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LOADING AND BRACING (TL & LTL) IN VAN TRAILERS OF PALLETIZED MEDIUM CALIBER PROJECTILES

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⊕ THIS DOCUMENT INCLUDES OUTLOADING PROCEDURES FOR CONVENTIONAL TYPE TRAILERS AND FOR TRAILERS EQUIPPED WITH MECHANICAL BRACING DEVICES AS APPROVED BY THE BUREAU OF EXPLOSIVES, ASSOCIATION OF AMERICAN RAILROADS. CAUTION: THE PROCEDURES SHOWN HEREIN, FOR BOTH TYPES OF TRAILERS, ARE ONLY APPLICABLE FOR HIGHWAY MOVEMENTS; NOT FOR CONTAINER/TRAILER-ON-FLAT-CAR MOVEMENTS.

⊕ THESE PROCEDURES MAY ALSO BE USED FOR LOADING AND BRACING EMPTY PROJECTILES.

THIS DRAWING, INCLUDING REVISION 1, SUPERSEDES DRAWING 19-48-4032-11PE1006 DATED 7 JANUARY 1960.

DO NOT SCALE

REVISIONS				DRAFTSMAN	PROJ. ENG.
1	AUG 77	<i>DL</i>	<i>AA</i>	<i>RHA</i>	<i>NEWS</i>
				CHECKER	LOG. ENG. OFFICE
				<i>PB</i>	<i>John Bond</i>
				APPROVED, U. S. ARMY ARMAMENT MATERIEL READINESS COMMAND	
				<i>David C. Fetter</i>	
				APPROVED BY ORDER OF COMMANDING GENERAL, U. S. ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND (DARCOM)	
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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 HEREIN ARE APPLICABLE TO MEDIUM CALIBER PROJECTILES AND PROJECTILE METAL PARTS, FROM 2.75 INCH THRU 165MM, WHEN PALLETIZED. SUBSEQUENT REFERENCE TO UNIT HEREIN MEANS THE PALLET UNIT WITH CONTENTS.
- C. FOR DETAILS OF THE BOXED-TYPE PALLET UNIT, SEE ORDNANCE CORPS DRAWING NO. F-7548604 AND THE PICTORIAL VIEW ON PAGE 3.
- D. FOR DETAILS OF THE "OPEN-TYPE" PALLET UNIT, SEE PICATINNY ARSENAL DRAWING NO. F-8837835 AND THE PICTORIAL VIEW ON PAGE 3.
- E. THE OUTLOADING PROCEDURES DEPICTED WITHIN THIS DOCUMENT ARE LIMITED TO HIGHWAY MOVEMENTS ONLY. THE PROCEDURES ARE APPLICABLE FOR SHIPMENTS IN CONVENTIONAL TYPE VAN TRAILERS, AND FOR SHIPMENTS IN VAN TRAILERS EQUIPPED WITH VARIOUS TYPES OF SELF-CONTAINED MECHANICAL BRACING DEVICES (CROSS MEMBERS AND WALL MEMBERS) AND APPLY TO TRAILERS HAVING WOOD, WOOD AND METAL, OR ALL METAL FLOORS. VAN TRAILERS WHICH ARE 40'-0" LONG BY 7'-6" WIDE (INSIDE WIDTH DIMENSION) HAVE BEEN SHOWN. HOWEVER, THE PROCEDURES ARE ALSO APPLICABLE FOR TRAILERS WHICH ARE NINETY INCHES (90") THRU NINETY-THREE INCHES (93") IN WIDTH AND FOR TRAILERS OF OTHER LENGTHS, UP TO AND INCLUDING 45'-0" LONG.
- F. IF THE TRAILER BEING USED IS EQUIPPED WITH A MECHANICAL LOAD BLOCKING SYSTEM, THE CROSS MEMBER ATTACHMENT FACILITIES WITHIN THE TRAILER MUST PROVIDE FOR THE INSTALLATION OF LOAD BLOCKING CROSS MEMBERS AT THE HEIGHTS SPECIFIED HEREIN. **CAUTION:** TRAILERS EQUIPPED WITH FACILITIES WHICH DO NOT MEET THE LOCATION REQUIREMENTS MUST NOT BE USED. THE HEIGHT REQUIREMENTS SPECIFIED WITHIN THIS DRAWING FOR INSTALLATION OF CROSS MEMBERS ARE IDENTICAL WITH THOSE RECOMMENDED BY THE BUREAU OF EXPLOSIVES PAMPHLET 6C, AND APPENDICES THERETO.
1. PALLET UNITS SHOULD BE LOADED TIGHTLY AGAINST EACH OTHER LONGITUDINALLY AND/OR AGAINST INSTALLED CROSS MEMBERS. VOIDS LENGTHWISE WITHIN A LOAD MUST BE HELD TO A MINIMUM. CROSS MEMBERS MUST BE PLACED AGAINST THE LADING AS TIGHTLY AS THE HOLE SPACING IN THE CROSS MEMBER ATTACHMENT FACILITY PERMITS. EACH CROSS MEMBER WILL BE INSTALLED WITH THE ENDS ATTACHED AS NEARLY AS POSSIBLE IN "MATED" POSITIONS (AT EQUAL HEIGHTS AND AT EQUAL DISTANCES FROM THE END OF THE TRAILER).
 2. CROSS MEMBERS IN EMPTY TRAILERS OR THOSE UNUSED IN LOADED TRAILERS MUST BE SECURED FOR SHIPMENT. COMPONENTS ASSIGNED TO EACH TRAILER MUST REMAIN THEREWITH EVEN THOUGH UNUSED DURING SOME SHIPMENTS.
 3. ONE (1) CROSS MEMBER WILL BE REQUIRED FOR EACH 10,000 POUNDS OF LADING, AND SHOULD NOT BE RELIED UPON TO RETAIN A GREATER WEIGHT. CROSS MEMBERS WILL NOT BE DOUBLED; THAT IS, TWO CROSS MEMBERS AT THE SAME HEIGHT LOCATION WILL NOT BE PLACED SIDE BY SIDE.
- G. **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. HOWEVER, THE APPROVED METHODS SHOWN HEREIN MUST BE FOLLOWED AS CLOSELY AS POSSIBLE FOR BLOCKING, BRACING, AND STAYING OF THE DESIGNATED ITEMS.
- H. 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 SEMI-TRAILER 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 ANY AXLES ARE OVERLOADED, OR ANY DOUBT AS TO WHETHER THE TOTAL GROSS WEIGHT EXCEEDS THE MAXIMUM ALLOWED, PROPER WEIGHT DISTRIBUTION SHOULD BE VERIFIED BY ACTUALLY WEIGHING THE LOADED VEHICLE.

(CONTINUED AT RIGHT)

MATERIAL SPECIFICATIONS

- LUMBER ----- : SEE TM 743-200-1, DUNNAGE LUMBER; FED SPEC MM-L-751.
- NAILS ----- : COMMON, CEMENT COATED OR CHEMICALLY ETCHED, FED SPEC FF-N-105.
ALT: ANNULAR-RING TYPE NAIL OF SAME SIZE.
- STRAPPING, STEEL - : CLASS I, TYPE I OR IV, HEAVY DUTY, FINISH A OR B (GRADE 2), FED SPEC QQ-5-781.
- SEAL, STRAP ----- : TYPE D, STYLE I, II, OR IV, CLASS H, FED SPEC QQ-5-781.
- PLYWOOD ----- : GROUP B OR C, GRADE* C-D (EXTERIOR). FED SPEC NN-P-530.

*IF SPECIFIED GRADE IS NOT AVAILABLE, A BETTER EXTERIOR GRADE MAY BE SUBSTITUTED.

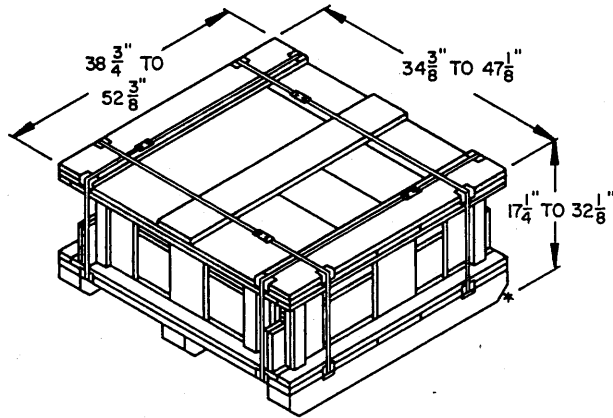
(GENERAL NOTES CONTINUED)

- J. OTHER TYPES OF LADING ITEMS MAY BE LOADED INTO TRAILERS WHICH ARE PARTIALLY LOADED WITH PALLET UNITS OF PROJECTILES OR PROJECTILE METAL PARTS, 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.
- K. EXCEPT FOR PLYWOOD, DUNNAGE LUMBER, SPECIFIED THROUGHOUT THIS PROCEDURAL DRAWING IS OF NOMINAL SIZE. FOR EXAMPLE, 1" X 4" MATERIAL IS ACTUALLY 3/4" THICK BY 3-1/2" OR 3-5/8" WIDE AND 2" X 6" MATERIAL IS ACTUALLY 1-1/2" THICK BY 5-1/2" WIDE OR 1-5/8" THICK BY 5-5/8" WIDE.
- L. **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 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 TWO (2) SEALS, BUTTED TOGETHER, WITH TWO (2) PAIRS OF CRIMPS PER SEAL MUST BE USED TO SEAL THE JOINT.
- N. PORTIONS OF THE TRAILERS, SUCH AS SIDEWALLS, END WALLS, AND ROOFS, HAVE NOT BEEN SHOWN IN THE LOAD VIEWS FOR CLARITY PURPOSES.
- O. ALL FULL TRAILER LOADS SHOWN HEREIN ARE TYPICAL, HOWEVER, THE PROCEDURES ARE ADAPTABLE TO THE SIZE OF THE UNIT TO BE SHIPPED. THE NUMBER OF PALLET UNITS IN THE LENGTH OF THE TRAILER WILL BE DEPENDENT UPON THE LENGTH OF THE UNIT, AND THE NUMBER OF LAYERS WILL BE BASED UPON THE HEIGHT AND/OR WEIGHT OF THE UNIT BEING LOADED. NOTE THAT THE "UNIT WEIGHT IN POUNDS" IN THE CHARTS FOR THE DEPICTED TRAILER LOADING PROCEDURES IS BASED ON THE WEIGHT OF EMPTY PROJECTILES. THE WEIGHT OF A PALLET UNIT OF FILLED PROJECTILES WILL BE GREATER THAN THE UNIT WEIGHT SPECIFIED AND IT MAY THEREFORE BE NECESSARY TO REDUCE THE QUANTITY OF PALLET UNITS FOR A LOAD. THE QUANTITIES SHOWN IN THE LESS THAN TRAILER LOAD VIEWS ARE ALSO TYPICAL AND MAY BE ADJUSTED TO SUIT.
- P. THE "LOAD AS SHOWN" FOR MOST OF THE FULL LOADS DEPICTED HEREIN IS BASED ON AN APPROXIMATE LADING WEIGHT OF 42,000 POUNDS. THE SPECIFIED BLOCKING AND BRACING FOR THE FULL LOADS (CONVENTIONAL VAN) IS ADEQUATE FOR THE RETENTION OF HEAVIER LOADS, IF IT IS DESIRED TO INCREASE THE LADING WEIGHT. **CAUTION:** THE TOTAL GROSS WEIGHT OF THE LADING, THE DUNNAGE, AND OF THE TRANSPORTING TRACTOR AND TRAILER EQUIPMENT MUST NOT EXCEED THE ALLOWABLE GROSS WEIGHT FOR THE STATES THRU WHICH THE LOAD WILL BE TRANSPORTED AND FOR THE CLASSES OF ROADS TO BE TRAVELED WITHIN THOSE STATES.
- Q. FOR ADDITIONAL GUIDANCE, ATTENTION IS DIRECTED TO THE "SPECIAL NOTES" SECTIONS WHICH ARE IMMEDIATELY ADJACENT TO THE DEPICTED OUTLOADING METHODS, AND TO THE LOAD CAPACITY CHARTS FOR THE LOADS.

REVISIONS

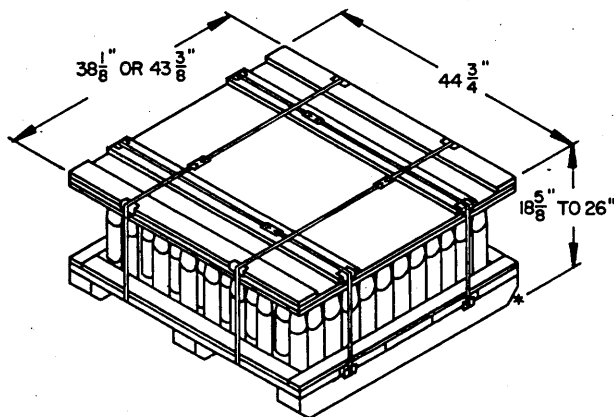
REVISION NO. 1, DATED AUGUST 1977, CONSISTS OF:

1. INCREASING TRAILER LENGTHS TO 40'-0".
2. INCLUDING PALLET UNITS OF OTHER SIZES AND WEIGHTS.
3. INCLUDING PROCEDURES FOR TRAILERS EQUIPPED WITH MECHANICAL BRACING DEVICES.
4. INCLUDING CHANGES AS NECESSARY TO UPDATE DRAWING FORMAT.



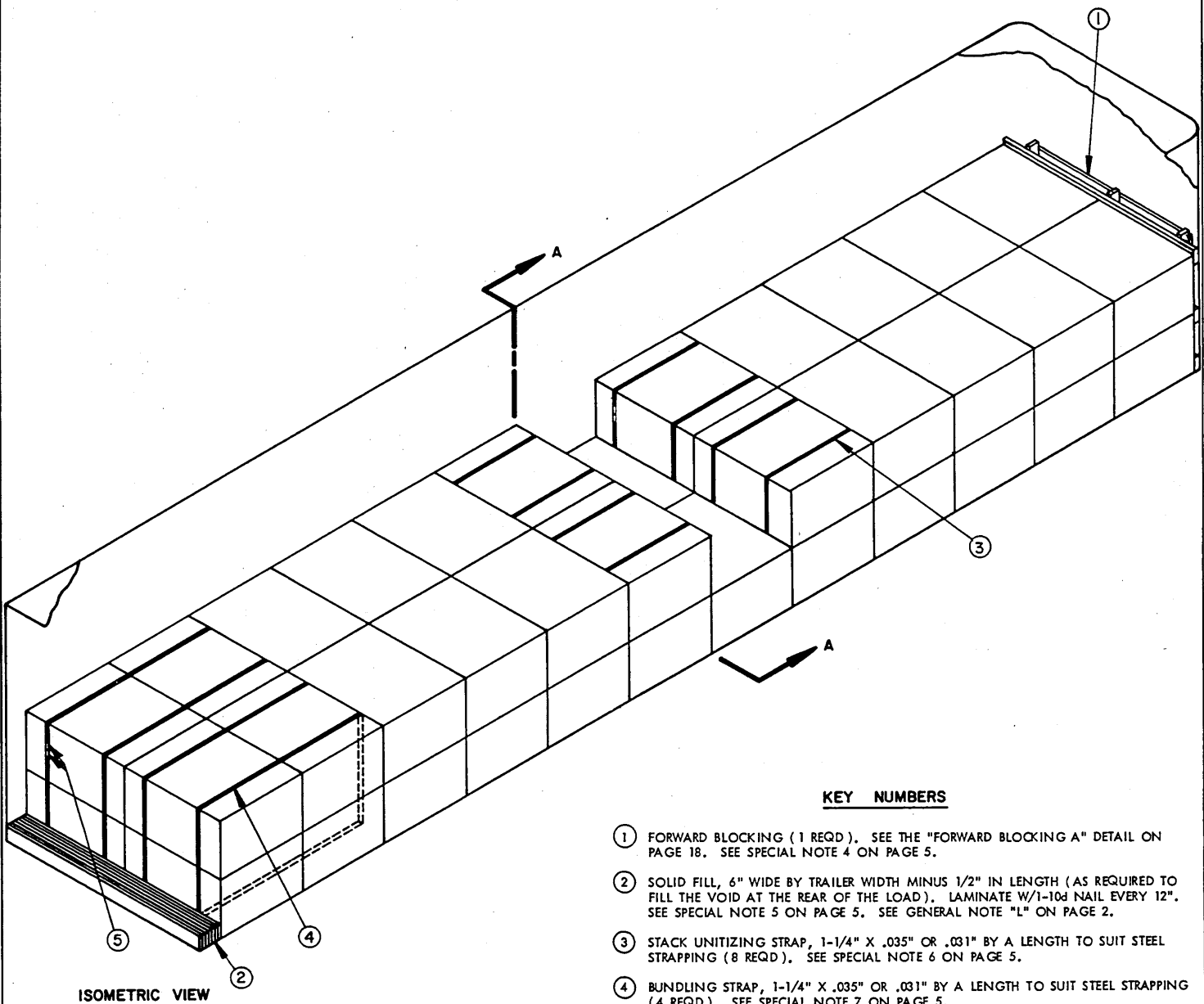
TYPICAL BOXED-TYPE PALLET UNIT

THIS PALLET IS DETAILED BY ORDNANCE CORPS DRAWING NO. F-7548604. THE PALLET IS DESIGNED FOR SHIPMENT OF THE DESIGNATED 2.75 INCH, 75MM, 76MM, 81MM, 90MM, 105MM, 106MM, AND 120MM AMMUNITION ITEMS. THE PALLET UNITS RANGE IN WEIGHT FROM 473 POUNDS TO 2,821 POUNDS. OUTLOADING PROCEDURES FOR BOXED-TYPE PALLET UNITS IN CONVENTIONAL VAN TRAILERS ARE SHOWN ON PAGES 6 THRU 16. OUTLOADING PROCEDURES FOR BOXED-TYPE PALLET UNITS IN TRAILERS EQUIPPED WITH MECHANICAL BRACING DEVICES ARE SHOWN ON PAGES 26 THRU 33. REFER TO THE "BOXED-TYPE PALLET UNIT INDEX" ON PAGE 38 FOR SPECIFIC PAGE REFERENCES.



TYPICAL "OPEN-TYPE" PALLET UNIT

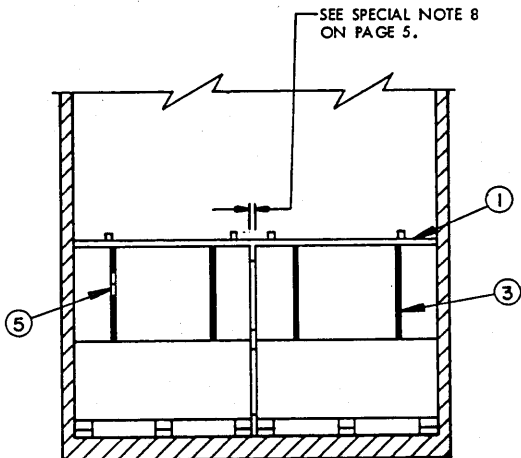
THIS PALLET IS DETAILED BY PICATINNY ARSENAL DRAWING NO. F-8837835. THE PALLET IS DESIGNED FOR SHIPMENT OF THE DESIGNATED 2.75 INCH, 75MM, 76MM, 90MM, 105MM, 106MM, 120MM, 152MM, 155MM, AND 165MM AMMUNITION ITEMS. THE PALLET UNITS RANGE IN WEIGHT FROM 912 POUNDS TO 3,225 POUNDS. OUTLOADING PROCEDURES FOR "OPEN-TYPE" PALLET UNITS IN CONVENTIONAL VAN TRAILERS ARE SHOWN ON PAGES 4 THRU 7 AND PAGES 14 THRU 16. OUTLOADING PROCEDURES FOR "OPEN-TYPE" PALLET UNITS IN TRAILERS EQUIPPED WITH MECHANICAL BRACING DEVICES ARE SHOWN ON PAGES 22 THRU 25. REFER TO THE "'OPEN-TYPE" PALLET UNIT INDEX" ON PAGE 38 FOR SPECIFIC PAGE REFERENCES.



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD BLOCKING (1 REQD). SEE THE "FORWARD BLOCKING A" DETAIL ON PAGE 18. SEE SPECIAL NOTE 4 ON PAGE 5.
- ② SOLID FILL, 6" WIDE BY TRAILER WIDTH MINUS 1/2" IN LENGTH (AS REQUIRED TO FILL THE VOID AT THE REAR OF THE LOAD). LAMINATE W/1-10d NAIL EVERY 12". SEE SPECIAL NOTE 5 ON PAGE 5. SEE GENERAL NOTE "L" ON PAGE 2.
- ③ STACK UNITIZING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (8 REQD). SEE SPECIAL NOTE 6 ON PAGE 5.
- ④ BUNDLING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (4 REQD). SEE SPECIAL NOTE 7 ON PAGE 5.
- ⑤ SEAL FOR 1-1/4" STRAPPING (24 REQD, 2 PER STRAP JOINT). SEE GENERAL NOTE "M" ON PAGE 2.



SECTION A-A

TYPICAL 46-UNIT LOAD OF "OPEN-TYPE" PALLET UNITS IN A
40'-0" LONG CONVENTIONAL VAN TRAILER

LOAD CAPACITY CHART

LINE NO.	CALIBER	DESIGNATION	UNIT WEIGHT IN POUNDS	MAX UNITS PER TRAILER	LOAD WEIGHT IN POUNDS
13	2.75 IN	WARHEAD HE M151, PRACTICE XM232	1,205	35	42,175
7	75 MM	HE M334	1,533	27	41,391
18	90 MM	HE-T 91	1,526	27	41,202
19	90 MM	CHEM-T T92	1,580	26	41,080
20	105 MM	WARHEAD, 105MM, XMS47	1,360	31	42,160
25	105 MM	HEP M393A2, WP XM416	1,352	31	41,912
38	105 MM	HE XM400E3, M444, M444E1	1,255	33	41,415
38	105 MM	HE M444, M444E1	1,295	32	41,440
31	106 MM	HEAT M344A1	1,185	35	41,475
14	152 MM	TP-T XM411E2	1,847	22	40,634
40	152 MM	HE XM657E2	1,340	31	41,540
41*	155 MM	M549 MOTOR BODY ASSY	1,120	37	41,540
39	165 MM	HEP T237E4 (M123)	912	46	41,952

* SEE SPECIAL NOTE 8.

○ EMPTY WEIGHTS ARE SHOWN. SEE GENERAL NOTE "O" ON PAGE 2.

SPECIAL NOTES:

1. A 40'-0" LONG BY 7'-6" WIDE (INSIDE WIDTH DIMENSION) CONVENTIONAL VAN TRAILER IS SHOWN. TRAILERS OF OTHER DIMENSIONS CAN BE USED. SEE SPECIAL NOTE 8 BELOW.
2. THE TYPICAL LOAD SHOWN IS APPLICABLE FOR "OPEN-TYPE" PALLET UNITS AS DETAILED BY PICATINNY ARSENAL DRAWING NO. F-8837835, AND FOR THE ITEMS AS SPECIFIED IN THE "LOAD CAPACITY CHART" AT LEFT. THE PROCEDURES ARE APPLICABLE FOR LOADS WHICH CONSIST OF A FULL FIRST LAYER AND A PARTIAL OR FULL SECOND LAYER. SEE SPECIAL NOTE 10.
3. A 46-UNIT LOAD OF "OPEN-TYPE" PALLET UNITS MEASURING 38-1/2" LONG BY 44-3/4" WIDE BY 30" HIGH AND WEIGHING 912 POUNDS IS SHOWN AS TYPICAL. THE ACTUAL QUANTITY THAT CAN BE SHIPPED WILL DEPEND UPON THE WEIGHT OF THE ITEM BEING LOADED AND THE CAPACITY OF THE TRAILER BEING USED. SEE THE "LOAD CAPACITY CHART" AT LEFT FOR GUIDANCE.
4. A TRAILER HAVING ROUNDED CORNERS AT THE FORWARD END IS SHOWN. IF THE TRAILER BEING USED IS EQUIPPED WITH A SQUARE FRONT OR WITH AN INSTALLED BULKHEAD, OMIT THE FORWARD BLOCKING, PIECE MARKED ①, AND POSITION THE PALLET UNITS DIRECTLY AGAINST THE FORWARD PORTION OF THE TRAILER.
5. STRUT TYPE REAR BLOCKING, AS SHOWN BY PIECES MARKED ⑤ AND ⑥ ON PAGE 10, WILL BE USED IN LIEU OF THE DEPICTED SOLID FILL, PIECE MARKED ②, WHEN THE SPACE BETWEEN THE LADING AND THE TRAILER DOORS IS 12" OR MORE.
6. STACK UNITIZING STRAPS, PIECES MARKED ③, WILL BE APPLIED AROUND THE REARMOST COMPLETE STACK AND AROUND THE MOST FORWARD COMPLETE STACK IN EACH ROW WHERE THE NUMBER OF LAYERS IN THE ROW CHANGES BY ONE.
7. THE BUNDLING STRAPS, PIECES MARKED ④, ARE SHOWN ENCIRCLING TWO COMPLETE STACKS. IF THE HEIGHT OF A PALLET STACK IS LESS THAN THE LENGTH OF THE PALLET UNIT, THE STRAPS MAY BE INSTALLED SO AS TO ENCIRCLE ONLY THE REARMOST PALLET STACK.
8. IF TRAILERS WIDER THAN NINETY-TWO INCHES (92") ARE TO BE USED FOR A SHIPMENT (WIDER THAN 90-1/2" FOR LINE NO. 41) LATERAL BRACING WILL BE REQUIRED BETWEEN LATERALLY ADJACENT UNITS IN THE STACKED PORTION OF THE LOAD. REFER TO THE PROCEDURES SHOWN ON PAGES 10 AND 11 FOR GUIDANCE.
9. PALLET UNITS WITHIN THE TOP LAYER WILL BE LOCATED SO AS TO PROVIDE FOR PROPER WEIGHT DISTRIBUTION, IF THE TOP LAYER IS NOT COMPLETE.
10. FOR FULL LOADS OF THE "OPEN-TYPE" PALLET UNITS OTHER THAN THOSE LISTED, REFER TO THE PROCEDURES ON PAGES 6 AND 7. THOSE PROCEDURES ARE ALSO APPLICABLE IF THE QUANTITY TO BE SHIPPED OF ANY OF THE ABOVE LISTED ITEMS IS SMALL ENOUGH (24 MAX FOR MOST ITEMS, 20 MAX FOR OTHERS) TO BE CONTAINED IN ONE LAYER. REFER TO PAGES 14 THRU 16 FOR GUIDANCE IN THE SHIPMENT OF ONLY A FEW PALLET UNITS.

BILL OF MATERIAL (TYPICAL)

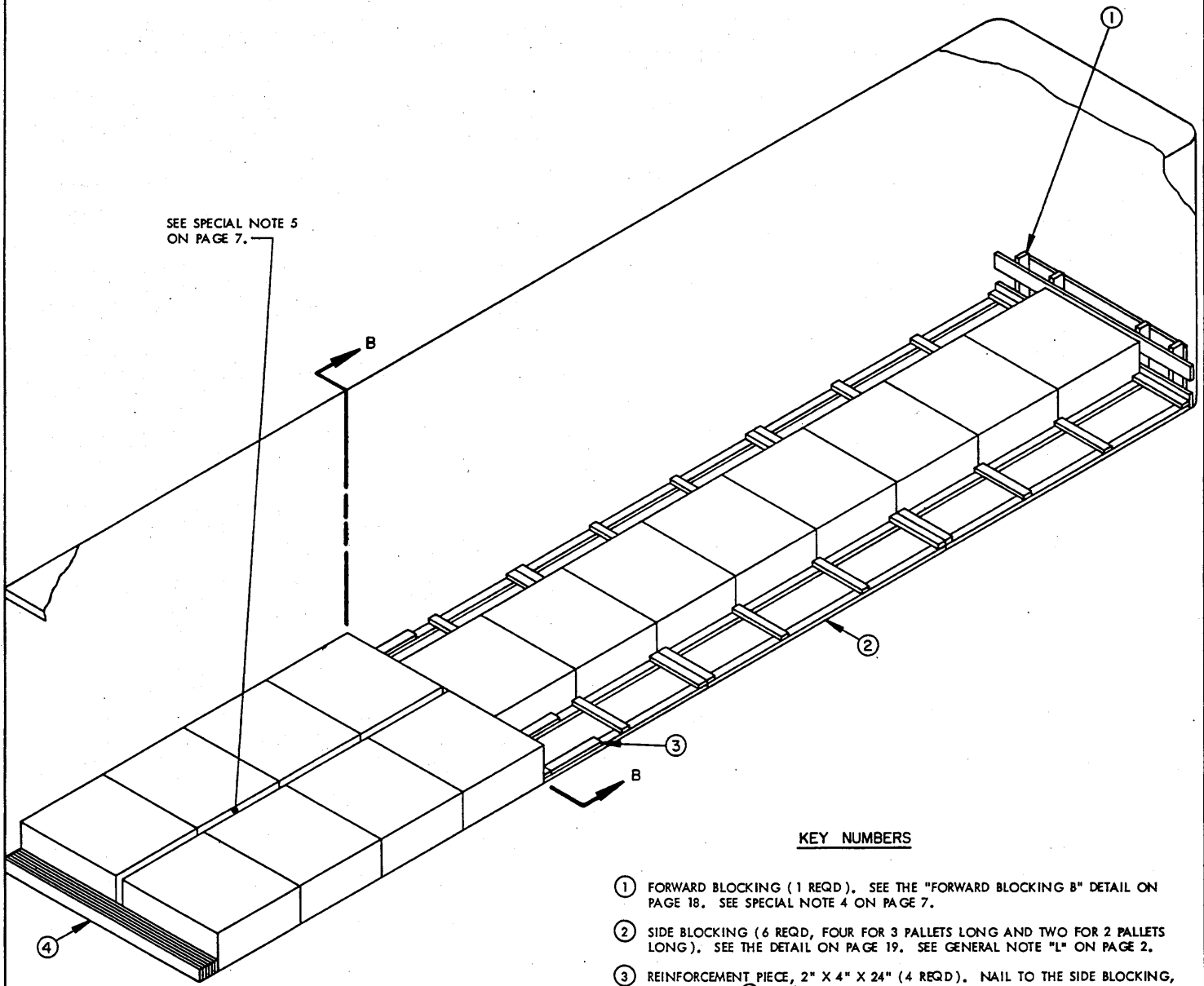
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	22	15
2" X 6"	86	86
NAILS	NO. REQD	POUNDS
10d (3")	88	1-1/2
STEEL STRAPPING, 1-1/4" X .035" OR .031" -- 236' REQD - 34 LBS		
SEAL FOR 1-1/4" STRAPPING ----- 24 REQD - 2 LBS		

LOAD AS SHOWN (TYPICAL)

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT -----	46	41,952 LBS
DUNNAGE -----		242 LBS
TOTAL WEIGHT -----		42,194 LBS

TYPICAL 46-UNIT LOAD OF "OPEN-TYPE" PALLET UNITS IN A
40'-0" LONG CONVENTIONAL VAN TRAILER

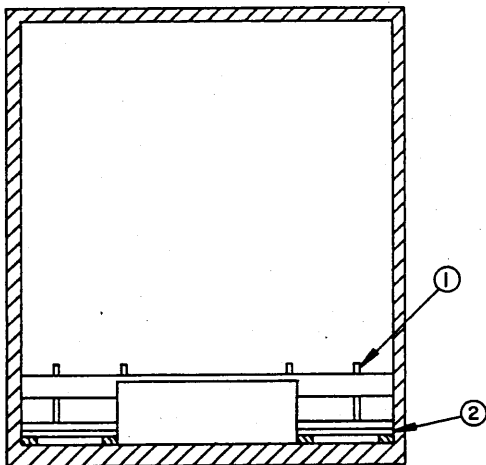
SEE SPECIAL NOTE 5
ON PAGE 7.



