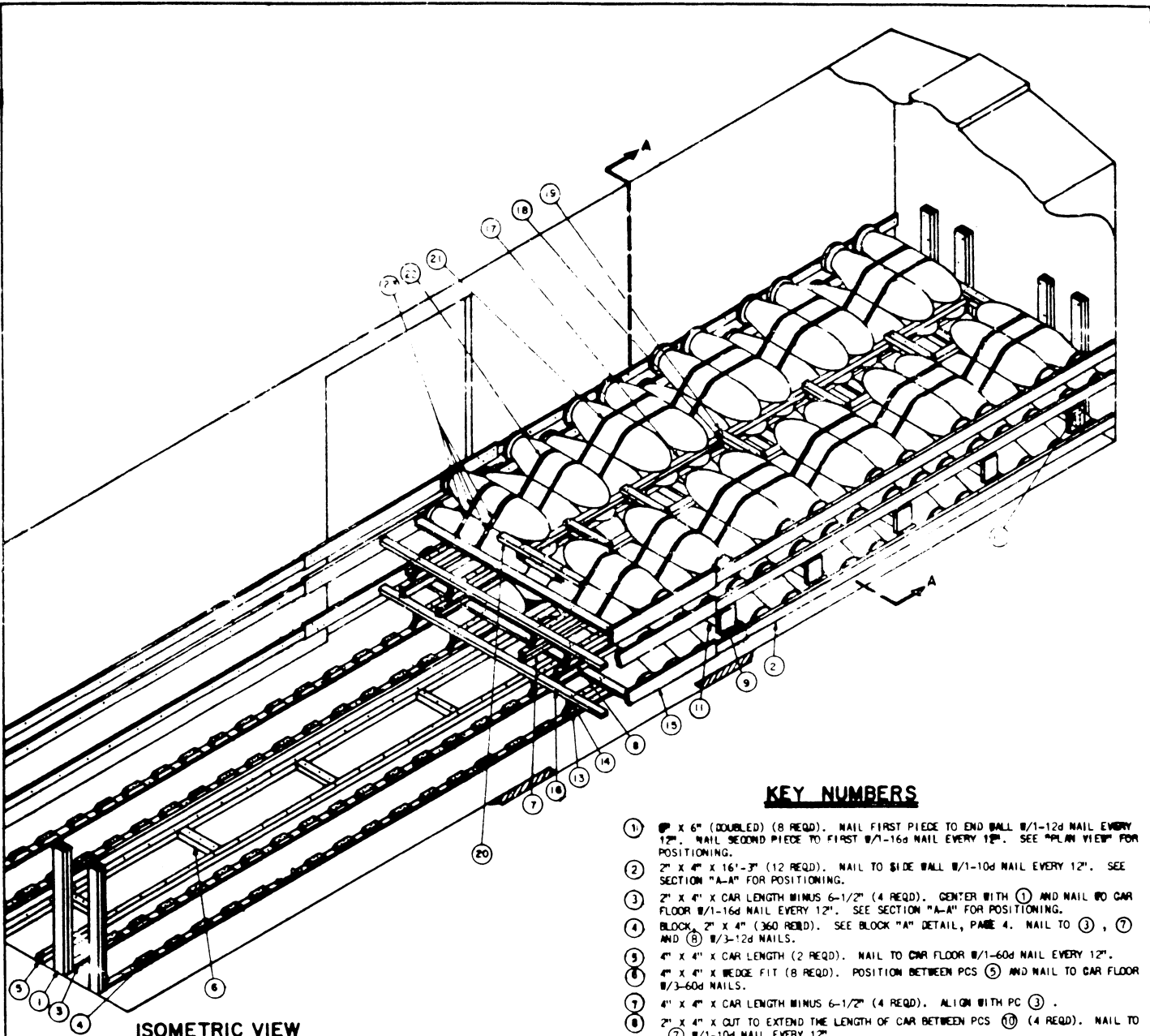


APPROVED  
 BUREAU OF EXPLOSIVES  
*A. J. Perasmuck*  
 MILITARY ASSISTANT  
 DATE 4/18/66

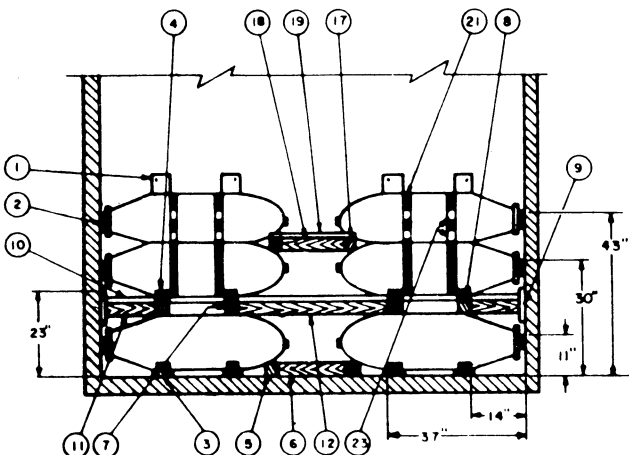
# LOADING & BRACING IN BOX CAR OF BOMB WITHOUT SHIPPING BANDS, GP, 500 LB AN-M64A1BI

DESIGNED BY <b>WBH</b>	PREPARED BY <i>JP/RCM</i>	APPROVED BY <b>PJS</b>	DRAWN BY <i>William S. Ashville</i>	
CHECKED BY <b>JDS/GBF</b>	DATE <i>4.18.66</i>		COORDINATING OFFICER, DIVISION ARMY SUPPLY	
<b>REVISIONS</b>			EXAMINED AND APPROVED <i>Paul Klemm</i>	
			APPROVED BY CHIEF OF COMMODITY CENTER U. S. ARMY MATERIEL COMMAND	
			<i>Paul Klemm</i>	
			<b>U. S. ARMY MATERIEL COMMAND</b>	
			<b>18 MAY 1966</b>	
			CLASS	DIVISION
			19	48
			DRAWING	FILE
			4053	5B41

