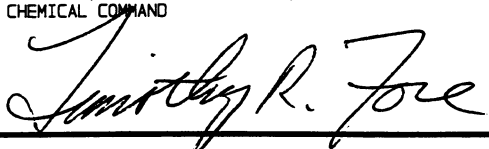
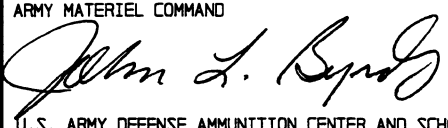

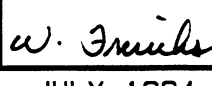


LOADING AND BRACING (TL & LTL) IN CLOSED OR OPEN TOP VAN TRAILERS[⊕] OF AGM-45 ALL-UP-ROUND MISSILE PACKED IN CNU-449/E CONTAINERS

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

U.S. ARMY MATERIEL COMMAND DRAWING			
<small>APPROVED, U.S. ARMY ARMAMENT, MUNITIONS AND CHEMICAL COMMAND</small> 	<small>DRAFTSMAN</small>		<small>TECHNICIAN</small>
			R. HAYNES
<small>APPROVED BY ORDER OF COMMANDING GENERAL, U.S. ARMY MATERIEL COMMAND</small> 	<small>VALIDATION ENGINEERING DIVISION</small>	<small>TRANSPORTATION ENGINEERING DIVISION</small>	<small>LOGISTICS ENGINEERING OFFICE</small>
			
JULY 1994			
	<small>CLASS</small>	<small>DIVISION</small>	<small>DRAWING</small>
	19	48	8565
			<small>FILE</small>
			SP11J25

DO NOT SCALE

PROJECT SP 267-92

GENERAL NOTES

- A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AR 740-1 AND AUGMENTS TM 743-200-1 (CHAPTER 5).
- B. THE OUTLOADING PROCEDURES SPECIFIED IN THIS DRAWING ARE APPLICABLE TO AGM-45 MISSILES PACKED IN CNU-449/E METAL CONTAINERS.
- CONTAINER DIMENSIONS -- 12'-1-1/4" LONG BY 42'-1/8"
WIDE BY 18'-3/8" HIGH.
CONTAINER WEIGHT -- 2,200 LBS (APPROX).
CONTAINER CUBE -- 65.2 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 OFF 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 PALLET UNITS OF COMPLETE ROUNDS, 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.

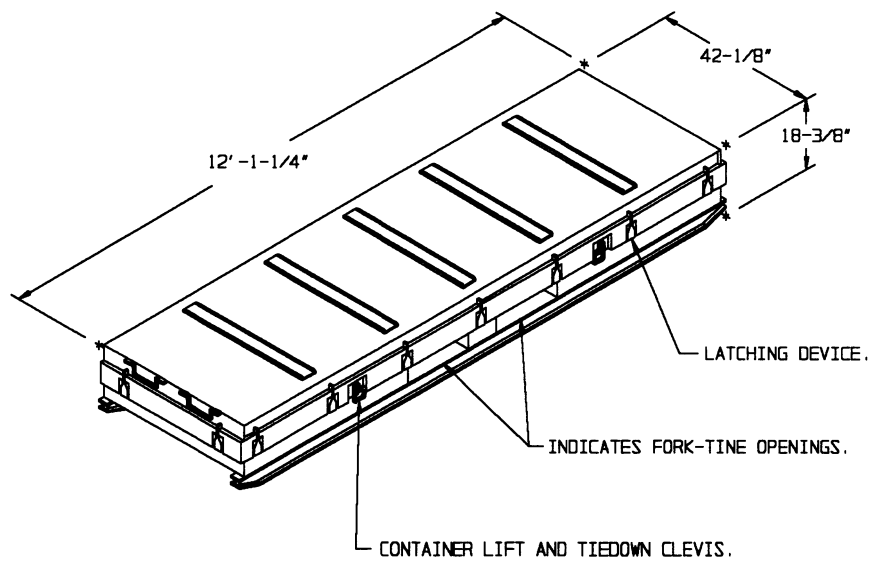
(CONTINUED AT RIGHT)

(GENERAL NOTES CONTINUED)

- 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 9 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 Senco 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.

