

LOADING AND BRACING (TL & LTL) ON FLATBED TRAILERS OF TRI-SERVICE STANDOFF ATTACK MISSILES (TSSAM) PACKED IN CNU-446/E 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

APPROVED, U.S. ARMY ARMAMENT, MUNITIONS AND
CHEMICAL COMMAND

Timothy R. Fore

APPROVED BY ORDER OF COMMANDING GENERAL, U.S.
ARMY MATERIEL COMMAND

John L. Byrd Jr.
U.S. ARMY DEFENSE AMMUNITION CENTER AND SCHOOL

DRAFTSMAN

TECHNICIAN

ENGINEER

L. FIEFFER

VALIDATION
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W. Emerick

W. Ernst

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GENERAL NOTES

(GENERAL NOTES CONTINUED)

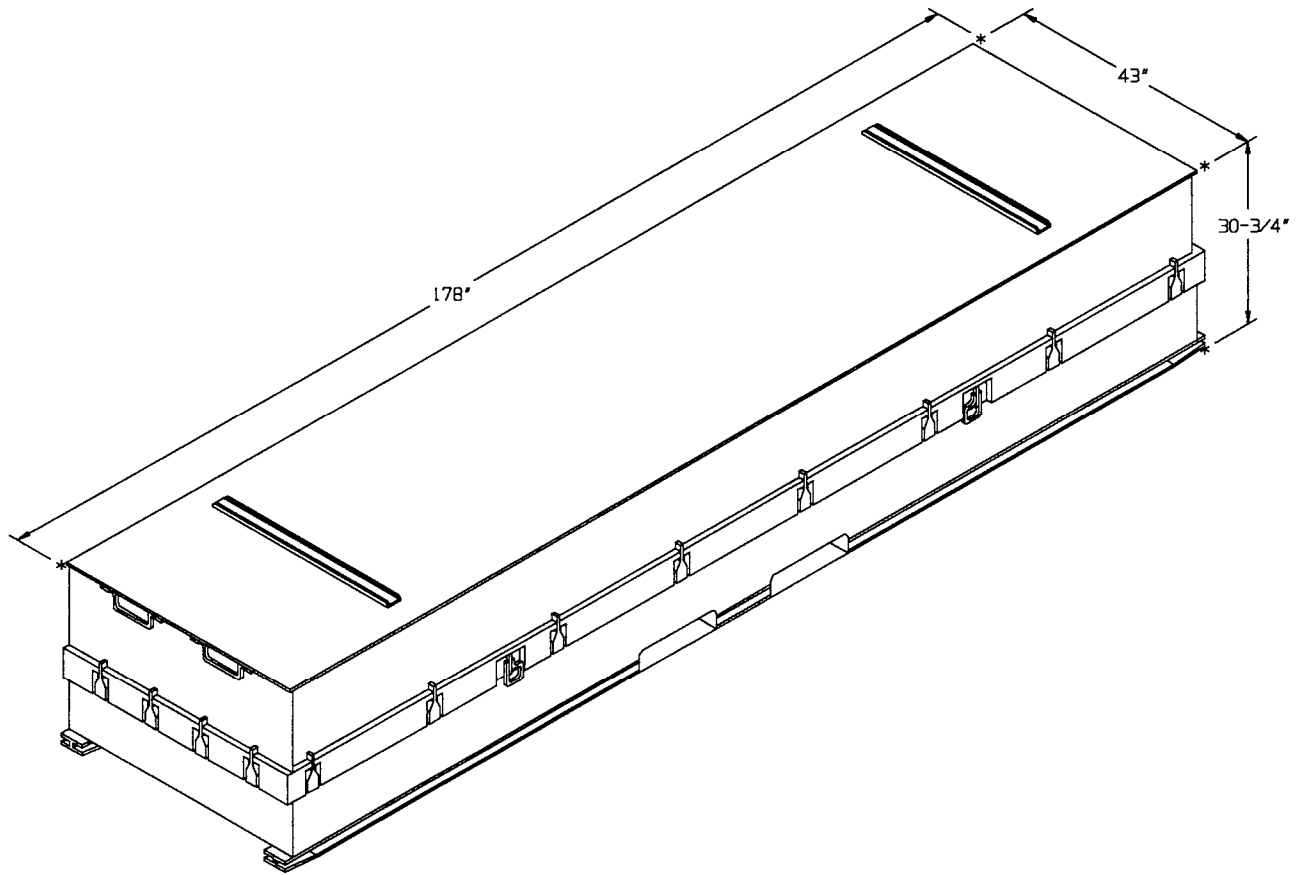
- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1, AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- B. THE OUTLOADING PROCEDURES SPECIFIED IN THIS DRAWING ARE APPLICABLE TO LOADS OF TRI-SERVICE STANDOFF ATTACK MISSILES (TSSAM) PACKED IN CNU-446/E CONTAINERS. SUBSEQUENT REFERENCE TO CONTAINER HEREIN MEANS THE CONTAINER WITH MISSILE INSTALLED. SEE PAGE 3 FOR DETAIL OF THE CONTAINER.
- C. THE LOADS AS SHOWN HEREIN ARE BASED ON 48'-0" LONG BY 8'-6" WIDE, AND 45'-0" LONG BY 8'-0" WIDE, FLATBED TRAILERS. TRAILERS OF OTHER LENGTH AND WIDTHS MAY BE USED. 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.
- D. 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.
- E. 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.
- F. NOTICE: A SHIPMENT WILL BE POSITIONED ON A TRAILER CONSISTENT WITH STATE WEIGHT LAWS.
- G. 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.