DO NOT SCALE



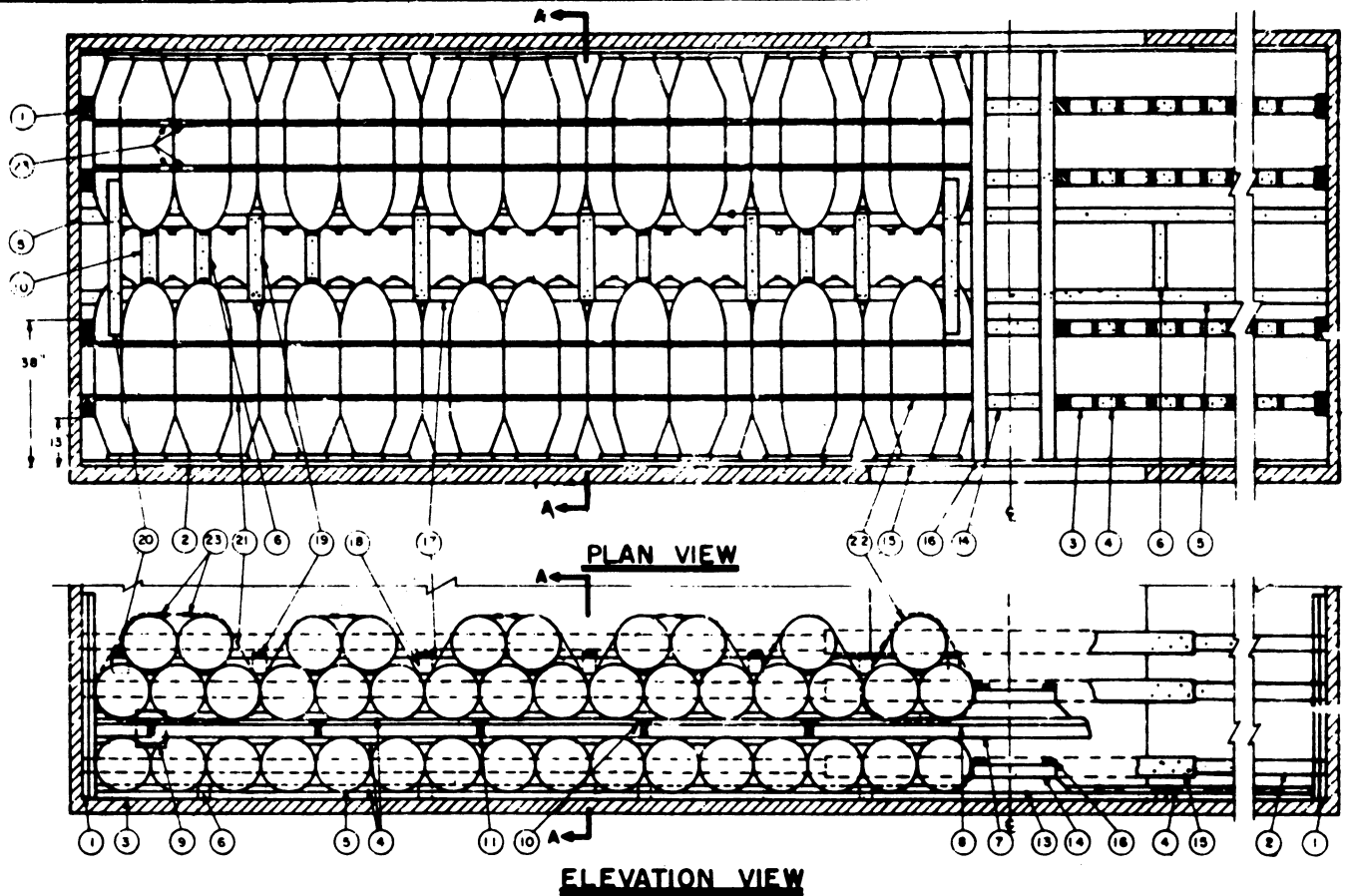
**ISOMETRIC VIEW**



**SECTION A-A**

**KEY NUMBERS**

- ① 2" X 6" (DOUBLED) (8 REQD.). NAIL FIRST PIECE TO END WALL  $\#1-12d$  NAIL EVERY 12". NAIL SECOND PIECE TO FIRST  $\#1-16d$  NAIL EVERY 12". SEE "PLAN VIEW" FOR POSITIONING.
- ② 2" X 4" X 16'-3" (12 REQD.). NAIL TO SIDE WALL  $\#1-10d$  NAIL EVERY 12". SEE SECTION "A-A" FOR POSITIONING.
- ③ 2" X 4" X CAR LENGTH MINUS 6-1/2" (4 REQD.). CENTER WITH ① AND NAIL TO CAR FLOOR  $\#1-16d$  NAIL EVERY 12". SEE SECTION "A-A" FOR POSITIONING.
- ④ BLOCK, 2" X 4" (360 REQD.). SEE BLOCK "A" DETAIL, PAGE 4. NAIL TO ③, ⑦ AND ⑧  $\#3-12d$  NAILS.
- ⑤ 4" X 4" X CAR LENGTH (2 REQD.). NAIL TO CAR FLOOR  $\#1-60d$  NAIL EVERY 12".
- ⑥ 4" X 4" X WEDGE FIT (8 REQD.). POSITION BETWEEN PCS ⑤ AND NAIL TO CAR FLOOR  $\#3-60d$  NAILS.
- ⑦ 4" X 4" X CAR LENGTH MINUS 6-1/2" (4 REQD.). ALIGN WITH PC ③.
- ⑧ 2" X 4" X CUT TO EXTEND THE LENGTH OF CAR BETWEEN PCS ⑦ (4 REQD.). NAIL TO ⑦  $\#1-10d$  NAIL EVERY 12".
- ⑨ 2" X 8" X 10" (20 REQD.). NAIL TO SIDE WALL  $\#5-10d$  NAILS. SEE SECTION "A-A" FOR POSITIONING.
- ⑩ SWAY BRACE, 2" X 4" X CAR WIDTH MINUS 3-1/4" (10 REQD.). NAIL TO ⑦  $\#3-16d$  NAILS EACH JOINT. NAIL TO ①  $\#3-16d$  NAILS AND TO ②  $\#6-16d$  NAILS.
- ⑪ 2" X 4" X CUT TO FIT BETWEEN ⑦ AND ⑨ (20 REQD.).
- ⑫ 2" X 4" X CUT TO FIT BETWEEN THE TWO INSIDE PIECES ⑦ (10 REQD.).
- ⑬ CENTER BLOCK, 4" X 4" (8 REQD.). SEE BLOCK "B" DETAIL, PAGE 4. NAIL TO ③ AND ⑧  $\#4-60d$  NAILS.
- ⑭ 4" X 4" X WEDGE FIT (8 REQD.). NAIL TO ⑬  $\#3-60d$  NAILS.
