

LOADING AND BRACING (TL & LTL) ON FLATBED TRAILERS[⊕] OF CBU-52/E OR CBU-58/B DISPENSERS PACKED IN CNU-126/E SHIPPING AND STORAGE CONTAINER

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

U.S. ARMY MATERIEL COMMAND DRAWING			
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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 WITHIN THIS DOCUMENT ARE APPLICABLE TO CBU-52/B AND CBU-58/E DISPENSER PACKED IN CNU-126/E CONTAINERS. SUBSEQUENT REFERENCE TO CONTAINER HEREIN MEANS THE CNU-126/E CONTAINER WITH CONTENTS.
- C. FOR DETAIL OF THE CNU-126/E CONTAINER, SEE PAGE 3.
CONTAINER DIMENSIONS----8'-2-1/2" LONG X 36-3/4" WIDE X
25-1/2" HIGH
GROSS WEIGHT W/CBU-52/B MUNITIONS - 2,032 POUNDS (APPROX)
GROSS WEIGHT W/CBU-58/E MUNITIONS - 2,160 POUNDS (APPROX)
- D. THE LOADS SHOWN HEREIN ARE BASED ON 8'-0" WIDE LONG FLATBED TRAILERS. TRAILERS MUST HAVE WOOD OR WOOD AND METAL FLOORS. TRAILERS HAVING ALL-METAL FLOORS CANNOT BE USED. CAUTION: IF THE TRAILER FLOOR IS EQUIPPED WITH EXPOSED METAL DECKING ABOVE THE BOGIE ASSEMBLY, OR ELSEWHERE, FIELD MEASUREMENTS SHOULD BE MADE TO ENSURE THAT THE METAL DECKING DOES NOT INTERFERE WITH THE PROPER POSITIONING AND NAILING OF THE DUNNAGE AS SPECIFIED BY THE PROCEDURES SHOWN HEREIN.
- E. SELECTION OF A VEHICLE USED TO TRANSPORT THE DESIGNATED ITEM MUST COMPLY WITH AR 55-355, CHAPTER 29, FOR EXPLOSIVES AND OTHER DANGEROUS ARTICLES, IN FULL.
- F. GROSS WEIGHT AND AXLE DISTRIBUTION OF WEIGHT FOR A LOAD WILL BE THE RESPONSIBILITY OF THE CARRIER. THE CARRIER WILL ADVISE THE SHIPPER OF APPLICABLE LOADING REQUIREMENTS, AND THE SHIPPER WILL LOAD ACCORDINGLY.
- G. NOTICE: A SHIPMENT WILL BE POSITIONED ON A TRAILER CONSISTENT WITH STATE WEIGHT LAWS.
- H. OTHER TYPES OF LADING ITEMS MAY BE LOADED ON A TRAILER WHICH IS 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.
- J. LADING MAY BE SECURED BY CHAINS AND LOAD BINDERS. SEE NOTES "N" AND "R".

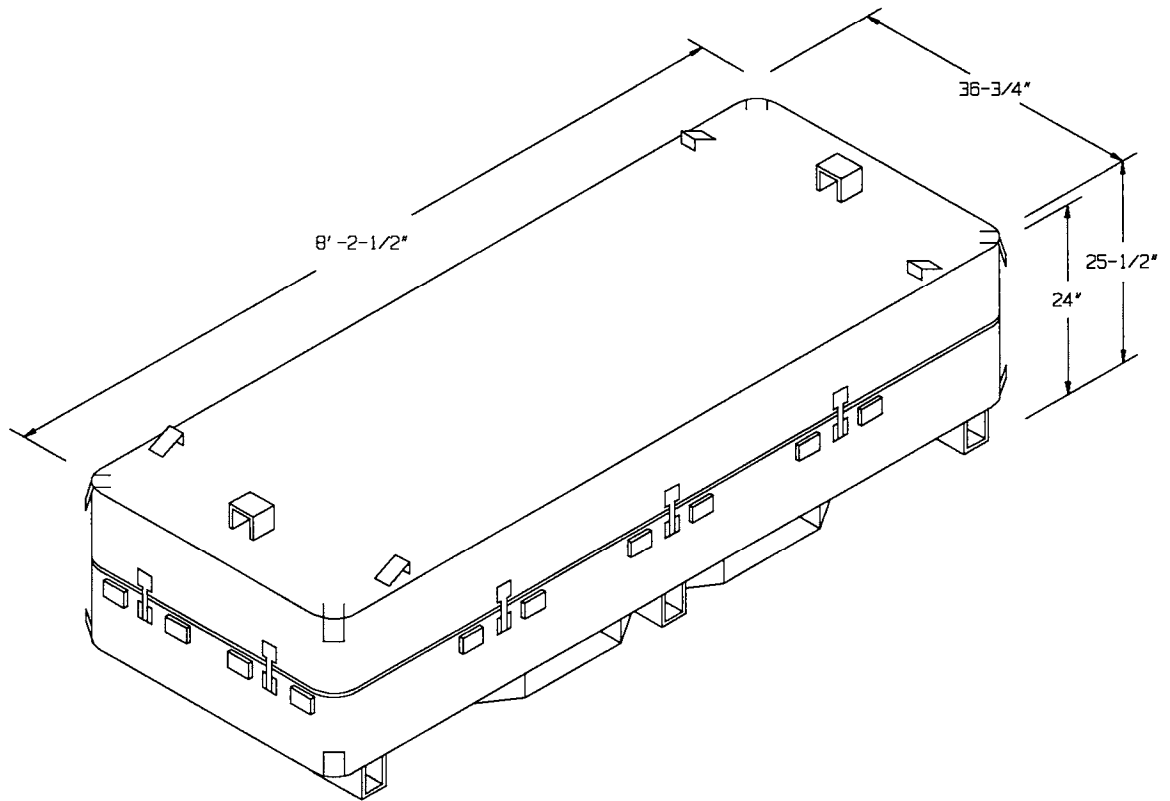
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(GENERAL NOTES CONTINUED)

- K. CAUTION: REGARDLESS OF THE TYPE OF TRAILER INVOLVED, ONLY THOSE TRAILERS HAVING TIE-DOWN STRAP ANCHORING FACILITIES WHICH PROVIDE HOLDING STRENGTH EQUAL TO OR GREATER THAN THE STRENGTH OF THE HOLD-DOWN STRAPS, AND WHICH ALIGN NEAR THE INDICATED LOCATIONS FOR THE HOLD-DOWN STRAPS, SHOULD BE USED. IF THE TRAILER STRAP ANCHOR DEVICES ARE NOT PROPERLY POSITIONED TO RECEIVE TWO INCH STRAPPING AS SHOWN, OR IF THE STRAP ANCHOR DEVICES ARE NOT EQUAL TO OR GREATER THAN THE STRENGTH OF THE TIE-DOWN STRAPS, THE STRAPS MAY BE APPLIED TO FORM A COMPLETE LOOP WHICH ENCOMPASSES BOTH THE LADING AND THE TRAILER FRAME AND/OR BED. CAUTION: AVOID TRAILER WHEELS, FIFTH WHEEL PLATE CONTROLS AND OTHER APPURTENANCES. USE EDGE PROTECTORS OR PADS ON ALL SHARP EDGES.
- L. 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.
- M. 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 "END-OVER-END LAP JOINT DETAILS" ON PAGE 11 FOR GUIDANCE.
- N. THE TRANSPORTING VEHICLE OPERATOR SHOULD BE INSTRUCTED TO PERIODICALLY INSPECT THE TIEDOWN CHAINS AND LOAD BINDERS DURING TRANSIT AND TIGHTEN IF NECESSARY.
- O. THE NUMBER OF LADING UNITS MAY BE ADJUSTED TO FIT THE SIZE OF THE TRAILER TO BE LOADED OR THE QUANTITY TO BE SHIPPED. THE APPROVED METHODS SHOWN HEREIN MUST BE FOLLOWED AS CLOSELY AS POSSIBLE FOR BLOCKING, BRACING AND STAYING OF THE DESIGNATED ITEM.
- P. DUNNAGE LUMBER SPECIFIED IS OF NOMINAL SIZE. FOR EXAMPLE, 1" X 4" MATERIAL IS ACTUALLY 3/4" THICK BY 3-1/2" WIDE AND 2" X 6" MATERIAL IS ACTUALLY 1-1/2" THICK BY 5-1/2" WIDE.
- Q. 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 0.454 KG.
- R. FOR ADDITIONAL GUIDANCE, ATTENTION IS DIRECTED TO THE "SPECIAL NOTES" SECTION WHICH IS IMMEDIATELY ADJACENT TO A DEPICTED OUTLOADING METHOD.