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD BLOCKING (1 REQD). SEE THE "FORWARD BLOCKING B" DETAIL ON PAGE 18. SEE SPECIAL NOTE 4 ON PAGE 7.
- ② SIDE BLOCKING (6 REQD, FOUR FOR 3 PALLETS LONG AND TWO FOR 2 PALLETS LONG). SEE THE DETAIL ON PAGE 19. SEE GENERAL NOTE "L" ON PAGE 2.
- ③ REINFORCEMENT PIECE, 2" X 4" X 24" (4 REQD). NAIL TO THE SIDE BLOCKING, PIECE MARKED ②, W/5-10d NAILS.
- ④ SOLID FILL, 6" WIDE BY TRAILER WIDTH MINUS 1/2" IN LENGTH (AS REQUIRED TO FILL THE VOID AT THE REAR OF THE LOAD). LAMINATE W/1-10d NAIL EVERY 12". SEE SPECIAL NOTE 6 ON PAGE 7.



SECTION B-B

TYPICAL 16-UNIT LOAD OF "OPEN-TYPE" OR BOXED-TYPE PALLET
UNITS IN A 40'-0" LONG CONVENTIONAL VAN TRAILER

LOAD CAPACITY CHART ("OPEN-TYPE")

LINE NO.	CALIBER	DESIGNATION	UNIT WEIGHT IN POUNDS	MAX UNITS PER TRAILER	LOAD WEIGHT IN POUNDS
8	2,75 IN	WARHEAD WTU-1/B	1,880	22	41,360
1	75 MM	HE M309 A1	1,931	21	40,551
2	75 MM	HEAT-T, M310A1	1,931	21	40,551
3	75 MM	WP 311A1	2,056	20	41,120
4	75 MM	HE M48	1,961	21	41,181
5	75 MM	SMOKE M64	2,090	20	41,800
6	75 MM	HEAT M66	1,961	21	41,181
9	76 MM	WP-M361	1,858	22	40,876
10	76 MM	WP-M312	1,740	24	41,760
11	76 MM	HE M42A1	1,733	24	41,592
15	90 MM	AP M82	2,888	14	40,432
16	90 MM	HE M71	2,391	17	40,647
17	90 MM	WP M313	2,320	18	41,760
12	105 MM	TACTICAL CS XM632	3,225	13	41,925
21	105 MM	HE M1	2,425	17	41,225
22	105 MM	HEAT M67	2,325	18	41,850
23	105 MM	HC, BE, M64, M84B1	2,225	18	40,050
24	105 MM	WP M60	2,475	17	42,075
26	105 MM	HE M323	2,375	17	40,375
27	105 MM	HEAT M324	1,795	23	41,285
28	105 MM	WP M325	2,435	17	41,395
29	105 MM	ILLUN, XM314A2E1	3,225	13	41,925
30	105 MM	HE M442	1,895	22	41,690
32	105 MM	TP-T XM468	2,365	17	40,205
33	120 MM	HE M73	2,661	15	39,915
34	120 MM	HE M356	2,142	19	40,698
35	120 MM	HE T15E3	2,548	16	40,768
36	120 MM	CHEM T16E1	2,234	18	40,212
37	120 MM	CHEM T16E3	2,484	17	42,228

● EMPTY WEIGHTS ARE SHOWN. SEE GENERAL NOTE "O" ON PAGE 2.

LOAD CAPACITY CHART (BOXED-TYPE)

LINE NO.	CALIBER	DESIGNATION	UNIT WEIGHT IN POUNDS	MAX UNITS PER TRAILER	LOAD WEIGHT IN POUNDS
8	90 MM	CANNISTER M377	2,144	19	40,736
12	90 MM	TP-T M35321	2,173	19	41,287
13	90 MM	AP-T M318A1C	2,173	19	41,287
17	90 MM	CANNISTER M336	2,117	20	42,340
21	120 MM	AP-T M368E1 OR AP-T M359	2,821	15	42,315

● EMPTY WEIGHTS ARE SHOWN. SEE GENERAL NOTE "O" ON PAGE 2.

SPECIAL NOTES:

1. A 40'-0" LONG BY 7'-6" WIDE (INSIDE WIDTH DIMENSION) CONVENTIONAL VAN TRAILER IS SHOWN. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
2. THE TYPICAL LOAD SHOWN IS APPLICABLE FOR THE "OPEN-TYPE" PALLET UNITS AS DETAILED BY PICATINNY ARSENAL DRAWING NO. F-8837835, AND FOR THE ITEMS AS SPECIFIED IN THE "LOAD CAPACITY CHART ("OPEN-TYPE")" AT LEFT. THE LOAD IS ALSO APPLICABLE FOR THE BOXED-TYPE PALLET UNITS AS DETAILED BY ORDNANCE CORPS DRAWING NO. F-7548604, AND FOR THE ITEMS AS SPECIFIED IN THE "LOAD CAPACITY CHART (BOXED-TYPE)" AT LEFT. THE PROCEDURES ARE APPLICABLE FOR LOADS WHICH CONSIST OF A FULL OR PARTIAL FIRST LAYER, AND WHICH MAY BE CLASSED EITHER AS A FULL LOAD OR AS AN LTL, DEPENDING UPON THE WEIGHT OF THE ITEM BEING LOADED. SEE SPECIAL NOTES 8 AND 9.
3. A 16-UNIT LOAD OF "OPEN-TYPE" PALLET UNITS MEASURING 38-1/8" LONG BY 44-3/4" WIDE BY 25-5/8" HIGH AND WEIGHING 2,548 POUNDS IS SHOWN AS TYPICAL. THE ACTUAL QUANTITY THAT CAN BE SHIPPED WILL DEPEND UPON THE WEIGHT OF THE ITEM BEING LOADED AND THE CAPACITY OF THE TRAILER BEING USED. SEE THE LOAD CAPACITY CHARTS AT LEFT FOR GUIDANCE.
4. A TRAILER HAVING ROUNDED CORNERS AT THE FORWARD END IS SHOWN. IF THE LOAD TO BE SHIPPED CONSISTS OF ONE OR MORE 2-WIDE LOAD UNITS AT THE FRONT OF THE LOAD, A "FORWARD BLOCKING A" ASSEMBLY MUST BE INSTALLED IN LIEU OF THE "FORWARD BLOCKING B" ASSEMBLY. SEE THE "FORWARD BLOCKING A" DETAIL ON PAGE 18. IF THE TRAILER BEING USED IS EQUIPPED WITH A SQUARE FRONT OR WITH AN INSTALLED BULKHEAD, OMIT THE FORWARD BLOCKING AND POSITION THE PALLET UNITS DIRECTLY AGAINST THE FORWARD PORTION OF THE TRAILER.
5. LATERAL BLOCKING IS NOT REQUIRED BETWEEN THE TWO ROWS OF PALLET UNITS IF THE EXCESS SPACE IS LESS THAN FOUR INCHES (4"). LOADS OF "OPEN-TYPE" PALLET UNITS WILL THEREFORE NOT REQUIRE LATERAL BLOCKING; HOWEVER, LOADS OF BOX-TYPE PALLET UNITS MOST GENERALLY WILL. SEE THE "ANTI-SWAY BRACE A" DETAIL ON PAGE 19 FOR AN ASSEMBLY TO BE USED IF THE EXCESS LATERAL SPACE IS LESS THAN EIGHT INCHES (8"). USE "ANTI-SWAY BRACE B", AS DETAILED ON PAGE 19, FOR A WIDER SPACE.
6. STRUT TYPE REAR BLOCKING, AS SHOWN BY PIECES MARKED ⑤ AND ⑥ ON PAGE 10, WILL BE USED IN LIEU OF THE DEPICTED SOLID FILL, PIECE MARKED ④, WHEN THE SPACE BETWEEN THE LADING AND THE TRAILER DOORS IS 12" OR MORE. K-BRACE BLOCKING, AS SHOWN ON PAGE 15 BY PIECES ② THRU ⑦, MAY BE USED PROVIDING THE SPACE AT THE REAR OF THE TRAILER IS AT LEAST 60" AND PROVIDING THE LOAD DOES NOT EXCEED 26,000 POUNDS.
7. THE 2-WIDE PORTION OF A LOAD MAY BE DIVIDED, WITH SOME OF THE SIDE-BY-SIDE UNITS PLACED AT THE FORWARD END OF THE TRAILER, AS NECESSARY TO PROVIDE FOR PROPER WEIGHT DISTRIBUTION.
8. FOR FULL LOADS OF THE "OPEN-TYPE" PALLET UNITS OTHER THAN THOSE LISTED ABOVE, REFER TO THE PROCEDURES ON PAGES 4 AND 5. REFER TO PAGES 14 THRU 16 FOR GUIDANCE IN THE SHIPMENT OF ONLY A FEW PALLET UNITS.
9. FOR FULL LOADS OF THE BOXED-TYPE PALLET UNITS OTHER THAN THOSE LISTED ABOVE, REFER TO THE "BOXED-TYPE PALLET UNIT INDEX" ON PAGE 38 AND TO THE APPLICABLE PROCEDURES ON PAGES 8 THRU 13. REFER TO PAGES 14 THRU 16 FOR GUIDANCE IN THE SHIPMENT OF ONLY A FEW PALLET UNITS.

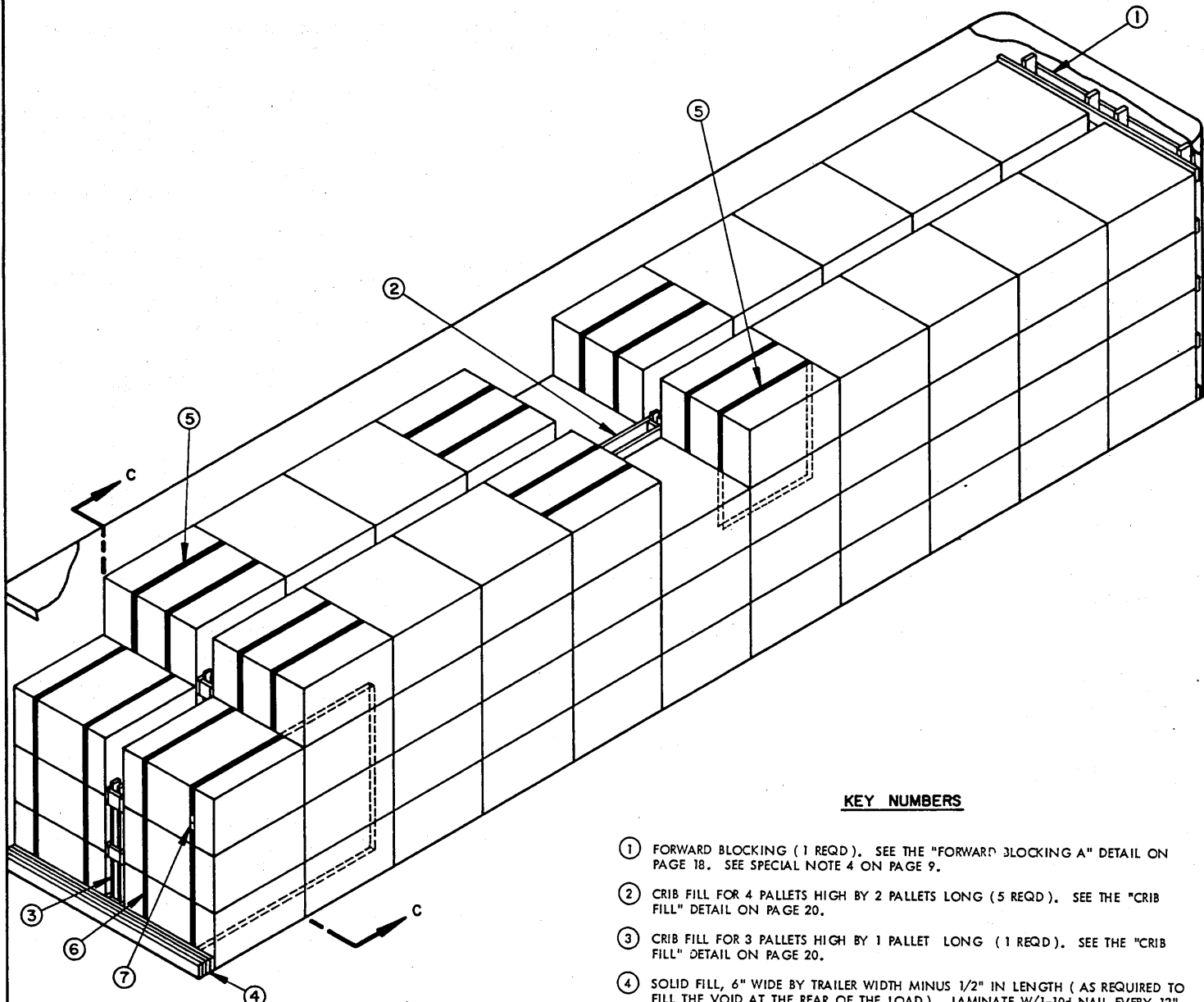
BILL OF MATERIAL (TYPICAL)

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	162	108
2" X 6"	72	72
NAILS	NO. REQD	POUNDS
10d (3")	224	3-1/2

LOAD AS SHOWN (TYPICAL)

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	16	40,768 LBS
DUNNAGE		364 LBS
TOTAL WEIGHT		41,132 LBS

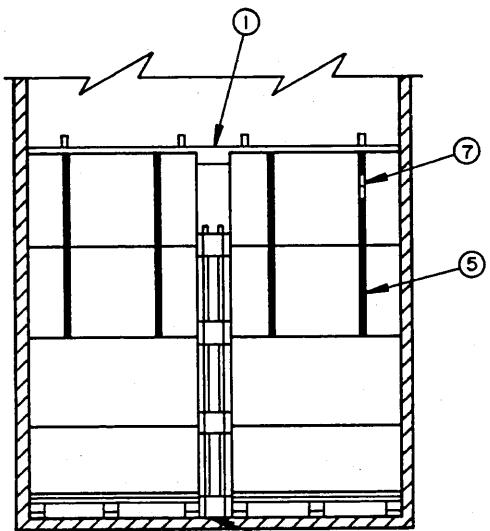
TYPICAL 16-UNIT LOAD OF "OPEN-TYPE" OR BOXED-TYPE PALLET UNITS IN A 40'-0" LONG CONVENTIONAL VAN TRAILER



KEY NUMBERS

- ① FORWARD BLOCKING (1 REQD). SEE THE "FORWARD BLOCKING A" DETAIL ON PAGE 18. SEE SPECIAL NOTE 4 ON PAGE 9.
- ② CRIB FILL FOR 4 PALLETS HIGH BY 2 PALLETS LONG (5 REQD). SEE THE "CRIB FILL" DETAIL ON PAGE 20.
- ③ CRIB FILL FOR 3 PALLETS HIGH BY 1 PALLET LONG (1 REQD). SEE THE "CRIB FILL" DETAIL ON PAGE 20.
- ④ SOLID FILL, 6" WIDE BY TRAILER WIDTH MINUS 1/2" IN LENGTH (AS REQUIRED TO FILL THE VOID AT THE REAR OF THE LOAD). LAMINATE W/1-10d NAIL EVERY 12". SEE SPECIAL NOTE 5 ON PAGE 9. SEE GENERAL NOTE "L" ON PAGE 2.
- ⑤ VERTICAL UNITIZING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (12 REQD). INSTALL SO AS TO ENCIRCLE THE TOP TWO LAYERS OF PALLET UNITS. SEE SPECIAL NOTE 6 ON PAGE 9.
- ⑥ BUNDLING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (4 REQD). SEE SPECIAL NOTE 7 ON PAGE 9.
- ⑦ SEAL FOR 1-1/4" STRAPPING (32 REQD, 2 PER STRAP JOINT). SEE GENERAL NOTE "M" ON PAGE 2.

ISOMETRIC VIEW



SECTION C-C

TYPICAL 84-UNIT LOAD OF BOXED-TYPE PALLET UNITS IN A 40'-0" LONG CONVENTIONAL VAN TRAILER.

LOAD CAPACITY CHART

LINE NO.	CALIBER	DESIGNATION	UNIT WEIGHT IN POUNDS	MAX UNITS PER TRAILER	MAX WEIGHT IN POUNDS
2	75MM	HEP-T150E29 OR T165E29	852	49	41,748
3	75MM	HEP-T151E28	822	51	41,922
9	76MM	HVAP-T T66E3 OR T66E5	850	49	41,650
10	76MM	HEAT-T M496	900	46	41,400
26	81MM	WP M375E2	880	48	42,240
23	90MM	HEAT M371E1	473	88	41,624

● EMPTY WEIGHTS ARE SHOWN. SEE GENERAL NOTE "O" ON PAGE 2.

SPECIAL NOTES:

1. A 40'-0" LONG BY 7'-6" WIDE (INSIDE WIDTH DIMENSION) CONVENTIONAL VAN TRAILER IS SHOWN. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
2. THE TYPICAL LOAD SHOWN IS APPLICABLE FOR BOXED-TYPE PALLET UNITS AS DETAILED BY ORDNANCE CORPS DRAWING NO. F-7548604, AND FOR THE ITEMS AS SPECIFIED IN THE "LOAD CAPACITY CHART" AT LEFT. THE PROCEDURES ARE APPLICABLE FOR LOADS WHICH CONSIST OF MORE THAN TWO LAYERS. SEE SPECIAL NOTE 9.
3. AN 84-UNIT LOAD OF BOXED-TYPE PALLET UNITS MEASURING 41-7/8" LONG BY 41-7/8" WIDE BY 21-5/16" HIGH AND WEIGHING 473 POUNDS IS SHOWN AS TYPICAL. THE ACTUAL QUANTITY THAT CAN BE SHIPPED WILL DEPEND UPON THE WEIGHT AND/OR SIZE OF THE ITEM BEING LOADED AND THE CAPACITY OF THE TRAILER BEING USED. SEE THE "LOAD CAPACITY CHART" AT LEFT FOR GUIDANCE. NOTE THAT THESE PROCEDURES ARE ONLY APPLICABLE FOR LOADS OF MORE THAN TWO LAYERS. SEE SPECIAL NOTE 9.
4. A TRAILER HAVING ROUNDED CORNERS AT THE FORWARD END IS SHOWN, IF THE TRAILER BEING USED IS EQUIPPED WITH A SQUARE FRONT OR WITH AN INSTALLED BULKHEAD, OMIT THE FORWARD BLOCKING, PIECE MARKED ①, AND POSITION THE PALLET UNITS DIRECTLY AGAINST THE FORWARD PORTION OF THE TRAILER.
5. STRUT TYPE REAR BLOCKING, AS SHOWN BY PIECES MARKED ⑤ AND ⑥ ON PAGE 10, WILL BE USED IN LIEU OF THE DEPICTED SOLID FILL, PIECE MARKED ④, WHEN THE SPACE BETWEEN THE LADING AND THE TRAILER DOORS IS 12" OR MORE.
6. VERTICAL UNITIZING STRAPS, PIECES MARKED ⑤, WILL BE APPLIED AROUND THE TOP TWO (2) LAYERS OF A STACK IN EACH ROW WHERE THE NUMBER OF LAYERS IN THE ROW CHANGES BY ONE.
7. THE BUNDLING STRAPS, PIECES MARKED ⑥, WILL BE INSTALLED SO AS TO ENCIRCLE THE REARMOST STACK IN A ROW AND THE SAME NUMBER OF PALLET UNITS IN THE STACK IMMEDIATELY ADJACENT.
8. PALLET UNITS WITHIN THE TOP LAYER WILL BE LOCATED SO AS TO PROVIDE FOR PROPER WEIGHT DISTRIBUTION, IF THE TOP LAYER IS NOT COMPLETE.
9. FOR FULL LOADS OF THE BOXED-TYPE PALLET UNITS OTHER THAN LISTED ABOVE, REFER TO THE "BOXED-TYPE PALLET UNIT INDEX" ON PAGE 38 AND TO THE APPLICABLE PROCEDURES ON PAGES 6 AND 7 AND PAGES 10 THRU 13. THE OUTLOADING PROCEDURES ON PAGES 6 AND 7 WILL BE USED IF THE QUANTITY TO BE SHIPPED OF ANY OF THE ABOVE LISTED ITEMS IS SMALL ENOUGH TO BE CONTAINED IN ONE LAYER; THE PROCEDURES ON PAGES 10 AND 11 WILL BE USED IF THE QUANTITY IS SUCH THAT A FULL OR PARTIAL SECOND LAYER WILL BE REQUIRED. REFER TO PAGES 14 THRU 16 FOR GUIDANCE IN THE SHIPMENT OF ONLY A FEW PALLET UNITS.

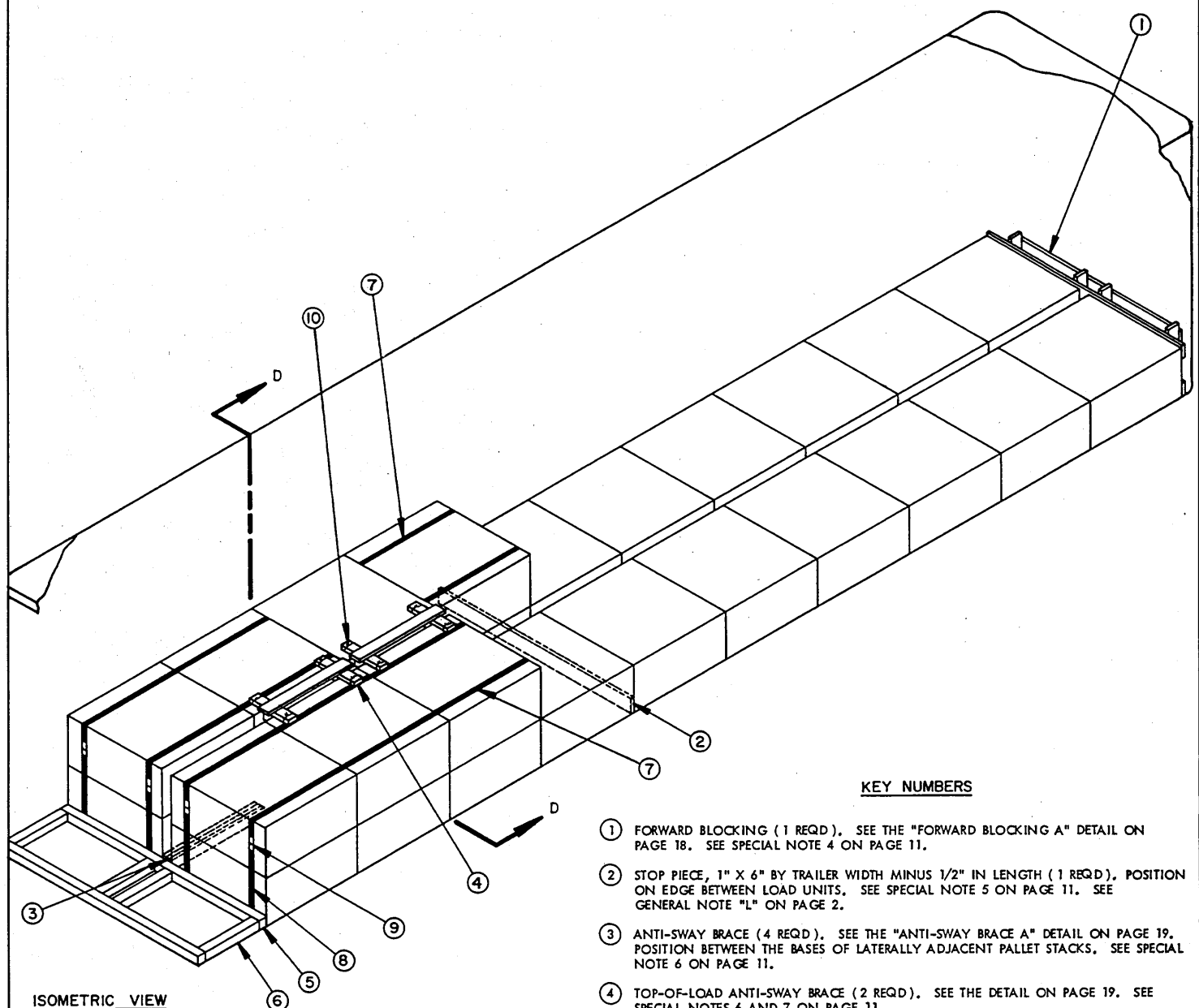
BILL OF MATERIAL (TYPICAL)

LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	155	104
2" X 6"	390	390
NAILS	NO. REQD	POUNDS
10d (3")	760	11-3/4
STEEL STRAPPING, 1-1/4" X .035" OR .031" --- 286' REQD --- 41 LBS		
SEAL FOR 1-1/4" STRAPPING ----- 32 REQD --- 2 LBS		

LOAD AS SHOWN (TYPICAL)

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	84	39,732 LBS
DUNNAGE		1,043 LBS
TOTAL WEIGHT		40,775 LBS

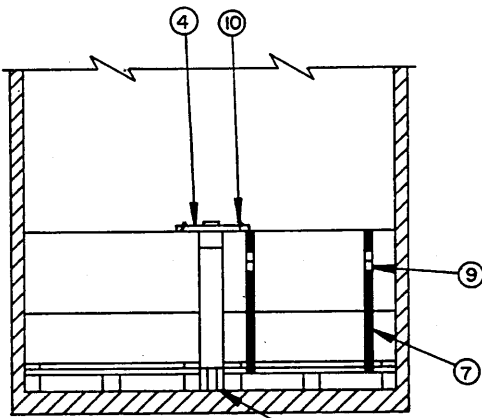
TYPICAL 84-UNIT LOAD OF BOXED-TYPE PALLET UNITS
IN A 40'-0" LONG CONVENTIONAL VAN TRAILER



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD BLOCKING (1 REQD). SEE THE "FORWARD BLOCKING A" DETAIL ON PAGE 18. SEE SPECIAL NOTE 4 ON PAGE 11.
- ② STOP PIECE, 1" X 6" BY TRAILER WIDTH MINUS 1/2" IN LENGTH (1 REQD). POSITION ON EDGE BETWEEN LOAD UNITS. SEE SPECIAL NOTE 5 ON PAGE 11. SEE GENERAL NOTE "L" ON PAGE 2.
- ③ ANTI-SWAY BRACE (4 REQD). SEE THE "ANTI-SWAY BRACE A" DETAIL ON PAGE 19. POSITION BETWEEN THE BASES OF LATERALLY ADJACENT PALLET STACKS. SEE SPECIAL NOTE 6 ON PAGE 11.
- ④ TOP-OF-LOAD ANTI-SWAY BRACE (2 REQD). SEE THE DETAIL ON PAGE 19. SEE SPECIAL NOTES 6 AND 7 ON PAGE 11.
- ⑤ HEADER, 4" X 4" BY TRAILER WIDTH MINUS 1/2" IN LENGTH (2 REQD). SEE SPECIAL NOTE 8 ON PAGE 11.
- ⑥ STRUT, 4" X 4" BY CUT TO FIT (4 REQD). ALIGN WITH AN OUTWARD PALLET SKID AND TOENAIL TO THE HEADERS, PIECES MARKED ⑤, W/2-16d NAILS AT EACH END.
- ⑦ STACK UNITIZING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (4 REQD). SEE SPECIAL NOTE 9 ON PAGE 11.
- ⑧ BUNDLING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (4 REQD). SEE SPECIAL NOTE 10 ON PAGE 11.
- ⑨ SEAL FOR 1-1/4" STRAPPING (16 REQD, 2 PER STRAP JOINT). SEE GENERAL NOTE "M" ON PAGE 2.
- ⑩ TIE WIRE, NO. 14 GAGE 18" LONG (8 REQD). THREAD ONE END OF WIRE UNDER A LATERALLY APPLIED UNIT STRAP, BRING ENDS TOGETHER SO AS TO ENCIRCLE THE SUPPORT PIECE OF THE TOP-OF-LOAD ANTI-SWAY BRACE AND TWIST.



