TRUCKLOAD

BOMB, GENERAL PURPOSE MK 83 AND MODS (1000 LB) IN PALLET ADAPTER MK 11 MOD 0

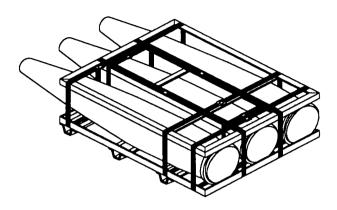


TABLE I UNIT LOAD DATA

MK MOD AND TYPE	UNIT LOAD DWG	DIMENSIONS	CUBE (CU FT)	WEIGHT (LBS)
MK 83 MODS 1, 2, 3 & 4 NON-THERMALLY PROTECTED	MIL-STD-1323-35	L - 74 1/2 W - 43 1/2 H - 19	35.6	2,935
MK 83 MODS 5 & 5A THERMALLY PROTECTED	WR-54/243	L - 74 1/4 W - 43 1/2 H - 19 1/2	36.4	2,976

NOTES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.
 SEE SW020-AC-SAF-010/020/030/040 FOR THE FOLLOWING INFORMATION:

 CROSS REFERENCE TO ASSOCIATED PALLETIZING, CONTAINER LOADING AND CAR LOADING MILITARY STANDARDS.

B.) HAZARD CLASSIFICATION.

-	ORIGINAL ISSUE, S	SUPERSEDES MIL-13	320-7A	7/12/99	QW.	χ				
REV,	REVISIO	N DESCRIPTION		DATE	TDA	SYSCOM				
	DRAWN BY	1325	7/12/99							
	ENGINEER	13/3	7/12/99		DIST	RIBUTION S	STATEMENT .	A		
	SYSTEMS ENGINEER B.Z		7/12/99	APPROVED FOR PUBLIC RELEASE DISTRIBUTION IS UNLIMITED						
S,	SYSTEMS ENG. SUPERVISOR		7/12/99							
	TECH DATA MANAGEMENT SUPERVISOR		7/12/99	THIS TRUCKLOAD IS AUTHORIZED AND RELEASED FOR HIGHWAY SHIPMENT ONLY.						
_	X X NAVSEASYSCOM	(BY DIRECTION)	7/12/58							
	DEPARTMENT OF TH	CAGE CODE 53711	DWG	NO. 6	52140)74	REV. —			
	WASHINGTON, D.C.,		SIZE A	PAGE 1 OF 1						

GENERAL NOTES

- THIS DOCUMENT GIVES DETAILED INSTRUCTIONS FOR TRUCKLOADING THE 1000 LB MK 83 AND MODS GENERAL PURPOSE BOMB IN BOMB PALLET MK 11 MOD 0. BOMBS MAY BE UNCOATED AND PALLETIZED IN ACCORDANCE WITH MIL-STD-1320-35 OR THERMALLY PROTECTED AND PALLETIZED IN ACCORDANCE WITH WR-54/243 NO OTHER LOADS ARE AUTHORIZED FOR SHIPMENT PER THIS DOCUMENT.
- MAXIMUM GROSS WEIGHT OF TRACTOR—TRAILER AND ALLOWABLE AXLE WEIGHTS ARE THE RESPONSIBILITY
 OF THE CARRIER. THE CARRIER WILL ADVISE THE SHIPPER OF THESE LIMITATIONS AND THE SHIPPER SHALL LOAD
 TRAILER IN SUCH A MANNER THAT TRACTOR—TRAILER WILL NOT EXCEED THESE LIMITATIONS.
- 3. UNLESS OTHERWISE SPECIFIED, DUNNAGE LUMBER, STEEL STRAPPING, STRAP SEALS, NAILS AND STAPLES SHALL BE AS SPECIFIED IN THE GENERAL TRUCKLOADING DOCUMENT MIL-STD-1320 (NAVY).
- 4. FOR GENERAL TRUCKLOADING PROCEDURES REFER TO GENERAL TRUCKLOADING DOCUMENT, MIL-STD-1320 (NAVY).