(CONTINUED AT RIGHT)

- H. CAUTION: REGARDLESS OF THE TYPE OF TRAILER INVOLVED, ONLY THOSE TRAILERS HAVING TIEDOWN ANCHORING FACILITIES WHICH PROVIDE HOLDING STRENGTH EQUAL TO OR GREATER THAN THE STRENGTH OF THE HOLD-DOWN STRAPS OR CHAINS AND WHICH ALIGN NEAR THE INDICATED LOCATIONS FOR THE HOLD-DOWN STRAPS OR CHAINS SHOULD BE USED. IF THE TRAILER ANCHOR DEVICES ARE NOT PROPERLY POSITIONED TO RECEIVE TWO INCH STRAPPING OR CHAINS, AS SHOWN, OR IF THE ANCHOR DEVICES ARE NOT EQUAL TO OR GREATER THAN THE STRENGTH OF THE TIEDOWN STRAPS OR CHAINS, 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. THE CHAINS WILL NOT BE APPLIED TO FORM A COMPLETE LOOP WHICH ENCOMPASSES BOTH THE LADING AND THE TRAILER FRAME AND/OR BED.
- J. 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.
- 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 9 FOR GUIDANCE.
- L. THE TRANSPORTING VEHICLE OPERATOR SHOULD BE INSTRUCTED TO PERIODICALLY INSPECT THE TIEDOWN CHAINS AND LOAD BINDERS DURING TRANSIT AND TIGHTEN IF NECESSARY.
- M. 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.
- N. 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.
- O. 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.
- P. FOR ADDITIONAL GUIDANCE, ATTENTION IS DIRECTED TO THE "SPECIAL NOTES" SECTION WHICH IS IMMEDIATELY ADJACENT TO A DEPICTED OUTLOADING METHOD.