- ⑮ 2" X 6" X DOOR OPENING WIDTH PLUS 24" (6 REQD.). CENTER ON ② AND NAIL TO SIDE WALL  $\#5-12d$  NAILS.
- ⑯ 2" X 4" X CAR WIDTH MINUS 3-1/4" (4 REQD.). NAIL TO ⑭  $\#3-12d$  NAILS EACH JOINT.
- ⑰ 4" X 4" X 19'-0" (4 REQD.).
- ⑱ 4" X 4" X WEDGE FIT (14 REQD.). TOENAIL TO ⑰  $\#3-12d$  NAILS EACH JOINT.
- ⑲ 2" X 4" X CUT TO FIT (10 REQD.). NAIL TO ⑱  $\#4-12d$  NAILS AND NAIL TO ⑰  $\#3-12d$  NAILS EACH END.
- ⑳ 2" X 4" X 41" (4 REQD.). NAIL TO ⑱  $\#4-12d$  NAILS AND NAIL TO ⑰  $\#3-12d$  NAILS EACH END.
- ㉑ STEEL STRAPPING, 1-1/4" X .035" X 11'-0" (32 REQD.). TO ENCIRCLE FIVE (5) BOLDS. SEAL  $\#2$  SEALS AND 2 CRUMPS PER SEAL.
- ㉒ STEEL STRAPPING, 1-1/4" X .035" X 8'-0" (16 REQD.). TO ENCIRCLE THREE (3) BOLDS. SEAL  $\#2$  SEALS AND 2 CRUMPS PER SEAL.
- ㉓ SEALS, FOR 1-1/4" STRAPPING (96 REQD.).



**GENERAL NOTES**

- A. LOAD AS SHOWN IS BASED ON BOX CAR 40'-6" LONG X 9'-2" WIDE WITH 6'-0" DOORWAY OPENING.
- B. DETAIL OF BOMB:  
 DIMENSIONS - - - - - 47.52" LONG X 14.125" DIAMETER.  
 GROSS WEIGHT - - - - - 574 POUNDS (APPROX)
- C. THIS ITEM IS AN ICC CLASS "A" EXPLOSIVE.
- D. ALL STRAPPING WILL BE SEALED WITH TWO (2) SEALS AND TWO (2) CRIMPS PER SEAL.
- E. NOTICE: SHIPMENTS WILL BE POSITIONED IN THE RAIL CAR IN COMPLIANCE WITH THE WEIGHT DISTRIBUTION REQUIREMENTS OF THE AAR. THE NUMBER OF BOMBS MAY BE ADJUSTED TO FIT THE RAIL CAR CONCERNED OR THE QUANTITY TO BE SHIPPED; HOWEVER, THE APPROVED METHOD CONTAINED HEREIN MUST BE FOLLOWED FOR BLOCKING, BRACING, AND STAYING OF THIS ITEM.