GUIDELINES FOR FTL & LTL 40, 42, 44 & 45 FT VAN TRAILERS

1. PROCEDURES AND PRACTICES DESCRIBED HEREIN ARE INTENDED FOR 40, 42, 44, AND 45 FT VAN TRAILERS WITH NAILABLE AND NON-NAILABLE FLOORS. TRAILER TANDEM AXLES SHALL BE LOCATED IN "WESTERN" POSITION (AT THE EXTREME REAR OF THE TRAILER).

WARNING
THIS STANDARD PROVIDES FOR INCREASED LOADS WHICH PRODUCE HEAVIER GROSS TANDEM AXLE WEIGHTS AND GROSS VEHICLE WEIGHTS. THESE INCREASED WEIGHTS ARE NOT AUTHORIZED IN ALL 50 STATES. BEFORE LOADING MORE THAN 14 UNIT LOADS IN A TRAILER, DETERMINE THAT THE LIMITATIONS OF THE NOTES IN TABLE III ON PAGE 4 ARE MET.

- 2. TO DETERMINE CORRECT LOAD PATTERN TO USE, SELECT CORRECT TABLE FOR LENGTH OF TRAILER BEING LOADED. OPPOSITE NUMBER OF UNIT LOADS TO BE LOADED, FIND CORRECT LOAD PATTERN. MAKE CERTAIN, THAT QUANTITY BEING SHIPPED IS COMPATIBLE WITH WEIGHT OF TRACTOR—TRAILER BEING LOADED AND WEIGHT LAWS OF STATES THROUGH WHICH SHIPMENT IS ROUTED.
 - NOTE LIGHT WEIGHT TRACTOR—TRAILERS: APPROXIMATE TARE WEIGHT OF TRAILER TANDEM AXLES IS 7,200 LBS.

 AND OF DRIVE TANDEM AXLES 10,500 LBS.

STANDARD WEIGHT TRACTOR-TRAILERS: APPROXIMATE TARE WEIGHT OF TRAILER TANDEM AXLES IS 7,800 LBS AND OF DRIVE TANDEM AXLES 11,500 LBS.

ABOVE WEIGHTS MAY BE ADJUSTED UPWARD WHEN EXPERIENCE INDICATES THAT WEIGHT RESTRICTIONS CAN BE MET.

- 3. FOLLOW GUIDELINES SHOWN ON PAGE 5 TO RESTRAIN ALL CONFIGURATIONS SHOWN IN TABLES II AND III ON PAGE 4.
- 4. WHEN SHIPPING LESS THAN AMOUNTS SHOWN IN TABLES II AND III ON PAGE 4, BLOCK AND BRACE ACCORDING TO GUIDELINES SHOWN ON PAGE 9.
- 5. AFTER BLOCKING HAS BEEN INSPECTED, ATTACH SHIPPING DOCUMENTS TO INTERIOR IN AN ACCESIBLE AREA, CLOSE AND SEAL DOORS AND ATTACH APPROPRIATE PLACARDS TO BOTH SIDES, FRONT AND BACK OF TRAILER.

GUIDELINES FOR FTL & LTL 48 FT. & SHORTER FLATBED TRAILERS

- PROCEDURES AND PRACTICES DESCRIBED HEREIN ARE INTENDED FOR 48 FT. AND SHORTER FLATBED TRAILERS.
 NOT USE TRAILERS WITH ALL METAL FLOORS. TRAILER TANDEM AXLES SHALL BE LOCATED IN "WESTERN" POSITION (AT THE EXTREME REAR OF THE TRAILER).
- 2. CHAINS AND LOAD BINDERS SHALL BE THE PRIMARY MEANS OF SECURING THE LOAD TO THE TRAILER. STEEL STRAPPING AND WEB STRAPS CAN BE USED AS ALTERNATE MEANS OF SECURING THE LOAD. USE OF THESE MATERIALS SHALL BE AS FOLLOWS:

A. CHAINS AND LOAD BINDERS

CHAINS, FITTINGS AND LOAD BINDERS SHALL CONFORM TO AND BE APPLIED AS SPECIFIED IN THE GENERAL TRUCKLOADING DOCUMENT, MIL-STD-1320 (NAVY), EXCEPT THAT THE CHAIN/GRAB HOOKS SHALL BE ATTACHED TO THE STAKE POCKETS (NOT AROUND THE RUB RAIL).