SECTION D-D

TYPICAL 27-UNIT LOAD OF BOXED-TYPE PALLET UNITS IN A 40'-0" LONG CONVENTIONAL VAN TRAILER

LOAD CAPACITY CHART

LINE NO.	CALIBER	DESIGNATION	UNIT WEIGHT IN POUNDS	MAX UNITS PER TRAILER	MAX WEIGHT IN POUNDS
24	2.75 IN	WARHEAD HE XM229	1,961	21	41,181
1	75MM	AP-T M338A1	2,042	20	40,840
5	76MM	HVAP-T M93A1	1,074	39	41,886
6	76MM	AP-T M339E1 OR TP-T M340A1E1	1,534	27	41,418
7	76MM	CANNISTER M363	1,585	26	41,210
11	90MM	HVAP-TM332A1E1 OR HVTP-M333A1E1	1,202	35	42,070
4	105MM	APERS-T M380	1,720	24	41,280
4	105MM	APERS-T XM603E1	1,894	22	41,668
18	105MM	HEAT M456A1 OR M456A1E1	1,209	35	42,315
20*	105MM	APDS-T M392A3	1,080	39	42,120
25	105MM	TP-T M459	2,060	20	41,200
22	120MM	HEAT M469	1,225	34	41,650

* SEE SPECIAL NOTE 13.

● EMPTY WEIGHTS ARE SHOWN. SEE GENERAL NOTE "O" ON PAGE 2.

SPECIAL NOTES:

1. A 40'-0" LONG BY 7'-6" WIDE (INSIDE WIDTH DIMENSION) CONVENTIONAL VAN TRAILER IS SHOWN. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
2. THE TYPICAL LOAD SHOWN IS APPLICABLE FOR BOXED-TYPE PALLET UNITS AS DETAILED BY ORDINANCE CORPS DRAWING NO. F-7548604, AND FOR THE ITEMS AS SPECIFIED IN THE "LOAD CAPACITY CHART" AT LEFT. THE PROCEDURES ARE APPLICABLE FOR LOADS WHICH CONSIST OF A FULL FIRST LAYER AND A PARTIAL OR FULL SECOND LAYER AND WHICH MAY BE CLASSIFIED EITHER AS A FULL LOAD OR AS AN LTL, DEPENDING UPON THE WEIGHT OF THE ITEM BEING LOADED. SEE SPECIAL NOTE 12.
3. A 27-UNIT LOAD OF BOXED-TYPE PALLET UNITS MEASURING 40-1/2" LONG BY 38-1/2" WIDE BY 18-3/4" HIGH AND WEIGHING 1,534 POUNDS IS SHOWN AS TYPICAL. THE ACTUAL QUANTITY THAT CAN BE SHIPPED WILL DEPEND UPON THE WEIGHT AND/OR SIZE OF THE ITEM BEING LOADED AND THE CAPACITY OF THE TRAILER BEING USED. SEE THE "LOAD CAPACITY CHART" AT LEFT FOR GUIDANCE. NOTE THAT THESE PROCEDURES ARE ONLY APPLICABLE FOR 2-LAYER LOADS. SEE SPECIAL NOTE 12.
4. A TRAILER HAVING ROUNDED CORNERS AT THE FORWARD END IS SHOWN. IF THE TRAILER BEING USED IS EQUIPPED WITH A SQUARE FRONT OR WITH AN INSTALLED BULKHEAD, OMIT THE FORWARD BLOCKING, PIECE MARKED ①, AND POSITION THE PALLET UNITS DIRECTLY AGAINST THE FORWARD PORTION OF THE TRAILER.
5. THE STOP PIECE, PIECE MARKED ②, IS REQUIRED SO AS TO RETAIN THE FLOOR LINE ANTI-SWAY BRACING FOR THE 2-LAYER PORTION OF THE LOAD. IF A LOAD CONSISTS OF TWO COMPLETE LAYERS, OMIT THE STOP PIECE; INSTALL ANTI-SWAY BRACE AT ALL LOCATIONS.
6. THE ANTI-SWAY BRACE A SHOWN IN THE LOAD VIEW IS APPLICABLE FOR USE IN AN EXCESS LATERAL SPACE OF FROM 2-1/2" TO 8". FOR A LATERAL VOID OF 8" OR MORE, ANTI-SWAY BRACE B WILL BE USED. SEE THE DETAIL ON PAGE 19. FLOOR LINE ANTI-SWAY BRACES, PIECES MARKED ③, AND TOP OF LOAD ANTI-SWAY BRACES, PIECES MARKED ④, ARE NOT REQUIRED IF THE LATERAL VOID BETWEEN ROWS IN A LOAD IS 2-1/2" OR LESS.
7. TOP-OF-LOAD ANTI-SWAY BRACES ARE REQUIRED FOR ALL VOIDS OVER 2-1/2" BETWEEN ALL LATERALLY ADJACENT STACKS UNLESS BOTH STACKS ARE STRAPPED WITH EITHER STACK UNITIZING STRAPS, PIECES MARKED ⑦, OR BUNDLING STRAPS, PIECES MARKED ⑧. TOP-OF-LOAD ANTI-SWAY BRACES ARE REQUIRED BETWEEN ALL LATERALLY ADJACENT STACKS WHICH ARE OVER 44" (STACKED HEIGHT) WHETHER OR NOT THE STACKS ARE STRAPPED.
8. SOLID FILL TYPE REAR BLOCKING, AS SHOWN BY PIECE MARKED ④ ON PAGE 8, WILL BE USED IN LIEU OF THE DEPICTED HEADERS AND STRUTS, PIECES MARKED ⑤ AND ⑥, WHEN THE SPACE BETWEEN THE LADING AND THE TRAILER DOORS IS LESS THAN 12".
9. STACK UNITIZING STRAPS, PIECES MARKED ⑦, WILL BE APPLIED AROUND THE MOST FORWARD (AND MOST REARWARD IF APPLICABLE) COMPLETE STACK IN EACH ROW WHERE THE NUMBER OF LAYERS IN THE ROW CHANGES BY ONE. IF THE LAST STACK IN A ROW DOES NOT HAVE A FULL STACK LATERALLY ADJACENT TO IT, AND IF THE STACK IS OVER 44" HIGH, THE STACK UNITIZING STRAPS MUST BE INSTALLED SO AS TO ENCIRCLE TWO (2) LONGITUDINALLY ADJACENT STACKS.
10. THE BUNDLING STRAPS, PIECES MARKED ⑧, ARE SHOWN ENCIRCLING TWO COMPLETE STACKS. IF THE HEIGHT OF A PALLET STACK IS LESS THAN THE LENGTH OF THE PALLET UNIT, THE STRAPS MAY BE INSTALLED SO AS TO ENCIRCLE ONLY THE REAR MOST PALLET STACK.
11. PALLET UNITS WITHIN THE TOP LAYER WILL BE LOCATED SO AS TO PROVIDE FOR PROPER WEIGHT DISTRIBUTION, IF THE TOP LAYER IS NOT COMPLETE.
12. FOR FULL LOADS OF THE BOXED-TYPE PALLET UNITS OTHER THAN THOSE LISTED ABOVE, REFER TO THE "BOXED-TYPE PALLET UNIT INDEX" ON PAGE 38 AND TO THE APPLICABLE PROCEDURES ON PAGES 6 THRU 9, AND PAGES 12 AND 13. THE OUTLOADING PROCEDURES ON PAGES 6 AND 7 WILL BE USED IF THE QUANTITY TO BE SHIPPED OF ANY OF THE ABOVE LISTED ITEMS IS SMALL ENOUGH TO BE CONTAINED IN ONE LAYER. REFER TO PAGES 14 THRU 16 FOR GUIDANCE IN THE SHIPMENT OF ONLY A FEW PALLET UNITS.
13. THE OUTLOADING PROCEDURES ON PAGE 10 AND THIS PAGE ARE APPLICABLE FOR THE LOADING OF LINE ITEM NO. 20 ONLY IN TRAILERS WHICH ARE 91" OR GREATER IN WIDTH. REFER TO THE PROCEDURES DEPICTED ON PAGES 12 AND 13 IF A SHIPMENT IS TO BE MADE IN A NARROWER TRAILER.

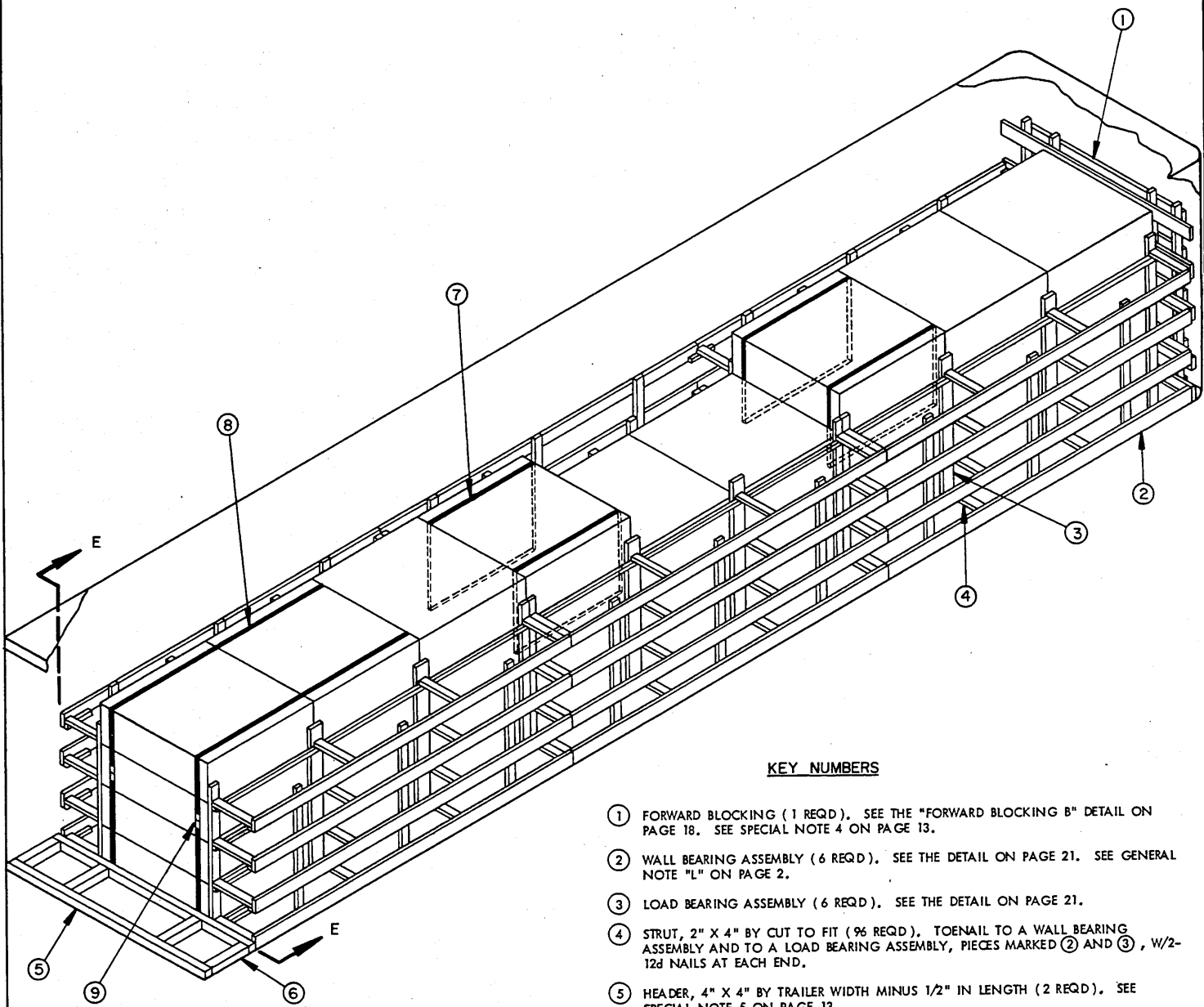
BILL OF MATERIAL (TYPICAL)

LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	6	2
1" X 6"	8	4
2" X 4"	55	37
2" X 6"	28	28
4" X 4"	34	46
NAILS	NO. REQD	POUNDS
6d (2")	16	1/4
10d (3")	80	1-1/4
12d (3-1/4")	16	1/4
16d (3-1/2")	16	1/2
STEEL STRAPPING, 1-1/4" X .035" OR .031" -----	112' REQD	16 LBS
SEAL FOR 1-1/4" STRAPPING -----	16 REQD	1 LB
WIRE, NO. 14 GAGE -----	12' REQD	NIL

LOAD AS SHOWN (TYPICAL)

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT -----	27	41,418 LBS
DUNNAGE -----		253 LBS
TOTAL WEIGHT -----		41,671 LBS

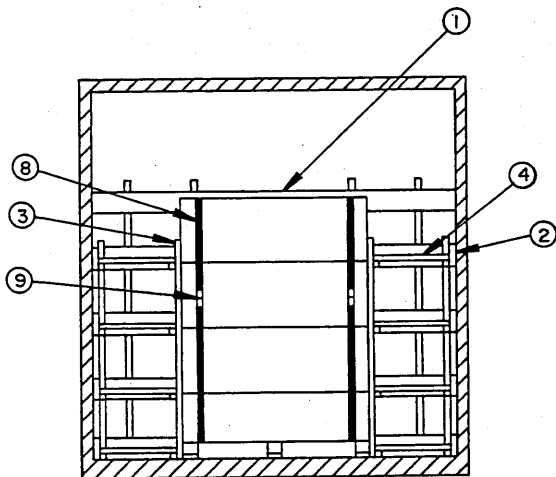
TYPICAL 27-UNIT LOAD OF BOXED-TYPE PALLET UNITS IN A
40'-0" LONG CONVENTIONAL VAN TRAILER



ISOMETRIC VIEW

KEY NUMBERS

- ① FORWARD BLOCKING (1 REQD). SEE THE "FORWARD BLOCKING B" DETAIL ON PAGE 18. SEE SPECIAL NOTE 4 ON PAGE 13.
- ② WALL BEARING ASSEMBLY (6 REQD). SEE THE DETAIL ON PAGE 21. SEE GENERAL NOTE "L" ON PAGE 2.
- ③ LOAD BEARING ASSEMBLY (6 REQD). SEE THE DETAIL ON PAGE 21.
- ④ STRUT, 2" X 4" BY CUT TO FIT (96 REQD). TOENAIL TO A WALL BEARING ASSEMBLY AND TO A LOAD BEARING ASSEMBLY, PIECES MARKED ② AND ③, W/2-12d NAILS AT EACH END.
- ⑤ HEADER, 4" X 4" BY TRAILER WIDTH MINUS 1/2" IN LENGTH (2 REQD). SEE SPECIAL NOTE 5 ON PAGE 13.
- ⑥ STRUT, 4" X 4" BY CUT TO FIT (4 REQD). ALIGN THE CENTRALLY LOCATED STRUTS WITH THE OUTWARD PALLET SKIDS. TOENAIL TO THE HEADERS, PIECES MARKED ⑤, W/2-16d NAILS AT EACH END.
- ⑦ VERTICAL UNITIZING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (4 REQD). INSTALL SO AS TO ENCIRCLE THE TOP TWO LAYERS OF A STACK. SEE SPECIAL NOTE 6 ON PAGE 13.
- ⑧ BUNDLING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (2 REQD). INSTALL SO AS TO ENCIRCLE THE REARMOST TWO COMPLETE STACKS. SEE SPECIAL NOTE 7 ON PAGE 13.
- ⑨ SEAL FOR 1-1/4" STRAPPING (12 REQD, 2 PER STRAP JOINT). SEE GENERAL NOTE "M" ON PAGE 2.



SECTION E-E

TYPICAL 34-UNIT LOAD OF BOXED-TYPE PALLET UNITS IN A
40'-0" LONG CONVENTIONAL VAN TRAILER

LOAD CAPACITY CHART

LINE NO.	CALIBER	DESIGNATION	UNIT WEIGHT IN POUNDS	MAX UNITS PER TRAILER	MAX WEIGHT IN POUNDS
14	90MM	HEAT M431E1	1,320	32	42,240
15	105MM	HEP-T M345 OR M345B1	964	36	34,704
16	105MM	HEAT M341	1,197	27	32,319
20*	105MM	APDS-T M392A3	1,080	39	42,120
19	106MM	HEP-T M346A1	964	36	34,704

* SEE SPECIAL NOTE 9.

● EMPTY WEIGHTS ARE SHOWN. SEE GENERAL NOTE "O" ON PAGE 2.

SPECIAL NOTES:

1. A 40'-0" LONG BY 7'-6" WIDE (INSIDE WIDTH DIMENSION) CONVENTIONAL VAN TRAILER IS SHOWN. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
2. THE TYPICAL LOAD SHOWN IS APPLICABLE FOR BOXED-TYPE PALLET UNITS AS DETAILED BY ORDNANCE CORPS DRAWING NO. F-7548604 AND FOR THE ITEMS AS SPECIFIED IN THE "LOAD CAPACITY CHART" AT LEFT. THE PROCEDURES ARE APPLICABLE ONLY FOR THOSE PALLET UNITS WHICH ARE TOO WIDE TO BE LOADED TWO UNITS WIDE IN A TRAILER AND ONLY FOR LOADS CONSISTING OF TWO OR MORE LAYERS. SEE SPECIAL NOTE 8.
3. A 34-UNIT LOAD OF BOXED-TYPE PALLET UNITS MEASURING 46-5/8" LONG BY 45-1/4" WIDE BY 18-5/16" HIGH AND WEIGHING 1,080 POUNDS IS SHOWN AS TYPICAL. THE ACTUAL QUANTITY THAT CAN BE SHIPPED WILL DEPEND UPON THE WEIGHT AND/OR SIZE OF THE ITEM BEING LOADED AND THE CAPACITY OF THE TRAILER BEING USED. SEE THE "LOAD CAPACITY CHART" AT LEFT FOR GUIDANCE. NOTE THAT THESE PROCEDURES ARE ONLY APPLICABLE FOR 1-WIDE LOADS CONSISTING OF TWO OR MORE LAYERS. SEE SPECIAL NOTE 8.
4. A TRAILER HAVING ROUNDED CORNERS AT THE FORWARD END IS SHOWN. IF THE TRAILER BEING USED IS EQUIPPED WITH A SQUARE FRONT OR WITH AN INSTALLED BULKHEAD, OMIT THE FORWARD BLOCKING, PIECE MARKED ①, AND POSITION THE PALLET UNITS DIRECTLY AGAINST THE FORWARD PORTION OF THE TRAILER.
5. SOLID FILL TYPE REAR BLOCKING, AS SHOWN BY PIECE MARKED ④ ON PAGE 8, WILL BE USED IN LIEU OF THE DEPICTED HEADERS AND STRUTS, PIECES MARKED ③ AND ⑥, WHEN THE SPACE BETWEEN THE LADING AND THE TRAILER DOORS IS LESS THAN 12".
6. VERTICAL UNITIZING STRAPS, PIECES MARKED ⑦, WILL BE APPLIED AROUND THE TOP TWO (2) LAYERS OF A STACK WHERE THE NUMBER OF LAYERS IN THE ROW CHANGES BY ONE.
7. THE BUNDLING STRAPS, PIECES MARKED ⑧, WILL BE INSTALLED SO AS TO ENCIRCLE THE REARMOST STACK AND THE SAME NUMBER OF PALLET UNITS IN THE STACK IMMEDIATELY ADJACENT. IF THE HEIGHT OF A PALLET STACK IS LESS THAN THE LENGTH OF THE PALLET UNIT, THE STRAPS MAY BE INSTALLED SO AS TO ENCIRCLE ONLY THE REARMOST PALLET STACK.
8. FOR FULL LOADS OF THE BOXED-TYPE PALLET UNITS OTHER THAN LISTED ABOVE, REFER TO THE "BOXED-TYPE PALLET UNIT INDEX" ON PAGE 38 AND TO THE APPLICABLE PROCEDURES ON PAGES 6 THRU 11. THE 1-WIDE PORTION OF THE OUTLOADING PROCEDURES ON PAGES 6 AND 7 WILL BE USED IF THE QUANTITY TO BE SHIPPED OF THE ABOVE LISTED ITEMS IS SMALL ENOUGH TO BE CONTAINED IN ONE LAYER. REFER TO PAGES 14 THRU 16 FOR GUIDANCE IN THE SHIPMENT OF ONLY A FEW PALLET UNITS.
9. THE OUTLOADING PROCEDURES ON PAGE 12 AND THIS PAGE ARE APPLICABLE FOR FULL LOADS OF LINE ITEM NO. 20 ONLY IN TRAILERS WHICH ARE LESS THAN 91" WIDE. REFER TO THE PROCEDURES DEPICTED ON PAGES 10 AND 11 IF TRAILERS 91" OR WIDER ARE FURNISHED FOR LOADING.

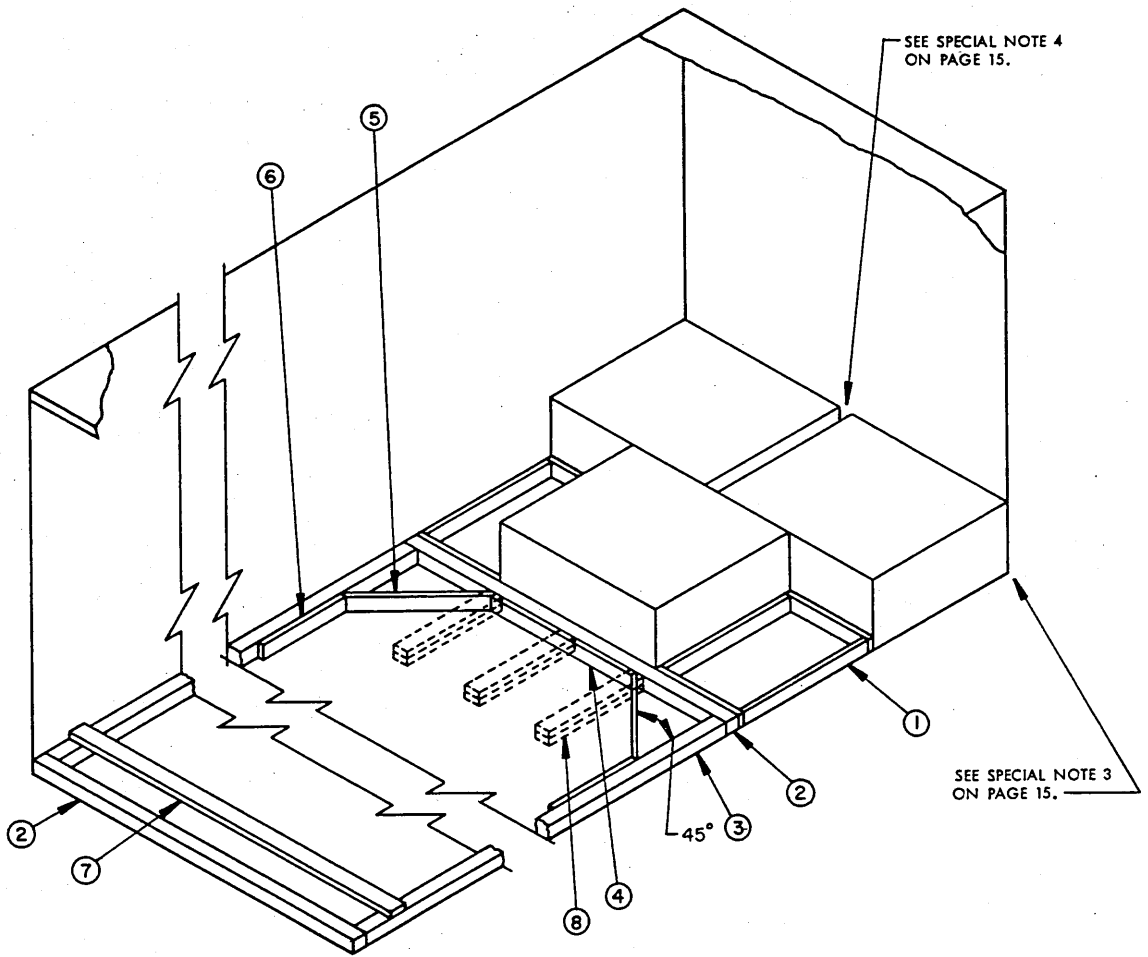
BILL OF MATERIAL (TYPICAL)

LUMBER	LINEAR FEET	BOARD FEET
2" X 2"	470	157
2" X 4"	380	254
2" X 6"	498	498
4" X 4"	31	42
NAILS	NO. REQD	POUNDS
10d (3")	782	12-1/4
12d (3-1/4")	384	6-1/2
16d (3-1/2")	16	1/2
STEEL STRAPPING, 1-1/4" X .035" OR .031" - 118' REQD -- 17 LBS		
SEAL FOR 1-1/4" STRAPPING ----- 12 REQD -- NIL		

LOAD AS SHOWN (TYPICAL)

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	34	36,720 LBS
DUNNAGE		1,939 LBS
TOTAL WEIGHT		38,659 LBS

TYPICAL 34-UNIT LOAD OF BOXED-TYPE PALLET UNITS IN A
40'-0" LONG CONVENTIONAL VAN TRAILER



ISOMETRIC VIEW

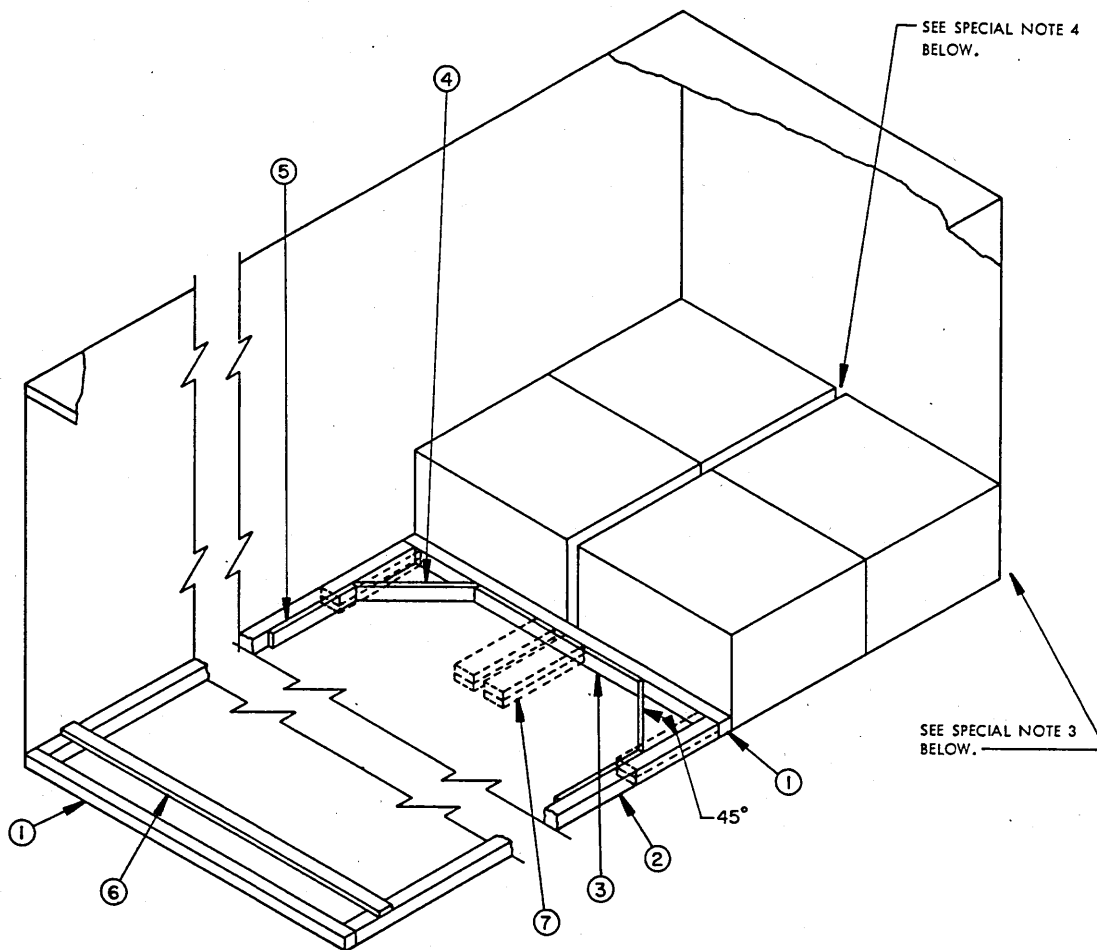
SPECIAL NOTES:

1. A 7'-6" WIDE (INSIDE WIDTH DIMENSION) CONVENTIONAL VAN TRAILER IS SHOWN. TRAILERS OF OTHER WIDTHS CAN BE USED.
2. THE TYPICAL LTL LOAD SHOWN IS APPLICABLE FOR EITHER BOXED-TYPE OR "OPEN-TYPE" PALLET UNITS.
3. THE ANTI-SWAY BRACES, PIECES MARKED ①, ARE ONLY REQUIRED WHEN SHIPPING AN UNEVEN NUMBER OF PALLET UNITS IN THE CONFIGURATION SHOWN.
4. THE REAR BLOCKING, PIECES MARKED ② THRU ⑦, IS ADEQUATE FOR RETAINING A MAXIMUM LTL LOAD OF 26,000 POUNDS.
5. THE BACK-UP CLEATS, PIECES MARKED ⑧, ARE FOR USE IN A TRAILER EQUIPPED WITH A NAILABLE FLOOR AND MAY BE USED IN LIEU OF REAR PIECE ② AND PIECES MARKED ③ THRU ⑦. THREE (3) 30" LONG BACK-UP CLEATS ARE ADEQUATE FOR RETAINING NOT MORE THAN 10,800 POUNDS. THREE (3) 36" LONG BACK-UP CLEATS WITH 9 NAILS IN EACH LAYER ARE ADEQUATE FOR RETAINING NOT MORE THAN 14,000 POUNDS.
6. ALL LTL LOADS, REGARDLESS OF THEIR SIZE, REQUIRE ONE STRUT BRACE POSITIONED NEAR THE REAR OF THE TRAILER. IF THE SIDE STRUTS ARE LONGER THAN 7'-0", AN ADDITIONAL STRUT BRACE, PIECE MARKED ⑦ ON THIS PAGE OR PIECE MARKED ⑥ ON PAGE 15, MUST BE APPLIED FOR EVERY 7'-0" OF SIDE STRUT LENGTH.
7. THE SIDE STRUTS, PIECES MARKED ③ ON THIS PAGE OR PIECES MARKED ② ON PAGE 15, 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 4" X 24" PIECE ON TOP OF THE JOINT OF THE SIDE STRUTS AND NAILING IT TO THE SIDE STRUTS W/4-10d NAILS AT EACH END.