MATERIAL SPECIFICATIONS

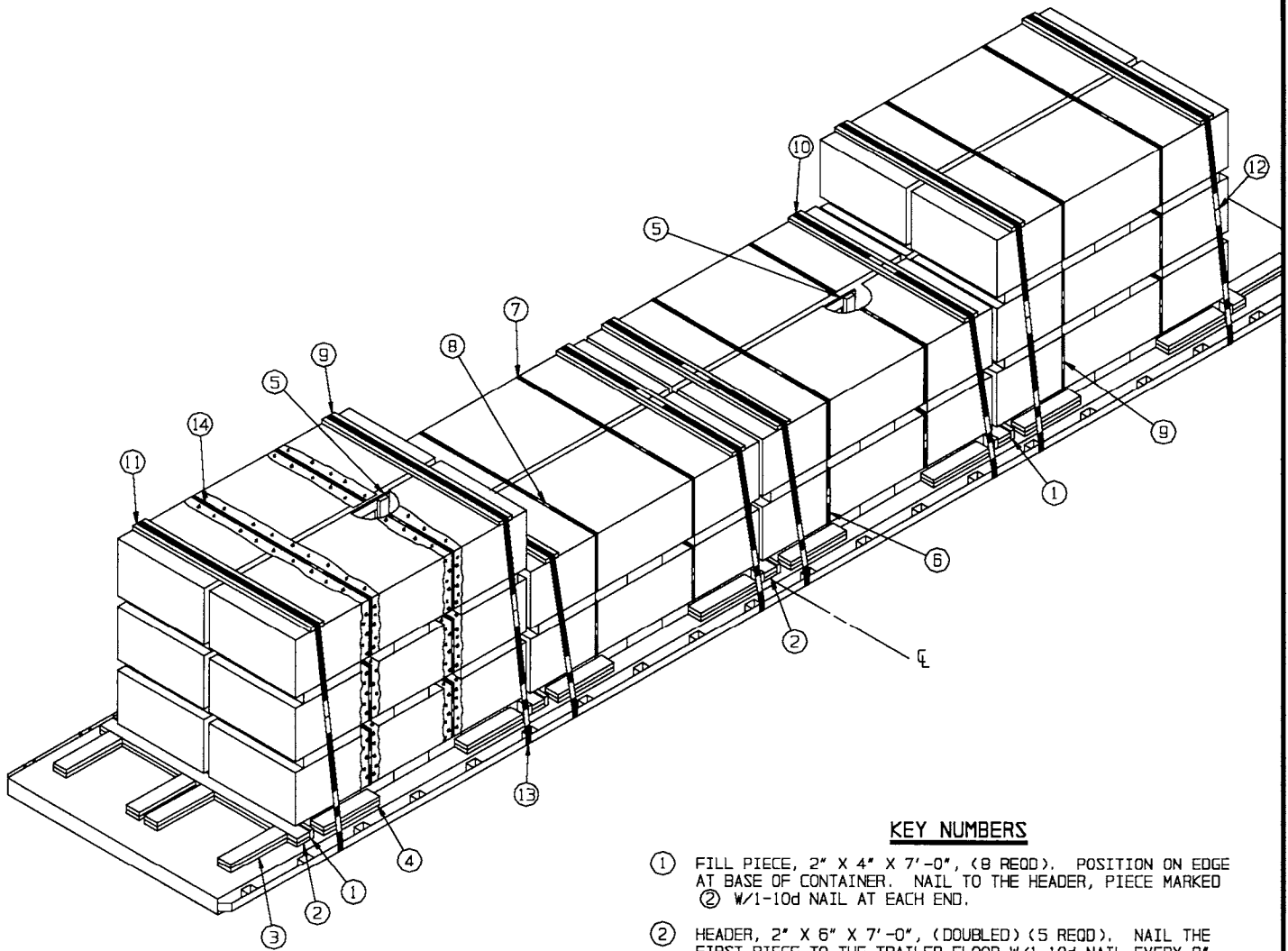
- LUMBER - - - - - : TM 743-200-1 (DUNNAGE LUMBER) AND
FED SPEC MM-L-751.
- NAILS - - - - - : FED SPEC FF-N-105; COMMON.
- STRAPPING, STEEL - - : ASTM D3953; FLAT STRAPPING, TYPE 1
OR 2, HEAVY DUTY, COATED FINISH
(ORGANIC), ZINC-COATED (GRADE 2), OR
UNCOATED.
- SEAL, STRAP - - - - : ASTM D3953; CLASS H, FINISH A, B
(GRADE 2), OR C, DOUBLE NOTCH TYPE,
STYLE I, II, OR IV.
- STAPLE, STRAP - - - : COMMERCIAL GRADE.
- CHAIN - - - - - : NATIONAL ASSOCIATION OF CHAIN MANU-
FACTURER'S WELDED CHAIN SPECIFICATION
ADOPTED NOVEMBER 1975.
- BINDER, LOAD - - - - : FED SPEC GGG-B-325.



CNU-126/E CONTAINER

(STACKING HEIGHT 24")

CONTAINER DIMENSIONS - - - - 8'-2-1/2" LONG X 36-3/4" WIDE X 25-1/2" HIGH
 GROSS WEIGHT W/CBU-52/B MUNITIONS - - - 2,032 POUNDS (APPROX)
 GROSS WEIGHT W/CBU-58/E MUNITIONS - - - 2,160 POUNDS (APPROX)
 CUBE - - - - - 49.3 CUBIC FEET (APPROX)



ISOMETRIC VIEW

(KEY NUMBERS CONTINUED)

- ⑩ HOLD-DOWN STRAP, 2" X .050" OR .044" X 24'-0" LONG STEEL STRAPPING (4 REQD). INSTALL EACH STRAP FROM TWO 12'-0" LONG PIECES. STAPLE TO STRAPPING BOARD, PIECE MARKED ⑨ W/2 STAPLES. SEE GENERAL NOTE "M" ON PAGE 2.
- ⑪ HOLD-DOWN STRAP, 2" X .050" OR .044" X 27'-6" LONG STEEL STRAPPING (4 REQD). INSTALL EACH STRAP FROM TWO PIECES, ONE 7'-0" LONG AND ONE 20'-6" LONG.
- ⑫ SEAL FOR 2" STEEL STRAPPING (48 REQD, 6 PER STRAP). CRIMP EACH SEAL WITH TWO PAIR OF CRIMPS EXCEPT THOSE USED TO SECURE THE PADS, PIECES MARKED ⑬. SEE "HOLD-DOWN STRAP ANCHORING DETAILS" AND "END-OVER-END LAP JOINT DETAILS" ON PAGE 11.
- ⑬ PAD, 2" X .050" OR .044" X 18" LONG STEEL STRAPPING (16 REQD). POSITION UNDER ANCHORING FACILITY AND SEAL TO HOLD-DOWN STRAPS, PIECES MARKED ⑩ AND ⑪. ALT: STAKE POCKET PROTECTOR (32 REQD). USE TWO UNDER EACH ANCHORING FACILITY WITH A HOLD-DOWN STRAP. SEE "HOLD-DOWN STRAP ANCHORING DETAILS" ON PAGE 11.
- ⑭ ANTI-CHAFING NEUTRAL BARRIER MATERIAL (AS REQD). POSITION UNDER ALL STRAPS AT POINTS OF CONTACT WITH THE CONTAINER, EXCEPT THRU FORK TINE OPENINGS.