DURING PRELOADING INSPECTION REQUIRED BY NAVSEA SW020-AG-SAF-010, THE CHAINS, FITTINGS & LOAD BINDERS SHALL BE INSPECTED FOR STRETCH, GOUGING, BENT LINKS, WEAR AND ANY OTHER NOTICEABLE DEFECTS. THE RESULTS OF THIS INSPECTION SHALL BE RECORDED IN ITEM 13-T OF DD FORM 626. ANY DEFICIENCY SHALL BE CAUSE FOR REJECTION OF A CHAIN OR LOAD BINDER.

B. STEEL STRAPPING

CHAINS AND STEEL STRAPPING MAY BE USED INTERCHANGEABLY ON A ONE-TO-ONE BASIS FOR TIEDOWNS.

STEEL STRAPPING USED AS TIEDOWNS SHALL BE 2 \times .050 AND SHALL CONFORM TO AND BE APPLIED AS SPECIFIED IN THE GENERAL TRUCKLOADING DOCUMENT, MIL-STD-1320 (NAVY).

C. WEB STRAPPING

WEB STRAPPING MAY BE SUBSTITUTED FOR CHAINS AND BINDERS.
USE A MINIMUM OF TWO WEB STRAPS (3 IN. WIDTH) TO RESTRAIN EACH STACK.
WEB STRAPS SHALL SHALL CONFORM TO AND BE APPLIED AS SPECIFIED ON NAVSEA DRAWING 6214037.

DURING PRELOADING INSPECTION REQUIRED BY NAVSEA SW020-AF-SAF-010, THE WEB STRAP ASSEMBLIES SHALL BE INSPECTED ACCORDING NAVSEA DWG. 6214037. THE RESULTS OF THIS INSPECTION SHALL BE RECORDED IN ITEM 13-T OF DD FORM 626. ANY DEFICIENCY SHALL BE CAUSE FOR REJECTION OF A WEBSTRAP ASSEMBLY.

- 3. PROTECTOR BOARDS (DOUBLED 2 x 6'S) SHALL BE USED UNDER THE TIEDOWNS. STEEL STRAPS SHALL BE SECURED TO THE PROTECTOR BOARDS USING 2—INCH STRAPPING STAPLES. WHEN USING CHAIN, THE CHAINS SHALL BE SECURED TO THE PROTECTOR BOARD BY DRIVING A 10d NAIL THROUGH THE CHAIN LINK AND CLINCHING THE NAIL OVER THE CHAIN. FIVE STAPLES/NAILS SHALL BE USED FOR EACH TIEDOWN.
- 4. AFTER THE BLOCKING, BRACING AND TIEDOWNS HAVE BEEN INSPECTED, THE LOAD SHALL BE COMPLETELY COVERED WITH FIRE RESISTANT, WATERPROOF TARPAULINS. THE TARPAULINS MAY BE UNDER THE TIEDOWNS & PROTECTOR BOARDS.
- 5. AFTER TARPAULINS ARE IN PLACE, ATTACH APPROPRIATE PLACARDS TO BOTH SIDES, FRONT AND BACK OF TRAILER AND ATTACH SHIPPING DOCUMENTS TO AN ACCESSIBLE AREA ON BACK DECK OF TRAILER.

