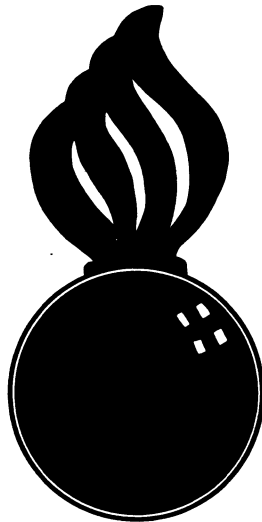


APPROVED  
BUREAU OF EXPLOSIVES

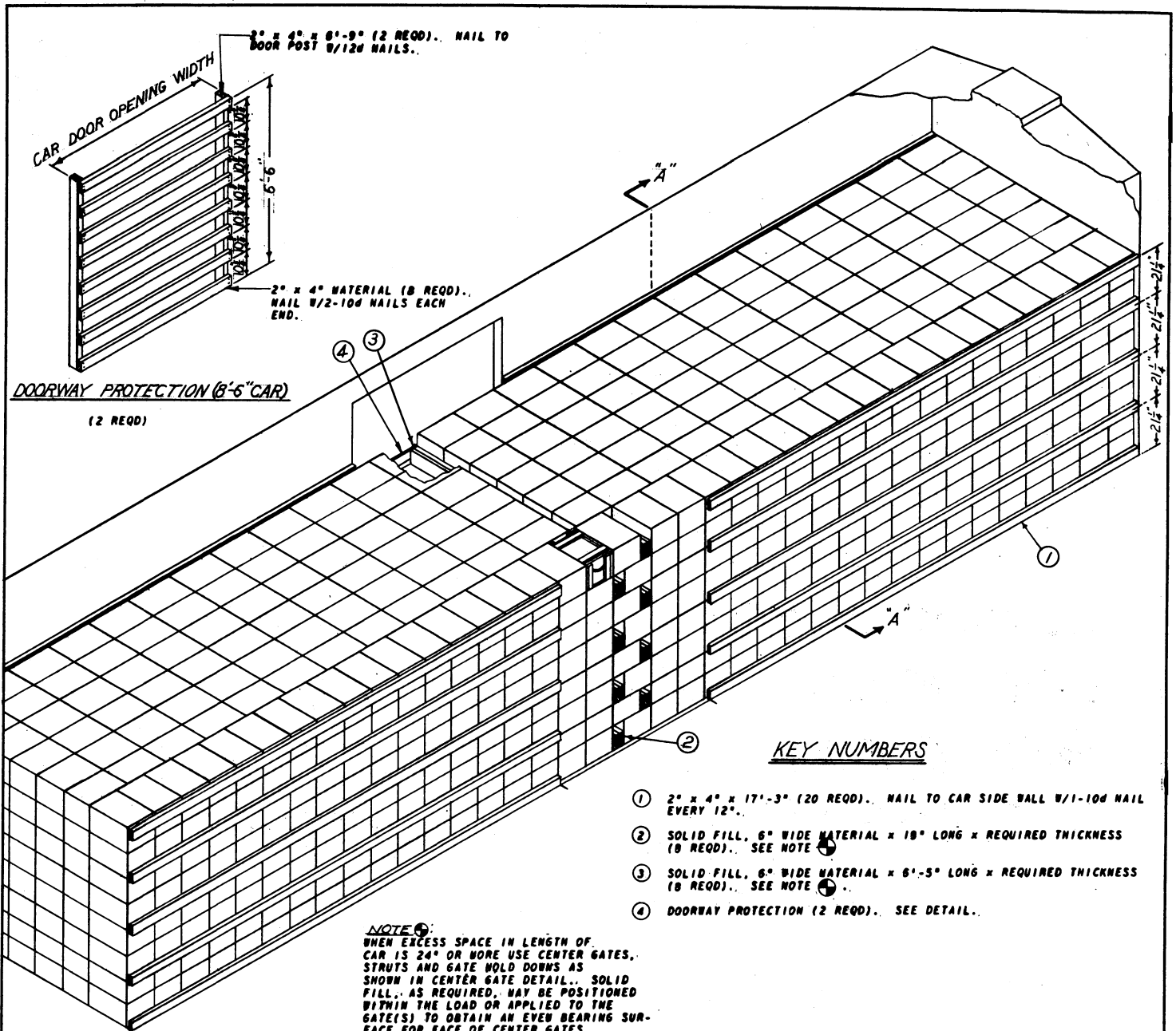
*M. F. Grassmuck*  
INSPECTOR  
DATE *9/20/62*