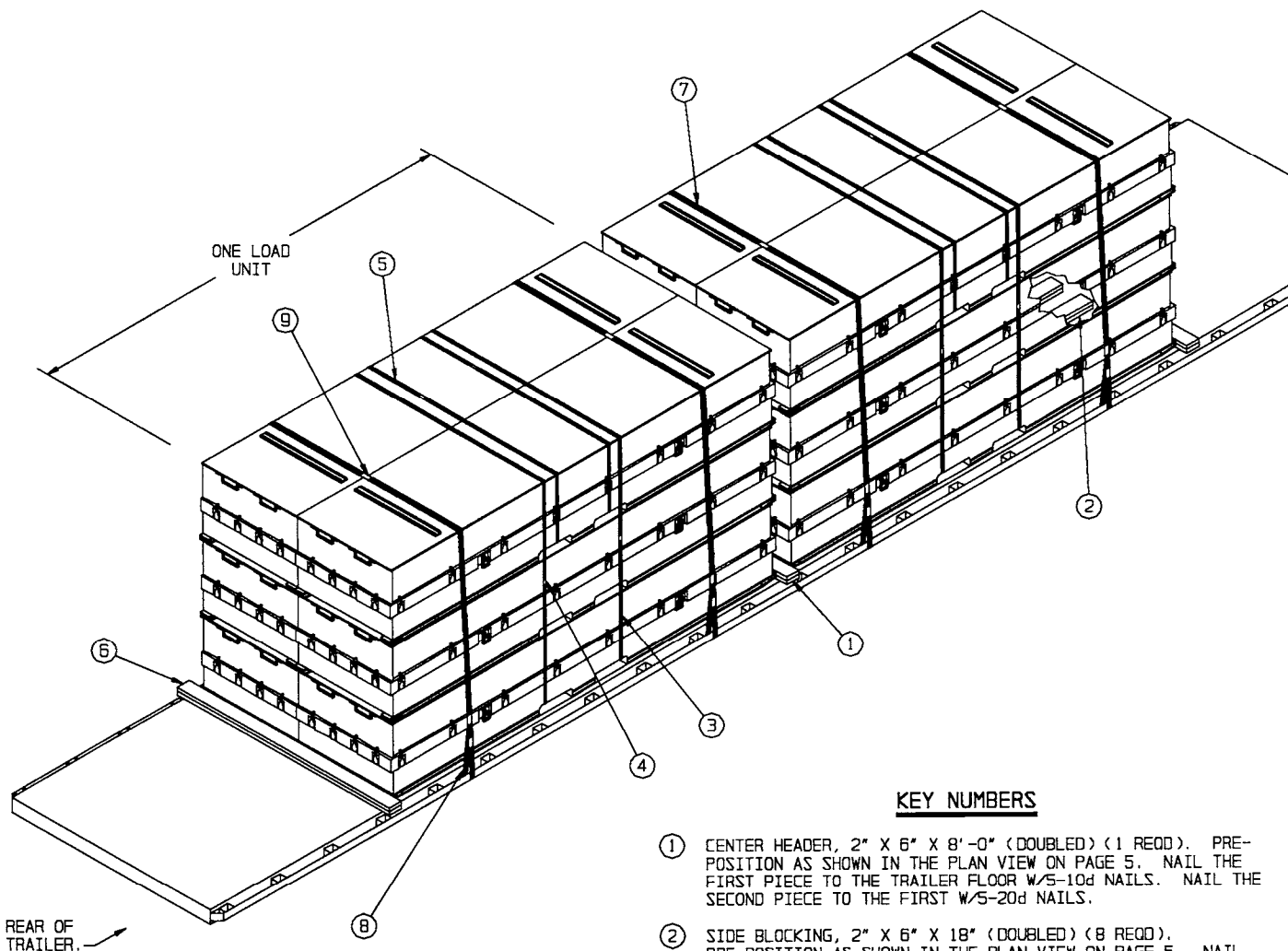
MATERIAL SPECIFICATIONS

- 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.
- WIRE, CARBON STEEL - : ASTM A853; ANNEALED AT FINISH, BLACK OXIDE FINISH, .0800" DIA, GRADE 1006 OR BETTER.
- STAPLE - - - - - : COMMERCIAL GRADE.
- ANTI-CHAFING MATERIAL - - - - - : MIL-B-121 (OR EQUAL); NEUTRAL BARRIER MATERIAL.
- STAKE POCKET PROTECTOR - - : COMMERCIAL GRADE.
- CHAIN - - - - - : NATIONAL ASSOCIATION OF CHAIN MANUFACTURER'S WELDED CHAIN SPECIFICATION ADOPTED NOVEMBER 1975.
- LOAD BINDER - - - - : FED SPEC GGG-B-325.



CNU-446/E CONTAINER

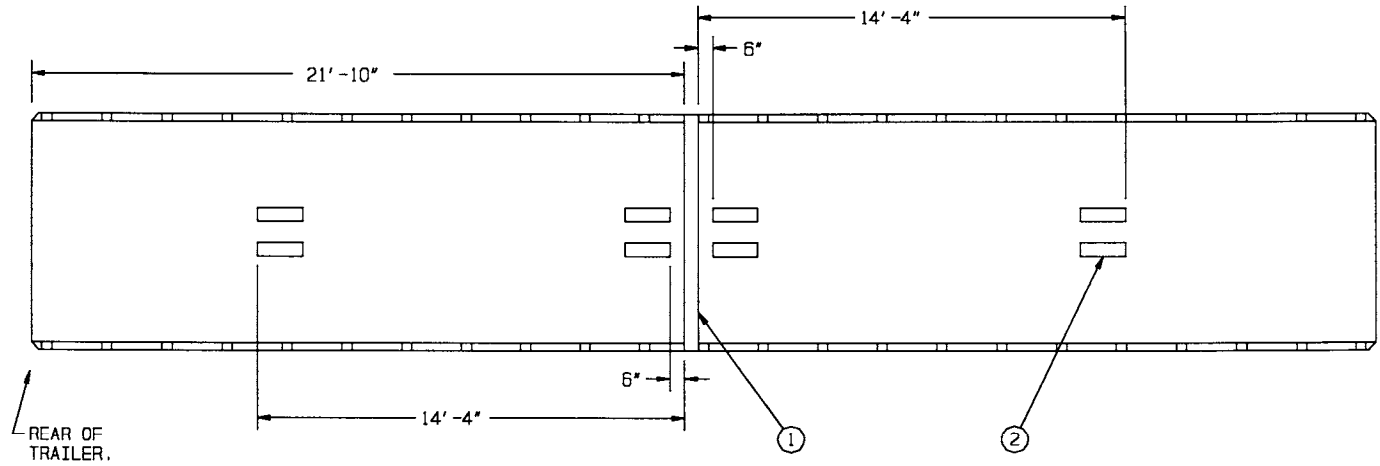
GROSS WEIGHT - - - - - 3,350 LBS (APPROX)
CUBE - - - - - 136.2 CUBIC FEET (APPROX)