TABLE II

NO OF	TRUCKLOAD WEIGHT (LBS	S) APPROX
UNIT LOADS	MK 83 MODS 0, 1, 2, 3, 4	MK 83 MODS 5 & 5A
16	46,960	47,616
15	44,025	44,640
14	41,090	41,664
13	38,155	38,688
12	35,220	35,712
11	32,285	32,736

TABLE III

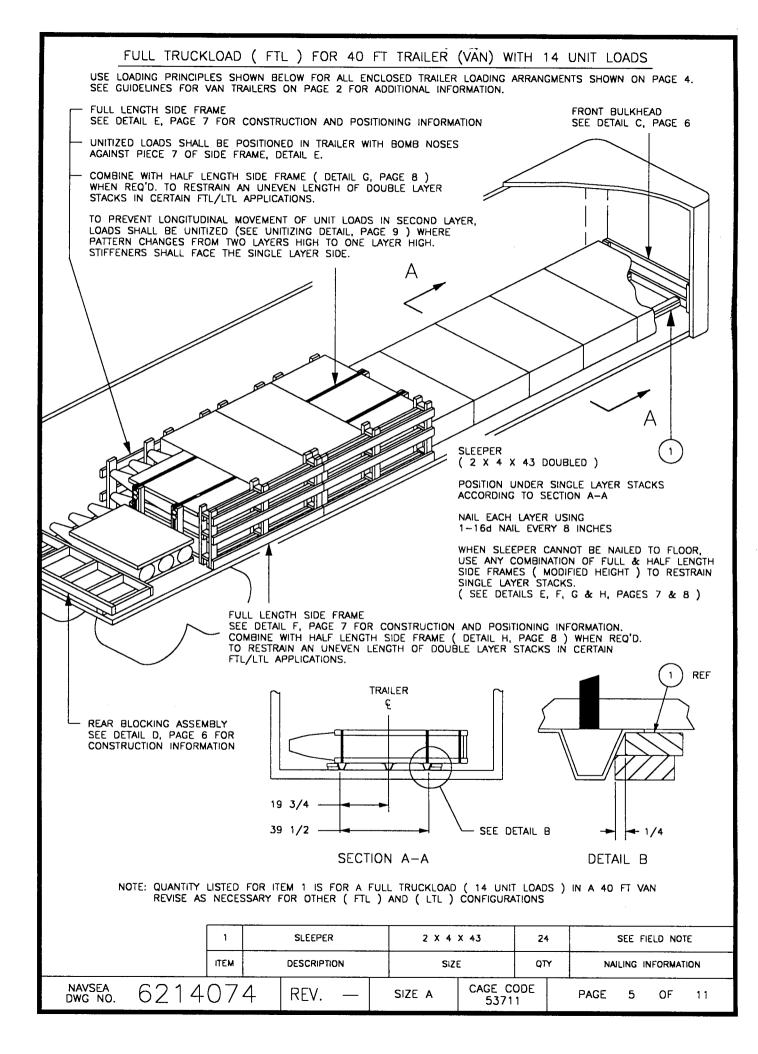
LOAD PATTERNS FOR 40, 42, 44 & 45 FT. VAN TRAILERS NOTE: FWD END OF TRAILER IS TO THE RIGHT IN ALL LOAD PATTERNS

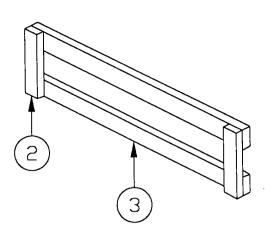
# OF UNIT LOADS		# OF UNIT LOADS	40 FT	# OF UNIT LOADS	5
16 **	1 2 2 2 2 2 2 1 1 1	13	1 1 2 2 2 1 1 1 1 1	10	1 1 1 1 1 1 1 1 1
15 •	1 2 2 2 2 2 1 1 1 1	12	1 1 2 2 1 1 1 1 1 1	9	1 1 1 1 1 1 1 1
14	1 2 2 2 2 1 1 1 1 1	11	1 1 2 1 1 1 1 1 1 1		
			42 FT		
16 **	1 1 2 2 2 2 2 1 1 1 1	14	1 1 1 2 2 2 1 1 1 1 1	12	1 1 1 2 1 1 1 1 1 1
15 *	1 1 1 2 2 2 2 1 1 1 1	13	1 1 2 2 1 1 1 1 1	11	1 1 1 1 1 1 1 1 1 1
			44 FT		
16 **	1 2 2 2 2 2 1 1 1 1 1	14	1 2 2 2 1 1 1 1 1 1 1	12	1 1 2 1 1 1 1 1 1 1
15 *	1 2 2 2 1 1 1 1 1 1	13	1 1 2 2 1 1 1 1 1 1 1	11	1 1 1 1 1 1 1 1 1 1
			45 FT		
16 **	1 2 2 2 2 1 1 1 1 1	14	2 2 2 1 1 1 1 1 1 1 1	12	1 1 1 1 1 1 1 1 1 1 1
15 *	1 2 2 2 1 1 1 1 1 1	13	1 2 2 1 1 1 1 1 1 1 1	11	