KEY NUMBERS

- ① ANTI-SWAY BRACE (2 REQD). SEE THE "ANTI-SWAY BRACE B" DETAIL ON PAGE 19.
- ② HEADER, 4" X 4" BY TRAILER WIDTH MINUS 1/2" IN LENGTH (2 REQD).
- ③ SIDE STRUT, 4" X 4" BY CUT TO FIT BETWEEN THE FORWARD AND REAR HEADERS, PIECES MARKED ② (2 REQD). TOENAIL TO THE HEADERS W/2-16d NAILS AT EACH END. SEE SPECIAL NOTE 7 AT LEFT.
- ④ CENTER CLEAT, 2" X 4" X 40" (1 REQD). NAIL TO A HEADER, PIECE MARKED ②, W/7-10d NAILS.
- ⑤ DIAGONAL BRACE, 2" X 4" BY CUT TO FIT (2 REQD). DOUBLE BEVEL EACH END WITH 45° CUTS. INSTALL AT A 45° ANGLE AS SHOWN AND TOENAIL TO A HEADER AND A SIDE STRUT, PIECES MARKED ② AND ③, W/2-16d NAILS AT EACH END.
- ⑥ SIDE CLEAT, 2" X 4" X 24" (2 REQD). NAIL TO A SIDE STRUT, PIECE MARKED ③, W/8-10d NAILS.
- ⑦ STRUT BRACE, 2" X 4" BY TRAILER WIDTH MINUS 1/2" IN LENGTH (MINIMUM OF ONE REQUIRED). POSITION NEAR REAR OF TRAILER AND NAIL TO THE SIDE STRUTS, PIECES MARKED ③, W/2-12d NAILS AT EACH END. SEE SPECIAL NOTE 6 AT LEFT.
- ⑧ BACK-UP CLEAT, 2" X 4" X 30" (DOUBLED) (3 REQD). ALIGN WITH CONTAINER SKIDS AND NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/7-12d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER. TOENAIL THE TOP PIECE TO A HEADER, PIECE MARKED ②, W/2-12d NAILS. SEE SPECIAL NOTE 5 AT LEFT.

TYPICAL 3-UNIT LOAD OF "OPEN-TYPE" OR BOXED-TYPE PALLET UNITS IN A CONVENTIONAL VAN TRAILER



ISOMETRIC VIEW

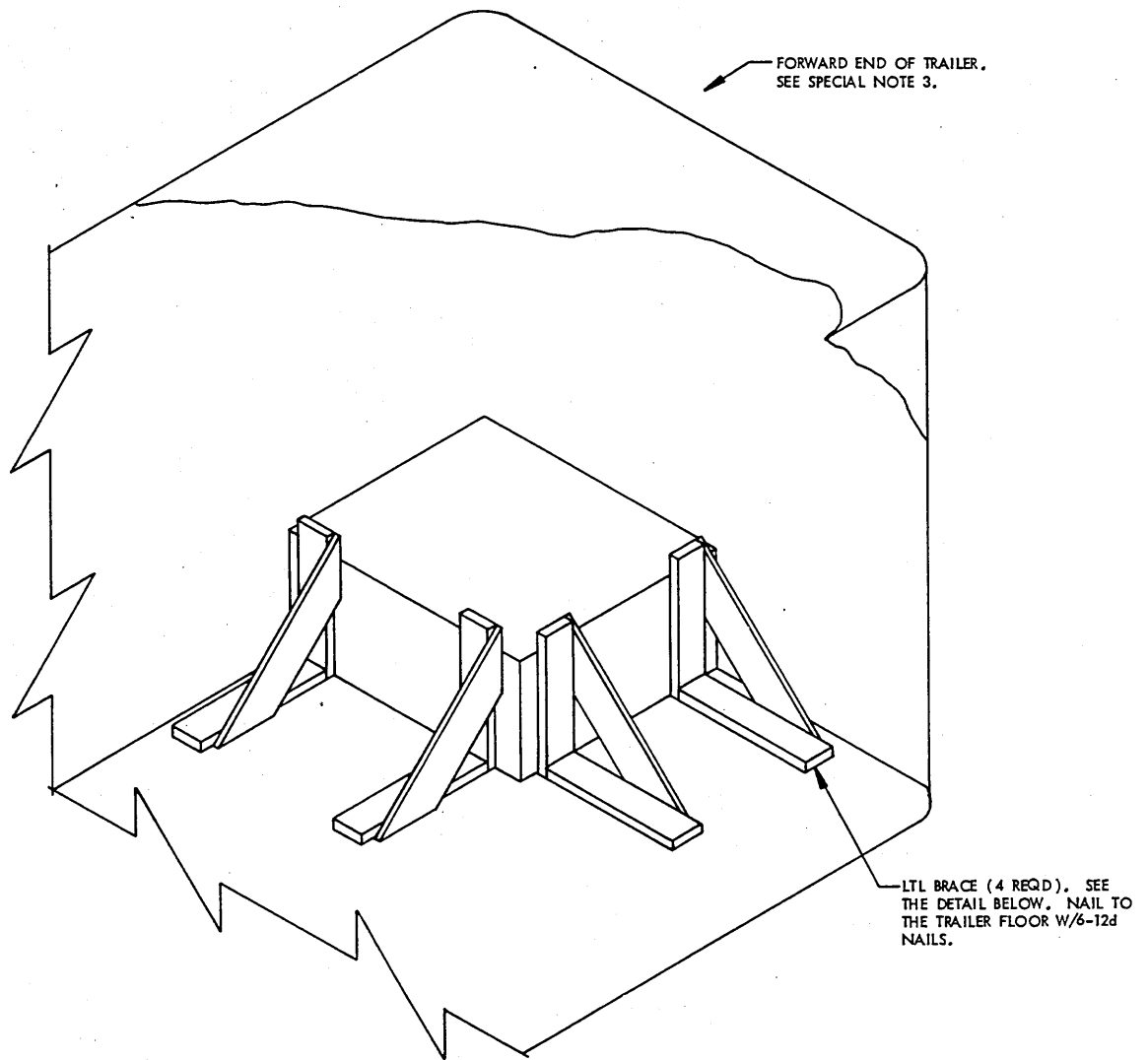
KEY NUMBERS

SPECIAL NOTES:

1. A 7'-6" WIDE (INSIDE WIDTH DIMENSION) CONVENTIONAL VAN TRAILER IS SHOWN. TRAILERS OF OTHER WIDTHS CAN BE USED.
2. THE TYPICAL LTL LOAD SHOWN IS APPLICABLE FOR EITHER BOXED-TYPE OR "OPEN-TYPE" PALLET UNITS.
3. A TRAILER HAVING SQUARE CORNERS AT THE FORWARD END IS SHOWN. IF THE TRAILER IS EQUIPPED WITH ROUNDED CORNERS, A FORWARD BLOCKING ASSEMBLY MUST BE INSTALLED AT THE FRONT OF THE TRAILER PRIOR TO POSITIONING OF THE PALLET UNITS. SEE THE "FORWARD BLOCKING A" DETAIL ON PAGE 18.
4. LATERAL BLOCKING MUST BE EMPLOYED IF THE EXCESS SPACE BETWEEN THE TWO ROWS OF PALLET UNITS IS FOUR INCHES (4") OR MORE. SEE THE "ANTI-SWAY BRACE A" DETAIL ON PAGE 19 FOR AN ASSEMBLY TO BE USED IF THE EXCESS LATERAL SPACE IS LESS THAN EIGHT INCHES (8"). USE "ANTI-SWAY BRACE B" AS DETAILED ON PAGE 19 FOR A WIDER SPACE.
5. THE REAR BLOCKING, PIECES MARKED ① THRU ⑥, IS ADEQUATE FOR RETAINING A MAXIMUM LTL LOAD OF 26,000 POUNDS.
6. THE BACK-UP CLEATS, SHOWN AS PIECES MARKED ⑦, ARE FOR USE IN A TRAILER EQUIPPED WITH A NAILABLE FLOOR AND MAY BE USED IN LIEU OF REAR PIECE ① AND PIECES MARKED ② THRU ⑥. FOUR (4) 30" LONG BACK-UP CLEATS ARE ADEQUATE FOR RETAINING NOT MORE THAN 15,600 POUNDS. FOUR (4) 36" BACK-UP CLEATS WITH 9 NAILS IN EACH LAYER ARE ADEQUATE FOR RETAINING NOT MORE THAN 20,000 POUNDS.

- ① HEADER, 4" X 4" BY TRAILER WIDTH MINUS 1/2" IN LENGTH (2 REQD).
- ② SIDE STRUT, 4" X 4" BY CUT TO FIT BETWEEN THE FORWARD AND REAR HEADERS, PIECES MARKED ① (2 REQD). TOENAIL TO THE HEADERS W/2-16d NAILS AT EACH END. SEE SPECIAL NOTE 7 ON PAGE 14.
- ③ CENTER CLEAT, 2" X 4" X 48" (1 REQD). NAIL TO A HEADER, PIECE MARKED ①, W/9-10d NAILS.
- ④ DIAGONAL BRACE, 2" X 4" BY CUT TO FIT (2 REQD). DOUBLE BEVEL EACH END WITH 45° CUTS. INSTALL AT A 45° ANGLE AS SHOWN AND TOENAIL TO A HEADER AND A SIDE STRUT W/2-16d NAILS AT EACH END.
- ⑤ SIDE CLEAT, 2" X 4" X 24" (2 REQD). NAIL TO A SIDE STRUT, PIECE MARKED ②, W/8-10d NAILS.
- ⑥ STRUT BRACE, 2" X 4" BY TRAILER WIDTH MINUS 1/2" IN LENGTH (MINIMUM OF ONE REQUIRED). POSITION NEAR REAR OF TRAILER AND NAIL TO THE SIDE STRUTS W/2-12d NAILS AT EACH END. SEE SPECIAL NOTE 6 ON PAGE 14.
- ⑦ BACK-UP CLEAT, 2" X 4" X 30" (DOUBLED) (4 REQD). ALIGN WITH AN OUTWARD CONTAINER SKID AND NAIL THE FIRST PIECE TO THE TRAILER FLOOR W/7-12d NAILS. NAIL THE SECOND PIECE TO THE FIRST IN A LIKE MANNER. TOENAIL TO A HEADER W/2-12d NAILS. SEE SPECIAL NOTE 6 AT LEFT.

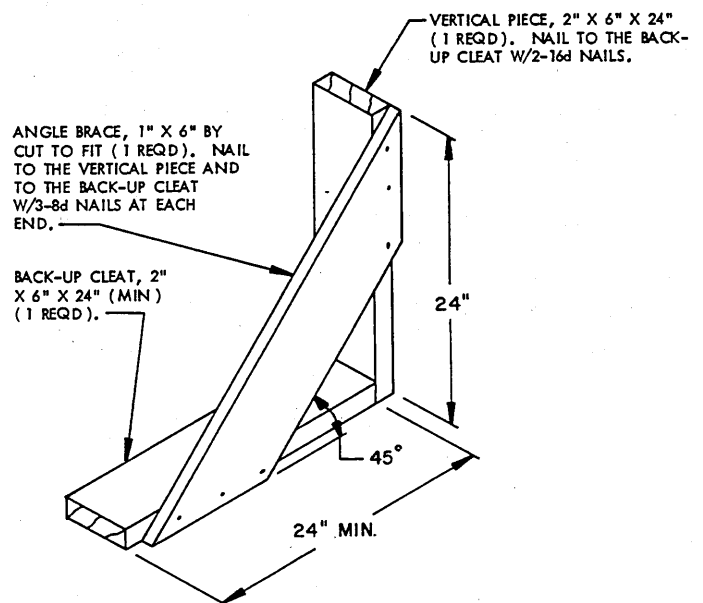
TYPICAL 4-UNIT LOAD OF "OPEN-TYPE" OR BOXED-TYPE PALLET UNITS IN A CONVENTIONAL VAN TRAILER



ISOMETRIC VIEW

SPECIAL NOTES:

1. A 7'-6" WIDE (INSIDE WIDTH DIMENSION) CONVENTIONAL VAN TRAILER WHICH HAS A NAILABLE FLOOR IS SHOWN. TRAILERS OF OTHER WIDTHS CAN BE USED.
2. THE TYPICAL 1-UNIT LOAD SHOWN IS APPLICABLE FOR EITHER BOXED-TYPE OR "OPEN-TYPE" PALLET UNITS. **CAUTION:** THESE PROCEDURES ARE LIMITED TO PALLET UNITS WHICH ARE 24" OR LESS IN HEIGHT.
3. A TRAILER HAVING ROUNDED FRONT CORNERS IS SHOWN. IF THE INSIDE CORNERS ARE OF SUCH A DESIGN THAT A PALLET UNIT WILL NOT FIT INTO THE CORNER, A FORWARD BLOCKING ASSEMBLY MUST BE INSTALLED. SEE THE "FORWARD BLOCKING A" DETAIL ON PAGE 18.
4. MORE THAN ONE PALLET UNIT 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 SIDEWALLS. THE PROPER ANTI-SWAY BRACES, IF REQUIRED, WILL BE POSITIONED BETWEEN THE LATERALLY ADJACENT UNITS. SEE THE "ANTI-SWAY BRACE A" AND "ANTI-SWAY BRACE B" DETAILS ON PAGE 19.
5. EACH LTL BRACE AS APPLIED FOR LONGITUDINAL BRACING WILL SUPPORT 2,000 POUNDS OF LADING; HOWEVER, NOT LESS THAN TWO (2) BRACES WILL BE USED AGAINST EACH PALLET UNIT ACROSS THE WIDTH OF THE TRAILER.



LTL BRACE

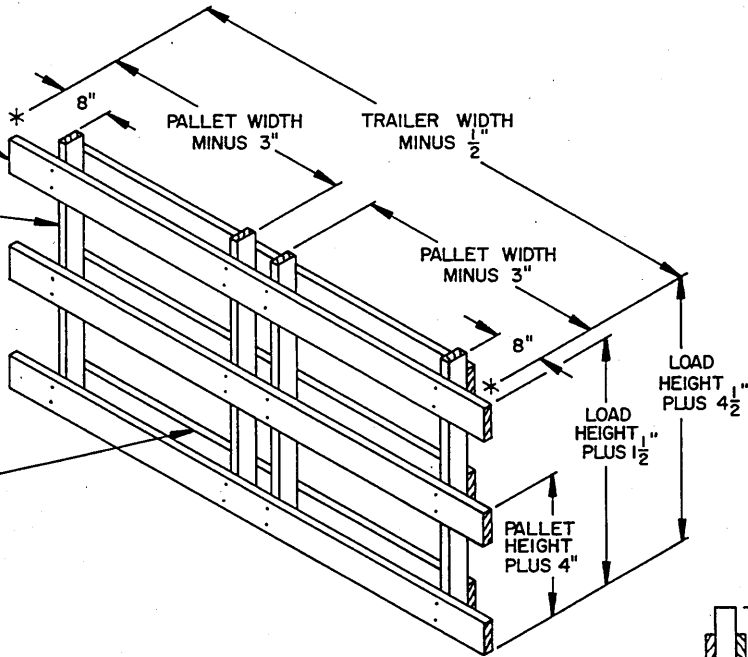
TYPICAL 1-UNIT LOAD OF "OPEN-TYPE" OR BOXED-TYPE PALLET UNITS IN A CONVENTIONAL VAN TRAILER

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REAR HORIZONTAL PIECE, 2" X 6" BY TRAILER WIDTH MINUS 1/2" IN LENGTH (AS REQD). NAIL TO THE VERTICAL PIECES W/2-10d NAILS AT EACH JOINT.

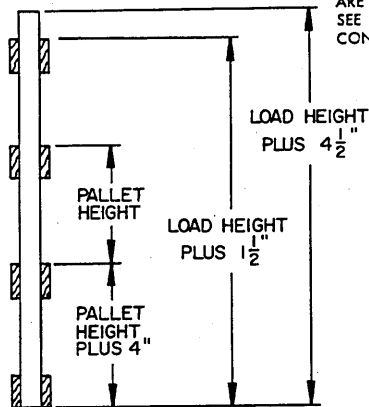
VERTICAL PIECE, 2" X 4" BY LOAD HEIGHT PLUS 4-1/2" (4 REQD).

FRONT HORIZONTAL PIECE, 2" X 6" BY CUT TO FIT (AS REQD). POSITION AT SAME HEIGHT AS A REAR HORIZONTAL AND NAIL TO THE VERTICAL PIECES W/2-10d NAILS AT EACH JOINT.

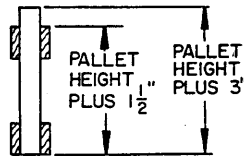


FORWARD BLOCKING A

THE DEPICTED GATE IS FOR USE WITH LOADS WHICH ARE 2 ROWS WIDE AND 2 PALLET UNITS HIGH. SEE THE "END VIEW" DETAILS BELOW IF LOADS CONSIST OF MORE OR LESS LAYERS.

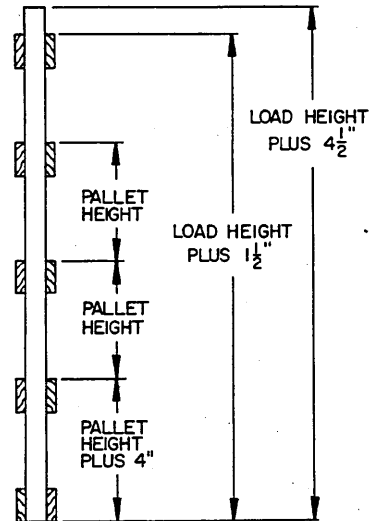


END VIEW



END VIEW

THIS FORWARD BLOCKING IS FOR LOADS WHICH ARE ONE (1) PALLET UNIT HIGH.



END VIEW

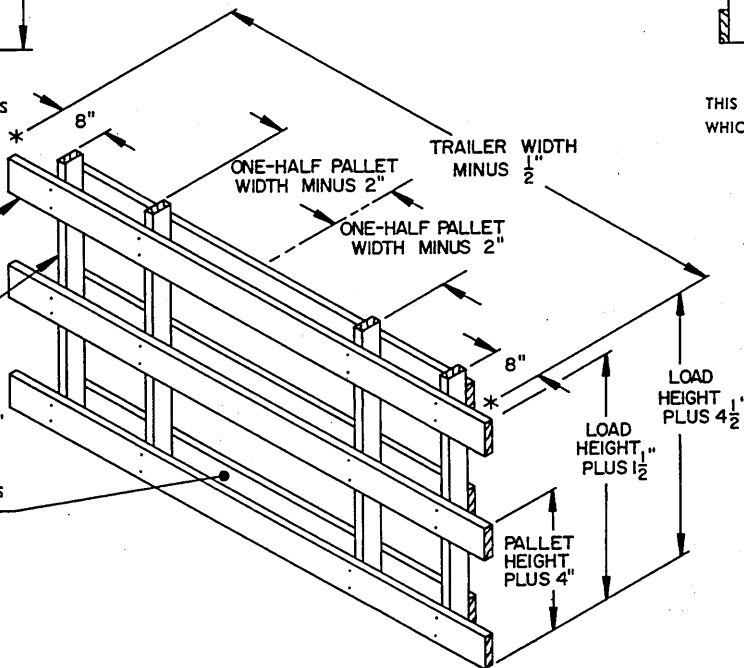
THIS FORWARD BLOCKING IS FOR LOADS WHICH ARE FOUR (4) PALLET UNITS HIGH.

THIS FORWARD BLOCKING IS FOR LOADS WHICH ARE THREE (3) PALLET UNITS HIGH.

REAR HORIZONTAL PIECE, 2" X 6" BY TRAILER WIDTH MINUS 1/2" IN LENGTH (AS REQD). NAIL TO THE VERTICAL PIECES W/2-10d NAILS AT EACH JOINT.

VERTICAL PIECE, 2" X 4" BY LOAD HEIGHT PLUS 4-1/2" (4 REQD).

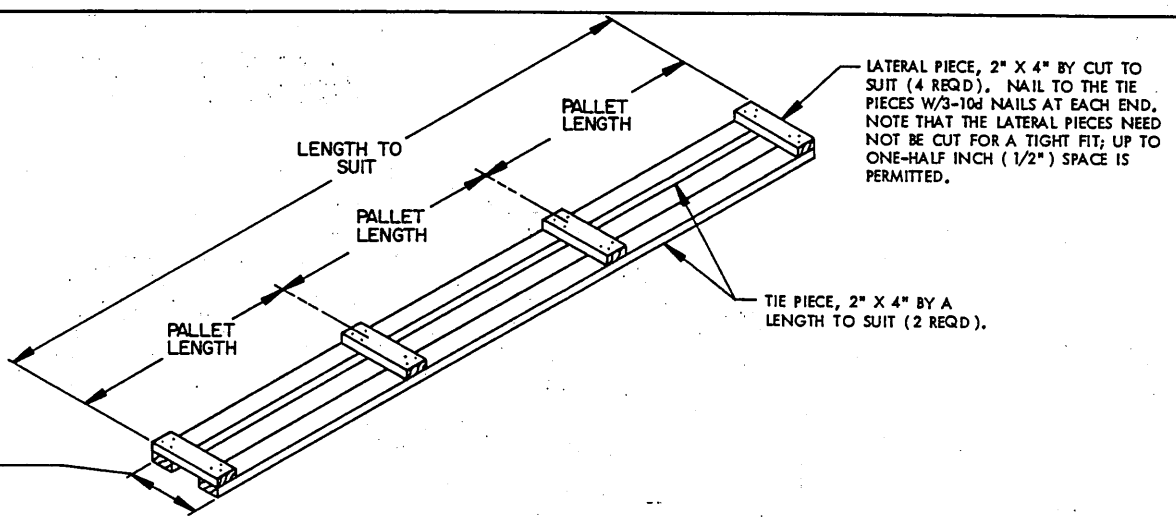
FRONT HORIZONTAL PIECE, 2" X 6" BY CUT TO FIT (AS REQD). POSITION AT SAME HEIGHT AS A REAR HORIZONTAL AND NAIL TO THE VERTICAL PIECES W/2-10d NAILS AT EACH JOINT.



FORWARD BLOCKING B

THE DEPICTED GATE IS FOR USE WITH LOADS WHICH ARE 1 ROW WIDE AND 2 PALLET UNITS HIGH. SEE THE "END VIEW" DETAILS ABOVE IF LOADS CONSIST OF MORE OR LESS LAYERS.

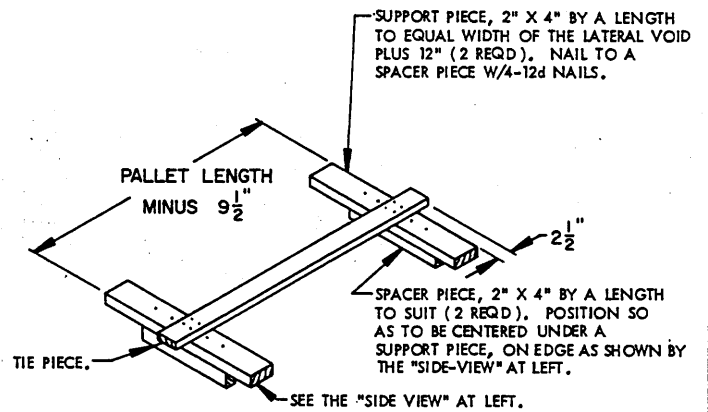
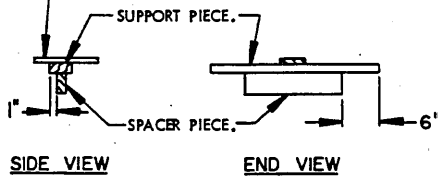
WIDTH TO FILL THE VOID BETWEEN TRAILER SIDEWALL AND PALLET SKID.



SIDE BLOCKING

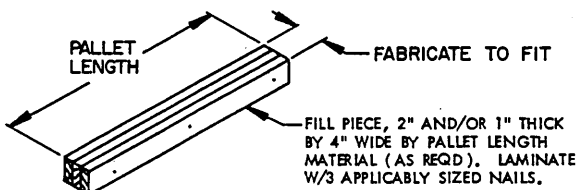
THIS ASSEMBLY IS DESIGNED FOR USE IN THE LOAD SHOWN ON PAGE 6. THE DEPICTED ASSEMBLY IS DESIGNED FOR THE BRACING OF THREE (3) PALLETS; THE ASSEMBLY MAY BE ADAPTED AS NECESSARY FOR BRACING AGAINST ONE OR TWO PALLET UNITS.

TIE PIECE, 1" X 4" BY PALLET LENGTH MINUS 4-1/2" (1 REQD). NAIL TO THE SUPPORT PIECES W/4-6d NAILS AT EACH JOINT.



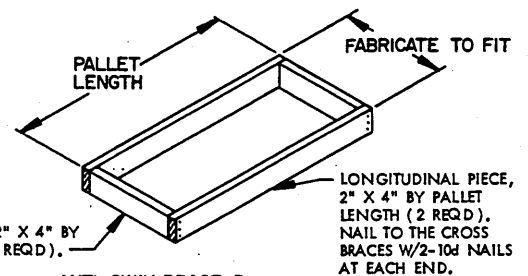
TOP-OF-LOAD ANTI-SWAY BRACE

THIS ASSEMBLY IS DESIGNED FOR USE BETWEEN THE TOPS OF Laterally ADJACENT UNITS IN THE LOADS SHOWN ON PAGES 10 AND 30.



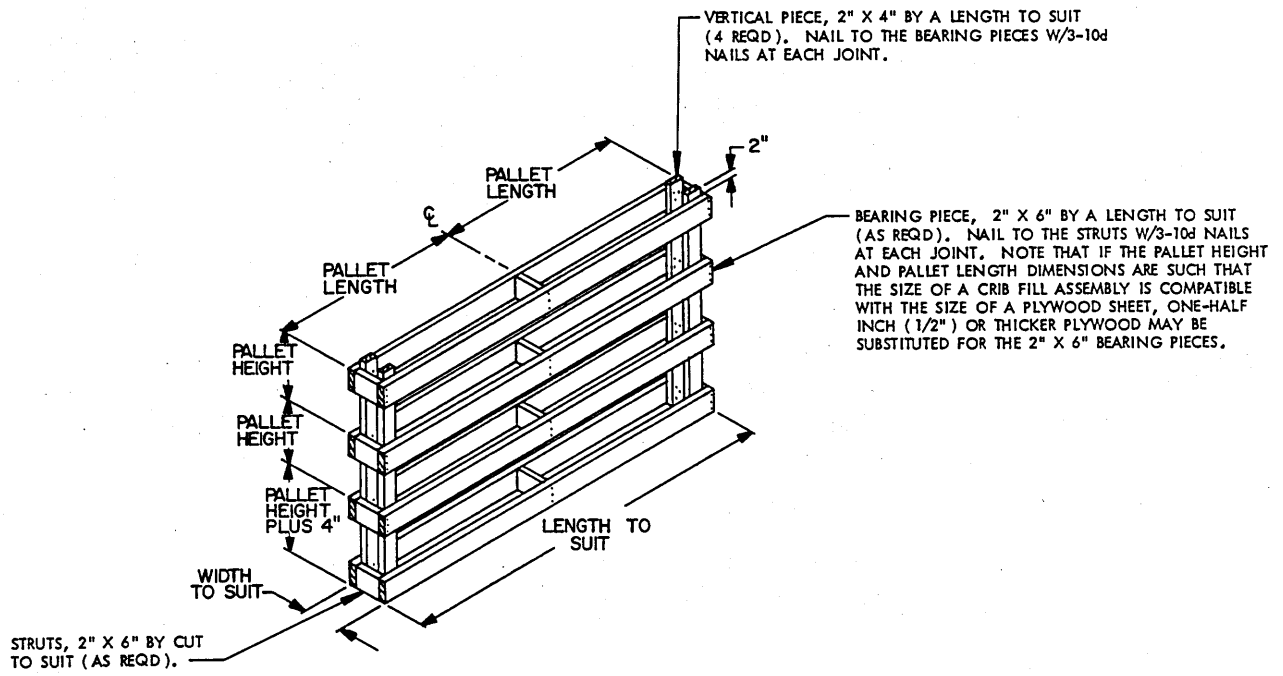
ANTI-SWAY BRACE A

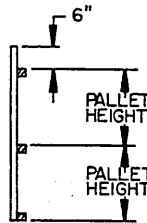
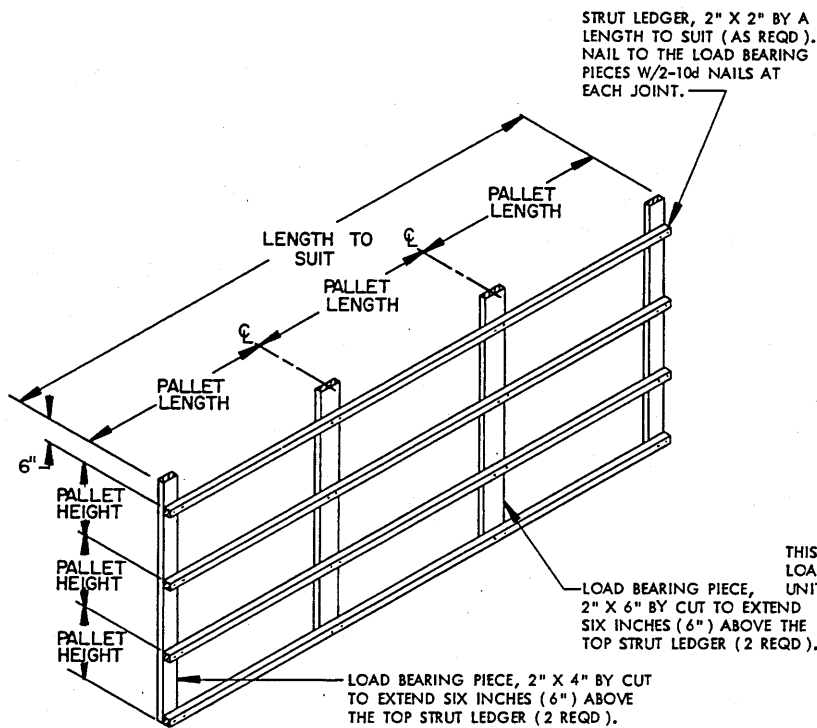
THIS ASSEMBLY IS DESIGNED FOR USE BETWEEN Laterally ADJACENT PALLET UNITS WHEN THE VOID BETWEEN THE UNITS IS LESS THAN EIGHT INCHES (8"). NOTE THAT AN ASSEMBLY NEED NOT BE CONSTRUCTED FOR A TIGHT FIT; UP TO ONE-HALF INCH (1/2") SPACE IS PERMITTED.