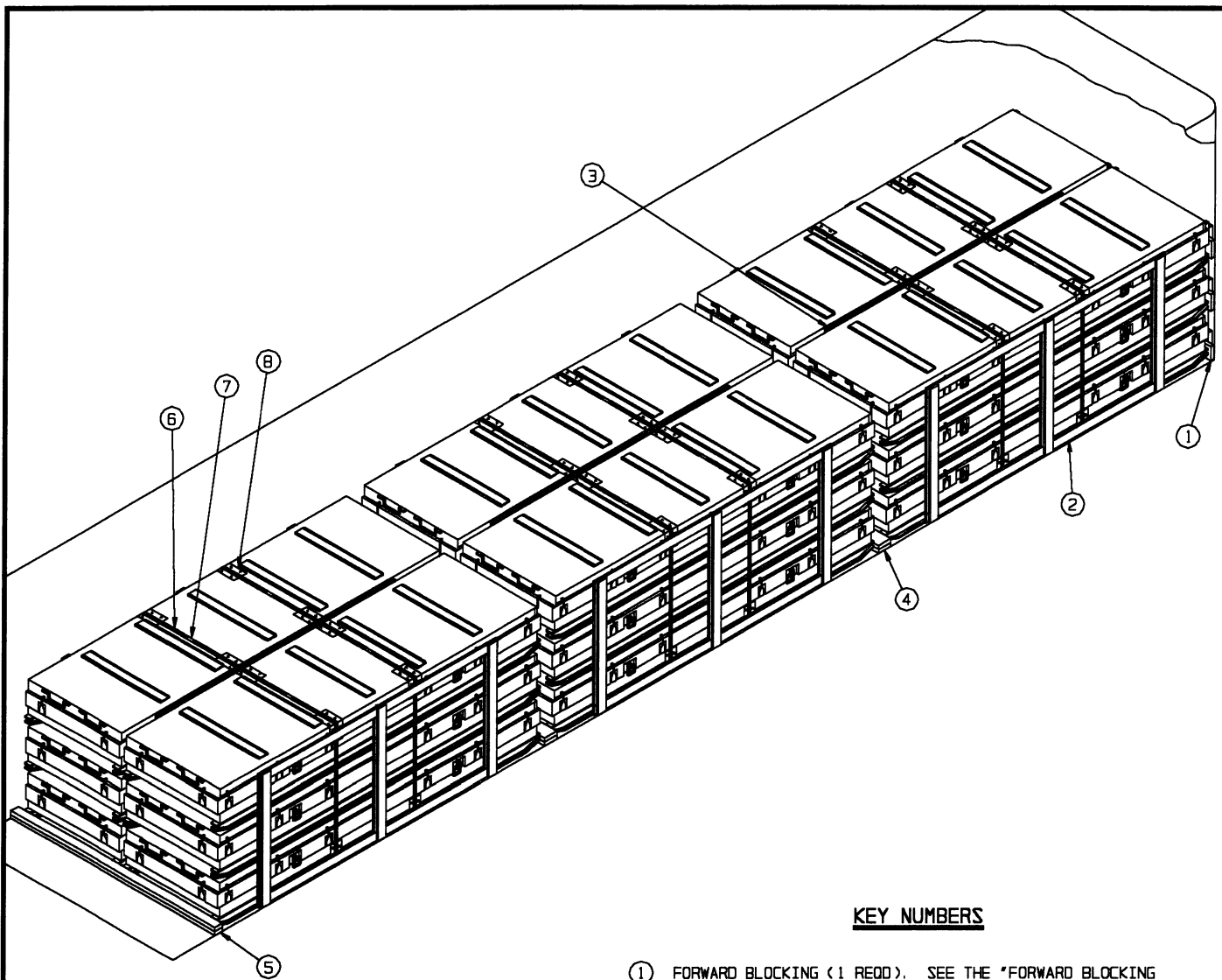
MATERIAL SPECIFICATIONS

- 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-449/E CONTAINER

WEIGHT - - 2,200 POUNDS (APPROX)
CUBE - - - - 65.2 CU FT (APPROX)