- AUTHORIZED WHEN ROUTING IS THROUGH STATES PERMITTING 34,000 LBS OR MORE ON THE TANDEM AXLES AND A GROSS VEHICLE WEIGHT OF 80,000 LBS. ONLY LIGHT WEIGHT TRACTOR-TRAILERS SHALL BE USED.
- * AUTHORIZED FOR LIGHT WEIGHT TRACTOR-TRAILERS ONLY WHEN ROUTING IS THROUGH STAYES LIMITING TANDEM AXLES TO 32,000 LBS. AND GROSS VEHICLE WEIGHTS OF 73,280 LBS. AUTHORIZED FOR BOTH STANDARD AND LIGHT WEIGHT TRACTOR-TRAILERS WHEN ROUTING IS THROUGH STATES PERMITTING 34,000 LBS LBS ON TANDEM AXLES AND GROSS VEHICLE WEIGHTS OF 80,000 LBS.

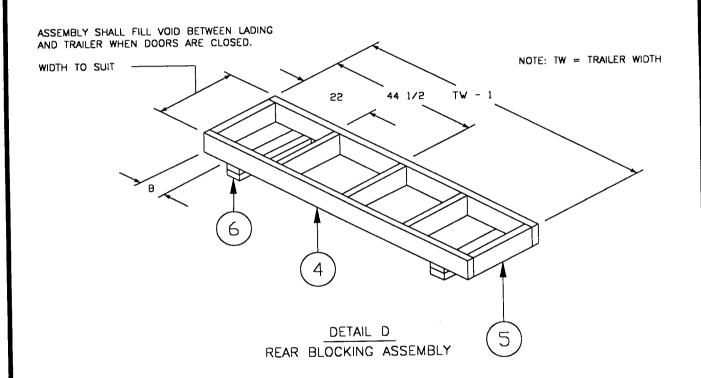
NOTE: WHEN SHIPPING 14 OR LESS UNIT LOADS, BOTH STANDARD AND LIGHTWEIGHT TRACTOR-TRAILERS MAY BE USED IN ALL 50 STATES WITHOUT EXCEEDING THE WEIGHT LAWS.

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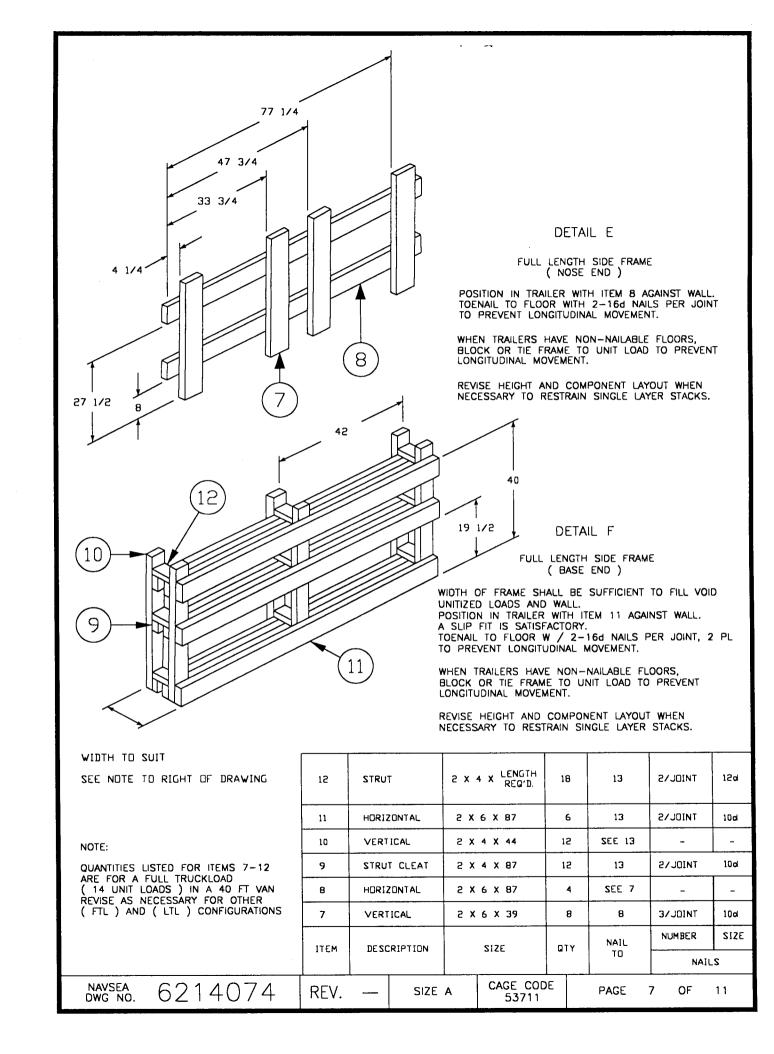