KEY NUMBERS

- ① FILL PIECE, 2" X 4" X 7'-0", (8 REQD). POSITION ON EDGE AT BASE OF CONTAINER. NAIL TO THE HEADER, PIECE MARKED ② W/1-10d NAIL AT EACH END.
- ② HEADER, 2" X 6" X 7'-0", (DOUBLED) (5 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/1-10d NAIL EVERY 8". NAIL THE SECOND PIECE TO THE FIRST W/1-20d NAIL EVERY 8". SEE GENERAL NOTE "L" ON PAGE 2.
- ③ BACK-UP CLEAT, 2" X 6" X 24" (DOUBLED) (8 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/6-10d NAILS. NAIL THE SECOND PIECE TO THE FIRST W/6-20d NAILS. ALIGN OUTER EDGE WITH END OF CONTAINER SKID.
- ④ SIDE BLOCKING, 2" X 6" X 24" (DOUBLED) (16 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/6-10d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER.
- ⑤ ANTI-CHAFING ASSEMBLY (4 REQD, 2 FOR 2-LAYER, 2 FOR 3 LAYER). SEE THE "ANTI-CHAFING ASSEMBLY A" DETAIL ON PAGE 12.
- ⑥ STACK UNITIZING STRAP, 1-1/4" X .035" OR .031" X 11'-0" LONG STEEL STRAPPING (24 REQD, 2 PER 2-HIGH, 4 PER 3-HIGH STACK). INSTALL THROUGH FORK TINE OPENINGS OF A FIRST LAYER AND A SECOND LAYER CONTAINER, AND A SECOND AND THIRD LAYER CONTAINER AS APPLICABLE. STRAPS SHOULD BE POSITIONED AS FAR APART AS THE FORK TINE OPENINGS PERMIT. SEE SPECIAL NOTE 2 ON PAGE 5.
- ⑦ BUNDLING STRAP, 1-1/4" X .035" OR .031" X 17'-6" LONG STEEL STRAPPING (8 REQD). INSTALL TO ENCIRCLE THROUGH FORK TINE OPENINGS OF THE TWO LATERALLY ADJACENT CONTAINERS IN THE TOP LAYER AS SHOWN. STRAPS SHOULD BE POSITIONED AS FAR APART AS THE FORK TINE OPENINGS PERMIT.
- ⑧ SEAL FOR 1-1/4" SEAL STRAPPING (64 REQD, 2 PER STRAP). CRIMP EACH SEAL WITH TWO PAIR OF CRIMPS. SEE GENERAL NOTE "M" ON PAGE 2 AND "END-OVER-END LAP JOINT DETAILS" ON PAGE 11.
- ⑨ STRAPPING BOARD, 2" X 6" X 6'-4" (8 REQD).

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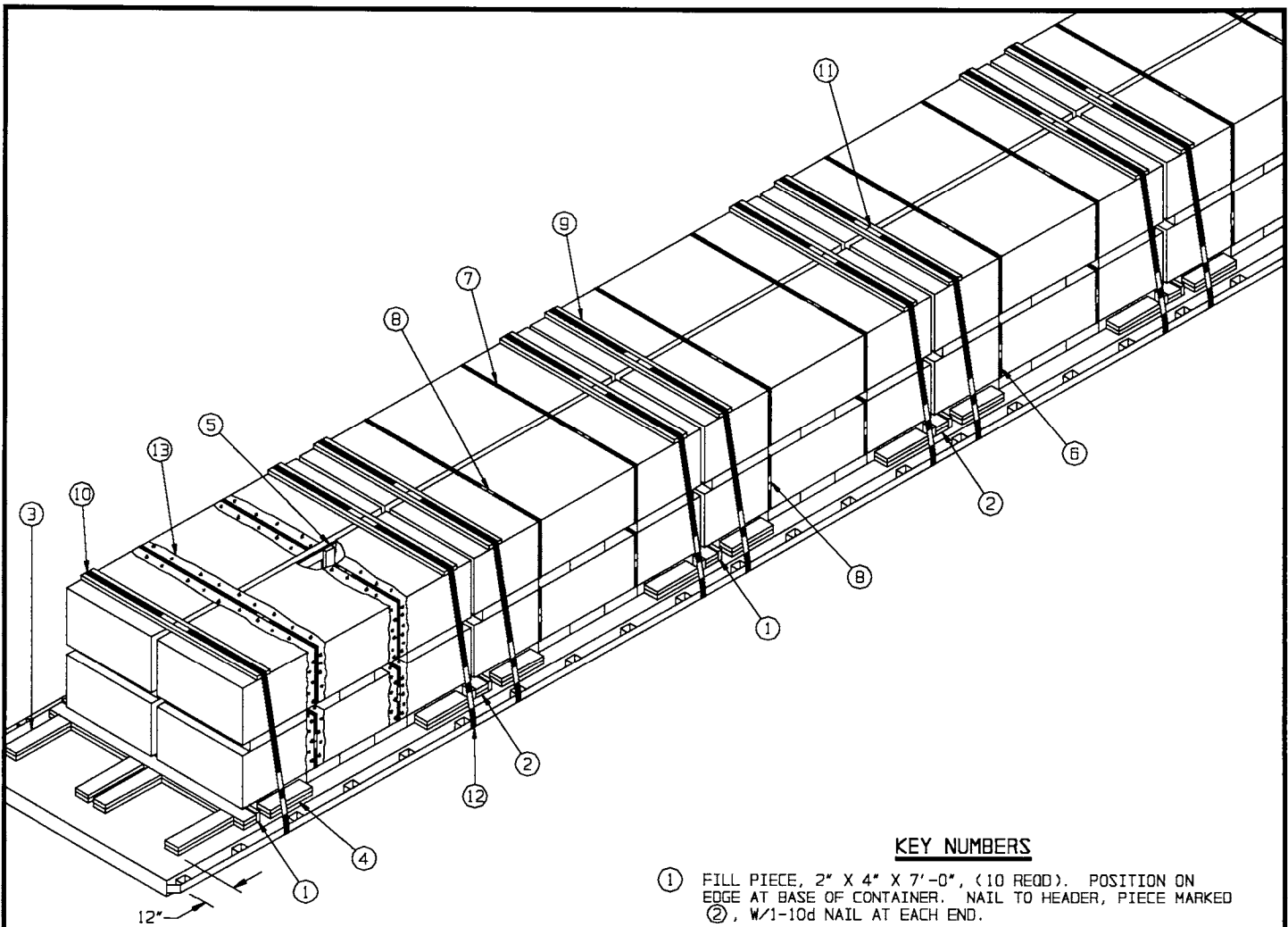
SPECIAL NOTES:

1. A 20-CONTAINER LOAD IS SHOWN ON A 40'-0" LONG BY 8'-0" WIDE FLATBED TRAILER. SHORTER TRAILERS CANNOT BE USED FOR SHIPMENT OF A 20-CONTAINER LOAD.
2. IF DESIRED, AND THE CAPACITY OF THE FORKLIFT TRUCK PERMITS, TWO CONTAINERS MAY BE STACKED AND UNITIZED WITH TWO STEEL STRAPS AS SPECIFIED BY KEY NUMBER ⑥ PRIOR TO PLACEMENT ON THE TRAILER.
3. IF CHAINS AND LOAD BINDERS ARE TO BE USED IN LIEU OF THE 2" STRAPPING FOR LOAD SECUREMENT, REFER TO THE PROCEDURES ON PAGES 8 AND 9 FOR GUIDANCE.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	68	23
2" X 4"	96	64
2" X 6"	217	217
NAILS	NO. REQD	POUNDS
6d (2")	100	3/4
10d (3")	296	4-1/2
20d (4")	98	3-1/2
STEEL STRAPPING, 1-1/4"		
X .035" OR .031"	404' REQD	58 LBS
STEEL STRAPPING, 2"		
X .050" OR .044"	230' REQD	77 LBS
SEAL FOR 1-1/4" STRAPPING	64 REQD	3 LBS
SEAL FOR 2" STRAPPING	48 REQD	10 LBS
STAPLE FOR 2" STRAPPING	16 REQD	NIL
ANTI-CHAFING MATERIAL	AS REQD	NIL

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CONTAINER	20	43,200 LBS
DUNNAGE		765 LBS
TOTAL WEIGHT		43,965 LBS (APPROX)



ISOMETRIC VIEW

(KEY NUMBERS CONTINUED)

- ⑩ HOLD-DOWN STRAP, 2" X .050" OR .044" X 24'-0" LONG STEEL STRAPPING (10 REQD). INSTALL EACH STRAP FROM TWO 12'-0" LONG PIECES. STAPLE TO STRAPPING BOARD, PIECE MARKED ⑨ W/2 STAPLES. SEE GENERAL NOTE "M" ON PAGE 2.
- ⑪ SEAL FOR 2" STEEL STRAPPING (60 REQD, 6 PER STRAP). CRIMP EACH SEAL WITH TWO PAIR OF CRIMPS EXCEPT THOSE USED TO SECURE THE PADS, PIECE MARKED ⑫. SEE "HOLD-DOWN STRAP ANCHORING DETAILS" AND "END-OVER-END LAP JOINT DETAILS" ON PAGE 11.
- ⑫ PAD, 2" X .050" OR .044" X 18" LONG STEEL STRAPPING (20 REQD). POSITION UNDER ANCHORING FACILITY AND SEAL TO HOLD-DOWN STRAPS, PIECE MARKED ⑩. ALT: STAKE POCKET PROTECTOR (40 REQD). USE TWO UNDER EACH ANCHORING FACILITY WITH A HOLD-DOWN STRAP. SEE "HOLD-DOWN STRAP ANCHORING DETAILS" ON PAGE 11.
- ⑬ ANTI-CHAFING NEUTRAL BARRIER MATERIAL (AS REQD). POSITION UNDER ALL STRAPS AT POINTS OF CONTACT WITH THE CONTAINER, EXCEPT THRU FORK TINE OPENINGS.

KEY NUMBERS

- ① FILL PIECE, 2" X 4" X 7'-0", (10 REQD). POSITION ON EDGE AT BASE OF CONTAINER. NAIL TO HEADER, PIECE MARKED ②, W/1-10d NAIL AT EACH END.
- ② HEADER, 2" X 6" X 7'-0", (DOUBLED) (6 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/1-10d NAIL EVERY 8". NAIL THE SECOND PIECE TO THE FIRST W/6-20d NAIL EVERY 8". SEE GENERAL NOTE "L" ON PAGE 2.
- ③ BACK-UP CLEAT, 2" X 6" X 24" (DOUBLED) (8 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/6-10d NAILS. NAIL THE SECOND PIECE TO THE FIRST W/6-20d NAILS. ALIGN OUTER EDGE WITH END OF CONTAINER SKID.
- ④ SIDE BLOCKING, 2" X 6" X 24" (DOUBLED) (20 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/6-10d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER.
- ⑤ ANTI-CHAFING ASSEMBLY (5 REQD). SEE THE "ANTI-CHAFING ASSEMBLY A" DETAIL ON PAGE 12.
- ⑥ STACK UNITIZING STRAP, 1-1/4" X .035" OR .031" X 11'-0" LONG STEEL STRAPPING (20 REQD). INSTALL THROUGH FORK TINE OPENINGS OF A FIRST LAYER AND A SECOND LAYER CONTAINER. STRAPS SHOULD BE POSITIONED AS FAR APART AS THE FORK TINE OPENINGS PERMIT. SEE SPECIAL NOTE 2 ON PAGE 7.
- ⑦ BUNDLING STRAP, 1-1/4" X .035" OR .031" X 17'-6" LONG STEEL STRAPPING (10 REQD). INSTALL TO ENCIRCLE THROUGH FORK TINE OPENINGS OF THE TWO LATERALLY ADJACENT CONTAINERS IN THE TOP LAYER AS SHOWN. STRAPS SHOULD BE POSITIONED AS FAR APART AS THE FORK TINE OPENINGS PERMIT.
- ⑧ SEAL FOR 1-1/4" SEAL STRAPPING (60 REQD, 2 PER STRAP). CRIMP EACH SEAL WITH TWO PAIR OF CRIMPS. SEE GENERAL NOTE "M" ON PAGE 2 AND "END-OVER-END LAP JOINT DETAILS" ON PAGE 11.
- ⑨ STRAPPING BOARD, 2" X 6" X 6'-4" (10 REQD).

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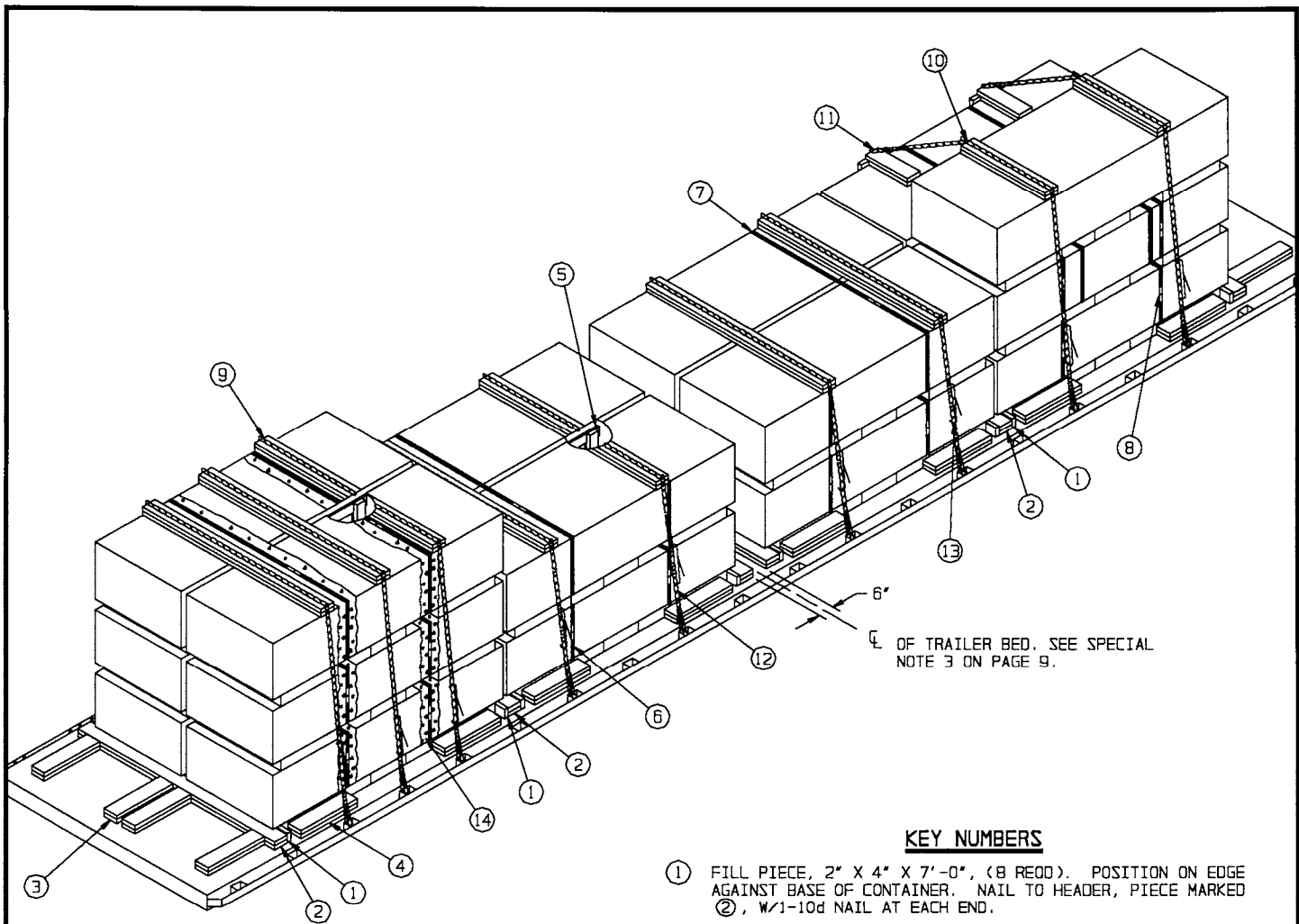
SPECIAL NOTES:

1. A 20-CONTAINER LOAD IS SHOWN ON A 48'-0" LONG BY 8'-0" WIDE FLATBED TRAILER. TRAILERS OF OTHER LENGTHS MAY BE USED, HOWEVER, A SHORTER TRAILER CANNOT BE USED FOR THE SHIPMENT OF FIVE LOAD UNITS.
2. IF DESIRED, AND IF THE CAPACITY OF THE FORKLIFT TRUCK PERMITS, TWO OR THREE CONTAINERS MAY BE STACKED AND UNITIZED WITH STEEL STRAPS, AS SPECIFIED BY KEY NUMBER ⑤, PRIOR TO PLACEMENT ON THE TRAILER.
3. FOR A 19-UNIT LOAD, IT IS RECOMMENDED THAT ONE CONTAINER BE OMITTED FROM THE SECOND OR THIRD LOAD UNIT FROM THE FRONT OF THE TRAILER.
4. IF CHAINS AND LOAD BINDERS ARE TO BE USED IN LIEU OF THE 2" STRAPPING FOR LOAD SECUREMENT, REFER TO THE PROCEDURES ON PAGES 8 AND 9 FOR GUIDANCE.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	75	25
2" X 4"	110	74
2" X 6"	240	240
NAILS	NO. REQD	POUNDS
6d (2")	110	3/4
10d (3")	308	4-3/4
20d (4")	108	4
STEEL STRAPPING, 1-1/4"		
X .035" OR .031"	395' REQD	57 LBS
STEEL STRAPPING, 2"		
X .050" OR .044"	270' REQD	90 LBS
SEAL FOR 1-1/4" STRAPPING	60 REQD	3 LBS
SEAL FOR 2" STRAPPING	60 REQD	12 LBS
STAPLE FOR 2" STRAPPING	20 REQD	NIL
ANTI-CHAFING MATERIAL	AS REQD	NIL

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CONTAINER	20	43,200 LBS
DUNNAGE		853 LBS
TOTAL WEIGHT		44,053 LBS (APPROX)



ISOMETRIC VIEW

(KEY NUMBERS CONTINUED)

- ⑩ CHAIN BOARD, 2" X 6" X 38" (DOUBLED) (2 REQD). LAMINATE W/5-10d NAILS.
- ⑪ ANTI-CHAFING ASSEMBLY (2 REQD). SEE THE "ANTI-CHAFING ASSEMBLY B" DETAIL ON PAGE 12.
- ⑫ CHAIN, BINDING, 5/16" GRADE 70 BY A LENGTH TO SUIT (8 REQD). POSITION AS SHOWN ABOVE, FASTENING THE CHAIN GRABHOOKS TO THE TRAILER STAKE POCKETS. SEE THE "SPECIAL PROVISIONS FOR CHAIN TIEDOWN" ON PAGE 9.
- ⑬ LOAD BINDER, 5/16", OVERCENTER TYPE (8 REQD, 1 PER CHAIN). WIRE TIE HANDLE TO PREVENT OPENING DURING TRANSPORT. FASTEN THE TENSIONED CHAIN, PIECE MARKED ⑫, TO THE CHAIN BOARDS, PIECES MARKED ⑨ AND ⑩, W/1-20d NAIL AT EACH END, BENDING OVER TO FORM A LOOP AROUND THE CHAIN LINK. FASTEN THE TENSIONED CHAIN TO AN ANTI-CHAFING ASSEMBLY, PIECE MARKED ⑪, W/1-16d NAIL BENT OVER TO FORM A LOOP AROUND THE CHAIN LINK.
- ⑭ ANTI-CHAFING NEUTRAL BARRIER MATERIAL (AS REQD). POSITION UNDER ALL STRAPS AT POINTS OF CONTACT WITH THE CONTAINER, EXCEPT THRU FORK TINE OPENINGS.

KEY NUMBERS

- ① FILL PIECE, 2" X 4" X 7'-0", (8 REQD). POSITION ON EDGE AGAINST BASE OF CONTAINER. NAIL TO HEADER, PIECE MARKED ②, W/1-10d NAIL AT EACH END.
- ② HEADER, 2" X 6" X 7'-0", (DOUBLED) (6 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/1-10d NAIL EVERY 8". NAIL THE SECOND PIECE TO THE FIRST W/1-20d NAIL EVERY 8". SEE GENERAL NOTE "L" ON PAGE 2.
- ③ BACK-UP CLEAT, 2" X 6" X 24" (DOUBLED) (8 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/6-10d NAILS. NAIL THE SECOND PIECE TO THE FIRST W/6-20d NAILS. ALIGN OUTER EDGE WITH END OF CONTAINER SKID.
- ④ SIDE BLOCKING, 2" X 6" X 24" (DOUBLED) (16 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/6-10d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER.
- ⑤ ANTI-CHAFING ASSEMBLY (4 REQD, 3 FOR 2-LAYER, 1 FOR 3 LAYER). SEE THE "ANTI-CHAFING ASSEMBLY A" DETAIL ON PAGE 12.
- ⑥ STACK UNITIZING STRAP, 1-1/4" X .035" OR .031" X 11'-0" LONG STEEL STRAPPING (22 REQD, 2 PER 2-HIGH, 4 PER 3-HIGH STACK). INSTALL THROUGH FORK TINE OPENINGS OF A FIRST LAYER AND A SECOND LAYER CONTAINER, AND A SECOND AND THIRD LAYER CONTAINER AS APPLICABLE. STRAPS SHOULD BE POSITIONED AS FAR APART AS THE FORK TINE OPENINGS PERMIT. SEE SPECIAL NOTE 5 ON PAGE 9.
- ⑦ BUNDLING STRAP, 1-1/4" X .035" OR .031" X 17'-6" LONG STEEL STRAPPING (8 REQD). INSTALL TO ENCIRCLE THROUGH FORK TINE OPENINGS OF THE TWO LATERALLY ADJACENT CONTAINERS IN THE TOP LAYER AS SHOWN. STRAPS SHOULD BE POSITIONED AS FAR APART AS THE FORK TINE OPENINGS PERMIT.
- ⑧ SEAL FOR 1-1/4" SEAL STRAPPING (60 REQD, 2 PER STRAP). CRIMP EACH SEAL WITH TWO PAIR OF CRIMPS. SEE GENERAL NOTE "M" ON PAGE 2 AND "END-OVER-END LAP JOINT DETAILS" ON PAGE 12.
- ⑨ CHAIN BOARD, 2" X 6" X 6'-4" (DOUBLED) (6 REQD). LAMINATE W/1-10d NAIL EVERY 8".