**LOADING & BRACING (CL & LCL) IN BOX  
CAR OF BATTERY, STORAGE, BB401/U,  
PACKED FOUR PER WOODEN BOX, FOR  
THE NIKE-AJAX AND NIKE-HERCULES  
GUIDED MISSILES**

LOADING & BRACING (CL & LCL) IN BOX CAR OF BATTERY, STORAGE, BB401/U, PACKED FOUR PER WOODEN BOX, FOR THE NIKE-AJAX AND NIKE-HERCULES GUIDED MISSILES			
DRAFTER GBF	INCHES	REVISIONS DIW <i>FB</i>	SUBMITTED
CHECKER RHP/GWP	CHECKED <i>and</i>	DATE	APPROVED <i>Robert A. O. ...</i> LT COLONEL, ORD. CORPS, U.S.A.
REVISIONS			EXAMINED <i>John Taylor</i> ORD. CORPS, U.S.A.
2	8 JUNE 62	BY <i>Andrew W. Steid</i>	APPROVED BY ORDER OF THE CHIEF OF ORDNANCE <i>Andrew W. Steid</i> ORD. CORPS, U.S.A.
			ORDNANCE CORPS U.S.A.
			15 NOVEMBER 1954
			CLASS DIVISION DRAWING FILE
			19 48 5066 GM5A16

DO NOT SCALE



DOORWAY PROTECTION (8'-6" CAR)  
(2 REQD)

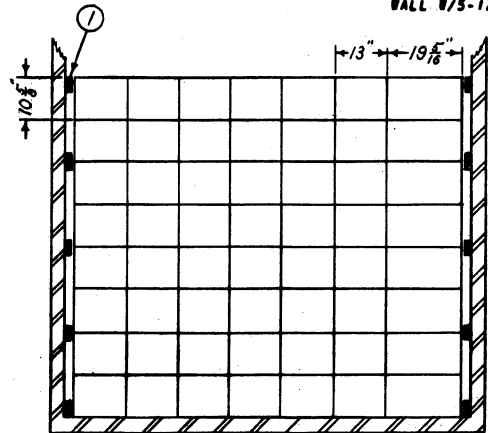
KEY NUMBERS

- ① 2" x 4" x 17'-3" (20 REQD).. NAIL TO CAR SIDE WALL W/1-10d NAIL EVERY 12".
- ② SOLID FILL, 6" WIDE MATERIAL x 18" LONG x REQUIRED THICKNESS (8 REQD).. SEE NOTE
- ③ SOLID FILL, 6" WIDE MATERIAL x 6'-5" LONG x REQUIRED THICKNESS (8 REQD).. SEE NOTE
- ④ DOORWAY PROTECTION (2 REQD).. SEE DETAIL..

NOTE:  
WHEN EXCESS SPACE IN LENGTH OF CAR IS 24" OR MORE USE CENTER GATES. STRUTS AND GATE HOLD DOWNS AS SHOWN IN CENTER GATE DETAIL.. SOLID FILL, AS REQUIRED, MAY BE POSITIONED WITHIN THE LOAD OR APPLIED TO THE GATE(S) TO OBTAIN AN EVEN BEARING SURFACE FOR FACE OF CENTER GATES.