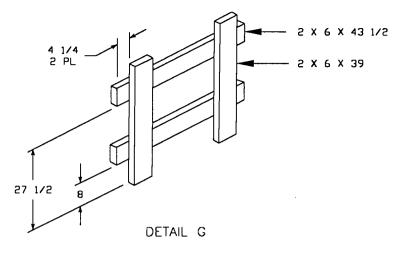
DETAIL C FRONT BULKHEAD



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	S	V							VERTICAL			s x	4	x 21	-1/2		2	3	3/J01	3/JOINT	
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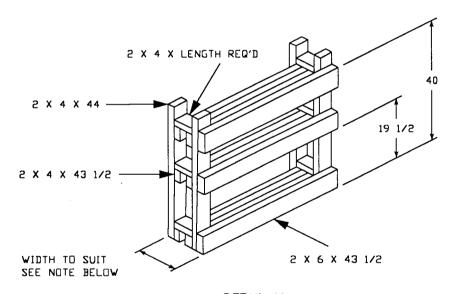
HALF LENGTH SIDE FRAME (NOSE END)

COMBINE WITH FULL LENGTH SIDE FRAME (DETAIL E, PAGE 7) WHEN REQ'D. TO RESTRAIN AN UNEVEN LENGTH OF DOUBLE LAYER STACKS IN CERTAIN FTL/LTL APPLICATIONS.

POSITION IN TRAILER WITH HORIZONTAL MEMBER AGAINST WALL. TOENAIL TO FLOOR WITH 2-16d NAILS PER JOINT TO PREVENT LONGITUDINAL MOVEMENT.

WHEN TRAILERS HAVE NON-NAILABLE FLOORS, BLOCK OR TIE FRAME TO UNIT LOAD TO PREVENT LONGITUDINAL MOVEMENT.

REVISE HEIGHT AND COMPONENT LAYOUT WHEN NECESSARY TO RESTRAIN SINGLE LAYER STACKS.



DETAIL H

HALF LENGTH SIDE FRAME (BASE END)

COMBINE WITH FULL LENGTH SIDE FRAME (DETAIL F, PAGE 7) WHEN REQ'D. TO RESTRAIN AN UNEVEN LENGTH OF OF DOUBLE LAYER STACKS IN CERTAIN FTL/LTL APPLICATIONS.

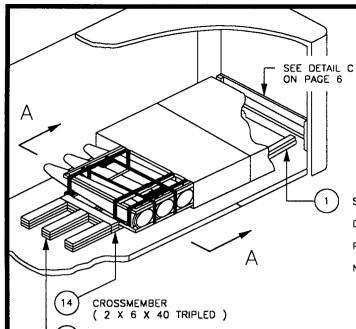
WIDTH OF FRAME SHALL BE SUFFICIENT TO FILL VOID BETWEEN UNITIZED LOADS AND WALL. POSITION IN TRAILER WITH HORIZONTAL MEMBER AGAINST WALL. A SLIP FIT IS SATISFACTORY.