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD BLOCKING (1 REQD). SEE THE "FORWARD BLOCKING ASSEMBLY A" DETAIL ON PAGE 6. SEE GENERAL NOTE "K" ON PAGE 2.
- ② SIDE BLOCKING ASSEMBLY (6 REQD). SEE THE DETAIL ON PAGE 6. POSITION AS SHOWN WITH THE VERTICAL PIECES AGAINST THE TRAILER SIDE WALL. SEE SPECIAL NOTE 4 ON PAGE 5.
- ③ CENTER FILL ASSEMBLY (3 REQD). SEE THE DETAIL ON PAGE 7. SEE SPECIAL NOTES 2 AND 4 ON PAGE 5.
- ④ INTERMEDIATE HEADER, 2" X 6" BY INSIDE TRAILER WIDTH MINUS 1/2" (DOUBLED) (2 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/4-10d NAILS. NAIL THE SECOND PIECE TO THE FIRST W/4-20d NAILS.
- ⑤ REAR HEADER, 2" X 4" BY INSIDE TRAILER WIDTH MINUS 1/2" (DOUBLED) (1 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/6-10d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER.
- ⑥ STACK UNITIZING STRAP, 1-1/4" X .035" OR .031" X 18'-0" LONG STEEL STRAPPING (12 REQD, 2 PER STACK).
- ⑦ SEAL FOR 1-1/4" STRAPPING (12 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.

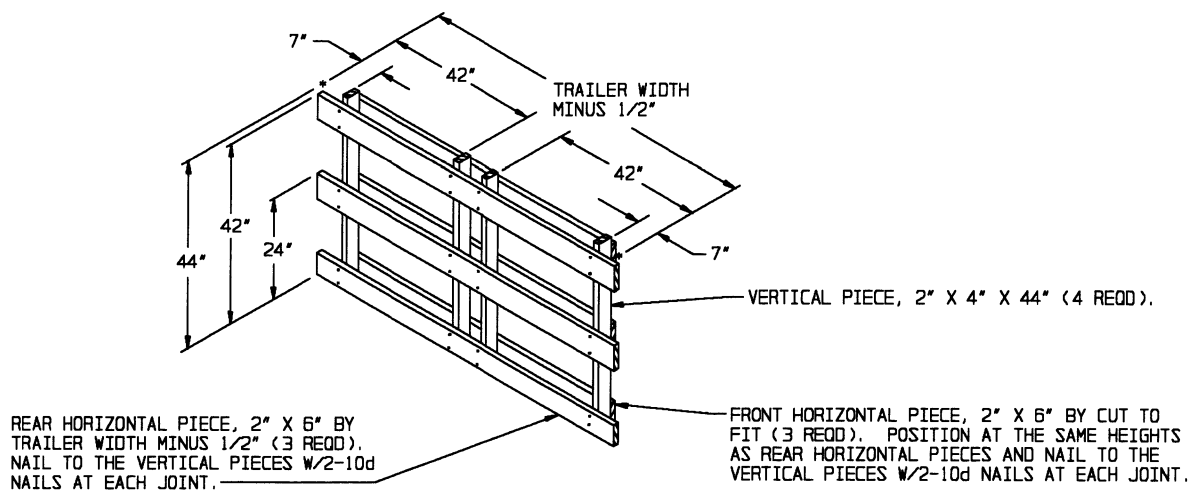
SPECIAL NOTES:

1. AN EIGHTEEN UNIT LOAD OF AGM-45 ALL-UP-ROUND MISSILES IN THE CNU-449/E CONTAINER IS SHOWN IN A 40'-0" LONG 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 BLOCKING AND CENTER FILL ASSEMBLIES AS NECESSARY.
3. FOR SHIPMENT OF A ONE-CONTAINER HIGH STACK, USE FORWARD BLOCKING ASSEMBLY B, AS SHOWN ON PAGE 7, AND MODIFY THE SIDE BLOCKING ASSEMBLIES, CENTER FILL ASSEMBLIES AND OMIT PIECES MARKED ⑥, ⑦, AND ⑧.
4. IF DEEMED MORE ECONOMICAL, THE SIDE BLOCKING AND CENTER FILL ASSEMBLIES MAY BE ELIMINATED AND REPLACED BY NAILED FLOORLINE BLOCKING. THE NAILED FLOORLINE BLOCKING WILL BE INSTALLED AFTER THE FIRST STACK OF CONTAINERS IS POSITIONED IN EACH LOAD BAY. THIS NAILED BLOCKING WILL BE DOUBLED 2" X 4" OR 2" X 6" MATERIAL BY 24" LONG, NAILED TO THE FLOOR OR THE PREVIOUSLY INSTALLED PIECE W/4-10d NAILS. THE LONGITUDINAL POSITIONING OF THIS BLOCKING WILL BE NEAR THE ENDS OF THE CONTAINER SKIDS. QUANTITY OF REQUIRED DOUBLED PIECES WILL DEPEND UPON THE TRAILER WIDTH, FOR NARROW TRAILERS, LESS THAN 90" IN WIDTH, ONLY ONE DOUBLED PIECE WILL BE USED NEAR EACH END OF THE STACK. FOR TRAILERS GREATER THAN 90" WIDE, TWO DOUBLED PIECES WILL BE USED BETWEEN THE STACKS, NEAR EACH END OF THE STACK.