ANTI-SWAY BRACE B

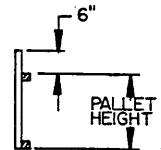
THIS ASSEMBLY IS DESIGNED FOR USE BETWEEN Laterally ADJACENT PALLET UNITS OR BETWEEN A PALLET UNIT AND THE TRAILER SIDEWALL WHEN THE VOID IS EIGHT INCHES (8") OR MORE. NOTE THAT AN ASSEMBLY NEED NOT BE CONSTRUCTED FOR A TIGHT FIT; UP TO ONE-HALF INCH (1/2") SPACE IS PERMITTED.





END VIEW

THIS LOAD BEARING ASSEMBLY IS FOR LOADS WHICH ARE THREE (3) PALLET UNITS HIGH.

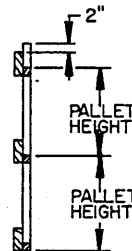
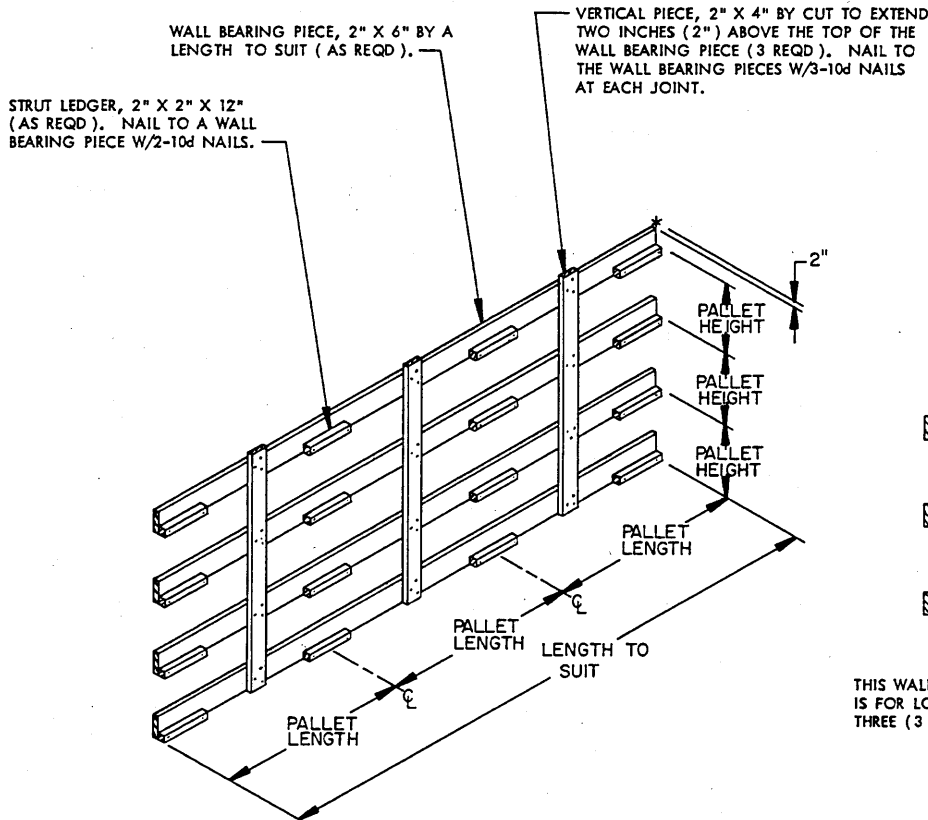


END VIEW

THIS LOAD BEARING ASSEMBLY IS FOR LOADS WHICH ARE TWO (2) PALLET UNITS HIGH.

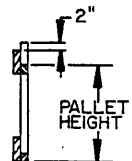
LOAD BEARING ASSEMBLY

THIS ASSEMBLY IS DESIGNED FOR USE AGAINST THE ROW OF PALLET UNITS IN THE LOAD SHOWN ON PAGE 12. THE ASSEMBLY SHOWN IS FOR THREE PALLET UNITS LONG AND FOUR PALLETS HIGH. SEE THE "END VIEW" DETAILS AT RIGHT FOR GUIDANCE IN CONSTRUCTING ASSEMBLIES FOR TWO AND THREE-LAYER LOADS. THE LENGTH OF THE ASSEMBLIES MAY BE ADJUSTED FOR BRACING TWO PALLET UNITS IN LENGTH, IF REQUIRED.



END VIEW

THIS WALL BEARING ASSEMBLY IS FOR LOADS WHICH ARE THREE (3) PALLET UNITS HIGH.



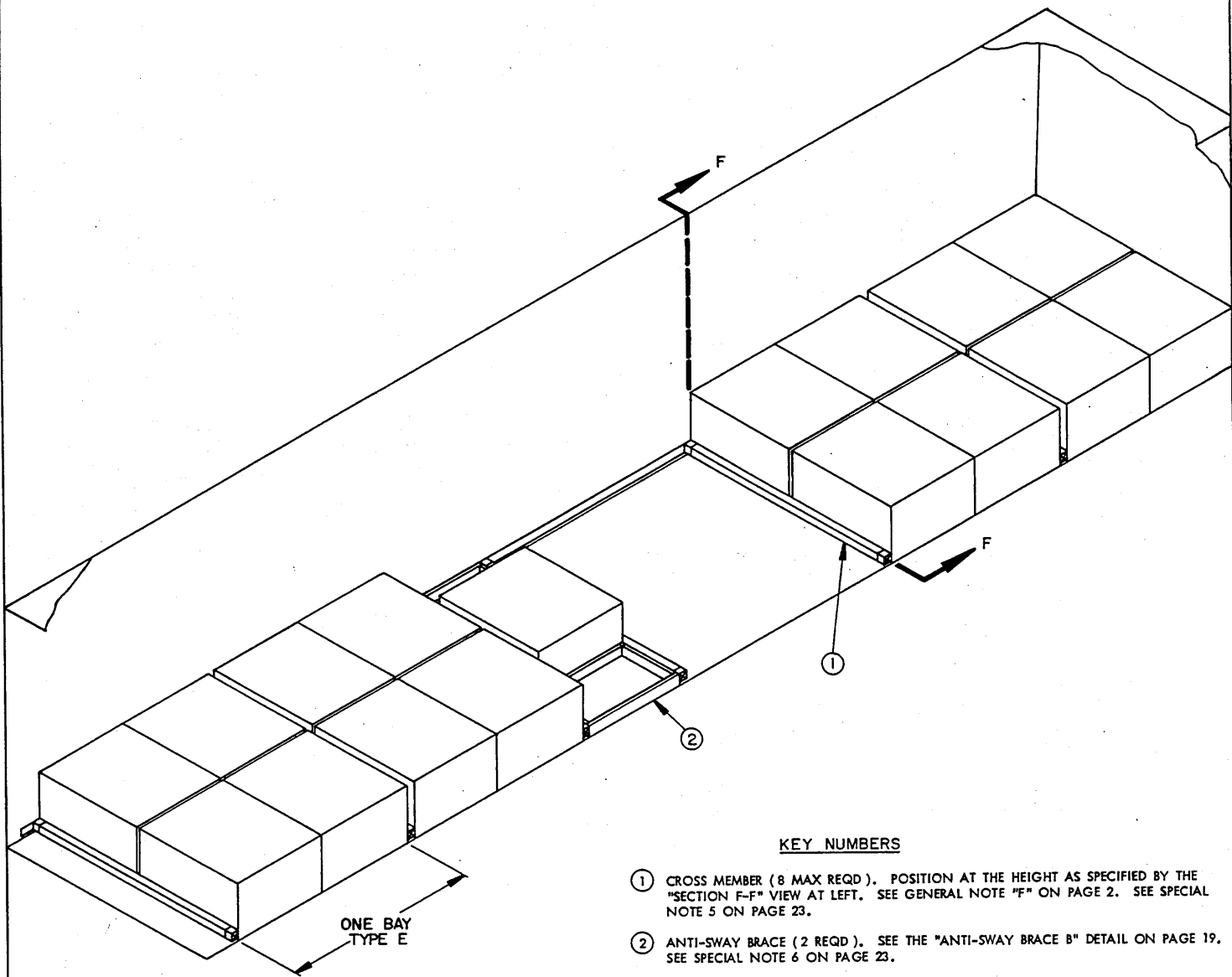
END VIEW

THIS WALL BEARING ASSEMBLY IS FOR LOADS WHICH ARE TWO (2) PALLET UNITS HIGH.

WALL BEARING ASSEMBLY

THIS ASSEMBLY IS DESIGNED FOR USE AGAINST THE WALL IN THE LOAD SHOWN ON PAGE 12. THE ASSEMBLY SHOWN IS FOR THREE PALLET UNITS LONG AND FOUR PALLETS HIGH. SEE THE "END VIEW" DETAILS AT RIGHT FOR GUIDANCE IN CONSTRUCTING ASSEMBLIES FOR TWO AND THREE-LAYER LOADS. THE LENGTH OF THE ASSEMBLIES MAY BE ADJUSTED FOR BRACING TWO PALLET UNITS IN LENGTH, IF REQUIRED.

DETAILS

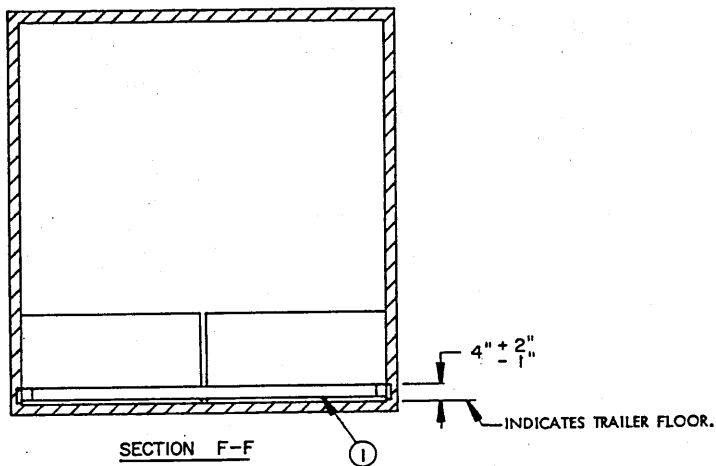


ISOMETRIC VIEW

ONE BAY
TYPE E

KEY NUMBERS

- ① CROSS MEMBER (8 MAX REQD). POSITION AT THE HEIGHT AS SPECIFIED BY THE "SECTION F-F" VIEW AT LEFT. SEE GENERAL NOTE "F" ON PAGE 2. SEE SPECIAL NOTE 5 ON PAGE 23.
- ② ANTI-SWAY BRACE (2 REQD). SEE THE "ANTI-SWAY BRACE B" DETAIL ON PAGE 19. SEE SPECIAL NOTE 6 ON PAGE 23.



SECTION F-F

4" + 2"
- 1"

INDICATES TRAILER FLOOR.

TYPICAL 17-UNIT LOAD OF "OPEN-TYPE" PALLET UNITS IN A
40'-0" LONG TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES

LOAD CAPACITY AND PLANNING CHART

LINE NO.	CALIBER	DESIGNATION	UNIT WEIGHT IN POUNDS	MAX UNITS PER BAY	BAY PATTERNS IN LOAD	MAX UNITS PER TRAILER	LOAD WEIGHT IN POUNDS	APPROX LOAD LENGTH
8	2.75 IN	WARHEAD WTU-1/B	1,880	5	5-E, 1-B	22	41,360	36'-7"
1	75MM	HE M309 A1	1,931	5	5-E, 1-A	21	40,551	36'-7"
2	75MM	HEAT-T, M310A1	1,931	5	5-E, 1-A	21	40,551	36'-7"
3	75MM	WP 311A1	2,056	4	5-E	20	41,120	33'-2"
4	75MM	HE M48	1,961	5	5-E, 1-A	21	41,181	36'-7"
5	75MM	SMOKE M64	2,090	4	5-E	20	41,800	33'-2"
6	75MM	HEAT M66	1,961	5	5-E, 1-A	21	41,181	36'-7"
9	76MM	WP-M361	1,858	5	5-E, 1-B	22	40,876	36'-7"
15	90MM	AP M82	2,888	3	7-B	14	40,432	24'-0"
16	90MM	HE M71	2,391	4	4-E, 1-A	17	40,647	29'-10"
17	90MM	WP M313	2,320	4	4-E, 1-B	18	41,760	29'-10"
12	105MM	TACTICAL CS XM632	3,225	3	6-B, 1-A	13	41,925	24'-0"
21	105MM	HE M1	2,425	4	4-E, 1-A	17	41,225	29'-10"
22	105MM	HEAT M67	2,325	4	4-E, 1-B	18	41,850	29'-10"
23	105MM	HC, BE, M84, M84B1	2,225	4	4-E, 1-B	18	40,050	29'-10"
24	105MM	WP M60	2,475	4	4-E, 1-A	17	42,075	29'-10"
26	105MM	HE M323	2,375	4	4-E, 1-A	17	40,375	29'-10"
27	105MM	HEAT M324	1,795	5	5-E, 1-B	22*	39,490	36'-7"
28	105MM	WP M325	2,435	4	4-E, 1-A	17	41,395	29'-10"
29	105MM	ILLUM XM314A2E1	3,225	3	6-B, 1-A	13	41,925	24'-0"
30	105MM	HE M442	1,895	5	5-E, 1-B	22	41,690	36'-7"
32	105MM	TP-T XM468	2,365	4	4-E, 1-A	17	40,205	29'-10"
33	120MM	HE M73	2,661	3	7-B, 1-A	15	39,915	27'-5"
34	120MM	HE M356	2,142	4	4-E, 1-B, 1-A	19	40,698	33'-4"
35	120MM	HE T15E3	2,548	3	8-B	16	40,768	27'-5"
36	120MM	CHEM T16E1	2,234	4	4-E, 1-B	18	40,212	29'-10"
37	120MM	CHEM T16E3	2,484	4	4-E, 1-A	17	42,228	29'-10"
14	152MM	TP-T XM411E2	1,847	5	5-E	20*	36,940	37'-6"

○ EMPTY WEIGHTS ARE SHOWN. SEE GENERAL NOTE "O" ON PAGE 2.

■ SEE SPECIAL NOTE 7.
* SEE SPECIAL NOTE 8.

SPECIAL NOTES:

(SPECIAL NOTES CONTINUED)

- LESS THAN FULL TRAILER LOADS (LTL) OF ANY OF THE ITEMS LISTED ABOVE CAN BE ATTAINED BY EMPLOYING COMBINATIONS OF THE APPLICABLE BAY TYPES A, B, AND E. SEE THE DETAILS ON PAGES 34 AND 35. CAUTION: THE MAXIMUM WEIGHT PER UNIT AS SPECIFIED FOR A BAY TYPE MUST NOT BE EXCEEDED.
- FOR FULL LOADS OF THE "OPEN-TYPE" PALLET UNITS OTHER THAN THOSE LISTED ABOVE, REFER TO THE PROCEDURES ON PAGES 24 AND 25.

- A 40'-0" LONG BY 7'-6" WIDE (INSIDE WIDTH DIMENSION) VAN TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES IS SHOWN. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
- THE TYPICAL LOAD SHOWN IS APPLICABLE FOR "OPEN-TYPE" PALLET UNITS AS DETAILED BY PICATINNY ARSENAL DRAWING NO. F-8837835, AND FOR THE ITEMS AS SPECIFIED IN THE "LOAD CAPACITY AND PLANNING CHART" ABOVE. THE PROCEDURES ARE APPLICABLE FOR LOADS WHICH CONSIST OF ONLY ONE LAYER. SEE SPECIAL NOTES 8 THRU 10.
- A 17-UNIT LOAD OF "OPEN-TYPE" PALLET UNITS MEASURING 38-1/8" LONG BY 44-3/4" WIDE BY 22-9/16" HIGH AND WEIGHING 2,365 POUNDS IS SHOWN AS TYPICAL. THE ACTUAL QUANTITY THAT CAN BE SHIPPED WILL DEPEND UPON THE WEIGHT OF THE ITEM BEING LOADED AND THE CAPACITY OF THE TRAILER BEING USED. SEE THE "LOAD CAPACITY AND PLANNING CHART" ABOVE FOR GUIDANCE.
- IF THE LADING DOES NOT ALMOST COMPLETELY FILL THE LENGTH OF THE TRAILER, THE BAYS OF PALLET UNITS WILL BE LOCATED SO AS TO PROVIDE FOR PROPER WEIGHT DISTRIBUTION.
- SIX (6) CROSS MEMBERS ARE REQUIRED FOR THE SHIPMENT OF THE DEPICTED 17-UNIT LOAD. THE ACTUAL NUMBER OF CROSS MEMBERS REQUIRED WILL VARY FROM FIVE TO EIGHT FOR SHIPMENT OF A FULL LOAD, DEPENDING UPON THE ITEM THAT IS BEING SHIPPED AND THE LOAD QUANTITY.
- THE ANTI-SWAY BRACES, PIECES MARKED (2), ARE USED WITHIN THE DEPICTED LOAD IN ORDER TO OBTAIN AN UNEVEN LOAD QUANTITY AND WILL NOT BE REQUIRED IF A LOAD CONSISTS OF AN EVEN NUMBER OF PALLET UNITS.
- THE COMBINATION OF FIGURES AND LETTERS IN THE LOAD CAPACITY AND PLANNING CHART COLUMN HEADED "BAY PATTERNS IN LOAD" REPRESENTS THE NUMBER AND TYPE OF BAYS NEEDED TO OBTAIN A CERTAIN LOAD QUANTITY. FOR INSTANCE, "5-E, 1-B" MEANS THAT FIVE (5) TYPE E BAYS AND ONE (1) TYPE B BAY ARE REQUIRED TO OBTAIN A LOAD OF 22 PALLET UNITS. SEE THE APPLICABLE BAY TYPE DETAILS ON PAGES 34 AND 35. OTHER LOAD QUANTITIES, AND/OR ITEMS LIGHTER OR HEAVIER THAN THE 22-UNIT LOAD FOR LINE ITEM NUMBER 8, WILL REQUIRE A DIFFERENT COMBINATION OF BAY TYPES.
- IF A STACK OF TWO PALLET UNITS OF 105MM HEAT M324, LINE NO. 27, IS NOT TALLER THAN 38", THE LOAD MAY BE INCREASED TO 23 UNITS BY SUBSTITUTING A BAY TYPE F FOR ONE OF THE FIVE TYPE E BAYS, OR BY SUBSTITUTING A BAY TYPE C FOR THE BAY TYPE B. LIKEWISE, IF A STACK OF TWO PALLET UNITS OF 152MM TP-T XM411E2, LINE NO. 14, IS NOT TALLER THAN 43", THE LOAD MAY BE INCREASED UP TO THREE PALLET UNITS. SUBSTITUTE ONE, TWO, OR THREE TYPE F BAYS FOR A LIKE NUMBER OF THE TYPE E BAYS. SEE THE DETAILS ON PAGES 34 AND 35 FOR GUIDANCE.

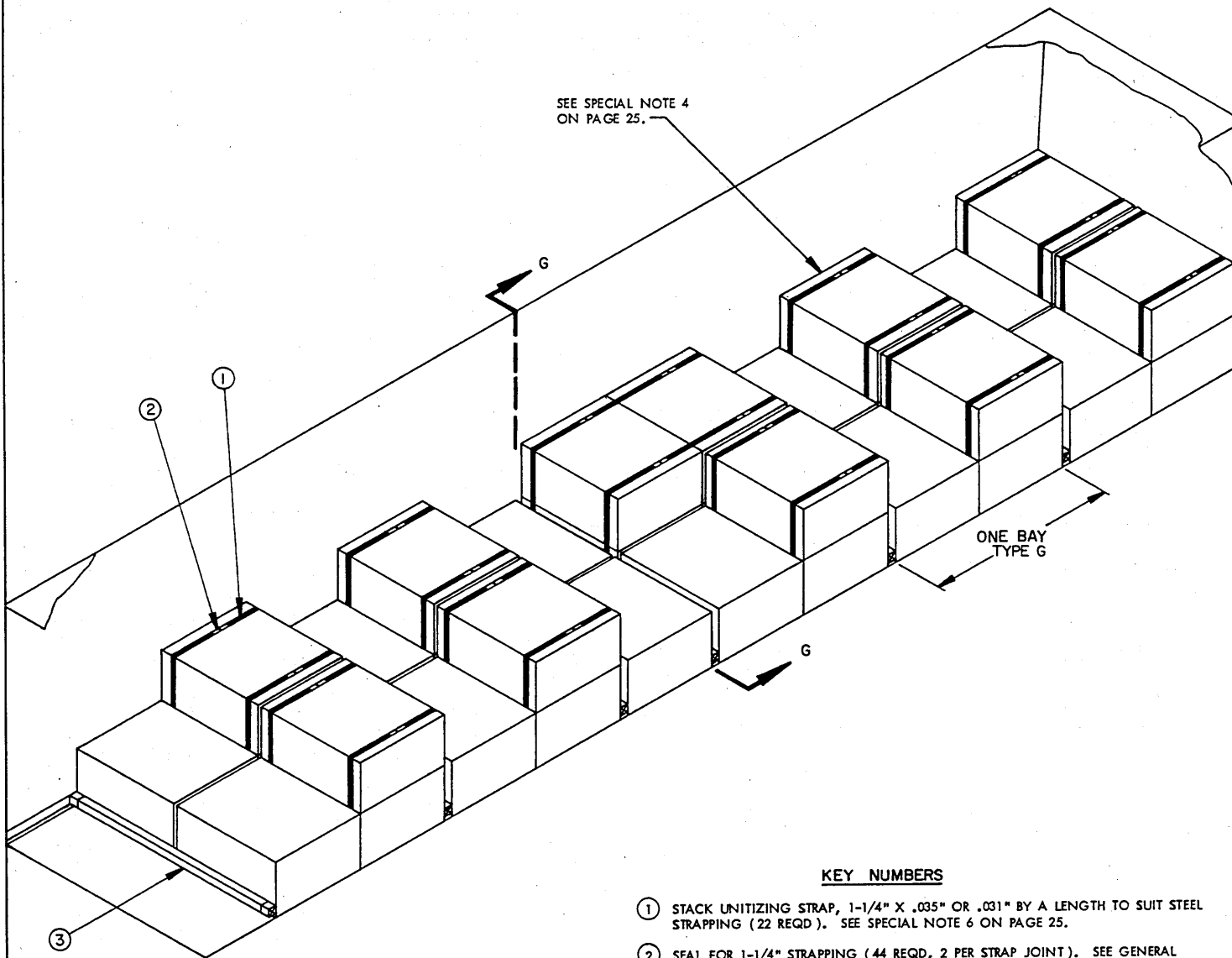
(CONTINUED AT LEFT)

BILL OF MATERIAL (TYPICAL)		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	20	14
NAILS	NO. REQD	POUNDS
10d (3")	16	1/4
CROSS MEMBERS	8 (MAX) REQD	

LOAD AS SHOWN (TYPICAL)

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	17	40,205 LBS
DUNNAGE		29 LBS
TOTAL WEIGHT		40,234 LBS

TYPICAL 17-UNIT LOAD OF "OPEN-TYPE" PALLET UNITS IN A 40'-0" LONG TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES



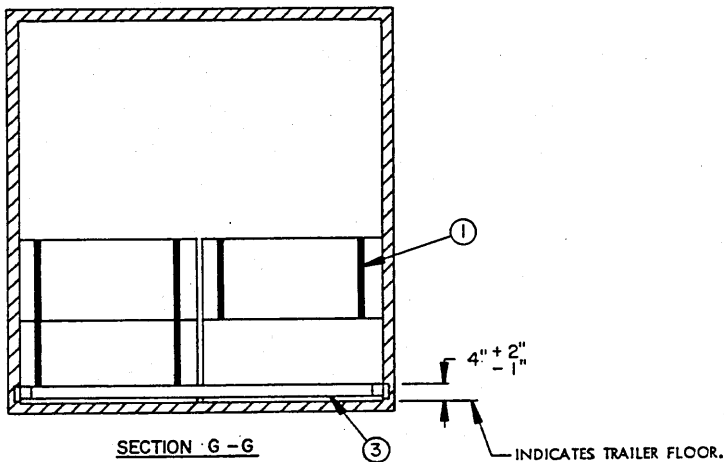
SEE SPECIAL NOTE 4
ON PAGE 25.

ONE BAY
TYPE G

ISOMETRIC VIEW

KEY NUMBERS

- ① STACK UNITIZING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (22 REQD). SEE SPECIAL NOTE 6 ON PAGE 25.
- ② SEAL FOR 1-1/4" STRAPPING (44 REQD, 2 PER STRAP JOINT). SEE GENERAL NOTE "M" ON PAGE 2.
- ③ CROSS MEMBER (7 MAX REQD). POSITION AT THE HEIGHT AS SPECIFIED BY THE "SECTION G-G" VIEW AT LEFT. SEE GENERAL NOTE "F" ON PAGE 2. SEE SPECIAL NOTE 5 ON PAGE 25.



SECTION G-G

INDICATES TRAILER FLOOR.

TYPICAL 33-UNIT LOAD OF "OPEN-TYPE" PALLET UNITS IN A
40'-0" LONG TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES

LOAD CAPACITY AND PLANNING CHART

LINE NO.	CALIBER	DESIGNATION	UNIT WEIGHT IN POUNDS	MAX UNITS PER BAY	BAY PATTERNS IN LOAD	MAX UNITS PER TRAILER	LOAD WEIGHT IN POUNDS	APPROX LOAD LENGTH
13	2.75 IN	WARHEAD HE M151 PRACTICE XM232	1,205	8	4-K, 1-B, 1-A	35	42,175	36'-7"
7	75MM	HE M334	1,533	6	2-G, 1-F, 2-E, 1-B	27	41,391	36'-7"
10	76MM	WP-M312	1,740	5	5-E, 1-D	24	41,760	36'-7"
11	76MM	HE M42A1	1,733	5	5-E, 1-D	24	41,592	36'-7"
18	90MM	HE-T 91	1,526	6	2-G, 1-F, 2-E, 1-B	27	41,202	36'-7"
19	90MM	CHEM-T T92	1,580	6	2-G, 3-E, 1-B	26	41,080	36'-7"
20	105MM	WARHEAD, 105MM, XM547	1,360	7	5-H, 1-A	31	42,160	36'-7"
25	105MM	HEP M393A2, WP XM416	1,352	7	5-H, 1-A	31	41,912	36'-7"
38	105MM	HE XM400E3	1,255	7	1-J, 4-G, 1-B	33	41,415	36'-7"
38	105MM	HE M444, M444E1	1,295	7	5-G, 1-B	32	41,440	36'-7"
31	106MM	HEAT M344A1	1,185	8	4-K, 1-B, 1-A	35	41,475	36'-7"
40	152MM	HE XM657E2	1,340	7	1-J, 4-G	31	41,540	37'-6"
41	155MM	M549 MOTOR BODY ASSY	1,120	8	4-K, 1-F	37	41,440	38'-0"
39	165MM	HEP T237E4 (M123)	912	10	5-K, 1-B	42 *	38,304	36'-7"

■ SEE SPECIAL NOTE 7.
* SEE SPECIAL NOTE 8.

● EMPTY WEIGHTS ARE SHOWN. SEE GENERAL NOTE "O" ON PAGE 2.