ISOMETRIC VIEW

KEY NUMBERS

- ① CENTER HEADER, 2" X 6" X 8'-0" (DOUBLED) (1 REQD). PRE-POSITION AS SHOWN IN THE PLAN VIEW ON PAGE 5. NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/5-10d NAILS. NAIL THE SECOND PIECE TO THE FIRST W/5-20d NAILS.
- ② SIDE BLOCKING, 2" X 6" X 18" (DOUBLED) (8 REQD). PRE-POSITION AS SHOWN IN THE PLAN VIEW ON PAGE 5. NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/5-10d NAILS. LAMINATE THE SECOND PIECE TO THE FIRST W/5-10d NAILS.
- ③ UNITIZING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT (REF: 23'-0") (8 REQD). INSTALL TO ENCIRCLE ALL THREE CONTAINERS IN ONE STACK.
- ④ SEAL FOR 1-1/4" STRAPPING (12 REQD, 1 PER STRAP). CRIMP EACH SEAL WITH TWO PAIR OF NOTCHES.
- ⑤ BUNDLING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT (REF: 20'-0") (4 REQD). INSTALL TO ENCIRCLE THE TOP TWO CONTAINERS IN ONE LOAD UNIT.
- ⑥ OUTER HEADER, 2" X 6" X 8'-0" (DOUBLED) (2 REQD). POSITION AS SHOWN AGAINST THE CONTAINER SKIDS. NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/5-10d NAILS. NAIL THE SECOND PIECE TO THE FIRST W/5-20d NAILS.
- ⑦ HOLD-DOWN STRAP, 2" X .044" OR .050" BY A LENGTH TO SUIT (REF: 26'-0") (4 REQD). INSTALL EACH STRAP FROM TWO 13'-0" LONG PIECES.
- ⑧ PAD, STRAPPING, 2" X .044" OR .050" X 18" (8 REQD). POSITION BETWEEN THE HOLD-DOWN STRAP, PIECE MARKED ⑦, AND THE TRAILER SIDE RAIL OR STAKE POCKET AND SEAL TO THE HOLD-DOWN STRAP. SEE "DETAIL A" ON PAGE 9. ALT: STAKE POCKET PROTECTOR (16 REQD). USE TWO UNDER EACH ANCHORING FACILITY WITH A HOLD-DOWN STRAP. SEE "DETAIL B" ON PAGE 9.
- ⑨ SEAL FOR 2" STRAPPING (20 REQD). FASTEN PIECE MARKED ⑦ WITH ONE SEAL CRIMPED WITH TWO PAIR OF NOTCHES. FASTEN PIECE MARKED ⑧ WITH ONE SEAL CRIMPED WITH ONE PAIR OF NOTCHES. SEE THE "END-OVER-END LAP JOINT DETAILS" ON PAGE 9.



PRE-POSITIONED DUNNAGE PLAN VIEW

(KEY NUMBER REFERS TO KEY NUMBERS ON PAGE 4)

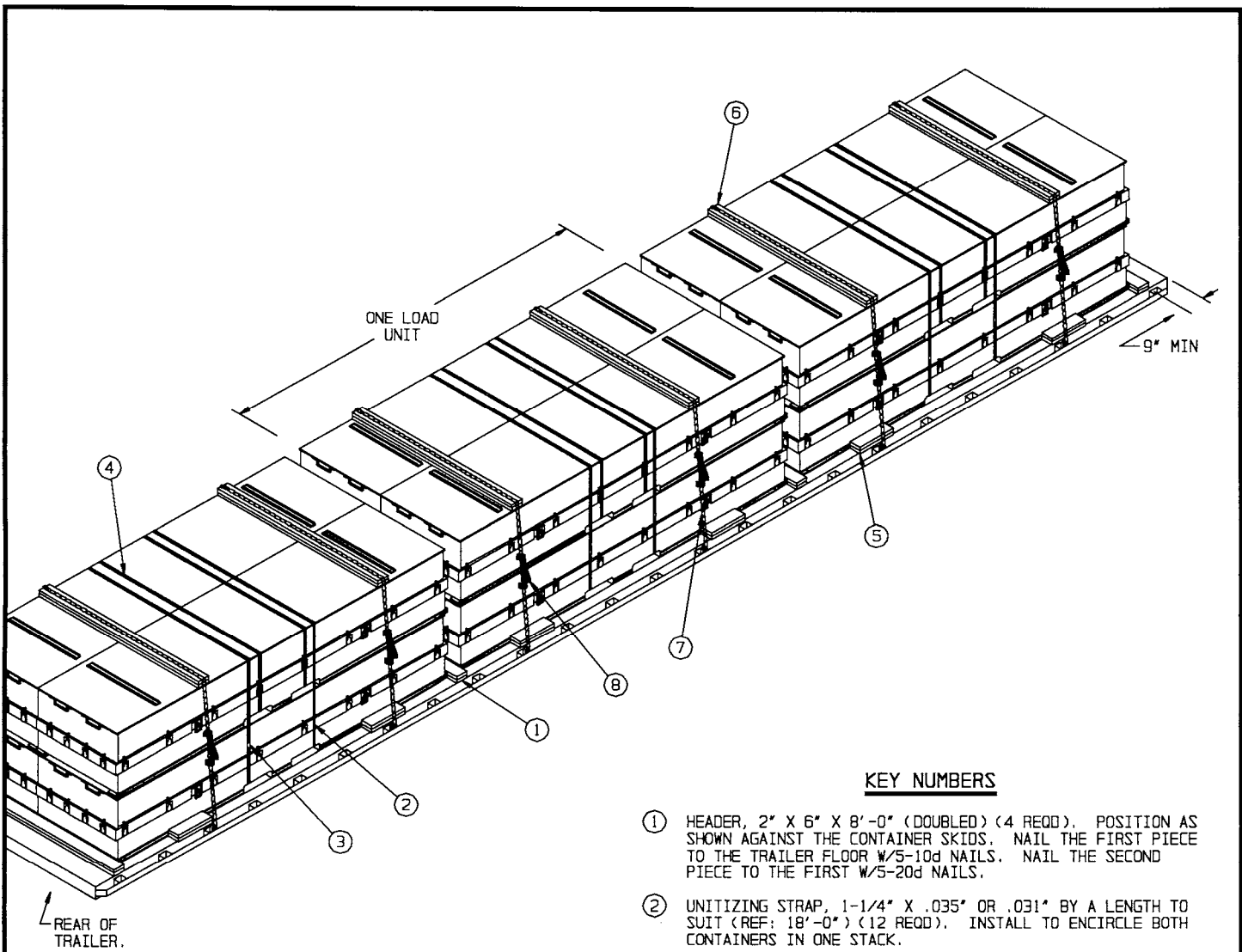
SPECIAL NOTES:

1. A 12-UNIT LOAD IS SHOWN ON A 45'-0" LONG BY 8'-0" WIDE FLATBED TRAILER. TRAILERS OF OTHER LENGTHS AND WIDTHS MAY BE USED.
2. IF DESIRED, AND THE CAPACITY OF THE FORKLIFT TRUCK PERMITS, THREE CONTAINERS MAY BE STACKED AND UNITIZED PRIOR TO PLACEMENT ON THE TRAILER.
3. LOADING SHOULD BEGIN AT THE CENTER OF THE TRAILER. INSTALL PIECE MARKED ① FIRST.
4. IF CHAINS AND LOAD BINDERS ARE TO BE USED FOR LOAD SECUREMENT IN LIEU OF STEEL STRAPPING, REFER TO THE PROCEDURES ON PAGES 6 AND 7.
5. THE DEPICTED LOAD CAN BE REDUCED TO SUIT THE QUANTITY TO BE SHIPPED. WHEN REDUCING THE LOAD BY ONE CONTAINER, ELIMINATE ONE OF THE TOP CONTAINERS, AND INSTALL THE BUNDLING STRAP FOR THAT LOAD BAY AROUND THE SECOND LAYER OF CONTAINERS.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 6"	72	72
NAILS	NO. REQD	POUNDS
10d (3")	95	1-1/2
20d (4")	15	3/4
STEEL STRAPPING, 1-1/4"	264' REQD	37.71 LBS
SEAL FOR 1-1/4" STRAPPING	12 REQD	0.56 LBS
STEEL STRAPPING, 2"	116' REQD	38.67 LBS
SEAL FOR 2" STRAPPING	20 REQD	4.00 LBS

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CNU-446/E	12	40,200 LBS
DUNNAGE		228 LBS
TOTAL WEIGHT		40,428 LBS (APPROX)



REAR OF TRAILER.

ISOMETRIC VIEW

KEY NUMBERS

- ① HEADER, 2" X 6" X 8'-0" (DOUBLED) (4 REQD). POSITION AS SHOWN AGAINST THE CONTAINER SKIDS. NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/5-10d NAILS. NAIL THE SECOND PIECE TO THE FIRST W/5-20d NAILS.
- ② UNITIZING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT (REF: 18'-0") (12 REQD). INSTALL TO ENCIRCLE BOTH CONTAINERS IN ONE STACK.
- ③ SEAL FOR 1-1/4" STRAPPING (18 REQD, 1 PER STRAP). CRIMP EACH SEAL WITH TWO PAIR OF NOTCHES.
- ④ BUNDLING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT (REF: 20'-0") (6 REQD). INSTALL TO ENCIRCLE THE TOP TWO CONTAINERS IN ONE LOAD BAY.
- ⑤ SIDE BLOCKING, 2" X 6" X 18" (DOUBLED) (12 REQD). POSITION AGAINST THE CONTAINER SKIDS, BETWEEN THE FORK POCKETS AND THE END OF THE SKID. NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/5-10d NAILS. LAMINATE THE SECOND PIECE TO THE FIRST W/5-10d NAILS.
- ⑥ CHAIN BOARD, 2" X 6" X 7'-2" (DOUBLED) (6 REQD). LAMINATE THE FIRST PIECE TO THE SECOND W/5-10d NAILS.
- ⑦ CHAIN, BINDING, 5/16", GRADE 70, BY A LENGTH TO SUIT (REF: 20'-0") (6 REQD). POSITION AS SHOWN. ATTACH TO A STAKE POCKET. DO NOT ATTACH TO A RUB RAIL. SEE THE "CHAIN ALIGNMENT DETAIL" AND THE "SPECIAL PROVISIONS FOR CHAIN TIEDOWN" ON PAGE 7.
- ⑧ LOAD BINDER, 5/16", OVER-CENTER TYPE (6 REQD, 1 PER CHAIN). WIRE TIE HANDLE TO PREVENT OPENING DURING TRANSPORT. FASTEN THE TENSIONED CHAIN, PIECE MARKED ⑦, TO THE LATERAL PIECE OF THE CHAIN BOARD ASSEMBLY. FASTEN TO PIECE MARKED ⑥ W/2-20d NAILS, ONE AT EACH END, BY DRIVING EACH NAIL INTO THE LATERAL PIECE OF THE CHAIN BOARD ASSEMBLY THRU AN OPENING IN A CHAIN LINK AND BENDING IT OVER THE LINK.