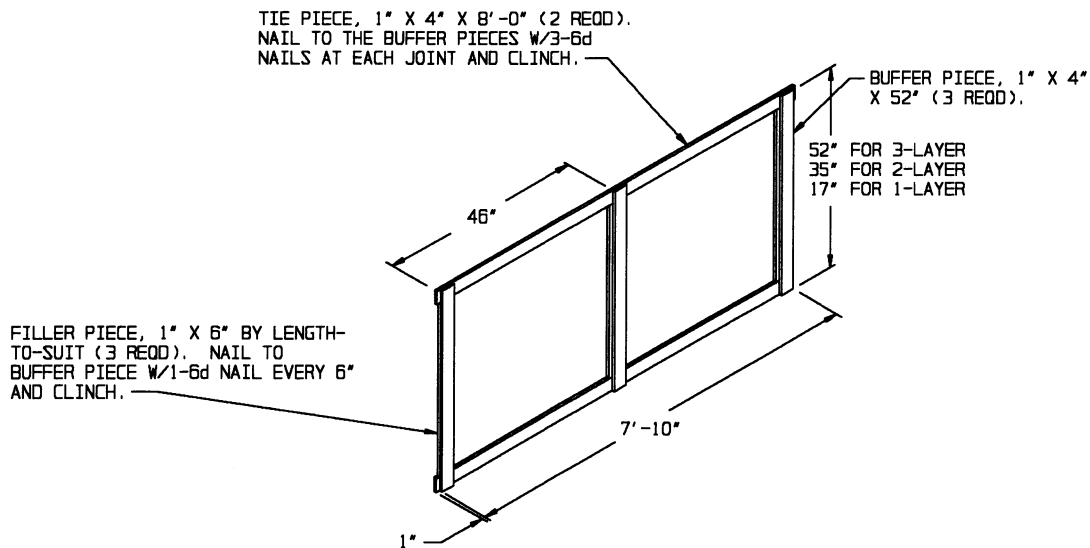
BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	222	74
1" X 6"	102	51
2" X 4"	69	46
2" X 6"	71	71
NAILS	NO. REQD	POUNDS
6d (2")	351	2
10d (3")	68	1
20d (4")	8	NIL
STEEL STRAPPING, 1-1/4" -- 216' REQD - - - - 31 LBS		
SEAL FOR 1-1/4" STRAPPING -- 12 REQD - - - - 2 LBS		
ANTI-CHAFING MATERIAL -- AS REQD - - - - - NIL		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CONTAINER - - - - -	18 - - - - -	39,600 LBS
DUNNAGE - - - - -	- - - - -	520 LBS
TOTAL WEIGHT - - - - -		40,120 LBS (APPROX)