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SPECIAL NOTES:

1. A 19-CONTAINER LOAD IS SHOWN ON A 40'-0" LONG BY 8'-0" WIDE FLATBED TRAILER. TRAILERS OF OTHER LENGTHS MAY BE USED.
2. THE PROCEDURES DEPICTED ON PAGE 8 AND ON THIS PAGE CAN BE USED FOR ANY OF THE LOADS DEPICTED HEREIN. **NOTE:** THE CHAINS MUST BE ATTACHED TO THE TRAILER STAKE POCKETS; DO NOT ATTACH TO A RUB RAIL. THE CHAIN BOARDS MUST BE POSITIONED SO AS TO PROVIDE FOR VERTICAL ALIGNMENT OF THE CHAINS AS VIEWED FROM THE SIDE OF THE TRAILER. THE CHAIN BOARDS CAN BE SHIFTED LEFT OR RIGHT BUT MUST NOT BE POSITIONED CLOSER THAN 6" FROM THE CONTAINER ENDS TO PROVIDE FOR THE VERTICAL ALIGNMENT. IT MAY BE NECESSARY FOR SOME LOADS TO SHIFT THE CONTAINERS AND DUNNAGE IN ORDER TO COMPLY WITH THIS REQUIREMENT. SEE GENERAL NOTES "N" AND "R" ON PAGE 2.
3. WHEN LOADING A FULL OR NEARLY FULL LOAD ON A 40-FOOT LONG TRAILER, POSITION A HEADER, PIECE MARKED (2), 6" ON EITHER SIDE OF THE CENTER OF THE LENGTH OF THE TRAILER AND LOAD IN BOTH DIRECTIONS FROM THERE. THIS WILL LOCATE CONTAINERS SO AS TO COMPLY WITH NOTE 2 ABOVE AS PERTAINS TO VERTICAL ALIGNMENT OF CHAINS, CHAIN BOARDS, AND TRAILER STAKE POCKETS.
4. A 19-UNIT LOAD IS SHOWN AS A TYPICAL LOAD USING THE CHAIN TIEDOWN METHODS OF LOAD SECUREMENT. THE PROCEDURES ARE APPLICABLE FOR EITHER THE CBU-52/E OR THE CBU-58/B MUNITIONS PACKED IN CNU-126/E CONTAINERS. THE NUMBER OF UNITS CAN BE ADJUSTED TO SUIT THE QUANTITY TO BE SHIPPED.
5. IF DESIRED, AND IF THE CAPACITY OF THE FORKLIFT TRUCK PERMITS, TWO OR THREE CONTAINERS MAY BE STACKED AND UNITIZED WITH STEEL STRAPS, AS DEPICTED BY KEY NUMBER (6), PRIOR TO PLACEMENT ON THE TRAILER.
6. IF THE DEPICTED LOAD IS TO BE DECREASED, THE SINGLE THIRD-LAYER CONTAINER SHOULD BE OMITTED FIRST, WITH ADDITIONAL CONTAINERS BEING OMITTED FROM THE THIRD LAYER, THEN FROM THE CENTER PORTION OF THE LOAD, AS NECESSARY. IF THE DEPICTED LOAD IS TO BE INCREASED, A CONTAINER CAN BE PLACED ADJACENT TO THE SINGLE THIRD-LAYER CONTAINER, SIMILAR TO THE LOAD PLACEMENT SHOWN ON PAGE 4. IF A 48-FOOT TRAILER IS BEING USED, THE PROCEDURES ON PAGE 6 CAN BE USED AS GUIDANCE IN CONTAINER PLACEMENT.

SPECIAL PROVISIONS FOR CHAIN TIEDOWN

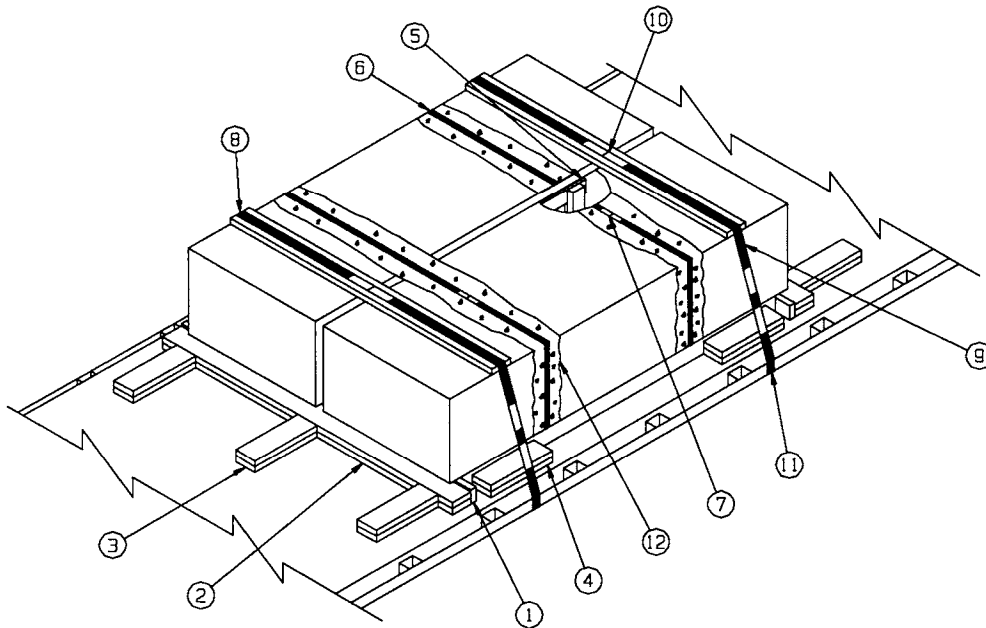
LADING MAY BE SECURED TO THE FLATBED TRAILER BY CARRIER-OWNED CHAINS AND LOAD BINDERS IN LIEU OF SPECIFIED STRAPPING, PROVIDED THE FOLLOWING CONDITIONS ARE MET AND THE PROCEDURES CONTAINED ON PAGES 8 AND 9 ARE FOLLOWED.