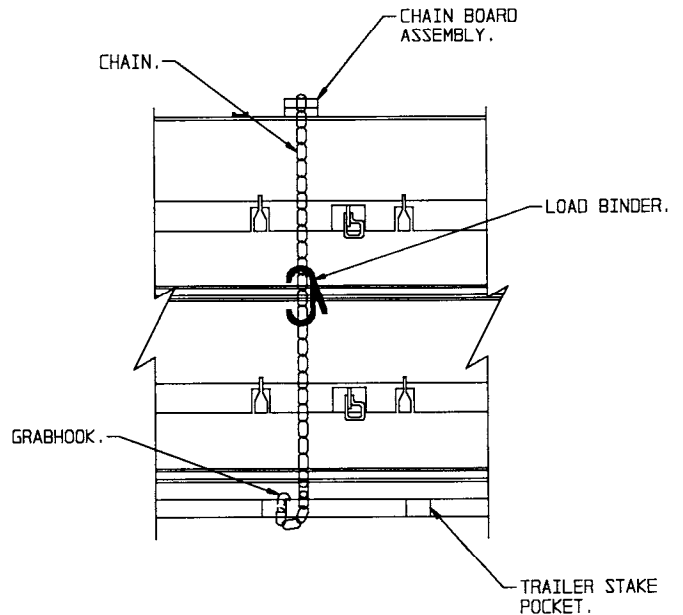
SPECIAL PROVISIONS FOR CHAIN TIEDOWN

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 6 AND 7 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.

SPECIAL NOTES:

1. A 12-UNIT LOAD IS SHOWN ON A 48'-0" LONG BY 8'-6" WIDE FLATBED TRAILER. TRAILERS OF OTHER LENGTHS AND WIDTHS MAY BE USED.
2. IF DESIRED, AND THE CAPACITY OF THE FORKLIFT TRUCK PERMITS, TWO CONTAINERS MAY BE STACKED AND UNITIZED PRIOR TO PLACEMENT ON THE TRAILER.
3. LOADING SHOULD BEGIN AT THE FORWARD END OF THE TRAILER. INSTALL THE FORWARDMOST PIECE MARKED ① FIRST.
4. IF STEEL STRAPPING IS TO BE USED FOR LOAD SECUREMENT IN LIEU OF THE CHAINS AND LOAD BINDERS, REFER TO THE PROCEDURES ON PAGES 4 AND 5.
5. THE DEPICTED LOAD CAN BE REDUCED TO SUIT THE QUANTITY TO BE SHIPPED. WHEN REDUCING THE LOAD BY ONE CONTAINER, ELIMINATE ONE OF THE TOP CONTAINERS, AND INSTALL THE BUNDLING STRAP FOR THAT LOAD BAY AROUND THE SECOND LAYER OF CONTAINERS.
6. THE TRANSPORTING VEHICLE OPERATOR SHOULD BE INSTRUCTED TO PERIODICALLY INSPECT THE TIEDOWN CHAINS AND LOAD BINDERS DURING TRANSIT AND TIGHTEN IF NECESSARY.