ISOMETRIC VIEW

40'-6" LONG x 8'-6" WIDE  
BOX CAR..

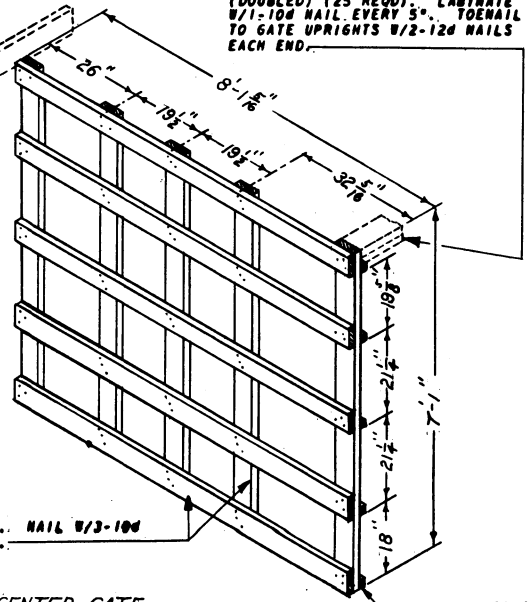


SECTION "A-A"

GATE HOLD DOWN, 2" x 6" x DOOR WIDTH PLUS 24" (2 REQD).. NAIL W/5-12d BAILS EACH END.

2" x 6" x 12" (4 REQD).. NAIL TO CAR WALL W/5-12d NAILS..

STRUTS, 2" x 6" x CUT TO FIT (DOUBLED) (25 REQD).. LAMINATE W/1-10d NAIL EVERY 5".. TOENAIL TO GATE UPRIGHTS W/2-12d NAILS EACH END..



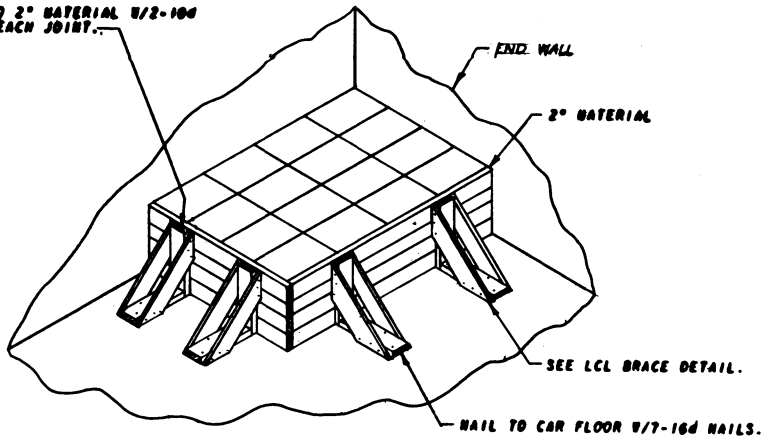
2" x 6" MATERIAL.. NAIL W/3-10d NAILS EACH JOINT..

CENTER GATE

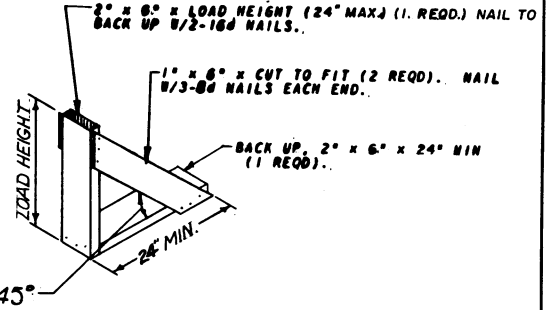
(2 REQD) 1 LEFT HAND AS SHOWN AND 1 RIGHT HAND

2" x 2" x 8'-1 1/2" (5 REQD).. NAIL W/2-10d NAILS EACH JOINT..

NAIL TO 2" MATERIAL 1/2-100  
NAILS EACH JOINT.