TOENAIL TO FLOOR WITH 2-16d NAILS PER JOINT, 2 PL TO PREVENT LONGITUDINAL MOVEMENT.

WHEN TRAILERS HAVE NON-NAILABLE FLOORS, BLOCK OR TIE FRAME TO UNIT LOAD TO PREVENT LONGITUDINAL MOVEMENT.

REVISE HEIGHT AND COMPONENT LAYOUT WHEN NECESSARY TO RESTRAIN SINGLE LAYER STACKS.

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ALTERNATE LTL (FOR ALL VAN TRAILERS)

USE WHEN SHIPPING LESS THAN AMOUNTS SHOWN IN TABLES II & III ON PAGE 4.

LOAD AS SHOWN IN A SINGLE ROW PATTERN.

DO NOT USE TRAILERS WITH NON-NAILABLE FLOORS.

SLEEPER (2 X 4 X 43 DOUBLED)

DETERMINE QUANTITY BASED ON LOAD CONFIGURATION.

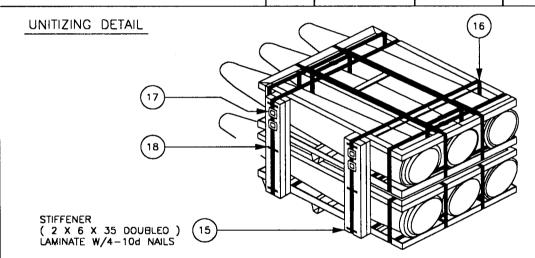
POSITION ACCORDING TO SECTION A-A ON PAGE 5

NAIL EACH LAYER USING 1-16d NAIL EVERY 8 INCHES

13) BACK-UP CLEAT (2 X 6 X 30 TRIPLED)

NAIL ITEMS 14 & 15 USING 6-16d NAILS PER LAYER

14	CROSSMEMBER	2 X 6 X 40	3	SEE FIELD NOTE
13	BACKUP CLEAT	2 X 6 X 30	9	SEE FIELD NOTE
ITEM	DESCRIPTION	SIZE	QTY	NAILING INFORMATION



NOTE: UNITIZED LOADS WILL WEIGH ALMOST 6000 LB. IF ADEQUATE HANDLING EQUIPMENT IS NOT AVAILABLE, HANDLE UNIT LOADS ONE AT A TIME AND STRAP STACKED UNIT LOADS IN PLACE.

- 1. WHEN REQUIRED BY THE FTL REQUIREMENTS, THE TWO-HIGH STACKED UNIT LOAD SHALL BE UNITIZED AS SHOWN ABOVE.
- 2. DOUBLED 2 X 6 STIFFENERS SHALL EXTEND FROM TOP OF STACKED UNIT LOADS TO BOTTOM EDGE OF LOWER FRAME. WHEN THERE IS ONLY ONE UNIT LOAD IN SECOND LAYER, STIFFENERS ARE REQ'D. ON BOTH SIDES OF UNITIZED LOADS.
- 3. 1-1/4 STEEL STRAPS, POSITIONED AS SHOWN, ENCIRCLED STACKED UNIT LOADS AND PASS UNDER BOTTOM OF LOWER FRAME. STRAPS HOLD STIFFENERS IN PLACE.
- 4. TENSION STRAPS AND SEAL WITH TWO, DOUBLED CRIMPED SEALS. SECURE EACH STRAP TO STIFFENER WITH THREE 1-1/4 INCH STAPLES.