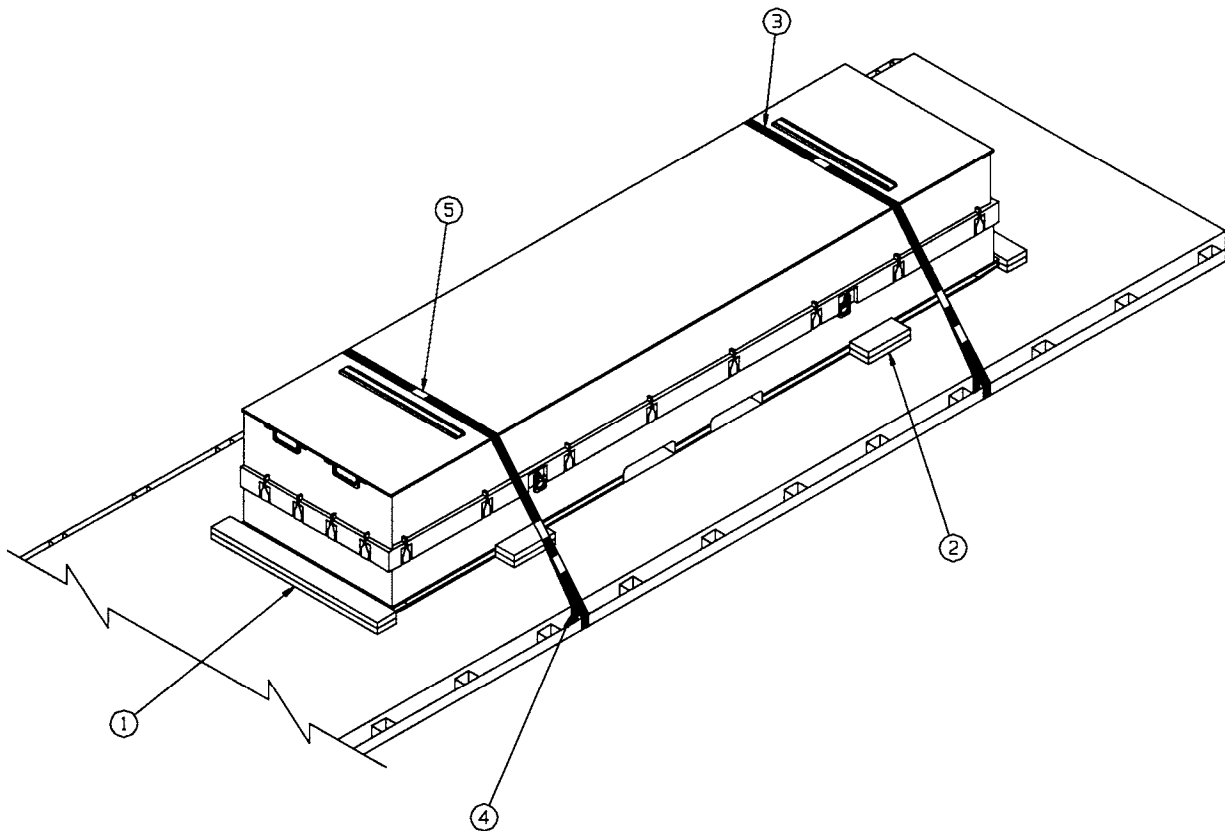


CHAIN ALIGNMENT DETAIL

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
2" X 6"	186	186
NAILS	NO. REQD	POUNDS
10d (3")	170	2-3/4
20d (4")	32	1-1/4
STEEL STRAPPING, 1-1/4"	336' REQD	48.00 LBS
SEAL FOR 1-1/4" STRAPPING	18 REQD	0.83 LBS
BINDING CHAIN, 5/16"	120' REQD	100.00 LBS
LOAD BINDER, 5/16"	6 REQD	36.00 LBS

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CNU-446/E	12	40,200 LBS
DUNNAGE		561 LBS
TOTAL WEIGHT		40,761 LBS (APPROX)