1. ONLY CHAINS AND LOAD BINDERS OF GOOD QUALITY WILL BE USED. ALL CHAINS AND LOAD BINDERS SHALL CONFORM TO THE NATIONAL ASSOCIATION OF CHAIN MANUFACTURER'S WELDED CHAIN SPECIFICATION ADOPTED NOVEMBER 1975.
2. ALL CHAINS SHALL BE MARKED AS PRESCRIBED BY THE NATIONAL ASSOCIATION OF CHAIN MANUFACTURER'S WELDED CHAIN SPECIFICATION ADOPTED NOVEMBER 1975. AT LEAST ONE LINK IN EVERY 36 LINKS SHALL CARRY THE MANUFACTURER'S PERMANENT AND DISTINCTIVE MARK IDENTIFYING THE GRADE OF CHAIN. CHAINS NOT MARKED IN THIS MANNER SHALL NOT BE USED. IN ADDITION TO THE GRADE MARKING, THE CHAIN MAY ALSO CARRY LETTER MARKINGS OR SYMBOLS IDENTIFYING THE CHAIN MANUFACTURER. THE PRESENCE OF THE MANUFACTURER'S IDENTIFICATION MARKING IS NOT MANDATORY.
3. BEFORE AND DURING INSTALLATION, THE CHAINS AND LOAD BINDERS SHALL BE INSPECTED FOR BENT HOOKS, STRETCH, GOUGES, BENT LINKS, WEAR, OR ANY OTHER NOTICEABLE DEFECTS. ANY DEFICIENCY SHALL BE CAUSE FOR REJECTION OF A CHAIN OR LOAD BINDER. CHAINS MUST NOT BE TWISTED DURING INSTALLATION. **CAUTION:** EXTREME CARE MUST BE EXERCISED WHEN TENSIONING CHAINS TO PREVENT DAMAGE OR PERMANENT DEFORMATION TO THE LADING.
4. CHAIN SIZES AND GRADES APPROVED FOR USE WITH FLATBED TRAILER LOADS ARE AS FOLLOWS:
 - A. 3/8", GRADE 43 HIGH TEST CHAIN
 - B. 5/16", GRADE 70 BINDING CHAIN
 - C. 3/8", GRADE 70 BINDING CHAIN
 - D. 5/16", GRADE 80 ALLOY STEEL CHAIN
 - E. 3/8", GRADE 80 ALLOY STEEL CHAIN
5. THE GRABHOOKS ON THE ENDS OF THE CHAIN MAY BE OF THE FOLLOWING TYPES WITH GRADE MARKINGS AS INDICATED.
 - A. CLEVIS GRABHOOKS, 3/8" SIZE, DO NOT REQUIRE GRADE MARKING. ALLOY GRABHOOKS, 5/16" SIZE, SHALL CARRY THE MANUFACTURER'S GRADE MARK OF 7, 70, OR 700. THE HOOKS SHALL BE USED ON THE APPROPRIATE SIZE CHAIN.
 - B. CLOSED EYE GRABHOOKS, 3/8" AND 5/16" SIZE, MAY BE USED ON THE APPROPRIATE SIZE CHAIN IF THEY ARE A PART OF A CHAIN ASSEMBLY WHICH WAS PROVIDED BY A CHAIN MANUFACTURER, AND THE CHAIN ASSEMBLY CARRIES THE CORRECT GRADE IDENTIFICATION MARKING AS PREVIOUSLY STATED. CLOSED EYE GRABHOOKS THAT FORM A PART OF THE CHAIN ASSEMBLY ARE EXEMPT FROM GRADE MARKINGS.
6. CONNECTING LINKS USED FOR CHAIN REPAIR MUST BE CORRECTLY MARKED AND BE EQUAL TO OR GREATER IN STRENGTH THAN THE CHAIN THEY ARE REPAIRING. CHAINS WITH UNMARKED CONNECTING LINKS SHALL NOT BE USED.
7. CHAIN AND FITTING OF A HIGHER GRADE MAY BE SUBSTITUTED FOR THE GRADES SPECIFIED IN NOTE 4 ABOVE.
8. LOAD BINDERS SHALL BE 5/16" TO 3/8" SIZE AND HAVE A MINIMUM BREAKING STRENGTH OF 16,200 POUNDS (WORKING LOAD LIMIT OF 5,400 POUNDS). OVERCENTER TYPE LOAD BINDERS SHALL BE SAFETY WIRED TO PREVENT ACCIDENTAL OPENING DURING TRANSPORT. LOAD BINDER SIZE SHALL BE COMPATIBLE WITH THE SIZE OF THE CHAIN BEING USED.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	64	22
2" X 4"	93	62
2" X 6"	271	271
NAILS	NO. REQD	POUNDS
6d (2")	94	3/4
10d (3")	372	5-3/4
20d (4")	98	3-1/2
STEEL STRAPPING, 1-1/4"		
X .035" OR .031"	360' REQD	52 LBS
SEAL FOR 1-1/4" STRAPPING	60 REQD	3 LBS
ANTI-CHAFING MATERIAL	AS REQD	NIL
CHAIN, BINDING, 5/16"	187' REQD	225 LBS
BINDER, LOAD	9 REQD	54 LBS

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CONTAINER	19	41,040 LBS
DUNNAGE		1054 LBS
TOTAL WEIGHT		42,094 LBS (APPROX)



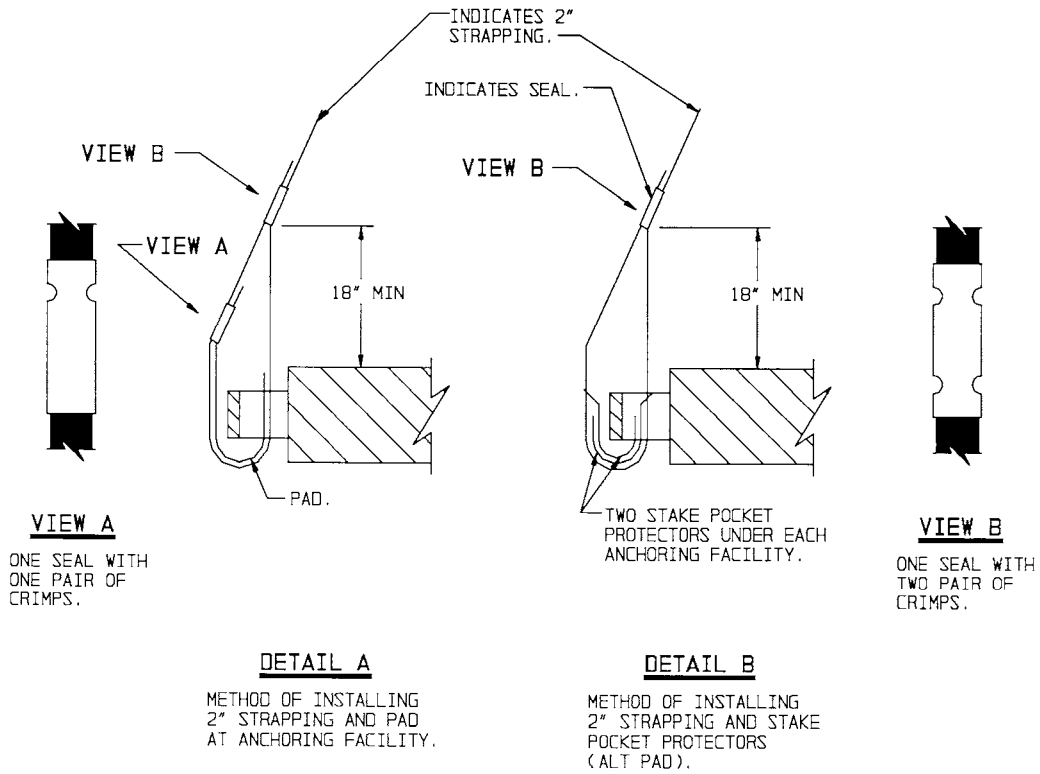
ISOMETRIC VIEW

SPECIAL NOTES:

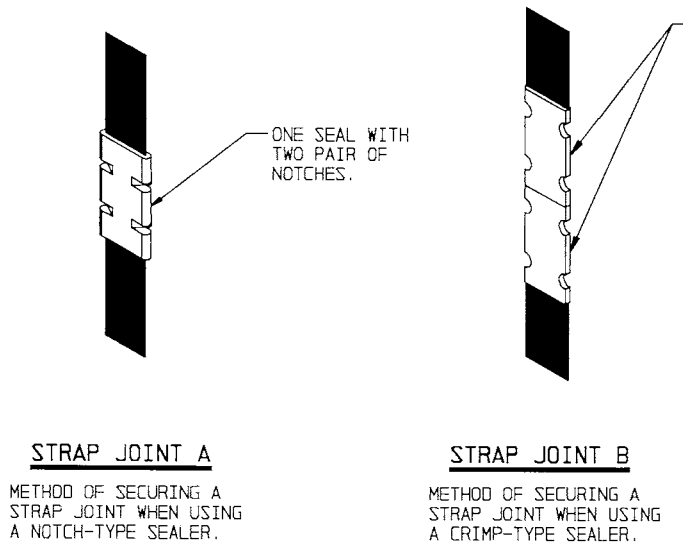
1. THE TWO-CONTAINER LOAD IS SHOWN ON AN 8'-0" WIDE FLATBED TRAILER. THESE PROCEDURES MAY BE USED IN CONJUNCTION WITH THE PROCEDURES DEPICTED ON PAGES 4 AND 6 AS NECESSARY IN OBTAINING THE QUANTITY TO BE SHIPPED.
2. THE DEPICTED 2-CONTAINER LOAD CAN BE MODIFIED FOR THE SHIPMENT OF A 1-CONTAINER LOAD AS FOLLOWS:
 - A. OMIT PIECES MARKED ③, ⑤, ⑥ AND ⑫.
 - B. USE PIECES MARKED ④, ⑩ AND ⑪ AS SPECIFIED.
 - C. REDUCE THE LENGTH OF THE TWO FILL PIECES, PIECES MARKED ①, AND OF THE TWO HEADERS. PIECES MARKED ②, TO 45".
 - D. REDUCE THE LENGTH OF THE TWO STRAPPING BOARDS, PIECES MARKED ⑧, TO 38".
 - E. ONLY FOUR BACK-UP CLEATS ARE REQUIRED.
 - F. REDUCE THE LENGTH OF THE TWO HOLD-DOWN STRAPS, PIECES MARKED ⑨, TO 19'-0".

KEY NUMBERS

- ① FILL PIECE, 2" X 4" X 7'-0", (2 REQD). POSITION ON EDGE AGAINST BASE OF CONTAINER. NAIL TO HEADER, PIECE MARKED ②, W/1-10d NAIL AT EACH END.
- ② HEADER, 2" X 6" X 7'-0", (DOUBLED) (2 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/1-10d NAIL EVERY 8". NAIL THE SECOND PIECE TO THE FIRST W/1-20d NAIL EVERY 8". SEE GENERAL NOTE "L" ON PAGE 2.
- ③ BACK-UP CLEAT, 2" X 6" X 18" (DOUBLED) (6 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/5-10d NAILS. NAIL THE SECOND PIECE TO THE FIRST W/5-20d NAILS. POSITION OUTER EDGE OF OUTSIDE CLEATS IN LINE WITH END OF CONTAINER SKID. CENTER MIDDLE CLEAT BETWEEN OUTER CLEATS.
- ④ SIDE BLOCKING, 2" X 6" X 18" (DOUBLED) (4 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/5-10d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER.
- ⑤ ANTI-CHAFING ASSEMBLY (5 REQD). SEE THE "ANTI-CHAFING ASSEMBLY A" DETAIL ON PAGE 12.
- ⑥ BUNDLING STRAP, 1-1/4" X .035" OR .031" X 17'-6" LONG STEEL STRAPPING (2 REQD). INSTALL TO ENCIRCLE THROUGH FORK TINE OPENINGS OF THE TWO LATERALLY ADJACENT CONTAINERS. STRAPS SHOULD BE POSITIONED AS FAR APART AS THE FORK TINE OPENINGS PERMIT.
- ⑦ SEAL FOR 1-1/4" SEAL STRAPPING (4 REQD, 2 PER STRAP). CRIMP EACH SEAL WITH TWO PAIR OF CRIMPS. SEE GENERAL NOTE "M" ON PAGE 2 AND "END-OVER-END LAP JOINT DETAILS" ON PAGE 11.
- ⑧ STRAPPING BOARD, 2" X 6" X 6'-4" (2 REQD).
- ⑨ HOLD-DOWN STRAP, 2" X .050" OR .044" X 20'-0" LONG STEEL STRAPPING (2 REQD). INSTALL EACH STRAP FROM TWO 10'-0" LONG PIECES. STAPLE TO THE STRAPPING BOARD, PIECE MARKED ⑧, W/2 STAPLES. SEE GENERAL NOTE "M" ON PAGE 2.
- ⑩ SEAL FOR 2" STEEL STRAPPING (12 REQD, 6 PER STRAP). CRIMP EACH SEAL WITH TWO PAIR OF CRIMPS, EXCEPT THOSE USED TO SECURE THE PADS, PIECE MARKED ⑪. SEE THE "HOLD-DOWN STRAP ANCHORING DETAILS" AND "END-OVER-END LAP JOINT DETAILS" ON PAGE 11.
- ⑪ PAD, 2" X .050" OR .044" X 18" LONG STEEL STRAPPING (4 REQD). POSITION UNDER ANCHORING FACILITY AND SEAL TO HOLD-DOWN STRAP, PIECE MARKED ⑨. ALT: STAKE POCKET PROTECTOR (8 REQD). USE TWO UNDER EACH ANCHORING FACILITY WITH A HOLD-DOWN STRAP.
- ⑫ ANTI-CHAFING NEUTRAL BARRIER MATERIAL (AS REQD). POSITION UNDER ALL STRAPS AT POINTS OF CONTACT WITH THE CONTAINER, EXCEPT THRU FORK TINE OPENINGS.

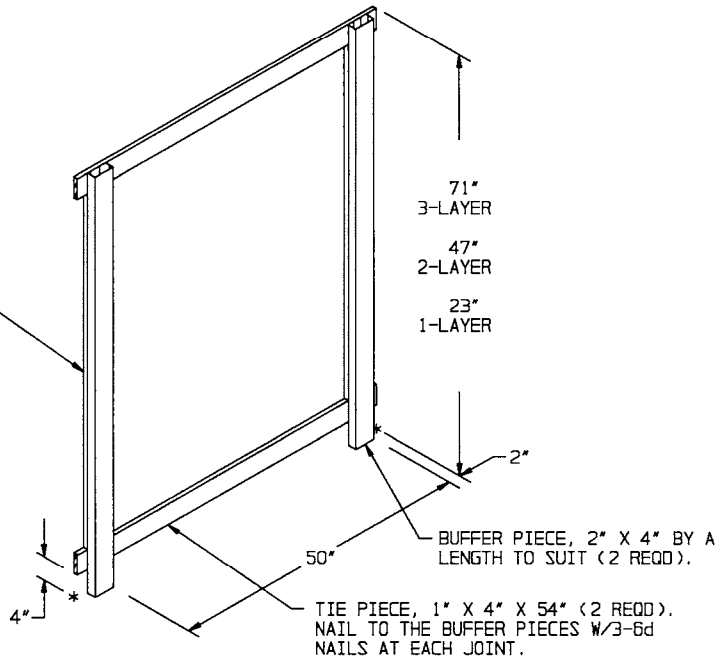


HOLD-DOWN STRAP ANCHORING DETAILS



END-OVER-END LAP JOINT DETAILS

FILL PIECE, 1" X 4" BY CUT-TO-FIT BETWEEN TIE PIECES (2 REQD). NAIL TO BUFFER PIECE W/1-6d NAIL EVERY 8".

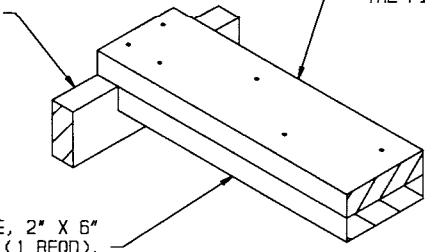


ANTI-CHAFING ASSEMBLY A

STOP PIECE, 2" X 4" X 12" (1 REQD). NAIL TO THE FILL PIECE W/2-10d NAILS.

BEARING PIECE, 2" X 6" X 18" (1 REQD). NAIL TO THE STOP PIECE W/2-10d NAILS AND TO THE FILL PIECE W/4-10d NAILS.

FILL PIECE, 2" X 6" X 16-1/2" (1 REQD).



ANTI-CHAFING ASSEMBLY B

FOR USE IN THE CHAIN TIEDOWN METHOD LOAD SHOWN ON PAGE 8.