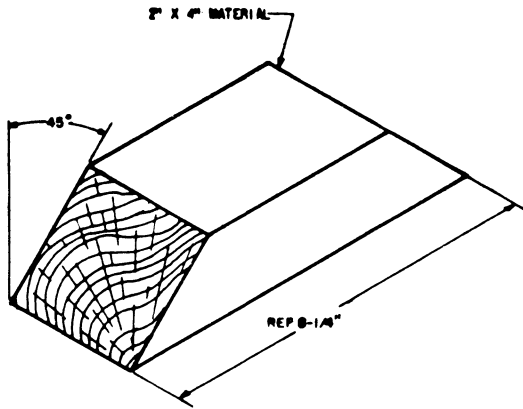
BILL OF MATERIAL		
LUMBER	LINEAL FEET	BOARD FEET
2" X 4"	967	645
2" X 6"	120	120
2" X 8"	17	23
4" X 6"	378	505
NAILS	NO. REQD	POUNDS
10d (3")	476	7-1/2
12d (3-1/4")	1436	24
16d (3-1/2")	440	9-3/4
60d (6")	154	15-1/2
STEEL STRAPPING - 1-1/4" X .035"		480 REQD - - - 69 LBS
SEALS, FOR 1-1/4" STRAP		96 REQD - - - 5 LBS

**MATERIAL SPECIFICATIONS**

LUMBER: SEE TW 715-5500-1; DUNNAGE LUMBER FED SPEC 88-L-751.  
 NAILS: COMMON, CEMENT COATED, FED SPEC FF-N-105.  
 ALT: ANNULAR-RING TYPE NAIL OF SAME SIZE.  
 STRAPPING, STEEL: TYPE 1, CLASS "A" OR "C", FED SPEC QQ-S-781.

**LOAD AS SHOWN**

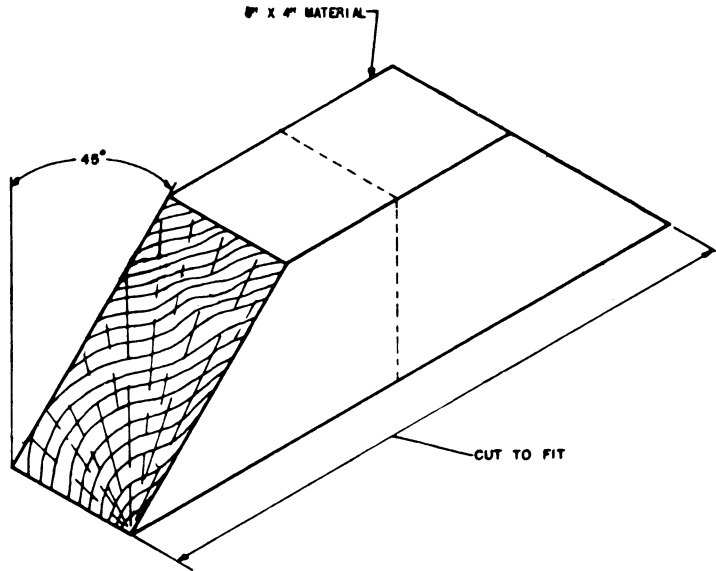
ITEM	QUANTITY	WEIGHT (APPROX)
500 LB BOMB	168	96,432 LBS
DUNNAGE		3,354 LBS
TOTAL WEIGHT		99,786 LBS



**BLOCK "A"**

(360 REQD)

CUT BLOCKS (REF: 8-1/4") TO EXTEND FROM BODY TO BODY OF BOMBS WHEN BOMBS ARE IN CONTACT. CAUTION: FIELD CHECK TO MAKE SURE 2" X 4" BLOCKS DO NOT KEEP BOMBS FROM CONTACTING PIECES ① AND ②.



**BLOCK "B"**

(8 REQD)

BLOCK MAY BE CONSTRUCTED IN TWO (2) SECTIONS AS SHOWN BY DOTTED LINE FOR EASER INSTALLATION.