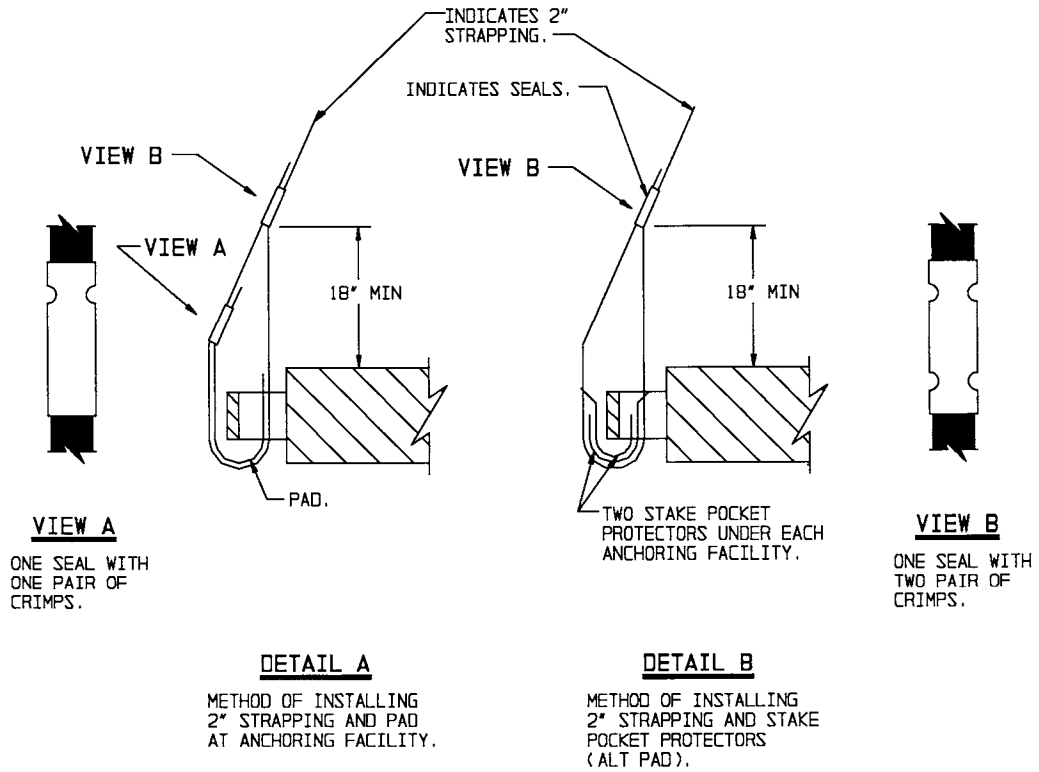
ISOMETRIC VIEW

KEY NUMBERS

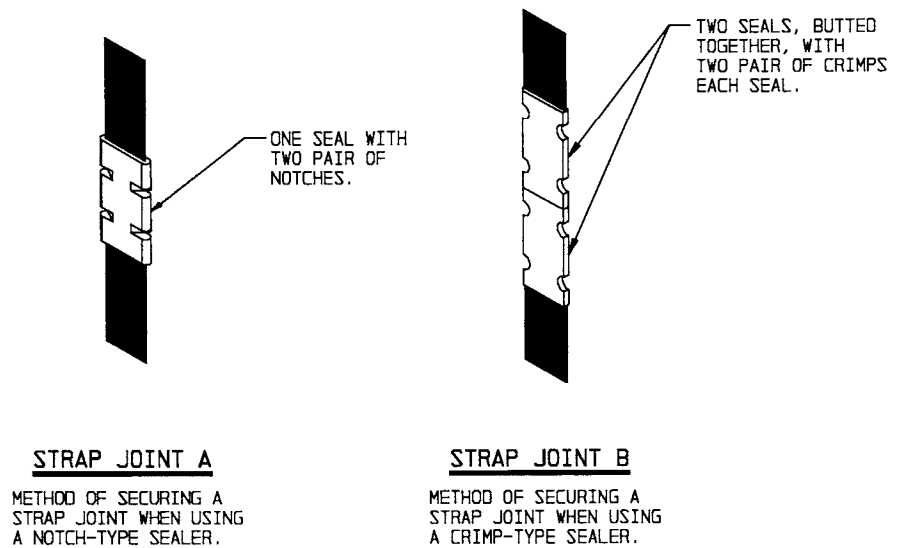
- ① HEADER, 2" X 6" X 48" (DOUBLED) (2 REQD). POSITION AS SHOWN AGAINST THE CONTAINER SKIDS. NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/3-10d NAILS. NAIL THE SECOND PIECE TO THE FIRST W/3-20d NAILS.
- ② SIDE BLOCKING, 2" X 6" X 12" (DOUBLED) (4 REQD). POSITION AGAINST THE CONTAINER SKIDS, BETWEEN THE FORK POCKETS AND THE END OF THE SKID. NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/3-10d NAILS. LAMINATE THE SECOND PIECE TO THE FIRST W/3-10d NAILS.
- ③ HOLD-DOWN STRAP, 2" X .044" OR .050" BY A LENGTH TO SUIT (REF: 15'-0") (2 REQD). INSTALL EACH STRAP FROM TWO 7'-6" LONG PIECES.
- ④ PAD, STRAPPING, 2" X .044" OR .050" X 18" (4 REQD). POSITION BETWEEN THE HOLD-DOWN STRAP, PIECE MARKED ③, AND THE TRAILER SIDE RAIL OR STAKE POCKET AND SEAL TO THE HOLD-DOWN STRAP. SEE "DETAIL A" ON PAGE 10. ALT: STAKE POCKET PROTECTOR (8 REQD). USE TWO UNDER EACH ANCHORING FACILITY WITH A HOLD-DOWN STRAP. SEE "DETAIL B" ON PAGE 10.
- ⑤ SEAL FOR 2" STRAPPING (10 REQD). FASTEN PIECE MARKED ③ WITH ONE SEAL CRIMPED WITH TWO PAIR OF NOTCHES. FASTEN PIECE MARKED ④ WITH ONE SEAL CRIMPED WITH ONE PAIR OF NOTCHES. SEE THE "END-OVER-END LAP JOINT DETAILS" ON PAGE 10.

SPECIAL NOTES:

1. A ONE-UNIT LOAD IS SHOWN ON AN 8'-0" WIDE FLATBED TRAILER. OTHER WIDTH TRAILERS MAY BE USED.
2. IF CHAINS AND LOAD BINDERS ARE TO BE USED FOR LOAD SECUREMENT IN LIEU OF THE 2" STEEL STRAPPING, A CHAIN BOARD, DOUBLED 2" X 4" X 43" LAMINATED TOGETHER W/3-10d NAILS, IS TO BE USED UNDER THE CHAIN. FASTEN THE TENSIONED CHAIN TO A CHAIN BOARD W/1-20d NAIL AT EACH END OF A LATERAL PIECE BY DRIVING EACH NAIL INTO THE LATERAL PIECE THRU AN OPENING IN A CHAIN LINK AND BENDING IT OVER THE LINK.



HOLD-DOWN STRAP ANCHORING DETAILS



END-OVER-END LAP JOINT DETAILS