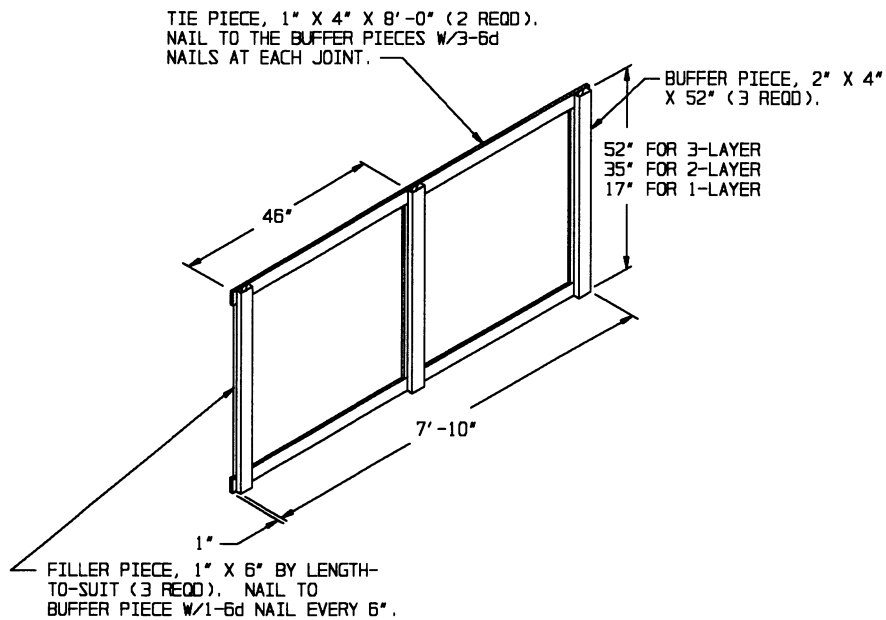


FORWARD BLOCKING ASSEMBLY A



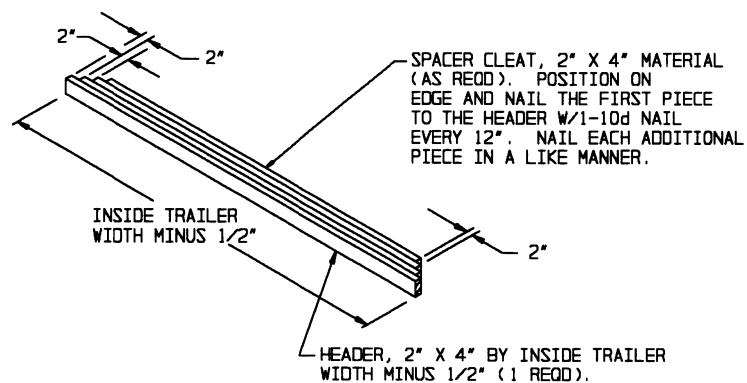
SIDE BLOCKING ASSEMBLY

THE SIDE BLOCKING ASSEMBLY DEPICTED ABOVE MAY BE USED WHEN SHIPPING A ONE, TWO OR THREE-CONTAINER HIGH LOAD BY ADJUSTING THE HEIGHT OF THE ASSEMBLY.