SPECIAL NOTES:

1. A 40'-0" LONG BY 7'-6" WIDE (INSIDE WIDTH DIMENSION) VAN TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES IS SHOWN. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
2. THE TYPICAL LOAD SHOWN IS APPLICABLE FOR "OPEN-TYPE" PALLET UNITS AS DETAILED BY PICATINNY ARSENAL DRAWING NO. F-8837835, AND FOR THE ITEMS AS SPECIFIED IN THE "LOAD CAPACITY AND PLANNING CHART" ABOVE. THE PROCEDURES ARE APPLICABLE FOR LOADS WHICH CONTAIN ONE OR MORE BAYS HAVING PALLET UNITS IN THE SECOND LAYER. SEE SPECIAL NOTES 8 THRU 10.
3. A 33-UNIT LOAD OF "OPEN-TYPE PALLET UNITS MEASURING 38-1/8" LONG BY 44-3/4" WIDE BY 21" HIGH AND WEIGHING 1,255 POUNDS IS SHOWN AS TYPICAL. THE ACTUAL QUANTITY THAT CAN BE SHIPPED WILL DEPEND UPON THE WEIGHT OF THE ITEM BEING LOADED AND THE CAPACITY OF THE TRAILER BEING USED. SEE THE "LOAD CAPACITY AND PLANNING CHART" ABOVE FOR GUIDANCE.
4. THE BAYS IN THE DEPICTED LOAD WHICH CONTAIN SIX (6) PALLET UNITS ARE LOADED AND BRACED IN ACCORDANCE WITH THE "BAY TYPE G" DETAIL ON PAGE 35. THIS PROCEDURE IS ADEQUATE IF A STACK OF TWO PALLET UNITS IS NOT HIGHER THAN IT IS LONG. IF THE HEIGHT OF A PALLET STACK IS GREATER THAN THE PALLET LENGTH, THE SIX PALLET UNITS MUST BE LOADED AND BRACED IN ACCORDANCE WITH THE "BAY TYPE H" DETAIL ON PAGE 35. TO PROVIDE PROPER LATERAL WEIGHT DISTRIBUTION, IF THE LOAD CONTAINS MORE THAN ONE 6-UNIT BAY, APPROXIMATELY ONE-HALF OF THE BAYS SHOULD BE LOADED IN SUCH A MANNER THAT THE STACKED PORTION(S) WILL BE ALONG EACH SIDE OF THE TRAILER.
5. SIX (6) CROSS MEMBERS ARE REQUIRED FOR THE SHIPMENT OF THE DEPICTED 33-UNIT LOAD. THE ACTUAL NUMBER OF CROSS MEMBERS REQUIRED WILL VARY FROM FIVE TO SEVEN FOR SHIPMENT OF A FULL LOAD, DEPENDING UPON THE ITEM THAT IS BEING SHIPPED AND THE LOAD QUANTITY.
6. IF THE CAPACITY OF THE MATERIAL HANDLING EQUIPMENT PERMITS, THE STACKED PALLET UNITS SHOULD BE UNITIZED PRIOR TO PLACEMENT IN THE TRAILER.
7. THE COMBINATION OF FIGURES AND LETTERS IN THE LOAD CAPACITY AND PLANNING CHART COLUMN HEADED "BAY PATTERNS IN LOAD" REPRESENTS THE NUMBER AND TYPE OF BAYS NEEDED TO OBTAIN A CERTAIN LOAD QUANTITY. FOR INSTANCE, "4-K, 1-B, 1-A" MEANS THAT FOUR (4) TYPE K BAYS AND ONE (1) EACH OF TYPE B AND TYPE A BAYS ARE REQUIRED TO OBTAIN A LOAD OF 35 PALLET UNITS. SEE THE APPLICABLE BAY TYPE DETAILS ON PAGES 34 THRU 36. OTHER LOAD QUANTITIES, AND/OR ITEMS LIGHTER OR HEAVIER THAN THE 35-UNIT LOAD FOR LINE ITEM NUMBER 13, WILL REQUIRE A DIFFERENT COMBINATION OF BAY PATTERNS.
8. IF THE HEIGHT OF A STACK OF TWO PALLET UNITS OF 165MM HEP T237E4 (M123), LINE NO. 39, IS LESS THAN THE LENGTH OF THE PALLET UNIT, THE LOAD MAY BE INCREASED TO 43 OR 44 UNITS BY SUBSTITUTING A BAY TYPE C, OR A BAY TYPE D, FOR THE TYPE B BAY. SEE THE DETAILS ON PAGE 34 FOR GUIDANCE.
9. LESS THAN FULL TRAILER LOADS (LTL) OF ANY OF THE ITEMS LISTED ABOVE CAN BE ATTAINED BY EMPLOYING COMBINATIONS OF THE APPLICABLE BAY TYPES A THRU K. SEE THE DETAILS ON PAGES 34 THRU 36. **CAUTION:** THE MAXIMUM WEIGHT PER UNIT AS SPECIFIED FOR A BAY TYPE MUST NOT BE EXCEEDED.
10. FOR FULL LOADS OF THE "OPEN-TYPE" PALLET UNITS OTHER THAN THOSE LISTED ABOVE, REFER TO THE PROCEDURES ON PAGES 22 AND 23.

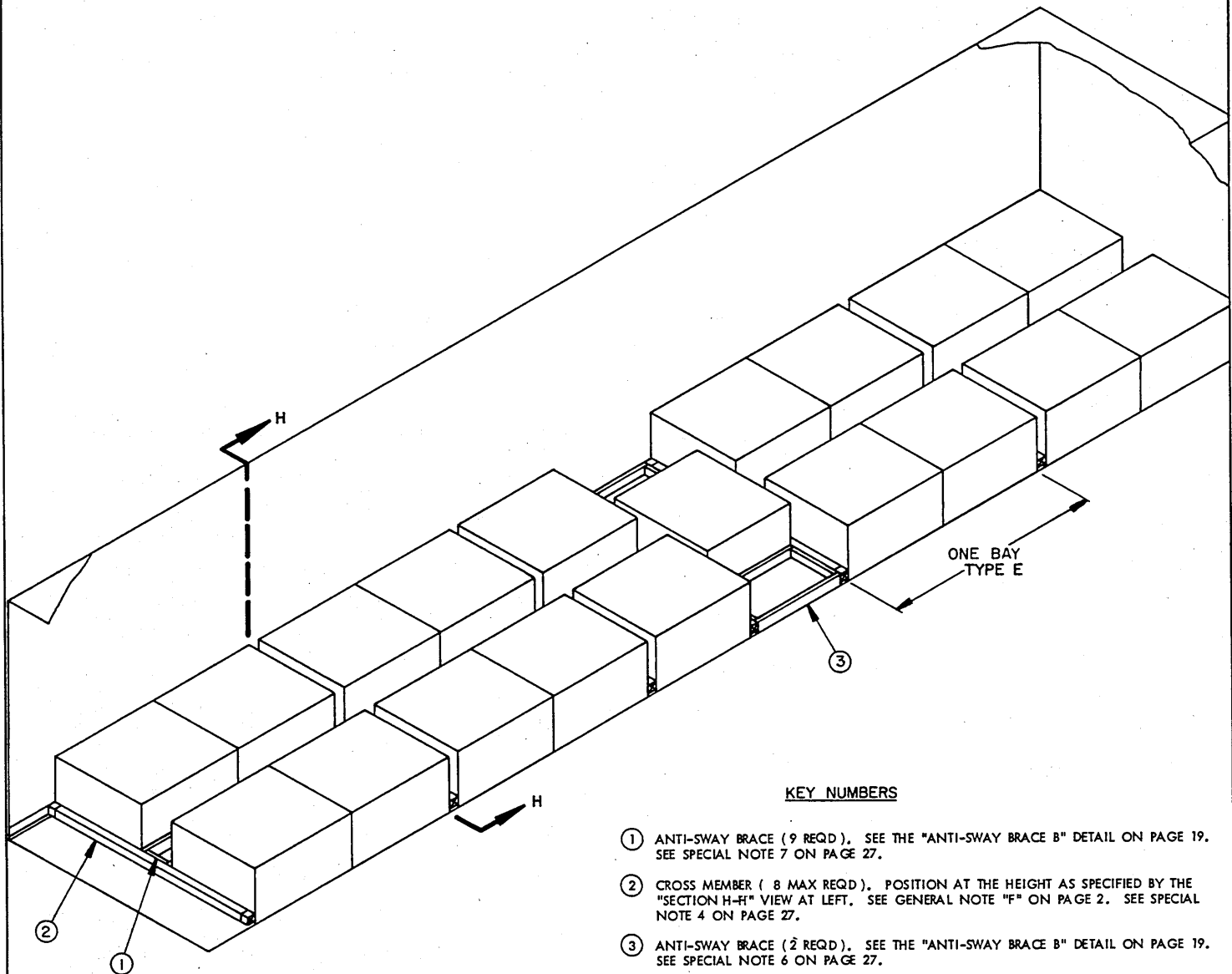
BILL OF MATERIAL (TYPICAL)

STEEL STRAPPING, 1-1/4" X .035" OR .031" - 319' REQD	46 LBS
SEAL FOR 1-1/4" STRAPPING	44 REQD - 3 LBS
CROSS MEMBERS	7 (MAX) REQD

LOAD AS SHOWN (TYPICAL)

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	33	41,415 LBS
DUNNAGE		49 LBS
TOTAL WEIGHT		41,464 LBS

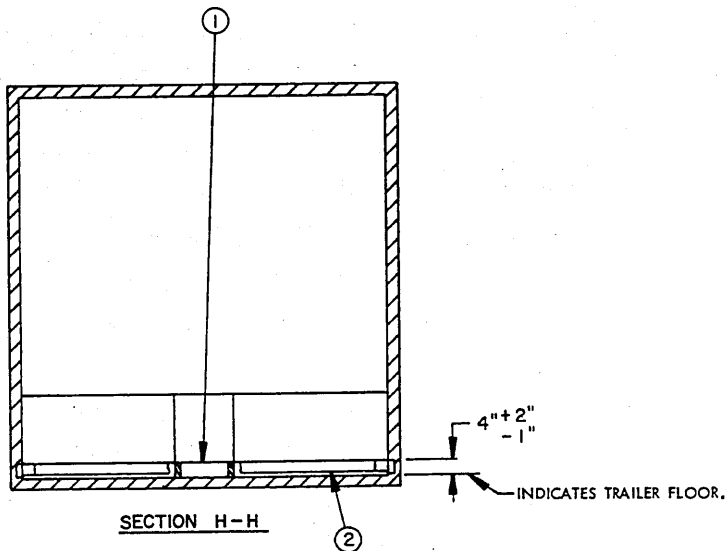
TYPICAL 33-UNIT LOAD OF "OPEN-TYPE" PALLET UNITS IN A
40'-0" LONG TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES



ISOMETRIC VIEW

KEY NUMBERS

- ① ANTI-SWAY BRACE (9 REQD). SEE THE "ANTI-SWAY BRACE B" DETAIL ON PAGE 19. SEE SPECIAL NOTE 7 ON PAGE 27.
- ② CROSS MEMBER (8 MAX REQD). POSITION AT THE HEIGHT AS SPECIFIED BY THE "SECTION H-H" VIEW AT LEFT. SEE GENERAL NOTE "F" ON PAGE 2. SEE SPECIAL NOTE 4 ON PAGE 27.
- ③ ANTI-SWAY BRACE (2 REQD). SEE THE "ANTI-SWAY BRACE B" DETAIL ON PAGE 19. SEE SPECIAL NOTE 6 ON PAGE 27.



SECTION H-H

TYPICAL 19-UNIT LOAD OF BOXED-TYPE PALLET UNITS IN A
40'-0" LONG TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES

LOAD CAPACITY AND PLANNING CHART

LINE NO.	CALIBER	DESIGNATION	UNIT WEIGHT IN POUNDS	MAX UNITS PER BAY	BAY PATTERNS IN LOAD	MAX UNITS PER TRAILER	LOAD WEIGHT IN POUNDS	APPROXIMATE LOAD LENGTH
24	2.75 IN	WARHEAD HE XM229	1,961	5	5-E	21	41,181	38'-7"
8	90MM	CANNISTER M377	2,144	4	4-E, 1-B, 1-A	19	40,736	37'-5"
12	90MM	TP-T M353E1	2,173	4	4-E, 1-B, 1-A	19	41,287	37'-5"
13	90MM	AP-T M318A1C	2,173	4	4-E, 1-B, 1-A	19	21,287	37'-5"
17	90MM	CANNISTER M336	2,117	4	5-E	20	42,340	36'-11"
25*	105MM	TP-T M489	2,060	4	4-E, 1-B	18	37,080	38'-8"
21	120MM	AP-T M358E1 OR AP-T M359	2,821	3	7-B, 1-A	15	42,315	35'-4"

SEE SPECIAL NOTE 5.
* SEE SPECIAL NOTE 7.

● EMPTY WEIGHTS ARE SHOWN. SEE GENERAL NOTE "O" ON PAGE 2.

SPECIAL NOTES:

1. A 40'-0" LONG BY 7'-6" WIDE (INSIDE WIDTH DIMENSION) VAN TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES IS SHOWN. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
2. THE TYPICAL LOAD SHOWN IS APPLICABLE FOR BOXED-TYPE PALLET UNITS AS DETAILED BY ORDNANCE CORPS DRAWING NO. F-7548604, AND FOR THE ITEMS AS SPECIFIED IN THE "LOAD CAPACITY AND PLANNING CHART" ABOVE. THE PROCEDURES ARE APPLICABLE FOR LOADS WHICH CONSIST OF ONLY ONE LAYER. SEE SPECIAL NOTES 8 AND 9.
3. A 19-UNIT LOAD OF BOXED-TYPE PALLET UNITS MEASURING 44-1/8" LONG BY 37-1/8" WIDE BY 20-3/4" HIGH AND WEIGHING 2,173 POUNDS IS SHOWN AS TYPICAL. THE ACTUAL QUANTITY THAT CAN BE SHIPPED WILL DEPEND UPON THE SIZE AND WEIGHT OF THE ITEM BEING LOADED AND THE CAPACITY OF THE TRAILER BEING USED. SEE THE "LOAD CAPACITY AND PLANNING CHART" ABOVE FOR GUIDANCE.
4. SIX (6) CROSS MEMBERS ARE REQUIRED FOR THE SHIPMENT OF THE DEPICTED 19-UNIT LOAD. THE ACTUAL NUMBER OF CROSS MEMBERS REQUIRED WILL VARY FROM FIVE TO EIGHT FOR SHIPMENT OF A FULL LOAD, DEPENDING UPON THE ITEM THAT IS BEING SHIPPED AND THE LOAD QUANTITY.
5. THE COMBINATION OF FIGURES AND LETTERS IN THE LOAD CAPACITY AND PLANNING CHART COLUMN HEADED "BAY PATTERNS IN LOAD" REPRESENTS THE NUMBER AND TYPE OF BAYS NEEDED TO OBTAIN A CERTAIN LOAD QUANTITY. FOR INSTANCE, "7-B, 1-A" MEANS THAT SEVEN (7) TYPE B BAYS AND ONE (1) TYPE A BAY ARE REQUIRED TO OBTAIN A LOAD OF 15 PALLET UNITS. SEE THE APPLICABLE BAY TYPE DETAILS ON PAGES 34 AND 35. OTHER LOAD QUANTITIES, AND/OR ITEMS LIGHTER OR HEAVIER THAN THE 15-UNIT LOAD FOR LINE ITEM NO. 21, WILL REQUIRE A DIFFERENT COMBINATION OF BAY PATTERNS.
6. THE ANTI-SWAY BRACES, PIECES MARKED (3), ARE USED WITHIN THE DEPICTED LOAD IN ORDER TO OBTAIN AN UNEVEN QUANTITY AND WILL NOT BE REQUIRED IF A LOAD CONSISTS OF AN EVEN NUMBER OF PALLET UNITS.
7. ANTI-SWAY BRACES WILL NOT BE REQUIRED BETWEEN LATERALLY ADJACENT BOXED-TYPE PALLET UNITS OF 105MM TP-T M489, LINE ITEM NO. 25, WHEN LOADING IN A NINETY INCH (90") WIDE TRAILER. SEE THE "ANTI-SWAY BRACE A" DETAIL ON PAGE 19 FOR THE ASSEMBLY TO BE USED IN TRAILERS WIDER THAN 90".
8. LESS THAN FULL TRAILER LOADS (LTL) OF ANY OF THE ITEMS LISTED ABOVE CAN BE ATTAINED BY EMPLOYING COMBINATIONS OF THE APPLICABLE BAY TYPES A, B, AND E. SEE THE DETAILS ON PAGES 34 AND 35. CAUTION: THE MAXIMUM WEIGHT PER UNIT AS SPECIFIED FOR A BAY TYPE MUST NOT BE EXCEEDED.
9. FOR FULL LOADS OF THE BOXED-TYPE PALLET UNITS OTHER THAN THOSE LISTED ABOVE, REFER TO THE "BOXED-TYPE PALLET UNIT INDEX" ON PAGE 38 AND TO THE APPLICABLE PROCEDURES ON PAGES 28 THRU 33.

BILL OF MATERIAL (TYPICAL)

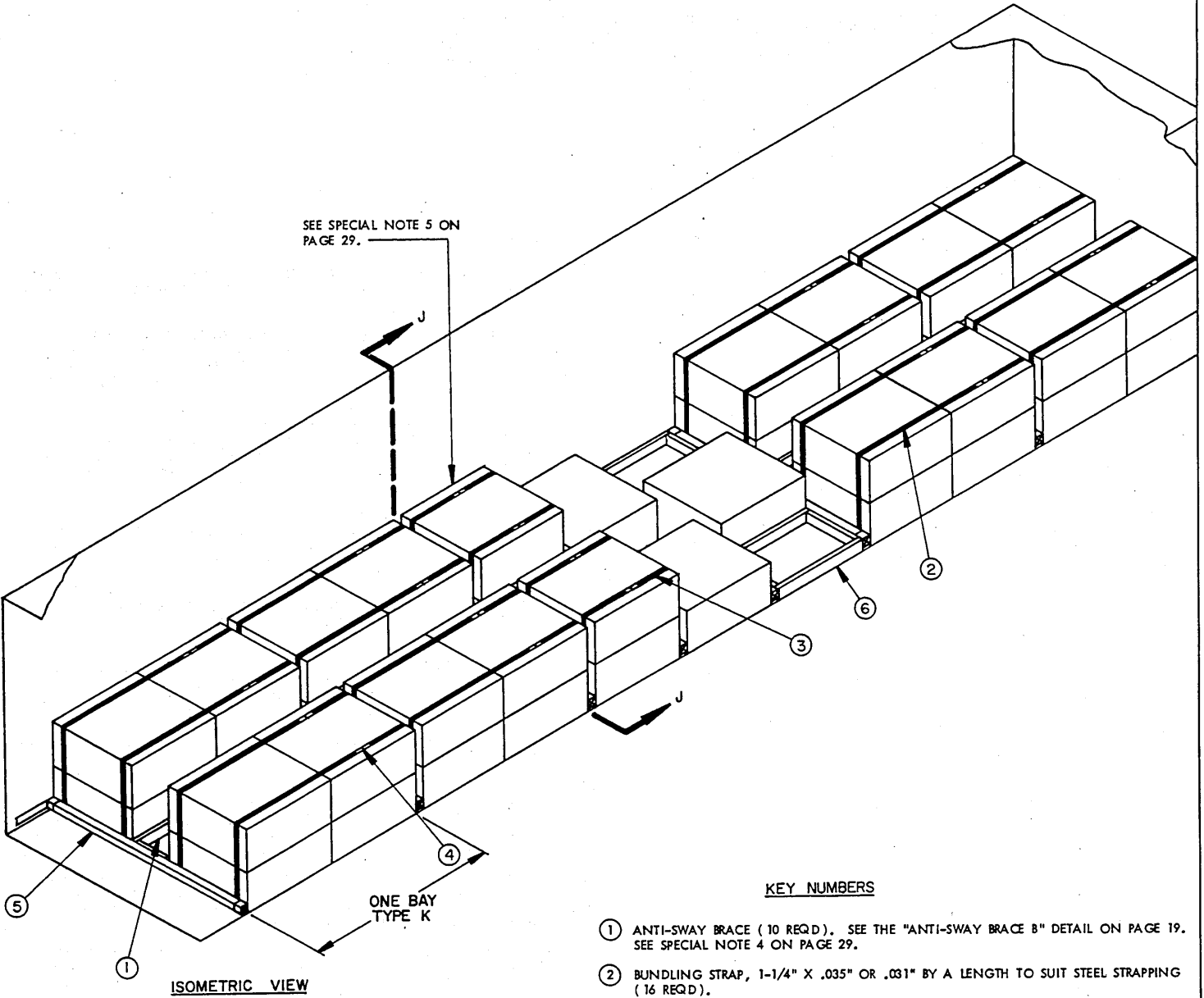
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	111	74
NAILS	NO. REQD	POUNDS
10d (3")	88	1-1/2
CROSS MEMBERS	8 (MAX) REQD	

LOAD AS SHOWN (TYPICAL)

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	19	41,287 LBS
DUNNAGE		150 LBS
TOTAL WEIGHT		41,437 LBS

TYPICAL 19-UNIT LOAD OF BOXED-TYPE PALLET UNITS IN A
40'-0" LONG TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES

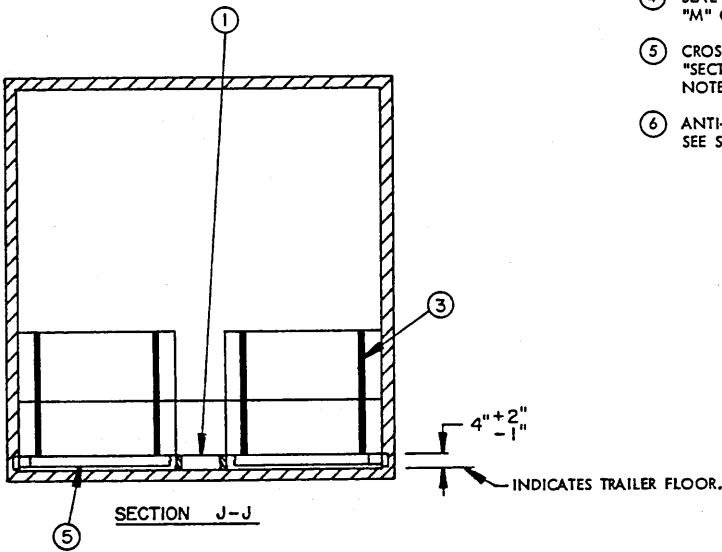
SEE SPECIAL NOTE 5 ON
PAGE 29.



ISOMETRIC VIEW

KEY NUMBERS

- ① ANTI-SWAY BRACE (10 REQD). SEE THE "ANTI-SWAY BRACE B" DETAIL ON PAGE 19. SEE SPECIAL NOTE 4 ON PAGE 29.
- ② BUNDLING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (16 REQD).
- ③ STACK UNITIZING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (4 REQD). SEE SPECIAL NOTE 5 ON PAGE 29.
- ④ SEAL FOR 1-1/4" STRAPPING (40 REQD, 2 PER STRAP JOINT). SEE GENERAL NOTE "M" ON PAGE 2.
- ⑤ CROSS MEMBER (7 MAX REQD). POSITION AT THE HEIGHT SPECIFIED BY THE "SECTION J-J" VIEW AT LEFT. SEE GENERAL NOTE "F" ON PAGE 2. SEE SPECIAL NOTE 6 ON PAGE 29.
- ⑥ ANTI-SWAY BRACE (2 REQD). SEE THE "ANTI-SWAY BRACE B" DETAIL ON PAGE 19. SEE SPECIAL NOTE 7 ON PAGE 29.



SECTION J-J

TYPICAL 39-UNIT LOAD OF BOXED-TYPE PALLET UNITS IN A
40'-0" LONG TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES

LOAD CAPACITY AND PLANNING CHART

LINE NO.	CALIBER	DESIGNATION	UNIT WEIGHT IN POUNDS	MAX UNITS PER BAY	BAY PATTERNS IN LOAD	MAX UNITS PER TRAILER	LOAD WEIGHT IN POUNDS	APPROXIMATE LOAD LENGTH
1	75MM	AP-T M338A1	2,042	4	4-E, 1-D	20	40,840	38'-1"
2	75MM	HEP-T15QE29 OR T165E29	852	11	4-K, 1-D	36*	30,672	38'-2"
5	76MM	HVAP-T M93A1	1,074	9	4-K, 1-D, 1-B, 1-A	39	41,886	37'-5"
6	76MM	AP-T M339E1 OR TP-T M340A1E1	1,534	6	3-G, 1-F, 1-E	27	41,418	35'-2"
7	76MM	CANNISTER M363	1,585	6	2-G, 3-E, 1-B	26	41,210	38'-0"
9	76MM	HVAP-T T66E3 OR T66E5	850	11	5-K, 1-D	44*	37,400	38'-0"
10	76MM	HEAT-T, M496	900	11	5-K, 1-D	44*	39,600	38'-4"
26	81MM	WP M375E2	880	11	5-K, 1-D	44*	38,720	38'-8"
11	90MM	HVAP-TM332A1E1 OR HVAP-TM333A1E1	1,202	8	4-K, 1-B, 1-A	35	42,070	38'-4"
4	105MM	APERS-T M380	1,720	5	2-E, 4-D	24	41,280	36'-7"
4	105MM	APERS-T XM603E1	1,894	5	2-E, 3-D, 1-B	22	41,668	36'-7"
18▲	105MM	HEAT M456A1 OR M456A1E1	1,209	8	4-K, 1-B, 1-A	35	42,315	35'-10"
20▲▲	105MM	APDS-T M392A3	1,080	9	4-K, 1-D	36*	38,880	36'-5"
22	120MM	HEAT M469	1,225	8	4-K, 1-B	34	41,650	35'-11"

- SEE SPECIAL NOTE 10
- * SEE SPECIAL NOTE 11
- ▲ SEE SPECIAL NOTE 4
- SEE SPECIAL NOTE 8

○ EMPTY WEIGHTS ARE SHOWN. SEE GENERAL NOTE "O" ON PAGE 2.

(SPECIAL NOTES CONTINUED)

11. THE "MAX UNITS PER TRAILER" SPECIFIED FOR THE ITEMS DESIGNATED BY LINE NOS. 2, 9, 10, 20, AND 26 IS THE LARGEST QUANTITY OF PALLET UNITS THAT CAN BE LOADED BY USING THE DEPICTED PROCEDURES. INCREASED QUANTITIES OF THESE ITEMS CAN BE ATTAINED BY POSITIONING APPROXIMATELY ONE-HALF OF THE INCREASED QUANTITY OF UNITS IN TWO ROWS AND IN TWO OR THREE LAYERS IN THE FRONT HALF OF THE TRAILER. POSITION A "REAR GATE B" AS DETAILED ON PAGE 37, AGAINST THESE LOADED UNITS AND INSTALL CROSS MEMBERS AT THE 4", 16", 28", AND 38" HEIGHTS. POSITION A "REAR GATE B" AGAINST THE INSTALLED CROSS MEMBERS AND CONTINUE LOADING THE REMAINDER OF THE PALLET UNITS IN TWO OR THREE LAYERS, AS APPLICABLE. POSITION A "GATE B" AT THE REAR OF THE COMPLETED LOAD AND INSTALL CROSS MEMBERS AT THE AFOREMENTIONED HEIGHTS. FORTY-NINE PALLET UNITS OF ITEMS DESIGNATED BY LINE NOS. 2 AND 9, FORTY-SIX UNITS OF LINE NO. 10, THIRTY-NINE UNITS OF LINE NO. 39, AND FORTY-EIGHT UNITS OF LINE NO. 26 CAN BE LOADED IN THIS MANNER.
12. LESS THAN FULL TRAILER LOADS (LTL) OF ANY OF THE ITEMS LISTED ABOVE CAN BE ATTAINED BY EMPLOYING COMBINATIONS OF THE APPLICABLE BAY TYPES A THRU K. SEE THE DETAILS ON PAGES 34, 35, AND 36. CAUTION: THE MAXIMUM WEIGHT PER UNIT AS SPECIFIED FOR A BAY TYPE MUST NOT BE EXCEEDED.
13. FOR FULL LOADS OF THE BOXED-TYPE PALLET UNITS OTHER THAN THOSE LISTED ABOVE, REFER TO THE "BOXED-TYPE PALLET UNIT INDEX" ON PAGE 38 AND TO THE APPLICABLE PROCEDURES ON PAGES 26 AND 27, AND PAGES 30 THRU 33.