TYPICAL LCL



LCL BRACE

EACH BRACE AS APPLIED FOR LONGITUDINAL OR LATERAL BRACING WILL SUPPORT 2,000 OR 8,000 POUNDS, RESPECTIVELY. ALSO RESPECTIVELY. A BRACE MUST BE USED FOR EACH 24" OR 40" INCREMENT OF LOAD DISTRIBUTION; ADDITIONALLY, A MINIMUM OF TWO (2) BRACES MUST BE USED IN THEIR RESPECTIVE DIRECTION IF THE LOAD IS MORE THAN TWO (2) BOXES WIDE OR LONG.

GENERAL NOTES

- A. LOADS AS SHOWN ARE BASED ON BOX CARS 40'-6" LONG x 8'-6" AND 9'-2" WIDE WITH 6'-0" DOORWAY OPENINGS.
- B. SELECTION OF RAIL CARS FOR THE TRANSPORT OF THIS ITEM WILL BE IN ACCORDANCE WITH PARAGRAPH 8,300.4, ORDM 3-4, VOL 3.
- C. NOTICE: SHIPMENTS WILL BE POSITIONED IN THE RAIL CAR IN COMPLIANCE WITH THE WEIGHT DISTRIBUTION REQUIREMENTS OF THE AAR. THE NUMBER OF UNITS MAY BE ADJUSTED TO FIT THE RAIL CAR CONCERNED, OR THE QUANTITY TO BE SHIPPED; HOWEVER, THE APPROVED METHODS CONTAINED HEREIN, FOR FULL OR PARTIAL CAR LOAD, MUST BE FOLLOWED FOR BLOCKING, BRACING, AND STAYING OF THIS ITEM.
- D. FOR DETAIL OF BOX SEE DRAWING NO. 8026371.  
BOX DIMENSIONS - 19-5/16" LONG x 13" WIDE x 10-5/8" HIGH.  
GROSS WEIGHT - 65 LBS (APPROX).
- E. FOR AUTHORIZED METHODS OF BRACING PARTIAL LAYERS, SEE ORD CORPS DRAWING 19-48-2213-SP34.
- F. PROCEDURES SHOWN HEREIN ARE APPLICABLE FOR THE SHIPMENT OF EMPTY BOXES.
- G. SANCTION: THESE BOXES MUST BE LOADED WITH TOP SIDE UP.

BILL OF MATERIAL (CL)

8'-6" WIDE BOX CAR		
LUMBER	LINEAL FEET	BOARD FEET
2" x 4"	468	312
2" x 6"	139	139
NAILS	NO. REQD	POUNDS
10d (3")	404	64
12d (3 1/2")	24	1
9'-2" WIDE BOX CAR		
LUMBER	LINEAL FEET	BOARD FEET
1" x 4"	84	20
2" x 3"	24	12
2" x 6"	187	187
NAILS	NO. REQD	POUNDS
8d (2")	56	1/3
10d (3")	24	1/2
12d (3 1/2")	84	1/2

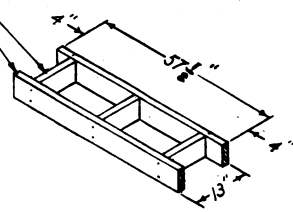
MATERIAL SPECIFICATIONS

LUMBER: SEE PARAGRAPH 8,300, ORDM 3-4, VOL 3.  
NAILS: COMMON, CEMENT COATED, FED SPEC FF-N-105.  
ALT: ANNULAR-RING TYPE NAIL OF SAME SIZE.