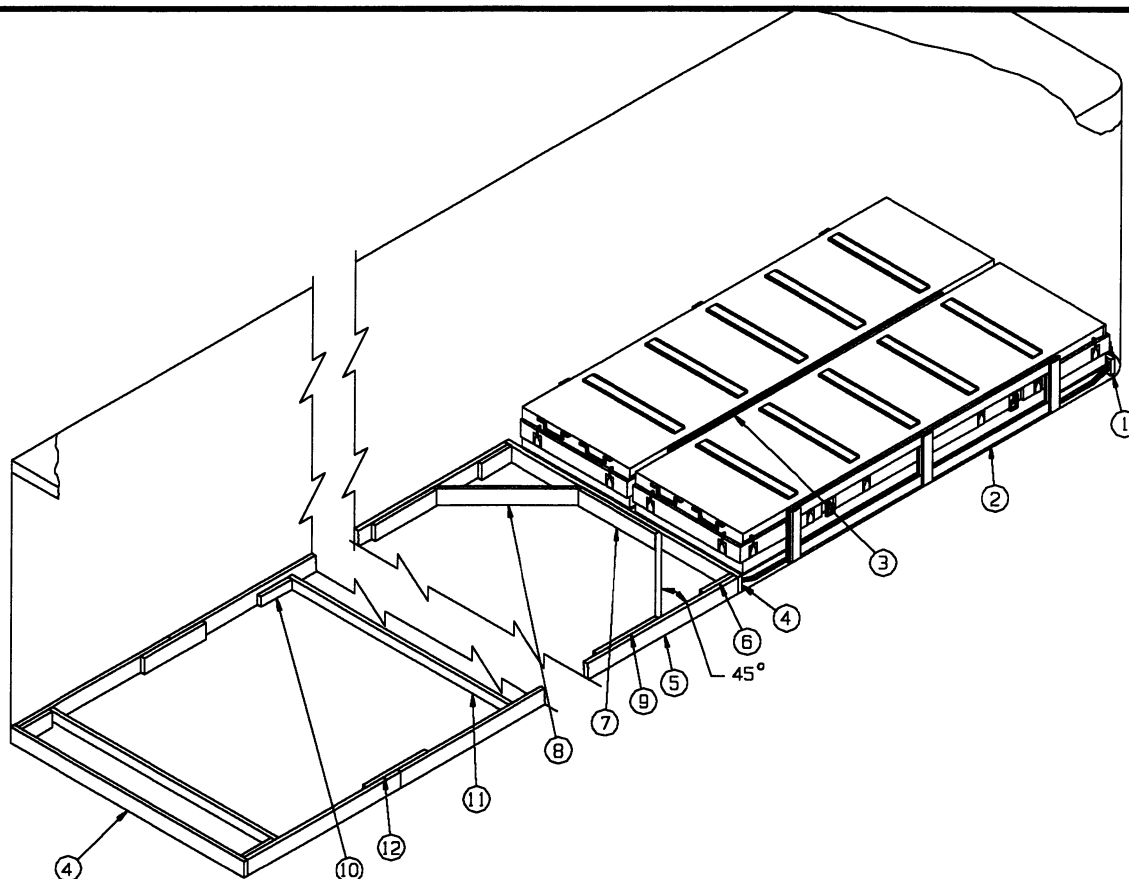
CENTER FILL ASSEMBLY

THE CENTER FILL ASSEMBLY DEPICTED ABOVE MAY BE USED WHEN SHIPPING A ONE, TWO OR THREE-CONTAINER HIGH LOAD BY ADJUSTING THE HEIGHT OF THE ASSEMBLY.



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.



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD BLOCKING ASSEMBLY (1 REQD). SEE THE "FORWARD BLOCKING ASSEMBLY B" DETAIL ON PAGE 7. SEE SPECIAL NOTE 4 AT LEFT AND GENERAL NOTE "K" ON PAGE 2.
- ② SIDE BLOCKING ASSEMBLY (2 REQD). SEE THE DETAIL ON PAGE 6. 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 7, AND SPECIAL NOTE 7 AT LEFT.
- ④ HEADER, 2" X 6" BY INSIDE TRAILER WIDTH MINUS 1/2" (2 REQD).
- ⑤ SIDE STRUT, 2" X 6" BY CUT TO FIT BETWEEN THE FORWARD AND REAR HEADERS, PIECES MARKED ④ (2 REQD). SEE SPECIAL NOTE 5 AT LEFT.
- ⑥ POCKET CLEAT, 2" X 6" X 12" (4 REQD). NAIL TO A SIDE STRUT, PIECE MARKED ⑤, W/3-10d NAILS. TOENAIL TO THE ADJACENT HEADER, PIECE MARKED ④, W/2-12d NAILS.
- ⑦ CENTER CLEAT, 2" X 6" X 24" (1 REQD). NAIL TO A HEADER, PIECE MARKED ④, W/5-10d NAILS.
- ⑧ DIAGONAL BRACE, 2" X 6" BY CUT TO FIT (2 REQD). SEE THE DETAIL ON PAGE 9. DOUBLE BEVEL EACH END WITH 45° CUTS AND TOENAIL TO THE ADJACENT HEADER AND SIDE STRUT, PIECES MARKED ④ AND ⑤, W/2-16d NAILS AT EACH END.
- ⑨ SIDE CLEAT, 2" X 6" X 24" (2 REQD). NAIL TO A SIDE STRUT, PIECE MARKED ⑤, W/8-10d NAILS.
- ⑩ STRUT BRACE RETAINING CLEAT, 2" X 4" X 12" (AS REQD). NAIL TO A SIDE STRUT, PIECE MARKED ⑤, W/3-10d NAILS. SEE SPECIAL NOTE 6 AT LEFT.
- ⑪ STRUT BRACE, 2" X 4" BY CUT TO FIT (MINIMUM OF ONE REQD). NAIL TO THE POCKET CLEATS, PIECES MARKED ⑥, AND/OR TO THE STRUT BRACE RETAINING CLEATS, PIECES MARKED ⑩, W/2-12d NAILS AT EACH END. SEE SPECIAL NOTE 6 AT LEFT.
- ⑫ SPLICE PIECE, 2" X 6" X 24" (AS REQD). CENTER ON JOINT OF PIECES MARKED ⑤, AND NAIL TO SIDE STRUT, PIECE MARKED ⑤, W/4-10d NAILS AT EACH END. SEE SPECIAL NOTE 5 AT LEFT.

