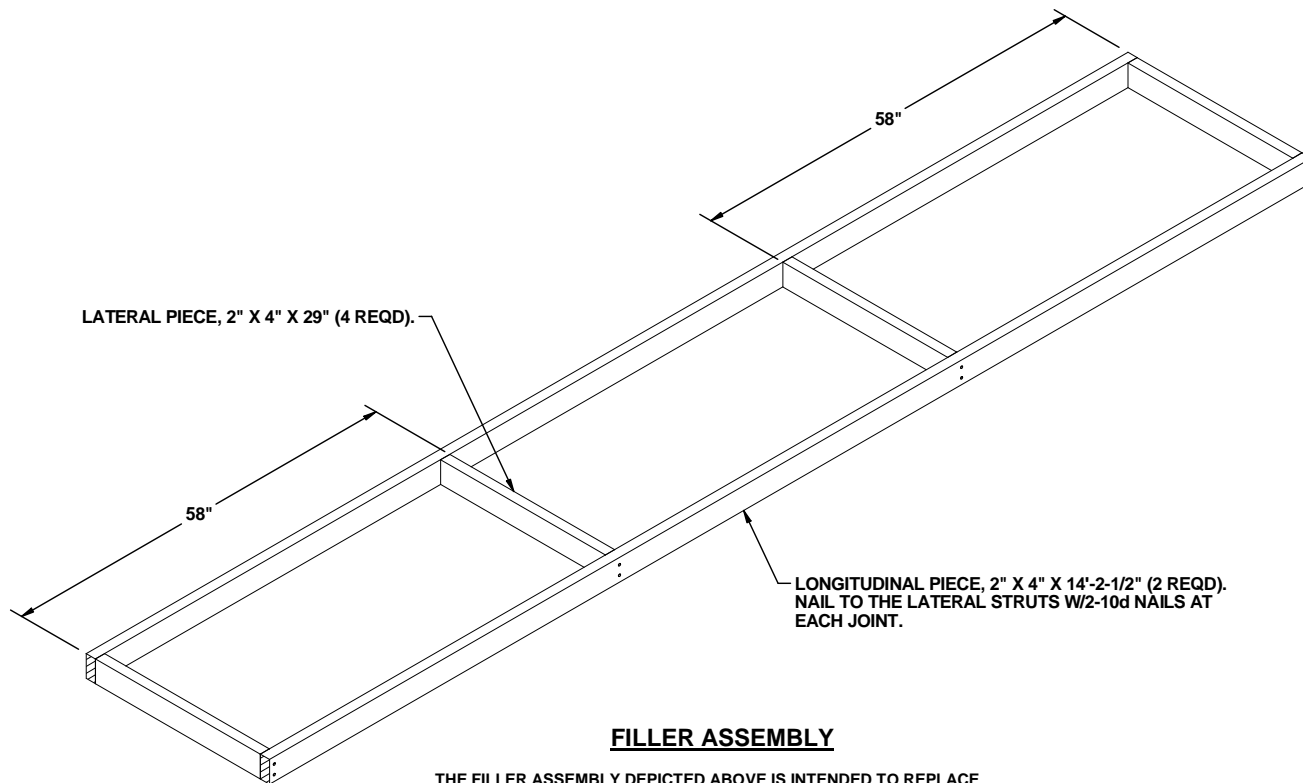
VERTICAL PIECE, 2" X 4" X 63"
(12 REQD). NAIL TO THE
LATERAL PIECES W/2-10d
NAILS AT EACH JOINT.



LATERAL PIECE, 2" X 4" BY TRAILER
WIDTH MINUS 1/2" (4 REQD).

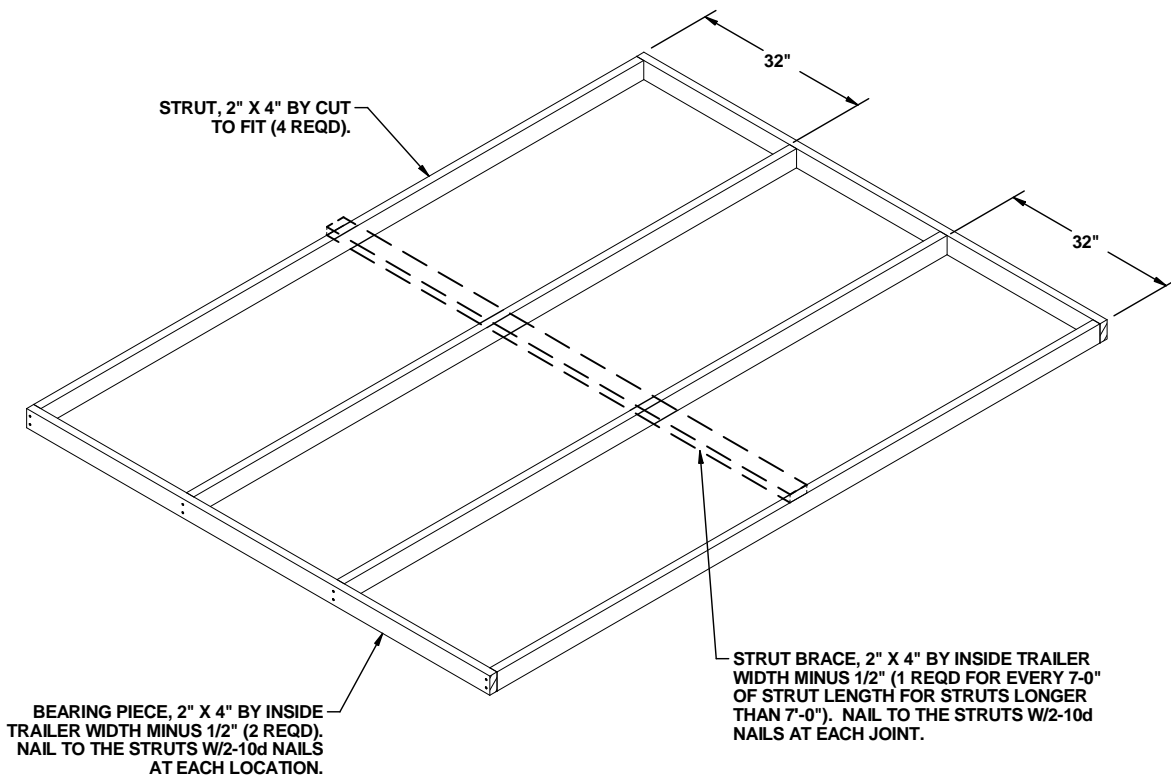
SEPARATOR GATE

THIS SEPARATOR GATE IS DESIGNED FOR USE IN TRAILERS THAT HAVE A NON-NAILABLE METAL FLOOR, BUT MAY ALSO BE USED IN TRAILERS WITH NAILABLE FLOORS, IF DESIRED. FOR A ONE HIGH LOAD, ELIMINATE THE TOP TWO LATERAL PIECES AND REDUCE THE LENGTH OF THE VERTICAL PIECES TO 31-1/4".



FILLER ASSEMBLY

THE FILLER ASSEMBLY DEPICTED ABOVE IS INTENDED TO REPLACE ONE CONTAINER. HOWEVER, THE FILLER ASSEMBLY MAY BE USED TO FILL EITHER CENTER OR SIDE VOIDS. MODIFY THE LENGTH OF THE LATERAL PIECES AS NECESSARY TO FILL THE VOIDS.



SPACER ASSEMBLY