NOTE: QUANTITIES LISTED FOR ITEMS 15 -18
ARE FOR A FULL TRUCKLOAD
(14 UNIT LOADS) IN A 40 FT VAN
REVISE AS NECESSARY FOR OTHER
(FTL) AND (LTL) CONFIGURATIONS

18	STAPLE	FOR 1 1/4 STRAP	12	_
17	SEAL	FOR 1 1/4 STRAP	8	_
16	STRAP	1 1/4 X .035 X 15 FT	4	_
15	STIFFENER	2 X 6 X 35	8	SEE FIELD NOTE
ITEM	DESCRIPTION	SIZE	QTY	NAILING INFORMATION

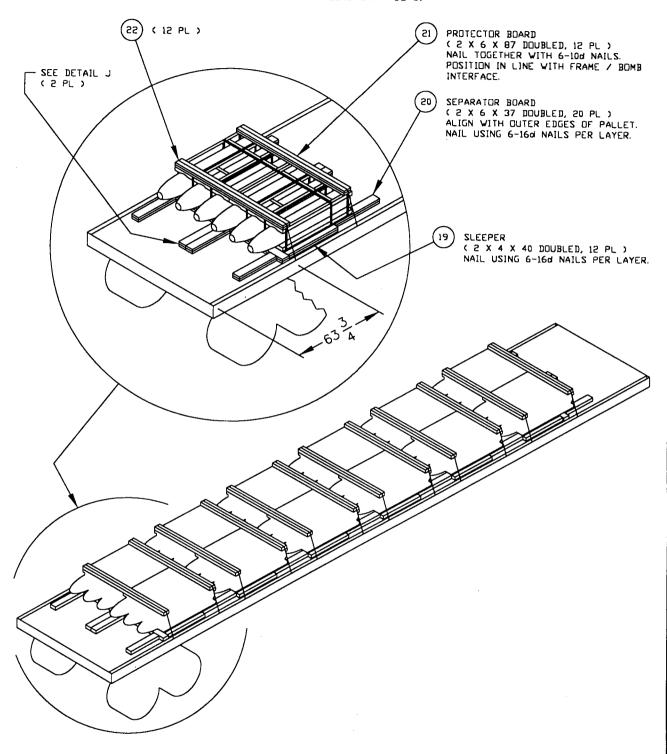
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FULL TRUCKLOAD (12 UNIT LOADS) ON A 48 FT. FLATBED

NOTE: REVISE AS NECESSARY FOR OTHER (FTL) AND (LTL) CONFIGURATIONS. SEE GUIDELINES FOR FLATBED TRAILERS ON PAGE 3.



NOTE: QUANTITIES LISTED FOR ITEMS 19 -22
ARE FOR A FULL TRUCKLOAD
(12 UNIT LOADS) ON A 48 FT FLATBED.
REVISE AS NECESSARY FOR OTHER
(FTL) AND (LTL) CONFIGURATIONS

12	22	CHAIN & LOADBINDER		STEEL ON PAGE 3 FOR USE TIEDOWN MATERIALS
24	21	PROTECTOR BOARD	wood	2 X 6 X 87
40	20	SEPARATOR BOARD	WOOD	2 X 6 X 37
24	19	SLEEPER	WOOD	2 X 4 X 4D
QTY	ITEM	DESCRIPTION	MAT'L/DWG	DIMENSIONS
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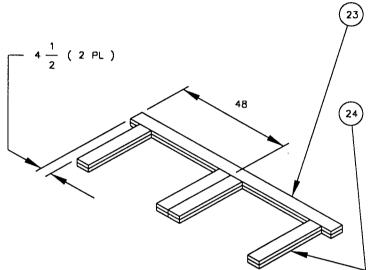
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CROSSMEMBER (2 x 6 x 96 DOUBLED)
NAIL USING 10-16d NAILS PER LAYER.

BACKUP CLEAT ($2 \times 6 \times 30$ DOUBLED, 4 PL) NAIL USING 6-16d NAILS PER LAYER.

DETAIL J FWD / AFT BLOCKING ASSEMBLY (2 PL)

1	6	24	l	BACKUP CLEAT	WOOD		2 X 6 >	30
<u> </u>	4 23 CROSSMEMBER		WOOD		X 6 >	96		
Q	ΤΥ	ITEM		DESCRIPTION	MAT'L/DWG	D	IMENS	ONS
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