LOAD AS SHOWN

(8'-6" CAR)		
ITEM	QUANTITY	WEIGHT
BOXES	1,296	97,240 LBS (APPROX)
DAMAGE		1,135 LBS
<b>TOTAL WEIGHT</b>		<b>98,375 LBS (APPROX)</b>
(9'-2" CAR)		
ITEM	QUANTITY	WEIGHT
BOXES	1,545	100,425 LBS (APPROX)
DAMAGE		569 LBS
<b>TOTAL WEIGHT</b>		<b>100,994 LBS (APPROX)</b>

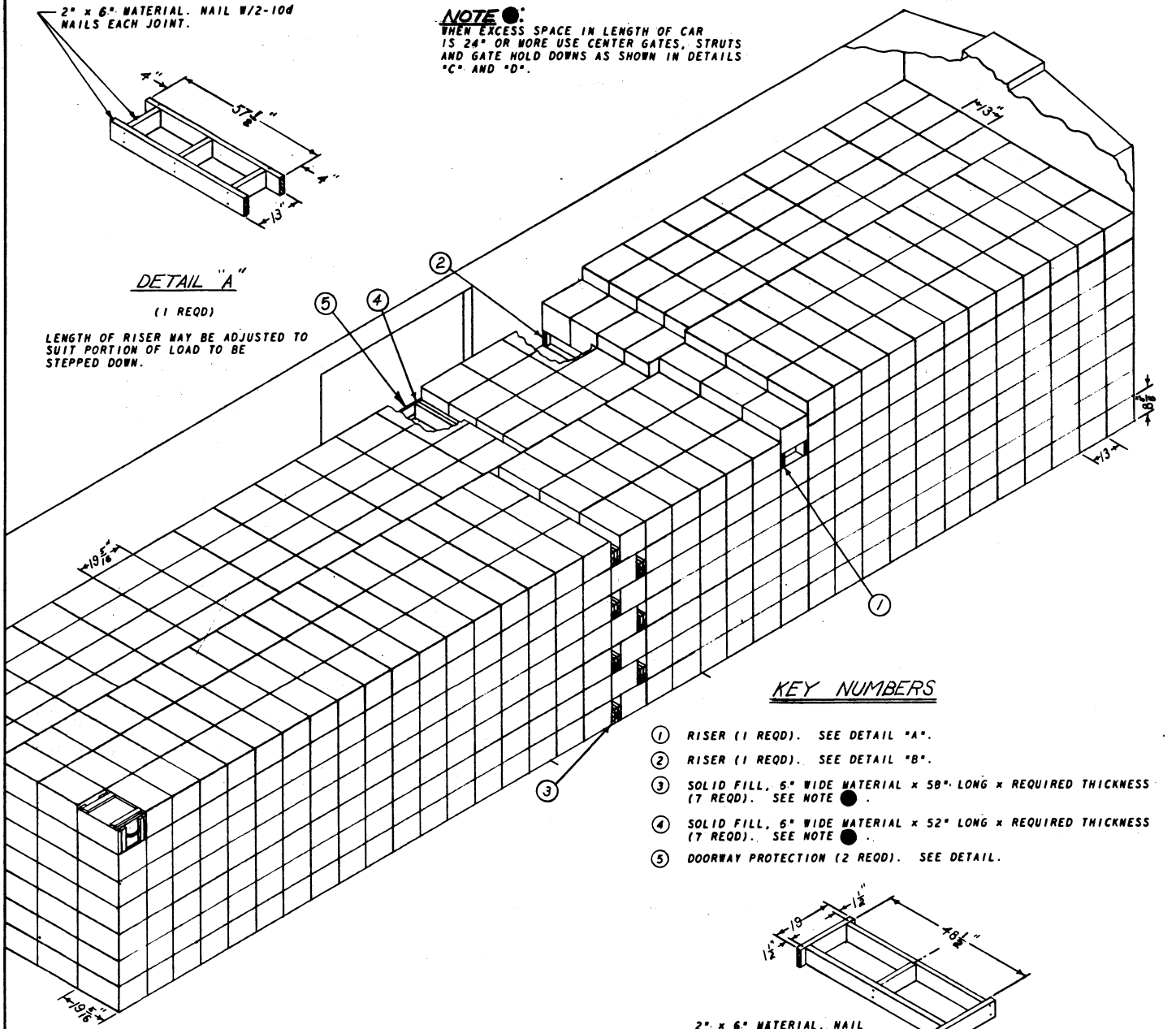
2" x 6" MATERIAL. NAIL W/2-10d NAILS EACH JOINT.