SPECIAL NOTES:

1. A 40'-0" LONG BY 7'-6" WIDE (INSIDE WIDTH DIMENSION) VAN TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES IS SHOWN. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
2. THE TYPICAL LOAD SHOWN IS APPLICABLE FOR BOXED-TYPE PALLET UNITS AS DETAILED BY ORDNANCE CORPS DRAWING NO. F-7548604, AND FOR THE ITEMS AS SPECIFIED IN THE "LOAD CAPACITY AND PLANNING CHART" ABOVE. THE PROCEDURES ARE APPLICABLE FOR LOADS WHICH CONTAIN ONE OR MORE BAYS HAVING PALLET UNITS IN THE SECOND LAYER. SEE SPECIAL NOTES 9 THRU 13.
3. A 39-UNIT LOAD OF BOXED-TYPE PALLET UNITS MEASURING 38-3/4" LONG BY 36-5/8" WIDE BY 17-5/8" HIGH AND WEIGHING 1,074 POUNDS IS SHOWN AS TYPICAL. THE ACTUAL QUANTITY THAT CAN BE SHIPPED WILL DEPEND UPON THE SIZE AND WEIGHT OF THE ITEM BEING LOADED AND THE CAPACITY OF THE TRAILER BEING USED. SEE THE "LOAD CAPACITY AND PLANNING CHART" ABOVE FOR GUIDANCE.
4. ANTI-SWAY BRACES, PIECES MARKED ①, ARE REQUIRED BETWEEN ALL Laterally ADJACENT FLOOR-LINE BOXED-TYPE PALLET UNITS EXCEPT WHEN LOADING THE ITEMS DESIGNATED BY LINE NO. 18 AND 20.
5. THE BAY IN THE DEPICTED LOAD WHICH CONTAINS FOUR (4) PALLET UNITS IS LOADED AND BRACED IN ACCORDANCE WITH THE "BAY TYPE D" DETAIL ON PAGE 34. THIS PROCEDURE IS ADEQUATE ONLY IF A STACK OF TWO PALLET UNITS IS NOT HIGHER THAN IT IS LONG.
6. SEVEN (7) CROSS MEMBERS ARE REQUIRED FOR THE SHIPMENT OF THE DEPICTED 39-UNIT LOAD. THE ACTUAL NUMBER OF CROSS MEMBERS REQUIRED WILL VARY FROM FIVE TO SEVEN FOR SHIPMENT OF A FULL LOAD, DEPENDING UPON THE ITEM THAT IS BEING SHIPPED AND THE LOAD QUANTITY.
7. THE ANTI-SWAY BRACES, PIECES MARKED ②, ARE USED WITHIN THE DEPICTED LOAD IN ORDER TO OBTAIN AN UNEVEN LOAD QUANTITY AND WILL NOT BE REQUIRED IF A LOAD CONSISTS OF AN EVEN NUMBER OF PALLET UNITS.
8. THE COMBINATION OF FIGURES AND LETTERS IN THE LOAD CAPACITY AND PLANNING CHART COLUMN HEADED "BAY PATTERNS IN LOAD" REPRESENTS THE NUMBER AND TYPE OF BAYS NEEDED TO OBTAIN A CERTAIN LOAD QUANTITY. FOR INSTANCE, "4-E, 1-D" MEANS THAT FOUR (4) TYPE E BAYS AND ONE (1) TYPE D BAY ARE REQUIRED TO OBTAIN A LOAD OF 20 PALLET UNITS. SEE THE APPLICABLE BAY TYPE DETAILS ON PAGES 34 THRU 36. OTHER LOAD QUANTITIES, AND/OR ITEMS LIGHTER OR HEAVIER THAN THE 20-UNIT LOAD FOR LINE ITEM NO. 1, WILL REQUIRE A DIFFERENT COMBINATION OF BAY PATTERNS.
9. THE LOADS FOR THE ITEMS DESIGNATED BY LINE NOS. 1, 4, 6, AND 7, WHICH HAVE ONE OR MORE BAYS LOADED IN ACCORDANCE WITH THE "BAY TYPE E" GUIDANCE SO AS TO DISTRIBUTE THE LADING WEIGHT OVER MOST OF THE LENGTH OF 40'-0" LONG TRAILERS, CAN BE LOADED WITH THE SAME QUANTITY OF UNITS IN A SHORTER LENGTH SPACE. THIS CAN BE ACCOMPLISHED BY SUBSTITUTING A "BAY TYPE D" FOR EACH "BAY TYPE E". SEE THE "BAY TYPE D" DETAIL ON PAGE 34 FOR GUIDANCE. POSITION THE BAYS WITHIN THE LENGTH OF THE TRAILER SO AS TO PROVIDE FOR PROPER WEIGHT DISTRIBUTION.
10. FOR THE LOADING OF THE ITEM DESIGNATED BY LINE NO. 20, THESE PROCEDURES ON PAGES 28 AND 29 ARE APPLICABLE ONLY FOR THE LOADING OF 36 PALLET UNITS IN TRAILERS WHICH ARE 91" OR GREATER IN WIDTH. FOR TRAILERS LESS THAN 91" WIDE, THE PROCEDURES SHOWN ON PAGES 32 AND 33 MUST BE USED.

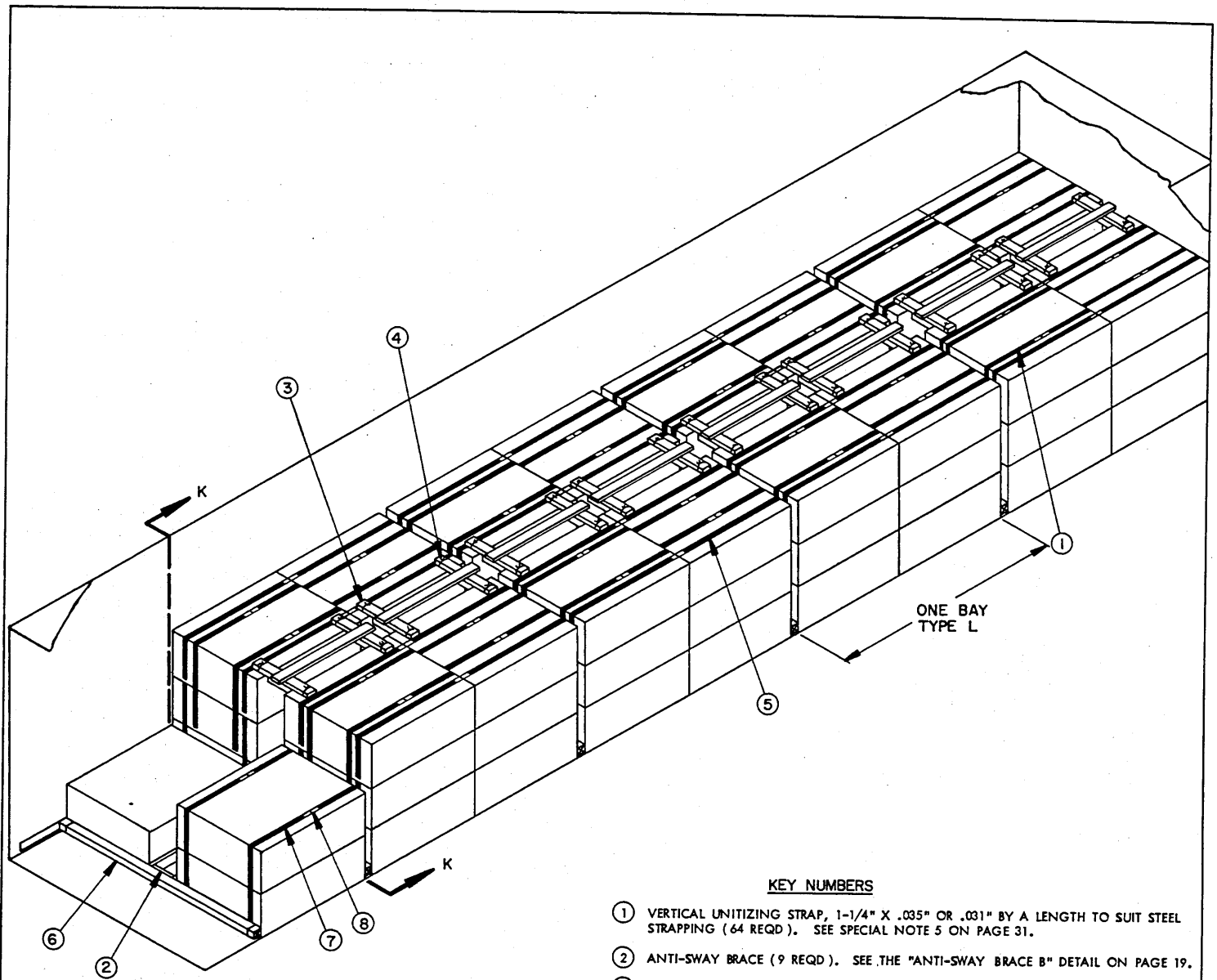
BILL OF MATERIAL (TYPICAL)		
LUMBER	LINEAR FEET	BOARD FEET
2" X 4"	109	73
NAILS	NO. REQD	POUNDS
10d (3")	96	1-3/4
STEEL STRAPPING, 1-1/4" X .035" OR .031" - 374' REQD --- 125 LBS		
SEAL FOR 1-1/4" STRAPPING ----- 40 REQD --- 2 LBS		
CROSS MEMBERS ----- 7 (MAX) REQD		

(CONTINUED AT LEFT)

LOAD AS SHOWN (TYPICAL)

ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	39	41,886 LBS
DUNNAGE		275 LBS
TOTAL WEIGHT		42,161 LBS

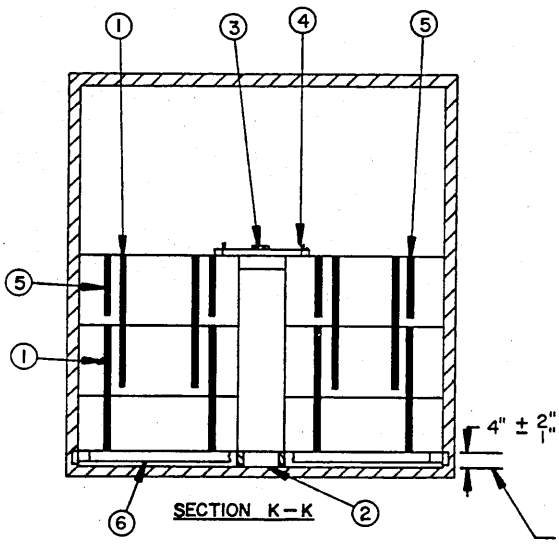
TYPICAL 39-UNIT LOAD OF BOXED-TYPE PALLET UNITS IN A
40'-0" LONG TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES



ISOMETRIC VIEW

KEY NUMBERS

- ① VERTICAL UNITIZING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (64 REQD). SEE SPECIAL NOTE 5 ON PAGE 31.
- ② ANTI-SWAY BRACE (9 REQD). SEE THE "ANTI-SWAY BRACE B" DETAIL ON PAGE 19.
- ③ TOP-OF-LOAD ANTI-SWAY BRACE (8 REQD). SEE THE DETAIL ON PAGE 19.
- ④ TIE WIRE, NO. 14 GAGE WIRE 18" LONG (32 REQD). THREAD ONE END OF WIRE UNDER A LATERALLY-APPLIED UNIT STRAP, BRING ENDS TOGETHER SO AS TO ENCIRCLE THE SUPPORT PIECE OF THE TOP-OF-LOAD ANTI-SWAY BRACE AND TWIST.
- ⑤ BUNDLING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (16 REQD).. PRE-POSITION AND INSTALL SO AS TO ENCIRCLE THE TOP LAYER OF PALLET UNITS IN LONGITUDINALLY ADJACENT STACKS WITHIN A BAY.
- ⑥ CROSS MEMBER (5 REQD). POSITION AT THE HEIGHT SPECIFIED BY THE "SECTION K-K" VIEW AT LEFT. SEE GENERAL NOTE "F" ON PAGE 2.
- ⑦ STACK UNITIZING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (2 REQD).
- ⑧ SEAL FOR 1-1/4" STRAPPING (164 REQD, 2 PER STRAP JOINT). SEE GENERAL NOTE "M" ON PAGE 2.



INDICATES TRAILER FLOOR.

TYPICAL 51-UNIT LOAD OF BOXED-TYPE PALLET UNITS IN A 40'-0" LONG TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES

SPECIAL NOTES:

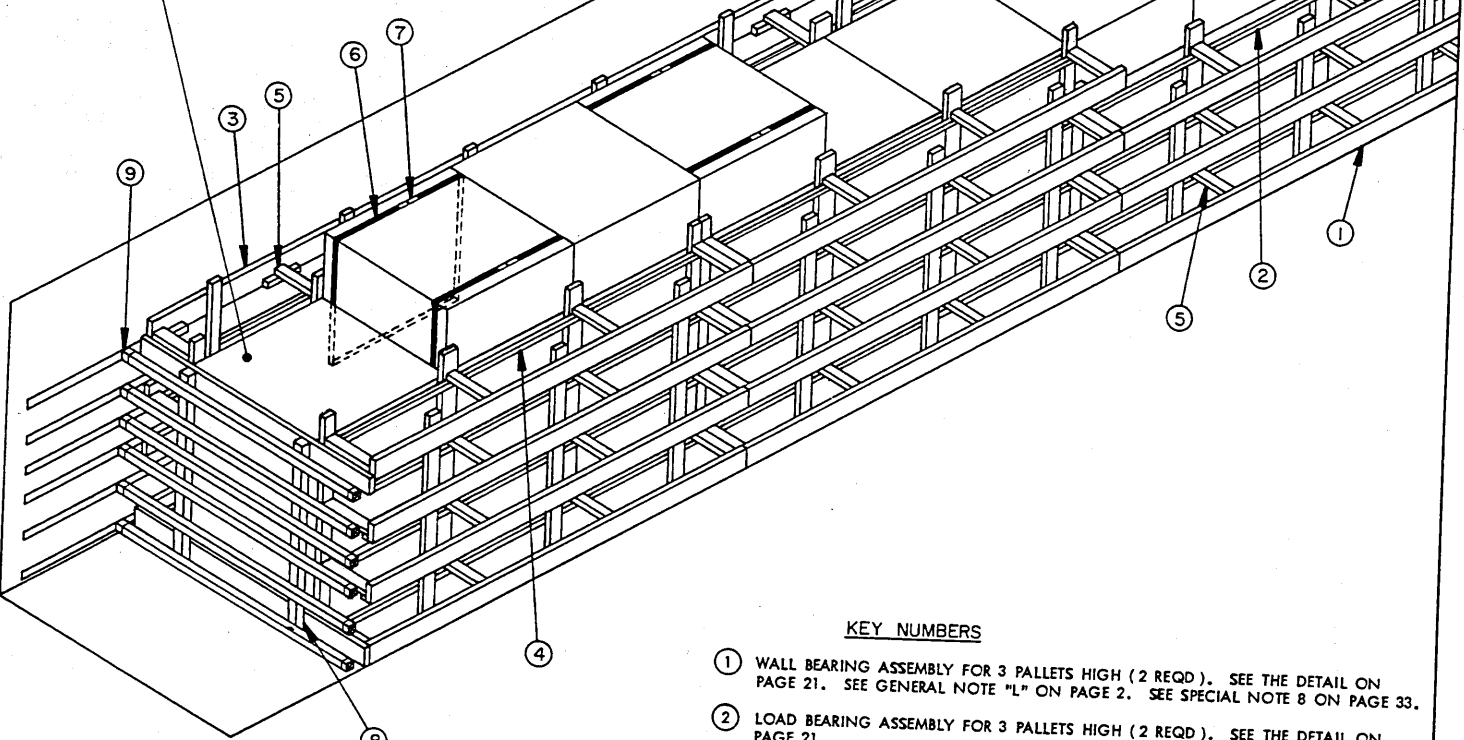
1. A 40'-0" LONG BY 7'-6" WIDE (INSIDE WIDTH DIMENSION) VAN TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES IS SHOWN. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
2. THE TYPICAL LOAD SHOWN IS APPLICABLE FOR BOXED-TYPE PALLET UNITS, LINE ITEMS NO. 3 AND 23, AS DETAILED BY ORDNANCE CORPS DRAWING NO. F-7548604. THE PROCEDURES ARE APPLICABLE FOR LOADS WHICH CONTAIN ONE OR MORE BAYS HAVING PALLET UNITS STACKED THREE (3) HIGH.
3. A 51-UNIT LOAD OF BOXED-TYPE PALLET UNITS, LINE NO. 3, MEASURING 48-7/8" LONG BY 39-1/8" WIDE BY 18" HIGH AND WEIGHING 822 POUNDS IS SHOWN AS TYPICAL. THE PROCEDURES ARE ALSO APPLICABLE FOR SHIPMENTS OF PALLET UNITS, LINE NO. 23; SIXTY (60) PALLET UNITS CAN BE LOADED, FIVE BAYS OF 12 PALLET UNITS LOADED IN ACCORDANCE WITH THE "BAY TYPE L" DETAIL SHOWN ON PAGE 36 AND AS SHOWN IN THE DEPICTED LOAD. SEE GENERAL NOTE "O" ON PAGE 2.
4. THE BAYS IN THE DEPICTED LOAD WHICH CONTAIN PALLET UNITS STACKED THREE HIGH ARE LOADED AND BRACED IN ACCORDANCE WITH THE "BAY TYPE L" DETAIL ON PAGE 36. THIS PROCEDURE IS ADEQUATE ONLY IF A STACK OF THREE PALLET UNITS IS NOT HIGHER THAN THE LENGTH OF TWO PALLET UNITS.
5. IF THE CAPACITY OF THE MATERIAL HANDLING EQUIPMENT PERMITS, PALLET STACKS OF TWO OR THREE PALLET UNITS, AS APPLICABLE, SHOULD BE UNITIZED PRIOR TO PLACEMENT IN THE TRAILER.
6. LESS THAN FULL TRAILER LOADS (LTL) OF LINE ITEMS NO. 3 AND 23 CAN BE ATTAINED BY EMPLOYING COMBINATIONS OF THE APPLICABLE BAY TYPES A THRU K. SEE THE DETAILS ON PAGES 34 THRU 36 FOR GUIDANCE.
7. FOR FULL LOADS OF THE BOXED-TYPE PALLET UNITS OTHER THAN LINE ITEMS NO. 3 AND 23, REFER TO THE "BOXED-TYPE PALLET UNIT INDEX" ON PAGE 38 AND TO THE APPLICABLE PROCEDURES ON PAGES 26 THRU 29 AND PAGES 32 AND 33.

BILL OF MATERIAL (TYPICAL)		
LUMBER	LINEAR FEET	BOARD FEET
1" X 4"	30	10
2" X 4"	119	80
NAILS	NO. REQD	POUNDS
6d (2")	64	1/2
10d (3")	72	1-1/4
12d (3-1/4")	64	1-1/4
STEEL STRAPPING, 1-1/4" X .035" OR .031" - 1,288' REQD - 184 LBS		
SEAL FOR 1-1/4" STRAPPING -----		164 REQD - 9 LBS
WIRE, NO. 14 GAGE -----		48' REQD - 1 LB
CROSS MEMBERS -----		5 REQD

LOAD AS SHOWN (TYPICAL)		
ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT -----	51 -----	41,922 LBS
DUNNAGE -----		377 LBS
TOTAL WEIGHT -----		42,299 LBS

TYPICAL 51-UNIT LOAD OF BOXED-TYPE PALLET UNITS IN A
40'-0" LONG TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES

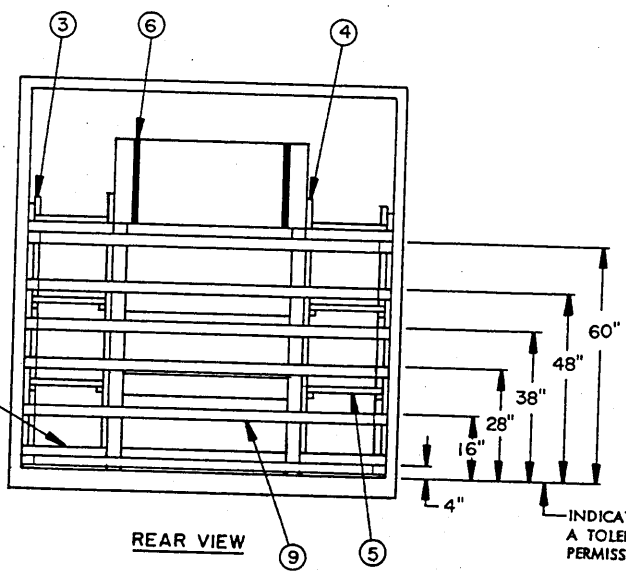
SEE SPECIAL NOTE 7
ON PAGE 33.



ISOMETRIC VIEW

KEY NUMBERS

- ① WALL BEARING ASSEMBLY FOR 3 PALLETS HIGH (2 REQD). SEE THE DETAIL ON PAGE 21. SEE GENERAL NOTE "L" ON PAGE 2. SEE SPECIAL NOTE 8 ON PAGE 33.
- ② LOAD BEARING ASSEMBLY FOR 3 PALLETS HIGH (2 REQD). SEE THE DETAIL ON PAGE 21.
- ③ WALL BEARING ASSEMBLY FOR 4 PALLETS HIGH (4 REQD). SEE THE DETAIL ON PAGE 21.
- ④ LOAD BEARING ASSEMBLY FOR 4 PALLETS HIGH (4 REQD). SEE THE DETAIL ON PAGE 21.
- ⑤ STRUT, 2" X 4" BY CUT TO FIT (88 REQD). TOENAIL TO A WALL BEARING ASSEMBLY, PIECE MARKED ① OR ③, AND TO A LOAD BEARING ASSEMBLY, PIECE MARKED ② OR ④, W/2-12d NAILS AT EACH END.
- ⑥ VERTICAL UNITIZING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (4 REQD). INSTALL SO AS TO ENCIRCLE THE TOP TWO LAYERS OF A STACK. SEE SPECIAL NOTES 4 AND 5 ON PAGE 33.
- ⑦ SEAL FOR 1-1/4" STRAPPING (8 REQD; 2 PER STRAP JOINT). SEE GENERAL NOTE "M" ON PAGE 2.
- ⑧ REAR GATE (1 REQD). SEE THE "REAR GATE A" DETAIL ON PAGE 37.
- ⑨ CROSS MEMBER (6 REQD). POSITION AT THE HEIGHTS AS SPECIFIED BY THE "REAR VIEW" AT LEFT. SEE GENERAL NOTE "F" ON PAGE 2.



REAR VIEW

INDICATES TRAILER FLOOR. NOTE THAT A TOLERANCE OF PLUS OR MINUS 1" IS PERMISSIBLE FOR LOCATION OF THE CROSS MEMBERS.

TYPICAL 30-UNIT LOAD OF BOXED-TYPE PALLET UNITS IN A 40'-0" LONG TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES

LOAD CAPACITY CHART

LINE NO.	CALIBER	DESIGNATION	UNIT WEIGHT IN POUNDS	MAX UNITS PER TRAILER	LOAD WEIGHT IN POUNDS	APPROXIMATE LOAD LENGTH
14	90MM	HEAT M431E1	1,320	30	39,600	36'-2"
15	105MM	HEP-T M345 OR M345B1	964	36 *	34,704	37'-11"
16	105MM	HEAT M341	1,197	27	32,319	37'-11"
20	105MM	APDS-T M392A3	1,080	36 *	38,880	35'-10"
19	106MM	HEP-T M346A1	964	36 *	34,704	37'-11"

■ SEE SPECIAL NOTE 6.
* SEE SPECIAL NOTE 7.

● EMPTY WEIGHTS ARE SHOWN. SEE GENERAL NOTE "O" ON PAGE 2.

SPECIAL NOTES:

1. A 40'-0" LONG BY 7'-6" WIDE (INSIDE WIDTH DIMENSION) VAN TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES IS SHOWN. TRAILERS OF OTHER DIMENSIONS CAN BE USED.
2. THE TYPICAL LOAD SHOWN IS APPLICABLE FOR BOXED-TYPE PALLET UNITS AS DETAILED BY ORDNANCE CORPS DRAWING NO. F-7548604, AND FOR THE ITEMS AS SPECIFIED IN THE "LOAD CAPACITY CHART" ABOVE. THE PROCEDURES ARE APPLICABLE FOR PALLET UNITS WHICH ARE TOO WIDE TO BE LOADED TWO (2) UNITS WIDE IN A TRAILER.
3. A 32-UNIT LOAD OF BOXED-TYPE PALLET UNITS MEASURING 47-1/8" LONG BY 47-1/8" WIDE BY 20-7/8" HIGH AND WEIGHING 1,320 POUNDS IS SHOWN AS TYPICAL. THE ACTUAL QUANTITY THAT CAN BE SHIPPED WILL DEPEND UPON THE LENGTH, HEIGHT, AND WEIGHT OF THE ITEM BEING LOADED AND THE CAPACITY OF THE TRAILER BEING USED. SEE THE "LOAD CAPACITY CHART" ABOVE FOR GUIDANCE.
4. VERTICAL UNITIZING STRAPS, PIECES MARKED (6), WILL BE APPLIED AROUND THE TOP TWO (2) LAYERS OF THE STACK AT EACH END OF THE UPPER LAYER OF PALLET UNITS. IF THE UPPER LAYER IS DIVIDED (NOT CONTINUOUS), UNITIZING STRAPS WILL BE REQUIRED AT THREE (3) LOCATIONS. NOTE THAT THE UNITIZING STRAPS ARE NOT REQUIRED FOR THE STACK WHICH CONTACTS THE TRAILER FRONT WALL.
5. IF THE CAPACITY OF THE MATERIAL HANDLING EQUIPMENT PERMITS, THE STRAPPED PALLET UNITS SHOULD BE UNITIZED PRIOR TO PLACEMENT IN THE TRAILER.
6. FOR THE LOADING OF THE ITEM DESIGNATED BY LINE NO. 20, THE PROCEDURES ON PAGES 32 AND 33 ARE APPLICABLE FOR THE LOADING OF 36 PALLET UNITS IN TRAILERS WHICH ARE LESS THAN 91" WIDE. FOR TRAILERS WHICH ARE 91" OR GREATER IN WIDTH, THE PROCEDURES SHOWN ON PAGES 28 AND 29 SHOULD BE USED.
7. LINE ITEMS NO. 14 AND 16 SHOULD NOT BE LOADED MORE THAN THREE (3) PALLET UNITS HIGH AT THE REAR OF THE LOAD ADJACENT TO THE CROSS MEMBERS. LINE ITEM NO. 20 MAY BE LOADED FOUR (4) UNITS HIGH AT THE REAR OF THE LOAD PROVIDED THE TOP TWO LAYERS OF THAT STACK ARE UNITIZED WITH THE VERTICAL UNITIZING STRAPS, PIECES MARKED (6). A FULL LOAD (36 UNITS) OF LINE ITEMS NO. 15, 20, AND 19 MAY BE SHIPPED PROVIDED THE TOP TWO (2) LAYERS OF THE REARMOST TWO (2) STACKS ARE ENCIRCLED WITH TWO (2) PIECES OF STEEL STRAPPING. SEE THE BUNDLING STRAPS, PIECES MARKED (4) ON PAGE 4 FOR GUIDANCE.
8. LESS THAN FULL TRAILER LOADS (LTL) OF ANY OF THE ITEMS LISTED ABOVE CAN BE ATTAINED BY REDUCING THE QUANTITY OF PALLET UNITS IN THE TOP LAYER, OR BY REDUCING THE NUMBER OF LAYERS, AND/OR BY REDUCING THE NUMBER OF STACKS IN A LOAD. IF THE QUANTITY TO BE SHIPPED CAN BE PLACED IN ONE LAYER, THE 1-WIDE PORTION OF THE LOAD SHOWN ON PAGE 6 CAN BE USED AS GUIDANCE. INSTALL SIDE BLOCKING, SHOWN AS PIECE MARKED (2) ON PAGE 6, IN LIEU OF THE DEPICTED PIECES MARKED (1) THRU (5). AT THE REAR OF THE LOAD, INSTALL A CROSS MEMBER AT THE 4" HEIGHT. IF A LOAD WEIGHT IS MORE THAN 10,000 POUNDS, WHICH IT COULD BE FOR LINE ITEMS NO. 14 AND 16, A CROSS MEMBER MUST ALSO BE INSTALLED NEAR THE CENTER OF THE LOAD LENGTH. IF ONLY A SMALL QUANTITY OF PALLET UNITS IS TO BE SHIPPED, FORM ONE OR MORE BAYS CONTAINING ONE PALLET UNIT. SEE THE "BAY TYPE A" DETAIL ON PAGE 34 FOR GUIDANCE.
9. FOR FULL LOADS OF THE BOXED-TYPE PALLET UNITS OTHER THAN THOSE LISTED ABOVE, REFER TO THE "BOXED-TYPE PALLET UNIT INDEX" ON PAGE 38 AND TO THE APPLICABLE PROCEDURES ON PAGES 26 THRU 31.

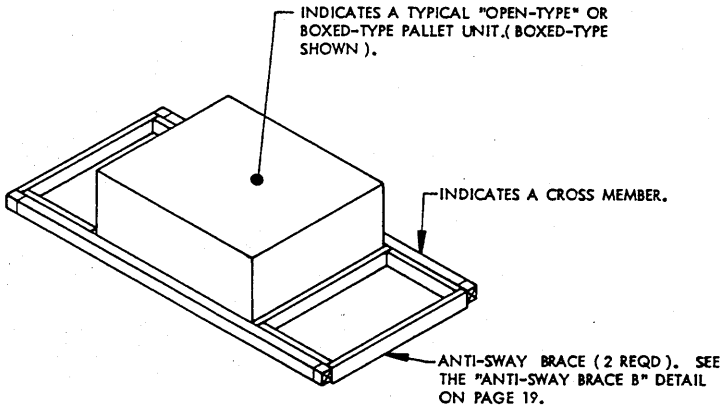
BILL OF MATERIAL (TYPICAL)

LUMBER	LINEAR FEET	BOARD FEET
2" X 2"	348	116
2" X 4"	290	194
2" X 6"	344	344
4" X 4"	12	16
NAILS	NO. REQD	POUNDS
10d (3")	574	9
12d (3-1/4")	352	6
STEEL STRAPPING, 1-1/4" X .035" OR .031" - 64' REQD --- 10 LBS		
SEAL FOR 1-1/4" STRAPPING ----- 8 REQD --- NIL		
CROSS MEMBERS ----- 6 REQD		

LOAD AS SHOWN (TYPICAL)

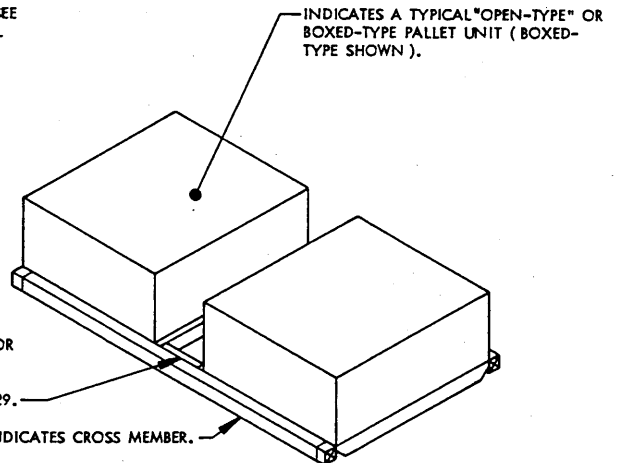
ITEM	QUANTITY	WEIGHT (APPROX)
PALLET UNIT	30	39,600 LBS
DUNNAGE		1,365 LBS
TOTAL WEIGHT		40,965 LBS

TYPICAL 30-UNIT LOAD OF BOXED-TYPE PALLET UNITS IN A
40'-0" LONG TRAILER EQUIPPED WITH MECHANICAL BRACING DEVICES



BAY TYPE A

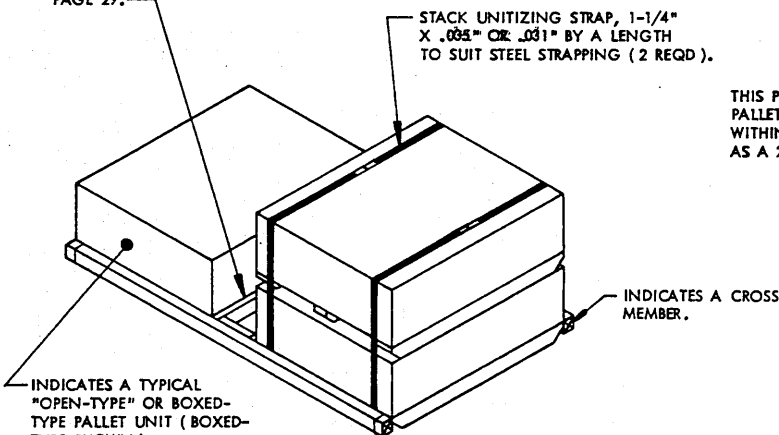
THIS PROCEDURE IS APPLICABLE FOR ANY "OPEN-TYPE" OR BOXED-TYPE PALLET UNIT AND MAY BE USED IN COMBINATION WITH OTHER BAY TYPES WITHIN A LOAD TO OBTAIN THE DESIRED QUANTITY, OR MAY BE USED AS A 1-UNIT LTL LOAD.