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 LOAD OF 20,000 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 BLOCKING AND CENTER FILL ASSEMBLIES, OR BY REPLACING WITH NAILED FLOORLINE BLOCKING.
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 MAY 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/10d NAILS.
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 MUST BE APPLIED FOR EVERY 7'-0" OF SIDE STRUT LENGTH.
7. NOTE THAT SIDE BLOCKING ASSEMBLIES AND CENTER FILL ASSEMBLY MUST BE MODIFIED AS DESCRIBED IN THE NOTES BENEATH THE DETAIL OF THE DUNNAGE ASSEMBLIES.



ONE SEAL WITH
TWO PAIR OF
NOTCHES.



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

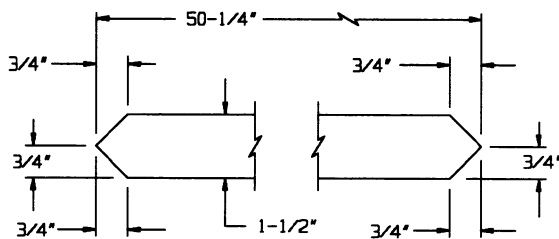
STRAP JOINT A

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

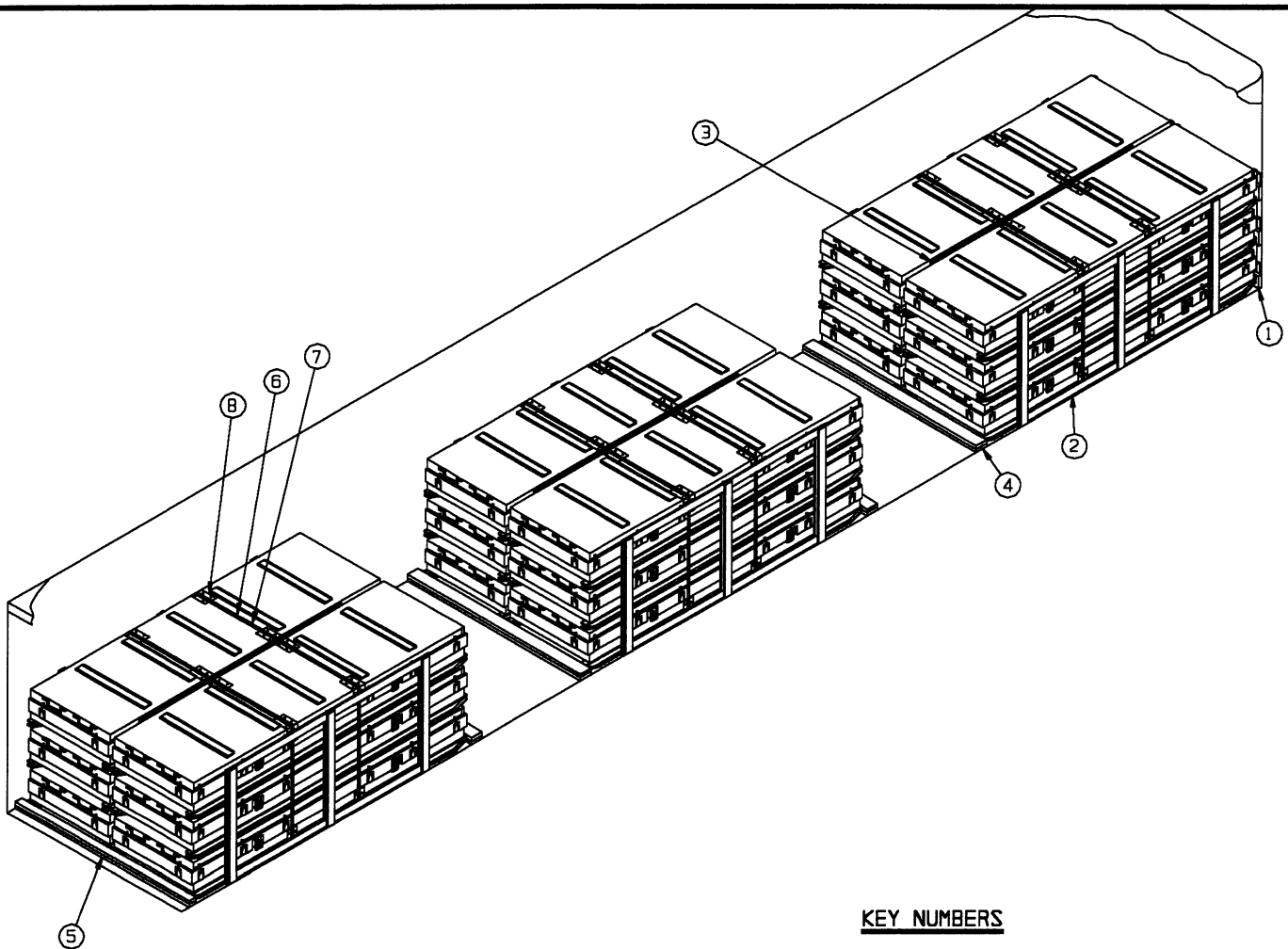
STRAP JOINT B

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

END-OVER-END LAP JOINT DETAILS



DIAGONAL BRACE



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD BLOCKING (1 REQD). SEE THE "FORWARD BLOCKING ASSEMBLY A" DETAIL ON PAGE 6. SEE GENERAL NOTE "K" ON PAGE 2.
- ② SIDE BLOCKING ASSEMBLY (6 REQD). SEE THE DETAIL ON PAGE 6. POSITION AS SHOWN WITH THE VERTICAL PIECES AGAINST THE TRAILER SIDE WALL. SEE SPECIAL NOTE 4 ON PAGE 5.
- ③ CENTER FILL ASSEMBLY (3 REQD). SEE THE DETAIL ON PAGE 7. SEE SPECIAL NOTES 2 AND 4 ON PAGE 5.