**DETAIL "A"**  
(1 REQD)

LENGTH OF RISER MAY BE ADJUSTED TO SUIT PORTION OF LOAD TO BE STEPPED DOWN.

**NOTE**  
WHEN EXCESS SPACE IN LENGTH OF CAR IS 24" OR MORE USE CENTER GATES, STRUTS AND GATE HOLD DOWNS AS SHOWN IN DETAILS "C" AND "D".

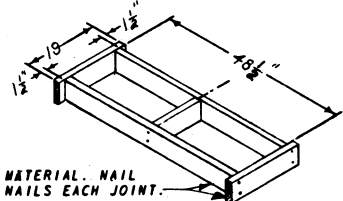


**ISOMETRIC VIEW**

40'-6" LONG x 9'-2" WIDE BOX CAR

**KEY NUMBERS**

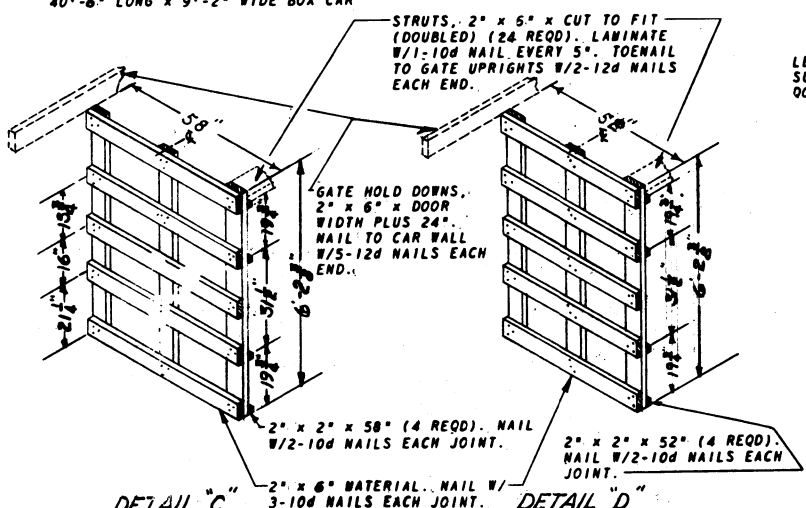
- ① RISER (1 REQD). SEE DETAIL "A".
- ② RISER (1 REQD). SEE DETAIL "B".
- ③ SOLID FILL, 6" WIDE MATERIAL x 58" LONG x REQUIRED THICKNESS (7 REQD). SEE NOTE.
- ④ SOLID FILL, 6" WIDE MATERIAL x 52" LONG x REQUIRED THICKNESS (7 REQD). SEE NOTE.
- ⑤ DOORWAY PROTECTION (2 REQD). SEE DETAIL.



2" x 6" MATERIAL. NAIL W/2-10d NAILS EACH JOINT.

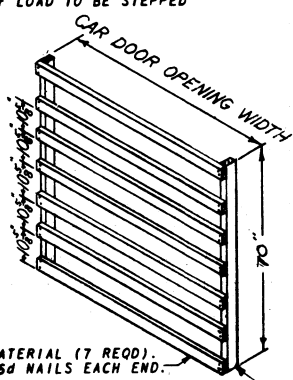
**DETAIL "B"**

(1 REQD)  
LENGTH OF RISER MAY BE ADJUSTED TO SUIT PORTION OF LOAD TO BE STEPPED DOWN.



**DETAIL "C"**  
(2 REQD)

**DETAIL "D"**  
(2 REQD)



**DOORWAY PROTECTION (9'-2" CAR)**

(2 REQD)