BAY TYPE B

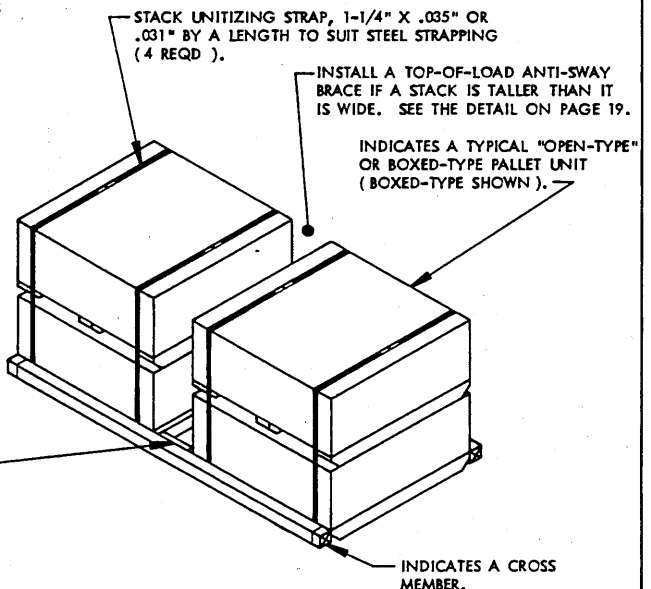
THIS PROCEDURE IS APPLICABLE FOR ANY "OPEN-TYPE" OR BOXED-TYPE PALLET UNIT AND MAY BE USED IN COMBINATION WITH OTHER BAY TYPES WITHIN A LOAD TO OBTAIN THE DESIRED QUANTITY, OR MAY BE USED AS A 2-UNIT LTL LOAD.

ANTI-SWAY BRACE (NOT REQD FOR "OPEN-TYPE" PALLET UNITS). SEE SPECIAL NOTE 7 ON PAGE 27 AND SPECIAL NOTE 4 ON PAGE 29.



BAY TYPE C

THIS PROCEDURE IS APPLICABLE FOR "OPEN-TYPE" OR BOXED-TYPE PALLET UNITS WHICH WHEN STACKED ARE NOT TALLER THAN EITHER LONG AND/OR WIDE. THEREFORE, BAY TYPE C WILL NOT BE USED FOR "OPEN-TOP" UNITS LINE ITEMS NO. 8, 10, 11, 12, 14, 20, AND 22. THE HEIGHT OF LINE ITEMS 15 THRU 19, 21, 23, 24, AND 25 SHOULD BE FIELD CHECKED TO ENSURE THAT A STACK IS NOT HIGHER THAN LONG. ALSO, BAY TYPE C WILL NOT BE USED FOR BOXED-TYPE PALLET UNITS LINE ITEMS 4, 12, 13, 21, 22, 24, AND 25.



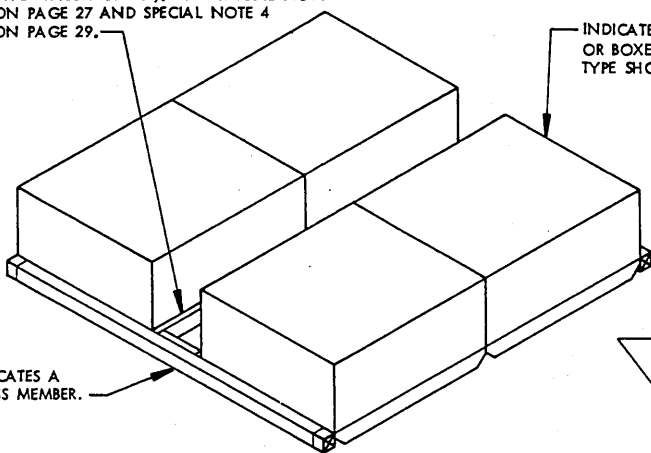
BAY TYPE D

THIS PROCEDURE IS APPLICABLE FOR PALLET UNITS WHICH WEIGH NOT MORE THAN 2,500 POUNDS, AND WHICH WHEN STACKED ARE NOT TALLER THAN LONG. THEREFORE, BAY TYPE D MAY BE USED FOR ANY "OPEN-TYPE" PALLET UNIT EXCEPT LINE ITEM NO. 12, 15, 16, 17, 21 THRU 24, 29, 33, AND 35. BAY TYPE D MAY BE USED FOR ANY BOXED-TYPE PALLET UNIT EXCEPT LINE ITEM NO. 12, 13, 21, AND 25. A BAY TYPE E MUST BE USED IN LIEU OF A BAY TYPE D FOR "OPEN-TYPE" UNITS NO. 12, 15, 29, 33, AND 35 AND FOR BOXED-TYPE UNIT NO. 21.

ANTI-SWAY BRACE (NOT REQD FOR "OPEN-TYPE" PALLET UNITS), SEE SPECIAL NOTE 7 ON PAGE 27 AND SPECIAL NOTE 4 ON PAGE 29.

INDICATES A TYPICAL "OPEN-TYPE" OR BOXED-TYPE PALLET UNIT (BOXED-TYPE SHOWN).

INDICATES A CROSS MEMBER.

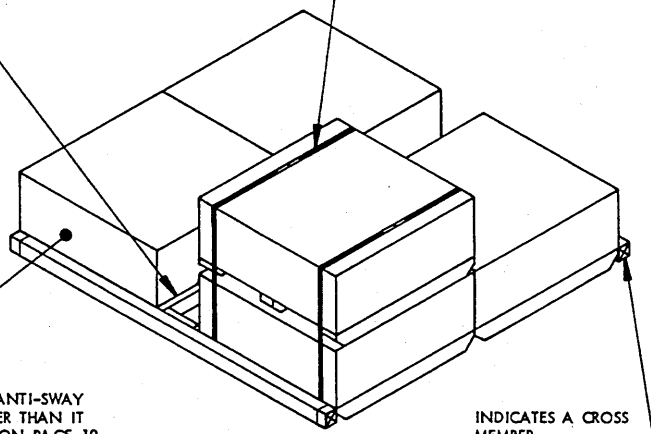


BAY TYPE E

THIS PROCEDURE IS APPLICABLE FOR PALLET UNITS WHICH WEIGH NOT MORE THAN 2,500 POUNDS. IT MAY BE USED FOR ANY "OPEN-TYPE" PALLET UNIT EXCEPT LINE ITEMS NO. 12 AND 15 FOR WHICH BAY TYPE A OR B MUST BE USED, AND EXCEPT FOR LINE ITEMS NO. 29, 33, AND 35 FOR WHICH BAY TYPES A, B OR C MUST BE USED. BAY TYPE E MAY BE USED FOR ANY BOXED-TYPE PALLET UNIT EXCEPT LINE ITEM NO. 21 FOR WHICH BAY TYPE A, B, OR C MUST BE USED.

ANTI-SWAY BRACE (NOT REQD FOR "OPEN-TYPE" PALLET UNITS), SEE SPECIAL NOTE 7 ON PAGE 27 AND SPECIAL NOTE 4 ON PAGE 29.

STACK UNITIZING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (2 REQD).



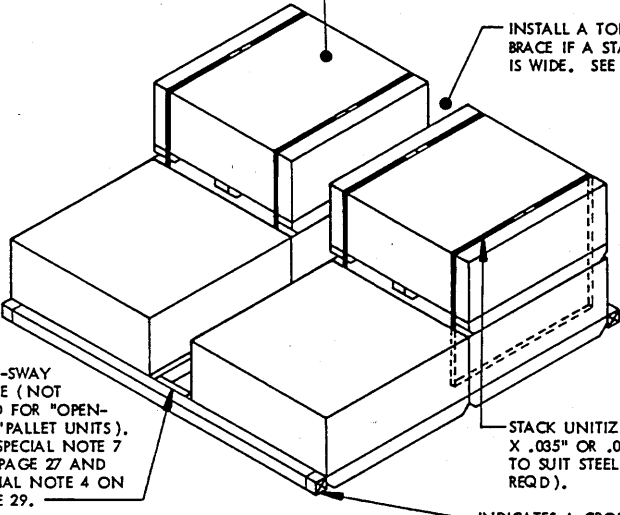
INDICATES A CROSS MEMBER.

BAY TYPE F

THIS PROCEDURE IS APPLICABLE FOR PALLET UNITS WHICH WEIGH NOT MORE THAN 2,000 POUNDS, AND WHICH WHEN STACKED ARE NOT TALLER THAN THEY ARE LONG AND/OR WIDE. IT MAY BE USED FOR "OPEN-TYPE" PALLET UNITS, LINE ITEMS NO. 1, 2, 4, 6, 9, 27, AND 30, AND POSSIBLY FOR UNITS NO. 8, 10, 11, AND 14 IF THEY ARE NOT TALLER THAN LONG WHEN STACKED. THIS PROCEDURE MAY ALSO BE USED FOR ALL THE ITEMS SPECIFIED FOR BAY TYPES G, J, K, AND L.

INDICATES A TYPICAL "OPEN-TYPE" OR BOXED-TYPE PALLET UNIT (BOXED-TYPE SHOWN).

INSTALL A TOP-OF-LOAD ANTI-SWAY BRACE IF A STACK IS TALLER THAN IT IS WIDE. SEE THE DETAIL ON PAGE 19.



ANTI-SWAY BRACE (NOT REQD FOR "OPEN-TYPE" PALLET UNITS), SEE SPECIAL NOTE 7 ON PAGE 27 AND SPECIAL NOTE 4 ON PAGE 29.

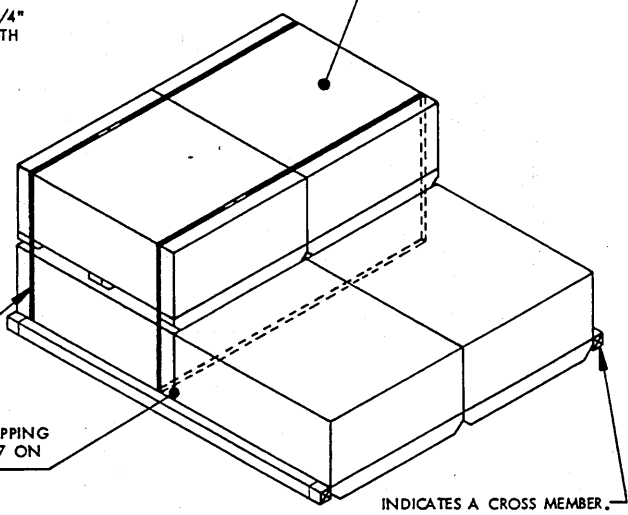
STACK UNITIZING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (4 REQD).

INDICATES A CROSS MEMBER.

BAY TYPE G

THIS PROCEDURE IS APPLICABLE FOR PALLET UNITS WHICH WEIGH NOT MORE THAN 1,666 POUNDS, AND WHICH WHEN STACKED ARE NOT TALLER THAN LONG. IT MAY BE USED FOR "OPEN-TYPE" PALLET UNIT LINE ITEM NO. 7, AND POSSIBLY FOR UNITS NO. 18 AND 19 IF THEY ARE NOT TALLER THAN LONG WHEN STACKED. THIS PROCEDURE MAY ALSO BE USED FOR BOXED-TYPE PALLET UNITS LINE ITEMS NO. 6 AND 7, AND FOR ALL THE ITEMS SPECIFIED FOR BAY TYPES J, K, AND L EXCEPT FOR "OPEN-TYPE" PALLET UNITS NO. 20 AND 25. BAY TYPE H WILL BE USED IN LIEU OF BAY TYPE G FOR PALLET UNITS WHICH WHEN STACKED ARE TALLER THAN THEY ARE LONG.

INDICATES A TYPICAL "OPEN-TYPE" OR BOXED-TYPE PALLET UNIT ("OPEN-TYPE" SHOWN).



INDICATES A CROSS MEMBER.

BAY TYPE H

BUNDLING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (2 REQD).

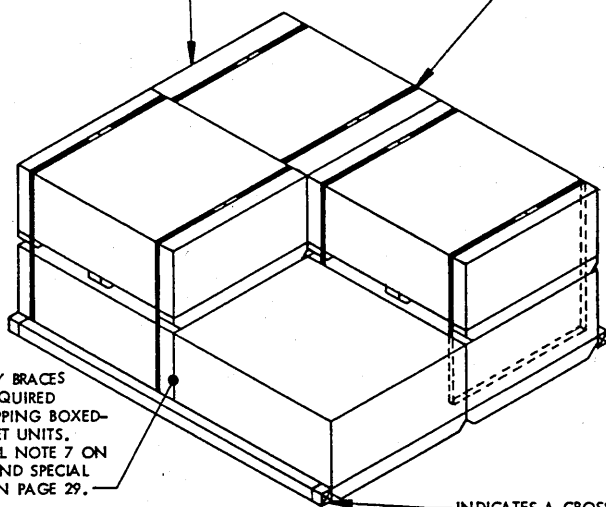
ANTI-SWAY BRACES MAY BE REQUIRED WHEN SHIPPING BOXED-TYPE PALLET UNITS. SEE SPECIAL NOTE 7 ON PAGE 27 AND SPECIAL NOTE 4 ON PAGE 29.

THIS PROCEDURE IS APPLICABLE FOR PALLET UNITS WHICH WEIGH NOT MORE THAN 1,666 POUNDS, AND WHICH WHEN STACKED ARE TALLER THAN LONG. IT MAY BE USED FOR "OPEN-TYPE" PALLET UNITS LINE ITEMS NO. 7, 18, AND 19, AND FOR BOXED-TYPE UNITS NO. 6 AND 7. BAY TYPE H MAY ALSO BE USED FOR ALL THE ITEMS SPECIFIED FOR BAY TYPES J, K, AND L EXCEPT FOR BOXED-TYPE UNIT NO. 22.

INDICATES A TYPICAL "OPEN-TYPE" OR BOXED-TYPE PALLET UNIT ("OPEN-TYPE" SHOWN).

STACK UNITIZING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (6 REQD).

ANTI-SWAY BRACES MAY BE REQUIRED WHEN SHIPPING BOXED-TYPE PALLET UNITS. SEE SPECIAL NOTE 7 ON PAGE 27 AND SPECIAL NOTE 4 ON PAGE 29.



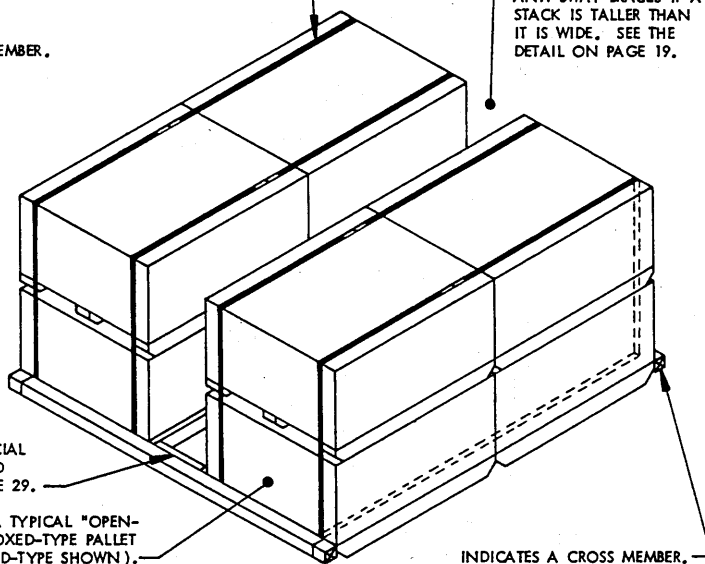
INDICATES A CROSS MEMBER.

BAY TYPE J

THIS PROCEDURE IS APPLICABLE FOR PALLET UNITS WHICH WEIGH NOT MORE THAN 1,428 POUNDS, AND WHICH WHEN STACKED ARE NOT TALLER THAN LONG AND/OR WIDE. IT IS APPLICABLE FOR "OPEN-TYPE" PALLET UNITS LINE ITEMS NO. 38 AND 40, AND POSSIBLY FOR LINE ITEMS NO. 20 AND 25 IF THEY ARE NOT TALLER THAN LONG WHEN STACKED. BAY TYPE J MAY ALSO BE USED FOR ALL THE ITEMS SPECIFIED FOR BAY TYPES K AND L EXCEPT FOR BOXED-TYPE UNIT NO. 22.

BUNDLING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (4 REQD).

INSTALL TOP-OF-LOAD ANTI-SWAY BRACES IF A STACK IS TALLER THAN IT IS WIDE. SEE THE DETAIL ON PAGE 19.



ANTI-SWAY BRACE (NOT REQD FOR "OPEN-TYPE" PALLET UNITS). SEE SPECIAL NOTE 7 ON PAGE 27 AND SPECIAL NOTE 4 ON PAGE 29.

TOP-OF-LOAD ANTI-SWAY BRACE (2 REQD). SEE THE DETAIL ON PAGE 19.

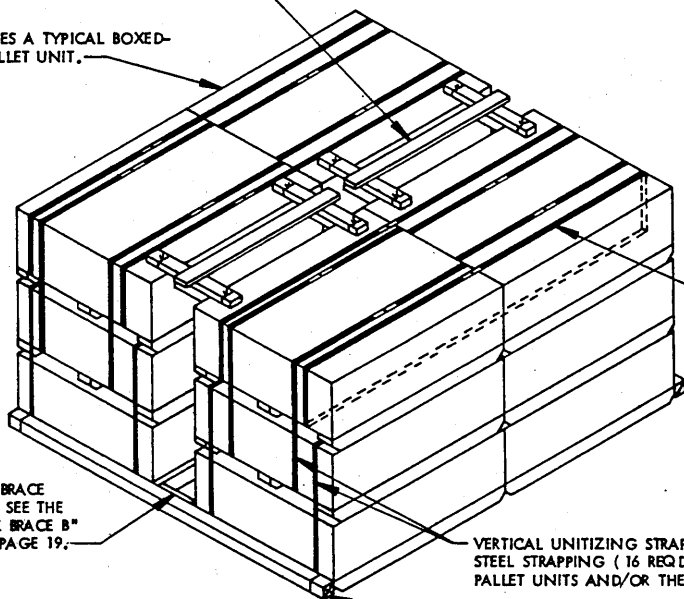
INDICATES A TYPICAL "OPEN-TYPE" OR BOXED-TYPE PALLET UNIT (BOXED-TYPE SHOWN).

INDICATES A CROSS MEMBER.

BAY TYPE K

THIS PROCEDURE IS APPLICABLE FOR PALLET UNITS WHICH WEIGH NOT MORE THAN 1,250 POUNDS. IT MAY BE USED FOR "OPEN-TYPE" PALLET UNITS LINE ITEM NO. 13, 31, 39, AND 41, AND FOR BOXED-TYPE UNITS LINE ITEM NO. 2, 5, 9, 10, 11, 18, 20 (WIDE TRAILER ONLY), 22, AND 26, AS WELL AS THE ITEMS SPECIFIED FOR BAY TYPE L.

INDICATES A TYPICAL BOXED-TYPE PALLET UNIT.



BUNDLING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (4 REQD). INSTALL AROUND THE TOP LAYER OF LONGITUDINALLY ADJACENT PALLET UNITS IN A ROW.

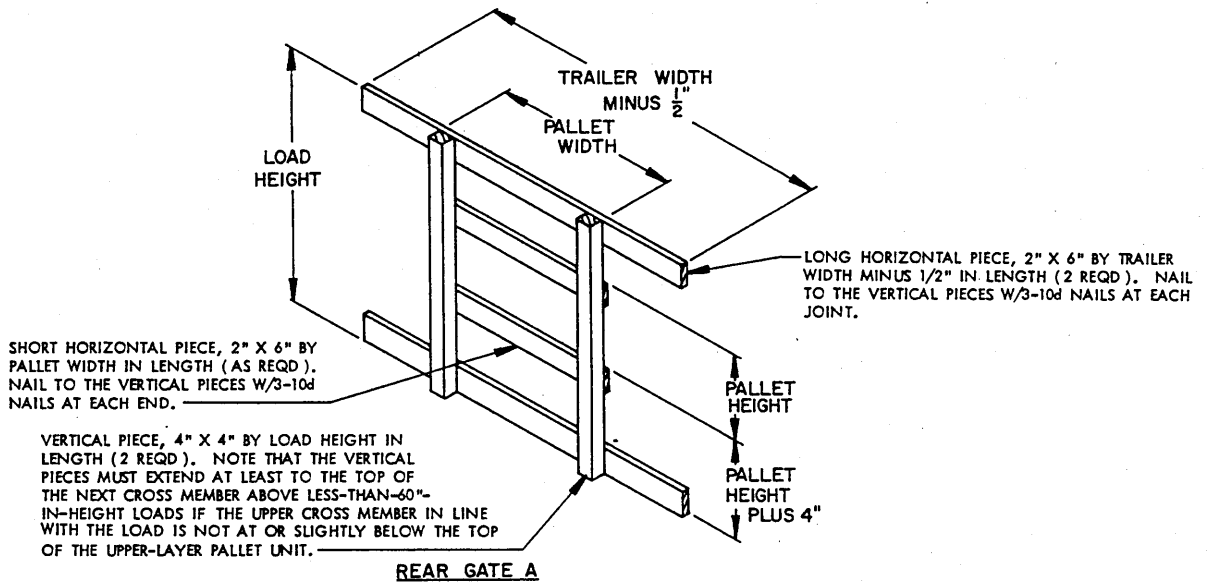
ANTI-SWAY BRACE (2 REQD). SEE THE "ANTI-SWAY BRACE B" DETAIL ON PAGE 19.

VERTICAL UNITIZING STRAP, 1-1/4" X .035" OR .031" BY A LENGTH TO SUIT STEEL STRAPPING (16 REQD). INSTALL SO AS TO ENCIRCLE THE TOP TWO PALLET UNITS AND/OR THE BOTTOM TWO PALLET UNITS OF A STACK.

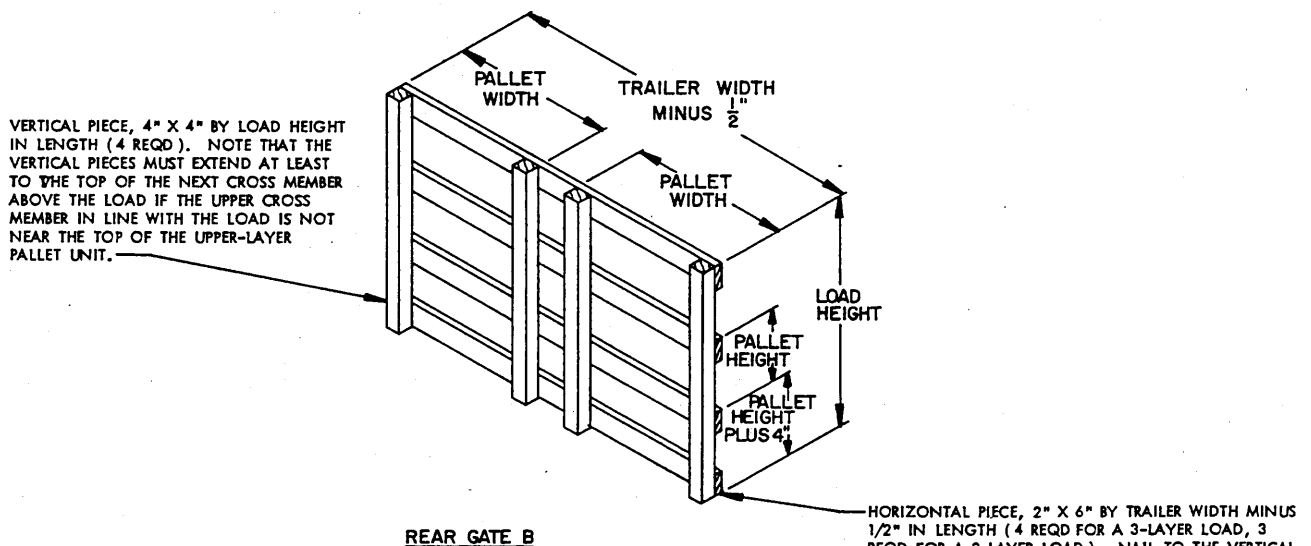
BAY TYPE L

INDICATES A CROSS MEMBER.

THIS PROCEDURE IS APPLICABLE FOR PALLET UNITS WHICH WEIGH NOT MORE THAN 833 POUNDS; BOXED-TYPE PALLET UNITS LINE ITEM NO. 3 AND 23 ARE IN THIS CATEGORY.



THIS GATE IS FOR USE IN THE LOAD SHOWN ON PAGE 32. THE DEPICTED GATE IS FOR A 3-LAYER LOAD; A 4-LAYER LOAD WILL REQUIRE ONE ADDITIONAL SHORT HORIZONTAL PIECE, AND ONE LESS WILL BE REQUIRED FOR A 2-LAYER LOAD.



THIS GATE IS FOR USE IN THE LOAD SHOWN ON PAGE 28 AS AN ALTERNATIVE TO THE DEPICTED PROCEDURES. SEE SPECIAL NOTE 11 ON PAGE 29. THE GATE SHOWN IS FOR USE AGAINST A 3-LAYER PORTION OF A LOAD; ADJUST THE HEIGHT FOR USE AGAINST TWO LAYERS OF A LOAD.

DETAILS

BOXED-TYPE PALLET UNIT INDEX

IDENTIFICATION			PAGE	
LINE NO.	CALIBER	DESIGNATION	CONV VAN	MECH VAN
1	75MM	AP-T M388A1	10	28
2	75MM	HEP-T150E 29 OR T165E29	8	28
3	75MM	HEP-T151E28	8	30
4	105MM	APERS-T M380	10	28
4	105MM	APERS-T XM603E1	10	28
5	76MM	HVAP-T M93A1	10	28
6	76MM	AP-T M339E1 OR TP-T M340A1E1	10	28
7	76MM	CANNISTER M363	10	28
8	90MM	CANNISTER M377	6	26
9	76MM	HVAP-T T66E3 OR T66E5	8	28
10	76MM	HEAT-T M496	8	28
11	90MM	HVAP-TM332A1E1 OR HVTP-M333A1E1	10	28
12	90MM	TP-T M35321	6	26
13	90MM	AP-T M318A1C	6	26
14	90MM	HEAT M431E1	12	32
15	105MM	HEP-T M345 OR M345B1	12	32
16	105MM	HEAT M341	12	32
17	90MM	CANNISTER M336	6	26
18	105MM	HEAT M456A1 OR M456A1E1	10	28
19	106MM	HEP-T M346A1	12	32
20	105MM	APDS-T M392A3	12	28
21	120MM	AP-TM368E1 OR AP-T M359	6	26
22	120MM	HEAT M469	10	28
23	90MM	HEAT M371E1	8	30
24	2.74 IN	WARHEAD HE XM229	10	26
25	105MM	TP-T M459	10	26
26	81MM	WP M375E2	8	28

"OPEN-TYPE" PALLET UNIT INDEX

IDENTIFICATION			PAGE	
LINE NO.	CALIBER	DESIGNATION	CONV VAN	MECH VAN
1	75MM	HE M309 A1	6	22
2	75MM	HEAT-T, M310A1	6	22
3	75MM	WP 311A1	6	22
4	75MM	HE M48	6	22
5	75MM	SMOKE M64	6	22
6	75MM	HEAT M66	6	22
7	75MM	HE M334	4	24
8	2.75 IN	WARHEAD WTU-1/B	6	22
9	76MM	WP-M361	6	22
10	76MM	WP-M312	6	24
11	76MM	HE-M42A1	6	24
12	105MM	TACTICAL CS XM632	6	22
13	2.75 IN	WARHEAD HE M151, PRACTICE XM232	4	24
14	152MM	TP-T XM411E2	4	22
15	90MM	AP-M82	6	22
16	90MM	HE-M71	6	22
17	90MM	WP-M313	6	22
18	90MM	HE-T91	4	24
19	90MM	CHEM-T T92	4	24
20	105MM	WARHEAD, 105MM, XM547	4	24
21	105MM	HE M1	6	22
22	105MM	HEAT M67	6	22
23	105MM	HC, BE, M64, M84B1	6	22
24	105MM	WP M60	6	22
25	105MM	HEP M393A2, WP XM416	4	24
26	105MM	HE M323	6	22
27	105MM	HEAT M324	6	22
28	105MM	WP M325	6	22
29	105MM	ILLUM, XM314A2E1	6	22
30	105MM	HE M442	6	22
31	106MM	HEAT M344A1	4	24
32	105MM	TP-T XM468	6	22
33	120MM	HE M73	6	22
34	120MM	HE M356	6	22
35	120MM	HE T15E3	6	22
36	120MM	CHEM T16E1	6	22
37	120MM	CHEM T16E3	6	22
38	105MM	HE M444, M444E1	4	24
39	165MM	HEP T237E4 (M123)	4	24
40	152MM	HE XM657E2	4	24
41	155MM	M549 MOTOR BODY ASSY	4	24