- ④ INTERMEDIATE HEADER, 2" X 6" BY INSIDE TRAILER WIDTH MINUS 1/2" (DOUBLED) (4 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/4-10d NAILS. NAIL THE SECOND PIECE TO THE FIRST W/4-20d NAILS.
- ⑤ REAR BLOCKING, 2" X 4" BY INSIDE CONTAINER WIDTH MINUS 1/2" (DOUBLED) (1 REQD). NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/6-10d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER.
- ⑥ STACK UNITIZING STRAP, 1-1/4" X .035" OR .031" X 18'-0" LONG STEEL STRAPPING (12 REQD, 2 PER STACK).
- ⑦ SEAL FOR 1-1/4" STRAPPING (12 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. AN EIGHTEEN UNIT LOAD OF AGM-45 ALL-UP-ROUND MISSILES IN THE CNU- 449/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. 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 BLOCKING AND CENTER FILL ASSEMBLIES AS NECESSARY.
3. FOR SHIPMENT OF A ONE-CONTAINER HIGH STACK, USE FORWARD BLOCKING ASSEMBLY B, AS SHOWN ON PAGE 7, AND MODIFY THE SIDE BLOCKING ASSEMBLIES, CENTER FILL ASSEMBLIES AND OMIT PIECES MARKED ⑥, ⑦, AND ⑧.

BILL OF MATERIAL		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	222	74
1" X 6"	102	51
2" X 4"	69	46
2" X 6"	102	102
NAILS	NO. REQD	POUNDS
6d (2")	351	2
10d (3")	76	1
20d (4")	16	NIL
STEEL STRAPPING, 1-1/4" -- 216' REQD - - - - 31 LBS		
SEAL FOR 1-1/4" STRAPPING -- 12 REQD - - - - 1 LB		
ANTI-CHAFING MATERIAL -- AS REQD - - - - - NIL		

LOAD AS SHOWN

ITEM	QUANTITY	WEIGHT (APPROX)
CONTAINER	18	39,600 LBS
DUNNAGE		581 LBS
TOTAL WEIGHT		40,181 LBS (APPROX)

